

**STORMWATER MANAGEMENT RULES AND REGULATIONS FOR
DEVELOPMENT OR REDEVELOPMENT PROJECTS DISTURBING
ONE ACRE OR LARGER**

Section 1: Purpose

- (a) Regulation of discharges to the municipal separate storm sewer system (MS4) is necessary for the protection of the City of Waltham water bodies and groundwater, and to safeguard the public health, safety, welfare and the environment. Increased and/or contaminated stormwater runoff associated with developed land uses and the accompanying increase in impervious surface are major causes of:
 - (1) impairment of water quality and flow in lakes, ponds, streams, rivers, wetlands and groundwater;
 - (2) contamination of drinking water supplies,
 - (3) erosion of stream channels;
 - (4) alteration or destruction of aquatic and wildlife habitat;
 - (5) flooding and;
 - (6) overloading or clogging of municipal catch basins and storm drainage systems.
- (b) Therefore, these Rules and Regulations establish stormwater management standards for the final conditions that result from development and redevelopment projects to minimize adverse impacts offsite and downstream which would be borne by abutters, residents and the general public.
- (c) The objectives of these Rules and Regulations are:
 - (1) To protect water resources;
 - (2) To require practices to retain stormwater flow on-site in newly developed and redeveloped sites in the City of Waltham in order to prevent flooding and erosion;
 - (3) To require practices that eliminate soil erosion and sedimentation and control the volume and rate of stormwater runoff resulting from land disturbance activities;
 - (4) To protect groundwater and surface water from degradation;
 - (5) To promote groundwater recharge;
 - (6) To prevent pollutants from entering the City of Waltham's municipal separate storm sewer system (MS4) and to minimize discharge of pollutants from the MS4;
 - (7) To ensure adequate long-term operation and maintenance of structural stormwater best management practices so that they work as designed;
 - (8) To ensure that soil erosion and sedimentation control measures and stormwater runoff control practices are incorporated into the site planning and design process and are implemented and maintained;
 - (9) To require practices to control waste such as discarded building materials, concrete truck washout, chemicals, litter, and sanitary waste at the construction site that may cause adverse impacts to water quality;

- (10) To comply with state and federal statutes and regulations relating to stormwater discharges; and
- (11) To establish the City of Waltham's legal authority to ensure compliance with the provisions of these Rules and Regulations through inspection, monitoring, and enforcement.

Section 2: Definitions

All terms in these Regulations shall have the same definitions as those contained in Article I, Chapter 25 "Stormwater Management" of the City of Waltham General Ordinances, as amended from time to time, and shall be incorporated by reference. Additional terms used in these Regulations shall be defined as follows:

- (a) **CHANGE IN LAND USE FOOTPRINT:** Any action that causes a change in the land's surface cover modifying the drainage characteristics of the site.
- (b) **DISTURBANCE OF LAND:** see **LAND DISTURBANCE** in Section 2 of Chapter 25 "Stormwater" of the City of Waltham General Ordinances
- (c) **GRUBBING:** The act of clearing land surface by digging up roots and stumps.
- (d) **OUTFALL:** The point at which stormwater flows out from a point source discernible, confined and discrete conveyance into waters of the Commonwealth.
- (e) **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.
- (f) **STORMWATER MANAGEMENT PLAN:** A plan required as part of the application for a Stormwater Management Permit. The Stormwater Management Plan shall clearly describe the measures and practices to be adopted in order to meet mandatory stormwater drainage and quality requirements after project completion.
- (g) **TSS: Total Suspended Solids.**
- (h) **RESPONSIBLE PARTIES:** Owner(s), persons with financial responsibility, and persons with operational responsibility of the constructed stormwater management system.

- (i) NOTICE TO PROCEED: Written authorization from the City Engineer to start or continue work.

Section 3: Authority

- (a) These Rules and Regulations are promulgated under authority granted by the Home Rule Amendment of the Massachusetts Constitution, the Home Rule statutes, the federal Clean Water Act, 40 CFR 122.34, and the Environmental Protection Agency NPDES MS4 General Permit requirements.
- (b) These Rules and Regulations are also promulgated pursuant to and in furtherance of the Article I, Chapter 16, "Sewers, Drains and Sewage Disposal", and Chapter 25 "Stormwater Management" of the City of Waltham General Ordinances. Specific authority is granted pursuant to Article I, Sections 25-4 and 25-20.

Section 4: Applicability

These Rules and Regulations apply to the following:

- (a) Activities that disturb an area equal to 1 acre or more of land or will disturb less than one acre of land but is part of a larger common plan of development or sale that will ultimately disturb equal to or greater than one acre of land draining to the City of Waltham's municipal separate storm sewer system.
- (b) Any project that may result in an adverse impact to municipal property or natural resources in the opinion of the City Engineer
- (c) Exemptions
 - (1) Normal maintenance and improvement of land in agricultural use as defined by the Wetlands Protection Act regulation 310 CMR 10.04;
 - (2) Maintenance of existing landscaping, gardens or lawn areas associated with a single family dwelling;
 - (3) The construction of fencing that will not substantially alter existing terrain or drainage patterns;
 - (4) Construction of utilities other than drainage (gas, water, electric, telephone, etc.) which will not alter terrain or drainage patterns;
 - (5) As authorized in the Phase II Small MS4 General Permit for Massachusetts, storm water discharges resulting from the activities identified in Section 4 that are wholly subject to jurisdiction under the Wetlands Protection Act and demonstrate compliance with the Massachusetts Storm Water Management Policy as reflected in an Order of Conditions issued by the Conservation Commission are exempt from compliance with these Rules and Regulations.

Section 5: Administration

- (a) The City Engineer and the Stormwater Enforcement Agent (if different from the City Engineer) shall administer, implement and enforce these Rules and Regulations. Any powers granted to or duties imposed upon the City Engineer or the Stormwater Enforcement Agent may be delegated in writing to the designated agents.

Section 6: Permitting

- (a) Filing Application. The site owner or his agent shall file with the Engineering Department three (3) copies of a completed application package for a Stormwater Management Permit (SWMP). Permit issuance is required prior to commencement of any site altering activity. While the application can be submitted by a representative of the Applicant, the Applicant must be the owner of the site. The SWMP Application package shall include:
 - (1) A completed Application Form with original signatures of all owners;
 - (2) A list of abutters, certified by the Assessor's Office;
 - (3) Infiltration and Inflow (I & I) form with calculations and owner's signature;
 - (4) The Stormwater Management Plan as specified in Section 8;
 - (5) The Operation and Maintenance Plan as specified in Section 9;
 - (6) The Waste, Erosion and Sediment Control Plan as specified in Section 10 or the approved Stormwater Pollution Prevention Plan (SWPPP) for projects with a NPDES Construction General Permit
 - (7) A copy of the NPDES Construction General Permit and related documentation, if applicable;
 - (8) Payment of the application and review fees.

Section 7: Permit Application Review

- (a) Entry. Filing an application to obtain a SWMP grants the City Engineer, Stormwater Enforcement Agent, or their agent(s), permission to enter the site to verify the information in the application and to inspect for compliance with the resulting permit
- (b) Fee Structure. The Engineering Department shall obtain with each submission an Application Fee established by the City Engineer to cover expenses connected with the application review process. The City Engineer is authorized to retain a Registered Professional Engineer or other professional consultant to advise on any or all aspects of the submittal. Applicants must pay review fees before the review process may begin.
- (c) Actions. Action, rendered in writing, shall be taken by the City Engineer or its representatives within 45 days of receipt of the application and shall consist of either:
 - a. Approval of the Application based upon determination that the proposed plan meets the most up to date City of Waltham drainage and design criteria and effectively protects water resources.

- b. Approval of the Application subject to any conditions, modifications or restrictions required by the City Engineer which will ensure that the project meets the most up to date City of Waltham drainage and design criteria and effectively protects water resources.
- c. Disapproval of the Application based upon a determination that the proposed plan, as submitted, does not meet the most up to date City of Waltham drainage and design criteria or does not adequately protect water resources.
- (d) Failure of the City Engineer 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 City Clerk that the allowed time has passed without action, the City Engineer must issue a Notice to Proceed or SWMP.
- (e) Plan Changes. The Applicant must notify the City Engineer in writing of any proposed drainage change or alteration in the system authorized in the Notice to Proceed or SWMP before any change or alteration is made. If the City Engineer determines that the change or alteration is significant based on the most up to date City of Waltham drainage and design criteria and accepted construction practices, the City Engineer may require that an amended application be filed.
- (f) Project Changes. The Applicant or his/her agent, shall notify the City Engineer in writing of any change or alteration of a land-disturbing activity authorized in a Stormwater Management Permit before any change or alteration occurs. If the City Engineer determines that the change or alteration is significant, based on the design requirements listed in Section 8 and accepted construction practices, the City Engineer may require that an amended Stormwater Management Permit application be filed. If any change or deviation from the Stormwater Management Permit occurs during a project, the City Engineer may require the installation of interim measures before approving the change.
- (g) Project Completion. Within ninety (90) days of project completion, the Applicant shall submit to the City Engineer as-built plot plans and survey records showing all structural stormwater controls and treatment best management practices constructed at the site. The as-built plans shall show any deviations from the approved plans, if any, and be stamped and signed in ink by a MA Registered Land Surveyor. All proposed utility designs shall be stamped by a MA Registered Professional Civil Engineer. The as-built plans must be submitted prior to receiving an occupancy permit from the Building Department.

Section 8: Stormwater Management Plan

- (a) The Stormwater Management Plan shall contain sufficient information for the City Engineer to evaluate the environmental impact, effectiveness, and acceptability of the measures proposed by the applicant for reducing adverse impacts from stormwater. The Plan shall be designed to meet the Massachusetts Stormwater Management Standards as set forth in Part (b) of this section and the DEP Stormwater Management Handbook Volumes I and II and shall guarantee that the stormwater leaving the site after

construction is subject to the same water quality standards as applicable to the City of Waltham. The Stormwater Management Plan shall include :

- (1) A locus map,
- (2) Current deed (copy with registry stamp, book and page) and latest Registry Plan (with registry Stamp, Book and plan number). If none, state "no plan recorded". Copies of other Registry Plans used.
- (3) Building zone for the lot (if in two or more zones, show the zone line(s) mathematically on the plan with area in each zone). Calculate land use of the site on each zone.
- (4) Pre-construction and proposed land use.
- (5) The location(s) of existing and proposed easements with their width and area.
- (6) The location of existing and proposed utilities.
- (7) The site's existing & proposed topography with contours at one-foot intervals in areas where the topography differs from the existing, extending to 20 feet of said areas. Projects with no change in topography are exempt from this requirement.
- (8) The existing site hydrology.
- (9) A description & delineation of existing stormwater conveyances, impoundments, and wetlands on or adjacent to the site or into which stormwater flows.
- (10) All wetland resource areas shall be shown as flagged, located and presented to the Waltham Conservation Commission. A copy of the plan presented to the Conservation Commission, if applicable, shall be given to the Engineering Department after obtaining approval from the Conservation Commission and before getting approval from Engineering.
- (11) Flood Plain Zone with the Community Panel Number from the latest F.E.M.A. map and delineation of 100-year flood plains with elevations, if applicable
- (12) Estimated seasonal high groundwater elevation (November to April) in areas to be used for stormwater retention, detention, or infiltration.
- (13) The existing and proposed vegetation and ground surfaces with runoff coefficient for each.
- (14) A drainage area map showing pre and post construction watershed boundaries, drainage area and stormwater flow paths.
- (15) 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 analyzed by a MA Registered Professional Engineer to show that peak rates of flow after development will not exceed those determined for existing conditions. Peak storm flow rates shall be determined for pre- and post-construction development conditions for the 10-yr,

25-yr, and 100-yr storm events. The post-development calculations must demonstrate that the designed system is capable of retaining/recharging on-site all drainage from a 100-year storm event with no connection to the system unless the City Engineer allows other alternatives due to exceptional site constraints, which must be verified;

- (G) Large developments shall consider the use of detention basins or underground storage tanks with flows to be discharged either on-site or off-site to existing waterways, with flows not to be discharged directly to existing municipal storm drainage systems unless allowed by the City Engineer under exceptional conditions. Smaller parcels may consider use of underground storage tanks with orifice regulated outflows.
- (16) Proposed improvements including location of buildings or other structures, impervious surfaces, and drainage facilities, if applicable.
- (17) Proposed water connection (with the size of main - must maintain 5 feet of cover), sewer connection (with the size of main and invert elevations) showing the two sewer manholes (upstream and downstream) in the street and proposed drainage system. All invert elevations must be shown. Necessary details for water and sewer systems shall be shown. Sewer laterals may not tie into manholes and must tie in to a main directly in front of the lot (if not available the main must be extended by owner with an approved plan and profile).
- (18) Lots that do not comply with current zoning are to be accompanied by a letter from the City of Waltham Law Department stating that the lot has been approved for old lot status (prior to 1952) and/or reduced frontage requirements.
- (19) List all grants, waivers, variances, conditions, etc., given to the lot together with the granting authority and date.
- (20) Timing, schedules, and sequence of development including clearing, stripping, rough grading, construction, final grading, and vegetative stabilization,
- (21) A maintenance schedule for the period of construction, and
- (22) Any other information requested by the City Engineer.

(b) Plot plans shall meet the following criteria and include the following:

- (1) All plot plans submitted to the Engineering Department shall be on 8½" x 11½", 11"x 17", or 24" x 36" paper or mylar with a ½" border. All plans will be done in a compatible ink and will be drawn to a scale of 1 inch = 20 feet or 1 inch = 40 feet. A proposed site plan MAY NOT be substituted for a plot plan or survey record (as-built site plan).
- (2) North Arrow in the upper left hand corner (pointing towards the top of the sheet). Street numbers (if existing) shown inside the building.
- (3) The North American Vertical Datum of 1988 (NAVD) must be used for any elevation information on the plan. A benchmark must be shown on the plan. All lot lines (even contiguous lot lines) with bearings, distances (to the nearest one-hundredth foot), central angles, radii and arcs. The North American Datum of 1983 for horizontal control shall be used with a coordinate shown of at least one corner and a disc supplied in AutoCAD (current version) of the plan.

- (4) Street names with width and whether "public" or "private". Lot numbers and lot areas (to the nearest square foot).
- (5) All plans shall clearly indicate the erosion control measures proposed to protect adjacent wetlands and/or municipal storm drainage systems.
- (6) All plans that include a proposed water service line(s) shall show the design water flow for the service and the proposed water meter size. Single and two-family dwellings are exempt from this requirement and shall be fitted with a 5/8-inch meter.
- (7) All plans showing or requiring a fire service line shall show a connection to a City of Waltham main. No connections shall be made to water service lines or combinations thereof. The owner shall install the fire service from the main to the building and shall be responsible for the fire service connection in its entirety for perpetuity. Three gate configurations with tees are required for larger fire services as determined by the City Engineer.
- (8) All buildings (existing and proposed) with all building dimensions (existing and proposed) and all offset distances to street lines and property lines must be to the nearest one hundredth [0.00] of a foot. The location of the main entrance to all buildings shall be noted.
- (9) Lot coverage and the F.A.R. (floor area ratio) and height of building shall be shown on the plan. All impervious areas are to be shown.
- (10) Plot plans for new construction must show curb cuts (see Consolidated Public Works requirements) with curb returns and curbing. Drives (not to exceed 10% grade), parking (including all treated areas), and proposed elevations of the following: top of foundation (and garage floor), back of walk (street line) at the drive, gutter line and the center of the existing street opposite the drive.
- (11) Proposed water connections (with the size of main), sewer connections (with the size of main and invert elevations) showing the two sewer manholes (upstream and downstream) in the street and proposed drainage system shall be shown. All invert elevations along with necessary details for water and sewer systems must be clearly shown.
- (12) All plans shall be prepared with a title block in the lower right-hand corner which identifies the project by title and location, name and address of the owner, the engineer with address and phone number, surveyor with address and phone number, scale of the plan, date of the plan and date of the survey. The title block shall also have a place for the name and initials of (1) the designer, (2) the draftsman and (3) the checker and the date each task was completed. The Engineering Department will not review plans which have not been reviewed and/or checked by the design engineer prior to submittal.
- (13) All wetland areas shall be shown as flagged, located and presented to the Waltham Conservation Commission.
- (14) All plot plans and survey records (as-built site plans) will be stamped and signed in ink by a MA Registered Land Surveyor. The plan, stamp and signature must be original. All proposed utility designs, and as-built utilities as to design, shall be stamped by a MA Registered Professional Civil Engineer.
- (15) All plans must be followed by a survey record (as-built site plan) at the time of final inspection (survey record to be certified by a MA Registered Land Surveyor and stating the date of the record field survey). The survey record will show all the items

in numbers 10 and 11 above as built and must be an original in ink with an original stamp and signature. All as built plans (final), with the exception of one & two families, will be accompanied by an AutoCad disc (latest version). All plans/lots other than those having a single or a two family dwelling shall comply with ALTA/ACSM standards.

(c) Standards. The Stormwater Management Plan shall prove that the project meets the Standards of the Massachusetts Stormwater Management Policy as amended from time to time, 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 are 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.
- (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) When one or more of the Standards cannot be met, an applicant may demonstrate that an equivalent level of environmental protection will be provided.

Section 9: Operation and Maintenance Plan

- (a) An Operation and Maintenance plan (O&M Plan) is required at the time of application. The maintenance plan shall be designed to ensure compliance with the City of Waltham's Stormwater Ordinance and the Massachusetts Surface Water Quality Standards, 314, CMR 4.00. The City Engineer shall make the final decision of what maintenance option is appropriate in a given situation. The City Engineer 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 Operation and Maintenance Plan shall remain on file with the Engineering Department 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).

(b) Stormwater Management Easement(s).

- (1) Stormwater management easements shall be provided by the property owner(s) as necessary for:
 - (A) access for facility inspections and maintenance,
 - (B) preservation of stormwater runoff conveyance, infiltration, and detention areas and facilities, including flood routes for the 100-year storm event.
 - (C) direct maintenance access by heavy equipment to structures requiring regular cleanout.
- (2) The purpose of each easement shall be specified in the maintenance agreement signed by the property owner.

(c) Operation and Maintenance Plan Requirements

- (1) The Operation and Maintenance Plan shall include a schedule of all the preventative and corrective measures necessary to maintain the designed level of service of the constructed stormwater management system. This log, to be filed by the Owner or its representative, will include, but is not limited to, repairs and replacements to the structure; removal of sediment, debris or trash; cleaning of pipes, manholes, or other structures; sweeping of impervious surfaces; restoration of eroded areas; snow and ice removal.
- (2) The Operation and Maintenance Plan and the maintenance log shall be retained by the Owner or designated person on-site and shall be made available, upon request, to City Officials at all times.

- (3) One (1) digital copy and one (1) hard copy of the maintenance log describing maintenance and operation activities performed in the last calendar year shall be submitted to the Engineering Department no later than February 1st of each year.

(d) Changes to Operation and Maintenance Plans

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

Section 10: Waste, Erosion, and Sediment Control Plan

- (a) The Waste, Erosion and Sediment Control Plan shall describe the different measures the Owner will execute, operate, and maintain in order to properly manage and dispose of wastes generated during construction, prevent erosion, and prevent sediment from reaching neighboring waterbodies or the City's stormwater system. Erosion and sediment control best management practices described in the plan shall adhere to the recommendations in the *Massachusetts Erosion and Sediment Control in Urban and Suburban Areas Report* by the Massachusetts Department of Environmental Protection. The plan shall be prepared, stamped and signed by a Massachusetts Registered Professional Engineer (P.E.), a Certified Professional in Erosion and Sediment Control (CPESC), or a Massachusetts Registered Landscape Architect.
- (b) The Waste, Erosion and Sediment Control Plan shall include, at a minimum, the following sections:
 - (1) Project description: this section will include a general, concise description of the project, nature of the project, intended use of built facilities after project completion, project location, total project size in acres, anticipated surface (in acres) of disturbed land during construction, and type of land disturbances.
 - (2) Project site description: this section will include, at a minimum, a brief narrative description and a plot plan of the project site emphasizing significant aspects that may affect erosion and sediment control such as average slope, location of steeper areas, current land cover (exposed or vegetated), current drainage conditions, proximity to waterbodies, and presence or absence of buffer zones around waterbodies. The site description shall clearly identify areas within the project zone that may be susceptible to erosion due to initial land conditions.
 - (3) Adjacent areas: this section will briefly describe areas surrounding the project site and a plan. The description and plan will clearly show land cover, land use, and drainage

conditions. This section should describe if the flow from adjacent areas will receive or contribute flow to the project site.

- (4) Soil description: a brief description of the soils will be included in the Waste, Erosion and Sediment Control Plan. The soil evaluation should focus on drainage conditions of the project area with special emphasis on the soil layer(s) that will get exposed during site grading activities. Expected drainage response of exposed soil layers during and after rain events as well as groundwater flow shall be included in this section. Vegetal growth potential should also be included in this section if applicable.
- (5) Description of proposed Best Management Practices: all the proposed best management practices will be briefly described in this section. Location and time of implementation will also be described here. A plan clearly showing the location of proposed BMP will also be submitted.
- (6) Implementation schedule: this section consists of a detailed schedule of BMP installation and expected duration and frequency of operation.
- (7) Operation and Maintenance Plan during construction: this section shall describe periodic maintenance and assessment activities to ensure the adopted practices continue to be effective throughout the construction phase of the project. System operation requirements and water quality sampling programs (if applicable) will also be described here.
- (8) A log indicating the different executed waste, sediment and erosion control activities shall be kept on-site at all times and made available to the City Officials at all times. This log will indicate adopted control measures and evaluate their condition on a weekly basis as well as their effectiveness before and after significant storm events. One (1) hard and one (1) digital copy of the summary report shall be submitted to the Engineering Department on a monthly basis.

Section 11: Surety

- (a) The City Engineer may require the Applicant to post before the start of land disturbance or construction activity, a surety bond, irrevocable letter of credit, cash, or other acceptable security. The form of the bond shall be approved by the Law Department, and be in an amount deemed sufficient by the City Engineer to ensure that the work will be completed in accordance with the permit. If the project is phased, the City Engineer 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 City Engineer has received the final inspection report as required by Section 14 and issued a Certificate of Completion.

Section 12: Inspections

- (a) The Applicant shall contact the City Engineer for an inspection at each of the following project stages:

- (1) Initial Site Inspection: prior to approval of any plan.
 - (2) Erosion Control Inspection: to ensure erosion control practices are in accord with the filed plan.
 - (3) Bury Inspection: prior to backfilling of any underground drainage or stormwater conveyance structures.
 - (4) Final Inspection. After the stormwater management system has been constructed and before the surety has been released, the applicant must submit a record plan detailing the actual stormwater management system as installed. The City Engineer or its representative shall inspect the system to confirm its "as-built" features. This inspector shall also evaluate the effectiveness of the system in an actual storm. If the inspector finds the system to be adequate he shall so report to the City Engineer, who will issue a Certificate of Completion.
- (b) If the system is found to be inadequate by virtue of physical evidence of operational failure, even though it was built as called for in the Stormwater Management Plan, it shall be corrected by the Applicant before the performance guarantee is released. If the Applicant fails to act, the City of Waltham may use the surety bond to complete the work. Examples of inadequacy shall be limited to: errors in the infiltrative capability, errors in the maximum groundwater elevation, failure to properly define or construct flow paths, or erosive discharges from basins.

Section 13: Waivers

- (a) The City Engineer may waive strict compliance with any requirement of these 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 these Rules and Regulations.
- (b) Any applicant may 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 Rules and Regulations does not further the purposes or objectives of these Rules and Regulations.

Section 14: Certificate of Completion

- (a) The City Engineer will issue a letter certifying completion upon receipt and approval of the final inspection reports and/or upon otherwise determining that all work of the permit has been satisfactorily completed in conformance with these Rules and Regulations.

Section 15: Enforcement

- (a) The City Engineer, Stormwater Enforcement Agent or an authorized agent shall enforce these Rules & Regulations in furtherance of Article I, Sections 16 and 25 of the City of Waltham General Ordinances. Such enforcement shall include, but not be limited to, violation notices and enforcement orders. Further, the Stormwater Enforcement Agent or authorized agent may seek injunctive relief in a court of competent jurisdiction to restrain a person from continued violations of or enforce compliance with these Rules and Regulations or of any notices, orders or written approvals or to compel a person to abate or remediate the violation(s).

Section 16: Fines/Penalties

In addition to other means of enforcement available for violations of these regulations, including, but not limited to, where applicable, the provisions of Sec. 1-13(a) of the General Ordinances, violations may be penalized, as provided by G.L. chapter 40, section 21D, pursuant to the non-criminal disposition provisions of Sec. 1-13(b) of the General Ordinances.

Section 17: Severability

- (a) If any provision, paragraph, sentence, or clause of these Rules & Regulations shall be held invalid for any reason, all other provisions shall continue in full force and effect.