

## ARTICLE 3-21

### STORMWATER MANAGEMENT

(05/2013)

#### Sec. 1 PURPOSE

Regulation of discharges to the municipal separate storm sewer system (MS4) is necessary for the protection of the Town of Hanson's water bodies and groundwater, and to safeguard the public health, safety, welfare and the environment. Increased and contaminated stormwater runoff associated with developed land uses and the accompanying increase in impervious surface are major causes of impairment of water quality and flow in lakes, ponds, streams, rivers, wetlands and groundwater.

##### A. The harmful impacts of soil erosion and sedimentation are:

1. Impairment of water quality and flow in lakes, ponds, streams, rivers, wetlands and groundwater;
2. Contamination of drinking water supplies;
3. Alteration or destruction of aquatic and wildlife habitat;
4. Flooding; and
5. Overloading or clogging of municipal catch basins and storm drainage systems.

##### B. The objectives of this Section are:

1. To require practices to control the flow of stormwater from new and redeveloped sites into the Town of Hanson's storm drainage system in order to prevent flooding and erosion;
2. To protect groundwater and surface water from degradation;
3. To promote groundwater recharge;
4. To prevent pollutants from entering the Town of Hanson's municipal separate storm sewer system (MS4) and to minimize discharge of pollutants from the MS4;
5. To ensure adequate long-term operation and maintenance of structural stormwater best management practices so that they work as designed;
6. To comply with state and federal statutes and regulations relating to stormwater discharges; and
7. To establish the Town of Hanson's legal authority to ensure compliance with the provisions of this Section through inspection, monitoring, and enforcement.

#### Sec. 2 DEFINITIONS

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

**AGRICULTURE:** The normal maintenance or improvement of land in agricultural or aquacultural use, as defined by the Massachusetts Wetlands Protection Act and its implementing regulations.



**ALTERATION OF DRAINAGE CHARACTERISTICS:** Any activity on an area of land that changes the water quality, force, 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:** Any person, individual, partnership, association, firm, company, corporation, trust, authority, agency, department, or political subdivision, of the Commonwealth or the Federal government to the extent permitted by law requesting a soil erosion and sediment control permit for proposed Construction Activity.

**AUTHORIZED ENFORCEMENT AGENCY:** The Planning Board (hereafter the Board), its employees or agents designated to enforce this Section.

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

**CLEARING:** Any activity that removes the vegetative surface cover.

**CONSTRUCTION ACTIVITY:** Any activity that causes a change in the position or location of soil, sand, rock, gravel or similar earth material.

**CONSTRUCTION SITE:** The plot of land located within the Town on which the Construction Activity will occur.

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

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

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

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

**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), which includes best management practices, or equivalent measures designed to control surface runoff, erosion and sedimentation during pre-construction and construction related activities.

**ESTIMATED HABITAT OF RARE WILDLIFE AND CERTIFIED VERNAL POOLS:** Habitats delineated for state-protected rare wildlife and certified vernal pools for use with the Wetlands Protection Act Regulations (310 CMR 10.00) and the Forest Cutting Practices Act Regulations (304 CMR 11.00).

**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.

**MASSACHUSETTS ENDANGERED SPECIES ACT:** (G.L. c. 131A) and its implementing regulations at (321 CMR 10.00) which prohibit the “taking” of any rare plant or animal species listed as Endangered, Threatened, or of Special Concern.

**MASSACHUSETTS STORMWATER MANAGEMENT POLICY:** The Policy issued by the Department of Environmental Protection, and as amended, that coordinates the requirements prescribed by state regulations promulgated under the authority of the Massachusetts Wetlands Protection Act G.L. c. 131 §. 40 and Massachusetts Clean Waters Act G.L. c. 21, §. 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.

**MASSACHUSETTS STORMWATER MANAGEMENT STANDARDS:** The Standards issued by the Massachusetts Department of Environmental Protection (DEP), codified in regulations at 310 CMR 10.05(6)(k)-(q) and further defined and specified in the Massachusetts Stormwater Handbook issued by the DEP. The Standards address stormwater impacts through implementation of performance standards that reduce or prevent pollutants from reaching water bodies and control the quantity of runoff from a site.

**MUNICIPAL SEPARATE STORM SEWER SYSTEM (MS4) or municipal storm drain 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 owned or operated by the Town of Hanson.

**NPDES:** National Pollution Discharge Elimination System Construction General Permit issued by the Environment Protection Agency to the Applicant.

**OPERATOR:** The party associated with the Construction Activity that meets either of the following two criteria: (1) The party who has operational control over construction plans and specifications including the ability to make modifications to those plans and specifications or (2) The party who has day-to-day operational control of those activities at a project which are necessary to ensure compliance with a Stormwater Pollution Prevention Plan for the site or other permit conditions.

**OWNER:** A person with a legal or equitable interest in property.

**OUTFALL:** The point at which stormwater flows out from a point source discernible, confined and 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.

**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.

**POLLUTANTS:** Include without limitation the following: Dredged spoil, solid waste, incinerator residue, filter back-wash, sewage, garbage, sludge, munitions, chemical wastes, biological materials, radioactive materials, heat, wrecked or discarded equipment, rocks, sand, animal or agricultural waste, oil, grease, gasoline or diesel fuel.

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

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

**PRIORITY HABITAT OF RARE SPECIES:** Habitats delineated for rare plant and animal populations protected pursuant to the Massachusetts Endangered Species Act and its regulations.

**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:** Any earth, sand, rock, gravel, or similar material.

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

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

**STORMWATER DISCHARGES:** Stormwater that runs off from the construction Site into the MS4 or otherwise into Waters of the U.S.

**STORMWATER MANAGEMENT MEASURES:** Infrastructure improvements that are constructed or installed during Construction Activity to prevent Pollutants from entering Stormwater Discharges or to reduce the quantity of Stormwater Discharges that will occur after Construction Activity has been completed. Examples include but are not limited to: on-site filtration, flow attenuation by vegetation or natural depressions, outfall velocity dissipation devices, retention structures and artificial wetlands, and water quality detention structures.

**STORMWATER PERMIT:** The permit issued by the Authorized Enforcement Agency to the Applicant which allows Construction Activity to occur as outlined by the Applicant in its application and Stormwater Pollution Prevention Plan.

**STORMWATER POLLUTION PREVENTION PLAN (SWPPP):** That plan required of all Applicants in which they outline the Erosion and Sedimentation BMPs they will use, the BMPs they will use to control wastes generated on the Construction Site, the Stormwater Management Measures they will construct and their plan for long-term maintenance of these measures.

**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.

**VERNAL POOLS:** Temporary bodies of freshwater which provide critical habitat for a number of vertebrate and invertebrate wildlife species.

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

**WATERS OF THE U.S.:** These include:

1. All waters that are currently used, were used in the past, or may be susceptible to use in interstate or foreign commerce, including all waters that are subject to the ebb and flow of the tide;
2. All interstate waters including interstate wetlands;
3. All other waters such as interstate lakes, rivers, streams (including intermittent streams), mudflats, sand flats, wetlands, sloughs, prairie potholes, wet meadows, playa lakes, or natural ponds the use, degradation, or destruction of which would affect or could affect interstate or foreign commerce including any such waters:
  - o That are or could be used by interstate or foreign travelers for recreational or other purposes;
  - o From which fish or shellfish are or could be taken and sold in interstate or foreign commerce; or
  - o That are used or could be used for industrial purposes by industries in interstate Commerce;
4. All impoundments of waters otherwise defined as waters of the United States under this definition;
5. Tributaries of waters identified in paragraphs 1 through 4 of this definition;
6. The territorial sea; and
7. Wetlands adjacent to waters (other than waters that are themselves wetlands) identified in paragraphs 1 through 6 of this definition.

**WETLANDS:** Tidal and non-tidal areas characterized by saturated or nearly saturated soils most of the year that are located between terrestrial (land-based) and aquatic (water-based) environments, including freshwater marshes around ponds and channels (rivers and streams), brackish and salt marshes; common names include marshes, swamps and bogs.

### **Sec. 3 AUTHORITY**

This Section 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.

### **Sec. 4 APPLICABILITY**

This Section shall apply to all activities that result in disturbance of one or more acres of land that drains to the municipal separate storm sewer system. Except as authorized by the Board in a Stormwater Permit or as otherwise provided in this Section, no person shall perform any activity that results in disturbance of an acre or more of land.

Normal maintenance and improvement of land in agricultural or aquacultural use, as defined by the Wetlands Protection Act regulation 310 CMR 10.4, are exempt. In addition, Construction Activities are exempt from needing a Stormwater Permit if the stormwater discharges resulting from them demonstrate compliance with the

Massachusetts Stormwater Management Standards, either through a properly issued Order of Conditions, Site Plan Review, Special Permit/Variance or Subdivision Plan approval.

The Stormwater Permit does not exclude the requirement of filing a Construction General Permit with the Environmental Protection Agency.

## **Sec. 5 RESPONSIBILITY FOR ADMINISTRATION**

A. The Board shall administer, implement and enforce this Section. Any powers granted to or duties imposed upon the Board may be delegated in writing by the Board to its employees or agents.

B. Waiver. The Board may waive strict compliance with any requirement of this Section or the rules and regulations promulgated hereunder, where:

1. Such action is allowed by federal, state and local statutes and/or regulations,
2. Is in the public interest, and
3. Is not inconsistent with the purpose and intent of this Section.

C. Rules and Regulations. The Board may adopt, and periodically amend rules and regulations to effectuate the purposes of this Section. Failure by the Board to promulgate such rules and regulations shall not have the effect of suspending or invalidating this Section.

## **Sec. 6 PERMITS and PROCEDURE**

A. Application Procedure. Applicant must sign and file an Application for a Stormwater Permit on a form provided by the Town. The Application should be submitted to the Board and to be deemed complete must be accompanied by:

1. A Stormwater Permit Application Fee.
2. Identification of the Construction Site by book, page, and plot number in the records of the Assessor's Office.
3. A narrative description of the Construction Activity intended, the proposed use of any improvements to be constructed and the construction timetable.
4. A Site Plan required by Section 7.
5. A list of abutters certified by the Assessor's Office including addresses.
6. A Stormwater Pollution Prevention Plan required by Section 8.

B. Entry. Filing an application for a permit grants the Board or its agent, permission to enter the site to verify the information in the application and to inspect for compliance with permit conditions.



C. Other Boards. The Board shall notify the Town Clerk of receipt of the application, and shall give one copy of the application package to the Building Department, Conservation Commission and Highway Department.

D. Public Hearing. The Board shall hold a public hearing within twenty-one (21) days of the receipt of a complete application and shall take final action within twenty-one (21) days from the time of the close of the hearing unless such time is extended by agreement between the applicant and the Board. Notice of the public hearing shall be given by publication and posting and by first-class mailings to abutters at least seven (7) days prior to the hearing. The Board shall make the application available for inspection by the public during business hours at the Town of Hanson's Planning Department Office.

E. Information requests. The applicant shall submit all additional information requested by the Board to issue a decision on the application.

F. Action by the Board.

The Board may:

1. Approve the Stormwater Permit Application and issue a permit if it finds that the proposed plan will protect water resources and meets the objectives and requirements of this Section;
2. Approve the Stormwater Permit Application and issue a permit with conditions, modifications or restrictions that the Board determines are required to ensure that the project will protect water resources and meets the objectives and requirements of this Section;
3. Disapprove the Stormwater Permit Application and deny the permit if it finds that the proposed plan will not protect water resources or fails to meet the objectives and requirements of this Section.

G. Failure of the Board to take final action. Failure of the Board to take final action upon an Application within the time specified above shall be deemed to be approval of said Application. Upon certification by the Town Clerk that the allowed time has passed without the Board's action, the Stormwater Permit shall be issued by the Board.

H. Fee Structure. Each application must be accompanied by the appropriate application fee as established by the Board. Applicants shall pay review fees as determined by the Board sufficient to cover any expenses connected with the public hearing and review of the Stormwater Permit Application before the review process commences. The Board is authorized to retain a Registered Professional Engineer or other professional consultant to advise the Board on any or all aspects of the Application.

I. Project Changes. The permittee, or their agent, must notify the Board in writing of any change or alteration of a land-disturbing activity authorized in a Stormwater Permit before any change or alteration occurs. If the Board determines that the change or

alteration is significant, based on the design requirements listed in Section 8 and accepted construction practices, the Board may require that an amended Stormwater Permit application be filed and a public hearing held. If any change or alteration from the Stormwater Permit occurs during any land disturbing activities, the Board may require the installation of interim erosion and sedimentation control measures before approving the change or alteration.

## **Sec. 7 SITE PLAN**

The Site Plan that is submitted must contain at least the following information:

- A. Names, addresses and telephone numbers of the Person(s) or firm(s) preparing the plan.
- B. Title, date, north arrow, scale, legend and locus map.
- C. Location and description of natural features including watercourses and water bodies, wetland resource areas and all floodplain information including the 100-year flood elevation based upon the most recent Flood Insurance Rate Map (or as calculated by a professional engineer for areas not assessed on those maps) located on or adjacent to the Construction Site.
- D. A description and delineation of existing Stormwater conveyances and impoundments located on the Construction Site with their point of discharge noted.
- E. Location and description of existing soils and vegetation including tree lines, shrub layer, ground cover and herbaceous vegetation and trees with a caliper twelve (12) inches or larger with run-off coefficient for each.
- F. Habitats mapped by the Massachusetts Natural Heritage & Endangered Species Program as Endangered, Threatened or of Special Concern, Estimated Habitats of Rare Wildlife and Certified Vernal Pools, and Priority Habitats of Rare Species located on or adjacent to the Construction Site.
- G. Lines of existing abutting streets showing drainage and driveway locations and curb cuts.
- H. Surveyed property lines of the Construction Site showing distances and monument locations, all existing and proposed easements, rights-of-way, and other encumbrances, the size of the entire Construction Site and the delineation and number of square feet of the land area that is to be disturbed.
- I. Proposed improvements including location of buildings or other structures and impervious surfaces (such as parking lots).
- J. Topographical features including existing and proposed contours at intervals of no greater than two (2) feet with spot elevations provided when needed.

K. The existing site hydrology including drainage patterns and approximate slopes anticipated after major grading activities.

L. Location of the MS4 with relation to the Construction Site.

M. Identification of Outfalls which are located on the Construction Site.

N. Stormwater Discharge calculations prepared and certified by a Registered Professional Engineer describing the volume of Stormwater that presently discharges from the Construction Site and the estimated volume post-development.

O. Identification of any existing Stormwater Discharges emanating from the Construction Site and discharging into the MS4 for which a NPDES Permit has been issued (include Permit number).

P. A list of water bodies that will receive Stormwater Discharges from the Construction Site with the location of drains noted on the map. A brief description of known water quality impacts and whether the water bodies receiving such Stormwater Discharges have:

1. Been assessed and reported in reports submitted by the Massachusetts Department of Environmental Protection to EPA pursuant to Section 305 (b) of CWA and
2. Been listed as a Category 5 Water (Waters Requiring a Total Maximum Daily Load (TMDL)) by DEP under 303(d) of the CWA.

## **Sec. 8 STORMWATER POLLUTION PREVENTION PLAN REQUIREMENTS**

Applicant must submit a Stormwater Pollution Prevention Plan (SWPPP) with its Application for a Stormwater Permit. The SWPPP must include the following: (1) a plan to control wastes generated by the Construction Activity on the Construction Site, (2) an Erosion and Sedimentation Control Plan, (3) a plan to construct Stormwater Management Measures, and (4) a plan for Operation and Maintenance of Stormwater Management Measures.

### **A. PLAN TO CONTROL WASTES**

Applicant must list the construction and waste materials expected to be generated or stored on the Construction Site. These wastes include but are not limited to: discarded building materials, concrete truck washout, chemicals, litter, sanitary waste and material stockpiles. Applicant must also describe in narrative form the Best Management Practices it will utilize to reduce pollutants from these materials including storage practices to minimize exposure of the materials to Stormwater and spill prevention and response plans. If any structural BMPs are proposed, they must be identified and located on the site plan. At a minimum, Applicant's plan should provide for the following:

1. Areas designated and controlled for equipment storage, maintenance and repair.
2. Convenient locations for waste receptacles and a schedule for regular removal.
3. Wash down areas for vehicles selected to prevent contamination of Stormwater.

4. Covered storage areas for chemicals, paints, solvents, fertilizers and other toxic materials.
5. Adequately maintained sanitary facilities.

## B. EROSION AND SEDIMENTATION CONTROL PLAN

Applicant must describe its plan for properly stabilizing the site before construction begins and the BMPs that it will use during construction to minimize erosion of the soil and sedimentation of the Stormwater. These BMPs should include both stabilization practices such as: seeding, mulching, preserving trees and vegetative buffer strips, and contouring and structural practices such as: earth dikes, silt fences, drainage swales, sediment traps, check dams, and subsurface or pipe slope drains. Applicant must locate structural BMPs on the site plan. Applicant must also provide details of construction including the timing, scheduling and sequencing of development including clearing, stripping, rough grading, construction, final grading and Final Site Stabilization. The design requirements of the Erosion and Sedimentation Control Plan are:

1. Minimize total area of disturbance;
2. Sequence activities to minimize simultaneous areas of disturbance;
3. Minimize peak rate of runoff in accordance with the Massachusetts Stormwater Policy;
4. Minimize soil erosion and control sedimentation during construction, provided that prevention of erosion is preferred over sedimentation control;
5. Divert uncontaminated water around disturbed areas;
6. Maximize groundwater recharge;
7. Install and maintain all Erosion and Sediment Control measures in accordance with the manufacturers specifications and good engineering practices;
8. Prevent off-site transport of sediment;
9. Protect and manage on and off-site material storage areas (overburden and stockpiles of dirt, borrow areas, or other areas used solely by the permitted project are considered a part of the project);
10. Comply with applicable Federal, State and local laws and regulations including waste disposal, sanitary sewer or septic system regulations, and air quality requirements, including dust control;
11. Prevent significant alteration of habitats mapped by the Massachusetts Natural Heritage & Endangered Species Program as Endangered, Threatened or Of Special Concern, Estimated Habitats of Rare Wildlife and Certified Vernal Pools, and Priority Habitats of Rare Species from the proposed activities;
12. Institute interim and permanent stabilization measures, which shall be instituted on a disturbed area as soon as practicable but no more than 14 days after construction activity has temporarily or permanently ceased on that portion of the site;
13. Prevent off-site vehicle tracking of sediments.

## C. PLAN TO CONSTRUCT STORMWATER MANAGEMENT MEASURES

The application for a Stormwater Permit shall include submittal of a Plan to Construct Stormwater Management Measures to the Board. This 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 and DEP Stormwater Management Handbook Volumes I and II. The Plan shall fully describe the project in drawings, and narrative. It shall include:

1. A locus map,
2. The existing zoning, and land use at the site,
3. The proposed land use,
4. The location(s) of existing and proposed easements,
5. The location of existing and proposed utilities,
6. The site's existing & proposed topography with contours at 2 foot intervals,
7. The existing site hydrology,
8. A description & delineation of existing stormwater conveyances, impoundments, and wetlands on or adjacent to the site or into which stormwater flows,
9. A delineation of 100-year flood plains, if applicable,
10. Estimated seasonal high groundwater elevation (November to April) in areas to be used for stormwater retention, detention, or infiltration,
11. The existing and proposed vegetation and ground surfaces with runoff coefficients for each,
12. A drainage area map showing pre and post construction watershed boundaries, drainage area and stormwater flow paths,
13. A description and drawings of all components of the proposed drainage system including:
  - a. locations, cross sections, and profiles of all brooks, streams, drainage swales and their method of stabilization,
  - b. all measures for the detention, retention or infiltration of water,
  - c. all measures for the protection of water quality,
  - d. the structural details for all components of the proposed drainage systems and stormwater management facilities,
  - e. notes on drawings specifying materials to be used, construction specifications, and typicals, and
  - f. expected hydrology with supporting calculations.
14. Proposed improvements including location of buildings or other structures, impervious surfaces, and drainage facilities, if applicable,
15. Timing, schedules, and sequence of development including clearing, stripping, rough grading, construction, final grading, and vegetative stabilization,
16. A maintenance schedule for the period of construction, and
17. Any other information requested by the Board.

The Plan 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.
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:
  - a. Suitable nonstructural practices for source control and pollution prevention and implemented;
  - b. Stormwater management best management practices (BMPs) are sized to capture the prescribed runoff volume; and
  - c. Stormwater management BMPs are maintained as designed.
5. 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.
6. 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.
7. 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.
8. Erosion and sediment controls must be implemented to prevent impacts during disturbance and construction activities.
9. All stormwater management systems must have an operation and maintenance plan to ensure that systems function as designed.
10. All illicit discharges to the stormwater management system are prohibited.

When one or more of the Standards cannot be met, an applicant may demonstrate that an equivalent level of environmental protection will be provided.

#### D. OPERATIONS AND MAINTENANCE PLAN

An Operation and Maintenance Plan (O&M Plan) is required at the time of application for all projects. The O&M plan shall be designed to ensure compliance with this Section 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. The O&M Plan shall remain on file with the Board and shall be an ongoing requirement. The O&M Plan shall include:

1. The name(s) of the owner(s) for all components of the system
2. Maintenance agreements that specify:
  - a. The names and addresses of the person(s) responsible for operation and maintenance
  - b. The person(s) responsible for financing maintenance and emergency repairs.
  - c. A maintenance schedule for all drainage structures, including swales and ponds.
  - d. A list of easements with the purpose and location of each.
  - e. The signature(s) of the owner(s).
3. Stormwater Management Easement(s).
  - a. Stormwater management easements shall be provided by the property owner(s) as necessary for:
    - (1) access for facility inspections and maintenance,
    - (2) preservation of stormwater runoff conveyance, infiltration, and detention areas and facilities, including flood routes for the 100-year storm event.
    - (3) direct maintenance access by heavy equipment to structures requiring regular cleanout.
  - b. The purpose of each easement shall be specified in the maintenance agreement signed by the property owner.
  - c. Stormwater management easements are required for all areas used for off-site stormwater control, unless a waiver is granted by the Board.
  - d. Easements shall be recorded with the Plymouth County Registry of Deeds prior to issuance of a Certificate of Completion by the Board.
4. Changes to Operation and Maintenance Plans
  - a. The owner(s) of the stormwater management system must notify the Board of changes in ownership or assignment of financial responsibility.
  - b. The maintenance schedule in the Maintenance Agreement may be amended to achieve the purposes of this Section by mutual agreement of the Board 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.

## **Sec. 9 PERMIT TERM**

The Stormwater Permit shall be effective upon the date of issuance and remain in effect until the earlier to occur of: 1) a Certificate of Completion is issued by the Board indicating that all Construction Activity has ceased and Final Site Stabilization construction, inspection and approval by a representative of the Board has occurred, or 2)

the date three years from the date of issuance of the Stormwater Permit has occurred without Applicant starting Construction Activity on the Construction Site.

## **Sec. 10            INSPECTION AND SITE SUPERVISION**

A. Pre-construction Meeting. Prior to starting clearing, excavation, construction, or land disturbing activity the applicant, the applicant's technical representative, the general contractor or any other person with authority to make changes to the project, shall meet with the Board, to review the permitted plans and their implementation.

B. Board Inspection. The Board or its designated agent shall make inspections as hereinafter required and shall either approve that portion of the work completed or shall notify the permittee wherein the work fails to comply with the Stormwater Permit as approved. The Permit and associated plans for grading, stripping, excavating, and filling work, bearing the signature of approval of the Board, shall be maintained at the site during the progress of the work. In order to obtain inspections, the permittee shall notify the Board at least two (2) working days before each of the following events:

1. Erosion and sediment control measures are in place and stabilized;
2. Site Clearing has been substantially completed;
3. Rough Grading has been substantially completed;
4. Final Grading has been substantially completed;
5. Close of the Construction Season; and
6. Final Landscaping (permanent stabilization) and project final completion.

C. Permittee Inspections. The permittee or his/her agent shall conduct and document inspections of all control measures) no less than weekly or as specified in the permit, and prior to and following anticipated storm events. The purpose of such inspections will be to determine the overall effectiveness of the control plan, and the need for maintenance or additional control measures. The permittee or his/her agent shall submit monthly reports to the Board or designated agent in a format approved by the Board.

D. Access Permission. To the extent permitted by state law, or if authorized by the owner or other party in control of the property, the Board its agents, officers, and employees may enter upon privately owned property for the purpose of performing their duties under this Section and may make or cause to be made such examinations, surveys or sampling as the Board deems reasonably necessary to determine compliance with the permit.

## **Article I.        Sec. 11            SURETY**

The Board may require the permittee to post before the start of Construction Activity, a surety bond, irrevocable letter of credit, cash, or other acceptable security. The form of



the bond shall be approved by town counsel, and be in an amount deemed sufficient by the Board to ensure that the work will be completed in accordance with the permit. If the project is phased, the 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 Board has received the final report as required by Section 12 and issued a Certificate of Completion.

## **Sec. 12 FINAL REPORTS**

Upon completion of the work, the permittee shall submit a report (including certified as-built construction plans) from a Professional Engineer (P.E.), surveyor, certifying that all erosion and sediment control devices, and approved changes and modifications, have been completed in accordance with the conditions of the approved Stormwater Permit. Any discrepancies should be noted in the cover letter.

## **Sec. 13 ENFORCEMENT**

**Article II.** A. The Board or an authorized agent of the Board shall enforce this Section, regulations, orders, violation notices, and enforcement orders, and may pursue all civil and criminal remedies for such violations.

### **B. Orders**

1. The Board or an authorized agent of the Board may issue a written order to enforce the provisions of this Section or the regulations thereunder, which may include:
  - a. a requirement to cease and desist from the Construction Activity until there is compliance with the provisions of the land-disturbance permit;
  - b. maintenance, installation or performance of additional erosion and sediment control measures;
  - c. monitoring, analyses, and reporting;
  - d. remediation of erosion and sedimentation resulting directly or indirectly from the land-disturbing activity.
2. 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 Hanson may, at its option, undertake such work, and the property owner shall reimburse the Town of Hanson's expenses.
3. 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 Hanson, 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.

C. Any person that violates any provision of this Section may be punished, under MGL C. 40 s 21D as a noncriminal offense, by fines of:

1. First offense: \$100
2. Second offense: \$200
3. Additional offenses: \$300 each

Or by criminal complaint at the appropriate venue. Each day or portion thereof during which a violation continues shall constitute a separate offense.

D. Appeals. The decisions or orders of the Board shall be final. Further relief shall be to a court of competent jurisdiction.

E. 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.

#### **Sec. 14        CERTIFICATE OF COMPLETION**

The Board will issue a letter certifying completion upon receipt and approval of the final reports and/or upon otherwise determining that all work of the permit has been satisfactorily completed in conformance with this Section.

#### **Sec. 15        SEVERABILITY**

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

**(05/2013)**