Chapter 13.12 STORMWATER MANAGEMENT

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13.12.010 Purpose.

The purpose of this chapter is to define policies, minimum requirements, minimum standards and design procedures and permits for the construction and maintenance of stormwater conveyance and quantity and quality control facilities in order to:

- A. Minimize increased stormwater runoff rates from any new development so as to minimize the impact upon any downstream natural channel that may exist between the subject area and the Willamette or Clackamas Rivers;
- B. Prevent water runoff generated by development from exceeding the capacity of downstream stormwater facilities;
- C. Reduce stormwater runoff rates and volumes, soil erosion and <u>nonpoint source</u> pollution, wherever possible, from <u>developed and developing</u> lands that were developed without the stormwater management controls required by this chapter;
- D. Prevent the uncontrolled or irresponsible discharge of stormwater from new development onto adjoining public or private property;

Comment [amm1]: Because the City has a NPDES Permit, the TMDL program now considers the City's stormwater runoff as a point source with a wasteload allocation. (That wasteload is addressed through permit implementation.)

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This is kind of a technicality, but just cleaning up the language to be consistent with the regulations.

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- E. Maintain the integrity of stream channels for their biological functions, as well as for drainage and other purposes;
- F. Have stormwater conveyance facilities of adequate design to manage all volumes of water generated in the contributing drainage area, for both the existing condition and the anticipated future condition;
- G. Have all stormwater facilities:
 - 1. Designed to mimic natural hydrologic conditions, to the maximum extent practicable,
 - 2. Designed in a manner to allow economical future maintenance,
 - 2. If city owned or maintained, designed for maintenance with city owned equipment,
 - 3. Designed using materials that will ensure a minimum practical design life of seventy-five years, and
 - Designed to have sufficient structural strength to resist erosion and all external loads (construction, traffic, seismic) which may be imposed;
- H. Establish maintenance easements with the owners of privately owned/maintained stormwater facilities to ensure an appropriate level of maintenance and to help minimize public safety hazards;
- I. Have all new stormwater facilities comply with applicable National Pollutant Discharge Elimination System (NPDES) requirements;
- J. Minimize the deterioration of existing watercourses, culverts, bridges, dams and other structures;
- K. Minimize increases in nonpoint sourcestormwater pollution; and
- L. Allow for periodic inspections of both private and public stormwater quantity control and quality control facilities to verify that they are functioning in substantial conformance with the approved design intent.
- M. Allow Issuance of engineering permits for stormwater work in the right-of-way or public easements either as a separate Public Works permit or as part of overall issued public infrastructure construction plans. The various fees for these permits are approved and modified from time to time by the city commission. Failure to meet the conditions of the issued permit shall constitute a violation of the Municipal Code. (Ord. 99-1029 <u>§2</u> (part), 1999)

(Ord. No. 10-1003, § 1(Exh. 1), 7-7-2010)

13.12.020 Adoption of standards.

The city commission may establish and modify from time to time by resolution Public Works Stormwater and Grading Design Standards to implement the requirements of this chapter.

(Ord. 99-1029 §2 (part), 1999)

13.12.030 Superceding Oregon City Drainage Master Plan Appendix A.

The policies and standards of this chapter are intended to be consistent with the applicable sections of the Oregon City Drainage Master Plan dated January 1988, and applicable basin master plans, for land drainage and flood control within the Oregon City urban growth area, as adopted by the city. Appendix A of the Oregon City Drainage Master Plan dated January 1988 is superseded by the Public Works Stormwater and Grading Design Standards adopted by resolution and as amended from time to time.

(Ord. 99-1029 §2 (part), 1999)

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same name

Comment [amm2]: New manual will keep the

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13.12.040 Definitions.

Unless specifically defined below, words and phases used in this chapter shall be interpreted so as to give them the meaning they have in common usage and to give this chapter its most reasonable application.

"Applicant" means a person, party, firm, corporation or other legal entity that has applied for a development permit or approval.

"Biosolids" means_solids_derived_from_primary, secondary_or_advanced_treatment_of_domestic wastewater that have been treated through one or more controlled processes that significantly reduce pathogens and reduce volatile solids or chemically stabilized solids to the extent that they do not attract vectors. This term refers to domestic wastewater treatment facility solids that have undergone adequate treatment to permit their land application.

"Bulk petroleum storage" means storage of any type of bulk liquid petroleum or petroleum waste materials stored outside in multiple above ground storage tanks (AST). Multiple ASTs include two or more tanks that are either within the same secondary containment structure or within twenty feet of each other.

"Catch basin" means a structure, normally with a sump, for receiving drainage from a gutter or median and discharging the water through a conduit.

"City" means the city of Oregon City.

"City engineer" means the city engineering manager, their duly authorized representative(s), or the city's duly authorized representative(s) as designated by the city manager.

"Clearing" means surface removal of vegetation.

"Closed depression" means a low lying area, which has no, or such a limited, surface outlet that in most storm events acts as a retention basin, holding water for infiltration into the ground or evaporation into the air. By their nature, closed depressions may contain wetlands.

"Constructed wetlands" means wetlands developed as a water quality or quantity facility, subject to change and maintenance and modification as such. These areas must be clearly defined and/or separated from naturally occurring or created wetlands.

"Construction" means any site altering activity, including but not limited to: grading, paving, utility construction, and building construction.

"Contributing drainage area" means the subject property together with the watershed land area contributing runoff to it.

"Conveyance" means a channel or conduit to move water from one point to another point.

"Culvert" means a hydraulically short conduit that conveys surface drainage in artificial or natural watercourses through a roadway embankment or past some other type of flow obstruction.

"Dam" means a water storage structure that may or may not meet Oregon Revised Statute (ORS) requirements for height and storage capacity. All such structures require professional engineer design. If the water storage structure exceeds the ORS criteria for height or storage capacity, then the Oregon State Water Resources Commission shall have approval authority.

"DEQ" means the Oregon Department of Environmental Quality.

"Development" means any land use decision or manmade change to improved or unimproved real estate, including but not limited to defined as buildings or other structures, <u>utility infrastructure</u>, streets or other structures or facilities, mining, dredging, paving, filling or excavation. Development does not include the following: (1) stream enhancement or restoration projects approved by the city; (2) farming practices as defined in ORS 30.930 and farm use as defined in ORS 215.203, except that buildings associated with

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Comment [amm3]: No longer used in this chapter.

Comment [amm4]: No longer used in this chapter.

Comment [amm5]: Updated to be consistent with OCMC 17.04 and WES Manual.

Comment [amm6]: Code section 13.12.050 includes additional project types that are exempt from <u>stormwater management</u> requirements (ex. utility projects). Those project types are still considered to be development, so not listed here.

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farm practices and farm uses are subject to the requirements of this chapter.; and (3) construction on lots in subdivisions meeting the criteria of ORS 92.040(2)(1995).

"Disturb" means man-made changes to the existing physical status of the land that are made in connection with development.

"Drainage feature" means any natural or man-made structure, facility, conveyance or topographic feature which has the potential to concentrate, convey, detain, retain, infiltrate or affect the flow rate of stormwater runoff.

"DSL" means the Oregon Division of State Lands.

"Easement" means the legal right to use a parcel of land for a particular purpose. It does not include fee ownership, but may restrict the owner's use of the land.

"Embankment" means a raised structure of earth, gravel or similar material above the surrounding grade.

"Engineer" means a registered professional engineer licensed by the state of Oregon.

"Engineer of record" means the project engineer who will affix his/her seal on project drainage plans and drainage analysis.

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

"Erosion" means the movement of soil particles resulting from actions of water, wind or mechanical means.

"Excavation" means the mechanical removal of earth material.

"Fill" means any material such as, but not limited to, sand, gravel, soil, rock or gravel that is placed for the purposes of development or redevelopment.

"Floodplain" means the land area identified and designated by the United States Army Corps of Engineers, the Oregon Division of State Lands, the Federal Emergency Management Agency or city of Oregon City that has been or may be covered temporarily by water as a result of a storm event of identified frequency. It is usually the flat area of land adjacent to a stream or river formed by floods.

"Forebay" means an easily maintained, extra storage area provided near an inlet of a BMP to trap incoming sediments before they accumulate in a pond or wetland BMP.

"Fuel dispensing facilities" means the area (including fuel islands, above ground fuel tanks, fuel pumps, and the surrounding pad) where fuel is transferred from bulk storage tanks to vehicles, equipment, and/or mobile containers.

"Grading" means any excavating, filling, embanking or altering contours of earth material.

"Grubbing" means the removal of vegetative matter from below the surface of the ground, such as sod, stumps, roots, buried logs or other debris, and shall include the incidental removal of topsoil to a depth not exceeding twelve inches.

"Impervious surfaces" means a hard surface area which either prevents or retards the entry of water into the soil mantle and/or causes water to run off the surface in greater than natural quantities or at an increased rate, as under natural conditions prior to development. It can also be a hard surface area which causes water to run off the surface in greater quantities or at an increased rate of flow from the flow present under natural conditions prior to development. Common il mpervious surfaces include, but are not limited to, rooftops, walkways, patios, driveways, parking lots or storage areas, concrete or asphalt paving, gravel surfaces with compacted subgrade, packed earthen materials and oiled, macadam or other surfaces which similarly impede the natural infiltration of stormwater. Open, uncovered retention/detentionstormwater management facilities shall not be considered impervious surfaces.

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Comment [amm8]: No longer referenced in this chapter.

Comment [amm9]:

Note: Definition of "Impervious Surface" in OCMC 17.04.586 exempts driveways. That should probably be modified with the development code update.

Comment [amm7]: I believe this is an outdated exemption. Should be reviewed by City attorney.

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"Inlet" means a connection between the surface of the ground and a drain or sewer for the admission of surface and stormwater runoff.

"Land disturbing activity" means any activity that results in a change in the existing soil cover (both vegetative and nonvegetative and both temporary and permanent) and/or the existing soil topography. Land disturbing activities include, but are not limited to, demolition, construction, paving, clearing, grading and grubbing.

"Lot" means a single unit of land that is created by a subdivision of land (ORS 92.010(3)). For the purposes of this chapter, the word "lot" includes "plot," "parcel," or "tract."

"Maintenance" means any activity that is necessary to keep an existing facility stormwater facility in good working order so as to function as designed. Maintenance includes complete reconstruction of a stormwater facility, if needed to return the facility to good working order. Maintenance also includes the correction of any problem on the site property that may directly impact the function of the stormwater facilities.

"Maintenance easement" means a binding agreement between the city and the person or persons holding title to a property served by a stormwater facility where the property owner promises to maintain certain stormwater facilities; grants the city the right to enter the subject property to inspect and make certain repairs, or perform certain maintenance procedures on the stormwater control facilities when such repairs or maintenance have not been performed by the property owner; and promises to reimburse the city for the cost should the city perform such repairs or maintenance.

"Mitigation" means the reduction of adverse effects of a proposed project by considering, in the following order: (1) avoiding the impact all together by not taking a certain action or parts of an action; (2) minimizing impacts by limiting the degree or magnitude of the action and its implementation; (3) rectifying the impact by repairing, rehabilitating or restoring the affected environment; (4) 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 (5) compensating for the impact by replacing or providing comparable substitute water quality resource areas.

"NPDES" means the National Pollutant Discharge Elimination System. A national permit system that covers discharges to waters of the United States and is enforced under the Federal Water Pollution Control Act, commonly known as the Clean Water Act.

"Nonpoint source pollution" means pollution from any source other than from discernible, confined and discrete conveyances, and includes, but is not limited to, pollutants from agricultural, silviculture, mining, construction, subsurface disposal and urban runoff sources.

"Oil/water separator" means a structure or device used to remove suspended, floating or dispersed oil and greasy solids from water.

"Off site" means any area lying upstream of the site that drains onto the site and any area lying downstream of the site to which the site drains.

"On site" means the entire property that includes the proposed development.

"Outlet" means a point of discharge of a culvert or other closed conduit.

"Owner or property owner" means the person who is the legal record owner of the land, or where there is a recorded land sale contract, the purchaser thereunder.

"Parcel" means a single unit of land that is created by a partitioning of land (ORS 92.010(7)).

"Partition" means the division of an existing land ownership into two or three parcels, within a pandar year, and is subject to approval under the Oregon City Municipal Code.

"Plans" mean the construction documents and specifications, including system site plans, storm drain plans and profiles, cross sections, detailed drawings, etc. or reproductions thereof, approved or to

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Comment [amm10]: Only referenced in definition of "subdivide land" that is not used in this chapter

Comment [amm11]: No longer referenced in this chapter.

Comment [amm12]: No longer referenced in this chapter.

Comment [amm13]: No longer referenced in this chapter.

Comment [amm14]: No longer referenced in this chapter.

Comment [amm15]: No longer referenced in this chapter.

Comment [amm16]: No longer referenced in this chapter

Comment [amm17]: Not referenced in this chapter.

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be approved by the city, county, or state. They will show the location, character, dimensions and details for the work to be done.

"Precipitation" means the process by which water in liquid or solid state falls from the atmosphere.

"Private stormwater facility" means a stormwater facility located on private property serving more than one structure and maintained by private property owners.

"Professional engineer" means a registered professional engineer licensed by the state of Oregon.means a person who, by reason of his or her special knowledge of the mathematical and physical sciences and the principles and methods of engineering analysis and design, acquired by professional education and practical experience, is qualified to practice engineering as attested by his or her legal registration as a professional engineer in the state of Oregon.

"Project engineer" means the professional engineer responsible for the project, who will affix his/her seal on the project drainage plans and drainage analysis and supervise construction of the stormwater facilities. The project engineer shall be licensed in the state of Oregon and qualified by experience or examination.

"Public stormwater facility" means any stormwater facility in the public right-of-way or easement operated and maintained by the city, county or state.

"Record drawings" means a set of engineering or site drawings that show how the project was constructed and what materials were used. Record drawings are signed and dated by the project engineer.

"Restoration" means 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.

"Right-of-way" means all land, or interest therein, which by deed, conveyance, agreement, easement, dedication, usage or process of law is reserved for, or dedicated to, the use of the general public.

"Sedimentation" means the process of gravity deposition of water suspended matter; the process of depositing soil particles, clays, sands and other sediment, that were picked up by stormwater runoff.

"Solid waste storage area" means a place where solid waste containers are stored. Solid waste containers include trash compactors, solid waste dumpsters and garbage cans.

"Stormwater" means the surface water runoff that results from all natural forms of precipitation.

"Stormwater easement" means a legal encumbrance that is placed against a property's title to reserve specified privileges for the users and beneficiaries of the drainage facilities contained within the boundaries of the easement.

"Stormwater facility" means a component of a man-made drainage feature, or features designed or constructed to perform a particular function or multiple functions <u>related to stormwater management</u>. Includes, but is not limited to, pipes, swales, ditches, culverts, street gutters, <u>rain gardens, pervious pavements</u>, <u>green roofs, ponds</u>detentions basins, retention basins, wet-ponds, constructed wetlands, infiltration devices, catch basins, oil/water separators and sediment basins. Stormwater facilities shall not include building gutters, downspouts, and drains serving one single-family residence.

"Stormwater management" means a program to provide surface water quality and quantity controls through structural and non-structural methods and capital improvement projects. Nonstructural controls include, but are not limited to, maintenance of stormwater facilities, public education, water quality monitoring, and preparation of agreements, ordinances, and regulations.encompasses "control," "developmental" and "maintenance" activities in which there is physical interaction with stormwater.

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Comment [amm18]: Not referenced.

Comment [amm19]: We talked about adding the definition of "Pre-developed Condition," but that term is not used in this chapter of code. Instead, we will have the definition in the Manual.

Comment [amm20]: Not needed.

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"Stormwater quality control" means the control of the introduction of pollutants into stormwater and the process of separating pollutants from stormwater. Stormwater guality control facilities include, but are not limited to, source controls, biofiltration/biofilter facilities, wet ponds, wetland forebays, oil/water and sedimentation control facilities. nstructed wetlands and erosion 'Stormwater guantity control" means the control of the rate and/or volume of stormwater released from a development site. Stormwater quantity control facilities include, but are not limited to, detention and retention facilities "Stream" means a body of running water moving over the earth's surface in a channel or bed, such as a creek, rivulet or river. It 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. "Street, private" means any street, road, or right-of way that is not a public street, as defined in this Comment [amm21]: Not needed. "Street, public" means a street or road dedicated or deeded for public use. For the purposes of this Comment [amm22]: Not needed. chapter, public street may include "alley," "lane," "court," "avenue," "boulevard," "cul de sac" and similar designations, and any county roads and state highways. "Structure(s)" means a building or other major improvement that is built, constructed or installed, or manmade improvements to land that are used, or expected to be used, in the operation of a utility. It includes buildings, utility lines, manholes, catch basins, driveways and sidewalks. It does not include minor improvements, such as fences, utility poles, flagpoles or irrigation system components that are not customarily regulated through zoning codes. "Subdivide land" means dividing an area or tract of land into four or more lots. This applies for an Comment [amm23]: Not referenced in this area or tract of land that existed as a unit or contiguous units of land under a single ownership at the chapter. beginning of the year. Subdivision" means either an act of subdividing land or an area or tract of land subdivided as Comment [amm24]: Not used in this chapter. defined in this section. "Surface waters" mean stormwater accumulating on a surface (including natural and man-made) and Comment [amm25]: Not used in this chapter. draining in the direction of least resistance due to gravity. "Waste discharges" mean any discharge that requires an NPDES permit. Water Pollution Control Comment [amm26]: Waste discharges is only Facility (WPCF) permit or 401 Certification. The following are excluded from this definition: used in 13.12.050.C.3, which has since been deleted. 1. Individual on-site sewage disposal systems subject to issuance of a construction-installation permit: 2. Domestic sewage facilities that discharge less than five thousand gallons per day under WPCF nermit: Biosolids land applied within agronomic loading rates pursuant to OAR Chapter 340, <u>Division 50</u>; and -Reclaimed domestic wastewater land applied at agronomic rates pursuant to OAR Chapter 340, "Watercourse" means a channel in which a flow of water occurs, either continuously or intermittently, and if the latter with some degree of regularity. Such flow must be in a definite direction. "Watershed" means a geographic unit defined by the flows of rainwater or snowmelt. All land in a Comment [amm27]: No longer referenced in watershed drains to a common outlet, such as a stream, lake or wetland. this chapter "Wetlands" means those areas that are 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

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vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps,

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marshes, bogs and similar areas. Wetlands are those areas identified and delineated by a qualified wetland specialist as set forth in the 1987 Corps of Engineers Wetland Delineation Manual.

(Ord. 99-1029 §2 (part), 1999)

13.12.050 Applicability and exemptions.

This chapter establishes performance standards for stormwater conveyance, quantity and quality. Additional performance standards for erosion prevention and sediment control are established in OCMC OCMC 17.47.

Pursuant to each of the subsections below, proposed activities may be required to meet the performance standards for stormwater conveyance, stormwater quantity or stormwater quality.

- A. Stormwater Conveyance. The stormwater conveyance requirements of this chapter shall apply to all stormwater systems constructed with any development activity, except as follows:
 - 1. The conveyance facilities are located entirely on one privately owned parcel; and
 - 2. The conveyance facilities are privately maintained; and
 - 3. The conveyance facilities receive no stormwater runoff from outside the parcel's property limits.

Those facilities exempted from the stormwater conveyance requirements by the above subsection will remain subject to the requirements of the Oregon Uniform Plumbing Code. Those exempted facilities shall be reviewed by the building official.

- B. Stormwater Quantity and Quality Control. The stormwater quantity control and quality control requirements of this chapter shall apply to the following proposed activities, uses or developments, unless as exempted under C:
 - Activities located wholly or partially within water quality resource areas pursuant to <u>Chapter</u> <u>17.49</u> that will result in the creation of more than five hundred square feet of impervious surface within the WQRA or will disturb more than one thousand square feet of existing impervious surface within the WQRA as part of a commercial or industrial redevelopment project. These square footage measurements will be considered cumulative for any given sevenfive-year period; or
 - Activities that create <u>or replace</u> more than <u>two-five</u> thousand square feet of impervious surface, cumulated over any given <u>seven five</u> year period; <u>or</u>.
 - Redevelopment of a commercial or industrial land use that will disturb more than five thousand square feet of existing impervious surface. This five thousand square foot measurement cumulates over any given seven year period;
- C. Exemptions. The following exemptions to 13.12.050(B) apply:
 - 41. An exemption to the stormwater quantity control requirements of this chapter will be granted in the following circumstances:

a. The development site discharges to a stormwater quantity control facility approved by the city engineer to receive the developed site runoff after verification that the facility is adequately sized to receive the additional stormwater, or,

b. The when the development site discharges to one of the following receiving bodies of water: the Willamette River, Clackamas River or Abernethy Creek; and either lies within the one hundred year floodplain or is up to ten feet above the design flood elevation as defined in Chapter 17.42, provided that the following conditions are met:

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- The project site is drained by a conveyance system that is comprised entirely of manmade elements (e.g. pipes, ditches, culverts outfalls, outfall protection, etc) and extends to the ordinary high water line of the exempt receiving water; and
- b. The conveyance system between the project site and the exempt receiving water has sufficient hydraulic capacity and erosion stabilization measures to convey discharges from the proposed conditions of the project site and the existing conditions from nonproject areas from which runoff is collected.
- Projects in the following categories are generally exempt from the stormwater quantity control and quality control requirements:
- a. Stream enhancement or restoration projects approved by the City;
- b. Farming practices as defined by ORS 30.960 and farm use as defined in ORS 214.000; except that buildings associated with farm practices and farm use are subject to the requirements of this chapter.
- c. Actions by a public utility or any other governmental agency to remove or alleviate an emergency condition.
- d. Road and parking area preservation/maintenance projects such as pothole and square cut patching, surface sealing, replacing or overlaying of existing asphalt or concrete pavement, provided the preservation/maintenance activity does not expand the existing area of impervious coverage above the thresholds in 13.12.050(B).
- e. Pedestrian and bicycle improvements (sidewalks, trails, pathways, and bicycle paths/lands) where no other impervious surfaces are created or replaced, built to direct stormwater runoff to adjacent vegetated areas.

<u>f.</u> Underground utility projects that replace the ground surface with in-kind material or materials with similar runoff characteristics.

- g. Maintenance or repair of existing utilities.
- C. Stormwater Quality Control. The stormwater quality control requirements of this chapter shall apply to the following proposed activities, uses or developments:
 - 1. Category A. Activities subject to general water quality requirements of this chapter:
 - a. The construction of four or more single-family residences;
 - b. Activities located wholly or partially within water quality resource areas pursuant to <u>Chapter 17.49</u> that will result in the creation of more than five hundred square feet of impervious surface within the WQRA or will disturb more than one thousand square feet of existing impervious surface within the WQRA as part of a commercial or industrial redevelopment project. These square footage measurements will be considered cumulative for any given seven year period; or
 - c. Activities that create more than eight thousand square feet of new impervious surface for other than a single-family residential development. This eight thousand square foot measurement will be considered cumulative for any given seven year period;
 - d. An exemption to the stormwater quantity control requirements of this subsection will be granted if the development site discharges to a stormwater quality control facility approved by the city engineer to receive the developed site runoff after verification that the facility is adequately sized to receive the additional stormwater.
 - D. 2. Category B. Uses Requiring Additional Management Practices. In addition to any other applicable requirements of this chapter, the following uses are subject to additional

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management practices as contained in the Public Works Stormwater and Grading Design Standards:

- a. Fuel dispensing facilities and surrounding traffic areas;
- b. Above ground storage of liquid materials;
- c. Solid waste storage areas, containers, and trash compactors for commercial, industrial, or multi-family uses;
- d. Exterior storage of bulk materials;
- e. Material transfer areas and loading docks;
- Equipment and/or vehicle washing facilities;
- Development on land with suspected or known contamination;
- Bulk petroleum storage in multiple stationary tanks;
- c. Solid waste storage areas for commercial, industrial or multi-family uses;
- d. Loading and unloading docks for commercial or industrial uses; or
- h. e. Covered vehicle parking for commercial or industrial uses.
- i. Industrial and Commercial high traffic areas, and
- i. Land uses subject to DEQ 1200-Z Industrial Stormwater Permit Requirements.
- Category C. Clackamas River Watershed. In addition to any other applicable requirements of this chapter, any development that creates new waste discharges and whose stormwater runoff may directly or indirectly flow into the Clackamas River is subject to additional requirements associated with Oregon Administrative Rules (OAR) 340-41-470 (Thee Basin Rule).

(Ord. 99-1029 §2 (part), 1999)

13.12.060 Abrogation and greater restrictions.

Where the provisions of this chapter are less restrictive or conflict with comparable provisions of other portions of this code, regional, state or federal law, the provisions that are more restrictive shall govern. Where this chapter imposes restrictions that are more stringent than regional, state or federal law, the provisions of this chapter shall govern. However, nothing in this chapter shall relieve any party from the obligation to comply with any applicable federal, state or local regulations or permit requirements.

Compliance with this chapter and the minimum requirements, minimum standards, and design procedures as set forth in the city's adopted Public Works Stormwater and Grading Design Standards does not relieve the designer, owner, or developer of the responsibility to apply conservative and sound professional judgment to protect the health, safety and welfare of the public. It is not the intent of this chapter to make the city a guarantor or protector of public or private property in regard to land development activity.

(Ord. 99-1029 §2 (part), 1999)

13.12.070 Severability.

The provisions of this chapter are severable. If any section, clause, or phrase of this chapter is adjudged invalid by a court of competent jurisdiction, the decision of that court shall not affect the validity of the remaining portions of this ordinance.

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Comment [amm28]: Three Basin Rule is no longer part of OARs.

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(Ord. 99-1029 §2 (part), 1999)

13.12.080 Submittal requirements.

A. Timing and Scope of Required Submittal.

- Applications subject to the stormwater conveyance requirements of this chapter shall include an engineered drainage plan and design flow calculation report submitted prior to, or contemporaneous with, submittal of an application for a building, land use or other city issued permit.
- Applications subject to the stormwater quantity and/or Category A quality requirements of this chapter shall include an engineered drainage plan and an engineered drainage report submitted prior to, or contemporaneous with, submittal of an application for a building, land use or other city issued permit.
- Applications subject to Category B water quality special management practices shall demonstrate compliance with the additional management practices for commercial, industrial and multi-unit dwelling land uses of the Public Works Stormwater and Grading Design Standards as part of the site plan and design review process.
- 4. Applications subject to Category C water quality requirements for the Clackamas River Watershed are subject to OAR 340-41-470 (Three Basin Rule). No new discharges will be approved until a copy of a current DEQ permit, or written statement from DEQ that none is required, is on file with the city.
- <u>AB.</u> <u>Applications subject to stormwater conveyance, stormwater quality control, and/or stormwater quantity control requirements of this chapter shall prepare Required</u> engineered drainage plans, drainage reports, and design flow calculation reports, which contain methods and proposed facilities to manage stormwater conveyance, quantity and/or quality, shall be prepared in compliance with the submittal requirements of the Public Works Stormwater and Grading Design Standards.
- **GB**. Each project site, which may be composed of one or more contiguous parcels of land, shall have a separate valid city approved plan and report before proceeding with construction.

(Ord. 99-1029 §2 (part), 1999)

13.12.090 Approval criteria for engineered drainage plans and drainage report.

An engineered drainage plan and/or drainage report shall be approved only upon making the following findings:

- A. The plan and report demonstrate how the proposed development and stormwater management facilities will accomplish the purpose statements of this chapter;
- B. The plan and report meet the requirements of the Public Works Stormwater and Grading Design Standards adopted by resolution under <u>Section 13.12.020</u>
- C. Unless otherwise exempted by <u>Section 13.12.050(B)</u>, the plan and report includes adequate stormwater quantity control facilities, so that when the proposed land development activity takes place, peak rates and volumes of runoff:
- 1. Do not exceed the capacity of receiving drainage conveyance facilities;
- 2. Do not increase the potential for streambank erosion; and
- 3. Do not add volume to an off-site closed depression without providing for mitigation.
- D. Unless otherwise exempted by Section 13.12.050(C), the proposed development includes:
- 1. Adequate stormwater quality control facilities, so that when the proposed land development activity takes place, the temperature and overall pollution level of stormwater runoff is no

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greater than the water entering. When no water enters a project, then stormwater runoff shall be compared to rain samples; and

- 2. Stormwater quality control facilities which:
- Are in compliance with applicable National Pollutant Discharge Elimination System (NPDES) requirements;
- Minimize the deterioration of existing watercourses, culverts, bridges, dams and other structures; and
- c. Minimize any increase in nonpoint source pollution.
- EC. The storm drainage design within the proposed development includes provisions to adequately control runoff from all public and private streets and roof, footing, and area drains and ensures future extension of the current drainage system.
- FD. Streambank erosion protection is provided where stormwater, directly or indirectly, discharges to open channels or streams. The postdevelopment peak stormwater discharge rate from a development site for the two year, twenty-four hour duration storm event shall not exceed fifty percent of the two year, twenty-four predevelopment peak runoff rate.
- GE. Specific operation and maintenance measures are proposed that ensure that the proposed stormwater quantity control facilities will be properly operated and maintained.

(Ord. 99-1029 §2 (part), 1999)

13.12.100 Alternative materials, alternative design and methods of construction.

The provisions of this chapter are not intended to prevent the use of any material, alternate design or method of construction not specifically prescribed by this chapter or the Public Works Stormwater and Grading Design Standards, provided any alternate has been approved and its use authorized by the city engineer. The city engineer may approve any such alternate, provided that the city engineer finds that the proposed design is satisfactory and complies with the intent of this chapter and that the material, method, or work offered is, for the purpose intended, at least the equivalent of that prescribed by this chapter in effectiveness, suitability, strength, durability and safety. The city engineer shall require that sufficient evidence or proof be submitted to substantiate any claims that may be made regarding its use. The details of any action granting approval of an alternate shall be recorded and entered in the city files.

(Ord. 99-1029 §2 (part), 1999)

13.12.110 Transfer of engineering responsibility.

Project drainage plans shall always have an engineer of record performing the function of project engineer. If the project engineer is changed during the course of the work, the city shall be notified in writing and the work shall be stopped until the replacement engineer has agreed to accept the responsibilities of the project engineer. The new project engineer shall provide written notice of accepting project responsibility to the city within seventy-two hours of accepting the position as project engineer.

(Ord. 99-1029 §2 (part), 1999)

13.12.120 Standard Construction Specifications.

The workmanship and materials shall be in accordance with the edition of the "Standard Specifications for Public Works Construction," as prepared by the Oregon Chapter of American Public Works Association (APWA) and as modified and adopted by the city, in effect at the time of application. The exception to this requirement is where this chapter and the Public Works Stormwater and Grading

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Design Standards provide other design details, in which case the requirements of this chapter and the Public Works Stormwater and Grading Design Standards shall be complied with.

(Ord. 99-1029 §2 (part), 1999)

13.12.130 Administrative provisions.

An applicant shall submit the following additional items to the city and complete the following tasks prior to proceeding with construction of proposed development plans. These items include the following:

- Engineer's cost estimate (also may be known as engineer's opinion of probable construction cost);
- B. Plan check and inspection fees (as set by city resolution);
- C. Certificate of liability insurance for city funded public projects contracted by the city (not less than one million dollars single incident and two million dollars aggregate);
- D. Preconstruction meeting (if required by some other provision of this code);
- E. Performance Assurance(s). Applicant must submit a letter of commitment, cash deposit or other form of assurance in form and substance satisfactory to the city engineer and city attorney, to cover the engineer's cost estimate for the construction of the stormwater facility. This is required to assure that the following are accomplished to the satisfaction of the city engineer:
 - 1. Work shown on the development plans is accomplished,
 - Appropriate as-built/record drawings and electronic files are delivered to the city. (As-built drawings, or record drawings, will be on four-mil Mylar.) Electronic files shall be submitted per city engineer format requirements,
 - 3. Compliance with the criteria in this chapter and the Public Works Stormwater and Grading Design Standards, as well as with other city standards, ordinances, resolutions or rules,
 - 4. Permanent stabilization and/or restoration of the impact from the development,
 - 5. Fulfillment of all conditions of approval,
 - 6. Payment of all outstanding fees,
 - 7. Submittal of any required maintenance guarantee(s);
- F. Developer/engineer agreement for public works improvements;
- G. Land division compliance agreement (if applicable);
- H. Project engineer's certificate of completion;
- Operation and maintenance easement <u>(if applicable)</u>, if required by subsection A of this section (for an example see Appendix 2-3 of the Public Works Stormwater and Grading Design Standards);
- J. Details on individual items required by this subsection can be obtained by contacting the city's engineering division. Many items, such as the engineer's cost estimate and plan check and inspection fee, <u>maybe be submitted in conjunction with documentation for are frequently incorporated with</u> other infrastructure improvements that are done with the development (such as street, sanitary sewer, and water).

(Ord. 99-1029 § 2 (part), 1999)

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13.12.140 Maintenance of public stormwater facilities.

- A. Where proposed drainage patterns require stormwater facilities to receive stormwater runoff from public streets, the city shall be responsible for maintenance of those stormwater facilities. Access for maintenance of the stormwater facilities shall be provided to the city through the granting of a stormwater easement or other means acceptable to the city.
- B. Responsibility for maintenance of stormwater management facilities including all landscaping, irrigationirrigation systems, structures and appurtenances other stormwater facilities with sumps shall remain with the property owner/developer for two years (known as the warranty period). To ensure the facility landscaping is actively and properly maintained during this critical plant establishment time period, the owner/developer shall pay the city to maintain these facilities during this two-year warranty period; the owner/developer shall still be responsible for reimbursing the city for replacement trees, shrubs, and grass mixes during this two-year period. The owner/developer shall provide the city a separate two-year landscaping maintenance bond for one hundred ten percent of the landscaping cost. Transfer of maintenance of all other stormwater facilities shall occur when the city accepts the stormwater facility.
- C. The city will perform an inspection of the development's entire tributary, publicly maintained, stormwater system approximately forty-five days before the two-year warranty period expires. The stormwater system must be found to be in a clean, functional condition by the city engineer before acceptance of maintenance responsibility by the city.

(Ord. 07-1011, 2007; Ord. 99-1029 § 2(part), 1999)

13.12.150 Penalties and enforcement.

- A. The city is authorized to make inspections and take such actions as required to enforce the provisions of this chapter. The city has the authority to enter onto land for the purpose of inspecting site development activities or resulting improvements. City staff will make an effort to contact the property owner before entering onto that property.
- B. If the city engineer determines a site has any unpermitted or illegal facilities placed, constructed or installed on the site, then the city engineer shall notify the owner in writing directing the owner to submit a written plan (with construction drawings completed by a professional engineer, if otherwise required by this chapter) within ten calendar days. This plan (and drawings, if required) shall depict the restoration or stabilization of the site or correct the work that has adversely impacted adjacent or downstream property owners. The city engineer shall review the plan (and drawings, if required) for compliance with city standards and issue comments for correction, if necessary, or issue an approval to the owner. If the required corrective work constitutes a grading permit, then the city shall collect the appropriate grading permit fee.
- C. Any person, firm, corporation or entity violating any of the provisions of this chapter, whether they be the property owner, the applicant, the contractor or any other person acting with or without the authorization of the property owner or applicant, shall be subject to the code enforcement procedures of Chapters <u>1.16</u>, <u>1.20</u> and <u>1.24</u>

(Ord. 99-1029 § 2 (part), 1999)

13.12.160 Hazardous conditions.

A. Determination and Notification. If the city engineer determines that any excavation, embankment, erosion/sedimentation control or drainage facility is a safety hazard; endangers property; or adversely affects the safety, use or stability of a public way, water quality resource areas (pursuant

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Comment [amm29]:

City to address:

Seems like this section is in conflict. This says that the owner is responsible for maintenance for the first two years, but then says they will pay the City for maintenance during that time. Is the City actively collecting the fees to perform this maintenance?

For the manual, we've just been referring this type of stuff to "engineering policy" but I think we need to clarify this part of the Code.

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to <u>Section 17.49</u>) or drainage course, the owner(s) of the subject property and/or the person or agent in control of the property shall be required to repair or eliminate the hazard in conformance with the requirements of this chapter and the Public Works Stormwater and Grading Design Standards. At the time that the city engineer makes the determination that a hazardous condition exists, the property owner and/or person or agent in control of the property will be notified in writing that the hazard exists.

B. Order to Correct. The city engineer will order the specific work to be undertaken or will order that an engineering design be submitted for review and approval by the city engineer, and will specify the time periods within which the hazardous conditions be repaired or eliminated. In the event that the owner and/or the person or agent in control of the property fails to comply with this order, that person shall be subject to the code enforcement procedures of Chapters 1.16, 1.20, and 1.24

(Ord. 99-1029 §2 (part), 1999)

13.12.170 Permits from other jurisdictions.

- A. The Oregon State Department of Environmental Quality (DEQ) currently issues NPDES <u>1200-C</u> permits for projects that cover areas of <u>five-one</u> acree or greater. No permit will be issued for projects of this size (or any other size as modified by DEQ) without a copy of said DEQ permit being on file with Oregon City. DEQ is responsible for policing its own permits, however, if city personnel observe conditions that are believed to be in violation of any such permit, and cannot get corrections made, the city will bring such conditions to the attention of the appropriate DEQ representatives.
- B. Projects often may require Oregon State Division of State Lands (DSL) and/or United States Army Corps of Engineers (USACE) permit. If, in the city's opinion, such if such permits are required, no permission to construct will be granted until such a time as a copy of such permit is on file with the city or notice is received from those agencies that a permit is not required. DSL/USACE is responsible for enforcing its own permits, however, if city personnel observe conditions that are believed to be in violation of any such permit, and cannot get corrections made, the city will bring such conditions to the attention of the appropriate DSL/USACE representatives.
- C. Occasionally, Pprojects may require Oregon State Department of Fish and Wildlife (ODFW) permits. <u>When ODFW permits are required</u>, <u>nN</u>o work will be authorized until the receipt of a copy of the ODFW permit. ODFW is responsible for policing its own permits, however, if city personnel observe conditions that are believed to be in violation of any such permit, and cannot get corrections made, the city will bring such conditions to the attention of the appropriate ODFW representatives.

(Ord. 99-1029 §2 (part), 1999)

13.12.180 Violation—Penalty.

Any act or omission in violation of this chapter shall be deemed a nuisance. Violation of any provision of this chapter is subject to the code enforcement procedures of Chapters <u>1.16</u>, <u>1.20</u> and <u>1.24</u>.

(Ord. No. 10-1003, § 1(Exh. 1), 7-7-2010)

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