TOWN OF DANVERS ENGINERING DEPARTMENT REGULATIONS GOVERNING STORMWATER MANAGEMENT

UNDER THE GENERAL BYLAWS OF THE TOWN OF DANVERS, CHAPTER XXXIX: STORMWATER MANAGEMENT AND LAND DISTURBANCE BYLAW

(Stormwater Management and Land Disturbance Bylaw adopted at Town Meeting on May 16, 2011 and approved by the Massachusetts Attorney General's Office on September 6, 2011)

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Section I: Introduction and Purpose

A. Purpose & Authority

The purpose of these Regulations is to protect, maintain and enhance the public health, safety, environment and general welfare by establishing minimum requirements and procedures to control the adverse effects of increased construction site and post-development stormwater runoff, decreased groundwater recharge, and nonpoint source pollution associated with new development and redevelopment, as more specifically addressed in the Town of Danvers Stormwater Management and Land Disturbance Bylaw.

These Regulations are hereby adopted by the Stormwater Authority in accordance with Section XXXIX of the Town of Danvers Stormwater Management and Land Disturbance Bylaw. Nothing in these Regulations is intended to replace or be in derogation of the requirements of the Town of Danvers Zoning Bylaw, Subdivision Rules and Regulations, Bylaw to Regulate Illicit Discharges, Wetlands Protection Bylaw, Board of Health Bylaws, or any Rules and Regulations adopted there under.

B. Adoption & Amendment

These Regulations and fee schedules may be periodically amended by the Stormwater Authority in accordance with the procedures outlined in Section 8 Administration of the Town of Danvers Stormwater Management and Land Disturbance Bylaw.

C. Effective Date

These Regulations are effective when voted. A copy shall be filed with the office of the Town Clerk, with appropriate endorsements, such as the date of adoption, date filed with the Town Clerk and any amendments.

Section 2. Definitions

The definitions contained here apply to issuance of a Stormwater Management Permit established by the Town of Danvers Stormwater Management and Land Disturbance Bylaw and implemented through these Stormwater Management Regulations. Terms not defined in this section shall be construed according to their customary and usual meaning unless the context indicates a special or technical meaning. The following terms are defined in the Massachusetts Wetlands Regulations (310 CMR 10.00): Cold-water fishery, Critical areas, Environmentally sensitive site design, Flood control, Ground water, Illicit discharge, Land uses with higher potential pollutant loads, Low impact development (LID) techniques, Maintenance of a stormwater management system, Redevelopment, Stormwater best management practice, Stormwater management system, and Surface waters.

ALTER: Any activity, which will measurably change the ability of a ground surface area to absorb water or will change existing surface drainage. Alter may be similarly represented as "alteration of drainage characteristics," and "conducting land disturbance activities."

APPROVAL NOT REQUIRED (ANR): A plan of land that does not require approval under the Subdivision Control Law of Massachusetts (M.G.L. - Chapter 41, Sections 81K through 81GG).

ABUTTER: A property owner within 300 feet of a proposed project.

APPLICANT: A property owner or Authority of a property owner who has filed an application for a Stormwater Management Permit.

BEST MANAGEMENT PRACTICE (BMP): A structural or nonstructural technique for managing stormwater to prevent or reduce pollutants from entering surface waters or ground waters. A structural stormwater best management practice includes a basin, discharge outlet, swale, rain garden, filter or other stormwater treatment practice or measure either alone or in combination including without limitation any overflow pipe, conduit, weir control structure that: (a) is not naturally occurring; (b) is not designed as a wetland replication area; and (c) has been designed, constructed, and installed for the purpose of conveying, collecting, storing, discharging, recharging or treating stormwater. Nonstructural stormwater best management practices include source control and pollution prevention measures.

BETTER SITE DESIGN: Site design approaches and techniques that can reduce a site's impact on the watershed through the use of nonstructural Stormwater Management practices. Better site design includes conserving and protecting natural areas and green space, reducing impervious cover, and using natural features for stormwater management.

CERTIFICATE OF COMPLETION (COC): A document issued by the Stormwater Authority after all construction activities have been completed which states that all conditions of an issued Stormwater Management Permit have been met and that a project has been completed in compliance with the conditions set forth in the Stormwater Management and Land Disturbance Bylaw.

COMMON PLAN OF DEVELOPMENT: A Common Plan of development shall mean any announcement or piece of documentation (including a contract, public notice or hearing, advertisement, drawing, plan, or permit application, etc.) or physical demarcation (including boundary signs, lot stakes, surveyor marking, etc.) indicating imminent or future plans to disturb earth regardless of how many phases or how long it will take to complete. Under this bylaw, a facility is no longer considered a common plan if the following criteria are met:

- 1. The original plan, including modifications, was substantially completed with less than one acre of the original common plan remaining (i.e., <1 acre of the common plan was not built out at the time); and
- 2. There was a clearly identifiable period of time (2 years or more) where there was no ongoing construction, including meeting the criteria for final stabilization.

COMPLETED APPLICATION: An application shall be deemed complete by the Stormwater Authority when all information is complete and accurate as stated in these Regulations including any supplemental information requested by the Stormwater Authority is submitted and accepted for review.

CONVEYANCE: Any natural or man-made structure or device, including pipes, drains, culverts, curb breaks, paved swales or man-made swales of all types designed or utilized to move or direct stormwater runoff or existing water flow.

DEVELOPER: A person who undertakes or proposes to undertake land disturbance activities.

DIRECTLY CONNECTED IMPERVIOUS AREA (DCIA): The portion of IMPERVIOUS SURFACE with a direct hydraulic connection to the MS4 or waterbody, via, continuous paved surfaces, gutters, pipes and other impervious features as defined by the USEPA. DCIA typically does not include isolated impervious areas with an indirect hydraulic connection to the MS4 (e.g., swale or detention basin) or that would otherwise drain to a pervious area.

DEVELOPMENT: The modification of land to accommodate a new use or expansion of use.

DRAINAGE EASEMENT: A legal right granted by a landowner to a grantee allowing the use of private land for Stormwater Management purposes.

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.

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

EROSION CONTROL: The prevention or reduction of the movement of soil particles or rock fragments due to stormwater runoff.

EROSION CONTROL PLAN: A plans that shows the location and construction detail(s) of the erosion and sediment reduction controls to be utilized for a construction site during and after construction.

FLOODING: A local and temporary inundation or a rise in the surface of a body of water, such that it covers land not usually under water.

FLOOD CONTROL: The prevention or reduction of flooding and flood damage.

GROUNDWATER: All water beneath any land surface including water in the soil and bedrock beneath water bodies.

IMPAIRED WATERS: Include those waters that MADEP has identified pursuant to section 303(d) of the Clean Water Act as not meeting applicable state water quality standards. Impaired waters encompass both those with approved Total Maximum Daily Loads (TMDLs), and those for which TMDL development has been identified as necessary, but for which a TMDL has not yet been approved.

IMPERVIOUS SURFACE or IMPERVIOUS COVER (IC) or IMPERVIOUS AREA (IA): Any material or structure on or above the ground that prevents water from infiltrating through the underlying soil. Impervious surface is defined to include, without limitation: paved surfaces (parking lots, sidewalks, driveways), roof tops, swimming pools, patios, and paved, gravel and compacted dirt surfaced roads.

INVASIVE SPECIES: Those plant species whose introduction does, or is likely to, cause economic or environmental harm or harm to human health. For the purpose of this bylaw, a plant species is considered "invasive" only when it occurs on the List of Federal Noxious Weeds (available at htt://plants.usda.gov/java/noxious?rptType=Federal) or on the Massachusetts Prohibited Plant List (available at http://www.mass.gov/agr/farmproducts/prohibitedplantlist.htm).

INFILTRATION: The act of conveying surface water into the ground to permit groundwater recharge and the reduction of stormwater runoff from a project site.

LAND DISTURBANCE: Any action that causes a change in the position, location, or arrangement of soil, sand, rock, gravel, or similar earth material. See also ALTER.

MADEP: The Massachusetts Department of Environmental Protection

MASSACHUSETTS STORMWATER HANDBOOK (HANDBOOK): The Stormwater Handbook, and as amended from time to time, that were produced by MADEP and the Massachusetts Office of Coastal Zone Management to be used as guidance for controlling stormwater. Implementation of the ten Stormwater Management Standards shall be in accordance with the Stormwater Handbook.

MASSACHUSETTS STORMWATER MANAGEMENT STANDARDS: The requirements described in the Massachusetts Stormwater Handbook, as they

may be amended from time to time, that address water quality (pollutants) and water quantity (flooding, low base flow and recharge) by establishing standards that require the implementation of a wide variety of stormwater management strategies. These strategies include environmentally sensitive site design and LID techniques to minimize impervious surface and land disturbance, source control and pollution prevention, structural Best Management Practices, construction period erosion and sedimentation control, and the long-term operation and maintenance of stormwater management systems. The Stormwater Management Standards have been incorporated in the Wetlands Protection Act Regulations, 310 CMR 10.05(6)(k) and the Water Quality Certification Regulations, 314 CMR 9.06(6)(a).

MODIFIED PLAN: A plan that has not started within 180 days of permit issuance or construction completed within 2 years of permit that requires resubmission to the Stormwater Authority.

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

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) Storm Water Discharge Permit shall mean a permit issued by United States Environmental Protection Authority or jointly with the State that authorizes the discharge of pollutants to waters of the United States.

NEW DEVELOPMENT: Any construction or Land Disturbance on a parcel of land that is currently in a natural vegetated state and does not contain alteration by man-made activities.

NONPOINT SOURCE POLLUTION: Any source from which pollution is discharged which is not identified as a point source, including, but not limited to urban, agricultural, or silvicultural runoff. Nonpoint source pollution emanates from many diffuse sources caused by rainfall or snowmelt moving over and/or through the ground. As the runoff moves, it picks up and carries away natural and human-made pollutants, finally depositing them into water resource areas.

OPERATION AND MAINTENANCE PLAN: A plan that defines the functional, financial and organizational mechanisms for the ongoing operation and maintenance of a Stormwater Management system to insure that it continues to function as designed.

OUTSTANDING RESOURCE WATER: Waters designated in the Massachusetts Surface Water Quality Standards, 314 CMR 4.00, which includes surface Public Drinking Water Supplies and their tributaries and bordering vegetated wetlands; specified Areas of Critical Environmental Concern (ACECs); and certified vernal pools.

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

PERSON: Any individual, group of individuals, association, partnership, corporation, company, business organization, trust, estate, the Commonwealth or political subdivision thereof to the extent subject to Town Bylaws, codes, administrative Authority, public or quasi-public corporation or body, the Town of Danvers, and any other legal entity, its legal representatives, agents, or assigns.

PLAN MODIFICATIONS: Any change in the stormwater management plan as authorized in the Stormwater Management Permit.

POINT SOURCE: Any discernible, confined, and discrete conveyance, including but not limited to any pipe, ditch, channel, tunnel, conduit, well, discrete, fissure, container, rolling stock, concentrated animal feeding operation, landfill leachate collection system, vessel or other floating craft from which pollutants are or may be discharged. This term does not include return flows from irrigated agriculture or agricultural storm water runoff.

POST-DEVELOPMENT: The conditions that reasonably may be expected or anticipated to exist after completion of the land development activity on a specific site or tract of land. Post-development refers to the phase of a new development or redevelopment project after completion, and does not refer to the construction phase of a project.

PRE-DEVELOPMENT: The conditions that exist at the time that plans for the land development of a tract of land are submitted to the Stormwater Authority. Where phased development or plan approval occurs (preliminary grading, roads and utilities, etc.), the existing conditions at the time prior to the first plan submission shall establish the site's pre-development conditions.

RECHARGE: The replenishment of underground water reserves.

REDEVELOPMENT: Development, replacement, rehabilitation, expansion, demolition or phased projects that disturb the ground surface or increase the impervious area on previously developed sites. Redevelopment is further defined by Massachusetts Stormwater Management Standard 7.

RESOURCE AREA: Any area protected under, including without limitation: the Massachusetts Wetlands Protection Act, Massachusetts Rivers Act or Town of Danvers Wetlands Protection Bylaw (Chapter XXVI of the Town Bylaws).

RUNOFF: Rainfall or snowmelt flowing over the ground surface.

SEDIMENTATION: A process of depositing material that has been suspended and transported in water.

SITE: The parcel of land being developed, or a designated planning area in which the land development project is located.

STANDARD SPECIFICATIONS: Commonwealth of Massachusetts, Department of Public Works Standard Specifications for Bridges & Highways, as amended.

STOP WORK ORDER: An order issued by the Stormwater Authority that requires that all construction activity on a site be stopped.

STORMWATER AUTHORITY: The Town of Danvers Department of Public Works or its designee is the entity responsible for adopting regulations pursuant to this bylaw.

STORMWATER MANAGEMENT: The use of structural or non-structural practices that are designed to reduce and control stormwater runoff pollutant loads, discharge volumes and/or peak flow discharge rates.

STORMWATER MANAGEMENT PERMIT (SMP): A permit issued by the Stormwater Authority, after review of an application, plans, calculations, and other supporting documents approving a system that is designed to protect the environment of the Town from the deleterious effects of uncontrolled and untreated stormwater runoff.

STORMWATER POLLUTION PREVENTION PLAN (SWPPP): a site-specific, written document that: (1) identifies potential sources of stormwater pollution at the construction site; (2) describes stormwater control measures to reduce or eliminate pollutants in stormwater discharges from the construction site; and (3) identifies procedures the operator will implement to comply with the terms and conditions of this general permit.

SUBDIVISION: Defined in the Subdivision Control Law of Massachusetts (M.G.L. – Chapter 41, Section 81L Definitions).

TOTAL MAXIMUM DAILY LOAD (TMDL): 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 pollutant's sources. A TMDL includes wasteload allocations (WLAs) for point source discharges; load allocations (LAs) for nonpoint sources and/or natural background, and must include a margin of safety (MOS) and account for seasonal variations. (See section 303(d) of the Clean Water Act and 40 CFR §130.2 and §130.7).

TOTAL SUSPENDED SOLIDS (TSS): A measure of the filterable solids present in a sample, as determined by the method specified in 40 CFR Part 136.

VERNAL POOL: A water body that has been certified by the Massachusetts Division of Fisheries and Wildlife as a vernal pool. Vernal pools are confined basin depressions which, at least in most years, hold water for a minimum of two continuous months during the spring and/or summer, and which are free of adult fish populations.

WATER QUALITY VOLUME (WQV): The storage volume needed to capture a specified average annual stormwater runoff volume. Numerically (WQV will vary as a function of drainage area or impervious area.

Section 3: Administration

The Department of Public Works or its designee is designated as the Stormwater Authority under the Stormwater Management and Land Disturbance Bylaw. The Stormwater Authority is the entity responsible for adopting regulations pursuant to this bylaw and shall administer, implement and enforce these Regulations. The Stormwater Authority may designate the Conservation Agent, the Town Engineer, or an outside consultant as its authorized agent for the purposes of reviewing all stormwater submittals and conducting inspections described in Section 11 - Construction Inspections

Section 4: Applicability

These Regulations apply to all activities in accordance with the Scope and Applicability of Section 5 of the Stormwater Management and Land Disturbance Bylaw and as described in this section. Any exemptions to the Stormwater Management and Land Disturbance Bylaw are located in Section 6 Exemptions. Projects and/or activities not specifically under the currently regulated jurisdiction of any of the Town of Danvers boards, commissions or departments but still within the jurisdiction of the Town of Danvers Stormwater Management and Land Disturbance Bylaw must obtain a Stormwater Management Permit from the Stormwater Authority in accordance with the permit procedures and requirements defined in Section 4 of these Regulations.

If a portion of a project or activity meets the Scope and Applicability of Section 5 of the Stormwater Management and Land Disturbance Bylaw and it is within the specific jurisdiction of another Town board, then the Stormwater Authority will remain responsible for facilitating stormwater review and approval of the Stormwater Management Permit. The specific application submission requirements, public notices, and fee requirements of the applicable board, commission, and/or department shall remain in effect in addition to the requirements of the Stormwater Management and Land Disturbance Bylaw. The Stormwater Authority and other Town boards shall coordinate any necessary expert engineering and other

consultant services required for application review. No work may commence without a Stormwater Management Permit from the Stormwater Authority.

Section 5: Permit Procedures and Requirements

Projects requiring a Stormwater Management Permit per Section 5 Scope and Applicability of the Stormwater Management and Land Disturbance Bylaw shall be required to submit the materials as specified in this Section, and are required to meet the Performance Standards as specified in Section 6 of these Regulations.

- A. Stormwater Management Permit Application
 The Applicant shall file with the Stormwater Authority, four (4) hard copies of a completed application package for a Stormwater Management Permit and one (1) PDF formatted copy consistent with the current Standard for Digital Plan Submission to Municipalities, published by the Commonwealth's Office of Environmental Information (MassGIS). Permit issuance is required prior to any land dicturbance. While the applicantion can be prepared by a representative
 - Submission to Municipalities, published by the Commonwealth's Office of Environmental Information (MassGIS). Permit issuance is required prior to any land disturbance. While the applicantion can be prepared by a representative, the applicant must be the owner of the site, duly authorized agent representing the owner, or holder of an easement.
- B. The Stormwater Management Permit Application Package
 The Stormwater Management Permit application package shall include:
 - 1. A completed Application Form with original signatures of all owners and representatives;
 - 2. Payment of the Application Fee;
 - 3. Responsible Billing Party;
 - 4. Maintenance Agreement;
 - 5. Surety bond (if required);
 - 6. A list of abutters, certified by the Assessor's Office, to be used by the developer to provide notice at the discretion of the Authority (abutters at their mailing addresses shown on the most recent applicable tax list of the assessors, including owners of land directly opposite on any public or private street or way, and abutters to the abutters within 300 feet of the property line of the applicant, including any in another municipality or across a body of water);
 - 7. A list of requested waivers, if applicable. Such a request shall be accompanied by an explanation or documentation supporting the waiver request and demonstrate that strict application of the Bylaw or Regulations is not necessary to meet the purposes or objectives of the Bylaw; and
 - 8. A Stormwater Management Plan (Stormwater Report, Erosion and Sediment Control Plan, Operation and Maintenance Plan, Cost Estimate and Timeline) to document compliance with the Stormwater Management Standards;

All items in Section 5B are required for application submission to be reviewed. Stormwater Authority will notify applicant within 14 days whether the application is considered a completed application. If application is determined to be incomplete, the Stormwater Authority will state which items are deficient and preventing the application from being determined to be a completed application. No work proposed shall be undertaken without a Stormwater Management Permit from the Stormwater Authority.

C. Entry on Land

To the extent permitted by state law, or if authorized by the owner or other party in control of the property, the Stormwater Authority or its agents, officers, and employees may enter upon privately owned property for the purpose of performing their duties under the Stormwater Management and Land Disturbance Bylaw Section 11.D and these Regulations and may make or cause to be made such examinations, surveys or sampling as the Stormwater Authority deems reasonably necessary to determine compliance with the Stormwater Management Permit.

D. Fees

1. General

The Stormwater Authority shall obtain with each submission an Application Fee established by the Authority to cover expenses connected with the administration of and application review of the Stormwater Management Permit sufficient to cover professional review. The Authority is authorized to retain a Registered Professional Engineer or other professional consultant to advise the Authority on any or all aspects of these plans. Applicants must pay review fees before the review process may begin.

2. Rules

- a. Application Fees are payable at the time of application and are non-refundable.
- b. All fees shall be calculated by the Stormwater Authority in accordance with the fee schedule below.
- c. These fees are in addition to any other local or state fees that may be charged under any other law, regulation, or local Bylaw.
- d. Municipal projects shall be exempt from Application Fees associated with a Stormwater Management Permit.
- e. A Stormwater Management Permit Application fee may be waived at the discretion of the Stormwater Authority if the plan is subject to the Planning Board Rules and Regulations Governing the Subdivision of Land.

3. Application Fees

Application Fees, in accordance with these Regulations, shall be payable to the Town of Danvers at the time of filing. Any application not

accompanied by the appropriate fee payment at the time of application shall be considered incomplete. The Application Fee will be used for processing of the application, coordination of Town staff, posting hearings, and other clerical work by Town staff. No fees are refundable in whole or in part under any circumstances.

The application fee is based on the land area that will be disturbed by construction and post construction activities. The application fee is \$200.00 for disturbance up to two (2) acres plus \$100.00 per additional acre of disturbance.

4. Revision of Fee Schedule and Regulations Governing Fees

- a. The Stormwater Authority may review and revise its Regulations and fee schedules periodically as it sees fit.
- b. Amendments shall be preceded by a posted public hearing of the Stormwater Authority not less than 14 days prior to the date upon which the change is to be effective.
- c. A copy of the written decision will be filed with the Town Clerk within 14 business days after final action is taken.

E. Public Hearings

If the Stormwater Authority deems it appropriate, a public hearing will be held within thirty (30) days of the receipt of a Completed Application and shall take final action within thirty (30) days from the close of the hearing unless such time is extended by agreement between the Applicant and the Stormwater Authority. Notice of the public hearing shall be given by a publication in a local newspaper of general circulation, by posting, and by hand delivery or a certified mailing, return receipt requested, at least fourteen (14) days prior to the hearing.

F. Permit Application Review Procedures

All applications for a Stormwater Management Permit shall be reviewed and determined by the Stormwater Authority.

1. Abutter Notification

If a public hearing is required, the Applicant shall provide notice to all abutters of the projects filing and invite comment to the Authority on said application for a period of not less than fourteen (14) days. The Authority shall make the application available for inspection by the public during business hours at the Department of Public Works.

2. Existing Conditions Review

As part of the application review, the Town reserves the right for an existing conditions review which includes an on-site evaluation. Please refer to Section 5C.

3. Final Action

The Authority shall take final action within thirty business (30) days of the receipt of a Completed Application, as defined in Section 2: Definitions, unless such time is extended by agreement between the Applicant and the Authority, per subsection 4 below. The Stormwater Authority's final action, rendered in writing, shall be filed with the Town Clerk, and shall consist of either:

- a. Approval of the Stormwater Management Permit Application based upon determination that the proposed plan will adequately protect the water resources of the community and is in compliance with the requirements set forth in these Regulations;
- Approval of the Stormwater Management Permit Application subject to any conditions, modifications or restrictions required by the Stormwater Authority which will ensure that the project will adequately protect the water resources of the community and is in compliance with the requirements set forth in these Regulations;
- c. Disapproval of the Stormwater Management Permit Application based upon a determination that the proposed plan, as submitted, does not adequately protect water resources, as set forth in these Regulations, or the application is deemed incomplete.

4. Mutual Extension of Time

The required time limits for final action may be extended by written agreement between the applicant and the Stormwater Authority. A copy of such an agreement shall be filed with the Town Clerk.

G. Plan Modifications

The applicant must notify the Stormwater Authority in writing of any changes in the Stormwater Management Plan as authorized in the Stormwater Management Permit before any change or alteration is made. If the Stormwater Authority determines that the change or alteration is significant, based on the Stormwater Management Standards in Section 7 and accepted construction practices, the Stormwater Authority may require that an application with Plan Modifications be filed.

Changes in ownership or responsible parties will not require resubmission of application as long as the permit timeline has not expired see Section 5J.

1. Final Action with Plan Modifications

The Authority shall take final action within thirty businesses (30) days of the receipt of a completed application with Plan Modifications unless such time is extended by agreement between the Applicant and the Authority, per Subsection 4 Mutual Extension of Time, above. The Stormwater Authority's final action, rendered in writing, shall be filed with the Town Clerk, and shall consist of either:

- a. Approval of the Stormwater Management Permit Application with Plan Modifications based upon determination that the proposed modifications will adequately protect the water resources of the community and is in compliance with the requirements set forth in these Regulations;
- b. Approval of the Stormwater Management Permit Application with Plan Modifications subject to any conditions, modifications or restrictions required by the Stormwater Authority which will ensure that the project with Plan Modifications will adequately protect the water resources of the community and is in compliance with the requirements set forth in these Regulations;
- c. Disapproval of the Stormwater Management Permit Application with Plan Modifications based upon a determination that the proposed Plan Modifications, as submitted, does not adequately protect water resources, as set forth in these Regulations, or the application is deemed incomplete.

H. Constructive Approval

Failure of the Stormwater Authority to take Final Action upon an application within 30 business days of receipt of a Completed Application shall be deemed to be approval of said Application. Upon certification by the Town Clerk that the allowed time has passed without Stormwater Authority action, the Stormwater Authority shall issue a Stormwater Management Permit.

I. Appeals of Actions

A decision of the Stormwater Authority shall be final. Further relief of a decision by the Stormwater Authority under the Stormwater Management and Land Disturbance Bylaw and these regulations shall be reviewable in the Superior Court in and action filed within 60 days thereof, in accordance with M.G.L. Ch 249 § 4. If any changes to the plan result from any such appeal, the SMP may require an amended permit application. An appeal of an action by a board, commission or department that has current regulatory authority for a project and/or activity shall be conducted under the applicable appeal provisions of said board, commission and/or department of the Town of Danvers. Such an appeal shall result in revocation of the written approval as described under Section 5F of these Regulations, until such time as the appeal process of the applicable board, commission and/or department has been resolved.

J. Permit Expiration / Extension Should a land-disturbing activity permitted in accordance with these Regulations not begin during a 180-day period following permit issuance, or if work has not been completed within two (2) years, the Applicant shall notify the Stormwater Authority 30 days before expiration to avoid expiration and resubmission. The Authority may re-evaluate the originally approved Stormwater Management Plan to determine whether the plan still satisfies local program requirements. Permits may be renewed for one (1) additional two (2) year term, without Public Hearings at the discretion of the Authority. If the Stormwater Authority finds the previously filed Plan to be inadequate, a Modified Plan shall be submitted and approved prior to the commencement of land-disturbing activities per the procedure in Section 5F of these Regulations.

K. Vesting of Rights

Upon amendment of the bylaw or regulations, applicants shall have a 180-day period following the effective date of the new bylaw or regulations, to use a previously issued SMP. After such time the Stormwater Authority may reevaluate the originally approved Stormwater Management Plan to determine whether the plan still satisfies the bylaw and regulation requirements. If the Authority finds the previously filed plan to be inadequate, a modified plan shall be submitted and approved before the commencement of land-disturbing activities.

Section 6: Stormwater Management Performance Standards

A. Minimum Performance Standards

For compliance with Performance Standards of the Danvers Stormwater Management and Land Disturbance Bylaw, the applicant must meet all the standards of the Massachusetts Department of Environmental Protection's Stormwater Management Standards and Handbook using current Best Management Practices (BMPs).

B. Additional Design Criteria

1. Landscape Design

Site plans and landscape plans for all proposed projects shall take appropriate steps to minimize water use for irrigation and to allow for natural recharge of groundwater. Native species and habitat creating species shall be used in all landscape plans to the maximum extent possible. Invasive species shall not be planted in the Town of Danvers.

The applicant should note that since the Town's water supply is subject to permit requirements under Massachusetts General Law 21-G, Water Management Act, and the Town's ongoing Water Conservation Program, water for any landscape irrigation desired by the applicant shall be provided from a private on-site well and/or from rainfall. All new landscape irrigation systems within the Town must include a soil moisture sensor to prevent unnecessary watering and a rainfall sensor to prevent watering when rain is falling, regardless of whether the irrigation water is supplied from the Town's municipal water system or a private well.

2. Hydrologic Basis for Design

For stormwater facility sizing criteria, the basis for hydrologic and hydraulic evaluation of development and redevelopment sites are as follows:

- a. All hydrological calculations shall be completed and certified to by a Registered Engineer licensed to practice in this field. Typically the procedures to follow will include Technical Release Number 55 (TR55) and/or TR20 (as amended); with pipe design flows calculated using the Rational Method.
- b. The rainfall amounts shall be determined using Type III 24-hour storm precipitation as referenced in Technical Release Number 55 and 20. Precipitation amounts shall be defined by the Northeast Regional Climate Center "Atlas of Precipitation Extremes for the Northeastern United States and Southeastern Canada."
- c. The minimum time of concentration for street drainage (Rational Method) shall be five (5) minutes.
- d. Water velocities in pipes and gutters shall be between two (2) and ten (10) feet per second, not more than five (5) feet per second on paved surfaces, and not more than four (4) feet per second in vegetated areas.
- e. Impervious cover is measured from the site plan and includes any material or structure on or above the ground that prevents water from infiltrating through the underlying soil.
- f. Off-site areas shall be assessed based on their "pre-developed condition" for computing the water quality volume (i.e., treatment of only onsite areas is required). However, if an offsite area drains to a proposed BMP, flow from that area must be accounted for in the sizing of a specific practice.
- g. Off-site areas draining to a proposed facility should be modeled as "present condition" for peak-flow attenuation requirements.
- h. The length of sheet flow used in time of concentration calculations is limited to no more than 100 feet.
- Detention time is defined as the time between the center of mass of the inflow hydrograph and the center of mass of the outflow hydrograph.
- j. For purposes of choosing a runoff Curve Number, all pervious lands in the site shall be assumed prior to development to be in "good" hydrologic condition regardless of conditions existing at the time of computation.
- k. Flooding and channel erosion impacts to receiving streams due to land development projects shall be determined at each point of discharge from the development project and such determination shall include any runoff from the balance of the watershed which also contributes to that point of discharge.
- I. Proposed residential, commercial, or industrial subdivisions or ANRs shall apply these Stormwater Management criteria to the land development as a whole. Individual lots in new subdivisions shall not be considered separate land development projects, but rather the

entire subdivision shall be considered a single land development project. Hydrologic parameters shall reflect the ultimate land development and shall be used in all engineering calculations.

C. Sensitive Areas – Additional Design Criteria
Stormwater discharges to Critical Areas with sensitive resources as defined in the Massachusetts Stormwater Management Standard No. 6 are subject to additional criteria, and may need to utilize or restrict certain Stormwater Management practices at the discretion of the Stormwater Authority. The Stormwater Authority may designate additional Sensitive Areas and specific criteria for these areas by amending these Regulations.

D. Discharges to Water Quality Impaired Waters

The Applicant must determine whether stormwater discharges from the proposed site will contribute, either directly or indirectly, to an impaired waterbody. Structural and non-structural stormwater BMPs shall be selected that will control the discharge of the pollutants of concern and ensure that the discharges will not cause an in-stream exceedances of applicable water quality standards. Pollutants of concern refer to the pollutant identified as causing the impairment.

Section 7: Stormwater Management Plan Contents

- A. The application for a Stormwater Management Permit shall include the submittal of a Stormwater Management Plan (Stormwater Report, Erosion and Sediment Control Plan, Operation and Maintenance Plan, Cost Estimate and Timeline) to the Stormwater Authority prepared in accordance with the Massachusetts Stormwater Handbook and the criteria established in these Regulations. This Stormwater Management Plan shall document compliance with each of the ten (10) Stormwater Management Standards as provided in the Massachusetts Stormwater Handbook and shall contain sufficient information for the Stormwater Authority to evaluate the environmental impact, effectiveness, and acceptability of the site planning process and the measures proposed by the applicant for reducing adverse impacts from stormwater runoff. The Stormwater Management Plan shall remain on file with the Stormwater Authority.
- B. The Stormwater Management Plan shall fully describe the project in drawings, narrative and calculations. The plan shall bear the stamp and signature of a Professional Engineer (PE) licensed in the Commonwealth of Massachusetts to certify that the Stormwater Management Plan is in accordance with the criteria established in the Stormwater Handbook, the Stormwater Management and Land Disturbance Bylaw and these Regulations. To demonstrate compliance to the Stormwater Authority, the applicant shall include the following in addition to the requirements in the Stormwater Handbook:
 - 1. Stormwater Report
 - a. Locus Map;

- b. Existing Site Plan;
- c. The existing zoning, and land use at the site and abutting properties;
- d. The proposed land use and limit of work;
- e. The location(s) of existing and proposed easements;
- f. The location of existing and proposed utilities;
- g. The site's existing & proposed topography with contours at 2-foot intervals:
- h. The existing site hydrology (both groundwater recharge and surface runoff):
- A description and delineation of existing stormwater conveyances, impoundments, wetlands, drinking water resource areas, swimming beaches or other protected resource areas, on or adjacent to the site or into which stormwater flows;
- j. A delineation of 100-year flood plains, if applicable;
- k. The existing and proposed vegetation and ground surfaces with runoff coefficients for each; (including all impervious cover – parking, driveways, etc.)
- I. A drainage area map showing pre- and post-construction watershed boundaries, drainage areas, time of concentration (tc), and stormwater flow paths, including municipal drainage system flows;
- m. A description and drawings of all components of the proposed Stormwater Management system including:
 - i. All measures for the detention, retention or infiltration of water;
 - ii. Description of non-structural BMPs;
 - iii. All measures for the protection of water quality (see Erosion and Control Plan for more details);
 - iv. The structural details for all components of the proposed drainage systems and Stormwater Management facilities;
 - v. Notes on drawings specifying materials to be used, construction specifications, and expected hydrology with supporting calculations;
 - vi. Proposed site plan including location of buildings or other structures, impervious surfaces, and drainage facilities, if applicable;
 - vii. Any other information requested by the Stormwater Authority.
- n. Hydrologic and hydraulic design calculations for the pre-development and post-development conditions for the design storms specified in the Stormwater Handbook. Such calculations shall include:
 - i. Description of the design storm frequency, intensity and duration;
 - ii. Time of concentration;
 - Soil Runoff Curve Number (RCN) based on land use and soil hydrologic group;
 - iv. Peak runoff rates and total runoff volumes for each watershed area:
 - v. Provisions for protecting, during construction, the infiltration capacity of the soil where infiltration is proposed;

- vi. Infiltration rates, where applicable;
- vii. Culvert capacities;
- viii. Flow velocities;
- ix. Data on the increase in rate and volume of runoff for the specified design storms, and
- x. Documentation of sources for all computation methods and field test results.
- Landscaping plan describing the woody and herbaceous vegetative stabilization and management techniques to be used within and adjacent to the stormwater practice.
- 2. The Erosion and Sediment Control Plan (Drawings and Narrative) should contain (in addition to the Stormwater Report) the following
 - a. Direction(s) of stormwater flow and approximate slopes anticipated after major grading activities;
 - b. Areas of soil disturbance and areas that will not be disturbed (limit of work line);
 - c. Locations of site access/egress, including applicable sediment control measures:
 - d. Locations where stabilization practices are expected to occur;
 - e. Locations where stormwater discharges to a surface water (include all roads, drains and other structures that could carry stormwater to a wetland or other water body, on or offsite); and
 - f. The on-site location(s) to be used for storage of materials, wastes, vehicles, equipment, soil, snow and other potential pollutants. If offsite, note location(s) of storage area(s) and detail applicable sediment control measures;
 - g. Estimation of the total area (in square footage and percentage) and total volume (in cubic feet) expected to be disturbed by excavation, grading or other construction activities (include dedicated off-site borrow and fill areas).
 - h. Description of appropriate erosion control measures, the general sequence during the construction process in which the measures will be implemented, and which operator is responsible for the control measure's implementation.
 - Description of structural practices to divert flows from exposed soils, retain/detain flows or otherwise limit runoff and the discharge of pollutants from exposed areas of the site.
 - j. Description of construction and waste materials expected to be stored on-site and a description of controls, including storage practices, to minimize exposure of the materials to stormwater, and spill prevention and response practices.
 - k. Description of interim and permanent slope stabilization practices for the site, including a schedule of when the practices will be implemented. Site plans should ensure that existing vegetation is preserved where possible and that disturbed portions of the site are

- stabilized. Use of impervious surfaces for stabilization should be avoided.
- A description of measures to minimize the tracking of sediments and dust off-site.
- 3. Operation and Maintenance Plan (Drawings and Narrative) in addition to items listed in section above this plan should also contain:

In addition to compliance with the Stormwater Management Handbook, the Operation and Maintenance Plan (the O & M Plan) shall be designed to ensure compliance the Massachusetts Surface Water Quality Standards (314 CMR 4.00) in all seasons and throughout the life of the system. When applicable, Stormwater Management easements will be required for all areas used for off-site stormwater control, unless the Stormwater Authority grants a waiver.

- a. The location of the systems and facilities including all stormwater and low-impact development best management practices, catch basins, manholes/access lids, pipes, and other stormwater devices;
- b. The location(s) of Stormwater Management easements provided by the property owner(s) as necessary for:
 - i. Access for facility inspections and maintenance;
 - ii. Preservation of stormwater runoff conveyance, infiltration, and detention areas and facilities, including flood routes for the 100year storm event;
 - iii. Direct maintenance access by heavy equipment to structures requiring regular maintenance.
- c. The names, addresses and contact information of the property owner;
- d. The names, addresses and contact information of the person(s) responsible for site operation and maintenance;
- e. The person(s) responsible for financing maintenance and emergency repairs:
- f. A list of easements with the purpose of each; and
- g. An Inspection and Maintenance Schedule for all stormwater management facilities, including what routine and non-routine maintenance tasks are to be performed, when they are to be conducted, who is to perform them, and to whom to report results (per SECTION, Annual Reports).
- h. Maintenance Inspections
 - i. Stormwater management facilities and practices included in an O & M Plan with a Maintenance Agreement in accordance with Section 6.M of these Regulations shall undergo ongoing inspections to document maintenance and repair needs and ensure compliance with the requirements of the agreement, the Plan and these Regulations.

- ii. At a minimum, inspections shall occur once every year. A Maintenance Agreement as specified under Section 6.M of these Regulations between the owner and the Stormwater Authority shall be executed for privately owned stormwater management systems that specify the Responsible Party for conducting long term inspections.
- i. Records of Maintenance and Repair Activities Parties responsible for the operation and maintenance of a stormwater management facility shall provide records of all maintenance and repairs to the Stormwater Authority upon request. Parties responsible for the operation and maintenance of a stormwater management facility shall prepare records of the installation and of all maintenance and repairs, and shall retain the records for the most recent five years. These records shall be made available to the Stormwater Authority during inspection of the facility and upon request.
- 4. Budget and Timeline in addition to items listed in section above this plan should also contain:
 - a. A pre-construction, construction and post-construction budget should be included in the project description. Any variances should be noted and communicated as soon as discovered to the Stormwater Authority.
 - b. A timeline should be included in the project description. Any variances should be noted and communicated as soon as discovered to the Stormwater Authority.
- C. If in the applicant's opinion one or more of the Stormwater Management Standards or other requirements cannot be reasonably met, the applicant shall provide a detailed explanation in the Stormwater Report. This narrative shall include reasons that the requirement or Standard could not be met and a description of potential consequences if no mitigating measures are provided.

Section 8: Surety

Before the start of any land disturbance or construction activity, the Stormwater Authority may require the applicant to furnish a Performance Bond of cash, certified check, a surety bond, irrevocable letter of credit, or other acceptable security to the Town as obligee in a penal sum. The form of the bond shall be approved by Town Counsel, and be in an amount deemed sufficient by the Stormwater Authority to ensure that the work will be completed in accordance with the Stormwater Management Permit. If the project is phased, the Stormwater Authority may release part of the bond as each phase is completed in compliance with the permit but the bond may not be released to an amount less than 15% of the original amount until the Stormwater Authority has received the final inspection report as required by Section 12 of these Regulations and issued a Certificate of Completion.

Section 9: Waivers

- A. The Stormwater Authority may in its discretion and after due consideration decide to waive and exempt strict compliance with any requirement of the Stormwater Management and Land Disturbance Bylaw and these Regulations, where it makes a written finding that such action is:
 - 1. Allowed by federal, state and local statutes and/or regulations;
 - 2. In the public interest; and
 - Consistent with the purpose and intent of the Town of Danvers Stormwater Management and Land Disturbance Bylaw and these Regulations.
- B. Any applicant shall submit a written request to be granted such a waiver. Such a request shall be accompanied by an explanation or documentation supporting the waiver request and demonstrating that strict application of the Bylaw does not further the purposes or objectives of the Bylaw.
- C. All waivers requested shall be discussed and voted on at the public hearing for the project, if applicable.
- D. If in the Stormwater Authority's opinion, additional time or information is required for review of a waiver request, the Stormwater Authority may continue a hearing to a date announced at the meeting. In the event the applicant objects to a continuance, or fails to provide requested information, the waiver request shall be denied.
- E. Waivers described herein shall not constitute an exemption from any applicable Federal or State permitting requirements.

Section 10: Enforcement

Enforcement powers of the Stormwater Authority or an authorized agent of the Stormwater Authority are granted in the Stormwater Management and Land Disturbance Bylaw, Section 11.

A. Notices and Orders

- 1. The Stormwater Authority may issue a written notice of violation or an enforcement order to enforce the provisions of the Stormwater Management and Land Disturbance Bylaw and the Regulations, which may include requirements to:
 - a. Suspend or revoke approval of any Stormwater Management Permit;
 - b. Cease and desist from a portion of construction or land disturbing activity until there is compliance with the Bylaw and the Stormwater Management Permit;
 - c. Repair, maintain, or replace the stormwater management system or portions thereof in accordance with the Maintenance Agreement;
 - d. Perform monitoring, analyses, and reporting; and/or
 - e. Fix adverse impact resulting directly or indirectly from malfunction of the stormwater management system.

The suspension or revocation of the Stormwater Management Permit shall not relieve the Applicant of his obligation there under except at the discretion of the Stormwater Authority.

- 2. If the Stormwater Authority determine that abatement or remediation of adverse impacts is required, the order may set forth a deadline by which such abatement or remediation shall be completed. Said order may further advise that, should the violator or property owner fail to abate or perform remediation within the specified deadline, the Town of Danvers may, at its option, undertake such work, and the property owner shall reimburse the Town of Danvers for expenses incurred.
- 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 Danvers, including administrative costs. The violator or property owner may file a written protest objecting to the amount or basis of costs with the Stormwater Authority within thirty (30) days of receipt of the notification of the costs incurred. If the amount due is not received by the expiration of the time in which to file a protest or within thirty (30) days following a decision of the Stormwater Authority affirming or reducing the costs, or from a final decision of a court of competent jurisdiction, the costs shall become a special assessment against the property owner and will constitute a lien on the owner's property for the amount of said costs. Interest shall begin to accrue on any unpaid costs at the statutory rate provided in G.L. Ch. 59, § 57, after the thirty-first day at which the costs first become due.
- B. Purchase, Inheritance, or Acquisition of Property
 Any person who purchases, inherits or otherwise acquires real estate upon which
 work has been done in violation of the provisions of the Stormwater Management
 and Land Disturbance Bylaw and these Regulations, or in violation of the
 approved Plans under this Section shall forthwith comply with any such Order,
 and restore such real estate to its condition prior to such violation, as the
 Stormwater Agent deems necessary to remedy such violation.

C. Fines

Any person who violates any provision of the Town of Danvers Stormwater Management and Land Disturbance Bylaw, these Regulations, or order or permit issued thereunder, may be ordered to correct the violation and/or shall be punished by a fine of not more than \$300.00, excluding the cost of damages. Each day or part thereof that such violation occurs or continues shall constitute a separate offense.

D. Non-Criminal Disposition

As an alternative to criminal prosecution or civil action, the Town of Danvers may elect to utilize the non-criminal disposition procedure set forth in G.L. Ch. 40,

§21D and the Town of Danvers General Bylaws Chapter XXVII Section 4 in which case the Stormwater Authority shall be the enforcing person. The provisions of the General Bylaws Chapter XXVII Section 4 as to the monetary penalties shall prevail. The penalty for the 1st violation shall be \$100.00. The penalty for the 2nd and subsequent violations shall be \$300.00. Each day or part thereof that such violation occurs or continues shall constitute a separate offense.

E. Appeals

The decisions or orders of the Stormwater Authority are final. Further relief is to a court of competent jurisdiction.

F. Remedies Not Exclusive

The remedies listed in these Regulations are not exclusive of any other remedies available under any applicable federal, state or local law.

Section 11. Construction Inspections

- A. Notice of Construction Commencement. The applicant must notify the Stormwater Authority or its authorized Agent 14 days prior to the commencement of construction.
- B. Stormwater Management System Installation. The applicant must notify the Stormwater Authority 14 days in advance of construction of critical components of any stormwater management facility and before the backfilling of any underground drainage or stormwater conveyance structures
- C. At the discretion of the Stormwater Authority, periodic inspections of the stormwater management system construction shall be conducted by qualified personnel (a Town Officer, a professional engineer, or their designee who has been approved by the Stormwater Authority). All inspections shall be documented and written reports prepared that contain the following information:
 - 1. The date and location of the inspection;
 - 2. Names, titles, and qualifications of personnel making the inspection;
 - 3. Whether construction is in compliance with the approved Stormwater Management Plan;
 - 4. Variations from the approved construction specifications; and
 - 5. Any other variations or violations of the conditions of the approved Stormwater Management Plan.

D. Erosion Control Inspection

1. To ensure erosion control practices are in accord with the filed Stormwater Management Plan, Erosion Control Inspections will be conducted by the site owner or an authorized representative at least once every 14 calendar days and within 24 hours of the end of a storm event of 0.5 inches or greater from the start of construction until the site is permanently stabilized. Inspection frequency may be reduced to at least once a month if the site is determined by the Stormwater Authority to be temporarily stabilized, such as runoff is unlikely due to winter conditions (e.g., site is covered with snow, ice, or the ground is frozen), or if construction is occurring during seasonal dry periods. The Applicant is required to notify the Stormwater Authority of any change in inspection frequency, including termination of inspections due to site stabilization.

- 2. The inspection form will include:
 - a. Name, date, and signature of qualified inspector.
 - b. Weather information for the period since the last inspection (or since commencement of construction activity if the first inspection) including a best estimate of the beginning of each storm event, duration of each storm event, approximate amount of rainfall for each storm event (in inches), and whether any discharges occurred;
 - c. Location(s) of discharges of sediment or other pollutants from the site;
 - d. Location(s) of BMPs that failed to operate as designed or proved inadequate for a particular location, and/or location(s) where additional BMPs are needed that did not exist at prior inspection; and
 - e. Corrective action required including any changes to the Stormwater Management Plan necessary and implementation dates.

If a project requires a Stormwater Pollution Prevention Plan (SWPPP) per the NPDES General Permit for Storm Water Discharges From Construction Activities (the most recent EPA Construction General Permit), then the Applicant is required to submit all Inspection Reports to the Stormwater Authority. If the Inspection Reports meet the requirements of the most recent Construction General Permit, it will be considered equivalent to the Erosion Control Inspection as described above.

- E. The Stormwater Authority or its designee shall inspect the project site at the following stages, at a minimum:
 - 1. Initial Site Inspection: prior to approval of any plan;
 - 2. Stormwater Management System Inspection: An inspection will be made of the completed stormwater management system, prior to backfilling of any underground drainage or stormwater conveyance structures.
 - 3. Final Inspection, following receipt of final As-Built.
 - a. After the stormwater management system has been constructed and before the surety has been released, all applicants are required to submit actual "as built" plans for any stormwater management facilities or practices after final construction is completed and must be certified by a Professional Engineer.
 - b. The Stormwater Authority or an authorized agent 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

F. Inadequacy of System

- If the system is found to be inadequate by virtue of physical evidence of operational failure, even though it was built in accordance with the Stormwater Management Plan, it shall be corrected by the applicant before the Certificate of Completion is released. If the applicant fails to act the Stormwater Authority may use the surety bond to complete the work.
- 2. If the Stormwater Authority determines that there is a failure to comply with the plan, the property owner shall be notified in writing of the nature of the violation and the required corrective actions. A Stop Work Order shall be issued until any violations are corrected and all work previously completed has received approval by the Stormwater Authority.

Section 12: Project Completion

A. "As-Built" Plans

Within 90 days of completion of the project, the applicant shall submit as-built record drawings of all structural stormwater controls and treatment best management practices required in Section 7 Stormwater Management Plan Contents. A Registered Professional Engineer must prepare As-built Plans that show the "as built" conditions, including all final grades, developed by contractor. All changes to project design shall be indicated in red on plans (or otherwise noted). All work deleted, corrections in elevations, and changes in materials, shall be shown on the as-built drawings and explained in writing. A Registered Professional Engineer shall certify deviations, if any, from the approved SMP.

As-builts shall be submitted electronically to the Town in PDF and GIS format consistent with the current Standard for Digital Plan Submission to Municipalities, published by the Commonwealth's Office of Environmental Information (MassGIS).

B. Certificate of Project Completion

- Upon completion, the Applicant is responsible for certifying that the completed project is in accordance with the approved plans and specifications by submitting As-built Plans to the Stormwater Authority as described in Section 12.A. The certification statement shall be based on regular inspections that occurred during construction sufficient to adequately document compliance.
- 2. Easements shall be properly recorded and/or registered at the Southern Essex Registry of Deeds before the Stormwater Authority can issue a Certificate of Completion.
- 3. The Stormwater Authority will issue a letter to the Applicant certifying completion upon receipt and approval of the final inspection and reports and/or upon otherwise determining that all work of the permit has been satisfactorily completed in conformance with the Stormwater Management and Land Disturbance Bylaw and these Regulations.

Section 13: Perpetual Inspection and Maintenance

The owner of the property on which work has been done pursuant to these Regulations for private stormwater management facilities, or any other person or agent in control of such property, shall maintain in good condition and promptly repair and restore all 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 approved plans.

A. Maintenance Responsibility

1. The Town of Danvers will not accept ownership of stormwater BMPs located outside of street rights of way, and the maintenance of such facilities shall remain the permanent responsibility of the applicant or his successors and/or assigns. The owner of the property on which work has been done pursuant to these Regulations for private stormwater management facilities, or any other person or agent in control of such property, shall maintain in good condition and promptly repair and restore all 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 approved plans.

B. Maintenance Inspections

- Stormwater management facilities and practices included in a Stormwater Management Plan with a Maintenance Agreement in accordance with Section 7 of these Regulations must undergo ongoing inspections to document maintenance, repair, replacement and disposal needs and ensure compliance with the requirements of the agreement, these Regulations, and Standard 9 of the Stormwater Management Handbook.
- 2. A Maintenance Agreement as specified under Section 7 of these Regulations between the owner and the Stormwater Authority shall be executed for privately-owned stormwater management systems that specify the Responsible Party for conducting long term inspections.
- At a minimum, inspections shall occur once during the first year of operation and at least once every three years thereafter. Some BMPs may require more frequent inspection, as specified in the Stormwater Management Plan.
- 4. Inspection reports shall be submitted to the Stormwater Authority for all stormwater management systems. Inspection reports for stormwater management systems shall include at a minimum:
 - a. The date of inspection;
 - b. Name and signature of inspector:
 - c. The condition of:
 - i) Pretreatment devices
 - ii) Vegetation or filter media
 - iii) Fences or other safety devices

- iv) Spillways, valves, or other control structures
- v) Embankments, slopes, and safety benches
- vi) Reservoir or treatment areas
- vii) Inlet and outlet channels and structures
- viii)Underground drainage
- ix) Sediment and debris accumulation in storage and fore bay areas (including catch basins)
- x) Any nonstructural practices
- xi) Any other item that could affect the proper function of the stormwater management system
- d. Description of the need for maintenance.

C. Right-of-Entry for Inspection

The terms of the Maintenance Agreement as specified in Section 7 of these Regulations shall provide for the Stormwater Authority or its designee to enter the property at reasonable times and in a reasonable manner for the purpose of inspection. The Stormwater Authority, its agents, officers, and employees shall have authority to enter upon privately owned land for the purpose of performing their duties under these Regulations and may make or cause to be made such examinations, surveys, or sampling as the Stormwater Authority deems necessary, subject to the constitutions and laws of the United States and the Commonwealth.

D. Records of Inspections and Maintenance, Repair, Replacement and Disposal Activities

Parties responsible for the operation and maintenance of a stormwater management facility shall prepare records of the installation and of all inspections, maintenance, repairs, replacement, and disposal activities, and shall retain the records for at least five years. These records shall be made available to the Stormwater Authority during inspection of the facility and upon request. For disposal, the record must indicate the type of material, quantity of material, and disposal location.

E. Failure to Maintain

1. If a Responsible Party fails or refuses to meet the requirements of the Maintenance Agreement, the Stormwater Authority, after 30 days written notice (except, that in the event the violation constitutes an immediate danger to public health or public safety, 24 hours notice shall be sufficient), may correct a violation of the design standards or maintenance requirements by performing the necessary work to place the facility or practice in proper working condition. The Stormwater Authority may assess the owner(s) of the facility for the cost of repair work, which shall be a lien on the property.

2. After notification is provided to the person responsible for carrying out the maintenance plan of any deficiencies discovered from an inspection of a stormwater management system, the person responsible for carrying out the maintenance plan shall have 30 days or other time frame mutually agreed to between the Stormwater Authority and the person responsible for carrying out the maintenance plan to correct the deficiencies. The Stormwater Authority shall then conduct a subsequent inspection to ensure completion of repairs.

Section 14: Severability

The invalidity of any section, provision, paragraph, sentence, or clause of these Regulations shall not invalidate any section, provision, paragraph, sentence, or clause thereof, nor shall it invalidate any permit or determination that previously has been issued.