STORMWATER MANAGEMENT AND EROSION CONTROL REGULATIONS FOR THE TOWN OF MARBLEHEAD

Adopted for implementation of the Stormwater Management and Erosion Control By-Law for the Town of Marblehead by the Marblehead Conservation Commission by majority vote on May 22, 2008, and filed with the Town Clerk on May 29, 2008.

I. Applications

A. Requirements

An application for a Land Disturbance Permit for the disturbance of 40,000 square feet or more shall include:

1. eight (8) copies of the completed Application, attached hereto, with the signatures of all property owners and the signature of the applicant, if different;

2. a request for a list of abutters which shall be as defined in accordance with G.L. c. 40A §11, and which will be certified by the Assessor's Office. The Applicant will be responsible for mailing the notice required hereunder, certified return receipt to all said abutters and shall then provide proof of mailing to the Authorized Enforcement Authority prior to the initial hearing;

3. eight (8) copies each of the Erosion and Sediment Control Plan, the Stormwater Management Plan, and the Operation and Maintenance Plan as specified in Sections II, III and IV herein; and

4. payment of the application and, compliance fees. Further, in compliance with Section 195-7A(2) of the Bylaw, additional professional review fees may be requested after application has been made.

B. A Land Disturbance Permit for the disturbance of less than 40,000 square feet is not required. However minimum control measures are required per Section II.C of these regulations.

C. Appeals Following Enforcement Action (See Bylaw Chapter 195, Section 195-14E)

1. Appeals to the Authorized Enforcement Authority contesting the determination and/or action of an Enforcement Action by the Authorized Enforcement Authority's Agent shall be filed with the Authorized Enforcement Authority in writing.
2. Any appeal of the Authorized Enforcement Authority's Agents actions shall be taken within ten (10) working days of the date of the postmark of the written notice of said Enforcement Action or date of hand delivery of said Enforcement Action; otherwise, the Enforcement Action shall be of full force and effect.

II. Erosion and Sedimentation Control Plans

A. Standards

The Erosion and Sediment Control Plan shall contain sufficient information to describe the nature and purpose of the proposed development, pre and post disturbance conditions of the site and the adjacent areas and proposed erosion and sedimentation controls. The Plan must be prepared by a registered Professional Engineer and in accordance with the following standards:

1. the total area of disturbance shall be minimized;

2. activities shall be sequenced to minimize simultaneous areas of disturbance;

3. soil erosion shall be minimized and sedimentation controlled during land disturbance activities; prevention of erosion is preferred over sedimentation control;

4. surface water runoff shall be diverted around disturbed areas; the post land disturbance volume and rate of stormwater runoff shall not exceed that of pre land disturbance conditions ;

5. all erosion and sediment control measures shall be installed and maintained in accordance with good engineering practices;

6. off-site transport of sediment shall be prevented, including sediment tracked by vehicles leaving the site;

7. on- and off-site stockpile areas shall be managed to provide protection from erosion and sediment transport (overburden and stockpiles of dirt, borrow areas or other areas used solely by the permitted project are considered a part of the project);

8. applicable federal, state and local laws and regulations shall be complied with fully, including but not limited to waste disposal, sanitary sewer or septic system regulations and air quality, and dust control requirements;

9. the proposed activities shall not be permitted to have adverse impacts to habitats mapped by the Massachusetts Natural Heritage & Endangered Species Program as "Endangered," "Threatened" or "Of Special Concern," Estimated Habitats of Rare Wildlife, Certified Vernal Pools, potential Vernal Pools and Priority Habitats of Rare Species, within 500 feet of any construction activity;

10. interim and permanent stabilization measures shall be instituted on a disturbed area as soon as practicable but no more than fourteen (14) days after construction activity has temporarily or permanently ceased on that portion of the site; and

11. on-site construction and waste materials shall be properly handled, stored and/or contained so as not to interfere with the erosion and sedimentation control on site.

B. Contents

The Erosion and Sediment Control Plan shall contain at a minimum the following information where applicable:

1. names, addresses and telephone numbers of the owner, applicant and person(s) or firm(s) preparing the plan;

2. title, date, north arrow, names of abutters, scale no greater than 1"=40', legend and locus map (1"=200').

3. location and description of natural features including: (i) watercourses and water bodies, wetland resource areas, riparian zones and all floodplain information, including the 100-year flood elevation based upon the most recent Flood Insurance Rate Map, or as calculated by a professional engineer for areas not assessed on these maps; and (ii) existing vegetation of various kinds, including tree lines, shrub layer, ground cover and herbaceous vegetation, trees with a caliper twelve (12) inches or larger, noting specimen trees and forest communities, habitats mapped by the

Massachusetts Natural Heritage & Endangered Species Program as "Endangered," "Threatened" or "Of Special Concern," Estimated Habitats of Rare Wildlife and Certified Vernal Pools, Potential Vernal Pools and Priority Habitats of Rare Species within five hundred (500) feet of any construction activity;

4. lines of existing abutting streets showing drainage and driveway locations and curb cuts;

5. the type, hydrologic group and erodibility of existing soils, and the volume and nature of imported soil materials;

6. topographical features, including existing and proposed contours at intervals no greater than two (2) feet with spot elevations provided when needed;

7. surveyed property lines showing distances and monument locations, all existing and proposed easements, rights-of-way and other encumbrances, the size of the entire parcel and the delineation and number of square feet of the land area to be disturbed;

8. drainage patterns, watersheds and subwatersheds, with calculations of proposed land disturbance within each subwatershed and areas of soil to be disturbed in each watershed throughout the duration of the proposed land disturbance activity;

9. location and details of erosion and sediment control measures with a narrative of the construction sequence/phasing of the project, including both operation and maintenance for structural and non-structural measures, interim grading and material stockpiling areas;

10. path and mechanism to divert uncontaminated water around disturbed areas, to the maximum extent practicable;

11. location, description of and implementation schedule for temporary and permanent seeding, vegetative controls and other stabilization measures;

12. a description of construction and waste materials expected to be stored on-site, including a description of controls to reduce pollutants from these materials, storage practices to minimize exposure of the materials to stormwater and spill prevention and response;

13. a description of provisions for phasing the project where one contiguous acre of area or greater is to be altered or disturbed;

14. plans, reports and calculations stamped and certified by a registered Professional Engineer; and

15. such other information as maybe required by the Authorized Enforcement Authority.

C. Minimum Erosion and Sedimentation Control Requirements

For projects less than 40,000 square feet, as required by Section 195-4B of the Marblehead Stormwater Management and Erosion Control By-Law, siltation and erosion controls shall be employed prior to the commencement of land disturbance activities on the site, with siltation controls placed to prevent soils or other eroded matter from being deposited onto adjacent properties, rights-of-ways, the public storm drainage system or wetlands and watercourses. Staked haybales and fabric sitlation fencing shall be placed on the down gradient side of the work area to protect these features when land disturbance exceeds either an aggregate area of 4,000 square feet, a volume of 10 cubic yards or is located on a slope in excess of 12 percent. Filter fabric shall be installed as recommended by the manufacturer, except as otherwise directed by the Authorized Enforcement Authority or its agent. The bottom six (6) inches of the material shall be buried by excavating a six (6) inch deep trench along the toe of the fabric line and placing the bottom six (6) inches of filter fabric into the trench. The trench shall be excavated on the upstream side of the fence. The trench shall then be backfilled with the spoil material and compacted. In no instance shall the bottom of the filter fabric be laid on the ground surface and simply covered with backfill or stone. Staked haybales shall be placed parallel to the fabric fence on top of the trench. The hay bales shall be double staked; having their ends butted one against the other without leaving appreciable space for sediment to travel through the barrier. In areas of shallow depth to bedrock, on pavement, when directed by other regulatory agencies or where desired by the applicant, alternative siltation controls may be used subject to the prior written authorization of the Authorized Enforcement Authority or its agent.

Adequate erosion and sedimentation control measures shall be implemented and maintained with proper effectiveness during the entire construction phase for a project. Such measures shall be monitored on a daily basis or as needed, and shall be reinforced or replaced when needed, per the judgment of the site foreman, owner and/or the Authorized Enforcement Authority. Such erosion and sedimentation control devices

shall remain in place until the site has become stabilized with an adequate vegetative cover.

III. Stormwater Management Plans

A. Standards

The Stormwater Management Plan shall be prepared by a registered Professional Engineer in accordance with the latest Massachusetts Stormwater Management Policy and the United States Department of Environmental Protection's Stormwater Management Handbook: Volumes I and II, as revised. Hydrology calculations shall be made using methods outlined in USDA Soil Conservation services (SCS) Technical Release 20 (TR20) using Type III, 24-hour design storms based upon a 2,10,25 and 100 year return frequency.

B. Contents

The Stormwater Management Plan shall contain at a minimum the following information as applicable:

1. names, addresses and telephone numbers of the owner, applicant and person(s) or firm(s) preparing the plan

2. title, date, north arrow, names of abutters, scale of no greater than 1"=40', legend and a locus map, at a scale of 1"=200';

3. the existing zoning and land use at the site;

4. the proposed land use;

5. surveyed property lines showing distances and monument locations, all existing and proposed easements, rights-of-way and other encumbrances, the size of the entire parcel and the delineation and number of square feet of the land area to be disturbed;

6. the location(s) of existing and proposed utilities, lines of existing abutting streets showing drainage and driveway locations and curb cuts;

7. the site's existing and proposed topography with contours at two (2) foot intervals, including topographical features, including spot elevations provided when needed;

8. the existing site hydrology;

9. location and description of natural features including: (i) watercourses and water bodies, wetland resource areas, riparian zones and all floodplain information, including the 100-year flood elevation based upon the most recent Flood Insurance Rate Map, or as calculated by a professional engineer for areas not assessed on these maps; and (ii) existing vegetation of various kinds, including tree lines, shrub layer, ground cover and herbaceous vegetation, trees with a caliper twelve (12) inches or larger, noting specimen trees and forest communities, habitats mapped by the Massachusetts Natural Heritage & Endangered Species Program as "Endangered," "Threatened" or "Of Special Concern," Estimated Habitats of Rare Wildlife and Certified Vernal Pools, Potential Vernal Pools and Priority Habitats of Rare Species within five hundred (500) feet of any construction activity

10. a description and delineation of existing stormwater conveyances, impoundments and wetlands on or adjacent to the site or into which stormwater flows;

11. a delineation of 100-year flood plains, if applicable;

12. an estimate made by a licensed soil evaluator of seasonal high groundwater elevation in each area 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- land disturbance 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 system and stormwater management facilities;

e. notes on drawings specifying materials to be used, construction specifications and typicals; and

f. expected hydrology with supporting calculations;

16. proposed improvements, including location of buildings or other structures, impervious surfaces and drainage facilities, if applicable;

17. the timing, schedules and sequence of development, including clearing, stripping, rough grading, construction, final grading and vegetative stabilization;

18. a maintenance schedule for the period of construction; and

19. any other information requested by the Authorized Enforcement Authority

IV. Operation and Management Plans

A. Requirements

An Operation and Maintenance Plan (O&M Plan) prepared by a registered Professional Engineer is required at the time of application for all projects. Once approved by the Authorized Enforcement Authority, the O&M Plan shall be recorded at the Southern Essex District Registry of Deeds, shall remain on file with the Authorized Enforcement Authority and shall be an ongoing requirement. The O&M Plan shall include:

1. the names(s) of the owner(s) of all components of the stormwater management and erosion control system; and

2. maintenance agreements specifying: (i) the names and addresses of the person(s) responsible for operation and maintenance; (ii) the person(s) responsible for financing maintenance and emergency repairs; (iii) a maintenance schedule for all drainage structures, including swales, detention/retention basins and ponds; (iv) a list of easements with the purpose and location of each; and (v) the signature(s) of the owner(s).

B. Stormwater Management Easements

Stormwater management easements shall be provided by the property owner(s) as areas are necessary for:

1. access for facility inspections and maintenance;

2. preservation of stormwater runoff conveyance, infiltration and detention areas and facilities, including flood routes for the 100-year storm event; and

3. direct maintenance access by heavy equipment to structures requiring regular cleanout maintenance.

The purpose of each easement shall be specified in the maintenance agreement signed by the property owner. Stormwater management easements are required for all areas used for off-site stormwater control, unless a waiver is granted by the Authorized Enforcement Authority. Easements shall be recorded with the Southern Essex District Registry of Deeds prior to issuance of a Certificate of Completion by the Authorized Enforcement Authority.

V. Fee Schedule

The following fee schedules are minimum fees. The Authorized Enforcement Authority may require higher fees if deemed necessary for proper review of an application or to ensure compliance. Fees for professional review will be established in accordance with M.G.L. Ch. 44, § 53G.

Lot Area	Application Fee	Compliance Fee
Less than 40,000 sq. ft.*	No charge	No charge
40,000 sq. ft. to 2 acres*	$700	$700
Greater than 2 acres*	$1,000	$500/acre

*If enforcement is required, and an appeal is filed with the Authorized Enforcement Authority, then the appeal application fee shall be $100.

All fees shall be made payable to the Town of Marblehead

APPLICATION FOR A LAND DISTURBANCE PERMIT

Instructions

An applicant for a land disturbance plan review must file with the Authorized Enforcement Authority a completed application package, in accordance with the requirements of the Stormwater Management and Erosion Control By-Law. Timelines concerning the review process will not begin until the Authorized Enforcement Authority has determined that the application is complete.

1. Any application not accompanied by the appropriate fee shall be deemed incomplete. Payment must be made to the Town of Marblehead Authorized Enforcement Authority in cash, money order or bank or certified check payable to the Town of Marblehead.

2. An applicant's failure to pay any additional review or inspection fee within five (5) business days of receipt of notice that further fees are required shall be grounds for disapproval.

3. The Authorized Enforcement Authority will publish the public notice, and the applicant shall pay all costs associated therewith.

Professional review fees include engineering review, legal review and clerical fees associated with the public hearing and permit processing. If professional fees are deemed necessary for proper review of the application, a fee estimate will be provided by a consultants chosen by the Authorized Enforcement Authority. The applicant will be required to cover the costs of said consultants through an account established pursuant to M.G.L. Ch. 44, § 53G.

Applicant

Name: _____
Address: _____
Phone: _____

Owner

Name: _____
Address: _____
Phone: _____

Project Information

The land disturbance involves property where the owner's title to the land is derived under deed from _____, dated _____ ____, _____, and recorded in the Essex Registry of Deeds at Book _____, Page _____/Land Court Certificate of Title No. _____, Book _____, Page_____. The property on which the project is located is shown on Assessors Map _____, Parcel _____. The street address of the property is _____, Marblehead, Massachusetts _____.

Please provide a brief summary of the nature of the project:

_____
_____
_____
_____

The property/building is currently used as/for _____.
The proposed changes are _____.

Planned start date: _____ ____, _____.
Planned completion date: _____ ____, _____.
Total area to be disturbed: _____ sq. ft.
Total area of the site/lot: _____.

Will there be disturbance of any slope greater than 25%? ____ Yes ____ No. If yes, what is the area of the slope disturbance: _____ sq. ft.

Please list other narrative and/or plans submitted with this application:

_____
_____
_____
_____

Attach the application fee and supporting documents hereto.

Certification

I, the undersigned, hereby certify that I have read and understand the requirements and conditions of the Town of Marblehead Stormwater Management and Erosion Control By-Law and that the information included in the application materials is accurate and truthful to the best of my knowledge.

Applicant: _____
Signature

_____
Name

Owner: _____
Signature

_____
Name

Date: _____