CHAPTER 1

STORMWATER MANAGEMENT

SECTION

21-101. General provisions.

(1) Purpose. It is the purpose of this Title to:

(a) Protect, maintain, and enhance the environment of the City of Portland and the public health, safety and the general welfare of the citizens of the City, by controlling discharges of pollutants to the City's stormwater system and to maintain and improve the quality of the receiving Waters into which the stormwater outfalls flow, including, without limitation, lakes, rivers, streams, ponds, wetlands, and groundwater of the City;

(b) Enable the City to comply with the National Pollution Discharge Elimination System Permit (NPDES) and applicable regulations, 40 CFR 122 for stormwater discharges;

(c) Allow the City to exercise the powers granted in Tennessee Code Annotated § 68-221-1105, which provides that, among other powers cities have with respect to stormwater facilities, is the power by ordinance or resolution to:

(i) Exercise general regulation over the planning, location, construction, and operation and maintenance of stormwater facilities in the City, whether or not owned and operated by the City;

(ii) Adopt any rules and regulations deemed necessary to accomplish the purposes of this statute, including the adoption of a system of fees for services and permits;

(iii) Establish standards to regulate the quantity of stormwater discharged and to regulate stormwater contaminants as may be necessary to protect water quality;

(iv) Review and approve plans and plats for stormwater management in proposed subdivisions or commercial developments;

(v) Issue permits for stormwater discharges, or for the construction, alteration, extension, or repair of stormwater facilities;

(vi) Suspend or revoke permits when it is determined that the permittee has violated any applicable ordinance, resolution, or condition of the permit;

(vii) Regulate and prohibit discharges into stormwater facilities of sanitary, industrial, or commercial sewage or waters that have otherwise been contaminated; and

(viii) Expend funds to remediate or mitigate the detrimental effects of contaminated land or other sources of stormwater contamination, whether public or private.

(2) Administering entity. The City Mayor, or their designee, shall administer the provisions of this Title.

(3) Stormwater Management ordinance. The intended purpose of this ordinance is to safeguard property and public welfare by regulating stormwater drainage and requiring temporary and permanent provisions for its control. It should be used as a planning and engineering tool for permit compliance and to facilitate the necessary control of stormwater.

(4) Jurisdiction. The Stormwater Management Ordinance (Title 21) shall govern all properties within the corporate limits of the City of Portland, Tennessee.

(5) Right of Entry. Designated City staff shall have right-of-entry, at reasonable times, on or upon the property of any person subject to this chapter and access to any permit/document issued hereunder. City staff shall be provided with ready access to all parts of the premises for purposes of inspection, monitoring, sampling, inventory, records examination and copying, and performance of any other duties necessary to determine compliance with this chapter. The City has the right to determine and impose inspection schedules necessary to enforce the provisions of this chapter.

21-102. Definitions.

For the purpose of this Title, the following definitions shall apply: Words used in the singular shall include the plural, and the plural shall include the singular; words used in the present tense shall include the future tense. The word "shall" is mandatory and not discretionary. The word "may" is permissive. Words not defined in this section shall be construed to have the meaning given by common and ordinary use as defined in the latest edition of Webster's Dictionary.

(1) "100-Year Flood Event." See Base Flood.

(2) "Active Construction Sites" means any site that has a permit for grading or other activities (even if actual construction is not proceeding) and any site where construction is occurring regardless of permits required.

(3) "Administrative or Civil Penalties" means under the authority provided in Tennessee Code Annotated § 68-221-1106, the City declares that any person violating the provisions of this Title may be assessed a civil penalty by the City of not less than fifty dollars ($50.00) and not more than five thousand dollars ($5,000.00) per day for each day of violation. Each day of violation shall constitute a separate violation.

(4) "Appeal" means a request for a review of the Stormwater Administrator's interpretation of any provision of these regulations.

(5) "Aquatic Resource Alteration Permit (ARAP)" physical alterations to properties of the waters of the state require an ARAP or a §401 Water Quality Certification (§401 certification). ARAP means a permit issued pursuant to T.C.A. § 69-3-108 of the Act, which authorizes the alteration of properties of waters of the state that result from activities other than discharges of wastewater through a pipe, ditch, or other conveyance.

(6) "As Built Plans" means record drawings depicting conditions as they were constructed.

(7) "Base Flood" means the Flood having a one percent (1%) chance of being equaled or exceeded in any given year. While this statistical event may occur more frequently, it may also be known as the "100-Year Flood Event."

(8) "Best Management Practices" ("BMP's") means schedules of activities, prohibitions of practices, maintenance procedures, and other management practices to prevent or reduce the Discharge of Pollutants to Waters of the State. BMP's also include treatment requirements, operating procedures, and practices to control plant site runoff, spillage or leaks, sludge or waste disposal, or drainage from raw material storage.

(9) "Borrow Pit" means an excavation from which erodible material (typically soil) is removed to be fill for another site. There is no processing or separation of erodible material conducted at the site. Given the nature of activity and pollutants present at such excavation, a Borrow Pit is considered a construction activity for the purpose of this permit.

(10) "Buffer Management Plan" means a written integrated plan outlining the utilitarian, ecological and aesthetic objectives for a specific landscape, and the landscape management practices and products that will be employed.

(11) "Buffer Zone" means a permanent strip of natural perennial vegetation, adjacent to a stream, river, wetland, pond, or lake that contains dense vegetation made up of grass, shrubs, and/or trees. The purpose of a water quality riparian buffer is to maintain existing water quality by minimizing risk of any potential sediments, nutrients or other pollutants reaching adjacent surface waters and to further prevent negative water quality impacts by providing canopy over adjacent waters.

(12) "Channel" means a natural or artificial watercourse with a definite bed and banks that conducts flowing water continuously or periodically.

(13) "City" means the City of Portland, Tennessee.

(14) "Common Plan of Development or Sale" is broadly defined as any announcement or documentation (including a sign, public notice or hearing, sales pitch, advertisement, drawing, permit application, zoning request, computer design, etc.) or physical demarcation (including boundary signs, lot stakes, surveyor markings, etc.) indicating construction activities may occur on a specific plot. A Common Plan of Development or Sale identifies a situation in which multiple areas of disturbance are occurring on contiguous areas. This applies because the activities may take place at different times, on different schedules, by different operators.

(15) "Construction Waste" means any trash, debris or waste that may occur on a construction site and be a potential pollutant to the storm sewer system.

(16) "Contaminant" means any physical, chemical, biological, or radiological substance or matter in water.

(17) "Control Measure" refers to any Best Management Practice (BMP) or other method used to prevent or reduce the discharge of pollutants to waters of the State.

(18) "Design Storm Event" means a hypothetical storm event, of a given frequency interval and duration, used in the analysis and design of a Stormwater Management Facility. The estimated design rainfall amounts, for any return period interval (i.e., 2-yr, 5-yr, 25-yr, etc.,) in terms of either 24-hour depths or intensities for any duration, can be found by accessing the following NOAA National Weather Service Atlas 14 data for Tennessee: http://hdsc.nws.noaa.gov/hdsc/pfds/pfds_map_cont.html?bkmrk=tn. Other data sources may be acceptable with prior written approval by TDEC Water Pollution Control. The

Design Storm Events for the City of Portland are: 2-, 5-, 10-, 25- and 100-year, 24-hour, storm events.

(19) "Detention" means the temporary delay of stormwater runoff prior to discharge into receiving waters.

(20) "Developer" means any individual, firm, corporation, association, partnership, trust, or authorized agents involved in commencing proceedings to effect development of land for him/her or others.

(21) "Development" means any man-made change to improved or unimproved real estate, including but not limited to, buildings or other structures, mining, dredging, filling, grading, paving, excavating, drilling operations, or permanent storage of materials (as defined as materials of like nature stored in whole or in part for more than six months).

(22) "Discharge" means dispose, deposit, spill, pour, inject, seep, dump, leak or place by any means, or that which is disposed, deposited, spilled, poured, injected, seeped, dumped, leaked, or placed by any means including any direct or indirect entry of any solid or liquid matter into the MS4.

(23) "Easement" means an acquired privilege or right of use or enjoyment that a person, party, firm, corporation, city or other legal entity has in the land of another.

(24) "Engineer" or "Professional Engineer" means an engineer duly registered, licensed or otherwise authorized by the State of Tennessee to practice in the field of civil engineering.

(25) "Erosion" means the removal of soil particles by the action of water, wind, ice or other geological agents, whether naturally occurring or acting in conjunction with or promoted by human activities or effects.

(26) "Erosion Prevention and Sediment Control Plan (EPSCP)" means a written plan (including drawings or other graphic representations) that is designed to minimize the erosion and sediment runoff at a site during construction activities.

(27) "Existing Construction" means any structure for which the "start of construction" commenced before the effective date of these regulations.

(28) "Existing Grade" means the slope or elevation of existing ground surface prior to cutting or filling.

(29) "Fill" means a portion of land surface or area to which soil, rock, or other materials have been or will be added; height above original ground surface after the material has been or will be added.

(30) "Finished Grade" means the final slope or elevation of the ground surface, after cutting or filling.

(31) "Flood or Flooding" means water from a river, stream, watercourse, lake, or other body of standing water that temporarily overflows and inundates adjacent lands, and which may affect other lands and activities through increased surface water levels and/or increased groundwater level.

(32) "Floodplain" means the relatively flat or lowland area adjoining a river, stream, watercourse, lake, or other body of standing water, which has been or may be covered temporarily by floodwater. For purposes of the Title, the floodplain is defined as the 100-year floodplain having a one percent (1%) chance of being equaled or exceeded in any given year.

(33) "Floodway" means that portion of the stream channel and adjacent floodplain required for the passage or conveyance of a 100-year flood discharge. The floodway boundaries are placed to limit encroachment in the floodplain so that a discharge can be conveyed through

the floodplain without materially increasing (less than one (1) foot) the water surface elevation at any point and without producing hazardous velocities or conditions. This is the area of significant depths and velocities, and due consideration should be given to effects of fill, loss of cross-sectional flow area, and resulting increased water surface elevations.

(34) "Floor" means the top surface of an enclosed area in a building (including basement), i.e., top of slab in concrete construction or top of wood flooring in wood frame construction. The term does not include the floor of a garage used solely for parking vehicles.

(35) "Grading" means any operation or occurrence by which the existing site elevations are changed; or where any ground cover, natural, or man-made, is removed; or any watercourse or body of water, either natural or man-made, is relocated on any site, thereby creating an unprotected area. This includes stripping, cutting, filling, stockpiling, or any combination thereof, and shall apply to the land in its cut or filled condition. Grading activities that disturb 10,000 square feet or more shall only be performed with a Land Disturbance Permit.

(36) "Green Infrastructure" means the interconnected network of natural areas and other open spaces that conserves natural ecosystem values and functions, sustains clean air and water, and provides environmental and community benefits.

(37) "Green Infrastructure Practices" means management measures that are designed, built and maintained to infiltrate, help produce evapotranspiration, harvest and/or use rainwater through the use of natural hydrologic features.

(38) "Greenways" means linear undeveloped areas linking various types of development by such facilities as bicycle paths, footpaths, and bridle paths. Greenways are usually kept in their natural state except for the pathway and areas immediately adjacent to the pathway.

(39) "Illicit Connections" means illegal and/or unauthorized connections to the MS4 whether such connections result in discharges into that system.

(40) "Illicit Discharge" means any discharge to the MS4 that is not composed entirely of stormwater, except discharges authorized under an NPDES Permit (other than the NPDES Permit for Discharges from the MS4) and discharges resulting from firefighting activities; and not specifically exempted under §21-108(2).

(41) "Impervious Surface" means a term applied to any ground or structural surface that water cannot penetrate or through which water penetrates with great difficulty.

(42) "Improved Sinkhole" means a natural surface depression that has been altered to direct fluids into the hole opening. Improved sinkhole is a type of injection well regulated under TDEC's Underground Injection Control (UIC) program. Underground injection constitutes an intentional disposal of waste waters in natural depressions, open fractures, and crevices (such as those commonly associated with weathering of limestone).

(43) "Inspector" means a Person that has successfully completed (has a valid certification from) the "Fundamentals of Erosion Prevention and Sediment Control Level I" course or equivalent course. An inspector performs and documents the required inspections, paying particular attention to time-sensitive permit requirements such as stabilization and maintenance activities. An inspector may also have the following responsibilities:

   a. Oversee the requirements of other construction-related permits, such as Aquatic Resources Alteration Permit (ARAP) or Corps of Engineers permit for construction activities in or around Waters of the State;

b. Update field SWPPP's;
c. Conduct pre-construction inspection to verify that undisturbed areas have been properly marked and initial measures have been installed; and
d. Inform the permit holder of activities that may be necessary to gain or remain in compliance with the Construction General Permit (CGP) and other environmental permits.

(44) "Land Disturbance Permit" means a permit issued by the Stormwater Administrator that allows for Land Disturbing Activities within the City of Portland in accordance with this Title. In some instances, additional local, state or federal permitting may also be required.

(45) "Land Disturbing Activity" means any activity on property that results in a change in the existing soil cover (both vegetative and non-vegetative) and/or the existing soil topography. Land Disturbing Activities include, but are not limited to, development, redevelopment, demolition, construction, reconstruction, clearing, grading, filling, and excavation. Land Disturbing Activities that disturb 10,000 square feet or more shall only be performed with a Land Disturbance Permit.

(46) "Landscape Architect" means a Landscape Architect duly registered, licensed or otherwise authorized by the State of Tennessee to practice in the field of landscape architecture.

(47) "Maintenance" means any activity that is necessary to keep a Stormwater Management Facility in good working order to function as designed. Maintenance shall include complete reconstruction of a Stormwater Management Facility if reconstruction is needed to restore the facility to its original operational design parameters. Maintenance shall also include the correction of any problem on the site property that may directly impair the functions of the Stormwater Management Facility.

(48) "Maintenance Agreement" or "Long Term Maintenance Agreement" means a document recorded in the land records that acts as a property deed restriction, and which provides for long-term Maintenance of Stormwater Management practices.

(49) "Municipal Separate Storm Sewer System (MS4)" includes the conveyances owned or operated by the City for the collection and transportation of Stormwater, including the roads and streets and their drainage systems, catch basins, curbs, gutters, ditches, man-made channels, and storm drains, and where the context indicates, it means the municipality that owns the separate storm sewer system.

(50) "National Pollutant Discharge Elimination System Permit" or a "NPDES Permit" means a permit issued pursuant to 33 U.S.C. 1342.

(51) "New Construction" means structures for which the "start of construction" commenced on or after the effective date of these regulations. The term also includes any subsequent improvements to such Structures.

(52) "Off-site Facility" means a Structural BMP located outside the subject property boundary described in the permit application for land Development activity.

(53) "On-site Facility" means a Structural BMP located within the subject property boundary described in the permit application for land development activity.

(54) "Passive Recreation" means recreational activities that require limited physical exertion on behalf of the participant. Examples of passive recreation activities include bird watching, walking or photography.

(55) "Peak Flow" means the maximum instantaneous rate of flow of water at a particular point resulting from a storm event.

(56) "Person" means all persons, natural or artificial, including any individual, firm or association and any municipal or private corporation organized or existing under the laws of this or any other state or country.

(57) "Permittee" means any person, firm, or any other legal entity to which a grading, building or other related permit is issued in accordance with City of Portland regulations.

(58) "Pollutant" means anything which causes or contributes to pollution. Pollutants may include, but are not limited to, paints, varnishes, and solvents; oil and other automotive fluids; non-hazardous liquid and solid wastes and yard wastes; refuse, rubbish, garbage, litter, or other discarded and abandoned objects, and accumulations, so that same may cause or contribute to pollution; any harmful floatable, pesticides, herbicides, and fertilizers; hazardous substances and wastes; sewage, animal waste, fecal coliform and pathogens; dissolved and particulate metals; sediment; and noxious or offensive matter of any kind.

(59) "Priority Area" means an area where land use or activities generate highly contaminated runoff, with concentrations of pollutants in excess of those typically found in stormwater. The following land uses and activities are deemed stormwater hotspots, but that term is not limited to only these land uses:

a. Vehicle salvage yards and recycling facilities
b. Vehicle service and maintenance facilities
c. Vehicle and equipment cleaning facilities
d. Fleet storage areas (bus, truck, etc.)
e. Industrial sites (included on Standard Industrial Classification code list)
f. Marinas (service and maintenance)
g. Public works storage areas
h. Facilities that generate or store hazardous waste materials
i. Commercial container nursery
j. Restaurants and food service facilities
k. Other land uses and activities as designated by an appropriate review authority.

(60) "Qualified Hydrologic Professional" or "QHP" means a Person who is duly registered, licensed or otherwise authorized by the State of Tennessee to perform hydrologic determinations and is certified as a Tennessee Qualified Hydrologic Professional.

(61) "Redevelopment" means the alteration of developed land that disturbs and increases the site or building impervious footprint or offers a new opportunity for stormwater controls. Demolition and reconstruction are considered development and not redevelopment. Note: redevelopment is not intended to include such activities as exterior remodeling, which would not be expected to cause adverse stormwater quality impacts.

(62) "Retention" means the prevention of storm runoff from direct discharge into receiving waters. Examples include systems which discharge through percolation, exfiltration, filtered bleed-down and evaporation processes.

(63) "Riparian Buffer". See Buffer Zone.

(64) "Runoff" means that portion of the precipitation on a drainage area that is discharged from the area into the MS4.

(65) "Sediment" means solid material, both inorganic and organic, that is in suspension, is being transported, or has been moved from its site of origin by air, water, gravity, or ice and has come to rest on the earth's surface either above or below sea level.

(66) "Sedimentation" means soil particles suspended in stormwater that can settle in stream beds.
(67) "Site" means all contiguous land and bodies of water in one ownership, graded, proposed for grading or development as a unit, although not necessarily at one time.
(68) "Slope" means degree of deviation of a surface from the horizontal, usually expressed in percentage or ratio.
(69) "Soil" means all unconsolidated mineral and organic material of any origin that overlies bedrock and that can be readily excavated.
(70) "Soils Report" means a study of soils on a subject property with the primary purpose of characterizing and describing the soils. The soils report shall be prepared by a qualified soils engineer, who shall be directly involved in the soil characterization either by performing the investigation or by directly supervising employees conducting the investigation.
(71) "Stabilization" means providing adequate measures, vegetative and/or structural, that will prevent erosion from occurring.
(72) "Stop Work Order" means an order directing the developer and/or permittee responsible for the development to cease and desist all or any portion of the work which violates the provisions of this Title.
(73) "Stormwater" means stormwater runoff, snow melt runoff, surface runoff, street wash waters related to street cleaning or maintenance, infiltration and drainage.
(74) "Stormwater Administrator" or "Administrator" refers to the person(s) designated by the City Mayor to enforce the stormwater management ordinance.
(75) "Stormwater Control Measure (SCM)" means permanent practices and measures designed to reduce the discharge of pollutants from new development projects or redevelopment projects.
(76) "Stormwater Management" means the programs to maintain quality and quantity of Stormwater Runoff to pre-Development levels.
(77) "Stormwater Management Facilities" means the drainage structures, conduits, ponds, ditches, combined sewers, sewers, and all device appurtenances by means of which stormwater is collected, transported, pumped, treated or disposed of.
(78) "Stormwater Management Plan" means the set of drawings and other documents that comprise all the information and specifications for the programs, drainage systems, structures, BMP's, concepts and techniques intended to maintain or restore quality and quantity of Stormwater Runoff to pre-Development levels.
(79) "Stormwater Pollution Prevention Plan (SWPPP)" means a written plan that includes site map(s), an identification of construction/contractor activities that could cause Pollutants in the Stormwater, and a description of measures or practices to control these Pollutants. It must be prepared and approved before construction begins. In order to effectively reduce Erosion and Sedimentation impacts, Best Management Practices (BMP's) must be designed, installed, and maintained during Land Disturbing Activities. The SWPPP should be prepared in accordance with the current Tennessee Erosion and Sediment Control Handbook. The handbook is intended for use during the design and construction of projects that require Erosion and Sediment controls to protect Waters of the State. It also aids in the Development of SWPPPs and other reports, plans, or specifications required when participating in Tennessee's water quality regulations. All SWPPP's shall

be prepared and updated in accordance with Section 3 of the General NPDES Permit for Discharges of Stormwater Associated with Construction Activities.

(80) "Stormwater Runoff" means flow on the surface of the ground, resulting from precipitation.

(81) "Stream" means a surface water that is not a wet weather conveyance (Rules and Regulations of the State of Tennessee, Chapter 0400-40-03). Stream includes lakes, wetlands and other non-linear surface waters. See also "waters of the state."

(82) "Structural BMP's" means facilities that are constructed to provide control of stormwater runoff.

(83) "Structure" means anything constructed or erected, the use of which requires a permanent location on or in the ground. Such construction includes but is not limited to objects such as buildings, towers, smokestacks, carports, and walls.

(84) "Surface Water" includes waters upon the surface of the earth in bounds created naturally or artificially including, but not limited to, streams, other water courses, lakes and reservoirs.

(85) "Top of Bank" means the ordinary high-water level and break in slope for a water resource.

(86) "View Corridors" means areas associated with formal trail systems closer than the required buffer width with an approved Buffer Management Plan.

(87) "Waste Site" means an area where waste material from a construction site is deposited. When the material is erodible, such as soil, the site must be treated as a construction site.

(88) "Water Quality Riparian Buffer Zone". See Buffer Zone.

(89) "Water Quality Treatment Volume (WQTV)" means a portion of the runoff generated from impervious surfaces at a new development or redevelopment project by the design storm.

(90) "Water Resources" means streams, seeps, springs, wetlands, sinkholes, lakes or channels, as determined by the Stormwater Administrator. It may be necessary to use methodology from Standard Operating Procedures for Hydrologic Determinations (see rules to implement a certification program for Qualified Hydrologic Professionals, TN Rules Chapter 0400-40-17) to identify a community water.

(91) "Watercourse" means a permanent or intermittent stream or other body of water, either natural or man-made, which gathers or carries surface water.

(92) "Watershed" means all the land area that contributes runoff to a particular point along a waterway.

(93) "Waters" or "Waters of the State" means any or all water, public or private, on or beneath the surface of the ground, which are contained within, flow through, or border upon Tennessee or any portion thereof except those bodies of water confined to and retained within the limits of private property in single ownership which do not combine or effect a junction with natural surface or underground waters.

(94) "Waters with Unavailable Parameters" means any segment of Surface Waters that has been identified by the Tennessee Department of Environment and Conservation (TDEC) as failing to support classified uses. Unavailable parameters exist where water quality is at, or fails to meet, the levels specified in water quality criteria in Rule 0400-40-03-.03, even if caused by natural conditions. In the case of a criterion that is a single response variable or is derived from measurement of multiple response variables, the unavailable parameters shall be the agents causing water quality to be at or failing to meet the levels

specified in criteria. Resources to be used in making this determination include biennial compilations of impaired waters, databases of assessment information, updated GIS coverages (https://tdeconline.tn.gov/dwr/), and the results of recent field surveys. GIS coverages of the streams and lakes not meeting water quality standards, plus the biennial list of waters with unavailable parameters, can be found at https://www.tn.gov/environment/program-areas/wr-water-resources/water-quality/water-quality-reports---publications.html. Additionally, TDEC periodically compiles a list of such Waters known as the "303(d) List".

(95) "Wetland(s)" means those areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support a prevalence of vegetation typically adapted to life in saturated soil conditions. Wetlands include, but are not limited to, swamps, marshes, bogs, and similar areas.

(96) "Wet Weather Conveyances" are man-made or natural watercourses, including natural watercourses that have been modified by channelization, that flow only in direct response to precipitation runoff in their immediate locality and whose channels are above the groundwater table and are not suitable for drinking water supplies; and in which hydrological and biological analyses indicate that, under normal weather conditions, due to naturally occurring ephemeral or low flow, there is not sufficient water to support fish or multiple populations of obligate lotic aquatic organisms whose life cycle includes an aquatic phase of at least two months. (Rules and Regulations of the State of Tennessee, Chapter 0400-40-3-.04(3)).

21-103. Land Disturbance Permit.

(1) General

The Land Disturbance Permit is designed to track all applicable land disturbance activities and ensure they are monitored for compliant erosion prevention and sediment controls, the absence of illicit discharges leaving the site, and compliance with the City's TDEC NPDES MS4 General Permit along with any applicable TDEC Construction General Permits, TDEC Aquatic Resources Alteration Permits (ARAP), and any other relevant permits. Tracking of these activities allows inspection, and in cases of non-compliance, enforcement actions to be taken.

(2) Applicability

This section shall be applicable to all land development, including, but not limited to, site plan applications, subdivision applications, land disturbance applications and grading applications. A Land Disturbance Permit shall be required for any land disturbing activity meeting any of the following requirements:

(a) Land Disturbance of 10,000 square feet or greater, or less than 10,000 square feet if part of a larger plan of common development or sale.
(b) Change in elevation of property.
(c) Any land disturbance that requires coverage under a TDEC Construction General Permit.
(d) Any land disturbance that requires coverage under a TDEC Aquatic Resources Alteration Permit.
(e) Any land disturbance requiring a TDEC Underground Injection Well Permit.
(f) Any new Development or Redevelopment, regardless of size, that is defined by the Stormwater Administrator to be a priority area land use.

(g) Any land disturbance that the Stormwater Department determines that the discharge of a site is causing, contributing to or likely to contribute to a violation of a state water quality standard.

(3) Exemptions

The following land disturbance activities are exempt from the requirements of obtaining a Land Disturbance Permit:

(a) Surface mining as is defined in Tennessee Code Annotated Section 59-8-202.

(b) Such minor land disturbing activities as home gardens and individual home landscaping, home repairs, home additions or modifications, home maintenance work, and other related activities that result in no soil erosion leaving the site. (Erosion Prevention and Sediment Control (ESPC) practices may be enforced through individual building permits.)

(c) Agriculture practices involving the establishment, cultivation or harvesting of products in the field or orchard, preparing and planting of pastureland, farm ponds, dairy operations, livestock and poultry management practices.

(d) Any project carried out under the technical supervision of NCRS, TDOT, TDEC, or USACE that is covered under applicable State or Federal construction permits.

(e) Any emergency activity that is immediately necessary for the protection of life, property, or natural resources.

These activities may be undertaken without a Land Disturbance Permit; however, the person conducting these excluded activities shall remain responsible for conducting these activities within accordance with provisions of this Ordinance and other applicable regulations including responsibility for controlling sediment, illicit discharges, and runoff.

(4) Application

Application for the Land Disturbance Permit shall be made to the Administrator by the primary permittee and co-permittee (if applicable). Applications are available from the Stormwater Department on the City's webpage or at City Hall. No land disturbing activities shall take place prior to approval of the Land Disturbance Permit application. Land disturbance permit fees must be paid, and initial erosion and sediment control practices must be in place prior to issuance of the Land Disturbance Permit.

(6) Permit Requirements

The following are conditions of Land Disturbance Permit coverage. Any violation of these conditions will make the permit holder(s) subject to all enforcement actions and penalties outlined in sections 21-109 and 21-110 of this Ordinance.

(a) Submittal and approval by Stormwater staff of the erosion Prevention and Sediment Control plans.

(b) Compliance with the site's TDEC Construction General Permit, TDEC ARAP, TDEC Underground Injection Well Permit, FEMA Floodplain Development Permit, and other Federal or State permits where applicable.

(c) Compliance with approved erosion prevention and sediment control plan and EPSC performance standards.

(d) Implementation and maintenance of appropriate erosion prevention and sediment control best management practices.

(e) Construction site operators must control waste such as discarded building materials, concrete truck washout, chemicals, litter, and sanitary waste at the construction site to avoid adverse impacts to water quality.

(7) Permit Duration

Each Land Disturbance Permit shall expire and become null and void if one of the following has occurred:

(a) Six (6) months of no activity on the site.
(b) Final stabilization of the site per the approved plans.
(c) Issuance of a TDEC Notice of Termination (NOT). A copy must be provided to the City in order to close out the Land Disturbance Permit.
(d) Three (3) years from issuance of Permit or if new federal or state regulations exist changing the scope of coverage where a new land disturbance permit is required.
(e) In the case of public infrastructure, acceptance by the City of Portland Public Works Department.

In cases of expiration of the Land Disturbance Permit, a permit may be re-issued with no additional fee, if the plan and scope of the project submitted on the original Land Disturbance Permit does not change significantly.

(8) Land Disturbance Permit Fee

The Land Disturbance Permit fee shall be paid before permits are issued.

21-104. Stormwater System Design: Construction and Permanent Stormwater Management Performance Standards.

(1) MS4 Stormwater design or BMP manuals.

(a) Adoption. The city adopts as its MS4 Stormwater design and Best Management Practices (BMP) manuals for stormwater management, construction and permanent, the following publications, which are incorporated by reference in this ordinance as if fully set out herein:
(i) TDEC Erosion Prevention and Sediment Control Handbook; most current edition.
(ii) Tennessee Permanent Stormwater Management and Design Guidance Manual; most current edition.
(iii) A collection of MS4 approved BMP's developed or collected by the MS4 that comply with the goals of the MS4 Permit and/or the CGP, such as the Nashville-Davidson County Metro Stormwater Management Manual (BEST MANAGEMENT PRACTICES (BMP) MANUAL - Volume 4); most current edition.
(iv) Requirements for design storm for all waters as well as special conditions for water with unavailable parameters or exceptional Tennessee waters must be consistent with those of the current Tennessee Construction General Permit (TNR100000).
(v) The City's adopted manual(s) may be updated and expanded from time to time, at the discretion of the governing body of the City, upon the recommendation of the Stormwater Administrator, based on improvements in engineering, science, monitoring and local maintenance experience, or changes in federal or state law or regulation. Stormwater facilities that are designed, constructed and maintained in accordance with these BMP criteria will be presumed to meet the minimum water quality performance standards.

(b) The City has adopted, for use in designing Stormwater Control Measures, construction design storm events. The construction design storm events adopted by the City are as follows: 2-, 5-, 10-, 25- and 100-year, 24-hour, storm events.

(c) The City has adopted, for use in designing EPSC measures, the design storm requirements from the current Tennessee Construction General Permit for all waters as well as special conditions for waters with unavailable parameters or Exceptional Tennessee Waters.

(2) Submittal of a copy of the NOC, SWPPP and NOT to the local MS4

Permittees who discharge Stormwater through an NPDES-permitted Municipal Separate Storm Sewer System (MS4) who are not exempted in section 1.4.5 (Permit Coverage through Qualifying Local Program) of the Construction General Permit (CGP) must provide proof of coverage under the Construction General Permit (CGP); submit a copy of the Stormwater Pollution Prevention Plan (SWPPP); and at project completion, a copy of the signed notice of termination (NOT) to the Stormwater Administrator.

Copies of additional applicable local, state or federal permits (i.e.: ARAP, etc.) must also be provided upon request. If requested, these permits must be provided before the issuance of any Land Disturbance Permit.

(3) Stormwater Pollution Prevention Plan (SWPPP) for Construction Stormwater Management: The applicant must prepare a Stormwater Pollution Prevention Plan for all construction activities that complies with subsection (5) below. The purpose of this plan is to identify construction/contractor activities that could cause pollutants in the stormwater, and to describe measures or practices to control these pollutants during project construction.

(4) Stormwater Pollution Prevention Plan requirements. The Erosion Prevention and Sediment Control Plan component of the SWPPP shall accurately describe the potential for soil erosion and sedimentation problems resulting from land disturbing activity and shall explain and illustrate the measures that are to be taken to control these problems. The length and complexity of the plan is to be commensurate with the size of the project, severity of the site condition, and potential for off-site damage. If necessary, the plan shall be phased so that changes to the site during construction that alter drainage patterns or characteristics will be addressed by an appropriate phase of the plan. The plan shall be sealed by a registered professional engineer or landscape architect licensed in the state of Tennessee. The plan shall also conform to the requirements found in the TDEC Construction General Permit manual, and shall include at least the following:

(a) Project description - Briefly describe the intended project and proposed land disturbing activity including number of units and structures to be constructed and infrastructure required.

(b) A topographic map with contour intervals of two (2) feet or less showing present conditions and proposed contours resulting from land disturbing activity.

(c) All existing drainage ways, including intermittent and Wet Weather Conveyances and any designated Floodways or Floodplains.

(d) A general description of existing land cover. Individual trees and shrubs do not need to be identified.

(e) Stands of existing trees as they are to be preserved upon project completion, specifying their general location on the property. Differentiation shall be made between existing trees to be preserved, trees to be removed and proposed planted trees. Tree protection measures must be identified, and the diameter of the area involved must also be identified on the plan and shown to scale. Information shall be supplied concerning the proposed destruction of exceptional and historic trees in setbacks and buffer strips, where they exist. Complete landscape plans may be submitted separately. The plan must include the sequence of implementation for tree protection measures.

(f) Approximate limits of proposed clearing, grading, and filling.

(g) Approximate flows of existing stormwater leaving any portion of the site.

(h) A general description of existing soil types and characteristics and any anticipated soil erosion and sedimentation problems resulting from existing characteristics.
(i) Location, size and layout of proposed stormwater and sedimentation control improvements.
(j) Existing and proposed drainage network.
(k) Proposed drain tile or waterway sizes.
(l) Approximate flows leaving the Site after construction and incorporating water runoff mitigation measures. The evaluation must include projected effects on property adjoining the site and on existing drainage facilities and systems. The plan must address the adequacy of outfalls from the development: when water is concentrated, what is the capacity of waterways, if any, accepting stormwater off-site; and what measures, including infiltration, sheeting into buffers, etc., are going to be used to prevent the scouring of waterways and drainage areas off-site, etc.
(m) The projected sequence of work represented by the grading, drainage and sedimentation and erosion control plans as related to other major items of construction, beginning with the initiation of excavation, and including the construction of any sediment basins or retention/detention facilities or any other Structural BMP's.
(n) Specific remediation measures to prevent erosion and sedimentation runoff. Plans shall include detailed drawings of all control measures used; stabilization measures including vegetation and non-vegetation measures, both temporary and permanent, will be detailed. Detailed construction notes and a maintenance schedule shall be included for all control measures in the plan.
(o) Specific details for: the construction of stabilized construction entrance/exits, concrete washouts, and sediment basins for controlling erosion; road access points; eliminating or keeping soil, sediment, and debris on streets and public ways at a level acceptable to the City. Soil, sediment, and debris brought onto streets and public ways must be removed by the end of the workday to the satisfaction of the City.
(p) Proposed structures: location and identification of any proposed additional buildings, structures, or development on the site.
(q) A description of on-site measures to be taken to recharge surface water into the ground water system through runoff reduction practices.
(r) Specific details for construction waste management. Construction site operators shall control waste such as discarded building materials, concrete truck washout, petroleum products and petroleum related products, chemicals, litter, and sanitary waste at the construction site that may cause adverse impacts to water quality. When the material is erodible, such as soil, the site must be treated as a construction site.

(5) General design performance criteria for permanent Stormwater Management: the following performance criteria shall be addressed for permanent stormwater management at all development sites that require a land disturbance permit.
(a) To comply with the permanent stormwater standards for new development and redevelopment projects, design and install SCMs as established by Tennessee Rule 0400-40-10-.04 and comply with other requirements of Tennessee Rule 0400-40-10-.04. Note that for design purposes, total suspended solids (TSS) may be used as the indicator for the reduction of pollutants.
(b) Site design standards for all new and redevelopment require, in combination or alone, management measures that are designed to provide full treatment capacity within 72 hours

following the end of the preceding rain event for the life of the new development and redevelopment project.

(i) The runoff quantity of the designed control measure can be found in the TDEC Small MS4 General Permit section 4.2.5.2.

(ii) Pre-Development infiltrative capacity of soils at the site must be considered in selection of runoff reduction management measures.

(iii) Incentive standards. The following types of development or redevelopment shall receive a twenty percent (20%) reduction in the water quality treatment volume for any of the following conditions:

(1) Redevelopment (including, but not limited to, brownfield redevelopment);

(2) Vertical Density, (Floor to Area Ratio (FAR) of 2 or >18 units per acre); and

(3) Incentives submitted to and approved by TDEC.

(c) Designs shall be based on the 24-hour design storms adopted by the City.

(d) To protect stream channels from degradation, specific channel protection criteria shall be provided as prescribed in the adopted MS4 BMP manual.

(e) Stormwater discharges to critical areas with sensitive resources (i.e., cold water fisheries, shellfish beds, swimming beaches, recharge areas, water supply reservoirs) may be subject to additional performance criteria or may need to utilize or restrict certain Stormwater Management practices.

(f) Stormwater discharges from hotspots may require the application of specific Structural BMP's and pollution prevention practices. In addition, stormwater from a hotspot land use may not be infiltrated.

(g) Prior to or during the site design process, applicants for Land Disturbance Permits shall consult with the Stormwater Administrator to determine if they are subject to additional stormwater design requirements.

(6) Permanent Stormwater Management Plan requirements. The Stormwater Management Plan shall include sufficient information to allow the Stormwater Administrator to evaluate the environmental characteristics of the project site, the potential impacts of all proposed development of the site, both present and future, on the Water Resources, and the effectiveness and acceptability of the measures proposed for managing stormwater generated at the project site. To accomplish this goal the Stormwater Management Plan shall include the following:

(a) Topographic base map: Topographic base map of the site which extends a minimum of 100 feet beyond the limits of the proposed development and indicates:

(i) Existing surface water drainage including streams, ponds, culverts, ditches, sink holes, wetlands; and the type, size, elevation, etc., of nearest upstream and downstream drainage structures;

(ii) Current land use including all existing structures, locations of utilities, roads, and easements;

(iii) All other existing significant natural and artificial features;

(iv) Proposed land use with tabulation of the percentage of surface area to be adapted to various uses; drainage patterns; locations of utilities, roads and easements; the limits of clearing and grading.

(b) Proposed structural and non-structural BMP's;

(c) A written description of the site plan and justification of proposed changes in natural conditions may also be required;

(d) Calculations: Hydrologic and hydraulic design calculations for the pre-development and post-development conditions for the design storm event specified in the MS4 BMP manual. These calculations must show that the proposed Stormwater Management measures are capable of controlling runoff from the site in compliance with this Title and the guidelines of the MS4 BMP manual. Such calculations shall include:
  (i) A description of the Design Storm Event frequency, duration, and intensity where applicable;
  (ii) Time of concentration;
  (iii) Soil curve numbers or runoff coefficients including assumed soil moisture conditions;
  (iv) Peak runoff rates and total runoff volumes for each watershed area;
  (v) Infiltration rates, where applicable;
  (vi) Culvert, stormwater sewer, ditch and/or other stormwater conveyance capacities;
  (vii) Flow velocities;
  (viii) Data on the increase in rate and volume of runoff for the Design Storm Event referenced in the MS4 BMP manual; and
  (ix) Documentation of sources for all computation methods and field test results.

(e) Soils information: If a Stormwater Management control measure depends on the hydrologic properties of soils (e.g., infiltration basins), then a Soils Report shall be submitted. The Soils Report shall be based on On-site boring logs or soil pit profiles and soil survey reports. The number and location of required soil borings or soil pits shall be determined based on what is needed to determine the suitability and distribution of soil types present at the location of the control measure.

(7) Maintenance and repair plan: *See Appendix A*. The design and planning of all permanent Stormwater Management Facilities shall include detailed maintenance and repair procedures to ensure their continued performance. These plans will identify the parts or components of a Stormwater Management Facility that need to be maintained and the equipment and skills or training necessary. Provisions for the periodic review and evaluation of the effectiveness of the maintenance program and the need for revisions or additional maintenance procedures shall be included in the plan.

(8) Buffers and Buffer Zones: Buffer and Buffer Zones shall be those buffers and Buffer Zones as described in section 21-108 and shall meet the requirements contained in those provisions.

21-105. Permanent Stormwater Management: Operation, Maintenance, and Inspection.

(1) As Built Plans. All applicants are required to submit As Built Plans for any stormwater structures located on-site within ninety (90) days after final construction is completed. The plan must show the final design specifications for all Stormwater Management Facilities and must be sealed by a registered Professional Engineer and/or Land Surveyor licensed to practice in Tennessee. A sealed certification by the design engineer that all SCMs will function within the design parameters as constructed shall accompany the as-built plans. A final inspection by the City is required before any performance surety is released. The City shall have the discretion to adopt provisions for a partial pro-rata release of the performance surety on the completion of various stages of development. In addition, occupation permits shall not be granted until corrections to all BMP's have been made and accepted by the City.

(2) Landscaping and Stabilization requirements.

(a) Any area of land from which the natural vegetative cover has been either partially or wholly cleared by development activities shall be stabilized. Stabilization measures shall be initiated as soon as possible in portions of the site where construction activities have temporarily or permanently ceased. Temporary or permanent soil stabilization at the construction site (or a phase of the project) must be completed not later than 14 days after the construction activity in that portion of the site has temporarily or permanently ceased. In the following situations, temporary stabilization measures are not required:

(i) where the initiation of stabilization measures is precluded by snow cover or frozen ground conditions or adverse soggy ground conditions, stabilization measures shall be initiated as soon as practicable; or

(ii) where construction activity on a portion of the site has temporarily ceased, and Land Disturbing Activities will be resumed within 14 days.

(b) Permanent stabilization with perennial vegetation (using native herbaceous and woody plants where practicable) or other permanently stable, non-eroding surface shall replace any temporary measures as soon as practicable. Unpacked gravel containing fines (silt and clay sized particles) or crusher runs will not be considered a non-eroding surface.

(c) The following criteria shall apply to revegetation efforts:

(i) Reseeding must be done with an annual or perennial cover crop accompanied by placement of straw mulch or its equivalent of sufficient coverage to control erosion until such time as the cover crop is established over ninety percent (90%) of the seeded area.

(ii) Replanting with native woody and herbaceous vegetation must be accompanied by placement of straw mulch or its equivalent of sufficient coverage to control erosion until the plantings are established and are capable of controlling erosion.

(iii) Any area of revegetation must exhibit survival of a minimum of seventy-five percent (75%) of the cover crop throughout the year immediately following revegetation. Revegetation must be repeated in successive years until the minimum seventy-five percent (75%) survival for one (1) year is achieved.

(iv) In addition to the above requirements, a landscaping plan must be submitted with the final design describing the vegetative stabilization and management techniques to be used at a site after construction is completed. This plan will explain not only how the site will be stabilized after construction, but who will be responsible for the maintenance of vegetation at the site and what practices will be employed to ensure that adequate vegetative cover is preserved.

(3) Inspection of Stormwater Management Facilities. Periodic inspections of facilities shall be performed, documented, and reported in accordance with this Title, as detailed in Appendix A.

(4) Records of installation and Maintenance activities. Parties responsible for the operation and maintenance of a Stormwater Management Facility shall make records of the installation of the Stormwater Management Facility, and of all maintenance and repairs to the facility, and shall retain the records for at least three (3) years. These records shall be made available to the City during inspection of the facility and at other reasonable times upon request.

(5) Failure to meet or maintain design or Maintenance standards. If a responsible party fails or refuses to meet the design or Maintenance standards required for Stormwater Facilities under this Title, the City, after reasonable notice, may correct a violation of the design standards or

maintenance needs by performing all necessary work to place the facility in proper working condition. If the Stormwater Management Facility becomes a danger to public safety or public health, the City shall notify in writing the party responsible for maintenance of the Stormwater Management Facility. Upon receipt of that notice, the responsible person shall have thirty (30) days to effect maintenance and repair of the facility in an approved manner. In the event that corrective action is not undertaken within that time, the City may take necessary corrective action. The cost of any action by the City under this section shall be charged to the responsible party.

21-106. Permanent Stormwater Management: Existing Locations and Ongoing Developments.

(1) On-site Stormwater Management Facilities Maintenance Agreement:

(a) Where the Stormwater Management Facility is located on property that is subject to a development agreement, and the development agreement provides for a permanent Stormwater Maintenance Agreement that runs with the land, the owners of property must execute an inspection and maintenance agreement that shall operate as a deed restriction binding on the current property owners and all subsequent property owners and their lessees and assigns, including but not limited to, homeowner associations or other groups or entities.

(b) The Maintenance Agreement shall:

(i) Assign responsibility for the maintenance and repair of the Stormwater Management Facility to the owners of the property upon which the facility is located and be recorded as such on the plat for the property by appropriate notation.

(ii) Provide for a periodic inspection by the property owners for the purpose of documenting maintenance and repair needs and to ensure compliance with the requirements of this ordinance. It shall also grant permission to the City to enter the property at reasonable times and to inspect the stormwater facility to ensure that it is being properly maintained.

(iii) Provide that the minimum maintenance and repair needs include but are not limited to the removal of silt, litter and other debris, the cutting of grass, cutting and vegetation removal, and the replacement of landscape vegetation, in detention and retention basins, and inlets and drainage pipes and any other Stormwater Facilities. It shall also provide that the property owners shall be responsible for additional maintenance and repair needed to meet the intended design specification of the stormwater facility.

(iv) Provide that maintenance needs must be addressed in a timely manner, on a schedule to be determined by the Stormwater Administrator.

(v) Provide that if the property is not maintained or repaired within the prescribed schedule, the City shall perform the maintenance and repair at its expense and bill the same to the property owner. The Maintenance Agreement shall also provide that the City's cost of performing the maintenance shall be a lien against the property.

(2) Existing problem locations – no Maintenance Agreement.

(a) The Stormwater Administrator shall in writing notify the owners of existing locations and developments of specific drainage, erosion or sediment problems affecting or caused by such locations and developments, and the specific actions required to correct those problems. The notice shall also specify a reasonable time for compliance. Discharges from

existing SCM's that have not been maintained and/or inspected in accordance with this ordinance shall be regarded as illicit discharges.

(b) Inspection of existing Stormwater Management Facilities. The City may, to the extent authorized by state and federal law, enter and inspect private property for the purpose of determining if there are non-stormwater illicit discharges, and to establish inspection programs to verify that all Stormwater Management Facilities are functioning within design limits. These inspection programs may be established on any reasonable basis, including but not limited to: routine inspections; random inspections; inspections based upon complaints or other notice of possible violations; inspection of drainage basins or areas identified as higher than typical sources of sediment or other contaminants or pollutants; inspections of businesses or industries of a type associated with higher than usual discharges of contaminants or pollutants or with discharges of a type which are more likely than the typical discharge to cause violations of the City's NPDES Stormwater Permit; and joint inspections with other agencies inspecting under environmental or safety laws. Inspections may include but are not limited to: reviewing maintenance and repair records; sampling discharges, surface water, groundwater, and material or water in drainage control facilities; and evaluating the condition of drainage control facilities and other SCM's.

(3) Owner/Operator Inspections. The owners and/or operators of the SCMs shall:

(a) Perform routine inspections to ensure that all SCM's are functioning properly. These inspections shall be conducted on an annual basis, at a minimum. These inspections shall be conducted by a person approved by the Stormwater Administrator that is familiar with control measures implemented at the site. Owners or operators shall maintain documentation of these inspections. Submittal of this documentation is required in an annual report due by July 1st of each year.

(b) Perform comprehensive inspection of all stormwater management facilities and practices. These inspections shall be conducted once every five years, at a minimum. Such inspections must be conducted by a licensed professional engineer, a licensed landscape architect, or other qualified professional familiar with applicable SCM design and maintenance requirements. Comprehensive inspection reports must be submitted to the City on July 1st every five years. Complete inspection reports for these five-year inspections shall include:

(i) Facility type.
(ii) Inspection date.
(iii) Latitude and longitude and nearest street address.
(iv) SCM owner information (e.g., name, address, phone number, and email).
(v) A description of SCM condition including vegetation and soils, inlet and outlet channels and structures, embankments, slopes, safety benches, spillways, weirs, and other control structures, and any sediment and debris accumulation
(vi) Photographic documentation of SCMs.
(vii) Specific maintenance items or violations that need to be corrected by the SCM owner along with deadlines and reinspection dates.

(4) Requirements for all existing locations and ongoing Developments. The following requirements shall apply to all locations and development at which land disturbing activities have occurred before the enactment of this ordinance:

(a) Denuded areas must be vegetated or covered under the standards and guidelines specified in the adopted BMP Manual and on a schedule acceptable to the City.
(b) Cuts and Slopes must be properly covered with appropriate vegetation and/or retaining walls constructed.
(c) Drainage ways shall be properly stabilized.
(d) Trash, junk, rubbish, etc. shall be cleared from drainage ways.
(e) Stormwater runoff shall, at the discretion of the Stormwater Administrator, be controlled to the maximum extent practicable to prevent its pollution. Such control measures may include, but are not limited to, the following:
    (i) Ponds
        (1) Detention pond
        (2) Extended detention pond
        (3) Wet pond
        (4) Alternative storage measures
    (ii) Constructed Wetlands
    (iii) Infiltration systems
        (1) Infiltration/percolation trench
        (2) Infiltration basin
        (3) Drainage (recharge) well
        (4) Porous pavement
    (iv) Filtering systems
        (1) Catch basin inserts/media filter
        (2) Sand filter
        (3) Filter/absorption bed
        (4) Filter and buffer strips
    (v) Open Channel
        (1) Swale

(5) Corrections of problems subject to appeal. Corrective measures imposed by the Stormwater Administrator under this section are subject to appeal under section 21-111 of this Title.

21-107. Water Quality Riparian Buffer Zone Requirements

(1) A riparian buffer shall be applied to all water resources located in, or adjacent to, new construction, development, or redevelopment that require a land disturbance permit. The goal of the Water Quality Riparian Buffer is to preserve undisturbed vegetation that is native to the streamside habitat around the project. The water quality riparian buffer zone is required to protect waters of the state located within or immediately adjacent to the boundaries of the project, as identified using methodology from standard operating procedures for hydrologic determinations (see rules to implement a certification program for qualified hydrologic professionals, Tennessee Rules chapter 0400-40-17). Buffer zones are not primary sediment control measures and should not be relied on as such. Rehabilitation and enhancement of a natural buffer zone is allowed, if necessary, for improvement of its effectiveness of protection of the waters of the state. Vegetated, preferably native, Water Quality Buffers protect water bodies by providing structural integrity and canopy cover, as well as Stormwater infiltration, filtration and evapotranspiration.
(2) Stormwater discharges should enter water quality riparian buffers as sheet flow, not concentrated flow, as site conditions allow.

(3) A determination that Water Quality Buffer widths cannot be met on-site may not be based solely on the difficulty or cost of implementing measures, but must include multiple criteria, such as: type of project, existing land use and physical conditions that preclude use of these practices. Every attempt should be made for development and redevelopment activities not to take place within the buffer zone.

(a) "Construction" or "temporary" applies to all streams adjacent to construction sites that require a land disturbance permit. The riparian buffer zone should be preserved between the top of stream bank and the disturbed construction area. Buffers shall be clearly marked on site development plans, grading permit applications, and/or concept plans. Refer to the table below for construction buffer zone requirements.

Construction Water Quality Buffer Requirements			
Receiving Feature	**Average buffer width (feet)**	**Minimum buffer width (feet)**	**Notes***
Waters with available parameters for siltation or unassessed waters	30	15	The criteria for the width of the buffer zone can be established on an average width basis at a project, as long as the minimum width of buffer zone is more than the required minimum width at any measured location. If the new development or redevelopment site encompasses both sides of a stream, buffer averaging can be applied to both sides, but must be applied independently.
Exceptional Tennessee Waters or waters with unavailable parameters for siltation	60	30	
*The Administrator may approve variances from the water quality buffer requirements set forth in this chapter.			

(b) "Permanent" new development and significant redevelopment sites are required to preserve Water Quality Buffers along waters within the MS4. Buffers shall be clearly marked on site development plans, land disturbance permit applications, and/or concept plans. Refer to the table below for permanent buffer zone requirements.

Permanent Water Quality Buffer Requirements			
Receiving Feature	**Average buffer width (feet)**	**Minimum buffer width (feet)**	**Notes***
Waters with available parameters for	30	15	The criteria for the width of the buffer zone can be established on an average width basis at a project, as long as the

siltation or habitat alteration or unassessed waters			minimum width of buffer zone is more than the required minimum width at any measured location. If the new development or redevelopment site encompasses both sides of a stream, buffer averaging can be applied to both sides, but must be applied independently.
Exceptional Tennessee Waters or waters with unavailable parameters for siltation or habitat alteration	60	30	
*The Administrator may approve variances from the water quality buffer requirements set forth in this chapter.			

(4) Water quality riparian buffer widths are measured from the top of bank, also referred to as the "ordinary high-water mark."

(5) The following list includes the allowable uses within the Buffer Zone. The Stormwater Administrator shall approve the specific requirements of a plan proposing the installation of any feature or construction within the Buffer Zone. For any such work, a Buffer Management Plan shall be submitted to the Stormwater Administrator prior to the issuance of a land disturbance permit.
   (a) Utility crossings
   (b) Passive recreation, pervious footpaths, and boardwalks to approach the Water Resource as approved by the Stormwater Administrator.
   (c) Biking or hiking paths and greenways, but no closer than 30 feet at any measured location. View corridors shall be allowed along greenways as approved by the Stormwater Administrator. Paths and greenways shall be designed to prevent the channelization of stormwater runoff and should be constructed of previous and/or permeable materials. There shall be no other permanent structures except for paths.
   (d) Stabilization practices to prevent channelization and erosion in the Buffer Zone from stormwater runoff adjacent to the water resource.
   (e) Landscaping allows for climax successional vegetation through the removal of invasive exotic plants and the establishment of native vegetation, and/or other practices that restore the ecological integrity of the Riparian Buffer.
   (f) Removal of individual trees within the Buffer Zone which are in danger of falling, causing damage to dwellings or other structures, or causing blockage of the water resource.
   (g) Cut and fill for floodplain compensations as approved by the City Floodplain Administrator.

(6) Requests to reduce the Riparian Buffer width, perform clearing activities or install crossings within the Riparian Buffer shall be approved by the Stormwater Administrator.

(a) The Riparian Buffer width may be reduced in conjunction with targeted restoration plans that make comparable improvements to both the ecological integrity within the Buffer Zone and water quality of the water resource. Reduction of the Riparian Buffer width shall be approved on a case-by-case basis. Restoration plans must be submitted along with a Buffer Management Plan to the Stormwater Administrator for approval.

(b) Riparian Buffer crossings should be limited as much as possible. Utilities shall be located under pavement where possible to limit the width of the crossing. Riparian Buffer crossings shall be submitted along with a Buffer Management Plan to the Stormwater Administrator for approval.

(i) Utilities may be allowed in the Riparian Buffer, but not closer than 30 feet to the top of bank except for crossings.

(ii) The Stormwater Administrator may approve new driveways or road crossings through or across Riparian Buffer Zones on a case-by-case basis. It shall be demonstrated that access across the buffer is necessary and that the buffer will not be impacted excessively. In these cases, the driveway or road crossing shall be constructed perpendicular, or as close to perpendicular as possible to the Water Resource and/or Riparian Buffer with careful detail to protecting trees and vegetation and minimizing site grades. Other federal, state and/or local permits may still be required.

(7) For any proposed development and/or construction activity within or adjacent to a Riparian Buffer, the following shall be required.

(a) The parameters of the Riparian Buffer shall be delineated by the applicant and boundaries shall be clearly indicated and labeled on all plats, plans, permits and official maps.

(b) Include a note on plans to reference protective covenants governing all Riparian Buffer areas, labeled as: "Any Riparian Buffer is subject to protective covenants recorded in the Register of Deeds (Sumner or Robertson County). Disturbance and use of these areas is restricted; severe penalties apply."

(c) Riparian Buffers shall be protected during construction activities by a combination of fencing and flagging to prevent entry of construction equipment, storage and stockpiling. Buffer boundaries shall be marked with signs that persist before, during and after construction activities.

(d) Permanent boundary markers shall be installed prior to the completion of the development activities. Signage shall be posted at the edge of the Riparian Buffer on each lot line, and at a maximum spacing of 200 feet. Properties with a large amount of Riparian Buffer frontage may request a reduction in spacing requirements, subject to approval by the Stormwater Administrator. The size of the sign shall be six inches by four inches or greater and shall contain the message, "Water Resource protected. Violators subject to severe penalties" or other language as approved by the Stormwater Administrator.

(e) All Riparian Buffers shall be placed in open space lots to be maintained according to Section 21-106.

(8) Riparian Buffers shall be actively managed with periodic buffer surveys. Violators shall be served with Civil Penalties according to section 21-110(2) of this Title and shall be required, at their own expense, to revegetate, according to an approved Buffer Management Plan, and maintain the section of the Riparian Buffer encroached upon, using only native vegetation.

Equivalent native plants and trees that were removed shall be replaced on a tree per tree basis or as approved by the Stormwater Administrator. Specimen trees shall be replaced as required by the City's Zoning Ordinance.

21-108. Illicit Discharges.

(1) Scope. This section shall apply to all water generated on developed or undeveloped land entering the City's separate storm sewer system.

(2) Prohibition of Illicit Discharges. No person shall introduce or cause to be introduced into the MS4 any discharge that is not composed entirely of stormwater or any discharge that flows from a Stormwater Management Facility that is not inspected in accordance with this Title shall be an illicit discharge. Non-stormwater discharges shall include, but shall not be limited to, sanitary wastewater, car wash wastewater, radiator flushing disposal, spills from roadway accidents, carpet cleaning wastewater, effluent from septic tanks, improper oil disposal, laundry wastewater/gray water, improper disposal of auto and household toxics. The commencement, conduct or continuance of any non-stormwater discharge to the MS4 is prohibited except as described as follows:

(a) Uncontaminated discharges from the following sources:
  (i) Water line flushing or other potable water sources;
  (ii) Landscape irrigation or lawn watering with potable water;
  (iii) Diverted stream flows;
  (iv) Rising ground water;
  (v) Groundwater infiltration to storm drains;
  (vi) Pumped groundwater;
  (vii) Foundation drains;
  (viii) Crawl space pumps;
  (ix) Air conditioning condensation;
  (x) Springs;
  (xi) Natural riparian habitat or Wetland flows;
  (xii) Swimming pools (if dechlorinated - typically less than one PPM chlorine or desalinated for salt water pools);
  (xiii) Firefighting activities;
  (xiv) Individual residential car washing;
  (xv) Discharges within the constraints of an NPDES permit from the Tennessee Department of Environment and Conservation (TDEC).

(b) Discharges specified in writing by the City as being necessary to protect public health and safety.

(c) Dye testing is an allowable discharge if the City has so specified in writing.

(d) Discharges that comply with section 1.2.3 of the Tennessee Construction General Permit (CGP).

(3) Prohibition of Illicit Connections. The construction, use, maintenance, or continued existence of illicit connections to the MS4 is prohibited. This prohibition expressly includes, without limitation, illicit connections made in the past, regardless of whether the connection was permissible under law or practices applicable or prevailing at the time of connection. This prohibition expressly includes SCM's connected to the system not properly inspected and maintained in accordance with this ordinance.

(4) Reduction of Stormwater Pollutants by the use of Best Management Practices. Any person responsible for a property or premises, which is, or may be, the source of an illicit discharge, may be required to implement, at the person's expense, the BMP's necessary to prevent the further discharge of pollutants to the MS4. Compliance with all terms and conditions of a valid NPDES Permit authorizing the discharge of stormwater associated with industrial activity, to the extent practicable, shall be deemed in compliance with the provisions of this section. Discharges from existing SCMs that have not been maintained and/or inspected in accordance with this ordinance shall be prohibited.

(5) Notification of spills. Notwithstanding other requirements of law, as soon as any person responsible for a facility or operation, or responsible for emergency response for a facility or operation has information of any known or suspected release of materials which are resulting in, or may result in, illicit discharges or pollutants discharging into the MS4, the person shall take all necessary steps to ensure the discovery, containment, and cleanup of such release. In the event of such a release of hazardous materials the person shall immediately notify emergency response agencies of the occurrence via emergency dispatch services. In the event of a release of non-hazardous materials, the person shall notify the City in person or by telephone or email, no later than the next business day. Notifications in person or by telephone shall be confirmed by written notice addressed and mailed to the City within three (3) business days of the telephone notice. If the discharge of prohibited materials emanates from a commercial or industrial establishment, the owner or operator of such establishment shall also retain an on-site written record of the discharge and the actions taken to prevent its recurrence. Such records shall be retained for at least three (3) years.

(6) No illegal dumping allowed. No Person shall dump or otherwise deposit outside an authorized landfill, convenience center or other authorized garbage or trash collection point, any trash or garbage of any kind or description on any private or public property, occupied or unoccupied, inside the City.

21-109. Enforcement.

(1) Enforcement authority. The Stormwater Administrator shall have the authority to issue notices of violation and citations, and to impose civil penalties to anyone that violates this chapter, who violates the provisions of any permit issued pursuant to this chapter, or who fails or refuses to comply with any lawful communication or notice to abate or take corrective action by the City. As set forth in the Enforcement Response Plan (ERP), the City enforcement authority includes:

a. Verbal Warnings. At minimum, verbal warnings must specify the nature of the violation and required corrective action.
b. Written Notices. Written notices must stipulate the nature of the violation and the required corrective action, with deadlines for taking such action.
c. Citations with Administrative Penalties. The City has the authority to assess monetary penalties, which may include civil and administrative penalties.
d. Stop Work Orders. Stop work orders that require construction activities to be halted, except for those activities directed at cleaning up, abating discharge, and installing appropriate control measures.
e. Withholding of Plan Approvals or Other Authorizations. Where a facility is in noncompliance, the City's own approval process affecting the facility's ability to discharge to the MS4 can be used to abate the violation.

f. Additional Measures. The City may also use other escalated measures provided under local legal authorities. The City may perform work necessary to improve erosion control measures and collect the funds from the responsible party in an appropriate manner, such as collecting against the project's bond or directly billing the responsible party to pay for work and materials.

(2) Notification of violation.

(a) Verbal warning. Verbal warnings may be given when it appears the condition can be corrected by the violator within a reasonable time. Verbal warnings are documented by the City.

(b) Written notice. Whenever the Stormwater Administrator finds that any permittee or any other person discharging stormwater has violated or is violating this ordinance or a permit or order issued hereunder, the Stormwater Administrator may serve upon such person written notice of the violation. All written notices will be documented and delivered by electronic mail, personal service or certified mail to the person that has violated or is violating this Title. Within ten (10) days of this notice or shorter period as may be prescribed in the notice, an explanation of the violation and a plan for the satisfactory correction and prevention thereof, to include specific required actions, shall be submitted to the Stormwater Administrator. Submission of this plan in no way relieves the discharger of liability for any violations occurring before or after receipt of the notice of violation.

(c) Cease and desist and Stop Work Orders. When the Stormwater Administrator finds that any Person has violated or continues to violate this Title or any Permit or order issued hereunder, the Stormwater Administrator may issue a Stop Work Order or an order to cease and desist all such violations and direct those persons in noncompliance to:

(i) Comply forthwith; or

(ii) Take such appropriate remedial or preventive action as may be needed to properly address a continuing or threatened violation; including halting operations except for terminating the discharge and installing appropriate control measures.

(d) Suspension, revocation or modification of permit. The Stormwater Administrator may suspend, revoke or modify the permit authorizing the land development project or any other project of the applicant or other responsible person within the City. A suspended, revoked or modified permit may be reinstated after the applicant or other responsible person has taken the remedial measures set forth in the notice of violation or has otherwise cured the violations described therein, provided such permit may be reinstated upon such conditions as the Stormwater Administrator may deem necessary to enable the applicant or other responsible person to take the necessary remedial measures to cure such violations.

(e) Consent orders. The Stormwater Administrator is empowered to enter consent orders, assurances of voluntary compliance, or other similar documents establishing an agreement with the person responsible for the noncompliance. Such orders will include specific action to be taken by the person to correct the noncompliance within a time period also specified by the order. Consent orders shall have the same force and effect as administrative orders issued pursuant to paragraphs (d) and (e) below.

(f) Show cause hearing. The Stormwater Administrator may order any person who violates this Title or Permit, or order issued hereunder, to show cause why a proposed enforcement action should not be taken. Notice shall be served to the person specifying the time and place for the meeting, the proposed enforcement action and the reasons for such action, and a request that the violator show cause why this proposed enforcement action should not be taken. The notice of the meeting shall be served personally or by registered or certified mail (return receipt requested) at least ten (10) days prior to the hearing.

(g) Compliance order. When the Stormwater Administrator finds that any person has violated or continues to violate this Title or a Permit or order issued thereunder, he may issue an order to the violator directing that, following a specific time period, adequate stormwater structures or devices be installed and/or procedures implemented and properly operated. Orders may also contain such other requirements as might be reasonably necessary and appropriate to address the noncompliance, including the construction of appropriate stormwater structures, installation of devices, self-monitoring, and management practices.

Whenever there is a conflict between any standard contained in this Title and in the BMP manual adopted by the City under this ordinance, the strictest standard shall prevail.

21-110. Penalties.

(1) Violations. Any Person who shall commit any act declared unlawful under this Title, who violates any provision of this Title, who violates the provisions of any permit issued pursuant to this Title, or who fails or refuses to comply with any lawful communication or notice to abate or take corrective action by the Stormwater Administrator, shall be guilty of a civil offense.

(2) Penalties. Under the authority provided in Tennessee Code Annotated § 68-221-1106, the City declares that any person violating the provisions of this Title may be assessed as a civil penalty by the Stormwater Administrator of not less than fifty dollars ($50.00) and not more than five thousand dollars ($5,000.00) per day for each day of violation. Each day of violation shall constitute a separate violation.

(3) Measuring Civil Penalties. In assessing a civil penalty, the Stormwater Administrator may consider:

(a) The harm done to the public health or the environment;
(b) The duration and gravity of the violation;
(c) Whether the civil penalty imposed will be a substantial economic deterrent to the illegal activity;
(d) The economic benefit gained by the violator;
(e) The amount of effort put forth by the violator to remedy this violation;
(f) Whether the violation was committed intentionally;
(g) The prior record of the violator in complying or failing to comply with the Stormwater Management Program;
(h) Any unusual or extraordinary enforcement costs incurred by the City;
(i) The amount of penalty established by ordinance or resolution for specific categories of violations; and

(j) Any equities of the situation which outweigh the benefit of imposing any penalty or damage assessment.

(4) Recovery of damages and costs. In addition to the civil penalty in subsection (2) above, the City may recover:
   (a) All damages proximately caused by the violator to the City, which may include any reasonable expenses incurred in investigating violations of, and enforcing compliance with, this Title, or any other actual damages caused by the violation.
   (b) The costs of the City's maintenance of stormwater facilities when the user of such facilities fails to maintain them as required by this Title.

(5) Referral to TDEC. In accordance with the City's Enforcement Response Plan and the NPDES Permit requirements, the City may also notify TDEC of violations.

(6) Other remedies. The City may bring legal action to enjoin the continuing violation of this Title, and the existence of any other remedy, at law or equity, shall be no defense to any such actions.

(7) Remedies cumulative. The remedies set forth in this section shall be cumulative, not exclusive, and it shall not be a defense to any action, civil or criminal, that one (1) or more of the remedies set forth herein has been sought or granted.

21-111. Appeals.

Pursuant to Tennessee Code Annotated § 68-221-1106(d), any person aggrieved by the imposition of a civil penalty or damage assessment as provided by this Title may appeal said penalty or damage assessment to the City's Board of Mayor and Aldermen.

(1) Appeals to be in writing. The appeal shall be in writing and filed with the municipal recorder or clerk within fifteen (15) days after the civil penalty and/or damage assessment is served in any manner authorized by law.

(2) Appeal Fee. Any Person who chooses to file an appeal will be required to pay a nonrefundable $100 appeal fee, which is due upon submittal of the appeal.

(3) Public hearing. Upon receipt of an Appeal, the City's governing body shall hold a public hearing within forty-five (45) days. Ten (10) days prior notice of the time, date, and location of said hearing shall be published in a daily newspaper of general circulation and on the City's website. Ten (10) days' notice by registered mail shall also be provided to the aggrieved party, such notice to be sent to the address provided by the aggrieved party at the time of appeal. The decision of the governing body of the City shall be final.

(4) Appealing decisions of the City's governing body. Any alleged violator may appeal a decision of the City's governing body pursuant to the provisions of Tennessee Code Annotated, title 27, chapter 8.

APPENDIX A

INSPECTION AND MAINTENANCE AGREEMENT OF PRIVATE STORMWATER MANAGEMENT FACILITIES

Prepared by: City of Portland Stormwater Department * 100 South Russell St. * Portland, TN 37148

THIS AGREEMENT, made this ___ day of _____, 20____ by and between _____, hereafter referred to as the "OWNER(S)" of the following property: _____, Map _____ Parcel _____, Portland, TN 37148, and the City of Portland, Tennessee hereafter referred to as the "City". Land disturbance permit number: _____.

WHEREAS the City is required by Federal and State surface water quality regulations and its National Pollutant Discharge Elimination System (NPDES) permit to prevent surface water quality degradation from development or redevelopment activities within its jurisdiction, and the City has adopted surface water quality regulations as required and such regulations are contained in the Stormwater Management chapter of the City's Stormwater ordinance; and

WHEREAS the Owner owns the Property identified above and has or will construct certain Stormwater management facilities on the Property and has developed a Stormwater Maintenance Plan (SWMP), as may be amended from time-to-time (the "Plan") for the maintenance of those facilities, which the City has reviewed and approved, and a copy of which will be maintained by the Owner. A drawing showing the general area of the facilities covered by the Plan is attached to this Agreement for ease of identification.

THEREFORE, in consideration of the benefits received by the Owner as a result of the approval by the City of the Plan, the Owner does hereby covenant and agree with the City as follows:

WITNESSETH:

I/WE, the OWNER(S) with full authority to execute deeds, mortgages, other covenants, all rights, titles and interests in the property described above:

l. The OWNER(S) covenant and agree with the City that they shall provide for adequate long-term maintenance and continuation of Stormwater control measures to ensure that all the Stormwater facilities are and remain in proper working condition in accordance with approved design standards, rules and regulations, and applicable laws. The OWNER(S) shall perform preventive maintenance activities at intervals described in the **Post Construction Long-Term Water Quality Maintenance Plan** attached hereto along with necessary landscaping (grass cutting, etc.) and trash removal as part of regular maintenance.

2. The OWNER(S) shall submit to the City an annual report by July 1st of each year. The report will include the Long-Term Maintenance Plan that documents inspection schedules, times of inspections, remedial actions taken to repair, modify or reconstruct the system and the state of control measures.

3. The OWNER(S) shall grant to the City or its agent or contractor the right of entry at a reasonable time and in a reasonable manner for the purpose of inspecting, operating, installing, constructing, reconstructing, maintaining, or repairing the facility.

4. The OWNER(S) shall grant to the City the necessary easements and rights-of-way and maintain perpetual access from the public rights-of-way to the facility for the City or its agent and/or contractor in accordance with the Stormwater Management Ordinance. The OWNER(S) agree that should maintenance not be properly performed, after due notice, the City may order the work performed. The OWNER(S) shall reimburse the City, upon immediate demand, the costs incurred, and any enforcement action costs according to the Stormwater Management Ordinance. Provided, however, that the City shall in no event be deemed obligated to maintain or repair the Stormwater management facilities and nothing in this Agreement shall ever be construed to impose or create any such obligation to the City.

5. The OWNER(S) shall indemnify and hold the City harmless from all claims for damages to persons or property arising from the construction, maintenance, and use of the facility.

6. This AGREEMENT and covenants contained herein shall apply to and bind the OWNER(S) and the OWNERS(S) heirs, executors, successors, and assigns and shall bind all present and subsequent owners of the property served by the facility.

7. The OWNER(S) shall not be able to transfer, assign or modify its responsibilities with respect to this agreement without the City's written prior consent. Nothing herein shall be construed to prohibit a transfer by OWNER(S) to subsequent owners and assigns.

8. No waiver of any provision of this Agreement shall affect the right of any party thereafter to enforce such provision or to exercise any right or remedy available to it in the event of any other default.

9. If it is later determined that the City's NPDES permit clearly directs Owners or the City to manage stormwater treatment systems differently than specified in the Plan, the direction of the NPDES permit shall override the provisions of the Plan.

10. The Owner shall have a Tennessee-licensed engineer, surveyor, or landscape architect to inspect the facilities and certify to the City via a written report that the constructed facilities conform and purport substantially to the approved Plan. If the constructed condition of the facility or its performance varies significantly from the approved Plan, appropriately revised calculations shall be provided to the City and the Plan shall be amended accordingly. This report shall be completed, at a minimum, once within a five-year period, or as required by the City, or TDEC, and submitted to the City's Stormwater department.

11. **The OWNER(S) shall record this AGREEMENT in the office of the Register of Deeds in the county of _____, Tennessee.**

FOR THE OWNER(S):

_____

Company Name

_____ _____

Signature Title

_____ _____

Printed Name Phone Number

STATE OF TENNESSEE
COUNTY OF _____

Before me, the undersigned Notary Public of the State and county mentioned, personally appeared _____, with whom I am personally acquainted (or provided to me on the basis of satisfactory evidence), and who, upon oath, acknowledges themselves to be the officer authorized to execute this Agreement (Inspection and Maintenance Agreement for Private Stormwater Management Facilities) heretofore named and executed the foregoing instrument for the purposes therein contained.

Witness my hand and official seal at office in, this _____ day of _____, 20_____.

_____ _____

Notary Public My Commission Expires

CITY OF PORTLAND STORMWATER DEPARTMENT
100 SOUTH RUSSELL STREET
PORTLAND, TN 37148

REVIEWED BY:

_____ _____

Signature Title

_____ _____

Printed Name Phone Number

STATE OF TENNESSEE
COUNTY OF _____

Before me, the undersigned Notary Public of the State and county mentioned, personally appeared with _____, whom I am personally acquainted (or provided to me on the basis of satisfactory evidence), and who, upon oath, acknowledges themselves to be a Stormwater Management Coordinator for the City of Portland, Tennessee and that as such Stormwater Management Coordinator, being authorized to do so, executed this Agreement (Inspection and Maintenance Agreement for Private Stormwater Management Facilities) for the purposes therein contained.

Witness my hand and official seal at office in, this _____ day of _____, 20_____.

_____ _____

Notary Public My Commission Expires