

RESPONSE TO PEER REVIEW COMMENTS

On behalf of the applicant, we hereby submit responses to comments received on July 25, 2024. The plans and documents were reviewed by Ms. Shannon Palmer, Conservation Agent for the town of Hingham. We utilized the review outline and have provided our responses in **bold** and Ms. Palmer's comments in *italics*.

Please see below comments on the NOI and project plan for 8 Franklin Rogers Rd....

- *The narrative does include a summary of potential impacts on the wetland values of the resource area however a specific performance standards analysis for compliance with the HWR Section 22(d) (Buffer Zone) is required.*
 - **The narrative has been revised and is included with this response.**
- *Please provide a mitigation table with a calculation of impacts in the 0-50 and 50-100 foot buffer zone including square footage of existing and proposed pervious and impervious area. If mitigation is required in accordance with the Buffer Zone Mitigation Policy, please submit planting plan.*
 - **A mitigation table has been added to the plan.**
- *The site plan does not show soil stockpiles. Please include on the plan.*
 - **Stockpile areas have been added to the plan.**
- *The plan identifies one tree for removal in the buffer zone. What is the size and species of the tree to be removed? Replacements should be proposed as applicable in accordance with the Commission's Tree Removal Policy.*
 - **The proposed tree is a 15" deciduous tree. Replacement will be in the form of multishrubs as depicted on the landscaping plan.**
- *The proposed garage is located directly on the 50 foot buffer boundary with no consideration for construction excavation or temporary disturbance. More detail on the garage would be helpful to evaluate potential temporary or permanent impacts in this area.*
 - **Although no grading or impervious areas are proposed on the 50' buffer, some disturbance in grassed areas will be necessary for the construction of the garage.**
- *The project proposes a large paved circular driveway in the outer buffer zone. Have other options been considered for driveway material or size to reduce impervious area within the buffer zone? Reducing the driveway would also reduce the size of the required infiltration area.*
 - **The large circle allows for a fire truck to maneuver to enter and exit as shown on the plans.**
- *As we discussed on the phone, the large infiltration area is needed due to anticipated high ground water. Please provide, if available, testing results for groundwater elevations.*
 - **A test pit was performed on July 24, 2024 and no groundwater was encountered at 4'-2" from the existing ground elevation. Test pit information has been added to the plan.**

Project Narrative

Notice of Intent
311 Rockland Street
Hingham, MA 02043

June 2024

Revised: August 5, 2024

Project Description

The project proponent, Gerry Rankin, proposes to construct a single-family dwelling at 311 Rockland Street, along with a bituminous concrete driveway, retaining walls, two rain gardens and associated utilities. The stormwater management and erosion control measures are proposed to minimize impacts to the wetland resource areas downgradient of the project.

Existing Conditions

Through an Approval Not Required (ANR) Plan, submitted to the Hingham Planning Board with the plan date of March 26, 2024, 301 Rockland Street, 311 Rockland Street and 210 Hull Street will have revised lot boundaries. The proposed site will consist of the newly created 311 Rockland Street property. This ANR plan was recorded at the Plymouth Registry of Deeds on May 8th, 2024, in plan book 67, page 1080.

301 Rockland Street, having the current Hingham assessor's parcel ID of 33-05, will gain lot area from parcels A & B. Parcels C & D will be combined to formulate the new 311 Rockland Street, which is the project location. Lot 1 listed on the ANR plan will represent the new lot configuration for 210 Hull Street.

311 Rockland Street will have frontage on Rockland Street and have a total lot area of 1.29 acres±. The property is located within Zone "X" and "AE(10.8)" of the Flood Insurance Rate Map, as shown in Ma No. 25023C0038J, effective July 17, 2012, and portions of the site along Rockland Street are within a special flood hazard area. The Weir River Estuary is located across Rockland Street and is an Area of Critical Environmental Concern (ACEC). The 200-foot Riverfront Area associated with the Weir River and measured from the mean annual highwater line extends across Rockland Street and onto the property. A Salt Marsh which is located at the toe of slope of the embankment just beyond the existing metal guardrail along Rockland Street and a Coastal Bank located at the landward limit of the Salt Marsh are the landward most wetland areas which abut the Weir River. The 50-foot and 100-foot buffer zones to the Salt Marsh and Coastal Bank are within the limit of work for 311 Rockland Street. To review resource area information in further detail, refer to the attached *Environmental Assessment Report*, prepared by Independent Environmental Consultants, Inc.

The site contains the following wetland resource areas and areas of Conservation Commission jurisdiction:

- 100-foot Buffer Zone (to Salt Marsh)
- 100-foot Buffer Zone (to Coastal Bank)

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- 200-foot Riverfront Area
 - Land Subject to Coastal Storm Flowage

The existing property has various ledge outcrops located throughout the site, and slopes reaching between 40-50% on portions of the property. The site is currently an undeveloped wooded property with the rear portion containing flatter topography.

Proposed Conditions and Mitigation

The work under this Notice of Intent includes the construction of a driveway, single-family dwelling, retaining walls, and stormwater management systems (rain gardens). The driveway is proposed to be 14' wide accessing Rockland Street, with a turnaround area for emergency vehicle access on the site near the dwelling located in the upper rear portion of the site. The proposed dwelling will have a 2,267 SF± footprint including the garage, and a 551 SF± deck area.

Based on driveway access required from Rockland Street, there are portions of work for this project that will result in alteration of land within the Riverfront Area and wetland buffer zones. The total site located within the riverfront area is 23,182 SF±. All riverfront alteration within the lot will occur between the 100'-200' riparian zone, and will result in 2,275 SF± of land alteration. For a full Riverfront Alternatives Analysis, refer to the attached *Riverfront Area Alternatives Analysis*.

For buffer zone alteration, approximately 325 SF± of the proposed driveway entrance is located within the 0-50 foot buffer zone to the Salt Marsh/Coastal Bank, and 2,880 SF± within the 50-100 foot buffer zone will be altered. Note that Rockland Street is located between the property and the wetland resource areas and is fully developed.

Per *Hingham's Buffer Zone Mitigation Policy*, areas which are altered within wetland resource areas and buffer zones require mitigation. Due to the site containing extensive ledge outcrops, a waiver is requested to dismiss the requirements of this policy. It would likely be unfeasible to plant on areas of the site which have steep slopes with ledge.

Stormwater Management

Stormwater systems on-site were designed to comply with the Stormwater Standards outlined in the Massachusetts Stormwater handbook to the extent practicable. Two proposed rain gardens on-site will be used for stormwater treatment. The first rain garden will be located next to the driveway entrance near Rockland Street. Runoff to this rain garden will be collected via a trench drain, located at the low point of the driveway and discharge to the rain garden area. The second rain garden will be located near the proposed house.

Erosion Control Measures

The potential for temporary impacts to wetlands due to erosion and mitigation of sediments into adjacent wetlands will be mitigated by adherence to basic erosion control practices.

Silt Sock

A silt sock will be installed prior to the start of work, at the limit of work, and will remain in place until the site is stabilized, and non-paved areas have been loamed and seeded.

The contractor will inspect the erosion control periodically including after each rain event. Any silt or other debris that builds up on the silt sock should be removed at the time of these inspections. Additional silt sock is to be kept on site to repair the erosion control line as needed.

Construction Entrance

A stabilized construction entrance shall be installed prior to site work, at the driveway entrance abutting Rockland Street. The construction entrance shall be approximately 14' x 30' to provide a stable site entrance and exit point for vehicular traffic navigating to the site. This erosion control measure also helps reduce the tracking of soil/sediment onto the roadway.

Performance Standard Analysis

As stated in the attached *Environmental Assessment Report*, prepared by Independent Environmental Consultants, Inc., wetland resources and associated buffers are identified on the property. Compliance with the Wetlands Protection Act and Hingham Wetland Regulations is demonstrated for work shown in both the Riverfront Area and wetland buffer areas as follows:

Compliance With Performance Standards for Work in the Buffer Zone (§22.0(d) Hingham Wetland Regulations)

The proposed work complies with the Hingham Wetland Regulations Performance Standards for work in the buffer zone as follows:

(1) The intent of the Conservation Commission is to move all structures and activities as far away as possible from any Resource Area, in order to protect the wetland values of Resource Areas.

The proposed dwelling and accessory structures were located to minimize impact to nearby resource areas and their buffer zones, and to meet the homeowners' desires for the property. The proposed development within the Riverfront Area and 0'-100' wetland buffer zone are required to provide adequate site access via a bituminous concrete driveway, and to treat stormwater runoff via a proposed rain garden. The proposed dwelling and pool are located outside of the Riverfront Area and wetland buffer zone to the Salt Marsh and Coastal Bank resource areas across Rockland Street.

(2) Except as otherwise specified, Resource Area buffers shall be retained and maintained in a naturally vegetated condition. Where buffer disturbance has occurred during construction, revegetation with native vegetation may be required.

The existing site is undeveloped, with ledge and woodland ground cover throughout. There is no possibility of retaining all wetland buffer zone vegetation for the purposes of this project. Buffer zone disturbance has been minimized to retain as much buffer zone vegetation as possible.

(3) The Commission may require that already-altered buffer zone be restored in order to protect or improve Resource Area values. Restoration means planting native vegetation, grading, correcting site drainage, removing debris, or other measures which will improve, restore and protect the wetland values of the Resource Area.

There are no areas of previous development within the wetland buffer zones on-site. A waiver is requested to dismiss the requirements within the *Hingham Wetland Buffer Zone Mitigation Policy*.

(4) Notwithstanding the above provisions, no project may be permitted which will have any adverse effect on specified habitat of rare vertebrate or invertebrate and rare plant species, as identified by procedures established under 310 CMR 10.37 for Coastal Resource Areas or 310 CMR 10.59 for Inland Resource Areas.

The project does not pose an adverse effect on specified habitat of rare vertebrate or invertebrate and rare plant species. Though the lot is currently undeveloped, the buffer zone area between the property and the Weir River wetland resources is altered by the Rockland Street Right of Way. No NHESP Estimated & Priority Habitats are identified onsite, per MassMapper and the Wetland Assessment Report.

The site is located within the Weir River Estuary Area of Critical Environmental Concern (ACEC) designation, per MassMapper data. The proposed construction within this area is minimal, and shall pose no damage to this ACEC, or the associated wildlife/wildlife habitat.

(5) The Commission may impose such additional requirements as are necessary to protect the wetland values protected under the Bylaw.

This application is presented to the Conservation Commission for their review.

Compliance With Performance Standards for Work in Riverfront Area (§21.1(d) Hingham Wetland Regulations)

The proposed work complies with the Hingham Wetland Regulations Performance Standards for work in the Riverfront Area as follows:

(1) Except as stated below, the Commission hereby incorporates 310 CMR 10.58 in its regulations for all matters related to Bylaw jurisdiction in lands within 200 feet of rivers and streams.

See *Riverfront Area Alternatives Analysis*, for more information about design considerations regarding the Riverfront Area within the site.

(2) Notwithstanding the above, a river is any natural flowing body of water that empties to any ocean, lake, pond, other river, stream or wetland and which flows throughout the year. Perennial rivers, streams and creeks are rivers; intermittent streams are not. Notwithstanding 310 CMR 10.58, the burden of proof shall be on any applicant to show that a river, stream or creek is not perennial (i.e., is intermittent).

The Weir River is considered a perennial river, which flows into Hingham Bay. The Weir River has a 200' riverfront area overlaying the site at 311 Rockland Street. Therefore, all relevant aspects of 310 CMR 10.58 shall apply to this project.

(3) For any river or stream that is tidally influenced, the Commission shall use the DEP mouth of the river designation line.

The Weir River is tidally influenced, based on the information from Mouth of Coastal Rivers Map ID: Hingham-Hull-Mor-1. The site falls within the designated area for a coastal river.

(4) Notwithstanding any provisions of 310 CMR 10.58, the Commission shall presume that the mean annual high-water line of a non-tidal river is coincident with the outer (landmost) boundary of any Bordering Vegetated Wetland (as defined in these regulations) that may be adjacent to the river. This presumption may be overcome upon a clear showing that the mean annual high-water line is closer to the river. Such evidence may include hydrological measurements and calculations prepared by a registered professional engineer and/or hydrologist, and/or stream flow stage data from U.S. Geological Survey stream gauges and survey. For non-tidal rivers lacking any Bordering Vegetated Wetland, the inner boundary of the 200-foot Riverfront Area shall be the top of Inland Bank as determined by the first observable break in slope or the mean annual flood level, whichever is lower. For tidal rivers, the inner boundary of the 200-foot Riverfront Area shall be the mean annual high-water line.

See the Site Plan for this project to review the Riverfront Area, which was delineated from the mean annual high-water line via Massachusetts GIS data.

(5) Notwithstanding any provisions of 310 CMR 10.58, the alternatives analysis shall include only lots adjacent to the lot(s) being proposed for development or located in the near vicinity.

Alternative options were only considered within the property area. See the *Riverfront Area Alternatives Analysis* for further information.

(6) Notwithstanding the above provisions, no project may be permitted which will have any adverse effect on specified habitat of rare vertebrate or invertebrate and rare plant species, as identified by procedures established under 310 CMR 10.59.

The project does not pose an adverse effect on specified habitat of rare vertebrate or invertebrate and rare plant species. No NHESP Estimated & Priority Habitats are identified onsite, per MassMapper and the Wetland Assessment Report.

The site is located within the Weir River Estuary Area of Critical Environmental Concern (ACEC) designation, per MassMapper data. The proposed construction within this area is minimal, and shall pose no damage to this ACEC, or the associated wildlife/ wildlife habitat.

(7) The Commission may impose such additional requirements as are necessary to protect the wetland values protected under the Bylaw.

This application is presented to the Conservation Commission for their review.

(8) Refer to HWR 23.0 et seq. for additional project-specific performance standards.

Not Applicable (N/A).

Compliance with 310 CMR 10.58(4)(d)1.

(1) The work, including proposed mitigation measures, must have no significant adverse impact on the riverfront area to protect the interests identified in M.G.L. c. 131, §40. (Surface water quality shall not be impaired).

The proposed work such as the driveway and retaining walls within the riverfront area will not pose any adverse impacts to surface water quality for the Weir River, because all driveway runoff will be treated within rain gardens prior to any overflow or discharge towards the Weir River.

Compliance With Performance Standards for Work in Land Subject to Coastal Storm Flowage (§20.1(d) Hingham Wetland Regulations)

The proposed work complies with the Hingham Wetland Regulations Performance Standards for work in Land Subject to Coastal Storm Flowage as follows:

1) A proposed project shall not cause any adverse effect or cumulative adverse effect upon the wetland values of LSCSF.

Approximately 1,813 SF of the site, within the front yard, is located within the floodplain area. A portion of the proposed driveway, a retaining wall, and a rain garden will be within LSCSF. Grading and site clearing will be required to allow for construction of the rain garden. As listed in HWR section 20.1(d).5, new construction for a driveway is prohibited within floodplain, unless minimal impact to wetland values is demonstrated to the satisfaction of the commission.

Though the proposed driveway adds impervious area to the floodplain, stormwater runoff will be collected within a trench drain at a low point in the driveway, and will be treated in a rain garden, sized to meet Massachusetts Stormwater Management Standards. This rain garden will also provide some compensatory flood storage, to benefit the resource values of LSCSF.

2) When LSCSF is significant to protection of wildlife habitat, a proposed activity shall not impair the capacity of LSCSF to provide important wildlife habitat functions.

Proposed site activities will not impair the capacity of LSCSF to provide important wildlife habitat functions.

3) When LSCSF is significant to pollution prevention, a proposed activity shall not cause ground, surface, or salt water pollution triggered by coastal storm flowage or flooding. For those areas within at least 100 feet of another Resource Area, activities shall minimize adverse effects in order to maintain the capability to remove suspended solids and other contaminants from runoff before it enters other Resource Areas.

No proposed activity will pollute any water source triggered by coastal storm flowage. See Operations and Maintenance plans within the attached Stormwater Report, to review construction and long-term pollution prevention. Proposed rain gardens will treat stormwater runoff from impervious surface areas proposed under this project.

4) For activities proposed in VE-zones and AE-zones, at a minimum, the historic rate of relative sea level rise in Massachusetts of 1 foot per 100 years shall be incorporated into the project design and construction. The Commission may also take other credible evidence of projected sea level rise, such as the Intergovernmental Panel on Climate Change into consideration.

The historic rate of relative sea level rise in Massachusetts of 1 foot per 100 years considered during the design of this project. The proposed work within LSCSF will provide additional flood storage for the foreseeable future.

5) Activities proposed within VE-zones and/or AE-zones that are likely to have an adverse effect on the protected values and are therefore prohibited.

The proposed driveway and a site retaining wall are within LSCSF and are listed as prohibited activities within this section of the Hingham Wetland Regulations.

These activities should be seen to have no adverse effects on the protected values of the flood zone area on-site. There is already significant disruption and impervious cover located within the LSCSF within Rockland Street. The proposed driveway and retaining wall within LSCSF will add minimal impervious cover within this area and were designed to minimize grade change to the extent possible, while satisfying other necessary project considerations such as stormwater management, and safe vehicular access and egress.

6) Notwithstanding the above, the Commission may permit the following activities in VE- and AE-zones provided that the applicant demonstrates to the satisfaction of the Commission that best available measures are utilized to avoid or minimize adverse effects on all wetland values of all Resource Areas.

Not Applicable (N/A).

HINGHAM WETLAND BYLAW INTEREST

Hingham Wetland Regulation interest	Project Activity/Impact	Notes
Protection of Public or Private Water Supply	<i>No significant impact.</i>	The site is not located within or near any public or private water supplies.
Protection of Surface Water or Groundwater	<i>No significant impact.</i>	The site is not located within any known surface or ground water protection overlays. No untreated stormwater discharges will be included in this project.
Flood Control	<i>No significant impact.</i>	Within FEMA Flood Zones "AE" (EL.=10.8) and "X" of the Flood Insurance Rate Map. The Flood plain area will not be significantly impacted by this project. Flood storage will be provided within rain garden #1 located at the bottom of the driveway.
Erosion and Sedimentation Control	<i>No significant impact.</i>	Any anticipated erosion or sedimentation which will occur during construction will be controlled via the proposed silt socks, at the limit of work line. Therefore, wetland resources downgradient shall be protected from sedimentation. A construction entrance will help avoid the tracking of soil onto the roadway.
Storm Damage Prevention	<i>No significant impact.</i>	The proposed single-family dwelling and driveway will be constructed to withstand heavy storm occurrences. Erosion on-site will be prevented by site stabilization after construction is completed.
Water Pollution Prevention	<i>No Significant Impact.</i>	No untreated Stormwater discharges or illicit discharges will be included in this project.
Protection of Fisheries	<i>No Significant Impact.</i>	The project is located near the Weir River but will have no significant impact to any fish habitat.
Protection of Shellfish	<i>No Significant Impact.</i>	The project is located near the Weir River but will have no significant impact to any shellfish growing areas, or general shellfish habitat.

Protection of Wildlife and Wildlife Habitat	<i>No Significant Impact.</i>	Site work will occur within the Riverfront Area and wetland buffer zone, but impacts will be minimized to reduce alterations within these resource areas.
Protection of Rare Species Habitat	<i>Not Applicable.</i>	The site is not located within or near to any NHESP Rare or Endangered Habitat overlays, according to the NHESP inventory map, dated August 1, 2021.
Protection of Recreation and Open Space	<i>No Significant Impact.</i>	No work is proposed to alter any recreational use land regarding wetlands.
Protection of Aesthetics	<i>No Significant Impact.</i>	Rockland Street is an area which is developed within the buffer zone to saltmarsh/coastal bank area and riverfront. Development of 311 Rockland Street will create no significant change in wetland aesthetics near the site.

Riverfront Area Alternatives Analysis

Project Address: 311 Rockland Street, Hingham MA

Plan Reference: Definitive Site Plan – 311 Rockland Street, Hingham MA

Date: June 2024

Revised: August 5, 2024

Introduction

According to the Wetlands Protection Act 310 CMR 10.58 (4)(d), the issuing authority may allow for land alteration of up to 10% of the Riverfront Area within a lot, for lots created after October 6, 1997. The total area of riverfront within the lot is 23,182± SF, meaning the maximum amount of land alteration allowed within the Riverfront Area for this site is 2,318± SF.

The current area of riverfront alteration within the lot is 2,275± sf (9.8% of RA), and includes the proposed driveway, and retaining walls. The proposed rain garden nearest to Rockland Street is not included in this alteration area because according to 310 CMR 10.58.(4)(d)(1), proponents may “exclude areas used for structural stormwater management measures, provided there is no practicable alternative to siting these structures within the riverfront area and provided a wildlife corridor is maintained”. This alternatives analysis addresses the fact that there are no feasible alternative conditions for the proposed work within the riverfront area. Therefore, work shall comply with 310 CMR 10.58.(4).

Stormwater management is proposed to be in accordance with the DEP Stormwater Management Regulations. The project has been designed to limit any potential impacts to the wildlife habitat functions or impairments to groundwater or surface water quality.

The following list provides the alternative conditions considered for the bituminous concrete driveway/ retaining wall, and rain garden within the riverfront area:

1. Bituminous Concrete Driveway/ Retaining Wall Analysis
 - a. Location
 - b. Size
 - c. Material
2. Rain Garden (Stormwater Management System)
 - a. Location
 - b. Size
 - c. Material

Please see the evaluation of each alternative solution below:

Riverfront Area Alternatives Analysis

Bituminous Concrete Driveway/ Retaining Wall Analysis

Alternative Locations

The proposed bituminous concrete driveway and retaining walls located within the riverfront area were considered at other locations on the site, to minimize alteration to the riverfront area resource.

Other locations along Rockland Street were considered, and resulted in essentially the same, if not more alteration to the riverfront area, and were therefore not favorable. The current location allows for site access with appropriately sized stormwater management. In addition, driveway grading had to be considered for the site, because of various ledge outcrops resulting in steep slopes. The proposed retaining walls located within the riverfront area help minimize alteration due to grading. Therefore, the proposed driveway and retaining wall layout are the most feasible location for this project.

A no action alternative for the driveway and retaining wall would not meet the applicants' needs of finding an adequate spot for vehicular driveway access to the proposed dwelling at 311 Rockland Street. Therefore, this alternative is not feasible.

Alternative Size

The current width of the driveway (14' wide) allows for emergency vehicles such as firetrucks to safely access and exit the site. Shrinking the driveway width would compromise the safety for these vehicles to maneuver the site.

There are no other feasible alternatives to the current size of the retaining walls.

Alternative Material

Alternative materials such as gravel for the driveway may compromise the safety of vehicles going up and down the proposed driveway, due to relatively steeper grades.

Rain Garden Analysis

Alternative Locations

For the rain garden located nearest to Rockland Street, locations outside of the riparian area are not feasible because of stormwater runoff from the driveway collects down near Rockland Street, within a trench drain. This location is the lowest stormwater collection point in the driveway. This rain garden as proposed, also provides compensatory flood storage, and will contain native plantings, which will benefit not only the riverfront area, but other wetland resources.

Alternative Size

The current size of the proposed rain gardens is designed in accordance with Massachusetts Stormwater Standards, with a focus on recharge and water quality

Riverfront Area Alternatives Analysis

volume (Standards 3 and 4). These rain gardens are sized appropriately to meet these standards and should not be decreased in size.

Alternative Materials/ Systems

As listed in Volume 2 Chapter 2, there are several Stormwater Treatment BMP's other than rain gardens, which could be considered as an alternative solution for this project. Alternative systems for stormwater treatment would result in similar alteration areas, and may not provide flood storage capacity, as provided in the rain garden adjacent to Rockland Street. Therefore, the proposed rain gardens are the most feasible stormwater system for this project.

Proposed Alternative

The project, as proposed, has a site layout which considers the necessity to minimize impacts to the Riverfront Area and vegetation on-site, while allowing for adequate vehicular access to the site, and stormwater treatment.