STAFF REPORT UPDATE:
The applicant was last before the Commission at the November 5, 2020 meeting. At that time the Commission and public commented on the proposal. The Commission asked to see additional renderings showing the proposed bridge from various angles to should the style but also the changes in grade proposed. In addition, the Commission asked to see alternative designs for the parapet or side walls of the bridge. It was also suggested that the masonry material of the bridge might look better if it tried to match the bridges in Binney Park, rather than the pattern shown in the provided plans.

The applicant has provided renderings as asked. The rendering attached show a masonry pattern similar to the foundation of the Perrot Library. The parapets have been rendered to show three options: one with a top railing; one with a solid wall, no railing; and a third with open railings on the bridge. Renderings with the rounded rock, similar to the Binney Park bridges will try to be provided in advance of the Commission’s 11/17 meeting. The following is our last staff report.

APPLICATION SUMMARY:
The Town’s Department of Public Works is seeking Final Coastal Site Plan approval, to replace a bridge over the Cider Mill Brook (Bridge No. 03954) and minor road improvements within the Sound Beach Avenue right-of-way and within the COZ zone.

ISSUES TO BE RESOLVED / RECOMMENDATIONS:
1. The Commission will need to determine if the work proposed meets the intents and purposes for site plan applications and those in the Coastal Overlay Zone, Sections 6-15 and 6-111 of the Town of Greenwich’s Building Zone Regulations.
2. The subject action is within a designated Scenic Road, action on the alterations of the Scenic Road (application PLPZ 2020 00296) should be made prior to decision on the Coastal Site Plan.
3. IWWA - The DPW was granted IWWA approval to do the proposed work at their meeting of 10/26/2020. The final decision has not been published at the time of this report.
4. CONSERVATION – the Conservation Commission intends to take this up at their Meeting on November 5, 2020.

DEPARTMENT COMMENTS:
ZEO -
CONSERVATION - not yet received.
ENGINEERING

- Drainage Exemption (less than 500 sq. ft. of new impervious surface)

PROPOSAL:
The subject proposal includes the replacement of the Sound Beach Avenue Bridge over Cider Mill Brook (known as Bridge No. 03954) as well as roadway improvements to the north and south approaches. The existing bridge superstructure is in poor condition and the substructure and channel are eroding. The pavement would be fully reconstructed, and curbing and sidewalks replaced. The bridge and adjacent roadway would be installed at a higher elevation (elevation 11) than the current elevation (elevation 8). The to be constructed elevation is based on FEMA base flood elevations, where an elevation of 11 along Sound Beach Avenue is desirable in order to install the bridge at a height above the record storm elevation and reduce the potential for flooding events to overtake the road and to improve the capacity for water to move beneath the bridge. Currently, the bridge is a two-span structure, meaning that there is a structural support in the middle of the Brook. The proposed bridge would be a single-span, with no intermediate structure. The Bridge would also be faced with a stoned masonry veneer. Additionally, sediment accumulating on the western side of the bridge would be removed to provide more natural stream flow. Riprap is proposed along the abutments of the proposed bridge to prevent scour at the footings. The width, or horizontal geometry, of existing roadway is proposed to remain unchanged. In addition to the roadwork and bridge work, the Town is proposing to install plantings in the on the north side of the Cider Mill Brook, west of the bridge at the intersection of Sound Beach Ave. and Harding Road.

ZONING:
Coastal Site Plan applications are governed by Section 6-15 and 6-111 of the Town of Greenwich’s Building Zone Regulations. Per Section 6-111, the purposes of the Coastal Overlay Zone are as follows (Staff observations are noted in bold italics):

1. To insure that the development, preservation or use of the land and water resources of the coastal area proceeds in a manner consistent with the capability of the land and water resources to support such development, preservation or use without significantly disrupting the natural environment;

   The subject action seeks to replace a bridge that has been identified to be in poor condition and the surrounding channel is showing eroding conditions.

2. To preserve and enhance coastal resources;

   The subject action is replacing an existing brook crossing.

3. To give high priority and preferences to uses and facilities which are dependent upon proximity to the water or the shorelands immediately adjacent to marine and tidal waters;

   The subject action would replace an existing bridge that is intermittently tidal, but predominately brackish and/or freshwater.
(4) To limit the immediate shorefront properties to the following principal uses: Residential, water dependent and Use Group 7 uses;

*The subject site is not shore front nor is it zoned or adjacent to properties that permit Use Group 7 uses.*

(5) To limit the potential impact of coastal flooding and erosion patterns on coastal development so as to minimize damage to and destruction of life and property and to reduce the necessity of public expenditure to protect future development from such hazards;

*The subject action seeks to mitigate erosion and improve the flow of water during flooding events with the goal of minimizing and reducing the threat of damage to property and possibly life, from flooding events. The raised height of the replacement bridge, would increase the resiliency bridge, reduce the likelihood of flood events overtaking the bridge and road, improving access through this area during such events and potentially reducing costs of repeat repairs to the current bridge from such events.*

(6) To encourage public access to the waters of Long Island Sound in both a physical and visual manner;

*No access or view of the Long Island Sound is present from this locale.*

(7) To encourage the development of recreational facilities in the coastal area as outlined in the Plan of Development/Land Use Plan of the Town;

*Improvements to the bridge and channel seeks to reverse erosion that has occurred in the area which is partially within Binney Park, a Town recreational resource.*

(8) To encourage fishing and recreational boating harbor space, and the related uses and facilities which support those activities.

*There is no harbor space related to this locale.*

Sec. 6-15 Site Plan Standards – In deciding site plan applications, the Commission needs to deem if the applicable listed requirements have been met. Staff notes the following as being applicable to the application, but the Commission may see other standards of Sec. 6-15 as being applicable as well.

Sec. 6-15(a)(1) “Evaluate Traffic Impacts”

(a) The effect of the proposed development on traffic conditions on abutting streets;
The proposed action could be considered an improvement to traffic conditions as it seeks to mitigate flooding across the road, making it more likely to be passible in major storm events.

(g) Patterns of vehicular and pedestrian circulation both within the boundaries of the development and in relation to the adjoining street and sidewalk system;

The proposed action sidewalks in the project area would be repaired, replaced, and/or reconnected to the current sidewalk network

Sec. 6-15(a)(2) “The protection of environmental quality and the preservation and enhancement of property values.”

(b) The location, height and materials of walls, fences, hedges and plantings so as to ensure harmony with adjacent development, screen parking and loading areas, and conceal storage areas, utility installations and other such features, all in conformity with the requirements of Section 6-176 of the Building Zone Regulations;

The proposal included a stone masonry veneer, and landscaping along the banks.

(c) The prevention of dust and erosion through the planting of ground cover or installation of other surfaces;

The proposal shows best management practices for soil and erosion prevention. The design seeks to reduce erosion in the area.

(d) The preservation of natural attributes and major features of the site such as wetlands, highly erodible areas, historic structures, major trees and scenic views both from the site and onto or over the site;

The design seeks to replace the bridge that is indicated to be in poor condition. It seeks make the infrastructure more resilient and repair - and hopefully slow down - erosion in the area. The IWWA has endorsed the work as proposed.

(g) The provision of adequate storm and surface water drainage facilities to properly drain the site while minimizing downstream flooding, yet not adversely affect water quality as defined by the State Department of Environmental Protection.

The design seeks to improve drainage characterizes during flood events, allowing for water in the Brook to flow better under the bridge and downstream. The IWWA has endorsed the work as proposed as the Agency in charge of water quality issues at this site.

COASTAL RESOURCES AND STRUCTURES:
The subject action is not on the coastline but is within 1,000 feet of a coastal resource, Greenwich Cove, which can and does breach the weir at the south end of the Park, making the Binney Park pond and the Cider Mill Brook, brackish, or intermittently tidally influenced. The site also lies within the FEMA designated AE-11 flood zone. The elevation of the site ranges from elevation 4 to elevation 8. The current deck of the bridge is noted to be at elevation 8 and would be raised to elevation 11. This would be at the federally required base flood elevation of 11 feet required for structures in the AE-11 flood zone. Staff would note that the if this was an enclosed habitable structure, the first floor elevation would be required to be at elevation 12 per the Town’s regulations. As subject work is within and crosses a fresh water watercourse, the entire action is subject to a Wetlands Permit from the IWWA. The DPW appeared before and received the needed IWWA permit at their 10/26/2020 meeting. The official decision of the IWWA was not available at the time of this report but will be shared with the Commission, once available.

DRAINAGE:

The proposed action represents a drainage exemption under the Towns’ Drainage Manual as less than 500 sq. ft. of impervious area is being proposed. 392 sq. ft. of additional impervious surface, is proposed. The proposed site plan notes silt fencing to mitigate off-site erosion impacts, during construction.

ADDITIONAL AGENCY/DEPARTMENT REVIEWS:

IWWA - The subject action is within the upland review area of a watercourse, the Cider Mill Brook and Binney Park Pond. The appeared before and received approval from the Inland Watercourse and Wetlands Agency on Monday, October 26, 2020. Per Sec. 6-14(c), “The decision of the Planning and Zoning Commission shall not be rendered on such preliminary or final site plan application until the Inland Wetlands and Watercourses Agency has submitted a report with its final decision.” The official decision of the IWWA was not available at the time of this report but will be shared with the Commission, once available.

APPLICABLE ZONING REGULATIONS:

Sections 6-15, and 6-111
Planning and Zoning Application for Reconstruction in a CAM Zone & Scenic Road

Sound Beach Avenue Bridge No. 03954
Town of Greenwich, Connecticut

LOTCP Project No. L056-0001

Prepared by:
Town of Greenwich Department of Public Works
Town Project No. 12-17

October 2020
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Site Plan Application (For Reconstruction in a Scenic Roadway)
Site Plan Application (For Reconstruction in a CAM Zone)
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Narrative
Project Location Map
GIS Property Map
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SITE PLAN CHECKLIST

APPLICATION NAME: Sound Beach Avenue Bridge No. 03954 over Cider Mill Brook

All applications for preliminary and final site plan approval shall be made on the appropriate forms as provided by the Planning Staff. The following items must also be provided with the application. If any of the following items are not filed at the time of application, the application may be returned to the applicant in order that it may be filed in the entirety at an appropriate future date. Required Items: (Sec. 6-14)

CHECK ITEMS SUBMITTED

1. Fifteen copies of a survey, folded to 9" x 12", showing existing conditions, including:
   a. Locations and dimensions of all existing buildings, structures, fences, retaining walls, utility facilities, trees of six (6) inches or more in diameter at breast height, and other similar features.
   b. Existing contours at no more than a two-foot vertical interval, unless waived by the commission Staff in circumstances where such contours may not be necessarily pertinent. The survey shall indicate topographic conditions of property immediately adjoining the subject parcel.
   c. The location of all existing watercourses, intermittent streams wetlands as required by IWWA, Flood Hazard Lines as determined by FEMA, springs and rock outcrops or a note indicating that none exist, with the sources of information listed.
   d. The zone in which the land to be developed falls and the location of any town and zone boundary lines within or adjoining the tract, and yard dimensions to existing buildings. Lot area, by zone, shall be indicated.
   e. The title of the development, date, revision date if any and nature of revision, north arrow, scale, and the name and address of owner and names of owners of adjacent land.
   f. Street and property lines, curbs, edges of pavement, sidewalks, easements, right-of-way, covenants, and deed restrictions.
   g. Traffic lights and controls, public trees, catch basins, hydrants, and power and telephone lines in adjacent streets.
   h. Certification with the signature and seal or registration number of a registered land surveyor licensed in the State of Connecticut that the drawing is substantially correct to A-2 Standards, and that the property is in a designated zone under the zoning regulations.

2. Fifteen sets of a detailed Site development plan, at a readable scale, folded to 9" x 12", prepared in accordance with all applicable Town standards including the Roadway Design and Drainage Design Manuals, and signed by a professional architect, land surveyor, or engineer licensed in the State of Connecticut, showing:
   a. Location, dimension, and elevation of all proposed buildings, structures, walls, fences.
   b. Location dimensions and surface treatment of all existing and proposed parking and loading spaces, traffic access and circulation drives, and pedestrian walks. Sidewalks are to be provided as required by the Building Zone Regulations.
   c. Approximate location of proposed utility lines, including water, gas, electricity, sewer and the location of any transformers.
   d. Note specifying source of water supply and method of sewage disposal.
   e. Existing and proposed contours at units of no more than a two foot interval unless waived by the Commission’s staff. Cuts and fills and estimates of blasting to be submitted at time of final site plan.
   f. Location, size and type of proposed landscaping and buffer planting and the designation of those areas of natural vegetation not to be disturbed.
   g. Any other similar information determined by the Commission staff in order to provide for the proper enforcement of the Building Zone Regulations.
   h. Zoning statistics including: Gross Floor Area, Floor Area Ratio, Usable Floor Area, Required Parking, Actual Parking Provided, Building Height, Building Footprint, and Area Devoted to Surface parking, Building and Drives.

3. Eight sets of architectural plans, signed and sealed by an architect registered in the State of Connecticut, of all floors, all exterior elevations showing existing and proposed grade conditions. Elevations are to detail architectural elements by labeling materials, color and dimensions. Each architectural elevation shall show the absolute building height as well as building height for zoning purposes. All HVAC facilities are to be shown on architectural elevations.
4. Three copies of Floor Plan Work Sheets with the dimensions and calculated floor areas for each floor prepared in accordance with Sec. 6-5(22). Consult Commission Staff for required format.

5. Three copies of “building coverage” computation sheets.

6. Three copies of “area devoted to surface parking, building, and drives” worksheets.

7. Five copies of sight distance certification reports when required by a preliminary site plan review or when advised by the commission staff pursuant to item 2(g) of this checklist.

8. Three copies of Volume calculations per 6-101.

9. Completed Traffic Impact Evaluation Form if applicable. Submission requirements are defined on the form, available at the Commission office. A traffic report may be required.

10. Ten copies of completed application form signed by applicant or authorized agent, owners and contract purchasers, as applicable.

11. Ten copies of completed Special Permit form, if required by Building Zone Regulations.

12. Fifteen copies of detailed, inclusive narrative description of the proposed project. For those projects involving amendments to the Building Zone Regulations and/or amendments to the Building Zone Regulation Map, the narrative description must provide the section number and text for the proposed amendments(s) to the BZR and an explanation providing justification for the proposal. For map changes, a scaled drawing at 1” to 400’ needs to be provided for affected areas(s).

13. Eight copies of reductions in, 11 x 17 size, or other appropriate size, providing a readable, clear plan of proposed site development and architectural plans.

14. A showing that an adequate source of potable water is available to satisfy the needs of the proposed development as per Sec. 6-15(a) (5), signed by C.A.W.C.

15. An affidavit certifying that all abutting property owners have been notified, as evidenced by the submission of a certificate of mailing or certified or registered mail receipts about said application. A schedule of names, addresses, shown on a GIS map with lot lines indicating the location of the notified property owners. Owners of lots, or portions of lots, which are across a public or private street shall be deemed to be abutting property owners. For projects which require the preliminary review by the Conservation Commission, the notice shall be sent by the applicant to abutting owners two weeks prior to any scheduled hearing date of the Conservation Commission.

16. Authorization for the agent and contract purchasers to act on behalf of the certified property owner(s).

17. A separate schematic plan at a scale no larger than 1”-100” indicating buildings, parking and drives on the site and all adjoining properties, including those across the street, and the nearest cross street.

18. Five copies of a Drainage Summary Report as per Department of Public Works and the Town Drainage Design Manual. The summary report must be prepared in accordance with the following formats: PRELIMINARY: Existing and proposed storm water distribution, existing and proposed runoff rates, capability of off-site drainage facilities to accommodate proposed runoff, capability of off-site soils to accommodate percolation or detention if proposed, and identification of proposed drainage structures. FINAL: Final structure design details, prior approval from IWWA, Engineering Division and Conservation Commission as appropriate, and all information required by the preliminary report or two copies of drainage exemption forms.

19. In accordance with Sec. 6-183.1 to 6-183.10 of the Building Zone regulations, tree protection and sedimentation and erosion control plans shall be submitted with all site plan applications.

20. All applications for final site plans shall be in the form of a survey prepared by a registered Connecticut land surveyor having metes and bounds, dimensions of all buildings, parking and drives, setbacks of all structures from property lines, setbacks between buildings, and certification that building dimensions shown thereon are the same as the approved architectural plans Architectural and drainage plans are to be references by title, date(s) and sheet numbers.

21. Required fee submitted at time of application (see fee schedule).

22. “It is the belief of the PZC staff that this application is incomplete because of the failure of the applicant to provide the materials referred to above. This application will be reviewed by the PZC and a decision made as to whether it is complete or incomplete at its public meeting to be held in the PZC office.”

All applicants must make an appointment to submit this application with the Applications Coordinator, Peter Mangs, who can be reached by (email) Peter.Mangs@greenwichct.org or (phone) 203-622-7894.

NOTE: Any new documentation presented at Planning and Zoning Meetings shall be submitted to staff so that they can be made part of the record. Please ensure all documents can easily be removed from presentation boards.
Preliminary application for the reconstruction of a bridge over Cider Mill Brook on Sound Beach Avenue. The town of Greenwich Department of Public Works is the property owner. The project is located between Harding Road and Forest Avenue.

**Please select all relevant items below:**
- Special Permit – Complete special permit application form
- Coastal Overlay Zone
- Property is within 500 feet of a Municipal Boundary of [insert boundary name] (for notification)
- Amendment to Building Zone Regulations – Section(s) [insert section numbers]
- Amendment to Building Zone Map – Zone(s) affected [insert zone names]
- Health Department review needed
- Sewer Department review needed
- Architectural Review Committee Application attached or Review needed
- Planning & Zoning Board of Appeals review needed
- Inland Wetlands and Watercourses Agency Review / Approval Required
- Scenic Road Designation

**Authorized Agent**

<table>
<thead>
<tr>
<th>Name: James Michel, P.E., Deputy Commissioner</th>
<th>Firm name: Town of Greenwich DPW</th>
</tr>
</thead>
<tbody>
<tr>
<td>Street Address: 101 Field Point Road</td>
<td>City: Greenwich, St: CT, Zip: 06830</td>
</tr>
<tr>
<td>Phone: 203-622-7767</td>
<td>Email: <a href="mailto:jmichel@greenwichct.org">jmichel@greenwichct.org</a></td>
</tr>
<tr>
<td>Signature:</td>
<td>Date: October 16, 2020</td>
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**Property Owner(s) Authorization**

<table>
<thead>
<tr>
<th>Name: James Michel, P.E., Deputy Commissioner</th>
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<tbody>
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<td>Signature:</td>
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<td>Date: October 16, 2020</td>
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To be completed by P&Z staff only:

Check # ___________________________  Check Amount: $ ____________

Application # ___________________________  PZ Site Plan App 2018
SITE PLAN APPLICATION
*For Reconstruction in a CAM Zone

Project Name: Sound Beach Avenue Bridge No. 03954 over Cider Mill Brook
Project Address: Sound Beach Avenue between Harding Road and Forest Avenue
Property Owner(s): Town of Greenwich Department of Public Works
Tax Account Number(s): N/A Zone(s): R-7 & R-12 Lot Area: N/A

Please select all relevant items below:

☐ Special Permit – Complete special permit application form
☐ Coastal Overlay Zone
☐ Property is within 500 feet of a Municipal Boundary of _______________ (for notification)
☐ Amendment to Building Zone Regulations – Section(s) _______________
☐ Amendment to Building Zone Map – Zone(s) affected _______________
☐ Health Department review needed
☐ Sewer Department review needed
☐ Architectural Review Committee Application attached or Review needed
☐ Planning & Zoning Board of Appeals review needed
☐ Inland Wetlands and Watercourses Agency Review / Approval Required

AUTHORIZED AGENT

Name: James Michel, P.E., Deputy Commissioner
Street Address: 101 Field Point Road
Phone: 203-622-7767
Signature: ____________________________

Firm name: Town of Greenwich DPW
City: Greenwich ST: CT Zip: 06830
Email: jmichel@greenwichct.org
Date: October 16, 2020

PROPERTY OWNER(S) AUTHORIZATION

Name: James Michel, P.E., Deputy Commissioner
Street Address: 101 Field Point Road
Phone: 203-622-7767
Signature: ____________________________

City: Greenwich ST: CT Zip: 06830
Email: jmichel@greenwichct.org
Date: October 16, 2020

To be completed by P&Z staff only:
Check # ________________ Check Amount: $ __________
Application # ________________________________ PZ Site Plan App 2018
## SITE PLAN ZONING STATISTICS

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This Site Plan Involves:

- ☐ ADDITIONS
- ☐ ALTERATIONS
- ☐ DEMOLITION
- ☐ RE-CONSTRUCTION
APPLICATION FOR REVIEW OF COASTAL SITE PLAN

Applicant’s Name: Town of Greenwich Department of Public Works  Date: October 16, 2020
Address: 101 Field Point Road, Greenwich, CT 06830
Project Address or Locations: Sound Beach Avenue Bridge No. 03954 over Cider Mill Brook

The following information must be supplied by the applicant and submitted in addition to, and along with, any application, plans and data required for approval of the proposed project under the zoning and/or subdivision regulation of the municipality. Attach additional sheets if more space is required.

1. PLANS

A. Project Plan(s)
   This application must be accompanied by a plan (or plans) of the entire project indicating 1) project location, 2) design of all existing and proposed buildings, structures, and uses, 3) all proposed site improvements or alterations, and 4) ownership and type of use on adjacent properties.

B. Costal Resources
   This application must be accompanied by a plan showing the location of all coastal resources (as defined in Section 22a-93(7) of the Connecticut Coastal Management Act) on and contiguous to the site.

2. WRITTEN INFORMATION

A. Description of the Proposed Project
   Describe the entire project including types of buildings and structures, uses, methods and timing of construction, type and extent of development adjacent to the site. This information should supplement and/or clarify plans in 1(A) above.

   This project includes the replacement of the Sound Beach Avenue Bridge over Cider Mill Brook (Bridge No. 03954) as well as minor roadway improvements to the north and south approaches. The existing bridge superstructure is in poor condition and the substructure and channel are eroding. Pavement will be fully reconstructed, and curbing and sidewalks replaced. The horizontal geometry of the roadway will remain unchanged. The bridge will be raised to increase the flood capacity and prevent overtopping and flooding during extreme rain events. The existing minimum roadway elevation in the area is approximately 8. Based on FEMA base flood elevations, an elevation of 11 along Sound Beach Avenue is desirable in order to raise the bridge above the record storm elevation and reduce flooding potential of the road. Therefore, the design raises Sound Beach Avenue at the bridge such that the lowest point of the roadway section on the bridge is at elevation 11 or greater. A part of the proposed bridge replacement the existing two-span bridge will be replaced with a single span bridge. The out-to-out length of the proposed crossing will be increased to 58.0 feet. The proposed structure will have a span of 38 feet along the face of the bridge and a rise of 3.5 feet. The sediment deposited island due to blockage from the existing western span of the bridge will be removed to provide more natural stream flow. Riprap is proposed along the abutments of the proposed bridge to prevent scour at the footings. Erosion and sedimentation control measures will be implemented and Accelerated Bridge Construction (ABC) techniques will be used.
B. Description of Coastal Resources

Identify the coastal resources on and contiguous to the site (as shown on the coastal resources map) and describe their condition. This information should supplement and/or clarify the plan in 1(B) above.

Tidal stream. Both State of Connecticut and Federal regulated wetlands were located within the project area. Federal wetlands match the Connecticut wetland and watercourse boundary. Wetlands sketches as well as Wetlands and Soils Report is included in along with this application. Wetland and watercourse limits are shown in the HWY-1 plan sheet of the plan set.

C. Assessment of the Suitability of the Project for the Proposed Site and the Capability of the Resources to Accommodate the Proposed Use.

(1) Identify any and all coastal use policies (in Section 22a-92(10)(b)(1) of Connecticut Coastal Management Act) applicable to the proposed project.

(D) to require that structures in tidal wetlands and coastal waters be designed, constructed and maintained to minimize adverse impacts on coastal resources, circulation and sedimentation patterns, water quality, and flooding and erosion, to reduce to the maximum extent practicable the use of fill, and to reduce conflicts with the riparian rights of adjacent landowners; (F) to make use of rehabilitation, upgrading and improvement of existing transportation facilities as the primary means of meeting transportation needs in the coastal area;

(2) Identify and all coastal resource policies (in Section 22a-92(10)(b)(2) of Connecticut Coastal Management Act) applicable to the proposed project.

N/A

(3) Describe how the proposed project is consistent with all of the coastal policies identified in C (1) and (2) above (i.e. describe the extent to which the project complies or conflicts with each policy, the project should be modified to reduce or eliminate the conflict.

The bridge will be raised to increase the flood capacity and prevent overtopping and flooding upstream during extreme rain events. The sediment deposited island due to blockage from the existing western span of the bridge will be removed to provide more natural stream flow.

D. Evaluation of the Potential Beneficial and Adverse Impacts of the Project and Description of Proposed Methods to Mitigate Adverse Effects.

(1) Identify and describe the potential adverse impacts (as defined in Section 22a-93(15) of Connecticut Coastal Management Act and potential beneficial impacts of the project on coastal resources.

Restoration will include additional plantings along the stream bank to restore a riparian buffer.

FOR WATERFRONT PROPERTY ONLY:

(2) Is the project a water dependent use as defined in Section 22a-93(16) OF THE CONNECTICUT Coastal management Act? If, so, explain why.

N/A
FOR WATERFRONT PROPERTY ONLY:

(3) Describe the impacts of effects (either positive or negative) that the project will have on future water dependent uses or development on and adjacent to this site as defined in Section 22a-93(17).

N/A

(4) Describe the proposed measures to mitigate (reduce or eliminate) any adverse impacts on coastal resources described in D(1) and, if applicable, on future water dependent development opportunities described in D(3).

N/A

E. Demonstration of the Acceptability of Remaining or Unmitigated Adverse Impacts on Coastal Resources and Future Water Dependent Uses and Development.

(1) Describe any adverse impacts that remain after employing all reasonable mitigation measures.

N/A

(2) Explain why these remaining adverse impacts were not mitigated.

N/A

(3) Explain why the commission reviewing this application should find these remaining adverse impacts to acceptable.

N/A
STORMWATER MANAGEMENT STANDARDS - DRAINAGE REPORT EXEMPTION

Project Name: Sound Beach Avenue Bridge No. 03954 over Cider Mill Brook

Project Address: Sound Beach Avenue Bridge over Cider Mill Brook

Project Lot Number(s): N/A

Property Owner(s): Town of Greenwich Department of Public Works (c/o James W. Michel, P.E.)

Tax Account Number(s): N/A  Zone(s): N/A  Lot Area: N/A

1. Check all that apply to the proposed project:
   ☒ This is a new development or redevelopment project,
   ☐ The project will result in an increased amount of stormwater runoff and/or water pollutants flowing from a parcel of land (prior to the application of stormwater Best Management Practices),
   ☐ The project will alter the drainage characteristics of a parcel of land (prior to the application of stormwater Best Management Practices).

Categorical Exemptions:

2. Does the proposed project meet one of the following categorical exemptions? Check all that apply:
   ☐ Normal maintenance and improvement of land in agricultural use (as defined by Connecticut General Statutes), provided such activity conforms to acceptable management practices for pollution control approved by the Connecticut Department of Energy and Environmental Protection and the Greenwich Inland Wetlands and Watercourses Commission. This exemption does not apply to construction activities that are not directly related to the farming or agricultural operation.
   ☐ Routine maintenance of existing landscaping, gardens (excluding structural modifications to stormwater BMPs including rain gardens) or lawn areas including those maintained by the Town of Greenwich Parks and Recreation Department and Board of Education.
   ☐ Resurfacing of an existing impervious area on a non-residential lot such as repaving an existing parking lot or drive with no increase in impervious cover.
   ☐ Routine maintenance to existing town roads that is performed to maintain the original width, line, grade, hydraulic capacity, or original purpose of the roadway.
   ☐ Customary cemetery management.
   ☐ Emergency repairs to any stormwater management facility or practice that poses a threat to public health or safety, or as deemed necessary by the approving authority.
   ☐ Any emergency activity that is immediately necessary for the protection of life, property, or the environment, as determined by the approving authority.
   ☐ Repair of an existing septic system.
   ☐ Construction of utilities (gas, water, electric, telephone, etc.), other than drainage, which will not permanently alter terrain, ground cover, or drainage patterns.
   ☐ Repair or replacement of an existing roof of a single-family dwelling.
   ☐ Construction of a second (or higher) floor addition on an existing building.
   ☐ Construction of a maximum 12 foot x 12 foot shed. The construction must include the installation of a 1 foot wide x 1 foot deep crushed stone trench along the sides of the shed that discharge the roof runoff.
   ☐ The repair of an existing wood, composite, or plastic deck with no proposed enlargement of the deck surface.
The reconstruction or construction of a wood, composite, or plastic deck with the decking boards spaced at least 3/16 of an inch and a pervious surface below the deck. The pervious area below the deck must have the soil tilled 12 to 16 inches and finished with grass seed, sod, or crushed stone. The minimum depth for the crushed stone is 4 inches. A site plan showing the proposed location of the deck and construction details for the deck must be submitted.

The construction of any fence that will not alter existing terrain or drainage patterns.

If so, the Greenwich Stormwater Management Standards shall not apply, and submittal of a Stormwater Management Report is not required. However, application of the standards is still strongly encouraged.

OWNERS' CERTIFICATION

Owners' Name _____________________________________________________________________________
Street Address ________________________________ City _____________________State ____ Zip__________
Phone _____________________________________________ FAX ___________________________________
Owners' Signature                   Date

CONTRACTOR'S CERTIFICATION

Company Name _____________________________________________________________________________
Street Address ________________________________ City _____________________State ____ Zip__________
Phone _____________________________________________ FAX ___________________________________
Contractor's Signature ___________________________ Date ___________________
Conditional Exemptions Requiring Certification from a Professional Engineer:

3. For projects adding up to 500 square feet of impervious surfaces:

   The project design, including the proposed drainage design, if any, will not have an adverse effect on offsite properties or offsite drainage infrastructure, as certified by a professional engineer.

   At least one of the following measures shall be implemented on the project site to help mitigate the effects of site disturbance and new impervious surfaces within its on site watershed and point of concern:

   - Disconnection of roof down spouts that meet the Simple Disconnection standards in the Town of Greenwich Drainage Manual February 2012 as amended
   - A zero increase in peak flow to all points of concern for the 1, 2, 5, 10, and 25-year design storms
   - The runoff volume from the new impervious surfaces shall be infiltrated for the 10-year design storm
   - Constructing a bioretention area for the Water Quality Volume of the contributing watershed of the project area. The design standards in the Town of Greenwich Drainage Manual February 2012 as amended must be met
   - Creating a buffer with a length greater than or equal to the length of the project area and a minimum width of 10 feet planted as a meadow

   ✗ Restoring a riparian buffer (may require IWMA permit)

For projects that meet the above criteria, the project proponent shall submit Pages 1, 2, 3, 5, and 8 of this exemption request form and all computations and any additional drainage documents (Soil Evaluation Test Results, Watershed Maps, Etc.), in lieu of a Stormwater Management Report. The application of the Greenwich Stormwater Management Standards is still strongly encouraged.

For projects that meet the above criteria, the project proponent needs to submit construction plans as required on the Checklist for Projects Submitting a Stormwater Management Standards – Drainage Report Exemption – Form CL-101.

For projects that meet the above criteria, the project proponent needs to submit the items on the Checklist for Operations and Maintenance Plan Report – Form CL-104.

For projects that meet the above criteria, the project proponent needs to submit the Certificate of Occupancy documents on the Checklist for Projects Submitting a Stormwater Management Standards – Drainage Report Exemption – Form CL-101.

Residential teardowns are not exempt unless the project meets the Conditional Residential Teardown Exemption Requirements.

Commercial teardowns are not exempt.

PROFESSIONAL ENGINEER

Company Name ____________________________

Weston & Sampson Engineers, Inc.

Street Address ____________________________ City ____________ State CT Zip ____________

712 Brook Street, Suite 103 Rocky Hill CT 06067

Phone ____________________________ FAX ____________________________

860-513-1473 x 3032 ____________________________

Professional Engineer’s Name ____________________________

Lisa Slonus, P.E.
PROFESSIONAL – EXEMPTION CERTIFICATION

I hereby declare that the proposed project will add the following amount of impervious surfaces to the project site (check the box that applies):

[ ] 0 to 500 square feet (conditionally exempt with Professional Engineer’s Certification)
[ ] 500 to 1,000 square feet (conditionally exempt with Professional Engineer’s Certification)

It is my professional opinion that the project design, including the proposed drainage system, if any, will not have an adverse effect on offsite properties or offsite drainage infrastructure.

I further declare that at least one of the following measures shall be implemented on the project site to help mitigate the effects of site disturbance and new impervious cover for 0 to 1,000 square feet (check all that apply):

[ ] Disconnection of roof down spouts that meet the Simple Disconnection standards in the Town of Greenwich Drainage Manual February 2012 as amended
[ ] A zero increase in peak flow to all points of concern for the 1, 2, 5, 10, and 25-year design storms
[ ] The runoff volume from the new impervious surfaces shall be infiltrated for the 10-year design storm
[ ] Constructing a bioretention area for the Water Quality Volume of the contributing watershed of the project area. The design standards in the Town of Greenwich Drainage Manual February 2012 as amended must be met
[ ] Creating a buffer with a length greater than or equal to the length of the project area and a minimum width of 10 feet planted as a meadow
[ ] Restoring a riparian buffer (may require IWQA permit)

I further declare that at least one of the following measures shall be implemented on the project site to help mitigate the effects of site disturbance and new impervious cover for 500 to 1,000 square feet (check all that apply)

[ ] A zero increase in peak flow to all points of concern for the 1, 2, 5, 10, and 25-year design storms
[ ] The runoff volume from the new impervious surfaces shall be infiltrated for the 10-year design storm

Professional Engineer’s Signature ____________________________ Date 10/19/2020

Professional Engineer’s Seal
IMPERVIOUS AREA WORKSHEET

This worksheet shall be used to quantify impervious surfaces\(^1\) associated with existing and proposed construction on your site. Please complete columns 1, 2, and 3 below listing the first floor or ground level square footage of each existing or proposed structure or site amenity. Each point of concern shall use a separate worksheet.

**POINT OF CONCERN**

<table>
<thead>
<tr>
<th></th>
<th>(1) Existing Conditions Impervious Surfaces (sq ft)</th>
<th>(2) Proposed Conditions Impervious Surfaces (sq ft)</th>
<th>(3) Proposed New Impervious Surfaces (sq ft) [Column 2 minus column 1]</th>
</tr>
</thead>
<tbody>
<tr>
<td>House/Buildings</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Driveways</td>
<td></td>
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<tr>
<td>Sidewalks/Paths</td>
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<tr>
<td>Swimming Pool</td>
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<tr>
<td>Patios</td>
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<tr>
<td>Tennis Court/Sport Court</td>
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<td></td>
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<tr>
<td>Other</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TOTALS:</td>
<td>9885 sq. ft.</td>
<td>10,254 sq. ft.</td>
<td>369 sq. ft.</td>
</tr>
</tbody>
</table>

\(^1\) Refer to the glossary in the Town of Greenwich Drainage Manual for a definition of "impervious surface."
Narrative

Project Description

The project area is located within the southeasterly corner of Greenwich, south of Route 1 and Interstate 95 and north of the Metro-North Railroad and the Sound Beach Avenue and Old Greenwich Railroad Station. A location map is provided, see Figure 1. This project is located in Greenwich, CT and includes replacement of the Sound Beach Avenue Bridge over Cider Mill Brook (Bridge No. 03954) as well as minor roadway improvements to the north and south approaches. Pavement will be fully reconstructed, and curbing and sidewalks replaced. The Sound Beach Avenue bridge will be raised to increase the flood capacity of Binney Park and prevent flooding during extreme rain events. This is a Local Transportation Capital Improvement Program (LOTCIP) project with design funded by the Town and construction funded with State sources. A project plan set with relevant plans is included as part of this application. The existing and proposed site conditions are as shown in HWY-1 plan sheet included in the Plan Set.

Existing Conditions

The project roadway is Sound Beach Avenue which provides two lanes, one in each direction, and has a posted speed limit of 25 miles per hour (mph). The project area begins on Sound Beach Avenue approximately 100-feet north of Forest Avenue and ends just before the existing traffic circle at the intersection of Harding Road and Laddins Rock Road. Approximately 200 linear feet of Sound Beach Avenue will be reconstructed, which includes the 40 linear feet of bridge replacement. Sound Beach Avenue, Laddins Rock Road, and Harding Road intersect to from a four-legged un signalized intersection. The intersection is currently controlled by a small traffic circle, with each approach yield controlled within the circle. Sound Beach Avenue forms the northbound and eastbound approaches. The northbound approach is posted with a 25-mph intersection warning sign. Laddins Rock Road forms the southbound approach, and Harding Road the westbound approach. Development adjacent to the work area includes the Perrot Memorial Library, Binney Park, the First Congregational Church of Greenwich, and single-family homes.

The length of the existing Sound Beach Avenue Bridge crossing along the direction of the stream flow is 50.0 feet with a hydraulic span of 30.0 feet perpendicular to the flow. The bridge structure is supported by a 2.0-foot-wide pier making it a 2-span structure. It appears that the pier is causing major obstruction to the flow with significant deposition of sediment in the western span of the bridge. The project site is influenced by downstream tidal conditions. It should be noted that as shown in the effective FEMA map, the entire project site will be submerged up to an elevation of 11.0 feet due to tidal influence. This would be equivalent to 2.4 feet of overtopping at the bridge.

Proposed Conditions

The Town of Greenwich has determined that Sound Beach Avenue Bridge No. 03954 requires a complete bridge replacement. The bridge was originally constructed in 1925 and reconstructed in 1977. Based on the latest Connecticut Department of Transportation (CTDOT) inspection report, dated April 10, 2019, the bridge superstructure is in poor condition, and the substructure and channel are eroding. The intersection of Sound Beach Avenue at Laddins Rock Road and Harding Road will be retained. The existing traffic circle will still be utilized and there will only be minor adjustments to the grading of the intersection to accommodate the bridge replacement.

While there will be no changes to the horizontal geometry of the roadway, there will be vertical improvements which include raising Sound Beach Avenue Bridge as well as north and south approaches to the bridge. The existing minimum roadway elevation in the area is approximately 8. Based on FEMA
base flood elevations, an elevation of 11 along Sound Beach Avenue is desirable in order to raise the bridge above the record storm elevation and reduce flooding potential of the road. Therefore, the design raises Sound Beach Avenue at the bridge such that the lowest point of the roadway section on the bridge is at elevation 11 or greater. A part of the proposed bridge replacement the existing two-span bridge will be replaced with a single span bridge. The out-to-out length of the proposed crossing will be increased to 58.0 feet. The proposed structure will have a span of 38 feet along the face of the bridge and a rise of 2.64 feet. The sediment deposited island due to lockage from the existing western span of the bridge will be removed to provide more natural stream flow. Riprap is proposed along the abutments of the proposed bridge to prevent scour at the footings.

Wetlands and Watercourses

Cider Mill Brook flows in a southwesterly direction under Sound Beach Avenue Bridge No. 03954 and into Binney Park Pond. Cider Mill Brook at the Sound Avenue Bridge is located within a FEMA flood Zone AE as shown in the effective FEMA map. A copy of the FEMA map is included along with this application. In January and February of 2015, the Soil & Environmental Services, Inc. performed site inspection to identify/flag the wetland and watercourse boundaries along Cider Mill Brook and Binney Park Pond. Both State of Connecticut and Federal regulated wetlands were located within the project area. Federal wetlands match the Connecticut wetland and watercourse boundary. Wetlands sketches as well as Wetlands and Soils Report is included in along with this application. Wetland and watercourse limits are shown in the HWY-1 plan sheet of the plan set. The project is not located in a Public Water Supply Aquifer or Watershed Area.

The proposed project in particular the replacement of the bridge will result in both watercourse and wetland impacts. The proposed improvements result in 2,425 SF of wetland impacts and 1,830 SF of watercourse impacts. The total wetland/ watercourse impacts will be 4,255 SF. The wetlands/ watercourses are a combination of permanent and temporary impacts. In addition, approximately 12,950 SF of project area will be impacted within the 100-feet upland review area. Permanent impacts include impacts due to bridge replacement, re-grading the adjacent roadway embankments, removing the sediment deposit and providing riprap for scour protection. The temporary impacts include silt fence limits at fill limits and temporary water handling measures. 625 SF of watercourse will be created due to widening the bridge and removal of existing pier. An application for this project has been submitted to the Inlands Wetlands and Watercourse Commission for review.

Erosion and Sedimentation Control Measures

Erosion and sedimentation controls will be employed and maintained throughout the project limits during construction. These controls will be based on “Guidelines for Soil Erosion and Sediment Control” prepared by the Connecticut Council on Soil and Water Conservation. Construction notes pertaining to Erosion and Sedimentation (E&S) are provided on Sheet GEN-1 of the plan set; and E&S Control measures are provided on Sheet DET-1 of the plan set. Prior to construction, the contractor will be required to submit detailed plans for erosion & sedimentation control in order to ensure permit compliance and understanding. These plans will be reviewed by the Engineer for compliance against approved permits, as well as the construction plans and specifications, which include design details for E&S measures. Also, prior to performing any work, the contractor shall install all the erosion and sedimentation control measures.

During construction, the contractor will be expected to revise and maintain all erosion and sedimentation control measures to ensure that they are effective and providing adequate protection to the stream and wetland environment within the project area. Requirements of the erosion and sedimentation control plans are included in the plans. Also, an experienced inspector will be on site during the entire project to
ensure that all construction operations, including the installation and maintenance of E&S measures, are performed in accordance with the approved plan and contract requirements. The inspector will report directly to the Town and will act as the Town’s representative during all construction activities.

**Hydraulics and Drainage**

A detailed hydrologic & hydraulic analysis was performed to evaluate the impacts of bridge replacement. Appropriate hydrologic methods were used to estimate the flows through the Sound Beach Avenue Bridge. Hydraulic analysis was performed using a hydraulic model HEC-RAS. The hydraulic model was run for both the existing and proposed conditions for the various scenarios including tidal affects from backwater, normal flow conditions and FEMA conditions. The proposed bridge will result in conveying more flow than the existing bridge. The proposed changes do not have any adverse impacts to residential properties or FEMA elevations.

New catch basins and a reinforced concrete pipe are proposed as a result of two newly created low points within the project area. The two low points occur on either side of the proposed bridge and the catch basins collect runoff from relatively small drainage areas with both systems discharging into Cider Mill Brook. Both systems have been modeled using Hydraflow Storm Sewers Extension for Autodesk Civil 3D for both 10-year and 25-year design storms. Drainage design has been performed to be in compliance with the Town of Greenwich Drainage Manual. All roadway drainage structures, and adjacent off-road drainage structures and outlets were inspected for condition. The one existing drainage structure is a curb inlet that will be removed as part of the proposed bridge construction.

**Proposed Avoidance, Minimization and Mitigation Measures**

The purpose of the project is to replace a structurally deficient bridge within the project area. These proposed changes result in minor impacts to the wetlands and watercourse at the project site. The project design has minimized impacts to the extent possible within the objectives of the project. The proposed project results in creation of 625 SF of watercourse. An Army Corp Permit will be submitted as part of the federal permit approvals.

All proposed catch basins include two-foot sumps and the last catch basin before the outfall will have four-foot sumps to trap sediments. Riprap rap placed along the abutments will prevent scour and erosion during large storm events. The elimination of pier at the bridge will result in smooth flow of the brook and prevents future sediment deposits and sediment island formation.

Turf will be established in the grading areas and allowed to naturally reestablish with grass. Water quality will be maintained and protected via the use of erosion and sedimentation prevention measures and the use of best management practices for construction activity within wetlands and upland buffer zone. Sedimentation and erosion control measures which includes silt fence at the fill limits and silt sacs at the catch basins will be provided as shown in the plans. There will be continuous flow through the bridge during construction by following temporary water handling measures.
Project Location Map
FIGURE 1

LOCATION MAP

SOUND BEACH AVENUE BRIDGE REPLACEMENT
GREENWICH, CT

SCALE: 1" = 1000'

NOTE: MAP REFERENCED FROM CT DOT TRU MAP
GIS Property Map
Regional Parcel Viewer makes no claims and no warranties, expressed or implied, concerning the validity or accuracy of the GIS data presented on this map.
FEMA Map
This map complies with FEMA’s standards for the use of digital flood maps if it is not void as described below. The basemap shown complies with FEMA’s basemap accuracy standards.

The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on 3/4/2020 at 4:08:26 PM and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by new data over time.

This map image is void if the one or more of the following map elements do not appear: basemap imagery, flood zone labels, legend, scale bar, map creation date, community identifiers, FIRM panel number, and FIRM effective date. Map images for unmapped and unmodernized areas cannot be used for regulatory purposes.
Abutters Information and Notification
ABUTTERS LIST
Sound Beach Avenue Bridge No. 03954

1. Madelyn H. Sherwood
   1 Forest Avenue
   Greenwich, CT 6870

2. Note: There is no record of owners for “Parkview Associates Open Space”

October 15, 2020

Madelyn H. Sherwood
1 Forest Avenue
Greenwich, CT 6870

Re: Sound Beach Avenue Bridge No. 03954 Planning & Zoning Application

Dear Mrs. Sherwood:

Notice is hereby given that Town of Greenwich Department of Public Works has filed a final site plan application with the Town of Greenwich, Planning and Zoning Commission for work in a Coastal Overlay Zone and for work within a Scenic Roadway for the replacement of the Sound Beach Avenue Bridge No. 03954 over Cider Mill Brook.

Further information concerning this application may be obtained by contacting the Planning and Zoning Commission at 203-622-7894.

Sincerely,

James W. Michel, P.E.
Deputy Commissioner

cc: File 12-17 (TOG)
TOWN OF GREENWICH
DEPARTMENT OF PUBLIC WORKS

REPLACEMENT OF BRIDGE NO. 03954
SOUND BEACH AVENUE OVER
CIDER MILL BROOK
GREENWICH, CONNECTICUT
NO. L056-0001

LIST OF DRAWINGS

AUGUST 2020
FOR PERMITTING

WESTON & Sampson

AMY J. SIEBERT, P.E.
COMMISSIONER OF PUBLIC WORKS

JAMES W. MICHEL, P.E.
DEPUTY COMMISSIONER OF PUBLIC WORKS
NOTE:
MATERIAL FOR FACE COAT SHALL BE APPLIED BETWEEN PAVERMENT COURSES
ON ALL MEXED SURFACES AND TO ALL PAVERMENT JOINS.

LEGEND:
1. 2" MAW 50.3.75
2. 2" MAW 50.5
3. 3" MAW 50.0
4. 4" PROCEEDING AGGREGATE BASE
5. TOPSOIL
6. FORMATION OF SUBGRADE
7. 5" x 10" GRANITE STONE CURING, 8" ROOF
8. 5" CONCRETE CURING
9. TRAFFIC ESTABLISHMENT
10. POINT OF GRACIOUS APPLICATION
11. MILL 2" OF EXISTING TRAVAILING PAVEMENT
12. 2" MAW 50.25
13. MILL MILL 2.1 PAVER

SOUND BEACH AVENUE
STA. 13+31.00 TO STA. 14+00

SOUND BEACH AVENUE
STA. 14+00 TO STA. 14+80

EXISTING CONDITIONS
5"
10"
8"
5"
5.5"
SECTIONAL ELEVATION A-B

SECTIONAL ELEVATION B-C

NOTES:
1. Dimension "A" shall be consistent with the invert elevation shown on contract drawings. When no invert elevation is specified, dimension "A" shall be adequate to provide a minimum of 5" of cover over pipe.

SCALE = N.T.S.

STANDARD CONSTRUCTION DETAIL

TYPE "C-1" PRECAST CATCH BASIN
TOWN OF GREENWICH, CONNECTICUT
ENGINEERING DIVISION
DEPARTMENT OF PUBLIC WORKS

FOR PERMITTING
PERENNIAL PLANTING

- 4" MULCH LAYER
- EXCAVATE DIRT TO DEPTH OF 12"
- PLANTING SOIL MIX
- UNDERPLANTED SOIL PEDIMENT

SHRUB PLANTING

- 309x1042
- TREE ROOT BALL 1'-4"
- STAKES 1'-4"
- SOIL 

SINGLE-STEM TREE PLANTING

- 3/4" FLAT BRAIDED NYLON CORDING TIED IN FIGURE EIGHT
- 2"x3" WOODEN STAKES (3 PER TREE) REQUIRED

PLANTING BED

- MULCH
- TOPSOIL
- LOOSENED SUBGRADE
- SUBGRADE

NOTES:

1. STAKING ONLY REQUIRED ON TREES 6' HT. OR TALLER.

2. DO NOT CUT OR BREAK LEADER
BEGIN FULL DEPTH CONSTRUCTION
SOUND BEACH AVENUE STA. 14+00
EL. 9.21
MATCH EXISTING ROADWAY GRADE
BEGIN MILL AND OVERLAY
SOUND BEACH AVENUE STA. 13+31.90
EL. 9.58
MATCH EXISTING ROADWAY GRADE
END CONSTRUCTION
SOUND BEACH AVENUE STA. 16+00
EL. 8.45
MATCH EXISTING ROADWAY GRADE
FOR PERMITTING
LIMIT OF PROPOSED PAVEMENT MARKINGS
SOUND BEACH AVENUE STA. 17+00

LIMIT OF PROPOSED PAVEMENT MARKINGS
LADDINS ROCK ROAD MATCH EXISTING MARKINGS

FOR PERMITTING
DETOUR NOTES:

1. Temporary stop bar
2. See insert "A"
3. Southbound detour route
4. Northbound detour route
5. Temporary chain link fence (TFL) work area
6. Detail notes
7. False notes
Conditional Exemptions Requiring Certification from a Professional Engineer:

3. For projects adding up to 500 square feet of impervious surfaces:
   The project design, including the proposed drainage design, if any, will not have an adverse effect on offsite properties or
   offsite drainage infrastructure, as certified by a professional engineer.
   At least one of the following measures shall be implemented on the project site to help mitigate the effects of site
   disturbance and new impervious surfaces within its on site watershed and point of concern:
   - Disconnection of roof down spouts that meet the Simple Disconnection standards in the Town of Greenwich
     Drainage Manual February 2012 as amended
   - A zero increase in peak flow to all points of concern for the 1, 2, 5, 10, and 25-year design storms
   - The runoff volume from the new impervious surfaces shall be infiltrated for the 10-year design storm
   - Constructing a bioretention area for the Water Quality Volume of the contributing watershed of the project area.
     The design standards in the Town of Greenwich Drainage Manual February 2012 as amended must be met
   - Creating a buffer with a length greater than or equal to the length of the project area and a minimum width of 10
     feet planted as a meadow
   - Restoring a riparian buffer (may require IWQA permit)

For projects that meet the above criteria, the project proponent shall submit Pages 1, 2, 3, 5, and 8 of this exemption request
form and all computations and any additional drainage documents (Soil Evaluation Test Results, Watershed Maps, Etc.), in lieu
of a Stormwater Management Report. The application of the Greenwich Stormwater Management Standards is still strongly
encouraged.

For projects that meet the above criteria, the project proponent needs to submit construction plans as required on the Checklist

For projects that meet the above criteria, the project proponent needs to submit the items on the Checklist for Operations and
Maintenance Plan Report – Form CL-104.

For projects that meet the above criteria, the project proponent needs to submit the Certificate of Occupancy documents on the

Residential teardowns are not exempt unless the project meets the Conditional Residential Teardown Exemption Requirements.

Commercial teardowns are not exempt.

PROFESSIONAL ENGINEER

______________________________
Company Name ____________________
Weston & Sampson Engineers, Inc.

______________________________
Street Address ____________________
712 Brook Street, Suite 103

______________________________
City ____________________________
Rocky Hill

______________________________
State ___________________________ CT
Zip __________

______________________________
Phone __________________________ 860-513-1473 x 3032

______________________________
FAX ____________________________

______________________________
Professional Engineer’s Name ________________ Lisa Slous, P.E.
PROFESSIONAL – EXEMPTION CERTIFICATION

I hereby declare that the proposed project will add the following amount of impervious surfaces to the project site (check the box that applies):

- [x] 0 to 500 square feet (conditionally exempt with Professional Engineer’s Certification)
- [ ] 500 to 1,000 square feet (conditionally exempt with Professional Engineer’s Certification)

It is my professional opinion that the project design, including the proposed drainage system, if any, will not have an adverse effect on offsite properties or offsite drainage infrastructure.

I further declare that at least one of the following measures shall be implemented on the project site to help mitigate the effects of site disturbance and new impervious cover for 0 to 1,000 square feet (check all that apply):

- [ ] Disconnection of roof down spouts that meet the Simple Disconnection standards in the Town of Greenwich Drainage Manual February 2012 as amended
- [ ] A zero increase in peak flow to all points of concern for the 1, 2, 5, 10, and 25-year design storms
- [ ] The runoff volume from the new impervious surfaces shall be infiltrated for the 10-year design storm
- [ ] Constructing a bioretention area for the Water Quality Volume of the contributing watershed of the project area. The design standards in the Town of Greenwich Drainage Manual February 2012 as amended must be met
- [ ] Creating a buffer with a length greater than or equal to the length of the project area and a minimum width of 10 feet planted as a meadow
- [x] Restoring a riparian buffer (may require IWWA permit)

I further declare that at least one of the following measures shall be implemented on the project site to help mitigate the effects of site disturbance and new impervious cover for 500 to 1,000 square feet (check all that apply)

- [ ] A zero increase in peak flow to all points of concern for the 1, 2, 5, 10, and 25-year design storms
- [ ] The runoff volume from the new impervious surfaces shall be infiltrated for the 10-year design storm

[Signature]

Professional Engineer’s Signature

[Date]

Date

[Seal]

Professional Engineer’s Seal
Town of Greenwich  
Department of Public Works - Engineering Division  
Town Hall - 101 Field Point Road, Greenwich, CT 06830-2540  
Phone 203-622-7767 - Fax 203-622-7747

**IMPERVIOUS AREA WORKSHEET**

This worksheet shall be used to quantify impervious surfaces\(^1\) associated with existing and proposed construction on your site. Please complete columns 1, 2, and 3 below listing the first floor or ground level square footage of each existing or proposed structure or site amenity. Each point of concern shall use a separate worksheet.

<table>
<thead>
<tr>
<th>POINT OF CONCERN</th>
<th>(1) Existing Conditions Impervious Surfaces (sq ft)</th>
<th>(2) Proposed Conditions Impervious Surfaces (sq ft)</th>
<th>(3) Proposed New Impervious Surfaces (sq ft) [Column 2 minus column 1]</th>
</tr>
</thead>
<tbody>
<tr>
<td>House/Buildings</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Driveways</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sidewalks/Paths</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Swimming Pool</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Patios</td>
<td></td>
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<td></td>
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<tr>
<td>Tennis Court/Sport Court</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>TOTALS:</strong></td>
<td><strong>9885 sq. ft.</strong></td>
<td><strong>10,254 sq. ft.</strong></td>
<td><strong>369 sq. ft.</strong></td>
</tr>
</tbody>
</table>

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\(^1\) Refer to the glossary in the Town of Greenwich Drainage Manual for a definition of "impervious surface."

Form SE-100  
Page 8 of 8  
February 2014
STORMWATER MANAGEMENT STANDARDS - DRAINAGE REPORT EXEMPTION

Project Name: Sound Beach Avenue Bridge No. 03954 over Cider Mill Brook
Project Address: Sound Beach Avenue Bridge over Cider Mill Brook
Project Lot Number(s): N/A
Property Owner(s): Town of Greenwich Department of Public Works (c/o James W. Michel, P.E.)
Tax Account Number(s): N/A  Zone(s): N/A  Lot Area: N/A

1. Check all that apply to the proposed project:
   - ☒ This is a new development or redevelopment project,
   - ☐ The project will result in an increased amount of stormwater runoff and/or water pollutants flowing from a parcel of land (prior to the application of stormwater Best Management Practices),
   - ☐ The project will alter the drainage characteristics of a parcel of land (prior to the application of stormwater Best Management Practices).

Categorical Exemptions:

2. Does the proposed project meet one of the following categorical exemptions? Check all that apply:
   - ☐ Normal maintenance and improvement of land in agricultural use (as defined by Connecticut General Statutes), provided such activity conforms to acceptable management practices for pollution control approved by the Connecticut Department of Energy and Environmental Protection and the Greenwich Inland Wetlands and Watercourses Commission. This exemption does not apply to construction activities that are not directly related to the farming or agricultural operation.
   - ☐ Routine maintenance of existing landscaping, gardens (excluding structural modifications to stormwater BMPs including rain gardens) or lawn areas including those maintained by the Town of Greenwich Parks and Recreation Department and Board of Education.
   - ☒ Resurfacing of an existing impervious area on a non-residential lot such as repaving an existing parking lot or drive with no increase in impervious cover.
   - ☐ Routine maintenance to existing town roads that is performed to maintain the original width, line, grade, hydraulic capacity, or original purpose of the roadway.
   - ☐ Customary cemetery management.
   - ☐ Emergency repairs to any stormwater management facility or practice that poses a threat to public health or safety, or as deemed necessary by the approving authority.
   - ☐ Any emergency activity that is immediately necessary for the protection of life, property, or the environment, as determined by the approving authority.
   - ☐ Repair of an existing septic system.
   - ☐ Construction of utilities (gas, water, electric, telephone, etc.), other than drainage, which will not permanently alter terrain, ground cover, or drainage patterns.
   - ☐ Repair or replacement of an existing roof of a single-family dwelling.
   - ☐ Construction of a second (or higher) floor addition on an existing building.
   - ☐ Construction of a maximum 12 foot x 12 foot shed. The construction must include the installation of a 1 foot wide x 1 foot deep crushed stone trench along the sides of the shed that discharge the roof runoff.
   - ☐ The repair of an existing wood, composite, or plastic deck with no proposed enlargement of the deck surface.
☐ The reconstruction or construction of a wood, composite, or plastic deck with the decking boards spaced at least 3/16 of an inch and a pervious surface below the deck. The pervious area below the deck must have the soil tilled 12 to 16 inches and finished with grass seed, sod, or crushed stone. The minimum depth for the crushed stone is 4 inches. A site plan showing the proposed location of the deck and construction details for the deck must be submitted.

☐ The construction of any fence that will not alter existing terrain or drainage patterns.

If so, the Greenwich Stormwater Management Standards shall not apply, and submittal of a Stormwater Management Report is not required. However, application of the standards is still strongly encouraged.

OWNERS’ CERTIFICATION

Owners’ Name Town of Greenwich Department of Public Works (c/o James W. Michel, P.E.)

Street Address 101 Field Point Road City Greenwich State CT Zip 06830

Phone 203-622-7767 FAX 203-622-7747

Owners’ Signature ________________________________ Date October 16, 2020

CONTRACTOR’S CERTIFICATION

Company Name _____________________________________________________________________________

Street Address ________________________________ City _____________________State ____ Zip__________

Phone ________________________________ FAX ________________________________

Contractor’s Signature ________________________________ Date ____________________
Dear Jim,

Thank you for the presentation last night at the IWWA meeting. Raju from the consulting firm was particularly articulate, and I think for the first time I understand the different impacts of tidal vs. riverine flooding vs. the infamous 100 year storm. Will he be available for the P and Z meeting next week to answer specific hydrology questions? We think it would be quite important to have him there.

First of all, I understand and agree with why the bridge needs replacing and I am confident the bridge itself will look and feel appropriate for the neighborhood. Hopefully, you will have visuals similar to what you had at the Wesskum Wood Road bridge meeting at next week’s P and Z meeting so we can “see” what it will look like. My question is on the road raise, however. There has been conflicting information out there. I first understood the road above the bridge would be raised 2.5 feet with a taper of 50 feet on each side. Gabriella’s presentation on the DPW website says 2 feet with an 80 foot taper. Last night I believe it was Mr. Clausi who said it was a 3 foot raise with a 75 foot taper. Which is it? The engineering drawings on a computer screen are simply too small and difficult to read. The tapering issue is what concerns us. A 75-80 foot taper and its associated regrading of the land on either side would have a significant impact on the Park, Outdoor Reading Room and on the Perrot intersection.

Secondly, because we are especially concerned about the impact of a road raise on the “scenic nature” of our Scenic Road, we would like to request drawings (similar to the ones you made of the proposed rotary) for the meeting next week. What will this grading of the road actually look like? We really can’t tell from the engineering diagrams. Also a drawing of the bridge from a side view would be extremely helpful in letting us see what the “hump” of the bridge will look like.

Thank you in advance for taking time to answer these questions.

Best regards,

Rita Baker