



CITY OF TROUTDALE

"Gateway to the Columbia River Gorge"

AGENDA

CITY COUNCIL – REGULAR MEETING

Troutdale Police Community Center – Kellogg Room
234 SW Kendall Court
Troutdale, OR 97060-2078

Tuesday, November 27, 2018 – 7:00PM

Mayor

Casey Ryan

City Council

David Ripma
Randy Lauer
Larry Morgan
Glenn White
Rich Allen
Zach Hudson

City Manager

Ray Young


City Recorder

Sarah Skroch

1. **PLEDGE OF ALLEGIANCE, ROLL CALL, AGENDA UPDATE.**
2. **PUBLIC COMMENT:** Public comment on non-agenda and consent agenda items is welcome at this time. *Public comment on agenda items will be taken at the time the item is considered. Public comments should be directed to the Presiding Officer, and limited to matters of community interest or related to matters which may, or could, come before Council. Each speaker shall be limited to 5 minutes for each agenda item unless a different amount of time is allowed by the Presiding Officer, with consent of the Council.*
3. **CONSENT AGENDA:**
 - 3.1 **MINUTES:** October 16, 2018 Joint City Council & SDIC Work Session and October 23, 2018 City Council Regular Meeting
 - 3.2 **RESOLUTION:** A resolution accepting the November 6, 2018 General Election results from the Director of Elections, Multnomah County, Oregon.
4. **PUBLIC HEARING / ORDINANCE (Introduction):** An ordinance to adopt Text Amendments to Chapters 1, 2, 4 and to establish Chapter 14 of the Troutdale Development Code.

Chris Damgen, Community Development Director
5. **STAFF COMMUNICATIONS**
6. **COUNCIL COMMUNICATIONS**

7. ADJOURNMENT



Casey Ryan, Mayor

Dated: November 20, 2018

City Council Regular Meetings will be replayed on Comcast Cable Channel 30 (HD Channel 330) and Frontier Communications Channel 38 on the weekend following the meeting - Friday at 4:00pm and Sunday at 9:00pm.

Further information and copies of agenda packets are available at: Troutdale City Hall, 219 E. Historic Columbia River Hwy. Monday through Friday, 8:00 a.m. - 5:00 p.m.; on our Web Page www.troutdaleoregon.gov or call Sarah Skroch, City Recorder at 503-674-7258.

The meeting location is wheelchair accessible. A request for an interpreter for the hearing impaired or for other accommodations for persons with disabilities should be made at least 48 hours before the meeting to: Sarah Skroch, City Recorder 503-674-7258.

DRAFT

**MINUTES
CITY COUNCIL – WORK SESSION
Troutdale Police Community Center – Kellogg Room
234 SW Kendall Court
Troutdale, OR 97060-2078**

Tuesday, October 16, 2018 – 6:00pm

1. Roll Call

Council President Ripma called the meeting to order at 6:00pm.

PRESENT: Council President Ripma, Councilor White, Councilor Allen and Councilor Hudson.

ABSENT: Mayor Ryan, Councilor Lauer and Councilor Morgan (excused).

STAFF: Ray Young, City Manager and Kenda Schlaht, Deputy City Recorder.

GUESTS: Bruce Etling - Sandy Drainage Improvement Company, President; Tanney Staffenson – Sandy Drainage Improvement Company, Board Member; Tom Hansell - Sandy Drainage Improvement Company, Board Member; Kelly Sherbo – Multnomah County Drainage District, District Counsel; Emily Stumpf – Multnomah County Drainage District, Sr. Policy Director; Nolan Young – City of Fairview, City Administrator; Evyn Mitchell – Levee Ready Columbia, Public Affairs & Communications Manager; Colin Rowan – Levee Ready Columbia, Program Director; Stephanie Hallock – Oregon Solutions; Reed Wagner – Multnomah County Drainage District, Executive Director; and Paul Wilcox, Troutdale Resident.

2. Discussion: A discussion of the work of Levee Ready Columbia and the future of the Sandy Drainage Improvement Company.

Ray Young stated all of us have a common interest in the levee system which protects an important part of Troutdale. All of our industrial land is there and the airport is there. About 90% of the levee is in the City of Troutdale and approximately 10% of it is in the City of Fairview which is why Nolan Young from the City of Fairview is here because they have an interest in what happens in the future with the levee system inside the Sandy Drainage Improvement Company (SDIC). Tonight's about getting the 2 Boards together so that we can discuss the joint responsibility that we have for a critical area of infrastructure in this area and getting everybody up to the current issues because we're at a critical juncture to talk about it. Ask questions and inquire. As we move forward, speaking for the City of Troutdale, I think there are 3 observations that make it important that staff felt to have this joint meeting. First of all, the current governance structure and financial model is basically 100 years old. It was originally designed to benefit farmers in

the area that is now protected by the levee. Second of all, a radical shift has occurred over those last 100 years. No longer are farmers down there but there's hundreds of millions of dollars in value of industrial land and buildings and an airport that is now being protected by the levee. What was also all very permeable surface, because it was all farm land, now is huge amount of land that is covered with asphalt and cement and a large amount of permeable surfaces are out there now. Thirdly, what you'll hear tonight and what you've received in the packets is that for the purposes of governance and financing there's a crossroads right now for the whole levee system. Particularly what it focuses on is the Sandy Drainage Improvement Company, which Troutdale is a big part of. The issue is, do we continue the current governance structure and financing structure that has served the district well for over 100 years? Or with the help from the State legislature, do we pursue another option that does it a different way to finance and govern not only our portion of the levee but the other portions of the levee that go down to I-5? One of the biggest concerns the City is going to have is financial. Because the City does not have the financial resources. We have not planned to be a financial back stop for the SDIC. Whatever avenue is chosen, the staff is going to encourage it. The financial model should be very, very stable and very able to handle whatever is going to be coming from the SDIC and our levee in the next 50 to 100 years. Because the value of that infrastructure, I can guess, is a \$100 million with the pump station, weirs and the structure of the levee itself and the City of Troutdale is not in a position to be able to be a significant help in terms of financing any acute needs that that's going to have in the foreseeable future.

Reed Wagner stated the last time I was here I was asking for money to fund the weir. The reason why that weir project was able to be executed really was two-fold. One was this Board was strategic and saw the needs of the district growing from a maintenance and operation standpoint and had to make some tough decisions about assessment. But as you all remember, you stepped in and helped fund the final \$260,000.00 of that weir. We wouldn't have been able to move forward without that. That's the kind of legacy funding programs we have dealt with when it comes to capital. I'm going to talk a little bit more about the districts and how they exist, why they exist and how the system works. These districts were created in 1916 and 1917 to deal with drainage of the acreage of the farm land in the area. They remained in that way and helped with the development of some levees in the area. This is both levees along the Columbia River and across as well. These levees, after the 1948 Vanport floods, was completed by the Corps of Engineers. They came in, they invested a lot of money in the area and then they handed over local sponsorship in responsibility of maintenance and operations to what was then a seemingly right governance structure because the City didn't have a lot of their jurisdictional boundaries in this area and drainage districts were really the only governance structure. That happened in the early 1950's and the agreement was we will keep these levees up to your standards and you will continue to participate in flood fighting and rebuilding of the levees after events that would have impact on them. That's the program that we participated in as local sponsors for the districts for over 60 years now. What that means is we're under contract. We have to do what they say to do or they can actually come in and sue us for breach of contract. In 1996 the levees proved to do very well. We had one of the biggest storms we had had in 40 years and the levees performed really well. One of the things that we learned was that prioritizing and maintaining during

major events is very difficult to do if you have a fractured governance system. Back then Sandy (SDIC) had its own management structure, MCDD had its own management structure and Pen 1. So after 1996 it was decided that there should be one management structure in place and that was MCDD. The other 3 should contract out services. MCDD has all the staff, equipment and we have 4 separate boards that decide on the service level for those areas. That's really how we got to this point in governance and decision making and also execution of service. There's different service levels across the board because there's different challenges when it comes to funding. SDIC is not subject to compression because it is a drainage improvement company. Pen 1, Pen 2 and MCDD are and they have limitations. In 2005 Katrina had a major impact on how everybody manages flood control and it's because Congress set different expectations for both FEMA and Corps of Engineers as well as the local sponsors. The general approach was if you have a flood control system that was created by the federal government in a major urban area there are new standards that they're going to apply because we've seen too much devastation in these areas. It wasn't funded by the federal government. These new standards were something that the locals had to approach and fund by themselves. So we shifted and worked with our Corps partners to understand what those changes were. About 2 months after I took the job we got notice that the accreditation changes were going to take place. We have a local sponsorship agreement with the Corps but it's the Cities that deal with FEMA because you have the land use authority, you care a lot about zoning and basically the levee protects your ability to develop in the area. If the levee's not accredited and you don't meet the standards it changes the way you can use the area, changes the way you can develop, changes the way you can fund and it changes the way you can get insurance for the area. We looked around at areas along the west coast where they had to meet the new accreditation standards. The average per mile cost was \$11 million. We have 27 miles with nearly \$300 million worth of possible upgrades to the system that we were going to be responsible for. So we put together a collective and Stephanie's going to talk a little bit about that collaboration of all the Cities, Port, Metro, County and the Districts. It caused us to think about, who has the authority and responsibility to do this? Who has the capacity to deal with the financial costs of this? Who's going to do it next time? This doesn't go away. As they create new standards you have to go through a new accreditation process and you have to meet those new standards. What is it that's going to allow us to be successful this time and next time from an authority perspective and a decision making perspective and a funding perspective? A little bit about the system, it was built as a single system. During the 1948 Vanport floods we had major inundation in Pen 1, a little less inundation in Pen 2 and some in MCDD and that's because of how the system is set up. So inundation in the west side was greater but it's those cross levees that allow to reduce the inundation going east. That was that flood. That flood was caused because where the land and Columbia River come together there was a pushback and it pushed against the levee and caused the breach at the railroad embankment which caused the major devastation of Vanport. But the risk is just as well up on the high side. So we have higher, broader levees as we go east. I think that was probably part of the design because more breaches usually happen up river. The system isn't limited to the levees. It's a combination of the levees and the internal drainage control. We have 11 pump stations across the 4 districts. Some that go directly to the river and some that pump water from one side to the other side. It allows

you to compartmentalize flooding as it happens. Sandy's pump station was built in 1941 and it has a total capacity of 36,000 gallons per minute. One of the pumps is an original pump that came with the pump station. Unfortunately when we recognized last season that there were problems, the board acted and we are in the process of replacing that pump. The other pump was replaced in 1997 and we actually just completed a rebuild of that pump. These newer pumps you get a couple rebuilds out of them. In 1996 that pump station during the '96 flood lost power, which you do a lot when you're in storm conditions, and the station ended up half way under water. Once you're under water you can't do back up generation. That was a big concern about the area. One of the changing issues is the amount of impervious areas that's been built up in the last few years. To give you an idea of how much that impacts the pump capacity, Amazon during a 100 year flood event would create about 30,000 gallons per minute of water. That takes up almost the whole capacity of the pump station. So we're in the process of working with Troutdale a drainage master plan that will help us understand how current storage behind the pump station can deal with some of that extra water during an event like that versus, how much pumping capacity do we need to push it out? It will also deal with another piece of your system which ownership is up in the air which is a gate tower that sits at the cross levee. It was built and designed to help relieve both Sandy and MCDD in different conditions. The drainage master plan that we're doing with the City of Troutdale is going to help us understand who really benefits from it and who's responsible for it.

Ray Young asked, that's currently broken isn't it?

Reed Wagner replied it currently does not operate the way it should. To give you an idea of why we have to make the drainage master plan, we have to have data that reinforces it because it is a Corps project. The Corps would have to agree to either rebuild or dismantle the project. It's not something we can do on our own. I have had the opportunity to deal with colleagues around the country, in New Orleans, Clark County up in Washington, Sacramento, Riverside and they've all had to deal with this issue. They've all had to change governance so they can deal with major capital projects. It's not something that these old districts are equipped to do. And there's always been some type of a balance when it comes to having a broader constituency pay for the capital projects and losing that local control because there are definitely political realities within these areas that when they join together they may be concerned about how that changes their assessment and the service level they're going to receive. There are varying levels of how they've dealt with this. They've dealt with this by having the separate zones so you have different assessment levels but you have a base level that helps pay for the capital projects, you have maintenance and operations, and by having budget committees associated with the utility. We're not alone. Everywhere I have gone they've had to adjust somehow because of these new regulatory factors and other environmental impacts to their system. We want to make sure that we're not just making decisions about the small area but how the whole system is working and how we finance this.

Stephanie Hallock, Oregon Solutions, stated Oregon Solutions is a community based problem, community government approach that really happened in the Kitzhaber administration. There's been a lot of community based problem solving concepts through

various governors. Governor Kitzhaber really believed in this and he started community solutions within his own office and ultimately one of his staff people went to Portland State University and started Oregon Solutions to focus on community based problem solving. It's now housed at Portland State University and it's funded in the higher education budget. When Reed came to Oregon Solutions and a decision was made to have it be an Oregon Solutions project, that's a formal decision that's made by the governor and the governor actually designates the conveners. We have project team meetings and the legislators from this area attend and there are also representatives from neighborhood organizations, business owners, environmental groups, etc. There's a very broad spectrum of people who care what happens along the levee system. The mechanism that Oregon Solutions and partners come together through is called a declaration of cooperation. It's not a legal document but it is signed. There's one in your packet and it starts on page 7. That's the mechanism that got us started. You can see everybody who signed onto that declaration of cooperation. They did it to complete the technical analysis, the communication and outreach that was going to be needed and to work on governance which would ultimately lead to the federal certification and accreditation. That was a non-binding document so there were a series of IGA's that were also entered into to fund the work that was going to be done by Levee Ready Columbia as was outlined in the declaration and cooperation. There is a current IGA that runs through June 30th 2019 and that is on page 66 in your packet. There's a draft of the new IGA which would begin July 1st of next year and that is on page 52 of your packet. The partners have committed through the existing IGA and they have the funding of the projects through June of next year and then hopefully there will be a new IGA. The partners in the IGA are only the funding jurisdictions. There are 4 drainage districts, the Cities of Portland, Troutdale, Fairview and Gresham, Metro, Multnomah County, Port of Portland and the State, in the coming IGA are going to be an ex-officio member. When this project started the original funding formula was 25% from the State, 25% from the regional partners, 25% from the drainage districts and 25% from the Cities of Portland, Troutdale, Fairview and Gresham and Multnomah County.

Ray Young stated just for Troutdale's understanding, we contribute about \$18,000.00 this budget year for the overriding organization that is doing Levee Ready Columbia. It will go up to \$26,000 or \$27,000 next year.

Stephanie Hallock stated so that was how it all started from that contribution. On page 65 of your packet shows what the proposed partner cash contributions would be from the first year under the new IGA. Under the current IGA the State had been a contributing partner through the Regional Solutions office. What we're projecting ahead to the new IGA, we have projected costs without the State. They will not be a party to the IGA and we do not know whether or not they will be continuing to fund. We have put a request in to the governor for a million dollars for the coming biennium to support Levee Ready Columbia. We'll find out whether or not she is able and willing to do that. It's possible if she is that that might affect the other partners share as well. What have we done for this money? This is before I came on and as well since I've been here, first of all, because of the visibility in a lot of the activities performed by Levee Ready Columbia the issue the federal requirements apply statewide. The jurisdictions along the Columbia have been

most active in trying to figure out how to address the accreditation issues and now pay for it. But there is a need statewide. Through the efforts of legislature and others, \$50 million for funding levee capital projects and keeping the levee system whole has been provided by the legislature through Oregon's infrastructure finance authority. That's a real accomplishment. The jurisdictions within Levee Ready Columbia have received about \$5.5 million from that fund for projects. We have also completed the technical analysis of projects needed to achieve and maintain certification for the entire 27 mile system. I think the total dollar amount of the project is estimated to be about \$43.5 million just for certifications and full modernization of the system is about \$115 million. The other thing that's been accomplished is public awareness of the importance of this system has grown. There's been some very good media coverage by the Portland Tribune and other news stations. I think a lot of people know about flooding along the Columbia. We talked lightly about this new IGA but this is really the crux of part of what we're going to talk about in more detail tonight in terms of why we're here and what it really means for your bodies to sign a new IGA which would need to be signed by elected officials. The goal is to have it signed by the end of this year and it's in circulation now for people to take a look at. The other thing that we are doing is we are going to the legislature in 2019 with 2 bills and they are summarized on pages 5 and 6 in your packet. One is to increase the \$15 million that's in the infrastructure finance authority fund by another \$10 million and also to loosen up the requirements so that grants are more easily available particularly for smaller communities around the state who have needs and that fund is intended to give both grants and loans but it's been a pretty high bar in order to get grants. Also legislation to create a new district which is going to be the subject of most interest to you tonight. That will be a boundary of Multnomah County within the UGB. Obviously for us to be successful at all in doing this, full partnership has to be on board when we go down to Salem. The governor continues to be very supportive of Levee Ready Columbia and we are hopeful that she will be receptive to our request of \$4 million for the process to get to accreditation. Also most recently FEMA and the Corps have been very active partners in this process and really I think because of the progress we've made with them at the table Congress appropriated \$3 million for this region of the Corps to do a feasibility analysis of their new start program that will build on all of the work that we've been able to produce in Levee Ready Columbia. They get their own look at what's needed but what is really important about it is the fact that they have made this investment in us opens the door to the big bucks at their level for the work that's needed to be done for the projects that have to get done ultimately. We need commitment to a new IGA and support for the legislation that is going forward.

Councilor Allen asked, do we know what needs to be done to the levees and how much money is needed?

Reed Wagner replied based on the expiration of the accreditation, we started on the west side and we worked east and we got through all of the investigation except for the encroachment evaluation. So we are now in the process of writing a report. We have the information but we have to actually make it consumable to somebody other than engineers.

Council President Ripma stated let's move on to pros and cons of forming a new district.

Reed Wagner stated there are true pros and cons that I think are perceived in different ways across my four districts. I can tell you from a staffing standpoint it's the simplicity of one agency working with the Corps of Engineers on the system. The Corps hasn't looked at us as 4 different jurisdictions. The Corps works with MCDD and if need be, paperwork is then distributed amongst the 4 boards for approval. But MCDD is the group they work with.

Stephanie Hallock stated it might help to look at page 82 of your packet. There's a memo regarding the pros and cons.

Reed Wagner stated the other thing is when I talk about simplicity we manage these 4 districts now separately. When it comes to managing boards and separate budgets across the 4 districts it's very complex and very inefficient. The second thing is having sufficient revenue. We got to come to you, although it wasn't even your responsibility to pull a weir funding project together because there was a lot of mutual benefit but I got to do that when the economy was high and new properties were coming online and new revenues were coming. That's not always going to be the case when capital projects happen. How do we come up with that sufficient revenue to do a critical infrastructure that protects the area? I personally believe when we're dealing with public safety and protecting jobs and properties we should be able to fund it through the organization as possible and strategically map out those costs that are necessary over a long period of time and not rely on piecing together funding for the projects as they come about. Having more than just one revenue source. We can't float general obligation bonds going forward because we now know that we don't have an electoral voting system. We have a fairly archaic system where you have to pull together an annual meeting, landowners have to come, a quorum of those landowners have to be represented 50% and then those landowners vote for their board members. Well that's not a part of our electoral system and therefore general obligation bonds can't be applied in our current governance. General obligation bonds are an incredibly important tool in public financing for projects. They have much lower rates and they can apply in public projects. Otherwise we rely on revenue bonds which are higher interest and cost taxpayers more money.

Ray Young stated the general obligation bonds are important because when you can take those bonds you can use them to do large multi-million dollar infrastructure projects that the system might need. So having that source of funding helps pay for the big stuff that the system could need all the way from Pen 1 all the way to us. Under the current structure they're not able to get general obligation bonds and that's a handicap.

Council President Ripma asked, the formation of this new structure, does that mean that these other districts disappear?

Reed Wagner replied I think the short answer is yes. They would dissolve or consolidate into this new district.

Council President Ripma asked, what about the contract with the Army Corps of Engineers?

Reed Wagner replied it would have to transfer over to the new district.

Council President Ripma stated I always assumed it was going to be larger in area than all of the current districts combined.

Ray Young stated there's so many meetings, Councilor Ripma, there's no way for us to explain to you all everything's been gone through. The basic theory has changed and this is why this is coming up, in the past the only people involved in the drainage districts were the people who had land there and had farms there. The basic underlining theory was that we started realizing that because of the thousands and thousands of jobs and hundreds and billions of dollars of property here, the international airport, the whole metro area benefits from everything that goes on that's protected by this levee and so that reality has been reflected in all discussions where we've suggested that these possible areas...

Stephanie Hallock stated we just say that because we all have varying and somewhat limited skills in this process. We did contract with FCS Group to do the kind of analysis what the different boundary options and what the different financing options might be. They did a year's worth of work and it was completed last April and then that was handed off to Tiberius who drilled down through the drainage districts for property by property evaluations. This is not my area of expertise but I will do the best I can. The bottom line of the analysis was expand the boundary so that more people are contributing. The water comes in from more than just those who live in the floodplain. Also expanding the funding base through the ability to do bonds to pay for the capital projects. The other component was that because of compression the current zone of property taxes was never going to be able to be equitable in terms of the ability to spread the costs fairly to pay for the system and that's when the analysis turned to some kind of utility fee structure. There were probably as many as 12 scenarios initially of how you might slice and dice this. It has narrowed down some. There has been no final decision on the formula other than the fact that it's pretty clear that we need something where the general obligation bonds can be used for the capital projects. In terms of the actual formula, what it would cost the household, what it will cost the business, the overall conclusion was in the long term the most equitable is this creation of a new district in terms of being able to spread costs most equitably. There will still be winners and losers in whatever scenario. Some people are going to pay more and some of them will pay less. Some people who haven't been paying into the system at all will have to pay. So this is not a slam dunk by any stretch of the imagination but a lot of thoughtful analysis has gone into this and is continuing to go into it. The other thing that is important to know is that the legislation being proposed does not include the proposed funding structure. It sets up a preliminary board to get the thing going and then it will have a permanent board and it will be their responsibility to set the fee structure. It's not mandated in the legislation.

Nolan Young, Fairview City Administrator, stated the district area that we're looking at for the new district right now is the Urban Growth Boundary for Multnomah County. We at

one time had looked at the entire metro area because of all the benefits that Ray talked about. Right now we've settled on just Multnomah County as being the area that would be responsible. Then we're trying to determine how we charge different aspects in the County. We've got the drainage districts, potential looking at the storm water drainage area, the watershed area and those are things we're still working on.

Council President Ripma asked would the utility fee be paid by not just property owners but presumably everybody who gets water or sewer, or is it just the property owners?

Nolan Young replied a current concept is that the utility fee would probably be in the area of where the drainage districts are right now. The others would participate in through general obligation bonds or assessments through the Cities in which they're located. Those that are currently getting assessments would probably be those that got the utility bills.

Council President Ripma asked, is there any idea how much a single family home would pay?

Colin Rowan, Levee Ready Columbia Program Director, stated the utility fee is going to be associated with the ones that benefit the greatest inside the drainage basin. The broader area is for the capital work. On page 38 that has the map of the proposed boundaries. On page 42 that has the option 3 and if you're asking about a single family home that is within the watershed that would be option 3, the second one down and that's monthly. On page 39 of your packet it shows the overlap between the City of Troutdale and the Columbia Slough Watershed. It's very different for the City of Fairview, Gresham and especially the City of Portland. As far as within the floodplain there aren't many single family property owners within SDIC within the City of Troutdale.

Councilor Allen stated so the levees are there to protect property for the most part. But the compression causes this quite a bit of a problem as far as you can divert funds but you're not actually able to get more revenue out of a good sizable portion of the properties. That brings us to, how do we convert this into some kind of utility fee? I think this is going to end up getting challenged and we're going to have to have some pretty darn good rationale for how we justify and I would think that's going to end up in a courtroom and be under a microscope.

Reed Wagner stated I think that's a great point and I think there will be people who challenge it and frankly they should. We should be very careful about how we adjust our government structure and how we change the revenue structure within our system. Currently our storm water systems that protect property are usually under utility structures. I think the cost should be consistent with service level.

Councilor White asked, how many of the capital improvement projects are in our district?

Reed Wagner replied on the right side of the map you can see that the gate tower structure is part of it. But as I mention earlier, we have to figure out who benefits that the

most. Is it the properties to the east of the boundary or west of the boundary? The way it was developed and the way it's been used in the last couple big storms was the gate tower structure created relief to the forebay of the Sandy pump station. We've got to figure out exactly what the benefit is to each side standing. The pump station very much could play into the cost of improvements with this accreditation project.

Councilor White stated it's kind of reminiscent of the push to get a parks district in Troutdale. Troutdale is an A student on parks. We have more parks than Gresham that has over 100,000 people, for example. We have a recreational program and we're very resistant to join a bigger group because we felt like we've done a good job and we're going to continue to do a good job. I kind of see the same situation here. We're going to be exposed to compression on this and quite frankly we could probably get our levees accredited a lot quicker on our own than we could as being part of this larger, bigger government and less control for us as a City. It feels like the same type of scenario as the park district thing.

Ray Young stated that's a good point. It's like, can we do it on our own? I think from the City's point of view we need to ask, can they create a financing structure within the current SDIC that will meet any contingency that might happen in the next 50 to 100 years so they can pay for everything on their own without coming to the City and say they didn't calculate, we didn't charge enough to our property owners, we can't do general obligation bonds. We're going to need \$10 million from the City of Troutdale or Amazon's going away. We have to make sure that that doesn't happen to us as a City because you guys and your neighbors are going to pay for it if they can't pay for it on their own. Theoretically if the SDIC fails for some reason the Army Corps of Engineers could come in and say we're not going to work with you guys anymore. We're going to go to the mapping agency, which is the City of Troutdale, and say now the levee's yours. Take care of it. And we want to make sure our interest and their interest are the same and we want to make sure that they will have enough income to pay for whatever happens.

Tanney Staffenson, SDIC Board Member, stated we talked about the weir a little bit and I still have a few scars from those events. That was something from a time when SDIC was in a little different financial position than what it is today. Also to be clear, that was on the SDIC capital plan but needed to be facilitated to accommodate the development of Amazon. I still believe that was the right decision for everybody to make, get it built, get the development in here and move forward. I still feel that. But it was quite painful coming here and ask for money. The important thing here is the partnership that SDIC has with Troutdale. The weir is an example of that and we can go on and on and we can talk about how well things have worked. As far as these documents go the SDIC board got together on October 4th and discussed these in great detail. The bottom line for this is SDIC isn't going to do anything that Troutdale's not on board with because we're in this together. You guys are the map holders and we're responsible for getting it there and maintaining the system. We didn't have some cash for a while but you look at even this last year we increased our assessments 53%. It might not sound like a lot but that's a budget of \$1.15 million. And this year we're doing over half a million in capital projects. One of them is replacing a pump. We are trying to keep ourselves in a good financial position and move

forward and it's been a challenge but we know we have capital projects and we're doing capital projects now and there's going to be capital projects going forward just like there always are and we're trying to put money aside for those. Going to a new district, to me, the general obligation bond would be huge. It would be great to be able to spread that out over a bigger base and get more money. I don't know how the voters go for that. I look at how things are with the City and how things are with the district and how it's going to impact the City and I wonder if we go out and work on a bond, does the City have to fund part of the campaign to do the bond? And I don't know how much that would be. Would a bond potentially cause problems for another bond that the City might want? What we're looking at is landowners costs are basically going to go double what they are today. That's an interesting place because we need to raise our costs. The other thing I think of is we're going to a bigger district which has its advantages but when we tie in with Portland it always makes me a little nervous because I don't know how that will directly affect us here. Right now we do have a system where the money is collected here and the money is spent here. And you can see there's been times when we haven't collected enough money. I think we've really worked on that. Speaking for the City, you don't want to see the money from these developments and from these systems going to fix a railroad embankment someplace else. Because I don't know if they would fix something here if it was in the same situation. Costs have gone up a lot. The City has raised their costs and the drainage district has raised their costs. I look at Fed-Ex and in 2016 they were paying \$31,000.00 for basically water they didn't want. It went somewhere. Now they're paying approximately \$137,000.00 three years later. Travel America was paying \$9,400.00 and now they're paying \$37,000.00. Were they paying too little 3 years ago? Probably. Are they paying too much now? I can't answer that.

Tom Hansel stated the rates are going to be adjusted based on the district's needs. They know they exist in the drainage improvement company boundaries so the rates that are necessary for the properties that consist in the district are set to ensure flood protection. At the same time the Troutdale recovery project, the TRIP project, we have so many developable lots that will be coming online which will actually build our financial base even further. That's the picture that we're seeing in the financial forecast.

Council President Ripma stated it sounds like our district, Sandy, there's some skepticism about the pros of forming a new district. Am I reading it wrong or am I understanding it?

Tom Hansel replied the IGA has a charge to establish financing strategies to fund this new organization. The current model is formed under the statutory authority of the drainage district and the drainage improvement company. That's clear and set. But we're moving to a new model of whatever that is. This group will establish that. That's TBD. Once it's enacted SDIC will just be responsible for all operation and maintenance. All planning and accreditation will move to the new 11 member board. These are just questions that we as boards need to understand to ensure eventually that accreditation is achieved.

Reed Wagner stated that was how we formed this group initially.

Council President Ripma asked, can you confirm that the new IGA is not just to study possible formation structure and taxing strategies but actually shifts responsibility for meeting standards? It's not just studying new structures but it actually does shift responsibilities away from our district even now if we join in. Is that correct?

Reed Wagner replied the establishment of Levee Ready Columbia was first to do the inspection. What the partner said was we can't stop now we have to make sure we stay accredited. We need to keep the areas developable and keep bank loans going and insurance going. Because FEMA and the Corps sees this as one system we have to apply as one system. This IGA allows enough time for there to do the project improvements, not necessarily shared in an equal way that it is now but more likely by geographical areas. If we assume that it will take about 5 years to get those projects done and to actually go through the application process for accreditation. I say that with one caveat. There have been questions about whether Sandy which has fewer projects could go through accreditation alone and it's a great question and I think with all the right intentions. Could we set a good example for the area, show that we're trying to be proactive? And the answer is they see it as one system. If we were to make the improvements, move forward with accreditation in the Sandy, it would trigger the evaluation of those other districts and they may remap before they're ready to do so. I'd say the only caveat I would have is that could be considered but you probably want to do it in concert with your partners at Fairview and Gresham and others that could be triggered by that accreditation. We don't have an answer from FEMA if you can just splice up the system.

Colin Rowan stated it's an interim IGA that really is being developed to continue the work, continue the process. It really is more of a change in how Levee Ready Columbia functions more so than the change in governance while keeping an eye on the certification projects and helping us move through the feasibility study and work with the Army Corps of Engineers.

Council President Ripma asked, any thoughts on the State simply deciding to impose structure on us? I know there's advantage in working together and trying to propose something but, let's face it, this is going to be difficult if the State's going to come in and override it anyway.

Reed Wagner stated it's interesting how State's participate in a cost share perspective when it comes to capital projects and flood control. The State of California has its own department that handles flood control. The State of Washington has a department that handles flood control. It helps jurisdictions in understanding new regulatory standards, identifying costs associated with them, finding revenue both at the state and federal levels. I get the sense that our partners in other areas are asking the legislature to figure out how they can be similar in providing that support and funding projects at least on a cost share basis. I have yet to hear an interest in the State taking over the overall responsibility. We haven't seen that anywhere else either.

Evyn Mitchell, Levee Ready Columbia Public Affairs & Communications Manager, stated any new district would need to have the financing structure set up and so the State would

not be able to just come in and impose something on us. That can easily be referred statewide.

Reed Wagner stated I think that the idea of adopting the highest common denominators service level in any area has been a problem in every jurisdiction I have visited across the country that deals with this. I don't think we should shy away from recognizing that it's a true difference of perspective in different parts of the corridor that we're trying to manage. I think that we really should think about, what type of control do we have when it comes to a service level and costs in specific areas? That can be done through budget committees or zone councils or things like that. I think when you talk about the circumference of the levee system which all parts benefit from the entire part of that circumference and cross levees I think that's something that really should be looked at in a more systematic way and how consistent levels of service. When it comes to the control of cost and operations and maintenance I really think you should look at the opportunity of local control through some type of committee system or zone system. That's where I've seen it work the best.

Councilor White stated I kind of wanted to hear from Tanney because he is our liaison with the SDIC. We have to give direction to staff so I want to know what you would do in this situation.

Council President Ripma stated the issue is we have a responsibility to our citizens. It's a concern about losing local control of good infrastructure and when the need for additional money has come up the City is willing to contribute. Committees are fine but we would lose actual control, potentially and with so much of the capital improvement being elsewhere that our people would end up funding it. There's no easy answer. This is tough.

Ray Young stated first of all, understand, I'm an advocate for the City of Troutdale. I work for these guys. My position is not going to be fair. It's going to be what's in the best interest of the citizens of Troutdale quite frankly. The weir, while for a one-time expense, you can justify getting the Amazon deal done. If that argument keeps coming back every time there's a development in the TRIP property then as the City I'm going to say, out of those increased revenues we have to pay for sheriff, fire, streets, we have PERS expenses going up and we have needs for those tax revenues that come from those developments and theoretically the SDIC is supposed to pay for its own needs out of its own resources and we shouldn't have to pay for that. The concern is I don't know, do we have a prediction from SDIC for the next 20, 30, and 40 years what the SDIC income projects to be from development in its area and what its needs for O and M and capital are going to be? I think as a Council I would suggest that you need to be assured that if they're going to go it alone they should show us how they're going to pay for it without asking us for money to do so over the next period of time. I think the Council should at least ask that of the SDIC board. If we want to entertain that idea show us how it's going to work so that you don't come asking us for money every time something happens in the SDIC. That would be my suggestion because it will come out of you and your fellow neighbors pocket books. Maybe SDIC comes back and says, we'll be supportive of joining the overall organization

as long as the rates for our current landowners over 50 years won't be more than it would be anyway. If the new organization is not going to make that go higher, great, that's a good start. If your property owners don't have to pay for the capital improvement in Pen 1 there's not going to be an increase load to pay for that then maybe that's the response from SDIC is that they'll join but we have to get guarantees of these 2 things.

Bruce Etling, SDIC Board President, stated I think we've been pretty responsible. It's been about 50% increases over the last 3 years. We are a pretty young board. We're getting better at holding MCDD accountable for their maintenance and repairs. As far as projecting the future, we know what the repairs are for the levee right now. We don't have 5 pump stations. We have one and we're taking really good care of it. I think there's a lot of questions but generally you've maintained and paid for a levee over the last 100 years. If you get a larger governance structure, are you going to be better served? You have 4 people here all advocating for SDIC.

Councilor White stated I never got my answer from Tanney. I do want to compliment the SDIC. You guys do have an excellent track record here in Troutdale. I think you've proven that.

Tanney Staffenson stated we appreciate that. I would say for me any decision would have to be something that you could say, this has been for the best interest of the citizens of Troutdale and landowners within the district.

Councilor White stated I saw in there it looked like they were trying to increase the standard above what the Army Corps of Engineers are asking. Did I misread that?

Colin Rowan replied the standard which is actually a FEMA standard is insurance standards where they talk about a 100 year level of protection. That's an insurance standard that must be met for accreditation. What's being considered by the Army Corps of Engineers right now is based on what's called a design water surface elevation. It's basically a different standard than that 100 year flood.

Stephanie Hallock stated I would like to offer a suggestion as part of the next steps. We certainly realize that although a lot of us have been working on this for quite some time this is very new and seeming to require some decision making in a very short period of time. I would like to put a little bit of perspective around that. There's really 2 things before you. One is the new IGA. The partnership has agreed that beyond this Oregon Solutions sort of informal connection they want to hang together to figure out what to do through this new IGA. That's the mechanism for doing that. The first question for you is, do you want to stay at the table, sign that IGA, commit to continuing to fund while this is worked through until June 30, 2024 in terms of the actual project planning that gets done, the whole next steps on the district if there is to be a district? That can be one decision. When we go to the legislative session in 2019 a decision was made that encouragement of the local legislators to go to this session with this request. We want to go to this session with all of our partners supporting the request. If we're in a place now where you as our partners are not ready to go there yet and you don't know whether you're going to be

ready to go there yet we may be well coming back for the partners who might not be ready to go there yet to the 2020 session if we're not able to get through 2019. That's another thing for you to consider. Do you want to stay at the table through how this all plays out or not?

Ray Young stated Stephanie did a great job of separating the 2 decisions that are going on. Committing to the IGA means we're committed to the process of trying to get an overall governance structure. Theoretically at any point along this the Troutdale City Council could say they want to back out and they don't want to go that direction. So by signing the IGA you're not signing your life away that we have to go with a larger organization. Theoretically you could back out at some point. This continues the first process. Maybe a good question to ask is, why do they want to do the larger organization or do you want to do the larger organization? It might be helpful for us to hear what another district's landowner says.

Mike Wells, MCDD Board President, stated I am personally in favor of joining the districts together in this new form that's being drafted for the legislature. MCDD is probably in the best position of all 4 districts to go. We have our staff, we have a relatively in-tact system that requires probably the least amount of work for landowner or acre of the totality. I looked at this at the standpoint of risk and as a developer that's my job is to manage risk. First you have to identify what the risks are then figure out how you litigate. The risks I point out are several. One is that if there was a failure at one of the districts it has a high probability of causing either chaos or damage to one of the other districts. The Corps looks at it as one system. FEMA looks at it as one system. It's one big river that would flood us and so it seems to me there's a lot of rationale to have a common front on managing that risk of fighting that flood that would occur. I think it's worth saying that we have a feeling at MCDD that we want to consolidate. We want all the districts to consolidate or be independent. As the regulations have become more and more complex and more difficult to comply with and contractual structures have gotten to be this tangled ball of yarn with many things divvied up 4 times and 4 invoices and 4 checks over and over, we don't want to go that road anymore. So our sense of it is that if one of the districts doesn't want to join in to the rest that we don't want to continue to provide service to that district. So we would ask it to transition to handling its own. If there are benefits for a certain district to go it alone there's also some drawbacks. They would need to be more independent. I think that has to be evaluated in context. The final comment I'll make about risk reduction is that if things go well, there aren't big storms, the existing infrastructure holds up well, it would probably do better for an individual district to go alone. But if there are horrible storms and catastrophic things happen then there may be benefits of spreading that risk so that it's more likely that the federal government will help in the form of the Corps and FEMA help. That help might be not just in getting the levees accredited but major repairs if there is a catastrophic situation as well as spreading the load on funding to a broader group than just the landowners within that particular district. This new boundary does that.

Council President Ripma asked, has anyone signed this IGA at this point?

Stephanie Hallock replied no but the IGA is being circulated. This Wednesday the 24th is the next meeting of the IGA group with our attorney. Tanney and Ray will be there. There's not much that's going to change at this point and then we'll need the budget to be approved. Then it will come to the elected officials for signatures hopefully by the end of the year. If we see that everybody is going that way we do have a meeting of all the elected officials associated with this project set for December 7th and if it's possible to have a signing ceremony with all the parties at one time we would certainly arrange to do that. Our goal has always been trying to get this signed by the end of the year.

Council President Ripma stated this has been very helpful. I wonder if it's possible to just have the IGA directed toward studying the formation of the district and structure and not move forward with this requirement for joint certification with FEMA. I wonder if that was discussed. It's way late in the game to bring something like that up but I can't be the first to have thought of that. Somebody said we can always pull out.

Colin Rowan stated the key parts of that IGA are definitely to continue moving towards a new governance structure and make sure that work continues. The reason why the certification pieces are in there is because in 2015 when the declaration of cooperation was signed by the project partners it was to complete the certification work and it was also to make sure that all 4 districts stay active in the rehabilitation inspection program. That's the districts direct responsibility contractually with the Army Corps of Engineers. And as the Army Corps of Engineers has expanded what their interest in this levee system is they've actually been able to include in their scope this feasibility study and certification project. The scope is beyond certification projects. It also includes areas where we have issues with maintenance and operation or access and it includes some of the pumping systems. To remove those certification projects and basically effectively remove the feasibility study would mean that that's sort of unfunded.

Councilor Allen stated I can't help but notice how this has changed from a few years ago. A few years ago we were talking about cooperation, working together, finding out what the deficiencies are and applying as a group for certification and I was assured that that's the direction we were going to go. And now what I'm hearing is join us in a new regional government or you're on your own. How different that is. I find it kind of shocking actually.

Reed Wagner stated I recognize this is complex. I'm still going through the discovery process and I started this 5 years ago. I just want to thank everybody for their consideration and I know that with the intention of these 3 bodies and the others that are partners that we're going to reach the right decision for our communities. Thank you.

3. Adjourn

MOTION: Councilor Ripma moved to adjourn. Seconded by Councilor Hudson.
Motion passed unanimously.

Meeting adjourned at 8:05pm.

Casey Ryan, Mayor

Dated: _____

DRAFT

ATTEST:

Kenda Schlaht, Deputy City Recorder

DRAFT

MINUTES
Troutdale City Council – Regular Meeting
Troutdale Police Community Center – Kellogg Room
234 SW Kendall Court
Troutdale, OR 97060

Tuesday, October 23, 2018 – 7:00PM

1. PLEDGE OF ALLEGIANCE, ROLL CALL, AGENDA UPDATE

Mayor Ryan called the meeting to order at 7:00pm.

PRESENT: Mayor Ryan, Councilor Ripma, Councilor Lauer, Councilor Morgan (via phone), Councilor White, Councilor Allen and Councilor Hudson.

ABSENT: None.

STAFF: Ray Young, City Manager; Kenda Schlaht, Deputy City Recorder; Ed Trompke, City Attorney and Chris Damgen, Community Development Director.

GUESTS: See Attached.

Mayor Ryan asked, are there any agenda updates?

Ray Young, City Manager, replied there are no updates.

2. PUBLIC COMMENT: Public comment on non-agenda and consent agenda items is welcome at this time.

No public comment.

3. CONSENT AGENDA:

3.1 MINUTES: September 11, 2018 City Council Regular Meeting.

MOTION: Councilor Allen moved to approve the consent agenda. Seconded by Councilor Ripma.
Motion Passed 7-0.

4. PROCLAMATION: Community Planning Month.

Mayor Ryan read the proclamation.

5. PRESENTATION: A presentation of the City of Troutdale logo made entirely from Legos.

Mayor Ryan stated Troutdale resident, Brett Hooper, has a presentation of the City of Troutdale logo made entirely from Legos.

Brett Hooper stated I'm a fan of Legos. For the past 9 years I've gotten back into it and I'm part of some clubs and some groups. I'm trying to do as many different categories that a lot of the competitions do and one of them was art. I wanted to come up with the best subject matter and so the coolest thing was this. It took me about 3 months and the other part was that I wanted to use all pieces that I had in my collection that weren't sorted. This is all stuff I just grabbed and put together. Just a couple weeks ago there was a Lego show in Seattle and I took it up there because I had it finished in time and I won Best Mosaic. I plan to show it in March at a show here in Portland.

6. PRESENTATION: A presentation from MetroEast Community Media regarding Community Media Day.

Marty Jones, MetroEast Community Media President, stated this is the third year for Community Media Day (a handout was distributed, a copy is included in the meeting packet). It's a national day of thanks and a way for us to connect with our communities and with the people that support us. Without your help and you all being a part of the Mt. Hood Cable Regulatory Commission and your IGA with Fairview, Troutdale, Wood Village, Gresham and Multnomah County we wouldn't exist. You'll see in the handouts there is a media kit and there are 2 pamphlets that are highlighting what we've been doing at our Rockwood DIY and the work we're doing in digital equity inclusion and also the work we're doing in Gresham at our offices at our main studio which is in downtown Gresham. We're bringing in people from as far away as Salem, Battle Ground, Hillsboro and points all in between. When we say community media center, MetroEast is really a community media center. We're housed in your jurisdiction but just know that a lot of people are coming here to work with us and to share their talent. Local programming is disappearing as you may or may not know. There's less and less of it and I thought I'd share a story with you. I think most of you probably heard of a little company called Netflix. They had a great earnings call the other day. They in 2017 at the cost of \$8 billion created 1000 hours of original programming by and for Netflix because they know that their days are numbered. They're the great disrupter and now they're about to be disrupted because Disney is going to withdraw all of the Star Wars movies and Marvel movies now that they've bought 20th Century Fox. They're going to hold all of that back and they're not going to send it to Netflix when their contract ends. So they're spending billions of dollars and they're creating all of this original content and when I saw this report it happened to be the day after we finished our activity report that goes to the Regulatory Commission. They spent \$8 billion on 1000 hours of original Netflix programming and right here in your jurisdiction MetroEast produced with our members 1,912 hours of original programming. That's the power of what you're supporting. We are creating twice as much content as Netflix did in 2017. They've got a much bigger budget and a lot more stars but just think about it. Not only your Council meetings but your sister City Council meetings, planning meetings, school board meetings and then original content that is created by your citizens. You might also like to know that our satellite feeds deliver over 15,000

hours of additional content over the course of the year on all of our 8 channels. Those are things coming in from NASA, school districts, and classic arts. A lot of content is going into your constituent's households in addition to your Council meetings. I want to thank you for that. I want to tell you about a humongous threat that could make this all go away in a minute. When I took the job I knew that people cutting the cord was going to be a major issue. A lot of people don't understand that that little \$4 or \$5 franchise fee is what gets turned into revenue for you all and gets turned into revenue for us. That fee is part of the public right-of-way. The thing that we all own as citizens whether we're cable subscribers or not are these phone poles and infrastructure that goes with them. Now 3 of the 5 FCC commissioners are about to sell us all down river. They're about to go into the hip pocket of industry and say that you can no longer levy for that public right-of-way. They want to take that away from you. And in the process of doing that, if you keep it they're going to say there's a perverted interpretation of the very successful 1984 Cable Act that was bipartisan and has worked for 30 years. They're putting a very perverted twist on that and saying that if you keep community media then all of these in-kind services, we want to charge for. These in-kind services are negotiated in the contract that you all have. We get to have so many channels, we get so many services, schools and hospitals get to have the internet, the library gets internet and these are pre-negotiated. So the twisted thinking that these are somehow costly is absurd. The fact that they want to then go into the 5G space, come in and put 5G wireless on your poles that we all own and not pay you a regular fee but pay you a one-time flat fee and walk away and make billions of dollars as an industry is preposterous. The fact that 3 people sitting in Washington with a skewed, lobbyist influenced vision of the cable act can take all of this away is really much more threatening than people cutting the cord. The cutting of the cord is very threatening. We had a \$200,000.00 reduction in our budget this year. And you know that we have a small budget. We're not that big of an organization. We're delivering a lot of bang for the buck. We're interacting with your citizens, school children, teachers and we're spreading your message out to the community and the fact that 3 people sitting in a room with a perverted annotation of the law could destroy all of this, it's scary. There's a lot more information to come. We're going to probably be a part of several lawsuits and coalitions of lawsuits. I think that the cable commission is watching this very closely so they'll be representing you all. But I just wanted to put this on your radar. The whole reason this exists is because there's a public benefit that comes with that. It's a real simple relationship and it's a negotiated relationship and the fact that they're trying to take it away is of great concern. We will be sending you some information and we will be keeping you posted and just for the record you can go to our website metroeast.org/fcc and get some more information.

7. REPORT: A report for East Metro Economic Alliance.

Jarvez Hall, East Metro Economic Alliance Executive Director, stated we want to thank each of one of you for giving us an opportunity. My name is Jarvez Hall and I'm the Executive Director at East Metro Economic Alliance (EMEA). Sitting next to me we have Dan Corcoran who is our current Treasurer and soon to be Vice President. And coming up before you a little bit later is our soon to be, even though we haven't officially voted yet and we haven't 100% told him yet, next President, Ken Anderton from the Port of Portland. A little bit about EMEA if you don't know about us, we're East Metro Economic Alliance which you are a part of (a handout was

distributed, a copy is included in the meeting packet). We are a non-profit organization comprised of businesses, chambers and public agencies working together to shape the future of the East Metro region.

Jarvez Hall showed the Council a PowerPoint presentation (a copy is attached as Exhibit A to these minutes).

Jarvez Hall stated some of the major events coming up, you have a handout in front of you for A Toast to EMEA event. We're going to be celebrating 15 years of economic development. Some of you may have been around from the beginning but it has been 15 years and we're going to celebrate that on Thursday, November 8th from 5 – 7pm at Bumpers. You can reserve your spot online and we're also going to have a donation station there to help support the Rockwood Boys and Girls Club.

Dan Corcoran stated as a business owner in the east metro area there's lots of business groups, lots of government silos, school silos and all those things happen individually. EMEA is one place where those actually come together and those things can work for both short term immediate issues where the freeway's closed and we work with Metro and waste haulers on the east side so that we can find ways to keep service going throughout the summer and get it diverted out to Wapato and can resolve that with members in the EMEA quickly and also toward long term goals with transportation where housing, schools, and hospitals are located. As a business owner and as a member it's been incredibly helpful and we thank all of you for your partnership in the City here.

Mayor Ryan stated I've been involved for not quite 15 years but maybe 12 of those.

Jarvez Hall stated we're inviting everybody out to come celebrate with us on November 8th.

8. REPORT: An annual report from the Port of Portland.

Emerald Bogue, Port of Portland Regional Affairs Manager, stated thank you for having us here tonight (a handout was distributed, a copy is included in the meeting packet). The reason we're here tonight is because in 2016 we wrapped up a Troutdale Airport Master Plan process and at the end of that process we agreed to continue working together on the success of the airport and also on the success of the adjacent industrial land. We've done that and we work together really closely. We also agreed to come back here once a year and talk about it and give a report to you all. I'm here tonight to give a report that is not super eventful and that's a very good thing, that's good news. I want to share what's going on at the airport and at TRIP. With the airport the good news is everything that we anticipated happening with the airport master plan is coming to fruition. Operations are staying at a level that we expected. We're almost done with the South Side Study. That will be a development plan for aviation uses on the south side of the airport. It verifies that the south side of the airport can meet existing and projected demand and that's consistent with the master plan. As we move forward with runway reconstruction in the summer of 2021, we are engaged in conversations with tenants around how to ease the impact. There's no way to prevent some impact but we're in touch with the

FAA surrounding the potential of using the parallel taxi way as a limited runway during construction. The environmental assessment will kick off next year and that will involve further public input. As far as the adjacent industrial land, TRIP, they had a very big year. A lot of growth at TRIP with the movement of lots 3 with FedEx Ground expanding onto lot 3, lot 10 with CRG and lots 11 and 12 for the Bonneville Power Association. Amazon as we know is operational and is set to hire likely 2000 employees. And I think we're all familiar with some of the wage pressures that are going on at the park that aren't a bad thing. FedEx and Amazon are having to compete for the same employees and it's driving wages higher than we originally had anticipated. We like that. That's a good thing and it's something we want to see more of. With the 3 smaller remaining lots, lots 4, 5 and 9, we are looking for opportunities best suited for the smaller lots. The better way of putting that is all of our business parks have a pretty healthy mix of uses. There's logistics and distribution at every park but there's also some higher end manufacturing. It might be fewer jobs but better jobs. These are good opportunities for smaller lots and we're going to be really looking for that. We're looking for that pretty consistently throughout our industrial land program now. When it comes to developing large lots of industrial land our role has been to develop the land and then see what the market brings. The market is very much bringing logistics and distribution. So we have to be pretty selective in trying to find some other employers that offer career ladder higher wages. That's the type of thing that we were hoping for, for these smaller lots. The natural resources aspects of the park continues to evolve in a good way. There's hearty planning for the 40-Mile Loop extension going on. The mitigation sites are completed and we have an operational weir which may sound very boring but that is actually a very big deal. Also we worked this year with the Confederated Tribes of the Grand Ronde to install some new signage for some culturally significant sites that were found there related to fruit drying that took place near the river. Your staff has done a dynamite job in every single way and especially around advocating for better transit to the park. There's rapidly increasing employment at TRIP and people needing to access the jobs at all hours so we are pleased with the Line 81 extension. We will share in your advocacy to do more. We're pleased that TriMet has added a new stop and even more pleased that they've secured some funding for the weekend shuttle to accommodate shifts that are not otherwise accommodated. Your staff is dynamite and very nimble and very responsive to a lot of the needs that come up in development.

Mayor Ryan asked, what about lot 13?

Emerald Bogue replied lot 13 is under Phase III. From what I understand, that lot has a lot of natural mitigation issues.

Ken Anderton, Port of Portland Senior Manager Real Estate Development, stated that's located in the City of Fairview as well. The Fairview utility extensions need to happen because it needs to improve access to the lot. And then it's fairly upside down in terms of development cost to make development feasible. It has a bunch of high tension power lines that go across it.

Ray Young asked, is there plans on the north side of the airport to at some point turn that into industrial land also?

Ken Anderton replied that's one of the reasons we did the South Side Study to figure out how to integrate the current functions of the airport that's happening on the north side to move them over to the south side and how we can do that in a cost effective way. I think we've been very successful with our plan. We've figured out that we don't need to impact wetlands which are expensive to mitigate and then we can reuse some infrastructure that's already there. Eventually the answer is yes. It's not going to be tomorrow but it's going to be in the 5 to 10 year range that will happen. It's an opportunity that will generate additional airport revenue but also it will generate additional tax space for the City of Troutdale.

Mayor Ryan asked, should we expect anything soon on lots 4 and 5?

Ken Anderton replied it's graded and it looks fantastic to show. We've showed it to a lot of people but we've been very picky in terms of prospects. We feel like we have a pretty good distribution logistics mix with Amazon and FedEx. This is happening in all of east counties, Gresham Vista as well, we're looking to be a little more selective in terms of the mix in the park. We've had some uses that wouldn't move the deal on the wage front or investment front.

Mayor Ryan asked, so you guys are really committed to that?

Ken Anderton replied we are very committed. We're in the midst of a little bit of a pivot in our industrial program in terms of we're looking at probably a little smaller lots in the future but also more of a manufacturing base.

Emerald Bogue stated it also just so happens that the region is just about out of large lot industrial land. What's left is land that's pretty hard to develop in smaller sites. So if our job is to promote economic growth and grow good jobs, there's opportunities to do that on smaller sites. But it's a lot easier said than done.

9. PUBLIC HEARING / ORDER: An order approving the site development review and variances for a proposed development on two parcels with an approximate total are of 8.82 acres located at the intersection of NE 242nd Drive and SW Cherry Park Road.

Chris Damgen, Community Development Director, stated this is the Eagle Ridge Apartment Home application 18-017. This is the latter half of the overall application proposal. The property we're talking about is at the corner of 242nd and Cherry Park Road.

Chris Damgen showed the Council a PowerPoint presentation (a copy is attached as Exhibit B to these minutes).

Councilor Ripma asked, is the 22 ½ setback along the southern and eastern property line the minimum required?

Chris Damgen replied that's the setback standard.

Councilor Ripma stated if the variance along the west and north was not granted for whatever reason. They would still have to have 22 ½ setbacks along the east and south side.

Chris Damgen stated yes. That would lead to one of two things. Either they would have to recalibrate the layout that they're proposing or they would have to seek setback requests from the south and the east property. And that would not be something that staff would be in support of. We would much rather see an impact on the north and west side.

Councilor Allen asked, can you clarify the relationship with the roadway improvements that we had been talking about earlier for a dedicated turning lane and a merge lane?

Chris Damgen replied to the 242nd issue, the way it's currently described, it would be a right-in and right-out turn. As far as the actual construction of turn lanes I do not believe that was covered in that approval from the County. What was approved was on the north side on Cherry Park Road, it was the auxiliary lane which would allow for that right turn movement in there and that acceleration lane once you're past the complex once it tapers down to one lane. That type of improvement would be accomplished within the right-of-way dedication. And then there's an addition to that of a 6 foot utility easement where there would be some overlap of where the sidewalk would have to go and the utilities along the frontage. So in addition to the 10 foot right-of-way once that's been dedicated there's an additional 6 feet that the applicant has to convey in easement to Multnomah County for the purpose of utilities. All in all, staff recommends and Planning Commission has recommended to approve this by Order as outlined by the findings of fact that were contained in your report. Again, the only amendment that we would propose is to include the newly amended conditions from Multnomah County based on the memo from October 18th which speak to the decisions that were made in August from the re-zoning application.

Councilor Lauer stated we went from a field, a pervious surface, to an impervious surface. Do we not have any requirements for how to mitigate the water that now is going to run off of that surface? Do we have any bio-swale requirements on impervious surfaces this large?

Chris Damgen replied with site development review we do, the Public Works review looks at storm water retention and there's a manual that our staff utilizes that determines the appropriate discharge retention. I'll let the applicant speak a little bit more to the specific design solution they have. There are some Public Works conditions of approval that speak to the standards that the applicants have to do either in their plans or installation or ongoing maintenance that they have to do in order to make sure that works. That's also another reason why we have a relatively high landscape requirement for these types of developments because there is a lot of impervious area and it's got to go somewhere.

Ed Trompke, City Attorney, stated when the applicant comes up, if you look after page 55 on the back of the first page of drawings there's a schematic and it says in the area that's along southwest Cherry Park at the intersection of 242nd it says proposed storm planter/infiltration pond. So there is a pond on there.

Councilor Morgan asked, do you feel that all the necessary requirements have been made to make this project move forward smoothly to make sure this is the best thing for our community?

Chris Damgen replied yes. We believe that's the case. A lot of times we will get applications for just a re-zoning request and we wonder what's going to happen. The applicant has been very upfront for the better part of a year for the intention. They produced the site plan early on and they combined it with a consolidated application for map amendments. That's a huge risk. We don't see that too often in the development community but it leads to greater comfort from a staff level to make recommendations on policy and on mapping changes to this body. The applicant has also gone to certain other extents to seek additional approval from you in the form of the variance requests in the spirit to be as minimally impactful to the surrounding areas and thus creating potential impact or variance impact along rights-of-way and not against the neighborhood.

Andrew Tull, 3J Consulting, stated we do believe we have a great project here before you tonight. I have a couple of slides to show you to give you some idea of what these buildings are going to look like

Andrew Tull showed the Council a PowerPoint presentation (a copy is attached as Exhibit C to these minutes).

Andrew Tull stated there were full elevations and renderings in some of the plans but as we've gone through this process the pages before you have gotten a little smaller. We are requesting a couple variances. The first being for the front yard setbacks. The standard for 3 story buildings within this particular A-2 zone is normally 20 feet but because we have 3 story buildings we're pushed a little farther based upon our building height. We don't mind having a 10 foot setback along the frontage roads. This is a very urban corner and placing buildings a little closer to the street we actually think is kind of nice. We have a unique constraint here in that this site is not rectangular and easy to lay out. We've got this strange bit of geometry along the front. 10 feet at a couple locations along 242nd really allows us to utilize the site that's left for us to design to include a nice building configuration, a pathway system and then we have good cross connections across the site as well. It's an amenity laden plan. When you've got this many units you can really put in some nice amenities. We have a children's play area, pool, clubhouse, garages and covered parking areas. As Chris mentioned during his presentation, Section 8 of your code details all the standards that you have to meet for multi-family buildings. These touch on things like the amount of outdoor living space provided, the amount of articulation in the building, the amount of glazing or the amount of windows that you provide on buildings and we have no problem meeting any of those standards. It's actually kind of a high bar to meet but the intent of those standards in including them in the code is to make really comfortable living spaces. Chris had sort of touched on what happens if either of these variances is not approved. I should mention with that landscape variance, as we tighten up the site plan and go into construction and review, if that variance is approved we may not end up actually exercising it in any way. It is just a very minute amount of land, only a couple of parking

spaces, but as we tighten things up a bit we may hit the 25% anyway. It's really the yard setbacks that we're interested in. If we don't get the variance approved we have options. We could reconfigure the site, shrink the buildings a little bit, take away some of the surplus in parking, look at how we're configuring amenities and maybe reduce some of that to keep the building footprint. It would require a fairly significant overhaul of the site plan. We like this building plan. It provides a significant amount of larger units. Housing developments of this type attract a wide variety of different kinds of tenants. This particular complex is going to have 78 one bedroom units, 120 two bedroom units and then 18 three bedroom units. Two bedrooms are easily the most in demand type of unit based upon the market research that went into this building design and we're trying to accommodate what we think is going to be the highest demand unit while also providing opportunities for 3 bedroom units. As staff has pointed out, the proposed applications meet all of the city's approval criteria and the applicant has willingly accepted all of the proposed conditions of approval including the Multnomah County revisions that came through earlier this week. There was a question that came into the record that I thought I would mention. It was a neighbor who asked questions about the pump station. Where it's going to be located, is it big, is it noisy? Because it's a private pump station it's going to be very small. You won't even notice it when you drive in and it's going to have a backup system. We can't allow that system to fail. With regard to the corner that I showed you before, we really want to make this a functional, usable and nicely landscaped area that looks attractive to folks driving by, to potential renters and users of the property, and presents well. If you have thoughts or feedback about the 2 designs we're happy to take any feedback you have. There were a couple of questions that were asked of staff which I'll try to answer. The first item is storm water. Because we're in this particular part of the world we get a lot of sandy soils here and your City does have a very robust storm water management manual. We simply can't just allow runoff to run off of roof tops and impervious areas and affect other properties. We're able to propose a large infiltration basin so all water will be collected and routed into that infiltration basin. It will be treated to meet DEQ standards and then it will infiltrate on site. I wanted to mention as well that Multnomah County has reviewed and approved our proposed road configuration, lane configuration and the project in general and they have recommended approval with the modified conditions. With that, we do accept staff's recommendations and all the proposed conditions of approval. We would kindly request an approval from this body tonight with the amended conditions of approval from Multnomah County.

Mayor Ryan stated I think the arch would be well done. I would personally like to see somewhere on there that lets people know that they're in Troutdale. I think that's one thing that's been important to me. I want them to feel like they're part of our City if you could put on the arch Troutdale. I was thinking something with Troutdale, Oregon with the fish. We've heard some public comment that people who live in apartments aren't really citizens of your City which I think is a horrible statement to say and I would be embarrassed if I said that on record. The point is that I think it would be nice for them to feel like they are part of a community and that they're welcome to live here.

Andrew Tull stated we will definitely take this feedback back with us.

Ed Trompke stated the City Manager just mentioned the possibility of a community enhancement grant from the waste stream funds that could be used if you were to apply for a monument or maybe Rip Caswell could make a small statue for an entrance way to the City.

Councilor Ripma stated I still have some questions about the setbacks. I don't have a clear answer on, what extra setback is being offered or being planned into this along the south and east?

Andrew Tull replied it's not necessarily that we're proposing an extra setback along the south and the east. What we're proposing is what we think are larger livable units. We also think we're providing a great amount of on-site amenities because we're able to spread out a little bit more and we're able to deal with the unique geometry that the northern side of the site presents to us. It's not necessarily required in code that if you're going to reduce one setback you increase the other. But the overall net effect has to be better for the site and we feel like we've achieved that through the quality of the units that are being proposed, size of units and also through additional parking and the provision of well-considered open spaces in areas where we have the opportunity to really make a statement about this being an entry to Troutdale.

Mayor Ryan stated my understanding is 3 story buildings in a property zoned like that needs to have a 20 foot setback. It has to have minimum 20 feet.

Andrew Tull stated Chris mentioned that that's a different standard than we're used to seeing in a lot of other jurisdictions. But yes, 20 foot would be the standard.

Mike Robinson, Applicant's Attorney, stated my mailing address is: 1211 SW 5th Avenue, Ste. 1900, Portland, OR 97204. The answer to Councilor Ripma's question is found on page 10 of the application narrative. There's a minimum of 20 feet on the south and east property line. When you calculate the required setback based on your code because these 3 story units, the setback is 22.5 feet. That's what the application says and that's what your code requires and that's what's shown on the site plan.

Councilor Lauer stated so 22.5 is the minimum setback.

Mike Robinson stated because it's a 3 story building.

Councilor Ripma stated it's nothing extra but it does meet the requirements.

Councilor Ripma asked, do you agree with the numbers that were just stated, Chris?

Chris Damgen replied yes. That is the staff recollection and we took a look at the application and the code.

Councilor Ripma stated I was interested in knowing whether the granting of the variance on the north and west side resulted in some additional setback on the south and east side. The answer really is no in this case. I'm not saying that's bad or good. It meets the requirements but the answer is no, there is nothing extra. One of the concerns of neighbors was the 3 story buildings right near their properties. That's why I'm asking and you've explained about Hogan cedars being put in and I understand the quality of the apartments. This all has to be taken into consideration. I appreciate the answers.

Mayor Ryan opened the public hearing at 8:47pm.

Marilyn Pierce, Troutdale resident, stated I live at 2260 SW 18th Way. We sit next to the east of this new property. I'm looking at how many car spaces are they bordering from the front of our acreage past our house.

Mayor Ryan stated 25 spaces and 50 feet from the property.

Andrew Tull stated it is about 45-50 feet between the nearest car parking stall and Marilyn's house. There's a setback requirement for parking as well. You can't just place parking right up against a property line. There's a 12 foot landscape buffer requirement which we intend to fill with evergreen shrubs. We certainly are sensitive to the fact that we don't want headlights from the parking lot shining into our first floor units and we'll be landscaping those areas as well. Nor do we want headlights from parking lots shining into our neighbors homes. We're very sensitive to that. It's not a 5 foot setback. It's a 12 foot setback. We can fit a lot of plantings in there.

Marilyn Pierce asked, is there not going to be a fence?

Andrew Tull replied I don't know but often times we do put fences around projects.

Marilyn Pierce stated I'm talking about all the way back from the front of our property to the back of our property. We're going to be in a fish bowl. We have an acre in the front of our house and an acre in the back. People look at that as it's to be used. My husband keeps it mowed. I look at they will use our front for walking their dogs and I know that's what they'll do. The back, the kids will come play and they won't see it as anything other than. And I don't care if you put signs up or whatever, we're still responsible.

Councilor Lauer asked, what's the footage from the north end to the south end of that straight away?

Andrew Tull replied 639 feet.

Councilor Lauer stated and I'm not suggesting we wrap the entire east and south but I understand where you're coming from. Your property is my favorite property in all of Troutdale. It's beautiful. You do a fantastic job. It's immaculate. But I see your concern and I can see

where that would be a huge impact on their livability. Not only having headlights shine into their house and then two, having the people see that big....

Andrew Tull stated that's why I'm fully prepared to say the applicant will either propose to put a 6 foot cedar fence along the entire shared property line with Mrs. Pierce's property or the Council is welcome to impose a condition of approval on us to do so.

Mayor Ryan stated I would personally be very comfortable with that because I think Marilyn makes a very good point.

Andrew Tull stated we do too.

Mayor Ryan stated I'm comfortable with that but I'm not comfortable with the cedar fence. I would be much more comfortable with a plastic fence, something that's going to stand up. Cedar fences don't last forever and with the winds we have out here. Something that's not going to need to be treated and waterproofed and stuff like that.

Ray Young stated even a 3 or 4 foot cyclone fence imbedded in the bushes along there. Really you don't even see it and it lasts forever and might be easier to do. This is probably something they need to propose to staff.

Mayor Ryan stated I think there would be 3 criteria. Something that's going to protect people from coming in there and also lights and the noise.

Andrew Tull stated I would amend any condition of approval to that effect to also say that it need to be mutually agreeable between the neighbors. We're happy to work with you.

Mayor Ryan closed the public hearing at 8:54pm.

Mike Robinson stated it's clear that we'll accept a conditional approval. I gave Chris just a very simple sentence and I think the Mayor enhanced what the condition would say so we're comfortable with that. The only thing I would add is if you have questions you haven't asked, please ask us. This is our last opportunity to answer them.

Mayor Ryan stated I would like to say too, the comments about making it have a real Troutdale feel to it and last meeting we were here I talked to Barry and I told him this is a big project for us. It's a very important corner for our City and to make us proud. I want to say that all the public testimony that's happened since the first time this happened 2 years ago did not go for nothing. Because of all that public testimony this is a lot better project than I'm assuming it would have been if it was approved the first time. I firmly believe that it's way better than it would have been. I hope that public understands too that it may not have had the end result that they wanted but the project is way better than what it was going to be.

Councilor Ripma stated you put up a document that had these additional conditions of approval and I'm still not clear. Does this Order include the change to the conditions of approval having to do with the County commitment?

Chris Damgen replied I'll also defer it to the City Attorney in case I get it wrong. Staff's understanding is that you have adopted proposed findings from Planning Commission and they contain the conditions of approval that were passed forth from May. And if you need to incorporate the recent suggestion about the fence as well as these new conditions from the County you basically make a motion to adopt the findings and conditions as written with the following insertions: the additional planning condition of approval for the fence and then the second would be the replacement of Multnomah County conditions 1-10 with the conditions within this memo.

Councilor Ripma asked, can you show me the whole memo?

Chris Damgen replied yes (the memo is included in Exhibit B, attached). Effectively, these conditions are very similar to what you have.

Councilor Ripma stated that was the list of 10 things.

Chris Damgen replied right.

Councilor Ripma stated go down to number 9.

Chris Damgen stated that effectively speaks to the fact that the applicant is intending to construct the improvements, not wait for a proportionate share type situation as had previously been called for.

Councilor Lauer asked, the roadway improvement, it still needs to be completed before occupancy is taken in any units, correct?

Andrew Tull replied yes. They need to be completed prior to occupancy.

Councilor Allen asked, Mayor, can we have staff write up the motion with the changes that were suggested?

Chris Damgen replied sure. The proposed motion that would be entertained by Council to approve the action along with the amendments would be to move to approve the recommended draft findings and proposed conditions of approval from Planning Commission with the following amendments: the first would be a new planning condition, number 11, applicant shall install a 6 foot high fence of a mutually agreed material between applicant and homeowner to the east on the entire east property line. And the second condition would be to strike through Multnomah County conditions of approval 1-10 from May 29th to be replaced with Multnomah County conditions 1-10 from the memo dated October 18th.

Councilor Ripma stated on Cherry Park the description of the additional lane and bike lane and sidewalk and so on all sounded like way more than 10 feet of dedicated right-of-way and I'm still not clear in my mind where the 10 foot right-of-way fits in with the lane and the bike lane and all that.

Ed Trompke stated there's existing right-of-way and part of the lane will be in the existing right-of-way and part will be in the newly dedicated right-of-way. Then there will be a 6 foot bike path and then a sidewalk of width I don't recall.

Mayor Ryan stated you said some of that goes onto the property, right?

Andrew Tull replied yes it's difficult to tell sometimes where an existing right-of-way line sits. There's no clear demarcation for it but in this case the geometry works with a 10 foot dedication and with a 6 foot easement.

Councilor Ripma stated thank you.

MOTION: Councilor Hudson moved adoption of the order as previously stated by staff. Seconded by Councilor Lauer.

VOTE: Council Allen – Yes; Councilor Hudson – Yes; Councilor Ripma – Yes; Councilor Lauer – Yes; Councilor Morgan; Mayor Ryan – Yes and Councilor White – Yes.

Motion passed 7-0.

10. STAFF COMMUNICATIONS

Ray Young stated I'm excited to announce that Imagination Station this week is actually getting the rubberized surface poured. As long as the weather isn't a torrential downpour they should finish it in the next week. We still are missing a couple playground parts. As soon as that's done we'll have a grand opening sometime probably in the middle of November so we can have a community party. Along with that I have been in consultation with the Grand Ronde Tribe and they have a cultural affairs person who just loves to come to places like this and work with you to figure out what they can do to enhance it and if we want to have them create art for us they will sell us art to put there that will enhance and honor Native American presence in this area. I'm having parks work with them to come up with some solution to add to that. Second, on December 5th the Citizens Advisory Committee is going to have the rate burdened public meeting, the one that the State requires. It's December 5th at 7:00pm and there will be more information in the Champion paper for that event. Next Tuesday night the Sheriff's Office at 5:30pm in this room is having their community meeting to get feedback from the community of Troutdale. On Thursday, November 8th the Planning Commission is having a work session at 7:00pm to discuss the upcoming flood management regulations that are going into the development code. On November 27th the Council meeting will probably be a one issue meeting to have the first hearing on that ordinance but if you want to get involved in the ground

floor with the Planning Commission of what those rules are going to be that is going to be November 8th at 7:00pm. Finally, November 6th is our election and the County tells us that if you get it into the mail by November 1st you increase your chances of making sure you really get counted.

11. COUNCIL COMMUNICATIONS

Councilor Hudson stated Reynolds High School theatre has their fall musical starting Thursday, Friday and Saturday and then also the following week Thursday, Friday and Saturday. There is a matinee as well. The play this fall is Cinderella Live.

Mayor Ryan stated Reynolds High School football beat Gresham 47-0. They're 6 and 2 and it's a fun year and fun team. I also talked about my work with the high school on getting Cherry Park cleaned up. The principal, Wade Bakely, and an officer met with the homeowners association and made some really good progress there. I have noticed the road has been a lot cleaner. Please feel free if you guys drive down there and don't like what you're seeing to email the principal. He's very responsive and he wants to hear. I did principal for a day last Tuesday at Troutdale Elementary. If you guys haven't toured it I think you should call Principal Ed and see the building. I'll be working with the Leadership Team there to do a day where we can pick up trash at Cherry Park. I got commitments from all the 5th graders that they will not go into high school and learn how to throw trash on the ground. They pinky promised me.

Councilor White stated I had the pleasure of attending the Troutdale Historical Society's 50th Anniversary. Congratulations to them. It was nice event.

12. ADJOURNMENT

MOTION: Councilor White moved to adjourn. Seconded by Councilor Ripma. Motion passed unanimously.

Meeting adjourned at 9:08pm.

Casey Ryan, Mayor
Dated:

DRAFT

ATTEST:

Kenda Schlaht, Deputy City Recorder

CITY OF TROUTDALE

**City Council – Regular Meeting
6:00PM**

Tuesday, October 23, 2018

PLEASE SIGN IN

[illegible]



East Metro Economic Alliance

"Shaping the future of East Metro through economic advocacy"





About East Metro Economic Alliance

The East Metro Economic Alliance (EMEA) is a non-profit organization comprised of approximately area businesses, chambers of commerce and public agencies working together to shape the future of East Multnomah through economic advocacy.

The East Metro region, often referred to as East Multnomah County, consists of the cities of Fairview, Gresham, Troutdale and Wood Village. It also includes East Portland and incorporated areas in East Multnomah County and North Clackamas County.

Mr Executive Director Jarvez Hall

Graduate of Gresham High School

M.S. in Business from Oregon State University

Member of the 2001 Fiesta Bowl Championship Team

MBA from Willamette University

Experience includes City of Portland, Portland State University, Small Business Majority, Small Business Development Center, Ascent Fundi





Our Executive Board

President: Sue O'Halloran – KMO, Inc.

Vice President: Diane McKeel – Miller and Main, LLC.

Treasurer: Dan Corcoran – McDonald & Wetle, Inc.

Secretary: Steve Entenman- Harper Houf Petersen Reghelis, I

Assistant President: Gretchen Nichols – Legacy Mt. Hood

Administrator: Mary Ann Gray – Westside Secretarial



Our Local Partner Board Members

Mayor Casey Ryan – City of Troutdale

Mayor Shane Bemis – City of Gresham

Mayor Tim Clark - City of Wood Village

Commissioner Lori Stegmann - Multnomah County



Our At-Large Board Members

Ken Anderton - Port of Portland

Steve Brown - Pamplin Media

Tim Brunner - Axis Design Group

Counselor Shirley Craddick - Oregon Metro

Deane Funk - Portland General Electric

Tom Perrick - JP Morgan/Chase

Dr. Katrise Perera - Gresham/Barlow School Dist.

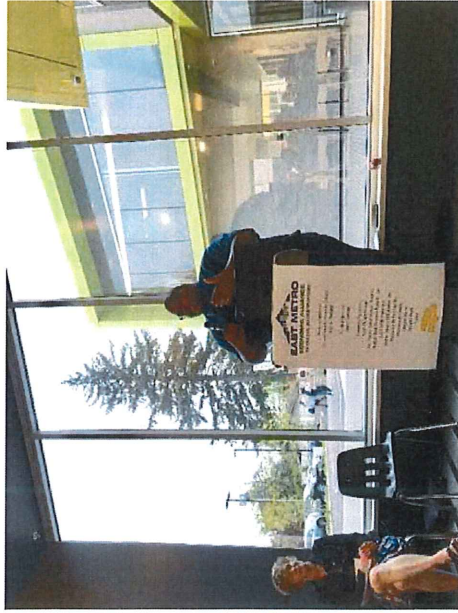
Dr. Lisa Skari - Mt. Hood Community College

Greg Whistler - East Metro Association of Realtors

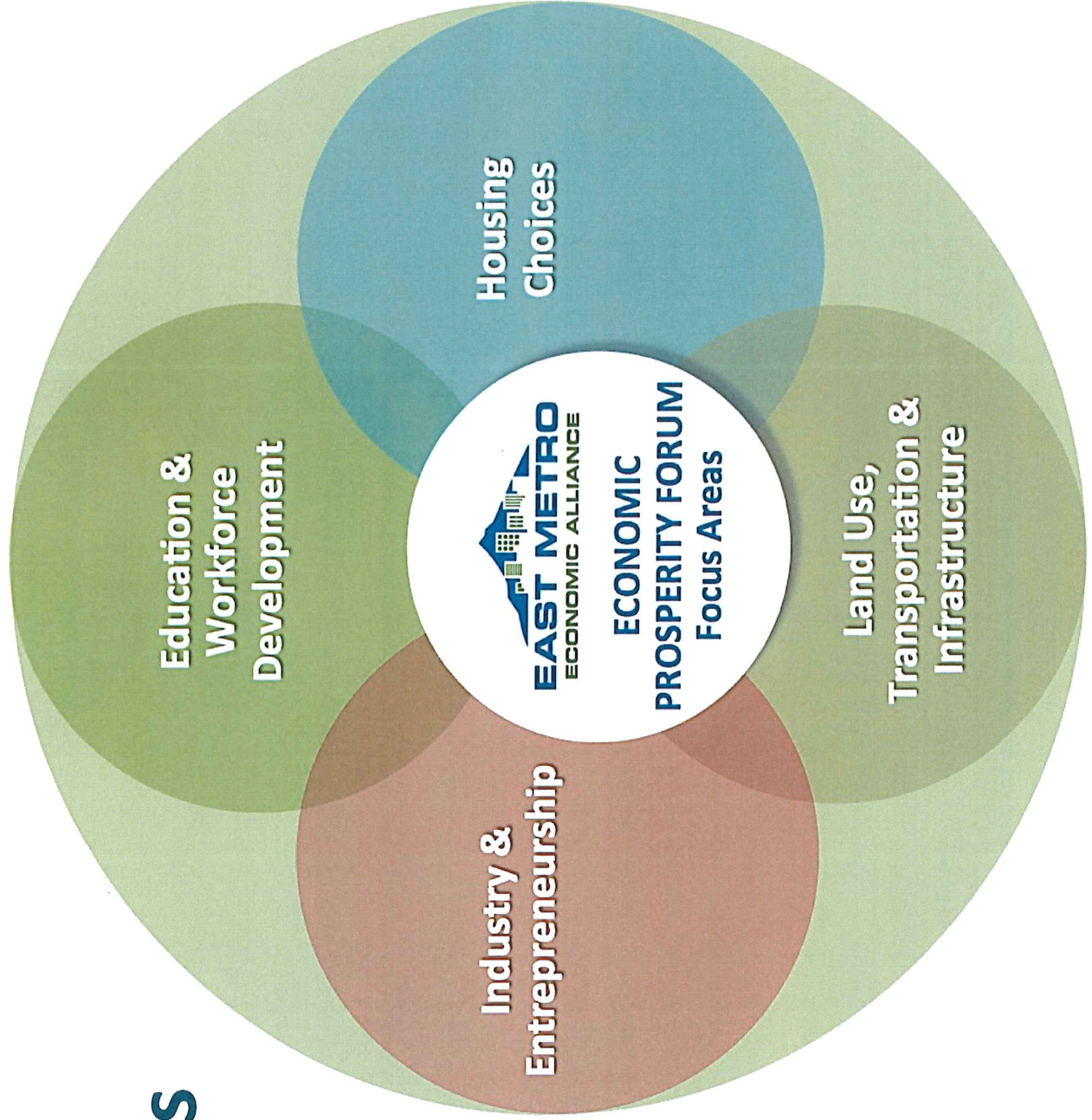
NEA's Committees and Task Forces



Inaugural East Metro Economic Prosperity Forum



cus Areas





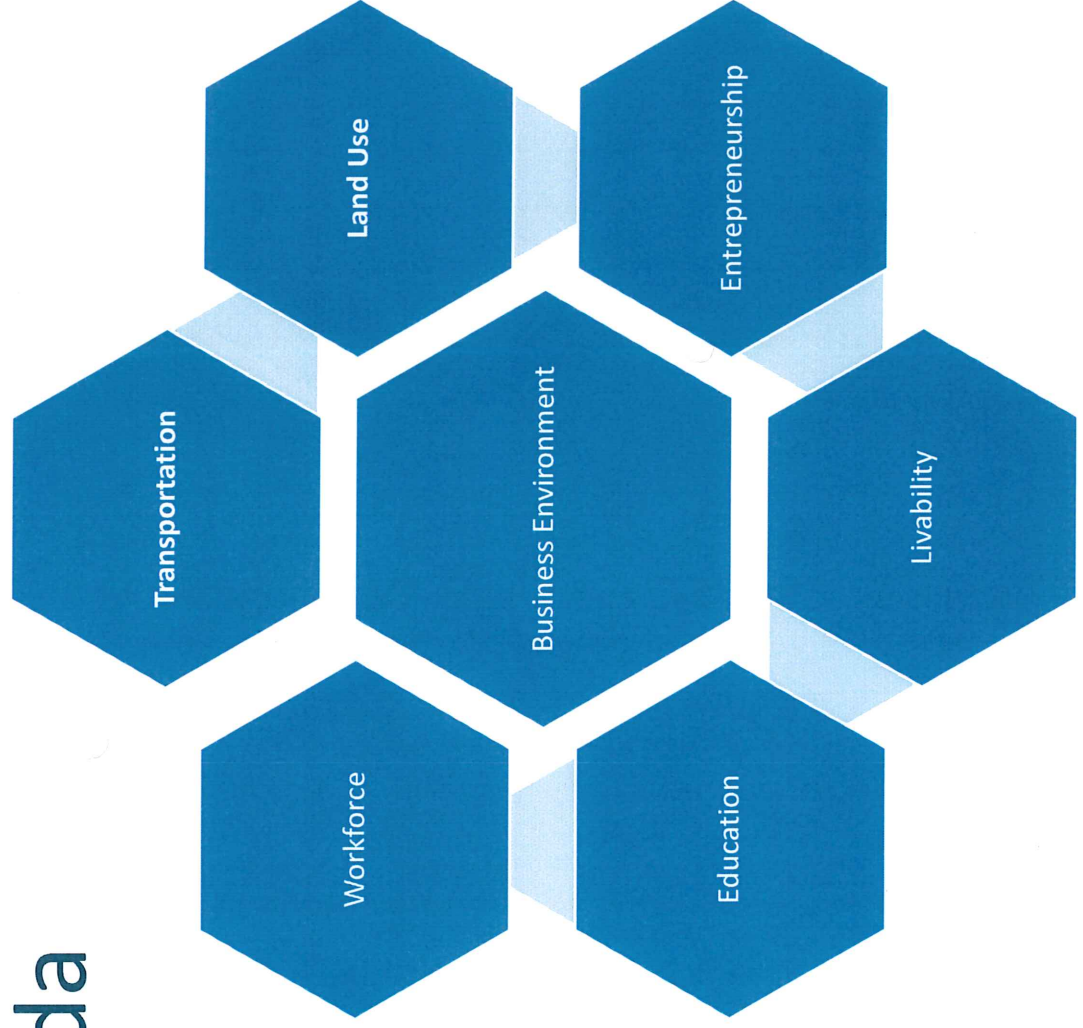
MEA Legislative Committee

Chair: Diane McKeel

Members organizations include

- Microchip Technologies
- J.P. Morgan Chase
- Pamplin Media
- Portland General Electric
- Northwest Natural Gas
- KMO, Inc.

|vocacy Agenda





SEA Transportation & Land Use Committee

Co-chairs: Steve Entenman and Tim Brunner

THCC Transportation Hub. Plan and develop a full-service transportation hub at Mt. Hood Community promoting improved transportation services, affordability, connectivity, and efficiency that benefits the East Metro area. (ê Top scoring idea in this area.)

Transit Oriented Development. Promote increased transit-oriented development, including mixed-use employment, residential and commercial development, along MAX light rail lines in the East Metro area

Transit Alternatives. Enhance transit alternatives throughout the East Metro area, including pedestrian bicycles, car sharing, and other modes of travel, improving mobility, convenience, speed, and security

Smart Technologies. Utilize smart transportation technologies to manage and improve transportation operation and efficiency across the East Metro area.

Large-Scale Development. Aggregate parcels and prepare larger sites for large-scale residential, commercial, and industrial development in the East Metro area.



1EA Education & Workforce Task Force

Workforce Development & Up-Skilling. Strengthen and support collaborative workforce development initiatives such as Prosperity 1000, including programs to up-skill workers in low-wage positions, retrain numbers of the workforce into middle-skill, living wage jobs in the East Metro area. (ê To lead in this area.)

College & Career Readiness. Improve grade 9-12 learning to increase relevant college and career readiness through strategic collaboration with business and industry in the East Metro area.

Schools-Social Service Partnerships. Promote expanded partnerships between local schools and services to further remove barriers to educational attainment by students in the East Metro area.

Regional Workforce System. Develop a regional system linking communication strategies, education and employers in the East Metro area, for improved workforce development and readiness.

Financial Literacy. Promote education and industry programs designed to increase financial literacy throughout the East Metro area.



1EA Industry & Entrepreneurship Task Force

Industry & Education Collaboration. Promote greater collaboration and support among existing educational institutions and resources in the East Metro area and industries that are already located in the region. (ê Top scoring idea in this area. ê Top scoring idea overall.)

Capital Partners. Recruit core sector capital investors and capital resource arms as partners that will invest in the East Metro area.

Unified Brand Strategy. Develop a cohesive unified brand strategy for the East Metro area that promotes the assets and strengths of the region, including existing business and industry, the area's natural resource base, and its overall livability.

Innovation & Entrepreneurship. Support innovation and entrepreneurship in the East Metro area by leveraging our knowledge of emerging markets.

Entertainment Options. Recruit and develop a more diverse array of entertainment options in the East Metro area that appeal to a broad cross section of the local population and its visitors.



1EA Housing Choices Task Force

ousing Conversation. Initiate a conversation on housing types and choices in the East Metro area, with voices from our diverse population to the table in order to better understand community needs and a top scoring idea in this area.)

ousing Development Sites. Investigate and inventory available sites for potential housing development in the East Metro area to meet housing needs where people live and work, including large employers.

innovative Housing Types. Explore innovative housing types for the East Metro area that broaden the housing choices resulting in greater community consensus on preferred options (similar to the "Connecticut Plan").

ousing Finance Models & Partnerships. Explore partnerships for new financial models to expand housing choices and affordability in the East Metro area, including REITs (real estate investment trusts) and large

expedited Development Approvals. Investigate ways to improve speed and efficiency in local development approval processes in the East Metro area, simplifying the housing development process across jurisdictions

MEA's Financial Viability





1EA in 2015

Total Revenue: \$43,486

Sponsorship Revenue: \$650

Total Events with a Financial Loss: 7

Total Network Contacts 300

Total Event Attendees: 108

Social Media Impressions: 0

Social Media Engagement: 0

Percentage of income from Local Partners: 54%



MEA in 2018 (As of October 3rd)

Total Revenue: \$59,836
Sponsorship Revenue: \$18,100
Total Events with a Financial Loss: 0
Total Network Contacts 903
Total Event Attendees: 243
Social Media Impressions: 14,149
Social Media Engagement: 621
Percentage of income from Local Partners: 18%

2015 VS. 2018

	2015	2018
Revenue	\$43,486	\$59,836
Membership Revenue	\$650	\$18,100
Months with Financial Loss	7/9	0/12
Workshop Contacts	300	903
Event Attendees	108	243
Media Impressions	0	14,149
Media Engagement	0	621
Percentage of Income from Local	54%	18%

ays EMEA Can Help Troutdale





are EMEA Represents You

2017 Transit Advisory Committee
umbia Connects Bi-State Consortium
t Multnomah County Transportation Committee
ater Portland Inc. – Small Cities
t Metro STEAM Partnership
ital Inclusion Network
gon Economic Development Association
in Streets on Halsey
gon Innovation Council
iness Oregon
: Metro Area Economic Development Collaborative

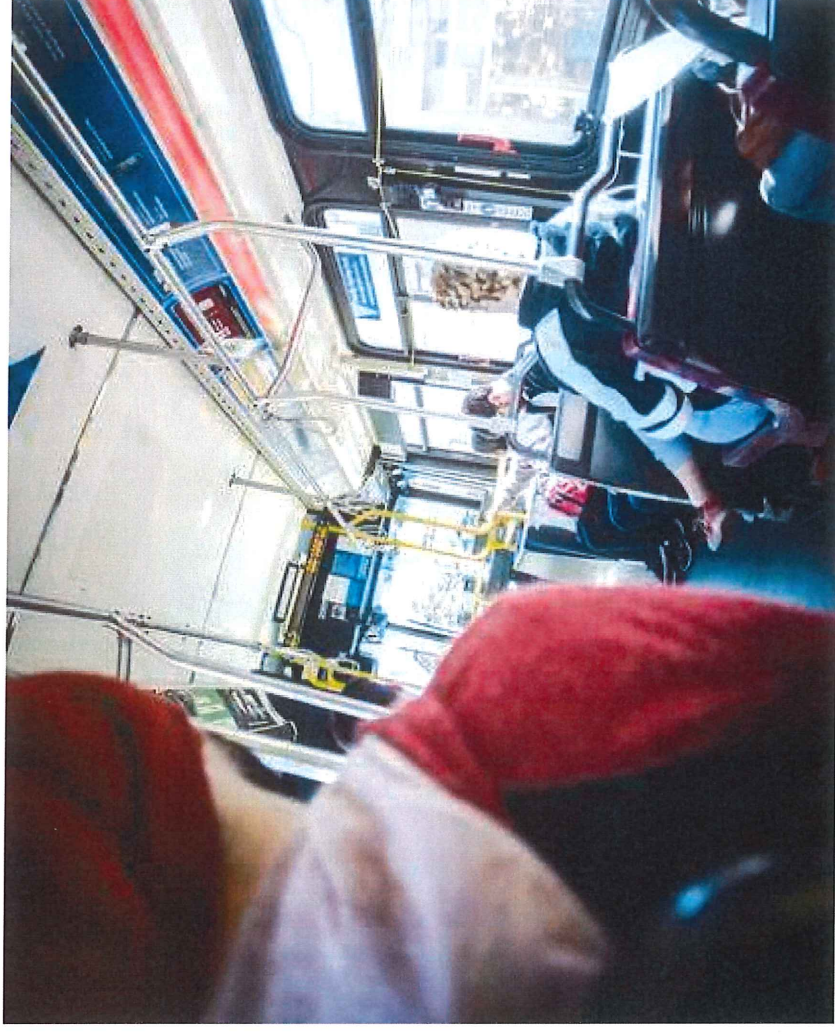


here EMEA Can Help

- 'provide consulting and feedback on economic policy
- 'provide representation at board, committees and forums
- 'provide added support in communicating priorities with elected officials
- 'provide market/outreach support and storytelling
- 'provide you with the unabridged business voice
- 'provide a voice where cities are unable to do so

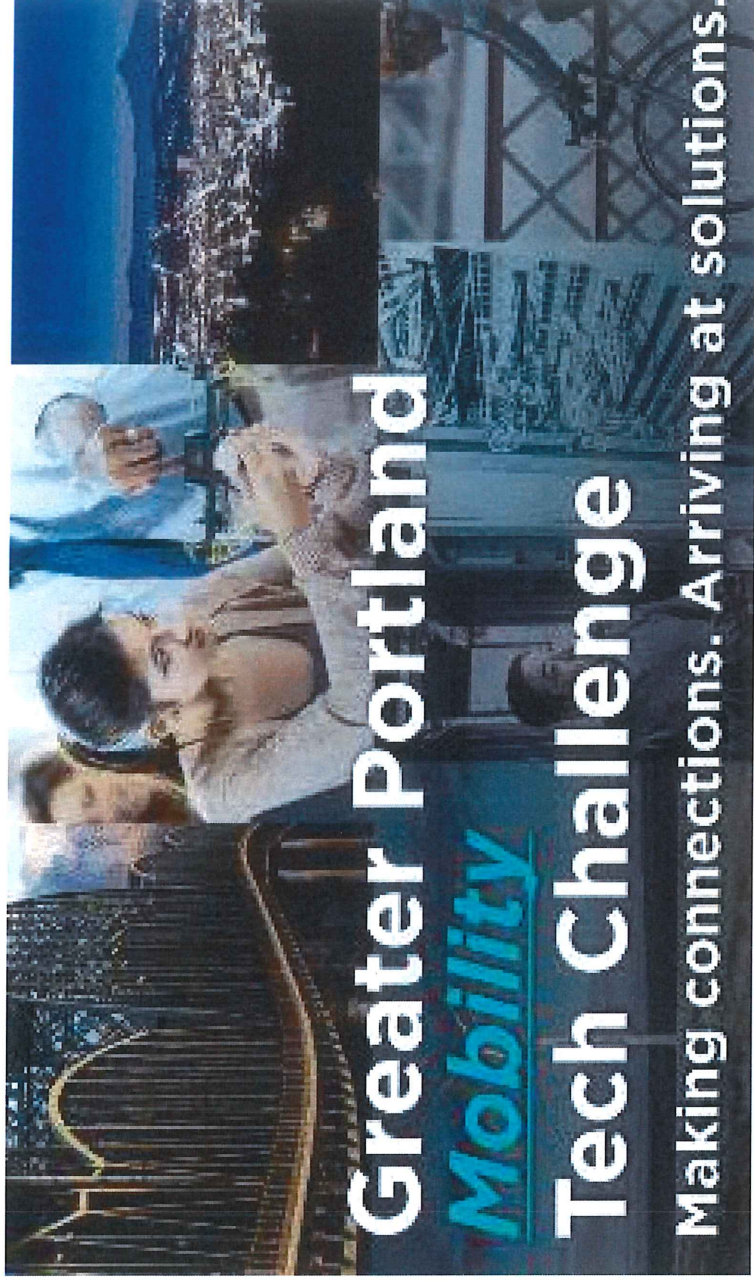
Here we have helped: Met Service Improvement to TRIP

Line 81 –Kane/257th
expanded hours of service
increased frequency with 21
added daily trips.
improves access to
employment opportunities in
the Troutdale Reynolds
Industrial Park.



How we can help: Greater Portland Tech Challenge

Companies that are able to submit a transportation issue facing the community to the challenge in collaboration with a local business or company to address the issue would then be able to apply to METRO for a grant to implement the project.



NEA Moving Forward





1EA Priorities

advocate for transportation investment in East Metro
protect manufacturing and fight for the reduction on layered regulations
promote incentive opportunities such as Urban Renewal, Opportunities and more to encourage private-sector investment
advocate for STEM & CTE to ensure a qualified local workforce
ensure the East Metro business voice is heard in all manner of regional planning
encourage entrepreneurship by supporting local entrepreneurs and cultivate a community of innovation
ensure equity is a key part of resource distribution and policy making



Coming Major EMEA Events

Toast To EMEA – 15 Years of Economic Development

Thursday, Nov. 8th from 5pm – 7pm at Bumpers

1st Metro Legislative Breakfast

Thursday, Dec. 6th from 7:30am – 9:00am at Heidi's

14th Annual East Metro Economic Prosperity Forum

Thursday, May 9th from 8:30am – 2:00pm at Rockwood Boy's & Girl's



1EA Projects/Events in Development

5PI's Greater Portland Tech Challenge

Start-up East Metro

Personal Financial Literacy Certification

In Partnership with Key Bank

inaugural East Metro Developer's Summit

Questions? We Are Always Here To Help

at Jarvez Hall

at Metro Economic Alliance

Mail: executivedirector@eastmetro.org

Phone: (503)912-8898



THANK
YOU!

18-017

Eagle Ridge Apartment Homes

Application for Site Development Review & Variances

Type IV Procedure

Public Hearing: Tuesday, October 23, 2018

Troutdale City Council | Troutdale Police Community Center

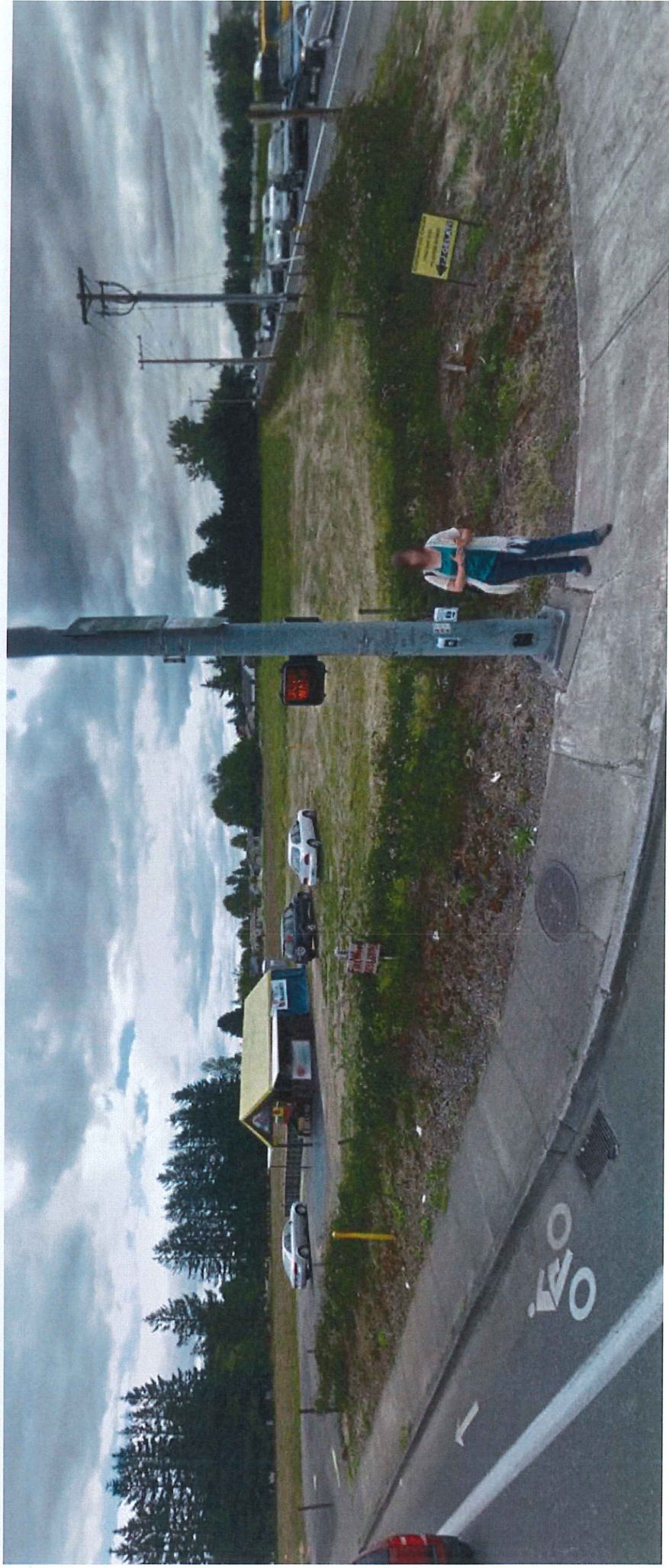
Staff Presentation

The Properties – Map View

- Two properties in question
- Total area: 8.82 acres
- Location: southeast corner of 242nd Drive and SW Cherry Park Rd
- Zoning District: A-2 Apartment Residential
- Land Use Designation: High-Density Residential



The Properties – Street View



The Application

What is being requested...

- **Site Development Plan approval** for a 216 unit apartment complex
- **Variance** for front setback line (20 feet to 10 feet)
- **Variance** for landscaping requirement (25% required, 24.7% proposed)

The above actions can be approved tonight by Order after public hearing

What has already been approved by City Council (August 28, 2018)

- Comprehensive Land Use Plan Map amendment
- Zoning Map amendment

Application Notes

- Typically, City Council is not a decision-making entity on site development review or variance applications, unless appealed
- Planning Commission hearing included map amendment components as well as site development and variance component
- Planning Commission did not vote to approve site development plan or variances as they were consolidated in one application
- City Council can approve site development plans and variances by order upon holding a public hearing, reviewing the draft findings and conditions.
- If application is turned down, Applicant can immediately re-apply, as the proposed use is now permitted in the zoning district (A-2)
- **Site Development & variance applications must meet decision criteria**

Application & Applicable Criteria

Applicable Criteria

- Comprehensive Land Use Plan
- Troutdale Development Code (TDC)
 - Ch. 1 Introductory Provisions
 - Ch. 2 Procedures for Decision Making
 - Sec. 3.060 Apartment Residential (A-2)
 - Sec. 5.600 Erosion Control & Water Quality
 - Sec. 5.700 Stormwater Management
 - Sec. 5.1000 Public Improvements
 - Ch. 6 Applications
 - Ch. 8 Site Orientation and Design Standards
 - Ch. 9 Off-Street Parking & Loading
 - Ch. 11 Landscaping & Screening
 - Ch. 17 General Provisions
- Troutdale Municipal Code
 - Outdoor Lighting
 - Tree Removal
- Troutdale Admin Rule 003 – Traffic Impact
- Appropriate Building & Fire Codes
- Construction Standards for Public Works Facilities
- Multnomah County Road Rules
- Relevant standards in Oregon Revised Statutes (ORS) and Oregon Administrative Rules (OAR)

Review Procedure

Type IV Decision

- Public hearing
- Planning Commission submits a recommendation to City Council
 - Voted 4-3 to recommend approval on 5/29/18
- City Council is the decision-making entity
 - Order to approve site development & variances

If there is an appeal...

- State Land Use Board of Appeals

Timeline

- Summer 2017: Applicant-neighbor meetings
- Oct. 17, 2017: Pre-Application Meeting #1
- Nov. 2, 2017: Pre-Application Meeting #2
- April 16, 2018: Applicant submits materials
- April 25: Application is deemed complete
- April 25: Notice of Application sent
- May 29: Initial Public Hearing
- August 28: City Council final hearing and vote to approve map amendments
- October 23: City Council Hearing on site development and variances

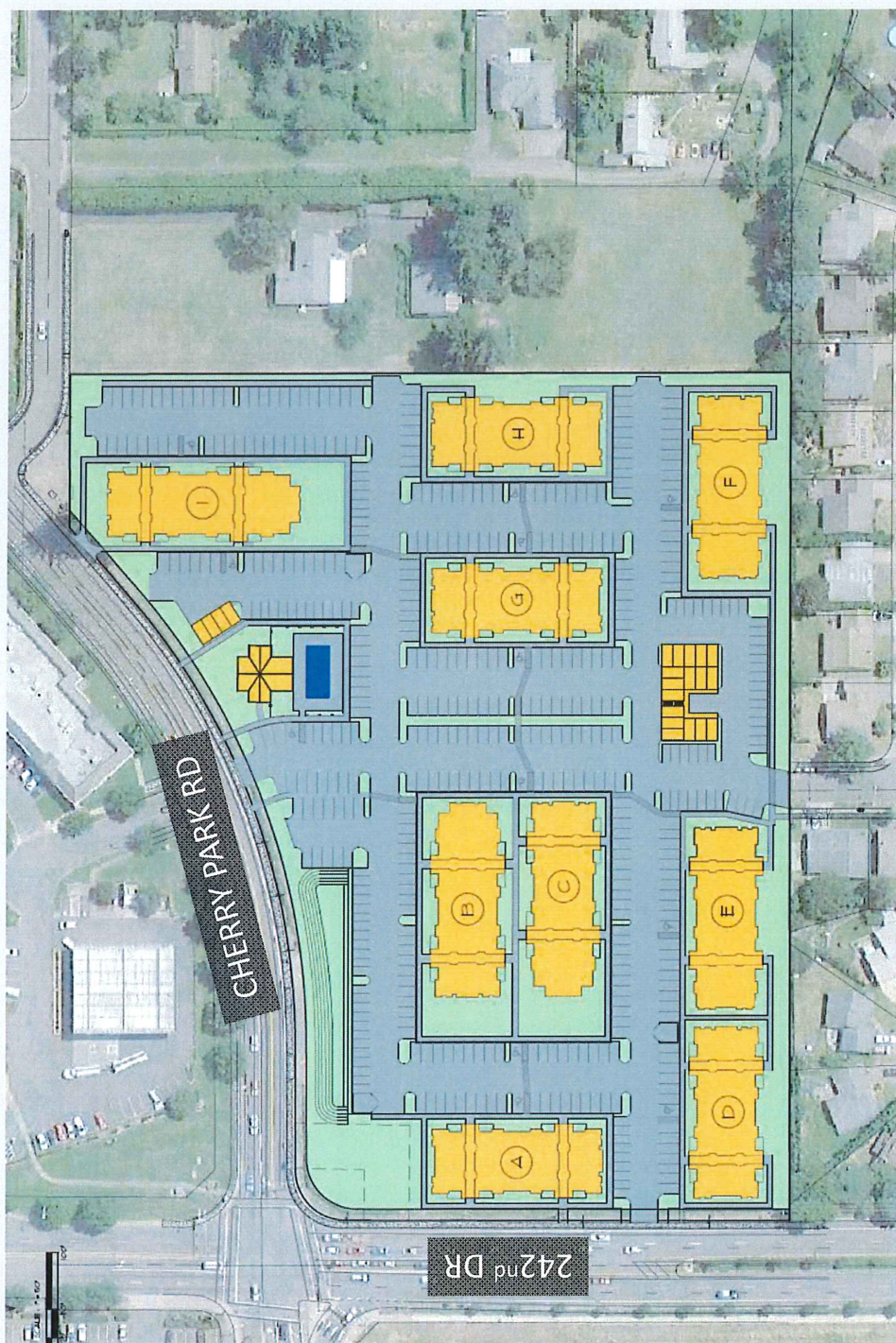
Notification & Summary of Comments

Agency Comments

- City of Troutdale Planning Division
- City of Troutdale Building Division
- City of Troutdale Public Works
- City of Gresham
- City of Wood Village
- Department of Land Conservation & Development
- Gresham Fire & Emergency Services
- Metro
- Multnomah Co. Transportation Planning
- Mid-County Lighting District
- Reynolds School District
- TriMet

Public Testimony Received

- Included in Packet
- Includes testimony received from the Planning Commission hearing and testimony received since 8/28/18 decision



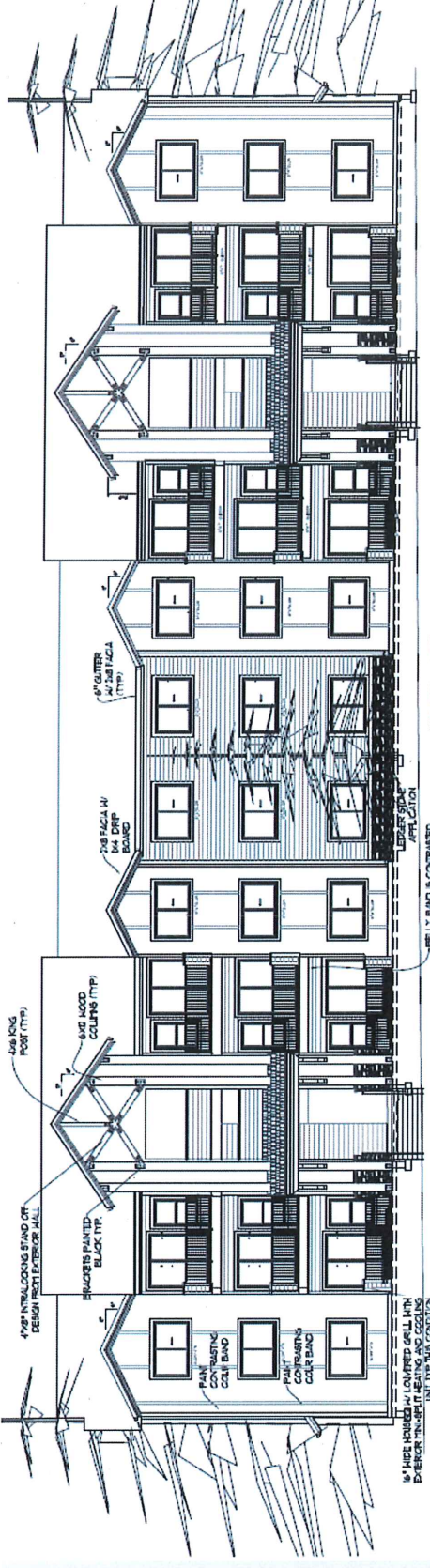
PROJECT LOCATION
 CHERRY PARK APARTMENTS
 2320 SW 18TH WAY
 TROUTDALE, OR 97080

DESIGNER
 D'Boi Design, LLC
 1899 SW 10th Ave
 Milwaukie, Oregon 97122

ARCHITECT
 J. L. LAYNE ENGINEERING & DESIGN
 10000 NE 10th Ave, Suite 100
 Portland, Oregon 97220

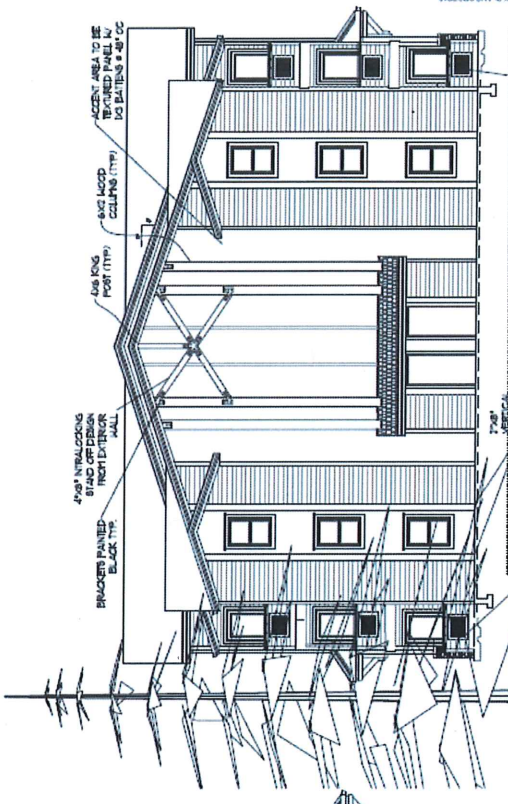
DEVELOPER
 Sheldon Development, Inc.
 237654 SE HWY 212
 DAMASCUS, OREGON 97080

PROJECT NO.
 A2.2

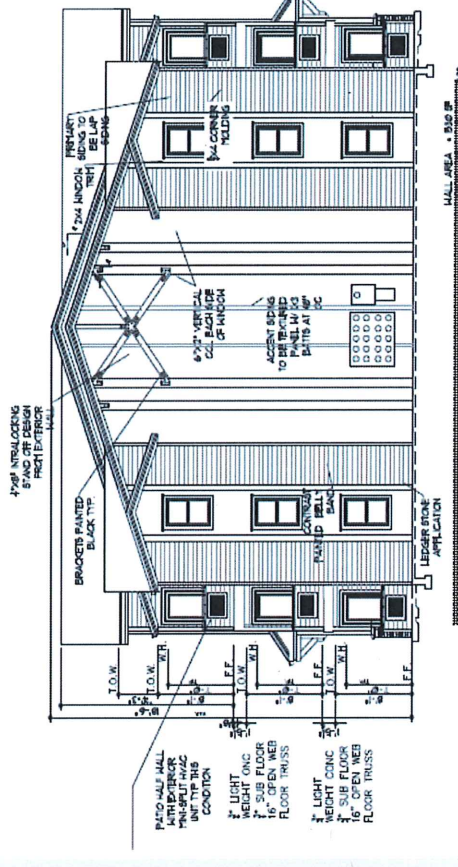


NOTE:
 ALL HORIZONTAL BANDING & TO BE A CONTRASTING PAINTED
 all are to be color forest fire

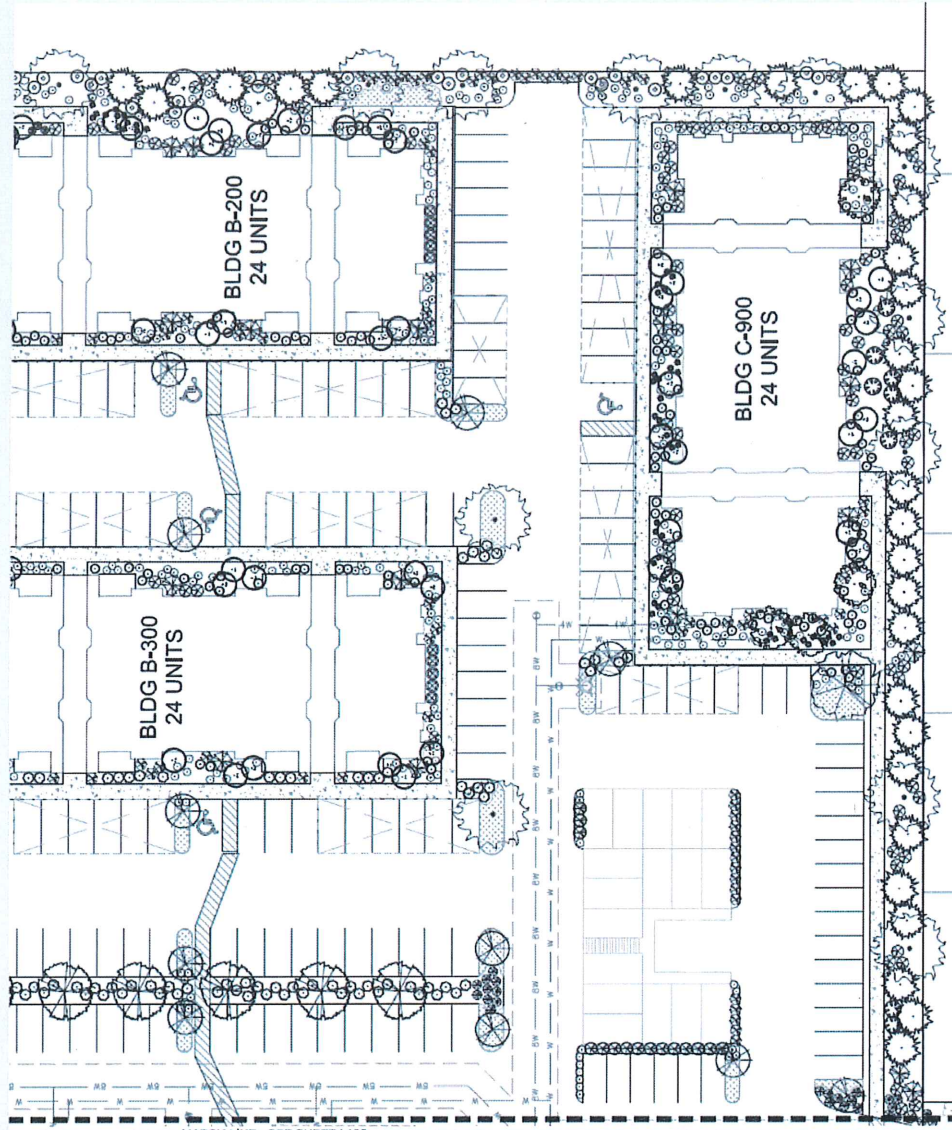
SOUTH SIDE ELEVATION



EAST SIDE ELEVATION



WEST SIDE ELEVATION



Tree Species along Periphery



Katsura (20)



Hogan Cedar (53)



Columnar Hornbeam



Green Vase Zelcova

Multnomah County Analysis & Conditions

- Updated conditions of approval from previous memo at Planning Commission hearing on 5/29/18
- Revises conditions 7, 9, and 10 due to rezoning decision.
- Reflects the agreement by developer to begin constructing improvements for auxiliary lane along Cherry Park Road, as offered on 8/28/18 as part of the hearing for map amendments
- Council should consider amending proposed Multnomah County conditions of approval as included in the packet to reflect the memo submitted on 10/18/18

Analysis

Benefits

- Adds additional housing options to the community
- Improves a property that has been mostly vacant and difficult to develop
- Improves vitality of surrounding commercial properties
- Increases the likelihood of transit service to 242nd and/or Cherry Park Rd
- Property tax collections and SDC contributions
- Proximity to job centers, commercial centers, school, and park – could lessen auto usage
- Traffic improvements partially paid and built by development – better than “no build” scenario

Drawbacks

- Public testimony from surrounding area has largely been against this proposal
- Traffic impact identified – though can be mitigated
- Concerns on privacy / visual impact on south and east adjacent properties

Decision Criteria to be Utilized

- Site Development Review
- Variance – front setback
 - Seeking reduction along north and west boundaries from 20 feet to 10 feet
 - Requested to lessen impact on southern and eastern boundaries
- Variance – landscape requirement
 - Seeking reduction of 25% lot coverage to 24.7% lot coverage
 - Requested to allow for more parking spaces (well above City requirement)

Decision Criteria – Site Development

- The application complies with all of the applicable provisions of the underlying zone and overlay zone(s), including but not limited to: building and yard setbacks, lot area and dimensions, density and floor area, lot coverage, building height, building orientation, architecture, and other applicable standards, or a variance or adjustment is granted.

FINDING: The Application calls for multi-family residential units. The lot is considered a continuously curved corner lot; as a result, the frontage on both 242nd Ave and Cherry Park Road are held to front yard setback requirements. The Applicant is applying for a variance to reduce this front yard standard from 20 feet to 10 feet. The layout and design meets all other setback requirements and dimensional standards. The Applicant is required to provide the net area in order to confirm density standards are met.

Their net area calculation did not take into consideration setbacks, however the maximum using that area was 248 units and the minimum was 199 units. Given they are closer to the minimum than the maximum calculation, it is not believed that density will be exceeded with the correct net area. Provided the Comprehensive Land Use Plan Map Amendment, Zoning Map Amendment, and proposed variances are upheld and associated conditions are met, **the criterion is conditionally met.**

Decision Criteria – Site Development

- The proposal includes required upgrades, if any, to existing development that does not comply with the applicable land use district standards, pursuant to Section 5.300 Nonconforming Uses.

FINDING: The only known nonconformity on the property is the existing fruit stand, which will no longer be located at the property should this application be approved. On the matter of site utility performance, certain conditions need to be considered. Due to the site's topography, full gravity flow to Basin A or B cannot be obtained, which will require a private sewer pump station to be installed. The Applicant has proposed, and Public Works has conditioned, redirecting the majority of the site to Basin A in order to mitigate some of the deficiencies in Basin B, which currently has several undersized pipes. As such, **the criterion is met.**

Decision Criteria – Site Development

- The proposal complies with all of the applicable site design and development standards of this Code, such as landscaping and parking.
- FINDING: The Applicant has met the multi-family design standards and the minimum vehicular and bicycle parking standards are exceeded. The Applicant is required to retain 25% of the property as landscaping, however they have proposed retaining 24.7% and have applied for a variance to address this. The landscaping provided does include screening from the neighboring single-family residential units. As such, **the criterion is conditionally met.**

Decision Criteria – Site Development

- If applicable design standards are proposed to be adjusted, the proposed adjustment:

- Is justified due to unique site conditions.
- Conforms to the extent practicable with these design standards.
- Mitigates potential impacts from the adjustments to the extent practical.

- FINDING: The Application has requested variance relief with regards to front yard setbacks and landscaping. No design standards are proposed to be adjusted in accordance with provisions in Section 8.240. The variance to the front yard setback allows the site to meet the side yard setbacks, which are located next to single-family homes. Provided the criteria for each of these three respective items are met through the variances, **the criterion is conditionally met.**

Decision Criteria – Setback Variance

- **Special circumstances or conditions including, but not limited to, lot size, lot shape, topography, or size or shape of building, apply to the property, development, or to the intended use and are not typical of the general conditions in the surrounding area.**

FINDING: The lot is a unique corner lot given the continuously curved nature of the property line. In this instance, a continuously curved property line adjacent to two or more streets of a corner lot shall be considered the front lot line. Such a corner lot has no rear property line, only front and side property lines. The Applicant has proposed a variance to the front yard setback requirement from 20 feet to 10 feet. This variance enables the proposed buildings to be located closer to 242nd Ave (arterial) and Cherry Park Road (collector) and retains the side yard setbacks on the east and south property lines which abut single-family residential homes. It also allows for circulation throughout the site.

The site was designed in a fashion to mitigate any negative impacts of development on surrounding properties in the most practicable fashion possible while complying with the spirit and intent of the zoning district and its prevailing standards. As such, **the criterion is met.**

Decision Criteria – Setback Variance

- **The variance authorized will not be injurious to adjacent properties or the surrounding neighborhood or otherwise detrimental to the public welfare.**

FINDING: The variance requested is in relationship to the west and north sides of the property, which are along two major streets and not adjacent to residential developments. The 22.5 foot setbacks shall be retained along the southern and eastern property lines.

In addition to this, the clear vision standards are still met for the corner of 242nd and Cherry Park Road, as no buildings are proposed along that corner. As such, **the criterion is met.**

Decision Criteria – Setback Variance

- The variance authorized will be consistent with the general purpose and intent of the provision from which a variance is sought.
- FINDING: The setback variance only impacts three buildings, two on the west and one on the north; clear vision standards are still met given their placement on the site. The impact this variance has is relatively insignificant to the north, because the corner of one building and potentially the club house are the only structures proposed within the original 20 foot setback. On the west only two buildings are impacted, however their location does not negatively impact clear vision standards and the adjacent use to the west on the other side of 242nd is industrial. As such, **the criterion is met.**

Decision Criteria – Setback Variance

- The variance is the minimum necessary to relieve a practical difficulty with full compliance and to avoid or minimize the resulting hardship.
- FINDING: The design of the proposed development was submitted with the intent to minimize hardships on the neighboring residential properties and to mitigate effects on surrounding property. Certain design considerations, including parking space lengths and driveway aisles are truly not variable due to safety considerations, which leaves limited room for the proposed buildings. Furthermore, required 10-foot right-of-way dedications from the existing property frontages along 242nd Ave and Cherry Park Road have effectively reduced the buildable area of the property. Without the dedication requirement, the placement of the structures would be in full conformity with the setbacks. As such, **the criterion is met.**

Decision Criteria – Landscaping Variance

- Special circumstances or conditions including, but not limited to, lot size, lot shape, topography, or size or shape of building, apply to the property, development, or to the intended use and are not typical of the general conditions in the surrounding area.

FINDING: The Applicant is aware that surrounding property owners have concerns regarding parking associated with apartments. In order to mitigate this as much as possible, they have proposed 512 parking spaces, 8 spaces above the requirement. In order to accommodate these extra spaces, the landscaping requirement was just barely not met. Parking availability and impacts from not having sufficient spaces are historically more concerning to surrounding land uses than landscaping area requirements. As such, **the criterion is met.**

Decision Criteria – Landscaping Variance

- The variance authorized will not be injurious to adjacent properties or the surrounding neighborhood or otherwise detrimental to the public welfare.

FINDING: A variance of this size will likely not be noticed by adjacent properties or the surrounding neighborhood. The applicant has also proposed a landscaping buffer between the proposed development and surrounding residential properties. As such, **the criterion is met.**

- The variance authorized will be consistent with the general purpose and intent of the provision from which a variance is sought.

FINDING: It is clear by how small this request is that the applicant has attempted to the best of their ability to meet this standard. Therefore, **the criterion is met.**

- The variance is the minimum necessary to relieve a practical difficulty with full compliance and to avoid or minimize the resulting hardship.

FINDING: The landscaping requirement for A-2 zoning districts is 25 percent (25%) and the applicant has proposed 24.7%. This variance is only about 1 percent (1%) of 25 percent (25%). The Applicant could have easily requested a larger variance in order to create room for more units, which the density allows, however it is clear that this is the minimum necessary to relieve a practical difficulty. In f As such, **the criterion is met.**

Staff Recommendation

Staff recommends **approval by order** as outlined in the proposed Findings of Fact with associated conditions of approval as presented, with amended conditions from Multnomah County.

Conditions from

- Planning division
- Public Works
- Gresham Fire & Emergency Services
- Multnomah County Transportation Planning
 - CONDITIONS REVISED AS STATED IN MEMO FROM OCTOBER 18, 2018

Public Testimony

Public Testimony

Order of Testimony

1. Applicant
2. Proponents
3. Opponents
4. Neutral Parties / Clarifications
5. Applicant Response
6. Requests for Additional Time

Reminder:

- All issues raised by a participant must be sufficiently clear and specific to allow PC and other parties to respond.
- Failure to raise an issue during this public hearing may invalidate a future appeal based on that issue.

MEMORANDUM

TO: Marlee Schuld, City of Troutdale

CC: Jessica Berry, AICP, Senior Transportation Planner

FROM: Scott Adams, AICP, Transportation Planner
Joanna Valencia, AICP Transportation Planning and Development Manager

DATE: October 18, 2018

SUBJECT: 18-017 Eagle Ridge Apartments (County File No: EP-2018-10416)

Multnomah County Transportation Planning and Development has reviewed the above referenced land use application and provide the following comments and conditions for the project. These comments are revisions to our previous memo dated May 29, 2018 and revises conditions 7, 9 and 10 of the previous memo as a result of the rezone decision. Condition is updated to reflect a minimum 6 foot slope/utility/drainage/sidewalk/landscaping/traffic control device easement recognizing that the easement may increase due to further refinements of the design of the improvements. Condition 9 is updated to reflect that the developer is now constructing the improvements to the intersection. Condition 10 is updated to reflect the correct reference of the frontages of the subject property, 242nd and Cherry Park.

The comments provided in this memorandum are based on the material submitted with City of Troutdale land use application 18-017. While every effort has been made to identify all related standards and issues, additional issues may arise and other standards not listed may become applicable as more information becomes available.

The subject application consists of a Comprehensive Plan Map Amendment, Zoning Map Amendment, Site Development Review, Lot Line Adjustment, and Two Variances to re-zone the properties at 242nd & Cherry Park Road from R-5 & R-7, Medium Density Residential & Low Density Residential to A-2, High Density Residential and construct 216 multi-family residential units. Access is proposed off of 242nd and Cherry Park Road. The subject property is located at southeast corner of the intersection of Cherry Park/Glisan and 242nd/Hogan Roads. The property has frontage on Cherry Park and 242nd, both of which are Multnomah County jurisdictional roads. NE 242nd Ave is functionally classified as a Principal Arterial facility and Cherry Park is functionally classified as a Major Collector facility.

The County does not object to proposal so long as the following conditions are met by the project:

Conditions of Approval

1. The Applicant will need to obtain a Construction Permit to construct half street improvements ensure that the half street meets county standards for ADA on the property's frontage on Cherry Park and 242nd per Multnomah County Road Rules [6.100]. The applicant will need to assess compliance with ADA requirements and get permits for and complete improvements prior to issuance of a Certificate of Occupancy.
2. Thirty days before issuance of Certificate of Occupancy, work with the County to modify the traffic signal at the NE 242nd Drive/SW Cherry Park Road intersection to allow for protective-permissive phasing for the eastbound and westbound left-turn movements.
3. Control the site-access driveway along NE 242nd Drive to right-in/right-out only.
4. Construct site-access driveways per Multnomah County standards and obtain a driveway permit from Multnomah County.
5. Locate and maintain all future landscaping, above-ground utilities, and site signage to provide adequate sight-distance per American Association of State Highway and Transportation Officials (AASHTO) requirements at the site driveways.
6. Construct an enhanced crossing at the intersection of Cherry Park and SW 18th Way that includes marked crossings and the installation of a Rectangular-Rapid Flashing Beacon (RRFB). The applicant shall obtain a construction permit for the installation of this enhanced crossing from Multnomah County.
7. Provide a 10 foot right-of-way dedication and a minimum 6 foot slope/utility/drainage/sidewalk/landscaping/traffic control device easement along the site's Cherry Park frontage for future widening of the intersection.
8. Prior to issuance of the Certificate of Occupancy, obtain a road rules variance from Multnomah County for the site's proposed multiple access points.
9. The applicant will need to obtain a construction permit from Multnomah County and work with the County and the City of Gresham to construct the improvement at the intersection of Cherry Park and 242nd/Hogan to mitigate impacts to the intersection resulting from this development. The intersection improvement includes widening to accommodate future traffic. The improvement shall be completed prior to issuance of the Certificate of Occupancy.
10. The Applicant is required to obtain approval from the Mid-County Lighting District for street lighting to be installed along the subject property's frontage along Cherry Park and 242nd Drive. The applicant will need to develop a street lighting design plan that is compliant with Mid-County Lighting District standards. Please contact Chet Hagen, Mid-County Street Lighting District Administrator, at chet.hagen@multco.us or 503-988-0164 for more information.

Improvement Requirements

Projects determined to have a transportation impact are required to provide improvements commensurate with impact. Required improvements are listed below as conditions of approval address immediate and future impacts to the transportation system including impacts to ADA movement, pedestrian/bike circulation, intersection levels of services and safety. [MCRR 6.000, 8.000, 9.000]

Right of way improvements are required to mitigate the impacts of the travel demand created by the proposed development. [MCRR 6.100; DCM 2.2.2]

Conditions: identified above.

The County has noted the recommendation for the intersection of 257th/Cherry Park from the submitted traffic impact analysis recommending that the traffic signal be modified to allow for protective-permissive phasing for northbound and southbound left turn movements. In reviewing this recommendation, staff finds that with low trip distribution (around 5%) to this intersection coming from the project to the intersection combined with pedestrian safety concerns for this intersections, the recommended mitigation is not required to be implemented at this time and staff will monitor the intersection and implement improvements as needed.

Access

Access to 242nd and Cherry Park

Finding: The applicant has proposed two access points, which does not meet the County standard of one access point per property. Due to this, they've applied for a Road Rules Variance.

Condition: Prior to issuance of the Certificate of Occupancy, obtain a road rules variance from Multnomah County for the site's proposed multiple access points.

Road Rules Variance

The applicant has submitted a Road Rules Variance to address their two access points.

Stormwater

Finding: Applicant has submitted preliminary stormwater report and the county finds that there will be no impact to the county stormwater system. No conditions required.

Mid-County Lighting District

Finding: The subject property is located in the Mid-County Lighting District and lighting will need to be provided along the site's frontage on 242nd/Hogan and Cherry Park, consistent with applicable standards and specifications.

Condition: The Applicant is required to obtain approval from the Mid-County Lighting District for street lighting to be installed along the subject property's frontage along SW Halsey Street and West Historic Columbia River Highway. The applicant will need to develop a street lighting design plan that is compliant with Mid-County Lighting District standards. Please contact Chet Hagen, Mid-County Street Lighting District Administrator, at chet.hagen@multco.us or 503-988-0164 for more information.

EAGLE RIDGE APARTMENTS

DESIGN REVIEW AND
COMPREHENSIVE PLAN
AMENDMENTS



EAGLE RIDGE APARTMENTS

216 Unit Multi-Family Homes

Applications have been submitted for Site Development Review, a Comprehensive Plan Map and Zone Change, and two Variances. (the landscape % variance may not be necessary)

The proposed Applications meet all of the approval criteria and the Applicant accepts all proposed conditions of approval.



EAGLE RIDGE APARTMENTS

- Landscape Planting Plan:
- Frontage Improvements
- Enhanced buffering along property boundaries



EAGLE RIDGE APARTMENT COMPLEX

SHELDON DEVELOPMENT, LLC

APPROVED BY CITY
A. J. MEANS ASSOCIATES, INC.

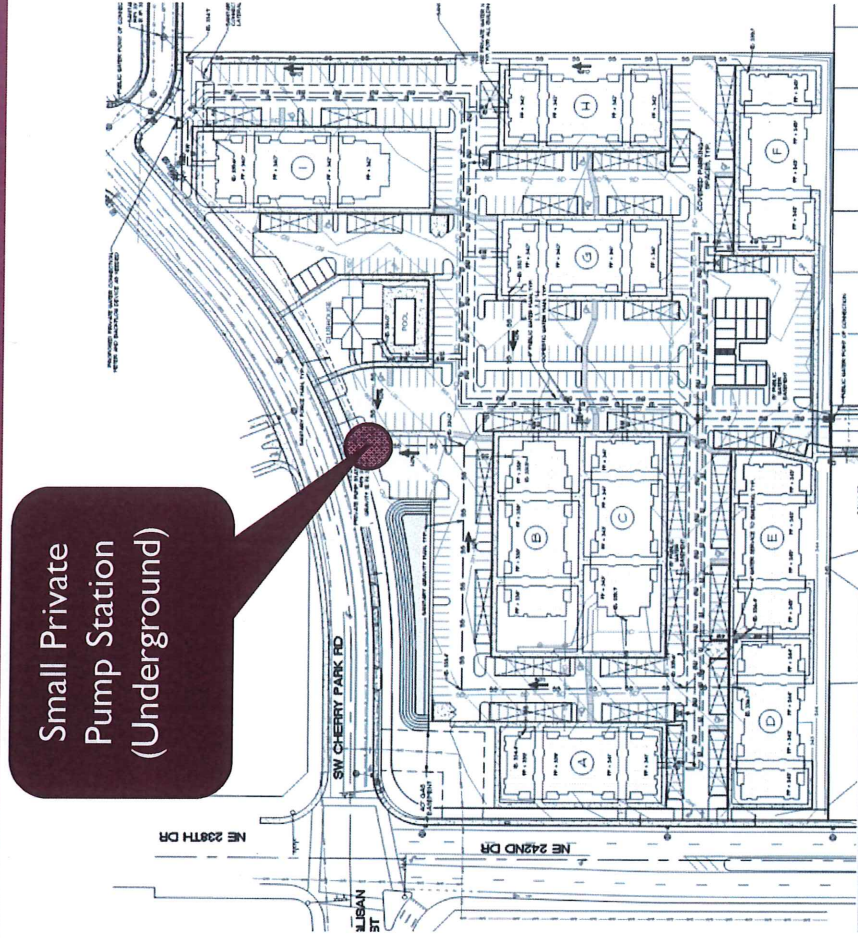
SJ CONSULTING, INC. PLANNING | ALL COUNTY SURVEYORS AND PLANNERS, INC. CIVIL ENGINEERS |
MEANS DESIGN GROUP LANDSCAPE ARCHITECT

EXHIBIT 'A'

SCALE: 1" = 40' 0"

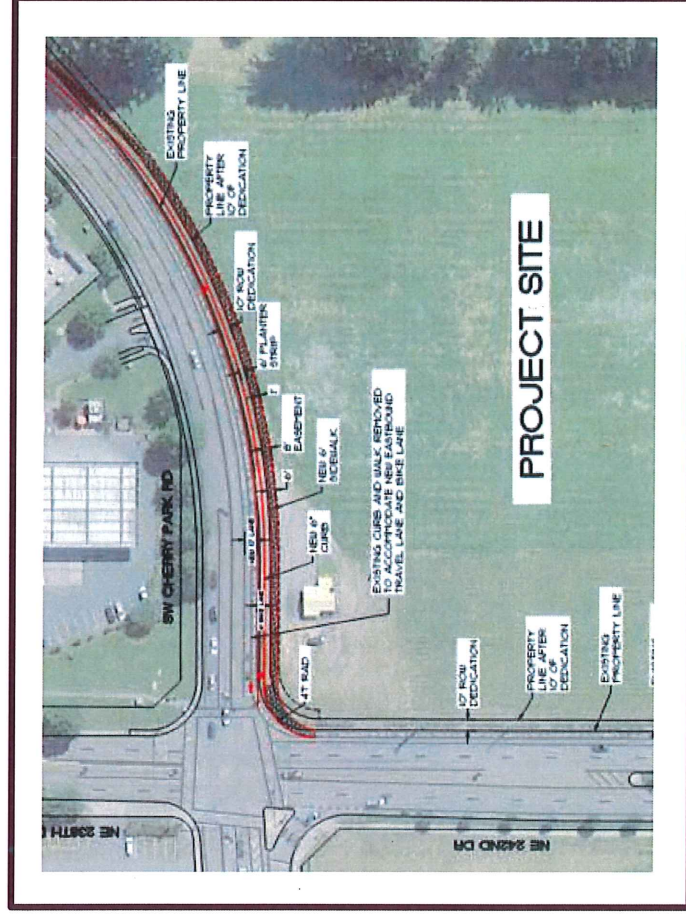
EAGLE RIDGE APARTMENTS

- Pump Station Location
- Small, quiet, privately maintained.



EAGLE RIDGE APARTMENTS

- Developer has accepted a condition of approval requiring the improvement of the intersection at Cherry Park and NE 242nd to include:
 - Frontage Improvements
 - Signal Modifications
 - Signing and restriping.
 - New 12' Travel Lane
 - New 6' Bike Lane
 - New 6' Sidewalk & 6' Planter











CITY OF TROUTDALE



STAFF REPORT

SUBJECT / ISSUE: A resolution accepting the November 6, 2018 General Election results from the Director of Elections, Multnomah County, Oregon.

MEETING TYPE:
City Council Regular Mtg.

STAFF MEMBER:
Sarah Skroch

MEETING DATE:
November 27, 2018

DEPARTMENT:
Executive

ACTION REQUIRED:
Consent Agenda - Resolution

ADVISORY COMMITTEE/COMMISSION RECOMMENDATION:
N/A

PUBLIC HEARING:
No

Comments:

STAFF RECOMMENDATION: Adoption.

EXHIBITS:
None.

SUBJECT / ISSUE RELATES TO:

☐ Council Goals

☐ Legislative

☒ Other (describe)

Required by ORS 254.565

BACKGROUND:

On November 6, 2018 electors of Troutdale were asked to cast their vote for candidates running for City Council Positions 1, 3 and 5.

The results of the November 6, 2018 General Election have been certified by Tim Scott, Director of Elections, Multnomah County, Oregon (Attachment A to the Resolution).

Current Year Budget Impacts: ☐ Yes (describe) ☒ N/A

Future Fiscal Impacts: ☐ Yes (describe) ☒ N/A

City Attorney Approved: ☐ Yes ☒ N/A

Community Involvement Process: ☐ Yes (describe) ☒ N/A

Reviewed and Approved by City Manager:

RESOLUTION NO.

A RESOLUTION ACCEPTING THE NOVEMBER 6, 2018 GENERAL ELECTION RESULTS FROM THE DIRECTOR OF ELECTIONS, MULTNOMAH COUNTY, OREGON.

THE TROUTDALE CITY COUNCIL FINDS AS FOLLOWS:

1. The results of the election were certified by Tim Scott, Director of Elections, Multnomah County, Oregon; and
2. The certified election results were received by Sarah Skroch, City Recorder of Troutdale (Attachment "A").

NOW THEREFORE, BE IT RESOLVED BY THE COUNCIL OF THE CITY OF TROUTDALE:

Section 1. The City Council accepts the certified results of the November 6, 2018 General Election (Attachment "A").

Section 2. This resolution shall take effect immediately upon adoption.

YEAS:
NAYS:
ABSTAINED:

Casey Ryan, Mayor

Date

Sarah Skroch, City Recorder

Adopted:

**The Certified Election Results will not be
available until November 27, 2018.**



CITY OF TROUTDALE



STAFF REPORT

SUBJECT / ISSUE: An Ordinance to Adopt Text Amendments to Chapters 1, 2, 4, and to Establish Chapter 14 of the Troutdale Development Code

MEETING TYPE:

City Council Regular Mtg.

MEETING DATE:

November 27, 2018

STAFF MEMBERS:

Chris Damgen & Ryan Krueger, CFM

DEPARTMENT:

Planning

ACTION REQUIRED:

Ordinance - Introduction

PUBLIC HEARING:

Yes

ADVISORY COMMITTEE/COMMISSION RECOMMENDATION:

Approval

Comments: Planning Commission (6-0)

STAFF RECOMMENDATION: Approval

EXHIBITS:

- A. Planning Commission Staff Report
- B. TDC Section 1.040 (Definitions) "Clean" Draft
- C. TDC Section 2.220 (Expiration of a Decision) "Clean" Draft
- D. TDC Section 4.500 (Flood Management Area) "Clean" Draft
- E. TDC Chapter 14 "Clean" Draft (formerly Section 4.500)
- F. TDC Section 1.040 (Definitions) "Red-Line" Draft
- G. TDC Section 4.500 (Flood Management Area) "Red-Line" Draft (to become Ch. 14)
- H. Common Floodplain Management Terms
- I. Measure 56 Notice & Map

SUBJECT / ISSUE RELATES TO:

☐ Council Goals

☒ Legislative

☐ Other (describe)

ISSUE / COUNCIL DECISION & DISCUSSION POINTS:

- ◆ Updates to the City's Flood Insurance Rate Map (FIRM) and Flood Insurance Studies (FIS) requires flood management standards to be consistent with federal and state requirements.
- ◆ Review the approval criteria, and revisions presented and receive any testimony provided.
- ◆ Approve amendment as presented (see pros/cons)

Reviewed and Approved by City Manager:

BACKGROUND:

Please review the Planning Commission Staff Report (Exhibit A) for details.

PROS & CONS:

Pros:

- Brings City flood management standards to full compliance with federal, state, and Metro requirements
- More clearly spells out review procedures for permits and procedures for applicants and decision criteria for Staff and/or Planning Commission
- Provides certain breaks on submittal requirements on smaller applications that were previously not in existence with the code
- Development standards as proposed could lead to further discounts of flood insurance policies; not only for residents within special flood hazard areas but also for residents and business in all other areas of the City.

Cons:

- Any amendments to the draft as presented would require re-review by FEMA to ensure compliance
- Previous exceptions from permit requirements have largely been removed at FEMA's insistence, including but not limited to activities for the Sandy Drainage Improvement Company and the Multnomah County Drainage District
- The City is required to approve new standards in a quick fashion and have them be in effect by February 1, 2019 or risk suspension from the National Flood Insurance Program, jeopardizing insurance coverage for citizens and businesses.

Current Year Budget Impacts: ☐ Yes (*describe*) ☒ N/A

Future Fiscal Impacts: ☐ Yes (*describe*) ☒ N/A

City Attorney Approved: ☐ Yes ☐ N/A

Community Involvement Process: ☒ Yes (*describe*) ☐ N/A

Public Hearing



CITY OF TROUTDALE

Community Development Department

NOTICE OF APPLICATION & PUBLIC HEARING

PROPOSED TEXT AMENDMENTS TO THE TROUTDALE DEVELOPMENT CODE

Date of Notice: October 9, 2018 | Date of Initial Public Hearing: November 14, 2018

Case File: 75-03 | Applicant: City of Troutdale

The City of Troutdale is hereby notifying all interested parties of a **proposed text amendment** to the Troutdale Development Code (TDC). The text amendments proposed would update floodplain management standards in order to comply with state/federal regulations and guidance. In addition, this action would also formally adopt an updated version of the Flood Insurance Rate Map (FIRM) and Flood Insurance Study (FIS) used in determining where those standards apply. The following chapters and sections of the TDC are proposed to amended:

- Section 1.040 (Definitions)
- Section 2.220 (Expiration of a Decision)
- Section 4.500 (Flood Management Area)
- Chapter 6 (Applications)

Text amendment applications are required to have public hearings and undergo a Type IV legislative procedure, in which the Troutdale Planning Commission may recommend to the Troutdale City Council, which is the decision-making entity. [TDC 2.065] Properties that are partially or fully located in Special Flood Hazard Areas (SFHA) in the current or proposed FIRM have been identified by the City as requiring formal notice in compliance with Oregon Revised Statute (ORS) 227.186 (Measure 56 notification requirements). This is a separate, general purpose notice.

An initial public hearing will be held at 7:00 p.m. on **Wednesday, November 14, 2018** in the Kellogg Room of the Troutdale Police Community Center, located at 234 SW Kendall Court. The public hearing will be conducted by the Troutdale Planning Commission. The Troutdale City Council is tentatively scheduled to hold hearings on this matter at 7 p.m. on Tuesday, November 27 and 7 p.m. on Tuesday, December 11, 2018 in the same location described above.

The location of the hearing is accessible to citizens with disabilities. If you require any other accommodation, please contact the Planning Division at planning@troutdaleoregon.gov or call 503-665-5175 at least one (1) week prior to the hearing.

Please contact Ryan Krueger CFM at planning@troutdaleoregon.gov for any questions or concerns about this matter.

STAFF REPORT

TO: Troutdale Planning Commission

STAFF REPORT DATE: Wednesday, October 24, 2018

STAFF / APPLICANT: Ryan Krueger, CFM; Senior Planner & Floodplain Manager
Chris Damgen, Community Development Director

CASE FILE: **75-03 Text Amendments: Flood Management**

SUBJECT: **Proposed Text Amendments to the Troutdale Development Code**

APPLICABLE CRITERIA: TDC Sections 2.065 and 6.1100

HEARING DATE: Wednesday, November 14, 2018

RECOMMENDATION: Planning Commission to review proposal, open the public hearing, consider proposed testimony and amendments from all parties, and recommend approval of the proposed text amendments with any additional amendments proposed to the City Council.

1. BACKGROUND

The City of Troutdale is required to undergo a comprehensive update to its flood management standards. These standards are in need of update due to the following circumstances:

- The release of new Flood Insurance Rate Maps (FIRM) and Flood Insurance Studies (FIS) for Troutdale by the Federal Emergency Management Agency (FEMA), to go into effect on February 1, 2019. Communities that have updated FIRM and FIS must have flood management regulations that are in compliance with standards in the National Flood Insurance Program (NFIP) at the time of map and study adoption. A FEMA audit of the City's current regulations found areas where code amendments were necessary.
- The State of Oregon's Department of Land Conservation & Development (DLCD) performs "Community Assistance Visits" (CAV) which involve a review of a city's flood management regulations in coordination with both federal and state standards. In 2014, the results of a CAV compelled the City of Troutdale to update its regulations. The City and DLCD agreed to defer the update within six (6) months of an effective date for the adoption of new FIRM and FIS. This direction from DLCD was reaffirmed during the CAV in 2018.
- The City's voluntary participation in the NFIP Community Rating System (CRS).

2. REVIEW TIMELINE

The City was notified of the need to update flood management regulations in 2014 during the CAV performed by DLCD as described above. On August 1, 2018, FEMA and its contractor informed communities in the Sandy River basin that revised FIRM and FIS would be going into effect on February 1, 2019. This effectively started the clock for communities to update their regulations based on federal and state requirements in order to maintain compliance. Consistent with State law, properties directly affected received “Measure 56” notices (**Attachment I**).

3. IMPORTANT TERMINOLOGY

Floodplain management often uses terms or abbreviations that appear interchangeable, but carry distinct differences. Listed below are important terms that are used throughout the Code. Please consult with the definitions in Section 1.040 for the precise definition. **Attachment H** also provides a reference for typical abbreviated terms in floodplain management.

Special Flood Hazard Area (SFHA)

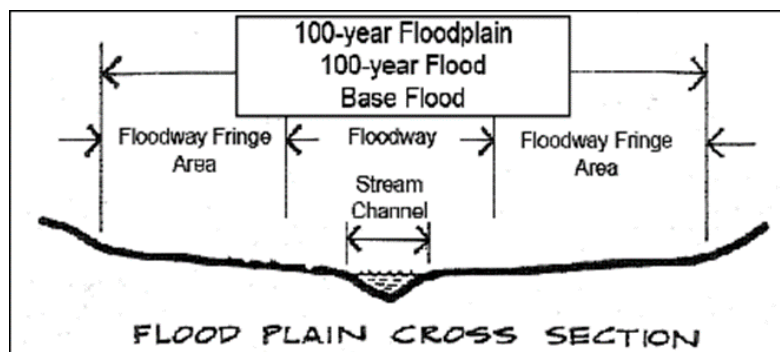
Also known as the “**100-year floodplain**”, these are areas that have an annual one percent (1%) chance of flooded conditions. In Troutdale, these areas are included in what is historically called the “**Flood Management Area**”. Properties and structures that are fully or partially affected by the SFHA are subject to the floodplain standards that are being reviewed.

Flood Zone

This is a term that is often misunderstood and misused. FEMA considers all properties to have flood zones. When most people think of flood zones, they are actually thinking of special flood hazard areas. Staff discourages the use of this term in a broad sense and utilizes it in conjunction with the actual flood zone assigned to a particular location (Flood Zone AE, Flood Zone X, etc.).

Floodway

This is a specific area within the Special Flood Hazard Area that has the greatest risk of regular flooding (see exhibit below). Floodways have more restrictive standards for development due to higher risk. See specifically Section 1.040.42 for the actual regulatory definition. See Sections 14.030, 14.045, and 14.050 for floodway-specific standards.



4. PROPOSED TEXT AMENDMENTS

The proposed text amendments would cover four (4) chapters in the Troutdale Development Code (TDC). This includes the transfer of flood management regulations from Section 4.500 to a new Chapter 14. Chapters 1, 2, and 4 are also amended.

Any required changes to the table of contents or sectional references in other chapters within the TDC would be made upon adoption and are deemed non-substantive. The following is a summary of the proposed amendments:

CHAPTER 1 – INTRODUCTORY PROVISIONS

There is one (1) section amendment proposed for this chapter:

1.040 Vegetation Corridor, Slope District, Water Quality and Flood Management Definitions

The definition section is updated with several new definitions and re-wordings, consistent with requirements and guidance from FEMA and DLCD. Please see **Attachment B** for the “clean” draft version and **Attachment F** for the “red-line” version.

CHAPTER 2 – PROCEDURES FOR DECISION-MAKING

There is one (1) section amendment proposed for this chapter.

2.220 Expiration of a Decision

The primary amendment is the inclusion of “flood development” permit land use decisions, which are to have a 180 day expiration period if no construction is occurring.

The additional amendments are the alphabetizing of the decisions currently listed so they are not listed without a specific sub-section reference. These amendments are non-substantive. Please see **Attachment C** for the “clean” draft version.

CHAPTER 4 – ZONING DISTRICT OVERLAYS

There is one (1) section amendment proposed for this chapter.

4.500 Flood Management Area

This section is proposed to be stricken in its entirety, with all flood management area regulations to be relocated to a new chapter in the TDC (Chapter 14). Section 4.500 would be reserved for a future zoning overlay district if needed. Please see **Attachment D** for the “clean” draft version.

CHAPTER 14 – FLOOD MANAGEMENT

This is a **proposed new chapter** that currently contains standards within Section 4.500. Because of the size of the section, coupled with the issue that the regulations contain not only overlay standards but also permitting and procedural standards, it was determined that a stand-alone chapter would be a more proper location within the Code.

Listed below is a **summary** of each section within the Chapter, along with a description of any major changes. Please also see **Attachment E** for the “clean” draft version (showing changes in a new Chapter 14) and **Attachment G** for the “red-line” version (showing changes in Section 4.500, the current location of standards).

14.005 Purpose (currently 4.510)

This section expands upon the provisions from the current TDC that flood management standards seek to govern. The purpose statement is generally the same.

14.010 Applicability (currently 4.512)

This section relocates the enumerated items needed for a flood development permit (shown in sub-section B) to another portion of the chapter where it is more logically located.

14.015 Severability (new)

This section is new and refers to the general severability standards in Chapter 17. This was requested by FEMA and DLCD.

14.020 Administration and Interpretation of FIRM Boundaries and Flood Management Area Standards (currently 4.513, [...] and Edge of Bankfull Stage or Two-Year Storm Level)

This section’s title was amended. Sub-section A has minor changes but now specifically calls out powers of determination and permit issuance. Sub-section B is new and effectively outlines the roles of the floodplain manager with enumerated responsibilities. The proposed Sub-section C is currently Sub-section B. The proposed Sub-section D is currently Sub-section C. Sub-section E is new and refers to inspections that can be made.

14.025 Uses within the Floodplain but Outside the Floodway and Outside Wetlands (currently 4.514)

Sub-section A (Prohibited Uses) remains largely the same, with more specificity given to the prohibition of uncontained, outside storage areas of hazardous materials.

Sub-section B (Permitted Uses) is generally the same with a couple of notes.

- In Item 4, it refers to the City of Portland Plant List as a reference material. The City of Troutdale has no independent reference document for native plantings. In the current standards, a reference to a Metro Native Plant list is shown, but that document is not in existence. The Portland Plant List is the reference most often used in the area in lieu of other reference material and is the preferred standard for the draft.

- Item 13 is new, in that wildfire mitigation projects are now listed. This was a specific recommendation of the City's Hazard Mitigation Plan.

14.030 Uses within the Floodway or within Wetlands (currently 4.515)

Sub-section A (Prohibited Uses) remains largely the same, except greater clarity was given on vegetation removal, fill, or excavation with regards to wildfire mitigation projects and the addition of prohibiting uncontained outside storage areas of hazardous materials.

Sub-section B (Permitted Uses) remains largely the same, except it removes stream habitat restoration and vegetative removal/restoration projects that were currently permitted. Dead/dying trees may be removed.

14.035 Floodplain Development Permit (currently 4.516)

This section has been heavily modified, due mostly to FEMA, DLCD, and Metro requirements but also to eliminate ambiguity. The most basic change is the new title, which now refers to permits as Flood Development Permits (currently Flood Hazard Permits). In addition, the section better outlines submittal requirements and permit type differentiations based on the desired activity.

Sub-sections A and B are new and contain background and applicability information, respectively.

Sub-section C (currently A) list exemptions from permitting requirements. Several currently exempted activities were removed due to FEMA requirements. However, exemptions were maintained for the following activities:

- removal of refuse;
- vegetative removal/restoration work;
- emergency tree removal; placement of fill in residential zones (for certain circumstances);
- installation of certain fencing;
- certain landscape activities;
- preservation of wetlands; and
- certain activities performed by the Sandy Drainage Improvement Company (SDIC).

Sub-section D lists submission requirements for a Floodplain Development Permit. The list of items appears long, however much of the information in most circumstances can be readily obtained with assistance from the City. Ensuring these items are submitted also helps to keep record-keeping in order—an important task in Community Rating System scoring. Flood development permit applications would require the following:

- site plan
- topographic survey
- elevations of lowest floor (for structures)
- hydrology and soils report (for ground disturbance/vegetation removal that exposes soil)
- grading plan (if grading is occurring)

- vegetation report (if vegetation removal or similar impacts occur)
- “no-rise” certification and letter of map change (certain activities in floodway)
- building and structure elevations (if applicable)
- infrastructure exhibit
- floodplain or watercourse alterations (if applicable)
- any other permits issued (or applied for) related to project

Sub-section E is expanded from the current version and better outlines the need for Flood Development Permits, based on the typical decision-making system used elsewhere in the TDC.

A **Type I permit** (Staff decision) is required for construction, repair, and alteration of single-family residential dwellings and manufactured dwellings; emergency bank stabilizations; and wildfire mitigation projects. A **Type II permit** (Staff decision with notification) is required for any Type II site development reviews; new/expanded streets, bridges, railroads, or trestles; permanent bank stabilization or fill; balanced cut-and-fill; fill of wetlands; and similar activities. A **Type III permit** (Planning Commission decision with notification) is required for any uses requiring a Type III review, variances requested within Chapter 14, and proposed alterations of a watercourse.

Sub-section F attaches review criteria for decision-making to Flood Development Permits, similar to that of other procedures in the TDC.

Sub-section G includes mandatory conditions of approval that would be included in every approved Floodplain Development Permit. Item 3 is a mandatory addition from Metro Title 3 of the Functional Plan.

14.040 Development Standards (currently 4.517)

This section remains generally the same, with a few notable provisions that have been altered or added in this proposal. Some of the proposed changes are for Community Rating System bonus credits, which could allow the City to achieve a better score to further reduce flood insurance rates for those who carry flood insurance.

Sub-section G is more specific in maintaining flood storage capacity through the “balanced cut and fill” approach that is typical for developing in special flood hazard areas. Specifically, the following provisions are new:

- Development may not result in any increase in flood levels throughout the special flood hazard area (currently undefined on the extent that no increase situation could occur)
- **Item 5:** New buildings built on fill must have fill that is certified by a professional engineer, and offers protection from erosion and scour.
- Part of **Item 6:** Provides relief for some applications from requirements to submit Letters of Map Change
- **Item 7:** Allows for the City to outsource engineering analysis of flood storage capacity to consultants who have technical aptitude to review plans and advise on action.

Sub-section H (Residential Development) has proposed changes as described below..

- **Item 1:** Elevation Certificates to be required for all residential development (CRS bonus)
- **Item 2.d:** When possible, have two opposing side openings for enclosed areas for flood waters to pass through.
- **Item 3.f:** Flood vent opening placement standards now in place (avoids standing water).
- **Item 4:** Require elevation of non-elevated structures to two (2) feet above base flood elevation (currently one (1) foot above base flood elevation; CRS bonus)

Sub-section I (Manufactured Dwellings) and Sub-section J (Recreational Vehicles) have updated standards as required by FEMA.

Sub-section K (Nonresidential Construction) remains largely the same, though new standards are in place for those structures who utilize floodproofing techniques. Those standards include submitting a maintenance plan (Item 6) and an emergency action plan (Item 7) if required.

Sub-section R (Utilities and Roads) would require roads built in the floodplain to be built at or above base flood elevation for emergency access purposes. (CRS bonus)

Sub-section S requires additional state agency notification for applications with alterations or relocations of watercourses.

Sub-section U (Critical Facilities) contains the following changes of interest:

- The “definition” of critical facilities can be found in Section 1.040. The current version re-articulates the definition, so it is proposed to be removed.
- Critical facilities constructed in special flood hazard areas should have their lowest floor elevated to one foot above the 500-year flood level. (CRS bonus)

Sub-section V (Small Accessory Structures) is a new sub-section designed to provide relief for certain types of accessory structures under certain circumstances.

14.045 Floodways (new)

This section is new and provides clear guidance on approving development activity in the floodway, which is generally discouraged due to the hazards associated with these areas.

14.050 Before Regulatory Floodway (new)

This section is new and prohibits most development activities to occur in areas where a regulatory floodway has not been designated. This situation is likely not to occur in Troutdale but is required to be in the floodplain regulations for the City.

14.055 Flood Management Area Variance Procedures (currently 4.518)

This section has been expanded, primarily at the direction of FEMA and DLCD.

Sub-section A is new and provides guidance on requests to vary from elevation standards based on 11 considerations outlined therein.

Sub-section B allows for relief to be sought for historic structures, with three (3) approval criteria items to be considered.

Sub-section C prohibits variances from being issued within a designated floodway if increased flood levels during the base flood discharge would result.

Sub-section D is the “minimum necessary” clause for most variance applications.

Sub-section E (currently sub-section A) remains the same, with a process for determination now established elsewhere in the Chapter.

Sub-section F (currently sub-section B) remains the same.

Sub-section G (currently sub-section C) allows for conditions to be attached by the decision-making entity.

Sub-section H (currently sub-section D) remains the same but is also expanded to allow for nonresidential buildings in very limited circumstances to seek variances from floodproofing standards.

Sub-section I (currently sub-section E) is mostly the same, with a reference changes.

Sub-section J (currently sub-section F) is mostly the same with an additional code reference in decision criteria 3 and two new decision criteria:

- Item 5: Determination that project cannot be located outside SFHA and that any impacts have been minimized to the extent practicable.
- Item 6: Consistency with other laws and ordinances.

14.060 Prescribed Conditions for the Rehabilitation or Replacement of Pre-Existing Structures
(currently 4.519)

This section remains mostly the same, with certain updates to references within the Code.

4. FACTS AND FINDINGS

TDC Section 2.065 specifies that the City Council is the decision-making body for text amendment applications after the Planning Commission forwards a recommendation for their consideration. Planning Commission is charged with making a finding for each applicable criterion point as listed in TDC Section 6.1120. Listed below are draft findings prepared by Staff for Planning Commission to review and amend as needed, upon the conclusion of the public hearing portion of the meeting and prior to a vote for a recommendation.

A. The proposed change to the Development Code does not conflict with applicable Comprehensive Land Use Plan goals or policies.

The Comprehensive Plan policies are in line with the proposed amendment. Goal 5, Policy 9 states that the City should “Notify and coordinate development proposals within natural resource areas with other local, state, and federal agencies”. Goal 7, Policy 1 speaks to “ensure that development in highly hazardous areas will be restricted or prohibited. Development may be allowed in areas of potential hazard if appropriate safeguards are taken in the design and construction to protect affected persons and property. Goal 7, Policy 3 seeks to restrict development within flood hazard areas to those uses which can be adequately floodproofed. The Code amendments are in line with these policies. **The criterion is met.**

B. The proposed change is consistent with the applicable Statewide Planning Goals.

The text amendments proposed are due in part to a State review of the existing regulations and required amendments to be made to come into compliance with Statewide Planning Goals in addition to federal standards. The state has performed a cursory review of the amendments as presented and have no additional comments. **The criterion is met.**

C. The proposed change is consistent with the applicable provisions of Metro Code.

The proposed text amendments are consistent with several Metro Code provisions and would be in conformance with Title 3 (Water Quality and Flood Management) of the Metro Growth Management Functional Plan. Of particular interest, the City was required to more specifically spell out required conditions of approval for flood development permits to ensure conformance with Title 3. **The criterion is met.**

D. Public need is best satisfied by this particular change.

Flood management is an exercise in protecting property and life from hazardous conditions. A primary responsibility of a local government is ensuring the safety of the community at large. The standards provide guidelines for responsible development in areas that are deemed to have flood risk, in order to minimize loss in case of a flood event. Furthermore, some of the regulations financially benefit the city residents, as they count toward a higher score on the Community Rating System, thus reducing insurance costs for all property owners. **The criterion is met.**

E. The change will not adversely affect the health, safety, and welfare of the community.

The existing flood management standards, along with the text amendments proposed are precisely in the spirit of protecting the health, safety, and general welfare of the community. do not weaken already existing standards that would suggest development activities would be more suitable in the flood management areas. The proposed amendments offer certain activities relief mechanisms in the forms of variances or in required submittal items, but in those situations, the applicants must demonstrate no negative impacts that would adversely affect public health, safety, or welfare. **The criterion is met.**

5. STAFF RECOMMENDATIONS

Staff offers the following recommendations for the conduct of the November 14, 2018 public hearing for the proposed amendments to the Troutdale Development Code.

- A. Conduct a public hearing and receive all public testimony relating to the proposal. Consider the public testimony and the facts and findings presented in the staff report and deliberate on policy issues, proposed amendments, and other issues identified by the Commission, Staff, other public entities, or the public.
- B. Recommend **approval** of the proposed text amendment application to the City Council for its consideration for its meeting and subsequent public hearings.

ATTACHMENTS

- A. This Staff Report
- B. TDC Section 1.040 (Definitions) – “Clean” Draft
- C. TDC Section 2.220 (Expiration of Decision) – “Clean” Draft
- D. TDC Section 4.500 (Flood Management Area) – “Clean” Draft
- E. TDC Chapter 14 – “Clean” Draft (formerly Section 4.500)
- F. TDC Section 1.040 (Definitions) – “Red-Line” Draft
- G. TDC Section 4.500 (Flood Management Area) – “Red-Line” Draft (to become Chapter 14)
- H. Common Floodplain Management Terms
- I. Measure 56 Notice & Map

1.040 Vegetation Corridor and Slope District, Water Quality, and Flood Management Definitions.

- .01 100-Year Flood. The flood that is equaled or exceeded once in one hundred (100) years on the average; equivalent to the one percent annual chance flood. Also called the Special Flood Hazard Area, Base Flood, and 100-year floodplain.
- .02 Area of Shallow Flooding. Means a designated AO, AH, AR/AO, AR/AH, or VO zone on a community's Flood Insurance Rate Map (FIRM) with a one percent (1%) or greater annual chance of flooding to an average depth of one to three (1 - 3) feet where a clearly defined channel does not exist, where the path of flooding is unpredictable, and where velocity flow may be evident. Such flooding is characterized by ponding or sheet flow.
- .03 Area of Special Flood Hazard. Means the land in the floodplain within a community subject to a one percent (1%) or greater chance of flooding in any given year. The area may be designated as Zone A on the Flood Hazard Boundary Map (FHBM). After detailed ratemaking has been completed in preparation for publication of the flood insurance rate map, Zone A usually is refined into Zones A, AO, AH, A1-30, AE, A99, AR, AR/A1-30, AR/AE, AR/AO, AR/AH, AR/A, VO, or V1-30, VE, or V. For purposes of these regulations, the term "special flood hazard area" is synonymous in meaning with the phrase "area of special flood hazard".
- .04 Bankfull Stage. As defined in the Oregon Administrative Rules pertaining to removal/fill permits, the stage or elevation at which water overflows the natural banks of a stream or other waters of the state and begins to inundate upland areas. In the absence of physical evidence, the two-year recurrent flood elevation (storm level) may be used to approximate the bankfull stage. The bankfull stage is the starting point for measuring the width of a vegetation corridor from a protected water feature. In the absence of any data to establish the bankfull stage or two-year storm event, the starting point for measuring the vegetation corridor is determined by the following indicators:
 - a. Water marks on fixed objects (vegetation, rocks, buildings, etc.);
 - b. Drift lines (deposited waterborne twigs, litter, etc.); or
 - c. Waterborne sediment deposits on the soil surface or fixed objects (vegetation, rocks, buildings, etc.)
- .05 Base Flood. A flood having a one percent (1%) chance of being equaled or exceeded in any given year.
- .06 Base Flood Elevation. The water surface elevation during the Base Flood in relation to a specified datum. The Base Flood Elevation (BFE) is depicted on the Flood Insurance Rate Map to the nearest foot and in the Flood Insurance Study to the nearest one-tenth (0.1) foot. Not every potential Special Flood Hazard Area within the Urban Growth Boundary has been mapped by the Federal Emergency Management Agency through the



- Flood Insurance Study, Flood Insurance Rate Maps, and Digital Flood Insurance Rate Maps. The Floodplain Manager or designee is authorized through Section 14.020 to obtain the information necessary to determine the presence and extent of unmapped Special Flood Hazard Areas and the associated Base Flood Elevation as part of reviewing development proposals that affect the 100-year Floodplain. Such information shall be used by the City of Troutdale to supplement the Flood Insurance Study, Flood Insurance Rate Maps, and Digital Flood Insurance Rate Maps.
- .07 Basement. Any area of the building having its floor subgrade (below ground level) on all sides.
- .08 Below-Grade Crawl Space. Means an enclosed area below the base flood elevation in which the interior grade is not more than two feet below the lowest adjacent exterior grade and the height, measured from the interior grade of the crawlspace to the top of the crawlspace foundation, does not exceed four (4) feet at any point.
- .09 Breakaway Wall. Means a wall that is not part of the structural support of the building and is intended through its design and construction to collapse under specific lateral loading forces, without causing damage to the elevated portion of the building or supporting foundation system.
- .10 Conservation Easement. An easement applied to environmentally sensitive lands including, but not limited to, lands identified as hillsides, wetlands, floodplains, and floodways. The field verification shall be done by a licensed surveyor, engineer, hydrologist, or any other licensed specialist in the fields of engineering, hydrology, or botany. A conservation easement prohibits most forms of development and assures that native vegetation will be maintained or enhanced. Conservation easements usually affect privately owned land and are enforceable by the City. Trails and limited public facilities may be permitted under carefully controlled conditions within conservation easements.
- .11 Construction, Start of. (For other than new construction or substantial improvements under the Coastal Barrier Resources Act (Pub. L. 97-348)), includes substantial improvement, and means the date the building permit was issued, provided the actual start of construction, repair, reconstruction, rehabilitation, addition placement, or other improvement was within one hundred eighty (180) days of the permit date. The actual start means either the first placement of permanent construction of a structure on a site, such as the pouring of slab or footings, the installation of piles, the construction of columns, or any work beyond the stage of excavation; or the placement of a manufactured home on a foundation. Permanent construction does not include land preparation, such as clearing, grading and filling; nor does it include the installation of streets and/or walkways; nor does it include excavation for a basement, footings, piers, or foundations or the erection of temporary forms; nor does it include the installation on the property of accessory buildings, such as garages or sheds not occupied as dwelling units or not part of the main structure. For a substantial improvement, the actual start of construction means the first alteration of any wall, ceiling, floor, or other structural part of a building, whether or not that alteration affects the external dimensions of the

building.

- .12 Critical Facility. A facility that is critical for the health and welfare of the population and is especially important to be located above the Base Flood Elevation following hazard events. The following is the list of Critical Facilities for the purposes of Chapter 14:
- a. Hospitals and other medical facilities having surgery and emergency treatment areas;
 - b. Fire and police stations;
 - c. Tanks or other structures containing, housing or supporting water or fire-suppression materials or equipment required for the protection of essential or hazardous facilities or special occupancy structures. These tanks or other structures do not include City water distribution facilities;
 - d. Emergency vehicle shelters and garages;
 - e. Structures and equipment in emergency-preparedness centers;
 - f. Standby power generating equipment for essential facilities;
 - g. Structures and equipment in government communication centers and other facilities required for emergency response; and
 - h. Other facilities as determined by the Floodplain Manager or designee.

Some types of facilities may be critical to a community, but require location within or partially within Special Flood Hazard Areas because of the nature of the facilities.

- .13 Debris. Debris includes discarded manmade objects and may include tires, vehicles, litter, scrap metal, construction waste, lumber, plastic, or styrofoam. Debris does not include objects necessary to a use allowed by this Code, or ornamental and recreational structures. Debris does not include existing natural plant materials or natural plant materials which are left after flooding, downed or standing dead trees, or trees which have fallen into protected water features.
- .14 Department of Environmental Quality (DEQ) Water Quality Standards. State of Oregon DEQ water quality standards are the numerical criteria or narrative condition needed in order to protect an identified beneficial use.
- .15 Design Flood Elevation. The elevation of the 100-year storm as defined in the Federal Emergency Management Agency Flood Insurance Studies or, in areas without Federal Emergency Management Agency floodplains, the elevation of the 25-year storm or the edge of mapped flood-prone soils or similar methodologies.

- .16 Developer. The owners of property, their agents or contractors, or their successors and assigns, who have undertaken or are proposing development which is regulated by Sections 4.300, 5.600, 5.700, and Chapter 14 of this Code.
- .17 Development. Any man-made change to improved or unimproved real estate, including but not limited to buildings or other structures, mining, dredging, filling, grading, paving, excavation or drilling operations or storage of equipment or materials. 
- .18 Digital Flood Insurance Rate Map. Depicts flood risk and federal flood zones and flood risk information. The Digital Flood Insurance Rate Map (DFIRM) presents the flood risk information in a format suitable for electronic mapping applications.
- .19 Disturb. Any manmade changes to the existing physical status of the land which are made in connection with development.
- .20 Elevated Building. Means for insurance purposes, a non-basement building which has its lowest elevated floor raised above ground level by foundation walls, shear walls, post, piers, pilings, or columns.
- .21 Elevation Certificate. A form supplied by the Federal Emergency Management Agency (FEMA) and used to document the lowest floor elevation of a building.
- .22 Emergency. Any manmade or natural event or circumstance causing or threatening loss of life, injury to person or property, and includes, but is not limited to, fire, explosion, flood, severe weather, drought, earthquake, volcanic activity, spills or releases of oil or hazardous material, contamination, utility or transportation disruptions, and disease.
- .23 Engineer. A registered professional engineer licensed by the State of Oregon.
- .24 Enhancement. The process of improving upon the natural functions and/or values of an area or feature which has been degraded by human activity. Enhancement activities may or may not return the site to a pre-disturbance condition, but create/recreate processes and features that occur naturally.
- .25 Erosion. Erosion is the detachment and movement of soil particles, rock fragments, or other material, organic or inorganic, resulting from actions of water, wind, human, or animal activity.
- .26  Erosion Hazard Zone. The area adjacent to a stream or river that is at risk of bank erosion from stream flow or mass wasting, as designated on the communities FIRM.
- .27 Erosion Prevention and Sediment Control Plans. Plan requirements are specified in the City of Troutdale's Construction Standards for Public Works Facilities.
- .28 Erosion, Visible or Measurable. Visible or measurable erosion includes, but is not limited to:

- a. Deposits of mud, dirt sediment, or similar material exceeding one-half cubic foot in volume on public or private streets, adjacent property, or onto the storm and surface water system, either by direct deposit, dropping discharge, or as a result of the action of erosion.
 - b. Evidence of concentrated flows of water over bare soils, turbid or sediment laden flows, or evidence of onsite erosion such as rivulets on bare soil slopes where the flow of water is not filtered or captured on the site.
 - c. Earth slides, mudflows, earth sloughing, or other earth movement that leaves the property.
- .29 Excavation. Any act by which soil or rock is cut into, dug, quarried, uncovered, removed, displaced, or relocated.
- .30 Existing Building or Structure. A structure for which the Start of Construction commenced before February 1, 2019.
- .31 Federal Emergency Management Agency (FEMA). The agency with the overall responsibility for administering the National Flood Insurance Program.
- .32 Fill. Any material such as, but not limited to, sand, soil, rock, gravel, clay, or mud that is placed on a site for the purposes of development or redevelopment.
- .33 FIRM. See Flood Insurance Rate Map.
- .34 Flood or Flooding. Means:
- a. A general and temporary condition of partial or complete inundation of normally dry land areas from:
 - 1. The overflow of inland or tidal waters.
 - 2. The unusual and rapid accumulation or runoff of surface waters from any source.
 - 3. Mudslides (i.e., mudflows) which are proximately caused by flooding as defined in paragraph (a)(2) of this definition and are akin to a river of liquid and flowing mud on the surfaces of normally dry land areas, as when earth is carried by a current of water and deposited along the path of the current.
 - b. The collapse or subsidence of land along the shore of a lake or other body of water as a result of erosion or undermining caused by waves or currents of water exceeding anticipated cyclical levels or suddenly caused by an unusually high

water level in a natural body of water, accompanied by a severe storm, or by an unanticipated force of nature, such as flash flood or an abnormal tidal surge, or by some similarly unusual and unforeseeable event which results in flooding as defined in paragraph (a)(1) of this definition.

- .35 Flood Insurance Rate Map (FIRM). An official map of a community, on which the Federal Insurance Administrator has delineated both the special hazard areas and the risk premium zones applicable to the community.
- .36 Flood Insurance Study (FIS). Or flood elevation study means an examination, evaluation and determination of flood hazards and, if appropriate, corresponding water surface elevations, or an examination, evaluation and determination of mudslide (i.e., mudflow) and/or flood-related erosion hazards.
- .37 Flood Management Area (FLMA). All lands contained within the 100-year floodplain and floodway as shown on the Flood Insurance Rate Map, and the area of inundation for the February 1996 flood. In addition, all lands which have documented evidence of flooding.
- .38 Floodplain. As shown below in Figure 1 - Floodplain Cross Section, the area adjacent to a stream or river channel that is covered by water when the river or stream overflows its banks.
- .39 Floodplain Development Permit. Federally required permit required prior to construction and other development in any Special Flood Hazard Area (100-yr. Floodplain). See Section 14.035 of this Code.
- .40 Floodplain Functions. Hydrological and ecological functions including conveyance and temporary storage of floodwater, depositions of sediments outside of the channel, ground water recharge, filtering of pollutants, and reduction of floodwater velocity and erosive forces. Also included, but to a lesser extent in previously urbanized areas, are such functions as nutrient exchange, refuges, and feeding areas for fish.
- .41 Floodplain, 100-Year. As shown below in Figure 1 - Floodplain Cross Section, land area adjacent to a river, stream, or other water body that is subject to a one percent or greater chance of flooding in any given year. It consists of land ranging from that which is subject to annual flooding to that which has a one percent (1%) or greater chance of flooding in any given year. The 100-year Floodplain consists of the Floodway and the Floodway Fringe. The 100-year Floodplain is mapped by the Federal Emergency Management Agency (FEMA) on Flood Insurance Rate Maps (FIRMs) and is the area subject to Base Flood regulations. Not every potential Special Flood Hazard Area within the Urban Growth Boundary has been mapped by the Federal Emergency Management Agency through the Flood Insurance Study, Flood Insurance Rate Maps, and Digital Flood Insurance Rate Maps. The Floodplain Manager or designee is authorized through Section 14.020 to obtain the information necessary to determine the presence and extent of unmapped Special Flood Hazard Areas as part of reviewing development proposals

that affect the 100-year Floodplain. Such information shall be used by the City of Troutdale to supplement the Flood Insurance Study, Flood Insurance Rate Maps, and Digital Flood Insurance Rate Maps and these areas are also subject to Base Flood regulations. See Base Flood.

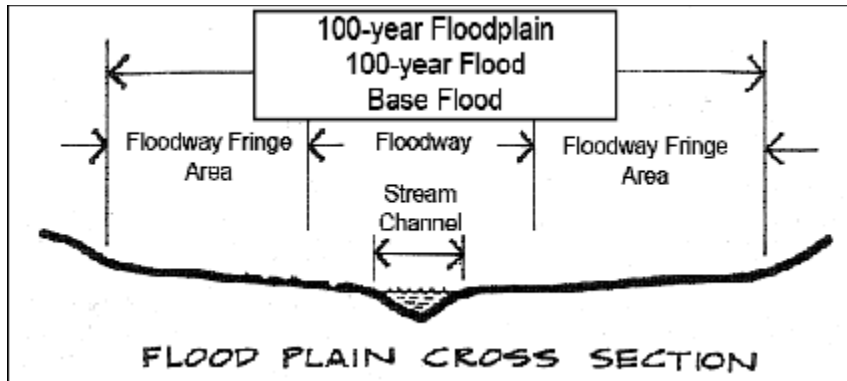


Figure 1 – Floodplain Cross Section

- .42 Floodway (Regulatory Floodway). Means the channel of a river or other watercourse and the adjacent land areas that must be reserved in order to discharge the base flood without cumulatively increasing the water surface elevation more than a designated height..
- .43 Flow-through Design. Typically a structure that does not displace surface floodwater or hinder or obstruct the movement of surface floodwater.
- .44 High Hazard Zone. Lands within the furthest landward extent of the floodway and erosion hazard zone, as designated on the communities FIRM.
- .45 Highest Adjacent Grade (HAG). The highest natural elevation of the ground surface prior to construction, adjacent to the proposed walls of a structure. Refer to the Elevation Certificate, FEMA Form 81-31, for more information.
- .46 Hydrodynamic Load. Force of water in motion.
- .47 Hydrostatic Load. Force of water at rest.
- .48 Invasive Non-native or Noxious Vegetation. Plant species that are listed as nuisance plants or prohibited plants on the most recent Portland Plant List as adopted by the City of Portland by ordinance because they are plant species that have been introduced and, due to aggressive growth patterns and lack of natural enemies in the area where introduced, spread rapidly into native plant communities.
- .49 Joint Fill Permit/404 Removal/Fill Permit. A permit issued jointly by the Oregon Department of State Lands and U.S. Army Corps of Engineers to allow, with conditions and mitigation, the removal or fill of wetlands determined to be of either local or state significance by the Oregon Department of State Lands.

- .50 Letter of Map Change (LOMC). An official FEMA determination, by letter, to amend or revise effective Flood Insurance Rate Maps and Flood Insurance Studies. LOMCs are issued in the following categories:
- a. Letter of Map Amendment (LOMA) - A revision based on technical data showing that a property was incorrectly included in a designated Special Flood Hazard Area. A LOMA amends the current effective Flood Insurance Rate Map and establishes that a specific property is not located in a Special Flood Hazard Area.
 - b. Letter of Map Revision (LOMR) - A revision based on technical data showing, usually due to manmade changes, alterations to Federal Flood Zones, flood elevations floodplain and floodway delineations, and planimetric features. One common type of LOMR, a LOMR-F, is a determination that a structure has been elevated through the placement of fill above the Base Flood Elevation and is excluded from the Special Flood Hazard Area.
 - c. Conditional Letter of Map Revision (CLOMR) - A formal review and comment by FEMA as to whether a proposed project complies with the minimum National Flood Insurance Program floodplain management criteria. A CLOMR does NOT amend or revise effective Flood Insurance Rate Maps, Flood Boundary and Floodway Maps, or Flood Insurance Studies.
- .51 Lowest Floor. Means the lowest floor of the lowest enclosed area (including basement). An unfinished or flood resistant enclosure, usable solely for parking of vehicles, building access or storage in an area other than a basement area is not considered a building's lowest floor. Provided that such enclosure is not built so as to render the structure in violation of the applicable non-elevation design requirements of CFR Sec. 60.3.
- .52 Manufactured Dwelling. Means a structure, transportable in one or more sections, which is built on a permanent chassis and is designed for use with or without a permanent foundation when attached to the required utilities. The term “manufactured dwelling” does not include a “recreational vehicle.”
- .53 Manufactured Dwelling Park or Subdivision. Means a parcel (or contiguous parcels) of land divided into two or more manufactured home lots for rent or sale
- .54 Mean Sea Level. For purposes of the National Flood Insurance Program, the North American Vertical Datum of 1988 or other Datum, to which Base Flood Elevations shown on a community's FIRM are referenced.
- .55 Mitigation. The reduction of adverse effects of a proposed project by considering, in this order:
- a. Avoiding the impact altogether by not taking a certain action or parts of an action;

- b. Minimizing impacts by limiting the degree or magnitude of the action and its implementation;
 - c. Rectifying the impact by repairing, rehabilitating, or restoring the effected environment;
 - d. Reducing or eliminating the impact over time by preservation and maintenance operations during the life of the action by monitoring and taking appropriate measures; and
 - e. Compensating for the impact by replacing or providing comparable substitute water quality resource areas.
- .56 Mulch. Application of plant residue, netting, or other suitable materials to the land surface to conserve moisture, hold soil in place, and aid in establishing plant cover.
- .57 NAVD 88. The North American Vertical Datum of 1988 (NAVD 88) is the vertical control datum established in 1991 by the minimum-constraint adjustment of the Canadian-Mexican-U.S. leveling observations. This is the data used on FIRMs and in flood insurance studies adopted in 2009.
- .58 NGVD 29. “The National Geodetic Vertical Datum of 1929: The name, after May 10, 1973, of (the) Sea Level Datum of 1929.” (Vertical control datum established for vertical control in the United States by the general adjustment of 1929.) This is the datum used on FIRMs and in flood insurance studies prior to 2009.
- .59 National Flood Insurance Program (NFIP). A federal program enabling property owners in participating communities to purchase insurance as a protection against flood losses in exchange for state and community floodplain management regulations that reduce future flood damages.
- .60 Native Vegetation or Native Plant. Vegetation listed as a native plant on the most recent Portland Plant List as adopted by the City of Portland by ordinance and any other vegetation native to the Portland metropolitan area provided that it is not listed as a nuisance plant or a prohibited plant on the Portland Plant List.
- .61 National Wetland Inventory (NWI) Map. The City is mapped on the Camas and Washougal, Washington-Oregon wetland maps prepared by the U.S. Department of the Interior, Fish and Wildlife Service.
- .62 New Construction. A structure for which the Start of Construction commenced after February 1, 2019, and includes subsequent Substantial Improvements to the structure
- .63 NPDES Permit. The National Pollutant Discharge Elimination System 1200-C Permit is a State of Oregon Department of Environmental Quality permit that covers federal stormwater regulations as they pertain to construction activities in Oregon. The permit is

- administered by the City.
- .64 ODFW Construction Standards. The Oregon Department of Fish and Wildlife construction guidelines for building roads, bridges, and culverts, or any transportation structure within a waterway.
- .65 One Percent Annual Chance Flood. The flood that has a one percent (1%) chance of being equaled or exceeded on the average in any given year; equivalent to the 100-year flood.
- .66 Open Space. Land that is undeveloped and that is planned to remain so indefinitely. The term encompasses parks, forests, and farmland. It may also refer only to land zoned as being available to the public, including playgrounds, watershed preserves, and parks.
- .67 Perennial Streams. All primary and secondary perennial waterways mapped by the U.S. Geological Survey, having year-round flow.
- .68 Practicable. Available and capable of being done after taking into consideration cost, existing technology, and logistics in light of overall project purpose.
- .69 Pre-FIRM Structures. Buildings that were built before the flood risk was known and identified on the community's FIRM.
- .70 Protected Water Features, Primary. Includes:
- a. Title 3 wetlands.
 - b. Rivers, streams (creeks or brooks) and drainages downstream from the point at which one hundred (100) acres or more are drained to that water feature (regardless of whether it carries year-round flow).
 - c. Streams carrying year-round flow.
 - d. Springs which feed streams and wetlands and have perennial (year-round) flow.
 - e. Natural lakes.
- .71 Protected Water Features, Secondary. Includes intermittent streams and seeps downstream of the point at which fifty (50) acres are drained and upstream of the point at which one hundred (100) acres are drained to that water feature.
- .72 Restoration. The process of returning a disturbed or altered area or feature to a previously existing natural condition. Restoration activities reestablish the structure, function, and/or diversity to that which occurred prior to impacts caused by human activity.
- .73 Recreational Vehicle (RV). A vehicle which is:

- a. Built on a single chassis;
 - b. Four hundred (400) square feet or less when measured at the largest horizontal projection;
 - c. Designed to be self-propelled or permanently towable by a light duty truck; and
 - d. Designed primarily not for use as a permanent dwelling but as temporary living quarters for recreational, camping, travel, or seasonal use.
- .74 Resource. A functioning natural system such as a wetland or stream.
- .75 Riparian. Those areas associated with streams, lakes, and wetlands where vegetation communities are predominately influenced by their association with water.
- .76 Routine Repair and Maintenance. Activities directed at preserving an existing allowed use or facility, or nonconforming use, without expanding the development footprint or site use.
- .77 Sediment. Any material that is in suspension, is being transported, or has been moved from its site of origin by water, wind, or gravity as a result of erosion.
- .78 Site. The lot, or contiguous lots, under the same ownership that are subject to a development permit or erosion control plan.
- .79 Slope District. Slopes of twenty-five percent (25%) or greater throughout the City that have a minimum horizontal distance of fifty (50) feet. Engineered slopes associated with public streets or roads are not included.
- .80 Special Flood Hazard Area (SFHA). The land in the floodplain within a community subject to a one percent (1%) or greater chance of flooding in any given year. The area may be designated as Zone A on the FHBM (Flood Hazard Boundary Map). After detailed ratemaking has been completed in preparation for publication of the flood insurance rate map, Zone A usually is refined into Zones A, AO, AH, A1-30, AE, A99, AR, AR/A1-30, AR/AE, AR/AO, AR/AH, AR/A, VO, or V1-30, VE, or V. For purposes of these regulations, the term “special flood hazard area” is synonymous in meaning with the phrase “area of special flood hazard”.
- .81 Statewide Planning Goal 5. Oregon’s statewide planning goal that addresses open space, scenic and historic areas, and natural resources. The purpose of the goal is to conserve open space and protect natural and scenic resources.
- .82 Statewide Planning Goal 6. Oregon’s statewide planning goal that addresses air, water, and land resources quality to “maintain and improve the quality of the air, water, and land resources of the state” as implemented by the Land Conservation and Development

Commission (LCDC).

- .83 Statewide Planning Goal 7. Oregon’s statewide planning goal that addresses areas subject to natural disasters and hazards to “protect life and property from natural disasters and hazards” as implemented by the Land Conservation and Development Commission.
- .84 Stockpile. Onsite storage of any soil, sand, gravel, clay, mud, debris, vegetation, refuse, or any other material, organic or inorganic, in a concentrated state.
- .85 Stream. A body of running water moving over the earth’s surface in a channel or bed, such as a creek, rivulet, or river, that flows at least part of the year, including perennial and intermittent streams. Streams are dynamic in nature and their structure is maintained through build-up and loss of sediment.
- .86 Stream Bank, Top of. See Bankfull Stage.
- .87 Structure. Means, for floodplain management purposes, a walled and roofed building, including a gas or liquid storage tank, that is principally above ground, as well as a manufactured home. Structure, for insurance purposes, means:
- a. A building with two or more outside rigid walls and a fully secured roof that is affixed to a permanent site;
 - b. A manufactured dwelling; or
 - c. A travel trailer without wheels, built on a chassis and affixed to a permanent foundation, that is regulated under the community's floodplain management and building ordinances or laws.
- For the latter purpose, structure does not mean a recreational vehicle or a park trailer or other similar vehicle, except as described in Section 1.040.87(c), or a gas or liquid storage tank.
- .88 Substantial Damage. Damage of any origin sustained by a structure located within the 100-year Floodplain, whereby the cost of restoring the structure to its prior condition would equal or exceed fifty percent (50%) of the structure's market value before the damage occurred.
- .89 Substantial Improvement. Means any reconstruction, rehabilitation, addition, or other improvement of a structure, the cost of which equals or exceeds forty-nine percent (49%) of the market value of the structure before the start of construction of the improvement. This term includes structures which have incurred substantial damage, regardless of the actual repair work performed. The term does not, however, include either:
- a. Any project for improvement of a structure to correct existing violations of state or local health, sanitary, or safety code specifications which have been identified

by the local code enforcement official and which are the minimum necessary to assure safe living conditions; or,

- b. Any alteration of a historic structure, provided that the alteration will not preclude the structure's continued designation as a historic structure.
- .90 Surface Water Management System. All natural and constructed facilities used to regulate the quantity and quality of surface water, including drainage easements, culverts, storm drains, catch basins, drainage ditches, natural drainageways, stream corridors, rivers, ponds, wetlands, and impoundments.
- .91 Title 3. Title 3 is part of the Metro Urban Growth Management Functional Plan pertaining to water quality, flood management, and fish and wildlife conservation, and directly pertains to Statewide Planning Goals 5, Open Spaces, Scenic and Historic Areas, and Natural Resources; 6, Air, Water, and Land Resources Quality; and 7, Areas Subject to Natural Disasters and Hazards.
- .92 Variance. Means a grant of relief by a community from the terms of a floodplain management regulation.
- .93 Vegetation, Approved. Vegetation which typically does not require irrigation or fertilization because it is adapted to natural soil, water, and climatic conditions. The list of approved vegetation species is based on the most recent Portland Plant List as adopted by the City of Portland by ordinance, and is on file in the Community Development Department.
- .94 Vegetation Corridor. The undisturbed area between a development and a protected water feature as designated in Sections 4.316, Width of Vegetation Corridor, and 4.317, Method for Determining Vegetation Corridors Next to Primary Protected Water Features, of this Code, or slopes of twenty-five percent (25%) or greater throughout the City, except engineered slopes associated with public streets or roads.
- .95 Vegetation, Invasive, Non-Native, or Noxious. Plant species that have been introduced and due to aggressive growth patterns and lack of natural enemies in the area where introduced, spread rapidly into native plant communities, or which are not listed on the most recent Portland Plant List as adopted by the City of Portland by ordinance.
- .96 Vegetation, Native. Any vegetation native to the Portland Metropolitan Area or listed on the Portland Plant List as adopted by the City of Portland by ordinance.
- .97 Water-dependent. A structure for commerce or industry which cannot exist in any other location and is dependent on the water by reason of the intrinsic nature of its operations.
- .98 Water Features. See Protected Water Features, primary and secondary.
- .99 Water Quality Facility. A created or constructed structure or drainageway that is

- designed, constructed, and maintained to collect, filter, retain, or detain surface water runoff during and after a storm event for the purpose of stormwater management and water quality improvement. The facility may take on characteristics of a wetland, but it does not become a resource.
- .100 Watershed. A geographic unit defined by the flows of rainwater or snowmelt. All land in a watershed drains to a common outlet, such as a stream, lake, or wetland.
- .101 Water Surface Elevation. The height, in relation to a specific datum, of floods of various magnitudes and frequencies in the floodplains of coastal or riverine areas.
- .102 Wetlands. Areas inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, and similar areas. Wetlands are those areas identified and delineated by qualified wetland specialists as set forth in the 1987 Corps of Engineers Wetland Delineation Manual.
- a. Wetland determinations. The identification of an area as either wetland or non-wetland.
 - b. Wetlands, constructed. Wetlands developed as a water quality or quantity facility, subject to change and maintenance as such. These areas must be clearly defined and/or separated from naturally occurring or created wetlands.
 - c. Wetlands, created. Those wetlands developed in an area previously identified as a non-wetland to replace or mitigate wetland destruction or displacement. A created wetland shall be regulated and managed the same as an existing wetland.
 - d. Wetlands, Title 3. Wetlands of metropolitan concern as shown on the Metro Water Quality and Flood Management Overlay District Map and other wetlands not mapped but determined significant by the Oregon Department of State Lands, consistent with the criteria in Title 3, Section 7.C. of the Metro Urban Growth Management Functional Plan. Title 3 wetlands include created wetlands approved and monitored by the Oregon Department of State Lands and U.S. Army Corps of Engineers. Title 3 wetlands do not include artificially constructed and managed stormwater and water quality treatment facilities.

2.220 Expiration of a Decision.

- A. Except as otherwise specifically provided in a specific decision or in this Code, a final decision on a Type I, II or III application made pursuant to this Code shall expire automatically on the following schedule unless the approval is enacted either through construction, establishment of use, or recordation of plat or survey within the specified time period.
1. No expiration date:
 - a. Comprehensive Plan Text Amendment (6.100)
 - b. Comprehensive Plan Map Amendment (6.200)
 - c. Director's Interpretation (Section 6.400)
 - d. Text Amendment (Section 6.1100)
 - e. Vacation (Section 6.1200)
 - f. Zoning Map Amendment (Section 6.1400)
 2. Five (5) years from the effective date of decision where phasing of the development is proposed.
 - a. Planned Unit Development (Section 6.700)
 - b. Preliminary Subdivision (Section 7.030.B)
 3. Two (2) years from the effective date of decision:
 - a. Alteration to a Historic Landmark (Section 6.515.C.)
 - b. Conditional Use (Section 6.300)
 - c. Demolition or Relocation of a Historic Landmark (Section 6.515.D.)
 - d. Expansion of a Non-Conforming Structure or Development (Section 6.615.C.)
 - e. Expansion of a Non-Conforming Use - Major (Section 6.615.B.)
 - f. Expansion of a Non-Conforming Use - Minor (Section 6.615.A.)
 - g. Historic Landmark Designation (Section 6.515.A.)
 - h. Planned Unit Development (Section 6.700), when there is no phasing to the development.
 - i. Preliminary Partition (Section 7.030.A)
 - j. Property Line Adjustment (Section 7.180)
 - k. Removal of a Historic Landmark Designation (Section 6.515.B.)
 - l. Site Development Review (Section 6.900)
 - m. Variance (Section 6.1300)
 4. One (1) year from the effective date of the decision:
 - a. Temporary Structure (Section 6.1000)

5. One hundred eighty (180) days from the effective date of the decision:
 - a. Floodplain Development (Section 14.035), if construction has not started.
 6. Any final decision that is not listed herein shall expire within two (2) years from the effective date of the decision.
- B. The effective date of the decision for Type I, Type II, or Type III applications shall be the date that the signed land use order is dated and mailed, unless appealed. If a Type I, Type II, or Type III application is appealed, the effective date of the decision shall be the date of the appellate decision making authority's signed land use order is dated and mailed. The effective date of decision for a Type IV application is thirty (30) days after the Mayor signs the ordinance, unless an emergency is declared in which case the ordinance is effective immediately upon signature of the Mayor.
- C. A decision shall expire according to Section 2.220.A. unless one of the following occurs prior to the date of expiration:
1. An application for an extension is filed pursuant to Section 2.225; or
 2. The development authorized by the decision has commenced as defined herein.
 - a. The use of the subject property has changed as allowed by the approval; or
 - b. In the case of development requiring construction, a construction permit has been issued and substantial construction pursuant thereto has taken place.
 - c. The approval time begins from the effective date of a decision. Appeal of a decision to LUBA does not extend the time.

2.225 Extension of a Decision.

- A. An application to extend the expiration date of a decision made pursuant to this Code may be filed only before the decision expires as provided in Section 2.220.
- B. A land use decision may be extended no more than two (2) times.
- C. Requests for extension of a decision shall be as follows:
 1. The first request for extension shall follow the Type II process.
 2. The second request for extension shall follow the Type III process.
- D. Extension requests shall provide mailed public notice to those parties identified in Section 2.085. In addition, the notice shall be mailed to the parties of record contained in the initial land use decision and any prior extension of time decision.

4.500 FLOOD MANAGEMENT AREA FLMA

4.500 Repeal. Ordinance 851 repealed this Section in its entirety and relocated the Flood Management Area standards previously contained in this Section to Chapter 14 of this Code.

Chapter 14 – Flood Management

- 14.005 Purpose. Without establishing any priority, the purpose of this Chapter is to promote the public health, safety, and general welfare, and to minimize public and private losses due to flood conditions or degradation of water quality in specific areas by provisions designed to:
- A. Protect human life, health, and property in areas subject to periodic flooding;
 - B. Implement the Floodplain requirements of Statewide Planning Goal 7 - which relates to areas subject to natural disasters and hazards;
 - C. Through floodplain regulation, contribute to the properly functioning condition of streams and rivers and address, in part, the water quality aspects of Statewide Planning Goal 6;
 - D. Implement requirements for the City's participation in the National Flood Insurance Program, and voluntary participation in the Community Rating System;
 - E. Implement the actions derived from the Multnomah County Hazard Mitigation Plan to minimize the risk of natural hazards, such as flooding, to people and property;
 - F. Ensure continuity of City services, access to City facilities, and minimal prolonged business interruptions during times of flood;
 - G. Manage stormwater drainage in a manner that:
 - 1. Maintains the properly functioning conditions of waterways;
 - 2. Provides for the conveyance and temporary storage of floodwater;
 - 3. Reduces floodwater velocity;
 - 4. Facilitates sediment deposition in the floodplain;
 - 5. Provides an opportunity for groundwater recharge; and
 - 6. Promotes other stormwater and floodplain functions.
- These provisions are also intended to minimize maintenance costs, eliminate potential hazards before they occur, and protect properties and persons adjacent to drainageways and to other natural hazard areas;
- H. Minimize damage to public facilities and utilities, such as water purification and sewage treatment plants, water and gas mains, electric, telephone and sewer lines, streets, and bridges located in floodplains;

- I. Help maintain a stable tax base by providing for sound use and development;
- J. Ensure that potential buyers are notified that property is in an area of special flood hazard;
- K. Compel those who occupy the areas of special flood hazard assume responsibility for their actions;
- L. Maintain and improve water quality;
- M. Minimize erosion and loss of native vegetation;
- N. Maintain wetlands, including swamps, marshes, bogs, and similar areas within the City, because wetlands help to maintain water quality and flood storage capacities;
- O. Avoid any increase in base flood elevations as a result of development;
- P. Minimize expenditure of public money for costly flood control projects;
- Q. Minimize the need for rescue and relief efforts associated with flooding and generally undertaken at the expense of the general public;
- R. Reduce flood losses and maintain water quality. In order to accomplish its purpose, this Chapter includes methods and provisions to:
 - 1. Require that development that is vulnerable to floods, including buildings, structures, and facilities necessary for the general health, safety and welfare of citizens, be protected against flood damage at the time of initial construction;
 - 2. Restrict or prohibit uses which are dangerous to health, safety and property due to water or erosion hazards, or which increase flood heights, velocities, or erosion;
 - 3. Control filling, grading, dredging and other development which may increase flood damage or erosion;
 - 4. Prevent or regulate the construction of flood barriers that will unnaturally divert flood waters or that may increase flood hazards on other lands;
 - 5. Preserve and restore natural floodplains, stream channels, and natural protective barriers which carry and store flood waters, and;
 - 6. Coordinate with and supplement provisions of Oregon Building Codes.
- S. To advance these purposes, where not required, creation of open space tracts is encouraged within areas designated as natural hazards on the Comprehensive Plan and official zoning maps.

14.010 Applicability.

- A. These provisions shall apply to public and private properties in the one percent (1%) annual chance of flood floodplain (100-year floodplain or Special Flood Hazard Area) as mapped by the Federal Insurance Administrator of rivers and local streams within the planning jurisdiction of the City of Troutdale, which includes land in unincorporated Multnomah County within the City’s Urban Planning Area.
- B. The areas of special flood hazard identified by the Federal Insurance Administrator in a scientific and engineering report entitled “The Flood Insurance Study for Multnomah County, Oregon and Incorporated Areas of Multnomah County”, with accompanying Flood Insurance Rate Maps, are hereby adopted by reference and declared to be a part of this ordinance. The Flood Insurance Study is on file at the Community Development Department located at 2200 SW 18th Way, Troutdale, OR 97060 (storage location subject to change, consult the Floodplain Manager for current file storage location). Metro, a regional metropolitan planning agency representing portions of Clackamas, Multnomah, and Washington Counties, mapped the flood hazard areas from areas inundated by flooding in 1996 on the Title 3 map. The Title 3 maps are adopted for reference only. Not every Special Flood Hazard Area has been mapped by the Federal Insurance Agency through the Flood Insurance Study and Flood Insurance Rate Maps cited above. The Floodplain Administrator or designee is authorized through Sections 14.020 to obtain from applicants the information necessary to determine the presence and extent of unmapped Special Flood Hazard Areas as part of reviewing development proposals that affect the floodplain. Once approved by the Floodplain Administrator or designee, such information shall be incorporated into the Natural Hazards Map and used by the City of Troutdale to supplement the Flood Insurance Study, Flood Insurance Rate Maps, and Digital Flood Insurance Rate Maps cited above to ensure consistency with the floodplain regulations contained in this Chapter. Contested base flood elevations are to be reviewed under the provisions of Subsection 14.020.D of this Chapter. The City will keep a record of all surveys, delineations, and any Letter of Map Change (LOMC) approved by the Federal Emergency Management Agency, as revisions to the local copy of the Title 3 map. The City will submit this information to Metro for future updates of the Title 3 map.
- C. Warning and Disclaimer of Liability. The degree of flood protection required by this Chapter is considered reasonable for regulatory purposes and is based on scientific and engineering considerations. Larger floods can and will occur on rare occasions. Flood heights may be increased by manmade or natural causes. This Code does not imply that land or uses will be free from flooding or flood damage. This Code shall not create liability on the part of the City, any officer or employee thereof, or the Federal Insurance Administrator, for any damages that result from reliance on this Code or any administrative decision lawfully made hereunder.

14.015 Severability. The standards of this Chapter are subject to the severability standards as described in Section 17.100 of this Code.

14.020 Administration and Interpretation of Flood Insurance Rate Map Boundaries and Flood Management Area Standards.

- A. The Community Development Director shall designate a Floodplain Manager to be the Local Administrator of this Chapter. The Floodplain Manager shall implement the provisions and standards of the National Flood Insurance Program, the standards of this Chapter, and make interpretations, where needed, including determinations regarding the exact location of the boundaries of the Special Flood Hazard Area (for example, where there appears to be a conflict between a mapped boundary and actual field conditions) by granting or denying Floodplain Development Permit applications in accordance with its provisions. In the interpretation and application of this Chapter, all provisions shall be:
1. Considered as minimum requirements;
 2. Liberally construed in favor of the governing body;
 3. Judged by established historical facts of flooding as known by, or made known to, the governing body;
 4. Deemed neither to limit nor repeal any other powers granted under State statutes; and
 5. Defined in Section 1.040 of this Code.
- B. Duties and Responsibilities of the Floodplain Manager. Duties of the Floodplain Manager shall include, but not be limited to:
1. Review all Floodplain Development Permits to determine that the permit requirements of this ordinance have been satisfied.
 2. Review all Floodplain Development Permits to determine that all necessary permits have been obtained from those Federal, State, or local governmental agencies from which prior approval is required.
 3. Review all Floodplain Development Permits to determine if the proposed development is located in the floodway. If located in the floodway, assure that the encroachment provisions of this Chapter are met.
 4. When base flood elevation data has not been provided (A Zones) in accordance with Section 14.010 of this Chapter, the Floodplain Manager shall obtain, review, and reasonably utilize any base flood elevation and floodway data available from a Federal, State or other source, in order to administer Section 14.040 of this Chapter.
 5. Where base flood elevation data is provided through the Flood Insurance Study, FIRM, or required as in Section 14.020.C, obtain and record the actual elevation

(in relation to mean sea level) of the lowest floor (including basements and below-grade crawlspaces) of all new or substantially improved structures, and whether or not the structure contains a basement.

6. For all new or substantially improved floodproofed structures where base flood elevation data is provided through the Flood Insurance Study, FIRM, or as required in Section 14.020.C, the administrator shall:
 - a. Verify and record the actual elevation (in relation to mean sea level), and
 - b. Maintain the floodproofing certifications required in Section 14.040 of this Chapter.
7. Maintain for public inspection all records pertaining to the provisions of this ordinance.
8. Notify adjacent communities, the Oregon Department of Land Conservation and Development, and other appropriate state and federal agencies, prior to any alteration or relocation of a watercourse, and submit evidence of such notification to the Federal Insurance Administrator.
9. Require that maintenance is provided within the altered or relocated portion of said watercourse so that the flood carrying capacity is not diminished.
10. Notify FEMA within six (6) months of project completion when an applicant had obtained a Conditional Letter of Map Change from FEMA, or when development altered a watercourse, modified floodplain boundaries, or modified Base Flood Elevations. This notification shall be provided as a Letter of Map Change. The property owner shall be responsible for preparing technical data to support the Letter of Map Change application and paying any processing or application fees to FEMA. The Floodplain Manager shall be under no obligation to sign the Community Acknowledgement Form, which is part of the Conditional Letter of Map Change and Letter of Map Change application, until the applicant demonstrates that the project will or has met the requirements of this Code and all applicable State and Federal laws.
11. Report to FEMA on each development permit issued in the SFHA, including:
 - a. Amount of fill or structural displacement of flood storage, and the amount (in volume and area) of compensatory storage provided;
 - b. Amount of new impervious surface and types and amounts of compensatory mitigation provided;
 - c. The number of trees equal to or greater than six (6) inches in diameter at

breast height removed, and the types and amounts of compensatory mitigation provided;

- d. The area in which clearing and/or grading occurred;
- e. For any project that disconnects or reconnects land to the floodplain, the type of project and amount of land disconnected or reconnected; and
- f. Location of the project and of the corresponding mitigation.

14. Make interpretations where needed, as to exact location of the boundaries of the areas of special flood hazards (for example, where there appears to be a conflict between a mapped boundary and actual field conditions). The person contesting the location of the boundary shall be given a reasonable opportunity to appeal the interpretation as provided in Section 14.055 of this Chapter.

- C. Use of Other Base Flood Data for Permit Review. When base flood elevation data is not available through the Flood Insurance Study, FIRM, or has not been provided in accordance with Section 14.010 of this Chapter, the City may obtain, review, and utilize any reasonable base flood elevation and floodway data available from a federal, state, or other source, in order to assure that proposed development will be reasonably safe from flooding. The test of reasonableness is a local judgment and includes use of historical data, high water marks, photographs of past flooding, etc., where available. Failure to elevate at least two (2) feet above grade in these zones may result in higher insurance rates.
- D. Contested Boundaries. A person contesting the location of the boundary has the opportunity to submit a Letter of Map Change (LOMC) directly to the Federal Emergency Management Agency to change the Flood Insurance Rate Map mapping of their property. If a land use application is submitted before a LOMC is approved by the Federal Emergency Management Agency, the application will be processed under the standards of this Chapter.
- E. Inspections. The Floodplain Manager shall inspect development that is subject to the permit requirements of this Chapter, including buildings and structures exempt from the Building Code. The floodplain administrator shall inspect Special Flood Hazard Areas to determine if development is being undertaken without the issuance of a permit. Annual inspection logs shall be maintained by the Floodplain Manager.

14.025 Uses within the Floodplain but Outside the Floodway and Outside Wetlands.

- A. Prohibited Uses.
 - 1. Any prohibited use in the underlying zoning district.
 - 2. Excavation, fill, or vegetation removal without an approved land use permit.

3. Expansion of legal nonconforming uses.
 4. Uncontained, outside storage areas of hazardous materials for hazardous materials as defined by the State of Oregon Department of Environmental Quality.
 5. No new land divisions will be approved for properties exclusively within the floodplain or that propose to create a buildable lot that is exclusively within the floodplain.
- B. Permitted Uses.
1. Any use permitted in the underlying zoning district, subject to the standards for development outlined in Section 14.040 of this Chapter, including stormwater management facilities developed in accordance with the standards of Section 5.700 of this Code.
 2. Open space, trails, walkways, and bike paths as designated by the Troutdale Parks Plan, or as approved with a land use application and constructed in compliance with Section 4.315.D.
 3. Removal of unauthorized fill.
 4. Removal of nuisance or invasive plant species, and/or the restoration of approved plant species on the City of Portland Plant List as defined in Section 1.040 of this Code.
 5. Removal of dead or dying trees that are an imminent danger to public safety as determined by a certified arborist or the equivalent.
 6. Construction of new roadways and utilities necessary to support permitted development within and outside the Flood Management Area, subject to the standards of Section 14.040 of this Chapter and the Construction Standards on file in the Public Works Department or the applicable jurisdiction of the roadway.
 7. New culverts, stream crossings, and transportation projects may be permitted if designed as balanced cut and fill projects, and in compliance with the standards of Section 14.040 of this Chapter. Such projects shall be designed to minimize the area of fill in Flood Management Areas and to minimize erosive velocities. Stream crossings shall be as close to perpendicular to the stream as practicable. Bridges shall be used instead of culverts wherever practicable.
 8. Excavation and fill required for the construction of detention facilities or structures, and other facilities such as levees specifically designed to reduce or mitigate flood impacts. Levees shall not be used to create vacant buildable land.

9. Temporary bank stabilization or tree and vegetation removal necessitating immediate action during a flood emergency or other emergency to prevent the loss of an existing structure, or to repair a bank damaged during a flood. Following the flood emergency or other emergency, the owner shall submit a Floodplain Development Permit according to Section 14.035.E(1)(b)..
10. Routine repair and maintenance of existing structures (conforming and nonconforming uses), streets, driveways, utilities, culverts, drainageways and levees constructed for flood control, accessory uses, and other existing development on the site (including landscaped yards, decks, patios, boat ramps, etc.).
11. Rehabilitation or replacement of a structure that is damaged or destroyed to any extent, whether it is partially or fully within the Flood Management Area, and in compliance with Section 4.521 of this Chapter. Any structure or use deliberately removed or demolished may not be restored, replaced, or rebuilt, except in compliance with all applicable provisions of this Code, federal, state, and county regulations.
12. Any development that must implement a Federal Aviation Administration (FAA) compliant wildlife hazard management plan on property owned by the Port of Portland or within ten thousand (10,000) feet of an Aircraft Operating Area, as defined by the FAA, and removal of trees that interfere with the landing or takeoff flight path of aircraft at the Troutdale Airport or otherwise interferes with the safe operation of the airport as determined by the Port of Portland. The removal of trees that interfere with the operation of the Troutdale Airport are permitted outright.
13. Wildfire mitigation projects, such as fuels reduction or the creation of defensible space.
14. Removal of refuse as defined in the Troutdale Municipal Code.

14.030 Uses within the Floodway or within Wetlands.

- A. Prohibited Uses within the Floodway or within Wetlands. Unless specifically permitted under this Section, the following uses are prohibited within floodways and wetlands:
 1. Manmade structures.
 2. Vegetation removal, fill, or excavation. Vegetation removal in the floodway in concert with an approved wildfire mitigation project may be permitted subject to review under the standards for development of Section 14.040 of this Chapter.
 3. Private road construction.

4. Alterations and relocations of the watercourses of Arata, Salmon, or Beaver Creeks, the Sandy and Columbia Rivers, or the watercourse of any unnamed perennial or intermittent stream except as provided for in Subsection B(11) of this Section and Section 14.040.O of this Chapter.
 5. Fill of wetlands without both an approved land use application and an approved Joint Fill Permit issued by the Oregon Department of State Lands and the U.S. Army Corps of Engineers.
 6. Uncontained, outside storage areas of hazardous materials for hazardous materials as defined by the State of Oregon Department of Environmental Quality.
 7. Expansion of nonconforming uses.
 8. New installation of manufactured dwellings.
- B. Permitted Uses within the Floodway or within Wetlands. The following uses are permitted subject to review under the standards for development of Section 14.040 of this Chapter:
1. Open space, trails, walkways, and bike paths, as designated by the Troutdale Parks Plan, or as approved with a land use application.
 2. Removal of unauthorized fill.
 3. Removal of dead or dying trees that are an imminent danger to public safety as determined by a certified arborist or the equivalent.
 4. Routine repair and maintenance of existing structures (conforming and nonconforming uses), streets, driveways, utilities, culverts, drainageways and levees constructed for flood control by the Sandy Drainage Improvement Company or its successor, accessory uses, and other existing development on the site (including landscaped yards, decks, patios, boat ramps, and the operation, maintenance, and repair of manmade water control facilities such as irrigation and drainage ditches, constructed ponds or lakes, wastewater facilities, and stormwater quality facilities, and similar development.
 5. Construction, expansion, and/or maintenance of public roadways and public utility facilities necessary to support permitted development. A “No-Rise” Certification for construction or expansion of public roadways and public utilities shall be required consistent with Section 14.040.G(4) for all approved projects.
 6. Balanced excavation and fill required for the construction of detention facilities or structures and other facilities such as levees specifically designed to reduce or mitigate flood impacts. Levees shall not be used to create vacant buildable lands.

7. New culverts, stream crossings, and transportation projects necessary to implement the City, County, or State Transportation System Plans or other development permitted under this Chapter, and as applicable, meets the specifications of the Oregon Department of State Lands, Oregon Department of Fish and Wildlife, and federal regulations.
8. Permanent bank stabilization necessary to preserve an existing structure provided the balanced cut and fill standard is met if the work is in the floodplain or a “No-Rise” certification if the work is within the floodway. Exception: Bank stabilization is not permitted for development on a vacant lot of record.
9. Temporary bank stabilization or tree and vegetation removal necessitating immediate action during a flood emergency or other emergency to prevent the loss of an existing structure, or to repair a bank damaged during a flood. Following the flood emergency or other emergency, the owner shall submit a Floodplain Development Permit according to Section 14.035.E(1)(b).
10. Fill of wetlands when there is no other practicable way to build on the site as established through Section 14.040 of this Chapter, and provided fill of wetlands within the floodplain is balanced with cut elsewhere within the floodplain, and a Fill/Removal Permit is issued from the Oregon Department of State Lands (DSL) and U.S. Army Corps of Engineers (Corps), as applicable. The application to DSL and the Corps may be processed concurrently with a land use application for site and design review, land division, a planned development application, or a conditional use. A joint fill permit may be applied for prior to application for a land use permit. However, if a joint fill permit is approved by the Oregon Department of State Lands and the U.S. Army Corps of Engineers prior to applying for the land use application, fill may not proceed until the final decision for the land use application has been made by the City. Mitigation for fill of wetlands and the location of the mitigation shall be as prescribed by the DSL/Corps permit.
11. New drainageways, levees, or alteration of watercourses to accommodate public projects administered by the Sandy Drainage Improvement Company or its successor, the City, Multnomah County, the state, or a federal agency, provided it is in compliance with Sections 14.035(C), and 14.040(R) and (S) of this Chapter.
12. Any development that must implement a Federal Aviation Administration (FAA) compliant wildlife hazard management plan on property owned by the Port of Portland or within ten thousand (10,000) feet of an Aircraft Operating Area, as defined by the FAA, and removal of trees that interfere with the landing or takeoff flight path of aircraft at the Troutdale Airport or otherwise interferes with the safe operation of the airport as determined by the Port of Portland. The removal of trees that interfere with the operation of the Troutdale Airport are permitted outright.

13. Removal of refuse as defined in the City of Troutdale Municipal Code.

14.035 Floodplain Development Permit

- A. **Background.** To participate in the National Flood Insurance Program (NFIP), a community must adopt and enforce a floodplain management ordinance that regulates development in the floodplain. This floodplain management ordinance is housed primarily in Chapter 14 of this Code, but is in part addressed in other Chapters of this Code. One of the basic Federal requirements for regulating Development in the Floodplain is a requirement for a Floodplain Development Permit (locally, a Floodplain Development Permit) before construction or other development begins within any Special Flood Hazard Area. In this context, the term "development" is defined in Section 1.040. This chapter contains provisions for the federally required Floodplain Development Permit and is consistent with the National Flood Insurance Program (NFIP) regulations. A Floodplain Development Permit is required for development within the Flood Management Area except as noted in Section 14.035.C of this Chapter.
- B. **Applicability.** Unless exempt per Section 14.035.C, below, approval of a Floodplain Development Permit shall be obtained before construction or development begins within any area of special flood hazard established in Section 14.010.B of this Chapter. The permit shall be for all structures including manufactured dwellings, as set forth in the Section 1.040 and for all development including fill and other activities, also as set forth in the Section 1.040.
- C. **Exemptions.** The following activities do not require a Floodplain Development Permit:
1. Removal of invasive, nuisance, or prohibited plant species that exposes the ground, provided a revegetation plan approved or prepared by the City, state, a federal agency, Metro, SOLV, the East Multnomah Soil & Water Conservation District, or other similar organizations as determined by the Floodplain Manager, is carried out to provide shade and habitat, prevent erosion of steep slopes and/or sedimentation into the protected water feature. A copy of the plan shall be provided to the Community Development Department prior to beginning the work.
 2. Placement of fill in residential zones, provided it is consistent with other applicable provisions of this Code, and provided the fill is used solely for the purpose of constructing a sandbox, a raised gardening bed, or other similar landscape feature.
 3. Installation of three strand, on bendable pole, wire farm type fencing that is constructed consistent with the provisions in Section 14.040 of this Chapter.

4. Landscape maintenance activities consistent with the standards identified in this Section.
 5. Wetlands not subject to flooding as described Section 14.010.B of this Chapter, nor identified as designated habitat covered under the Endangered Species Act, and are not exempt for review under Section 4.300 of this Code.
- D. **Submission Requirements.** An application for a Floodplain Development Permit within the Flood Management Area shall include the following, and these requirements apply to all applicants for development approval unless otherwise noted below:
1. A site plan showing the proposed development on the site, drawn to a standard scale, and including an illustrated scale for use in reductions. A site plan shall also consist of the following:
 - a. SFHA boundaries, and the base flood elevations based upon the North American Vertical Datum of 1988 (NAVD 88);
 - b. The 1996 flood boundaries established by Metro;
 - c. Floodway boundaries as determined by datum available from the FIRM and Flood Insurance Study;
 - d. The name, location, and dimensions of affected streams or rivers, and the bankfull stage or the two-year storm level.
 - e. The area comprising the vegetation corridor as established by Sections 4.316 and 4.317 of this Code;
 - f. Wetlands that are determined significant by the Oregon Department of State Lands or have the following characteristics. All wetland determinations made prior to development must be reviewed and acknowledged by the Oregon Department of State Lands prior to issuance of City permits. The characteristics shall be determined by a qualified scientist.
 - i. The wetland is fed by surface flows, sheet flows, or precipitation; has evidence of flooding during the growing season; at least sixty percent (60%) of the area is vegetation; and is over one-half acre in size; or, the wetland qualifies as having “intact water quality function” under the 1996 Oregon Freshwater Wetland Assessment Methodology; or
 - ii. The wetland is in the Flood Management Area; has evidence of flooding during the growing season; is five (5) acres or more in size; and has a restricted outlet or no outlet; or, the wetland qualifies as

having “intact hydrologic control function” under the 1996 Oregon Freshwater Wetland Assessment Methodology; or

- iii. The wetland, or a portion of the wetland, is within a horizontal distance of less than one-fourth (1/4) mile from a water body which meets the State of Oregon Department of Environmental Quality definition of “water quality limited water body” in OAR Chapter 340, Division 41 (1996).
2. Topographic survey. The survey shall show the floodway and floodplain. The survey shall also show the location of existing and proposed improvements on the site, trees or tree clusters (including those to be removed), existing roads, utilities, and structures, buildings, structures, fencing, walls, landscaping, storage of materials or equipment, drainage facilities, parking areas, and other impervious surface areas. The survey shall be drawn to scale, with two (2) foot contours, and shall note the distance from Top-of-bank to the improvements on the site;
3. Where base flood elevation data is provided through the City’s Flood Insurance Study, or by other means as permitted in this Chapter, the developer shall obtain and record the actual elevation of the lowest floor (including basement) of all new or substantially improved structures, including the placement of a manufactured dwelling, and whether or not the structure contains a basement. This information shall be based upon NAVD 88 and provided on a City Floodplain Development Permit form, and should include the following, as applicable:
 - a. For all new or substantially improved, elevated, or floodproofed structures, verify and record the actual elevation.
 - b. Where development occurs within Zone A of the Flood Management Area and the Base Flood Elevation (BFE) data is not available either through the Flood Insurance Study or from another authoritative source as authorized in Subsection 14.020(C) of this Chapter, the Floodplain Development Permit shall be reviewed for compliance with FEMA Publication 265 issued July 1995 “Managing Floodplain Development in Approximate Zone A Areas”, adopted herein for reference, and applicable State of Oregon Building Codes.
4. Hydrology and soils report. Where ground disturbance or vegetation removal is proposed that exposes the soil, this report shall be required. This report shall include information on the hydrological activities of the site, the effect of hydrologic conditions on the proposed development, and any hydrological or erosion hazards. This report shall also include characteristics of the soils on the site, suitability for development, its carrying capacity, and erosion or slumping characteristics that might present a hazard to life and property, or adversely affect the function or stability of a public use or facility. This report shall also include information on the nature, distribution, and strength of existing soils; the

adequacy of the site for development purposes; and an assessment of grading procedures required to impose the minimum disturbance to the natural state. The report shall be prepared by a professional engineer registered in Oregon. In Oregon Department of Geology and Mineral Industries (DOGAMI) inventory of landslide hazard areas, on hillsides where grading will lessen stability, or in areas where historic or prehistoric mudflows have occurred, a soils engineer and/or engineering geologist registered in Oregon shall certify the development will not negatively impact public safety, adjacent properties, or water quality.

5. Grading plan. If grading is to occur, a grading plan shall be required that shows existing and finished contours (two-foot contour intervals), drainage, all cut and fill slopes and proposed drainage channels, direction of drainage flow, location of proposed structures and existing structures which may be affected by the proposed grading operations, and water quality facilities .
6. Vegetation report. Where vegetation is to be removed or other impacts to the onsite vegetation is to be expected as a result of development, this report shall be required. This report shall consist of a survey of existing vegetation, whether it is native or introduced, and how it will be altered by the proposed development. Measures for enhancement of the site, including revegetation with approved plant species, will be clearly stated, as well as methods for immediate and long-term stabilization of slopes and control of soil erosion. The vegetation report shall be prepared by a landscape architect, landscape designer, botanist, arborist, or other authority as determined by the Floodplain Manager with specific knowledge of approved plant species, planting and maintenance methods, survival rates, and their ability to control erosion and sedimentation. The contractor for installation and maintenance will be responsible for replacing any approved plant species that do not survive the first two (2) years after planting.
7. A “No-Rise” certification and a Letter of Map Change (LOMC) shall be submitted with the land use application for the following activities within the floodway as mapped by FEMA:
 - a. Permanent bank stabilization that occurs in the floodway.
 - b. Development, alterations, or relocations of the floodway, including any permanent fill within the floodway.
8. Building and structure elevations. For all existing and proposed, relocated, or expanded buildings and structures, elevation in relation to the Highest Adjacent Grade, the North American Vertical Datum 1988 (NAVD88), and the base flood elevation as applicable, of the:
 - a. Lowest enclosed area of all existing and proposed, relocated, or expanded buildings and structures. This includes crawlspaces, basement floors, and attached garages, electrical equipment (except utility meters), heating and

ventilation equipment, plumbing, air conditioning equipment, and/or other service facilities (including ductwork); top of proposed garage slabs; and next highest floor situated above the items herein.

- b. Elevation to which any existing building or structure has been or is proposed to be flood-proofed; and certification by a registered professional engineer that the flood-proofing methods for any nonresidential structure meet the floodproofing criteria in this Chapter.
 - c. The locations and sizes of all flood openings in any proposed buildings and structures.
- 9. Infrastructure. Location of all proposed infrastructure necessary to serve the proposed development shall be required when such new development is proposed by the applicant. Such infrastructure includes, but is not limited to, streets, driveways, water, sanitary sewer, and storm drainage.
- 10. Floodplain or watercourse alterations. Where floodplain or watercourse alterations are proposed, a description of the extent to which any floodplain or watercourse is proposed to be altered or affected as a result of proposed development shall be required.
- 11. All federally-mandated or state-mandated permits issued by other governmental agencies shall be obtained, or obtaining such permits shall be a Condition of Approval to be satisfied prior to issuance of any construction permit. Such permits include but are not limited to Section 404 of the Federal Water Pollution Control Act Amendments of 1972, 33 U.S.C. 1334, 16 U.S.C. 1531-1544, and State of Oregon Removal-Fill permits, as amended.
- E. Application for Floodplain Development Permit. A Floodplain Development Permit shall be obtained before construction or development begins within any area of special flood hazard established in Section 14.010 of this Chapter. The permit shall be for all structures including manufactured dwellings, as set forth in Section 1.040 and for all development including fill and other activities, also as set forth in Section 1.040. Applications for a Floodplain Development Permit shall be made on forms furnished by the Community Development Department and may include, but not be limited to, plans drawn to scale showing the nature, location, dimensions, elevations of the area in question, existing or proposed structures, fill, storage of materials, drainage facilities, and the location of the foregoing.
 - 1. A Type I Floodplain Development Permit is required for the following:
 - a. Construction of a single-family dwelling, including the placement of a manufactured dwelling or repair or alteration of existing single-family dwellings and manufactured dwellings. Single-family dwellings and manufactured dwellings shall be built in compliance with the applicable

development standards in Section 14.040 of this Chapter.

- b. Bank stabilization or tree and vegetation removal necessary to preserve an existing structure during an emergency. During the flood emergency or other emergency the permit is not required; however, as immediately as possible following the emergency a Floodplain Development Permit shall be obtained that documents the bank stabilization and tree and vegetation removal measures taken during the emergency; the schedule and procedure that will be used to remove any temporary fill, including sand bags, and the schedule and procedure to replant tree and vegetation where required according to the standards in Section 4.300. If the stabilization measures will not be removed, a Type II Floodplain Development Permit will be required as well as a “No-Rise” certification and LOMC as applicable. The required Floodplain Development Permit shall also show that the long-term stability of the site is in compliance with all other relevant Development Standards identified in Section 14.040 as applicable.
 - c. Wildfire mitigation projects as identified in this Chapter.
2. A Type II Floodplain Development Permit is required for:
- a. Any use in the underlying zoning district requiring a Type II Site Development review.
 - b. New or expanded streets or bridges.
 - c. New or expanded railroads or trestles.
 - d. Permanent bank stabilization or fill within the floodplain or floodway.
 - e. Balanced cut and fill activity within the floodplain, with a Letter of Map Change, as required in this Code.
 - f. Fill of wetlands. If the wetland is outside of the floodplain and not hydrologically connected, a Floodplain Development Permit is not required, only the Site Development Review.
 - g. Other uses similar in nature to those listed above.
3. A Type III procedure and Floodplain Development Permit shall be processed for uses requiring a Type III review in the underlying zoning district, for all special variances requested from the standards of this Chapter, and for any proposed alteration of a watercourse of any perennial or intermittent streams.

F. Review Criteria - Requests for approval of a Floodplain Development Permit shall be

reviewed by the Floodplain Administrator or designee to ensure:

1. Consistency with the standards from Sections 1.040, Chapter 2, and Section 14.040 of this Code, as applicable;
 2. Consistency with other applicable standards of this Code and all other applicable policies and standards adopted by the City.
- G. Mandatory Conditions of Approval - The following Conditions of Approval are mandatory and shall be imposed on every approved Floodplain Development Permit:
1. Required During Construction Elevation Certificate. For all new construction, development, and substantial improvements, the permit holder shall provide to the Floodplain Administrator or designee an as-built certification of the floor elevation or flood-proofing elevation immediately after the lowest floor or flood-proofing is placed and prior to further vertical construction. Any deficiencies identified by the Floodplain Administrator or designee shall be corrected by the permit holder immediately and prior to work proceeding. Failure to submit certification or failure to make the corrections shall be cause for the Floodplain Administrator or designee or the Building Official to issue a stop-work order for the project.
 2. Required Documentation Prior to Issuance of Certificate of Occupancy
 - a. In addition to the requirements of the Building Codes pertaining to Certificate of Occupancy, prior to the final inspection the owner or authorized agent shall submit the following documentation to the Floodplain Administrator or designee and the documentation shall be prepared and sealed by a registered surveyor or engineer:
 - i. For elevated buildings and structures in Special Flood Hazard Areas, the as-built elevation of the lowest floor, including basement, or where no base flood elevation is available the height above highest adjacent grade of the lowest floor;
 - ii. For buildings and structures that have been floodproofed, the elevation to which the building or structure was floodproofed.
 - b. Failure to submit certification or failure to correct violations shall be cause for the Floodplain Administrator or designee or the Building Official to withhold a Certificate of Occupancy until such deficiencies are corrected.
 3. For applications for partitions and subdivisions, one of the following shall be required:
 - a. Protection of Flood Management Areas with a conservation easement;

- b. Platting Flood Management Areas as common open space; or
- c. Offer of sale or donation of Flood Management Area property to public agencies or private non-profits for preservation where feasible.

14.040 Development Standards. The land use application shall establish through the use of narrative, site plans, and professional reports, the following:

- A. Type II or III approval for new development, including additions or alterations to existing structures, except for single family dwellings, in the Flood Management Area may be allowed, provided that:
 - 1. The applicant shall demonstrate that there is no reasonable nor practical alternative design or method of development that would have a lesser impact on the Flood Management Area than the one proposed.
 - 2. If there is no reasonable nor practical alternative design or method of development the project shall be designed in compliance with applicable parts of Subsections (B) through (X) of this Section, so that the impacts on the Flood Management Area are limited and the plans shall include restoration, replacement, or rehabilitation of the vegetation within the Flood Management Area.
 - 3. The applicant shall provide mitigation to ensure that impacts to the functions and values of the vegetation corridor and integrity of the slope will be mitigated or restored to the extent practicable.
- B. A professional engineer registered in Oregon must certify that the development will not result in any increase in flood levels throughout the SFHA during the occurrence of the base flood discharge, and that water quality will not be adversely affected.
- C. As applicable, the development must be authorized by the Oregon Department of State Lands, U.S. Army Corps of Engineers, the Oregon Department of Fish and Wildlife, and the Sandy Drainage Improvement Company. The applicant shall obtain and submit a copy of all required state and federal permits for any proposed development in the Flood Management Area, including Section 404 of the Federal Water Pollution Control Act Amendments of 1972, 33 USC 1334.
- D. Unless otherwise authorized under the provisions of this Chapter, the development shall comply with the underlying zoning district dimensional standards and the minimum vegetation corridor as established in Sections 4.316 and 4.317 of this Code. The applicant shall submit an exhibit that shows the location and provides a description of all actions to be provided to mitigate the impacts of permitted development as established in Section 4.314 of this Code.

- E. Protect the water quality resource, and Flood Management Area functions and values from uncontained areas of hazardous materials as defined by the State of Oregon Department of Environmental Quality water quality standards.
- F. Limit impervious surface areas in the Flood Management Area.
 - 1. The impervious surface of the development may not exceed thirty percent (30%) of the flood plain area, provided the standards of this Code are met. Exception: Public roads necessary to serve the transportation needs of the City may exceed thirty percent (30%) of the Flood Management Area provided all other applicable standards of this Chapter have been met.
 - 2. Clustering of houses and multiple-family units, zero lot line developments, and/or modifications to setbacks may be approved under the Type II procedure in order to accommodate the density permitted within the underlying zoning district and not exceed the impervious surface limitation of thirty percent (30%) of the Flood Management Area on the site.
 - 3. The Director, or their designee, may grant an administrative variance of up to fifty percent (50%) of any dimensional standard in the underlying zoning district where necessary to avoid development within the Flood Management Area.
- G. Maintain flood storage capacity. The developer is required to offset new fill placed in the floodplain by excavating an additional flood-able area to replace the lost flood storage area, preferably at hydrologically equivalent sites. All development proposals in the SFHA shall provide compensatory mitigation for impacts to flood storage, water infiltration, and riparian vegetation to ensure that new development does not increase flood hazards on other properties. A mitigation plan shall be submitted with the land use application. All required actions derived from that plan shall be completed prior to issuance of a Certificate of Occupancy, a Certificate of Completion for a subdivision, or the final building inspection, as applicable. Balanced cut and fill is required for permitted development in the Flood Management Area. Excavation and fill shall be performed in a manner to maintain or increase flood storage and conveyance capacity and not increase design flood elevations. A professional engineer registered in Oregon must certify that the development will not result in any increase in flood levels throughout the SFHA during the occurrence of the base flood discharge except as described in Section 14.040.G(8), and that water quality will not be adversely affected.
 - 1. All fill placed at or below the design flood elevation in the Flood Management Area shall be balanced with at least an equal volume or amount of soil material removal. The development shall be designed to minimize development within the Flood Management Area and amount of fill necessary. Balanced cut and fill may be used to elevate structures but shall not be used for density transfer. Residential density must be calculated prior to changes to the floodplain as a result of balanced cut and fill.

2. Excavation shall not be counted as compensating for fill if such areas will be filled with water in non-storm winter conditions.
3. The cumulative effect of any proposed development shall not increase the water surface elevation of the base flood except as described in Section 14.040.G(8). Onsite flood storage capacity shall not decrease as a result of development, vegetation removal, or excavation except as described in Section 14.040.G(8).
4. A “No-Rise” certification is required for any fill or permitted development within the floodway pursuant to Section 60.3(d)(3) of the National Flood Insurance Program.
 - a. The “No-Rise” supporting data and a copy of the engineering certification must be submitted to, and reviewed by, the City prior to approval of development, and the data shall be submitted with the Floodplain Development Permit.
 - b. The “No-Rise” certification and supporting technical data must stipulate no impact on the 100-year flood elevations, floodway elevations, or floodway widths at the new cross-sections and at all existing cross-sections anywhere in the model.
 - c. A sample “No-Rise” certification is available in the Community Development Department.
5. All new buildings built on fill in the regulatory floodplain shall be constructed on fill:
 - a. Certified by a professional engineer registered in Oregon as suitably designed and compacted for the development (e.g. fill that meets the criteria of 1803.5.8 and Section 1804.4 of the International Building Code, Section 2.4 of ASCE 24, or their equivalent); and
 - b. Providing protection from erosion and scour.
6. When a project proposes development that will alter a watercourse, modify floodplain boundaries, or modify Base Flood Elevations, the application shall obtain a Conditional Letter of Map Change from FEMA prior to grading and filling the site and then obtain and submit the final Letter of Map Change prior to final inspections, or issuance of a certificate of completion, or issuance of the certificate of occupancy as required under this Section. When a project applicant has demonstrated through the Floodplain Development Permit that, in addition to the standards listed for Section 14.040.G, the following standards have been achieved, a Conditional Letter of Map Change/Letter of Map Change may not be required:

- a. Fill is not proposed in the floodway for the site to be impacted through development;
 - b. The project site is not being elevated to or above the base flood elevation (BFE);
 - c. The project is proposing to remove unsuitable existing material (topsoil) and backfilling with select structural material, not alter the existing (natural grade) elevation of the site;
 - d. The site to be impacted does not have US Fish and Wildlife Service (USFWS) designations for critical habitat for Threatened or Endangered; and
 - e. In areas where a regulatory floodway has not been designated, the new construction, substantial improvements, or other development (including fill) within A or AE Zones on the community's FIRM, has demonstrated that the cumulative effect of the proposed development, when combined with all other existing and anticipated development, will not increase the water surface elevation of the base flood at any point within the community.
7. All proposals that include engineering analysis for maintenance of flood storage capacity are subject to review by a qualified engineer licensed in the State of Oregon. The applicant shall be responsible for the cost of this independent review and will be advised at the time of application of this expectation.
8. As described in FEMA's "NFIP Guidebook - A Local Administrator's Guide to Floodplain Management and the National Flood Insurance Program, 5th Addition, Appendix E - Policy on Fish Enhancement Structures in the Floodway", projects that are specifically implemented to restore or enhance US Fish and Wildlife Service (USFWS) identified Threatened or Endangered anadromous fish species or habitat where such species have been determined to reside qualify to allow for minimal rises in the 100-year flood levels as a result of implementation. In addition to the Submission Standards identified in Section 14.035.D, applicants for such projects shall also provide statements from Rural Conservation and Development, the Natural Resource Conservation Service, or similarly qualified staff of fisheries, natural resource, or water resources agencies that less than the maximum hydraulic analyses may be allowed. A professional engineer registered in Oregon shall provide a feasibility analysis and certify that the project was designed to keep any rise in 100-year flood levels to as close to zero as practically possible and ensure that no structures would be impacted by a potential rise. Additionally, routine maintenance of any such project would be necessary to sustain conveyance over time. A plan that sets forth how long-term maintenance is to be maintained shall be required with the submittal of the Floodplain Development Permit. An additional mandatory condition of approval, as

recommended by FEMA, shall be attached to such projects that emphasize the dynamics of a river or creek, and, where the Floodplain Manager has deemed necessary, a requirement for further analysis.

- H. Residential Development, including accessory structures as referenced in Section 5.010 of this Code and not constructed in accordance with Section 14.040.V. Note: if more than fifty percent (50%) of the lot being developed is affected by the floodplain, then the minimum density standard of this Code does not apply.
1. Elevate structures. The minimum finished floor elevation, including basement floor, for all new or substantially improved residential structures in the Flood Management Area shall be at least two (2) feet above the base flood elevation, as established by Section 14.010.B in this Chapter, and as demonstrated through the Elevation Certificate submittals as established in this Section. Elevation Certificates shall be required for all residential development as required by the Community Rating System.
 - a. An Elevation Certificate shall be submitted with the construction plans. The Elevation Certificate shall include the elevation of the lowest floor (including basement). The Elevation Certificate shall be certified by a land surveyor, engineer, or architect who is authorized by state or local law to certify elevation information for construction within specific flood hazard areas.
 - b. A second certified Elevation Certificate shall be submitted to the City of Troutdale prior to pouring the foundation.
 - c. A third certified Elevation Certificate shall be submitted after the structure is completed based upon finished construction.
 - d. The City shall maintain the Elevation Certificates for public inspection.
 2. Fully enclosed areas below the lowest floor that are subject to flooding are prohibited, or shall be designed to automatically equalize hydrostatic flood forces on exterior walls by allowing for the entry and exit of flood waters. Designs for meeting this requirement must either be certified by a registered professional engineer or architect, or must meet or exceed the following minimum criteria:
 - a. A minimum of two (2) openings having a total net area of not less than one (1) square inch for every square foot of enclosed area subject to flooding shall be provided.
 - b. The bottom of all openings shall be no higher than one (1) foot above grade.
 - c. Openings may be equipped with screens, louvers, or other devices

provided that they permit the automatic entry and exit of floodwaters.

- d. Where possible, openings will be installed on at least two opposing sides of the enclosed area.
3. Below-grade crawlspaces are allowed only when in compliance with the design requirements of FEMA Technical Bulletin 11-01, “Crawlspace Construction for Buildings Located in Special Flood Hazard Areas.” Buildings that have below-grade crawlspaces will have higher flood insurance premiums than buildings that have the preferred crawlspace construction with an interior elevation at or above the lowest adjacent exterior grade.
 - a. The building must be designed and adequately anchored to resist flotation, collapse, and lateral movement of the structure resulting from hydrodynamic and hydrostatic loads, including the effects of buoyancy. Hydrostatic loads and the effects of buoyancy can usually be addressed through the required openings:
 - i. Openings that equalize hydrostatic pressures by allowing for the automatic entry and existence of floodwaters is required. The bottom of each flood vent opening can be no more than one (1) foot above the lowest adjacent exterior grade. See FEMA Technical Bulletin 1-93, Opening in Foundation Walls, for guidance.
 - ii. All portions of the building below the base flood elevation must be constructed with materials resistant to flood damage. This includes not only the foundation walls of the crawlspace used to elevate the building, but also any joists, insulation, or other materials that extend below the BFE. The recommended construction practice is to elevate the bottom of joists and all insulation above BFE. Ductwork or other utility systems located below the insulation may pull away from their supports. See page 8 of Technical Bulletin 1-93 and FEMA Technical Bulletin 2-93 Flood Resistant Materials Requirements.
 - iii. Any building utility systems within the crawlspace must be elevated above the base flood elevation or designed so that floodwaters cannot enter or accumulate within the system components during flood conditions. Ductwork, in particular, must either be placed above the BFE or sealed from floodwaters. For further guidance, see FEMA 348, Protecting Building Utilities from Flood Damage.
 - b. The interior grade of a crawlspace below the base flood elevation must not be more than two (2) feet below the lowest adjacent exterior grade.

- c. The height of the below-grade crawlspace, measured from the interior grade of the crawlspace to the top of the crawlspace foundation wall must not exceed four (4) feet at any point. The height limitation is the maximum allowable unsupported wall height according to the engineering analyses and building Code requirements for flood hazard areas. Crawlspaces may not be converted to basements.
 - d. There must be an adequate drainage system that removes floodwaters from the interior area of the crawlspace. The enclosed area should be drained within a reasonable time after a flood event. The type of drainage system will vary because of the site gradient and other drainage characteristics, such as soil types. Possible options include natural drainage through porous, well-drained soils and drainage systems such as perforated pipes, drainage tiles or gravel, or crushed stone drainage by gravity or mechanical means.
 - e. Crawlspace construction is not permitted in areas with flood velocities greater than five (5) feet per second unless the design is reviewed by a qualified design professional, such as a registered architect or professional engineer. For velocities in excess of five (5) feet per second, other foundation types should be used.
 - f. The crawlspace is an enclosed area below the base flood elevation (BFE) and, as such, must have openings that equalize hydrostatic pressures by allowing the automatic entry and exit of floodwaters. The bottom of each flood vent opening can be no more than one (1) foot above the lowest immediate interior or exterior grade.
4. Substantial improvements will require elevation of any non-elevated structure to two (2) feet above the base flood elevation in compliance with this Section and in accordance with Section 1.040. Substantial improvement is considered to occur when the first alteration of any wall, ceiling, floor, or other structural part of the building commences, whether or not that alteration affects the external dimensions of the structure. Substantial improvements include:
- a. Any repair, reconstruction, or improvement of a structure, the cost of which exceeds forty-nine percent (49%) of the market value of the structure as established by the County appraiser or a licensed professional appraiser.
 - b. Reconstruction or repair of a structure that exceeds forty-nine percent (49%) of the market value of the building before it was damaged.
 - c. Additions to an existing structure when the addition increases the market value of the structure by more than forty-nine percent (49%) or the floor

area by more than twenty percent (20%).

5. Comply with other standards of this Section, as applicable.
- I. Manufactured dwellings within the Special Flood Hazard Area.
 1. All manufactured dwellings to be placed or substantially improved on sites that are outside of a manufactured dwelling park or subdivision; in a new manufactured dwelling park or subdivision; in an expansion to an existing manufactured dwelling park or subdivision, or in an existing manufactured dwelling park or subdivision on which a manufactured dwelling has incurred substantial damage shall be elevated on a permanent foundation such that the finished floor of the manufactured dwelling is elevated to a minimum eighteen (18) inches (46 cm) above the base flood elevation and be securely anchored to an adequately designed foundation system to resist flotation, collapse, and lateral movement.
 2. Manufactured dwellings to be placed or substantially improved on sites in an existing manufactured dwelling park or subdivision within the Special Flood Hazard Area on the community's FIRM that are not subject to the above manufactured dwelling provisions shall be elevated so that either:
 - a. The finished floor of the manufactured dwelling is elevated to a minimum of eighteen (18) inches (46 cm) above the base flood elevation; or
 - b. The manufactured dwelling chassis is supported by reinforced piers or other foundation elements of at least equivalent strength that are no less than thirty-six (36) inches in height above grade and be securely anchored to an adequately designed foundation system to resist flotation, collapse, and lateral movement. Anchoring shall be installed using methods and practices that minimize flood damage. Anchoring methods may include, but are not limited to, use of over-the-top or frame ties to ground anchors (Reference FEMA's "Manufactured Home Installation in Flood Hazard Areas" guidebook for additional techniques).
 3. Manufactured dwellings shall have all electrical crossover connections installed at a minimum of twelve (12) inches above BFE.
 4. Manufactured dwellings supported on solid foundation walls shall be constructed with flood openings that comply with Section 14.040.H(2).
 5. Comply with the other standards of this Section as applicable.
 - J. Recreational Vehicles (RV) within the Special Flood Hazard Area, whether in a park or on private property outside of a park, are required to:

1. Be on the site for fewer than one hundred eighty (180) consecutive days, and
 2. Be fully licensed and ready for highway use. Highway use means on its wheels or jacking system, is attached to the site only by quick disconnect type utilities and security devices, and has no permanently attached additions; or
 3. Meet the permit requirements of Section 14.040.I and the elevation and anchoring requirements for manufactured dwellings.
 4. The RV “pads” shall be paved with asphaltic concrete or comparable, and have a special water quality facility for the collection of the stormwater from the site.
 5. The RV “pads” shall be wide enough to accommodate a trailer parked next to the towing vehicle or be long enough to accommodate both towing vehicle and trailer.
- K. Nonresidential Construction. New construction, development, and substantial improvement of any commercial, industrial, or other nonresidential structure shall have the lowest floor, including basement, elevated to no less than two (2) feet above the base flood elevation; or, together with attendant utility and sanitary facilities, shall:
1. Be dry floodproofed so that below the base flood level the structure is watertight with walls substantially impermeable to the passage of water. A dry floodproofing certificate shall be filed with the City following the form and procedure established by the Federal Emergency Management Agency.
 2. Have structural components capable of resisting hydrostatic and hydrodynamic loads and effects of buoyancy, in accordance with standards established by the Federal Emergency Management Agency and the National Flood Insurance Program.
 3. Be certified by a registered professional engineer or architect that the design and methods of development are in accordance with accepted standards of practice for meeting provisions of National Flood Insurance Program regulations (CFR 60.3(c)(4) and (5)) based on their development and/or review of the structural design, specifications, and plans. Such certifications shall be provided to the City.
 4. Nonresidential structures that are elevated, not dry floodproofed, must meet the same standards for space below the lowest floor as described in Section 14.040.H. If elevated, an Elevation Certificate shall be submitted with the construction plans, prior to pouring the foundation, and after construction.
 5. Applicants dry floodproofing nonresidential buildings shall be notified that flood insurance premiums will be based on rates that are one (1) foot below the floodproofed level (e.g., a building floodproofed to the base flood elevation will be rated as one (1) foot below the base flood elevation).

6. Applicants that elect to utilize floodproofing instead of elevation shall supply a comprehensive Maintenance Plan at the time of building plan review for the entire structure to include but not limited to: exterior envelope of structure; all penetrations to the exterior of the structure; all shields, gates, barriers, or components designed to provide floodproofing protection to the structure; all seals or gaskets for shields, gates, barriers, or components; and, the location of all shields, gates, barriers, and components as well as all associated hardware, and any materials or specialized tools necessary to seal the structure.
 7. Applicants may be required by the Floodplain Manager to supply an Emergency Action Plan (EAP) for the installation and sealing of the structure prior to a flooding event that clearly identifies what triggers the EAP and who is responsible for enacting the EAP.
 8. Comply with other standards of this Section as applicable.
- L. Remove temporary fills. Temporary fills permitted during construction or emergency bank stabilization shall be removed if not in compliance with the balanced cut and fill standard of this Code or prior to issuance of a Certificate of Occupancy or release of any bond issued for the development.
- M. Preserve and/or restore the vegetation corridor within the disturbed areas, and retain the existing tree canopy as established in Sections 4.316, Width of Vegetation Corridor, and 4.317, Methods for Determining Vegetation Corridors Next to Primary Protected Water Features, of this Chapter. An enhancement plan for disturbed areas shall be prepared and implemented to stabilize slopes to prevent landslides on slopes and sedimentation of water features. This plan shall provide for the replanting and maintenance of approved plant species designed to achieve pre-disturbance conditions.
- N. Maintain or reduce stream temperatures.
- O. Minimize erosive velocities, nutrient, and pollutant loading into water. Use filtering, infiltration, and natural water purification for stormwater runoff in compliance with the Erosion Control and Water Quality Standards of Section 5.600 of this Code. The applicant's engineering plans shall certify that runoff and sedimentation from the site will comply with the standards of Section 5.600 of this Code.
- P. Anchoring. All new construction, development, and substantial improvements shall be anchored to prevent flotation, collapse, or lateral movement of the structure.
- Q. Construction Materials and Methods. All new construction, development, and substantial improvements shall use flood-resistant materials in accordance with the requirements of FEMA Technical Bulletin 2-93 "Flood Resistant Materials Requirements" and utilities shall be designed and installed in accordance with FEMA Publication 348 "Protecting Building Utilities from Flood Damage." The following standards are only a summary of

those requirements:

1. All new construction, development, and substantial improvements shall be constructed with materials and utility equipment resistant to flood damage.
2. All new construction, development, and substantial improvements shall be constructed using methods and practices that minimize flood damage and minimize impacts to natural floodplain functions, including flood storage, water infiltration, and riparian vegetation.
3. Electrical, heating, ventilation, plumbing, and air conditioning equipment, and other service facilities shall be designed and/or otherwise elevated or located so as to prevent water from entering or accumulating within the components during conditions of flooding.
4. No construction materials or methods may be used within the floodplain that would impair or damage water quality or native vegetation.
5. All development shall have adequate drainage provided to reduce exposure to flood damage and maintain water quality.



R. Utilities and Roads.

1. Stream crossings shall be as close to perpendicular to the stream as practicable. Bridges shall be used instead of culverts wherever practicable, and comply with the Oregon Department of Fish and Wildlife construction standards.
2. All new and replacement water supply systems shall be designed to minimize or eliminate infiltration of floodwaters into the system.
3. New and replacement sanitary sewage systems shall be designed to minimize or eliminate infiltration of floodwaters into the systems and discharge from the systems into floodwaters.
4. Onsite waste disposal systems shall be located to avoid impairment to them, or contamination from them, during flooding consistent with the State of Oregon Department of Environmental Quality.
5. Utility and road placement shall occur outside the floodway unless the utility or road is necessary to serve permitted development, and there is no reasonable alternative. Roads built in the floodplain shall be built at or above the base flood elevation to provide access to emergency vehicles during a flood.
6. Stormwater management and water quality facilities shall comply with the siting and construction standards of Section 5.700 of this Code.



For any alterations or relocations of a watercourse the developer shall be required to notify the Oregon Department of State Lands, the Oregon Department of Land Conservation and Development, and adjacent communities that will be impacted by the alteration or relocation. The developer shall be responsible for obtaining and submitting copies of any required project permits required by the Oregon Department of State Lands, U.S. Army Corps of Engineers, Oregon Department of Fish and Wildlife Service, Federal Emergency Management Agency, and other affected agencies, as applicable. The flood carrying capacity of the altered or relocated watercourse shall not be diminished and shall be maintained. Alterations will require a “No-Rise” certification for changes to the floodway, and changes that relocate the floodplain will require a Letter of Map Change (LOMC) from FEMA or may require a revised Flood Insurance Study and Flood Insurance Rate Map for the City. The burden for all engineering studies required to process these forms is the applicant’s, not the City’s.

T. Subdivision Proposals. In addition to compliance with the underlying zoning district standards of this Code and this Chapter, the development of the subdivision shall be subject to the following additional criteria:

1. All subdivision proposals shall be consistent with the need to minimize flood damage.
2. All subdivision proposals shall have public utilities and facilities such as sewer, gas, electrical, and water systems located and constructed to minimize flood damage.
3. All subdivision proposals shall have adequate drainage provided to reduce exposure to flood damage.
4.  Where the base flood elevation data has not been provided or is not available from another authoritative source, it shall be generated for subdivision proposals and other proposed developments which contain at least fifty (50) lots or five (5) acres, whichever is less.
5.  If more than fifty percent (50%) of the lot being partitioned or subdivided is affected by the floodplain, then the minimum density standard of this Code does not apply.

U. Critical Facilities.

1. Construction of new critical facilities shall be, to the extent possible, located outside the limits of the Special Flood Hazard Area.
2. Construction of new critical facilities shall be permissible within the SFHA if no feasible alternative site is available.
3. Critical facilities constructed within the SFHA shall have the lowest floor

elevated one foot above the height of the 500-year flood level. Submit Elevation Certificates with the construction plans, prior to pouring the foundation, and upon completion of the structure in accordance with Subsections H(1)(a - c) of this Section.

4. Access to and from the critical facility shall also be protected to the height utilized above.
 5. Access routes elevated to or above the level of the base flood elevation shall be provided to all critical facilities to the extent possible.
 6. Floodproofing and sealing measures must be taken to ensure that toxic substances will not be displaced by or released into floodwaters.
 7. Comply with the other standards of this Section as applicable.
- V. Small Accessory Structure. Relief from elevation or floodproofing as required in this Section may be granted for small accessory structures that meet the following standards. The applicant shall be advised that this type of allowance will result in higher insurance rates for these structures, as applicable.
1. Less than two hundred (200) square feet, less than \$5,000 in valuation, and do not exceed one story;
 2. Not temperature controlled;
 3. Not used for human habitation and are used solely for parking of vehicles or storage of items having low damage potential when submerged;
 4. Not used to store toxic material, oil or gasoline, or any priority persistent pollutant identified by the State of Oregon Department of Environmental Quality unless confined in a tank installed in compliance with this ordinance or stored at least two feet above base flood elevation;
 5. Located and constructed to have low damage potential;
 6. Constructed with materials resistant to flood damage as described in this Section;
 7. Anchored to prevent flotation, collapse, or lateral movement of the structure resulting from hydrodynamic and hydrostatic loads, including the effects of buoyancy, during conditions of the base flood;
 8. Constructed to equalize hydrostatic flood forces on exterior walls by allowing for the automatic entry and exit of floodwater. Designs for complying with this requirement must be certified by a licensed professional engineer or architect or designed in compliance with Section 14.040.H(2):

9. Constructed with electrical, and other service facilities located and installed so as to prevent water from entering or accumulating within the components during conditions of the base flood.

14.045 Floodways. Located within areas of special flood hazard established in Section 14.010.B of this Chapter are areas designated as floodways. Since the floodway is an extremely hazardous area due to the velocity of floodwaters which carry debris, potential projectiles, and erosion potential, the following provisions apply:


- A. Except as provided in Section 14.045.C, encroachments, including fill, new construction, development, substantial improvements, and other development are prohibited unless certification by a registered professional civil engineer is provided demonstrating through hydrologic and hydraulic analyses performed in accordance with standard engineering practice that encroachments shall not result in any increase in flood levels during the occurrence of the base flood discharge.
- B. If Section 14.040.A is satisfied, all new construction, development, and substantial improvements shall comply with all applicable flood hazard reduction provisions of Section 14.040 of this Code.
- C. Floodways and other high hazard zones are extremely hazardous areas due to exceptionally high flood and erosion potential. In these areas, the development actions permitted in high hazard zones shall be limited to water-dependent uses; bridges and other location-dependent uses; habitat restoration activities consistent with Sections 14.035.C(2); low-intensity recreation; and bioengineered banks.

14.050 Before Regulatory Floodway. In areas where a regulatory floodway has not been designated, no new construction, substantial improvements, or other development (including fill) shall be permitted within Zones A1-30 and AE on the community's FIRM, unless it is demonstrated that the cumulative effect of the proposed development, when combined with all other existing and anticipated development, will not increase the water surface elevation of the base flood more than one foot at any point within the community.

14.055 Flood Management Area Variance Procedures. Variances from dimensional standards of the underlying zoning district or other provisions of this Code not part of this Chapter shall be processed in accordance with Section 6.800 of this Code.



- A. Generally, the only condition under which a variance from the elevation standard may be issued is for new construction, development, and substantial improvements to be erected on a lot of one-half (1/2) acre or less in size contiguous to and surrounded by lots with existing structures constructed below the base flood level, providing that the considerations of Section 14.055.A(1 - 11) have been fully reviewed. As the lot size increases the technical justification required for issuing the variance increases.

1. The danger that materials may be swept onto other lands to the injury of others;

2. The danger to life and property due to flooding or erosion damage;
 3. The susceptibility of the proposed facility and its contents to flood damage and the effect of such damage on the individual owner;
 4. The importance of the services provided by the proposed facility to the community;
 5. The necessity to the facility of a waterfront location, where applicable;
 6. The availability of alternative locations for the proposed use which are not subject to flooding or erosion damage;
 7. The compatibility of the proposed use with existing and anticipated development;
 8. The relationship of the proposed use to the comprehensive plan and floodplain management program for that area;
 9. The safety of access to the property in times of flood for ordinary and emergency vehicles;
 10. The expected heights, velocity, duration, rate of rise, and sediment transport of the flood waters and the effects of wave action, if applicable, expected at the site; and,
 11. The costs of providing governmental services during and after flood conditions, including maintenance and repair of public utilities and facilities such as sewer, gas, electrical, and water systems, and streets and bridges.
- B. Variances may be issued for the reconstruction, rehabilitation, or restoration of structures listed on the National Register of Historic Places or the Statewide Inventory of Historic Properties, without regard to the procedures set forth in this Section.
1.  Is the minimum necessary to preserve the historic character and design of the site, building or structure;
 2. Will not result in the site, building or structure losing its historic designation; and
 3. Demonstrates consistency with all other local, state, or federal laws or ordinances, including documentation of any necessary consultations with state or federal agencies.
- C. Variances shall not be issued within a designated floodway if any increase in flood levels during the base flood discharge would result.

- D. Variances shall only be issued upon a determination that the variance is the minimum necessary, considering the flood hazard, to afford relief.
- E. The Director, or their designee, may grant a Type II variance of up to fifty percent (50%) of any dimensional standard in the underlying zoning district where necessary to avoid construction or development within the Flood Management Area. The Director or designee shall make a determination in accordance with the criteria established in Section 14.055.J of this Chapter.
- F. Applications for variances to dimensional standards in excess of that provided in Section 14.055.E shall be a Type III application.
- G. The Planning Commission or Director, or their designee, may attach conditions to the granting of variances as it deems necessary to further the purpose of this Chapter.
- H. As a participant in the National Flood Insurance Program, the City is not authorized to grant a variance from the requirement to elevate or floodproof structures in accordance with state and federal regulations, whichever is most restrictive. Variances may be issued for nonresidential buildings in very limited circumstances to allow a lesser degree of floodproofing than watertight or dry-floodproofing, where it can be determined that such action will have low damage potential, complies with all other variance criteria except Section 14.055.A and otherwise complies with Sections 14.040.P - R of this Chapter.
- I. The City cannot grant a variance from the special flood hazard designation assigned by the Federal Insurance Administrator to a site. However, a property owner may request a Letter of Map Change (LOMC) from the Federal Emergency Management Agency.
- J. In reviewing a Type III Variance, the Planning Commission shall consider all technical evaluations, relevant factors, and standards specified in other Sections of this Chapter and other Chapters of this Code, and make affirmative findings, with or without conditions, for each of the following criteria:
 - 1. A showing of good and sufficient cause that the need for the variance is not of the applicant's making and will not result in a use of the site that is not otherwise permitted in the underlying zoning district.
 - 2. A determination that failure to grant the variance would result in exceptional hardship to the applicant and is the minimum necessary to grant relief.
 - 3. A determination that the granting of a variance will not result in increased flood heights, additional threats to public safety, extraordinary public expense, create nuisances, cause fraud on or victimization of the public as identified in Section 14.055.A(1) – (11) or conflict with existing local, state, or federal laws or ordinances.
 - 4. The safety of access to the property in times of flood for ordinary and emergency

vehicles.

5.  A determination that the development project cannot be located outside the Special Flood Hazard Area and/or high hazard area and that impacts to flood storage, water infiltration, and riparian vegetation have been minimized to the extent practicable.
6.  A demonstration of consistency with all other local, state, or federal laws or ordinances, including documentation of any necessary consultations with state or federal agencies.

14.060 Prescribed Conditions for the Rehabilitation or Replacement of Pre-Existing Structures. The replacement of pre-existing structures or development damaged or destroyed accidentally is subject to following standards:

- A. The structure or development was in existence within the Flood Management Area prior to February 1, 2019.
- B. The use is allowed in the underlying zoning district at the time the application is made to rehabilitate or replace the structure.
- C. A Type I Floodplain Development Permit is approved prior to applying for building permits.
- D. The rehabilitation or replacement is rebuilt on the same footprint of the original structure and does not increase the impervious area within the Special Flood Hazard Area.
- E. The rehabilitated or replaced structure is elevated, if residential, or floodproofed or elevated, if non-residential, in accordance with the applicable standards of this Chapter, the definition found Section 1.040, and all additional relevant standards in this Code.



EXHIBIT F

1.040 Vegetation Corridor and Slope District, ~~and~~, Water Quality, and Flood Management Definitions.

.01 100-Year Flood. The flood that is equaled or exceeded once in one hundred (100) years on the average; equivalent to the one percent annual chance flood. Also called the Special Flood Hazard Area, Base Flood, and 100-year floodplain.

~~.02 Appeal. A request for a review of the Director's interpretation of any provision of this Code or request for a variance from requirements of Chapter 4.500, Flood Management Area, of this Code.~~

~~.02 XX – "Area Of Shallow Flooding." Means a designated AO, AH, AR/AO, AR/AH, or VO zone on a community's Flood Insurance Rate Map (FIRM) with a one percent (1%) or greater annual chance of flooding to an average depth of one to three (1 - 3) feet where a clearly defined channel does not exist, where the path of flooding is unpredictable, and where velocity flow may be evident. Such flooding is characterized by ponding or sheet flow.~~ means a designated AO, or AH Zone on the Flood Insurance Rate Map (FIRM). The base flood depths range from one to three feet; a clearly defined channel does not exist; the path of flooding is unpredictable and indeterminate; and, velocity flow may be evident. AO is characterized as sheet flow and AH indicates ponding.

~~.03 XX – "Area Of Special Flood Hazard." Means the land in the floodplain within a community subject to a one percent (1%) or greater chance of flooding in any given year. The area may be designated as Zone A on the Flood Hazard Boundary Map (FHBM). After detailed ratemaking has been completed in preparation for publication of the flood insurance rate map, Zone A usually is refined into Zones A, AO, AH, A1-30, AE, A99, AR, AR/A1-30, AR/AE, AR/AO, AR/AH, AR/A, VO, or V1-30, VE, or V. For purposes of these regulations, the term "special flood hazard area" is synonymous in meaning with the phrase "area of special flood hazard."~~ the land in the flood plain within a community subject to a one percent or greater chance of flooding in any given year. Designation on maps always includes the letters A or V.

.043 Bankfull Stage. As defined in the Oregon Administrative Rules pertaining to removal/fill permits, the stage or elevation at which water overflows the natural banks of a stream or other waters of the state and begins to inundate upland areas. In the absence of physical evidence, the two-year recurrent flood elevation (storm level) may be used to approximate the bankfull stage. The bankfull stage is the starting point for measuring the width of a vegetation corridor from a protected water feature. In the absence of any data to establish the bankfull stage or two-year storm event, the starting point for measuring the vegetation corridor is determined by the following indicators:

- a. Water marks on fixed objects (vegetation, rocks, buildings, etc.);
- b. Drift lines (deposited waterborne twigs, litter, etc.); or

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- c. Waterborne sediment deposits on the soil surface or fixed objects (vegetation, rocks, buildings, etc.)

~~.045~~ Base Flood. A flood having a one percent (1%) chance of being equaled or exceeded in any given year flood having a one percent chance of being equaled or exceeded in any given year. Also referred to as the “100-year” flood. Designation on maps always includes the letters A or V.

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~~.06~~ Base Flood Elevation. The water surface elevation during the Base Flood in relation to a specified datum. The Base Flood Elevation (BFE) is depicted on the Flood Insurance Rate Map to the nearest foot and in the Flood Insurance Study to the nearest one-tenth (0.1) foot. Not every potential Special Flood Hazard Area within the Urban Growth Boundary has been mapped by the Federal Emergency Management Agency through the Flood Insurance Study, Flood Insurance Rate Maps, and Digital Flood Insurance Rate Maps. The Floodplain Manager or designee is authorized through Sections ~~4.513~~ 14.020 to obtain the information necessary to determine the presence and extent of unmapped Special Flood Hazard Areas and the associated Base Flood Elevation as part of reviewing development proposals that affect the 100-year Floodplain. Such information shall be used by the City of Troutdale to supplement the Flood Insurance Study, Flood Insurance Rate Maps, and Digital Flood Insurance Rate Maps.

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~~.075~~ Basement. Any area of the building having its floor ~~d~~ subgrade (below ground level) on all sides.

~~XX.08~~ “Below-Grade Crawl Space.” ~~m~~ Means an enclosed area below the base flood elevation in which the interior grade is not more than two feet below the lowest adjacent exterior grade and the height, measured from the interior grade of the crawlspace to the top of the crawlspace foundation, does not exceed four (4) feet at any point.

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~~.09XX~~ “Breakaway Wall.” ~~m~~ Means a wall that is not part of the structural support of the building and is intended through its design and construction to collapse under specific lateral loading forces, without causing damage to the elevated portion of the building or supporting foundation system.

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~~.1006~~ Conservation Easement. An easement applied to environmentally sensitive lands including, but not limited to, lands identified as hillsides, wetlands, floodplains, and floodways. The field verification shall be done by a licensed surveyor, engineer, hydrologist, or any other licensed specialist in the fields of engineering, hydrology, or botany. A conservation easement prohibits most forms of development and assures that native vegetation will be maintained or enhanced. Conservation easements usually affect privately owned land and are enforceable by the City. Trails and limited public facilities may be permitted under carefully controlled conditions within conservation easements.

~~.1107~~ Construction, Start of. (For other than new construction or substantial improvements under the Coastal Barrier Resources Act (Pub. L. 97-348)), includes substantial improvement, and means the date the building permit was issued, provided the

actual start of construction, repair, reconstruction, rehabilitation, addition placement, or other improvement was within one hundred eighty (180) days of the permit date. The actual start means either the first placement of permanent construction of a structure on a site, such as the pouring of slab or footings, the installation of piles, the construction of columns, or any work beyond the stage of excavation; or the placement of a manufactured home on a foundation. Permanent construction does not include land preparation, such as clearing, grading and filling; nor does it include the installation of streets and/or walkways; nor does it include excavation for a basement, footings, piers, or foundations or the erection of temporary forms; nor does it include the installation on the property of accessory buildings, such as garages or sheds not occupied as dwelling units or not part of the main structure. For a substantial improvement, the actual start of construction means the first alteration of any wall, ceiling, floor, or other structural part of a building, whether or not that alteration affects the external dimensions of the building.

Start of construction includes substantial improvement and means the date the building permit was issued, provided the actual start of construction, repair, reconstruction, placement, or other improvement was within one hundred eighty (180) days of the permit date. The actual start means either the first placement of permanent construction on a site, such as the pouring of slab or footings, paving a parking lot, installation of piles, construction of columns, or any work beyond the stage of excavation; or the placement of a manufactured home on a foundation. Permanent construction does not include land preparation, such as clearing, grading, and filling; installation of streets and/or walkways; excavation for a basement, footings, piers, or foundation; erection of temporary forms; or installation of accessory buildings on the property, such as garages or sheds not occupied as dwelling units or not part of the main structure.

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12XX "Critical Facility." A facility that is critical for the health and welfare of the population and is especially important to be located above the Base Flood Elevation following hazard events. The following is the list of Critical Facilities for the purposes of Section 4.500Chapter 14:

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a. Hospitals and other medical facilities having surgery and emergency treatment areas;

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b. Fire and police stations;

c. Tanks or other structures containing, housing or supporting water or fire-suppression materials or equipment required for the protection of essential or hazardous facilities or special occupancy structures. These tanks or other structures do not include City water distribution facilities;

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d. Emergency vehicle shelters and garages;

e. Structures and equipment in emergency-preparedness centers;

f. Standby power generating equipment for essential facilities;

g. Structures and equipment in government communication centers and other facilities required for emergency response; and

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h. Other facilities as determined by the Floodplain Manager or designee.

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Some types of facilities may be critical to a community, but require location within or partially within Special Flood Hazard Areas because of the nature of the facilities. means a facility for which even a slight chance of flooding might be too great. Critical facilities include, but are not limited to schools, nursing homes, hospitals, police, fire and emergency response installations, installations which produce, use or store hazardous materials or hazardous waste.

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.13 08 — Debris. Debris includes discarded manmade objects and may include tires, vehicles, litter, scrap metal, construction waste, lumber, plastic, or styrofoam. Debris does not include objects necessary to a use allowed by this Code, or ornamental and recreational structures. Debris does not include existing natural plant materials or natural plant materials which are left after flooding, downed or standing dead trees, or trees which have fallen into protected water features.

.14 09 — Department of Environmental Quality (DEQ) Water Quality Standards. State of Oregon DEQ water quality standards are the numerical criteria or narrative condition needed in order to protect an identified beneficial use.

.150 Design Flood Elevation. The elevation of the 100-year storm as defined in the Federal Emergency Management Agency Flood Insurance Studies or, in areas without Federal Emergency Management Agency floodplains, the elevation of the 25-year storm or the edge of mapped flood-prone soils or similar methodologies.

.164 Developer. The owners of property, their agents or contractors, or their successors and assigns, who have undertaken or are proposing development which is regulated by Chapters Sections 4.300, Vegetation Corridor and Slope District; 4.500, Flood Management Area; 5.600, Erosion Control and Water Quality Standards; and 5.700, Stormwater Management, and Chapter 14 of this Code.

.172 Development. Any man-made change to improved or unimproved real estate, including but not limited to buildings or other structures, mining, dredging, filling, grading, paving, excavation or drilling operations or storage of equipment or materials. Any manmade change to improved or unimproved real estate including, but not limited to, construction, installation, or change of a building or structure; land division; storage on the land; tree cutting; drilling; and site alteration such as that due to land surface mining, dredging, grading, paving, excavating, or clearing. Development does not include the following:

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a. Stream enhancement or restoration projects approved by any of the following: Oregon Division of State Lands, Oregon Department of Fish and Wildlife, U.S. Army Corps of Engineers, the City, or Multnomah County.

b. ~~Farming practices and farm use, as defined in the Oregon Revised Statutes, which were actively occurring prior to December 1999, and all modifications to existing buildings. Construction of new buildings associated with farm practices and farm uses are subject to the requirements of Section 5.080, Agricultural Use Permitted, and Subsection 5.611(E) of this Code.~~

Commented [RK1]: Consistent with CAV NFIP Compliance letter #1 from DLCD dated 2/13/18.

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.18 Digital Flood Insurance Rate Map. Depicts flood risk and federal flood zones and flood risk information. The Digital Flood Insurance Rate Map (DFIRM) presents the flood risk information in a format suitable for electronic mapping applications.

.193 Disturb. Any manmade changes to the existing physical status of the land which are made in connection with development. ~~The following uses are excluded from the definition:~~

a. ~~Enhancement or restoration of the Water Quality Resource Area.~~

b. ~~Planting native cover identified in the Metro Native Plant List.~~

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.20 Elevated Building. Means for insurance purposes, a non-basement building which has its lowest elevated floor raised above ground level by foundation walls, shear walls, post, piers, pilings, or columns.

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.2144 Elevation Certificate. A form supplied by the Federal Emergency Management Agency (FEMA) and used to document the lowest floor elevation of a building.

.2245 Emergency. Any manmade or natural event or circumstance causing or threatening loss of life, injury to person or property, and includes, but is not limited to, fire, explosion, flood, severe weather, drought, earthquake, volcanic activity, spills or releases of oil or hazardous material, contamination, utility or transportation disruptions, and disease.

.2346 Engineer. A registered professional engineer licensed by the State of Oregon.

.2447 Enhancement. The process of improving upon the natural functions and/or values of an area or feature which has been degraded by human activity. Enhancement activities may or may not return the site to a pre-disturbance condition, but create/recreate processes and features that occur naturally.

.2548 Erosion. Erosion is the detachment and movement of soil particles, rock fragments, or other material, organic or inorganic, resulting from actions of water, wind, human, or animal activity.

.26 Erosion Hazard Zone. The area adjacent to a stream or river that is at risk of bank erosion from stream flow or mass wasting, as designated on the communities FIRM.

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.2749 Erosion Prevention and Sediment Control Plans. Plan requirements are specified

in the City of Troutdale's Construction Standards for Public Works Facilities.

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.280 Erosion, Visible or Measurable. Visible or measurable erosion includes, but is not limited to:

- a. Deposits of mud, dirt sediment, or similar material exceeding one-half cubic foot in volume on public or private streets, adjacent property, or onto the storm and surface water system, either by direct deposit, dropping discharge, or as a result of the action of erosion.
- b. Evidence of concentrated flows of water over bare soils, turbid or sediment laden flows, or evidence of onsite erosion such as rivulets on bare soil slopes where the flow of water is not filtered or captured on the site.
- c. Earth slides, mudflows, earth sloughing, or other earth movement that leaves the property.

.249 Excavation. Any act by which soil or rock is cut into, dug, quarried, uncovered, removed, displaced, or relocated.

.30 Existing Building or Structure. A structure for which the Start of Construction commenced before February 1, 2019.

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.3122 Federal Emergency Management Agency (FEMA). The agency with the overall responsibility for administering the National Flood Insurance Program.
~~An independent federal agency reporting to the President. FEMA is responsible for coordinating the federal response to floods, earthquakes, hurricanes, and other natural or manmade disasters and providing disaster assistance to states, communities, and individuals. FEMA administers the National Flood Insurance Program (NFIP).~~

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.3223 Fill. Any material such as, but not limited to, sand, soil, rock, gravel, clay, or mud that is placed on a site for the purposes of development or redevelopment.

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.3324 FIRM. See Flood Insurance Rate Map.

.34 25 Flood or Flooding, Means:

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a. A general and temporary condition of partial or complete inundation of normally dry land areas from:

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1. The overflow of inland or tidal waters.

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2. The unusual and rapid accumulation or runoff of surface waters from any source.

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3. Mudslides (i.e., mudflows) which are proximately caused by flooding as defined in paragraph (a)(2) of this definition and are akin to a river of liquid and flowing mud on the surfaces of normally dry land areas, as when earth is carried by a current of water and deposited along the path of the current.
- b. The collapse or subsidence of land along the shore of a lake or other body of water as a result of erosion or undermining caused by waves or currents of water exceeding anticipated cyclical levels or suddenly caused by an unusually high water level in a natural body of water, accompanied by a severe storm, or by an unanticipated force of nature, such as flash flood or an abnormal tidal surge, or by some similarly unusual and unforeseeable event which results in flooding as defined in paragraph (a)(1) of this definition. ~~A general and temporary condition of partial or complete inundation of normally dry land areas from:~~
- a. The overflow of inland or tidal waters; and/or
- b. The unusual and rapid accumulation of runoff of surface waters from any source.
- .3526 Flood Insurance Rate Map (FIRM). An official map of a community, on which the Federal Insurance Administrator has delineated both the special hazard areas and the risk premium zones applicable to the community. ~~The official map of a community for which the Federal Insurance Administration has delineated both the areas of special flood hazards and the risk premium zones applicable to the community.~~
- .3627 Flood Insurance Study (FIS). Or flood elevation study means an examination, evaluation and determination of flood hazards and, if appropriate, corresponding water surface elevations, or an examination, evaluation and determination of mudslide (i.e., mudflow) and/or flood-related erosion hazards. ~~A report published by FEMA that provides detailed information on a community's flood hazard areas. The FIS normally includes topographic information, floodplain and floodway data charts, study information, and stream profiles.~~
- .3728 Flood Management Area (FLMA). All lands contained within the 100-year floodplain and floodway as shown on the Flood Insurance Rate Map, and the area of inundation for the February 1996 flood. In addition, all lands which have documented evidence of flooding.
- .3829 Floodplain. As shown below in Figure 1 - Floodplain Cross Section, the area adjacent to a stream or river channel that is covered by water when the river or stream overflows its banks. ~~Any land area, such as the lowland and relatively flat areas adjoining inland waters, susceptible to being inundated by water from any source, including land that may be covered temporarily by water as a result of a storm event.~~
- .39 Floodplain Development Permit. Federally required permit required prior to construction and other development in any Special Flood Hazard Area (100-yr. Floodplain). See

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Section ~~4.516~~ 14.035 of this Code.

.40 Floodplain Functions. Hydrological and ecological functions including conveyance and temporary storage of floodwater, depositions of sediments outside of the channel, ground water recharge, filtering of pollutants, and reduction of floodwater velocity and erosive forces. Also included, but to a lesser extent in previously urbanized areas, are such functions as nutrient exchange, refuges, and feeding areas for fish.

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.4130 Floodplain, 100-Year. As shown below in Figure 1 - Floodplain Cross Section, land area adjacent to a river, stream, or other water body that is subject to a one percent or greater chance of flooding in any given year. It consists of land ranging from that which is subject to annual flooding to that which has a one percent (1%) or greater chance of flooding in any given year. The 100-year Floodplain consists of the Floodway and the Floodway Fringe. The 100-year Floodplain is mapped by the Federal Emergency Management Agency (FEMA) on Flood Insurance Rate Maps (FIRMs) and is the area subject to Base Flood regulations. Not every potential Special Flood Hazard Area within the Urban Growth Boundary has been mapped by the Federal Emergency Management Agency through the Flood Insurance Study, Flood Insurance Rate Maps, and Digital Flood Insurance Rate Maps. The Floodplain Manager or designee is authorized through Section 14.020 to obtain the information necessary to determine the presence and extent of unmapped Special Flood Hazard Areas as part of reviewing development proposals that affect the 100-year Floodplain. Such information shall be used by the City of Troutdale to supplement the Flood Insurance Study, Flood Insurance Rate Maps, and Digital Flood Insurance Rate Maps and these areas are also subject to Base Flood regulations. See Base Flood.

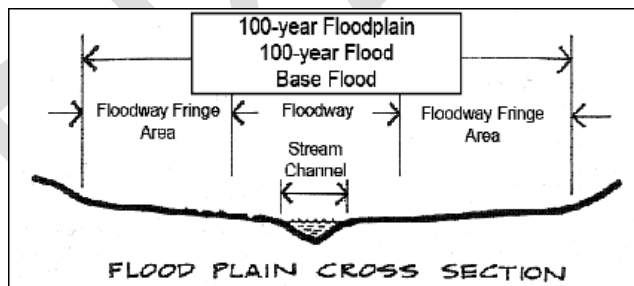


Figure 1 – Floodplain Cross SectionSee Base Flood.

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.4234 Floodway (Regulatory Floodway). Means the channel of a river or other watercourse and the adjacent land areas that must be reserved in order to discharge the base flood without cumulatively increasing the water surface elevation more than a designated height. The portion of a watercourse required for the passage or conveyance of a given storm event as identified and designated on the Flood Insurance Rate Map as produced by the Federal Emergency Management Agency. The floodway shall include the channel of the watercourse and the adjacent floodplain that must be reserved in an

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unobstructed condition in order to discharge the base flood without increasing the flood levels by more than one (1) foot.

.43 Flow-through Design. Typically a structure that does not displace surface floodwater or hinder or obstruct the movement of surface floodwater.

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.44 High Hazard Zone. Lands within the furthest landward extent of the floodway and erosion hazard zone, as designated on the communities FIRM.

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.45 Highest Adjacent Grade (HAG). The highest natural elevation of the ground surface prior to construction, adjacent to the proposed walls of a structure. Refer to the Elevation Certificate, FEMA Form 81-31, for more information.

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.46 Hydrodynamic Load. Force of water in motion.

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.47 Hydrostatic Load. Force of water at rest.

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.48~~32~~ Invasive Non-native or Noxious Vegetation. Plant species that are listed as nuisance plants or prohibited plants on the most recent Portland Plant List as adopted by the City of Portland by ordinance ~~Metro Native Plant List as adopted by Metro Council resolution~~ because they are plant species that have been introduced and, due to aggressive growth patterns and lack of natural enemies in the area where introduced, spread rapidly into native plant communities.

.49~~33~~ Joint Fill Permit/404 Removal/Fill Permit. A permit issued jointly by the Oregon ~~Division~~ Department of State Lands and U.S. Army Corps of Engineers to allow, with conditions and mitigation, the removal or fill of wetlands determined to be of either local or state significance by the Oregon ~~Division~~ Department of State Lands.

.50 Letter of Map Change (LOMC). An official FEMA determination, by letter, to amend or revise effective Flood Insurance Rate Maps and Flood Insurance Studies. LOMCs are issued in the following categories:

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a. Letter of Map Amendment (LOMA) - A revision based on technical data showing that a property was incorrectly included in a designated Special Flood Hazard Area. A LOMA amends the current effective Flood Insurance Rate Map and establishes that a specific property is not located in a Special Flood Hazard Area.

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b. Letter of Map Revision (LOMR) - A revision based on technical data showing, usually due to manmade changes, alterations to Federal Flood Zones, flood elevations floodplain and floodway delineations, and planimetric features. One common type of LOMR, a LOMR-F, is a determination that a structure has been elevated through the placement of fill above the Base Flood Elevation and is excluded from the Special Flood Hazard Area.

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c. Conditional Letter of Map Revision (CLOMR) - A formal review and comment

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by FEMA as to whether a proposed project complies with the minimum National Flood Insurance Program floodplain management criteria. A CLOMR does NOT amend or revise effective Flood Insurance Rate Maps, Flood Boundary and Floodway Maps, or Flood Insurance Studies.

~~.51~~³⁴ **Lowest Floor.** Means the lowest floor of the lowest enclosed area (including basement). An unfinished or flood resistant enclosure, usable solely for parking of vehicles, building access or storage in an area other than a basement area is not considered a building's lowest floor. Provided that such enclosure is not built so as to render the structure in violation of the applicable non-elevation design requirements of CFR Sec. 60.3.

The lowest floor of the lowest enclosed area of a building (including basement). An unfinished or flood-resistant enclosure, usable solely for parking of vehicles, building access, or storage, in an area other than a basement area, is not considered a building's lowest floor, provided that such enclosure is not built so as to render the structure in violation of the applicable non-elevation design requirements of the flood hazard regulations.

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~~.52~~ **Manufactured Dwelling.** Means a structure, transportable in one or more sections, which is built on a permanent chassis and is designed for use with or without a permanent foundation when attached to the required utilities. The term "manufactured dwelling" does not include a "recreational vehicle."

~~.53~~ **Manufactured Dwelling Park or Subdivision.** Means a parcel (or contiguous parcels) of land divided into two or more manufactured home lots for rent or sale

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~~.54~~ **Mean Sea Level.** For purposes of the National Flood Insurance Program, the North American Vertical Datum of 1988 or other Datum, to which Base Flood Elevations shown on a community's FIRM are referenced.

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~~.55~~³⁵ **Mitigation.** The reduction of adverse effects of a proposed project by considering, in this order:

- a. Avoiding the impact altogether by not taking a certain action or parts of an action;
- b. Minimizing impacts by limiting the degree or magnitude of the action and its implementation;
- c. Rectifying the impact by repairing, rehabilitating, or restoring the effected environment;
- d. Reducing or eliminating the impact over time by preservation and maintenance operations during the life of the action by monitoring and taking appropriate measures; and
- e. Compensating for the impact by replacing or providing comparable substitute water quality resource areas.

- .5636 **Mulch.** Application of plant residue, netting, or other suitable materials to the land surface to conserve moisture, hold soil in place, and aid in establishing plant cover.
- .5737 **NAVD 88.** The North American Vertical Datum of 1988 (NAVD 88) is the vertical control datum established in 1991 by the minimum-constraint adjustment of the Canadian-Mexican-U.S. leveling observations. This is the data used on FIRMs and in flood insurance studies adopted in 2009.
- .5838 **NGVD 29.** “The National Geodetic Vertical Datum of 1929: The name, after May 10, 1973, of (the) Sea Level Datum of 1929.” (Vertical control datum established for vertical control in the United States by the general adjustment of 1929.) This is the datum used on FIRMs and in flood insurance studies prior to 2009.
- .5939 **National Flood Insurance Program (NFIP).** A federal program enabling property owners in participating communities to purchase insurance as a protection against flood losses in exchange for state and community floodplain management regulations that reduce future flood damages.
- .6040 **Native Vegetation or Native Plant.** Vegetation listed as a native plant on the most recent Metro-NativePortland Plant List as adopted by the City of Portland by ordinance as adopted by Metro Council resolution and any other vegetation native to the Portland metropolitan area provided that it is not listed as a nuisance plant or a prohibited plant on the Metro-NativePortland Plant List.
- .6144 **National Wetland Inventory (NWI) Map.** The City is mapped on the Camas and Washougal, Washington-Oregon wetland maps prepared by the U.S. Department of the Interior, Fish and Wildlife Service.
- .62 New Construction. A structure for which the Start of Construction commenced after February 1, 2019, and includes subsequent Substantial Improvements to the structure
- .6342 **NPDES Permit.** The National Pollutant Discharge Elimination System 1200-C Permit is a State of Oregon, Department of Environmental Quality permit that covers federal stormwater regulations as they pertain to construction activities in Oregon. The permit is administered by the City.
- .6443 **ODFW Construction Standards.** The Oregon Department of Fish and Wildlife construction guidelines for building roads, bridges, and culverts, or any transportation structure within a waterway.
- .6544 **One Percent Annual Chance Flood.** The flood that has a one percent (1%) chance of being equaled or exceeded on the average in any given year; equivalent to the 100-year flood.
- .6645 **Open Space.** Land that is undeveloped and that is planned to remain so

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indefinitely. The term encompasses parks, forests, and farmland. It may also refer only to land zoned as being available to the public, including playgrounds, watershed preserves, and parks.

.6746 Perennial Streams. All primary and secondary perennial waterways mapped by the U.S. Geological Survey, having year-round flow.

.6847 Practicable. Available and capable of being done after taking into consideration cost, existing technology, and logistics in light of overall project purpose.

.6948 Pre-FIRM Structures. Buildings that were built before the flood risk was known and identified on the community's FIRM.

.7049 Protected Water Features, Primary. Includes:

- a. Title 3 wetlands.
- b. Rivers, streams (creeks or brooks) and drainages downstream from the point at which one hundred (100) acres or more are drained to that water feature (regardless of whether it carries year-round flow).
- c. Streams carrying year-round flow.
- d. Springs which feed streams and wetlands and have perennial (year-round) flow.
- e. Natural lakes.

.7150 Protected Water Features, Secondary. Includes intermittent streams and seeps downstream of the point at which fifty (50) acres are drained and upstream of the point at which one hundred (100) acres are drained to that water feature.

.7542 Restoration. The process of returning a disturbed or altered area or feature to a previously existing natural condition. Restoration activities reestablish the structure, function, and/or diversity to that which occurred prior to impacts caused by human activity.

.73 Recreational Vehicle (RV). A vehicle which is:

- a. Built on a single chassis;
- b. Four hundred (400) square feet or less when measured at the largest horizontal projection;
- c. Designed to be self-propelled or permanently towable by a light duty truck; and
- d. Designed primarily not for use as a permanent dwelling but as temporary living

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quarters for recreational, camping, travel, or seasonal use.

.7452 **Resource.** A functioning natural system such as a wetland or stream.

.7553 **Riparian.** Those areas associated with streams, lakes, and wetlands where vegetation communities are predominately influenced by their association with water.

.7654 **Routine Repair and Maintenance.** Activities directed at preserving an existing allowed use or facility, or nonconforming use, without expanding the development footprint or site use.

.7755 **Sediment.** Any material that is in suspension, is being transported, or has been moved from its site of origin by water, wind, or gravity as a result of erosion.

.7856 **Site.** The lot, or contiguous lots, under the same ownership that are subject to a development permit or erosion control plan.

.7957 **Slope District.** Slopes of twenty-five percent (25%) or greater throughout the City that have a minimum horizontal distance of fifty (50) feet. Engineered slopes associated with public streets or roads are not included.

.8058 **Special Flood Hazard Area (SFHA).** The land in the floodplain within a community subject to a one percent (1%) or greater chance of flooding in any given year. The area may be designated as Zone A on the FHBM (Flood Hazard Boundary Map). After detailed ratemaking has been completed in preparation for publication of the flood insurance rate map, Zone A usually is refined into Zones A, AO, AH, A1-30, AE, A99, AR, AR/A1-30, AR/AE, AR/AO, AR/AH, AR/A, VO, or V1-30, VE, or V. For purposes of these regulations, the term "special flood hazard area" is synonymous in meaning with the phrase "area of special flood hazard". The term used by the National Flood Insurance Program for areas inundated by 100-year flood. The SFHA is mapped on the flood insurance rate maps (FIRM). The SFHA is the area where floodplain management regulations must be enforced and the area where the mandatory purchase of flood insurance applies.

.8159 **Statewide Planning Goal 5.** Oregon's statewide planning goal that addresses open space, scenic and historic areas, and natural resources. The purpose of the goal is to conserve open space and protect natural and scenic resources.

.8260 **Statewide Planning Goal 6.** Oregon's statewide planning goal that addresses air, water, and land resources quality to "maintain and improve the quality of the air, water, and land

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resources of the state” as implemented by the Land Conservation and Development Commission (LCDC).

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.8364 Statewide Planning Goal 7. Oregon’s statewide planning goal that addresses areas subject to natural disasters and hazards to “protect life and property from natural disasters and hazards” as implemented by the Land Conservation and Development Commission.

.8462 Stockpile. Onsite storage of any soil, sand, gravel, clay, mud, debris, vegetation, refuse, or any other material, organic or inorganic, in a concentrated state.

.8563 Stream. A body of running water moving over the earth’s surface in a channel or bed, such as a creek, rivulet, or river, that flows at least part of the year, including perennial and intermittent streams. Streams are dynamic in nature and their structure is maintained through build-up and loss of sediment.

.8664 Stream Bank, Top of. See Bankfull Stage.

.87 65 Structure. Means, for floodplain management purposes, a walled and roofed building, including a gas or liquid storage tank, hat is principally above ground, as well as a manufactured home. Structure, for insurance purposes, means:

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a. A building with two or more outside rigid walls and a fully secured roof that is affixed to a permanent site;

b. A manufactured dwelling; or

c. A travel trailer without wheels, built on a chassis and affixed to a permanent foundation, that is regulated under the community's floodplain management and building ordinances or laws.

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For the latter purpose, structure does not mean a recreational vehicle or a park trailer or other similar vehicle, except as described in Section 1.040.87(c), or a gas or liquid storage tank. A building or other improvement that is built, constructed, or installed.

.88 Substantial Damage. Damage of any origin sustained by a structure located within the 100-year Floodplain, whereby the cost of restoring the structure to its prior condition would equal or exceed fifty percent (50%) of the structure's market value before the damage occurred.

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.89 Substantial Improvement. Means any reconstruction, rehabilitation, addition, or other improvement of a structure, the cost of which equals or exceeds forty-nine percent (49%) of the market value of the structure before the start of construction of the improvement. This term includes structures which have incurred substantial damage, regardless of the actual repair work performed. The term does not, however, include either:

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- a. Any project for improvement of a structure to correct existing violations of state or local health, sanitary, or safety code specifications which have been identified by the local code enforcement official and which are the minimum necessary to assure safe living conditions; or,
- b. Any alteration of a historic structure, provided that the alteration will not preclude the structure's continued designation as a historic structure.

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~~.66 Substantial Improvement.~~

- a. ~~There are three occasions when work on an existing building is considered a substantial improvement:~~
 - 1. ~~Any improvement of a structure, the cost of which exceeds fifty percent (50%) of the current market value of the existing structure.~~
 - 2. ~~Reconstruction or repair of a building, that exceeds fifty percent (50%) of the market value of the structure before it was damaged.~~
 - 3. ~~Additions to an existing structure when the addition increases the current market value of a structure by more than fifty percent (50%) or the floor area by more than twenty percent (20%).~~
 - 4. ~~Unless other evidence is provided to the satisfaction of the Director, "market value" shall be based on the latest market, not assessed, value of the structure as determined by Multnomah County.~~
- b. ~~The term does not include:~~
 - 1. ~~Any project for improvement of a structure to comply with existing state or local health, sanitary, or safety Code specifications which are solely necessary to assure safe living conditions; or~~
 - 2. ~~Any alteration of a structure listed on the National Register of Historic Places or a State Inventory of Historic Places.~~

~~.9067~~ Surface Water Management System. All natural and constructed facilities used to regulate the quantity and quality of surface water, including drainage easements, culverts, storm drains, catch basins, drainage ditches, natural drainageways, stream corridors, rivers, ponds, wetlands, and impoundments.

~~.9168~~ Title 3. Title 3 is part of the Metro Urban Growth Management Functional Plan pertaining to water quality, flood management, and fish and wildlife conservation, and directly pertains to Statewide Planning Goals 5, Open Spaces, Scenic and Historic Areas, and Natural Resources; 6, Air, Water, and Land Resources Quality; and 7, Areas Subject to Natural Disasters and Hazards.

.92 Variance. Means a grant of relief by a community from the terms of a floodplain management regulation.

.9369 Vegetation, Approved. Vegetation which typically does not require irrigation or fertilization because it is adapted to natural soil, water, and climatic conditions. The list of approved vegetation species is based on the most recent Portland Plant List as adopted by the City of Portland by ordinance~~Metro Native Plant List~~, and is on file in the Community Development Department.

.9470 Vegetation Corridor. The undisturbed area between a development and a protected water feature as designated in Sections 4.316, Width of Vegetation Corridor, and 4.317, Method for Determining Vegetation Corridors Next to Primary Protected Water Features, of this Code, or slopes of twenty-five percent (25%) or greater throughout the City, except engineered slopes associated with public streets or roads.

.9574 Vegetation, Invasive, Non-Native, or Noxious. Plant species that have been introduced and due to aggressive growth patterns and lack of natural enemies in the area where introduced, spread rapidly into native plant communities, or which are not listed on the most recent Portland Plant List as adopted by the City of Portland by ordinance~~Metro Native Plant List~~.

.9672 Vegetation, Native. Any vegetation native to the Portland Metropolitan Area or listed on the Portland Plant List as adopted by the City of Portland by ordinance~~Metro Native Plant List~~.

.9773 Water-dependent. A structure for commerce or industry which cannot exist in any other location and is dependent on the water by reason of the intrinsic nature of its operations.

~~A use which can be carried out only on, in, or adjacent to water because it requires access to the water for waterborne transportation or recreation. Water-dependent also includes development which by its nature can be built only on, in, or over water. Bridges supported by piers or pillars as opposed to fill are water-dependent development.~~

.9874 Water Features. See Protected Water Features, primary and secondary.

.9975 Water Quality Facility. A created or constructed structure or drainageway that is designed, constructed, and maintained to collect, filter, retain, or detain surface water runoff during and after a storm event for the purpose of stormwater management and water quality improvement. The facility may take on characteristics of a wetland, but it does not become a resource.

.10076 Watershed. A geographic unit defined by the flows of rainwater or snowmelt. All land in a watershed drains to a common outlet, such as a stream, lake, or wetland.

.101 Water Surface Elevation. The height, in relation to a specific datum, of floods of various

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magnitudes and frequencies in the floodplains of coastal or riverine areas.

- .10277 **Wetlands.** Areas inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, and similar areas. Wetlands are those areas identified and delineated by qualified wetland specialists as set forth in the 1987 Corps of Engineers Wetland Delineation Manual.
- a. Wetland determinations. The identification of an area as either wetland or non-wetland.
 - b. Wetlands, constructed. Wetlands developed as a water quality or quantity facility, subject to change and maintenance as such. These areas must be clearly defined and/or separated from naturally occurring or created wetlands.
 - c. Wetlands, created. Those wetlands developed in an area previously identified as a non-wetland to replace or mitigate wetland destruction or displacement. A created wetland shall be regulated and managed the same as an existing wetland.
 - d. Wetlands, Title 3. Wetlands of metropolitan concern as shown on the Metro Water Quality and Flood Management Overlay District Map and other wetlands not mapped but determined significant by the Oregon Department of State Lands, consistent with the criteria in Title 3, Section 7.C. of the Metro Urban Growth Management Functional Plan. Title 3 wetlands include created wetlands approved and monitored by the Oregon Department of State Lands and U.S. Army Corps of Engineers. Title 3 wetlands do not include artificially constructed and managed stormwater and water quality treatment facilities.

EXHIBIT G

NOTE: Red-Line Version shows existing Section 4.500. The "clean" version (Attachment E) shows section carried over to the proposed Chapter 14

4.500 FLOOD MANAGEMENT AREA

FLMA

4.510 Purpose. ~~Without establishing any priority,~~ The purpose of this Chapter is to promote the public health, safety, and general welfare, and to minimize public and private losses due to flood conditions or degradation of water quality in specific areas by provisions designed to:

- A. Protect human life, health, and property in areas subject to periodic flooding.~~Protect human life and health;~~
- B. Minimize expenditure of public money and costly flood control projects.Implement the Floodplain requirements of Statewide Planning Goal 7 - which relates to areas subject to natural disasters and hazards;:
- C. Through floodplain regulation, contribute to the properly functioning condition of streams and rivers and address, in part, the water quality aspects of Statewide Planning Goal 6;
- D. Implement requirements for the City's participation in the National Flood Insurance Program, including the Community Rating System;
- ~~Minimize the need for rescue and relief efforts associated with flooding and generally undertaken at the expense of the general public;~~
- E. Implement the actions derived from the Multnomah County Hazard Mitigation Plan to minimize the risk of natural hazards, such as flooding, to people and property;
- ~~F.~~ Ensure continuity of City services, access to City facilities, and minimize minimal prolonged business interruptions during times of flood;
- ~~G.~~ Manage stormwater drainage in a manner that:
 - 1. Maintains the properly functioning conditions of waterways;
 - 2. Provides for the conveyance and temporary storage of floodwater;
 - 3. Reduces floodwater velocity;
 - 4. Facilitates sediment deposition in the floodplain;
 - 5. Provides an opportunity for groundwater recharge; and
 - 6. Promotes other stormwater and floodplain functions.

These provisions are also intended to minimize maintenance costs, eliminate potential

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hazards before they occur, and protect properties and persons adjacent to drainageways and to other natural hazard areas;

H. Minimize damage to public facilities and utilities, such as water purification and sewage treatment plants, water and gas mains, electric, telephone and sewer lines, streets, and bridges located in floodplains.~~Minimize damage to public facilities and utilities such as water and gas mains; electric, telephone, and sewer lines; streets; and bridges located in areas of special flood hazard;~~

FJ. Help maintain a stable tax base by providing for the sound use and development of~~areas of special flood hazard so as to minimize future flood blight areas~~flood-prone areas;

JG. Ensure that potential buyers are notified that property is in an area of special flood hazard;

HK. ~~Ensure that~~Compel those who occupy the areas of special flood hazard assume responsibility for their actions;

LI. Maintain and improve water quality;

MJ. Minimize erosion and loss of native vegetation;

NK. Maintain wetlands, including swamps, marshes, bogs, and similar areas within the City, because wetlands help to maintain water quality and flood storage capacities;~~and~~

OL. Avoid any increase in base flood elevations as a result of development;

PM. ~~Minimize expenditure of public money for costly flood control projects~~Comply with Statewide Planning Goal 7 Areas Subject to Natural Disasters and Hazards;

Q. ~~Minimize the need for rescue and relief efforts associated with flooding and generally undertaken at the expense of the general public;~~

R. ~~4.511 — Methods of Reducing Flood Losses and mMaintaining wWater qQuality. In order to accomplish its purpose, this chapter includes methods and provisions to: This Chapter includes methods and provisions for:~~

1. Require that development that is vulnerable to floods, including buildings, structures, and facilities necessary for the general health, safety and welfare of citizens, be protected against flood damage at the time of initial construction;

2. Restrict or prohibit uses which are dangerous to health, safety and property due to water or erosion hazards, or which increase flood heights, velocities, or erosion;

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3. Control filling, grading, dredging and other development which may increase flood damage or erosion;
4. Prevent or regulate the construction of flood barriers that will unnaturally divert flood waters or that may increase flood hazards on other lands;
5. Preserve and restore natural floodplains, stream channels, and natural protective barriers which carry and store flood waters, and;
6. Coordinate with and supplement provisions of Oregon Building Codes. A. Restricting or prohibiting uses which are dangerous to health, safety, and property due to water or erosion hazards, or which result in damaging increases in erosion, flood heights, or velocities.
B. Requiring that uses vulnerable to floods, including facilities which serve such uses, be protected against flood damage at the time of initial construction.
C. Controlling the alteration of natural, floodplains, stream channels, and natural protective barriers, which help accommodate or channel floodwaters.
D. Controlling filling, grading, dredging, and other development which may increase flood damage.
E. Preventing or regulating the construction of flood barriers which will unnaturally divert floodwaters or may increase flood hazards in other areas.
F. Maintaining and reintroducing approved vegetation which minimizes erosion and helps to maintain and improve water quality.
G. Coordinating and supplementing the provisions of the state Building Code.
- S. To advance these purposes, where not required, creation of open space tracts is encouraged within areas designated as natural hazards on the Comprehensive Plan and official zoning maps.

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~~4.511 Methods of Reducing Flood Losses and Maintaining Water Quality. This Chapter includes methods and provisions for:~~

- ~~A. Restricting or prohibiting uses which are dangerous to health, safety, and property due to water or erosion hazards, or which result in damaging increases in erosion, flood heights, or velocities.~~
- ~~B. Requiring that uses vulnerable to floods, including facilities which serve such uses, be protected against flood damage at the time of initial construction.~~
- ~~C. Controlling the alteration of natural, floodplains, stream channels, and natural protective barriers, which help accommodate or channel floodwaters.~~
- ~~D. Controlling filling, grading, dredging, and other development which may increase flood damage.~~
- ~~E. Preventing or regulating the construction of flood barriers which will unnaturally divert floodwaters or may increase flood hazards in other areas.~~
- ~~F. Maintaining and reintroducing approved vegetation which minimizes erosion and helps to maintain and improve water quality.~~
- ~~G. Coordinating and supplementing the provisions of the state Building Code.~~

4.511² Applicability.

- A. These provisions shall apply to public and private properties in the 1% annual chance of flood floodplain (100-yr. floodplain or Special Flood Hazard Area) as mapped by the Federal Insurance Administration of rivers and local streams within the planning jurisdiction of the City of Troutdale. This Chapter shall apply to all development of land within the Flood Management Area (FLMA) and wetlands within the planning jurisdiction of the City, which includes land in unincorporated Multnomah County within the City's Urban Planning Area.
- B. The areas of special flood hazard identified by the Federal Insurance Administration in a scientific and engineering report entitled "The Flood Insurance Study for Multnomah County, Oregon and Incorporated Areas of Multnomah County", with accompanying Flood Insurance Rate Maps, are hereby adopted by reference and declared to be a part of this ordinance. The Flood Insurance Study is on file at the Community Development Department located at 2200 SW 18th Way, Troutdale, OR 97060. The Flood Management Area development standards apply to the 100-year floodplain as mapped by the Department of Homeland Security, Federal Emergency Management Agency (FEMA) on the county wide Flood Insurance Rate Map (FIRM) covering the cities of Fairview, Gresham, Troutdale and Wood Village, and the unincorporated areas of Multnomah County and titled: "FIRM Flood Insurance Rate Map, Multnomah County, Oregon and Incorporated Areas, Map Number 41051C," effective December 18, 2009, areas of

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flooding in 1996 as mapped by Metro, and wetlands. The FIRM is supported by county-wide Flood Insurance Study Number 41051CV000A, effective December 18, 2009, entitled "Flood Insurance Study, Multnomah County, Oregon and Incorporated Areas," published by FEMA, covering the cities of Fairview, Gresham, Troutdale, and Wood Village, and the unincorporated areas of Multnomah County in effect at the time of submission. Metro, a regional metropolitan planning agency representing portions of Clackamas, Multnomah, and Washington Counties, mapped the flood hazard areas from areas the Flood Insurance Rate Map and areas inundated by flooding in 1996 on the Title 3 map. The Title 3 maps, the Flood Insurance Study, and the Flood Insurance Rate Map are adopted for reference only. Not every Special Flood Hazard Area has been mapped by the Federal Insurance Agency through the Flood Insurance Study and Flood Insurance Rate Maps cited above. The Floodplain Administrator or designee is authorized through Sections 4.513 to obtain from applicants the information necessary to determine the presence and extent of unmapped Special Flood Hazard Areas as part of reviewing development proposals that affect the floodplain. Once approved by the Floodplain Administrator or designee, such information shall be incorporated into the Natural Hazards Map and used by the City of Troutdale to supplement the Flood Insurance Study, Flood Insurance Rate Maps, and Digital Flood Insurance Rate Maps cited above to ensure consistency with the floodplain regulations contained in this Chapter. The applicant for development within this area shall be responsible for precisely establishing base flood elevations and delineating the boundaries of the Flood Management Area based upon site specific field surveys and delineations certified by a licensed engineer or surveyor. Contested base flood elevations are to be reviewed under the provisions of Subsection 4.513, (DC) of this Chapter. The City will keep a record of all surveys, delineations, and any Letter of Map Amendments Change (LOMCA) approved by the Federal Emergency Management Agency, as revisions to the local copy of the Title 3 map. The City will submit this information to Metro for future updates of the Title 3 map. A field survey shall consist of the following:

1. 100-year floodplain boundaries, and the base flood elevation based upon the North American Vertical Datum of 1988 (NAVD 88).
2. The 1996 flood boundaries established by Metro.
3. Floodway boundaries as determined by datum available from the FIRM and Flood Insurance Study.
4. The name, location, and dimensions of affected streams or rivers, and the bankfull stage or the two-year storm level.
5. The area comprising the vegetation corridor as established by Sections 4.316, Width of Vegetation Corridor, and 4.317, Method for Determining Vegetation Corridors Next to Primary Protected Water Features, of this Code.
6. Wetlands that are determined significant by the Oregon Division of State Lands or have the following characteristics. All wetland determinations made prior to development must

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be reviewed and acknowledged by the Oregon Division of State Lands prior to issuance of City permits. The characteristics shall be determined by a qualified scientist.

- a. The wetland is fed by surface flows, sheet flows, or precipitation; has evidence of flooding during the growing season; at least sixty percent (60%) of the area is vegetation; and is over one-half acre in size; or, the wetland qualifies as having “intact water quality function” under the 1996 Oregon Freshwater Wetland Assessment Methodology; or
- b. The wetland is in the Flood Management Area; has evidence of flooding during the growing season; is five (5) acres or more in size; and has a restricted outlet or no outlet; or, the wetland qualifies as having “intact hydrologic control function” under the 1996 Oregon Freshwater Wetland Assessment Methodology; or
- c. The wetland, or a portion of the wetland, is within a horizontal distance of less than one-fourth mile from a water body which meets the Department of Environmental Quality definition of “water quality limited water body” in OAR Chapter 340, Division 41 (1996).

- C. Warning and Disclaimer of Liability. The degree of flood protection required by this Chapter is considered reasonable for regulatory purposes and is based on scientific and engineering considerations. Larger floods can and will occur on rare occasions. Flood heights may be increased by manmade or natural causes. This Code does not imply that land or uses will be free from flooding or flood damage. This Code shall not create liability on the part of the City, any officer or employee thereof, or the Federal Insurance Administration, for any damages that result from reliance on this Code or any administrative decision lawfully made hereunder.

4.512 Severability. - The standards of this Chapter are subject to the severability standards as described in Section 17.100 of this Code.

4.513 Administration and Interpretation of Flood Insurance Rate Map Boundaries and Flood Management Area Standards, and Edge of Bankfull Stage or Two-Year Storm Level.

- A. The Community Development Director shall designate a Floodplain Manager to be the Local Administrator of this Chapter. The Community Development Director or designee, is the Local Administrator and shall implement the provisions and standards of the National Flood Insurance Program, the standards of this Chapter, and make interpretations, where needed, as to including determinations regarding the exact location of the boundaries of the Special Flood Hazard Area floodplain (for example, where there appears to be a conflict between a mapped boundary and actual field conditions) by granting or denying Floodplain Development Permit applications in accordance with its provisions. In the interpretation and application of this Chapter, all provisions shall be:

- 1. Considered as minimum requirements;

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2. Liberal construed in favor of the governing body;
23. Judged by established historical facts of flooding as known by, or made known to, the governing body;
43. Deemed neither to limit nor repeal any other powers granted under State statutes; and
54. Defined in Section 1.040, ~~Vegetation Corridor and Slope District, and Water Quality and Flood Management Definitions~~, of this Code.

B. Duties and Responsibilities of the Floodplain Manager. Duties of the Floodplain Manager shall include, but not be limited to:

1. Review all Floodplain Development Permits to determine that the permit requirements of this ordinance have been satisfied.
2. Review all Floodplain Development Permits to determine that all necessary permits have been obtained from those Federal, State, or local governmental agencies from which prior approval is required.
3. Review all Floodplain Development Permits to determine if the proposed development is located in the floodway. If located in the floodway, assure that the encroachment provisions of this Chapter are met.
4. When base flood elevation data has not been provided (A Zones) in accordance with Section 4.511, the Floodplain Manager shall obtain, review, and reasonably utilize any base flood elevation and floodway data available from a Federal, State or other source, in order to administer Sections 4.517.
5. Where base flood elevation data is provided through the Flood Insurance Study, FIRM, or required as in Section 4.513.C, obtain and record the actual elevation (in relation to mean sea level) of the lowest floor (including basements and below-grade crawlspaces) of all new or substantially improved structures, and whether or not the structure contains a basement.
6. For all new or substantially improved floodproofed structures where base flood elevation data is provided through the Flood Insurance Study, FIRM, or as required in Section 4.513.C, the administrator shall:
 - a. Verify and record the actual elevation (in relation to mean sea level), and
 - b. Maintain the floodproofing certifications required in Section 4.517.
7. Maintain for public inspection all records pertaining to the provisions of this

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ordinance.

8. Notify adjacent communities, the Oregon Department of Land Conservation and Development, and other appropriate state and federal agencies, prior to any alteration or relocation of a watercourse, and submit evidence of such notification to the Federal Insurance Administration.
9. Require that maintenance is provided within the altered or relocated portion of said watercourse so that the flood carrying capacity is not diminished.
10. Notify FEMA within six months of project completion when an applicant had obtained a Conditional Letter of Map Change from FEMA, or when development altered a watercourse, modified floodplain boundaries, or modified Base Flood Elevations. This notification shall be provided as a Letter of Map Change. The property owner shall be responsible for preparing technical data to support the Letter of Map Change application and paying any processing or application fees to FEMA. The Floodplain Administrator shall be under no obligation to sign the Community Acknowledgement Form, which is part of the Conditional Letter of Map Change and Letter of Map Change application, until the applicant demonstrates that the project will or has met the requirements of this code and all applicable State and Federal laws.
11. Report to FEMA on each development permit issued in the SFHA, including:
 - a. Amount of fill or structural displacement of flood storage, and the amount (in volume and area) of compensatory storage provided;
 - b. Amount of new impervious surface and types and amounts of compensatory mitigation provided;
 - c. The number of trees equal to or greater than six (6) inches in diameter at breast height removed, and the types and amounts of compensatory mitigation provided;
 - d. The area in which clearing and/or grading occurred;
 - e. For any project that disconnects or reconnects land to the floodplain, the type of project and amount of land disconnected or reconnected; and
 - f. Location of the project and of the corresponding mitigation.
12. Make interpretations where needed, as to exact location of the boundaries of the areas of special flood hazards (for example, where there appears to be a conflict between a mapped boundary and actual field conditions). The person contesting the location of the boundary shall be given a reasonable opportunity to appeal the interpretation as provided in Section 4.520.

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CB. Use of Other Base Flood Data for Permit Review. ~~When~~ When base flood elevation data is not available through the Flood Insurance Study, FIRM, or has not been provided in accordance with Section 4.51 12, Applicability, of this Chapter, the City may obtain, review, and utilize any reasonable base flood elevation and floodway data available from ~~the developer or property owner, or a federal, state, or other source, in order to assure that proposed development will be reasonably safe from flooding. manage development within the Flood Management Area.~~ The test of reasonableness shall be based upon historical data, high water marks, photographs of past flooding, etc., where available. Failure to elevate the lowest floor at least two (2) feet above grade in these zones may result in higher insurance rates. he test of reasonableness is a local judgment and includes use of historical data, high water marks, photographs of past flooding, etc., where available. Failure to elevate at least two (2) feet above grade in these zones may result in higher insurance rates.

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CD. Contested Boundaries. A person contesting the location of the boundary has the opportunity to submit a Letter of Map ~~Amendment~~ Change (LOMC) directly to the Federal Emergency Management Agency to change the Flood Insurance Rate Map mapping of their property. If a land use application is submitted before a ~~Letter of Map Amendment~~ LOMC is approved by the Federal Emergency Management Agency, the application will be processed under the standards of this Chapter.

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E. Inspections. The Floodplain Manager shall inspect development that is subject to the permit requirements of this Chapter, including buildings and structures exempt from the Building Code. The floodplain administrator shall inspect Special Flood Hazard Areas to determine if development is being undertaken without the issuance of a permit. Annual inspection logs shall be maintained by the Floodplain Manager.

4.514 Uses Within the Floodplain but Outside the Floodway- and Outside Wetlands.

A. Prohibited Uses.

1. Any prohibited use in the underlying zoning district.
2. Excavation, fill, or vegetation removal without an approved land use permit.
3. Expansion of legal nonconforming uses.
4. Uncontained, outside ~~Outside~~ storage areas of hazardous materials for ~~of~~ hazardous materials as defined by the Department of Environmental Quality.
5. No new land divisions will be approved for properties exclusively within the floodplain or that propose to create a buildable lot that is exclusively within the floodplain.

B. Permitted Uses.

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1. Any use permitted in the underlying zoning district, subject to the standards for development outlined in Section 4.517, Development Standards, of this Chapter, including stormwater management facilities developed in accordance with the standards of Chapter 5.700, Stormwater Management, of this Code.
2. Open space, trails, walkways, and bike paths as designated by the Troutdale Parks Plan, or as approved with a land use application and constructed in compliance with ~~Sub~~Section 4.315, ~~D.D of this Code.~~
3. Removal of ~~refuse and~~ unauthorized fill.
4. Removal of nuisance or invasive plant species, and/or the restoration of approved plant species on the ~~Metro Native~~City of Portland Plant List ~~as defined in Section 1.040 kept on file at the Community Development Department of this Code.~~
5. Removal of dead or dying trees that are an imminent danger to public safety as determined by a certified arborist or the equivalent.
6. Construction of new roadways and utilities necessary to support permitted development within and outside the Flood Management Area, subject to the standards of Section 4.517, Development Standards, of this Chapter and the ~~C~~onstruction ~~S~~tandards on file in the Public Works Department or the applicable jurisdiction of the roadway.
7. New culverts, stream crossings, and transportation projects may be permitted if designed as balanced cut and fill projects, ~~or designed to not significantly raise the design flood elevation,~~ and in compliance with the standards of Section 4.517, Development Standards, of this Chapter. Such projects shall be designed to minimize the area of fill in Flood Management Areas and to minimize erosive velocities. Stream crossings shall be as close to perpendicular to the stream as practicable. Bridges shall be used instead of culverts wherever practicable.
8. Excavation and fill required for the construction of detention facilities or structures, and other facilities such as levees specifically designed to reduce or mitigate flood impacts. Levees shall not be used to create vacant buildable land.
9. Emergency temporary bank stabilization necessitating immediate action during a flood event to prevent the loss of an existing structure, or to repair a bank damaged during a natural flooding event.
10. Routine repair and maintenance of existing structures (conforming and nonconforming uses), streets, driveways, utilities, culverts, drainageways and levees constructed for flood control, accessory uses, and other existing

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development on the site (including landscaped yards, decks, patios, boat ramps, etc.).

11. Rehabilitation or replacement of a structure that is damaged or destroyed to any extent, whether it is partially or fully within the Flood Management Area, and in compliance with Section 4.52149, Prescribed Conditions for the Rehabilitation or Replacement of Pre-Existing Structures, of this Chapter. Any structure or use deliberately removed or demolished may not be restored, replaced, or rebuilt, except in compliance with all applicable provisions of this ~~e-Development~~ Code, federal, state, and county regulations.
12. Any development that must implement a Federal Aviation Administration (FAA) compliant wildlife hazard management plan on property owned by the Port of Portland or within ten thousand (10,000) feet of an Aircraft Operating Area, as defined by the FAA, and removal of trees that interfere with the landing or takeoff flight path of aircraft at the Troutdale Airport or otherwise interferes with the safe operation of the airport as determined by the Port of Portland. The removal of trees that interfere with the operation of the Troutdale Airport are permitted outright.

13. Wildfire mitigation projects, such as fuels reduction or the creation of defensible space.

4.515 Uses within the Floodway or within Wetlands.

- A. Prohibited Uses within the Floodway or within Wetlands. Unless specifically permitted under this Section, the following uses are prohibited within floodways and wetlands:
 1. Manmade structures.
 2. Vegetation removal, fill, or excavation. Vegetation removal in the floodway in concert with an approved wildfire mitigation project may be permitted subject to review under the standards for development of Section 4.517.
 3. Private road construction.
 4. Alterations and relocations of the watercourses of Arata, Salmon, or Beaver Creeks, the Sandy and Columbia Rivers, or the watercourse of any unnamed perennial or intermittent stream except as provided for in Subsection ~~B(B)~~(1142) of this Section and Section 4.517.4(O) of this Chapter.
 5. Fill of wetlands without both an approved land use application and an approved Joint Fill Permit issued by the ~~Oregon Division~~Oregon Department of State Lands and the U.S. Army Corps of Engineers.
 6. Uncontained, outside storage areas of hazardous materials for hazardous materials

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as defined by the Department of Environmental Quality. ~~Storage of uncontained hazardous materials as defined by the Department of Environmental Quality.~~

7. Expansion of nonconforming uses.
 8. New installation of manufactured dwellings.
- B. Permitted Uses within the Floodway or within Wetlands. The following uses are permitted subject to review under the standards for development of Section 4.517, Development Standards, of this Chapter:
1. Open space, trails, walkways, and bike paths, as designated by the Troutdale Parks Plan, or as approved with a land use application.
 2. Removal of ~~refuse and~~ unauthorized fill.
 3. ~~Projects for stream habitat restoration, removal of nuisance or invasive plant species, and/or the restoration of approved plant species from the Metro Native Plant List subject to the approval of a removal/revegetation plan prepared by a licensed landscape architect, landscape designer, botanist, or arborist with specific knowledge of native plant species, planting and maintenance methods, survival rates, and their ability to control erosion and sedimentation in compliance with Chapter 5.600, Erosion Control and Water Quality Standards, of this Code. A copy of the Metro plant list is available from the Planning Division.~~
 43. Removal of dead or dying trees that are an imminent danger to public safety as determined by a certified arborist or the equivalent.
 54. Routine repair and maintenance of existing structures (conforming and nonconforming uses), streets, driveways, utilities, culverts, drainageways and levees constructed for flood control by the Sandy Drainage Improvement Company or its successor, accessory uses, and other existing development on the site (including landscaped yards, decks, patios, boat ramps, and the operation, maintenance, and repair of manmade water control facilities such as irrigation and

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drainage ditches, constructed ponds or lakes, wastewater facilities, and stormwater quality facilities, and similar development.

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56. Construction, expansion, and/or maintenance of public roadways and public utility facilities necessary to support permitted development. A “No-Rise” Certification for construction or expansion of public roadways and public utilities shall be required consistent with Section 4.517.G(4) for all approved projects.

67. Balanced excavation and fill required for the construction of detention facilities or structures and other facilities such as levees specifically designed to reduce or mitigate flood impacts. Levees shall not be used to create vacant buildable lands.

87. New culverts, stream crossings, and transportation projects necessary to implement the City, County, or State Transportation System Plans or other development permitted under this Chapter, and as applicable, meets the specifications of the Oregon Department of State Lands, Oregon Department of Fish and Wildlife, and federal regulations.

89. Permanent bank stabilization necessary to preserve an existing structure provided the balanced cut and fill standard is met if the work is in the floodplain or a “No-Rise” certification if the work is within the floodway. Exception: Bank stabilization is not permitted for development on a vacant lot of record.

940. Emergency temporary bank stabilization necessitating immediate action during a flood event to prevent the loss of an existing structure. Following the flood event, the owner shall submit a plan to the City that outlines removal of the temporary bank stabilization or shall apply for a permit for permanent bank stabilization.

1044. Fill of wetlands when there is no other practicable way to build on the site as established through Subsection 4.517 of this Chapter, and provided fill of wetlands within the floodplain is balanced with cut elsewhere within the floodplain, and a Fill/Removal Permit is issued from the Oregon Department of State Lands (DSL) and U.S. Army Corps of Engineers (Corps), as applicable. The application to DSL and the Corps may be processed concurrently with a land use application for site and design review, land division, a planned development application, or a conditional use. A joint fill permit may be applied for prior to application for a land use permit. However, if a joint fill permit is approved by the Oregon Division Oregon Department of State Lands and the U.S. Army Corps of Engineers prior to applying for the land use application, fill may not proceed until the final decision for the land use application has been made by the City. Mitigation for fill of wetlands and the location of the mitigation shall be as prescribed by the DSL/Corps permit.

112. New drainageways, levees, or alteration of watercourses to accommodate public projects administered by the Sandy Drainage Improvement Company or its successor, the City, Multnomah County, the state, or a federal agency, provided it

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is in compliance with ~~Subsections~~ Sections 4.516(~~C~~A) and 4.517(R) and (S) of this Chapter.

123. Any development that must implement a Federal Aviation Administration (FAA) compliant wildlife hazard management plan on property owned by the Port of Portland or within ten thousand (10,000) feet of an Aircraft Operating Area, as defined by the FAA, and removal of trees that interfere with the landing or takeoff flight path of aircraft at the Troutdale Airport or otherwise interferes with the safe operation of the airport as determined by the Port of Portland. The removal of trees that interfere with the operation of the Troutdale Airport are permitted outright.

4.516 Permit Required Floodplain Development Permit

A. Background. To participate in the National Flood Insurance Program (NFIP), a community must adopt and enforce a floodplain management ordinance that regulates development in the floodplain. This floodplain management ordinance is housed primarily in Chapter 4.500 - Flood Management Area (FLMA), but is in part addressed in other Chapters of this Code. One of the basic Federal requirements for regulating Development in the Floodplain is a requirement for a Floodplain Development Permit (locally, a Floodplain Development Permit) before construction or other development begins within any Special Flood Hazard Area. In this context, the term "development" is defined in Section 1.040. This chapter contains provisions for the federally required Floodplain Development Permit and is consistent with the National Flood Insurance Program (NFIP) regulations. A Flood Hazard Permit Floodplain Development Permit is required for development within the Flood Management Area except as noted: in Section 4.516.C.

B. Applicability. Unless exempt per Section 4.516.C, below, approval of a Floodplain Development Permit shall be obtained before construction or development begins within any area of special flood hazard established in Section 4.511.B. The permit shall be for all structures including manufactured dwellings, as set forth in the Section 1.040 and for all development including fill and other activities, also as set forth in the Section 1.040.

~~C.~~A. Exemptions. The following activities do not require a ~~Flood Hazard Permit~~Floodplain Development Permit:

- ~~1. Routine repair of public streets and public utilities that occurs entirely within the right of way.~~
- ~~2. Routine repair of railroads that occurs entirely within the railroad right of way.~~
- ~~3. Flood management activities conducted by the Sandy Drainage Improvement Company (SDIC). Routine operations, repair, maintenance, reconfiguration, rehabilitation, or replacement of existing drainage and flood control facilities, and~~

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existing related facilities, including any structures, pump stations, water control structures, culverts, irrigation systems, roadways, utilities, accessory uses (such as off load facilities that facilitate water based maintenance), erosion control projects, levees, soil and bank stabilization projects, dredging and ditch clearing within the hydraulic cross section in existing storm water conveyance drainageways, or other water quality and flood storage projects applicable to existing facilities and required to be undertaken pursuant to ORS Chapters 547 or 554 or Titles 33 or 44 of the Code of Federal Regulations, provided that:

- a. ~~These activities are conducted by the Sandy Drainage Improvement Company or its successor or designee; and~~
- b. ~~The activities are consistent with all other applicable local, state, and federal laws and regulations; and~~
- c. ~~The activities do not encroach closer to a surface stream or river, wetland, or other body of open water than existing operations and development; and~~
- d. ~~Disturbed areas are replanted with vegetation and no bare soils remain after project completion; the planting of native vegetation and removal of invasive non-native or noxious vegetation is encouraged; invasive non-native or noxious vegetation shall not be planted; and~~
- e. ~~The SDIC or its successor submits an annual report to all local permitting agencies in which the district operates, describing the projects the district completed in the previous year and how those projects complied with all applicable federal and state laws and requirements.~~

41. The removal of refuse.

25. Removal of invasive, nuisance, or prohibited plant species that exposes the ground, provided a revegetation plan approved or prepared by the City, state, a federal agency, Metro, SOLV, the West-East Multnomah Soil & Water Conservation District, or other similar organizations as determined by the Floodplain Manager, is carried out to provide shade and habitat, prevent erosion of steep slopes and/or sedimentation into the protected water feature. A copy of the plan shall be provided to the Planning Division/Community Development Department prior to beginning the work.

36. Emergency tree removal or emergency hazard mitigation during emergency declaration for an imminent natural hazard event. In the event that a tree or other vegetation poses an immediate danger to life or property, removal is allowed without a tree removal permit. Following the emergency, the owner shall provide the tree species, diameter, and approximate location on the property to the Planning Division submit documentation that all applicable standards of this Chapter have been met.

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7. Development within an area of the site that has been excluded from the Special Flood Hazard Area through a Letter of Map Amendment (LOMA) or it is very clear on the plan view that the area is outside of the Special Flood Hazard area and above the base flood elevation.
8. Continued use and maintenance of existing gardens or other landscaped areas, orchards or agricultural fields provided no fill is added to the floodplain.
9. Operation, maintenance, and repair of manmade water control facilities such as irrigation and drainage ditches, constructed ponds or lakes, wastewater facilities, and stormwater quality facilities. An expansion of these facilities will require a Type II Flood Hazard Permit⁴. Placement of fill in residential zones, provided it is consistent with other applicable provisions of this Code, and provided the fill is used solely for the purpose of constructing a sandbox, a raised gardening bed, or other similar landscape feature.
5. Installation of three strand, on bendable pole, wire farm type fencing that is constructed consistent with the provisions in Section 4.517.
6. Landscape maintenance activities consistent with the standards identified in this Section.
7. Wetlands not subject to flooding as described Section 4.511.B, nor identified as designated habitat covered under the Endangered Species Act, and are not exempt for review under Section 4.300 of this Code.
8. Flood management activities conducted by the Sandy Drainage Improvement Company (SDIC). Routine operations, repair, maintenance, reconfiguration, rehabilitation, or replacement of existing drainage and flood control facilities, and existing related facilities, including any structures, pump stations, water control structures, culverts, irrigation systems, roadways, utilities, accessory uses (such as off-load facilities that facilitate water-based maintenance), erosion control projects, levees, soil and bank stabilization projects, dredging and ditch clearing within the hydraulic cross-section in existing storm water conveyance drainageways, or other water quality and flood storage projects applicable to existing facilities and required to be undertaken pursuant to ORS Chapters 547 or 554 or Titles 33 or 44 of the Code of Federal Regulations, provided that:
 - a. These activities are conducted by the Sandy Drainage Improvement Company or its successor or designee; and
 - b. The activities are consistent with all other applicable local, state, and federal laws and regulations; and

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- c. The activities do not encroach closer to a surface stream or river, wetland, or other body of open water than existing operations and development; and
- d. Disturbed areas are replanted with vegetation and no bare soils remain after project completion; the planting of native vegetation and removal of invasive non-native or noxious vegetation is encouraged; invasive non-native or noxious vegetation shall not be planted; and
- e. The SDIC or its successor submits an annual report to all local permitting agencies in which the district operates, describing the projects the district completed in the previous year and how those projects complied with all applicable federal and state laws and requirements.

D. Submission Requirements. An application for a Floodplain Development Permit within the Flood Management Area shall include the following, and these requirements apply to all applicants for development approval unless otherwise noted below:

- 1. A site plan showing the proposed development on the site, drawn to a standard scale, and including an illustrated scale for use in reductions. A site plan shall also consist of the following:
 - a. SFHA boundaries, and the base flood elevations based upon the North American Vertical Datum of 1988 (NAVD 88);
 - b. The 1996 flood boundaries established by Metro;
 - c. Floodway boundaries as determined by datum available from the FIRM and Flood Insurance Study;
 - d. The name, location, and dimensions of affected streams or rivers, and the bankfull stage or the two-year storm level.
 - e. The area comprising the vegetation corridor as established by Sections 4.316, Width of Vegetation Corridor, and 4.317, Method for Determining Vegetation Corridors Next to Primary Protected Water Features, of this Code;
 - f. Wetlands that are determined significant by the Oregon Department of State Lands or have the following characteristics. All wetland determinations made prior to development must be reviewed and acknowledged by the Oregon Department of State Lands prior to issuance of City permits. The characteristics shall be determined by a qualified scientist.
 - i. The wetland is fed by surface flows, sheet flows, or precipitation; has evidence of flooding during the growing season; at least sixty

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percent (60%) of the area is vegetation; and is over one-half acre in size; or, the wetland qualifies as having “intact water quality function” under the 1996 Oregon Freshwater Wetland Assessment Methodology; or

ii. The wetland is in the Flood Management Area; has evidence of flooding during the growing season; is five (5) acres or more in size; and has a restricted outlet or no outlet; or, the wetland qualifies as having “intact hydrologic control function” under the 1996 Oregon Freshwater Wetland Assessment Methodology; or

iii. The wetland, or a portion of the wetland, is within a horizontal distance of less than one-fourth mile from a water body which meets the Department of Environmental Quality definition of “water quality limited water body” in OAR Chapter 340, Division 41 (1996).

2.1. Topographic survey. Where development, excavation, or vegetation removal is proposed within the Flood Management Area, an on the ground topographical survey shall be prepared for the entire site. The survey shall show ~~The survey shall show the floodway and floodplain~~ trees or tree clusters, existing roads, utilities, and structures with two (2) foot contours. The survey maps shall be provided by the property owner or applicant for development approval. The survey shall also show the location of existing and proposed improvements on the site, trees or tree clusters (including those to be removed), existing roads, utilities, and structures, buildings, structures, fencing, walls, landscaping, storage of materials or equipment, drainage facilities, parking areas, and other impervious surface areas. The survey shall be drawn to scale, with two (2) foot contours, and shall note the distance from Top-of-bank to the improvements on the site;

23. Where base flood elevation data is provided through the City’s Flood Insurance Study, or by other means as permitted in this Chapter, the developer shall obtain and record the actual elevation of the lowest floor (including basement) of all new or substantially improved structures, including the placement of a manufactured dwelling, and whether or not the structure contains a basement. This information shall be based upon NAVD 88 and provided on a City Floodplain Development Permit form, and should include the following, as applicable: ~~Base flood elevation data. Where base flood elevation data is provided through the City’s Flood Insurance Study, or by other means as permitted in this Chapter, the developer shall obtain and record the actual elevation lowest floor (including basement) of all new or substantially improved structures, including the placement of a manufactured home, and whether or not the structure contains a basement. This information shall be based upon NAVD 88 and provided on a City Flood Hazard Permit form.~~

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- a. For all new or substantially improved, elevated, or floodproofed structures, verify and record the actual elevation. ~~a. For all new or substantially improved, elevated, or floodproofed structures, verify and record the actual elevation.~~
- b. Where development occurs within Zone A of the Flood Management Area and the Base Flood Elevation (BFE) data is not available either through the Flood Insurance Study or from another authoritative source as authorized in Subsection 4.513(BC) of this Chapter, the Flood Hazard Permit Floodplain Development Permit shall be reviewed for compliance with FEMA Publication 265 issued July 1995 "Managing Floodplain Development in Approximate Zone A Areas", adopted herein for reference, and applicable State of Oregon Building Codes.
3. Hydrology and soils report. This report shall include information on the hydrological activities of the site, the effect of hydrologic conditions on the proposed development, and any hydrological or erosion hazards. This report shall also include characteristics of the soils on the site, suitability for development, its carrying capacity, and erosion or slumping characteristics that might present a hazard to life and property, or adversely affect the use or stability of a public facility or utility. Finally, this report shall include information on the nature, distribution, and strength of existing soils; the adequacy of the site for development purposes; and an assessment of grading procedures required to impose the minimum disturbance to the natural state. The report shall be prepared by a professional engineer registered in Oregon.
4. Hydrology and soils report. Where ground disturbance or vegetation removal is proposed that exposes the soil, this report shall be required. This report shall include information on the hydrological activities of the site, the effect of hydrologic conditions on the proposed development, and any hydrological or erosion hazards. This report shall also include characteristics of the soils on the site, suitability for development, its carrying capacity, and erosion or slumping characteristics that might present a hazard to life and property, or adversely affect the function or stability of a public use or facility. This report shall also include information on the nature, distribution, and strength of existing soils; the adequacy of the site for development purposes; and an assessment of grading procedures required to impose the minimum disturbance to the natural state. The report shall be prepared by a professional engineer registered in Oregon. In Oregon Department of Geology and Mineral Industries (DOGAMI) inventory of landslide hazard areas, on hillsides where grading will lessen stability, or in areas where historic or prehistoric mudflows have occurred, a soils engineer and/or engineering geologist registered in Oregon shall certify the development will not negatively impact public safety, adjacent properties, or water quality.

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45. Grading plan. If grading is to occur, a grading plan shall be required that shows existing and finished contours. The grading plan shall be specific to a proposed physical structure or use and shall include information on terrain (two-foot contour intervals of property), drainage, all cut and fill slopes and proposed drainage channels, direction of drainage flow, location of proposed structures and existing structures which may be affected by the proposed grading operations, and water quality facilities; post grading, and finished contours or elevations, including all cut and fill slopes and proposed drainage channels. Project designs including, but not limited to, locations of surface and subsurface devices, walls, dams, sediment basins, storage reservoirs, and other protective devices shall form part of the submission. The grading plan shall also include a construction phase erosion control plan and a schedule of operations and shall be prepared by a professional engineer registered in Oregon.

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65. Vegetation report. Where vegetation is to be removed or other impacts to the onsite vegetation is to be expected as a result of development, this report shall be required. This report shall consist of a survey of existing vegetation, whether it is native or introduced, and how it will be altered by the proposed development. Measures for enhancement of the site, including revegetation with approved plant species, will be clearly stated, as well as methods for immediate and long-term stabilization of slopes and control of soil erosion. The vegetation report shall be prepared by a landscape architect, landscape designer, botanist, or arborist with specific knowledge of approved plant species, planting and maintenance methods, survival rates, and their ability to control erosion and sedimentation. The contractor for installation and maintenance will be responsible for replacing any approved plant species that do not survive the first two (2) years after planting.

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76. A "No-Rise" certification and a Letter of Map Revision/Change-Fill (LOMRC-F) shall be submitted with the land use application for the following activities within the floodway as mapped by FEMA:

- a. Permanent bank stabilization that occurs in the floodway.
- b. Development, alterations, or relocations of the floodway, including any permanent fill within the floodway.

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8. Building and structure elevations. For all existing and proposed, relocated, or expanded buildings and structures, elevation in relation to the Highest Adjacent Grade, the North American Vertical Datum 1988 (NAVD88), and the base flood elevation as applicable, of the:

- a. Lowest enclosed area of all existing and proposed, relocated, or expanded buildings and structures. This includes crawlspaces, basement floors, and attached garages, electrical equipment (except utility meters), heating and ventilation equipment, plumbing, air conditioning equipment, and/or other

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service facilities (including ductwork); top of proposed garage slabs; and next highest floor situated above the items herein.

b. Elevation to which any existing building or structure has been or is proposed to be flood-proofed; and certification by a registered professional engineer that the flood-proofing methods for any nonresidential structure meet the floodproofing criteria in this Chapter.

c. The locations and sizes of all flood openings in any proposed buildings and structures.

9. Infrastructure. Location of all proposed infrastructure necessary to serve the proposed development shall be required when such new development is proposed by the applicant. Such infrastructure includes, but is not limited to, streets, driveways, water, sanitary sewer, and storm drainage.

10. Floodplain or watercourse alterations. Where floodplain or watercourse alterations are proposed, a description of the extent to which any floodplain or watercourse is proposed to be altered or affected as a result of proposed development shall be required.

11. All federally-mandated or state-mandated permits issued by other governmental agencies shall be obtained, or obtaining such permits shall be a Condition of Approval to be satisfied prior to issuance of any construction permit. Such permits include but are not limited to Section 404 of the Federal Water Pollution Control Act Amendments of 1972, 33 U.S.C. 1334, 16 U.S.C. 1531-1544, and State of Oregon Removal-Fill permits, as amended.

E.B. Application for Floodplain Development Permit. A Floodplain Development Permit shall be obtained before construction or development begins within any area of special flood hazard established in Section 4.511. The permit shall be for all structures including manufactured dwellings, as set forth in Section 1.040 and for all development including fill and other activities, also as set forth in Section 1.040. Applications for a Floodplain Development Permit shall be made on forms furnished by the Community Development Department and may include, but not be limited to, plans drawn to scale showing the nature, location, dimensions, elevations of the area in question, existing or proposed structures, fill, storage of materials, drainage facilities, and the location of the foregoing.

1. A Type I Flood Hazard Permit Floodplain Development Permit is required for the following:

a. Construction of a single-family dwelling, including the placement of a ~~manufactured home~~ manufactured dwelling or repair or alteration of existing single-family dwellings and ~~manufactured home~~ manufactured dwellings. An elevation certificate and the information required in Subsection (E) of this Section shall be submitted with the Flood Hazard

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Permit application unless it is very clear on the plan view that the structure is on a portion of the site that is naturally elevated one (1) foot or more above the base flood elevation. Single-family dwellings and ~~manufactured~~ ~~home~~ ~~manufactured dwellings~~ shall be built in compliance with the applicable development standards in Section 4.5177, ~~Development Standards~~, of this Chapter.

2. Any use in the underlying zoning district requiring a ~~Development Permit~~ except as provided in Section 4.516 C.

3b. Emergency bank stabilization necessary to preserve an existing structure during an emergency. During the flood event the permit is not required; however, immediately following the event a ~~Flood Hazard Permit~~ ~~Floodplain Development Permit~~ shall be obtained that documents the bank stabilization measures taken during the emergency and the schedule and procedure that will be used to remove any temporary fill, including sand bags. If the stabilization measures will not be removed, a Type II ~~Flood Hazard Permit~~ ~~Floodplain Development Permit~~ will be required as well as a “No-Rise” certification and LOMCR-F, as if applicable.

c. Wildfire mitigation projects as identified in this Chapter.

4. Projects for stream habitat restoration subject to the following standards:

- a. The project qualifies for a U.S. Army Corps of Engineer’s “Regional General Permit” for Stream Habitat Restoration (NWP 2007 1023) and complies with applicable Oregon Department of State Lands standards, as applicable; and
- b. If within the floodway, a qualified professional (a Registered Professional Engineer) provides a feasibility analysis and certification that the project was designed to keep any rise in 100-year flood levels as close to zero as practically possible given the goals of the project; and
- c. No structures would be impacted by a potential rise in flood elevation; and
- d. An agreement to monitor the project, correct problems, and ensure that flood carrying capacity remains unchanged is included in the application.

2. C. A Type II site and design review and ~~Flood Hazard Permit~~ ~~Floodplain Development Permit~~ is required for:

- a+. Any use in the underlying zoning district requiring a Type II site and design ~~Site Development~~ review.
- 2b. New or expanded streets or bridges.

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- ~~c3.~~ New or expanded railroads or trestles.
- ~~4d.~~ Permanent bank stabilization or fill within the floodplain or floodway.
- ~~e5.~~ Balanced cut and fill activity within the floodplain, with a Letter of Map ~~Revision~~ Fill Change, as required in this Code.
- ~~f6.~~ Fill of wetlands ~~_, but if the wetland is outside of the floodplain and not hydrologically connected,~~ a ~~Flood Hazard Permit~~ Floodplain Development Permit is not required, only the Site ~~and Design~~ Development Review.
- ~~g.~~ Other uses similar in nature to those listed above.
- ~~D. 3.~~ A Type III procedure and ~~Flood Hazard Permit~~ Floodplain Development Permit shall be processed for uses requiring a Type III review in the underlying zoning district, for all special variances requested from the standards of this Chapter, and for any proposed alteration of a watercourse of any perennial or intermittent streams.
- ~~E. Submission Requirements. An application for development within the Flood Management Area shall include the following:~~
- ~~1. Topographic survey. Where development, excavation, or vegetation removal is proposed within the Flood Management Area, an on the ground topographical survey shall be prepared for the entire site. The survey shall show trees or tree clusters, existing roads, utilities, and structures with two (2) foot contours. The survey maps shall be provided by the property owner or applicant for development approval.~~
- ~~2. Base flood elevation data. Where base flood elevation data is provided through the City's Flood Insurance Study, or by other means as permitted in this Chapter, the developer shall obtain and record the actual elevation lowest floor (including basement) of all new or substantially improved structures, including the placement of a manufactured home, and whether or not the structure contains a basement. This information shall be based upon NAVD 88 and provided on a City Flood Hazard Permit form.~~
- ~~a. For all new or substantially improved, elevated, or floodproofed structures, verify and record the actual elevation.~~
- ~~b. Where development occurs within Zone A of the Flood Management Area and the Base Flood Elevation (BFE) data is not available either through the Flood Insurance Study or from another authoritative source as authorized in Subsection 4.513(B) of this Chapter, the Flood Hazard Permit shall be reviewed for compliance with FEMA Publication 265 issued July 1995 "Managing Floodplain Development in Approximate Zone A Areas" and applicable State of Oregon Building Codes.~~

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3. ~~Hydrology and soils report. This report shall include information on the hydrological activities of the site, the effect of hydrologic conditions on the proposed development, and any hydrological or erosion hazards. This report shall also include characteristics of the soils on the site, suitability for development, its carrying capacity, and erosion or slumping characteristics that might present a hazard to life and property, or adversely affect the use or stability of a public facility or utility. Finally, this report shall include information on the nature, distribution, and strength of existing soils; the adequacy of the site for development purposes; and an assessment of grading procedures required to impose the minimum disturbance to the natural state. The report shall be prepared by a professional engineer registered in Oregon.~~
4. ~~Grading plan. The grading plan shall be specific to a proposed physical structure or use and shall include information on terrain (two-foot intervals of property), drainage, direction of drainage flow, location of proposed structures and existing structures which may be affected by the proposed grading operations, water quality facilities, post-grading, and finished contours or elevations, including all cut and fill slopes and proposed drainage channels. Project designs including, but not limited to, locations of surface and subsurface devices, walls, dams, sediment basins, storage reservoirs, and other protective devices shall form part of the submission. The grading plan shall also include a construction phase erosion control plan and a schedule of operations and shall be prepared by a professional engineer registered in Oregon.~~
5. ~~Vegetation report. This report shall consist of a survey of existing vegetation, whether it is native or introduced, and how it will be altered by the proposed development. Measures for enhancement of the site, including revegetation with approved plant species, will be clearly stated, as well as methods for immediate and long-term stabilization of slopes and control of soil erosion. The vegetation report shall be prepared by a landscape architect, landscape designer, botanist, or arborist with specific knowledge of approved plant species, planting and maintenance methods, survival rates, and their ability to control erosion and sedimentation. The contractor for installation and maintenance will be responsible for replacing any approved plant species that do not survive the first two (2) years after planting.~~
6. ~~A "No-Rise" certification and a Letter of Map Revision-Fill (LOMR-F) shall be submitted with the land use application for the following activities within the floodway as mapped by FEMA:~~
- a. ~~Permanent bank stabilization that occurs in the floodway.~~
- b. ~~Development, alterations or relocations of the floodway, including any permanent fill within the floodway.~~
- F. Review Criteria - Requests for approval of a Floodplain Development Permit shall be reviewed by the Floodplain Administrator or designee to ensure:
1. Consistency with the standards from Sections 1.040, Chapter 2, and Section

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- 4.517, as applicable;
2. Consistency with other applicable standards of this Code and all other applicable policies and standards adopted by the City.
- I. Mandatory Conditions of Approval - The following Conditions of Approval are mandatory and shall be imposed on every approved Floodplain Development Permit:
1. Required During Construction Elevation Certificate. For all new construction, development, and substantial improvements, the permit holder shall provide to the Floodplain Administrator or designee an as-built certification of the floor elevation or flood-proofing elevation immediately after the lowest floor or flood-proofing is placed and prior to further vertical construction. Any deficiencies identified by the Floodplain Administrator or designee shall be corrected by the permit holder immediately and prior to work proceeding. Failure to submit certification or failure to make the corrections shall be cause for the Floodplain Administrator or designee or the Building Official to issue a stop-work order for the project.
 2. Required Documentation Prior to Issuance of Certificate of Occupancy
 - a. In addition to the requirements of the Building Codes pertaining to Certificate of Occupancy, prior to the final inspection the owner or authorized agent shall submit the following documentation to the Floodplain Administrator or designee and the documentation shall be prepared and sealed by a registered surveyor or engineer:
 - i. For elevated buildings and structures in Special Flood Hazard Areas, the as-built elevation of the lowest floor, including basement, or where no base flood elevation is available the height above highest adjacent grade of the lowest floor;
 - ii. For buildings and structures that have been floodproofed, the elevation to which the building or structure was floodproofed.
 - b. Failure to submit certification or failure to correct violations shall be cause for the Floodplain Administrator or designee or the Building Official to withhold a Certificate of Occupancy until such deficiencies are corrected.
 3. For applications for partitions and subdivisions, one of the following shall be required:
 - a. Protection of Flood Management Areas with a conservation easement;
 - b. Platting Flood Management Areas as common open space; or

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c. Offer of sale or donation of Flood Management Area property to public agencies or private non-profits for preservation where feasible.

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4.517 Development Standards. The land use application shall establish through the use of narrative, site plans, and professional reports, the following:

- A. Type II or III approval for new development, including additions or alterations to existing structures, except for single family dwellings, in the Flood Management Area may be allowed, provided that:
 1. The applicant shall demonstrate that there is no reasonable nor practical alternative design or method of development that would have a lesser impact on the Flood Management Area than the one proposed.
 2. If there is no reasonable nor practical alternative design or method of development the project shall be designed in compliance with applicable parts of Subsections (BE) through (XU) of this Section, so that the impacts on the Flood Management Area are limited and the plans shall include restoration, replacement, or rehabilitation of the vegetation within the Flood Management Area.
 3. The applicant shall provide mitigation to ensure that impacts to the functions and values of the vegetation corridor and integrity of the slope will be mitigated or restored to the extent practicable.
- B. A professional engineer registered in Oregon must certify that the development will not result in any increase in flood levels throughout the SFHA during the occurrence of the base flood discharge, and that water quality will not be adversely affected.
- C. As applicable, the development must be authorized by the Oregon Department of State Lands, U.S. Army Corps of Engineers, the Oregon Department of Fish and Wildlife, and the Sandy Drainage Improvement Company. The applicant shall obtain and submit a copy of all required state and federal permits for any proposed development in the Flood Management Area, including Section 404 of the Federal Water Pollution Control Act Amendments of 1972, 33 USC 1334.
- D. Unless otherwise authorized under the provisions of this Chapter, the development shall comply with the underlying zoning district dimensional standards and the minimum vegetation corridor as established in Sections 4.316, Width of Vegetation Corridor, and 4.317, Method for Determining Vegetation Corridors Next to Primary Protected Water Features, of this Code. The applicant shall submit an exhibit that shows the location and provides a description of all actions to be provided to mitigate the impacts of permitted development as established in Section 4.314.
- E. Protect the water quality resource and Flood Management Area functions and values from uncontained areas of hazardous materials as defined by the Department of Environmental Quality water quality standards.

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F. Limit impervious surface areas in the Flood Management Area.

1. The impervious surface of the development may not exceed thirty percent (30%) of the flood plain area, provided the standards of this Code are met. Exception: Public roads necessary to serve the transportation needs of the City may exceed thirty percent (30%) of the Flood Management Area provided all other applicable standards of this Chapter have been met.
2. Clustering of houses and multiple-family units, zero lot line developments, and/or modifications to setbacks may be approved under the Type II procedure in order to accommodate the density permitted within the underlying zoning district and not exceed the impervious surface limitation of thirty percent (30%) of the Flood Management Area on the site.
3. The Director, or their designee, may grant an administrative variance of up to fifty percent (50%) of any dimensional standard in the underlying zoning district where necessary to avoid construction development within the Flood Management Area.

G. Maintain flood storage capacity. The developer is required to offset new fill placed in the floodplain by excavating an additional flood-able area to replace the lost flood storage area, preferably at hydrologically equivalent sites. All development proposals in the SFHA shall provide compensatory mitigation for impacts to flood storage, water infiltration, and riparian vegetation to ensure that new development does not increase flood hazards on other properties. A mitigation plan shall be submitted with the land use application. All required actions derived from that plan shall be completed prior to issuance of a Certificate of Occupancy, a Certificate of Completion for a subdivision, or the final building inspection, as applicable. ~~Maintain flood storage capacity.~~ Balanced cut and fill is required for permitted development in the Flood Management Area. ~~Excavation and fill shall be performed in a manner to maintain or increase flood storage and conveyance capacity and not increase design flood elevations. A professional engineer registered in Oregon must certify that the development will not result in any increase in flood levels throughout the SFHA during the occurrence of the base flood discharge, and that water quality will not be adversely affected. The applicant shall obtain a Conditional Letter of Map Revision Fill (CLOMR-F) from FEMA prior to grading and filling the site and then obtain and submit the final Letter of Map Revision Fill (LOMR-F) prior to final inspections, or issuance of a certificate of completion, or issuance of the certificate of occupancy.~~

1. All fill placed at or below the design flood elevation in the Flood Management Area shall be balanced with at least an equal amount-volume or amount of soil material removal. The development shall be designed to minimize development within the Flood Management Area and amount of fill necessary. Balanced cut and fill may be used to elevate structures but shall not be used for density transfer.

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Residential density must be calculated prior to changes to the floodplain as a result of balanced cut and fill.

2. Excavation shall not be counted as compensating for fill if such areas will be filled with water in non-storm winter conditions.
3. The cumulative effect of any proposed development shall not increase the water surface elevation of the base flood. Onsite flood storage capacity shall not decrease as a result of development, vegetation removal, or excavation.
4. A “No-Rise” certification is required for any fill or permitted development within the floodway pursuant to Section 60.3(d)(3) of the National Flood Insurance Program.
 - a. The “No-Rise” supporting data and a copy of the engineering certification must be submitted to, and reviewed by, the City prior to approval of development, and the data shall be submitted with the ~~Flood Hazard Permit~~Floodplain Development Permit.
 - b. The “No-Rise” certification and supporting technical data must stipulate no impact on the 100-year flood elevations, floodway elevations, or floodway widths at the new cross-sections and at all existing cross-sections anywhere in the model.
 - c. A sample “No-Rise” certification is available in the Community Development Department.
5. All new buildings built on fill in the regulatory floodplain shall be constructed on fill:
 - a. Certified by a professional engineer registered in Oregon as suitably designed and compacted for the development (e.g. fill that meets the criteria of 1803.5.8 and Section 1804.4 of the International Building Code, Section 2.4 of ASCE 24, or their equivalent); and
 - b. Providing protection from erosion and scour.
6. Obtain a Conditional Letter of Map Change from FEMA prior to grading and filling the site and then obtain and submit the final Letter of Map Change prior to final inspections, or issuance of a certificate of completion, or issuance of the certificate of occupancy as required under this Section. When a project applicant has demonstrated through the Floodplain Development Permit that, in addition to the standards listed for Section 4.517.G, the following standards have been achieved, a Conditional Letter of Map Change/Letter of Map Change may not be required:

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- a. Fill is not proposed in the floodway for the site to be impacted through development;
 - b. The project site is not being elevated to or above the base flood elevation (BFE);
 - c. The project is proposing to remove unsuitable existing material (topsoil) and backfilling with select structural material, not alter the existing (natural grade) elevation of the site;
 - d. The site to be impacted does not have US Fish and Wildlife Service designations for critical habitat for endangered species; and
 - e. In areas where a regulatory floodway has not been designated, the new construction, substantial improvements, or other development (including fill) within A or AE Zones on the community's FIRM, has demonstrated that the cumulative effect of the proposed development, when combined with all other existing and anticipated development, will not increase the water surface elevation of the base flood at any point within the community.
7. All proposals that include engineering analysis for maintenance of flood storage capacity are subject to review by a qualified engineer licensed in the State of Oregon. The applicant shall be responsible for the cost of this independent review and will be advised at the time of application of this expectation.
- H. Residential Construction Development, including accessory structures as referenced in Section 5.010 of this Code and not constructed in accordance with Section 4.517.V; including accessory structures associated with residential dwellings. -Note: -if more than fifty percent (50%) of the lot being developed is affected by the floodplain, then the minimum density standard of this Code does not apply.
- 1. Elevate structures. -The minimum finished floor elevation, including basement floor, for all new or substantially improved residential structures in the Flood Management Area shall be at least ~~one foot~~two (2) feet above the base flood elevation, as established by in 4.511.Bthe Federal Emergency Management Agency, and as demonstrated through the Elevation Certificate submittals as established in this Section. Elevation Certificates shall be required for all residential development as required by the Community Rating System.
 - a. An ~~Federal Emergency Management Agency National Flood Insurance Program~~ Elevation Certificate shall be submitted with the construction plans unless there is a LOMA for the site or it is very clear on the plan view that the area is outside of the Special Flood Hazard area and above the Base Flood Elevation. TThe Elevation Certificate shall include the elevation of the lowest floor (including basement). The Elevation

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Certificate shall be certified by a land surveyor, engineer, or architect who is authorized by state or local law to certify elevation information for construction within specific flood hazard areas.

- b. ____ A second certified Elevation Certificate shall be submitted to the City of Troutdale prior to pouring the foundation.
 - c. ____ A third certified Elevation Certificate shall be submitted after the structure is completed based upon finished construction.
 - d. ____ The City shall maintain the Elevation Certificates for public inspection.
2. Fully enclosed areas below the lowest floor that are subject to flooding are prohibited, or shall be designed to automatically equalize hydrostatic flood forces on exterior walls by allowing for the entry and exit of flood waters. Designs for meeting this requirement must either be certified by a registered professional engineer or architect, or must meet or exceed the following minimum criteria:
- a. ____ A minimum of two (2) openings having a total net area of not less than one (1) square inch for every square foot of enclosed area subject to flooding shall be provided.
 - b. ____ The bottom of all openings shall be no higher than one (1) foot above grade.
 - c. ____ Openings may be equipped with screens, louvers, or other devices provided that they permit the automatic entry and exit of floodwaters.
 - d. ____ Where possible, openings will be installed on at least two opposing sides of the enclosed area.
3. Below-grade crawlspaces are allowed only when in compliance with the design requirements of FEMA Technical Bulletin 11-01, "Crawlspace Construction for Buildings Located in Special Flood Hazard Areas." Buildings that have below-grade crawlspaces will have higher flood insurance premiums than buildings that have the preferred crawlspace construction with an interior elevation at or above the lowest adjacent exterior grade.
- a. ____ The building must be designed and adequately anchored to resist flotation, collapse, and lateral movement of the structure resulting from hydrodynamic and hydrostatic loads, including the effects of buoyancy. Hydrostatic loads and the effects of buoyancy can usually be addressed through the required openings:
 - i. Openings that equalize hydrostatic pressures by allowing for the automatic entry and existence of floodwaters is required. The

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bottom of each flood vent opening can be no more than one (1) foot above the lowest adjacent exterior grade. See FEMA Technical Bulletin 1-93, Opening in Foundation Walls, for guidance.

- ii. All portions of the building below the base flood elevation must be constructed with materials resistant to flood damage. This includes not only the foundation walls of the crawlspace used to elevate the building, but also any joists, insulation, or other materials that extend below the BFE. The recommended construction practice is to elevate the bottom of joists and all insulation above BFE. Ductwork or other utility systems located below the insulation may pull away from their supports. See page 8 of Technical Bulletin 1-93 and FEMA Technical Bulletin 2-93 Flood Resistant Materials Requirements.
 - iii. Any building utility systems within the crawlspace must be elevated above the base flood elevation or designed so that floodwaters cannot enter or accumulate within the system components during flood conditions. Ductwork, in particular, must either be placed above the BFE or sealed from floodwaters. For further guidance, see FEMA 348, Protecting Building Utilities from Flood Damage.
- b. The interior grade of a crawlspace below the base flood elevation must not be more than two (2) feet below the lowest adjacent exterior grade.
- c. The height of the below-grade crawlspace, measured from the interior grade of the crawlspace to the top of the crawlspace foundation wall must not exceed four (4) feet at any point. The height limitation is the maximum allowable unsupported wall height according to the engineering analyses and building Code requirements for flood hazard areas. Crawlspaces may not be converted to basements.
- d. There must be an adequate drainage system that removes floodwaters from the interior area of the crawlspace. The enclosed area should be drained within a reasonable time after a flood event. The type of drainage system will vary because of the site gradient and other drainage characteristics, such as soil types. Possible options include natural drainage through porous, well-drained soils and drainage systems such as perforated pipes, drainage tiles or gravel, or crushed stone drainage by gravity or mechanical means.
- e. Crawlspace construction is not permitted in areas with flood velocities greater than five (5) feet per second unless the design is reviewed by a qualified design professional, such as a registered architect or professional

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engineer. For velocities in excess of five (5) feet per second, other foundation types should be used.

f. The crawlspace is an enclosed area below the base flood elevation (BFE) and, as such, must have openings that equalize hydrostatic pressures by allowing the automatic entry and exit of floodwaters. The bottom of each flood vent opening can be no more than one (1) foot above the lowest immediate interior or exterior grade.

4. Substantial improvements ~~of existing dwellings~~ will require elevation of any non-elevated structure to ~~two one (21) feet~~ two one (21) feet above the base flood elevation in compliance with this Section and in accordance with Section 1.040. Substantial improvement is considered to occur when the first alteration of any wall, ceiling, floor, or other structural part of the building commences, whether or not that alteration affects the external dimensions of the structure. Substantial improvements include:

- a. Any repair, reconstruction, or improvement of a structure, the cost of which exceeds ~~forty-nine~~ fifty percent (~~50~~49%) of the market value of the structure as established by the County appraiser or a licensed professional appraiser.
- b. Reconstruction or repair of a structure that exceeds ~~fifty-forty-nine~~ percent (~~54~~90%) of the market value of the building before it was damaged.
- c. Additions to an existing structure when the addition increases the market value of the structure by more than ~~fifty-forty-nine~~ percent (~~50~~49%) or the floor area by more than twenty percent (20%).

d. The term does not include the following:

- i. Any project for improvement of a structure to comply with existing state or local health, sanitary, or safety code specifications which are solely necessary to assure safe living conditions; or
- ii. Any alteration of a structure listed on the National Register of Historic Places or a State Inventory of Historic Places.

5. Accessory structures may either be elevated or meet these standards:

- a. Be equipped with adequate flood vents;
- b. Be constructed of flood-resistant materials;
- c. Utilities and mechanicals, if used, comply with Section Q of this Section.

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d. ~~Be anchored.~~

65. Comply with other standards of this Section, as applicable.

I. ~~Manufactured Home~~Manufactured dwellings within the Special Flood Hazard Area.

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1. All ~~manufactured home~~manufactured dwellings to be placed or substantially improved on sites that are outside of a ~~manufactured home~~manufactured dwelling park or subdivision; in a new ~~manufactured home~~manufactured dwelling park or subdivision; in an expansion to an existing ~~manufactured home~~manufactured dwelling park or subdivision, or in an existing ~~manufactured home~~manufactured dwelling park or subdivision on which a ~~manufactured home~~manufactured dwelling has incurred "substantial damage" ~~as the result of a flood~~ shall be elevated on a permanent foundation such that the finished floor of the ~~manufactured home~~manufactured dwelling is elevated to a minimum eighteen (18) inches (46 cm) above the base flood elevation and be securely anchored to an adequately designed foundation system to resist flotation, collapse, and lateral movement.

2. ~~Manufactured home~~Manufactured dwellings to be placed or substantially improved on sites in an existing ~~manufactured home~~manufactured dwelling park or subdivision within the Special Flood Hazard Area on the community's FIRM that are not subject to the above ~~manufactured home~~manufactured dwelling provisions shall be elevated so that either:

a. The finished floor of the ~~manufactured home~~manufactured dwelling is elevated to a minimum of eighteen (18) inches (46 cm) above the base flood elevation; or

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b. The ~~manufactured home~~manufactured dwelling chassis is supported by reinforced piers or other foundation elements of at least equivalent strength that are no less than thirty-six (36) inches in height above grade and be securely anchored to an adequately designed foundation system to resist flotation, collapse, and lateral movement. Anchoring shall be installed using methods and practices that minimize flood damage. Anchoring methods may include, but are not limited to, use of over-the-top or frame ties to ground anchors (Reference FEMA's "Manufactured Home Installation in Flood Hazard Areas" guidebook for additional techniques).

3. Manufactured dwellings shall have all electrical crossover connections installed at a minimum of 12 inches above BFE.

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4. Manufactured dwellings supported on solid foundation walls shall be constructed with flood openings that comply with Section 4.517.H(2).

5. Comply with the other standards of this Section as applicable.

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- J. Recreational Vehicles (RV) within the Special Flood Hazard Area, whether in a park or on private property outside of a park, are required to~~are subject to the following standards:~~

1. ~~The RV is built on a single chassis.~~

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2. ~~The RV is four hundred (400) square feet or less in area when measured at the largest horizontal projection.~~

3. ~~The RV is self-propelled or permanently towable by a light duty truck.~~

4. ~~The RV is designed primarily not for use as a permanent dwelling but as temporary living quarters for recreational, camping, travel, or seasonal use.~~

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1.5 ~~Be on the site for fewer than 180 consecutive days, and~~

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2. ~~Be fully licensed and ready for highway use. Highway use means on its wheels or jacking system, is attached to the site only by quick disconnect type utilities and security devices, and has no permanently attached additions; or The RV is fully licensed and ready for highway use (street legal), on its wheels or jacking system, and attached to the site only by quick disconnect type utilities (water, electricity, sewer) and security devices, and having no permanent attached additions.~~

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3. ~~Meet the permit requirements of Section 4.517.I and the elevation and anchoring requirements for manufactured dwellings.6. The occupancy of the RV site is for fewer than one hundred eight (180) consecutive days.~~

74. The RV “pads” shall be paved with asphaltic concrete or comparable, and have a special water quality facility for the collection of the stormwater from the site.

58. The RV “pads” shall be wide enough to accommodate a trailer parked next to the towing vehicle or be long enough to accommodate both towing vehicle and trailer.

9. ~~National Flood Insurance Program regulations (reference Code of Federal Regulations (CFR) 60.3(e)(14)(iii)) require that if a recreational vehicle does not meet the criteria of this Subsection, then the vehicle must “meet the elevation and anchoring requirements for manufactured homes” pursuant to Subsection (I) of this Section.~~

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- K. Nonresidential Construction. New construction, development, and substantial improvement of any commercial, industrial, or other nonresidential structure shall have

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the lowest floor, including basement, elevated to no less than ~~two~~ (+2) ~~feet~~ above the base flood elevation; or, together with attendant utility and sanitary facilities, shall:

1. Be dry floodproofed so that below the base flood level the structure is watertight with walls substantially impermeable to the passage of water. A dry floodproofing certificate shall be filed with the City following the form and procedure established by the Federal Emergency Management Agency.
2. Have structural components capable of resisting hydrostatic and hydrodynamic loads and effects of buoyancy, in accordance with standards established by the Federal Emergency Management Agency and the National Flood Insurance Program.
3. Be certified by a registered professional engineer or architect that the design and methods of construction development are in accordance with accepted standards of practice for meeting provisions of National Flood Insurance Program regulations (CFR 60.3(c)(4) and (5)) based on their development and/or review of the structural design, specifications, and plans. Such certifications shall be provided to the City.
4. Nonresidential structures that are elevated, not dry floodproofed, must meet the same standards for space below the lowest floor as described in 4.517.H Subsection (H)(2) of this Section. If elevated, an Elevation Certificate shall be submitted with the construction plans, prior to pouring the foundation, and after construction, unless there is a LOMA for the site or it is very clear on the plan view that the area is outside of the Special Flood Hazard area and above the Base Flood Elevation.
5. Applicants dry floodproofing nonresidential buildings shall be notified that flood insurance premiums will be based on rates that are one (1) foot below the floodproofed level (e.g., a building floodproofed to the base flood elevation will be rated as one (1) foot below the base flood elevation).
6. Applicants that elect to utilize floodproofing instead of elevation shall supply a comprehensive Maintenance Plan at the time of building plan review for the entire structure to include but not limited to: exterior envelope of structure; all penetrations to the exterior of the structure; all shields, gates, barriers, or components designed to provide floodproofing protection to the structure; all seals or gaskets for shields, gates, barriers, or components; and, the location of all shields, gates, barriers, and components as well as all associated hardware, and any materials or specialized tools necessary to seal the structure.
7. Applicants may be required by the Floodplain Manager to supply an Emergency Action Plan (EAP) for the installation and sealing of the structure prior to a flooding event that clearly identifies what triggers the EAP and who is responsible for enacting the EAP.

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8. _____ Comply with other standards of this Section as applicable.

- L. Remove temporary fills. Temporary fills permitted during construction or emergency bank stabilization shall be removed if not in compliance with the balanced cut and fill standard of this Code or prior to issuance of a Certificate of Occupancy or release of any bond issued for the development.
- M. Preserve and/or restore the vegetation corridor within the disturbed areas, and retain the existing tree canopy as established in Sections 4.316, Width of Vegetation Corridor, and 4.317, Methods for Determining Vegetation Corridors Next to Primary Protected Water Features, of this Chapter. An enhancement plan for disturbed areas shall be prepared and implemented to stabilize slopes to prevent landslides on slopes and sedimentation of water features. This plan shall provide for the replanting and maintenance of approved plant species designed to achieve pre-disturbance conditions.
- N. Maintain or reduce stream temperatures.
- O. Minimize erosive velocities, nutrient, and pollutant loading into water. Use filtering, infiltration, and natural water purification for stormwater runoff in compliance with the Erosion Control and Water Quality Standards of Chapter 5.600 of this Code. The applicant's engineering plans shall certify that runoff and sedimentation from the site will comply with the standards of Chapter 5.600, Erosion Control and Water Quality Standards, of this Code.
- P. Anchoring. All new construction, development, and substantial improvements shall be anchored to prevent flotation, collapse, or lateral movement of the structure.
- Q. Construction Materials and Methods. All new construction, development, and substantial improvements shall use flood-resistant materials in accordance with the requirements of FEMA Technical Bulletin 2-93 "Flood Resistant Materials Requirements" and utilities shall be designed and installed in accordance with FEMA Publication 348 "Protecting Building Utilities from Flood Damage." The following standards are only a summary of those requirements:
1. All new construction, development, and substantial improvements shall be constructed with materials and utility equipment resistant to flood damage.
 2. All new construction, development, and substantial improvements shall be constructed using methods and practices that minimize flood damage and minimize impacts to natural floodplain functions, including flood storage, water infiltration, and riparian vegetation.
 3. Electrical, heating, ventilation, plumbing, and air conditioning equipment, and other service facilities shall be designed and/or otherwise elevated or located so as to prevent water from entering or accumulating within the components during

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conditions of flooding.

4. No construction materials or methods may be used within the floodplain that would impair or damage water quality or native vegetation.
5. All development shall have adequate drainage provided to reduce exposure to flood damage and maintain water quality.

R. Utilities and Roads.

1. Stream crossings shall be as close to perpendicular to the stream as practicable. Bridges shall be used instead of culverts wherever practicable, and comply with the Oregon Department of Fish and Wildlife construction standards.
2. All new and replacement water supply systems shall be designed to minimize or eliminate infiltration of floodwaters into the system.
3. New and replacement sanitary sewage systems shall be designed to minimize or eliminate infiltration of floodwaters into the systems and discharge from the systems into floodwaters.
4. Onsite waste disposal systems shall be located to avoid impairment to them, or contamination from them, during flooding consistent with the Oregon Department of Environmental Quality.
5. Utility and road placement shall occur outside the floodway unless the utility or road is necessary to serve permitted development, and there is no reasonable alternative. Roads built in the floodplain shall be built at or above the base flood elevation to provide access to emergency vehicles during a flood.
6. Stormwater management and water quality facilities shall comply with the siting and construction standards of Chapter 5.700, Stormwater Management, of this Code.

- S. For any alterations or relocations of a watercourse, ~~the floodplain or floodway,~~ the developer shall be required to notify the Oregon Department of State Lands, the Oregon Department of Land Conservation and Development, and adjacent communities that will be impacted by the alteration or relocation. The developer shall be responsible for obtaining and submitting copies of any -the required authorization and project permits required by the from the Oregon Department of Land Conservation and Development, Oregon Division Oregon Department of State Lands, U.S. Army Corps of Engineers, Oregon Department of Fish and Wildlife Service, Federal Emergency Management Agency, and other affected agencies, as applicable. The flood carrying capacity of the altered or relocated watercourse shall not be diminished and shall be maintained. Alterations will require a “No-Rise” certification for changes to the floodway, and

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changes that relocate the floodplain will require a Letter of Map ~~Revision~~Change-Fill (~~LOMR~~LOMC-F) from FEMA or may require a revised Flood Insurance Study and Flood Insurance Rate Map for the City. The burden for all engineering studies required to process these forms is the applicant's, not the City's.

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T. Subdivision Proposals. In addition to compliance with the underlying zoning district standards of this Code and this Chapter, the construction-development of the subdivision shall be subject to the following additional criteria:

1. All subdivision proposals shall be consistent with the need to minimize flood damage.
2. All subdivision proposals shall have public utilities and facilities such as sewer, gas, electrical, and water systems located and constructed to minimize flood damage.
3. All subdivision proposals shall have adequate drainage provided to reduce exposure to flood damage.
4. Where the base flood elevation data has not been provided or is not available from another authoritative source ~~for Zone A~~, it shall be generated for subdivision proposals and other proposed developments which contain at least fifty (50) lots or five (5) acres, whichever is less.
 - a. BFE data is not required when the actual building envelopes are clearly outside of Zone A or are on naturally higher ground (not created by fill) that is above the grade of Zone A by five (5) feet or more.
 - b. BFE data is required when the building envelope outside of Zone A is elevated above Zone A by a five (5) foot or less change in grade of the natural ground elevation (not created by fill).
5. If more than fifty percent (50%) of the lot being partitioned or subdivided is affected by the floodplain, then the minimum density standard of this Code does not apply.

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U. Critical Facilities. ~~A critical facility means a facility for which even a slight chance of flooding might be too great. Critical facilities include, but are not limited to schools, nursing homes, congregate care facilities, clinics and/or hospitals, police, fire and emergency response installations, water pollution control facilities, and installations which produce, use, or store hazardous materials or hazardous waste.~~

1. Construction of new critical facilities shall be, to the extent possible, located outside the limits of the Special Flood Hazard Area (~~SFHA~~), ~~(100-year floodplain)~~.

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2. Construction of new critical facilities shall be permissible within the SFHA if no feasible alternative site is available.
3. Critical facilities constructed within the SFHA shall have the lowest floor elevated ~~three feet or to the one foot above the~~ height of the 500-year flood level, ~~whichever is higher.~~ Submit Elevation Certificates with the construction plans, prior to pouring the foundation, and upon completion of the structure in accordance with Subsections ~~H(G1)(a), (b), and (c)~~ of this Section.
4. Access to and from the critical facility shall ~~also~~ be protected to the height utilized above.
5. Access routes elevated to or above the level of the base flood elevation shall be provided to all critical facilities to the extent possible.
6. Floodproofing and sealing measures must be taken to ensure that toxic substances will not be displaced by or released into floodwaters.
7. Comply with the other standards of this Section as applicable.

V. Small Accessory Structure. -Relief from elevation or floodproofing as required in this Section may be granted for small accessory structures that meet the following standards. The applicant shall be advised that this type of allowance will result in higher insurance rates for these structures, as applicable.

1. Less than 200 square feet, less than \$5000 in valuation, and do not exceed one story;
2. Not temperature controlled;
3. Not used for human habitation and are used solely for parking of vehicles or storage of items having low damage potential when submerged;
4. Not used to store toxic material, oil or gasoline, or any priority persistent pollutant identified by the Oregon Department of Environmental Quality unless confined in a tank installed in compliance with this ordinance or stored at least two feet above base flood elevation;
5. Located and constructed to have low damage potential;
6. Constructed with materials resistant to flood damage as described in this Section;
7. Anchored to prevent flotation, collapse, or lateral movement of the structure resulting from hydrodynamic and hydrostatic loads, including the effects of buoyancy, during conditions of the base flood;

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8. Constructed to equalize hydrostatic flood forces on exterior walls by allowing for the automatic entry and exit of floodwater. Designs for complying with this requirement must be certified by a licensed professional engineer or architect or designed in compliance with Section 4.517.H(2):

9. Constructed with electrical, and other service facilities located and installed so as to prevent water from entering or accumulating within the components during conditions of the base flood.

4.518. Floodways. Located within areas of special flood hazard established in Section 4.511.B are areas designated as floodways. Since the floodway is an extremely hazardous area due to the velocity of floodwaters which carry debris, potential projectiles, and erosion potential, the following provisions apply:

A. Except as provided in Section 4.518.C, encroachments, including fill, new construction, development, substantial improvements, and other development are prohibited unless certification by a registered professional civil engineer is provided demonstrating through hydrologic and hydraulic analyses performed in accordance with standard engineering practice that encroachments shall not result in any increase in flood levels during the occurrence of the base flood discharge.

B. If Section 4.517.A is satisfied, all new construction, development, and substantial improvements shall comply with all applicable flood hazard reduction provisions of Section 4.517.

C. Floodways and other high hazard zones are extremely hazardous areas due to exceptionally high flood and erosion potential. In these areas, the development actions permitted in high hazard zones shall be limited to water-dependent uses; bridges and other location-dependent uses; habitat restoration activities consistent with Sections 4.516.C(2); low-intensity recreation; and bioengineered banks.

4.519. Before Regulatory Floodway. In areas where a regulatory floodway has not been designated, no new construction, substantial improvements, or other development (including fill) shall be permitted within Zones A1-30 and AE on the community's FIRM, unless it is demonstrated that the cumulative effect of the proposed development, when combined with all other existing and anticipated development, will not increase the water surface elevation of the base flood more than one foot at any point within the community.

4.520. Flood Management Area Variance Procedures. Variances from dimensional standards of the underlying zoning district or other provisions of this Code not part of this Chapter shall be processed in accordance with Chapter 6.800, Variance, of this Code.

A. Generally, the only condition under which a variance from the elevation standard may be issued is for new construction, development, and substantial improvements to be erected on a lot of one-half acre or less in size contiguous to and surrounded by lots with existing

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structures constructed below the base flood level, providing that the considerations of Section 4.520.A(1 - 11) have been fully reviewed. As the lot size increases the technical justification required for issuing the variance increases.

1. The danger that materials may be swept onto other lands to the injury of others;
 2. The danger to life and property due to flooding or erosion damage;
 3. The susceptibility of the proposed facility and its contents to flood damage and the effect of such damage on the individual owner;
 4. The importance of the services provided by the proposed facility to the community;
 5. The necessity to the facility of a waterfront location, where applicable;
 6. The availability of alternative locations for the proposed use which are not subject to flooding or erosion damage;
 7. The compatibility of the proposed use with existing and anticipated development;
 8. The relationship of the proposed use to the comprehensive plan and floodplain management program for that area;
 9. The safety of access to the property in times of flood for ordinary and emergency vehicles;
 10. The expected heights, velocity, duration, rate of rise, and sediment transport of the flood waters and the effects of wave action, if applicable, expected at the site; and
 11. The costs of providing governmental services during and after flood conditions, including maintenance and repair of public utilities and facilities such as sewer, gas, electrical, and water systems, and streets and bridges.
- B. Variances may be issued for the reconstruction, rehabilitation, or restoration of structures listed on the National Register of Historic Places or the Statewide Inventory of Historic Properties, without regard to the procedures set forth in this Section.
1. Is the minimum necessary to preserve the historic character and design of the site, building or structure;
 2. Will not result in the site, building or structure losing its historic designation; and
 3. Demonstrates consistency with all other local, state, or federal laws or ordinances, including documentation of any necessary consultations with state or federal

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agencies.

C. Variances shall not be issued within a designated floodway if any increase in flood levels during the base flood discharge would result.

D. Variances shall only be issued upon a determination that the variance is the minimum necessary, considering the flood hazard, to afford relief.

E.A. The Director, or their designee, may grant a Type II variance of up to fifty percent (50%) of any dimensional standard in the underlying zoning district where necessary to avoid construction or development within the Flood Management Area. The Director or designee shall make a determination in accordance with the criteria established in Section 4.520.J.

FB. Applications for variances to dimensional standards in excess of that provided in paragraph A Section 4.520.E or to the maximum impervious surface area shall be a Type III application.

GC. The Planning Commission or Director, or their designee, may attach such conditions to the granting of variances as it deems necessary to further the purpose of this Chapter.

HD. As a participant in the National Flood Insurance Program, the City is not authorized to grant a variance from the requirement to elevate or floodproof structures in accordance with state and federal regulations, whichever is most restrictive. Variances may be issued for nonresidential buildings in very limited circumstances to allow a lesser degree of floodproofing than watertight or dry-floodproofing, where it can be determined that such action will have low damage potential, complies with all other variance criteria except Section 4.520.A and otherwise complies with Sections 4.517.P - R.

IE. The City cannot grant a variance from the special flood hazard designation assigned by the Federal Emergency Management Agency Insurance Administrator to a site. However, a property owner may request a Letter of Map Amendment (LOMA), a Letter of Map Revision (LOMR), or a Letter of Map Change (LOMC) from the Federal Emergency Management Agency.

IF. In reviewing a Type III V^{ar}iance, the Planning Commission shall consider all technical evaluations, relevant factors, and standards specified in other Sections of this Chapter and other Chapters of this Code, and make affirmative findings, with or without conditions, for each of the following criteria:

1. A showing of good and sufficient cause that the need for the variance is not of the applicant's making and will not result in a use of the site that is not otherwise permitted in the underlying zoning district.

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2. A determination that failure to grant the variance would result in exceptional hardship to the applicant and is the minimum necessary to grant relief.
3. A determination that the granting of a variance will not result in increased flood heights, additional threats to public safety, extraordinary public expense, create nuisances, cause fraud on or victimization of the public as identified in Section 4.520.A(1) – (11) or conflict with existing local, state, or federal laws or ordinances. A determination that the granting of a variance will not result in increased flood heights, additional threats to public safety, impairment of water quality,

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~~extraordinary public expense, create nuisances, cause fraud on, or victimization of, the public, or conflict with existing local laws and ordinances.~~

4. The safety of access to the property in times of flood for ordinary and emergency vehicles.

5. A determination that the development project cannot be located outside the Special Flood Hazard Area and/or high hazard area and that impacts to flood storage, water infiltration, and riparian vegetation have been minimized to the extent practicable.

6. A demonstration of consistency with all other local, state, or federal laws or ordinances, including documentation of any necessary consultations with state or federal agencies.

4.52149

Prescribed Conditions for the Rehabilitation or Replacement of Pre-Existing Structures.

The replacement of pre-existing structures or development damaged or destroyed accidentally is ~~not~~ subject to ~~the limitations and standards of Section 5.330, Reconstruction of a Damaged Nonconforming Structure or Development, and/or Section 5.335, Destruction of a Nonconforming Structure or Development, of this Code, provided the following standards are met:~~

- A. The structure or development was in existence within the Flood Management Area prior to ~~November 24~~February 1, 2019~~2000~~.
- B. The use is allowed in the underlying zoning district at the time the application is made to rehabilitate or replace the structure.
- C. A Type I ~~Flood Hazard Permit~~Floodplain Development Permit is approved prior to applying for building permits.
- D. The rehabilitation or replacement is rebuilt on the same footprint of the original structure and does not increase the impervious area within the ~~100-year floodplain~~Special Flood Hazard Area.
- E. The rehabilitated or replaced structure is elevated, if residential, or floodproofed or elevated, if non-residential, in accordance with the applicable standards of this Chapter, ~~the definition found Section 1.040, and all additional relevant standards in this Code.~~

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ATTACHMENT EXHIBIT H

Common Floodplain Management Terms

Acronym	Term	Definition / Explanation
FEMA	Federal Emergency Management Agency	The entity within the Department of Homeland Security that regulates floodplain insurance and management activities in the U.S.
NFIP	National Flood Insurance Program	Established in 1968 and run by FEMA, NFIP sets standards for purchasing flood insurance and coordinates flood management regulations in working with states and localities to reduce flood risks.
FIRM	Flood Insurance Rate Map	Also called a Flood Map, it is the official flood hazard map for a community produced by FEMA. To show detail, maps for a community are broken into smaller map "panels".
FIS	Flood Insurance Study	A technical report that is released concurrently with the FIRM. It discusses particular flood risks for a hydrologic area, such as the Sandy River and Beaver Creek and provides profiles to display risk.
SFHA	Special Flood Hazard Area	Commonly referred to as "the flood zone" or "the 100 year flood", this is a zone shown on a FIRM where there is a 1% annual chance of a flood event, called a "base flood". Structures and development located in SFHA are regulated by local flood management ordinances and typically are required to carry flood insurance under the NFIP.
BFE	Base Flood Elevation	The computed elevation to which floodwater is anticipated to rise during the base flood. The BFE determines the requirement for the elevation or floodproofing of structures. BFEs are mapped and established in most SFHA zones.
A	SFHA Flood Zone A	An area where flood hazards have been mapped but BFE has not been established and technical data has not been fully evaluated.
AE	SFHA Flood Zone AE	An area where flood hazards have been mapped, BFE has been established and the hazard area has been studied. The majority of SFHA located in Troutdale fall in this category.
X	Flood Zone X	Areas of minimal flood risk. Flood insurance purchase is optional. Please note that properties in Flood Zone X are not immune to flood risk; they carry less risk than those SHFA zones.
LOMC - LOMR - LOMA	Letter of Map Change (2 types) - Letter of Map Revision - Letter of Map Amendment	An action taken to update the FIRM and/or FIS that reflects new or more detailed information about a property in an effort to better map or reduce risk in and around SFHA areas.
CRS	Community Rating System	An optional program within the NFIP that rewards property owners in participating cities with reduced insurance premiums due to the City's additional efforts to reduce flood damage, strengthen development regulations, and engage in public outreach. CRS communities must be re-certified on an annual basis. Troutdale participates in the CRS.
7	CRS Class (or CRS Rating)	CRS communities are rated on a scale of 1-9, with Class 1 communities receiving the biggest insurance premium reduction. Troutdale is a Class 7 community, which translates to a 15% premium reduction for SFHA properties. Nearly all CRS communities in Oregon are in the 6-9 range.



CITY OF TROUTDALE

Community Development Department

THIS IS TO NOTIFY YOU THAT THE CITY OF TROUTDALE HAS PROPOSED A LAND USE REGULATION THAT MAY AFFECT THE PERMISSIBLE USES OF YOUR PROPERTY AND OTHER PROPERTIES.

October 16, 2018

Dear Property Owner:

This land use hearing notice is being sent to you to comply with Oregon Revised Statute (ORS) 227.186 (Measure 56) with the following required language:

ON THURSDAY NOVEMBER 14, 2018 THE CITY OF TROUTDALE WILL HOLD A PUBLIC HEARING REGARDING ADOPTION OF ORDINANCE NO. 851. THE CITY HAS DETERMINED THAT ADOPTION OF THIS ORDINANCE MAY AFFECT THE PERMISSIBLE USES OF YOUR PROPERTY, AND OTHER PROPERTIES IN THE AFFECTED ZONE, AND MAY CHANGE THE VALUE OF YOUR PROPERTY.

HERE IS WHAT THIS MEANS:

The City of Troutdale Planning Commission is proposing to amend the Troutdale Development Code Sections 1.040 Vegetation Corridor and Slope District, and Water Quality and Flood Management Definitions; 2.220 Expiration of a Decision; and 4.500 Flood Management Area to adopt Federal Emergency Management Agency (FEMA) requirements for development in the floodplain.

The purpose of these amendments is to facilitate local implementation of the National Flood Insurance Program and Community Rating System requirements, and to adopt the best available geographic data defining locations that are at a high risk of flooding.

FURTHER DETAILS ON THE BACK PAGE

CONTINUED FROM FRONT PAGE**WHEN AND WHERE IS THE HEARING AND WHAT ARE THE DETAILS?**

When: Thursday November 14, 2018 at 7:00 p.m.

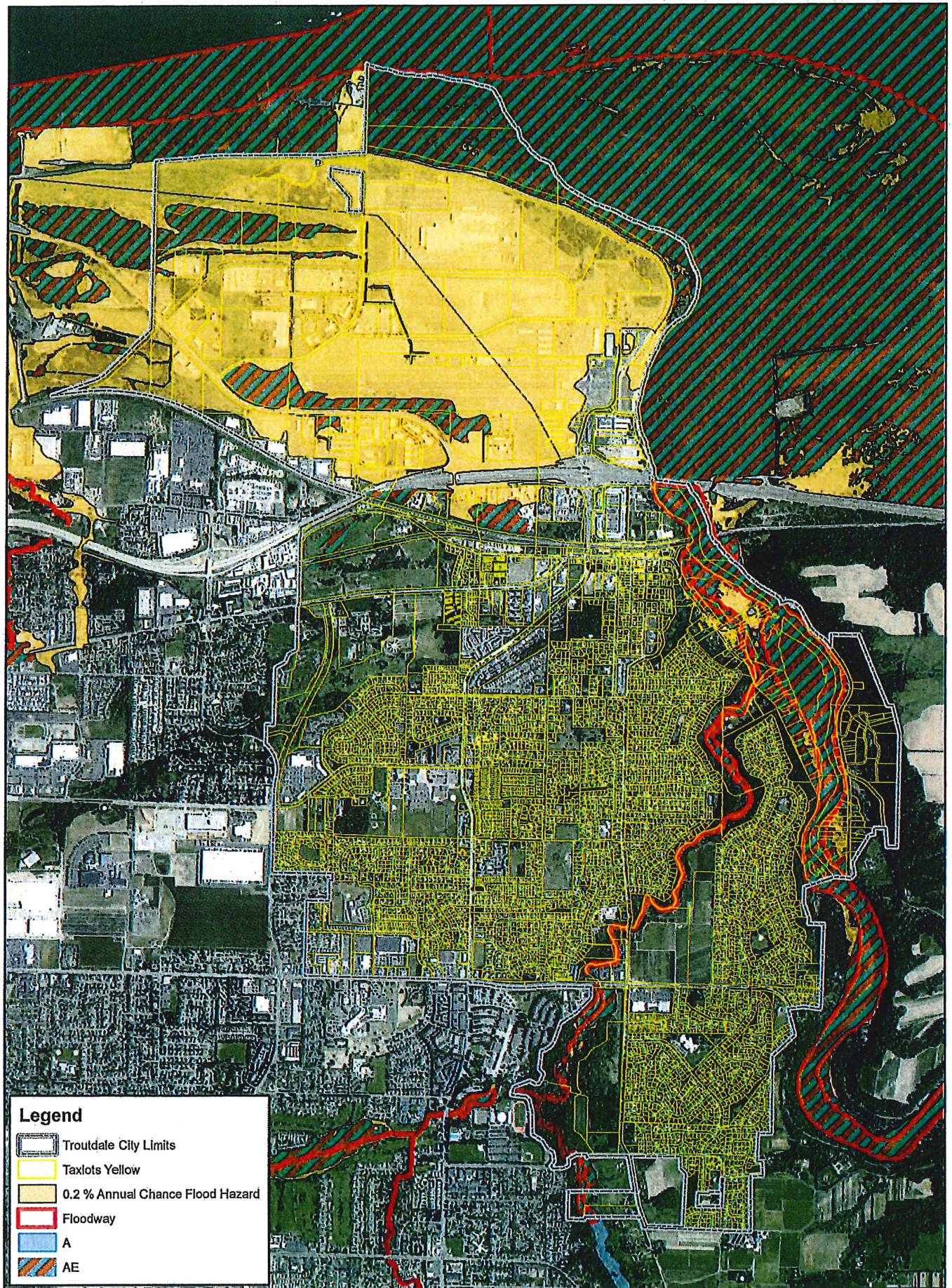
Where: Troutdale Police Community Center – Kellogg Room, 234 SW Kendall Ct, Troutdale, Oregon 97060

Details: You may comment in writing to the Community Development Department prior to the hearing and/or present written and/or verbal testimony to the Planning Commission at the hearing. Failure (1) to raise an issue in the hearing in person or by letter to the address above or (2) provide sufficient detail and clarity to enable a decision-maker to respond to the issue precludes appeal to the Oregon Land Use Board of Appeals (LUBA) on that issue.

IF YOU WANT ADDITIONAL INFORMATION:

- To view the application materials, visit <http://www.ci.troutdale.or.us/>.
- Ordinance No. 851 is available for inspection at no cost at the Troutdale Community Development Department located at 2200 SW 18th Way, Troutdale, OR 97060. A copy of Ordinance No 851 is available for review at least seven (7) days prior to the hearing.
- For additional information concerning Ordinance No. 851, you may contact Breezy Poulin at the Community Development Department at 503-674-7229 or planning@troutdaleoregon.gov.

Attachment(s): Map of Tax Lots Impacted by the 1% Annual Chance of Flood (100 Year Flood) Floodplain



ORDINANCE NO.

AN ORDINANCE TO ADOPT TEXT AMENDMENTS TO CHAPTERS 1, 2, 4 AND TO ESTABLISH CHAPTER 14 OF THE TROUTDALE DEVELOPMENT CODE.

THE TROUTDALE CITY COUNCIL FINDS AS FOLLOWS:

1. The City of Troutdale recognizes the importance of flood management regulations in helping to ensure the protection of property and life.
2. The existing flood management regulations are required to be updated to secure compliance with federal, state, and regional standards.
3. New Flood Insurance Rate Maps and Flood Insurance Studies for the Sandy River basin are to be in effect on February 1, 2019, necessitating a text amendment action to update regulations prior to the effective date in order to maintain good standing in the National Flood Insurance Program.
4. The Planning Commission has reviewed proposed amendments at a public hearing during the November 14, 2018 meeting and voted 6-0 to forward a recommendation of approval.
5. The draft amendments have been reviewed and no additional testimony has been provided by the Federal Emergency Management Agency, Oregon Department of Land Conservation and Development, or Metro; as presented.
6. The City Council has adopted findings consistent with the provisions set forth in Troutdale Development Code Section 6.1100 as set forth in Attachment A.

NOW, THEREFORE, BE IT ORDAINED BY THE COUNCIL OF THE CITY OF TROUTDALE

Section 1. Chapter 1 shall be amended as set forth in Attachment B.

Section 2. Chapter 2 shall be amended as set forth in Attachment C.

Section 3. Chapter 4 shall be amended as set forth in Attachment D

Section 4. Chapter 14 shall be newly established as set forth in Attachment E.

YEAS:
NAYS:
ABSTAINED:

Casey Ryan, Mayor

Date

Sarah Skroch, City Recorder
Adopted:

STAFF REPORT

TO: Troutdale Planning Commission

STAFF REPORT DATE: Wednesday, October 24, 2018

STAFF / APPLICANT: Ryan Krueger, CFM; Senior Planner & Floodplain Manager
Chris Damgen, Community Development Director

CASE FILE: **75-03 Text Amendments: Flood Management**

SUBJECT: **Proposed Text Amendments to the Troutdale Development Code**

APPLICABLE CRITERIA: TDC Sections 2.065 and 6.1100

HEARING DATE: Wednesday, November 14, 2018

RECOMMENDATION: Planning Commission to review proposal, open the public hearing, consider proposed testimony and amendments from all parties, and recommend approval of the proposed text amendments with any additional amendments proposed to the City Council.

1. BACKGROUND

The City of Troutdale is required to undergo a comprehensive update to its flood management standards. These standards are in need of update due to the following circumstances:

- The release of new Flood Insurance Rate Maps (FIRM) and Flood Insurance Studies (FIS) for Troutdale by the Federal Emergency Management Agency (FEMA), to go into effect on February 1, 2019. Communities that have updated FIRM and FIS must have flood management regulations that are in compliance with standards in the National Flood Insurance Program (NFIP) at the time of map and study adoption. A FEMA audit of the City's current regulations found areas where code amendments were necessary.
- The State of Oregon's Department of Land Conservation & Development (DLCD) performs "Community Assistance Visits" (CAV) which involve a review of a city's flood management regulations in coordination with both federal and state standards. In 2014, the results of a CAV compelled the City of Troutdale to update its regulations. The City and DLCD agreed to defer the update within six (6) months of an effective date for the adoption of new FIRM and FIS. This direction from DLCD was reaffirmed during the CAV in 2018.
- The City's voluntary participation in the NFIP Community Rating System (CRS).

2. REVIEW TIMELINE

The City was notified of the need to update flood management regulations in 2014 during the CAV performed by DLCD as described above. On August 1, 2018, FEMA and its contractor informed communities in the Sandy River basin that revised FIRM and FIS would be going into effect on February 1, 2019. This effectively started the clock for communities to update their regulations based on federal and state requirements in order to maintain compliance. Consistent with State law, properties directly affected received “Measure 56” notices (**Attachment I**).

3. IMPORTANT TERMINOLOGY

Floodplain management often uses terms or abbreviations that appear interchangeable, but carry distinct differences. Listed below are important terms that are used throughout the Code. Please consult with the definitions in Section 1.040 for the precise definition. **Attachment H** also provides a reference for typical abbreviated terms in floodplain management.

Special Flood Hazard Area (SFHA)

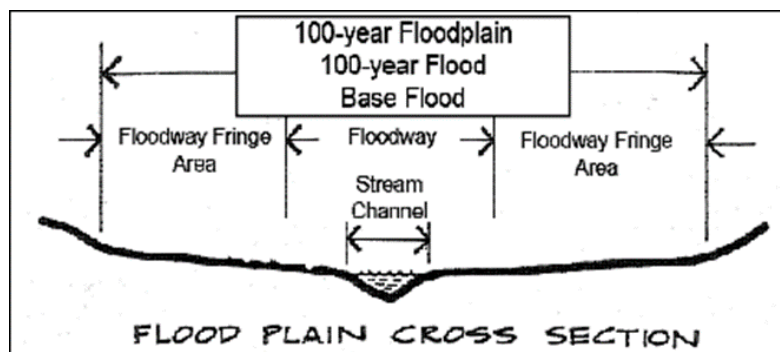
Also known as the “**100-year floodplain**”, these are areas that have an annual one percent (1%) chance of flooded conditions. In Troutdale, these areas are included in what is historically called the “**Flood Management Area**”. Properties and structures that are fully or partially affected by the SFHA are subject to the floodplain standards that are being reviewed.

Flood Zone

This is a term that is often misunderstood and misused. FEMA considers all properties to have flood zones. When most people think of flood zones, they are actually thinking of special flood hazard areas. Staff discourages the use of this term in a broad sense and utilizes it in conjunction with the actual flood zone assigned to a particular location (Flood Zone AE, Flood Zone X, etc.).

Floodway

This is a specific area within the Special Flood Hazard Area that has the greatest risk of regular flooding (see exhibit below). Floodways have more restrictive standards for development due to higher risk. See specifically Section 1.040.42 for the actual regulatory definition. See Sections 14.030, 14.045, and 14.050 for floodway-specific standards.



4. PROPOSED TEXT AMENDMENTS

The proposed text amendments would cover four (4) chapters in the Troutdale Development Code (TDC). This includes the transfer of flood management regulations from Section 4.500 to a new Chapter 14. Chapters 1, 2, and 4 are also amended.

Any required changes to the table of contents or sectional references in other chapters within the TDC would be made upon adoption and are deemed non-substantive. The following is a summary of the proposed amendments:

CHAPTER 1 – INTRODUCTORY PROVISIONS

There is one (1) section amendment proposed for this chapter:

1.040 Vegetation Corridor, Slope District, Water Quality and Flood Management Definitions

The definition section is updated with several new definitions and re-wordings, consistent with requirements and guidance from FEMA and DLCD. Please see **Attachment B** for the “clean” draft version and **Attachment F** for the “red-line” version.

CHAPTER 2 – PROCEDURES FOR DECISION-MAKING

There is one (1) section amendment proposed for this chapter.

2.220 Expiration of a Decision

The primary amendment is the inclusion of “flood development” permit land use decisions, which are to have a 180 day expiration period if no construction is occurring.

The additional amendments are the alphabetizing of the decisions currently listed so they are not listed without a specific sub-section reference. These amendments are non-substantive. Please see **Attachment C** for the “clean” draft version.

CHAPTER 4 – ZONING DISTRICT OVERLAYS

There is one (1) section amendment proposed for this chapter.

4.500 Flood Management Area

This section is proposed to be stricken in its entirety, with all flood management area regulations to be relocated to a new chapter in the TDC (Chapter 14). Section 4.500 would be reserved for a future zoning overlay district if needed. Please see **Attachment D** for the “clean” draft version.

CHAPTER 14 – FLOOD MANAGEMENT

This is a **proposed new chapter** that currently contains standards within Section 4.500. Because of the size of the section, coupled with the issue that the regulations contain not only overlay standards but also permitting and procedural standards, it was determined that a stand-alone chapter would be a more proper location within the Code.

Listed below is a **summary** of each section within the Chapter, along with a description of any major changes. Please also see **Attachment E** for the “clean” draft version (showing changes in a new Chapter 14) and **Attachment G** for the “red-line” version (showing changes in Section 4.500, the current location of standards).

14.005 Purpose (currently 4.510)

This section expands upon the provisions from the current TDC that flood management standards seek to govern. The purpose statement is generally the same.

14.010 Applicability (currently 4.512)

This section relocates the enumerated items needed for a flood development permit (shown in sub-section B) to another portion of the chapter where it is more logically located.

14.015 Severability (new)

This section is new and refers to the general severability standards in Chapter 17. This was requested by FEMA and DLCD.

14.020 Administration and Interpretation of FIRM Boundaries and Flood Management Area Standards (currently 4.513, [...] and Edge of Bankfull Stage or Two-Year Storm Level)

This section’s title was amended. Sub-section A has minor changes but now specifically calls out powers of determination and permit issuance. Sub-section B is new and effectively outlines the roles of the floodplain manager with enumerated responsibilities. The proposed Sub-section C is currently Sub-section B. The proposed Sub-section D is currently Sub-section C. Sub-section E is new and refers to inspections that can be made.

14.025 Uses within the Floodplain but Outside the Floodway and Outside Wetlands (currently 4.514)

Sub-section A (Prohibited Uses) remains largely the same, with more specificity given to the prohibition of uncontained, outside storage areas of hazardous materials.

Sub-section B (Permitted Uses) is generally the same with a couple of notes.

- In Item 4, it refers to the City of Portland Plant List as a reference material. The City of Troutdale has no independent reference document for native plantings. In the current standards, a reference to a Metro Native Plant list is shown, but that document is not in existence. The Portland Plant List is the reference most often used in the area in lieu of other reference material and is the preferred standard for the draft.

- Item 13 is new, in that wildfire mitigation projects are now listed. This was a specific recommendation of the City's Hazard Mitigation Plan.

14.030 Uses within the Floodway or within Wetlands (currently 4.515)

Sub-section A (Prohibited Uses) remains largely the same, except greater clarity was given on vegetation removal, fill, or excavation with regards to wildfire mitigation projects and the addition of prohibiting uncontained outside storage areas of hazardous materials.

Sub-section B (Permitted Uses) remains largely the same, except it removes stream habitat restoration and vegetative removal/restoration projects that were currently permitted. Dead/dying trees may be removed.

14.035 Floodplain Development Permit (currently 4.516)

This section has been heavily modified, due mostly to FEMA, DLCD, and Metro requirements but also to eliminate ambiguity. The most basic change is the new title, which now refers to permits as Flood Development Permits (currently Flood Hazard Permits). In addition, the section better outlines submittal requirements and permit type differentiations based on the desired activity.

Sub-sections A and B are new and contain background and applicability information, respectively.

Sub-section C (currently A) list exemptions from permitting requirements. Several currently exempted activities were removed due to FEMA requirements. However, exemptions were maintained for the following activities:

- removal of refuse;
- vegetative removal/restoration work;
- emergency tree removal; placement of fill in residential zones (for certain circumstances);
- installation of certain fencing;
- certain landscape activities;
- preservation of wetlands; and
- certain activities performed by the Sandy Drainage Improvement Company (SDIC).

Sub-section D lists submission requirements for a Floodplain Development Permit. The list of items appears long, however much of the information in most circumstances can be readily obtained with assistance from the City. Ensuring these items are submitted also helps to keep record-keeping in order—an important task in Community Rating System scoring. Flood development permit applications would require the following:

- site plan
- topographic survey
- elevations of lowest floor (for structures)
- hydrology and soils report (for ground disturbance/vegetation removal that exposes soil)
- grading plan (if grading is occurring)

- vegetation report (if vegetation removal or similar impacts occur)
- “no-rise” certification and letter of map change (certain activities in floodway)
- building and structure elevations (if applicable)
- infrastructure exhibit
- floodplain or watercourse alterations (if applicable)
- any other permits issued (or applied for) related to project

Sub-section E is expanded from the current version and better outlines the need for Flood Development Permits, based on the typical decision-making system used elsewhere in the TDC.

A **Type I permit** (Staff decision) is required for construction, repair, and alteration of single-family residential dwellings and manufactured dwellings; emergency bank stabilizations; and wildfire mitigation projects. A **Type II permit** (Staff decision with notification) is required for any Type II site development reviews; new/expanded streets, bridges, railroads, or trestles; permanent bank stabilization or fill; balanced cut-and-fill; fill of wetlands; and similar activities. A **Type III permit** (Planning Commission decision with notification) is required for any uses requiring a Type III review, variances requested within Chapter 14, and proposed alterations of a watercourse.

Sub-section F attaches review criteria for decision-making to Flood Development Permits, similar to that of other procedures in the TDC.

Sub-section G includes mandatory conditions of approval that would be included in every approved Floodplain Development Permit. Item 3 is a mandatory addition from Metro Title 3 of the Functional Plan.

14.040 Development Standards (currently 4.517)

This section remains generally the same, with a few notable provisions that have been altered or added in this proposal. Some of the proposed changes are for Community Rating System bonus credits, which could allow the City to achieve a better score to further reduce flood insurance rates for those who carry flood insurance.

Sub-section G is more specific in maintaining flood storage capacity through the “balanced cut and fill” approach that is typical for developing in special flood hazard areas. Specifically, the following provisions are new:

- Development may not result in any increase in flood levels throughout the special flood hazard area (currently undefined on the extent that no increase situation could occur)
- **Item 5:** New buildings built on fill must have fill that is certified by a professional engineer, and offers protection from erosion and scour.
- Part of **Item 6:** Provides relief for some applications from requirements to submit Letters of Map Change
- **Item 7:** Allows for the City to outsource engineering analysis of flood storage capacity to consultants who have technical aptitude to review plans and advise on action.

Sub-section H (Residential Development) has proposed changes as described below..

- **Item 1:** Elevation Certificates to be required for all residential development (CRS bonus)
- **Item 2.d:** When possible, have two opposing side openings for enclosed areas for flood waters to pass through.
- **Item 3.f:** Flood vent opening placement standards now in place (avoids standing water).
- **Item 4:** Require elevation of non-elevated structures to two (2) feet above base flood elevation (currently one (1) foot above base flood elevation; CRS bonus)

Sub-section I (Manufactured Dwellings) and Sub-section J (Recreational Vehicles) have updated standards as required by FEMA.

Sub-section K (Nonresidential Construction) remains largely the same, though new standards are in place for those structures who utilize floodproofing techniques. Those standards include submitting a maintenance plan (Item 6) and an emergency action plan (Item 7) if required.

Sub-section R (Utilities and Roads) would require roads built in the floodplain to be built at or above base flood elevation for emergency access purposes. (CRS bonus)

Sub-section S requires additional state agency notification for applications with alterations or relocations of watercourses.

Sub-section U (Critical Facilities) contains the following changes of interest:

- The “definition” of critical facilities can be found in Section 1.040. The current version re-articulates the definition, so it is proposed to be removed.
- Critical facilities constructed in special flood hazard areas should have their lowest floor elevated to one foot above the 500-year flood level. (CRS bonus)

Sub-section V (Small Accessory Structures) is a new sub-section designed to provide relief for certain types of accessory structures under certain circumstances.

14.045 Floodways (new)

This section is new and provides clear guidance on approving development activity in the floodway, which is generally discouraged due to the hazards associated with these areas.

14.050 Before Regulatory Floodway (new)

This section is new and prohibits most development activities to occur in areas where a regulatory floodway has not been designated. This situation is likely not to occur in Troutdale but is required to be in the floodplain regulations for the City.

14.055 Flood Management Area Variance Procedures (currently 4.518)

This section has been expanded, primarily at the direction of FEMA and DLCD.

Sub-section A is new and provides guidance on requests to vary from elevation standards based on 11 considerations outlined therein.

Sub-section B allows for relief to be sought for historic structures, with three (3) approval criteria items to be considered.

Sub-section C prohibits variances from being issued within a designated floodway if increased flood levels during the base flood discharge would result.

Sub-section D is the “minimum necessary” clause for most variance applications.

Sub-section E (currently sub-section A) remains the same, with a process for determination now established elsewhere in the Chapter.

Sub-section F (currently sub-section B) remains the same.

Sub-section G (currently sub-section C) allows for conditions to be attached by the decision-making entity.

Sub-section H (currently sub-section D) remains the same but is also expanded to allow for nonresidential buildings in very limited circumstances to seek variances from floodproofing standards.

Sub-section I (currently sub-section E) is mostly the same, with a reference changes.

Sub-section J (currently sub-section F) is mostly the same with an additional code reference in decision criteria 3 and two new decision criteria:

- Item 5: Determination that project cannot be located outside SFHA and that any impacts have been minimized to the extent practicable.
- Item 6: Consistency with other laws and ordinances.

14.060 Prescribed Conditions for the Rehabilitation or Replacement of Pre-Existing Structures
(currently 4.519)

This section remains mostly the same, with certain updates to references within the Code.

4. FACTS AND FINDINGS

TDC Section 2.065 specifies that the City Council is the decision-making body for text amendment applications after the Planning Commission forwards a recommendation for their consideration. Planning Commission is charged with making a finding for each applicable criterion point as listed in TDC Section 6.1120. Listed below are draft findings prepared by Staff for Planning Commission to review and amend as needed, upon the conclusion of the public hearing portion of the meeting and prior to a vote for a recommendation.

A. The proposed change to the Development Code does not conflict with applicable Comprehensive Land Use Plan goals or policies.

The Comprehensive Plan policies are in line with the proposed amendment. Goal 5, Policy 9 states that the City should “Notify and coordinate development proposals within natural resource areas with other local, state, and federal agencies”. Goal 7, Policy 1 speaks to “ensure that development in highly hazardous areas will be restricted or prohibited. Development may be allowed in areas of potential hazard if appropriate safeguards are taken in the design and construction to protect affected persons and property. Goal 7, Policy 3 seeks to restrict development within flood hazard areas to those uses which can be adequately floodproofed. The Code amendments are in line with these policies. **The criterion is met.**

B. The proposed change is consistent with the applicable Statewide Planning Goals.

The text amendments proposed are due in part to a State review of the existing regulations and required amendments to be made to come into compliance with Statewide Planning Goals in addition to federal standards. The state has performed a cursory review of the amendments as presented and have no additional comments. **The criterion is met.**

C. The proposed change is consistent with the applicable provisions of Metro Code.

The proposed text amendments are consistent with several Metro Code provisions and would be in conformance with Title 3 (Water Quality and Flood Management) of the Metro Growth Management Functional Plan. Of particular interest, the City was required to more specifically spell out required conditions of approval for flood development permits to ensure conformance with Title 3. **The criterion is met.**

D. Public need is best satisfied by this particular change.

Flood management is an exercise in protecting property and life from hazardous conditions. A primary responsibility of a local government is ensuring the safety of the community at large. The standards provide guidelines for responsible development in areas that are deemed to have flood risk, in order to minimize loss in case of a flood event. Furthermore, some of the regulations financially benefit the city residents, as they count toward a higher score on the Community Rating System, thus reducing insurance costs for all property owners. **The criterion is met.**

E. The change will not adversely affect the health, safety, and welfare of the community.

The existing flood management standards, along with the text amendments proposed are precisely in the spirit of protecting the health, safety, and general welfare of the community. do not weaken already existing standards that would suggest development activities would be more suitable in the flood management areas. The proposed amendments offer certain activities relief mechanisms in the forms of variances or in required submittal items, but in those situations, the applicants must demonstrate no negative impacts that would adversely affect public health, safety, or welfare. **The criterion is met.**

5. STAFF RECOMMENDATIONS

Staff offers the following recommendations for the conduct of the November 14, 2018 public hearing for the proposed amendments to the Troutdale Development Code.

- A. Conduct a public hearing and receive all public testimony relating to the proposal. Consider the public testimony and the facts and findings presented in the staff report and deliberate on policy issues, proposed amendments, and other issues identified by the Commission, Staff, other public entities, or the public.
- B. Recommend **approval** of the proposed text amendment application to the City Council for its consideration for its meeting and subsequent public hearings.

ATTACHMENTS

- A. This Staff Report
- B. TDC Section 1.040 (Definitions) – “Clean” Draft
- C. TDC Section 2.220 (Expiration of Decision) – “Clean” Draft
- D. TDC Section 4.500 (Flood Management Area) – “Clean” Draft
- E. TDC Chapter 14 – “Clean” Draft (formerly Section 4.500)
- F. TDC Section 1.040 (Definitions) – “Red-Line” Draft
- G. TDC Section 4.500 (Flood Management Area) – “Red-Line” Draft (to become Chapter 14)
- H. Common Floodplain Management Terms
- I. Measure 56 Notice & Map

1.040 Vegetation Corridor and Slope District, Water Quality, and Flood Management Definitions.

- .01 100-Year Flood. The flood that is equaled or exceeded once in one hundred (100) years on the average; equivalent to the one percent annual chance flood. Also called the Special Flood Hazard Area, Base Flood, and 100-year floodplain.
- .02 Area of Shallow Flooding. Means a designated AO, AH, AR/AO, AR/AH, or VO zone on a community's Flood Insurance Rate Map (FIRM) with a one percent (1%) or greater annual chance of flooding to an average depth of one to three (1 - 3) feet where a clearly defined channel does not exist, where the path of flooding is unpredictable, and where velocity flow may be evident. Such flooding is characterized by ponding or sheet flow.
- .03 Area of Special Flood Hazard. Means the land in the floodplain within a community subject to a one percent (1%) or greater chance of flooding in any given year. The area may be designated as Zone A on the Flood Hazard Boundary Map (FHBM). After detailed ratemaking has been completed in preparation for publication of the flood insurance rate map, Zone A usually is refined into Zones A, AO, AH, A1-30, AE, A99, AR, AR/A1-30, AR/AE, AR/AO, AR/AH, AR/A, VO, or V1-30, VE, or V. For purposes of these regulations, the term "special flood hazard area" is synonymous in meaning with the phrase "area of special flood hazard".
- .04 Bankfull Stage. As defined in the Oregon Administrative Rules pertaining to removal/fill permits, the stage or elevation at which water overflows the natural banks of a stream or other waters of the state and begins to inundate upland areas. In the absence of physical evidence, the two-year recurrent flood elevation (storm level) may be used to approximate the bankfull stage. The bankfull stage is the starting point for measuring the width of a vegetation corridor from a protected water feature. In the absence of any data to establish the bankfull stage or two-year storm event, the starting point for measuring the vegetation corridor is determined by the following indicators:
- a. Water marks on fixed objects (vegetation, rocks, buildings, etc.);
 - b. Drift lines (deposited waterborne twigs, litter, etc.); or
 - c. Waterborne sediment deposits on the soil surface or fixed objects (vegetation, rocks, buildings, etc.)
- .05 Base Flood. A flood having a one percent (1%) chance of being equaled or exceeded in any given year.
- .06 Base Flood Elevation. The water surface elevation during the Base Flood in relation to a specified datum. The Base Flood Elevation (BFE) is depicted on the Flood Insurance Rate Map to the nearest foot and in the Flood Insurance Study to the nearest one-tenth (0.1) foot. Not every potential Special Flood Hazard Area within the Urban Growth Boundary has been mapped by the Federal Emergency Management Agency through the



- Flood Insurance Study, Flood Insurance Rate Maps, and Digital Flood Insurance Rate Maps. The Floodplain Manager or designee is authorized through Section 14.020 to obtain the information necessary to determine the presence and extent of unmapped Special Flood Hazard Areas and the associated Base Flood Elevation as part of reviewing development proposals that affect the 100-year Floodplain. Such information shall be used by the City of Troutdale to supplement the Flood Insurance Study, Flood Insurance Rate Maps, and Digital Flood Insurance Rate Maps.
- .07 Basement. Any area of the building having its floor subgrade (below ground level) on all sides.
- .08 Below-Grade Crawl Space. Means an enclosed area below the base flood elevation in which the interior grade is not more than two feet below the lowest adjacent exterior grade and the height, measured from the interior grade of the crawlspace to the top of the crawlspace foundation, does not exceed four (4) feet at any point.
- .09 Breakaway Wall. Means a wall that is not part of the structural support of the building and is intended through its design and construction to collapse under specific lateral loading forces, without causing damage to the elevated portion of the building or supporting foundation system.
- .10 Conservation Easement. An easement applied to environmentally sensitive lands including, but not limited to, lands identified as hillsides, wetlands, floodplains, and floodways. The field verification shall be done by a licensed surveyor, engineer, hydrologist, or any other licensed specialist in the fields of engineering, hydrology, or botany. A conservation easement prohibits most forms of development and assures that native vegetation will be maintained or enhanced. Conservation easements usually affect privately owned land and are enforceable by the City. Trails and limited public facilities may be permitted under carefully controlled conditions within conservation easements.
- .11 Construction, Start of. (For other than new construction or substantial improvements under the Coastal Barrier Resources Act (Pub. L. 97-348)), includes substantial improvement, and means the date the building permit was issued, provided the actual start of construction, repair, reconstruction, rehabilitation, addition placement, or other improvement was within one hundred eighty (180) days of the permit date. The actual start means either the first placement of permanent construction of a structure on a site, such as the pouring of slab or footings, the installation of piles, the construction of columns, or any work beyond the stage of excavation; or the placement of a manufactured home on a foundation. Permanent construction does not include land preparation, such as clearing, grading and filling; nor does it include the installation of streets and/or walkways; nor does it include excavation for a basement, footings, piers, or foundations or the erection of temporary forms; nor does it include the installation on the property of accessory buildings, such as garages or sheds not occupied as dwelling units or not part of the main structure. For a substantial improvement, the actual start of construction means the first alteration of any wall, ceiling, floor, or other structural part of a building, whether or not that alteration affects the external dimensions of the

building.

- .12 Critical Facility. A facility that is critical for the health and welfare of the population and is especially important to be located above the Base Flood Elevation following hazard events. The following is the list of Critical Facilities for the purposes of Chapter 14:
- a. Hospitals and other medical facilities having surgery and emergency treatment areas;
 - b. Fire and police stations;
 - c. Tanks or other structures containing, housing or supporting water or fire-suppression materials or equipment required for the protection of essential or hazardous facilities or special occupancy structures. These tanks or other structures do not include City water distribution facilities;
 - d. Emergency vehicle shelters and garages;
 - e. Structures and equipment in emergency-preparedness centers;
 - f. Standby power generating equipment for essential facilities;
 - g. Structures and equipment in government communication centers and other facilities required for emergency response; and
 - h. Other facilities as determined by the Floodplain Manager or designee.

Some types of facilities may be critical to a community, but require location within or partially within Special Flood Hazard Areas because of the nature of the facilities.

- .13 Debris. Debris includes discarded manmade objects and may include tires, vehicles, litter, scrap metal, construction waste, lumber, plastic, or styrofoam. Debris does not include objects necessary to a use allowed by this Code, or ornamental and recreational structures. Debris does not include existing natural plant materials or natural plant materials which are left after flooding, downed or standing dead trees, or trees which have fallen into protected water features.
- .14 Department of Environmental Quality (DEQ) Water Quality Standards. State of Oregon DEQ water quality standards are the numerical criteria or narrative condition needed in order to protect an identified beneficial use.
- .15 Design Flood Elevation. The elevation of the 100-year storm as defined in the Federal Emergency Management Agency Flood Insurance Studies or, in areas without Federal Emergency Management Agency floodplains, the elevation of the 25-year storm or the edge of mapped flood-prone soils or similar methodologies.

- .16 Developer. The owners of property, their agents or contractors, or their successors and assigns, who have undertaken or are proposing development which is regulated by Sections 4.300, 5.600, 5.700, and Chapter 14 of this Code.
- .17 Development. Any man-made change to improved or unimproved real estate, including but not limited to buildings or other structures, mining, dredging, filling, grading, paving, excavation or drilling operations or storage of equipment or materials. 
- .18 Digital Flood Insurance Rate Map. Depicts flood risk and federal flood zones and flood risk information. The Digital Flood Insurance Rate Map (DFIRM) presents the flood risk information in a format suitable for electronic mapping applications.
- .19 Disturb. Any manmade changes to the existing physical status of the land which are made in connection with development.
- .20 Elevated Building. Means for insurance purposes, a non-basement building which has its lowest elevated floor raised above ground level by foundation walls, shear walls, post, piers, pilings, or columns.
- .21 Elevation Certificate. A form supplied by the Federal Emergency Management Agency (FEMA) and used to document the lowest floor elevation of a building.
- .22 Emergency. Any manmade or natural event or circumstance causing or threatening loss of life, injury to person or property, and includes, but is not limited to, fire, explosion, flood, severe weather, drought, earthquake, volcanic activity, spills or releases of oil or hazardous material, contamination, utility or transportation disruptions, and disease.
- .23 Engineer. A registered professional engineer licensed by the State of Oregon.
- .24 Enhancement. The process of improving upon the natural functions and/or values of an area or feature which has been degraded by human activity. Enhancement activities may or may not return the site to a pre-disturbance condition, but create/recreate processes and features that occur naturally.
- .25 Erosion. Erosion is the detachment and movement of soil particles, rock fragments, or other material, organic or inorganic, resulting from actions of water, wind, human, or animal activity.
- .26  Erosion Hazard Zone. The area adjacent to a stream or river that is at risk of bank erosion from stream flow or mass wasting, as designated on the communities FIRM.
- .27 Erosion Prevention and Sediment Control Plans. Plan requirements are specified in the City of Troutdale's Construction Standards for Public Works Facilities.
- .28 Erosion, Visible or Measurable. Visible or measurable erosion includes, but is not limited to:

- a. Deposits of mud, dirt sediment, or similar material exceeding one-half cubic foot in volume on public or private streets, adjacent property, or onto the storm and surface water system, either by direct deposit, dropping discharge, or as a result of the action of erosion.
 - b. Evidence of concentrated flows of water over bare soils, turbid or sediment laden flows, or evidence of onsite erosion such as rivulets on bare soil slopes where the flow of water is not filtered or captured on the site.
 - c. Earth slides, mudflows, earth sloughing, or other earth movement that leaves the property.
- .29 Excavation. Any act by which soil or rock is cut into, dug, quarried, uncovered, removed, displaced, or relocated.
- .30 Existing Building or Structure. A structure for which the Start of Construction commenced before February 1, 2019.
- .31 Federal Emergency Management Agency (FEMA). The agency with the overall responsibility for administering the National Flood Insurance Program.
- .32 Fill. Any material such as, but not limited to, sand, soil, rock, gravel, clay, or mud that is placed on a site for the purposes of development or redevelopment.
- .33 FIRM. See Flood Insurance Rate Map.
- .34 Flood or Flooding. Means:
- a. A general and temporary condition of partial or complete inundation of normally dry land areas from:
 - 1. The overflow of inland or tidal waters.
 - 2. The unusual and rapid accumulation or runoff of surface waters from any source.
 - 3. Mudslides (i.e., mudflows) which are proximately caused by flooding as defined in paragraph (a)(2) of this definition and are akin to a river of liquid and flowing mud on the surfaces of normally dry land areas, as when earth is carried by a current of water and deposited along the path of the current.
 - b. The collapse or subsidence of land along the shore of a lake or other body of water as a result of erosion or undermining caused by waves or currents of water exceeding anticipated cyclical levels or suddenly caused by an unusually high

water level in a natural body of water, accompanied by a severe storm, or by an unanticipated force of nature, such as flash flood or an abnormal tidal surge, or by some similarly unusual and unforeseeable event which results in flooding as defined in paragraph (a)(1) of this definition.

- .35 Flood Insurance Rate Map (FIRM). An official map of a community, on which the Federal Insurance Administrator has delineated both the special hazard areas and the risk premium zones applicable to the community.
- .36 Flood Insurance Study (FIS). Or flood elevation study means an examination, evaluation and determination of flood hazards and, if appropriate, corresponding water surface elevations, or an examination, evaluation and determination of mudslide (i.e., mudflow) and/or flood-related erosion hazards.
- .37 Flood Management Area (FLMA). All lands contained within the 100-year floodplain and floodway as shown on the Flood Insurance Rate Map, and the area of inundation for the February 1996 flood. In addition, all lands which have documented evidence of flooding.
- .38 Floodplain. As shown below in Figure 1 - Floodplain Cross Section, the area adjacent to a stream or river channel that is covered by water when the river or stream overflows its banks.
- .39 Floodplain Development Permit. Federally required permit required prior to construction and other development in any Special Flood Hazard Area (100-yr. Floodplain). See Section 14.035 of this Code.
- .40 Floodplain Functions. Hydrological and ecological functions including conveyance and temporary storage of floodwater, depositions of sediments outside of the channel, ground water recharge, filtering of pollutants, and reduction of floodwater velocity and erosive forces. Also included, but to a lesser extent in previously urbanized areas, are such functions as nutrient exchange, refuges, and feeding areas for fish.
- .41 Floodplain, 100-Year. As shown below in Figure 1 - Floodplain Cross Section, land area adjacent to a river, stream, or other water body that is subject to a one percent or greater chance of flooding in any given year. It consists of land ranging from that which is subject to annual flooding to that which has a one percent (1%) or greater chance of flooding in any given year. The 100-year Floodplain consists of the Floodway and the Floodway Fringe. The 100-year Floodplain is mapped by the Federal Emergency Management Agency (FEMA) on Flood Insurance Rate Maps (FIRMs) and is the area subject to Base Flood regulations. Not every potential Special Flood Hazard Area within the Urban Growth Boundary has been mapped by the Federal Emergency Management Agency through the Flood Insurance Study, Flood Insurance Rate Maps, and Digital Flood Insurance Rate Maps. The Floodplain Manager or designee is authorized through Section 14.020 to obtain the information necessary to determine the presence and extent of unmapped Special Flood Hazard Areas as part of reviewing development proposals

that affect the 100-year Floodplain. Such information shall be used by the City of Troutdale to supplement the Flood Insurance Study, Flood Insurance Rate Maps, and Digital Flood Insurance Rate Maps and these areas are also subject to Base Flood regulations. See Base Flood.

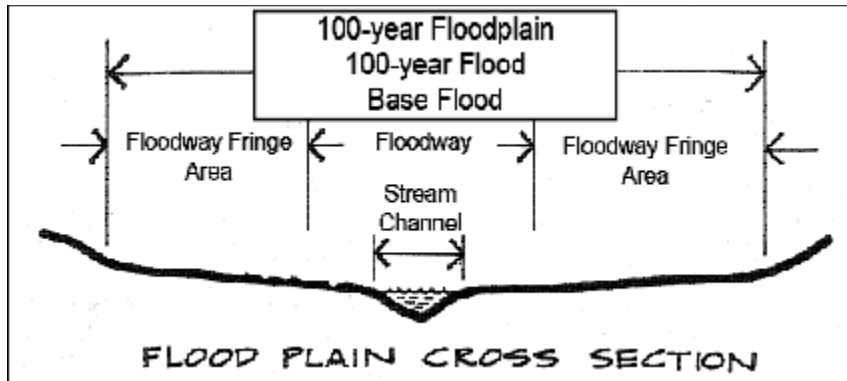


Figure 1 – Floodplain Cross Section

- .42 Floodway (Regulatory Floodway). Means the channel of a river or other watercourse and the adjacent land areas that must be reserved in order to discharge the base flood without cumulatively increasing the water surface elevation more than a designated height..
- .43 Flow-through Design. Typically a structure that does not displace surface floodwater or hinder or obstruct the movement of surface floodwater.
- .44 High Hazard Zone. Lands within the furthest landward extent of the floodway and erosion hazard zone, as designated on the communities FIRM.
- .45 Highest Adjacent Grade (HAG). The highest natural elevation of the ground surface prior to construction, adjacent to the proposed walls of a structure. Refer to the Elevation Certificate, FEMA Form 81-31, for more information.
- .46 Hydrodynamic Load. Force of water in motion.
- .47 Hydrostatic Load. Force of water at rest.
- .48 Invasive Non-native or Noxious Vegetation. Plant species that are listed as nuisance plants or prohibited plants on the most recent Portland Plant List as adopted by the City of Portland by ordinance because they are plant species that have been introduced and, due to aggressive growth patterns and lack of natural enemies in the area where introduced, spread rapidly into native plant communities.
- .49 Joint Fill Permit/404 Removal/Fill Permit. A permit issued jointly by the Oregon Department of State Lands and U.S. Army Corps of Engineers to allow, with conditions and mitigation, the removal or fill of wetlands determined to be of either local or state significance by the Oregon Department of State Lands.

- .50 Letter of Map Change (LOMC). An official FEMA determination, by letter, to amend or revise effective Flood Insurance Rate Maps and Flood Insurance Studies. LOMCs are issued in the following categories:
- a. Letter of Map Amendment (LOMA) - A revision based on technical data showing that a property was incorrectly included in a designated Special Flood Hazard Area. A LOMA amends the current effective Flood Insurance Rate Map and establishes that a specific property is not located in a Special Flood Hazard Area.
 - b. Letter of Map Revision (LOMR) - A revision based on technical data showing, usually due to manmade changes, alterations to Federal Flood Zones, flood elevations floodplain and floodway delineations, and planimetric features. One common type of LOMR, a LOMR-F, is a determination that a structure has been elevated through the placement of fill above the Base Flood Elevation and is excluded from the Special Flood Hazard Area.
 - c. Conditional Letter of Map Revision (CLOMR) - A formal review and comment by FEMA as to whether a proposed project complies with the minimum National Flood Insurance Program floodplain management criteria. A CLOMR does NOT amend or revise effective Flood Insurance Rate Maps, Flood Boundary and Floodway Maps, or Flood Insurance Studies.
- .51 Lowest Floor. Means the lowest floor of the lowest enclosed area (including basement). An unfinished or flood resistant enclosure, usable solely for parking of vehicles, building access or storage in an area other than a basement area is not considered a building's lowest floor. Provided that such enclosure is not built so as to render the structure in violation of the applicable non-elevation design requirements of CFR Sec. 60.3.
- .52 Manufactured Dwelling. Means a structure, transportable in one or more sections, which is built on a permanent chassis and is designed for use with or without a permanent foundation when attached to the required utilities. The term “manufactured dwelling” does not include a “recreational vehicle.”
- .53 Manufactured Dwelling Park or Subdivision. Means a parcel (or contiguous parcels) of land divided into two or more manufactured home lots for rent or sale
- .54 Mean Sea Level. For purposes of the National Flood Insurance Program, the North American Vertical Datum of 1988 or other Datum, to which Base Flood Elevations shown on a community's FIRM are referenced.
- .55 Mitigation. The reduction of adverse effects of a proposed project by considering, in this order:
- a. Avoiding the impact altogether by not taking a certain action or parts of an action;

- b. Minimizing impacts by limiting the degree or magnitude of the action and its implementation;
 - c. Rectifying the impact by repairing, rehabilitating, or restoring the effected environment;
 - d. Reducing or eliminating the impact over time by preservation and maintenance operations during the life of the action by monitoring and taking appropriate measures; and
 - e. Compensating for the impact by replacing or providing comparable substitute water quality resource areas.
- .56 Mulch. Application of plant residue, netting, or other suitable materials to the land surface to conserve moisture, hold soil in place, and aid in establishing plant cover.
- .57 NAVD 88. The North American Vertical Datum of 1988 (NAVD 88) is the vertical control datum established in 1991 by the minimum-constraint adjustment of the Canadian-Mexican-U.S. leveling observations. This is the data used on FIRMs and in flood insurance studies adopted in 2009.
- .58 NGVD 29. “The National Geodetic Vertical Datum of 1929: The name, after May 10, 1973, of (the) Sea Level Datum of 1929.” (Vertical control datum established for vertical control in the United States by the general adjustment of 1929.) This is the datum used on FIRMs and in flood insurance studies prior to 2009.
- .59 National Flood Insurance Program (NFIP). A federal program enabling property owners in participating communities to purchase insurance as a protection against flood losses in exchange for state and community floodplain management regulations that reduce future flood damages.
- .60 Native Vegetation or Native Plant. Vegetation listed as a native plant on the most recent Portland Plant List as adopted by the City of Portland by ordinance and any other vegetation native to the Portland metropolitan area provided that it is not listed as a nuisance plant or a prohibited plant on the Portland Plant List.
- .61 National Wetland Inventory (NWI) Map. The City is mapped on the Camas and Washougal, Washington-Oregon wetland maps prepared by the U.S. Department of the Interior, Fish and Wildlife Service.
- .62 New Construction. A structure for which the Start of Construction commenced after February 1, 2019, and includes subsequent Substantial Improvements to the structure
- .63 NPDES Permit. The National Pollutant Discharge Elimination System 1200-C Permit is a State of Oregon Department of Environmental Quality permit that covers federal stormwater regulations as they pertain to construction activities in Oregon. The permit is

- administered by the City.
- .64 ODFW Construction Standards. The Oregon Department of Fish and Wildlife construction guidelines for building roads, bridges, and culverts, or any transportation structure within a waterway.
 - .65 One Percent Annual Chance Flood. The flood that has a one percent (1%) chance of being equaled or exceeded on the average in any given year; equivalent to the 100-year flood.
 - .66 Open Space. Land that is undeveloped and that is planned to remain so indefinitely. The term encompasses parks, forests, and farmland. It may also refer only to land zoned as being available to the public, including playgrounds, watershed preserves, and parks.
 - .67 Perennial Streams. All primary and secondary perennial waterways mapped by the U.S. Geological Survey, having year-round flow.
 - .68 Practicable. Available and capable of being done after taking into consideration cost, existing technology, and logistics in light of overall project purpose.
 - .69 Pre-FIRM Structures. Buildings that were built before the flood risk was known and identified on the community's FIRM.
 - .70 Protected Water Features, Primary. Includes:
 - a. Title 3 wetlands.
 - b. Rivers, streams (creeks or brooks) and drainages downstream from the point at which one hundred (100) acres or more are drained to that water feature (regardless of whether it carries year-round flow).
 - c. Streams carrying year-round flow.
 - d. Springs which feed streams and wetlands and have perennial (year-round) flow.
 - e. Natural lakes.
 - .71 Protected Water Features, Secondary. Includes intermittent streams and seeps downstream of the point at which fifty (50) acres are drained and upstream of the point at which one hundred (100) acres are drained to that water feature.
 - .72 Restoration. The process of returning a disturbed or altered area or feature to a previously existing natural condition. Restoration activities reestablish the structure, function, and/or diversity to that which occurred prior to impacts caused by human activity.
 - .73 Recreational Vehicle (RV). A vehicle which is:

- a. Built on a single chassis;
 - b. Four hundred (400) square feet or less when measured at the largest horizontal projection;
 - c. Designed to be self-propelled or permanently towable by a light duty truck; and
 - d. Designed primarily not for use as a permanent dwelling but as temporary living quarters for recreational, camping, travel, or seasonal use.
- .74 Resource. A functioning natural system such as a wetland or stream.
- .75 Riparian. Those areas associated with streams, lakes, and wetlands where vegetation communities are predominately influenced by their association with water.
- .76 Routine Repair and Maintenance. Activities directed at preserving an existing allowed use or facility, or nonconforming use, without expanding the development footprint or site use.
- .77 Sediment. Any material that is in suspension, is being transported, or has been moved from its site of origin by water, wind, or gravity as a result of erosion.
- .78 Site. The lot, or contiguous lots, under the same ownership that are subject to a development permit or erosion control plan.
- .79 Slope District. Slopes of twenty-five percent (25%) or greater throughout the City that have a minimum horizontal distance of fifty (50) feet. Engineered slopes associated with public streets or roads are not included.
- .80 Special Flood Hazard Area (SFHA). The land in the floodplain within a community subject to a one percent (1%) or greater chance of flooding in any given year. The area may be designated as Zone A on the FHBM (Flood Hazard Boundary Map). After detailed ratemaking has been completed in preparation for publication of the flood insurance rate map, Zone A usually is refined into Zones A, AO, AH, A1-30, AE, A99, AR, AR/A1-30, AR/AE, AR/AO, AR/AH, AR/A, VO, or V1-30, VE, or V. For purposes of these regulations, the term “special flood hazard area” is synonymous in meaning with the phrase “area of special flood hazard”.
- .81 Statewide Planning Goal 5. Oregon’s statewide planning goal that addresses open space, scenic and historic areas, and natural resources. The purpose of the goal is to conserve open space and protect natural and scenic resources.
- .82 Statewide Planning Goal 6. Oregon’s statewide planning goal that addresses air, water, and land resources quality to “maintain and improve the quality of the air, water, and land resources of the state” as implemented by the Land Conservation and Development

Commission (LCDC).

- .83 Statewide Planning Goal 7. Oregon’s statewide planning goal that addresses areas subject to natural disasters and hazards to “protect life and property from natural disasters and hazards” as implemented by the Land Conservation and Development Commission.
- .84 Stockpile. Onsite storage of any soil, sand, gravel, clay, mud, debris, vegetation, refuse, or any other material, organic or inorganic, in a concentrated state.
- .85 Stream. A body of running water moving over the earth’s surface in a channel or bed, such as a creek, rivulet, or river, that flows at least part of the year, including perennial and intermittent streams. Streams are dynamic in nature and their structure is maintained through build-up and loss of sediment.
- .86 Stream Bank, Top of. See Bankfull Stage.
- .87 Structure. Means, for floodplain management purposes, a walled and roofed building, including a gas or liquid storage tank, that is principally above ground, as well as a manufactured home. Structure, for insurance purposes, means:
- a. A building with two or more outside rigid walls and a fully secured roof that is affixed to a permanent site;
 - b. A manufactured dwelling; or
 - c. A travel trailer without wheels, built on a chassis and affixed to a permanent foundation, that is regulated under the community's floodplain management and building ordinances or laws.
- For the latter purpose, structure does not mean a recreational vehicle or a park trailer or other similar vehicle, except as described in Section 1.040.87(c), or a gas or liquid storage tank.
- .88 Substantial Damage. Damage of any origin sustained by a structure located within the 100-year Floodplain, whereby the cost of restoring the structure to its prior condition would equal or exceed fifty percent (50%) of the structure's market value before the damage occurred.
- .89 Substantial Improvement. Means any reconstruction, rehabilitation, addition, or other improvement of a structure, the cost of which equals or exceeds forty-nine percent (49%) of the market value of the structure before the start of construction of the improvement. This term includes structures which have incurred substantial damage, regardless of the actual repair work performed. The term does not, however, include either:
- a. Any project for improvement of a structure to correct existing violations of state or local health, sanitary, or safety code specifications which have been identified

by the local code enforcement official and which are the minimum necessary to assure safe living conditions; or,

- b. Any alteration of a historic structure, provided that the alteration will not preclude the structure's continued designation as a historic structure.
- .90 Surface Water Management System. All natural and constructed facilities used to regulate the quantity and quality of surface water, including drainage easements, culverts, storm drains, catch basins, drainage ditches, natural drainageways, stream corridors, rivers, ponds, wetlands, and impoundments.
- .91 Title 3. Title 3 is part of the Metro Urban Growth Management Functional Plan pertaining to water quality, flood management, and fish and wildlife conservation, and directly pertains to Statewide Planning Goals 5, Open Spaces, Scenic and Historic Areas, and Natural Resources; 6, Air, Water, and Land Resources Quality; and 7, Areas Subject to Natural Disasters and Hazards.
- .92 Variance. Means a grant of relief by a community from the terms of a floodplain management regulation.
- .93 Vegetation, Approved. Vegetation which typically does not require irrigation or fertilization because it is adapted to natural soil, water, and climatic conditions. The list of approved vegetation species is based on the most recent Portland Plant List as adopted by the City of Portland by ordinance, and is on file in the Community Development Department.
- .94 Vegetation Corridor. The undisturbed area between a development and a protected water feature as designated in Sections 4.316, Width of Vegetation Corridor, and 4.317, Method for Determining Vegetation Corridors Next to Primary Protected Water Features, of this Code, or slopes of twenty-five percent (25%) or greater throughout the City, except engineered slopes associated with public streets or roads.
- .95 Vegetation, Invasive, Non-Native, or Noxious. Plant species that have been introduced and due to aggressive growth patterns and lack of natural enemies in the area where introduced, spread rapidly into native plant communities, or which are not listed on the most recent Portland Plant List as adopted by the City of Portland by ordinance.
- .96 Vegetation, Native. Any vegetation native to the Portland Metropolitan Area or listed on the Portland Plant List as adopted by the City of Portland by ordinance.
- .97 Water-dependent. A structure for commerce or industry which cannot exist in any other location and is dependent on the water by reason of the intrinsic nature of its operations.
- .98 Water Features. See Protected Water Features, primary and secondary.
- .99 Water Quality Facility. A created or constructed structure or drainageway that is

- designed, constructed, and maintained to collect, filter, retain, or detain surface water runoff during and after a storm event for the purpose of stormwater management and water quality improvement. The facility may take on characteristics of a wetland, but it does not become a resource.
- .100 Watershed. A geographic unit defined by the flows of rainwater or snowmelt. All land in a watershed drains to a common outlet, such as a stream, lake, or wetland.
- .101 Water Surface Elevation. The height, in relation to a specific datum, of floods of various magnitudes and frequencies in the floodplains of coastal or riverine areas.
- .102 Wetlands. Areas inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, and similar areas. Wetlands are those areas identified and delineated by qualified wetland specialists as set forth in the 1987 Corps of Engineers Wetland Delineation Manual.
- a. Wetland determinations. The identification of an area as either wetland or non-wetland.
 - b. Wetlands, constructed. Wetlands developed as a water quality or quantity facility, subject to change and maintenance as such. These areas must be clearly defined and/or separated from naturally occurring or created wetlands.
 - c. Wetlands, created. Those wetlands developed in an area previously identified as a non-wetland to replace or mitigate wetland destruction or displacement. A created wetland shall be regulated and managed the same as an existing wetland.
 - d. Wetlands, Title 3. Wetlands of metropolitan concern as shown on the Metro Water Quality and Flood Management Overlay District Map and other wetlands not mapped but determined significant by the Oregon Department of State Lands, consistent with the criteria in Title 3, Section 7.C. of the Metro Urban Growth Management Functional Plan. Title 3 wetlands include created wetlands approved and monitored by the Oregon Department of State Lands and U.S. Army Corps of Engineers. Title 3 wetlands do not include artificially constructed and managed stormwater and water quality treatment facilities.

2.220 Expiration of a Decision.

- A. Except as otherwise specifically provided in a specific decision or in this Code, a final decision on a Type I, II or III application made pursuant to this Code shall expire automatically on the following schedule unless the approval is enacted either through construction, establishment of use, or recordation of plat or survey within the specified time period.
1. No expiration date:
 - a. Comprehensive Plan Text Amendment (6.100)
 - b. Comprehensive Plan Map Amendment (6.200)
 - c. Director's Interpretation (Section 6.400)
 - d. Text Amendment (Section 6.1100)
 - e. Vacation (Section 6.1200)
 - f. Zoning Map Amendment (Section 6.1400)
 2. Five (5) years from the effective date of decision where phasing of the development is proposed.
 - a. Planned Unit Development (Section 6.700)
 - b. Preliminary Subdivision (Section 7.030.B)
 3. Two (2) years from the effective date of decision:
 - a. Alteration to a Historic Landmark (Section 6.515.C.)
 - b. Conditional Use (Section 6.300)
 - c. Demolition or Relocation of a Historic Landmark (Section 6.515.D.)
 - d. Expansion of a Non-Conforming Structure or Development (Section 6.615.C.)
 - e. Expansion of a Non-Conforming Use - Major (Section 6.615.B.)
 - f. Expansion of a Non-Conforming Use - Minor (Section 6.615.A.)
 - g. Historic Landmark Designation (Section 6.515.A.)
 - h. Planned Unit Development (Section 6.700), when there is no phasing to the development.
 - i. Preliminary Partition (Section 7.030.A)
 - j. Property Line Adjustment (Section 7.180)
 - k. Removal of a Historic Landmark Designation (Section 6.515.B.)
 - l. Site Development Review (Section 6.900)
 - m. Variance (Section 6.1300)
 4. One (1) year from the effective date of the decision:
 - a. Temporary Structure (Section 6.1000)

5. One hundred eighty (180) days from the effective date of the decision:
 - a. Floodplain Development (Section 14.035), if construction has not started.
 6. Any final decision that is not listed herein shall expire within two (2) years from the effective date of the decision.
- B. The effective date of the decision for Type I, Type II, or Type III applications shall be the date that the signed land use order is dated and mailed, unless appealed. If a Type I, Type II, or Type III application is appealed, the effective date of the decision shall be the date of the appellate decision making authority's signed land use order is dated and mailed. The effective date of decision for a Type IV application is thirty (30) days after the Mayor signs the ordinance, unless an emergency is declared in which case the ordinance is effective immediately upon signature of the Mayor.
- C. A decision shall expire according to Section 2.220.A. unless one of the following occurs prior to the date of expiration:
1. An application for an extension is filed pursuant to Section 2.225; or
 2. The development authorized by the decision has commenced as defined herein.
 - a. The use of the subject property has changed as allowed by the approval; or
 - b. In the case of development requiring construction, a construction permit has been issued and substantial construction pursuant thereto has taken place.
 - c. The approval time begins from the effective date of a decision. Appeal of a decision to LUBA does not extend the time.

2.225 Extension of a Decision.

- A. An application to extend the expiration date of a decision made pursuant to this Code may be filed only before the decision expires as provided in Section 2.220.
- B. A land use decision may be extended no more than two (2) times.
- C. Requests for extension of a decision shall be as follows:
 1. The first request for extension shall follow the Type II process.
 2. The second request for extension shall follow the Type III process.
- D. Extension requests shall provide mailed public notice to those parties identified in Section 2.085. In addition, the notice shall be mailed to the parties of record contained in the initial land use decision and any prior extension of time decision.

4.500 FLOOD MANAGEMENT AREA**FLMA**

- 4.500 Repeal. Ordinance 851 repealed this Section in its entirety and relocated the Flood Management Area standards previously contained in this Section to Chapter 14 of this Code.

Chapter 14 – Flood Management

- 14.005 Purpose. Without establishing any priority, the purpose of this Chapter is to promote the public health, safety, and general welfare, and to minimize public and private losses due to flood conditions or degradation of water quality in specific areas by provisions designed to:
- A. Protect human life, health, and property in areas subject to periodic flooding;
 - B. Implement the Floodplain requirements of Statewide Planning Goal 7 - which relates to areas subject to natural disasters and hazards;
 - C. Through floodplain regulation, contribute to the properly functioning condition of streams and rivers and address, in part, the water quality aspects of Statewide Planning Goal 6;
 - D. Implement requirements for the City's participation in the National Flood Insurance Program, and voluntary participation in the Community Rating System;
 - E. Implement the actions derived from the Multnomah County Hazard Mitigation Plan to minimize the risk of natural hazards, such as flooding, to people and property;
 - F. Ensure continuity of City services, access to City facilities, and minimal prolonged business interruptions during times of flood;
 - G. Manage stormwater drainage in a manner that:
 - 1. Maintains the properly functioning conditions of waterways;
 - 2. Provides for the conveyance and temporary storage of floodwater;
 - 3. Reduces floodwater velocity;
 - 4. Facilitates sediment deposition in the floodplain;
 - 5. Provides an opportunity for groundwater recharge; and
 - 6. Promotes other stormwater and floodplain functions.
- These provisions are also intended to minimize maintenance costs, eliminate potential hazards before they occur, and protect properties and persons adjacent to drainageways and to other natural hazard areas;
- H. Minimize damage to public facilities and utilities, such as water purification and sewage treatment plants, water and gas mains, electric, telephone and sewer lines, streets, and bridges located in floodplains;

- I. Help maintain a stable tax base by providing for sound use and development;
- J. Ensure that potential buyers are notified that property is in an area of special flood hazard;
- K. Compel those who occupy the areas of special flood hazard assume responsibility for their actions;
- L. Maintain and improve water quality;
- M. Minimize erosion and loss of native vegetation;
- N. Maintain wetlands, including swamps, marshes, bogs, and similar areas within the City, because wetlands help to maintain water quality and flood storage capacities;
- O. Avoid any increase in base flood elevations as a result of development;
- P. Minimize expenditure of public money for costly flood control projects;
- Q. Minimize the need for rescue and relief efforts associated with flooding and generally undertaken at the expense of the general public;
- R. Reduce flood losses and maintain water quality. In order to accomplish its purpose, this Chapter includes methods and provisions to:
 - 1. Require that development that is vulnerable to floods, including buildings, structures, and facilities necessary for the general health, safety and welfare of citizens, be protected against flood damage at the time of initial construction;
 - 2. Restrict or prohibit uses which are dangerous to health, safety and property due to water or erosion hazards, or which increase flood heights, velocities, or erosion;
 - 3. Control filling, grading, dredging and other development which may increase flood damage or erosion;
 - 4. Prevent or regulate the construction of flood barriers that will unnaturally divert flood waters or that may increase flood hazards on other lands;
 - 5. Preserve and restore natural floodplains, stream channels, and natural protective barriers which carry and store flood waters, and;
 - 6. Coordinate with and supplement provisions of Oregon Building Codes.
- S. To advance these purposes, where not required, creation of open space tracts is encouraged within areas designated as natural hazards on the Comprehensive Plan and official zoning maps.

14.010 Applicability.

- A. These provisions shall apply to public and private properties in the one percent (1%) annual chance of flood floodplain (100-year floodplain or Special Flood Hazard Area) as mapped by the Federal Insurance Administrator of rivers and local streams within the planning jurisdiction of the City of Troutdale, which includes land in unincorporated Multnomah County within the City’s Urban Planning Area.
- B. The areas of special flood hazard identified by the Federal Insurance Administrator in a scientific and engineering report entitled “The Flood Insurance Study for Multnomah County, Oregon and Incorporated Areas of Multnomah County”, with accompanying Flood Insurance Rate Maps, are hereby adopted by reference and declared to be a part of this ordinance. The Flood Insurance Study is on file at the Community Development Department located at 2200 SW 18th Way, Troutdale, OR 97060 (storage location subject to change, consult the Floodplain Manager for current file storage location). Metro, a regional metropolitan planning agency representing portions of Clackamas, Multnomah, and Washington Counties, mapped the flood hazard areas from areas inundated by flooding in 1996 on the Title 3 map. The Title 3 maps are adopted for reference only. Not every Special Flood Hazard Area has been mapped by the Federal Insurance Agency through the Flood Insurance Study and Flood Insurance Rate Maps cited above. The Floodplain Administrator or designee is authorized through Sections 14.020 to obtain from applicants the information necessary to determine the presence and extent of unmapped Special Flood Hazard Areas as part of reviewing development proposals that affect the floodplain. Once approved by the Floodplain Administrator or designee, such information shall be incorporated into the Natural Hazards Map and used by the City of Troutdale to supplement the Flood Insurance Study, Flood Insurance Rate Maps, and Digital Flood Insurance Rate Maps cited above to ensure consistency with the floodplain regulations contained in this Chapter. Contested base flood elevations are to be reviewed under the provisions of Subsection 14.020.D of this Chapter. The City will keep a record of all surveys, delineations, and any Letter of Map Change (LOMC) approved by the Federal Emergency Management Agency, as revisions to the local copy of the Title 3 map. The City will submit this information to Metro for future updates of the Title 3 map.
- C. Warning and Disclaimer of Liability. The degree of flood protection required by this Chapter is considered reasonable for regulatory purposes and is based on scientific and engineering considerations. Larger floods can and will occur on rare occasions. Flood heights may be increased by manmade or natural causes. This Code does not imply that land or uses will be free from flooding or flood damage. This Code shall not create liability on the part of the City, any officer or employee thereof, or the Federal Insurance Administrator, for any damages that result from reliance on this Code or any administrative decision lawfully made hereunder.

14.015 Severability. The standards of this Chapter are subject to the severability standards as described in Section 17.100 of this Code.

14.020 Administration and Interpretation of Flood Insurance Rate Map Boundaries and Flood Management Area Standards.

- A. The Community Development Director shall designate a Floodplain Manager to be the Local Administrator of this Chapter. The Floodplain Manager shall implement the provisions and standards of the National Flood Insurance Program, the standards of this Chapter, and make interpretations, where needed, including determinations regarding the exact location of the boundaries of the Special Flood Hazard Area (for example, where there appears to be a conflict between a mapped boundary and actual field conditions) by granting or denying Floodplain Development Permit applications in accordance with its provisions. In the interpretation and application of this Chapter, all provisions shall be:
1. Considered as minimum requirements;
 2. Liberally construed in favor of the governing body;
 3. Judged by established historical facts of flooding as known by, or made known to, the governing body;
 4. Deemed neither to limit nor repeal any other powers granted under State statutes; and
 5. Defined in Section 1.040 of this Code.
- B. Duties and Responsibilities of the Floodplain Manager. Duties of the Floodplain Manager shall include, but not be limited to:
1. Review all Floodplain Development Permits to determine that the permit requirements of this ordinance have been satisfied.
 2. Review all Floodplain Development Permits to determine that all necessary permits have been obtained from those Federal, State, or local governmental agencies from which prior approval is required.
 3. Review all Floodplain Development Permits to determine if the proposed development is located in the floodway. If located in the floodway, assure that the encroachment provisions of this Chapter are met.
 4. When base flood elevation data has not been provided (A Zones) in accordance with Section 14.010 of this Chapter, the Floodplain Manager shall obtain, review, and reasonably utilize any base flood elevation and floodway data available from a Federal, State or other source, in order to administer Section 14.040 of this Chapter.
 5. Where base flood elevation data is provided through the Flood Insurance Study, FIRM, or required as in Section 14.020.C, obtain and record the actual elevation

(in relation to mean sea level) of the lowest floor (including basements and below-grade crawlspaces) of all new or substantially improved structures, and whether or not the structure contains a basement.

6. For all new or substantially improved floodproofed structures where base flood elevation data is provided through the Flood Insurance Study, FIRM, or as required in Section 14.020.C, the administrator shall:
 - a. Verify and record the actual elevation (in relation to mean sea level), and
 - b. Maintain the floodproofing certifications required in Section 14.040 of this Chapter.
7. Maintain for public inspection all records pertaining to the provisions of this ordinance.
8. Notify adjacent communities, the Oregon Department of Land Conservation and Development, and other appropriate state and federal agencies, prior to any alteration or relocation of a watercourse, and submit evidence of such notification to the Federal Insurance Administrator.
9. Require that maintenance is provided within the altered or relocated portion of said watercourse so that the flood carrying capacity is not diminished.
10. Notify FEMA within six (6) months of project completion when an applicant had obtained a Conditional Letter of Map Change from FEMA, or when development altered a watercourse, modified floodplain boundaries, or modified Base Flood Elevations. This notification shall be provided as a Letter of Map Change. The property owner shall be responsible for preparing technical data to support the Letter of Map Change application and paying any processing or application fees to FEMA. The Floodplain Manager shall be under no obligation to sign the Community Acknowledgement Form, which is part of the Conditional Letter of Map Change and Letter of Map Change application, until the applicant demonstrates that the project will or has met the requirements of this Code and all applicable State and Federal laws.
11. Report to FEMA on each development permit issued in the SFHA, including:
 - a. Amount of fill or structural displacement of flood storage, and the amount (in volume and area) of compensatory storage provided;
 - b. Amount of new impervious surface and types and amounts of compensatory mitigation provided;
 - c. The number of trees equal to or greater than six (6) inches in diameter at

breast height removed, and the types and amounts of compensatory mitigation provided;

- d. The area in which clearing and/or grading occurred;
- e. For any project that disconnects or reconnects land to the floodplain, the type of project and amount of land disconnected or reconnected; and
- f. Location of the project and of the corresponding mitigation.

14. Make interpretations where needed, as to exact location of the boundaries of the areas of special flood hazards (for example, where there appears to be a conflict between a mapped boundary and actual field conditions). The person contesting the location of the boundary shall be given a reasonable opportunity to appeal the interpretation as provided in Section 14.055 of this Chapter.

- C. Use of Other Base Flood Data for Permit Review. When base flood elevation data is not available through the Flood Insurance Study, FIRM, or has not been provided in accordance with Section 14.010 of this Chapter, the City may obtain, review, and utilize any reasonable base flood elevation and floodway data available from a federal, state, or other source, in order to assure that proposed development will be reasonably safe from flooding. The test of reasonableness is a local judgment and includes use of historical data, high water marks, photographs of past flooding, etc., where available. Failure to elevate at least two (2) feet above grade in these zones may result in higher insurance rates.
- D. Contested Boundaries. A person contesting the location of the boundary has the opportunity to submit a Letter of Map Change (LOMC) directly to the Federal Emergency Management Agency to change the Flood Insurance Rate Map mapping of their property. If a land use application is submitted before a LOMC is approved by the Federal Emergency Management Agency, the application will be processed under the standards of this Chapter.
- E. Inspections. The Floodplain Manager shall inspect development that is subject to the permit requirements of this Chapter, including buildings and structures exempt from the Building Code. The floodplain administrator shall inspect Special Flood Hazard Areas to determine if development is being undertaken without the issuance of a permit. Annual inspection logs shall be maintained by the Floodplain Manager.

14.025 Uses within the Floodplain but Outside the Floodway and Outside Wetlands.

- A. Prohibited Uses.
 - 1. Any prohibited use in the underlying zoning district.
 - 2. Excavation, fill, or vegetation removal without an approved land use permit.

3. Expansion of legal nonconforming uses.
 4. Uncontained, outside storage areas of hazardous materials for hazardous materials as defined by the State of Oregon Department of Environmental Quality.
 5. No new land divisions will be approved for properties exclusively within the floodplain or that propose to create a buildable lot that is exclusively within the floodplain.
- B. Permitted Uses.
1. Any use permitted in the underlying zoning district, subject to the standards for development outlined in Section 14.040 of this Chapter, including stormwater management facilities developed in accordance with the standards of Section 5.700 of this Code.
 2. Open space, trails, walkways, and bike paths as designated by the Troutdale Parks Plan, or as approved with a land use application and constructed in compliance with Section 4.315.D.
 3. Removal of unauthorized fill.
 4. Removal of nuisance or invasive plant species, and/or the restoration of approved plant species on the City of Portland Plant List as defined in Section 1.040 of this Code.
 5. Removal of dead or dying trees that are an imminent danger to public safety as determined by a certified arborist or the equivalent.
 6. Construction of new roadways and utilities necessary to support permitted development within and outside the Flood Management Area, subject to the standards of Section 14.040 of this Chapter and the Construction Standards on file in the Public Works Department or the applicable jurisdiction of the roadway.
 7. New culverts, stream crossings, and transportation projects may be permitted if designed as balanced cut and fill projects, and in compliance with the standards of Section 14.040 of this Chapter. Such projects shall be designed to minimize the area of fill in Flood Management Areas and to minimize erosive velocities. Stream crossings shall be as close to perpendicular to the stream as practicable. Bridges shall be used instead of culverts wherever practicable.
 8. Excavation and fill required for the construction of detention facilities or structures, and other facilities such as levees specifically designed to reduce or mitigate flood impacts. Levees shall not be used to create vacant buildable land.

9. Temporary bank stabilization or tree and vegetation removal necessitating immediate action during a flood emergency or other emergency to prevent the loss of an existing structure, or to repair a bank damaged during a flood. Following the flood emergency or other emergency, the owner shall submit a Floodplain Development Permit according to Section 14.035.E(1)(b)..
10. Routine repair and maintenance of existing structures (conforming and nonconforming uses), streets, driveways, utilities, culverts, drainageways and levees constructed for flood control, accessory uses, and other existing development on the site (including landscaped yards, decks, patios, boat ramps, etc.).
11. Rehabilitation or replacement of a structure that is damaged or destroyed to any extent, whether it is partially or fully within the Flood Management Area, and in compliance with Section 4.521 of this Chapter. Any structure or use deliberately removed or demolished may not be restored, replaced, or rebuilt, except in compliance with all applicable provisions of this Code, federal, state, and county regulations.
12. Any development that must implement a Federal Aviation Administration (FAA) compliant wildlife hazard management plan on property owned by the Port of Portland or within ten thousand (10,000) feet of an Aircraft Operating Area, as defined by the FAA, and removal of trees that interfere with the landing or takeoff flight path of aircraft at the Troutdale Airport or otherwise interferes with the safe operation of the airport as determined by the Port of Portland. The removal of trees that interfere with the operation of the Troutdale Airport are permitted outright.
13. Wildfire mitigation projects, such as fuels reduction or the creation of defensible space.
14. Removal of refuse as defined in the Troutdale Municipal Code.

14.030 Uses within the Floodway or within Wetlands.

- A. Prohibited Uses within the Floodway or within Wetlands. Unless specifically permitted under this Section, the following uses are prohibited within floodways and wetlands:
 1. Manmade structures.
 2. Vegetation removal, fill, or excavation. Vegetation removal in the floodway in concert with an approved wildfire mitigation project may be permitted subject to review under the standards for development of Section 14.040 of this Chapter.
 3. Private road construction.

4. Alterations and relocations of the watercourses of Arata, Salmon, or Beaver Creeks, the Sandy and Columbia Rivers, or the watercourse of any unnamed perennial or intermittent stream except as provided for in Subsection B(11) of this Section and Section 14.040.O of this Chapter.
 5. Fill of wetlands without both an approved land use application and an approved Joint Fill Permit issued by the Oregon Department of State Lands and the U.S. Army Corps of Engineers.
 6. Uncontained, outside storage areas of hazardous materials for hazardous materials as defined by the State of Oregon Department of Environmental Quality.
 7. Expansion of nonconforming uses.
 8. New installation of manufactured dwellings.
- B. Permitted Uses within the Floodway or within Wetlands. The following uses are permitted subject to review under the standards for development of Section 14.040 of this Chapter:
1. Open space, trails, walkways, and bike paths, as designated by the Troutdale Parks Plan, or as approved with a land use application.
 2. Removal of unauthorized fill.
 3. Removal of dead or dying trees that are an imminent danger to public safety as determined by a certified arborist or the equivalent.
 4. Routine repair and maintenance of existing structures (conforming and nonconforming uses), streets, driveways, utilities, culverts, drainageways and levees constructed for flood control by the Sandy Drainage Improvement Company or its successor, accessory uses, and other existing development on the site (including landscaped yards, decks, patios, boat ramps, and the operation, maintenance, and repair of manmade water control facilities such as irrigation and drainage ditches, constructed ponds or lakes, wastewater facilities, and stormwater quality facilities, and similar development.
 5. Construction, expansion, and/or maintenance of public roadways and public utility facilities necessary to support permitted development. A “No-Rise” Certification for construction or expansion of public roadways and public utilities shall be required consistent with Section 14.040.G(4) for all approved projects.
 6. Balanced excavation and fill required for the construction of detention facilities or structures and other facilities such as levees specifically designed to reduce or mitigate flood impacts. Levees shall not be used to create vacant buildable lands.

7. New culverts, stream crossings, and transportation projects necessary to implement the City, County, or State Transportation System Plans or other development permitted under this Chapter, and as applicable, meets the specifications of the Oregon Department of State Lands, Oregon Department of Fish and Wildlife, and federal regulations.
8. Permanent bank stabilization necessary to preserve an existing structure provided the balanced cut and fill standard is met if the work is in the floodplain or a “No-Rise” certification if the work is within the floodway. Exception: Bank stabilization is not permitted for development on a vacant lot of record.
9. Temporary bank stabilization or tree and vegetation removal necessitating immediate action during a flood emergency or other emergency to prevent the loss of an existing structure, or to repair a bank damaged during a flood. Following the flood emergency or other emergency, the owner shall submit a Floodplain Development Permit according to Section 14.035.E(1)(b).
10. Fill of wetlands when there is no other practicable way to build on the site as established through Section 14.040 of this Chapter, and provided fill of wetlands within the floodplain is balanced with cut elsewhere within the floodplain, and a Fill/Removal Permit is issued from the Oregon Department of State Lands (DSL) and U.S. Army Corps of Engineers (Corps), as applicable. The application to DSL and the Corps may be processed concurrently with a land use application for site and design review, land division, a planned development application, or a conditional use. A joint fill permit may be applied for prior to application for a land use permit. However, if a joint fill permit is approved by the Oregon Department of State Lands and the U.S. Army Corps of Engineers prior to applying for the land use application, fill may not proceed until the final decision for the land use application has been made by the City. Mitigation for fill of wetlands and the location of the mitigation shall be as prescribed by the DSL/Corps permit.
11. New drainageways, levees, or alteration of watercourses to accommodate public projects administered by the Sandy Drainage Improvement Company or its successor, the City, Multnomah County, the state, or a federal agency, provided it is in compliance with Sections 14.035(C), and 14.040(R) and (S) of this Chapter.
12. Any development that must implement a Federal Aviation Administration (FAA) compliant wildlife hazard management plan on property owned by the Port of Portland or within ten thousand (10,000) feet of an Aircraft Operating Area, as defined by the FAA, and removal of trees that interfere with the landing or takeoff flight path of aircraft at the Troutdale Airport or otherwise interferes with the safe operation of the airport as determined by the Port of Portland. The removal of trees that interfere with the operation of the Troutdale Airport are permitted outright.

13. Removal of refuse as defined in the City of Troutdale Municipal Code.

14.035 Floodplain Development Permit

- A. **Background.** To participate in the National Flood Insurance Program (NFIP), a community must adopt and enforce a floodplain management ordinance that regulates development in the floodplain. This floodplain management ordinance is housed primarily in Chapter 14 of this Code, but is in part addressed in other Chapters of this Code. One of the basic Federal requirements for regulating Development in the Floodplain is a requirement for a Floodplain Development Permit (locally, a Floodplain Development Permit) before construction or other development begins within any Special Flood Hazard Area. In this context, the term "development" is defined in Section 1.040. This chapter contains provisions for the federally required Floodplain Development Permit and is consistent with the National Flood Insurance Program (NFIP) regulations. A Floodplain Development Permit is required for development within the Flood Management Area except as noted in Section 14.035.C of this Chapter.
- B. **Applicability.** Unless exempt per Section 14.035.C, below, approval of a Floodplain Development Permit shall be obtained before construction or development begins within any area of special flood hazard established in Section 14.010.B of this Chapter. The permit shall be for all structures including manufactured dwellings, as set forth in the Section 1.040 and for all development including fill and other activities, also as set forth in the Section 1.040.
- C. **Exemptions.** The following activities do not require a Floodplain Development Permit:
1. Removal of invasive, nuisance, or prohibited plant species that exposes the ground, provided a revegetation plan approved or prepared by the City, state, a federal agency, Metro, SOLV, the East Multnomah Soil & Water Conservation District, or other similar organizations as determined by the Floodplain Manager, is carried out to provide shade and habitat, prevent erosion of steep slopes and/or sedimentation into the protected water feature. A copy of the plan shall be provided to the Community Development Department prior to beginning the work.
 2. Placement of fill in residential zones, provided it is consistent with other applicable provisions of this Code, and provided the fill is used solely for the purpose of constructing a sandbox, a raised gardening bed, or other similar landscape feature.
 3. Installation of three strand, on bendable pole, wire farm type fencing that is constructed consistent with the provisions in Section 14.040 of this Chapter.



4. Landscape maintenance activities consistent with the standards identified in this Section.
 5. Wetlands not subject to flooding as described Section 14.010.B of this Chapter, nor identified as designated habitat covered under the Endangered Species Act, and are not exempt for review under Section 4.300 of this Code.
- D. **Submission Requirements.** An application for a Floodplain Development Permit within the Flood Management Area shall include the following, and these requirements apply to all applicants for development approval unless otherwise noted below:
1. A site plan showing the proposed development on the site, drawn to a standard scale, and including an illustrated scale for use in reductions. A site plan shall also consist of the following:
 - a. SFHA boundaries, and the base flood elevations based upon the North American Vertical Datum of 1988 (NAVD 88);
 - b. The 1996 flood boundaries established by Metro;
 - c. Floodway boundaries as determined by datum available from the FIRM and Flood Insurance Study;
 - d. The name, location, and dimensions of affected streams or rivers, and the bankfull stage or the two-year storm level.
 - e. The area comprising the vegetation corridor as established by Sections 4.316 and 4.317 of this Code;
 - f. Wetlands that are determined significant by the Oregon Department of State Lands or have the following characteristics. All wetland determinations made prior to development must be reviewed and acknowledged by the Oregon Department of State Lands prior to issuance of City permits. The characteristics shall be determined by a qualified scientist.
 - i. The wetland is fed by surface flows, sheet flows, or precipitation; has evidence of flooding during the growing season; at least sixty percent (60%) of the area is vegetation; and is over one-half acre in size; or, the wetland qualifies as having “intact water quality function” under the 1996 Oregon Freshwater Wetland Assessment Methodology; or
 - ii. The wetland is in the Flood Management Area; has evidence of flooding during the growing season; is five (5) acres or more in size; and has a restricted outlet or no outlet; or, the wetland qualifies as

having “intact hydrologic control function” under the 1996 Oregon Freshwater Wetland Assessment Methodology; or

- iii. The wetland, or a portion of the wetland, is within a horizontal distance of less than one-fourth (1/4) mile from a water body which meets the State of Oregon Department of Environmental Quality definition of “water quality limited water body” in OAR Chapter 340, Division 41 (1996).
2. Topographic survey. The survey shall show the floodway and floodplain. The survey shall also show the location of existing and proposed improvements on the site, trees or tree clusters (including those to be removed), existing roads, utilities, and structures, buildings, structures, fencing, walls, landscaping, storage of materials or equipment, drainage facilities, parking areas, and other impervious surface areas. The survey shall be drawn to scale, with two (2) foot contours, and shall note the distance from Top-of-bank to the improvements on the site;
3. Where base flood elevation data is provided through the City’s Flood Insurance Study, or by other means as permitted in this Chapter, the developer shall obtain and record the actual elevation of the lowest floor (including basement) of all new or substantially improved structures, including the placement of a manufactured dwelling, and whether or not the structure contains a basement. This information shall be based upon NAVD 88 and provided on a City Floodplain Development Permit form, and should include the following, as applicable:
 - a. For all new or substantially improved, elevated, or floodproofed structures, verify and record the actual elevation.
 - b. Where development occurs within Zone A of the Flood Management Area and the Base Flood Elevation (BFE) data is not available either through the Flood Insurance Study or from another authoritative source as authorized in Subsection 14.020(C) of this Chapter, the Floodplain Development Permit shall be reviewed for compliance with FEMA Publication 265 issued July 1995 “Managing Floodplain Development in Approximate Zone A Areas”, adopted herein for reference, and applicable State of Oregon Building Codes.
4. Hydrology and soils report. Where ground disturbance or vegetation removal is proposed that exposes the soil, this report shall be required. This report shall include information on the hydrological activities of the site, the effect of hydrologic conditions on the proposed development, and any hydrological or erosion hazards. This report shall also include characteristics of the soils on the site, suitability for development, its carrying capacity, and erosion or slumping characteristics that might present a hazard to life and property, or adversely affect the function or stability of a public use or facility. This report shall also include information on the nature, distribution, and strength of existing soils; the

adequacy of the site for development purposes; and an assessment of grading procedures required to impose the minimum disturbance to the natural state. The report shall be prepared by a professional engineer registered in Oregon. In Oregon Department of Geology and Mineral Industries (DOGAMI) inventory of landslide hazard areas, on hillsides where grading will lessen stability, or in areas where historic or prehistoric mudflows have occurred, a soils engineer and/or engineering geologist registered in Oregon shall certify the development will not negatively impact public safety, adjacent properties, or water quality.

5. Grading plan. If grading is to occur, a grading plan shall be required that shows existing and finished contours (two-foot contour intervals), drainage, all cut and fill slopes and proposed drainage channels, direction of drainage flow, location of proposed structures and existing structures which may be affected by the proposed grading operations, and water quality facilities .
6. Vegetation report. Where vegetation is to be removed or other impacts to the onsite vegetation is to be expected as a result of development, this report shall be required. This report shall consist of a survey of existing vegetation, whether it is native or introduced, and how it will be altered by the proposed development. Measures for enhancement of the site, including revegetation with approved plant species, will be clearly stated, as well as methods for immediate and long-term stabilization of slopes and control of soil erosion. The vegetation report shall be prepared by a landscape architect, landscape designer, botanist, arborist, or other authority as determined by the Floodplain Manager with specific knowledge of approved plant species, planting and maintenance methods, survival rates, and their ability to control erosion and sedimentation. The contractor for installation and maintenance will be responsible for replacing any approved plant species that do not survive the first two (2) years after planting.
7. A “No-Rise” certification and a Letter of Map Change (LOMC) shall be submitted with the land use application for the following activities within the floodway as mapped by FEMA:
 - a. Permanent bank stabilization that occurs in the floodway.
 - b. Development, alterations, or relocations of the floodway, including any permanent fill within the floodway.
8. Building and structure elevations. For all existing and proposed, relocated, or expanded buildings and structures, elevation in relation to the Highest Adjacent Grade, the North American Vertical Datum 1988 (NAVD88), and the base flood elevation as applicable, of the:
 - a. Lowest enclosed area of all existing and proposed, relocated, or expanded buildings and structures. This includes crawlspaces, basement floors, and attached garages, electrical equipment (except utility meters), heating and

ventilation equipment, plumbing, air conditioning equipment, and/or other service facilities (including ductwork); top of proposed garage slabs; and next highest floor situated above the items herein.

- b. Elevation to which any existing building or structure has been or is proposed to be flood-proofed; and certification by a registered professional engineer that the flood-proofing methods for any nonresidential structure meet the floodproofing criteria in this Chapter.
 - c. The locations and sizes of all flood openings in any proposed buildings and structures.
 - 9. Infrastructure. Location of all proposed infrastructure necessary to serve the proposed development shall be required when such new development is proposed by the applicant. Such infrastructure includes, but is not limited to, streets, driveways, water, sanitary sewer, and storm drainage.
 - 10. Floodplain or watercourse alterations. Where floodplain or watercourse alterations are proposed, a description of the extent to which any floodplain or watercourse is proposed to be altered or affected as a result of proposed development shall be required.
 - 11. All federally-mandated or state-mandated permits issued by other governmental agencies shall be obtained, or obtaining such permits shall be a Condition of Approval to be satisfied prior to issuance of any construction permit. Such permits include but are not limited to Section 404 of the Federal Water Pollution Control Act Amendments of 1972, 33 U.S.C. 1334, 16 U.S.C. 1531-1544, and State of Oregon Removal-Fill permits, as amended.
- E. Application for Floodplain Development Permit. A Floodplain Development Permit shall be obtained before construction or development begins within any area of special flood hazard established in Section 14.010 of this Chapter. The permit shall be for all structures including manufactured dwellings, as set forth in Section 1.040 and for all development including fill and other activities, also as set forth in Section 1.040. Applications for a Floodplain Development Permit shall be made on forms furnished by the Community Development Department and may include, but not be limited to, plans drawn to scale showing the nature, location, dimensions, elevations of the area in question, existing or proposed structures, fill, storage of materials, drainage facilities, and the location of the foregoing.
- 1. A Type I Floodplain Development Permit is required for the following:
 - a. Construction of a single-family dwelling, including the placement of a manufactured dwelling or repair or alteration of existing single-family dwellings and manufactured dwellings. Single-family dwellings and manufactured dwellings shall be built in compliance with the applicable

development standards in Section 14.040 of this Chapter.

- b. Bank stabilization or tree and vegetation removal necessary to preserve an existing structure during an emergency. During the flood emergency or other emergency the permit is not required; however, as immediately as possible following the emergency a Floodplain Development Permit shall be obtained that documents the bank stabilization and tree and vegetation removal measures taken during the emergency; the schedule and procedure that will be used to remove any temporary fill, including sand bags, and the schedule and procedure to replant tree and vegetation where required according to the standards in Section 4.300. If the stabilization measures will not be removed, a Type II Floodplain Development Permit will be required as well as a “No-Rise” certification and LOMC as applicable. The required Floodplain Development Permit shall also show that the long-term stability of the site is in compliance with all other relevant Development Standards identified in Section 14.040 as applicable.
 - c. Wildfire mitigation projects as identified in this Chapter.
2. A Type II Floodplain Development Permit is required for:
- a. Any use in the underlying zoning district requiring a Type II Site Development review.
 - b. New or expanded streets or bridges.
 - c. New or expanded railroads or trestles.
 - d. Permanent bank stabilization or fill within the floodplain or floodway.
 - e. Balanced cut and fill activity within the floodplain, with a Letter of Map Change, as required in this Code.
 - f. Fill of wetlands. If the wetland is outside of the floodplain and not hydrologically connected, a Floodplain Development Permit is not required, only the Site Development Review.
 - g. Other uses similar in nature to those listed above.
3. A Type III procedure and Floodplain Development Permit shall be processed for uses requiring a Type III review in the underlying zoning district, for all special variances requested from the standards of this Chapter, and for any proposed alteration of a watercourse of any perennial or intermittent streams.

F. Review Criteria - Requests for approval of a Floodplain Development Permit shall be

reviewed by the Floodplain Administrator or designee to ensure:

1. Consistency with the standards from Sections 1.040, Chapter 2, and Section 14.040 of this Code, as applicable;
 2. Consistency with other applicable standards of this Code and all other applicable policies and standards adopted by the City.
- G. Mandatory Conditions of Approval - The following Conditions of Approval are mandatory and shall be imposed on every approved Floodplain Development Permit:
1. Required During Construction Elevation Certificate. For all new construction, development, and substantial improvements, the permit holder shall provide to the Floodplain Administrator or designee an as-built certification of the floor elevation or flood-proofing elevation immediately after the lowest floor or flood-proofing is placed and prior to further vertical construction. Any deficiencies identified by the Floodplain Administrator or designee shall be corrected by the permit holder immediately and prior to work proceeding. Failure to submit certification or failure to make the corrections shall be cause for the Floodplain Administrator or designee or the Building Official to issue a stop-work order for the project.
 2. Required Documentation Prior to Issuance of Certificate of Occupancy
 - a. In addition to the requirements of the Building Codes pertaining to Certificate of Occupancy, prior to the final inspection the owner or authorized agent shall submit the following documentation to the Floodplain Administrator or designee and the documentation shall be prepared and sealed by a registered surveyor or engineer:
 - i. For elevated buildings and structures in Special Flood Hazard Areas, the as-built elevation of the lowest floor, including basement, or where no base flood elevation is available the height above highest adjacent grade of the lowest floor;
 - ii. For buildings and structures that have been floodproofed, the elevation to which the building or structure was floodproofed.
 - b. Failure to submit certification or failure to correct violations shall be cause for the Floodplain Administrator or designee or the Building Official to withhold a Certificate of Occupancy until such deficiencies are corrected.
 3. For applications for partitions and subdivisions, one of the following shall be required:
 - a. Protection of Flood Management Areas with a conservation easement;

- b. Platting Flood Management Areas as common open space; or
- c. Offer of sale or donation of Flood Management Area property to public agencies or private non-profits for preservation where feasible.

14.040 Development Standards. The land use application shall establish through the use of narrative, site plans, and professional reports, the following:

- A. Type II or III approval for new development, including additions or alterations to existing structures, except for single family dwellings, in the Flood Management Area may be allowed, provided that:
 - 1. The applicant shall demonstrate that there is no reasonable nor practical alternative design or method of development that would have a lesser impact on the Flood Management Area than the one proposed.
 - 2. If there is no reasonable nor practical alternative design or method of development the project shall be designed in compliance with applicable parts of Subsections (B) through (X) of this Section, so that the impacts on the Flood Management Area are limited and the plans shall include restoration, replacement, or rehabilitation of the vegetation within the Flood Management Area.
 - 3. The applicant shall provide mitigation to ensure that impacts to the functions and values of the vegetation corridor and integrity of the slope will be mitigated or restored to the extent practicable.
- B. A professional engineer registered in Oregon must certify that the development will not result in any increase in flood levels throughout the SFHA during the occurrence of the base flood discharge, and that water quality will not be adversely affected.
- C. As applicable, the development must be authorized by the Oregon Department of State Lands, U.S. Army Corps of Engineers, the Oregon Department of Fish and Wildlife, and the Sandy Drainage Improvement Company. The applicant shall obtain and submit a copy of all required state and federal permits for any proposed development in the Flood Management Area, including Section 404 of the Federal Water Pollution Control Act Amendments of 1972, 33 USC 1334.
- D. Unless otherwise authorized under the provisions of this Chapter, the development shall comply with the underlying zoning district dimensional standards and the minimum vegetation corridor as established in Sections 4.316 and 4.317 of this Code. The applicant shall submit an exhibit that shows the location and provides a description of all actions to be provided to mitigate the impacts of permitted development as established in Section 4.314 of this Code.

- E. Protect the water quality resource, and Flood Management Area functions and values from uncontained areas of hazardous materials as defined by the State of Oregon Department of Environmental Quality water quality standards.
- F. Limit impervious surface areas in the Flood Management Area.
 - 1. The impervious surface of the development may not exceed thirty percent (30%) of the flood plain area, provided the standards of this Code are met. Exception: Public roads necessary to serve the transportation needs of the City may exceed thirty percent (30%) of the Flood Management Area provided all other applicable standards of this Chapter have been met.
 - 2. Clustering of houses and multiple-family units, zero lot line developments, and/or modifications to setbacks may be approved under the Type II procedure in order to accommodate the density permitted within the underlying zoning district and not exceed the impervious surface limitation of thirty percent (30%) of the Flood Management Area on the site.
 - 3. The Director, or their designee, may grant an administrative variance of up to fifty percent (50%) of any dimensional standard in the underlying zoning district where necessary to avoid development within the Flood Management Area.
- G. Maintain flood storage capacity. The developer is required to offset new fill placed in the floodplain by excavating an additional flood-able area to replace the lost flood storage area, preferably at hydrologically equivalent sites. All development proposals in the SFHA shall provide compensatory mitigation for impacts to flood storage, water infiltration, and riparian vegetation to ensure that new development does not increase flood hazards on other properties. A mitigation plan shall be submitted with the land use application. All required actions derived from that plan shall be completed prior to issuance of a Certificate of Occupancy, a Certificate of Completion for a subdivision, or the final building inspection, as applicable. Balanced cut and fill is required for permitted development in the Flood Management Area. Excavation and fill shall be performed in a manner to maintain or increase flood storage and conveyance capacity and not increase design flood elevations. A professional engineer registered in Oregon must certify that the development will not result in any increase in flood levels throughout the SFHA during the occurrence of the base flood discharge except as described in Section 14.040.G(8), and that water quality will not be adversely affected.
 - 1. All fill placed at or below the design flood elevation in the Flood Management Area shall be balanced with at least an equal volume or amount of soil material removal. The development shall be designed to minimize development within the Flood Management Area and amount of fill necessary. Balanced cut and fill may be used to elevate structures but shall not be used for density transfer. Residential density must be calculated prior to changes to the floodplain as a result of balanced cut and fill.

2. Excavation shall not be counted as compensating for fill if such areas will be filled with water in non-storm winter conditions.
3. The cumulative effect of any proposed development shall not increase the water surface elevation of the base flood except as described in Section 14.040.G(8). Onsite flood storage capacity shall not decrease as a result of development, vegetation removal, or excavation except as described in Section 14.040.G(8).
4. A “No-Rise” certification is required for any fill or permitted development within the floodway pursuant to Section 60.3(d)(3) of the National Flood Insurance Program.
 - a. The “No-Rise” supporting data and a copy of the engineering certification must be submitted to, and reviewed by, the City prior to approval of development, and the data shall be submitted with the Floodplain Development Permit.
 - b. The “No-Rise” certification and supporting technical data must stipulate no impact on the 100-year flood elevations, floodway elevations, or floodway widths at the new cross-sections and at all existing cross-sections anywhere in the model.
 - c. A sample “No-Rise” certification is available in the Community Development Department.
5. All new buildings built on fill in the regulatory floodplain shall be constructed on fill:
 - a. Certified by a professional engineer registered in Oregon as suitably designed and compacted for the development (e.g. fill that meets the criteria of 1803.5.8 and Section 1804.4 of the International Building Code, Section 2.4 of ASCE 24, or their equivalent); and
 - b. Providing protection from erosion and scour.
6. When a project proposes development that will alter a watercourse, modify floodplain boundaries, or modify Base Flood Elevations, the application shall obtain a Conditional Letter of Map Change from FEMA prior to grading and filling the site and then obtain and submit the final Letter of Map Change prior to final inspections, or issuance of a certificate of completion, or issuance of the certificate of occupancy as required under this Section. When a project applicant has demonstrated through the Floodplain Development Permit that, in addition to the standards listed for Section 14.040.G, the following standards have been achieved, a Conditional Letter of Map Change/Letter of Map Change may not be required:

- a. Fill is not proposed in the floodway for the site to be impacted through development;
 - b. The project site is not being elevated to or above the base flood elevation (BFE);
 - c. The project is proposing to remove unsuitable existing material (topsoil) and backfilling with select structural material, not alter the existing (natural grade) elevation of the site;
 - d. The site to be impacted does not have US Fish and Wildlife Service (USFWS) designations for critical habitat for Threatened or Endangered; and
 - e. In areas where a regulatory floodway has not been designated, the new construction, substantial improvements, or other development (including fill) within A or AE Zones on the community's FIRM, has demonstrated that the cumulative effect of the proposed development, when combined with all other existing and anticipated development, will not increase the water surface elevation of the base flood at any point within the community.
7. All proposals that include engineering analysis for maintenance of flood storage capacity are subject to review by a qualified engineer licensed in the State of Oregon. The applicant shall be responsible for the cost of this independent review and will be advised at the time of application of this expectation.
8. As described in FEMA's "NFIP Guidebook - A Local Administrator's Guide to Floodplain Management and the National Flood Insurance Program, 5th Addition, Appendix E - Policy on Fish Enhancement Structures in the Floodway", projects that are specifically implemented to restore or enhance US Fish and Wildlife Service (USFWS) identified Threatened or Endangered anadromous fish species or habitat where such species have been determined to reside qualify to allow for minimal rises in the 100-year flood levels as a result of implementation. In addition to the Submission Standards identified in Section 14.035.D, applicants for such projects shall also provide statements from Rural Conservation and Development, the Natural Resource Conservation Service, or similarly qualified staff of fisheries, natural resource, or water resources agencies that less than the maximum hydraulic analyses may be allowed. A professional engineer registered in Oregon shall provide a feasibility analysis and certify that the project was designed to keep any rise in 100-year flood levels to as close to zero as practically possible and ensure that no structures would be impacted by a potential rise. Additionally, routine maintenance of any such project would be necessary to sustain conveyance over time. A plan that sets forth how long-term maintenance is to be maintained shall be required with the submittal of the Floodplain Development Permit. An additional mandatory condition of approval, as

recommended by FEMA, shall be attached to such projects that emphasize the dynamics of a river or creek, and, where the Floodplain Manager has deemed necessary, a requirement for further analysis.

- H. Residential Development, including accessory structures as referenced in Section 5.010 of this Code and not constructed in accordance with Section 14.040.V. Note: if more than fifty percent (50%) of the lot being developed is affected by the floodplain, then the minimum density standard of this Code does not apply.
1. Elevate structures. The minimum finished floor elevation, including basement floor, for all new or substantially improved residential structures in the Flood Management Area shall be at least two (2) feet above the base flood elevation, as established by Section 14.010.B in this Chapter, and as demonstrated through the Elevation Certificate submittals as established in this Section. Elevation Certificates shall be required for all residential development as required by the Community Rating System.
 - a. An Elevation Certificate shall be submitted with the construction plans. The Elevation Certificate shall include the elevation of the lowest floor (including basement). The Elevation Certificate shall be certified by a land surveyor, engineer, or architect who is authorized by state or local law to certify elevation information for construction within specific flood hazard areas.
 - b. A second certified Elevation Certificate shall be submitted to the City of Troutdale prior to pouring the foundation.
 - c. A third certified Elevation Certificate shall be submitted after the structure is completed based upon finished construction.
 - d. The City shall maintain the Elevation Certificates for public inspection.
 2. Fully enclosed areas below the lowest floor that are subject to flooding are prohibited, or shall be designed to automatically equalize hydrostatic flood forces on exterior walls by allowing for the entry and exit of flood waters. Designs for meeting this requirement must either be certified by a registered professional engineer or architect, or must meet or exceed the following minimum criteria:
 - a. A minimum of two (2) openings having a total net area of not less than one (1) square inch for every square foot of enclosed area subject to flooding shall be provided.
 - b. The bottom of all openings shall be no higher than one (1) foot above grade.
 - c. Openings may be equipped with screens, louvers, or other devices

provided that they permit the automatic entry and exit of floodwaters.

- d. Where possible, openings will be installed on at least two opposing sides of the enclosed area.
3. Below-grade crawlspaces are allowed only when in compliance with the design requirements of FEMA Technical Bulletin 11-01, “Crawlspace Construction for Buildings Located in Special Flood Hazard Areas.” Buildings that have below-grade crawlspaces will have higher flood insurance premiums than buildings that have the preferred crawlspace construction with an interior elevation at or above the lowest adjacent exterior grade.
 - a. The building must be designed and adequately anchored to resist flotation, collapse, and lateral movement of the structure resulting from hydrodynamic and hydrostatic loads, including the effects of buoyancy. Hydrostatic loads and the effects of buoyancy can usually be addressed through the required openings:
 - i. Openings that equalize hydrostatic pressures by allowing for the automatic entry and existence of floodwaters is required. The bottom of each flood vent opening can be no more than one (1) foot above the lowest adjacent exterior grade. See FEMA Technical Bulletin 1-93, Opening in Foundation Walls, for guidance.
 - ii. All portions of the building below the base flood elevation must be constructed with materials resistant to flood damage. This includes not only the foundation walls of the crawlspace used to elevate the building, but also any joists, insulation, or other materials that extend below the BFE. The recommended construction practice is to elevate the bottom of joists and all insulation above BFE. Ductwork or other utility systems located below the insulation may pull away from their supports. See page 8 of Technical Bulletin 1-93 and FEMA Technical Bulletin 2-93 Flood Resistant Materials Requirements.
 - iii. Any building utility systems within the crawlspace must be elevated above the base flood elevation or designed so that floodwaters cannot enter or accumulate within the system components during flood conditions. Ductwork, in particular, must either be placed above the BFE or sealed from floodwaters. For further guidance, see FEMA 348, Protecting Building Utilities from Flood Damage.
 - b. The interior grade of a crawlspace below the base flood elevation must not be more than two (2) feet below the lowest adjacent exterior grade.

- c. The height of the below-grade crawlspace, measured from the interior grade of the crawlspace to the top of the crawlspace foundation wall must not exceed four (4) feet at any point. The height limitation is the maximum allowable unsupported wall height according to the engineering analyses and building Code requirements for flood hazard areas. Crawlspaces may not be converted to basements.
 - d. There must be an adequate drainage system that removes floodwaters from the interior area of the crawlspace. The enclosed area should be drained within a reasonable time after a flood event. The type of drainage system will vary because of the site gradient and other drainage characteristics, such as soil types. Possible options include natural drainage through porous, well-drained soils and drainage systems such as perforated pipes, drainage tiles or gravel, or crushed stone drainage by gravity or mechanical means.
 - e. Crawlspace construction is not permitted in areas with flood velocities greater than five (5) feet per second unless the design is reviewed by a qualified design professional, such as a registered architect or professional engineer. For velocities in excess of five (5) feet per second, other foundation types should be used.
 - f. The crawlspace is an enclosed area below the base flood elevation (BFE) and, as such, must have openings that equalize hydrostatic pressures by allowing the automatic entry and exit of floodwaters. The bottom of each flood vent opening can be no more than one (1) foot above the lowest immediate interior or exterior grade.
4. Substantial improvements will require elevation of any non-elevated structure to two (2) feet above the base flood elevation in compliance with this Section and in accordance with Section 1.040. Substantial improvement is considered to occur when the first alteration of any wall, ceiling, floor, or other structural part of the building commences, whether or not that alteration affects the external dimensions of the structure. Substantial improvements include:
- a. Any repair, reconstruction, or improvement of a structure, the cost of which exceeds forty-nine percent (49%) of the market value of the structure as established by the County appraiser or a licensed professional appraiser.
 - b. Reconstruction or repair of a structure that exceeds forty-nine percent (49%) of the market value of the building before it was damaged.
 - c. Additions to an existing structure when the addition increases the market value of the structure by more than forty-nine percent (49%) or the floor

area by more than twenty percent (20%).

5. Comply with other standards of this Section, as applicable.
- I. Manufactured dwellings within the Special Flood Hazard Area.
 1. All manufactured dwellings to be placed or substantially improved on sites that are outside of a manufactured dwelling park or subdivision; in a new manufactured dwelling park or subdivision; in an expansion to an existing manufactured dwelling park or subdivision, or in an existing manufactured dwelling park or subdivision on which a manufactured dwelling has incurred substantial damage shall be elevated on a permanent foundation such that the finished floor of the manufactured dwelling is elevated to a minimum eighteen (18) inches (46 cm) above the base flood elevation and be securely anchored to an adequately designed foundation system to resist flotation, collapse, and lateral movement.
 2. Manufactured dwellings to be placed or substantially improved on sites in an existing manufactured dwelling park or subdivision within the Special Flood Hazard Area on the community's FIRM that are not subject to the above manufactured dwelling provisions shall be elevated so that either:
 - a. The finished floor of the manufactured dwelling is elevated to a minimum of eighteen (18) inches (46 cm) above the base flood elevation; or
 - b. The manufactured dwelling chassis is supported by reinforced piers or other foundation elements of at least equivalent strength that are no less than thirty-six (36) inches in height above grade and be securely anchored to an adequately designed foundation system to resist flotation, collapse, and lateral movement. Anchoring shall be installed using methods and practices that minimize flood damage. Anchoring methods may include, but are not limited to, use of over-the-top or frame ties to ground anchors (Reference FEMA's "Manufactured Home Installation in Flood Hazard Areas" guidebook for additional techniques).
 3. Manufactured dwellings shall have all electrical crossover connections installed at a minimum of twelve (12) inches above BFE.
 4. Manufactured dwellings supported on solid foundation walls shall be constructed with flood openings that comply with Section 14.040.H(2).
 5. Comply with the other standards of this Section as applicable.
 - J. Recreational Vehicles (RV) within the Special Flood Hazard Area, whether in a park or on private property outside of a park, are required to:

1. Be on the site for fewer than one hundred eighty (180) consecutive days, and
 2. Be fully licensed and ready for highway use. Highway use means on its wheels or jacking system, is attached to the site only by quick disconnect type utilities and security devices, and has no permanently attached additions; or
 3. Meet the permit requirements of Section 14.040.I and the elevation and anchoring requirements for manufactured dwellings.
 4. The RV “pads” shall be paved with asphaltic concrete or comparable, and have a special water quality facility for the collection of the stormwater from the site.
 5. The RV “pads” shall be wide enough to accommodate a trailer parked next to the towing vehicle or be long enough to accommodate both towing vehicle and trailer.
- K. Nonresidential Construction. New construction, development, and substantial improvement of any commercial, industrial, or other nonresidential structure shall have the lowest floor, including basement, elevated to no less than two (2) feet above the base flood elevation; or, together with attendant utility and sanitary facilities, shall:
1. Be dry floodproofed so that below the base flood level the structure is watertight with walls substantially impermeable to the passage of water. A dry floodproofing certificate shall be filed with the City following the form and procedure established by the Federal Emergency Management Agency.
 2. Have structural components capable of resisting hydrostatic and hydrodynamic loads and effects of buoyancy, in accordance with standards established by the Federal Emergency Management Agency and the National Flood Insurance Program.
 3. Be certified by a registered professional engineer or architect that the design and methods of development are in accordance with accepted standards of practice for meeting provisions of National Flood Insurance Program regulations (CFR 60.3(c)(4) and (5)) based on their development and/or review of the structural design, specifications, and plans. Such certifications shall be provided to the City.
 4. Nonresidential structures that are elevated, not dry floodproofed, must meet the same standards for space below the lowest floor as described in Section 14.040.H. If elevated, an Elevation Certificate shall be submitted with the construction plans, prior to pouring the foundation, and after construction.
 5. Applicants dry floodproofing nonresidential buildings shall be notified that flood insurance premiums will be based on rates that are one (1) foot below the floodproofed level (e.g., a building floodproofed to the base flood elevation will be rated as one (1) foot below the base flood elevation).

6. Applicants that elect to utilize floodproofing instead of elevation shall supply a comprehensive Maintenance Plan at the time of building plan review for the entire structure to include but not limited to: exterior envelope of structure; all penetrations to the exterior of the structure; all shields, gates, barriers, or components designed to provide floodproofing protection to the structure; all seals or gaskets for shields, gates, barriers, or components; and, the location of all shields, gates, barriers, and components as well as all associated hardware, and any materials or specialized tools necessary to seal the structure.
 7. Applicants may be required by the Floodplain Manager to supply an Emergency Action Plan (EAP) for the installation and sealing of the structure prior to a flooding event that clearly identifies what triggers the EAP and who is responsible for enacting the EAP.
 8. Comply with other standards of this Section as applicable.
- L. Remove temporary fills. Temporary fills permitted during construction or emergency bank stabilization shall be removed if not in compliance with the balanced cut and fill standard of this Code or prior to issuance of a Certificate of Occupancy or release of any bond issued for the development.
- M. Preserve and/or restore the vegetation corridor within the disturbed areas, and retain the existing tree canopy as established in Sections 4.316, Width of Vegetation Corridor, and 4.317, Methods for Determining Vegetation Corridors Next to Primary Protected Water Features, of this Chapter. An enhancement plan for disturbed areas shall be prepared and implemented to stabilize slopes to prevent landslides on slopes and sedimentation of water features. This plan shall provide for the replanting and maintenance of approved plant species designed to achieve pre-disturbance conditions.
- N. Maintain or reduce stream temperatures.
- O. Minimize erosive velocities, nutrient, and pollutant loading into water. Use filtering, infiltration, and natural water purification for stormwater runoff in compliance with the Erosion Control and Water Quality Standards of Section 5.600 of this Code. The applicant's engineering plans shall certify that runoff and sedimentation from the site will comply with the standards of Section 5.600 of this Code.
- P. Anchoring. All new construction, development, and substantial improvements shall be anchored to prevent flotation, collapse, or lateral movement of the structure.
- Q. Construction Materials and Methods. All new construction, development, and substantial improvements shall use flood-resistant materials in accordance with the requirements of FEMA Technical Bulletin 2-93 "Flood Resistant Materials Requirements" and utilities shall be designed and installed in accordance with FEMA Publication 348 "Protecting Building Utilities from Flood Damage." The following standards are only a summary of

those requirements:

1. All new construction, development, and substantial improvements shall be constructed with materials and utility equipment resistant to flood damage.
2. All new construction, development, and substantial improvements shall be constructed using methods and practices that minimize flood damage and minimize impacts to natural floodplain functions, including flood storage, water infiltration, and riparian vegetation.
3. Electrical, heating, ventilation, plumbing, and air conditioning equipment, and other service facilities shall be designed and/or otherwise elevated or located so as to prevent water from entering or accumulating within the components during conditions of flooding.
4. No construction materials or methods may be used within the floodplain that would impair or damage water quality or native vegetation.
5. All development shall have adequate drainage provided to reduce exposure to flood damage and maintain water quality.



R. Utilities and Roads.

1. Stream crossings shall be as close to perpendicular to the stream as practicable. Bridges shall be used instead of culverts wherever practicable, and comply with the Oregon Department of Fish and Wildlife construction standards.
2. All new and replacement water supply systems shall be designed to minimize or eliminate infiltration of floodwaters into the system.
3. New and replacement sanitary sewage systems shall be designed to minimize or eliminate infiltration of floodwaters into the systems and discharge from the systems into floodwaters.
4. Onsite waste disposal systems shall be located to avoid impairment to them, or contamination from them, during flooding consistent with the State of Oregon Department of Environmental Quality.
5. Utility and road placement shall occur outside the floodway unless the utility or road is necessary to serve permitted development, and there is no reasonable alternative. Roads built in the floodplain shall be built at or above the base flood elevation to provide access to emergency vehicles during a flood.
6. Stormwater management and water quality facilities shall comply with the siting and construction standards of Section 5.700 of this Code.



For any alterations or relocations of a watercourse the developer shall be required to notify the Oregon Department of State Lands, the Oregon Department of Land Conservation and Development, and adjacent communities that will be impacted by the alteration or relocation. The developer shall be responsible for obtaining and submitting copies of any required project permits required by the Oregon Department of State Lands, U.S. Army Corps of Engineers, Oregon Department of Fish and Wildlife Service, Federal Emergency Management Agency, and other affected agencies, as applicable. The flood carrying capacity of the altered or relocated watercourse shall not be diminished and shall be maintained. Alterations will require a “No-Rise” certification for changes to the floodway, and changes that relocate the floodplain will require a Letter of Map Change (LOMC) from FEMA or may require a revised Flood Insurance Study and Flood Insurance Rate Map for the City. The burden for all engineering studies required to process these forms is the applicant’s, not the City’s.

T. Subdivision Proposals. In addition to compliance with the underlying zoning district standards of this Code and this Chapter, the development of the subdivision shall be subject to the following additional criteria:

1. All subdivision proposals shall be consistent with the need to minimize flood damage.
2. All subdivision proposals shall have public utilities and facilities such as sewer, gas, electrical, and water systems located and constructed to minimize flood damage.
3. All subdivision proposals shall have adequate drainage provided to reduce exposure to flood damage.
4.  Where the base flood elevation data has not been provided or is not available from another authoritative source, it shall be generated for subdivision proposals and other proposed developments which contain at least fifty (50) lots or five (5) acres, whichever is less.
5.  If more than fifty percent (50%) of the lot being partitioned or subdivided is affected by the floodplain, then the minimum density standard of this Code does not apply.

U. Critical Facilities.

1. Construction of new critical facilities shall be, to the extent possible, located outside the limits of the Special Flood Hazard Area.
2. Construction of new critical facilities shall be permissible within the SFHA if no feasible alternative site is available.
3. Critical facilities constructed within the SFHA shall have the lowest floor

elevated one foot above the height of the 500-year flood level. Submit Elevation Certificates with the construction plans, prior to pouring the foundation, and upon completion of the structure in accordance with Subsections H(1)(a - c) of this Section.

4. Access to and from the critical facility shall also be protected to the height utilized above.
 5. Access routes elevated to or above the level of the base flood elevation shall be provided to all critical facilities to the extent possible.
 6. Floodproofing and sealing measures must be taken to ensure that toxic substances will not be displaced by or released into floodwaters.
 7. Comply with the other standards of this Section as applicable.
- V. Small Accessory Structure. Relief from elevation or floodproofing as required in this Section may be granted for small accessory structures that meet the following standards. The applicant shall be advised that this type of allowance will result in higher insurance rates for these structures, as applicable.
1. Less than two hundred (200) square feet, less than \$5,000 in valuation, and do not exceed one story;
 2. Not temperature controlled;
 3. Not used for human habitation and are used solely for parking of vehicles or storage of items having low damage potential when submerged;
 4. Not used to store toxic material, oil or gasoline, or any priority persistent pollutant identified by the State of Oregon Department of Environmental Quality unless confined in a tank installed in compliance with this ordinance or stored at least two feet above base flood elevation;
 5. Located and constructed to have low damage potential;
 6. Constructed with materials resistant to flood damage as described in this Section;
 7. Anchored to prevent flotation, collapse, or lateral movement of the structure resulting from hydrodynamic and hydrostatic loads, including the effects of buoyancy, during conditions of the base flood;
 8. Constructed to equalize hydrostatic flood forces on exterior walls by allowing for the automatic entry and exit of floodwater. Designs for complying with this requirement must be certified by a licensed professional engineer or architect or designed in compliance with Section 14.040.H(2):

9. Constructed with electrical, and other service facilities located and installed so as to prevent water from entering or accumulating within the components during conditions of the base flood.

14.045 Floodways. Located within areas of special flood hazard established in Section 14.010.B of this Chapter are areas designated as floodways. Since the floodway is an extremely hazardous area due to the velocity of floodwaters which carry debris, potential projectiles, and erosion potential, the following provisions apply:


- A. Except as provided in Section 14.045.C, encroachments, including fill, new construction, development, substantial improvements, and other development are prohibited unless certification by a registered professional civil engineer is provided demonstrating through hydrologic and hydraulic analyses performed in accordance with standard engineering practice that encroachments shall not result in any increase in flood levels during the occurrence of the base flood discharge.
- B. If Section 14.040.A is satisfied, all new construction, development, and substantial improvements shall comply with all applicable flood hazard reduction provisions of Section 14.040 of this Code.
- C. Floodways and other high hazard zones are extremely hazardous areas due to exceptionally high flood and erosion potential. In these areas, the development actions permitted in high hazard zones shall be limited to water-dependent uses; bridges and other location-dependent uses; habitat restoration activities consistent with Sections 14.035.C(2); low-intensity recreation; and bioengineered banks.

14.050 Before Regulatory Floodway. In areas where a regulatory floodway has not been designated, no new construction, substantial improvements, or other development (including fill) shall be permitted within Zones A1-30 and AE on the community's FIRM, unless it is demonstrated that the cumulative effect of the proposed development, when combined with all other existing and anticipated development, will not increase the water surface elevation of the base flood more than one foot at any point within the community.

14.055 Flood Management Area Variance Procedures. Variances from dimensional standards of the underlying zoning district or other provisions of this Code not part of this Chapter shall be processed in accordance with Section 6.800 of this Code.



- A. Generally, the only condition under which a variance from the elevation standard may be issued is for new construction, development, and substantial improvements to be erected on a lot of one-half (1/2) acre or less in size contiguous to and surrounded by lots with existing structures constructed below the base flood level, providing that the considerations of Section 14.055.A(1 - 11) have been fully reviewed. As the lot size increases the technical justification required for issuing the variance increases.

1. The danger that materials may be swept onto other lands to the injury of others;

2. The danger to life and property due to flooding or erosion damage;
 3. The susceptibility of the proposed facility and its contents to flood damage and the effect of such damage on the individual owner;
 4. The importance of the services provided by the proposed facility to the community;
 5. The necessity to the facility of a waterfront location, where applicable;
 6. The availability of alternative locations for the proposed use which are not subject to flooding or erosion damage;
 7. The compatibility of the proposed use with existing and anticipated development;
 8. The relationship of the proposed use to the comprehensive plan and floodplain management program for that area;
 9. The safety of access to the property in times of flood for ordinary and emergency vehicles;
 10. The expected heights, velocity, duration, rate of rise, and sediment transport of the flood waters and the effects of wave action, if applicable, expected at the site; and,
 11. The costs of providing governmental services during and after flood conditions, including maintenance and repair of public utilities and facilities such as sewer, gas, electrical, and water systems, and streets and bridges.
- B. Variances may be issued for the reconstruction, rehabilitation, or restoration of structures listed on the National Register of Historic Places or the Statewide Inventory of Historic Properties, without regard to the procedures set forth in this Section.
1.  Is the minimum necessary to preserve the historic character and design of the site, building or structure;
 2. Will not result in the site, building or structure losing its historic designation; and
 3. Demonstrates consistency with all other local, state, or federal laws or ordinances, including documentation of any necessary consultations with state or federal agencies.
- C. Variances shall not be issued within a designated floodway if any increase in flood levels during the base flood discharge would result.

- D. Variances shall only be issued upon a determination that the variance is the minimum necessary, considering the flood hazard, to afford relief.
- E. The Director, or their designee, may grant a Type II variance of up to fifty percent (50%) of any dimensional standard in the underlying zoning district where necessary to avoid construction or development within the Flood Management Area. The Director or designee shall make a determination in accordance with the criteria established in Section 14.055.J of this Chapter.
- F. Applications for variances to dimensional standards in excess of that provided in Section 14.055.E shall be a Type III application.
- G. The Planning Commission or Director, or their designee, may attach conditions to the granting of variances as it deems necessary to further the purpose of this Chapter.
- H. As a participant in the National Flood Insurance Program, the City is not authorized to grant a variance from the requirement to elevate or floodproof structures in accordance with state and federal regulations, whichever is most restrictive. Variances may be issued for nonresidential buildings in very limited circumstances to allow a lesser degree of floodproofing than watertight or dry-floodproofing, where it can be determined that such action will have low damage potential, complies with all other variance criteria except Section 14.055.A and otherwise complies with Sections 14.040.P - R of this Chapter.
- I. The City cannot grant a variance from the special flood hazard designation assigned by the Federal Insurance Administrator to a site. However, a property owner may request a Letter of Map Change (LOMC) from the Federal Emergency Management Agency.
- J. In reviewing a Type III Variance, the Planning Commission shall consider all technical evaluations, relevant factors, and standards specified in other Sections of this Chapter and other Chapters of this Code, and make affirmative findings, with or without conditions, for each of the following criteria:
 - 1. A showing of good and sufficient cause that the need for the variance is not of the applicant's making and will not result in a use of the site that is not otherwise permitted in the underlying zoning district.
 - 2. A determination that failure to grant the variance would result in exceptional hardship to the applicant and is the minimum necessary to grant relief.
 - 3. A determination that the granting of a variance will not result in increased flood heights, additional threats to public safety, extraordinary public expense, create nuisances, cause fraud on or victimization of the public as identified in Section 14.055.A(1) – (11) or conflict with existing local, state, or federal laws or ordinances.
 - 4. The safety of access to the property in times of flood for ordinary and emergency

vehicles.

5.  A determination that the development project cannot be located outside the Special Flood Hazard Area and/or high hazard area and that impacts to flood storage, water infiltration, and riparian vegetation have been minimized to the extent practicable.
6.  A demonstration of consistency with all other local, state, or federal laws or ordinances, including documentation of any necessary consultations with state or federal agencies.

14.060 Prescribed Conditions for the Rehabilitation or Replacement of Pre-Existing Structures. The replacement of pre-existing structures or development damaged or destroyed accidentally is subject to following standards:

- A. The structure or development was in existence within the Flood Management Area prior to February 1, 2019.
- B. The use is allowed in the underlying zoning district at the time the application is made to rehabilitate or replace the structure.
- C. A Type I Floodplain Development Permit is approved prior to applying for building permits.
- D. The rehabilitation or replacement is rebuilt on the same footprint of the original structure and does not increase the impervious area within the Special Flood Hazard Area.
- E. The rehabilitated or replaced structure is elevated, if residential, or floodproofed or elevated, if non-residential, in accordance with the applicable standards of this Chapter, the definition found Section 1.040, and all additional relevant standards in this Code.

