

APPLICANT: JACOB AND KATIE SILVERMAN

**SPECIAL PERMIT
LAKE AND POND OVERLAY DISTRICT**

**CONSTRUCTION OF A SCREEN PORCH AND
PATIO ON A SINGLE FAMILY HOUSE**

**104 INTERLAKEN ROAD
STOCKBRIDGE, MA 01262**

MARCH 2024



**WHITE ENGINEERING, INC.
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Town of Stockbridge
Special Permit Application

Fee: \$300

Application is hereby made to the Planning Board by:

Applicant (name): Jacob and Katie Silverman

Applicant Signature: Jacob Silverman / SOB

Applicant Mailing Address: 530 East 72nd Street Apt 1C New York, NY 10021

On the 12 day of March 2024 for property shown on the Stockbridge

Assessors Map # 205, Lot # 15 Book 7000, Page 250

Owner of property: Jacob and Katie Silverman

Owner's signature: Jacob Silverman / SOB

Address of property: 104 Interlaken Road

Mailing Address: 530 East 72nd Street Apt 1C New York, NY 10021

Description of property: 4.92 Acre parcel developed with single family house

Present use of property: Residential

Project Description: Construction of a screen porch and patio addition to the existing house

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.

1.0 PROJECT SCOPE

The applicants, Jacob and Katie Silverman, propose to construct a screen porch and patio addition to the south side of the existing house on property located at 104 Interlaken Road.

2.0 EXISTING CONDITIONS

The subject of this application is a 4.92 acre property on the west shore of Stockbridge Bowl. The site is served by a drilled well and on-site septic system.

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) associated with Stockbridge Bowl and an intermittent stream. A Notice of Intent has been 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 not 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.

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

The parcel fronts on Interlaken Road within the R-4 Residence zones.

Section 6.5: Lake and Pond Overlay District (LPOD)

6.5.1 Purpose

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 house is within the 150-foot LPOD of Stockbridge with the closest point being 50' from Stockbridge Bowl. The project has been designed to ensure the proposed additions are no closer to Stockbridge Bowl. The side setbacks are met, and the front setback is met.

The proposed project's purpose is to and expanded outdoor living area. Stormwater management has been increased to accommodate the new roof area. Under the Special Permit issued March of 2023 the Stockbridge Planning Board required 75% natural vegetative cover with in the LPOD. This far exceeds the new impervious areas proposed.

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 also within the R-4 District.

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 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.

No alteration to wetlands or watercourses is proposed or mining.

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:

- *Boundaries of the property plotted to scale;*

Surveyed boundaries of property are shown, to scale, on the site plan based on the survey titled “Plan of Land to be conveyed to Ronald J. McDonald” 1977.

- *Existing watercourses;*

The existing intermittent stream and Stockbridge Bowl are 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 site plan shows the proposed work. Minimal grading is required for this work.

- *The location and description of existing and proposed features;*

The enclosed site plan set prepared by White Engineering, Inc. titled “Site Improvement Plan for Jacob and Katie Silverman” dated March 6, 2024.

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

The area of driveway reconfiguration to accommodate the new garage is shown on the attached drawing. This is the same configuration as approved under the March 2023 Special Permit.

- *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 (inches per hour) |
|-----------------|----------------------------|--|
| Sand | A | 8.27 |
| Loamy Sand | A | 2.41 |
| Sandy Loam | B | 1.02 |
| Loam | B | 0.52 |
| Silt Loam | C | 0.27 |
| Sandy Clay Loam | C | 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 A Design Infiltration Rate of 2.41 Inches/Hour.

- *Plans and specifications for soil erosion and sedimentation control measures*

Erosion control measures are shown on the attached plans. Silt fence 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. May 2024- Begin exterior work on house
2. September 2024 - Implement Planting Plan
3. October 2024 - Anticipated project completion

- *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 Pollutant | Sources | Site Specific Information |
|-------------------------------------|---|--|
| Nutrients Nitrogen & Phosphorous | Urban Runoff, Animal Waste, Fertilizers, Failing Septic System | -No Urban Runoff -No Animal Waste Proposed -No Fertilizers Proposed within LPOD |
| Bacteria | Urban Runoff, Animal Waste, Failing Septic System | -No Urban Runoff -No Animal Waste Proposed |
| Metals | Industrial Processes, Automobile Pollutants, Metal Roofs | -No Industrial Processes -Automobile Pollutants Low for Single- Family House Site -Any Metal Roof to be Coated First |
| Total Suspended Solids | Construction Sites, Other Disturbed and/or Non-Vegetated Lands, Eroding Banks, Road Sanding, Urban Runoff | -Erosion and Sedimentation Controls are Proposed Prior to Construction -All land to be stabilized upon 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 50 feet from the high water mark with the proposed house is no closer than 50 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 10.1% of the LPOD area.

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

Existing driveway is gravel. Driveway reconfiguration 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 garden the property will have 75% natural vegetation and an additional 9.6% remaining lawn area within the LPOD for a total of 84.6% vegetative cover.

- *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%.

- *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 the site work is completed permanent vegetation will be established.

- *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 new roof area will be directed to infiltration trenches and the rain garden.

- *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 with the stone trench and rain garden.

- *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. Roofs are coated.

- *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 roof materials are metal 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.*

No trees are proposed to be cut within the 35' setback. Invasive shrubs, vines and herbaceous material along the shoreline of Stockbridge Bowl will be cut flush with the ground and the areas replanted with native species to provide an improved buffer strip. Invasives will be cut annually to eliminate regrowth. No chemicals will be used.

- *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.*

A walkway for the dock is existing. Vegetation may be trimmed back for safe access.

5.0 SOILS AND DRAINAGE

The soils on the property are sandy loam and we have utilized the 2.41 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 a stone infiltration trench and rain garden to manage the increase roof area and existing site conditions.

6.0 SEWAGE DISPOSAL

The property has a Title 5 compliant septic system.

7.0 WATER SUPPLY

An existing private well will continue to serve the house.

8.0 OTHER UTILITIES

There will be no change to existing utilities.

9.0 DRIVEWAY AND PARKING

The existing driveway is gravel and the driveway reconfiguration to accommodate the new garage will be gravel.

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

Greater than 80% of the land within the LPOD will remain in its natural state.

12.0 ARCHITECTURAL ELEMENTS AND VISUAL IMPACT

The proposed addition will utilize the same colors and materials as the existing house. Existing mature trees along the shoreline to remain as well as the new buffer strip to be planted will provide a natural screen of the house from Stockbridge Bowl.

13.0 LANDSCAPING AND LIGHTING

Enclosed with this application is a planting list, and the plan indicates the location plantings will occur on the property within the LPOD.

Lake and Pond Overlay District Checklist

Date: March 12, 2024

Name of Applicant: Jacob and Katie Silverman

Address: 530 East 72nd Street Apt 1C New York, NY 10021

Property Affected: 104 Interlaken Road, Stockbridge, MA 01262

(To be filled out by applicant)

1. How far from the mean high water mark is the existing structure? 50'
2. Is the existing structure, lot, etc. nonconforming in any manner other than being within the LPOD? Yes X No Explain. Structure is within 100-ft of the mean highwater line of Stockbridge Bowl. Actual is 50-ft
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 No X
5. What is the lot coverage of the existing structure(s)? 1.87% Under the proposed plan? 2.51%
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 No X
 - 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:

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

9. What is the Conservation Commission's opinion? _____

Stormwater Management Report
For
Jacob and Katie Silverman
104 Interlaken Road, Stockbridge, MA

March 2024



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

Introduction:

The subject parcel is located at 104 Interlaken Road in Stockbridge, MA. The property is roughly 4.92 acres located on the west side of Stockbridge Bowl. The property is currently developed with a single-family house. The proposed project includes the construction of a screen porch and patio addition to the house. The proposed scope of work uses stormwater management best management practices during construction, the use of infiltration through the implementation of stone infiltration at the new drip lines, rain garden and providing more native plantings on the property.

Summary of Subcatchment Analysis:

The proposed scope of is to add stone infiltration trenches at the drip line of the new addition. The proposed work was taken under the guidance of the Massachusetts Stormwater Water Handbook Vol 2. 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 Sandy Loam. Copake Fine Sandy Loam is an extremely well-drained soil with a hydrologic soil group class of an "A". Please refer to the attached Site Improvement Plan and Stormwater Pollution Prevention Plan for construction period erosion controls.

Illicit Discharge Statement
Of
The Stormwater and Sanitary Sewer System
Prepared For
Jacob and Katie Silverman
Located at
104 Interlaken Road Stockbridge, MA 01262

March 2024

This statement, along with the accompanying plan, verifies that the proposed site does not propose any illicit discharges to the stormwater management systems.

As seen on the enclosed project plans, stormwater is conveyed off-site through open and drainage.

The existing sanitary septic service for the site is on-site.

If it is found that any illicit discharges have been constructed or are found on the existing site, action will be taken immediately in accordance with state and local regulations to correct the matter.

Brent White

Brent M. White, MCE, PE, LEED AP, for
Jacob Silverman

Stormwater Pollution Prevention Plan (SWPPP)

For

Jacob and Katie Silverman

104 Interlaken Road, Stockbridge MA

March 2024



White Engineering, Inc.
55 South Merriam Street
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Revised Stormwater Pollution Prevention Plan
Prepared for
Jacob and Katie Silverman

This project involves the construction of a screen porch and pervious patio, mitigation and restoration plantings within the property 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. Stockpile of dirt within the silt fence for grading
4. Grading of driveway, pouring of concrete for the garage slab and foundations
5. Light excavation for rain garden
6. Final plantings in proposed areas (rain gardens, and plantings areas)
7. Final topsoil and seeding of all disturbed areas
8. 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 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, will be controlled on site using pervious materials, stone drip edge. 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 the material used for the proposed project and the additional plantings. 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 litter, 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:

Jacob and Katie Silverman will be responsible for the ongoing maintenance and inspection of the proposed system. Ongoing tasks that Jacob and Katie Silverman 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 (3.01 inches in 24 hours) or any series of rain events within a short period of time and in spring, rain gardens and swales 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 Jacob and Katie Silverman

Prepared By:

White Engineering, Inc.

Inspector: _____

Date: _____

Weather Conditions: _____

Purpose for

Inspection: _____

Items/Activity

Inspected: _____

Items Found in

Compliance: _____

Items Found needing

Repair: _____

If Yes, was corrective action taken: Y / N

If No, expected timeline for completion of

tasks: _____



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.¹ 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 8²
- 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.

¹ 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.

² 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.



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



Signature and Date

3/12/24

Checklist

Project Type: Is the application for new development, redevelopment, or a mix of new and redevelopment?

- ☐ New development
- ☒ Redevelopment
- ☐ Mix of New Development and Redevelopment



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
- ☐ Water Quality Swale
- ☐ Grass Channel
- ☐ Green Roof
- ☒ Other (describe): Infiltration trench

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)

Standard 2: Peak Rate Attenuation

- ☐ Standard 2 waiver requested because the project is located in land subject to coastal storm flowage and stormwater discharge is to a wetland subject to coastal flooding.
- ☐ Evaluation provided to determine whether off-site flooding increases during the 100-year 24-hour storm.
- ☒ Calculations provided to show that post-development peak discharge rates do not exceed pre-development rates for the 2-year and 10-year 24-hour storms. If evaluation shows that off-site flooding increases during the 100-year 24-hour storm, calculations are also provided to show that post-development peak discharge rates do not exceed pre-development rates for the 100-year 24-hour storm.

Standard 3: Recharge

- ☒ Soil Analysis provided.
- ☐ Required Recharge Volume calculation provided.
- ☐ Required Recharge volume reduced through use of the LID site Design Credits.
- ☒ Sizing the infiltration, BMPs is based on the following method: Check the method used.
 - ☒ Static
 - ☐ Simple Dynamic
 - ☐ Dynamic Field¹
- ☐ Runoff from all impervious areas at the site discharging to the infiltration BMP.
- ☐ Runoff from all impervious areas at the site is *not* discharging to the infiltration BMP and calculations are provided showing that the drainage area contributing runoff to the infiltration BMPs is sufficient to generate the required recharge volume.
- ☐ Recharge BMPs have been sized to infiltrate the Required Recharge Volume.
- ☐ Recharge BMPs have been sized to infiltrate the Required Recharge Volume *only* to the maximum extent practicable for the following reason:
 - ☐ Site is comprised solely of C and D soils and/or bedrock at the land surface
 - ☐ M.G.L. c. 21E sites pursuant to 310 CMR 40.0000
 - ☐ Solid Waste Landfill pursuant to 310 CMR 19.000
 - ☐ Project is otherwise subject to Stormwater Management Standards only to the maximum extent practicable.
- ☐ Calculations showing that the infiltration BMPs will drain in 72 hours are provided.
- ☐ Property includes a M.G.L. c. 21E site or a solid waste landfill and a mounding analysis is included.

¹ 80% TSS removal is required prior to discharge to infiltration BMP if Dynamic Field method is used.



Checklist for Stormwater Report

Checklist (continued)

Standard 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.

Standard 4: Water Quality

The 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 within soils with a rapid infiltration rate (greater than 2.4 inches per hour)
 - ☐ involves runoff from land uses with higher potential pollutant loads.
 - ☐ 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 applicable, the 44% TSS removal pretreatment requirement, are provided.



Checklist for Stormwater Report

Checklist (continued)

Standard 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.

Standard 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 *prior to* the discharge of stormwater to the post-construction stormwater BMPs.
- ☐ The NPDES Multi-Sector General Permit does *not* 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 *not* 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.

Standard 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.



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 the proposed stormwater management system (a) complies with Standards 2, 3 and the pretreatment and structural BMP requirements of Standards 4-6 to the maximum extent practicable and (b) improves existing conditions.

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

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

- 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;
 - 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.



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.

Stormwater Calculations for Single Family Home- O Screen Porch

Silverman
104 Interlaken Road
Stockbridge, MA

lf = lineal foot
sf = square foot
cf = cubic foot

Prepared by White Engineeirng, Inc.

Area of Proposed Impervious

| | | |
|-------------|-------|----|
| Existing | | sf |
| Proposed | 290.9 | sf |
| Total | 290.9 | sf |
| Total House | | sf |

Runoff Volume per Inch of rain

| Depth of Rain (in) | Volume | cf |
|--------------------|-------------|----|
| 1 | 24.24166667 | cf |
| 2 | 48.48333333 | cf |
| 3 | 72.725 | cf |
| 4 | 96.96666667 | cf |
| 5 | 121.2083333 | cf |
| 6 | 145.45 | cf |
| 7 | 169.6916667 | cf |
| 8 | 193.9333333 | cf |

Stone Drip Edge Design

| | | |
|----------------------|------|----|
| Length of drip edge | 22 | lf |
| Width of drip edge | 3 | lf |
| Depth of drip edge | 2 | lf |
| Volume of Trench = | 132 | cf |
| Volume of Void Space | 52.8 | cf |

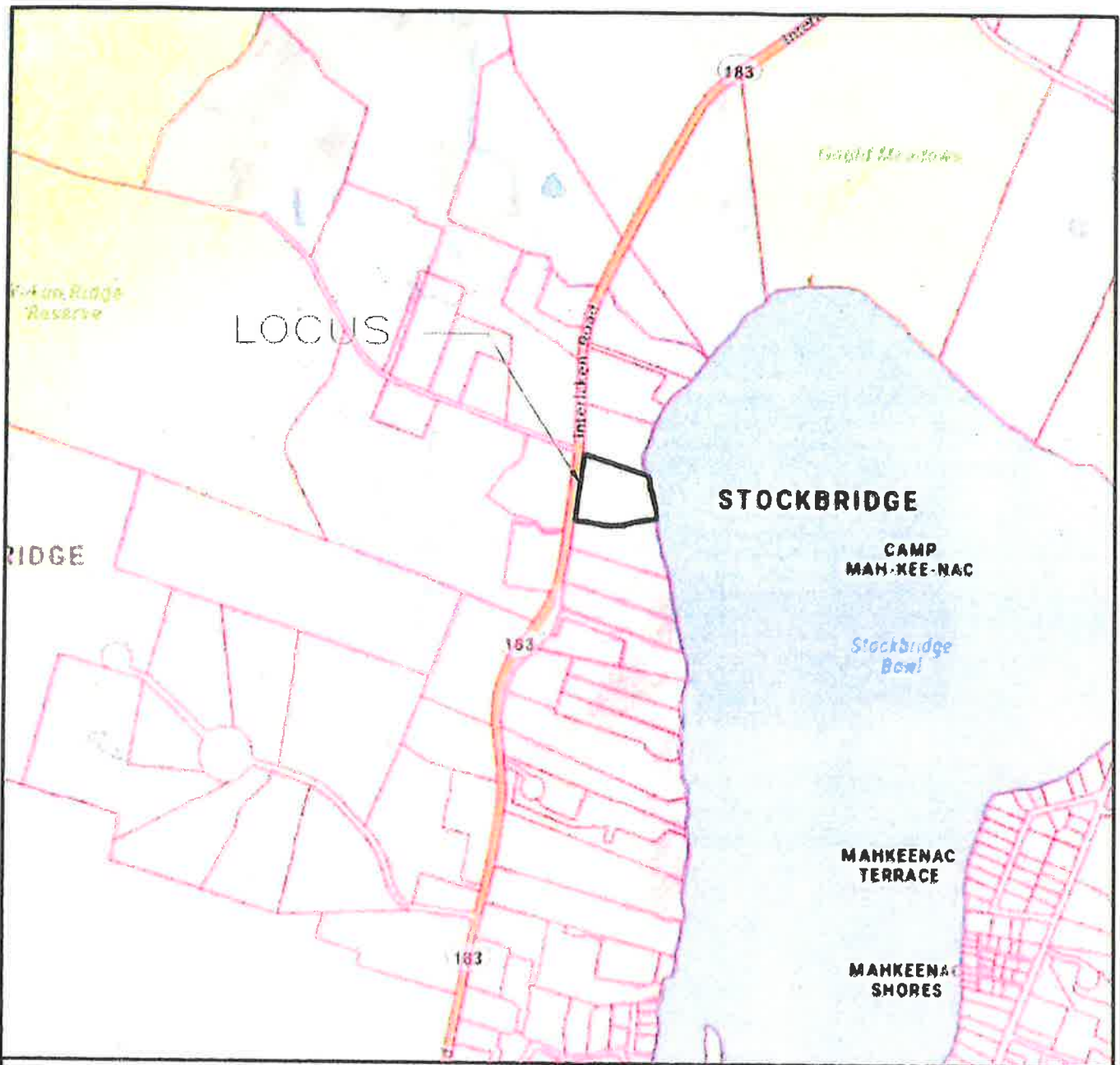
Note the void space volume is assumed to be 40% of the trench volume for 3/4"-1 1/2" stone

Rain Garden

| | | |
|------------------|-----------------|-------|
| Catchment Area | Total Size (sf) | Units |
| Rain Garden Size | | sf |
| Depth | | ft |
| Volume | 0 | cf |

Total

| | | |
|--------------------|-------|----|
| Impervious Area | 290.9 | sf |
| Stormwater Storage | 33.6 | cf |



TOWN ASSESSORS MAP
FOR
JACOB & KATIE SILVERMAN

104 INTERLAKEN ROAD

STOCKBRIDGE, MA



WHITE ENGINEERING INC.

CIVIL & ENVIRONMENTAL

55 SOUTH MERRIAM STREET, PITTSFIELD, MA 01201

PHONE (413) 443-8011

E-MAIL: SBOOMSMA@WHITEENG.COM

FAX (413) 443-8012

DATE: **AUGUST 17, 2022**

DRN: TJR

APVD: SDB/BMW

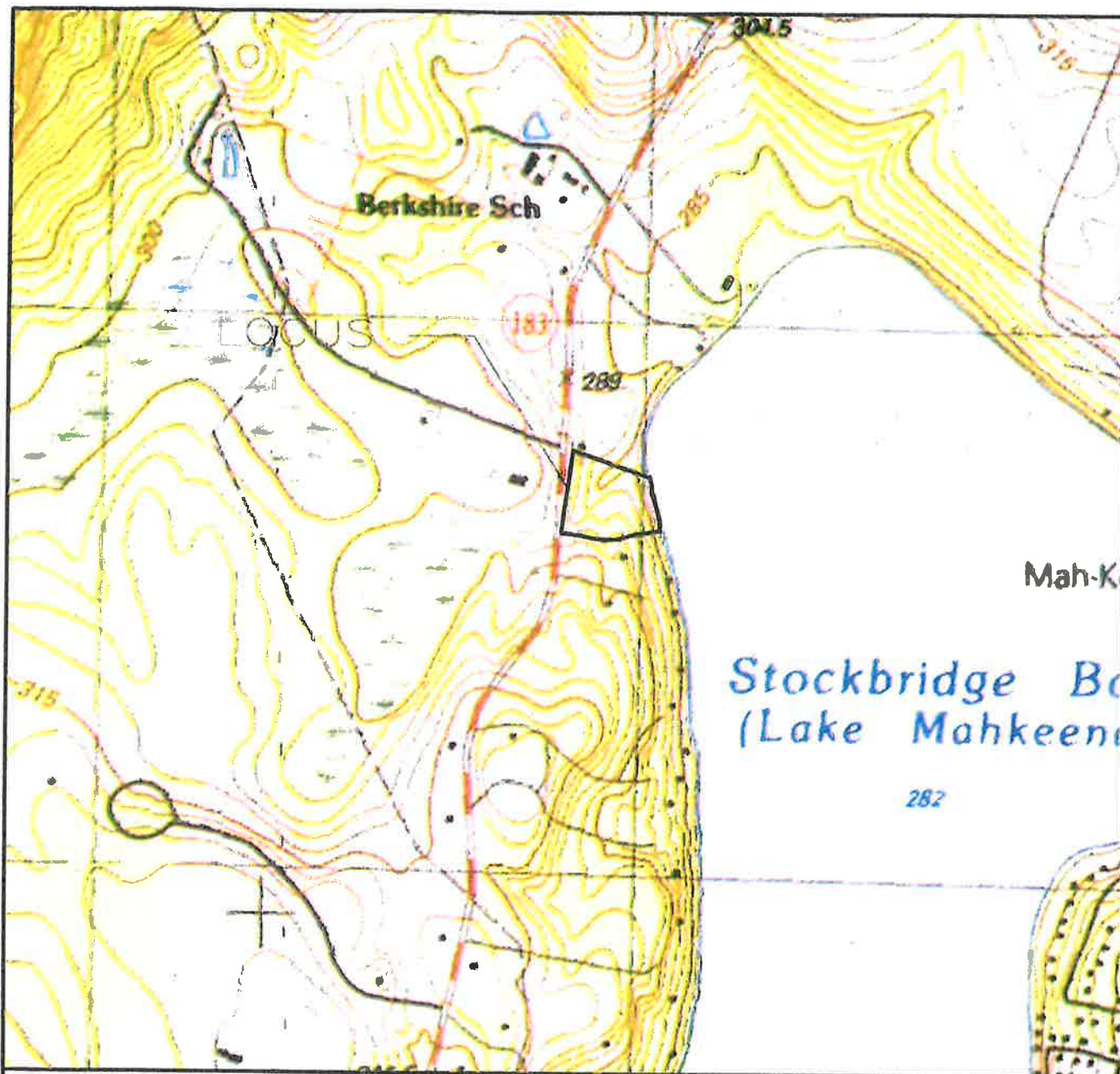
DWG NO:

DSGN: SDB

OK'D: SDB/BMW

SCALE: N.T.S.

22-05-01



USGS MAP
FOR
JACOB & KATIE SILVERMAN

104 INTERLAKEN ROAD

STOCKBRIDGE, MA



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ORTHO PHOTO
FOR
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22-05-01



PROPOSED
SCREEN PORCH
DESIGN 1



CREATIVE
GREAT BARRINGTON

SILVERMAN - SK PLANS

DRAWN BY:

DATE:

SHEET NUMBER
4
REVISION #

