

# EXHIBIT 1

## Chapter 6

### STORMWATER MANAGEMENT ORDINANCE

August 2024

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14-601. Short title. This Chapter shall be known as the "Stormwater Management Ordinance of the Town of Bluff City, Tennessee".

14-602. Purpose.

- (1) The purpose of this ordinance is to conserve the land, water and other natural resources of the Town of Bluff City; and promote the public health and welfare of the people by establishing requirements for the management of stormwater and by establishing procedures whereby these requirements shall be administered and enforced; and to diminish threats to public safety from degrading water quality caused by soil erosion and sediment runoff, the runoff of excessive stormwaters and associated pollutants; reduce the discharge of pollutants to the Town's stormwater system, and to reduce flooding and the hydraulic overloading of the Town's stormwater system; and to reduce the economic loss to individuals and the community at large.
- (2) The Town of Bluff City is required by federal law, particularly 33 U.S.C. 1342(p) and 40 CFR 122.26, to obtain a National Pollutant Discharge Elimination System (NPDES) permit through the Tennessee Department of Environment and Conservation (TDEC) to reduce stormwater flows and associated pollutants discharged into waterways through Bluff City's stormwater system and drainage ways. The NPDES permit requires the Town to impose controls on future and existing development necessary to reduce the discharge of pollutants in stormwater to the maximum reasonable extent using management practices, control techniques and system design and engineering methods, and such other provisions which are determined to be appropriate for the control of such pollutants.
- (3) Allow the Town of Bluff City to exercise the powers granted in Tennessee Code Annotated 68-221-1105, which provides that, among other powers

municipalities have with respect to stormwater facilities, is the power by ordinance or resolution to:

- (a) Exercise general regulation over the planning, location, construction, and operation and maintenance of stormwater facilities in the municipality, whether or not owned and operated by the municipality;
- (b) Adopt any rules and regulations deemed necessary to accomplish the purposes of this statute, including adoption of a system of fees for services and permits;
- (c) Establish standards to regulate the quantity of stormwater discharged and to regulate stormwater contaminants as may be necessary to protect water quality;
- (d) Review and approve plans and plats, where appropriate, for stormwater management in proposed subdivisions and other developments;
- (e) Issue permits for stormwater discharges, or for the construction, alteration, extension, or repair of stormwater facilities;
- (f) Suspend or revoke permits when it is determined that the permittee has violated any applicable ordinance, resolution, or condition of the permit;
- (g) Regulate and prohibit discharges of stormwater into facilities of sanitary, industrial, or commercial sewage or waters that have otherwise been contaminated;
- (h) Expend funds to remediate or mitigate the detrimental effects of contaminated land or other sources of stormwater contamination, whether public or private.

- (4) The entity, person, or department designated by the Town of Bluff City Board of Mayor and Aldermen as Stormwater Coordinator shall administer the provisions of this ordinance.

14-603. Definitions. For the purpose of this Chapter, the following words and phrases shall have the meanings respectively ascribed to them by this section:

Accidental Discharge; means a discharge prohibited by this chapter which occurs by chance and without planning or thought prior to occurrence.

Adequacy of Outfalls: The capacity of the receiving channel, stream, waterway, storm drain system, etc., and a determination whether it is adequately sized to receive runoff from the developed site so as to not cause erosion and/or flooding.

Best Management Practices (BMP's): Schedules of activities, prohibitions of practices, maintenance procedures, Water Quality Management Facilities, structural controls and other management practices designed to prevent or reduce the pollution of waters of the United States. Water quality BMPs may include structural or non-structural practices.

Channel: A natural or man-made watercourse with a defined bottom and banks to confine and convey continuously or periodically flowing stormwater.

Clean Water Act: means the Federal Water Pollution Control Act (33.U.S.C. § 1251 et seq.), and any subsequent amendments thereto.

Construction Activity: means activities subject to the Town of Bluff City Stormwater, Erosion and Sediment Control Ordinance or NPDES General Construction Permits. These include construction projects resulting in land disturbance. Such activities include but are not limited to clearing and grubbing, grading, excavating, and demolition.

Covenants for Maintenance of Stormwater Facilities and Best Management Practices: A legal document executed by the property owner, or a homeowners' association as owner of record, and recorded with the Register of Deeds in the Sullivan County, Tennessee Courthouse which guarantees maintenance of Water Quality Management Facilities and Best Management Practices.

Development: Any land change that alters the hydrologic or hydraulic conditions of any property, often referred to as "site development". Development includes, but is not limited to, providing access to a site, clearing of vegetation, grading, earth moving, providing utilities, roads and other services such as parking facilities, Water Quality Management Facilities and erosion control systems, potable water and wastewater systems, altering land forms, or construction or demolition of a structure on the land.

Development Plan: Detailed engineering or architectural drawing(s) showing existing site conditions and proposed improvements with sufficient detail for Town review, approval, and then subsequent construction. The contents of a development plan are further defined by the Town Zoning Ordinance, Subdivision Regulations, and other Town departmental standards for constructing developments and public works projects.

Denuded Area: Areas disturbed by grading, tilling, or other such activity in which all vegetation has been removed and soil is exposed directly to the elements allowing for the possibility of erosion and stormwater and sediment run-off.

Developer: Any person, owner, individual, partnership, co-partnership, firm, company, corporation, association, joint stock company, trust, estate, governmental entity or any other legal entity, or their legal representatives, agents or assigns.

Drainage: A general term applied to the removal of surface or subsurface water from a given area either by gravity or by pumping; commonly applied to surface water/stormwater.

Drainage Ways and Local Waters: Any and all streams, creeks, branches, ponds, reservoirs, springs, wetlands, wells, drainage ways and wet weather ditches, or other bodies of surface or subsurface water, natural or artificial including Bluff City's stormwater system; lying within or forming a part of the boundaries of the Town of Bluff City, or the areas under the regulatory responsibility of the Bluff City Planning Commission that are adjacent to or intended to be served by the Bluff City Sewer System.

Enforcement Officer: The Stormwater Coordinator or any other person designated by the Bluff City Board of Mayor and Aldermen, such as a Town of Bluff City Police Officer, to enforce the Stormwater Management Ordinance.

Erosion: The general process whereby soils are moved by flowing surface or subsurface water.

Exceptional and Historical Trees: Those trees or stands of trees that are exceptional representatives of their species in terms of size, age, or unusual botanical quality, or which are associated with historical events.

Exceptional Waters of the State: Surface waters of the State of Tennessee that satisfy the characteristics as listed in Rule 1200-4-3-.06 of the official compilation - rules and regulations of the State of Tennessee. Characteristics include waters with exceptional biological diversity or other waters with outstanding ecological or recreational value as determined by the State of

Existing Stormwater Facility: Any existing structural feature that conveys, slows, filters, or infiltrates runoff after a rainfall event.

Grading Permit: The permit that must be issued by the Stormwater Coordinator, or in his/her absence, the Town's designee, before any land disturbing activity is undertaken by a developer; or when grading, filling, or excavating is proposed on any project.

Hot Spots: means sites, developments, or uses that have the potential of discharging pollutants or concentrations of pollutants that are not normally found in stormwater. These sites could include concrete and asphalt facilities, auto repair, auto supply, and large commercial parking lots.

Illicit Discharge: means any direct or indirect non-stormwater discharge to the Town of Bluff City storm drain system, except as exempted in 14-635 of this chapter.

Illegal Connection: means either of the following:

- a. Any pipe, open channel, drain or conveyance, whether on the surface or subsurface, which allows an illicit discharge to enter the storm drain

system including but not limited to any conveyances which allow any non-stormwater discharge including sewage, process wastewater, and wash water to enter the storm drain system and any connections to the storm drain system from indoor drains and sinks, regardless of whether such pipe, open channel, drain or conveyance has been previously allowed, permitted, or approved by an authorized enforcement agency; or

- b. Any pipe, open channel, drain or conveyance from a commercial or industrial use connected to the Town of Bluff City storm drain system which has not been documented in plans, maps, or equivalent records and approved by an authorized enforcement agency.

Impaired Waters of the State: Any segment of surface waters that has been identified by the State of Tennessee as failing to support classified uses. The State of Tennessee periodically compiles a list of such waters known as the 303(d) List.

Impervious Surface: A surface comprised of material(s) that prohibits or severely restricts the infiltration of stormwater into the underlying soil such as, but not limited to, asphalt, buildings, concrete, and brick. Compacted stone/gravel such as found in parking and drive areas is considered impervious.

Industrial Activity: means activities subject to NPDES industrial permits.

Land Disturbing Activity: Means any activity which may result in soil erosion from water or wind and the movement of sediments into drainage ways, or local waters, including, but not limited to, clearing, grading, excavating, transportation and filling of land, except that the term shall not include:

- (a) such minor land disturbing activities as home gardens and individual home landscaping, repairs and maintenance work.
- (b) construction, installation or maintenance of utility lines and individual service connections, or septic lines and drainage fields.
- (c) emergency work to protect life, limb or property.

Lake: An inland body of standing water, usually of considerable size.

National Pollutant Discharge Elimination System (NPDES) Storm Water Discharge Permit: means a permit issued by the State of Tennessee that authorizes the discharge of pollutants to water of the United States, whether the permit is applicable on an individual, group, or general area-wide basis.

Non-Stormwater Discharge: means any discharge to the storm drain system that is not composed entirely of stormwater.

Owner or Property Owner: The legal owner of the property as recorded with the Sullivan County Register of Deeds.

Person: means, except to the extent exempted from this chapter, any individual, partnership, firm, association, joint venture, public or private corporation, trust, estate, commission, board, public or private institution, utility, cooperative, city, county or other political subdivision of the state, any interstate body of any other legal entity.

Pollutant: means anything which causes or contributes to pollution. Pollutants may include, but are not limited to: paints, varnishes, and solvents; petroleum hydrocarbons; automotive fluids; cooking grease; detergents (biodegradable or otherwise); degreasers; cleaning chemicals; non-hazardous liquid and solid wastes and yard wastes; refuse, rubbish, garbage, litter, or other discarded or abandoned objects and accumulations, so that the same may cause or contribute to pollution; floatables; pesticides, herbicides, and fertilizers; liquid and solid wastes; sewage, fecal coliform and pathogens; dissolved and particulate metals; animal wastes; wastes and residues that result from construction a building or structure; concrete and cement; and noxious or offensive matter of any kind.

Pollution: means the contamination or other alteration of any water's physical, chemical or biological properties by the addition of any constituent and includes but is not limited to, a change in temperature, taste, color, turbidity, or odor of such water, or the discharge of any liquid, gaseous, solid, radioactive, or other substance into any such waters as will or is likely to create a nuisance or render such water harmful, detrimental or injurious to the public health, safety, welfare, or environment, or to domestic, commercial, industrial, agricultural, recreational, or other legitimate beneficial uses, or to livestock, wild animals, birds, fish or other aquatic life.

Pond: An inland body of standing water that is usually smaller than a lake.

Premises: means any building, lot, parcel of land, or portion of land whether improved or unimproved including adjacent sidewalks and parking strips.

Priority Construction Site: Means a construction site which will discharge construction stormwater directly into, or immediately upstream, of a Waters of the State impaired for siltation or habitat alteration or Exceptional Tennessee Waters.

Redevelopment: The improvement of a lot(s) or parcel of land that is improved with existing structures. If the existing impervious areas including but not limited to buildings and parking remain as is, then the water quality portion of this Ordinance only applies to the newly constructed structures and disturbed areas. If the existing impervious areas are removed and the soil underneath disturbed

and then replaced with new impervious areas or newly graded areas then the water quality portion of this Ordinance applies to the entire disturbed area. Areas or uses designated as “hotspots” that are redeveloped must provide water quality improvements for not only the new impervious and graded areas but also the existing impervious areas that remain.

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

State Waters: means any and all rivers, streams, creeks, branches, lakes, reservoirs, ponds, drainage systems, springs, wells, and other bodies of surface and subsurface water, natural or artificial, lying within or forming a part of the boundaries of the State of Tennessee which are not entirely confined and retained completely upon the property of a single person.

Stormwater Coordinator: means the person, or their designee in their absence, designated by the Board of Mayor and Aldermen to enforce the stormwater regulations.

Stormwater control measure (SCM) - Stormwater control measure or SCM means permanent practices and measures designed to reduce the discharge of pollutants from new development projects or redevelopment projects.

Stormwater Management facility: Term is used in a general sense to mean retention ponds, detention ponds, sedimentation basins, sediment traps, and any other structure that is constructed to reduce or control stormwater run-off and prevent silt and other pollutants from entering the town’s waterways. When terms such as sediment basins and detention ponds are used in this ordinance, they are also intended to describe a variety of possible structures whose applications in certain circumstances helps control stormwater and waterway pollutants.

Stormwater Runoff or Stormwater: means any surface flow, runoff, and drainage consisting entirely of water from any form of natural precipitation, and resulting from such precipitation.

Stormwater Plan: For the purpose of this Chapter; a Stormwater Plan refers to a formal written document and/or drawing addressing grading, stabilization using vegetation, stormwater conveyance, stormwater management, and erosion and sediment controls, that is reviewed by the Stormwater Coordinator with possible other technical assistance as deemed necessary, reviewed by the Town of Bluff City Planning Commission, and if approved by the Planning Commission is used as the basis for the Stormwater Coordinator to issue a Grading Permit that allows land disturbing activity to proceed.

Stream: For the specific purpose of vegetated buffers, a stream is defined as a linear surface water conveyance that can be characterized with either perennial



or ephemeral base flow and is regulated by the Town as a Special Flood Hazard Area (SFHA) or has been identified by the United States Army Corps of Engineers or the Tennessee Department of Environment and Conservation as a stream.

Structure: For the purpose of this Ordinance, anything constructed or erected such that the use of it requires a more or less permanent location on or in the ground. Such construction includes, but is not limited to, objects such as buildings, houses, towers, overhead transmission lines, carports, garages, walls, parking areas, driveways, roads, and sidewalks.

SWPPP: Stormwater Pollution Prevention Plan. This is a combination of the Erosion and Sediment Control Plan and a narrative in accordance with the Tennessee Department of Environment and Conservation Standards.

TMDL: Total Maximum Daily Load. A TMDL is a calculation of the maximum amount of a pollutant that a waterbody can receive and still meet water quality standards, and an allocation of that amount to the source(s) of the pollutant.

Town of Bluff City Storm Drain System: means any publicly owned or operated facility designed or used for collecting and/or conveying stormwater including, but not limited to, any roads and streets with drainage systems, curbs, gutters, inlets, catch basins, storm drains, structural and non-structural stormwater controls, stormwater management devices such as detention ponds, ditches, swales, natural and man-made or altered drainage channels, streams, creeks, rivers, reservoirs, and other drainage structures.

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

Vegetated Buffer: A use-restricted vegetated area that is located along the perimeter of streams, ponds, lakes, or wetlands, containing natural vegetation and/or enhanced or restored vegetation.

Water Course: means any structural or non-structural stormwater conveyance device including, but not limited to, storm drains, ditches, swales, channels, creeks, streams, rivers, and lakes.

Water Quality BMP Manual: A document which contains policies, design standards and criteria, technical specifications and guidelines, maintenance guidelines, and other supporting documentation to be used as the policies and technical guidance for implementation of the provisions of this Ordinance. The manual to be used shall be the Town of Bluff City's manual, if developed, or if it has not been developed then the Northeast Tennessee Water Quality BMP Manual, latest edition, shall be used.

Water Quality Management Facilities: Structural and non-structural features designed to prevent or reduce the discharge of pollution in stormwater runoff from a development or redevelopment.

Water Quality Management Plan: An engineering plan for the design of Water Quality Management Facilities and Best Management Practices within a proposed development or redevelopment. The Water Quality Management Plan includes a plan showing the extent of the land development activity, water quality management facilities, BMPs, vegetated buffers, water quality volume reduction areas, design calculations for water quality management facilities and BMPs, and may contain record drawings/certifications and Covenants for Maintenance of Stormwater Facilities and Best Management Practices along with easements for the water quality management facilities, BMPs, vegetated buffers, water quality volume reduction areas.

Waters of the State: Defined in the Tennessee Water Quality Control Act and 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 to effect a junction with natural surface or underground waters.

Wetland: An area that is inundated or saturated by surface water or groundwater at a frequency and duration sufficient to support, and that under normal circumstances does support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetland determination shall be made by the United States Army Corps of Engineers, and/or the Tennessee Department of Environment and Conservation.

14-604. Regulated land disturbing activities:

- (1.) Except as provided in subsection 14-604(2) and 604(3), it shall be unlawful for any person to engage in any land disturbing activity on any commercial development, on any multi-family development, or any single-family development, construction, or renovation activity involving at least one (1) acre of land disturbance, construction activity that is part of a larger common development or sale that would disturb at least one (1) acre of land, or three (3) lots or more without submitting and obtaining approval of a Stormwater Plan as detailed in Sections 14-606 through 14-609 of this Chapter, and being issued a Grading Permit by the Stormwater Coordinator.
- (2.) Any person who owns, occupies and operates private agriculture or forest lands shall not be deemed to be in violation of this ordinance of land disturbing activities which result from the normal functioning of these lands, however, the Stormwater Coordinator has the authority to require "best

practices” erosion and sedimentation control measures if pollution and run-off problems are evident.

- (3.) Any State or Federal agency not under the regulatory authority of the Town of Bluff City for stormwater management and erosion and sediment control.

14-605. Permit required for any land disturbing activity: Any land disturbing activity, as defined, shall require a Grading Permit, in addition to any Building Permit, which must be issued by the Stormwater Coordinator prior to the commencement of any work. Grading Permits for regulated land disturbing activities as defined in 14-604 will be issued by the Stormwater Coordinator only upon the Developer meeting requirements outlined in Sections 14-606 through 14-609 of this Chapter which includes obtaining approval of a Stormwater Plan by the Bluff City Planning Commission.

A Grading Permit is also required for any development or construction activity on less than one (1) acre of land. However, said development and construction activities do not require a formal Stormwater Plan unless they are commercial or multi-family developments or a Stormwater Plan is specifically requested by the Planning Commission.

A pre-construction meeting shall be held between the Town of Bluff City and the developer (or their representative) for any Priority Construction Site. No grading operations may take place until after the pre-construction meeting and perimeter sediment control devices are in place and functional.

14-606. Stormwater Plan required: A Stormwater Plan shall be required for all developments, subdivisions, or construction activities involving one (1) or more acres, of land disturbance, construction activity that is part of a larger common development or sale that would disturb at least one (1) acre of land, or three (3) lots or more, except as exempted in Sections 14-604(2) and 14-604(3) of this Chapter. A Stormwater Plan shall be required for all commercial construction or renovation, or any multi-family residential facility regardless of the acreage or number of units. If necessary to protect the health and safety of the people, the Planning Commission may, at its discretion, require a Stormwater Plan for any development or renovation under an acre, or single-family subdivision with less than three (3) lots.

14-607. Plan requirements: The Stormwater Plan shall be prepared and designed by a registered design professional qualified to prepare stormwater plans in accordance with State of Tennessee law and in accordance with the current State of Tennessee Construction General Permit, where applicable. The length and complexity of the plan is to be commensurate with the size of the project, severity of the site condition, and the potential for off-site damage. The plan shall include at least the following:

For projects which require a construction general permit through the State of Tennessee, the SWPPP (plan and narrative) shall be prepared by a person in accordance with the current State of Tennessee Construction General Permit and submitted to the Town. The SWPPP shall contain all required information at required by the current State of Tennessee Construction General Permit. Be aware that the requirements for projects which drain into an impaired stream or Exceptional Waters of the State are different than for projects draining to an unimpaired stream.

- ( 1.) Project Description - Briefly describe the intended project and proposed land disturbing activity including number of units and structures to be constructed and infrastructure required.
- ( 2.) Contour intervals of five (5) feet or less showing present conditions and proposed contours resulting from land disturbing activity.
- ( 3.) All existing drainage ways, including intermittent and wet-weather. Include any designated floodways or flood plains.
- ( 4.) A general description of existing land cover; individual trees and shrubs do not need to be identified.
- ( 5.) Limit of disturbance showing approximate limits of proposed clearing, grading and filling.
- ( 6.) Drainage area map showing pre and post development stormwater leaving any portion of the site.
- ( 7.) A general description of existing soil types and characteristics and any anticipated soil erosion and sedimentation problems resulting from existing characteristics.
- ( 8.) Location, size, details, and layout of proposed stormwater management improvements. Provide appropriate details such as a profile through the principal spillway with cut-off trench, anti-seep control, trash rack details, compaction/backfill details or notes, riser detail, outlet stabilization, and emergency spillway detail for detention ponds and other details/sections as needed for the contractor to build the structures.

Any opening in a riser structure and its overflow shall have a trash rack to prevent the openings, the riser, and/or the principal spillway from becoming clogged. The trash racks shall not be flat across the openings.

Provide hydraulic calculations sealed by a registered professional engineer for stormwater facilities. As a minimum, the calculations shall include a pre and post development drainage area map, brief narrative, pre and post

development run-off data, and routing calculations to determine the outflow rate.

- (9.) Proposed closed and open drainage network.
- (10.) Proposed storm drain or waterway sizes.
- (11.) Location and amount of stormwater run-off leaving site after construction and stormwater management measures proposed. 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 and storm drains, if any, accepting stormwater off-site, and what measures including infiltration, sheeting into buffers, outfall setbacks, etc. are to be used to spread concentrated run-off and prevent the scouring of waterways and drainage areas off-site.

If the downstream storm drain or waterway is not of sufficient size to handle the post development run-off, or even the pre-development a review shall be undertaken to determine if any reasonable accommodation can be given in the Stormwater Plan to reducing the likelihood of problems downstream. The plan will be expected to address, to the extent reasonable, improvements that will reduce the release rate to no greater than the capacity of the downstream storm drains or waterways.

Outfall pipes from storm drain systems and stormwater management facilities shall be setback sufficiently from off-site properties to allow the concentrated water to spread out back to pre-development flow characteristics. Under no circumstance shall an outfall pipe, as measured from the end section, headwall, or pipe, if no end structures used, be any closer than ten (10) feet from the off-site property unless a drainage easement from the off-site property owner is obtained and recorded. The outfall setback shall be determined by the Engineer and shall be based on outflow rate and the receiving channel or pipe characteristics.

Stormwater discharge from a concentrated point such as a pipe outfall shall discharge onto rip-rap or other velocity/energy dissipating method to reduce erosion potential. All rip-rap or other stone used to reduce velocity shall be placed on a geotextile to prevent scouring and the stone from sinking into the underlying soil.

The overflow path through the site and from any stormwater management device for stormwater run-off above the design storm event, shall not impact any structure.

- (12.) The projected sequence of construction represented by the grading, drainage and erosion and sedimentation 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 stormwater facilities. The sequence of construction is a vital component of the drainage and sediment control plan and it explains to the contractor, and Stormwater Coordinator, when the drainage and sediment control devices are to be in place.

The sequence of construction shall state that no clearing or grading may begin until all perimeter sediment control devices are in place and functional.

- (13.) Specific remediation measures to prevent erosion and sedimentation run-off and to meet approved standards as outlined in Section 14-608 of this Chapter. Plans shall include detailed drawings of all control measures used; stabilization measures including vegetation and non-vegetative 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.

If a detention pond is to be used initially as a temporary sediment basin, then appropriate details and notes shall be provided showing how the pond will increase the residence time of the sediment laden water and when and how the sediment basin is to be converted to a permanent detention pond. Typically this conversion occurs once the upland drainage area to the pond has been stabilized. The sequence of construction shall include notes on when these activities are to take place.

The use of earth berms/dikes, swales, sediment traps, outlet structures, and sediment basins are strongly encouraged over the use of silt fence and straw bales for long term projects and where concentrated run-off is present.

All disturbed areas that will not be disturbed again within fourteen (14) days shall be temporary or permanently stabilized with seed, mulch, and/or other appropriate measures within fourteen (14) days of grading or clearing operations ceasing. It is very important that disturbed soil be stabilized as soon as possible to prevent sediment run-off. For slopes 3:1 or steeper, they must be temporarily or permanently stabilized within 7 days of grading ceasing on those slopes.

- (14.) A stone construction exit per the Tennessee Sediment Control Handbook shall be provided for all construction ingress/egress points for all construction projects including single lot construction. This is required in order to prevent mud, sediment, and debris on Bluff City streets and public

ways at a level acceptable to the Stormwater Coordinator. Mud, sediment, and debris brought onto streets and public ways must be removed by the end of the day by machine, broom or shovel to the satisfaction of the Stormwater Coordinator. Failure to remove said sediment, mud or debris shall be deemed a violation of this ordinance.

It is the contractor's responsibility to prevent sediment from leaving the construction site and this includes sediment leaving the site by way of run-off flowing out the entrance or by vehicular tires carrying the sediment into the street. If there is run-off flowing down the construction exit to the street, a mountable stone berm or equivalent measures shall be used to direct the run-off to sediment control devices adjacent to the exit. The use of smaller stone or gravel other than shown in the Tennessee Sediment Control Handbook is not permitted.

- (15.) Proposed structures; location (to the extent possible) and identification of any proposed additional building, structures or development on the site.
- (16.) A description of on-site measures to be taken to recharge surface water in to the ground water system through infiltration, if appropriate for the site.
- (17.) The Plan must have the seal of the design professional responsible for creating the Plan. The stamped and signed Plan, if approved, shall be copied and be the official Plan that must be available in the field during construction.

14-608. Plan must contain measures to meet approved standards. The Stormwater Plan shall contain measures that will ensure development, construction or site work will meet or exceed the following standards:

- (1.) The development fits within the topography and soil conditions in a manner that allows stormwater and erosion and sedimentation control measures to be implemented in a manner satisfactory to the Bluff City Planning Commission. Development shall be accomplished so as to minimize adverse effects upon the natural or existing topography and soil conditions and to minimize the potential for erosion.
- (2.) Plans for development and construction shall seek to minimize cut and fill operations. Construction and development plans calling for excessive cutting and filling shall be justified to the Bluff City Planning Commission.
- (3.) During development and construction, adequate protective measures shall be provided to minimize damage from surface water to the cut face of excavations or the sloping surfaces of fills. Fills shall not encroach upon natural water courses, their flood plains; or constructed channels in a manner so as to adversely affect other properties.

- (4.) Pre-construction vegetation ground cover shall not be removed, destroyed, or disturbed prior to obtaining a Grading Permit and no more than 14 days prior to the start of grading or earth moving operations. Perimeter sediment controls shall be in place prior to the start of clearing or grading operations.
- (5.) Developers shall be responsible upon completion of land disturbing activities to leave slopes and developed or graded areas so that they will not erode. Such methods include, but are not limited to, re-vegetation, mulching, rip-rapping or gunniting, and retaining walls. Bank cuts and fills should preferably be 3 to 1 slopes or flatter; however, they shall not exceed a 2 to 1 slope without Planning Commission approval and must be permanently stabilized. Regardless of the method used, the objective is to leave the site as erosion and maintenance free as is practical.
- (6.) Provisions are implemented that accommodate any increased in stormwater run-off generated by the development in a manner in which the pre-development levels of run-off for the two (2) and ten (10) year storm events are not increased during and following development and construction. The Board of Mayor and Aldermen reserves the right to require stormwater management to maintain pre-development levels of run-off for the 25, 50, 100-year storm event, when it is determined that it is in the best interest of the Town to consider "partnering" with the developer to further reduce stormwater flows onto adjoining properties or if a known flooding problem exists downstream.

Any stormwater detention or retention pond shall also be designed to pass the 100-year storm (peak attenuation to the 100-year pre-development rate is not required) through the pond without over topping any portion of the dam. This can be accomplished through the principal spillway shall be installed on virgin soil and is not be placed on fill material or the dam. If it is not feasible to place the emergency spillway on virgin soil then the principal spillway shall be designed for the 100-year storm.

To the extent necessary, sediment in run-off water must be trapped by the use of sediment basins, silt traps or other sediment control measures until the disturbed area is stabilized. Structural controls shall be designed and maintained as required to prevent pollution. The Town strongly encourages the use of sediment traps/basins and earth berms/dikes for sediment control measures. Silt fence may be used but should not always be the first or only device considered.

All off site surface water flowing toward the construction or development area shall, to the extent possible, be diverted around the disturbed area by using berms, channels, or other measures as necessary. Limiting the amount of run-off, especially concentrated run-off, from flowing through the construction site can be extremely helpful in preventing or significantly



reducing sediment run-off. Under no circumstances, unless a drainage easement is obtained, may be diverted off site run-off be redirected onto off site properties or be diverted onto an off site property's existing drainage way in a manner that would cause harm to the property.

- (7.) All grading, vegetation, drainage, stormwater, erosion and sedimentation control mitigation measures shall conform to any or all Best Management Practices approved and revised from time to time by the Board of Mayor and Aldermen and meet the requirements of the current State of Tennessee's Erosion and Sediment Control Handbook.
- (8.) All perimeter sediment control devices such as earth berms/dikes, swales, sediment basins, sediment traps, and other perimeter drainage and sedimentation control measures shall be installed in conjunction with initial work and must be in place and functional prior to the initial grading operations. These measures must be maintained throughout the development process. Sediment basins and/or sediment traps may be temporary, but shall not be removed without the approval of the Stormwater Coordinator.
- (9.) A permanent undisturbed buffer shall be provided from the top of bank along both sides of streams, rivers, lakes, wetlands, or other Waters of the State except as necessary for the installation of utilities, development of roads crossing the waterway, trails and walkways, or construction of outfalls for stormwater facilities and related drainage improvements and for removal of invasive species to enhance the existing buffer. These utility, road, trail/walkway, and stormwater outfall disturbances shall be designed to minimize disturbance and impact on the Waters of the State and their buffers. Any disturbance to streams, wetlands, or other Waters of the State require an Aquatic Resource Alteration Permit through the State of Tennessee.

	Average buffer width (feet)	Minimum buffer width (feet)	Notes
Waters with available parameters for siltation or habitat alteration or unassessed waters	30	15	The criteria for the width of the buffer zone can be established on an average width basis at a project, as long as the minimum width of the buffer zone is more than the required minimum width at any measured location. If the new development or redevelopment site encompasses both sides of a stream, buffer averaging can be applied to both sides, but must be applied independently.
Exceptional Tennessee Waters or waters with unavailable parameters for siltation or habitat alteration	60	30	

The predominant vegetation within the minimum buffer width area should be trees. The remaining riparian buffers may be composed of herbaceous cover or infiltration-based SCMs.

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

If it is not practical to provide the required buffer or only a portion of the buffer can be provided, approval through the Town of Bluff City Board of Zoning Appeals must be obtained. Justification for this variance must be justified in accordance with the Town of Bluff City Board of Zoning Appeals criteria.

During construction, a temporary 30' average (15' minimum) undisturbed buffer or equivalent measures, shall be provided from the top of the stream bank. If the stream or Water of the State is impaired due to siltation or streamside habitat removal or is an exceptional Water of the State, the temporary undisturbed buffer during construction is increased to a 60' average (30' minimum) or equivalent measures.

The criteria for the width of the buffer zone can be established on an average width basis at a project, as long as the minimum width of the buffer zone is more than the required minimum width at any measured location. If the new development or redevelopment site encompasses both sides of a stream, buffer averaging can be applied to both sides, but must be applied independently.

- (10.) Soil and other materials shall not be temporarily or permanently stored in locations which would cause suffocation of root systems of trees intended to be preserved. Stockpiled soils shall have silt fencing or other sedimentation control measures surrounding, and shall be located away from street, curbs and drainage ways to prevent sediment from getting into local waters or streets and public ways.
- (11.) Land shall be developed to the extent possible in increments of workable size, which can be completed in a single construction season, Spring to Fall. Erosion and sediment control measures shall be coordinated with the sequence of construction, development and construction operations. Control measures such as berms, interceptor ditches, terraces, and sediment and silt traps shall be put into effect prior to any next stage of development.
- (12.) The permanent vegetation shall be installed on areas of the construction site that are outside of the building area, pad or footprint, as soon as utilities are in place and final grades are achieved. Without prior approval of an

alternate plan by the Bluff City Planning Commission, permanent or temporary soil stabilization must be applied to disturbed areas outside of the building pad or footprint within fourteen (14) days from substantial completion of grading, or where these disturbed areas outside the building site will remain unfinished for more than fourteen (14) calendar days. The building area should be stabilized with a concrete pad or the footprint covered with gravel.

- (13.) Stormwater management facilities and drainage structures shall, where possible, use natural topography and natural vegetation. In lieu thereof, these structures shall have planted trees and vegetation such as shrubs and permanent ground cover on their borders, except no woody vegetation such as trees and shrubs shall be planted on dam areas or within 25 feet of the dam. Plant varieties shall be those sustainable in a drainage way environment or as may be outlined in Best Management Practices.
- (14.) In many situations stormwater management facilities and drainage structures need to be fenced in order to protect public safety. The Bluff City Planning Commission may require fencing for any basin or structure. When fencing is required, the following specifications apply:

- (a) Height: minimum of forty-two (42) inches.
- (b) For residential areas and high visibility commercial areas, the fencing shall be split rail with black or green vinyl coated wire attached, or some other type of attractive fencing but shall not be chain link fencing.

For commercial and industrial uses, the fencing may be chain link up to six (6) feet tall. Under no circumstances may barbed wire be used.

- (c) A lockable access gate of a minimum width of twelve (12) feet must be provided to allow access by equipment and machinery as needed for maintenance.
- (d) An adequate access road to the gate sufficient for maintenance vehicles and equipment.

The Bluff City Planning Commission may consider and approve other fencing alternatives provided that the alternatives presented meet minimum safety and security objectives.

- (15.) Stormwater Plans must meet minimum requirements established in by the State of Tennessee's Construction General Permit, where applicable, and in their Erosion and Sediment Control Handbook. If there is a conflict

between these regulations and the State of Tennessee's Regulation, the most stringent regulation shall apply.

All erosion and sediment control devices shall be designed for the 2 year, 24 hour storm as a minimum. For drainage area of 10 acres or more to a single outfall point, a sediment basin(s) or equivalent measures shall be used and designed for the 2-year, 24-hour storm.

For projects which drain into an impaired or exceptional state water, the erosion and sediment control devices shall be designed for the 5 year, 24 hour storm and a sediment basin or equivalent measures shall be used for drainage areas of 5 acres or more to a single outfall point.

- (16.) For projects that are not exempt, provide permanent water quality stormwater management in accordance with Section 14-634.

The Town of Bluff City wishes to minimize the negative effects of development on our environment, on our economy, and on our health while at the same time reducing development costs for the developers and maintenance costs for the Town and the developer. All efforts should be utilized to implement site design and non-structural stormwater management practices to reduce and minimize runoff in new development. Efforts to enhance infiltration, passage or movement of water into the soil surface, reduction of hard surfaces, minimizing the concentration of runoff, and lengthening of the time of concentration should be a priority.

The following BMPs and stormwater credits can be applied to the peak and water quality stormwater calculations thereby reducing the size and cost of the stormwater BMPs:

- (a) Natural area conservation

The preservation of forest, wetlands, pasture land, and other sensitive areas of existing vegetation thereby retaining pre-development hydrologic and water quality characteristics. If these areas are undisturbed and placed in a recorded protective easement, these areas may be subtracted from the total site area when calculating water quality volume. The post development curve numbers for these areas can be modeled as forest in good condition.

- (b) Disconnection of rooftop runoff

Rooftop runoff that is disconnected from another impervious surface and directed over a pervious area will infiltrate into the soil or be filtered by the surface material. The longer the flow path of the water from the pipe across vegetated areas, the greater the filtering and

infiltration of the run-off which in turn improves water quality and reduces downstream run-off.

If the lot is graded to disperse the rooftop runoff as sheet flow through at least 50' of thick grass or other thick vegetation or through at least 25' of existing woodlands, 50% of the rooftop impervious area draining through the vegetation may be modeled as grass in good condition when calculating the post development curve number. If reforestation or planted landscape beds equal in area to 50% of the rooftop area is placed in the path of the disconnected rooftop runoff, then the remaining 50% of the rooftop impervious area may be modeled as grass in good condition when calculating the post development curve number.

If the rooftop runoff is discharged into a properly designed and constructed bioretention facility/rain garden onsite, 100% of the rooftop impervious area draining to the device may be modeled as grass in good condition when calculating the post development curve number.

In addition, under both conditions listed above, the total impervious area in the water quality calculations may be reduced relative to the impervious area reduction associated with the curve number credit.

If downspouts need to be piped away from building foundations to prevent damage to the foundations, the pipes must outfall at least ten (10) feet, preferable further, from any property line. If the downspouts are piped and the runoff cannot disperse in accordance with the above requirements, no stormwater credit is available.

(c) Disconnection of non-rooftop impervious runoff

Rooftop runoff that is disconnected from another impervious surface and directed over a pervious area will infiltrate into the soil or be filtered by the surface material. The longer the flow path of the water across vegetated areas, the greater the filtering and infiltration of the runoff which in turn improves water quality and reduces downstream runoff.

Discharging run-off from impervious surfaces onto pervious surfaces through the use of pervious pavers, permeable paving surfaces, rain gardens/bioretention facilities, grassed swales, use of open road sections in lieu of curbed roads, and by grading the site so that run-off travels from an impervious surface to a pervious surface before being collected in a drainage system. All of these increase filtering and infiltration of stormwater before the flows become concentrated

and this in turn improves water quality and reduces downstream run-off which means pipes, swales, ditches, and stormwater facilities can be smaller.

Avoid sending run-off from one impervious surface directly onto another impervious surface. Place pervious surfaces between impervious surfaces along the run-off path.

If the site is graded to disperse the impervious runoff as sheet flow through at least 50' of thick grass or other thick vegetation or through at least 25' of existing woodlands, 50% of the impervious area draining through the vegetation may be modeled as grass in good condition when calculating the post development curve number. If the impervious runoff is discharged into a properly designed and constructed bioretention facility/rain garden onsite, 100% of the impervious area draining to the device may be modeled as grass in good condition when calculating the post development curve number.

(d) Sheet flow

Maintain sheet flow for as long as possible before the run-off has to be collected in a stormwater conveyance system. Sheet flow increases infiltration and lengthens the time of concentration which in turn improves water quality and reduces run-off downstream. Spread out concentrated flows created by the development before they are discharged offsite using stilling basins, level spreaders, directing run-off through woodlands, or other means so the run-off returns to pre-development characteristics to meet the adequacy of outfall provision of this ordinance and to improve water quality and reduce run-off downstream.

(e) Grass channels in lieu of piping or hard surface channels.

(e) Environmentally sensitive development

Maintaining/not disturbing environmentally sensitive areas such as streams, stream buffers, existing woodlands, existing steep slopes, wetlands, etc., the reduction of cut and fill, excavating, etc. and the appropriate balance of buildings and parking on the development site.

(g) Improvements to and the reduction in the impervious areas on the development site. Design parking lots with the minimum amount of hard surface required to meet the zoning regulations. If additional parking area is desired, the Town strongly encourages the employee

and/or overflow parking areas to be constructed in a more pervious material than asphalt or concrete. If the parking regulations require excessive parking for your type of development, discuss the issue with the Town Staff. If the Town Staff feels a reduction in the number of required parking spaces is justified, a variance can be submitted to the Board of Zoning Appeals to reduce the parking requirements which in turn will reduce the amount of impervious surface installed.

(h) Increased use of trees, shrubs and ground cover, which absorb up to 14 times more rainwater than grass and require less maintenance.

(17.) Neighboring persons and property shall be protected from damage or loss resulting from an increase in stormwater run-off above the pre-development rate, soil erosion, or the deposit upon private property, public streets or right-of-ways of silt and debris transported by water from construction, excavating, grading, etc. associated with a development.

14-609. Permit application: In addition to the Stormwater Plan, applications for a Grading Permit involving land disturbing activities must include the following:

- (1.) Name of applicant.
- (2.) Business or residence address of applicant.
- (3.) Name and address of owner(s) of property involved in activity.
- (4.) Address and legal description of property, and names of adjoining property owners.
- (5.) Name, address and state license number of contractor, if different from applicant, and to the extent possible any subcontractor(s) who shall undertake the land disturbing activity and who shall implement the Stormwater Plan.
- (6.) A brief description of the nature, extent, and purpose of the land disturbing activity.
- (7.) Proposed schedule for starting and completing project.

14-610. Plan development at Developer's expense. Unless approved by the Board of Mayor and Aldermen, all Stormwater Plans shall be developed and presented at the expense of the owner/developer.

14-611. Plan submitted to Stormwater Coordinator: Three (3) copies of the Stormwater Plan shall be submitted directly to the Town who will direct a copy to the Stormwater Coordinator, and may provide copies to others for review. Any

insufficiencies and violations determined by the Stormwater Coordinator and others shall be noted and comments will be directed back to the Applicant/Developer. The Plan will then be revised as required prior to being presented to the Bluff City Planning Commission.

- 14-612. Plan submitted in number satisfactory to Planning Commission. The Bluff City Planning Commission shall determine the number of copies of the Stormwater Plan that must be provided to the Commission by the Owner/Developer.
- 14-613. Plan Review. The Bluff City Planning Commission shall review Stormwater Plans as quickly as possible while still allowing for a thorough evaluation of the problems and mitigation measures identified and addressed.
- 14-614. Grading permit and security. Following approval of the Stormwater Plan by the Planning Commission, a grading permit shall be obtained from the Stormwater Coordinator. The grading permit shall become null and void 180 calendar days from the date of issuance unless land disturbing activities have commenced, or land disturbing activities are not complete within eighteen (18) months from date of commencement of land disturbing activities.

The Stormwater Coordinator may, at his/her discretion, require a performance security or bond prior to the issuance of a grading permit to ensure that the stormwater practices are installed properly by the permittee as required by the approved stormwater plan. The amount of the security or bond shall be the total estimated construction cost of the stormwater BMPs including stabilization plus any reasonably foreseeable additional related costs, e.g., for damages and enforcement. The applicant shall provide an itemized construction cost estimate complete with unit prices which shall be subject to acceptance, amendment, or rejection by the Stormwater Coordinator. Alternatively, the Stormwater Coordinator shall have the right to calculate the estimate of construction costs.

The security or bond shall be made out to the Town of Bluff City with language acceptable to the Town Attorney. Upon the posting of the bond, the Developer must sign and have notarized an approved certification granting permission for any Stormwater Plan activities to be made on the property in case of default. If after eight (8) months from the start of construction it appears that the Stormwater Plan activities approved by the Bluff City Planning Commission will not be implemented within a twelve (12) month period, the Stormwater Coordinator, in conjunction with the Town Attorney, at his or her discretion after a Notice of Non-Compliance has been properly issued as outlined in Section 14-628 of this Chapter and the Developer has failed to comply, may cash said security or bond to complete all of the improvements approved or any portion of the Stormwater Plan activities it deems necessary to protect the health and safety of residents and to protect the quality of local waters.



The security or bond shall only be released by the Stormwater Coordinator following completion of construction and acceptance of the grading, vegetation, drainage, stormwater management, and erosion and sedimentation control measures. A registered design professional shall provide written certification that the structural BMPs are installed correctly per the approved Stormwater Plan or that they were installed differently than the approved Stormwater Plan but that they are still working properly and meet all applicable regulations. The Stormwater Coordinator shall make a final inspection of the site to ensure compliance with the approved stormwater plan, provisions of this ordinance, and/or the design professional's certification. Provisions for a partial pro-rata release of the security or bond based on completion of various development stages can be made at the discretion of the Stormwater Coordinator.

- 14-615. Stormwater Coordinator may require additional protective measures. The Stormwater Coordinator has the authority at their discretion to require ground cover or other remediation measures preventing stormwater, erosion and sediment run-off, if either determines after construction begins that the plan and/or implementation schedule approved by the Planning Commission does not adequately provide the protection intended in the ordinance and in the approval issued by the Commission. Additional protective measures required by the Stormwater Coordinator that fall under the authority of the Planning Commission are subject to appeal under the procedures outlined in Section 631 of this Chapter.
- 14-616. Certification of Design Professional: The registered design professional responsible for developing the Stormwater Plan may be required to provide written certification to the extent possible that the stormwater management facility approved by the Planning Commission have been implemented satisfactorily and are in compliance with the approved plan. The Town of Bluff City through the Stormwater Coordinator will ultimately have final approval authority through the issuance of Certificate of Occupancy as designated in Section 14-629.
- 14-618. Stormwater management facilities and drainage structures maintained. All on-site stormwater management and drainage structures shall be properly maintained by the owner/developer during all phases of construction and development so that they do not become a nuisance. Nuisance conditions shall include: improper storage resulting in uncontrolled run-off and overflow; stagnant water with concomitant algae growth, insect breeding, and odors; discarded debris; and safety hazards created by the facilities operation. When problems occur during any phase of construction and development, it is the responsibility of the developer to make the necessary corrections. Corrective actions will be monitored and inspected by the Stormwater Coordinator.

The Board of Mayor and Aldermen may accept ownership of stormwater management facilities in behalf of the Town under the terms set forth in Section

619 of this Chapter, however, unless the Town accepts ownership the Developer, or a legal entity acceptable to the Planning Commission, shall have on-going responsibility to see that the stormwater management facility is properly maintained and operational. The Developer shall provide the necessary permanent easements to provide Town personnel access to the stormwater management facilities and drainage structures for periodic inspection. A right-of-way to conduct such inspections shall be expressly reserved in the permit.

- 14-618. Improperly maintained stormwater management facilities and drainage structures a violation. The Stormwater Coordinator shall periodically monitor and inspect the care, maintenance and operation of stormwater management facilities and drainage structures during and after construction and development. Facilities found to be a nuisance, as defined in Section 14-618, are in violation of the ordinance and are subject to fines of up to \$5,000.00 per day for each day of violation (T.C.A. §68-621-1101) with each additional day considered a separate violation.
- 14-619. Town may take ownership of stormwater management facilities and drainage structures. The Bluff City Planning Commission shall have the authority to recommend to the Board of Mayor and Aldermen that the Town take ownership of stormwater management facilities and drainage structures provided that the Board and Commission feel the public interest is best served by the Town providing on-going responsibility for maintenance and up-keep. The Board of Mayor and Aldermen will consider the recommendations of the Planning Commission on a case-by-case basis. In such cases, approval of the transfer of ownership shall only occur after the Board of Mayor and Aldermen has received an inspection report from the Stormwater Coordinator, with the possible technical assistance of others, that certifies to the extent possible said devices have been properly constructed and landscaped, are operating effectively, and appropriate safety and protective measures have been implemented or constructed. The design professional for the project shall also certify that the stormwater management/drainage facility meets the standards outlined in Best Management Practices. Transfer of ownership to the Town shall occur at or near the completion of the subdivision or development and the Developer must provide fee simple title to the property on which the stormwater management or drainage structure is located and/or any necessary easements allowing the Town of Bluff City to get access to the facilities for routine maintenance and care.
- 14-620. Technical assistance The Town Staff and/or consultants for the Town are available for consultation and advice concerning stormwater management and erosion and sedimentation problems to all persons planning to develop land within the Town or under the subdivision jurisdiction of the Bluff City Planning Commission.
- 14-621. Stormwater Coordinator responsible for providing safeguards in projects less than one acre or utilizing less than three (3) lots. Projects undertaken within the

city limits of Bluff City that are not subject to review and approval of the Bluff City Planning Commission shall fall under the responsibility of the Enforcement Officers to see that the measures required in this Chapter to protect the health and safety of the people and to protect the quality of surface water are carried out as needed. The Stormwater Coordinator shall require reasonable drainage and erosion and sedimentation control measures as part of the grading permit process outlined in Section 14-622. Under no conditions shall the developer/contractor of a property allow silt or sedimentation to enter drainage ways or adjoining properties, or allow stormwater flows to adversely impact adjoining properties. Denuded areas, cuts, and slopes in areas outside the building site shall be properly covered within the same schedule as directed in Section 14-608(14) of this Chapter.

14-622. Grading permit also required for any project on less than one acre involving grading, filling, or excavating. A Grading Permit is also required for any development or construction activity on property one (1) acre or less except for: the normal functioning and operation of private agriculture and forest lands; any State or Federal agency not under the regulatory authority of the Town of Bluff City for stormwater management, sedimentation and erosion control; and minor land disturbing activities such as home gardens, individual home landscaping, repairs and maintenance. However, said development and construction activities do not require a formal Stormwater Plan unless specifically requested by the Planning Commission. The Stormwater Coordinator shall require that all grading, vegetation, drainage, stormwater, erosion and sedimentation control measures necessary shall be implemented, shall conform to any and all Best Management Practices, and shall meet the objectives established in this ordinance. Developers must also present to the Stormwater Coordinator a description of the measures that will be taken to address the requirements established in Sections 14-607 and 14-608 of this Chapter. These measures must be addressed prior to the Stormwater Coordinator issuing a Grading Permit. Measures preventing excess run-off and erosion must be in place prior to the commencement of grading and/or excavation.

14-623. Existing developed properties with drainage, erosion and sediment concerns. Properties of any size within the city limits of the Town of Bluff City that have been developed or in which land disturbing activities have previously been undertaken, are subject to the following requirements:

- (1.) Denuded areas still existing as of the second and final reading of this ordinance must be vegetated or covered under the standards and guidelines specified in the Best Management Practices adopted by the Board of Mayor and Aldermen, and on a schedule acceptable to the Stormwater Coordinator.
- (2.) Cuts and slopes must be properly covered with appropriate vegetation and/or retaining walls constructed.

- (3.) Drainage ways shall be properly covered in vegetation or secured with stones, etc. to prevent erosion.
- (4.) Junk, rubbish, etc. shall be cleared of drainage ways to prevent possible contaminate and pollution.
- (5.) Stormwater run-off in commercial areas, office or medical facilities, and multifamily residences of three (3) or more units shall be controlled to the extent reasonable to prevent pollution of local waters. Such control measures may include, but not be limited to, the following:
  - (a.) Oil skimmer/grit collector structure or other water quality device. These structures are designed to skim off floatables out of parking lots and other impervious surfaces, and allow solids of debris and sediment to settle before being discharged in a local waterway.
  - (b.) Stormwater management facilities.
  - (c.) Planting and/or sowing of vegetation and other nonstructural measures.
  - (d.) Rip-rapping, mulching, and other similar erosion control measures associated with local drainage ways.

14-624. Improvements needed at existing locations/developments determined by the Stormwater Coordinator. Improvements needed to provide drainage and sediment control in existing and completed developments shall be determined by the Stormwater Coordinator. The Stormwater Coordinator shall evaluate existing developments, parking areas, site work, and drainage ways to determine if additional measures to protect health and safety and water quality are needed. Recommendations shall be:

- (1.) Provided in writing to the property/business owner.
- (2.) Detailed as to specific actions required and why these actions are necessary.
- (3.) Made with a reasonable period of time for implementation.

14-625. Improvements required in existing developments normally at owner's expense. Stormwater control measures required in existing developed properties shall normally be undertaken at the property or business owner's expense. Unless, determined otherwise by the Board of Mayor and Aldermen, drainage and sedimentation control measures implemented shall be properly maintained by the property or business owner. The Board of Mayor and Aldermen, however, at its discretion in circumstances in which Board members feel the Town's

participation is essential to protecting the health and safety of residents and the water quality of Bluff City's drainage ways, may approve cost-sharing or total financial responsibility for needed drainage and sedimentation control measures.

- 14-626. Town may take responsibility for existing stormwater management facilities and drainage structures. The Bluff City Planning Commission may recommend that the Board of Mayor and Aldermen take responsibility for existing stormwater management facilities and drainage structures if the Commission determines that the general public is better served when said facilities are under the long-term maintenance responsibility of the Town. The Board of Mayor and Aldermen will consider these recommendations on a case-by-case basis. Facilities considered shall be accepted as outlined in Section 14-619 of this Chapter. The Bluff City Planning Commission may also recommend to the Board of Mayor and Aldermen that the Town participate in making certain improvements to existing facilities in addition to accepting responsibility for their long-term maintenance and care if the Commission feels said improvements are in the best interest of the general public.
- 14-627. Improvements required with existing developments subject to appeal. Improvements required by the Stormwater Coordinator as outlined in Sections 14-624 and 14-625 of this Chapter are subject to appeal by the property/business owners to the Bluff City Planning Commission as specified in Section 14-631.
- 14-628. Monitoring, reports, and inspections: The Stormwater Coordinator, with the possible assistance of others, shall make periodic inspections, during construction and development, of the land disturbing activities, the stormwater management system installations, and other activities requiring a grading permit to ensure compliance with the approved plan and Bluff City's Best Management Practices. For construction sites draining to siltation or habitat alteration impaired streams or exceptional waters of the State, the Town shall perform monthly inspections. Inspections will evaluate whether the measures required in the Stormwater Plan and/or grading permit and undertaken by the Developer are effective in controlling erosion. The right of entry to conduct such inspections shall be expressly reserved in the permit.

As a minimum, the owner/operator of any construction project which requires a Stormwater Plan is required to perform twice weekly inspections of their erosion and sediment control devices and to perform required maintenance in a timely manner. If the construction project requires a construction stormwater permit through the State of Tennessee, the owner/operator shall perform inspections, site assessments, maintenance of devices, and documentation in accordance with the State of Tennessee's current Construction General Permit.

For drainage areas of 10 acres or more to a single outfall (5 acres or more if draining to siltation or stream-side habitat alteration impaired or exceptional waters of the state), a site assessment by the design professional who prepared

the plans shall be performed within 1 month of grading or clearing operations starting to verify the installation, functionality and performance of all erosion and sediment control measures on the plans and in the SWPPP. Any issues shall be addressed immediately and the plans and SWPPP updated, if applicable

- 14-629. Certificate of Occupancy not issued until approvals. The Town of Bluff City will not issue a Certificate of Occupancy necessary to occupy any commercial or residential establishment until all aspects of the Stormwater Plan including stormwater management facilities have been completed, control devices constructed have been approved and accepted, and, if within a subdivision or commercial development, all paving, landscaping of public ways, and utilities, including street lighting if decorative lights are used, are approved and accepted.
- 14-630. Plan construction acceptance and security release. Stormwater Plan activities must be inspected and accepted by the Stormwater Coordinator before final plat approval and/or security release. If within a commercial development or subdivision, streets, sidewalks, curbs and alleys, landscaping, street lighting, storm drain, stormwater management, water, sewer, and any installation of electric, telephone, cable, and gas utilities must be approved and accepted by the appropriate official before final plat approval and/or security release.
- 14-631. Appeal of administrative action. Any person aggrieved by the imposition of a penalty, damage assessment, or the decisions of the Stormwater Coordinator or any Enforcement Officer may appeal said penalty, damage assessment, or other decisions to the Town's governing body.

The appeal shall be filed in writing with the Town Recorder or Clerk within fifteen (15) days from the date the penalty or damage assessment was served in any manner authorized by law or the decision was rendered

Upon receipt of an appeal, the Town's governing body shall hold a public hearing within thirty (30) days. At least ten (10) days prior to the hearing, the notice of the time, date, and location of said hearing shall be both published in a daily newspaper of general circulation and the aggrieved party shall be notified by registered mail to the address provided with the appeal request. The decision of the governing body shall be final.

Any alleged violator may appeal a decision of the Town's governing body pursuant to the provisions of TCA, Title 27, Chapter 8.

- 14-632. Town clean-up resulting from violations at Developer's/Owner's expense. Town staff is authorized at any time during construction and development to take remedial actions to prevent, clean-up, repair or otherwise correct situations in which water, sediment rock, vegetation, etc. ends up on public streets and/or right-of-ways resulting from violations of this ordinance; where necessary drainage erosion and sedimentation control measures have not been properly

implemented. In such cases, the cost of labor, equipment, and materials used will be charged to the Developer/Owner in addition to a service charge of \$100.00 per hour. The Town will invoice the Developer/Owner directly, and payment shall be received within fourteen (14) days. Failure to pay for remedial actions taken by the Town under this Section may result in the Town Attorney filing a lien against the property involved in the action, and may negate any intention by the Town to accept responsibility for any drainage and sediment control facilities. The decision of the Town to take remedial actions to protect the health and safety of the public in no way supplants or negates the authority of the appropriate Town Staff to issue citations for violations of this Ordinance.

14-633. Illicit Discharge and Illegal Dumping during construction. The owner/operator of the site or project must design, install, implement, and maintain effective pollution prevention measures to minimize the discharge of pollutants. At a minimum, such measures must be designed, installed, implemented and maintained to:

1. Minimize the discharge of pollutants from equipment and vehicle washing, wheel washwater, and other wash waters. Wash waters must be treated in a sediment basin or alternative control that provides equivalent or better treatment prior to discharge;
2. Minimize the exposure of building materials, building products, construction wastes, trash, landscape materials, fertilizers, pesticides, herbicides, detergents, sanitary waste and other materials present on the site to precipitation and to stormwater; and
3. Minimize the discharge of pollutants from spills and leaks and implement chemical spill and leak prevention and response procedures.

The following discharges are prohibited from construction sites:

1. Wastewater from washout of concrete, unless managed by an appropriate control.
2. Wastewater from washout and cleanout of stucco, paint, form release oils, curing compounds and other construction materials
3. Fuels, oils, or other pollutants used in vehicle and equipment operation and maintenance.
4. Soaps or solvents used in vehicle and equipment washing

14-634. Permanent Water Quality Stormwater Management Requirements

#### 14-634.1 General Requirements

- ( 1) Owners of land development activities not exempted under Section 14-634.3 must submit a Water Quality Management Plan. The Water Quality Management Plan shall be submitted as part of the Site Development Plans as required by the Town Zoning Ordinance, Subdivision Regulations, and other standards for development plans.
- ( 2) The Water Quality BMP Manual to be used shall be The Town of Bluff City's Manual, if developed, or if it has not been developed then the Northeast Tennessee Water Quality BMP Manual, latest edition, shall be used.
- ( 3) The Water Quality Management Plan shall include the specific required elements that are listed and/or described in the Water Quality BMP Manual. The Stormwater Coordinator may require submittal of additional information in the Water Quality Management Plan as necessary to allow an adequate review of the existing or proposed site conditions.
- ( 4) The Water Quality Management Plan shall be subject to any additional requirements set forth in the minimum subdivision regulations, Zoning Ordinance, or other Town Ordinances and regulations including Peak Stormwater Management and Erosion and Sediment Control.
- ( 5) Water Quality Management Plans shall be prepared and stamped by a design professional qualified to prepare stormwater and site plans in accordance with State of Tennessee law.
- ( 6) Other State and/or Federal permits that may be necessary for construction in and around streams and/or wetlands shall be approved prior to approval of a Water Quality Management Plan by the Town.
- ( 7) The approved Water Quality Management Plan shall be adhered to during grading and construction activities. Under no circumstance is the owner or operator of land development activities allowed to deviate from the approved Water Quality Management Plan without prior approval of a plan amendment by the Stormwater Coordinator.
- ( 8) The approved Water Quality Management Plan shall be amended if the proposed site conditions change after plan approval is obtained, or if it is determined by the Stormwater Coordinator during the course of grading or construction that the approved plan is inadequate.
- ( 9) The Water Quality Management Plan shall include a listing of any known legally protected state or federally listed threatened or endangered species and/or critical habitat located in the area of land disturbing activities and a description of the measures that will be used to protect them during and after grading and construction.



- (10) Water quality management facilities, BMPs, vegetated buffers and water quality volume reduction areas shown in Water Quality Management Plans shall be maintained through Covenants for Maintenance of Stormwater Facilities and Best Management Practices or other legal means as determined by the Stormwater Coordinator. The other means must be legally enforceable to ensure ownership, maintenance responsibility, and inspection requirements are provided for in perpetuity. The Covenants, or other legal means, must be approved by and shall be enforceable by the Town. The Covenants shall be recorded with the Register of Deeds at the Sullivan County Courthouse and shall run with the land and continue in perpetuity.
- (11) Water quality management facilities, BMPs, vegetated buffers and water quality volume reduction areas shown in Water Quality Management Plans shall be placed into a permanent Stormwater Facilities and Best Management Practices Easement held by the Town that is recorded with the Register of Deeds at the Sullivan County Courthouse.
- (12) A maintenance right-of-way or easement, having a minimum width of twenty (20') feet shall be provided to all water quality management facilities, BMPs, vegetated buffers and water quality volume reduction areas from a driveway, public road or private road.
- (13) Owners of land development activities not exempted from submitting a Water Quality Management Plan may be subject to additional watershed or site-specific requirements than those stated in this Ordinance in order to satisfy other local, State, and Federal water quality requirements. Areas subject to additional requirements may also include developments, redevelopments, or land uses that are considered pollutant hotspots or areas where the Stormwater Coordinator has determined that additional restrictions are needed to limit adverse impacts of the proposed development on water quality or channel protection.
- (14) The Stormwater Coordinator may waive or modify any of the requirements of Section 14-634.2 of this Ordinance if adequate water quality treatment and channel protection are suitably provided by a downstream or shared off-site Water Quality Management Facility, or if engineering studies determine that installing the required Water Quality Management Facilities or BMPs would actually cause adverse impact to water quality or cause increased channel erosion or downstream flooding.
- (15) This Ordinance is not intended to repeal, abrogate, or impair any existing easements, covenants, deed restrictions, or existing Ordinances and regulations. If provisions of this Ordinance and another regulation

conflict, that provision which is more restrictive or imposes higher standards or requirements shall control.

14-634.2 Design Criteria

- ( 1) All owners of developments or redevelopments who must submit a Water Quality Management Plan shall provide treatment of Stormwater Runoff in accordance with the following requirements:

The water quality treatment design storm is a 1-year, 24-hour storm event as defined by Precipitation-Frequency Atlas of the United States. Atlas 14. Volume 2. Version 3.0. U.S. Department of Commerce. National Oceanic and Atmospheric Administration (NOAA), National Weather Service, Hydrometeorological Design Studies Center, Silver Springs, Maryland or its digital product equivalent.

The water quality treatment volume (WQTV) is a portion of the runoff generated from impervious surfaces at a new development or redevelopment project by the design storm, as set forth below. SCMs must be designed, at a minimum, to achieve an overall treatment efficiency of at least 80% TSS removal from the WQTV.

The quantity of the WQTV depends on the type of treatment provided, as established in the following table:

SCM Treatment Type	WQTV	Notes
infiltration, evaporation, transpiration, and/or reuse	runoff generated from the first 1 inch of the design storm	Examples include, but are not limited to, bioretention, stormwater wetlands, and infiltration systems.
biologically active filtration, with an underdrain	runoff generated from the first 1.25 inches of the design storm	To achieve biologically active filtration, SCMs must provide minimum of 12 inches of internal water storage.

sand or gravel filtration, settling ponds, extended detention ponds, and wet ponds	runoff generated from the first 2.5 inches of the design storm or the first 75% of the design storm, whichever is less	Examples include, but are not limited to, sand filters, permeable pavers, and underground gravel detention systems. Ponds must provide forebays comprising a minimum of 10% of the total design volume. Existing regional detention ponds are not subject to the forebay requirement.
hydrodynamic separation, baffle box settling, other flow-through manufactured treatment devices (MTDs), and treatment trains using MTDs	maximum runoff generated from the entire design storm	Flow-through MTDs must provide an overall treatment efficiency of at least 80% TSS reduction.

The WQTV for a redevelopment project may be reduced by 20% for a redevelopment project. Redevelopment projects include sites with existing impervious surfaces and/or buildings where the overall amount of existing impervious area is maintained or reduced and for brownfield redevelopment.

Permanent SCMs must be installed, implemented, and maintained to meet the performance standards above and provide full treatment capacity within 72 hours following the end of the preceding rain event.

- (a) The Stormwater Runoff from the site must be treated for water quality prior to discharge from the site in accordance with the Stormwater treatment standards and criteria provided in the Water Quality BMP Manual and as found in the Peak Stormwater Management and Erosion and Sediment Control regulations.
- (b) The treatment of Stormwater Runoff shall be achieved through the use of one or more Water Quality Management Facilities and/or BMPs that are designed and constructed in accordance with the Water Quality BMP Manual or other BMPs as approved by the Stormwater Coordinator.
- (c) Methods, designs or technologies for Water Quality Management Facilities or BMPs that are not provided in the Water Quality BMP

Manual may be submitted for approval by the Stormwater Coordinator if it is proven that such methods, designs or technologies will meet or exceed the stormwater treatment standards set forth in the Water Quality BMP Manual and this Ordinance.

- (d) BMPs shall not be installed within public right-of-ways or on public property without prior approval of the Stormwater Coordinator.
- ( 2) All owners of developments or redevelopments who require a grading permit, plan approval, or subdivision approval shall establish, protect, and maintain a Vegetated Buffer along all streams, ponds, rivers, lakes, wetlands, or other Waters of the State.

	Average buffer width (feet)	Minimum buffer width (feet)	Notes
Waters with available parameters for siltation or habitat alteration or unassessed waters	30	15	The criteria for the width of the buffer zone can be established on an average width basis at a project, as long as the minimum width of the buffer zone is more than the required minimum width at any measured location. If the new development or redevelopment site encompasses both sides of a stream, buffer averaging can be applied to both sides, but must be applied independently.
Exceptional Tennessee Waters or waters with unavailable parameters for siltation or habitat alteration	60	30	

The predominant vegetation within the minimum buffer width area should be trees. The remaining riparian buffers may be composed of herbaceous cover or infiltration-based SCMs.

Water quality riparian buffer widths are measured from the top of bank also referred to as the “ordinary high-water mark.

If it is not practical to provide the required buffer or only a portion of the buffer can be provided, approval through the Town of Bluff City Board of Zoning Appeals must be obtained. Justification for this variance must be justified in accordance with the Boards of Zoning Appeals criteria.

Exemptions from this requirement are as follows:

- (a) Vegetated Buffers are not required around the perimeter of ponds that have no known connection to streams, other ponds, lakes, rivers, or wetlands.
- (b) Vegetated Buffers are not required around Water Quality Management Facilities, BMPs, or detention ponds that are designed,

constructed and maintained for the purposes of water quality and/or quantity control, unless expressly required by the design standards and criteria for the facility that are provided in the Water Quality BMP Manual.

- (c) The installation of utilities, development of roads crossing the waterway, trails and walkways, or construction of outfalls for stormwater facilities and related drainage improvements, and the removal of invasive species to enhance the existing buffer are allowed within the buffer. These utility, road, trail/walkway, and stormwater outfall disturbances shall be designed to minimize disturbance and impact on the Waters of the State and their buffers. Any disturbance to streams, wetlands, or other Waters of the State require an Aquatic Resource Alteration Permit through the State of Tennessee.
- ( 4) In addition to the above requirements, all owners of developments or redevelopments who must submit a Water Quality Management Plan shall:
  - (a) Provide erosion prevention and sediment control in accordance with the Ordinances and Regulations of the Town;
  - (d) Control stormwater drainage onsite and provide peak stormwater management in accordance with the Ordinances and Regulations of the Town; and
  - (e) Adhere to all local floodplain development requirements in accordance with Ordinances and Regulations of the Town.

#### 14-634.3 Exemptions

- ( 1) Owners of developments and redevelopments who conform to the criteria in Subsection 14-634.3(3) are exempt from the requirements of this Ordinance, unless the Stormwater Coordinator has determined that treatment of Stormwater Runoff for water quality is needed to order to satisfy local or State NPDES, TMDL or other regulatory water quality requirements, or the proposed development will be a pollutant Hotspot, or to limit adverse water quality or channel protection impacts of the proposed development.
- ( 2) The exemptions listed in Subsection 14-634.3(3) shall not be construed as exempting the owners of developments and redevelopments from compliance with stormwater requirements stated in the minimum Subdivision Regulations, Zoning Ordinance, or other Town Ordinances

and regulations including peak stormwater management and erosion prevention and sediment control.

- ( 3) The following developments and redevelopments are exempt from the requirements for a Water Quality Management Plan:
  - (a) Developments or redevelopments that disturb less than one (1) acre of land. No exemption is granted if the development or redevelopment is part of a larger common plan of development or sale that would potentially disturb one (1) acre or more and the Stormwater Runoff from the development or redevelopment is not treated for water quality via a downstream or regional Water Quality Management Facility or BMP that meets the requirements of this Ordinance;
  - (b) Minor land disturbing activities such as residential or non-residential repairs, landscaping, or maintenance work;
  - (c) Public utility service connections, unless such activity is carried-out in conjunction with the clearing, grading, excavating, transporting, or filling of a lot or lots for which a Water Quality Management Plan would otherwise be required;
  - (d) Installation, maintenance, or repair of individual septic tank lines or drainage fields, unless such activity is carried out in conjunction with the clearing, grading, excavating, transporting, or filling of a lot or lots for which a Water Quality Management Plan would otherwise be required;
  - (e) Agricultural activities;
  - (f) Emergency work to protect life, limb or property, and emergency repairs.

#### 14-634.4 Special Pollution Reduction Requirements

- ( 1) A Special Pollution Reduction Plan shall be required for the following land uses, which are considered pollutant Hotspots:
  - (a) Vehicle, truck or equipment maintenance, fueling, washing or storage areas including but not limited to: automotive dealerships, automotive repair shops, and car wash facilities;
  - (b) Recycling and/or salvage yard facilities;
  - (c) Restaurants, grocery stores, and other food service facilities;

- (d) Commercial facilities with outside animal housing areas including animal shelters, fish hatcheries, kennels, livestock stables, veterinary clinics, or zoos;
  - (e) Other producers of pollutants identified by the Stormwater Coordinator as a pollutant Hotspot using information provided to or collected by him/her or his/her representatives, or reasonably deduced or estimated by him/her or his/her representatives from engineering or scientific study.
- ( 2) A Special Pollution Reduction Plan may be required for land uses or activities that are not identified by this Ordinance as Hotspot land uses but are deemed by the Stormwater Coordinator to have the potential to generate concentrations of pollutants in excess of those typically found in stormwater.
  - ( 3) The Special Pollution Reduction Plan shall be submitted as part of the Water Quality Management Plan and the BMPs submitted on the plan shall be subject to all other provisions of this Ordinance.
  - ( 4) Best Management Practices specified in the Special Pollution Reduction Plan must be appropriate for the pollutants targeted at the site.
  - ( 5) A Special Pollution Reduction Plan will be valid for a period of five (5) years, at which point it must be renewed. At the time of renewal, any deficiency in the pollutant management method must be corrected.

#### 14-634.5 Security

- ( 1) A security that guarantees satisfactory completion of construction work related to Water Quality Management Facilities, channel protection, and/or the establishment of Vegetated Buffers may be required. Final plat approval or certificate of occupancy may be granted if items in 14-634.5 (3) and (4) are completed or if a security guarantees their completion.
- ( 2) The security shall be in conformance with Section 14-614.
- ( 3) Prior to approval of a final subdivision plat, release of a security, and/or the issuance of an occupancy permit, the property owner/developer shall provide the Town with an executed and recorded copy of the protective covenants and an executed and recorded copy of the easement plat showing the easements associated with the locations of the Best Management Practices, Water Quality Management Facilities, Vegetated Buffers, Water Quality Volume Reduction Areas, and access easements to said facilities.

- ( 4) Prior to approval of a final subdivision plat, release of a security, and/or the issuance of an occupancy permit, the property owner/developer shall provide the Town with an accurate record drawing of the property for all the Best Management Practices, Water Quality Management Facilities, Vegetated Buffers, and Water Quality Volume Reduction Areas.

#### 14-634.6 Record Drawings and Design Certification

- ( 1) Prior to approval of a final subdivision plat, release of a security, and/or the issuance of an occupancy permit, the property owner/developer has to provide the Town with an accurate record drawing of the property for all the Best Management Practices, Water Quality Management Facilities, Vegetated Buffers, and Water Quality Volume Reduction Areas shown on the approved Water Quality Management Plan(s).
- ( 2) The boundaries of Water Quality Management Facilities, BMPs, Vegetated Buffers, or Water Quality Volume Reduction Areas shall be shown on the record drawings along with any other information in accordance with guidance provided in the Water Quality BMP Manual.
- ( 3) Record drawings shall include sufficient design information to show that Water Quality Management Facilities required by this Ordinance will operate as approved. This shall include all necessary computations used to determine percent pollutant removal and the flow rates and treatment volumes required to size Water Quality Management Facilities and BMPs.
- ( 4) The easements associated with the Water Quality Management Facilities, BMPs, Vegetated Buffers, or Water Quality Volume Reduction Areas shall be shown on the record drawings along with any other information in accordance with guidance provided in the Water Quality BMP Manual.
- ( 5) The record drawings shall be stamped by the appropriate design professional required to stamp the Water Quality Management Plan and/or a registered land surveyor licensed to practice in the State of Tennessee.

#### 14-634.7 Inspections and Maintenance

- ( 1) Right of Entry
  - (a) During and after construction, the Stormwater Coordinator or designee may enter upon any property which has a Water Quality



Management Facility, BMP, Vegetated Buffer, or Water Quality Volume Reduction Area during all reasonable hours to inspect for compliance with the provisions of this Ordinance, or to request or perform corrective actions.

(b) Failure of a property owner to allow such entry onto a property shall be cause for the issuance of a violation, stop work order, withholding of a certificate of occupancy, and/or civil penalties.

( 2) Requirements

(a) The owner(s) of Existing Stormwater Facilities, Water Quality Management Facilities, BMPs, Vegetated Buffers, and Water Quality Volume Reduction Areas shall inspect and maintain all devices and areas in accordance with the Covenants for Maintenance of Stormwater Facilities and Best Management Practices.

(b) Inspection and maintenance of privately-owned Existing Stormwater Facilities, Water Quality Management Facilities, Best Management Practices, Vegetated Buffers, and Water Quality Volume Reduction Areas shall be performed at the sole cost and expense of the owner(s) of such facilities/areas. The Best Management Practices owner shall perform routine inspections on at least an annual basis. Inspections shall be performed by a person familiar with the control measures. The Best Management Practices owner shall maintain documentation of these inspections. A comprehensive inspection of all BMPs shall be conducted once every 5 years by a professional engineer or landscape architect, or other qualified professional familiar with applicable SCM design and maintenance requirements. Records stating the BMP, date, latitude/longitude, address, BMP owner information, description of BMP, photos of BMP and any corrective action needed and when performed shall be maintained by the BMP owner.

(c) Inspections and maintenance shall be performed in accordance with specific requirements and guidance provided in the Covenants for Maintenance of Stormwater Facilities and Best Management Practices and the Water Quality BMP Manual. Inspection and maintenance activities shall be documented by the property owner (or his/her designee), and such documentation shall be maintained by the property owner for a minimum of three (3) years, and shall be made available for review by the Stormwater Coordinator upon request.

- (d) The Stormwater Coordinator has the authority to impose more stringent inspection requirements as necessary for purposes of water quality protection and public safety.
  - (e) The removal of sediment and/or other debris from Existing Stormwater Facilities, Water Quality Management Facilities, and Best Management Practices shall be performed in accordance with all Town, State, and Federal laws and the Water Quality BMP Manual. The Stormwater Coordinator may stipulate additional guidelines if deemed necessary for public safety.
  - (f) The Stormwater Coordinator may order corrective actions to Best Management Practices, Existing Stormwater Facilities, Water Quality Management Facilities, Vegetated Buffer Areas, and/or Water Quality Volume Reduction Areas as are necessary to properly maintain the facilities/areas within the Town for the purposes of water quality treatment, channel erosion protection, adherence to local performance standards, and/or public safety. When corrective action is required, the BMP owner must initiate the correction action within 30 days of notice. If the property owner(s) fails to perform corrective action(s), the Stormwater Coordinator shall have the authority to order the corrective action(s) to be performed by the Town or others. In such cases where a performance bond exists, the Town shall utilize the bond to perform the corrective actions. In such cases where a performance bond does not exist, the cost of labor, equipment, and materials used will be charged to the Developer/Owner in addition to a service charge of \$100.00 per hour. The Town will invoice the Developer/Owner directly, and payment shall be received within fourteen (14) days. Failure to pay for remedial actions taken by the Town under this Section may result in the Town Attorney filing a lien against the property involved in the action, and may negate any intention by the Town to accept responsibility for any Best Management Practices, Existing Stormwater Facilities, Water Quality Management Facilities, Vegetated Buffer Areas, and/or Water Quality Volume Reduction Areas. The decision of the Town to take remedial actions to protect the health and safety of the public in no way supplants or negates the authority of the appropriate Town Staff to issue citations for violations of this Ordinance.
- ( 3) Any alteration, improvement, or disturbance to Water Quality Management Facilities, BMPs, Vegetated Buffers, or Water Quality Volume Reduction Areas shown in the Water Quality Management Plan, certified record drawings, and/or easement plats shall be prohibited without authorization from the Stormwater Coordinator. This does not include alterations that must be made in order to maintain the intended

performance of the Water Quality Management Facilities, BMPs, Vegetated Buffers, or Water Quality Volume Reduction Areas.

#### 14-635 Illicit Discharge and Illegal Connection Regulations

##### 14-635.1. Prohibition of illicit discharges.

No person shall throw, drain, illegally dump, or otherwise discharge, cause, or allow others under its control to throw, drain, or otherwise discharge into the Town of Bluff City storm drain system any pollutants or waters containing any pollutants, other than stormwater. The Town should identify areas that would be considered "hot spots" for pollution runoff. These sites should be investigated for potential highly contaminated runoff and, if found, enforcement action shall occur.

##### 14-635.2. Exemptions.

The following discharges are exempt from the prohibition Section 14-635.1 above:

- ( 1) Water line flushing performed by a governmental agency;
- ( 2) Landscape irrigation or lawn watering with potable water;
- ( 3) Diverted stream flows permitted by the State of Tennessee;
- ( 4) Rising ground water;
- ( 5) Ground water infiltration to storm drains;
- ( 6) Uncontaminated pumped ground water
- ( 7) Foundation or footing drains (not including active groundwater dewatering systems);
- ( 8) Crawl space pumps;
- ( 9) Air conditioning condensation;
- (10) Springs;
- (11) Natural riparian habitat or wetland flows;
- (12) Discharges or flows from firefighting;
- (13) Individual residential washing of vehicles;
- (14) Vehicle washing for non-profit fund raising purposes as long as the activity does not negatively impact waters of the State;
- (15) Swimming pools (if de-chlorinated-typically less than one part per million chlorine);
- (16) Street wash waters resulting from normal street cleaning operations as long as the water is cold and does not contain any soap, detergent, degreaser, solvent, emulsifier, dispersant, or other harmful cleaning substance;
- (17) Dye testing permitted by the Town of Bluff City;
- (18) Any other water source not containing pollutants;

- (19) Other discharges specified in writing by the Town of Bluff City as being necessary to protect public health and safety;
- (20) Discharges permitted under an NPDES permit or order issued to the discharger and administered under the authority of the state and Federal Environmental Protection Agency, provided that the discharger is in full compliance with all requirements of the permit, waiver, or order and other applicable laws and regulations, and provided that written approval has been granted for any discharge to the Town of Bluff City storm drain system.

#### 14-635.3. Prohibition of illegal connections.

The construction, connection, use, maintenance or continued existence of any illegal connection to the Town of Bluff City storm drain system is prohibited.

- ( 1) This prohibition expressly includes, without limitation, illegal connections made in the past, regardless of whether the connection was permissible under law or practices applicable or prevailing at the time of connection.
- ( 2) A person violates this chapter if the person connects a line conveying sewage to the Town of Bluff City storm drain system, or allows such a connection to continue.
- ( 3) Improper connections in violation of this chapter must be disconnected and redirected, if necessary, to an approved onsite wastewater management system or the sanitary sewer system upon approval of the receiving sanitary sewer agency.
- ( 4) Any drain or conveyance that has not been documented in plans, maps or equivalent, and which may be connected to the storm sewer system, shall be located by the owner or occupant of that property upon receipt of written notice of violation from the enforcement officer requiring that such locating be completed. Such notice will specify a reasonable time period within which the location of the drain or conveyance is to be completed, that the drain or conveyance be identified as storm sewer, sanitary sewer or other, and that the outfall location or point of connection to the storm sewer system, sanitary sewer system or other discharge point be identified. Results of these investigations are to be documented and provided to the enforcement officer.

#### 14-635.4. Storm drain inlet labeling.

Storm drain inlets installed in new public streets whether installed by private parties or the Town of Bluff City shall be stenciled with the words “Don’t Dump – Drains to Stream” using traffic bearing paint and minimum 2” high letters.

The stenciling shall be placed in a conspicuous location adjacent to or on the inlet. The preferred location for the stenciling is outside of the road pavement

on the curb, if applicable, or the top of the inlet structure. Other alternate locations for the stenciling if the top of the curb or structure does not work are the pavement or sidewalk.

Other methods such as storm drain markers or castings in the structures to provide the words “Don’t Dump – Drains to Stream” adjacent to or on the inlets may be used with the building inspector’s approval and as long as the wording is conspicuous and long lasting.

The stenciling or other method of labeling installed by private developers within their new developments shall be guaranteed by the private developer for one (1) year from the time of installation and after this guarantee period the Town of Bluff City shall be responsible for maintenance. Labeling installed by the Town of Bluff City or citizen groups in existing public streets shall be maintained by the Town of Bluff City from the time of installation. Other wording besides “Don’t Dump – Drains to Stream” may be used with the Stormwater Coordinator’s approval and as long as the intent is the same.

#### 14-635.5. Watercourse protection.

Every person owning property through which a watercourse passes, or such person’s lessee, shall keep and maintain that part of the watercourse within the property boundaries free of trash, debris, and other items and obstacles that would pollute, contaminate, or significantly retard the flow of water through the watercourse.

#### 14-635.6. Industrial construction activity discharges.

Any person subject to an industrial or construction activity NPDES stormwater discharge permit shall comply with all provisions of such permit. Proof of compliance with said permit may be required in a form acceptable to the enforcement officer prior to allowing discharges to the Town of storm drain system.

#### 14-635.7. Access and inspection of properties and facilities.

The Stormwater Coordinator or enforcement officer shall be permitted to enter and inspect properties and facilities at reasonable times as often as may be necessary to determine compliance with this chapter.

- ( 1) If a property or facility has security measures in force which require proper identification and clearance before entry into its premises, the owner or operator shall make the necessary arrangements to allow access for representatives of the enforcement officer.

- ( 2) The owner or operator shall allow the Stormwater Coordinator or enforcement officer ready access to all parts of the premises for the purposes of inspection, sampling, photography, videotaping, examination and copying of any records that are required under the conditions of an NPDES permit to discharge stormwater.
- ( 3) The Stormwater Coordinator or enforcement officer shall have the right to set up on any property or facility such devices as are necessary in the opinion of the enforcement officer to conduct monitoring and/or sampling of flow discharges.
- ( 4) The Stormwater Coordinator or enforcement officer may require the owner or operator to install monitoring equipment and perform monitoring as necessary, and make the monitoring data available to the enforcement officer. This sampling and monitoring equipment shall be maintained at all times in a safe and proper operating condition by the owner or operator at his/her own expense. All devices used to measure flow and quality shall be calibrated to ensure their accuracy.
- ( 5) Any temporary or permanent obstruction to safe and easy access to the property or facility to be inspected and/or sampled shall be promptly removed by the owner or operator at the written or oral request of the Stormwater Coordinator or enforcement officer and shall not be replaced. The costs of clearing such access shall be borne by the owner or operator.
- ( 6) Unreasonable delays in allowing the Stormwater Coordinator or enforcement officer access to a facility are a violation of this chapter.
- ( 7) If the Stormwater Coordinator or enforcement officer has been refused access to any part of the premises from which stormwater is discharged, and the enforcement officer is able to demonstrate probable cause to believe that there may be a violation of this chapter, or that there is a need to inspect and/or sample as part of a routine inspection and sampling program designed to verify compliance with this chapter or any order issued hereunder, or to protect the overall public health, safety, environment and welfare of the community, then the enforcement officer may seek issuance of a search warrant from any court of competent jurisdiction.

14-635.8. Responsibility for discoveries, containment and cleanup.

Notwithstanding other requirements of law, as soon as any person responsible for a facility, activity or operation, or responsible for emergency response for a facility, activity or operation has information of any known or suspected release of pollutants or non-stormwater discharges from that facility or operation which

are resulting or may result in illicit discharges or pollutants discharging into stormwater, the Town of Bluff City storm drain system, state waters, or water of the U.S., said person shall take all necessary steps to ensure the discovery, containment, and cleanup of such releases so as to minimize the effects of the discharge.

14-635.9. Responsibility for notification.

The person responsible for a facility operation or premises on which a suspected release of pollutants or non-stormwater discharge may be generated shall notify the authorized enforcement agency in person, by phone, or facsimile no later than 24 hours of the nature, quantity and time of occurrence of the discharge. Notifications in person or by phone shall be confirmed by written notice addressed and mailed to the Stormwater Coordinator or enforcement officer within three (3) business days of the phone or in person notice.

14-635.10. Records required.

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. Said person shall also take immediate steps to ensure no recurrence of the discharge or spill.

14-635.11. Immediate notification of hazardous discharge.

In the event of such a release of hazardous materials, emergency response agencies and/or other appropriate agencies shall be immediately notified through emergency dispatch services.

14-635.12. Failure to notify a violation.

Failure to provide notification of a release as provided above is a violation of this chapter.

14-635.13. Violations.

It shall be unlawful for any person to violate any provision or fail to comply with any of the requirements of this chapter.

- ( 1) Any person who has violated or continues to violate the provisions of this chapter, may be subject to the enforcement actions outlined in this section or may be restrained by injunction or otherwise abated in a manner provided by law.

- ( 2) In addition to the enforcement processes and penalties provided, any condition caused or permitted to exist in violation of any of the provisions of this chapter is a threat to public health, safety, welfare, and environment and is declared and deemed a nuisance, and may be abated by injunctive or other equitable relief as provided by law.

14-635.14. Violation an immediate danger to public health or safety.

In the event the violation constitutes an immediate danger to public health or public safety, the Stormwater Coordinator or enforcement officer is authorized to enter upon the subject private property, without giving prior notice, to take any and all measures necessary to abate the violation and/or restore the property. The Stormwater Coordinator or enforcement officer is authorized to seek costs of the abatement as outlined in § 14-635.18.

14-635.15. Notice of violation.

Whenever the Stormwater Coordinator or enforcement officer finds that a violation of this section has occurred, the Stormwater Coordinator or enforcement officer may order compliance by written notice of violation.

- ( 1) The notice of violation shall contain:

- (a) The name and address of the alleged violator;
- (b) The address when available or a description of the building, structure or land upon which the violation is occurring, or has occurred;
- (c) A statement specifying the nature of the violation;
- (d) A description of the remedial measures necessary to restore compliance with this chapter and a time schedule for the completion of such remedial action;
- (e) A statement of the penalty or penalties that shall or may be assessed against the person to whom the notice of violation is directed; and
- (f) A statement that the determination of violation may be appealed to the enforcement officer by filing a written notice of appeal within thirty (30) days of service of notice of violation.

- ( 2) Such notice may require without limitation:

- (a) The performance of monitoring, analyses, and reporting;
- (b) The elimination of illicit discharges and illegal connections;
- (c) That violating discharges, practices, or operations shall cease and desist.
- (d) The abatement or remediation of stormwater pollution or contamination hazards and the restoration of any affected property;
- (e) Payment of costs to cover administrative and abatement costs; and,



- (f) The implementation of pollution prevention practices.

14-635.16. Appeal of notice of violation.

Any person receiving a notice of violation may appeal the determination of the Stormwater Coordinator or enforcement officer in accordance with Section 14-631.

14-635.17. Enforcement measures after appeal.

If the violation has not been corrected pursuant to the requirements set forth in the notice of violation, or, in the event of an appeal, within thirty (30) days of the decision of the appropriate authority upholding the decision of the enforcement officer, then representatives of the Stormwater Coordinator or enforcement officer may enter upon the subject private property and are authorized to taken any and all measures necessary to abate the violation and/or restore the property. It shall be unlawful for any person, owner, agent or person in possession of any premises to refuse to allow the government agency or designated contractor to enter upon the premises for the purposes set forth above.

14-635.18. Costs of abatement of the violation.

Within thirty (30) days after abatement of the violation, the owner of the property will be notified of the cost of abatement, including administrative costs.

- ( 1) The property owner may file a written protest objecting to the assessment or to the amount of the assessment within 30 days of such notice. If the amount due is not paid within thirty (30) days after receipt of the notice, or if an appeal is taken, within thirty (30) days after a decision on said appeal upholds the assessment, the charges shall become a special assessment against the property and shall constitute a lien on the property for the amount of the assessment.
- ( 2) Any person violating any of the provisions of this article shall become liable to the Town of Bluff City by reason of such violation.

14-635.19. Remedies not exclusive.

The remedies listed in this section are not exclusive of any other remedies available under any applicable federal, state or local law and the Stormwater Coordinator or enforcement officer may seek cumulative remedies.

The Stormwater Coordinator or enforcement officer may recover attorney's fees, court costs, and other expenses associated with enforcement of this section, including sampling and monitoring expenses.

#### 14-636. VariANCES

- ( 1) VariANCES to the requirements of this Chapter shall be handled by the Board of Zoning Appeals.
- ( 2) The Board of Zoning Appeals shall not approve variANCES that cause the Town to be in violation of any state or Federal NPDES permit, TMDL, or other applicable water quality regulation.

#### 14-637. Penalties and Enforcement.

- (1) Any Developer or person who shall commit any act declared unlawful under this Chapter, who violates any provision of this Chapter, who violates the provisions of any permit issued pursuant to this Chapter, or who fails or refuses to comply with any lawful communication or notice to abate or take corrective action by the Stormwater Coordinator or any authorized Enforcement Officer or the Bluff City Planning Commission, shall be guilty of a violation of this municipal ordinance, and each day of such violation or failure to comply shall be deemed a separate offense and punishable accordingly. Upon conviction, the Developer or person may be subject to fines of up to \$5,000.00 per day for each day of violation (T.C.A. §68-221-1106. Citations for violations may be issued by any Enforcement Officer.
- (2) In assessing the penalty, the Stormwater Coordinator may consider:
  - a. The harm done to the public health or the environment;
  - b. Whether the penalty imposed will be a substantial economic deterrent to the illegal activity;
  - c. The economic benefit gained by the Violator;
  - d. The amount of effort put forth by the Violator to remedy this violation;
  - e. Any unusual or extraordinary enforcement costs incurred by the Town;
  - f. The amount of penalty established by ordinance or resolution for specific categories of violations; and
  - g. Any equities of the situation which outweigh the benefit of imposing any penalty or damage assessment.
- (3) In addition to any penalty, the Town may recover:
  - a. All damages proximately caused by the Violator to the Town, 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 Town's maintenance of stormwater facilities when the user of such facilities fails to maintain them as required by ordinance.

- (4) The Town 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.
- (5) The remedies set forth in the section shall be cumulative, not exclusive, and it shall not be a defense to any action, civil or criminal, that one or more of the remedies set forth herein has been sought or granted.
- (6) If the Stormwater Coordinator determines that a property owner, developer, permit holder, or other entity or individual (Violator) is in Violation of this Chapter, the following procedures shall apply:
  - a. A Notice from the Stormwater Coordinator or Enforcement Officer shall be served on the Violator either by registered or certified mail, delivered by hand to the Violator or an agent or employee of the permittee supervising the activities, or by posting the notice at the property in a visible location, that the Violator is in Non-Compliance.
  - b. The Notice of Non-Compliance shall specify the measures needed to comply and shall specify the time within which such corrective measures shall be completed. The Stormwater Coordinator or Enforcement Officer shall require a reasonable period of time for the Violator to implement measures bringing the project into compliance, however, if it is determined by the Stormwater Coordinator or Enforcement Officer that health and safety factors or the damage resulting from being non-compliant is too severe, immediate action may be required.
  - c. If the Violator holder fails to comply within the time specified, the Violator may be subject to the revocation of any permits. In addition, the Violator shall be deemed to be in violation of this ordinance and upon conviction shall be subject to the penalties provided in this ordinance.
  - d. In conjunction with the issuance of a Notice of Non-Compliance, or subsequent to the permittee not completing the corrective measures directed in the time period required, the Stormwater Coordinator, or his designee, may issue an Order requiring all or part of the land disturbing activities on the site be stopped. The Stop Work Order may be issued with or as part of the Notice of Non-Compliance, or may be delivered separately in the same manner as directed in Section 14-637.6.a.

14-638. Severability. If any provision of this Ordinance is held to be unconstitutional or invalid, such unconstitutionality or invalidity shall not affect any remaining provisions.