

## Chapter 19

### Stormwater Management & Erosion Control

#### Sections:

19.010	Purpose
19.020	Definitions
19.030	Authority
19.040	Applicability
19.041	Regulated Activities
19.042	Exempt Activities
19.043	Activities Allowed to Request Exemption
19.050	Administration
19.060	Permits and Procedures
19.070	Fees
19.080	Surety
19.090	Waivers
19.100	Inspections
19.110	Enforcement
19.120	Stormwater Management Plan
19.130	Operation and Maintenance Plans
19.140	Severability

#### **19.010 Purpose**

- A. Increased volumes of stormwater, contaminated stormwater runoff from impervious surfaces, and soil erosion and sedimentation are major causes of:
1. impairment of water quality and decreased flow in lakes, ponds, streams, rivers, wetlands and groundwater;
  2. decreased flow in lakes, ponds, streams, rivers, wetlands and groundwater;
  3. contamination of drinking water supplies;
  4. erosion of stream channels;
  5. alteration or destruction of aquatic and wildlife habitat;
  6. flooding;
  7. overloading or clogging of municipal catch basins and storm drainage systems; and
  8. flooding and erosion on abutting properties.

The United States Environmental Protection Agency has identified sedimentation from land disturbance activities and polluted stormwater runoff from land development and redevelopment as major sources of water pollution, impacting drinking water supplies, natural habitats, and recreational resources. Regulation of activities that result in the disturbance of land and the creation of stormwater runoff is necessary for the protection of the Town of Tewksbury water bodies and groundwater resources, to safeguard the health, safety, and welfare of the general public and protect the natural resources of the Town.

In addition, this bylaw establishes stormwater management standards for the final conditions that result from development and redevelopment projects to minimize adverse impacts offsite and downstream which would be borne by abutters, townspeople and the general public.

B. The **objectives** of this Bylaw are to:

1. protect water resources;
2. require practices that eliminate soil erosion and sedimentation;
3. control the volume and rate of stormwater runoff resulting from land disturbance activities in order to minimize potential impacts of flooding;
4. require practices to manage and treat stormwater runoff generated from new development and redevelopment;
5. protect groundwater and surface water from degradation or depletion;
6. promote infiltration and the recharge of groundwater;
7. prevent pollutants from entering the municipal storm drain system;
8. prevent flooding and erosion to abutting properties;
9. ensure that soil erosion and sedimentation control measures and stormwater runoff management practices are incorporated into the site planning and design process and are implemented and maintained;
10. ensure adequate long-term operation and maintenance of stormwater best management practices so that they work as designed;
11. require practices to control waste such as discarded building materials, concrete truck washout, chemicals, litter, and sanitary waste at construction sites that may cause adverse impacts to water quality;
12. comply with state and federal statutes and regulations relating to stormwater discharges; and
13. establish the Town of Tewksbury legal authority to ensure compliance with the provisions of this Bylaw through inspection, monitoring and enforcement.

## **19.020 Definitions**

**ABUTTER:** The owner(s) of land abutting the land disturbance site.

**AGRICULTURE:** The normal maintenance or improvement of land in agricultural or aquacultural use, as defined by the Massachusetts Wetlands Protection Act (M.G.L. c. 131 § 40) and its implementing regulations (310 CMR 10.00).

**ALTERATION OF DRAINAGE CHARACTERISTICS:** Any activity on an area of land that changes the water quality, or the force, quantity, direction, timing or location of runoff flowing from the area. Such changes include: change from distributed runoff to confined, discrete discharge; change in the volume of runoff from the area; change in the peak rate of runoff from the area; and change in the recharge to groundwater on the area.

**APPLICANT:** Shall be the owner of record of all of the land shown on any plan submitted for approval to the Planning Board in accordance with the Stormwater Management Bylaw and

Regulations, any person or persons acting on behalf of the applicant for purposes of preparing and submitting plans and documents to the Planning Board, and may include engineers, surveyors, contractors or attorneys, and may also include any person or persons having an equitable interest in the land under an agreement or option to purchase the land. The owner shall certify in writing the identity of each applicant who is authorized to submit plans and/or documents and act on behalf of the owner. Without such certification an applicant shall not act on behalf of the owner. The applicant shall submit the title reference or references from the Middlesex County Registry of Deeds indicating the owner of record. All applications shall include original signatures of all owners.

**AUTHORIZED ENFORCEMENT AGENCY:** The Planning Board and its employees or agents who will be in charge of enforcing the requirements of this bylaw.

**BEST MANAGEMENT PRACTICE (BMP):** An activity, procedure, restraint, or structural improvement that helps to reduce the quantity or improve the quality of stormwater runoff.

**THE BOARD –** Town of Tewksbury Planning Board.

**CONSTRUCTION AND WASTE MATERIALS:** Excess or discarded building or construction site materials that may adversely impact water quality, including but not limited to concrete truck washout, chemicals, litter and sanitary waste.

**CLEARING:** Any activity that removes the vegetative surface cover. Clearing activities generally include grubbing activity as defined below.

**DEVELOPMENT:** The modification of land to accommodate a new use or expansion of use, usually involving construction.

**DISTURBANCE OF LAND:** Any action, including clearing and grubbing, that causes a change in the position, location, or arrangement of soil, sand, rock, gravel, or similar earth material.

**EROSION:** The wearing away of the land surface by natural or artificial forces such as wind, water, ice, gravity, or vehicle traffic and the subsequent detachment and transportation of soil particles.

**EROSION AND SEDIMENTATION CONTROL PLAN:** A document containing narrative, drawings and details developed by a qualified professional engineer (PE) or a public land surveyor (PLS), which includes best management practices, or equivalent measures designed to control surface runoff, erosion and sedimentation during pre-construction and construction related land disturbance activities.

**GRADING:** Changing the level or shape of the ground surface.

**GRUBBING:** The act of clearing land surface by digging up roots and stumps.

**IMPERVIOUS SURFACE:** Any material or structure on or above the ground that prevents water infiltrating the underlying soil. Impervious surface includes without limitation roads, paved parking lots, sidewalks, and roof tops. Impervious surface also includes soils, gravel driveways, and similar surfaces with a runoff coefficient (Rational Method) greater than 85.

**LAND-DISTURBING ACTIVITY or LAND DISTURBANCE:** Any activity, including clearing and grubbing, that causes a change in the position or location of soil, sand, rock, gravel, or similar earth material.

**LAND-DISTURBANCE PERMIT:** A permit issued by the Planning Board .

**LOT:** An area or parcel of land or any part thereof, in common ownership, designated on a plan filed with the Town of Tewksbury by its owner or owners as a separate lot.

**MASSACHUSETTS STORMWATER MANAGEMENT POLICY:** The Policy issued by the Department of Environmental Protection, as amended, that coordinates the requirements prescribed by state regulations promulgated under the authority of the Massachusetts Wetlands Protection Act MGL c. 131 s. 40 and the Massachusetts Clean Waters Act MGL c. 21, ss. 23-56. The Policy addresses stormwater impacts through implementation of performance standards to reduce or prevent pollutants from reaching water bodies and control the quantity of runoff from a site.

**MUNICIPAL STORM DRAIN SYSTEM or MUNICIPAL SEPARATE STORM SEWER SYSTEM (MS4):** The system of conveyances designed or used for collecting or conveying stormwater, including any road with a drainage system, street, gutter, curb, inlet, piped storm drain, pumping facility, retention or detention basin, natural or man-made or altered drainage channel, swales, brooks, reservoir, and other drainage structure that together comprise the storm drainage system owned or operated by the Town of Tewksbury.

**OPERATION AND MAINTENANCE PLAN:** A plan developed by a Massachusetts licensed professional engineer (PE) describing the functional, financial and organizational mechanisms for the ongoing operation and maintenance of a stormwater management system to ensure that it continues to function as designed.

**OUTFALL:** The point at which stormwater flows out from a discernible, confined point source or discrete conveyance into waters of the Commonwealth.

**OUTSTANDING RESOURCE WATERS (ORWs):** Waters designated by Massachusetts Department of Environmental Protection as ORWs. These waters have exceptional sociologic, recreational, ecological and/or aesthetic values and are subject to more stringent requirements under both the Massachusetts Water Quality Standards (314 CMR 4.00) and the Massachusetts Stormwater Management Standards. ORWs include vernal pools certified by the Natural Heritage Program of the Massachusetts Department of Fisheries and Wildlife and Environmental Law Enforcement, all Class A designated public water supplies with their bordering vegetated wetlands, and other waters specifically designated.

**OWNER:** Shall be the owner of record of all the land shown on any plan submitted. The owner shall submit the title reference or references from the Middlesex County Registry of Deeds indicating the owner of record.

**PERMITTEE:** The person who holds a land disturbance permit and therefore bears the responsibilities and enjoys the privileges conferred thereby.

**PERSON:** An individual, partnership, association, firm, company, trust, corporation, agency, authority, department or political subdivision of the Commonwealth or the federal government, to the extent permitted by law, and any officer, employee, or agent of such person.

**POINT SOURCE:** Any discernible, confined, and discrete conveyance, including but not limited to, any pipe, ditch, channel, tunnel, conduit, well, discrete fissure, or container from which pollutants are or may be discharged.

**PRE-CONSTRUCTION:** All activity in preparation for construction.

**PRIVATE STORM DRAIN SYSTEM or PRIVATE SEPARATE STORM SEWER SYSTEM:** The system of conveyances designed or used for collecting or conveying stormwater, including any road with a drainage system, street, gutter, curb, inlet, piped storm drain, pumping facility, retention or detention basin, natural or man-made or altered drainage channel, reservoir, and other drainage structure that together comprise the storm drainage system that is not owned and maintained by the Town.

**REDEVELOPMENT:** Development, rehabilitation, expansion, demolition or phased projects that disturb the ground surface or increase the impervious area on previously developed sites.

**RESPONSIBLE PARTIES:** owner(s), persons with financial responsibility, and persons with operational responsibility.

**RUNOFF:** Rainfall, snowmelt, or irrigation water flowing over the ground surface.

**SEDIMENT:** Mineral or organic soil material that is transported by wind or water, from its origin to another location; the product of erosion processes.

**SEDIMENTATION:** The process or act of deposition of sediment.

**SITE:** Any lot or parcel of land or area of property where land-disturbing activities are, were, or will be performed.

**SLOPE:** The incline of a ground surface expressed as a ratio of horizontal distance to vertical distance.

**SOIL:** Earth materials including duff, humic materials, sand, rock and gravel.

**STABILIZATION:** The use, singly or in combination, of mechanical, structural, or vegetative methods, to prevent or retard erosion.

**STORMWATER:** Stormwater runoff, snow melt runoff, and surface water runoff and drainage.

**STORMWATER MANAGEMENT PLAN:** A document containing narrative, drawings and details prepared by a qualified professional engineer (PE) or a professional public land surveyor (PLS), which includes structural and non-structural best management practices to manage and treat stormwater runoff generated from regulated development activity. A stormwater management plan also includes an Operation and Maintenance Plan describing the maintenance requirements for structural best management practices.

**STRIP:** Any activity which removes the vegetative ground surface cover, including tree removal, clearing, grubbing, and storage or removal of topsoil.

**TSS:** Total Suspended Solids. Material, including but not limited to trash, debris, soils, sediment and sand suspended in stormwater runoff.

**WATERCOURSE:** A natural or man-made channel through which water flows, including a river, brook, or stream.

**WETLAND RESOURCE AREA:** Areas specified in the Massachusetts Wetlands Protection Act M.G.L. c. 131, s.40 and in the Town of Tewksbury Wetland Protection By-law.

### **19.030 Authority**

This Bylaw is adopted under authority granted by the Home Rule Amendment of the Massachusetts Constitution, the Home Rule statutes, and pursuant to the regulations of the federal Clean Water Act found at 40 CFR 122.34.

### **19.040 Applicability**

No person may undertake a construction activity, including clearing, grading and excavation that results in a land disturbance that will disturb equal to or greater than one half acre of land or will disturb less than one acre of land but is part of a larger common plan of development or sale that will ultimately disturb equal to or greater than one acre of land draining to the Town of Tewksbury's municipal separate storm sewer system without a permit from the Planning Board. Construction activity does not include routine maintenance that is performed to maintain the original line and grade, hydraulic capacity or the original purpose of the site.

Except as permitted below or as otherwise provided in this Bylaw, no person shall perform any activity that results in disturbance or clearing of land without a land disturbance permit.

### **19.041 Regulated Activities.**

A. For minor land disturbance, defined as the disturbance of five hundred (500) cubic yards or more of material or clearing activity which disturbs an area of 20,000 square feet or more and less than 40,000 square feet within any twelve (12) month period, the activity shall be allowed

only under a Land Disturbance Permit issued by the Planning Board. Said permit shall be considered an administrative action by the Planning Board and no public hearing shall be required. The Department of Community Development shall be the administrator of a minor land disturbance permit.

B. Regulated activities by the Planning Board shall include, but not be limited to:

1. Land disturbance of 40,000 square feet or more of land, associated with construction or reconstruction of structures,
2. Development or redevelopment involving multiple separate activities in discontinuous locations or on different schedules if the activities are part of a larger common plan of development that all together disturbs 40,000 square feet or more of land,
3. Paving or other change in surface material over an area of 40,000 square feet or more causing a significant reduction of permeability or increase in runoff,
4. Construction of a new drainage system or alteration of an existing drainage system or conveyance serving a drainage area of more than 40,000 square feet,
5. Any other activity altering the surface of an area exceeding 40,000 square feet that will, or may, result in increased stormwater runoff flowing from the property into a public way or the municipal storm drain system, OR
6. Land disturbance where there is a 15% or greater slope and where the land disturbance is greater than or equal to 200 square feet within the sloped area.

C. Minimum performance standards for regulated activities:

1. Erosion control structures will be located no closer than 15 feet from an abutting property line and will be designed so as not to create point discharges onto abutting properties.
2. Dust from all earthmoving activities shall be controlled.
3. Earth materials shall not be deposited onto any roadways.
4. Vegetative stabilization measures shall be employed during the Regulated Activity and construction activity as required by the approving authority. All perimeter dikes and slopes, basin or trap embankments shall be stabilized with sod, seed, anchored mulch within seven (7) days of disturbance. All other disturbed areas shall be stabilized with sod, seed and anchored mulch within fourteen (14) days after disturbing activities are ceased.
5. Topsoil shall be stripped from disturbed areas and stockpiled in an approved area and stabilized with a temporary vegetative cover if left more than fifteen (15) calendar days. Perimeter sediment controls shall be installed around stockpiled topsoil.
6. During cold weather months, when seeding and sodding may be impractical, anchored mulch shall be applied as approved.

**19.042 Exempt Activities.** The following activities are exempt from the requirements of this Bylaw:

1. Normal maintenance and improvement of Town owned public ways and appurtenances.
2. Normal maintenance and improvement of land in agricultural use.
3. Repair of septic systems when required by the Board of Health for the protection of public health.
4. Normal maintenance of currently existing landscaping, gardens or lawn areas associated with a single-family dwelling.

5. The construction of fencing that will not alter existing terrain or drainage patterns.
6. Construction of utilities other than drainage (gas, water, electric, telephone, etc.) that will not alter terrain or drainage patterns.
7. Maintenance of existing town drainage system, including, but not limited to removal of trees, debris, sediment and trash from swales, brooks, culverts, and any other impediment to the flow of the town's drainage system.
8. Normal maintenance and improvement of land in agricultural use as defined by the Wetlands Protection Act regulation 310 CMR 10.04;
9. As authorized in the Phase II Small MS4 General Permit for Massachusetts, storm water discharges resulting from the activities identified in Section 19.043 that are wholly subject to jurisdiction under the Wetlands Protection Act and demonstrate compliance with the Massachusetts Storm Water Management Policy as reflected in an Order of Conditions issued by the Conservation Commission are exempt from compliance with this bylaw.

**19.043 Activities Allowed to Request Exemption.** Areas of land that have had a Stormwater Management review either through the Conservation Commission or Planning Board using the performance standards as defined in this bylaw and Regulations may request an exemption from the requirements of this bylaw. Requests must include a plan of the area of land reviewed and approved by either the Planning Board or Conservation Commission accompanied by a sign-off from the issuing authority.

The Planning Board will review each request on an individual basis and issue a decision as to whether the exemption is granted or whether the applicant is required to file for a permit.

**19.050 Administration**

- A. The Planning Board shall administer this bylaw. The Town of Tewksbury's Community Development Department shall serve as the Planning Board's primary staff support for this bylaw. The Department may use the Director, Conservation Administrator, Town Engineer, or others to implement this bylaw.
- B. The Planning Board and its agents shall review all applications for a land disturbance permit, conduct inspections, issue a final permit and conduct any necessary enforcement action.
- C. The Planning Board may adopt and periodically amend Stormwater Regulations relating to Land Disturbance Permits, exemption or waiver applications; permit terms or conditions, Design Criteria, additional definitions, enforcement, fees (including application, inspection, and/or consultant fees), or other procedures and administration of this Bylaw after conducting a public hearing to receive comments on any proposed revisions. Such hearing dates shall be advertised in a newspaper of general local circulation, at least seven (7) days before the hearing date. After public notice and hearing, the Planning Board may promulgate rules and regulations to effectuate the purposes of this Bylaw. Failure by the Planning Board to promulgate such rules and regulations shall not have the effect of suspending or invalidating this Bylaw.

- D. The Planning Board will refer to the policy, criteria and information including specifications and standards of the latest edition of the Massachusetts Stormwater Management Policy or with Design Criteria that may be developed or in Tewksbury's Subdivision Regulations, whichever is more stringent, in the protection of the town's environmental and infrastructure resources, for execution of the provisions of this Bylaw.
- E. All meetings of the Planning Board are subject to the Open Meeting Law. A notice in the local newspaper of a hearing on the Land Disturbance Application and that the Planning Board is accepting comments on the Land Disturbance Application shall be published at the applicant's expense. The Land Disturbance Application shall be available for inspection by the public during normal business hours at the Town offices. Comments may be submitted to the Planning Board during business hours at the Town offices.
- F. Filing an application for a land disturbance permit grants the Planning Board or its agent, permission to enter the site to verify the information in the application and to inspect for compliance with permit conditions.
- G. The Planning Board may:
- i. Approve the Application and issue a permit if it finds that the proposed plan will protect water resources and meets the objectives and requirements of this Bylaw;
  - ii. Approve the Application and issue a permit with conditions, modifications, requirements for operation and maintenance requirements of permanent structural BMPs, designation of responsible party, or restrictions that the Planning Board determines are required to ensure that the project will protect water resources and will meet the objectives and requirements of this Bylaw; or
  - iii. Disapprove the application and deny a permit if it finds that the proposed plan fails to meet the objectives and requirements of this Bylaw and its Regulations. If the Planning Board finds that the applicant has submitted insufficient information to describe the site, the work, or the effect of the work on water quality and runoff volume, the Planning Board may disapprove the application, denying a permit.
- H. The Planning Board shall take final action on an Application within 30 days of receipt of a complete application. If in the Planning Board's opinion, additional time or information is required for review, the Planning Board by written agreement of the applicant may continue a consideration of the request to a date certain announced at the meeting.
- I. Failure to take action shall be deemed to be approval of said application. Upon certification by the Town Clerk that the allowed time has passed without the Planning Board's action, the Land Disturbance Permit shall be issued by the Planning Board.
- J. Appeals of Action by the Planning Board. A decision of the Planning Board shall be final. Further relief of a decision by the Planning Board made under this Bylaw shall be reviewable in the Superior Court or Land Court in accordance with the applicable law. The remedies listed in this Bylaw are not exclusive of any other remedies available under any applicable federal, state

or local law. No work shall commence until the applicable appeal period has passed with no appeal or if an appeal has been filed, the appeal has been finally resolved by adjudication or otherwise.

K. All activity permitted by the Land Disturbance Permit must be completed within one-year of permit issuance. Extensions of time can be granted by the Planning Board upon formal written request by the applicant. Should the one-year pass without an extension being granted the permit is then considered revoked.

L. Project Completion. At completion of the project the permittee shall submit as-built record drawings of all structural stormwater controls and treatment best management practices required for the site. The as-built drawing shall show deviations from the approved plans, if any, and be certified by a Registered Professional Engineer. As-built drawings must comply with the Town's Digital data submission requirements.

#### **19.060 Permits & Procedures**

Permit Procedures and Requirements shall be defined and included as part of any rules and regulations promulgated as permitted under Section 19.050 of this Bylaw.

#### **19.070 Fees**

The Planning Board shall establish fees subject to cover expenses connected with application review and monitoring permit compliance. The fees shall be sufficient to cover Town secretarial staff and professional staff. The Planning Board is also authorized to charge the applicant fees to pay a Registered Professional Engineer or other professional consultant to advise the Planning Board on any or all aspects of the project. The applicant for a Land Disturbance Permit may be required to establish and maintain an escrow account to cover the costs of said consultants.

#### **19.080 Surety**

The Planning Board may require the permittee to post before the start of land disturbance activity, a surety bond, or other acceptable security. The form of the bond shall be approved by the Planning Board, which may consult with town counsel when necessary, and be in an amount deemed sufficient by the Planning Board to insure that the work will be completed in accordance with the permit. If the project is phased, the Planning Board may release part of the bond as each phase is completed in compliance with the permit but the bond may not be fully released until the Planning Board has issued a certificate of completion.

#### **19.090 Waivers**

- A. The Planning Board may waive strict compliance with any requirement of this by-law or the rules and regulations promulgated hereunder, where the activity:
1. is allowed by federal, state or local statutes and/or regulations, or

2. is in the public interest, and is not inconsistent with the purpose and intent of this bylaw and its regulations.

- B. Any applicant may submit a written request to be granted such a waiver at the time of submission. Such a request shall be accompanied by an explanation or documentation supporting the waiver request and demonstrating that the activity is allowed by federal, state or local statutes and/or regulations or is in the public interest and is not inconsistent with the purpose and intent of this bylaw and its regulations.
- C. All waiver requests shall be discussed and a decision will be made at the time of final action by the Planning Board .
- D. If in the Planning Board 's opinion, additional information is required for review of a waiver request, the Planning Board may continue a consideration of the waiver request to a date certain announced at the meeting. In the event the applicant fails to provide requested information, the waiver request shall be denied.

#### **19.100 Inspections**

- A. The Board or its agents shall inspect the project site at the following stages:
  - (1) Initial Site Inspection: prior to approval of any plan.
  - (2) Erosion Control Inspection: to ensure erosion control practices are in accordance with the filed plan.
  - (3) Bury Inspection: prior to backfilling of any underground drainage or stormwater conveyance structures.
  - (4) Final Inspection. After the stormwater management system has been constructed and before the surety has been released, the applicant must submit a record plan detailing the actual stormwater management system as installed. The Board shall inspect the system to confirm its "as-built" features. This inspector shall also evaluate the effectiveness of the system in an actual storm. If the inspector finds the system to be adequate he shall so report to the Board which will issue a Certificate of Completion.
- B. If the system is found to be inadequate by virtue of physical evidence of operational failure, even though it was built as called for in the Stormwater Management Plan, it shall be corrected by the permittee before the performance guarantee is released. If the permittee fails to act the Town of Tewksbury may use the surety bond to complete the work. Examples of inadequacy include, but shall not be limited to: errors in the infiltrative capability, errors in the maximum groundwater elevation, failure to properly define or construct flow paths, or erosive discharges from basins.

#### **19.110 Enforcement**

- A. The Planning Board or its authorized agent shall enforce this Bylaw, its regulations, orders, violation notices, and enforcement orders, and may pursue all civil and criminal remedies for such violations.
- B. Orders. The Planning Board or its authorized agent may issue a written order to enforce the provisions of this Bylaw or the regulations thereunder, which may include:
  - 1. a requirement to cease and desist from the land-disturbing activity until there is compliance with the Bylaw or provisions of the land-disturbance permit;
  - 2. maintenance, installation or performance of additional erosion and sediment control measures;
  - 3. monitoring, analyses, and reporting;
  - 4. remediation of erosion and sedimentation resulting directly or indirectly from the land-disturbing activity;
  - 5. compliance with the Operation and Maintenance Plan.
  - 6. If the enforcing person determines that abatement or remediation of erosion and sedimentation is required, the order shall set forth a deadline by which such abatement or remediation must be completed. Said order shall further advise that, should the violator or property owner fail to abate or perform remediation within the specified deadline, the Town of Tewksbury may, at its option, undertake such work, and the property owner shall reimburse the town's expenses. Within thirty (30) days after completing all measures necessary to abate the violation or to perform remediation, the violator and the property owner shall be notified of the costs incurred by the Town of Tewksbury, including administrative costs. The violator or property owner may file a written protest objecting to the amount or basis of costs with the Board within thirty (30) days of receipt of the notification of the costs incurred.
  - 7. Fines. Any person who violates any provision of this Bylaw, regulation, order or permit issued there under, shall be punished by a fine of not more than \$ 300.00. Each day or part thereunder that such violation occurs or continues shall constitute a separate offense.
  - 8. Non-Criminal Disposition. As an alternative to criminal prosecution or civil action, the Planning Board may elect to utilize the non-criminal disposition procedure set forth in G.L. Ch. 40, §21D, which has been adopted by the Town, in which case the Planning Board or authorized agent shall be the enforcing person. The penalty for each violation shall be \$300.00. Each day or part thereof that such violation occurs or continues shall constitute a separate offense.

#### **19.120 Stormwater Management Plan**

- A. The Stormwater Management Plan shall contain sufficient information for the Board to evaluate the environmental impact, effectiveness, and acceptability of the measures proposed by the applicant for reducing adverse impacts from stormwater. The Plan shall be designed to meet the Massachusetts Stormwater Management Standards as set forth in Part B of this section and DEP Stormwater Management Handbook Volumes I and II. The Stormwater Management Plan shall fully describe the project in drawings, and narrative. The Planning Board may adopt regulations for specific submittal requirements.

- B. Standards. Projects shall meet the Standards of the Massachusetts Stormwater Management Policy, which are as follows:
1. No new stormwater conveyances (e.g. outfalls) may discharge untreated stormwater directly to or cause erosion in wetlands or water of the Commonwealth.
  2. Stormwater management systems must be designed so that post-development peak discharge rates do not exceed pre-development peak discharge rates. The rates may be equal to be better than pre-existing conditions.
  3. Loss of annual recharge to groundwater should be minimized through the use of infiltration measures to the maximum extent practicable. The annual recharge from the post-development site should approximate the annual recharge rate from the pre-development or existing site conditions, based on soil types.
  4. For new development, stormwater management systems must be designed to remove 80% of the average annual load (post development conditions) of Total Suspended Solids (TSS). It is presumed that this standard is met when:
  5. Suitable nonstructural practices for source control and pollution prevention and implemented;
  6. Stormwater management best management practices (BMPs) are sized to capture the prescribed runoff volume; and
  7. Stormwater management BMPs are maintained as designed.
  8. Stormwater discharges from areas with higher potential pollutant loads require the use of specific stormwater management BMPs (see Stormwater Management Volume I: Stormwater Policy Handbook). The use of infiltration practices without pretreatment is prohibited.
  9. Stormwater discharges to critical areas must utilize certain stormwater management BMPs approved for critical areas (see Stormwater Management Volume I: Stormwater Policy Handbook). Critical areas are Outstanding Resource Waters (ORWs), shellfish beds, swimming beaches, cold water fisheries and recharge areas for public water supplies.
  10. Redevelopment of previously developed sites must meet the Stormwater Management Standards to the maximum extent practicable. However, if it is not practicable to meet all the Standards, new (retrofitted or expanded) stormwater management systems must be designed to improve existing conditions.
  11. Erosion and sediment controls must be implemented to prevent impacts during disturbance and construction activities.
  12. All stormwater management systems must have an operation and maintenance plan to ensure that systems function as designed.
  13. When one or more of the Standards cannot be met, an applicant may demonstrate that an equivalent level of environmental protection will be provided.

### **19.130            Operation and Maintenance Plans**

- A. A post construction Operation and Maintenance plan (O&M Plan) is required prior to final release of the project. The maintenance plan shall be designed to ensure compliance with the

Permit, this Bylaw and that the Massachusetts Surface Water Quality Standards, 314, CMR 4.00 are met in all seasons and throughout the life of the system. The Board shall make the final decision of what maintenance option is appropriate in a given situation. The Board will consider natural features, proximity of site to water bodies and wetlands, extent of impervious surfaces, size of the site, the types of stormwater management structures, and potential need for ongoing maintenance activities when making this decision. Once approved, The Operation and Maintenance Plan shall remain on file with the Town Engineer and shall be an ongoing requirement. The Planning Board may adopt regulations for specific submittal requirements.

#### B. Stormwater Management Easement(s).

1. Stormwater management easements shall be provided by the property owner(s) as necessary for:
  - a. access for facility inspections and maintenance,
  - b. preservation of stormwater runoff conveyance, infiltration, and detention areas and facilities, including flood routes for the 100-year storm event.
  - c. direct maintenance access by heavy equipment to structures requiring regular cleanout.
2. The purpose of each easement shall be specified in the maintenance agreement signed by the property owner.
3. Stormwater management easements are required for all areas used for off-site stormwater control, unless a waiver is granted by the The Board.
4. Easements shall be recorded with the Middlesex North County Registry of Deeds prior to issuance of a Certificate of Completion by the Board.

#### C. Changes to Operation and Maintenance Plans

1. The owner(s) of the stormwater management system must notify the Board and Town Engineer of changes in ownership or assignment of financial responsibility.
2. The maintenance schedule in the Maintenance Agreement may be amended to achieve the purposes of this bylaw by mutual agreement of the Board, the Town Engineer and the Responsible Parties. Amendments must be in writing and signed by all Responsible Parties. Responsible Parties shall include owner(s), persons with financial responsibility, and persons with operational responsibility.

#### D. Maintenance Responsibility

The responsibility party named in the Operation and Maintenance Plan shall maintain in good condition and promptly repair and restore all structural and non-structural stormwater BMPs and all necessary access routes and appurtenances (grade surfaces, walls, drains, dams and structures, vegetation, erosion and sedimentation controls, and other protective devices). Such repairs or restoration and maintenance shall be in accordance with the approved stormwater management design plan, the stormwater maintenance agreement and the stormwater maintenance plan.

E. Maintenance Inspection by Planning Board, its agent, or Town Engineer

The Planning Board or its Representatives shall conduct periodic inspections for all stormwater practices for which a Stormwater Certificate of Completion has been issued in accordance with section 19.050. All inspections shall document any maintenance and repair needs and any discrepancies from the stormwater maintenance agreement and stormwater maintenance plan.

F. Record of Maintenance Activities

The responsible party shall make records of the installation and of all maintenance and repairs, and shall retain the records for at least five (5) years. These records shall be submitted to the Town Engineer on an annual basis.

**19.140 Severability**

If any provision, paragraph, sentence, or clause of this Bylaw shall be held invalid for any reason, all other provisions shall continue in full force and effect.