

TOWN OF YARMOUTH

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December 5, 2022

Wendi Holden, Chair
Yarmouth Planning Board
200 Main Street
Yarmouth, Maine 04096

Re: Yarmouth Code of Ordinance Updates: Chapter 601, 701 and 702

Dear Madam Chair and Members of the Board:

On behalf of the Town of Yarmouth, I am respectfully requesting that the Yarmouth Planning Board (Board) review proposed stormwater management changes to several chapters of Yarmouth's Code of Ordinances and schedule a public hearing for discussion and potentially approval at the January 25, 2023, meeting. The proposed changes to Chapter 601 Subdivision Ordinance, Chapter 701 Zoning Ordinance and Chapter 702 Site Plan Review Ordinance generally update and codify Erosion and Sedimentation Control (ESC) requirements for soil disturbance as part of earthwork activities in Yarmouth. These proposed changes are required as part of Yarmouth's Municipal Separate Storm Sewer System (MS4) General Stormwater Permit.

As I am sure you recall, Yarmouth maintains permission to discharge stormwater runoff from its stormwater system to Waters of the United States (WOTUS) under the MS4 General Permit. On July 1, 2022, a new permit took effect with the requirement that the Town formalize ESC standards in its Code such that ESC measures are uniformly implemented to a minimum standard and that enforcement may be pursued if required. The permit requires that this update work be complete and implemented by July 1, 2023.

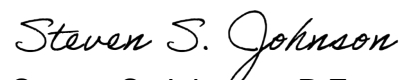
To meet the new permit requirements Yarmouth's ESC standards must, at a minimum, meet the standards of the Maine Department of Environmental Protection (MDEP) Chapter 500 Stormwater Management rules. Rather than try to recreate appropriate language in Yarmouth's Code, it is preferred to adopt the required standards by reference to Chapter 500. As such, a new technical appendix in Chapter 601 Subdivision, Technical Appendices, *Appendix D Erosion and Sedimentation Control* was developed to provide the appropriate reference and technical submission requirements. Pertinent sections in Chapter 701 and Chapter 702 will be updated to reference the new Appendix D in Chapter 601.

This approach provides several benefits to the Town. By adopting the ESC standards by reference, the Town will comply should the MDEP update Chapter 500 or change any technical Best Management Practice (BMP) requirement and not require lengthy ordinance updates. Additionally, by adopting the reference in the Technical Appendices, any required updates or changes to ESC standards that may happen from time to time can be more easily updated, normally requiring only Planning Board approval. And finally, having one location for the pertinent language minimizes the potential for conflict between chapters in the Code and confusion in the application of the standards as well as provides generally a “one stop shopping” for readers of the Code regarding ESC.

Included with this submission is a letter from Kristie Rabasca, P.E. of Integrated Environmental Engineering, that outlines in more detail the required Code updates. Also included is a synopsis of the proposed code language changes in underline ~~strikeout~~ format for ease of review.

It is anticipated that once the Board has reviewed and approved the proposed changes, then the proposed changes will be forwarded to the Town Council for review and action. If you or the Board have any questions, please do not hesitate to contact me.

Sincerely,



Steven S. Johnson, P.E.
Town Engineer

SSJ/ssj

Encl.

CC Erin Zwirko, Director of Planning; Nathaniel Tupper, Town Manager; Erik Street, Director of Public Works



Mr. Steven S. Johnson
Town Engineer
200 Main Street
Yarmouth, ME 04096

November 22, 2022

Subject: MS4 Stormwater Ordinance changes required to be implemented by 6/30/2023 – For Yarmouth Planning Board Consideration.

Dear Mr. Johnson:

This letter provides materials for consideration by the Yarmouth Planning Board at their 1/25/2023 meeting to address ordinance changes required by the General Permit for Stormwater Discharges from the Municipal Separate Storm Sewer Systems (MS4s). The changes required by the MS4 General Permit relate to how construction sites prepare and implement erosion and sedimentation control.

Specifically, the MS4 General Permit specifies that the Town adopt erosion and sedimentation control standards consistent with the Maine DEP Chapter 500 Standards by 6/30/2023. Though the MS4 General Permit requires the erosion and sedimentation control standards only apply to the Urbanized Area, for sites that disturb one or more acres of land, Town Staff recommend these standards apply to all sites that are subject to Site Plan or Subdivision review. These requirements will provide a uniform set of standards for erosion and sedimentation control which will facilitate review of development projects and enforcement of erosion and sedimentation controls during construction by providing a single set of standards applicable to all projects.

It should be noted that developers have been required to provide this level of control for erosion and sedimentation for sites that disturb one or more acres of land because of the state requirements (the thresholds and standards are the same) for many years.

You and I and Erin Zwirko met on several occasions to review the Yarmouth Code and identify a proposed plan for adoption to meet the MS4 General Permit requirements. We are providing a brief “road map” showing what sections are affected in the paragraphs below, and have attached a document that shows the proposed redline changes.

The changes in the attached redline strikeout documents reflect the following proposed program for adoption of the erosion and sedimentation control standards: :

Chapter 601 Subdivision – Creation of a new Technical Appendix D to hold the new standards for erosion and sedimentation, with direct reference to Chapter 500, and the addition of several changes that will provide developers additional flexibility in designing their erosion and sedimentation control practices, and will enhance the Town’s ability to enforce these standards and protect water quality. Additional minor changes are being made to Article I Definitions, Article II Submission Requirements, and Article V Technical and Design Standards to support the new technical appendix.

Chapter 701 Zoning – The only changes to the Zoning Ordinance area to add several definitions (which directly reference the new Chapter 601 definitions), and to modify text related to erosion and sedimentation control to ensure there are not conflicts associated with the new standards.

Chapter 702 Site Plan Review – Erosion and sedimentation control requirements will refer to the Chapter 601 Subdivision Technical Appendix D. Additional changes are being made to Article 1 B. Definitions, C. Exemptions, G Application Requirements, H. Review Criteria and J. Technical Standards.

The attachment to this letter provides proposed redline/strike out changes to the Code.

If you have any questions about this information or need changes in advance of the meeting, please let me know. I can be reached at 207-415-5830 or via email krabasca@integratedenv.com.

Sincerely,

Integrated Environmental Engineering, Inc.

A handwritten signature in cursive script that reads "Kristie L. Rabasca".

Kristie L. Rabasca, P.E.

Attachments: Redline Strikeout proposed changes to address MS4 General Permit requirements for erosion and sedimentation control.

**11/23/2022 Proposed Changes to Yarmouth Code to address MS4 Requirements by
6/30/2023**

Proposed changes to Chapter 601 Subdivision Ordinance, Chapter 701 Zoning, and to Chapter 702 Site Plan Review Ordinance to address 2022 Stormwater General Permit requirements for Erosion and Sedimentation Control. New text is shown as underline. Text to be deleted is shown as strikethrough.

Proposed ESC Changes to Chapter 601 Subdivision Ordinance:

Table of Contents:

Technical Appendices:

D. Erosion and Sedimentation Control

Article I. C. Definitions:

Common Plan of Development or Sale - Means a “subdivisions” as defined in this chapter.

Construction Activity – Means any activity associated with a subdivision that results in Disturbed Area.

Discharge - Means any spilling, leaking, pumping, pouring, emptying, dumping, disposing, or other addition of pollutants to the Waters of the State located within the Municipality’s Urbanized Area and not including groundwater.

Disturbed Area - Means all land areas of a Parcel that are stripped, graded, grubbed, filled, or excavated at any time during the Site preparation or removing vegetation for, or construction of, a project. Cutting of trees, without grubbing, stump removal, disturbance, or exposure of soil is not considered Disturbed Area. Disturbed Area does not include routine maintenance but does include redevelopment and new Impervious Areas. “Routine maintenance” is maintenance performed to maintain the original line and grade, hydraulic capacity, and original purpose of the facility. Paving impervious gravel surfaces provided that an applicant or permittee can prove the original line and grade and hydraulic capacity shall be maintained and original purpose of the gravel surface remains the same is considered routine maintenance. Replacement of a building is not considered routine maintenance of the building and is therefore considered Disturbed Area.

Erosion and Sedimentation Control Best Management Practices (Erosion and Sedimentation Control BMPs) - Means schedules of activities, prohibitions of practices, maintenance procedures, and other methods, techniques, designs, and management practices to prevent or reduce the pollution of Waters of the State and to control erosion (Erosion Control BMPs) and sedimentation (Sedimentation Control BMPs). BMPs also include treatment requirements,

operating procedures, and practices to control Site runoff, spillage or leaks, sludge or waste disposal, or drainage from raw material storage.

Article II Submission Requirements

B. Preliminary Plan: ...

27. Erosion and Sedimentation requirements as specified in Technical Appendix D

Article V Technical and Design Standards

L. STORMWATER RUNOFF, DRAINAGE, EROSION AND SEDIMENTATION CONTROL AND DESIGN STANDARDS

1. Intent: Stormwater runoff associated with the subdivision will be designed and installed to minimize environmental impacts from the development during construction and after construction. An adequate treatment and conveyance system will be installed and piped storm drainage system including appurtenances such as catch basins and manholes shall be provided for proper drainage of storm water collected in streets and areas tributary to the street system. Discharge of the collected storm water drainage shall be by piped system or ditches, is allowed when approved by the Planning Board. Appropriate conveyances for outlets to drainage systems must be provided. A minimum easement width of 30 feet will be required.
2. Design Standards:
 - h. An Erosion and Sedimentation Control Plan will be prepared and submitted as part of the Final Plan, Erosion and Sedimentation Control Best Management Practices will be installed, inspected by the owner or their contractor, and maintained throughout construction as described in Technical Appendix D of this chapter.

S. STREET AND STORM DRAINAGE PLANS

1. Construction plans for streets and storm drainage systems shall be designed and prepared by a professional engineer registered in the State of Maine. Plans shall show the plan, profile, cross-sections and details of appurtenances. ~~Three (3) copies shall be submitted to the Planning Board for their review and referral to the Municipal Engineer or other designated registered engineer by the Planning Board.~~

Technical Appendices

Appendices A-E D below detail roadway, sidewalk and related infrastructure specifications. Such appendices shall be updated from time to time by the Town Engineer to reflect the most current information, and shall become effective upon public hearing and approval by the Planning Board.

D. Erosion and Sedimentation Control

Appendix D Erosion and Sedimentation Control

An Erosion and Sedimentation Control Plan shall be prepared by a Qualified Professional (i.e., a person who has been certified by Enviro-Cert International in erosion and sedimentation control practices or has been certified by completing the Maine Department of Environmental Protection Erosion and Sedimentation Control Practices Workshop, or is a Maine Professional Engineer with at least two years' experience in designing Erosion and Sedimentation Control BMPs).

The Erosion and Sedimentation Control Plan shall be developed and implemented to conform to the Maine Department of Environmental Protection's 06-096 CMR Chapter 500 Stormwater Management Rule Appendices A, B, and C as mandatory minimum standards with additional standards as identified in this Appendix D.

Where not otherwise specified in this Appendix, the Erosion and Sedimentation Control BMPs shall be designed using Performance Standards specified in the Maine Erosion and Sediment Control BMPs Manual developed by the Maine DEP (October 2016 or most current version).

Plan contents:

The Erosion and Sedimentation Control Plan shall consist of a graphic representation of the Site at a scale no smaller than 1 inch = 100 feet showing:

- Parcel boundaries,
- Locations of Protected Natural Resources,
- Locations of all potential sources of authorized and unauthorized non-stormwater discharges,
- Locations of all Erosion and Sedimentation Control BMPs to be used,
- Topography for Site pre-and post-construction conditions as 1-foot elevation contours,
- Details for all Erosion and Sedimentation Control BMPs to be used,

- Details and timing associated with phasing of Construction Activity in Disturbed Areas at the Site, and phasing of installation and stabilization of Erosion and Sedimentation Control BMPs (applicable to sites that will disturb 5 or more acres of land),
- Erosion and Sedimentation Control BMPs Notes with construction standards,
- A narrative description of the timing, inspections, and Erosion and Sedimentation Control BMPs to be used,
- Example inspection form,
- Dewatering plan if dewatering will be conducted on-site,
- Concrete washout plan and location if applicable,
- BMPs for concrete and brick cutting if applicable and
- Limits of disturbance with the following notes:
 - 1. the contractor will provide visual markers on the site using flagging, fencing, signs or other means to provide a clear indication of the limits of disturbance prior to the preconstruction meeting and
 - 2. That construction equipment and materials may not be stored outside the limits of disturbance.

The Erosion and Sedimentation Control Plan shall also include documentation of any variances or releases provided by the Maine Department of Environmental Protection from Chapter 500 performance standards.

Proposed ESC Changes to Chapter 701 Zoning:

ARTICLE I

D. DEFINITIONS

Common Plan of Development or Sale: As defined in Chapter 601 Article I.C.

Construction Activity: As defined in Chapter 601 Article I.C.

Discharge: As defined in Chapter 601 Article I.C.

Disturbed Area: As defined in Chapter 601 Article I.C.

Erosion and Sedimentation Control Best Management Practices: As defined in Chapter 601 Article I.C.

ARTICLE IV R.7 (SOD) SHORELAND OVERLAY DISTRICT STANDARDS (PAGE 117)

o. Erosion and Sedimentation Control (beginning on page 134)

(1) All activities which involve filling, grading, excavation or other similar activities which result in unstabilized soil conditions and which require a permit shall also require a written soil erosion and sedimentation control plan. For sites that disturb one or more acres of land, the plan shall be in accordance with Chapter 601 Technical Appendix D for Erosion and Sedimentation Control. For sites that disturb less than one acre of land, the plan shall conform to the requirements of this section. The plan (whether subject to Chapter 601 Technical Appendix D or this section) shall be submitted to the Permitting Authority for approval and shall include, where applicable, provisions for:

(a.) Mulching and re-vegetation of disturbed soil.

(b.) Temporary runoff control features such as hay bales, silt fencing or diversion ditches.

(c.) Permanent stabilization structures such as retaining walls or rip-rap.

(d.) The retention of trees, shrubs and ground cover on steep slopes or erodible soils. (2) In order to create the least potential for erosion, development shall be designed to fit with the topography and soils of the site. Areas of steep slopes where high cuts and fills may be required shall be avoided wherever possible, and natural contours shall be followed as closely as possible.

Proposed ESC Changes to Chapter 702 Site Plan Review:

ARTICLE 1

B. DEFINITIONS

For the purpose of this Section, all terms and words shall have their ordinary meaning except as provided herein and defined in Ch. 701 Article I section D of Chapter 701: including the following definitions which reference Chapter 601 Article I.C: Common Plan of Development or Sale, Construction Activity, Discharge, Disturbed Area, and Erosion and Sedimentation Control Best Management Practices.

2. Minor Development:

n: disturbance of one or more acres of land including disturbance of less than one acre of land if the overall project will disturb one or more acres of land.

C. EXEMPTIONS

The following exemptions apply unless a project disturbs one or more acres of land:

1. Single or two family dwellings outside of the W.O.C. II zone, including their basement, excavations are exempt from the requirements of site plan review.
2. External changes made to existing building for the purpose of closing an entrance or creating a new entrance is also exempt from site plan review.
3. Municipal public works, water utility projects done within public right-of-way, and public easements.
4. Filling, grading or excavation projects which move not more than one hundred (100) cubic yards of material;

G. APPLICATION REQUIREMENTS

3. Final Site Plan: The final site plan application shall include all information required in Section I.G.2, Concept Plans, and in addition shall require the following information:

- b. Storm Water Management Plan: Prepared by a professional engineer licensed in the State of Maine analyzing the proposal's impact on existing storm water facilities and

watersheds. The storm water management plan shall include a map of watersheds significantly impacted by the proposal and identify all areas of existing or anticipated flooding, location of existing and proposed culverts, pipes, detention ponds and flow restrictions to be affected by the proposal. The storm water management plan shall comply with the performance standards found in ARTICLE I.J.9 ~~ARTICLE I.H.10.~~

h. ~~Medium~~ High intensity soils classifications of the soils located on the site.

H. REVIEW CRITERIA

10 Storm Water Management: The plan provides for adequate storm water management facilities so that the post development runoff rate will be no greater than the predevelopment rate or that there is no adverse downstream impact. Proposed storm water detention facilities shall provide for the control of two year and twenty-five year storm frequency rates. The design, construction and maintenance of private facilities are in conformance with Chapter 330 Post Construction Stormwater Management. maintenance of private storm water management facilities.

11 Erosion and Sedimentation Control :The proposed development includes adequate measures to control erosion and sedimentation and will not contribute to the degradation of nearby streams, watercourses or coastal lowlands by virtue of soil erosion or sedimentation. The erosion control measures are to be in conformance with Appendix D of Chapter 601 of the Town's Code. the most current edition of the "Environmental Quality handbook, Erosion and Sedimentation Control", prepared by the Maine Soil and Water Conservation Commission.

J. TECHNICAL STANDARDS

1. Parking Spaces: All parking spaces are to be ~~9X19 feet~~ 9X18 feet.

9. Storm Water ~~m~~Management Facilities: Proposed storm water management facilities are to be reviewed by the Town Engineer or their designee for conformance with accepted engineering design and Chapter 601 Technical Appendix D Erosion and Sedimentation Control.).

10. 100-999 cubic yards. Excavation and removal of lands and filling of lands in excess of 100 cubic yards and less than 1000 cubic yards shall be reviewed in accordance with the following criteria:

a. Filling, grading, lagooning, dredging, earth- moving activities, and other site alterations shall be conducted as to prevent to the maximum extent possible, soil erosion and sedimentation of surface waters. The Erosion and Sedimentation Control portion of the Stormwater Facilities Standard in

ARTICLE I.J.9 shall apply even if only filling is conducted. ~~To this end, all construction and site alterations shall be accomplished in conformance with the erosion prevention provisions of with Chapter 601 Appendix D the “Best Management Practices (BMP’s), March 1991 (as developed by the Cumberland County Soil and Water Conservation District and the Department of Environmental Protection.)~~

11. More than 1000 cubic yards. Excavation and removal of lands and filling of lands equaling 1000 cubic yards or more shall be reviewed in accordance with the following criteria:

- a. Specific plans are established to avoid hazards from excessive slopes or standing water. Where an embankment must be left upon the completion of operations, it shall not be at a slope steeper than one (1) foot vertical to two (2) feet horizontal.
- b. The operation is shielded from surrounding property with adequate screening and creates no disturbance of a water source.
- c. No excavation shall be extended below the grade of adjacent streets unless 100 feet from the street line or unless provision has been made for reconstruction of the street at a different level.
- d. Sufficient top soil or loam shall be retained to cover all areas, so that they may be seeded and restored to natural conditions.
- e. A surety bond, one payable to the Town of Yarmouth and issued by a commercial surety company authorized to do business within the State of Maine, is posted by the owner with the Treasurer of Yarmouth by the applicant in an amount recommended by the Town Manager or his/her agent and approved by the Planning board as sufficient to guarantee conformity with the provisions of the grant of approval.
- f. The Erosion and Sedimentation Control portion of the Stormwater Facilities Standard in ARTICLE I.J.9 shall apply even if only filling is conducted.