

AN ORDINANCE Adopting Standards for the Control of Erosion and Sediment and Prescribing a Penalty for the Violation Thereof

WHEREAS, the city council desires to adopt standards for the control of erosion and sediment in the City of Bristol.

NOW, THEREFORE, BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF BRISTOL TENNESSEE AS FOLLOWS:

SECTION I. Purposes: The purposes of this ordinance are as follows:

- a. To protect, maintain, and enhance the environment of the City of Bristol and the public health, safety and general welfare of the citizens of the city, by preventing the discharge of sediment and construction related waste into the city's storm water system; and
- b. To maintain and improve the quality of the receiving waters into which storm water runoff flows, including streams, rivers, lakes, ponds, and wetlands.

SECTION II. Definitions: As used in this ordinance:

- a. ***Best management practices (BMP)*** means schedules of activities, prohibitions of practices, maintenance procedures, and other management practices to prevent or reduce the discharge of pollutants to the municipal separate storm sewer system. This term also includes treatment requirements, operating procedures, and practices to control plant site runoff, spillage, or leaks, sludge or waste disposal, or drainage from raw material storage.
- b. ***City*** means the City of Bristol Tennessee.
- c. ***City manager*** means the city manager of the city or his designee, who is responsible for the approval of development and redevelopment plans, grading permits, and the implementation of this ordinance.
- d. ***Clearing*** means the removal of vegetation and disturbance of soil prior to grading or excavation in anticipation of construction activities or a wide area land disturbance in anticipation of non-construction activities such as the clearing of forested land for conversion to pasture for wildlife management purposes. This term does not include the clearing of vegetation along roadways, highways or power lines for site distance or other maintenance or safety concerns, or cold planing, milling, or removal of concrete or bituminous asphalt roadway pavement surfaces.
- e. ***Commencement of construction*** or ***commencement of land disturbing activities*** means the initial disturbance of soils associated with clearing, grading or excavating activities or other construction activities.

f. **Construction** means any installation, building, placement or assembly of facilities or equipment (including contractual obligations to purchase such facilities or equipment) at the premises where such equipment will be used, including preparation work at such premises.

g. **Construction related waste** means refuse or unused materials that result from construction activities. Construction related waste can include, but not limited to, unused building and landscaping materials, chemicals, litter, sanitary waste, and concrete truck washout.

h. **Development** means any man-made change to improved or unimproved property including, but not limited to, the construction of buildings or other structures, clearing, dredging, drilling operations, filling, grading, paving, excavation, or storage of equipment or materials.

i. **Erosion** means the removal of soil particles by the action of water, wind, ice or other agents, whether naturally occurring or acting in conjunction with or promoted by man-made activities or effects.

j. **Erosion and sediment control plan** means a written plan, including drawings or other graphic representations, that is designed to eliminate or reduce erosion and off-site sedimentation from a site during construction activities.

k. **Filling** means any deposition or stock-piling of dirt, rock, stumps, or other natural or man-made solid waste material.

l. **Final stabilization** means when all soil disturbing activities at the site have been completed, and a perennial vegetative cover sufficient to prevent erosion has been well established on all unpaved areas, or equivalent permanent stabilization measures have been employed.

m. **Grading** means any excavation, filling (including fill placed in watercourses), or stockpiling of earth materials or any combination thereof, including the land in its excavated or filled condition.

n. **Grading permit** means a permit issued by the city authorizing the commencement of land disturbing activities.

o. **High quality waters** means surface waters of the State of Tennessee that are identified by TDEC as "high quality waters."

p. **Land disturbing activity** means any activity on a property that results in a change in the existing soil cover, whether vegetative or non-vegetative, or the existing soil topography. Land disturbing activities include, but are not limited to, development, re-development, demolition, construction, reconstruction, clearing, grading, filling, land transporting, and excavation.

q. **Municipal separate storm sewer system (MS4)** means a conveyance or system of conveyances, including roads with drainage systems, streets, roads, catch basins, curbs, gutters, ditches, man-made channels, or storm drains, which are:

1. Owned or operated by a state, county, city, town, district, association, or other public body created by or pursuant to state law having jurisdiction over the disposal of sewage, industrial wastes, storm water, or other wastes, including special districts under state law such as a sewer district, flood control district or drainage district, or similar entity, or a designated and approved management agency under section 208 of the federal Clean Water Act that discharges to waters of the state;
2. Designed or used for collecting or conveying storm water;
3. Which is not a combined sewer; and
4. Which is not part of a publicly owned treatment works (POTW) as defined by 40 C.F.R. §122.2, as amended from time to time.

r. **Owner or operator** means any person or entity associated with a construction project that meets either of the following two criteria:

1. The person or entity has operational control over construction plans and specifications, including the ability to make modifications to those plans and specifications, typically be the owner or developer; or
2. The person or entity has day-to-day operational control of those activities at a project which are necessary to ensure compliance with a storm water pollution prevention plan for the site or other permit conditions, e.g., they are authorized to direct workers at a site to carry out activities required by the storm water pollution prevention plan (SWPPP) or comply with other permit conditions. This would typically include the general contractor and erosion control contractors.

s. **Plan** means an erosion and sediment control plan, or a small lot erosion and sediment control plan.

t. **Priority construction activity** means construction activities that discharge directly into or immediately upstream from waters the state recognizes as impaired for siltation or those waters designated as high quality waters. A property is considered to have a direct discharge if storm water runoff from the property does not cross any other property before entering the water of the state.

u. **Section 404 permit** means a permit issued by the United States Army Corps of Engineers under Section 404 of the federal Clean Water Act.

v. **Sediment** means solid material, either mineral or organic, that is in suspension, being transported, or has been moved from its site of origin by erosion.

w. **Small lot erosion and sediment control plan** means a plan that is designed to eliminate or reduce erosion and off-site sedimentation from a site during construction activities, applicable to development and redevelopment sites that disturb less than one acre and are not part of a larger plan of development.

x. **State** means the State of Tennessee or, where the context indicates, any state of the United States.

y. **Storm water pollution prevention plan (SWPPP)** means a document describing how an owner or operator intends to provide storm water management during land disturbing or construction activities.

z. **Subdivision** means the division, subdivision, or resubdivision of any lot or parcel of land as defined in the Subdivision Regulations of the city.

aa. **Tennessee Erosion & Sediment Control Handbook or handbook** means the handbook bearing such title, as amended from time to time, published by the Division of Water Pollution Control of TDEC.

bb. **Tennessee General Permit** means State of Tennessee General Permit No. TNR10-0000 Storm Water Discharges from Construction Activities.

cc. **TDEC** means the Department of Conservation and Environment of the State of Tennessee.

dd. **Transporting** means any moving of earth materials from one place to another, other than such movement incidental to grading, as authorized on an approved plan.

ee. **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.

SECTION III. General Requirements:

3.1. Applicability

a. All land disturbing or construction activities that cause off-site sedimentation or sediment discharges to waters of the state shall be in violation of this ordinance.

b. No owner or operator of any property within the city shall commence land-disturbing activities unless an erosion and sediment control plan is submitted to and approved by the city manager.

c. For construction resulting in less than one acre of disturbed area a small lot erosion and sediment control plan shall be submitted to and approved by the city manager prior to commencement of any land disturbing activity. Notwithstanding the foregoing, such a plan shall not be required for the construction of a single family residence on property which is part of a larger common plan of development for which an erosion and sediment control plan has been approved.

d. The issuance of a grading permit shall be conditioned upon the approval of the erosion and sediment control plan by the city manager. The city shall serve as the plan approval agency only, and in no instance are its regulations to be construed as designing erosion and sediment control or other storm water systems.

e. No building permit shall be issued until the owner or operator has obtained a grading permit and is in compliance with the grading permit, where the same is required by this ordinance.

f. All land disturbing activities shall employ adequate erosion and sediment control best management practices.

3.2. Exemptions from Plans Submittal

a. The following activities shall not require submittal and approval of an erosion and sediment control plan, or small lot erosion and sediment control plan:

1. Minor land disturbing activities such as home gardens and individual home landscaping, repairs or maintenance work;
2. Additions or modifications to existing, individual, single family structures;
3. Emergency work to protect life, limb or property, and emergency repairs, provided that the land area disturbed shall be shaped and stabilized in accordance with the requirements of this ordinance;
4. Existing nursery and agricultural operations conducted as a permitted main or accessory use; and
5. State and federal projects subject to the submission requirements of TDEC.

b. All other provisions of this ordinance shall apply to the exemptions noted in 3.2.a above.

SECTION IV. Erosion and Sediment Control Design Standards:

4.1. Adoption of Standards

a. The city adopts as its erosion and sediment control design standards and best management practices manual the *Tennessee Erosion & Sediment Control Handbook*. This handbook is incorporated by reference into this ordinance. This handbook includes a list of acceptable BMPs, including the specific design performance criteria and operation and maintenance requirements for each BMP.

b. The design, operation and maintenance criteria presented in the handbook may be updated and expanded upon, at the discretion of the city manager, based on improvements in engineering, science, monitoring, and local maintenance experience.

c. Erosion and sediment control BMPs that are designed, constructed and maintained in accordance with the BMP criteria presented in the handbook shall be presumed to meet the minimum water quality performance standards required by the city.

4.2. General Criteria and Requirements

The following standards, as set forth in the *Tennessee General Permit*, and the *Tennessee Erosion & Sediment Control Handbook*, are adopted.

- a. Erosion and sediment controls shall be designed to retain sediment on-site.
- b. All control measures must be properly selected, installed, and maintained in accordance with the manufacturer's specifications and good engineering practices. If periodic inspections or other information indicate a control has been used inappropriately, or incorrectly, the owner or operator must replace or modify the control for site situations.
- c. Sediment should be removed from sediment traps, silt fences, sedimentation ponds, and other sediment controls as necessary, and must be removed when design capacity has been reduced by 50%.
- d. Construction related waste, litter, construction debris, and construction chemicals exposed to storm water shall be removed, covered or properly stored prior to anticipated storm events, or otherwise prevented from becoming a pollutant source for storm water discharges. After use, silt fences should be removed or otherwise prevented from becoming a pollutant source for storm water discharges.
- e. Offsite material storage areas, including overburden and stockpiles of dirt and other materials, used solely by the permitted project are considered part of the project and shall be addressed in the plan.
- f. Pre-construction vegetative ground cover shall not be destroyed, removed, or disturbed more than 20 calendar days prior to grading or earth moving unless the area is seeded or mulched or other temporary cover is installed.
- g. Clearing and grubbing must be held to the minimum necessary for grading and construction equipment.
- h. Construction must be sequenced to minimize the exposure time for graded or denuded areas.
- i. Construction must be phased for projects in which more than 50 acres of soil will be disturbed. Areas of the completed phase must be stabilized within 21 days after another phase has been initiated.

j. Erosion and sediment control measures must be in place and functional before commencement of land disturbing activities, and must be constructed and maintained throughout the construction period. Temporary measures may be removed at the beginning of the work day, but must be replaced at the end of the work day or prior to a rain event, whichever is sooner.

k. The following records shall be maintained on site: the dates when major grading activities occur; the dates when construction activities temporarily or permanently cease on a portion of the site; and the dates when stabilization measures are initiated.

l. The city manager has the discretion to require BMPs that conform to a higher than minimum standard for priority construction activities, for high quality waters, or where deemed necessary.

4.3. Stabilization Practices

The plan shall include a description of interim and permanent stabilization practices, including site-specific scheduling of the implementation of the practices. Plans should ensure that existing vegetation is preserved where feasible and that disturbed portions of the site are stabilized. Stabilization practices may include: temporary seeding, permanent seeding, mulching, geotextiles, sod stabilization, vegetative buffer strips, protection of trees, preservation of mature vegetation, and other appropriate measures. Use of impervious surfaces for stabilization should be avoided.

a. Stabilization measures shall be initiated as soon as practicable on portions of the site where construction activities have temporarily or permanently ceased, but in no case more than seven days after the construction activity in that portion of the site has temporarily or permanently ceased, except in the following two situations:

1. Where the initiation of stabilization measures by the seventh day is precluded by snow cover or frozen ground conditions, stabilization measures shall be initiated as soon as practicable; or
2. Where construction activity on a portion of the site is temporarily closed, and land disturbing activities will be resumed within 15 days, temporary stabilization measures do not have to be initiated on that portion of the site.

b. Temporary or permanent soil stabilization shall be accomplished within 15 days after final grading or other land disturbing activity. 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.

4.4. Structural Practices

The plan shall include a description of structural best management practices to divert flows from exposed soils, store flows, or otherwise limit runoff and the discharge of pollutants from exposed areas of the site to the degree attainable. Such best management practices may include silt fences, earth dikes, drainage swales, sediment traps, check dams, subsurface drains, pipe slope

drains, level spreaders, storm drain inlet protection, rock outlet protection, reinforced soil retaining systems, gabions, and temporary or permanent sediment basins. Structural controls shall not be placed in streams or wetlands except as authorized by section 404 permit or Tennessee Aquatic Resource Alteration Permit.

a. Erosion and sediment control best management practices shall be designed according to the size and slope of disturbed or drainage areas to detain runoff and trap sediment. In addition, best management practices shall be designed to control the rainfall and runoff from a 2-year, 24-hour storm, as a minimum.

b. When temporary or permanent sediment basins are used to control sedimentation at a site, the basin must provide storage for a calculated volume of runoff from a 2-year, 24-hour storm and runoff coefficient from each disturbed acre drained until final stabilization of the site. Where no such calculation has been performed, a temporary or permanent sediment basin providing 3,600 cubic feet of storage per acre drained, or equivalent control measure, shall be provided until final stabilization of the site. When computing the number of acres draining into a common location, it is not necessary to include flows from offsite areas and flows from onsite areas that are either undisturbed or have undergone final stabilization where such flows are diverted around both the disturbed area and the sediment basin.

c. Discharges from sediment basins and traps must be through a pipe, or through a channel lined with rip rap or other stabilized spillway, so that the discharge does not cause erosion.

d. Muddy water to be pumped from excavation and work areas must be held in settling basins or filtered prior to its discharge into surface waters. Water must be discharged onto a stabilized outlet point so that the discharge does not cause erosion and sedimentation.

4.5. Other Requirements

a. No solid materials, including building materials, shall be discharged to waters of the State, except as authorized by a section 404 permit or Tennessee Aquatic Resource Alteration Permit.

b. Off-site vehicle tracking of sediments is prohibited.

c. Dust generation shall be minimized.

d. For installation of any waste disposal systems on site, or sanitary sewer or septic system, the plan shall provide for the necessary sediment controls. Owners and operators shall comply with all applicable state or local waste disposal, sanitary sewer or septic system regulations for such systems to the extent that these are located within the permitted area.

SECTION V. Erosion and Sediment Control Plans:

5.1. Requirements

- a. The erosion and sediment control plan shall present in detail the best management practices that will be employed to reduce erosion and control sedimentation.
- b. The plan shall be sealed by a registered professional licensed to practice storm water management design in the State of Tennessee.
- c. Best management practices presented in the plan shall conform to the requirements found in the *Tennessee Erosion & Sediment Control Handbook*, and shall meet or exceed the requirements of the *Tennessee General Permit*.
- d. The plan shall include measures to protect legally protected state or federally listed threatened or endangered aquatic fauna or critical habitat (if applicable).
- e. The plan submitted shall be subject to any additional requirements set forth in the city's Subdivision Regulations, Planning and Zoning Ordinance, or other city regulations.
- f. Construction of the site in accordance with the approved plan must commence within one year from the issue date of the grading permit, or the grading permit will become null and void and the plan must be resubmitted for approval.

5.2. Plan Contents

Erosion and sediment control plans shall include a fully engineered erosion and sediment control plan containing such information as may be required by the city manager consistent with this ordinance.

5.3. Small Lot Erosion and Sediment Control Plan Contents

- a. Land disturbing activities that affect less than one acre and are not part of a larger common plan of development with an approved plan shall submit and obtain approval of a small lot erosion and sediment control plan prior to obtaining a building permit.
- b. The plan shall include such information as may be required by the city manager consistent with this ordinance.
- c. The city manager has the discretion to require a fully engineered erosion and sediment control plan.

SECTION VI. Compliance:

6.1. Conformity to Approved Plan

- a. The approved erosion and sediment control plan, shall be followed during the entire duration of construction at the site.
- b. The city manager may require reports or records from the permittee or person responsible for carrying out the plan to insure compliance.
- c. No land disturbing activity shall be commenced without prior plan approval by the city manager.

6.2. Amendments to Approved Plan

- a. The owner or operator shall amend the plan for any of the following conditions:
 1. Whenever there is a change in the scope of the project, which would be expected to have a significant effect on the discharge of pollutants to the municipal separate storm sewer system and which has not otherwise been addressed in the plan;
 2. Whenever inspections or investigations by site operators or local officials indicate the plan is proving ineffective in eliminating or significantly minimizing erosion or off-site sedimentation or discharge of other construction related wastes, or is otherwise not achieving the general objectives of controlling pollutants in storm water discharges associated with construction activity;
 3. To identify any new contractor or subcontractor that will implement a measure of the plan;
 4. To include measures necessary to prevent a negative impact to legally protected state or federally listed or proposed threatened or endangered aquatic fauna.
- b. The amended plan shall be submitted for approval by the city manager.

6.3. Maintenance

- a. Maintenance and inspections of the best management practices shall be implemented in the manner specified by the by *Tennessee Erosion & Sediment Control Handbook*, as amended by qualified personnel that are provided by the owner or operator of the land disturbing activity.
- b. The owner or operator shall at all times properly operate and maintain all facilities and systems of treatment and control and related appurtenances which are installed or used by the owner or operator to achieve compliance with this ordinance. Proper operation and maintenance requires the operation of backup or auxiliary facilities or similar systems, installed by an owner or operator only when necessary to achieve compliance with the conditions of this ordinance.

c. Any inadequate control measures or control measures in disrepair shall be replaced or modified, or repaired as necessary, before the next rain event if possible, but in no case more than seven days after the need is identified. If maintenance prior to the next anticipated storm event is impracticable, maintenance must be scheduled and accomplished as soon as practicable.

d. If sediment escapes the permitted property, off-site accumulations of sediment that have not reached a stream shall be removed promptly so as to minimize offsite impacts. For example, fugitive sediment that has escaped the construction site and has collected in the street shall be removed so that it is not subsequently washed into storm sewers and streams by the next rain and so that it does not pose a safety hazard to users of public streets. Removal of fugitive sediments will be done by the owner or operator at the his expense. Nothing in this ordinance shall be construed as authorizing remediation or restoration of a stream without consultation with TDEC, or as authorizing access by the owner or operator to other private property.

6.4 Inspections by the City

a. The city manager shall have the right to enter onto private property for the purposes of conducting unrestricted periodic inspections of all land disturbing activities to verify compliance with the approved plan or to determine whether such a plan is necessary.

b. The city manager shall have the right to enter onto private property for the purposes of investigating a suspected violation of this ordinance.

c. Failure on the part of an owner or operator to allow such inspections by the city manager shall be cause for the issuance of a stop work order, withholding of a certificate of occupancy, and civil penalties.

6.5 Enforcement, Penalties, and Liability

a. Any person failing to have an approved erosion and sediment control plan prior to starting a land disturbing activity shall be in violation of this ordinance. Each day such violation shall continue shall constitute a separate violation.

b. Any owner, operator or contractor who fails to comply with an approved erosion and sediment control plan shall be in violation of this ordinance, and shall be subject to the issuance of a stop work order, the withholding of a certification of occupancy or civil damages. Each day such violation shall continue shall constitute a separate violation.

c. Any failure of an owner, operator or contractor to comply with a stop work order issued by the city shall be in violation of this ordinance. Each day such violation shall continue shall constitute a separate violation.

d. The owner, operator or contractor shall allow periodic inspections by the city of all land disturbing activities. Any failure to allow such an inspection shall be considered a failure to follow the approved plan, and shall constitute a violation of this ordinance, and shall be subject to the issuance of a stop work order or the withholding of a certificate of occupancy.

f. In order to obtain compliance with this ordinance, the city manager may notify departments of the city to deny service to the property until the site has been brought into compliance.

g. Upon the request of the city manager, the city attorney shall initiate appropriate legal action to enforce the provisions of this ordinance.

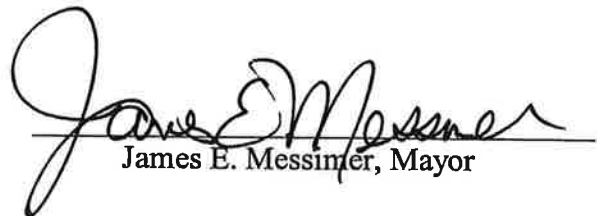
h. The remedies provided for in this ordinance are cumulative and not exclusive, and shall be in addition to any other remedies provided by law.

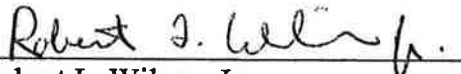
i. Neither the approval of a plan under this ordinance, nor compliance with the conditions of such plan, shall relieve any person of responsibility for damage to other persons or property or impose any liability upon the city for damage to other persons or property.

SECTION VII: The violation of any provision of this ordinance shall be subject to penalty as provided in Section 1-8 of the Code of Ordinances of the city.

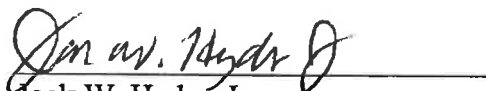
SECTION VIII: A public hearing on this ordinance will be held by the city council prior to its consideration on second reading.

SECTION IX: This ordinance shall take effect seventeen (17) days from and after its final passage, the welfare of the city requiring it.


James E. Messimer, Mayor


Robert L. Wilson, Jr.
City Recorder

Approved as to Form and Legality
this 1st day of December, 2004


Jack W. Hyder, Jr.
City Attorney

Passed on 1st Reading: 12-7-04
Public Hearing: 1-4-05
Passed on 2nd Reading: 1-4-05