

CHAPTER 2
STORMWATER ORDINANCE

12-201. General provisions.

- (1) Purpose. It is the purpose of this ordinance to:
- (a) Protect, maintain, and enhance the environment of the City of Belle Meade 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 of Belle Meade to comply with the National Pollution Discharge Elimination System permit (NPDES) and applicable regulations, 40 CFR 122.26 for stormwater discharges;
 - (c) Allow the City of Belle Meade 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, and any proposed land disturbing activities requiring a land disturbance permit;
 - (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 of Belle Meade shall administer the provisions of this ordinance through the City Building Official and the Public Works Director.
 - (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 implement to facilitate the necessary control of stormwater.

12-202. Definitions.

For the purpose of this ordinance, 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) *“Administrative or Civil Penalties.”* Under the authority provided in Tennessee Code Annotated § 68-221-1106, the city declares that any person violating the provisions of this chapter 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.
- (2) *“Best Management Practices”* (“BMPs”) 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. BMPs 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.
- (3) *“Borrow Pit”* is 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.
- (4) *“Buffer Zone”* means a setback from the top of water body’s bank of undisturbed vegetation, including trees, shrubs and herbaceous vegetation; enhanced or restored vegetation; or the re-establishment of native vegetation bordering streams, ponds, wetlands, springs, reservoirs or lakes, which exists or is established to protect those water

bodies. Buffer zones are not primary sediment control measures and should not be relied on as such.

- (5) “*Channel*” means a natural or artificial watercourse with a definite bed and banks that conducts flowing water continuously or periodically.
- (6) “*City Building Official*” and/or “*Public Works Director*” means the City of Belle Meade, City Building Official working in conjunction with the City Public Works Director, each of whom has authority to enforce the provisions of this stormwater ordinance, Title 12, Chapter 2 of the Code of the City of Belle Meade, and each of whom has the authority to delegate to designated City staff or the staff of the City’s designated engineering consultant.
 - (a) The “*City Building Official*” and/or “*Public Works Director*” shall also act at the “*City Inspector*,” as that term is used herein, which 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.
 - (i) This person performs inspections on behalf of the city to check compliance with the city’s requirements and performs enforcement activities.
 - (ii) This person does not do the functions of an “Inspector” defined below.
 - (b) As between the City Building Official and Public Works Director, they shall resolve in conjunction with the City Manager primary responsibility for matters addressed by this ordinance. With regard to private property, it is generally understood that the City Building Official has primary authority and responsibility. With regard to city property such as streets, right-of-ways and other MS4 conveyances, it is generally understood that City Public Works Director has primary authority and responsibility.
- (7) “*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.
- (8) “*Community water*” means any and all rivers, streams, creeks, branches, lakes, reservoirs, ponds, drainage systems, springs, wetlands, wells and other bodies of surface or subsurface water, natural or artificial, lying within or forming a part of the boundaries of the City of Belle Meade. 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.

- (9) “*Contaminant*” means any physical, chemical, biological, or radiological substance or matter in water.
- (10) “*Design storm event*” means a hypothetical storm event, of a given frequency interval and duration, used in the analysis and design of a stormwater facility. The estimated design rainfall amounts, for any return period interval (i.e., 2-year, 5-year, 25-year, 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.
- (11) “*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 municipal separate storm sewer system.
- (12) “*Disturb*” means to alter the natural or predeveloped ground surface in such a way that the erosion potential of the ground surface is increased.
- (13) “*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.
- (14) “*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.
- (15) “*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.
- (16) “*Hotspot*” 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 hot spots, 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

- (17) *“Illicit connections”* means illegal and/or unauthorized connections to the municipal separate stormwater system whether or not such connections result in discharges into that system.
- (18) *“Illicit discharge”* means any discharge to the municipal separate storm sewer system that is not composed entirely of stormwater and not specifically exempted under §7(2).
- (19) *“Improved sinkhole”* is a natural surface depression that has been altered in order 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).
- (20) *“Inspector”* An inspector is 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.
- (21) *“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, re-development, demolition, construction, reconstruction, clearing, grading, filling, and excavation
- (22) *“Maintenance”* means any activity that is necessary to keep a stormwater facility in good working order so as to function as designed. Maintenance shall include complete reconstruction of a stormwater facility if reconstruction is needed in order 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 facility.
- (23) *“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.

- (24) “*Municipal separate storm sewer system (MS4)*” means 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.
- (25) “National Pollutant Discharge Elimination System permit” or a “NPDES permit” means a permit issued pursuant to 33 U.S.C. 1342.
- (26) “*Off-site facility*” means a structural BMP located outside the subject property boundary described in the permit application for land development activity.
- (27) “*On-site facility*” means a structural BMP located within the subject property boundary described in the permit application for land development activity.
- (28) “*Peak flow*” means the maximum instantaneous rate of flow of water at a particular point resulting from a storm event.
- (29) “*Person*” means any and 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.
- (30) “*Record drawings*” means drawings depicting conditions as they were actually constructed.
- (31) “*Runoff*” means that portion of the precipitation on a drainage area that is discharged from the area into the municipal separate storm sewer system.
- (32) “*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.
- (33) “*Sedimentation*” means soil particles suspended in stormwater that can settle in stream beds.
- (34) “*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.
- (35) “*Stabilization*” means providing adequate measures, vegetative and/or structural, that will prevent erosion from occurring.
- (36) “*Stormwater*” means stormwater runoff, snow melt runoff, surface runoff, street wash waters related to street cleaning or maintenance, infiltration and drainage.

- (37) “*Stormwater Control Measure (SCM)*” means measures meant to directly affect the flow of stormwater and/or contaminants, and that have defined specifications and standards. These measures have one or both of two parts: 1) a defined surface management to encourage infiltration and contaminant removal; and/or 2) a clear Protocol defining engineering design, installation, and maintenance. A Measure such as a “good forest” has just a Management, a Measure such as a manufactured stormwater treatment device has just an engineering Protocol, and “bioretention cell” has both.
- (38) “*Stormwater management*” means the programs to maintain quality and quantity of stormwater runoff to pre-development levels.
- (39) “*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.
- (40) “*Stormwater management plan*” means the set of drawings and other documents that comprise all the information and specifications for the programs, drainage systems, structures, BMPs, concepts and techniques intended to maintain or restore quality and quantity of stormwater runoff to pre-development levels.
- (41) “*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 (BMPs) 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 prevention 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.
- (42) “*Stormwater runoff*” means flow on the surface of the ground, resulting from precipitation.
- (43) “*Structural BMPs*” means facilities that are constructed to provide control of stormwater runoff.
- (44) “*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.
- (45) “*Tennessee Department of Environment and Conservation (TDEC) Level I & Level II Trained Individual*” means an individual who has successfully completed the Level I Fundamentals course and the Level II Design Principles for Erosion Prevention and

Sediment Control at Construction Sites course conducted by the Tennessee Water Resources Research Center.

- (46) “*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.
- (47) “*Water Quality Buffer*” – See “Buffer”.
- (48) “*Watercourse*” means a permanent or intermittent stream or other body of water, either natural or man-made, which gathers or carries surface water.
- (49) “*Watershed*” means all the land area that contributes runoff to a particular point along a waterway.
- (50) “*Waters*” or “*waters of the state*” means any and 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.
- (51) “*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.
- (52) “*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 1200-4-3-.04(3)).

12-203. Erosion prevention and sediment control.

- (1) All land disturbing activities shall employ adequate erosion prevention and sediment control measures to minimize erosion and prevent off-site sedimentation in conformance with the provisions of this ordinance and guidance materials referenced herein. Land disturbing or construction activities that do not employ erosion prevention and sediment controls in conformance with this ordinance and that cause off-site sedimentation or sediment discharges to Waters of the State or onto adjacent properties shall be in violation of this ordinance.
- (2) All previously disturbed areas shall be permanently stabilized with groundcover sufficient to restrain erosion.

12-204. Waivers.

- (1) General. No waivers will be granted for any construction or site work project. All construction and site work shall provide for stormwater management as required by this ordinance. However, alternatives to the 2010 NPDES General Permit for Discharges from Small Municipal Separate Storm Sewer Systems primary requirement for on-site permanent stormwater management may be considered, if:
 - (a) Management measures cannot be designed, built and maintained to infiltrate, evapotranspire, harvest and/or use, at a minimum, the first inch of every rainfall event preceded by 72 hours of no measurable precipitation. This first inch of rainfall must be 100% managed with no discharge to surface waters.
 - (b) It can be demonstrated that the proposed development is not likely to impair attainment of the objectives of this ordinance. Alternative minimum requirements for on-site management of stormwater discharges have been established in a stormwater management plan that has been approved by the city.
- (2) Downstream damage, etc. prohibited. In order to receive consideration, the applicant must demonstrate to the satisfaction of the City Building Official and/or Public Works Director that the proposed alternative will not lead to any of the following conditions downstream:
 - (a) Deterioration of existing culverts, bridges, dams, and other structures;
 - (b) Degradation of biological functions or habitat;
 - (c) Accelerated streambank or streambed erosion or siltation;
 - (d) Increased threat of flood damage to public health, life or property.
- (3) Land Disturbance permit not to be issued where alternatives requested. No land disturbance permit shall be issued where an alternative has been requested until the alternative is approved. If no alternative is approved, the plans must be resubmitted with a stormwater management plan that meets the primary requirement for on-site stormwater management.

12-205. Stormwater system design: Construction and Permanent stormwater management.

- (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; current edition.
 - (ii) Tennessee Permanent Stormwater Management and Design Guidance Manual, current edition.
 - (iii) A collection of MS4 approved BMPs developed or collected by the MS4 that comply with the goals of the MS4 permit and/or the CGP.
- (b) The city’s BMP manual(s) include a list of acceptable BMPs including the specific design performance criteria and operation and maintenance requirements for each stormwater practice. These include city approved BMPs for permanent stormwater management including green infrastructure BMPs.
- (c) The city 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 City of Belle Meade, 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.
- (2) Land development. This section shall be applicable to all land development, including, but not limited to, site plan applications, subdivision applications, and land disturbance applications. These standards apply to any new development or redevelopment site according to Table 1 below:

| Table 1 - Land Disturbance Permit (LDP) | | | | | |
|--|----------------------|--|---|---|---------------------------------------|
| Total Disturbed area | LDP Required? | City forms/checklists to complete | Stormwater Management Plan required? | Construction General permit (CGP) coverage required? | Water Quality Buffer Required? |
| < 10,000 ft | No | None | No | No | No |
| 10,000 ft ² – 0.99 acre | Yes | General, Checklist 1-3 | Yes; See Checklist 3 and Table 2 | No | See Table 3 |
| 1 acre or more | Yes | General, Checklist 1-3 | Yes; See Checklist 3 and Table 2 | Yes | See Table 4 |

- (a) A land disturbance permit may also be required if one of the following conditions apply:

- (i) The City of Belle Meade has determined that the stormwater discharge from a site is causing, contributing to, or is likely to contribute to a violation of a state water quality standard;
 - (ii) The City of Belle Meade has determined that the stormwater discharge is, or is likely to be a significant contributor of pollutants to waters of the state;
 - (iii) Changes in state or federal rules require sites of less than one acre that are not part of a larger common plan of development or sale, or otherwise require construction, to obtain a land disturbance permit;
 - (iv) Any new development or redevelopment, regardless of size, that is defined by the City of Belle Meade to be a hotspot land use;
 - (v) Development and redevelopment within the floodplain;
 - (vi) New development or redevelopment that involves land development activity of one acre or more if such activities are part of a larger common plan of development, even multiple activities, that is part of a separate and distinct land development activity that may take place at different times on different schedules; or
 - (vii) A permit may also be required for other comparable activities as determined by the City Building Official and/or Public Works Director (e.g. swimming pool construction, increased impervious area).
- (b) Land disturbance permit applications shall not be approved unless the following conditions are met:
- (i) For residential and non-residential developments disturbing 10,000 square feet or more of land, an Erosion Prevention and Sediment Control Plan and a Stormwater Management Plan shall be required. Forms provided in Appendix A of this ordinance must be completed and submitted with the land disturbance permit application. These forms may be altered as deemed necessary by the City Building Official and/or Public Works Director to modify the information required to be provided by the applicant provided that such modification preserves the intent of this ordinance and do not alter the design criteria or the water quality standards contained therein.
- (3) Building permit. No building permit shall be issued until the applicant has obtained a land disturbance permit where the same is required by this ordinance.
- (4) Review and approval of application.
- (a) The City of Belle Meade, acting through its City Building Official and/or Public Works Director, and as needed its designated consultant, shall review each

application for a land disturbance permit to determine its conformance with the provisions of this ordinance. Within 15 days after receiving an application, the City of Belle shall provide one of the following responses in writing:

- (i) Approval of the permit application;
 - (ii) Approval of the permit application, subject to such reasonable conditions as may be necessary to secure substantially the objectives of this ordinance, and issue the permit subject to these conditions; or
 - (iii) Denial of the permit application, indicating the reason(s) for the denial.
- (b) If the City of Belle Meade has granted conditional approval of the permit, the applicant shall submit a revised plan that conforms to the conditions established by the City of Belle Meade within the timeframe designated in the conditional approval. However, the applicant shall be allowed to proceed with his land disturbing activity so long as it conforms to conditions established by the City of Belle Meade.
- (c) No development activities shall be released until the land disturbance permit has been approved.

(5) Permit duration.

Every land disturbance permit shall expire and become null and void if substantial work authorized by such permit has not commenced within one hundred eighty (180) calendar days of issuance, or is not complete within eighteen (18) months from the date of the commencement of construction. Permit extension requests may be made in writing to the City.

(6) Notice of construction.

After obtaining a permit, the applicant must notify the City of Belle Meade ten (10) working days in advance of the commencement of construction.

(7) Inspections and Maintenance.

- (a) The City Building Official and/or its Public Works Director may enter upon any property which discharges or contributes, or is believed to discharge or contribute, to stormwater runoff or the stormwater system, stream(s), natural drainageway(s) or via any other private or public stormwater management system during all reasonable hours to monitor, remove foreign objects or blockages, and to inspect for compliance with the provisions of this ordinance.
- (b) EPSC inspections. The land disturbance permit holder shall perform routine inspections as follows:

- (i) Disturbed areas shall be inspected in conformance with the conditions of the TN Construction General Permit.
 - (ii) Inspections shall be documented and the documentation provided to the City of Belle Meade when requested.
 - (iii) All erosion prevention and sediment control measures shall be inspected to ensure that they are functioning as designed.
- (c) All erosion prevention and sediment control measures shall be maintained by the land disturbance permit holder to ensure that they are functioning as designed. Failure to maintain measures constitutes a violation of this ordinance.
- (d) Permanent stormwater management facilities inspections. Permanent stormwater management facilities shall be inspected by the land disturbance permit holder on a regular basis during construction and by the landowner after construction has been completed to ensure that they are functioning as designed.
- (i) Inspections shall be documented and documentation provided to the City of Belle Meade when requested.
 - (ii) Permanent stormwater facilities shall be maintained by the land disturbance permit holder during construction and by the landowner after construction has been completed to ensure that they are functioning as designed.
 - (iii) In addition to those sanctions provided herein, the maintenance of a permanent stormwater facility is subject the Property Maintenance Regulations, Title 13, Code of the City of Belle Meade.
- (8) Performance bonds.
- (a) The City of Belle Meade may, at its discretion, require the submittal of a performance security or performance bond prior to issuance of a permit in order to ensure that the stormwater practices are installed by the permit holder as required by the approved stormwater management plan. The amount of the installation performance security or performance bond shall be the total estimated construction cost of the structural BMPs approved under the permit plus any reasonably foreseeable additional related costs, e.g., for damages or enforcement. The performance security shall contain forfeiture provisions for failure to complete work specified in the stormwater management plan. The applicant shall provide an itemized construction cost estimate complete with unit prices which shall be subject to acceptance, amendment or rejection by the City of Belle Meade. Alternatively the City of Belle Meade shall have the right to calculate the cost of construction cost estimates.
 - (b) The performance security or performance bond shall be released in full only upon submission of as-built plans and written certification by a registered professional

engineer licensed to practice in Tennessee that the structural BMP(s) have been installed in accordance with the approved plan and other applicable provisions of this ordinance. The City of Belle Meade will make a final inspection of the structural BMP(s) to ensure that they are in compliance with the approved plan and the provisions of this ordinance. Provisions for a partial pro-rata release of the performance security or performance bond based on the completion of various development stages can be made at the discretion of the City of Belle Meade.

- (9) Erosion prevention and sediment control plan requirements. The Erosion Prevention and Sediment Control (EPSC) plan 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.

The plan shall be prepared by an individual who has successfully completed the TDEC Level I training course or a Certified Professional in Erosion and Sediment Control (CPESC). The plan shall address all items on the EPSC Plan checklist. Failure to fully complete the EPSC checklist could be considered an incomplete submittal and result in plan disapproval.

- (10) Submittal of a copy of the NOC, SWPPP and NOT to the local MS4. Permittees that were required to obtain coverage under the Construction General Permit 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 City of Belle Meade.

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 or the equivalent. Note: Any discharge of stormwater or other fluid to an improved sinkhole or other injection well, as defined, must be authorized by permit or rule as a Class V underground injection well under the provisions of Tennessee Department of Environment and Conservation (TDEC) Rules, Chapter 1200-4-6.

- (11) 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 (12) 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.

(12) 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 staged so that changes to the site during construction that alter drainage patterns or characteristics will be addressed by an appropriate stage 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 MS4 BMP 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. Include 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 site after construction and incorporating water run-off 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 erosion prevention and sediment 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 BMPs.
 - (n) Specific remediation measures to prevent erosion and sedimentation run-off. 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 work day to the satisfaction of the city. Failure to remove the sediment, soil or debris shall be deemed a violation of this ordinance.
 - (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.
- (13) General design performance criteria for permanent stormwater management. Permanent stormwater management requirements for new development and redevelopment are summarized in Table 2 below:

| Total Disturbed area | Stormwater Runoff Quantity Requirements | Stormwater Runoff Quality Requirements | Comments |
|------------------------------------|--|--|---|
| < 10,000 ft ² | None unless deemed necessary by the City Building Official and /or Public Works Director due to an increase in impervious area | None unless deemed necessary by the City Building Official and /or Public Works Director due to an increase in impervious area | Allowing runoff from impervious surfaces to flow over pervious surfaces (e.g. driveway runoff allowed to sheet flow across yard) is encouraged. |
| 10,000 ft ² – 0.99 acre | See Checklist 3 – Stormwater Management Plan and Section 5(15) below. | One non-structural water quality improvement | Examples include disconnected roof drains, sheet flow of impervious surfaces runoff, or vegetated filter strips. |
| 1 acre or more | See Checklist 3 – Stormwater Management Plan and Section 5(15) below. | Runoff reduction (See Section 5(14) below) | |

- (14) Performance criteria. The following performance criteria shall be addressed for permanent stormwater management at all development sites that disturb one acre or more of land:
- (a) Site design standards for all new and redevelopment require, in combination or alone, management measures that are designed, built and maintained to infiltrate, evapotranspire, harvest and/or use, at a minimum, the first inch of every rainfall event preceded by 72 hours of no measurable precipitation. This first inch of rainfall must be 100% managed with no discharge to surface waters or the public storm sewer system.
 - (b) Limitations to the application of runoff reduction requirements include, but are not limited to:
 - (i) Where a potential for introducing pollutants into the groundwater exists, unless pretreatment is provided;
 - (ii) Where pre-existing soil contamination is present in areas subject to contact with infiltrated runoff;
 - (iii) Presence of sinkholes or other karst features.
 - (c) Pre-development infiltrative capacity of soils at the site must be taken into account in selection of runoff reduction management measures.

- (d) Incentive Standards for re-developed sites: a 10% reduction in the volume of rainfall to be managed for any of the following types of development. Such credits are additive such that a maximum reduction of 50% of the standard in the paragraph above is possible for a project that meets all 5 criteria:
 - (i) Redevelopment;
 - (ii) Brownfield redevelopment;
 - (iii) High density (>7 units per acre);
 - (iv) Vertical Density, (Floor to Area Ratio (FAR) of 2 or >18 units per acre); and
 - (v) Mixed use and Transit Oriented Development (within ½ mile of transit).
- (e) For projects that cannot meet 100% of the runoff reduction requirement unless subject to the incentive standards, the remainder of the stipulated amount of rainfall must be treated prior to discharge with a technology documented to remove 80% total suspended solids (TSS) unless an alternative provided under this ordinance is approved. The treatment technology must be designed, installed and maintained to continue to meet this performance standard.
- (f) To protect stream channels from degradation, specific channel protection criteria shall be provided as prescribed in the MS4 BMP manual.
- (g) Stormwater discharges to critical areas with sensitive resources (i.e., cold water fisheries, shellfish beds, recharge areas, water supply reservoirs) may be subject to additional performance criteria, or may need to utilize or restrict certain stormwater management practices.
- (h) Stormwater discharges into streams impaired by sediment or into streams with an approved TMDL may be subject to additional performance criteria.
- (i) Stormwater discharges from hot spots may require the application of specific structural BMPs and pollution prevention practices. In addition, stormwater from a hot spot land use may not be infiltrated.
- (j) Prior to or during the site design process, applicants for land disturbance permits shall consult with the City of Belle Meade to determine if they are subject to additional stormwater design requirements.
- (k) The calculations for determining peak flows as found in the MS4 BMP manual shall be used for sizing all stormwater facilities. Other hydrological methods of determining peak runoff may be substituted; however, they will be subject to the City of Belle Meade's engineering consultant's review for appropriateness.

- (15) Minimum volume control requirements. In accordance with §1(1)(c)(iii) the City of Belle Meade establishes the following standards to regulate the quantity of stormwater discharged, therefore:
- (a) All site designs requiring a stormwater management plan or as otherwise required by the City of Belle Meade shall control the peak flow rates of stormwater discharge associated with design storms specified in the MS4 BMP manual or this ordinance and reduce the generation of post construction (or permanent) stormwater runoff to pre-construction levels. These practices should seek to utilize pervious areas for stormwater treatment and to infiltrate stormwater runoff from driveways, sidewalks, rooftops, parking lots, and landscaped areas to the maximum extent practical to provide treatment for both water quality and quantity.
 - (b) Stormwater designs shall meet the multi-stage storm frequency storage requirements as identified in the MS4 BMP manual and Appendix A of this ordinance unless the City of Belle Meade has granted the applicant a full or partial waiver for a particular BMP under §12-204.
 - (c) The maximum distance that a roof downspout may extend perpendicular from a structure is ten (10) feet. Up to three separate roof downspouts may be collected into a single collector pipe to be discharged the maximum perpendicular distance of ten (10) feet from the structure. A maximum ten (10) feet of roof drainage piping may be buried before the pipe outlets. The City Building Official's and /or Public Works Director's discretion may be used in the enforcement of the requirements of this Section 12-205(15)(c). Additionally, a plan prepared by a Tennessee registered Professional Engineer or Landscape Architect that does not meet the requirements of Section 12-205(15)(c) but otherwise complies with the requirements of a Land Disturbance Permit may be accepted by the City Building Official and /or Public Works Director at his/her discretion.
 - (d) If hydrologic or topographic conditions warrant greater control than that provided by the minimum control requirements, the City of Belle Meade may impose any and all additional requirements deemed necessary to control the volume, timing, and rate of runoff.
- (16) Permanent stormwater management plan requirements. The stormwater management plan shall include sufficient information to allow the City of Belle Meade 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 address all items on the Stormwater Management Plan checklist. Failure to fully complete the Stormwater Management Plan checklist will be considered an incomplete submittal and result in plan disapproval.

- (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, sinkholes, 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 BMPs;
- (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 storms 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 chapter and the guidelines of the MS4 BMP manual. Such calculations shall include:
 - (i) A description of the design storm 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 storms 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.
- (17) Maintenance and repair plan. 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.

12-206. Permanent stormwater management: Operation, Maintenance, and Inspection

- (1) Record Drawings. All applicants are required to submit record drawings for any structures located on-site after final construction is completed. The drawing(s) must show the final design specifications for all stormwater management facilities and must be sealed by a registered professional engineer licensed to practice in Tennessee. A final inspection by the City of Belle Meade is required before any performance security or performance bond will be released. The City of Belle Meade shall have the discretion to adopt provisions for a partial pro-rata release of the performance security or performance bond on the completion of various stages of development. In addition, occupation permits shall not be granted until corrections to all BMPs have been made and accepted by the City of Belle Meade.
- (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 stabilize. 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 (7 days for slopes of 35 percent or steeper). 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 is temporarily ceased, and earth 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) Prior to releasing the performance bond, a permanent ground cover must be established over the entire site.
 - (v) 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.
 - (vi) In addition the remedies and sanctions provided herein, the enforcement of these provisions shall also be subject to the Property Maintenance Regulations, Title 13, Code of the City of Belle Meade.
- (3) Inspection of stormwater management facilities. Periodic inspections of facilities shall be performed, documented, and reported in accordance with this chapter, as detailed in §12-206.
- (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 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 of Belle Meade 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 ordinance, the City of Belle Meade, 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. In the event that the stormwater management facility becomes a danger to public safety or public health, the City of Belle Meade shall notify in writing the party responsible for maintenance of the stormwater management facility. Upon receipt of that notice, the responsible person shall have ten (10) 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 of Belle Meade may take necessary corrective action. The cost of any action by the City of Belle Meade under this section shall be charged to the responsible party.
- (6) Failure to meet or maintain design or maintenance standards as a violation of the Property Maintenance Regulations. The failure to comply with the provisions of this Title and Chapter shall be a violation of Title 13 of the Code of the City of Belle Meade, the Property Maintenance Regulations.

12-207. Existing locations and ongoing developments.

- (1) Right of Entry. The City Building Official and/or the Public Works Director may enter upon any property which discharges or contributes, or is believed to discharge or contribute, to stormwater runoff or the stormwater system, stream(s), natural drainageway(s) or via any other private or public stormwater management system during all reasonable hours to monitor, remove foreign objects or blockages, and to inspect for compliance with the provisions of this ordinance.
- (2) On-site stormwater management facilities maintenance agreement.
 - (a) Where the stormwater 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.
 - (i) The responsibility for, and costs of, preparing and recording the inspection and maintenance agreement to assure that it is of record within the chain of title at the Register's Office of Davidson County shall be borne by the property owner.

- (ii) The inspection and maintenance agreement shall expressly reference this code section as well as the Property Maintenance Regulations, Title 13, Code of the City of Belle Meade
- (b) The maintenance agreement shall:
 - (i) Assign responsibility for the maintenance and repair of the stormwater 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 in accordance with the requirements of subsection 12-207(2)(b)(v) below for the purpose of documenting maintenance and repair needs and to ensure compliance with the requirements of this ordinance. The property owners will arrange for this inspection to be conducted by a registered professional engineer licensed to practice in the State of Tennessee, who will submit a signed written report of the inspection to the City of Belle Meade, and that the cost of such inspection shall be paid by the property owner. It shall also grant permission to the city and its agents 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 needs consistent with the needs and standards outlined in the MS4 BMP manual.
 - (iv) Provide that maintenance needs must be addressed in a timely manner, on a schedule subject to the review and/or amendment by the City of Belle Meade.
 - (v) Provide that if the property is not maintained or repaired within the prescribed schedule, the City of Belle Meade 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 of Belle Meade's cost of performing the maintenance shall be a lien against the property.
- (3) Existing problem locations – no maintenance agreement.
 - (a) The City of Belle Meade, acting through its City Building Official and/or Public Works Director, 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 BMPs that have not been maintained and/or inspected in accordance with this ordinance shall be regarded as illicit.

- (b) Inspection of existing facilities. The City of Belle Meade acting through its City Building Official and/or Public Works Director, may, to the extent authorized by state and federal law, enter and inspect private property for the purpose of determining if there are illicit non-stormwater 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 BMPs.

(4) Owner/Operator Inspections - generally. The owners and/or the operators of stormwater management practices shall:

- (a) Perform routine inspections to ensure that the BMPs are properly functioning. These inspections shall be conducted on an annual basis, at a minimum. These inspections shall be conducted by a person familiar with control measures implemented at a site. Owners or operators shall maintain documentation of these inspections. The City of Belle Meade requires submittal of this documentation by July 1 each year.
- (b) Perform comprehensive inspections 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 either a professional engineer or landscape architect, licensed in the State of Tennessee. 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) BMP owner information (e.g. name, address, phone number, fax, and email),

- (v) A description of BMP condition including: vegetation and soils; inlet and outlet channels and structures; embankments, slopes, and safety benches; spillways, weirs, and other control structures; and any sediment and debris accumulation,
 - (vi) Photographic documentation of BMPs, and
 - (vii) Specific maintenance items or violations that need to be corrected by the BMP owner along with deadlines and reinspection dates.
- (c) Owners or operators shall maintain documentation of these inspections. The City of Belle Meade requires submittal of this documentation by July 1 each year.
- (5) 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 previous to the enactment of this ordinance:
- (a) Denuded areas must be vegetated or covered under the standards and guidelines specified in §12-206(2)(c)(i), (ii), (iii) and on a schedule acceptable to the City of Belle Meade.
 - (b) Cuts and slopes must be properly covered with appropriate vegetation and/or retaining walls constructed.
 - (c) Drainage ways shall be properly covered in vegetation or secured with rip-rap, channel lining, etc., to prevent erosion.
 - (d) Trash, junk, rubbish, etc. shall be cleared from drainage ways.
 - (e) Stormwater runoff shall, at the discretion of the City of Belle Meade 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

(6) Corrections of problems subject to appeal. Corrective measures imposed by the City Building Official and/or Public Works Director under this section are subject to appeal under section §12-212 of this chapter.

12-208. 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 municipal separate storm sewer system any discharge that is not composed entirely of stormwater or any discharge that flows from stormwater facility that is not inspected in accordance with section §12-207 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 municipal separate storm sewer system 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 or footing drains;
 - (viii) Crawl space pumps;
 - (ix) Air conditioning condensation;
 - (x) Springs;
 - (xi) Non-commercial washing of vehicles;
 - (xii) Natural riparian habitat or wetland flows;
 - (xiii) Swimming pools (if dechlorinated - typically less than one PPM chlorine, or desalinated for salt water pools);

- (xiv) Firefighting activities;
 - (xv) Individual residential car washing (only if water is directed to flow across vegetated area);
 - (xvi) Discharges within the constraints of an NPDES permit from the Tennessee Department of Environment and Conservation (TDEC);
 - (xvii) Any other uncontaminated water source.
- (b) Discharges specified in writing by the City of Belle Meade as being necessary to protect public health and safety.
- (c) Dye testing is an allowable discharge if the City of Belle Meade has so specified in writing.
- (d) Discharges authorized by the Construction General Permit (CGP), which comply with Section 3.5.9 of the same:
- (i) dewatering of work areas of collected stormwater and ground water (filtering or chemical treatment may be necessary prior to discharge);
 - (ii) waters used to wash vehicles (of dust and soil, not process materials such as oils, asphalt or concrete) where detergents are not used and detention and/or filtering is provided before the water leaves site;
 - (iii) water used to control dust in accordance with CGP section 3.5.5;
 - (iv) potable water sources including waterline flushings from which chlorine has been removed to the maximum extent practicable;
 - (v) routine external building washdown that does not use detergents or other chemicals;
 - (vi) uncontaminated groundwater or spring water; and
 - (vii) foundation or footing drains where flows are not contaminated with pollutants (process materials such as solvents, heavy metals, etc.).
- (3) Prohibition of illicit connections. The construction, use, maintenance or continued existence of illicit connections to the municipal separate storm sewer system 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.
- (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 BMPs necessary to prevent the further discharge of pollutants to the municipal separate storm sewer system. 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 BMPs that have not been maintained and/or inspected in accordance with this ordinance shall be regarded as illicit.

- (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 municipal separate storm sewer system, 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 of Belle Meade in person or by telephone, fax, 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.

12-209. Water Quality Buffers.

- (1) Scope. A water quality buffer shall be established, protected, and maintained along all community waters in areas of new development and redevelopment for which a land disturbance permit, as defined in §12-205, is required in accordance with Table 3 or Table 4 below, as applicable. The goal of the water quality buffer is to preserve undisturbed vegetation that is native to the streamside habitat in the area of the project. Vegetated, preferably native, water quality buffers protect water bodies by providing structural integrity and canopy cover, as well as stormwater infiltration, filtration and evapotranspiration.

| Table 3 – Water Quality Buffer Requirements for Sites That Disturb < 1 acre (no CGP coverage required) | | |
|--|--|--|
| Community water characteristics | Permanent buffer | During construction (temporary) buffer |
| All community waters | 20-feet (City-approved buffer enhancement plan required for temporary buffer encroachment) | 20-feet (City-approved buffer enhancement plan required for temporary buffer encroachment) |

| Table 4 – Water Quality Buffer Requirements for Sites That Require CGP Coverage | | |
|---|---|--|
| Community water characteristics | Permanent buffer | During construction (temporary) buffer |
| Community water drainage area < 1 square mile and <u>not</u> designated as impaired or an Exceptional Tennessee Water (ETW) | 30-feet | 30-feet (Can be established on an average basis as long as minimum is 15-feet. City-approved buffer enhancement plan required for CGP-allowable, temporary buffer encroachment.) |
| Community water drainage area < 1 square mile and designated as impaired or an Exceptional Tennessee Water (ETW) | 30-feet | 60-feet (can be established on an average basis as long as minimum is 30-feet) |
| Community water drainage area > 1 square mile and <u>not</u> designated as impaired or an Exceptional Tennessee Water (ETW) | 60-feet (Can be established on an average basis as long as minimum is 30-feet.) | 30-feet (Can be established on an average basis as long as minimum is 15-feet. City-approved buffer enhancement plan required for CGP-allowable, temporary buffer encroachment.) |
| Community water drainage area > 1 square mile and designated as impaired or an Exceptional Tennessee Water (ETW) | 60-feet (Can be established on an average basis as long as minimum is 30-feet) | 60-feet (Can be established on an average basis as long as minimum is 30-feet) |
| Note: “Impaired” refers to community water that is impaired for siltation and habitat alteration. | | |

- (a) The buffer width shall be measured perpendicular from the top of bank on each side of the community water channel; around the perimeter of a pond or lake identified as a community water measured as perpendicular to the contour at which normal pool is located around; and around the perimeter of a wetland identified as a community water.
- (b) The water quality buffer is to remain undisturbed except for the following disturbances which are allowed subject to approval by the City Building Official and /or Public Works Director including the approval of an erosion prevention and sediment control plan:

- (i) Limited disturbances to remove and/or plant trees or vegetation, as required to maintain the overall health of vegetation in the buffer area. This includes the removal of invasive exotic plants and the establishment of native vegetation, and/or other practices to restore the ecological integrity of the buffer.
 - (ii) Removal of individual trees that are in danger of falling, causing damage to dwellings or other structures, are dead or diseased, or have been heavily damaged by storms. The root wad or stump should be left in place, where feasible, to maintain soil stability.
 - (iii) Disturbances necessary for the construction of utility access areas and approved stream crossings as long as the crossings are perpendicular or as near to perpendicular as possible to the channel.
 - (iv) Disturbances as required to establish and/or restore buffer areas in accordance with an approved Buffer Enhancement Plan.
 - (v) Passive recreation, pervious footpaths, and boardwalks to approach the water resource as approved by the City Building Official and /or Public Works Director.
 - (vi) 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 City Building Official and /or Public Works Director. Paths and greenways shall be designed to prevent the channelization of stormwater runoff, and should be constructed of pervious and/or permeable materials. There shall be no other permanent structures with the exception of paths.
 - (vii) Stormwater channels as approved by the City Building Official and /or Public Works Director.
 - (viii) Cut and fill for floodplain compensations as approved by the City Building Official and/or Public Works Director.
- (c) A determination that standards cannot be met may not be based solely on the difficulty or cost associated with implementation. Every attempt should be made for development and redevelopment activities not to take place within the buffer zone. 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.
- (d) Any approved disturbance of the water quality buffer shall be revegetated in kind and/or enhanced subject to the requirements of §12-206 of this ordinance and approval of the acting through its City Building Official and/or Public Works Director. The vegetative target for the inner zone is mature, moderately dense

forest (i.e., trees) with woody shrubs and understory vegetation. Where forest vegetation has the potential to impact traffic safety or limit access, areas immediately surrounding approved stream crossings and utility access areas may be vegetated with dense grasses.

- (e) For any proposed development and/or construction activity within or adjacent to a water quality buffer, the following shall be required.
 - (i) The parameters of the water quality buffer shall be delineated by the applicant and boundaries shall be clearly indicated and labeled on all plats, plans, permits and official maps.
 - (ii) Include a note on plans to reference protective covenants governing all water quality buffer areas, labeled as: “Any water quality buffer is subject to protective covenants recorded in the Register of Deeds (Davidson County). Disturbance and use of these areas is restricted; severe penalties apply.”
 - (iii) Water Quality 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 during construction activities.

12-210. Enforcement.

- (1) Enforcement authority. The City Building Official and/or Public Works Director shall have the authority to issue notices of violation and citations, to issue Cease and Desist orders, and to impose the civil penalties provided in this section. Each day of noncompliance is considered a separate offense; and nothing herein contained shall prevent the City from taking such other lawful action as is necessary to prevent or remedy any violation, including application for injunctive relief. If the person, property or facility has or is required to have a stormwater discharge permit from TDEC, the City shall alert the appropriate state authorities of the violation. Measures authorized include:
 - (a) Verbal Warnings – At a minimum, verbal warnings must specify the nature of the violation and required corrective action. Verbal warnings will be documented by the City.
 - (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 MS4 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 MS4’s own approval process affecting the facility’s ability to discharge to the MS4 can be used to abate the violation.

Additional Measures – The MS4 may also use other escalated measures provided under local legal authorities. The MS4 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 warning may be given at the discretion of the inspector when it appears the condition can be corrected by the violator within a reasonable time, which time shall be approved by the inspector.
- (b) Written notice. Whenever the City of Belle Meade, acting through its City Building Official and/or Public Works Director, 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 City may serve upon such person written notice of the violation. All written notices will be documented and delivered by personal service or by registered or certified mail (return receipt requested) to the person that has violated or is violating this ordinance. 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 City Building Official and/or Public Works Director. 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) Consent orders. The City Building Official and/or Public Works Director is empowered to enter into 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.
- (d) Show cause hearing. The City, acting through its City Building Official and/or Public Works Director, may order any person who violates this ordinance or permit or order issued hereunder, to show why a proposed enforcement action should not be taken. Notice shall be served on 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.

- (e) Compliance order. When the City, acting through its City Building Official and/or Public Works Director, finds that any person has violated or continues to violate this ordinance or a permit or order issued thereunder, he may issue an order to the violator directing that, following a specific time period, adequate 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 structures, installation of devices, self-monitoring, and management practices.
- (f) Cease and desist and stop work orders. When the City, acting through its City Building Official and/or Public Works Director, finds that any person has violated or continues to violate this ordinance or any permit or order issued hereunder, the Stormwater Program Manager or his designee 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.
- (g) Suspension, revocation or modification of permit. The City of Belle Meade, acting through its City Building Official and/or Public Works Director, 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 City may deem necessary to enable the applicant or other responsible person to take the necessary remedial measures to cure such violations.
- (h) Conflicting standards. Whenever there is a conflict between any standard contained in this ordinance and in the BMP manual adopted by the city under this ordinance, the strictest standard shall prevail.

12-211. Penalties.

- (1) Violations. Any person who shall commit any act declared unlawful under this ordinance, who violates any provision of this ordinance, who violates the provisions of any permit issued pursuant to this ordinance, or who fails or refuses to comply with any lawful communication or notice to abate or take corrective action by the City of Belle Meade, 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 ordinance may be assessed a civil penalty by the City of Belle Meade of not less than fifty dollars (\$50.00) and not more than five thousand dollars (\$5,000.00) or such lesser amount as may be allowed by law 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 Board of Building Code Appeals may consider:
- (a) The harm done to the public health or the environment;
 - (b) The duration and gravity of the violation(s);
 - (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(s) 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 Board of Building Code Appeals 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 ordinance, 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 ordinance.
- (5) Referral to TDEC. Where the city has used progressive enforcement to achieve compliance with this ordinance, and in the judgment of the city has not been successful, the city may refer the violation to TDEC. For the purposes of this provision,

“progressive enforcement” shall mean two (2) follow-up inspections and two (2) warning letters. In addition, enforcement referrals to TDEC must include, at a minimum, the following information:

- (a) Construction project or industrial facility location;
 - (b) Name of owner or operator;
 - (c) Estimated construction project or size or type of industrial activity (including SIC code, if known);
 - (d) Records of communications with the owner or operator regarding the violation, including at least two follow-up inspections, two warning letters or notices of violation, and any response from the owner or operator.
- (6) Other remedies. The city may bring legal action to enjoin the continuing violation of this ordinance, 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.

12-212. 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 ordinance may appeal said penalty or damage assessment to the Commissioners.

- (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) Public hearing. Upon receipt of an appeal, the Commissioners shall hold a public hearing within thirty (30) 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 or within the City’s monthly newsletter or 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 Commissioners shall be final.
- (3) Appealing decisions of the Commissioners. Any alleged violator may appeal a decision of the Commissioners pursuant to the provisions of Tennessee Code Annotated, Title 27, Chapter 8.