#### **ORDINANCE 2008-02**

# AN ORDINANCE OF THE CITY OF BRENTWOOD, TENNESSEE, PROVIDING THAT THE CODE OF ORDINANCES OF THE CITY OF BRENTWOOD BE AMENDED BY ADDING A NEW CHAPTER 56, IN REGARD TO STORM WATER MANAGEMENT AND EROSION CONTROL; BY REVISING CHAPTER 14, ARTICLE II, DIVISION 2, IN REGARD TO THE BOARD OF BUILDING CONSTRUCTION APPEALS; BY REVISING SECTION 70-44, IN REGARD TO SEWERS; AND BY REVISING VARIOUS PORTIONS OF CHAPTER 78, IN REGARD TO ZONING

**WHEREAS**, the City of Brentwood desires to protect and preserve its natural water resources and to control soil erosion; and

**WHEREAS,** the provisions set forth in this ordinance will protect the environment by establishing erosion control standards; storm water quality requirements; waterway buffer requirements; long term operation and maintenance requirements for drainage facilities; and restrictions on illicit discharges to the City's storm drain system; and

**WHEREAS**, existing requirements for storm water management and erosion control have been included in Chapter 78 (Zoning) of the Brentwood Municipal Code; and

**WHEREAS,** upon enactment of this ordinance, a new Chapter 56 will be added to the Brentwood Municipal Code to incorporate storm water management and erosion control provisions; and

**WHEREAS,** adoption of the provisions herein will ensure compliance with the National Pollutant Discharge Elimination System (NPDES) storm water permitting program; and

**WHEREAS,** to effectuate the requirements contained herein, certain amendments should also be adopted in Chapter 14, Article II, Division 2, in regard to the Board of Building Construction Appeals; in Chapter 70, Article II, in regard to sewers; and in various portions of Chapter 78, in regard to zoning.

# NOW, THEREFORE, BE IT ORDAINED BY THE CITY OF BRENTWOOD, TENNESSEE, AS FOLLOWS:

#### Establishment of New Chapter 56 - Storm Water Management and Erosion Control

**SECTION 1.** That the Code of Ordinances of the City of Brentwood be amended by adding a new chapter to be numbered Chapter 56, and to read as follows:

## CHAPTER 56 STORM WATER MANAGEMENT AND EROSION CONTROL

#### **ARTICLE I. IN GENERAL**

#### Sec. 56-1. Intent; application.

(a) Land disturbances and storm water can contribute to the degradation of land surfaces and streams, erosion, siltation, earth slides, mud flows, dusty conditions, clogged storm sewers, additional road maintenance cost, increased water runoff and localized flooding. It is the intent of this chapter to protect the health and safety of residents and to preserve adjoining or nearby properties, including hilltops, hillsides, waterways, vegetation, structures and other natural and manmade features, through the regulation of land disturbances and storm water runoff and the imposition of erosion control and storm water management measures.

(b) Except as otherwise provided for, the following regulations shall apply to all properties throughout the city.

#### Sec. 56-2. Definitions.

The following words, terms and phrases, when used in this chapter, shall have the meanings ascribed to them in this section, except where the context clearly indicates a different meaning:

*Best Management Practices Manual* means a manual approved for use by the city's engineering director to provide examples of structural or non-structural practices intended to address water quantity or quality. The Best Management Practices Manual is intended to be utilized by design professionals and/or construction personnel in the course of development and construction activities within the city.

Channel means the portion of a natural stream which conveys normal flows of water.

*Combined sewer* means a sewer which conveys both sanitary sewage and storm water.

*Construction activities* means activities which include but are not limited to clearing and grubbing, grading, excavating and demolition.

*Cut* means the portion of land surface or area from which earth has been or will be removed by excavation; also, the depth below original ground surface to excavated surface.

*Disturbed area* means an area of land subjected to erosion due to the removal of vegetative cover and/or earthmoving activities, including filling.

*Drainage* means the interception and removal of groundwater or surface water by natural or artificial means.

EPA means the United States Environmental Protection Agency.

*Erosion* means any removal or loss of soil by the action of wind and water. Erosion includes both the detachment and transportation of soil particles.

*Erosion control measures* means one or more of the following measures, or other methods of slowing or stopping the removal of soil by wind, water, or gravity used singularly or in combination as appropriate:

- (1) *Diversion:* A swale or channel with supporting ridge (berm, dike or wall) constructed across a sloping land surface along the contour, or with predetermined grades, to intercept and divert surface runoff before it gains sufficient volume or velocity to create conditions of erosion.
- (2) *Drains:* Underground conduits or filter drains to reduce surface runoff or lower a high-water table.
- (3) *Grade stabilization structures:* Drop structures made of concrete, corrugated metal pipe or other suitable materials which dissipate the energy of flowing water by dropping it in a relatively short horizontal distance.
- (4) *Grassed waterways:* A natural or constructed waterway, usually broad and shallow, covered with erosion-resistant grasses used to carry surface water.
- (5) *Land grading:* Reshaping the ground surface by grading to planned slopes and configurations that will prevent excessive erosion conditions.
- (6) *Mulching:* The application of plant or other suitable materials on the soil surface to conserve moisture, reduce erosion and aid in establishing plant cover.
- (7) *Sediment barriers:* A temporary barrier installed to intercept runoff containing sediment. The barrier shall filter sediment and allow runoff to pass through. Sediment barriers may include straw bale barriers and silt fences.

*Excavation* means the act of removing dirt or soil (see *Cut*).

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

*Grade* means the slope or elevation of the ground surface prior to or after cutting and filling.

*Grading* means any operation or occurrence by which the existing site elevations are changed by cutting, filling, borrowing or stockpiling, or where any ground cover, natural or manmade, is removed, or any buildings or other structures are removed or any watercourse or

body of water, either natural or manmade, is relocated on any site, thereby creating an unprotected area. Grading shall be synonymous with land disturbance activity.

*Hazardous material* means any material, including any substance, waste, or combination thereof, which because of its quantity, concentration, or physical, chemical, or infectious characteristics may cause, or significantly contribute to, a substantial present or potential hazard to human health, safety, property or the environment when improperly treated, stored, transported, disposed of or otherwise managed.

*Immediate threat to public health and safety* means a very serious threat to the community or adjacent property including, but not limited to, clogged drainage ditches, flooding of adjacent properties, threat of landslides or other problems which should be resolved without delay. In instances where this is the case, verbal instructions to remedy the situation with follow-up of written notification shall be sufficient to meet the notification requirements of this article.

*Illicit discharge* means either of the following:

- (1) Any discharge to a municipal separate storm sewer system that is not composed entirely of storm water, except as authorized herein.
- (2) Any infiltration into the storm drain system resulting from spills, illegal dumping, or contaminated runoff from residential, commercial or industrial properties.

*Illicit connection* means either of the following:

- (1) Any drain or conveyance, whether on the surface or subsurface, that allows an illicit discharge to enter the storm drain system, including but not limited to any conveyance that allows any non-storm water discharge (including sewage, processed wastewater or wash water) to enter the storm drain system or any connection to the storm drain system from an indoor drain or sink, regardless of whether said connection had been previously allowed, permitted or approved by an authorized enforcement agency.
- (2) Any drain or conveyance connected from a commercial or industrial land use to the storm drain system that has not been documented in plans, maps or equivalent records and approved by an authorized enforcement agency.

*Land disturbance plan* means the plan required before a grading permit may be issued. A land disturbance plan consists of a narrative description and appropriate drawings and plans that spell out the methods, techniques and procedures to be followed on a site to control erosion and other potential degradation of adjoining or nearby properties, during and after development, including methods of final stabilization of the site.

*Municipal separate storm sewer system (MS4)* means the system of conveyances (including sidewalks, roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, man-made channels, or storm drains):

- (1) Owned or operated by the city;
- (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 sanitary sewage treatment facility operated by a public utility.

*National Pollutant Discharge Elimination System (NPDES) permit* means a permit issued by the EPA or by the state under authority delegated by the EPA that authorizes the discharge of pollutants to waters of the United States, whether the permit is applicable on an individual, group, or general area-wide basis.

*Non-storm water discharge* means any discharge to the storm drain system that is not composed entirely of storm water.

*Owner* means the person or entity holding the registered title to property. The city property tax rolls shall be prima facie evidence that the person or entity listed therein is the registered owner.

*Permit holder* means the owner of the property or the owner's representative in whose name a permit has been applied for and issued by the city.

*Pollutant* means anything that causes or contributes to pollution. Pollutants may include, but are not limited to: paints, varnishes and solvents; oil and other automotive fluids; non-hazardous liquid and solid wastes and yard wastes; refuse, rubbish, garbage, litter or other discarded or abandoned objects and accumulations, so that some may cause or contribute to pollution; floatables; pesticides and fertilizers; hazardous substances and wastes; sewage, fecal coli form and pathogens; dissolved and particulate metals; animal wastes; wastes and residues that result from constructing a building or structure; and noxious or offensive matter of any kind.

*Potable water* means any water from a public water supply system or private well that is suitable to drink.

Sediment means rocks, sand, gravel, silt or other material deposited by action of wind, water or gravity.

*Sedimentation* means the action of settling out of the soil particles which are transported by wind, water or gravity.

*Site* means any tract, lot or parcel of land or combination of tracts, lots or parcels of land proposed for development.

*Stop work order* means an order issued by the city requiring construction activity on a site to be stopped.

Storm water means any accumulation of water from rain, snow or other forms of precipitation.

*Storm water runoff* means storm water flowing over the surface of the ground or collected in channels, watercourses or conduits, measured in depth of inches.

*Stripping* means any activity which removes or significantly disturbs the vegetative cover, including clearing and grubbing operations and top soil stripping.

TDEC means the Tennessee Department of Environment and Conservation.

USGS means the U.S. Geological Survey, an agency of the U.S. Department of the Interior.

*Vegetative cover* means grasses, shrubs, trees and other vegetation which hold and stabilize soils.

*Wastewater* means the discharge of any water or other liquid, other than uncontaminated storm water.

*Waterway natural area* or *WNA* means the area adjacent to, on either side, an intermittent or perennial stream waterway, as determined by the city, state, or USGS topographic information that is to remain in its natural state to protect the quality and ecology of the stream.

Secs. 56-3 – 56-10. Reserved.

# ARTICLE II. EROSION AND SEDIMENT CONTROL

#### DIVISION 1. GRADING PERMITS

#### Sec. 56-11. Grading permit procedure.

(a) *Requirements.* Except as otherwise exempted in section 56-12, no person shall engage in any land-disturbing activity which will modify the existing grade and/or may result in increased soil erosion or sedimentation, including, but not limited to, clearing, stripping, grading, excavation, transporting and filling, unless a grading permit has first been obtained from the city's engineering department. The owner of the property or his representative shall complete an application for the permit on forms provided by the engineering department and shall submit a proposed land disturbance plan in compliance with section 56-13 herein with the application. The property owner shall be responsible for compliance with all provisions of this article. The grading permit does not preclude additional permits or authorization required by the state or the city.

(b) *Staff authorization; appeals of staff decisions.* No grading permit or building permit shall be issued until the proposed land disturbance is reviewed and approved by the city's engineering department. The engineering department shall require such revisions to the land disturbance plan as may be necessary to carry out the intent of this chapter. In the event a property owner or permit applicant disputes a decision made by the engineering department in regard to the review of a land disturbance plan, an appeal may be filed with the board of building construction appeals as set forth in Chapter 14, Article II of this Code.

(c) *Fees.* In order to defray costs associated with the processing of permits and for inspections of land disturbance activities, a nonrefundable fee as established in section 14-72(h) or such other applicable section of this Code shall be required with the application for a grading permit.

(d) Security. Prior to the issuing of a permit for any land disturbance activity affecting more than five acres, the applicant shall be required to provide a letter of credit or cashier's check to the city to guarantee completion of all land and grade stabilization measures and improvements as shown by the approved plan. For smaller areas when potentially hazardous soil or drainage conditions exist due to types of soils, steep grades, floodplain development or nearby lakes, streams or large drainage ditches, the applicant may be required, at the discretion of the engineering department, to provide a letter of credit or cashier's check to the city to guarantee completion of all land and grade stabilization measures and improvements as shown by the approved plan. The city's engineering director or his designee shall establish the amount and time period of the security, based on the estimated cost and time for completing the plan. Within 30 days of the engineering department's determination that all provisions of the approved plan have been completed or upon receipt of performance security for required subdivision improvements by the city, such land and grade stabilization security shall be refunded or terminated

#### Sec. 56-12. Properties exempt from grading permit requirements.

The following uses and activities shall be exempt from the requirements for a grading permit:

(1) *Single-family residence*. The construction of a single-family residence or addition to an existing single-family residence with an approved building permit, on a lot with grades less than 15 percent; provided, however, such construction shall be required to comply with the erosion control requirements set forth in section 56-13(3).

(2) *Public utilities and roadway construction*. The installation, maintenance and repair of any public utility, as well as public roadway and storm drainage construction and maintenance by governmental agencies and/or their agents; provided, however, that such land-disturbing activity shall comply fully with the rules and regulations set forth by TDEC.

(3) *Agricultural uses.* Farming or other accepted agricultural uses, as identified in the Tennessee Right to Farm Act (T.C.A. § 43-26-101 *et seq.*, or as hereafter replaced or amended.)

(4) *Lawns/gardens/landscaping*. Home gardens, home landscaping or lawn preparations on existing lots or parcels, unless the possibility for erosion or alteration of drainage patterns or structures is such to necessitate a grading permit, as determined by the city's engineering department.

# Sec. 56-13. Land disturbance plan.

A land disturbance plan required under the provisions of this article shall comply with the requirements set forth in this section. The complexity of the plan shall be commensurate with the severity of site conditions and potential for off-site damage. The engineering department may require additional information if deemed necessary and appropriate to evaluate the feasibility of the plan.

(1) *Basic plan requirements.* The plan shall identify the specific and appropriate erosion control practices and sediment trapping facilities proposed for the site to be disturbed, as well as a schedule for implementation and maintenance. The plan shall address the specific requirements of sections 58-14 through 58-18 herein. The plan shall also identify final stabilized conditions for the site, provisions for removing temporary control measures and stabilization of the site when temporary measures are removed, permanent storm water conveyance structures and maintenance requirements for any permanent measures.

(2) *Professional design*. The land disturbance plan shall be developed by a qualified professional engineer or landscape architect, licensed to practice in the state, when the area of disturbance exceeds five acres or when potentially hazardous soil or drainage conditions exist due to types of soils, steep grades, floodplain development or nearby lakes, streams or large drainage ditches.

(3) *Erosion control.* Erosion control measures shall be designed and carried out in accordance with generally accepted engineering practices and the requirements of the city's Best Management Practices Manual. Areas that are to be developed or excavated shall apply these guidelines, fitting the appropriate measures to the specific soils and topography so as to minimize soil erosion and surface water runoff. The erosion control measures shall be maintained, and replaced if necessary, until vegetative cover is significantly established.

(4) *Protection of natural vegetation and trees.* Natural vegetation shall be retained and protected whenever feasible during construction. If an area is stripped of vegetation during construction, the exposed area shall be limited to the smallest practical size, and duration of the exposure limited to the shortest practical time.

(5) *Minimum information required*. It shall be at the discretion of the city's engineering director to determine how much information is necessary to obtain a grading permit. The engineering director may also determine the number of paper copies of the land disturbance plan to be submitted, and/or may require that the plan be submitted in a specified electronic format. At a minimum, a land disturbance plan shall contain the following:

- a. Name, address and telephone number of the applicant, and the owners and developer, if other than the applicant, of the property to be graded.
- b. The registration seal and signature of the engineer or landscape architect who prepared the plan.
- c. A brief project description.
- d. Drawings showing pre-development topographic conditions and post-development grades, at a scale appropriate to the land area of the plan, and with contour intervals no greater than two feet. The plan shall include off-site existing topographic conditions extended to a minimum of 25 feet beyond the boundaries of the subject tract if grading is designed to be within 20 feet of any boundary line. Information on all public roads and utilities adjoining the subject property shall also be included.
- e. The site location, boundaries, adjacent properties, location of any existing or proposed structures on the property or on adjacent land within 100 feet of the area to be disturbed, floodplain areas, ditch lines and any existing on-site and off-site structural or natural features of the land which have a significant impact on drainage or sediment control.
- f. The location and a description of temporary and permanent erosion control measures and drainage apparatuses to be constructed and structural changes and improvements to the land, including clearing and grading limits, daily cleanup and site control practices and other activities to mitigate the adverse impact of land disturbance.

#### Sec. 56-14. Construction access routes.

Prior to the initiation of any grading work, a stabilized stone pad shall be placed at any point where traffic will be entering or leaving a construction site. Stone pads shall contain ASTM-1 stone, six inches thick, with a minimum width of 12 feet and a minimum length from the public or private road of 100 feet for commercial property and 50 feet for residential property.

#### Sec. 56-15. Cut and fill slopes.

Permanent cut and fill slopes shall be designed and constructed in a manner that will minimize erosion. Consideration shall be given to the length and steepness of the slope, the soil type, upslope drainage area, groundwater conditions and other applicable factors. Any slopes installed at two foot horizontal to one foot vertical or steeper shall be stabilized with rock riprap or other acceptable method approved by the city's engineering director.

#### Sec. 56-16. Stabilization of denuded areas and soil stockpiles.

Permanent erosion control measures shall be applied to denuded areas within 15 days after final grade is reached on any portion of the site. Soil stabilization shall also be applied

within 15 days to any denuded area which may not be at final grade, but will remain dormant (undisturbed by construction activity) for longer than 60 days. Any temporary soil stockpiles shall be stabilized or protected with sediment trapping measures to prevent erosion. Applicable erosion control measures shall include establishment of vegetation, mulching and the early application of gravel base on areas to be paved. Selected permanent or temporary erosion control measures shall be appropriate for the time of year, site conditions and estimated duration of use.

## Sec. 56-17. Establishment of permanent vegetation.

A permanent vegetative cover shall be established on denuded areas not otherwise permanently stabilized through the construction of approved structures and parking lots or driveways. Permanent vegetation shall not be considered stabilized until a ground cover is achieved, which in the opinion of the city's engineering director or his designee is mature enough to control erosion and to survive seasonal conditions for a period of one year from initial planting.

# Sec. 56-18. Protection of adjacent properties.

(a) *Downhill protection*. All properties adjacent to and/or downhill from the site of a land disturbance shall be protected from soil erosion and sedimentation. This shall be accomplished by preserving a well-vegetated buffer strip around the lower perimeter of the land disturbance or by installing perimeter controls such as sediment barriers, filters or dikes, or sediment basins, or by a combination of such measures.

(b) *Use of buffer strips*. Vegetated buffer strips shall be used alone only where storm water runoff is anticipated to occur through sheet flow and shall be a minimum of 20 feet in width. If at any time it is found that a vegetated buffer strip alone is ineffective in stopping erosion onto adjacent property, additional perimeter controls shall be provided by the owner.

(c) *Sediment control.* Sediment basins and traps, perimeter dikes, sediment barriers, dams, diversions and other erosion control measures intended to trap sediment on-site shall be constructed as the first step in grading and shall be made functional prior to disturbance of upslope land. Earthen structures such as dams, dikes and diversions shall be seeded and mulched within seven days of installation.

(d) *Storm water runoff.* Storm water runoff from disturbed areas five acres or greater shall pass through a sediment basin or other suitable sediment trapping facility. All storm drainage inlets shall be protected during construction with a sediment barrier to prevent clogging and localized flooding. All means of protection shall be maintained and monitored throughout construction.

#### Sec. 56-19. Inspections; corrections of problems.

(a) *Permit holder's responsibility*. Upon issuance of a grading permit, it shall be the responsibility of the permit holder to:

- (1) Promptly notify the city in writing of any proposed changes to the phasing plan and schedules for the land disturbance activities and periodic maintenance as included in the approved land disturbance plan, provided that such proposed changes may be rejected or revised by the city's engineering department; and
- (2) Conduct periodic inspections of the erosion control measures installed during construction and of nearby downstream properties, to determine if the land disturbance plan is effective. The permit holder shall make immediate arrangements for the repair or remediation of any damage to downhill property caused by erosion, such as clogged storm sewers, inlets or drainage ditches.

(b) *City authority*. The city's engineering director or his designee may enter upon any site for which a grading permit has been issued and periodically make inspections of any area before, during and after construction to ensure compliance with the requirements of this article and the authorized land disturbance plan. If the engineering director or his designee determines that significant erosion problems are occurring on the site, notwithstanding compliance with the approved land disturbance plan, the permit holder shall be required to take additional corrective actions to protect the adversely affected area. The specifications of the additional measures shall be considered as an amendment to the land disturbance plan. The engineering director or his designee may also require that the phasing plan and schedules for the land disturbance activities and periodic maintenance be revised at any point in order to meet the intent of this chapter.

(c) *Correction of problems.* If it is determined by the city's engineering director or his designee that a grading permit holder has failed to comply with the approved plan, a correction notice shall immediately be served upon the permit holder in writing, setting forth the measures needed to come into compliance and specifying time for such compliance. Where an immediate threat to public health and safety exists, verbal notice given by the engineering director or his designee to immediately correct the problem shall be sufficient, but shall be followed by written notice. Failure to comply within the time specified for compliance shall subject the permit holder to a stop work order. The stop work order shall remain in effect until the work in progress is determined to be in compliance with the specifications of the approved plan. The issuance of a stop work order shall not preclude other remedial or punitive actions which may be taken under this Code or state law. Upon completion of the work set forth in an approved land disturbance plan, the property owner shall adequately maintain and repair erosion control measures, pursuant to the requirements of section 56-51 herein.

#### Secs. 56-20 – 56-30. Reserved.

#### DIVISION 2. WATERWAY NATURAL AREAS

#### Sec. 56-31. Waterway natural areas.

In order to create, protect and maintain water quality buffers, a waterway natural area (WNA) shall be established as part of any new development or redevelopment of property

bordering or traversed by an intermittent or perennial stream waterway. The following provisions are hereby established for the designation, protection and maintenance of WNAs:

- (1) WNAs shall be designated along all intermittent and perennial stream waterways as determined by the city, state or USGS topographic information. This determination shall be conducted at the preliminary planning phase; however, the City reserves the right to identify a waterway at any point until construction plans have been approved.
- (2) In any residential subdivision, the WNA, if required, shall be designated as open space. No portion of the WNA may be within a private lot. The WNA within an OSRD subdivision's open space shall be counted toward the open space requirements for the subdivision at 100% of the WNA's area unless the WNA falls within an area for which another percentage applies.
- (3) The WNA width, as measured from the top of the bank on each side of the waterway, shall be as follows:

Upstream watershed area	WNA width
At least 5 square miles	60 feet
At least 1 square mile/less than 5 square miles	45 feet
Less than 1 square mile	30 feet

- (4) If the required width of a WNA or waterway buffer under federal or state regulations differs from the width required by the city, the more stringent requirement shall govern.
- (5) The WNA shall be recorded on all final plats approved on or after June 1, 2008 for property bordering or traversed by an intermittent or perennial stream waterway, provided that the requirement for a WNA may be waived or reduced if an unexpired preliminary plan was approved prior to June 1, 2008 and if, in the opinion of the city's engineering department, a WNA cannot be designated on the plat at the required width without significant impact to the approved development plan. For a final plat approved prior to June 1, 2008, the planning commission may require that any subsequent revisions provide for a WNA up to the extent a WNA would be required under this section for a new final plat if, in the opinion of the city's engineering department, a WNA can be so designated on the plat without significant impact to the approved development plan.
- (6) All site development plans and plats prepared for recording shall:
  - a. Clearly identify the boundaries of any WNA on the subject property and label the area as "Waterway Natural Area."

- b. Provide a note to reference any WNA stating: "There shall be no clearing, grading, construction or disturbance of vegetation within the waterway natural area, except as permitted by the City of Brentwood."
- (7) Any WNA or portions of any WNA shall also be designated as a public drainage easement if required by the planning commission, based on the recommendation of the city's engineering department.
- (8) All WNAs must be protected during development activities. Each WNA shall be staked and labeled as part of a construction layout survey prior to commencement of construction, using a combination of stakes and flagging to ensure adequate visibility.
- (9) Minor landscaping and stabilization is allowed within a WNA to repair erosion, damaged vegetation or other problems, if prior approval has been granted by the city's engineering department. Nothing shall be installed within a WNA except as permitted under this section.
- (10) Any person seeking a grading permit for property within a WNA shall provide evidence that appropriate permits required from federal and state regulatory agencies or written waivers of such permits have been obtained.
- (11) If a land use adjacent to a WNA involves subsurface discharges or surface application from a wastewater treatment system that serves more than one household or a non-residential use, no effluent may be discharged in the WNA except as provided herein. If a NPDES wastewater permit has been granted, the permittee may convey the effluent through the WNA to the waterway designated in the NPDES permit.
- (12) No septic tanks may be located within a WNA. Septic field lines may be allowed within the WNA, but no closer than 25 feet from the top of the stream bank or such greater distance as may be required by the state or the Williamson County Department of Health.
- (13) No structures shall be allowed in a WNA, with the exception of greenway trails, drainage structures, watertight utility line crossings and bridges that have been approved by the city and are constructed to minimize disturbance to the WNA.

Secs. 56-32 – 56-40. Reserved.

# ARTICLE III. STORM WATER MANAGEMENT

#### Sec. 56-41. Purpose.

The intent of this article is to protect the health and safety of the residents of the city; to control the level, intensity and quality of storm water runoff; to minimize expenditure of public funds for costly flood control projects; to minimize the need for rescue and relief efforts associated with flooding; to maximize beneficial use of land without incurring flood hazard potential; to ensure a functional drainage system that will not result in excessive maintenance costs; to encourage the use of natural and aesthetically pleasing design; to ensure water quality; and to protect or improve ground waters and surface waters.

#### Sec. 56-42. Storm water management plan.

(a) *Drainage plan approval.* Prior to approval of any site development plan or subdivision plat, approval of any construction plans or issuance of a grading permit, the engineering department shall determine whether there is a need for a storm water management plan based upon the standards outlined in the city's subdivision regulations. When a storm water management plan is required, such plan shall be submitted to the engineering department for review and approval.

(b) *Improvements required.* The engineering department may require additional structural or other improvements designed to control the level, intensity and quality of storm water runoff associated with the development, above and beyond the requirements outlined in the city's subdivision regulations, if local conditions warrant such additional measures.

(c) Location/maintenance required. All structures or other improvements constructed to meet the requirements of this article shall remain in the ownership of the property owner, who shall be responsible for maintaining such improvements in accordance with section 56-43 unless an alternative plan is approved by the planning commission. In addition, any such structures or other improvements within a residential subdivision shall be located within permanent designated open space for the subdivision with the legally designated homeowners or property owners association being responsible for such maintenance. Prior to the recording of lots for a subdivision, subdivision covenant provisions or other legal documents ensuring the maintenance of such improvements and funding mechanism for said maintenance in perpetuity shall be submitted to the city attorney for his review and approval.

#### Sec. 56-43. Storm water system long-term operation and maintenance.

(a) All storm drainage systems, structures and facilities shall be maintained such that the original design function is maintained over time. The storm drainage elements requiring maintenance shall include, but not be limited to, detention/retention systems, outlet control structures, storm water quality facilities and emergency overflows. These elements shall be maintained in accordance with a written "Storm Water Long-term Operation and Maintenance Plan." Said plan shall be recorded either separately or as part of other recorded documents such

as a plat, covenants, or homeowners/property owners association documents. The plan shall be developed by a Tennessee licensed professional engineer and approved by the city's engineering department prior to recording.

(b) All Storm Water Long-Term Operation and Maintenance Plans shall include detailed operation and maintenance procedures to ensure the continued performance of the facilities. Each plan shall identify the parts or components of a storm water management facility to be maintained and the necessary equipment and skills or training, along with an estimate of probable annual costs. Provisions for the periodic review and evaluation of the effectiveness of the maintenance program shall be included in the plan, so that revisions and additional maintenance procedures can be incorporated as necessary. The plan must contain a provision that grants access for inspection at any reasonable time by the engineering director or his designee to the facilities covered by the plan. A permanent elevation benchmark shall be identified in the plan to assist in the periodic inspection of the facility.

# Sec. 56-44. Illicit discharges and connections.

- (a) *Prohibition of illicit discharges and connections.*
- (1) All illicit discharges, as such terms are defined in section 56-2 or this chapter, are prohibited.
- (2) The construction, use, maintenance or continued existence of illicit connections to the 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 laws or practices applicable or prevailing at the time of connection.
- (3) Improper connections in violation of this section shall be disconnected and redirected, if necessary, to an approved onsite wastewater management system or the sanitary sewer system. Any connection to a sanitary sewer system must be approved by the governing utility.

(b) *Allowable non-storm water discharges.* Unless the city, TDEC, EPA or other regulatory agency has identified them as a source of pollutants to the state's waters, non-storm water discharges into the municipal separate storm sewer system from the following sources are not considered to be illicit discharges:

- (1) Water line flushing or other potable water sources, dechlorinated to potable water standards.
- (2) Landscape irrigation or lawn watering with potable water.
- (3) Diverted stream flows.
- (4) Rising ground water.

- (5) Groundwater infiltration to storm drains.
- (6) Pumped groundwater.
- (7) Foundation or footing drains.
- (8) Crawl space pumps.
- (9) Air conditioning condensation.
- (10) Springs.
- (11) Non-commercial washing of vehicles.
- (12) Natural riparian habitat or wet-land flows.
- (13) Non-commercial swimming pools (if dechlorinated.)
- (14) Firefighting activities.
- (15) Street wash water.
- (16) Discharges authorized in writing by the city as being necessary to protect public health and safety.
- (17) Dye testing approved by the city.

(c) *Notification of spills.* Upon the release or suspected release of materials which is resulting in or may result in illicit discharges, the owner of the property from which the release occurs or is suspected, or any person responsible for a facility or operation from which the release occurs or is suspected, or any person responsible for emergency response for such a facility or operation shall:

- (1) Take all necessary steps to ensure the discovery, containment and cleanup of such release. Any such property owner or other person who fails to take such necessary steps shall be in violation of this section.
- (2) Immediately notify emergency response agencies of the occurrence via emergency dispatch services, if the release or suspected release involves hazardous materials.
- (3) Notify the city's engineering department in person or by telephone no later than the next business day in the event of a release or suspected release of nonhazardous materials. Notifications by telephone shall be confirmed by written

notice delivered to the engineering department within three business days of the telephone notice.

(4) Retain an on-site written record of the discharge and the actions taken to prevent its recurrence if the discharge of prohibited materials emanates from a commercial or industrial establishment. Such records shall be retained for at least three years.

Secs. 56-45 – 56-50. Reserved.

# **ARTICLE IV. VIOLATIONS**

#### Sec. 56-51. Correction of soil erosion, storm water runoff or illicit discharge problems.

(a) The city's engineering department shall send written notification and demand for corrective action to the owner of any parcel of land which exhibits storm water runoff conditions, illicit discharges or unstable or eroding soil conditions that are presently or potentially adversely affecting downhill properties, public right-of-ways, the storm sewer system or watercourses. The owner shall correct the problem within 30 calendar days from receipt of such notification. Upon written request by the owner, the engineering director may extend the period for correction if seasonal conditions warrant and temporary erosion control, storm water control or illicit discharge prevention measures are installed or implemented. Minimum corrective measures may include stabilizing eroding slopes and revegetating all exposed soil surfaces. Before commencing corrective measures, the owner shall consult with the engineering director or his designee to determine an acceptable method of correction. A permanent plan for erosion control, storm water management or illicit discharge prevention may be required by the engineering director or his designee prior to or concurrent with initiation of corrective measures.

(b) All temporary and permanent erosion control, storm water management and illicit discharge prevention measures shall be maintained and repaired as needed by the property owner to assure continued performance of their intended function. If it is determined that a property owner has failed to maintain such measures, or has failed to comply with any of the provisions of this article, a corrective notice shall be sent to the property owner, setting forth the measures needed to bring the site into compliance and specifying time for such compliance. When an immediate threat to public health and safety exists, verbal notice given by the city's engineering director or his designee to immediately correct the problem shall be sufficient, but shall be followed by written notice within seven days.

(c) Should the property owner fail to remedy the above conditions within the prescribed time, the city's engineering director shall direct that the condition be remedied by an appropriate city department or outside contractual arrangement. Upon completion of work, the engineering department shall determine the reasonable costs thereof and bill the owner of the property. Should the owner fail to remit to the city the amount due within 30 days from the date of the bill, the amount due shall be certified to the city attorney, who may undertake such legal action as

may be needed to collect the amount due, including an action to attach a lien to the property for which the expenditure was made.

# Amendments to Chapter 14, Article II, Division 2 – Board of Building Construction Appeals

**SECTION 2**: That section 14-37 of the Code of Ordinances of the City of Brentwood shall be revised to read as follows:

# Sec. 14-37. Appeals to board.

(a) Whenever the city building inspector shall reject or refuse to approve the mode or matter of construction proposed, or materials to be used in the installation or alteration of a building or structure, or when it is claimed that the provisions of the adopted codes do not apply, or that any equal or more desirable form of construction can be used in any specific case, or when it is claimed that the true intent and meaning of the adopted codes or any of the regulations therein have been misinterpreted; the owner, contractor or duly authorized agent affected may appeal the decision of the building inspector to the board of building construction appeals.

(b) Whenever the city's engineering department shall reject or refuse to approve a proposed land disturbance plan, or materials to be used, or when the engineering department requires that a land disturbance be revised, or when it is claimed that the provisions applied by the engineering department do not apply or that the true intent and meaning of this Code or any of the regulations adopted herein have been misconstrued or wrongly interpreted, the permit applicant or property owner may appeal the engineering department's decision to the board of building construction appeals.

(c) Notice of appeal shall be in writing and filed within 30 days from the time a decision is rendered by the building inspector or engineering department. An appeal shall be on forms provided by the city.

**SECTION 3**: That section 14-38 of the Code of Ordinances of the City of Brentwood shall be revised to read as follows:

# Sec. 14-38. Decisions.

The board of building construction appeals, when appealed to and after a public hearing, may vary the application of any provision of the city's adopted codes to any particular case when in the board's opinion, the enforcement thereof would cause undue hardship, would be contrary to the spirit and purpose of the adopted code or public interest, or when in the board's opinion the interpretation of the building inspector or engineering director should be modified or reversed.

**SECTION 4**: That section 14-39 of the Code of Ordinances of the City of Brentwood shall be revised to read as follows:

#### Sec. 14-39. Action.

The board of building construction appeals shall consider an appeal within 35 days of its filing, and shall reach a decision within 35 days after the initial consideration of the appeal, unless the applicant requests or consents to additional time. Each decision of the board of building construction appeals shall also include the basis for its decision. If a decision of the board of building construction appeals reverses or modifies a decision of the building inspector or engineering department, or varies the application of any provision of the adopted code, the building inspector or engineering department shall immediately take action in accordance with that decision.

**SECTION 5**: That section 14-40 of the Code of Ordinances of the City of Brentwood shall be revised to read as follows:

#### Sec. 14-40. Rules of procedure.

The board of building construction appeals shall establish guidelines and procedures consistent with the provisions of the adopted codes. A certified copy of the board's decision shall be sent by mail to the appellant and a copy shall be kept in the public records of the building inspector.

**SECTION 6**: That section 14-46 of the Code of Ordinances of the City of Brentwood shall be revised to read as follows:

#### Sec. 14-46. Fees.

When a decision of the building inspector or the city's engineering department is appealed to the board of building construction appeals, the property owner or applicant shall pay a filing fee of \$100.00, which shall be refundable if the board of building construction appeals overturns the decision of the building inspector or engineering department.

#### Amendment to Chapter 70, Article II – Sewers

**SECTION 7**: That section 70-44(b) of the Code of Ordinances of the City of Brentwood shall be revised to read as follows:

(b) Storm water and all other unpolluted drainage shall be discharged to such sewers as are specifically designated as combined sewers or storm sewers, or to a natural outlet approved by the city's engineering department. Industrial cooling water or unpolluted process waters may be discharged, on approval of the engineering department, to a storm sewer or natural outlet.

# <u> Amendments to Chapter 78 – Zoning</u>

# A-R, R-1, R-2, OSRD Districts:

**SECTION 8.** That the Code of Ordinances of the City of Brentwood be amended by adding new sections to Article III, Divisions 2, 3, 4 and 5, said new sections to be number sections 78-131, 78-151, 78-172 and 78-193, and to read as follows:

## Sec. [78-131, 78-151, 78-172, 78-193] Erosion control and storm water management.

(a) The control of erosion during and after development and the design of drainage systems suitable to handle storm water runoff after the site is developed shall comply with the requirements of chapter 56 of this Code and the subdivision regulations of the city.

(b) Erosion and sediment control measures, drainage calculations and storm water management plans shall be included with each subdivision plan presented for approval, in accordance with the requirements of chapter 56 of this Code.

(c) Waterway natural areas (WNAs), if required pursuant to chapter 56 of this Code, shall be identified on the subdivision plan, and shall be designated as open space, as provided for in this division. No portion of a WNA may be within a private lot.

**SECTION 9.** That section 78-186(b) of the Code of Ordinances of the City of Brentwood shall be revised to insert a new subsection (6), to read as follows:

(6) All waterway natural areas required pursuant to chapter 56 of this Code.

**SECTION 10.** That section 78-186(d)(1)b. of the Code of Ordinances of the City of Brentwood shall be revised to read as follows:

b. While 100 percent of the floodway fringe area within the legally designated floodway overlay district may be considered for calculation purposes as usable open space, only 25 percent of the land lying within the floodway area shall be considered as usable open space. For land within a waterway natural area (WNA), 100% of the acreage may be considered as usable open space, unless the WNA falls within an area for which another percentage applies. Notwithstanding the foregoing, any use of the land within a WNA shall comply with chapter 56 of this Code

#### <u>C-1, C-2, C-3 Districts:</u>

**SECTION 11.** That section 78-206(g), 78-226(g) and 78-246(g) of the Code of Ordinances of the City of Brentwood shall each be revised to read as follows:

(g) *Erosion control and storm water management.* The control of erosion during and after development and the design of drainage systems suitable to handle storm water runoff after

the site is developed shall comply with the requirements of chapter 56 of this Code and the subdivision regulations of the city.

**SECTION 12.** That section 78-208(1)f., 78-228(1)f. and 78-248(1)f. of the Code of Ordinances of the City of Brentwood shall each be revised to read as follows:

f. Erosion and sediment control measures, and location of any waterway natural areas, in accordance with the requirements of chapter 56 of this Code;

**SECTION 13.** That section 78-208(1)h., 78-228(1)h., and 78-248(1)h. of the Code of Ordinances of the City of Brentwood shall each be revised to read as follows:

h. Drainage calculations and storm water management plan, in accordance with the requirements of chapter 56 of this Code;

# <u>C-4 District</u>:

**SECTION 14.** That section 78-256(8) of the Code of Ordinances of the City of Brentwood shall be revised to read as follows:

(8) *Erosion control and storm water management.* The control of erosion during and after development and the design of drainage systems suitable to handle storm water runoff after the site is developed shall comply with the requirements of chapter 56 of this Code and the subdivision regulations of the city. Underground storm water detention facilities should be used when feasible and practical.

**SECTION 15.** That section 78-260(c)(1)f. of the Code of Ordinances of the City of Brentwood shall be revised to read as follows:

f. Erosion and sediment control measures, and location of any waterway natural areas, in accordance with the requirements of chapter 56 of this Code.

**SECTION 16.** That section 78-260(c)(1)i. of the Code of Ordinances of the City of Brentwood shall be revised to read as follows:

i. Drainage calculations and storm water management plan, in accordance with the requirements of chapter 56 of this Code;

#### SI-1, SI-2, SI-3 and SI-4 Districts:

**SECTION 17.** That section 78-266(h), 78-286(h), 78-306(h), and 78-327(j) of the Code of Ordinances of the City of Brentwood shall each be revised to read as follows:

[(h), (j)] *Erosion control and storm water management.* The control of erosion during and after development and the design of drainage systems suitable to handle storm water runoff after the site is developed shall comply with the requirements of chapter 56 of this Code and the subdivision regulations of the city.

**SECTION 18.** That section 78-268(1)f., 78-288(1)f. and 78-308(1)f. of the Code of Ordinances of the City of Brentwood shall be revised to read as follows:

f. Erosion and sediment control measures, and location of any waterway natural areas, in accordance with the requirements of chapter 56 of this Code.

**SECTION 19.** That section 78-268(1)h., 78-288(1)h. and 78-308(1)h. of the Code of Ordinances of the City of Brentwood shall be revised to read as follows:

h. Drainage calculations and storm water management plan, in accordance with the requirements of chapter 56 of this Code;

**SECTION 20.** That section 78-328(1)j. shall be revised to read as follows:

j. Drainage calculations and storm water management plan, in accordance with the requirements of chapter 56 of this Code;

**SECTION 21.** That section 78-328(1)k. shall be revised to read as follows:

k. Erosion and sediment control measures, and location of any waterway natural areas, in accordance with the requirements of chapter 56 of this Code;

**SECTION 22.** That Article IV of Chapter 78 of the Code of Ordinances of the City of Brentwood is hereby repealed and declared null and void and of no effect.

**SECTION 23.** In case of conflict between this ordinance or any part hereof, and the whole or part of any existing ordinance of the City, the provision that establishes the higher standard shall prevail.

**SECTION 24.** If any section, subsection, clause, provision or portion of this ordinance is held to be invalid or unconstitutional by any court of competent jurisdiction, such holding shall not affect any other section, subsection, clause, provision or portion of this ordinance.

**SECTION 25.** That this ordinance shall take effect from and after its final passage and publication thereof, or fifteen days after its first passage, whichever occurs later, the general welfare of the City of Brentwood, Williamson County, Tennessee, requiring it.

PASSED:	1st reading	2/11/08	PLANNING COMMISSION	3308
PUBLIC H	2nd reading EARING ptice published in:	3/24/08	NOTICE OF PASSAGE Notice published in: Date of publication:	Williamson AM 32808
Da	ate of publication: ate of hearing:	<u>alaplos</u> <u>3 10 08</u>	EFFECTIVE DATE	3/28/08
MAYOR	Autor	) Joe Reagan	Deborah Hed	Gepath Deborah Hedgepath
Annroved	as to form.			

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