

ORDINANCE NO. NS- 2176

**AN ORDINANCE AMENDING THE BEND CODE BY ADDING A NEW TITLE 16
GRADING, EXCAVATION AND STORMWATER AND DELETING PORTIONS OF
BEND CODE CHAPTER 9-16**

Findings

- A. The City is in the process of reviewing and revising the Bend Code.
- B. Appropriate standards for grading and excavation and regulation of actions that affect stormwater provide environmental protections for both natural areas and developed neighborhoods.
- C. The City is required by permit to adopt provisions regulating stormwater.

BASED ON THESE FINDINGS THE CITY OF BEND ORDAINS AS FOLLOWS:

- Section 1. The Bend Code is amended by adding a new Title 16 Grading, Excavation and Stormwater to read as shown in the attached Exhibit A.
- Section 2. Bend Code Chapter 9-16 (Ordinance No. 1879) is repealed except for Section 8 Temporary Rock Crushing Outside of the SM Zone. Bend Code Chapter 9-16 shall remain applicable to any actions taken or initiated before the effective date of this ordinance. The City Recorder is directed to incorporate Section 8 of Chapter 91-6 into an appropriate location in the Bend Code.

First Reading held on the 21st day of December, 2011.

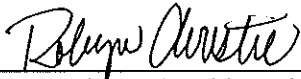
Second Reading and Adoption by Roll Call Vote on the 4th day of January, 2012.

YES:	Mayor Jeff Eager	NO: none
	Mayor Pro Tem Jodie Barram	
	Scott Ramsay	
	Mark Capell	
	Jim Clinton	
	Kathie Eckman	



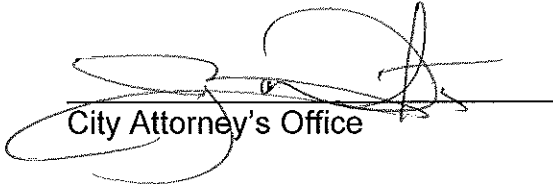
Jeff Eager, Mayor

ATTEST:



Robyn Christie, City of Bend Recorder

Approved as to form:



City Attorney's Office

EXHIBIT A

TITLE 16. GRADING, EXCAVATION, AND STORMWATER MANAGEMENT

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Chapter 16.05 General Provisions

16.05.010 Purpose

The purpose of this Title is to establish minimum grading, drainage and stormwater management requirements and controls for new and existing developments within Bend, as described in each section of this Title. The specific objectives of this Title are:

1. To minimize the negative impacts of increased stormwater discharges from new land development and redevelopment.
2. To maintain the integrity and quality of the Deschutes River and Tumalo Creek for their biological functions, aesthetic and recreational properties, and natural recharge of groundwater.
3. To preserve the natural infiltration of groundwater to maintain the quantity and quality of groundwater resources.
4. To protect against and minimize the pollution of public drinking water supplies and surface waterbodies resulting from development and redevelopment (whether private or public projects).
5. To control the rate, quality and volume of stormwater originating from development and redevelopment sites so that surface water and groundwater are protected, and flooding and erosion potential are not increased.

6. To control non-stormwater discharges to storm drains, dry wells and drill holes, and to reduce pollutants in stormwater discharges.
 7. To provide design, construction, operation and maintenance standards for temporary and permanent onsite stormwater management practices so as to control stormwater runoff.
 8. To promote the public health, safety, property, general welfare, and aesthetics for the citizens of Bend by regulating clearing and grading activities associated with land development including but not limited to initial clearing, brushing, grubbing, excavating, filling and any other activity that disturbs or breaks the topsoil.
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9. To preserve and enhance the City's physical and aesthetic character, to reduce erosion, and to reduce the volume of polluted stormwater runoff by preventing untimely and indiscriminant removal or destruction of trees and ground cover; by limiting clearing of native vegetation and trees; and by keeping grading to the minimum amount needed to build lots, allow access, and provide fire protection.
 10. To promote building and site planning practices that are consistent with the City's natural topography, soils, and vegetative features.
 11. To provide long-term responsibility for and maintenance of stormwater Best Management Practices (BMPs) and facilities.
 12. To enable the City to comply with provisions in the City's National Pollutant Discharge Elimination System (NPDES) Permit, as well as adhere to provisions contained in the City's Water Pollution Control Facilities Permit for Class V Stormwater Underground Injection Control Systems, as anticipated through Oregon Department of Environmental Quality (ODEQ) permit templates, in a manner promoted by the U.S. Environmental Protection Agency that implements innovative solutions including increased use of Low Impact Development (LID) and best management practices.
 13. To make people responsible for costs of mitigation if they drill wells that impact existing stormwater facilities.

16.05.015 Organization of Title 16

This title is organized into six Chapters. Chapter 16.05 General Provisions provides general standards applicable to the entire title. Chapter 16.10 Clearing, Grading and Erosion Control on Construction Sites contains a requirement to obtain a permit for certain clearing and grading activities, describes the

exemptions from the permit requirements, and establishes standards for clearing, grading, erosion and sediment control. Chapter 16.15 Stormwater Management Design Standards and Maintenance Controls provides standards for stormwater management systems on private property and requirements for ongoing maintenance. Chapter 16.20 Illicit Discharge Controls prohibits certain discharges to stormwater systems and groundwater. Chapter 16.25 Well Drilling imposes mitigation responsibility on those responsible for new wells that impact existing stormwater facilities. Chapter 16.30 Stormwater Drainage Utility contains standards and procedures and imposes charges for the City's Stormwater Drainage Utility.

16.05.020 Regulatory Consistency

This Title is consistent with federal laws, rules and regulations including the Federal Water Pollution Control Act (33 USC §1251 et seq. (1972, as amended) (Clean Water Act), the Safe Drinking Water Act (42 USC §300f et seq. (1974, as amended); the State of Oregon's air quality standards; the State of Oregon's Administrative Rules related to groundwater quality, underground injection controls and surface water quality; Oregon Drainage Law; the City's National Pollutant Discharge Elimination System (NPDES) Permit; the City's Water Pollution Control Facilities Permit for Class V Stormwater Underground Injection Control Systems; and any other provisions of the Bend Code. No permit or approval issued pursuant to this Title shall relieve a person of the responsibility to secure permits and approvals required for activities regulated by any other applicable rule, code, act, permit or ordinance. Compliance with this Title does not exempt any person from complying with other applicable ordinances, rules, codes, acts or permits. The requirements of this Title are minimum requirements. If any other ordinance, rule or regulation, or other provision of law also applies, the provisions that are more restrictive or impose higher protective standards shall take precedence.

16.05.030 Responsibility

Any person who undertakes or causes to be undertaken land development or redevelopment shall ensure that soil erosion, sedimentation, increased pollutant loads, and changed water flow characteristics resulting from the activity are controlled to minimize pollution of receiving waters and minimize any increased threat of localized flooding. The requirements of this Title are minimum standards and a person's compliance shall not relieve the person from existing duties relating to stormwater or to enacting measures and best management practices necessary to minimize pollution of receiving waters, and minimize threat of localized flooding resulting from increased runoff or impacted drainage systems as a result of development. By approving a plan under this Title, the City does not accept responsibility for the design, installation, and operation and

maintenance of stormwater BMPs unless specifically agreed to in a separate agreement.

16.05.040 Central Oregon Stormwater Manual

The Central Oregon Stormwater Manual (COSM) is adopted by the City as the design manual for stormwater. Stormwater design professionals are required to be familiar with and use the COSM. All activities and facilities governed by this Title shall be in compliance with the COSM and the City Standards and Specifications. The City Manager may adopt guidance documents and procedures manuals related to implementation of provisions of this Title. The COSM may be updated and expanded periodically by the City Manager, including by adding a Bend Supplement, after public notice and input, based on improvements in engineering, science, monitoring and local maintenance experience.

16.05.050 Enforcement

Violation of permits, plans, provisions, and/or performance standards authorized or contained in this Title are subject to the following enforcement actions. With the exception of Chapter 16.10, which is based closely on long-standing clearing and grading standards, during the first year of implementation (January 30, 2012 through January 31, 2013), enforcement will be limited to education and Administrative Enforcement Remedies as described in Section A., below. Thereafter Judicial Enforcement Remedies may also be imposed in cases where education or Administrative Enforcement Remedies are not proving to be effective in meeting the purpose of this Title.

A. Administrative Enforcement Remedies

1. Withholding Inspections/Approvals: The City may withhold inspections or approvals for projects that are not in compliance with any provision of this Title.
2. Notification of Violation: When the City determines that a land owner has violated or continues to violate any provision of this Title including any permit, agreement or plan authorized by this Title, the City may serve upon the owner a written Notice of Violation (NOV) describing the violation. Within five working days of the receipt of the notice or other deadline agreed to in writing by the City, an explanation of how the violation was rectified or a plan for the satisfactory correction and prevention, to include specific actions, shall be submitted by the land owner to the City. Submission of this plan does not relieve the owner of liability for any violations occurring before or after receipt of the NOV.

Nothing in this Title shall limit the authority of the City to take any action, including emergency actions, stop work orders, or any other enforcement action, without first issuing a NOV.

3. Consent Orders: The City may enter into voluntary compliance agreements with any land owner responsible for non-compliance. The voluntary compliance agreement will include specific action to be taken by the owner to correct the non-compliance within a time period specified by the agreement. The agreements shall be judicially enforceable. Use of a voluntary compliance agreement shall not be a bar against, or prerequisite for, taking any other action against the land owner.
4. Cease and Desist Orders: When the City determines that a land owner has violated (or continues to violate) any provision of this Title including a Clearing, Grading and Erosion Control Permit; performance standards; or any other required plan or other remedies provided for by this Title, or that the owner's past violations are likely to recur, the City may, in addition to other remedies provided by this Title, issue an order to the land owner identifying the violation(s) and directing the landowner to cease and desist all violations and directing the owner to:
 - a. Immediately comply with all requirements; and
 - b. Take appropriate remedial or preventive action as needed to properly address the violation, including halting land clearing, grading or other land development actions. Issuance of a Cease and Desist Order shall not be a bar against, or a prerequisite for, taking any other action against the land owner.
5. Emergency Suspensions: The City may immediately suspend a land owner's permit or approvals (after oral or written notice to the user identifying the violation and provide notice within two working days as to the violation to the Permit holder) whenever the suspension is necessary to stop an actual, recurring or explicitly threatened action that reasonably appears to present or cause an imminent or substantial endangerment to the health or welfare of persons, property, or water quality in the City. The City may also immediately suspend a land owner's permit or approvals (after notice and opportunity to respond) that presents or may present an endangerment to the environment.

Land owners notified of a suspension of their permit or approvals shall immediately stop or eliminate the violation. In the event of the owner's failure to immediately comply voluntarily with the suspension order, at the owner's expense, the City may take steps to prevent or minimize endangerment to any individuals or harm to the environment including unauthorized discharges to surface water and/or groundwater. The City

shall allow the land owner to recommence land development activities for the site when the owner has demonstrated to the satisfaction of the City that the period of endangerment has passed. Notwithstanding any permit suspension, the land owner may take whatever action(s) are needed to correct the violations.

B. Judicial Enforcement Remedies

1. Injunctive Relief: The City may seek a temporary or permanent injunction from the Circuit Court for Deschutes County to restrain or compel specific performance of permits, plans, approvals, orders issued or other requirements imposed or authorized by this Title on the land owner. The City may also initiate other action for legal and/or equitable relief, including a requirement for the land owner to conduct environmental remediation. A petition for injunctive relief shall not be a bar against, or a prerequisite for, taking any other action against a land owner.
2. Civil Penalties:
 - a. Violation of any provision of this Title or of any permit or order issued under this Title is a Class A Civil Infraction. Each day that a violation remains uncured in effect is a separate violation.
 - b. The City may recover reasonable attorneys' fees, court costs, and other expenses associated with enforcement activities (i.e., Section 16.05.050 5.), including expenses related to stormwater BMP maintenance and/or repair, monitoring expenses, and the cost of any actual damages incurred by the City.
 - c. In determining the amount of civil penalty, the Municipal Court shall take into account all relevant circumstances, including, but not limited to, the extent of harm caused by the violation, the magnitude and duration, any economic benefit gained through the owner's violation, corrective actions by the owner, the compliance history of the owner, and any other factor as justice requires.
 - d. Initiation of a civil infraction proceeding shall not be a bar against, or a prerequisite for, taking any other action against a land owner.
3. Remedies Non-Exclusive: The provisions in this section are not exclusive remedies. The City reserves the right to take any, all, or any combination of these actions against a non-compliant land owner or other responsible person. The City is empowered to take more than one enforcement action

against any non-compliant land owner or other responsible person. These actions may be taken concurrently.

16.05.060 Definitions and Acronyms

The following definitions apply in this title.

Access road means a road within one mile of a construction site, designated on an approved construction plan and used during site clearing, grading and construction for the transport of equipment, hauling of fill, and other equivalent vehicular traffic to and from the construction site.

Approval authority means the respective City Department / Division that approves the required permit or measure. This could include the Community Development Director, City Engineer, or the Public Works Director or his/her designees.

Areas of Special Interest (ASI) means river corridor and upland areas of special interest as described in Bend Code – Chapter 10-10, Development Code Sections 2.7.630 and 2.7.700.

Bedrock means naturally occurring solid rock.

Berm means a mound, small rise or hill that is used for landscaping or visual screening purposes.

Best Management Practice (BMP) means a technique, activity, maintenance procedure, structural and/or managerial practice, and/or prohibition of a practice that, when used singly or in combination in a designated manner, is proven to be effective in preventing or reducing the release of pollutants and other adverse impacts to downstream or down-gradient systems. BMPs include, but are not limited to, those listed in the COSM.

Blasting means any activity entailing the use of explosives for the purpose of producing an explosion to demolish structures or to fragment rock for mining, quarrying, excavation and construction.

Blasting performance standards mean measures intended to provide a minimum threshold for controlling stormwater pollution associated with blasting activity, and are used to determine if the requirements in this Title have been met (see Section 16.10.090).

Brushing means the selective removal of vegetation.

Building footprint means the outline of a building, as measured around its foundation.

Central Oregon Stormwater Manual (COSM) means the most current version of the stormwater design guidance manual and any City of Bend-specific supplements.

City means City of Bend, Oregon.

Clearing and grading performance standards mean measures intended to provide a minimum threshold for controlling stormwater pollution associated with clearing and grading activity, and are used to determine if the requirements in this Title have been met (see Section 16.10.070.A).

Clearing, Grading, and Erosion Control Permit (Permit) means a permit that is issued for construction, demolition, and site development for improvements related to all land divisions, multi-family developments, and commercial, industrial, and institutional sites (see Section 16.10.020.A).

Construction activity means any activity occurring in the furtherance of a construction project, including but not limited to, land disturbing activities; hauling of soil and rock; handling of building materials; concrete, stone and tile cutting; and operation of motorized machinery and motor vehicles on the site or on any access routes to the construction site.

Cut and fill performance standards mean measures intended to provide a minimum threshold for controlling stormwater pollution associated with cut and fill activity, and are used to determine if the requirements in this Title have been met (see Section 16.10.070.B).

DBH (dbh) means the diameter at breast height, which is a measurement of tree diameter taken between four and five feet from natural ground level.

Detention means the process of collecting and holding surface and stormwater runoff temporarily in a designed facility such as a pond.

Detention facility means an above ground or below ground facility, such as a pond or tank, that temporarily stores stormwater runoff and subsequently releases it at a slower rate than it is collected by the drainage facility system.

Development. See definition in Bend Development Code Chapter 1.20.

Development approval means written consent from the approval authority.

Discharge means any addition or introduction of any pollutant, surface runoff, or any other substance whatsoever into the municipal storm sewer system, a dry well, drill hole or into waters of the state.

Discharger means any person who causes, allows, permits or is otherwise responsible for a discharge including, without limitation, any operator of a construction site or commercial / industrial facility.

Drainage Submittal means the submittal of documentation including narrative, basin maps, plans, calculations and other supporting documentation to demonstrate that the proposed project will adequately treat and dispose of the stormwater (see Section 16.15.10 and COSM Chapter 3).

Drip-line means an imaginary line around a tree or shrub at a distance from the trunk equivalent to the canopy (leaf and branch) spread.

Earth material means any rock, natural soil or fill, and/or any combination of those materials.

Equivalent Residential Unit (ERU) means a configuration of development or impervious surface estimated to contribute an amount of runoff to the City's stormwater system that is approximately equal to that created by the average developed single-family residence. One ERU is equal to 3,800 square feet of impervious surface area. All single family residences are one ERU, regardless of impervious surface area.

Erosion means the progressive detachment and removal of particles, including soil and rock fragments, from the earth's surface by means of water, wind, ice, gravity or mechanical processes, including vehicular traffic.

Erosion and Sediment Control (ESC) measures are those best management practices that when implemented correctly help prevent soils from moving and eroded sediment from leaving a site.

Erosion and Sediment Control (ESC) performance standards mean measures intended to provide a minimum threshold for controlling stormwater pollution associated with erosion and sediment control activity, and are used to determine if the requirements in this Title have been met (see Section 16.10.080).

Erosion and Sediment Control (ESC) plan means a specific plan prepared by or under the direction of a Oregon licensed professional engineer or other certified professional as authorized by the City Engineer that includes a specific set of best management practices and construction sequencing that are designed to control surface runoff and erosion, and to retain sediment on a site

both before, during and after development. For the purposes of this Title, an ESC Plan shall be prepared in accordance with the COSM.

ESC means erosion and sediment control.

ERU means Equivalent Residential Unit

Good housekeeping practice means a BMP related to the transfer, storage, use, or cleanup of materials performed in a regular manner that minimizes the discharge of pollutants to the storm drain system and/or receiving waters.

Grade means the vertical location of the ground surface. **Existing grade** means the existing condition of the elevation of the ground surface or the natural grade prior to grading, placement of fill, or the excavation or removal of earth from the site. **Rough grade** means the stage at which the grade substantially conforms, in an unfinished state, to an approved clearing and grading sketch or plan.

Finished grade means the final grade of the site after all clearing and grading has been completed that conforms to an approved clearing and grading sketch or plan. For sloping sites exceeding 12 percent slope, the finished grade shall not exceed four feet above or below the existing grade, unless the finished grade has been set through a Site Map and Grading Plan as specified in this Title and approved by the City.

Grading means land disturbance including excavation or filling of earth materials or any combination thereof, including the land in its excavated or filled condition.

Grading plan means a document that defines and describes what activities will take place in clearing and grading a site, typically in preparation for development.

Ground cover means a plant material or non-plant organic material (e.g., mulch, bark chips/dust) that is used to cover bare ground.

Grubbing means the removal of trees and other large plants by their roots.

IBC means International Building Code.

Illicit discharge means any discharge to a catch basin, surface water body, dry well or drill hole that is not composed entirely of stormwater, except conditionally exempt discharges pursuant to a NPDES permit or WPCF permit or rule authorization requirement specific to the inlet, discharges resulting from firefighting activities, or other exempt discharges as outlined in the Chapter 16.20 of this Title.

Illicit Discharge Manual means *City of Bend Illicit Discharge Minimization Best Management Practices Manual*.

Illicit drainage connection means any physical connection to a publicly maintained storm drain system composed of non-stormwater that has not been permitted by the public entity responsible for the operation and maintenance of the system.

Impervious surface means a hard surface area that either prevents or retards the entry of water into the soil mantle. Common impervious surfaces include building roofs, walkways, patios, driveways, parking lots, concrete or asphalt paving, gravel roads, and packed earthen materials.

Infiltration means the passage of water through the soil surface into the underlying geologic material.

Land disturbance and land disturbing activities mean moving or removal of earth material or significant removal of vegetation (e.g. clear-cutting) by manual or mechanical means that results in a denuded landscape that could result in significant erosion problems.

Limited clearing and grading mean clearing and grading resulting in only minor land disturbing activity.

Low Impact Development (LID) means a stormwater management strategy that emphasizes conservation and use of existing natural site features integrated with distributed, small-scale stormwater controls to more closely mimic natural hydrologic patterns and prevent, reduce and treat runoff and pollutant loadings as close to the source as possible in residential, commercial, and industrial settings.

Minor land disturbing activities mean those activities that are equivalent to or less than:

- Excavation or fill of two feet or less (other than foundation areas of single-family or duplexes);
- Alteration to or creation of a slope that is twenty percent or less;
- An excavation or fill that is two feet or further away from the property line; and

Mitigation means measures undertaken to rectify, repair, rehabilitate, restore and/or compensate for negative impacts that result from other actions.

MS4 means a Municipal Separate Storm Sewer System that is a conveyance or system of conveyances (including roads with drainage systems, municipal streets, catch basins, curb, gutters, ditches, manmade channels, or storm drains) owned or operated by a public body (created under State law) having jurisdiction over disposal of sewage, industrial wastes, stormwater, or other wastes that

discharges to the waters of the United States and which are not part of a Publicly Owned Treatment Works (POTW) as defined at 40 CFR Section 122.2.

National Pollutant Discharge Elimination System (NPDES) Permit means a stormwater discharge permit issued by the U.S. EPA, Region X, in compliance with the federal Clean Water Act and its amendments, for the discharge of pollutants into the waters of the United States as defined in 40 CFR 122.2.

Native vegetation means plants commonly found growing in, and adapted to Central Oregon soils and climate.

Non-stormwater discharge means any discharge to the storm drain system or receiving waters that is not entirely composed of stormwater or melted snow and ice.

NOV means Notice of Violation.

NRCS means Natural Resource Conservation Service.

OAR means Oregon Administrative Rules.

ODEQ means Oregon Department of Environmental Quality.

ORS means Oregon Revised Statutes.

Performance standards mean provisions of this Title intended to provide a minimum threshold for controlling stormwater pollution in the subject area, and are used to determine if the requirements of the section have been met. (See Sections 16.10.070, -.080, -.090, -.100 and 16.15.040)

Perimeter control means any barrier that prevents sediment from leaving a site, either by filtering sediment-laden runoff or by diverting runoff to a sediment trap or basin.

Permit means a Clearing, Grading and Erosion Control Permit.

Person responsible means the occupant, lessee, tenant, contract purchaser, owner, agent or other person having possession of property, or if no person is in possession, then the person in control of the use of the property, or in control of the supervision of development on the property.

Phasing means clearing a parcel of land in distinct phases, and stabilizing each phase using erosion and sediment control measures, before clearing the next phase.

Pollutant means dredged spoil, solid waste, incinerator residue, filter backwash, sewage, sewage sludge, garbage, munitions, oils and grease, paints, solvents, fertilizers, pesticides, other chemical wastes, biological materials, radioactive materials, heat, wrecked or discarded equipment, concrete washout, rock, sand, dirt, and industrial, municipal, and agricultural waste discharged into water, and as otherwise defined in 40 CFR 122.2.

Pollution prevention means implementing one or a series of BMPs to prevent pollutants of any kind from entering the storm drainage system including drainage to a surface waterbody, a dry well or a drill hole.

Pollution source control plan means a plan that addresses the prevention and/or control of stormwater pollutants at their source.

Post-construction performance standards mean measures intended to provide a minimum threshold for controlling stormwater pollution associated with post-construction activity, and are used to determine if the requirements in this Title have been met (see Section 16.15.040.A).

P.E. means Professional Engineer in the State of Oregon.

POTW means Publically Owned Treatment Works.

Predevelopment means the natural condition before any type of development.

Redevelopment means a project for which a building permit is required that proposes to add, replace and/or alter impervious surfaces, other than routine maintenance, resurfacing, or repair.

Retaining wall means a wall designed to resist the lateral displacement of soil or other material, as defined in the current International Building Code (IBC).

Retention means the process of collecting and holding surface and stormwater runoff with no surface outflow.

Revegetation means placement of living plant material on sites or excavation and fill slopes where the natural vegetation has been removed.

Riparian area. See definition in Bend Development Code Chapter 1.20.

Riparian corridor means the area within and adjacent to the Deschutes River and Tumalo Creek that includes water areas, fish and wildlife habitat, wetlands, and riparian vegetation and other State Planning Goal 5 resources to be conserved and protected. For purposes of this ordinance, the Riparian corridor is defined as the area within the WOZ.

Sensitive areas means wetlands, areas within a site with individual trees with a specific trunk diameter for deciduous trees of six inches or greater and for coniferous trees of 10 inches or greater as measured four feet dbh, steep slopes, floodplains and other natural resource areas designated for protection or conservation by the Bend Area General Plan or the State of Oregon.

Site means any lot or parcel of land, or a contiguous combination of lots, parcels and or easements under the same ownership or unified control.

Site development envelope means that area of a site that is best suited for development, as determined by identifying sensitive areas (as defined in this Title) for protection, setbacks, and other local standards and requirements.

Site map means a document that defines and describes specific attributes of a site proposed for development.

Site map and grading plan means a document that defines and describes specific attributes of a site proposed for development and what activities will take place in clearing and grading a site in preparation for development (see Section 16.10.020.B).

Slope means an inclined ground surface, the inclination of which is expressed as a ratio of horizontal distance to vertical distance or expressed as a percent of the change in elevation over a given distance.

Steep slope means slopes that are greater than 10 percent.

SM Zone means surface mining zone.

Soil means naturally occurring unconsolidated sediments and deposits that overlay bedrock.

Soils and geological reconnaissance report (soils report) means a report based on adequate test borings (as necessary) that contains data regarding the nature, distribution, strength and erodibility of both existing soils and soils to be placed on the site, if any (see Section 16.10.020.B).

Source control practice means one or a series of best management practices that when implemented correctly, controls pollutants at their source and limits their discharge into the storm drainage system, dry well or drill hole.

Stabilization means the use of practices that prevent exposed soil from eroding and/or increases the structural strength of a graded area.

Standards and Specifications mean the most recent version of the *City of Bend Public Improvement Construction Procedures*.

Stormwater means water from precipitation that collects on or runs off surfaces such as roofs, buildings, roads, or paved or unpaved land surfaces; that portion of precipitation that does not naturally percolate into the ground or evaporate, but flows, via overland flow, interflow pipes and other features of a stormwater drainage system, into a defined surface water body or constructed infiltration or evaporation facility.

Stormwater facility means a detention and/or retention pond, swale, drywell, or other surface water feature that provides storage during high rainfall events and/or water quality treatment.

Stormwater management means the process of collection, conveyance, storage, treatment, and disposal of stormwater to ensure control of the magnitude and frequency of runoff and to minimize the hazards associated with flooding. It also includes implementing controls to reduce the discharge of pollutants to streams and groundwater including management practices, control techniques and systems, design and engineering methods.

Stormwater service means the operations of the City's stormwater utility in providing programs and facilities for maintaining, improving, regulating, collecting, and managing stormwater quantity and quality within the City's service area.

Stormwater system means any structure or configuration of ground that is used or by its location becomes a place where stormwater flows or is accumulated, including but not limited to drywells, drill holes, swales, pipes, curbs, gutters, manholes, catch basins, ponds, creeks, open drainage ways, ditches and their appurtenances. **City stormwater system** means the portions of the stormwater system in public rights of way, within easements owned by the City, or on City property. **Private stormwater facility** means any stormwater facility on private property and not within an easement owned by the City.

Stormwater system maintenance agreement means a document executed by the property owner that is recorded in the Deschutes County Clerk's office to run with the land, that requires the current and successor owners to maintain the stormwater system on the property so that the system continues to function as planned (see Section 16.15.050).

Stream means a year round flowing watercourse.

Surface runoff means that portion of rain, snow melt, or irrigation water that does not naturally percolate into the ground or evaporate, but instead flows over the land or impervious surfaces.

Swale means a type of stormwater facility consisting of a broad, shallow depression used to provide a required volume of on-site storage for stormwater, typically planted with vegetation that filters and processes contaminants.

SWMP means Stormwater Management Plan.

TMDL means Total Maximum Daily Load, a calculation of the maximum amount of a pollutant that a waterbody can receive and still safely meet water quality standards. Under section 303(d) of the federal Clean Water Act, states, territories, and authorized tribes are required to develop lists of impaired waters (e.g., waters that are too polluted or otherwise degraded to meet the water quality standards set by the states, etc.) and TMDLs for these waters. (Source: United States Environmental Protection Agency.)

Tree preservation performance standards mean measures intended to provide a minimum threshold for preserving trees during clearing and grading activities, and are used to determine if the requirements in this Title have been met (see Section 16.10.100).

Tree protection plan means a plan developed in accordance with Bend Code – Chapter 10-10, Development Code, Section 3.2.200.C.

UIC means underground injection control.

Underground injection control (UIC) system means any structure or activity that discharges fluids such as stormwater or septic effluent below the ground or subsurface. Common UIC designs include drywells, drill holes, floor drains, trench drains, and drain fields.

Water Overlay Zone (WOZ) means areas of special designation adjacent to the Deschutes River and Tumalo Creek as described in Bend Code – Chapter 10-10, Development Code, Chapter 2.7.600.

Wellhead protection area means an area within 500 feet of an undelineated water well (e.g., drinking or irrigation water); or within the modeled two-year-time-of-travel area for a delineated water well.

Work schedule means the schedule of anticipated clearing, grading, installation of ESC measures, and proposed inspection and maintenance schedule(s) for a construction site (see Section 16.10.020.F).

WOZ means Waterway Overlay Zone.

WPCF means Water Pollution Control Facility.

Chapter 16.10 Clearing, Grading, and Erosion Control on Construction Sites

16.10.010 Applicability and Exemptions

A. Applicability

This Chapter applies to all construction activity and all land disturbing activity, directly or indirectly associated with construction projects, and all persons engaged in construction activity and land disturbing activity, directly or indirectly associated with construction projects, within the City.

1. Erosion and sediment pollution must be prevented on all construction sites, regardless of whether a Clearing, Grading and Erosion Control Permit (Permit) is required, to prevent migration of sediment and construction related pollutants off site. Erosion must be controlled to keep sediment and debris from streets, storm drainage facilities, and surface water bodies. All construction sites must be cleaned up and stabilized to avoid erosion and sedimentation.
2. Unless exempt, no clearing and grading shall occur without a valid Permit.
3. Unless exempt, the applicant for a Permit must submit a written commitment to comply with this Title to the maximum extent practicable.
4. If a Permit has been suspended, revoked or has expired, all work covered by the Permit shall cease until the suspension or revocation is lifted by the City or a new Permit is issued.

B. Exemptions

Projects in the following categories do not need to apply for, and are exempt from the Permit requirements, but not from the Performance Standards (described in Sections 16.10.070 through 16.10.100 and Section 16.15.040), provided the project does not include an existing or proposed UIC facility:

1. Commercial agriculture practices involving working the land for production are generally exempt, except land disturbance related to the construction of new, permanent impervious surfaces as related to commercial

- agriculture or the construction of agricultural drains that are designed to act as UICs.
2. Forest practices regulated under the Oregon Forest Practices Act (ORS 527.610-527.770, 527.990(1) and 527.992), except conversions from forest lands or timberlands to other land uses.
 3. Actions by a public utility or any other governmental agency to remove or alleviate an emergency condition, restore utility service, or reopen a public thoroughfare to traffic.
 4. Remodeling permits or tenant improvements that do not add 5,000 or more square feet of impervious surface.
 5. Change of use permits.
 6. Records of survey, boundary (i.e. minor lot line) adjustments, and property aggregations, unless the action affects drainage tracts or easements.
 7. Permits or applications for projects not physically disturbing the land; issuance of permits and/or approvals for land divisions; interior improvements to an existing structure; or other approvals for which there is no physical disturbance to the surface of the land.
 8. Public or private road and parking area preservation/maintenance projects such as:
 - a. Pothole and square cut patching;
 - b. Crack sealing;
 - c. Resurfacing with in-kind material without expanding the area of coverage;
 - d. Overlaying existing asphalt or concrete pavement with bituminous surface treatment (or chip seal), asphalt or concrete without expanding the area of coverage;
 - e. Shoulder grading;
 - f. Maintaining existing drainage systems including reshaping or regrading drainage systems to original design; and
 - g. Vegetation maintenance.
 9. Operation and maintenance or repair of existing facilities.

10. Landscaping and maintenance on residential lots, including gardening, non-commercial agricultural activity, and limited clearing and grading. (Note: this exemption does not apply to landscaping modifications to stormwater drainage or treatment swales.)
11. Cemetery graves.
12. Landfill operations by a governmental entity consistent with an Oregon Department of Environmental Quality permit for the operation of or post-closure activities at a landfill.
13. Archaeological exploration conducted under state permit.
14. Removal of selected individual plants for storage or replanting.
15. Removal of trees on single family residential lots on one acre or less.
16. Removal of trees less than eight inches dbh.
17. Removal of flammable vegetation and combustible growth within 30 feet of a structure for fire safety.
18. Normal maintenance, pruning or limbing of trees.
19. Removal of noxious weeds.
20. Removal of trees within an area approved by Deschutes County for a sanitary septic system.
21. Normal and customary excavation and fill associated with the ongoing maintenance activities on golf courses such as reconstruction of tee boxes, re-sculpturing of fairway bunkers and greens, etc.
22. Normal pruning, limbing and removal of trees and vegetation in routine landscaping maintenance of public school grounds, parks and trails, golf courses and cemeteries that is not associated with preliminary grading or clearing of a development project.
23. An emergency that immediately affects life or property.

Any of the exemptions from treatment requirements are superseded by requirements set forth in a Total Maximum Daily Load (TMDL), water cleanup plan, groundwater cleanup plan, Surface Water Management Plan (SWMP), Safe Drinking Water Act, Oregon Administrative Rules specifically OAR 340-040-0030, and UIC permit requirements.

16.10.020 Clearing, Grading and Erosion Control on Construction Sites

A. Permit Requirements

1. The City shall issue a Clearing, Grading, and Erosion Control Permit (Permit) for non-exempt construction work.
2. The Permit is required for clearing and grading activities related to construction, demolition, and site development for improvements related to all land divisions, multi-family developments, and commercial, industrial, and institutional sites. Single-family and duplex site developments are exempt from the permit requirement (but not from the standards described in Sections 16.10.010 and Performance Standards 16.10.070 through 16.10.100) unless one of the following activities is proposed:
 - a. Excavation or fill exceeding two feet other than foundation areas of single-family or duplexes.
 - b. Alteration to or creation of a slope exceeding 20 percent.
 - c. An excavation or fill within two feet of the property line.
 - d. Tree removal of trees more than eight inches DBH on properties greater than one acre.
 - e. Any clearing and grading activity located entirely or partially on sensitive areas or within a designated Area of Special Interest or Waterway Overlay Zone as described in Bend Development Code Section 2.7.
 - f. Any other site determined by the City to have conditions necessitating additional control measures on a site specific basis for the protection of health, safety, property, or water quality protection.

B. Applications

A Permit must be obtained prior to performing activities authorized by a City building permit or other permit authorizing construction. The application for a permit shall include:

1. A completed Permit Application Form.
2. A fee in an amount set by Council Resolution.
3. A Site Map and Grading Plan containing all the following information:
 - a. Existing and proposed topography of the site taken at a contour interval sufficiently detailed to define the topography over the entire site. Ninety percent of the contours shall be plotted within one contour interval of the true location.
 - b. One-foot contour intervals that extend offsite sufficient to show on and offsite drainage.
 - c. The site's property lines shown in true location with respect to the plan's topographic information.
 - d. The location of all sensitive lands including Area of Special Interest (ASI) lands, and any areas on the site that are intended to remain undisturbed.
 - e. The location and dimensions of the Site Development Envelope as defined in this Title.
 - f. Location and graphic representation of all existing and proposed natural and man-made drainage facilities, including the direction of drainage within 300 feet of the site boundaries in all directions. The Site Map and Grading Plan shall demonstrate that clearing and grading activities will have minimal impact on the existing water flow through the natural and existing drainage routes, except in instances where an approved surface water collection facility is incorporated into this Plan.
 - g. The site's point(s)-of-entry and/or access road(s) that will be used for clearing and grading activity access.
 - h. Location of existing vegetation types, and the location and type of vegetation to be left undisturbed, per the requirements specified in Bend Code – Chapter 10-10, Development Code Section 3.2.200 (Landscape Conservation) and shown in the Planning Development Approval.
 - i. A description of the tree protection standards to be implemented during construction.

- j. Location and graphic representation of all drainage features, existing and proposed Underground Injection Controls (UICs), and erosion and sediment control measures.
 - k. Location of any buildings or structures on the work site, and the location of any buildings or structures on land of adjacent owners that are within 15 feet of the work site, or that may be affected by the proposed grading operations. These would include, but not be limited to, utilities locations.
 - l. For applicable sites, an overlay map including the 100 year flood zone, WOZ, ASI, or otherwise depicting the sensitive areas.
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- 4. The City may require the Site Map and Grading Plan be prepared by a registered professional licensed to prepare such documents by the State of Oregon.
 - 5. An Erosion and Sediment Control (ESC) Plan prepared in accordance with the COSM.
 - 6. A Soils and Geological Reconnaissance Report (Soils Report) prepared by an Oregon licensed professional engineer (P.E.) or an Oregon licensed professional geologist may be required if the City determines that special circumstances warrant such information.
 - a. The report shall contain all geotechnical engineering information and recommendations applicable to the project including data, based on adequate test borings (as necessary), regarding the nature, distribution, strength and erodibility of both existing soils and soils to be placed on the site, if any; and shall be sealed and signed by an Oregon licensed professional engineer or an Oregon licensed professional geologist.
 - b. The report shall be incorporated into the Site Map and Grading Plan and statement and be provided during clearing, grading and erosion and sediment control inspections.

C. Approval Criteria

An application for a Permit may be approved only if it includes all materials required by this Title and demonstrates compliance with applicable standards of this Title, including compliance with Performance Standards described in Sections 16.10.070 through 16.10.100. The application must show that receiving

ground and surface waters are protected and that surface runoff, erosion and offsite sediment transport are minimized to the maximum extent possible.

If a Permit application cannot be approved as submitted, the City may require the applicant to do any or all of the following:

1. Reduce the area of land to be disturbed.
2. Change a BMP or any facet of, where deemed necessary.
3. Submit a Soils Report to inform conclusions and recommendations for grading procedures and soil stabilization.
4. Restrict land disturbing, filling or soil storage activities during precipitation.
5. Revise and resubmit the Plan as per the direction of the approval authority.

D. Compliance

All construction activity under a Clearing, Grading and Erosion Control Permit must comply with the conditions of the Permit and approved plans. Construction activity shall be conducted in compliance with Performance Standards (described in Sections 16.10.070 through 16.10.100 and in Section 16.15.040) to the maximum extent practical unless otherwise specified in the Permit. During construction, a copy of the ESC Plan must be kept on the construction site and readily available to construction personnel and inspectors. The Permit holder is responsible for ensuring that contractor(s), subcontractor(s), and all other persons entering the site abide by the conditions of the Permit and Plan.

Land disturbing activities involving one acre or more of disturbed area may also require a NPDES Stormwater Discharge Permit (1200-C for construction activity) from the Oregon Department of Environmental Quality (ODEQ) when the site discharges to surface water or to a conveyance system that leads to surface water.

E. Conditions of Approval

All permits shall contain standard conditions to ensure compliance with this Title and construction consistent with the approved plans.

The following items are required as conditions of approval to be included in each Permit:

1. A requirement to provide the City any updates to the Site Map and Grading Plan and Work Schedule.
2. A Tree Protection Plan, if required by Bend Code – Chapter 10-10, Development Code, Section 3.2.200.C.
3. A requirement to maintain a copy of the Permit, approved plans, Site Map and Grading Plan addenda in conformance with Section G, and required reports on the work site, available for inspection during work hours.
4. A requirement to construct and maintain BMP's in conformity with the Permit and approved plans.

F. Work Schedule

A detailed Work Schedule must be provided prior to grading that includes the following:

1. Anticipated grading schedule (e.g. the proposed sequence, schedule and/or timing for excavation, filling, and other land-disturbing and filling activities, and earth material storage and disposal).
2. Anticipated clearing and grading and/or construction status conditions of the site at the end of each month during which the Permit is in effect.
3. Proposed schedule for installation of all erosion and sediment control measures described in the Erosion and Sediment Control Plan (ESC) Plan including but not limited to, the stage of completion of erosion and sediment control devices and vegetative measures on each of the dates set forth in the Work Schedule.
4. Proposed project inspection and maintenance schedule(s).
5. Schedule for construction of final improvements, if any.

G. Site Map and Grading Plan Addenda

If the following information could not be provided as part of the original Site Map and Grading Plan, it shall be submitted as Site Map and Grading Plan addenda prior to clearing and grading activities.

1. Location and graphic representation of proposed excavations and fills, of onsite storage and/or stockpiling of soil and other earthen materials, and of onsite disposal.

2. Location of dumpsters, concrete and cement wash areas, vehicle fueling and maintenance areas, and construction material (including but not limited to drywall, plaster, paint, solvents, adhesives, and other hazardous materials) storage and handling areas, if any.
3. Outline of the methods to be used in clearing vegetation, and in storing and disposing of the cleared vegetative matter.
4. Quantity of soil and other earth materials expressed in tons or cubic yards to be excavated, filled, stored, or otherwise used onsite. If fill is to be removed from the site, the location where fill materials will be taken.

16.10.030 Permit Fees

A. Applicability and Establishment

1. Fees are established by Council Resolution. Applicable fees shall be paid at the time of application and at any other time additional fees are incurred.
2. The permit fees may be based on the nature or size of the permitted area.
3. The applicable fees shall be doubled if the construction activity is commenced prior to permit issuance, except where an emergency situation has been recognized by the City. Payment of the doubled fee shall not preclude the City from taking any other enforcement actions within its authority. The City may waive doubling of the fee if the applicant is shown to have acted in good faith.
4. The fee necessary to resubmit an application for an expired permit shall be one half of the otherwise applicable fee.

16.10.040 Issuance and Implementation of Permits

A. Permit Issuance

The City shall issue a Permit on approval of a Site Map and Grading Plan, an ESC Plan, a Work Schedule, a Soils Report (if required), and on payment of applicable fees. The Permit is subject to the following conditions:

1. The Permittee shall maintain a copy of the Permit, approved plans and required reports on the work site and available for inspection during all working hours.

2. The Permittee shall, at all times, be in conformity with the approved Site Map and Grading Plan, and ESC Plan. If site conditions require emergency measures and in-field changes, the Permittee must notify the City and obtain amendments of the plans as necessary.

B. Implementation of Permit – Permittee's Duties

1. Holders of a Permit shall comply with the Permit requirements, including the Site Map and Grading Plan, ESC Plan, Work Schedule, and incorporated BMPs appropriate to meet Performance Standards requirements (as described in Sections 16.10.070 through 16.10.100).
2. A Permittee shall notify the City via email or in writing at least 48 hours before the beginning of land disturbing or filling activities, or soil storage when these activities are scheduled to occur in areas located in designated WOZ or ASI zones. The Permittee shall also submit, based on a schedule agreed upon between the Permittee and the City based on activity levels on the site, and at least quarterly, regular notifications on:
 - a. The progress of, or delays in, land disturbing or filling activities or soil storage.
 - b. Any other departures from the approved Site Map and Grading Plan that may affect implementation of the ESC Plan, as scheduled.
 - c. Possible delays in obtaining materials, machinery, services, or manpower necessary to the implementation of the ESC Plan, as scheduled.
 - d. The progress of, delays in or any other departures from implementation of the ESC Plan.
3. For any post-construction or long-term BMPs or stormwater facilities incorporated as part of the ESC Plan, the Permittee shall submit a copy of the instructions given by the Permittee to the new owners of the improved property or their agent regarding the maintenance of the surface runoff, erosion and sediment control measures, and devices implemented under the ESC Plan to the City.
4. Maintenance: The owner of any private property on which clearing and grading or other work has been performed pursuant to an approved Site Map and Grading Plan, ESC Plan, approved land use application, or approved building permit granted by the Community Development Department, shall maintain and repair in perpetuity all graded surfaces

and erosion prevention, sediment control, and pollution prevention devices, retaining walls, drainage structures, plantings and ground cover, or other means or devices deemed not to be the responsibility of the City or other public agency.

C. Implementation of Permit – City's Duties

The City shall review all reports submitted by the Permittee. If the City finds delays in implementing or departures from the approved Site Map and Grading Plan or ESC Plan, or any problems with or breakdowns in any technique provided for by the ESC Plan, the City shall notify the Permittee in writing of the requirement, and the Permittee shall be required to comply with the order to modify within five working days or sooner should the City request based on potential threat from weather conditions.

The City may develop an inspection schedule to inspect work sites for compliance with this Title, permits and plans.

D. Suspension or Revocation of Permit

The City shall follow the procedures of this Section before resorting to other enforcement activities.

1. The City shall suspend any Clearing, Grading and Erosion Control Permit and issue a stop work order, and the Permittee shall cease all work on the work site, except work necessary to remedy the cause of the suspension, on notification of the suspension when:
 - a. The Permittee fails to act in compliance with Section 16.10.040 (B).
 - b. The Permittee fails to submit required reports in full on time.
 - c. A City inspection reveals that the work or work site is not in compliance or conformance with:
 - i. Section 16.10.040(A);
 - ii. The Site Map and Grading Plan and/or the ESC Plan;
 - iii. Required reports (e.g., private inspection records, Permit reports and copy of maintenance instructions); or
 - iv. Orders authorized by this Title.

2. The City may revoke any Permit and issue a stop work order, and the Permittee shall cease work when:
 - a. The Permittee fails or refuses to cease work after receiving a stop work order.
 - b. Any failure to comply with this Title, permit or order issued under this Title, or plan or schedule approved under this Title in the Riparian Corridor Sub Zone as described in Bend Code – Chapter 10-10, Development Code, Section 2.7.620, or in a wellhead protection area.
3. If a stop work order has been placed on a project due to violations of this Title the City may require the applicant to provide the City with financial security in an amount designed to assure compliance with this Title. If required, the financial security must be a bond or other financial security approved by the City Attorney. The financial security must be sufficient to restore the site to a stable and safe condition.
4. The City may reinstate a suspended Permit on the Permittee's correction of the cause of the suspension, but shall not reinstate a revoked Permit. A Permittee may appeal a permit revocation decision to the City Manager within 30 days of receipt of the revocation notice.

16.10.050 Clearing, Grading, Erosion and Sediment Control, and Pollution Prevention Inspections

A. General Inspections

1. All clearing, grading, erosion and sediment control (ESC), and pollution prevention controls that require a Permit shall be inspected by the City to ensure compliance with the Permit:
 - a. The permit holder shall request an inspection 48 hours prior to the desired inspection time and date.
 - b. Whenever clearing and grading, ESC, and pollution prevention work requiring City inspection is concealed by additional work without first having been inspected, the City may require that such work be exposed for inspection by the City.

B. Inspection of Rough Grade

1. At the discretion of the City, a rough grade inspection may be required. All rough clearing and grading shall be completed in accordance with the Permit.
2. A copy of the Soils Report (if required) and certification of sub-base requirements shall be submitted to the City prior to any foundation inspections or prior to issuance of certificate of final clearing/grading approval.

C. Final Clearing and Grading and Erosion and Sediment Control and Pollution Prevention Inspections

1. All required clearing and grading and ESC and pollution prevention control work shall be completed in accordance with the Permit prior to final clearing and grading, ESC control and pollution prevention inspections by the City and issuance of final approvals..
2. Where the conditions of a Permit include the establishment of vegetation or other final site clearing and grading or ESC control work that extends beyond the expiration of the Permit, the City shall make a post-clearing and grading or ESC and pollution prevention control inspection within six months of permit expiration or as required by the Permit before final approval.

16.10.060 Erosion and Sediment Control and Pollution Prevention Compliance

A. Applicability

1. Permittees are required to ensure compliance with this Title during clearing, grading and construction activities. The Permittee must designate a person to be responsible for compliance with this Section. The person must be knowledgeable in the principles and practices of erosion and sediment controls; possess the skills to assess conditions at the construction site that could impact stormwater quality; be knowledgeable in the correct installation of the erosion and sediment controls and general construction site pollution prevention and good housekeeping practices; and be able to assess the effectiveness of any sediment and erosion control and pollution prevention measures selected to control the quality of stormwater discharges from the construction activity.
2. The permit application form shall contain the name, address, telephone number and email of the person designated to be responsible for erosion

and sediment control during clearing, grading and other construction activities.

3. The following must be routinely inspected by the person designated to be responsible for ESC and pollution prevention compliance:
 - a. All areas of the site disturbed by construction activity to ensure that BMPs are followed and are being effective.
 - b. Discharge point(s) identified in the ESC Plan for evidence of or the potential for the discharge of pollutants (including sediment and turbidity), and to ascertain whether ESC and pollution prevention measures are effective in preventing significant impacts to surface waters. Where discharge points are inaccessible, nearby downstream locations must be inspected to the extent that such inspections are practical.
 - c. BMPs identified in the ESC Plan or any revision thereto to assess whether they are functioning properly.
 - d. Locations where vehicles enter or exit the site for evidence of off-site sediment tracking.
 - e. Areas used for storage of materials that are exposed to precipitation for evidence of spillage or other potential to contaminate stormwater runoff.
4. The Permittee is responsible to ensure BMPs are utilized, that inspections required by this section occur on a site-appropriate schedule and that BMPs are maintained, repaired and/or removed so that the performance standards continue to be met.
5. The Permittee must document all inspections conducted by Permittee and retain records of inspections for at least three years after project completion.

16.10.070 Clearing and Grading Performance Standards

A. General Performance Standards

The following performance standards shall be implemented prior to the start of, and as part of clearing and grading of all lands requiring a Permit per this Title unless exempted in writing by the City:

1. Site clearing and grading shall be in conformance with an approved subdivision/site plan or other development approval. Site clearing and grading shall protect water resource quality by:
 - a. Limiting clearing or destruction of native vegetation and trees to those areas defined within the Site Development Envelope as shown on the Site Map and Grading Plan required on the Permit Application Form; and
 - b. Keeping clearing and grading limited to the Site Development Envelope as shown on the Site Map and Grading Plan.
2. Establishment of the Site Development Envelope shall consider preservation of natural land and water features, steep slopes, topography, vegetation such as per the tree preservation standards, drainage, geotechnical site assessments, areas that provide water quality or quantity benefits and/or are necessary to maintain riparian and aquatic biota, and other indigenous natural features of the site.
3. Site clearing, except that necessary to establish erosion and sediment control devices, shall not begin until all erosion and sediment control devices have been installed by the Permittee and have been inspected by the City.
4. During site clearing or grading activity, no vehicles shall be driven over sensitive lands including River Corridor Areas of Special Interest (ASI), as described in Bend Code – Chapter 10-10, Development Code, Section 2.7.630) or Upland Areas of Special Interest (as described in Bend Code – Chapter 10-10, Development Code, Section 2.7.700), or any areas on the site that are intended to remain as protected natural open space areas, as designated on the Site Map and Grading Plan and/or a Tree Protection Plan, including all areas outside of the Site Development Envelope.
5. During site clearing or grading activity, no potential soil or earth compaction activities, including the operation of heavy construction equipment or vehicles, shall be allowed to the maximum extent practicable in areas that have been designated as stormwater infiltration facilities within the Site Development Envelope or on a Site Map and Grading Plan and/or a Tree Protection Plan. Any infiltration facility areas that do become compacted during construction must be fully mitigated so that they will infiltrate properly.
6. Phasing of site clearing and grading shall be considered on all sites disturbing greater than five acres, with the size of each phase to be established prior to grading and as approved by the City.

7. Site grading shall not result in landslides, accelerated soil creep, settlement, or any pollutant that crosses beyond the Site Development Envelope boundary.
8. All site clearing and grading activity within 100 feet of the Deschutes River or Tumalo Creek shall comply with all provisions of the Water Overlay Zone (WOZ; as described in Bend Code – Chapter 10-10, Development Code, Section 2.7.600).
9. During clearing and grading operations, all public right-of-way, sidewalks and other improvements shall be maintained in a neat and clean condition at the end of each working day (i.e., free of loose soil, construction debris, and trash).
10. During clearing and grading operations, no debris, fill, stockpiles, or equipment shall be stored within a public right-of-way, or in such a way that blocks an emergency access route(s).
11. Construction site access ramps shall be constructed so that:
 - a. Material used in construction of the ramp will not erode or deteriorate under adverse conditions;
 - b. Sediment tracking onto adjacent roadways shall be minimized to the maximum extent practicable and dry swept at the end of each working day; and
 - c. Access ramp material shall not be placed in a manner that interferes with or blocks the passage of surface runoff in the public right-of-way.
12. During clearing and grading operations, and until site re-vegetation and/or site stabilization has occurred, dust shall be minimized to the maximum extent practicable through application of dust control measures approved by the City.
13. All clearing and grading activities shall be performed in accordance with noise standards in Bend Code, Title V – Public Protection, Chapter 5.50.
14. The transport of earth material, including but not limited to soil and vegetation to or from the site on public rights-of-way, shall be covered to eliminate any soil or other material being blown from the transport vehicle in accordance with Deschutes County Code.

15. Slash and other cleared vegetative material that exceeds three cubic yards in volume shall be removed from cleared sites within three months from the completion of the site clearing operation.
16. Any site for which a stop work order has been issued, or where work has stopped for any other reason, must be left in a condition that prevents erosion or sediment from leaving the Site Development Envelope and prevents threats to public health and safety.
17. When applicable, the Permittee shall obtain and comply with a Special Use Permit for Temporary Rock Crushing outside the Surface Mining (SM) Zone.
18. Any site for which grading and clearing stops prematurely for whatever reason must continue to meet the Erosion and Sediment Control and Pollution Prevention Performance Standards (described in Section 16.10.080) and implement the provisions of the site ESC Plan.

B. Cut and Fill Performance Standards

The following performance standards shall be implemented prior to the start of, and as part of clearing and grading of all private and public lands requiring a permit as described in this Title, unless specifically exempted by the City for minor clearing and grading operations not intended to support structures, or in instances where the literal interpretation of the underlying provisions would not serve the intent or purposes of this section. In all other instances, the following performance standards shall be followed to the maximum extent practicable:

1. Cut slopes greater than five feet in height shall not exceed a slope of 2:1 except where approved retaining walls are engineered and installed, and where trenches are refilled with material from the excavation. Cut slopes in solid rock or cemented tuff shall not exceed a slope of 0.5:1.
2. The ground surface shall be prepared to receive fill by removing vegetation, non-approved fill, topsoil, and other unsuitable earth material as determined by the City and, where the slopes are 5:1 or steeper, by the excavation of level steps into the slope on which fill is to be placed.
3. Fill slopes shall not be constructed on natural slopes that are steeper than 2:1.
4. Fill slopes exceeding five feet in depth shall be no steeper than 2:1, except where approved retaining walls are engineered and installed.
5. The slopes of all fill surfaces shall be no steeper than 2:1 unless approved by the City.

6. When the owner of any parcel alters the level or existing grade of a site by a fill or excavation, the owner shall at their own expense protect all adjoining property from encroachment by such fill, or from danger of collapse due to such excavation, either by the erection of an engineered retaining wall or by sloping the sides of such fill or excavation entirely within the confines of the site in a manner approved by the City.
7. Cut and fill slopes shall be provided with subsurface and surface drainage as necessary to retain slope stability, to control erosion, and for public safety.
8. The faces of all cut and fill slopes shall be prepared and maintained to control erosion.

16.10.080 Erosion and Sediment Control and Pollution Prevention Performance Standards

Appropriate erosion and sediment control devices, and measures and devices to prevent and control other construction site pollutants, shall be in place prior to the start of, and as part of construction activity on all private or public lands requiring a permit as part of this Section, unless specifically exempted by the City, so that the performance standards of the Erosion and Sediment Control chapter of the COSM and as follows are met.

A. Additional ESC Performance Standards

1. Once permanent ESC have been effectively established and temporary ESC and pollution prevention measures are no longer needed, temporary measures and materials (e.g., silt fences, inlet protection devices, etc.) shall be removed and properly disposed of.

16.10.090 Blasting Performance Standards

A. General Performance Standards

All persons conducting blasting activities shall comply with all federal, state and local regulations applicable to blasting activities and maintain and provide upon request, evidence of all necessary federal, state and local licensing required to conduct blasting activities.

This section in no way replaces or negates the requirements pertaining to explosives as contained in the Oregon Revised Statutes (ORS), Chapter 480-010 through 480.290, or replacement of such.

B. Notification

1. Notice of all blasting shall be provided to the City. Prior to blasting, the person responsible for the blast shall inform all building occupants within 100 feet of the blast site.
2. The City may require additional notification for particular areas where sudden excessive noise would be especially disruptive such as medical districts, hospitals, schools, and properties engaged in farm use, veterinary or commercial daycare/boarding involving animals.
3. Signs shall be placed at street intersections adjacent to the blasting site on the day of the blasting or earlier if feasible. The sign shall state the approximate blasting times and the responsible party to contact.

16.10.100 Tree Preservation Performance Standards

A. General Performance Standards

1. For clearing and/or grading activities on all undeveloped properties or properties without land use approval, including single family residential lots greater than one acre in size, the following tree preservation Performance Standards shall be implemented:
 - a. All trees 12 inches diameter at breast height (dbh) and larger shall be retained on-site.
 - b. Fifty percent of all trees between 8 inches and 12 inches dbh shall be retained on site.
 - c. The fifty percent retention of trees between 8 inches and 12 inches dbh shall result in a tree coverage pattern that is dispersed throughout the site pursuant to on-site tree locations.
 - d. All trees retained on-site shall be protected during clearing and grading activities.
2. Clearing and grading activities on sites with an approved development application are not subject to the standards of subsection 1, however trees shall be preserved as specified in the development approval.

Chapter 16.15 Stormwater Management Design Standards and Post-Construction Maintenance Controls

16.15.010 Applicability and Drainage Submittal Requirements

A. Applicability

This Section is applicable to all land development, including but not limited to applications for a Clearing, Grading and Erosion Control Permit (Permit), site plan applications, and land division applications unless exempt. These provisions apply to any new development or redevelopment site within the City that meets one or more of the following criteria:

1. Projects adding 5,000 square feet or more of impervious area or disturbing one or more acres.
2. Projects that propose a UIC facility.
3. Manufactured and mobile home parks.
4. Commercial building permits and site plans (including institutional and multi-family residential projects) prior to the issuance of the building or grading permits.
5. Clearing, Grading and Erosion Control Permits (not in conjunction with building permits).
6. Construction of new public or private road projects (not in conjunction with land use actions or permits).
7. Projects proposing the installation, removal, or modification of drainage systems.
8. Land development activities that are smaller than the minimum applicability criteria if the activities are part of a larger common plan of development that meets the applicability criteria , even though multiple, separate and distinct land development activities may take place at different times on different schedules.

B. Drainage Submittal Requirements

1. Drainage Submittals shall comply with City regulations, which include the COSM and the City of Bend Standards and Specifications.
2. All plans and calculations required in this Section must be submitted to the City for review and acceptance as part of the Permit or land use application.
3. Residential, commercial, institutional, or industrial developments may apply stormwater management standards described in the COSM and in this Title to common plan land development as a whole if the development is appropriately master planned, and has formal arrangements for stormwater drainage across multiple properties. Prior to final plat, individual residential lots in new subdivisions shall not be considered separate land development projects, but rather the entire subdivision shall be considered a single land development project.
4. The responsibility for adhering to the standards in this Title lies with the property owner.
5. Low Impact Development (LID) techniques are encouraged by the City and shall be incorporated into the site and facility design when deemed appropriate by the applicant after consultation with appropriate City officials. All projects should incorporate LID techniques to the degree practicable, and a description of the techniques considered and used should be added to the Drainage Submittal.
6. All projects shall meet the basic requirements for stormwater management as defined in the COSM. An applicant may use different methods to meet the basic requirements described in the COSM on a case by case basis subject to approval by the City. The applicability of the basic requirements depends on the type, size and location of the project as described in the COSM. Onsite capture and containment systems can be deeper than those specified in the COSM as long as all ODEQ and federal regulations are being met.
7. All stormwater will be contained within designed facilities as appropriate. Stormwater facilities shall be designed to provide service for the National Resource Conservation Service (NRCS) Type I 24-hour storm event, for a 25-year, 24-hour design storm, with a safe overflow path that:

- a. has the capacity to convey the pre-development storm events per Oregon Drainage Law to an existing, historical, or natural drainage point as described in the COSM; or
- b. maintains the 100-year design storm onsite; or,
- c. provides for offsite safe passage of the 100-year, 24-hour design storm through formal agreements made with the City and any other affected landowners to safely provide and maintain offsite overflow routes.

Coordination with affected landowners to ensure safe passage is encouraged. Off-site drainage cannot be directed to irrigation district facilities without the district's written approval.

8. The Drainage Submittal should include appropriate field tests for verifying sizing and infiltration capability of stormwater facilities. All infiltration ponds and swales may be tested before and after initial fracturing and shall be tested after final construction. Testing shall be per Chapter 4.3.2 of the COSM and shall be performed under the direction of a professional engineer.
9. The project shall meet the Post-Construction Performance Standards described in Section 16.15.040 of this Title.

16.15.020 Exemptions

A. Exemptions

The following activities are exempt from the Drainage Submittal Review and Process provisions (Section 16.15.030) of this section:

1. Individual single-family or duplex residential lots that are not part of a land division or phased development project that is otherwise subject to this Title.
2. Additions or modifications to existing single-family or duplex residential structures.
3. Remodeling permits or tenant improvements that do not add 5,000 or more square feet of impervious surface.
4. Maintenance and repair to any stormwater BMP deemed necessary by the City.

5. Any emergency project that is immediately necessary for the protection of life, property or natural resources.
6. Commercial agriculture practices involving working the land for production are generally exempt, except the construction of impervious surfaces as related to commercial agriculture.
7. Forest practices regulated under the Oregon Forest Practices Act, except conversions from forest lands to other land uses.
8. Actions by a public utility or any other governmental agency to remove or alleviate an emergency condition when the action does not alter the stormwater characteristics.
9. Minor land-disturbing activities that do not require a Clearing, Grading and Erosion Control Permit (Permit).
10. Permits or applications for projects not physically disturbing the land.
11. Public or private road and parking area preservation and/or maintenance projects such as:
 - a. Pothole and square cut patching;
 - b. Crack sealing;
 - c. Resurfacing with in-kind material without expanding the area of coverage;
 - d. Overlaying existing asphalt or concrete pavement without expanding the area of coverage;
 - e. Shoulder grading;
 - f. Maintaining existing drainage systems including reshaping or regrading drainage systems to original design;
 - g. vegetation maintenance; or
 - h. Addition of bicycle lanes or ADA compliance work.
12. Landscaping and maintenance on residential lots, including gardening, non-commercial agricultural activity, and limited clearing and grading.

13. City of Bend public capital improvement projects, which must meet the equivalent standards as set forth in the City's Standards and Specifications.

B. Exceptions

An exception may be granted by the City to approve design elements that do not conform to, or are not explicitly addressed by the COSM. The requirements of the COSM represent the minimum criteria for the design of stormwater management systems as required in the City of Bend. Designs that offer a superior alternative to standard measures, or creative means not yet specified in the standards, must be reviewed and approved by the City.

16.15.030 Drainage Submittal Review and Approval Process

A. Submittal Process

The Drainage Submittal shall be submitted to the City as part of the Clearing, Grading and Erosion Control Permit (Permit) application required by Chapter 16.10. The City may charge a fee in an amount set by Council resolution for the Permit. The plans shall be reviewed by the City for compliance with the COSM, the Post-Construction Performance Standards for Stormwater Management that are described in Section 16.15.040, and other applicable rules and standards prior to approval.

B. Notification Required

The City shall be notified prior to the commencement of any development covered by a Drainage Submittal.

C. Applicant's Responsibilities

1. Any modifications to the Drainage Submittal shall be submitted to the City for approval. A new Drainage Submittal shall be submitted on request of the City.
2. Stormwater systems shall be tested for approval after construction. Stormwater systems shall be inspected when deemed necessary by the City during and after construction to assure consistency with the approved Drainage Submittal, and for compliance with this Title.

D. Conditions of Approval

The following conditions apply to all approved Drainage Submittals:

1. Approval of the Drainage Submittal does not relieve the owner or responsible party from the duty to ensure the systems and their safety measures function as designed.
2. Approval may be suspended or revoked at any time if conditions are not as stated or shown in the approved application or implementation of the Drainage Submittal is not proceeding in the approved manner.
3. Approval of a Drainage Submittal may be suspended if the project is not completed within a two year period or development has ceased for a period of more than two years. However, a one year extension may be granted upon a written request that provides the reason(s) for the delay or cessation of development and specifies a time frame for completion or commencement of development activities.
4. If suspension or revocation of approval is necessary, the owner will receive notice of this decision and may appeal to the City Manager. A written request for appeal and hearing must be made within 10 days from the notice of suspension or revocation.
5. If Drainage Submittal approval is suspended or revoked, the owner shall be required to submit a new plan for approval, with the requisite fee, prior to starting or continuing the planned project or development.
6. Approval of any plans by the City shall not create a liability on the part of or cause of action against the City or City employee regarding the plan or its operation.

16.15.040 Post-Construction Performance Standards for Stormwater Management

A. General Post-Construction Performance Standards

Post-construction stormwater BMPs shall adhere to the following performance standards.

1. All stormwater BMPs shall be maintained in accordance with the approved Stormwater System Maintenance Agreement as described in Section 16.15.050. The design of stormwater facilities shall incorporate maintenance accommodation and long-term maintenance reduction features in accordance with the latest version of the COSM.
2. Overland flood routing paths shall be used to safely convey stormwater runoff to an adequate receiving area or stormwater BMP as defined under Section 16.15.010.C.3, such that the runoff is contained within the

drainage easement for the flood routing path and does not cause flooding of buildings or related structures. The peak water surface elevation along flood routing paths shall be at least one foot below the finished grade elevation at the structure. When designing the flood routing paths, the conveyance capacity of the site's stormwater conveyance systems shall be taken into consideration.

3. Velocity dissipation devices shall be placed at discharge locations and along the length of any surface waterbody outfall to provide non-erosive flow velocity from the structure to an adequate receiving stream or channel, so that the natural physical and biological characteristics and functions of the receiving stream or channel are maintained and protected.
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4. Stormwater drainage in excess of the predevelopment rates or volumes shall be retained on the lot of origin and not trespass onto the public right-of-way or private property except as provided below:
 - a. If the City determines that retaining the design storm amount of stormwater on the site of origin would pose a threat to public safety or adjacent properties. If the developer chooses to direct all or part of the runoff off-site and there is enough capacity in the conveyance system, the runoff or a specified portion thereof shall be directed to an off-site drainage facility approved by the City.
 - b. When runoff from non-City-owned property in excess of the predevelopment rates or volumes is directed to or allowed to flow to City-owned property or right of way, the owner(s) of the lot(s) of origin shall compensate the City for the costs it incurs for constructing, operating and maintaining the additional stormwater drainage and treatment capacity.
 - c. Access to, and maintenance and operation of all stormwater facilities on private property shall be as required by the most current version of the COSM.
 - d. Residential, commercial, institutional or industrial developments may apply stormwater management standards described in Section 16.15. to a common plan of land development as a whole if the development is appropriately master planned, and has formal arrangements for stormwater drainage across multiple properties. Prior to final plat approval, individual residential lots in new subdivisions shall not be considered separate land development projects, but rather the entire subdivision shall be considered a single land development project.

5. The City may require drainage easements where stormwater discharges must cross an adjacent or off-site property before reaching an adequate conveyance.
6. Stormwater facilities within residential subdivisions that serve multiple lots and/or a combination of lots and roadways shall be on a lot owned and maintained by an entity of common ownership, unless an alternative arrangement is approved by the City. Stormwater facilities located on individual lots shall be maintained by the lot owner or, at the discretion of the City, be placed within an easement and maintained by an entity of common ownership.
7. Hydrologic parameters shall reflect the ultimate land development, shall be used in all engineering calculations, and shall follow required procedures outlined in the COSM. The stormwater design shall provide for treatment of runoff from the entire land development, to the extent practicable.
8. If runoff in excess of the predevelopment rates or volumes from a land development will flow to a municipal separate storm sewer system (MS4) or other publicly-owned storm sewer system, then the applicant shall obtain authorization from the system's owner to discharge into the system. The City may require the applicant to demonstrate that the system has adequate capacity for any increases in peak flow rates and volumes.
9. All stormwater facilities and conveyance systems shall be designed in compliance with all applicable state and federal laws and regulations, and all applicable erosion and sediment control and flood plain regulations.
10. The design of stormwater BMPs shall consider public health, safety and general welfare. These considerations include, but are not limited to:
 - a. Preventing flooding of structures and roadways;
 - b. Preventing standing water in facilities, manholes, inlets and other structures in a manner that promotes breeding of mosquitoes;
 - c. Preventing attractive nuisance conditions and dangerous conditions due to velocity or depth of water, and/or access to orifices and drops; and
 - d. Preventing aesthetic nuisances due to excessive slopes, cuts and fills, vegetation mortality, and other conditions.

11. All stormwater BMPs shall be designed to the standards of the most current version of the COSM, unless the City grants the applicant a waiver or the applicant is exempt from such requirements.
12. All new or refurbished stormwater inlets placed as part of a new development project shall be marked with a permanent "Do Not Dump" and/or "Protect Our Waters" or similar stamp or embossed image that has been approved by the City.
13. All new development projects shall prepare and submit to the City as-built for all site impervious surfaces and permanent stormwater facilities.
14. All stormwater management designs shall preserve the natural hydrologic functions, stream channel characteristics, and groundwater recharge of the pre-developed site, to the extent practical. This shall be accomplished by:
 - a. Treating runoff at the source;
 - b. Disconnecting impervious surfaces;
 - c. Preserving or enhancing natural flow paths and vegetative cover;
 - d. Preserving or enhancing natural open spaces and riparian areas;
 - e. Applying other measures that replicate pre-development hydrologic conditions.

The City may exercise discretion in the application of this standard, especially in cases of infill development, redevelopment, or other unique circumstances.

15. If hydrologic, geologic, topographic, or land use conditions warrant greater control than that provided by the minimum control requirements, the City may impose additional requirements deemed reasonable and necessary to control the volume, timing, rate and/or quality of runoff in excess of the predevelopment rates or volumes. In these cases the City may restrict the use of certain stormwater BMPs, require pretreatment above the minimum standards in the COSM, and/or require a Pollution Source Control Plan. Example conditions that may warrant greater control include, but are not limited to:
 - a. Stormwater generated within the drainage basins of problem flooding areas as noted on the City's Capital Improvement Project prioritization list;

- b. Stormwater discharges that are conveyed with non-stormwater discharges;
- c. Stormwater in areas underlaid by naturally impermeable layers;
- d. Stormwater discharged in important groundwater management areas such as wellhead protection areas; and
- e. Stormwater discharged to surface water outfalls or directly to waterbodies such as the Deschutes River or Tumalo Creek.

16.15.050 Stormwater System Maintenance Agreement

A. Responsible Party

Owners are responsible for the operation and maintenance of stormwater facilities on their property.

B. Requirement for Stormwater System Maintenance Agreement

If a project requiring a Drainage Submittal requires structural or nonstructural measures, the owner shall execute a Stormwater System Maintenance Agreement prior to the City granting final approval of any development plan or other development for which a Permit is required under this Title. The Stormwater System Maintenance Agreement shall be recorded in the office of the Deschutes County Clerk and shall run with the land.

C. Required Elements for Stormwater System Maintenance Agreement

The Stormwater System Maintenance Agreement shall be in a form approved by the City, and shall, at a minimum:

1. Require the owner of the property, including successor owners, to maintain the stormwater system on the property so that the system continues to function as planned.
2. Grant the City the right to enter the property at reasonable times with at least 24-hour notice except in instances of emergency to inspect the system and take corrective action.

D. Maintenance Responsibility

Property owners shall maintain in good condition and promptly repair and restore all structural and non-structural stormwater BMPs, and all necessary access routes and appurtenances (e.g., graded surfaces, walls, drains, check dams and structures, UICs, catch basins, pipes, vegetation adjacent to the inlets and within the facility, erosion and sedimentation controls, and other protective devices).

E. Maintenance Records Required

The owner or other responsible party shall make at least annual inspections of the facilities and maintain records of such inspections. Stormwater BMP inspection, maintenance and repair records shall be retained by the owner or their designee for a period of five years, and shall be made available to the City upon request.

F. Maintenance Inspection by Stormwater Authority

The City shall retain the right to conduct periodic inspections for all stormwater BMPs, which shall be documented in writing. The inspection shall document any maintenance and repair needs, and any discrepancies from the Stormwater System Maintenance Agreement.

Whenever necessary to make an inspection to enforce any of the provisions of this Title, or whenever the City has reasonable cause to believe that there exists in any building or upon any premises any condition that may constitute a violation of the provisions of this Title, City personnel may inspect buildings or premises at all reasonable times provided that:

1. If the building or premises is occupied, City personnel shall first present proper credentials and request entry.
2. If the building or premises is unoccupied, City personnel shall first make a reasonable effort to locate the owner or other persons having charge or control of the building or premises and request entry.
3. The property owner or occupant has the right to refuse entry but, in the event entry is refused, the City may seek a warrant to authorize entry and inspection.

Routine or area inspections shall be based upon such reasonable selection processes as may be deemed necessary to carry out the objectives of this Title, including but not limited to, random sampling and/or sampling in areas with evidence of stormwater pollution, illicit discharges, or similar factors.

G. Failure to Provide Adequate Maintenance

In the event that the stormwater BMP has not been maintained and/or becomes a danger to public safety or public health, the City shall notify the responsible party personally or by registered or certified mail. The notice shall specify the measures needed to comply with the Stormwater System Maintenance Agreement, and shall specify that the responsible party has 30 days or other time frame mutually agreed to between the City and the responsible party, to complete the necessary measures to comply with the Agreement. If such measures are not completed, then the City may pursue enforcement procedures.

If a responsible person fails or refuses to meet the requirements of an inspection report or the Stormwater System Maintenance Agreement, the City, after 30 days written notice (except, in the event the violation constitutes an immediate danger to public health or public safety, 24-hour notice shall be sufficient), may correct a violation of the design standards or maintenance requirements by performing the necessary work to place the facility in proper working condition. This necessary corrective or maintenance work shall be performed at the owner's expense.

Chapter 16.20 Illicit Discharge Controls

16.20.010 General Requirements and Prohibitions

- A. An illicit discharge is anything not entirely composed of stormwater that is allowed to enter a storm drainage system that discharges to surface water or groundwater. Dumping materials into or that may reach a storm drain facility, including but not limited to a storm drain inlet, a dry well or drill hole, or connecting a wastewater pipe into the storm drainage system, are prohibited under various state and local laws and result in illicit discharge (see *City of Bend Illicit Discharge Minimization Best Management Practices Manual* (Illicit Discharge Manual)). Any illicit discharge to any storm drain, dry well or drill hole, including the Municipal Separate Storm Sewer System (MS4), Underground Injection Controls and private storm drainage systems, is a violation of this Title unless exempted by Section 16.20.030.
- B. Any person engaged in activities that will or may result in pollutants entering a storm drain, dry well or drill hole shall undertake reasonable measures to reduce such pollutants.
- C. No person shall throw, deposit, leave, maintain, keep, or permit to be thrown, deposited, placed, left or maintained, any refuse, rubbish, garbage, debris,

sediment, or other discarded or abandoned objects, articles, and accumulations, in or upon any street, alley, sidewalk, storm drain, dry well or drill hole inlet, catch basin, conduit or other drainage structures, parking area, or upon any public or private plot of land so that the same might be or become a pollutant, except where such pollutant is being temporarily stored in properly contained waste receptacles or is part of a well-defined compost system.

- D. No person shall cause or permit any dumpster, solid waste bin, or similar container to leak such that any pollutant is discharged into any street, alley, sidewalk, parking lot, storm drain, dry well or drill hole inlet, catch basin, conduit or other drainage structures, business place, or upon any public or private plot of land within Bend's jurisdictional boundaries.
- E. The occupant or tenant, the owner, lessee, or proprietor of any real property in the City where there is located a paved sidewalk, drive, or parking area shall maintain said paved surface free of dirt or litter to the extent reasonable and practicable, and provide an adequate means for the disposal of refuse, rubbish, garbage, or other articles so as to prevent such matter from entering a storm drain facility. Sweepings from said paved areas shall be disposed of properly.
- F. No person shall throw or deposit any pollutant in any fountain, pond, lake, stream, creek or any other body of water in a park or elsewhere within the City, except as otherwise permitted under local, state or federal law.
- G. It is prohibited to establish, use, maintain, commence or continue illicit drainage connections or discharges to the MS4 or any public or private storm drains, dry wells and drill holes.

16.20.020 Discharges from Specific Sites Covered

The prohibitions on illicit discharges in this chapter apply to all illicit discharges including but not limited to the following.

A. Surface Cleaning, Parking Lots and Similar Structures

Persons owning or operating a paved parking lot, gas station pavement, paved private street or road, or similar structure or conducting routine building or surface wash downs, shall clean and maintain those structures consistent with the City of Bend's Illicit Discharge Manual which shall serve as regulations implementing this Title and may be amended by the City Manager. Compliance with the Manual is required prior to any discharge to a storm drain, dry well or drill hole.

B. Covered Parking Garages

All water from non-stormwater sources or incidental stormwater sources (i.e., blown in through openings and windows or transported on vehicles) that enter newly developed or significantly redeveloped covered parking garages are to be directed to the sanitary sewer disposal system unless that alternative is not reasonably feasible. Newly developed or significantly redeveloped covered permanent parking garages may drain into a storm drain when no feasible alternative is available, with the consent of the owner and operator, and with proper pretreatment and maintenance accessibility in accordance with this Title and state and federal regulations.

C. Outdoor Storage Areas – Commercial and Industrial Facilities

In outdoor areas, no person shall store grease, oil or other hazardous substances in a manner that will or may result in such substances entering a storm drain facility. In outdoor areas, no person shall store motor vehicles, machine parts, or other objects in a manner that may leak grease, oil, or other hazardous substances to a storm drain facility. To prevent the discharge of hazardous substances to the public or private storm drainage systems, the City may require the installation of a spill containment system. Spill containment systems may consist of dikes, walls, barriers, berms, or other devices as required. No person shall operate a spill containment system such that it allows incompatible liquids to mix and thereby create a hazardous condition.

16.20.030 Allowed Non-Stormwater Uses of Storm Drains, Dry Wells and Drill Holes

A. Allowed Discharges

Discharges authorized by (1) any Illicit Discharge Manual adopted by the City, or (2) the City's MS4 NPDES Permit or (3) Water Pollution Control Facility (WPCF) - Underground Injection Control (UIC) Permits are allowed unless they violate the provision of either permit.

16.20.040 Discharge Pursuant to Bend's Stormwater Quality Permits or Regulations

A. Permit Compliance

The prohibition of discharges shall not apply to any discharge already regulated under an MS4 NPDES Permit, Total Maximum Daily Load (TMDL), or WPCF-UIC Permit issued and administered by the EPA or Oregon Department of

Environmental Quality (ODEQ) provided that the discharger is in full compliance with all requirements of the permit and other applicable laws or regulations. Compliance with an applicable NPDES Permit or TMDL governing discharges into the MS4 or with an applicable WPCF-UIC Permit or rule authorization governing discharges into the UIC shall be considered compliance with this Title.

B. Violation of Stormwater Quality Permits or Regulations

Any discharge that would cause a violation of Bend's NPDES Permit, TMDL, or WPCF-UIC Permit and any amendments, revisions or re-issuance thereof, either separately considered or when combined with other discharges, is prohibited. Liability for any such discharge shall be the responsibility of the person(s) causing or responsible for the discharge, and the City shall seek to have such persons defend, indemnify and hold harmless the City in any administrative or judicial enforcement action against the permit holder relating to such discharge as provided by applicable rules of law.

C. Owner Responsibility

All persons in charge of a facility are to comply with applicable State and Federal laws including facility personnel, training, training record maintenance, training records, maintenance of notification procedures, and implementation of notification requirements for spill response to assure containment, cleanup, and immediate notification to the owner and operator of the MS4 or UIC. Individuals responsible for spills are to comply with applicable State and Federal notification requirements to assure containment, clean up, and immediate notification to the owner and operator of the MS4 or UIC.

Chapter 16.25 Well Drilling

16.25.010 Responsibility for Effect of Well Drilling

If the drilling of a new groundwater well causes any existing UIC that has been registered with the Oregon Department of Environmental Quality to be subject to this Title or requires the registered UIC to become subject to additional state permitting or mitigation requirements, the owner of the well shall be responsible for all permitting, compliance and mitigation costs incurred by the UIC owner or operator above that amount that the UIC owner would otherwise be required to address if not in a wellhead protection area. If the well owner does not pay the permitting, compliance and mitigation costs, the UIC owner or operator who has incurred costs may bring an action in Circuit Court and recover reasonable attorney fees in addition to damages.

Chapter 16.30 Stormwater Drainage Utility

16.30.010 Purpose

Effective maintenance, operation, regulation, and control of stormwater drainage are needed to protect the health, safety and general welfare of the City. Natural and man-made stormwater facilities and conveyances together constitute a stormwater system. Effective regulation and control of stormwater can best be accomplished through formation, by the City, of a stormwater utility.

16.30.020 Provision of Service

The City provides stormwater services to all properties within the City that have impervious surfaces. Those services include the maintenance of stormwater facilities in rights-of-way that serve both rights-of-way and adjoining properties. The City also provides stormwater services by regulating stormwater as provided in this Section, and by meeting State and Federal stormwater regulations.

16.30.030 Charges for Stormwater Service

- A. Unless another person responsible has agreed in writing to pay for stormwater service and a copy of that writing is filed with the City, the person receiving the City's water or sewer bill shall pay the stormwater charges as set by City Council resolution. The fee shall be based on Equivalent Residential Units (ERUs) with one ERU equal to 3,800 square feet of impervious surface area. If there is no City water or sewer service to the property, or if water service is discontinued and the property is an improved premises, the stormwater charges shall be paid by the person responsible for the property with the right to occupy the property. The person required to pay the charge is the "customer."
- B. The City Council may, by resolution, establish fees and charges necessary to provide and operate the stormwater system and service.

16.30.040 Stormwater Charges — Billing

- A. The customer shall be responsible for all stormwater service fees and charges.
- B. All money collected through stormwater fees and charges shall be used for the improvement, maintenance, and repair of the City's stormwater system.

16.30.050 Stormwater Charges — When Delinquent

- A. The City shall bill stormwater fees and charges in the same manner and at the same times as it bills for water and sewer service, and shall combine the stormwater bill with the water and/or sewer bill.
- B. A delinquent fee, in an amount established by resolution of the City Council, shall be added to all delinquent accounts.
- C. The finance director is authorized to determine what constitutes a de minimis account balance and to waive the delinquent fee imposed by Section 16.30.050.B.

16.30.060 Appeal and Credits

The City has established appeals and credit programs. Any customer aggrieved by any decision made with regard to the customer's account or a decision on charge reduction or avoidance may appeal to the City Manager by filing a written request for review no later than 10 days after receiving the decision. The City Manager's decision shall be subject to review by the City Council upon filing of an appeal within 15 days of the notice of decision.

16.30.070 Tampering with System/Prohibited Discharges

- A. No unauthorized person shall damage, destroy, uncover, alter, deface, or tamper with any facility that is part of the City stormwater system without the written permission from the City. No authorized person shall fill or divert any portion of the City stormwater drainage system except as authorized by the City.
- B. No person shall discharge any sewage, pollutants or hazardous materials into the stormwater system.

16.30.080 Meeting Regulatory Requirements

- A. In order to meet Oregon Department of Environmental Quality (ODEQ) and Federal stormwater-related requirements, the City retains the ability, at a minimum, to:
 - 1. Implement the ODEQ-approved stormwater permits, stormwater

monitoring plan and underground injection system management plan and/or integrated stormwater management plan.

2. Limit or terminate a non-stormwater discharge to an underground injection system, MS4, or surface water body.
3. Prohibit discharge to an underground injection system from non-City owned or managed properties or facilities that may cause a violation of the conditions of the City's WPCF-UIC Permit; and to prohibit discharge to an MS4 or surface water body from non-City owned or managed properties or facilities that may cause a violation of the conditions of the City's MS4 NPDES Permit.
4. Implement the highest and best practicable methods in accordance with OAR 340-040-0020 to protect groundwater quality by reducing or eliminating the movement of pollutants carried in stormwater runoff to groundwater via an underground injection system.
5. Identify the legal and administrative procedures available to mandate compliance with the conditions of the City's WPCF-UIC Permit and in ordinances, permits, contracts or orders that involve the discharge of fluids to an underground injection system.
6. Carry out all inspections, surveillance and monitoring procedures necessary to determine compliance and noncompliance with the conditions of the City's WPCF-UIC Permit, MS4 NPDES Permit, or TMDLs.

16.30.090 Responsibility for Private Stormwater Facilities

The owner of property where a private stormwater facility is located shall maintain the private stormwater facility in a properly functioning condition and shall operate the private stormwater facility to avoid flooding or erosion in excess of what would occur under natural conditions. An improperly maintained or operated private stormwater facility that results in flooding or erosion in excess of what would occur in natural conditions is a nuisance and may be abated as provided in this Title.