# Town of Stockbridge Special Permit Application

Fee: \$300

Application is hereby made to the Planning Board by:
Applicant (name): Michael & Rebecca Bellora
Applicant Signature: Mehael Bellara Com
Applicant Mailing Address: 34 Millard Street, Fairfield, CT 06824
On the <u>3</u> day of <u>August</u> 2022 for property shown on the Stockbridge
Assessors Map #101, Lot #26 Book 6762, Page 31
Owner of property: Michael & Rebecca Bellora
Owner's signature: Mehad Bellom 18m
Address of property: 38 Lake Drive
Mailing Address: 34 Millard Street, Fairfield, CT 06824
Description of property: Single-family, two-story dwelling on .26 acres
Present use of property: Residential
Project Description: <u>Demolition of existing dwelling and construction of new single-family home, septic system, and dock.</u>
Appropriate Section of Zoning Bylaw: 6.5 - Lake and Pond Overlay District
Attach six sets of scale drawings with measurements showing the existing conditions and proposed changes. Also attach six plot plans showing the locations of all structures and buildings with scaled measurements to all lot lines and between all structures, along with a total of five copies of this application.

All applications must be accompanied by six complete sets of documents, all areas of the above form-must be completed, and the proper fee paid, or the application will be deemed to be

incomplete and returned to the applicant.

**Applicant: MICHAEL & REBECCA BELLORA** 

# SPECIAL PERMIT LAKE AND POND OVERLAY DISTRICT

# CONSTRUCTION OF SINGLE FAMILY HOME

38 LAKE DRIVE STOCKBRIDGE, MA 01262

**AUGUST 2022** 



WHITE ENGINEERING, INC. 55 S. MERRIAM STREET PITTSFIELD, MA 01201 (PH) 413-443-8011 (FX) 413-443-8012 (EMAIL) BWHITE@WHITEENG.COM

# Lake and Pond Overlay District Checklist

Date: 8/03/2022

Name of Applicant: Michael and Rebecca Bellora Address: 34 Millard Street, Fairfield, CT 06824 Property Affected: 38 Lake Drive, Stockbridge, MA 01262 (To be filled out by applicant) 1. How far from the mean high water mark is the existing structure? 35' 2. Is the existing structure, lot, etc. nonconforming in any manner other than being within the LPOD? Yes X No Explain. Does not meet requirements for Lot Frontage or Lot Area in R-2 District or front and side setbacks 3. Is any construction being done closer to the mean high water mark than the existing structure? Yes\_\_\_ No\_X\_ 4. Is any septic system work being done within 150' of the mean high water mark? Yes X No 5. What is the lot coverage of the existing structure(s)? 11% Under the proposed plan? 11% 6. Cutting in the LPOD a. Is cutting of live vegetation being done within 35' of the mean high water mark? Yes X No b. Is an alternative cutting plan being proposed? Yes X No If so, is a description of natural shrubbery and replacement plantings, if required, included? Yes X No 7. Excavation in the LPOD a. Are any changes being made to roads/driveways? Yes\_X \_\_ No\_\_\_ b. Any removal of soil? Yes X No c. Any demolition being done? Yes X No

# (continued on other side)

(To be filled out by Planning Board.)
8. Does the application/plan include:

locus map
scaled drawing of property showing existing watercourses, existing features, parking and loading areas with materials, and erosion control measures.
grading and drainage plan with 2' contour lines in building area and 5' contour lines elsewhere
construction time schedule

9. What is the Conservation Commission's opinion?

# 1.0 PROJECT SCOPE

The applicant, Michael and Rebecca Bellora, proposes to demolish an existing house built in 1957, and reconstruct a new single-family home, new septic system, deck and patio, porch, landscaping and seasonal dock on property located at 38 Lake Drive.

# 2.0 EXISTING CONDITIONS

The subject of this application is a small parcel roughly 10,703 square feet off of Lake Drive having frontage on the Western shore of Stockbridge Bowl. An individual driveway provides access to the existing house coming off Lake Drive. The Stockbridge Historic Preservation Commission approved an Application for Demolition of the existing cottage at their meeting on May 4, 2022. The site is served by a drilled well which will be kept online and an on-site tight tank which will be replaced with a new septic tank, pump chamber and drip dispersal leach field located approximately southwest of the existing house adjacent to Lake Drive. There is a seasonal dock currently in place, however plans to removed the existing seasonal dock and replace it with a new one are proposed. The existing parcel sits within a small community abutting neighboring parcels similar to 38 Lake Drive.

# 3.0 WETLAND RESOURCE AREAS

Wetland resource areas associated with Stockbridge Bowl in the vicinity of property are Land Under Water Body 10.56 (LUWB), Bank 10.54, and Bordering Vegetated Wetland 10.5S(BVW). A Notice of Intent is being submitted to the Stockbridge Conservation Commission for work within areas subject to protection under the Wetlands Protection Act and Town of Stockbridge Wetland Bylaw.

According to the current Natural Heritage & Endangered Species Program (NHESP) mapping, the work area is located within an area of Estimated Habitat of Rare Wildlife and an area of Priority Habitat of Rare Species (PHI 300). There are no Certified or Potential Vernal Pools within the vicinity of the project. A copy of the Notice of Intent was submitted to NHESP for review under the Massachusetts Endangered Species Act (MESA). The response from NHESP is attached stating "will not result in a prohibited take".

According to FEMA Firm Panel 250042 0005B, the property is not located within the 100-year or 500-year floodplain.

The property is not within an Area of Critical Environmental Concern (ACEC).

Erosion control devices and practices shall be implemented to protect resource areas. This project, as designed, will not affect Stockbridge Bowl or wetland resource areas on the parcel.

# 4.0 ZONING

This parcel is located within the R-2 Residence zone. All proposed buildings subject to this application lie within the R-2 district. Portions of the existing house do not comply with the zoning setbacks for the R-2 District. No proposed work will be closer than the existing setbacks on the non-conforming lot.

# Section 6.5: Lake and Pond Overlay District (LPOD)

The Lake and Pond Overlay District (LPOD) is intended to protect and enhance the principal lakefronts and shorelines of the Town of Stockbridge; to maintain safe and healthful conditions; to prevent and control water pollution; and to preserve habitat, vegetative cover and natural beauty.

The existing structure is within the 150-foot LPOD of Stockbridge with the closest point being 35' from the Mean Highwater Line of Stockbridge Bowl. The project has been designed to ensure the proposed house maintains the same 35' setback to Stockbridge Bowl. The home will have an attached screened in porch and patio on the East side of the house. With a 28' wide gravel driveway/ parking area on the West side. On May 19<sup>th</sup>, 2022 we received a written correspondence from the Natural Heritage Endangered Species Program (NHESP) stating the proposed project will not adversely effect the resource area habitat and the Commission will be able to formally close their hearing and vote to issue an Order of Conditions.

To accommodate the proposed reconstruction of the home and stormwater management the applicant proposes a tree re-planting plan and buffer zone improvement plantings. The applicant as well as staff of White Engineering, Inc. consulted with neighbors to provide the proposed planting plan. The stormwater management system uses a combination of stone settlement areas, a trench drain, and one rain garden along the wetland. This is a concept we've employed with great success on other projects helping the applicant not only properly manage stormwater in compliance with the stormwater management performance standards of the LPOD but helps to supplement the 35' vegetated buffer from Stockbridge Bowl.

Finally, the applicant proposes one dock for the parcel to launch kayaks off of. The dock as shown are shown on the plans presented to the Conservation Commission in May 2022. The dock has been configured to comply with the Stockbridge Zoning Bylaw requirements of a maximum length of 25' beyond the high-water line and 200 square foot area. Upon receipt of our Order of Conditions a Chapter 91 license will be applied for with the Massachusetts Department of Environmental Protection. Please accept this application as formal notice to the Planning Board of the proposed dock.

# 6.5.1 Purpose

The proposed project's purpose is to demolish an existing single family home and replace it with a new single family home, new septic system, patio, and porch, with landscaping as well as a seasonal dock along the waterfront.

# 6.5.2 Description

This LPOD shall include:

• The lakefront of the Stockbridge Bowl, Lily Pond, Echo Lake, Mohawk Lake and Agawam Lake and one hundred fifty (150) feet back from the high water mark of these waterbodies;

The project is within the LPOD as it lies within the 150' setback to Stockbridge Bowl.

### 6.5.3 Relation to Other Districts

The LPOD is an overlay district mapped over other districts. Where there is an inconsistency between the requirements of Section 6.5 and the regulations otherwise applicable in such other districts, the more restrictive provision shall be deemed to apply.

The project is within the R-2 District fronting on Lake Drive.

# 6.5.4 Applicability

a. Jurisdictional Activities - Except as otherwise provided in Section 6.5, no building, structure or land use activity shall be permitted except pursuant to a special permit issued by the Planning Board pursuant to the requirements of Sections 6.3 and 6.5. For the purposes of Section 6.5, "land use activity" shall mean any significant change in the physical characteristics of land or the physical or chemical characteristics of the wastewater produced from a building or structure, but excluding any exempt uses listed in paragraph b of this subsection. Except as otherwise provided in said paragraph b, "land use activity" shall include, but not be limited to: any extension or alteration of an existing structure; any removal of vegetation; any road or driveway; any excavation for the purpose of removing earth materials off-site; and any facility designed to prevent or mitigate the impacts of stormwater or associated drainage.

The project is within the LPOD and requires a permit from the Planning Board.

- b. Exempt Activities The following activities do not require a special permit, but must nevertheless comply with the requirements of subsection 6.5.9:
- Any principal or accessory use, otherwise permitted by this Bylaw, to be located within an existing structure, provided that any extension or alteration of such structure does not increase the height of the structure and is no closer to the high water mark than the existing structure; the resulting structure complies with applicable yard, lot coverage and floor area requirements of Section 5.5; and the chemical characteristics of any wastewater produced from such use are not significantly changed;
- Ordinary repair or maintenance of, or interior alterations to, existing structures;
- Removal of dead, diseased or dying trees and vegetation,
- Ordinary pruning or maintenance of shrubs or trees;
- Other gardening uses that do not involve the cutting of shrubs or trees,
- Structures under one hundred (100) square feet in footprint area; and
- Recreational, municipal

The project does not qualify for exemption of the requirement for a Special Permit.

# 6.5.5 Prohibited Activities

The following activities shall be prohibited within the LPOD:

• The storage or dumping of any waste material, junk, refuse, or other debris;

There is no proposed storage or dumping of any waste material, junk, refuse or other debris. Any

demolition will be loaded into a container and disposed of off-site in a legal manner.

• The discharge or application of wastewater or any pollutant except as specifically permitted by the Board of Health; and

Wastewater discharge is approved by Tri-Town Board of Health. No other pollutants proposed to be used on site.

• The relocation of perennial or intermittent watercourses, the filling or reclaiming of wetlands and watercourses, the mining or off-site removal of topsoil, subsoil, clay, peat, gravel, sand, shale or other similar materials.

There is no proposed alteration of wetlands or water courses. Soils and rock from the foundation excavation no utilized as backfill will be removed from site.

# 6.5.6 Required Findings

The Planning Board shall approve a special permit for any building, structure or land use activity within the LPOD if it finds that the building, structure or land use activity meets all application and site plan requirements set forth in Section 6.3 and subsection 6.5.8 and all applicable land use and development standards set forth in subsection 6.5.9.

This submittal meets the application and site plan requirements of Section 6.3 and Subsection 6.5.8 (see below). The project will have no adverse impact on the environment utilizing the construction period erosion and sedimentation controls and construction practices identified in the enclosed Stormwater Pollution Prevention Plan (SWPPP). Long term stormwater management requirements are met with details of the stormwater management system identified in the attached Stormwater Report.

### 6.5.7 Procedure

The procedure for review and approval under this section shall be as set forth in Sections 6.3 and 6.5. A Site Plan satisfying the requirements of subsections 6.3.7 and 6.5.8 is required for any proposed building, structure or land use activity within the LPOD for which a special permit is required Special permit applications and site plans shall be submitted to the Board of Selectmen for its review and comment to the Planning Board.

A site plan satisfying these requirements has been submitted along with the application of the Special Permit and LPOD criteria and checklist.

# 6.5.8 Application and Site Plan Requirements

In addition to the application and site plan data required by Section 6.3, an Applicant for a special permit pursuant to Section 6.5 shall submit the following information to the Planning Board for its review:

• The location and description of existing and proposed features;

The enclosed site plan set prepared by White Engineering, Inc. prepared for Michael and Rebecca Bellora with drawing number 21-06-04B with a revision date of August 3, 2022.

Boundaries of the property plotted to scale;

Surveyed boundaries of property are shown, to scale, on the site plan based on the survey prepared by Patrick McColgan of Taconic Land Surveyors for the property provided to White Engineering, Inc. in September 2021.

Existing watercourses;

The existing watercourses, Stockbridge Bowl and an unnamed intermittent stream, is shown on the plan.

• A grading and drainage plan, showing existing and proposed contours at a two (2) foot contour in the area of activities for which a special permit under section 6.5 is being sought, and a five (5) foot contour elsewhere;

The enclosed plan set shows existing and proposed topography associated with the proposed reconstruction of the single family home, proposed septic system, and proposed stormwater management system.

The location, design, and construction materials of all driveway, parking and loading areas;

The area of the relocated driveway from the existing is shown on the site plan.

• The location of all stormwater drainage areas (catchments) for each distinct receiving water/wetland area within and/or downgradient of activities for which a special permit is being sought;

The work area is a single catchment with Stockbridge Bowl being the receiving water.

Soils-based stormwater infiltration rates using the following table:

Texture Class	NRCS Hydrologic Soil Group	Design Infiltration Rate
Sand	A	8.27
Loamy Sand	A	2.41
Sandy Loam	В	1.02
Loam	В	0.52
Silt Loam	С	0.27
Sandy Clay Loam	С	0.17
Clay Loam	D	0.09
Silty Clay Loam	D	0.06
Sandy Clay	D	0.05
Silty Clay	D	0.04
Clay	D	0.02

The stormwater infiltration rates using the LPOD table for Sandy Loam soils group B Design Infiltration Rate of 1.02 Inches/Hour.

- Plans and specifications for soil erosion and sedimentation control measures

  Erosion control measures are shown and detailed on the site plan. Silt fence and straw bales will be used throughout the entire site. Specification for soil stockpiles to be tarped are included in the SWPPP.
- A timing schedule indicating anticipated starting and completion dates, the sequence of anticipated tasks, and the duration of exposure of each disturbed area prior to the completion of effective erosion and sediment control measures;
  - 1. October 2022- Complete appeal period of all Special Permits, finalize construction documents and apply for permits. Install construction period erosion and sedimentation controls with inspection by conservation commission
  - 2. November 2022- Remove selected trees, utility disconnection and completion of demolition of existing home, site preparation for foundation
  - 3. December 2022- Commencement of framing/construction of the proposed single-family home
  - 4. Summer/Fall 2023- Complete construction of on-site sewage disposal system
  - 5. Fall 2023 or Spring 2024- Final grading, planting of proposed buffer plant areas and permanent stormwater management best management practices
  - 6. Summer 2024- Obtain certificate of occupancy for the home
  - 7. Summer/Fall 2024- Obtain Certificate of Compliance from Conservation Commission releasing the Order of Conditions upon confirmation of stabilization of final planting
- For any land use activity involving the construction or expansion of a building or structure, the paving of roads, or the creation of driveway, parking and loading area, the results of a pollutant loading model demonstrating that stormwater flow on or from the site will not result in a discharge of any pollutant in violation of subsection 6.5.5. Such model shall evaluate the loadings of nutrients (nitrogen and phosphorus), bacteria, metals and total suspended solids, the expected removal rates associated with any stormwater treatment facility and the resulting loads to the LPOD. The site plan shall be developed subsequent to, and in accordance with an existing natural resources conditions inventory that shows topography including steep slopes (greater than 10%), severe slopes (greater than 20%), soils limitations (constraints related to septic system suitability and erosive characteristics as mapped by the USDA, Natural Resources Conservation Service) and vegetation.

No increase in the discharge of pollutants is proposed (nutrients, bacteria, metals, or total suspended solids) from the site.

The following represents information from the Mass DEP Stormwater Policy Volume 2, Table 1.2: Stormwater Pollutants, Sources, and Related Items.

Stormwater	4	

Pollutant	Sources	Site Specific Information
	Urban Runoff, Animal Waste,	No Urban Runoff, No Animal Waste
Nutrients Nitrogen &	Fertilizers, Failing Septic System	proposed, No Fertilizers proposed
Phosphorous		within LPOD,
		Replacing Failed Septic System
	Urban Runoff, Animal Waste,	No Urban Runoff,
Bacteria	Failing Septic System	No Animal Waste proposed.
		Replacing Failed Septic System
	dustrial Processes, Automobile Pollutan	No Industrial processes, Automobile
Metals	Metal Roofs	pollutants low for single family house site.
		Any metal roof to be coated first
	0 1 1 5 1 1	
	Construction Sites, Other Disturbed	Erosion and Sedimentation Controls are
T + 1 C 1 1	and/or Non-Vegetated Lands,	proposed prior to construction.
Total Suspended	Eroding Banks, Road Sanding,	All land to be stabilized upon
Solids	Urban Runoff	completion of work.

The proposed site plan set as well as the SWPPP ensure that there will be no increase in the pollutants identified in the chart referenced in Mass DEP Stormwater Policy Volume 2, Table 1.2: Stormwater Pollutants, Sources, and Related Items.

# 6.5.9 Land Use and Development Standards All Buildings, Structures and Land Use Activities Shall Comply with the Following Standards:

# a. Development of Lots

• The minimum setback from the high water mark for buildings and structures shall be 100 feet.

Existing house is 35 feet from the high water mark with the proposed house is no closer than 35 feet to Stockbridge Bowl.

• The maximum lot coverage by buildings, structures and impermeable surfaces within the LPOD shall be fifteen (15) percent of the total lot area within the LPOD.

Lot coverage is 11% of the LPOD area.

• All driveways, parking and loading areas shall be constructed of permeable materials.

Existing driveway is gravel. Proposed driveway to be gravel.

# b. Erosion and Sedimentation Control

• Natural vegetation shall be maintained on at least seventy-five percent (75%) of the total lot area within the LPOD.

Upon completion of the proposed project including the proposed tree replacement and construction of the rain gardens the property will have at least 75% natural vegetation within the LPOD.

• Grading shall not result in the creation of slopes greater than twenty percent (20%) within the LPOD.

The project as proposed does not create any new slopes exceeding 20%. The proposed leach field will have retaining walls to minimize the footprint of the system.

• Activities that result in slopes exceeding ten percent (10%) shall incorporate the use of staked straw bales, siltation fences, sedimentation basins and silt traps to control sedimentation and erosion during construction. Such practices shall be implemented within twenty-four (24) hours of clearing and excavation and shall be maintained until completion of all such activities.

An erosion and sediment control plan has been proposed on the site plans as well as the enclosed SWPPP.

• All activities shall be completed within 90 days from original clearing and excavation, except as otherwise authorized by the Building Inspector, in order to minimize exposure to sedimentation and erosion.

Disturbed areas shall be stabilized with cover within 90 days unless otherwise authorized. Erosion control measures will be maintained until project completion and not removed until authorized by the Stockbridge Conservation Commission.

• In cleared areas surrounding the creation of new impermeable surfaces, temporary or permanent vegetative landscaping shall be employed within seven (7) days of initial clearing and excavation.

Once foundation is backfilled temporary vegetation will be planted until the final landscaping is completed.

• Stockpiled soils or other erodible materials shall be securely covered and/or vegetated to avoid erosion and sedimentation during construction.

Any stockpiling of soils will be temporary and will be covered with a tarp to avoid erosion and sedimentation along with a straw wattle around the perimeter of the pile.

### c. Stormwater Management

• Upon completion of activities for which a special permit under Section 6.5 has been granted, stormwater runoff rates shall match pre-development (natural) conditions for the two-, twenty-five- and one-hundred- (2-, 25- and 100-) year events in each catchment area.

Upon completion of site development stormwater runoff rates will match pre-development rates for 2, 25 and 100 year storms. The rain gardens as designed will be able to store a static volume of 1.44 inches or rain prior to accounting for any infiltration

• Upon completion of activities for which a special permit under Section 6.5 has been granted, annual groundwater recharge rates shall match pre-development (natural) conditions to preserve groundwater supplies and to protect baseflow to downgradient streams, lakes and wetlands.

Annual stormwater recharge rates will match pre-development through infiltration within the rain gardens.

• Upon completion of activities for which a special permit under Section 6.5 has been granted, additional stormwater recharge shall be provided in an amount equal to the total volume of consumptive uses of groundwater withdrawals, such as drinking water and irrigation, on the site.

The applicant proposes to capture and infiltrate all proposed runoff generated on site which far exceeds the consumptive use of domestic water and irrigation.

• Stormwater treatment using bioretention areas, constructed wetlands or organic filters shall be provided for the first flush (1") rainstorm from roads, other paved areas and metallic roofs prior to infiltration/recharge. Stormwater treatment facilities may be designed to include both static storage and dynamic infiltration (infiltration that occurs during the peak 2 hours of the design storm event).

There is no proposed pavement of the driveway, rain gardens, and stone infiltration trenches provided will provide total suspended solids removal prior to reaching the rain garden.

- Pollutant loading shall be less than the following receiving water standards:
- a. Phosphorus 0.08 mg/liter
- b. Bacteria 200 colonies/100 milliliters
- c. Metals applicable federal and state drinking water standards

No pollutant loads containing Phosphorous, bacteria, or metals are proposed (see Table in Section 3.0 Zoning subsection 6.5.8). The final roof design are typical shingles. There will be no proposed metal roof where it would need to be treated with a silicone membrane which would increase the longevity of the roof and prevent metals from degrading groundwater quality.

# d. Cutting

• Except as otherwise permitted by this subsection, no vegetation may be removed within thirty-five (35) feet extending inland from any point along the high water mark. This area shall be maintained as an undisturbed natural buffer strip.

The trees proposed to be cut within the 35' setback are largely dead, diseased or dying with a substantial tree replanting plan accounting for all trees removed within the 100' buffer zone to Stockbridge Bowl.

• For the purpose of water access, a contiguous clear-cut opening in the buffer strip, not to exceed thirty-five (35) feet in width or twenty percent (20%) of the lot's frontage along the water, whichever is less, shall be permitted. Such opening shall not be less than thirty (30) degrees from perpendicular to the water's edge.

There will be no need for clear cutting to provide water front access and the standard is met.

# 5.0 <u>SOILS AND DRAINAGE</u>

The soils on the property are sandy loam and we have utilized the 1.02 in/hr as the design infiltration rate as identified in the Stockbridge Zoning Bylaw. The drainage has been designed to allow all proposed runoff to be captured and collected through stone infiltration trenches and a rain garden to manage the increase in runoff from the proposed improvements.

# 6.0 SEWAGE DISPOSAL

A new septic system is proposed to serve the existing home. The septic tank, pump chamber and leach field are within the LPOD due to the location of the house and property. The proposed leachfield will utilize the Oakson Drip Irrigation system which is a DEP approved Innovation & Alternative (IA) technology that we have used with great success. The proposed septic tank will include a Jet-Bat J-500 series tank that is equipment with a secondary treatment process to better handle nitrogen sensitive areas.

# 7.0 WATER SUPPLY

The existing well on the property will remain online for the new house.

# 8.0 OTHER UTILITIES

The existing overhead electric and cable utilities will be disconnected prior to demolition. The applicant's representatives will work with the utility providers to provide new services to the proposed house.

# 9.0 DRIVEWAY AND PARKING

The existing driveway is gravel and the proposed driveway will be gravel as well. A portion of the existing driveway will be needed for the septic system so a new driveway/ parking area will be constructed to the north.

# 10.0 SOLID WASTE

Construction waste will be stored in an approved container and removed from the site by a licensed hauler. Debris material will not be stored on-site, outside of the container. Domestic solid waste will be disposed of in a legal manner by an independent hauler arranged by the owner.

# 11.0 OPEN SPACE, LAND LEFT IN NATURAL STATE

79% of the land within the LPOD will be vegetated after construction. 88% of the property within the LPOD will be of pervious materials.

# 12.0 ARCHITECTURAL ELEMENTS AND VISUALIMPACT

The proposed house will use natural colors and materials. Existing mature trees along the shoreline are to remain as well as the additional trees to be planted will provide a natural screen of the house from Stockbridge Bowl.

# 13.0 <u>L ANDSCAPING AND LIGHTING</u>

Enclosed with this application is a robust planting plan showing the proposed trees, shrubs, and plugs to be planted on the property within the LPOD.

# Stormwater Management Report For Michael & Rebecca Bellora 38 Lake Drive, Stockbridge, MA

August 2022



White Engineering, Inc.
55 South Merriam Street
Pittsfield, MA 01201
(P) 413-443-8011
(F) 413-443-8012
bwhite@whiteeng.com

# Introduction:

The subject parcel is located at 38 lake Drive in Stockbridge, MA. The parcel contains just under one quater (1/4) acre and contains an existing house in the middle of the lot. The lot is on the east side of the Lake Drive and east of Route 183 a.k.a. Interlaken Road. The proposed project calls for demolition and reconstruction of a new single-family home that is approximately 1174 sf, located on the lot along with the associated parking, stormwater management best management practices during construction, the use of infiltration through rain gardens, trench drains, stone drip edges, and stone aprons to manage runoff and providing more native plantings on the property.

# **Summary of Subcatchment Analysis:**

The roof runoff is being primarily managed with 375 sf rain garden and 292 sf of stone drip edge. Any runoff from the driveway or any other impervious area will be contained in a trench drain and relocated to a planted area with a stone apron to allow of infiltration while reducing the amount of erosion. Both best management practices help to promote infiltration while providing a decentralized scheme to manage stormwater. By managing the runoff in smaller areas, it provides greater redundancy rather than a scheme that would collect all driveway and roof runoff to a single treatment and infiltration best management practice.

The soil conditions are favorable for the use of infiltration best management practices. According to NRCS Web Soil Survey the area the soil in the area is classified as Farmington-Rock Complex. The native soil is a Sandy Loam and under the *Stockbridge Zoning Bylaw, Section 6.5.8, Application and Site Design Requirements*, a design infiltration rate of 1.02 inches/hour was utilized.

There are no proposed metal roofs so there will be no concerns for treatment of runoff for metal constituents. Please refer to the attached Site Improvement Plan and Stormwater Pollution Prevention Plan for construction period erosion controls.



# **Checklist for Stormwater Report**

# A. Introduction

Important: When filling out forms on the computer, use only the tab key to move your cursor - do not use the return key.





A Stormwater Report must be submitted with the Notice of Intent permit application to document compliance with the Stormwater Management Standards. The following checklist is NOT a substitute for the Stormwater Report (which should provide more substantive and detailed information) but is offered here as a tool to help the applicant organize their Stormwater Management documentation for their Report and for the reviewer to assess this information in a consistent format. As noted in the Checklist, the Stormwater Report must contain the engineering computations and supporting information set forth in Volume 3 of the Massachusetts Stormwater Handbook. The Stormwater Report must be prepared and certified by a Registered Professional Engineer (RPE) licensed in the Commonwealth.

The Stormwater Report must include:

- The Stormwater Checklist completed and stamped by a Registered Professional Engineer (see page 2) that certifies that the Stormwater Report contains all required submittals.<sup>1</sup> This Checklist is to be used as the cover for the completed Stormwater Report.
- Applicant/Project Name
- Project Address
- Name of Firm and Registered Professional Engineer that prepared the Report
- Long-Term Pollution Prevention Plan required by Standards 4-6
- Construction Period Pollution Prevention and Erosion and Sedimentation Control Plan required by Standard 8<sup>2</sup>
- Operation and Maintenance Plan required by Standard 9

In addition to all plans and supporting information, the Stormwater Report must include a brief narrative describing stormwater management practices, including environmentally sensitive site design and LID techniques, along with a diagram depicting runoff through the proposed BMP treatment train. Plans are required to show existing and proposed conditions, identify all wetland resource areas, NRCS soil types, critical areas, Land Uses with Higher Potential Pollutant Loads (LUHPPL), and any areas on the site where infiltration rate is greater than 2.4 inches per hour. The Plans shall identify the drainage areas for both existing and proposed conditions at a scale that enables verification of supporting calculations.

As noted in the Checklist, the Stormwater Management Report shall document compliance with each of the Stormwater Management Standards as provided in the Massachusetts Stormwater Handbook. The soils evaluation and calculations shall be done using the methodologies set forth in Volume 3 of the Massachusetts Stormwater Handbook.

To ensure that the Stormwater Report is complete, applicants are required to fill in the Stormwater Report Checklist by checking the box to indicate that the specified information has been included in the Stormwater Report. If any of the information specified in the checklist has not been submitted, the applicant must provide an explanation. The completed Stormwater Report Checklist and Certification must be submitted with the Stormwater Report.

<sup>&</sup>lt;sup>1</sup> The Stormwater Report may also include the Illicit Discharge Compliance Statement required by Standard 10. If not included in the Stormwater Report, the Illicit Discharge Compliance Statement must be submitted prior to the discharge of stormwater runoff to the post-construction best management practices.

<sup>&</sup>lt;sup>2</sup> For some complex projects, it may not be possible to include the Construction Period Erosion and Sedimentation Control Plan in the Stormwater Report. In that event, the issuing authority has the discretion to issue an Order of Conditions that approves the project and includes a condition requiring the proponent to submit the Construction Period Erosion and Sedimentation Control Plan before commencing any land disturbance activity on the site.



# Massachusetts Department of Environmental Protection

Bureau of Resource Protection - Wetlands Program

# Checklist for Stormwater Report

# B. Stormwater Checklist and Certification

The following checklist is intended to serve as a guide for applicants as to the elements that ordinarily need to be addressed in a complete Stormwater Report. The checklist is also intended to provide conservation commissions and other reviewing authorities with a summary of the components necessary for a comprehensive Stormwater Report that addresses the ten Stormwater Standards.

*Note:* Because stormwater requirements vary from project to project, it is possible that a complete Stormwater Report may not include information on some of the subjects specified in the Checklist. If it is determined that a specific item does not apply to the project under review, please note that the item is not applicable (N.A.) and provide the reasons for that determination.

A complete checklist must include the Certification set forth below signed by the Registered Professional Engineer who prepared the Stormwater Report.

# Registered Professional Engineer's Certification

I have reviewed the Stormwater Report, including the soil evaluation, computations, Long-term Pollution Prevention Plan, the Construction Period Erosion and Sedimentation Control Plan (if included), the Long-term Post-Construction Operation and Maintenance Plan, the Illicit Discharge Compliance Statement (if included) and the plans showing the stormwater management system, and have determined that they have been prepared in accordance with the requirements of the Stormwater Management Standards as further elaborated by the Massachusetts Stormwater Handbook. I have also determined that the information presented in the Stormwater Checklist is accurate and that the information presented in the Stormwater Report accurately reflects conditions at the site as of the date of this permit application.

Registered Professional Engineer Block and Signature



# Checklist

pject Type: Is the application for new development, redevelopment, or a mix of new and evelopment?
New development
Redevelopment
Mix of New Development and Redevelopment



# Massachusetts Department of Environmental Protection

Bureau of Resource Protection - Wetlands Program

# **Checklist for Stormwater Report**

# Checklist (continued)

LID Measures: Stormwater Standards require LID measures to be considered. Document what environmentally sensitive design and LID Techniques were considered during the planning and design of the project: No disturbance to any Wetland Resource Areas Site Design Practices (e.g. clustered development, reduced frontage setbacks) Reduced Impervious Area (Redevelopment Only) Minimizing disturbance to existing trees and shrubs LID Site Design Credit Requested: Credit 1 Credit 2 ☐ Credit 3 Use of "country drainage" versus curb and gutter conveyance and pipe ⊠ Bioretention Cells (includes Rain Gardens) Constructed Stormwater Wetlands (includes Gravel Wetlands designs) Treebox Filter ☐ Grass Channel ☐ Green Roof Stone drip edge, trench drain, stone aprons, and additional plantings Other (describe): Standard 1: No New Untreated Discharges No new untreated discharges Outlets have been designed so there is no erosion or scour to wetlands and waters of the Commonwealth Supporting calculations specified in Volume 3 of the Massachusetts Stormwater Handbook included.



# **Checklist for Stormwater Report**

Checklist (continued)

Sta	ındard 2: Peak Rate	e Attenuation			
	and stormwater disc	charge is to a wetland subject to	located in land subject to coastal storm flowage coastal flooding. boding increases during the 100-year 24-hour		
	development rates flooding increases of	for the 2-year and 10-year 24-ho during the 100-year 24-hour stor	nt peak discharge rates do not exceed pre- ur storms. If evaluation shows that off-site m, calculations are also provided to show that eed pre-development rates for the 100-year 24-		
Sta	ındard 3: Recharge				
$\boxtimes$	Soil Analysis provid	ed.			
	Required Recharge	Volume calculation provided.			
	Required Recharge volume reduced through use of the LID site Design Credits.				
	Sizing the infiltration	n, BMPs is based on the followin	g method: Check the method used.		
	☐ Static	☐ Simple Dynamic	☐ Dynamic Field¹		
	Runoff from all impe	ervious areas at the site discharç	ging to the infiltration BMP.		
	are provided showir		scharging to the infiltration BMP and calculations uting runoff to the infiltration BMPs is sufficient to		
	Recharge BMPs ha	ve been sized to infiltrate the Re	equired Recharge Volume.		
	_	ve been sized to infiltrate the Re or the following reason:	equired Recharge Volume <i>only</i> to the maximum		
	☐ Site is comprise	ed solely of C and D soils and/or	bedrock at the land surface		
	☐ M.G.L. c. 21E s	ites pursuant to 310 CMR 40.00	00		
	☐ Solid Waste La	ndfill pursuant to 310 CMR 19.0	00		
	Project is other practicable.	wise subject to Stormwater Man	agement Standards only to the maximum extent		
	Calculations showing	ng that the infiltration BMPs will o	drain in 72 hours are provided.		
	Property includes a	M.G.L. c. 21E site or a solid wa	ste landfill and a mounding analysis is included.		

<sup>&</sup>lt;sup>1</sup> 80% TSS removal is required prior to discharge to infiltration BMP if Dynamic Field method is used.



# **Checklist for Stormwater Report**

Ch	ecklist (continued)
Star	ndard 3: Recharge (continued)
	The infiltration BMP is used to attenuate peak flows during storms greater than or equal to the 10- year 24-hour storm and separation to seasonal high groundwater is less than 4 feet and a mounding analysis is provided.
	Documentation is provided showing that infiltration BMPs do not adversely impact nearby wetland resource areas.
Star	ndard 4: Water Quality
	Long-Term Pollution Prevention Plan typically includes the following:  Good housekeeping practices;  Provisions for storing materials and waste products inside or under cover;  Vehicle washing controls;  Requirements for routine inspections and maintenance of stormwater BMPs;  Spill prevention and response plans;  Provisions for maintenance of lawns, gardens, and other landscaped areas;  Requirements for storage and use of fertilizers, herbicides, and pesticides;  Pet waste management provisions;  Provisions for operation and management of septic systems;  Provisions for solid waste management;  Snow disposal and plowing plans relative to Wetland Resource Areas;  Winter Road Salt and/or Sand Use and Storage restrictions;  Street sweeping schedules;  Provisions for prevention of illicit discharges to the stormwater management system;  Documentation that Stormwater BMPs are designed to provide for shutdown and containment in the event of a spill or discharges to or near critical areas or from LUHPPL;  Training for staff or personnel involved with implementing Long-Term Pollution Prevention Plan;  List of Emergency contacts for implementing Long-Term Pollution Prevention Plan.  A Long-Term Pollution Prevention Plan is attached to Stormwater Report and is included as an attachment to the Wetlands Notice of Intent.  Treatment BMPs subject to the 44% TSS removal pretreatment requirement and the one inch rule for calculating the water quality volume are included, and discharge:  is within the Zone II or Interim Wellhead Protection Area  is near or to other critical areas  is near or to other critical areas
	is within soils with a rapid inilitration rate (greater than 2.4 inches per nour)

involves runoff from land uses with higher potential pollutant loads.

applicable, the 44% TSS removal pretreatment requirement, are provided

☐ The Required Water Quality Volume is reduced through use of the LID site Design Credits.

□ Calculations documenting that the treatment train meets the 80% TSS removal requirement and, if



# **Checklist for Stormwater Report**

Cł	necklist (continued)
Sta	ndard 4: Water Quality (continued)
	The BMP is sized (and calculations provided) based on:
	The ½" or 1" Water Quality Volume or
	☐ The equivalent flow rate associated with the Water Quality Volume and documentation is provided showing that the BMP treats the required water quality volume.
	The applicant proposes to use proprietary BMPs, and documentation supporting use of proprietary BMP and proposed TSS removal rate is provided. This documentation may be in the form of the propriety BMP checklist found in Volume 2, Chapter 4 of the Massachusetts Stormwater Handbook and submitting copies of the TARP Report, STEP Report, and/or other third party studies verifying performance of the proprietary BMPs.
	A TMDL exists that indicates a need to reduce pollutants other than TSS and documentation showing that the BMPs selected are consistent with the TMDL is provided.
Sta	ndard 5: Land Uses With Higher Potential Pollutant Loads (LUHPPLs)
	The NPDES Multi-Sector General Permit covers the land use and the Stormwater Pollution Prevention Plan (SWPPP) has been included with the Stormwater Report.  The NPDES Multi-Sector General Permit covers the land use and the SWPPP will be submitted <i>prior to</i> the discharge of stormwater to the post-construction stormwater BMPs.
	The NPDES Multi-Sector General Permit does <i>not</i> cover the land use.
	LUHPPLs are located at the site and industry specific source control and pollution prevention measures have been proposed to reduce or eliminate the exposure of LUHPPLs to rain, snow, snow melt and runoff, and been included in the long term Pollution Prevention Plan.
	All exposure has been eliminated.
	All exposure has <i>not</i> been eliminated and all BMPs selected are on MassDEP LUHPPL list.
	The LUHPPL has the potential to generate runoff with moderate to higher concentrations of oil and grease (e.g. all parking lots with >1000 vehicle trips per day) and the treatment train includes an oil grit separator, a filtering bioretention area, a sand filter or equivalent.
Sta	ndard 6: Critical Areas
	The discharge is near or to a critical area and the treatment train includes only BMPs that MassDEP has approved for stormwater discharges to or near that particular class of critical area.
	Critical areas and BMPs are identified in the Stormwater Report.



# Massachusetts Department of Environmental Protection

Bureau of Resource Protection - Wetlands Program

# Checklist for Stormwater Report

# Checklist (continued)

Standard 7: Redevelopments and Other Projects Subject to the Standards only to the maximum extent practicable ☐ The project is subject to the Stormwater Management Standards only to the maximum Extent Practicable as a: Limited Project Small Residential Projects: 5-9 single family houses or 5-9 units in a multi-family development provided there is no discharge that may potentially affect a critical area. Small Residential Projects: 2-4 single family houses or 2-4 units in a multi-family development with a discharge to a critical area Marina and/or boatyard provided the hull painting, service and maintenance areas are protected from exposure to rain, snow, snow melt and runoff ☐ Bike Path and/or Foot Path □ Redevelopment Project Redevelopment portion of mix of new and redevelopment. Certain standards are not fully met (Standard No. 1, 8, 9, and 10 must always be fully met) and an explanation of why these standards are not met is contained in the Stormwater Report. The project involves redevelopment and a description of all measures that have been taken to improve existing conditions is provided in the Stormwater Report. The redevelopment checklist found in Volume 2 Chapter 3 of the Massachusetts Stormwater Handbook may be used to document that

### Standard 8: Construction Period Pollution Prevention and Erosion and Sedimentation Control

and structural BMP requirements of Standards 4-6 to the maximum extent practicable and (b)

A Construction Period Pollution Prevention and Erosion and Sedimentation Control Plan must include the following information:

the proposed stormwater management system (a) complies with Standards 2, 3 and the pretreatment

- Narrative:
- Construction Period Operation and Maintenance Plan;
- Names of Persons or Entity Responsible for Plan Compliance;
- Construction Period Pollution Prevention Measures;
- Erosion and Sedimentation Control Plan Drawings;
- Detail drawings and specifications for erosion control BMPs, including sizing calculations;
- Vegetation Planning;
- Site Development Plan;

improves existing conditions.

- Construction Sequencing Plan;
- Sequencing of Erosion and Sedimentation Controls;
- Operation and Maintenance of Erosion and Sedimentation Controls;
- Inspection Schedule;
- Maintenance Schedule;
- Inspection and Maintenance Log Form.
- A Construction Period Pollution Prevention and Erosion and Sedimentation Control Plan containing the information set forth above has been included in the Stormwater Report.



# Massachusetts Department of Environmental Protection

Bureau of Resource Protection - Wetlands Program

# Checklist for Stormwater Report

Checklist (continued) Standard 8: Construction Period Pollution Prevention and Erosion and Sedimentation Control (continued) ☐ The project is highly complex and information is included in the Stormwater Report that explains why it is not possible to submit the Construction Period Pollution Prevention and Erosion and Sedimentation Control Plan with the application. A Construction Period Pollution Prevention and Erosion and Sedimentation Control has not been included in the Stormwater Report but will be submitted before land disturbance begins. ☐ The project is **not** covered by a NPDES Construction General Permit. ☐ The project is covered by a NPDES Construction General Permit and a copy of the SWPPP is in the Stormwater Report. ☐ The project is covered by a NPDES Construction General Permit but no SWPPP been submitted. The SWPPP will be submitted BEFORE land disturbance begins. Standard 9: Operation and Maintenance Plan The Post Construction Operation and Maintenance Plan is included in the Stormwater Report and includes the following information: Name of the stormwater management system owners; Party responsible for operation and maintenance: Schedule for implementation of routine and non-routine maintenance tasks; ☑ Plan showing the location of all stormwater BMPs maintenance access areas; Description and delineation of public safety features; Estimated operation and maintenance budget; and Operation and Maintenance Log Form. The responsible party is **not** the owner of the parcel where the BMP is located and the Stormwater Report includes the following submissions: A copy of the legal instrument (deed, homeowner's association, utility trust or other legal entity) that establishes the terms of and legal responsibility for the operation and maintenance of the project site stormwater BMPs: A plan and easement deed that allows site access for the legal entity to operate and maintain BMP functions. Standard 10: Prohibition of Illicit Discharges ☐ The Long-Term Pollution Prevention Plan includes measures to prevent illicit discharges; An Illicit Discharge Compliance Statement is attached; NO Illicit Discharge Compliance Statement is attached but will be submitted prior to the discharge of

any stormwater to post-construction BMPs.

>

INSTRUCTIONS:

1. In BMP Column, click on Blue Cell to Activate Drop Down Menu

2. Select BMP from Drop Down Menu

3. After BMP is selected, TSS Removal and other Columns are automatically completed.

4	D E F	Starting TSS Amount Remaining	Load* Removed (C*D) Load (D-E)	1.00 0.90 0.10	0.10 0.00 0.10	0.10 0.00 0.10	0.10 0.00 0.10	0.10 0.00 0.10	Total TSS Removal = 90% Outlet or BMP Train		*Equals remaining load from previous BMP (E)	which enters the BMP
OCation: 38 Lake Drive, Stockbridge, MA	O	TSS Removal	Rate <sup>1</sup>	0:30	0.00	0.00	0.00	0.00	Total TS	Project: Bellora	Prepared By: Aaron Biasin	Date: 5/9/2022
Local	Ф		BMP <sup>1</sup>	Geten Rain Garden	orksh orksh	Remo		Oalo		Proj	Prepared	Q

Non-automated TSS Calculation Sheet must be used if Proprietary BMP Proposed 1. From MassDEP Stormwater Handbook Vol. 1

Mass\_Dept. of Environmental Protection

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# **Bellora Catchment Area Summary**

Preapred by: White Engineering, Inc. 38 Lake Drive, Stockbridge, MA

Imprevious Area		
Existing	1177	sf
Proposed	1439	sf

# Rain Garden

Catchment Area	Total Size	Units
Rain Garden Size	375	sf
Depth	2	ħ
Volume	750	jo

# Drip Edge

Units	sf	ft	cf
Total Size	357	7	714
Catchment Area	Drip Edge	Depth	Volume

# Total

Imprevious Area	1439	sf
Stormwater Storage	1464	cf

USDA Nat

Natural Resources Conservation Service

Web Soil Survey National Cooperative Soil Survey

5/9/2022 Page 1 of 3

# **MAP LEGEND**

Spoil Area	Stony Spot	Very Stony Spot	_	Wet Spot		Other	Special Line Features		Water Features	Streams and Canals		Transportation	Rails	Interstate Highways	US Routes	Major Roads	Local Roads	puna	Aerial Photography
uu	•	*	3	<b>W</b>	•	7	•		Water	7		Transp	Ī	5	1		5	Background	
Area of Interest (AOI)	Area of Interest (AOI)		Soil Map Unit Polygons		Soil Map Unit Lines	Soil Map Unit Points		Special Point Features	Blowout		Ватом Pit		Clay Spot	Closed Depression	Gravel Pit	Gravelly Spot	Landfill	Lava Flow	Marsh or swamp
Area of In		Soils		1	}		3	Special	(0)	)	X	ł	×	<b>\Q</b>	×	*:	0	4	#

# MAP INFORMATION

The soil surveys that comprise your AOI were mapped at

Warning: Soil Map may not be valid at this scale.

contrasting soils that could have been shown at a more detailed Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of

Please rely on the bar scale on each map sheet for map measurements. Source of Map: Natural Resources Conservation Service Web Soil Survey URL:

Coordinate System: Web Mercator (EPSG:3857)

distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts accurate calculations of distance or area are required. This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Berkshire County, Massachusetts Survey Area Data: Version 16, Sep 2, 2021

Miscellaneous Water Perennial Water

Rock Outcrop

0

Saline Spot Sandy Spot

Mine or Quarry

Soil map units are labeled (as space allows) for map scales

Date(s) aerial images were photographed: Aug 15, 2021—Nov

1:50,000 or larger.

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Severely Ended Spot

Slide or Slip

Sinkhole

Sodic Spot

# **Map Unit Legend**

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
1	Cwater	0,0	1.8%
78B	Kendala silt loam, 3 to 8 percent slopes, extremely stony	0.0	0.1%
108E	Farmington-Rock outcrop complex, 15 to 35 percent slopes	0,5	98:2%
Totals for Area of Interest		0.5	100.0%

# Stormwater Pollution Prevention Plan (SWPPP)

For

Michael & Rebecca Bellora

38 Lake Drive Stockbridge, MA

August 2022



White Engineering, Inc. 55 South Merriam Street Pittsfield, MA 01201 (P) 413-443-8011 (F) 413-443-8012

bwhite@whiteeng.com

# Stormwater Pollution Prevention Plan Prepared for Michael & Rebecca Bellora

This project involves construction of a new single-family home with a new driveway, utilities and requisite stormwater management.

The order of activities will be as follows:

- 1. Install all required silt fencing, straw bales, and straw wattles
- 2. Installation of construction entrance at the curb cut
- 3. Demolition of existing house
- 4. Excavation of driveway to new house and preparation for foundation construciton
- 5. Rough excavation of rain garden and trench drain.
- 6. Excavation for concrete foundation and their respective footing drains
- 7. Installation of new stormwater infiltration system including drip edges, rain garden, trench drain for roof runoff.
- 8. Forming, pouring of foundation for the proposed single-family home
- 9. Framing and construction of the proposed house
- 10. Final planting of the rain garden plus other proposed planting areas
- 11. Final topsoil and seeding of all disturbed areas
- 12. Upon complete establishment of vegetative cover, inspection by White Engineering, Inc. erosion controls shall be removed

### Controls:

**Temporary Stabilization** - Topsoil stockpile areas and disturbed portions of the site where construction activity temporarily ceases for at least twenty-one (21) days will be stabilized with temporary seed and mulch no later than seven (7) days from the last construction activity in that area. The temporary seed shall be erosion seed mix, as specified in Mass. Highway Standard Specifications for Highways and Bridges, M6.03.1, applied at the rate of 100 pounds per acre. After seeding, each area shall be mulched with 4,000 pounds per acre of straw.

**Permanent Stabilization** - Disturbed portions of the site where construction activities permanently cease shall be stabilized with permanent seed no later than seven (7) days after the last construction activity. The permanent seed shall be seed mix for grassplots and islands, as specified in Mass. Highway Standard Specifications for Highways and Bridges, M6.03.0, applied at the rate of 100 pounds per acre. After seeding, each area shall be mulched with 4,000 pounds per acre of straw.

Construction Entrance - A stabilized construction entrance shall be installed in the gravel driveway just beyond the curb cut into the site to the site to help reduce vehicle tracking of sediments onto public ways. Streets adjacent to the site entrance will be inspected weekly and swept monthly to remove any excess mud, dirt, or rock tracked from the site. Should the weekly inspections reveal excess accumulation on abutting roadways, the roadways will be swept within one (1) week from the date of discovery. Dump trucks hauling material from the construction site will be covered with a tarpaulin to prevent fugitive materials.

**Stormwater Management** - Runoff, including that which will be generated from the installation of new impervious surfaces as well as that which will be intercepted by the placement of impervious surfaces including roadways, structures, and driveways, will flow through a primarily open drainage system. Once stormwater has been collected, it will be routed through stormwater control structures. These structures include: a trench drain, stone drip edge and a rain garden. The design objective of the stormwater management system is to ensure that potential on-site impacts from flooding or erosion due to the proposed development are mitigated. There are no anticipated off-site impacts.

Annual recharge rates at the site are improved by the roof runoff being filtered through stone at dripline and the inclusion of stormwater BMPs. The ability to maintain or exceed current recharge rates will be achieved by the infiltration in rain gardens.

Erosion and sedimentation controls shall be installed prior to commencement of work to prevent impacts during construction.

### Other Controls:

Waste Materials - All waste will be collected, stored, and disposed of properly so as not to pollute the construction site. Any such disposal shall be removed by a licensed solid waste management company. If deemed required, a dumpster shall be located at the site and shall meet all local and state regulations. The dumpster will be emptied a minimum of once a week or more often, if necessary. No construction waste material shall be permitted to be buried on site. All personnel will be instructed regarding the correct procedure for waste disposal. Notices stating these practices will be posted in the site trailer and the individual, who manages the day-to-day on site operations, will be responsible for seeing that these practices are followed.

**Hazardous Waste** - All hazardous waste materials will be disposed of in a manner specified by local or state regulations or by the manufacturer. Site personnel will be instructed in these practices and the individual who manages day-to-day site operations will be responsible for seeing that these practices are followed.

**Sanitary Waste** - All sanitary waste will be collected from the portable units a minimum of once per week by a licensed sanitary waste management contractor as required by local regulation.

**Maintenance and Inspections** - The following are the minimum requirements for maintenance and inspection of the above controls to ensure that they are functioning properly as intended and to ensure that if additional measures are required that they are installed when the need arises.

- All control measures will be inspected at least once each week and following any storm event of 0.5 inches or greater. If no rain gauge is present on-site, then inspections shall be following any storm event.
- All measures will be maintained in good working order; if a repair is necessary, it will be initiated
  within 24 hours of report. Sufficient stockpiles of controls shall be kept on-site in reserve in the
  event that immediate repair is required.
- Built up sediment will be removed from silt fence when it has reached a 6-inch height of the fence. In the case of straw bale barriers, it is preferable to place a second row of bales or fence upgradient of the first row when the sediment reaches the specified level.
- Silt fence/straw bale barriers will be inspected for depth of sediment, tears, gaps, etc., and to see if the fabric or bales are secure and firmly in the ground.
- Temporary and permanent seeding and planting will be inspected for bare spots, washouts, and healthy growth initially on a daily basis until growth is established and weekly thereafter until fully established.

- Maintenance and inspection reports shall be kept and a copy of the report retained on-site. The
  form shall state the date of inspection or maintenance with a sketch of the area and activity along
  with responsibility of required actions, follow-up dates, and completion due dates.
- Individuals shall be designated responsible for inspections, maintenance, repair activities, and filling out the inspection and maintenance report. These individuals shall be properly trained in the designated areas.

### **Inventory for Pollution Prevention Plan:**

The materials or substances listed below are expected to be present on-site during construction.

- Concrete
- Detergents
- Paints (enamel and latex)
- Metal Studs
- Tar

- Petroleum Based Products
- Cleaning Solvents
- Wood
- Masonry Block
- Roofing Shingles

### **Material Management Practices:**

The following are the material management practices that will be used to reduce the risk of spills or other accidental exposure of materials and substances to storm water runoff:

### Good Housekeeping:

The following good housekeeping practices will be followed on-site during the construction project:

- An effort will be made to store only enough product required to do the job.
- All materials stored on-site will be stored in a neat, orderly manner in their appropriate containers and, if possible, under a roof or other enclosure.
- Products will be kept in their original containers with the original manufacturer's label.
- Substances will not be mixed with one another unless recommended by the manufacturer.
- Whenever possible, all of a product will be used up before disposing of the container.
- Manufacturer's recommendations for proper use and disposal will be followed.
- The on-site superintendent will inspect daily to ensure proper use and disposal of materials on-site.

### **Hazardous Products:**

These practices are used to reduce the risk associated with hazardous materials:

- Products will be kept in original containers unless they are not resealable.
- Original labels and material safety data will be retained; they contain important product information. MSDS's will be available on-site in the event of an emergency. If materials are transferred to another container, the container will be labeled accordingly.
- If surplus product must be disposed of, manufacturer's or local and state recommended methods for proper disposal will be followed.

### **Product Specific Practices:**

The following product specific practices will be followed on-site:

### Petroleum Products:

All on-site vehicles will be monitored for leaks and receive regular preventive maintenance to reduce the chance of leakage. Petroleum products will be stored in tightly sealed containers which are clearly labeled. Any asphalt substance used on-site will be applied according to the manufacturer's recommendations.

### Paints:

All containers will be tightly sealed and stored when not required for use. Excess paint will not be discharged to the storm sewer system but will be properly disposed of according to manufacturers' instructions or state and local regulations.

### **Concrete Trucks:**

Concrete trucks will not be allowed to wash out or discharge surplus concrete or drum wash water on the site.

### **Spill Control Practices:**

In addition to the good housekeeping and management practices discussed in the previous sections of this plan, the following practices will be followed for spill prevention and cleanup:

- Manufacturer's recommended methods for spill cleanup will be clearly posted and site personnel will be made aware of the procedures and the location of the information and cleanup supplies.
- Materials and equipment necessary for spill cleanup will be kept in the material storage area on-site. Equipment and materials will include, but not be limited to, brooms, dust pans, mops, rags, gloves, goggles, kitty liter, sand, sawdust, and plastic and metal trash containers specifically for this purpose.
- All spills will be cleaned up immediately after discovery.
- The spill area will be kept well ventilated and personnel will wear appropriate protective clothing to prevent injury from contact with a hazardous substance.
- Spills of a toxic or hazardous material will be reported to the appropriate state or local government agency, regardless of the size.
- The spill prevention plan will be adjusted to include measures to prevent this type of spill from reoccurring and how to clean up the spill if there is another one. A description of the spill, what caused it, and the cleanup measures will also be included.
- The site superintendent responsible for the day-to-day site operations will be the spill prevention and cleanup coordinator. He/She will designate at least three (3) other site personnel who will receive spill prevention and cleanup training. These individuals will each become responsible for a particular phase of prevention and cleanup. The names of responsible spill personnel will be posted in the material storage area and in the office trailer on-site.

# **Post Construction Requirements:**

The Bellora's will be responsible for the ongoing maintenance and inspection of the proposed system. Ongoing tasks that the Bellora's will be responsible for include:

- Ensuring the vegetative cover over the property is maintained and stabilized.
- After any single rain event which yields the 2 Year Storm (1.44 inches in 24 hours) or any series of rain events within a short period of time and in spring, rain gardens and trench drain shall be inspected for sediment and leaf litter build up and cleaned out.

Any questions with regards to this Plan may be directed to Brent M. White, MCE, PE, at White Engineering, Inc.

Included with this document are the following:

- Proposed Site Plan
- Blank Inspection Report

# Construction Inspection Form for Michael & Rebecca Bellora

# Prepared By:

# White Engineering, Inc.

Inspector:	
Date:	
Weather Conditions:	
Purpose for	(5
Inspection:	
Items/Activity	
Inspected:	
Items Found in	
Compliance:	
Items Found needing	
Repair:	 
If Yes, was corrective action taken: Y/N	
if fes, was corrective action taken. T/N	
If No, expected timeline for completion of	
tasks:	

**MEMORANDUM** 

May 4, 2022

To: Ned Baldwin, Building Inspector

From: Peter Williams, Secretary, Historic Preservation Commission

Re: 38 Lake Drive / Application To Permit Demolition

At the May 2, 2022 meeting of the Historic Preservation Commission, the Commission

considered an Application for Demolition with respect to the House ("the House") at 38 Lake Drive,

filed with the Commission on April 13, 2022. The application was filed by attorney Nick Arienti on

behalf the owners of the House, Michael and Rebecca Bellora. Mr. Arienti attended the meeting and

spoke in favor of the application.

The Commission members had previously reviewed the Application and its supporting exhibits,

and Mr. Arienti summarized them at the meeting. The estimated date of the House according to the

Assessor is 1957. The House is not listed in any Historical Commission records. Based upon the

presentations made and documents reviewed at the meeting, the Commission determined by a

unanimous vote that the House is not a Significant Historic Building under Article XXII of the Town

Bylaws (Historic Preservation and Demolition Delay).

Based upon the Commission's determination, it is the Commission's view that, under

Paragraph 3.4 of Article XXII, there is no impediment under that Bylaw to your office permitting the

proposed demolition of the House.

P. C. W.

cc: Carl Sprague, Chairman

C. Nicholas Arienti, Esq.



# DIVISION OF FISHERIES & WILDLIFE

1 Rabbit Hill Road, Westborough, MA 01581 p: (508) 389-6300 | f: (508) 389-7890 MASS.GOV/MASSWILDLIFE

May 19, 2022

Stockbridge Conservation Commission Town Hall West Main Street Stockbridge MA 01262

Michael & Rebecca Bellora 34 Millard Street Fairfield CT 06824

RE:

Applicant:

Michael & Rebecca Bellora

Project Location:

38 Lake Drive

Project Description:

Reconstruct home, install seasonal Dock

DEP Wetlands File No.: Unavailable

**NHESP File No.:** 

22-41061

# Dear Commissioners & Applicant:

The Natural Heritage & Endangered Species Program of the Massachusetts Division of Fisheries & Wildlife (the "Division") received a Notice of Intent with site plans (dated 5/10/2022) in compliance with the rare wildlife species section of the Massachusetts Wetlands Protection Act Regulations (310 CMR 10.59). The Division also received the MESA Review Checklist and supporting documentation for review pursuant to the MA Endangered Species Act Regulations (321 CMR 10.18).

### WETLANDS PROTECTION ACT (WPA)

Based on a review of the information that was provided and the information that is currently contained in our database, the Division has determined that this project, as currently proposed, will not adversely affect the actual Resource Area Habitat of state-protected rare wildlife species. Therefore, it is our opinion that this project meets the state-listed species performance standard for the issuance of an Order of Conditions.

Please note that this determination addresses only the matter of rare wildlife habitat and does not pertain to other wildlife habitat issues that may be pertinent to the proposed project.

# MASSACHUSETTS ENDANGERED SPECIES ACT (MESA)

Based on a review of the information that was provided and the information that is currently contained in our database, the Division has determined that this project, as currently proposed, will not result in a prohibited Take of state-listed rare species. This determination is a final decision of the Division of Fisheries and Wildlife pursuant to 321 CMR 10.18. Any changes to the proposed project or any additional work beyond that shown on the site plans may require an additional filing with the Division

MASSWILDLIFE

pursuant to the MESA. This project may be subject to further review if no physical work is commenced within five years from the date of issuance of this determination, or if there is a change to the project.

Please note that this determination addresses only the matter of state-listed species and their habitats. If you have any questions regarding this letter please contact Melany Cheeseman, Endangered Species Review Assistant, at (508) 389-6357.

Sincerely,

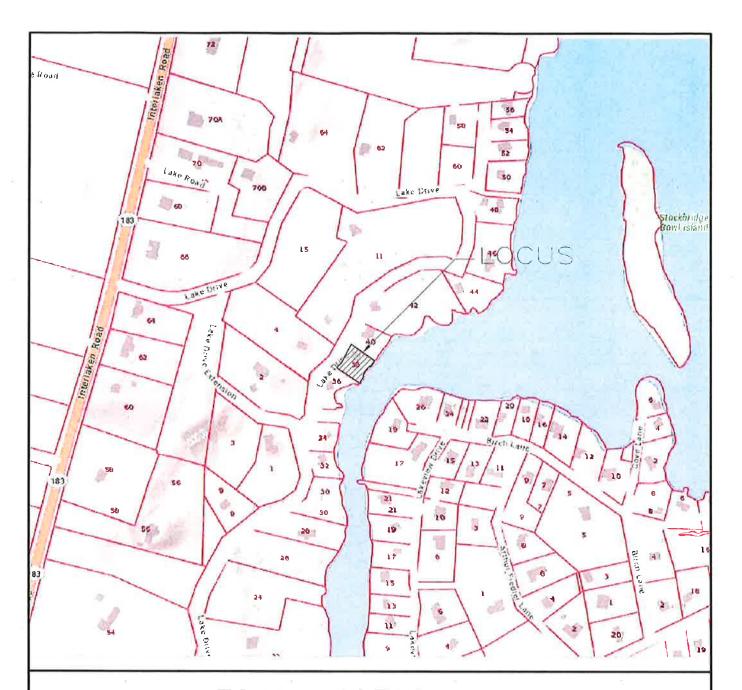
Everose Schlüter, Ph.D.

**Assistant Director** 

cc:

MA DEP Western Region

Shannon Boomsma, White Engineering, Inc.



TOWN ASSESSORS MAP

FOR

MICHAEL & REBECCA BELLORA

38 LAKE DRIVE

STOCKBRIDGE, MA



# WHITE ENGINEERING INC.

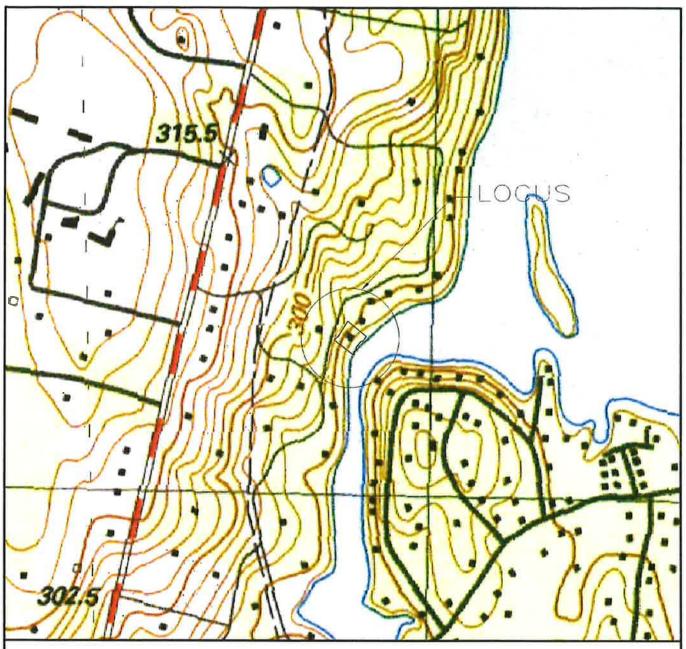
CIVIL & ENVIRONMENTAL

55 SOUTH MERRIAM STREET, PITTSFIELD, MA 01201

 PHONE (413) 443-8011
 E-MAIL: \$BOOMSMA@WHITEENG.COM
 FAX (413) 443-8012

 DATE:
 JUNE 30, 2021
 DRN:
 RMJ
 APVD: SOB/BMW
 DWG NO:

 DB'GN:
 SDB
 SCALE:
 N.T.S
 21-06-04



USGS MAP
FOR
MICHAEL & REBECCA BELLORA

38 LAKE DRIVE

STOCKBRIDGE, MA



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