

Narrative

The proposed portion of the project located within areas subject to jurisdiction under the MA Wetlands Protection Act and Town of Scituate Wetlands Protection Bylaw includes the construction of a drainage basin with a point source discharge within the 100-foot buffer zone associated with a Bordering Vegetated Wetland (BVW). The drainage basin is associated with a 5-lot residential development. The roadways and residences for the development are wholly located outside of the buffer zone (see enclosed Special Permit Plan by Grady Consulting, dated 2019-05-29).

The wetlands resource areas were delineated by South River Environmental on November 11, 2018. Wetland resource areas present within or within 100 feet of the subject property include BVW associated with an unnamed intermittent stream that flows northerly under Country Way. The “A” series flags are located within the Southeast portion of the locus property. There is also a BVW located across Country Way to the north that was delineated with a “B” series of flags. There is an intermittent stream (inland bank) delineated with “TOB” flags. The stream becomes braided within the property and loses its defined channel within the interior of the BVW. There is a potential vernal pool delineated with flags “GC”. The flags are located at the limit of the vernal pool breeding habitat and are associated with the approximate outlet elevation.

Regulatory Compliance

The project was designed to avoid any direct resource area alteration. Work within the buffer zone was minimized by siting the roadway and residences greater than 100 feet from the delineated BVW boundary. The project proposes no project-related activities within the 50-foot no disturbance buffer subject to protection under the Bylaw.

The BVW will be protected during construction and until slope stabilization has occurred via the use of a contiguous silt sock erosion control (see site plans). The silt sock will serve as the limit of work and will provide a physical barrier to prevent siltation and erosion of the resource area and buffer zone. Erosion controls will remain in place until construction has been completed and disturbed areas have been permanently stabilized and/or revegetated.

Inland Bank (associated with Intermittent Stream)

No work or alteration is proposed directly within the inland bank. The majority of the proposed project-related activities is located greater than 100 feet from the with the closest activity located 77 feet from the delineated bank boundary. Since there is no proposed direct alteration of inland bank, the proposed work will not alter the stabilization of the bank, not alter the carrying capacity of the channel within the bank or impair the ability of the bank to provide breeding habitat or important wildlife functions.

Vernal Pool

The buffer zone for vernal pools shall be the area within a line parallel to the boundary of the vernal pool measuring 250 feet from that boundary; the buffer strip/no-build zone for a vernal pool shall be the area within a line parallel to the boundary of the vernal pool measuring 125 feet from that boundary.

All proposed work is located beyond 125 of the delineated vernal pool boundary. A significant portion of the 250-foot vernal pool buffer is being maintained in a well-vegetated state and undisturbed. A significant area of undisturbed upland habitat will remain around the potential vernal pool. The Planning Board approval of this project includes a restriction that limits development of this parcel to the proposed 5 houses in perpetuity. Therefore, the undisturbed habitat will remain as such in perpetuity as well.

The vernal pool is 11,604 sf. Within the 250 ft buffer zone an undisturbed buffer of 114,869 sf (2.64 acres) on the locus lot will remain protected woodland. An additional 37,694 sf of undisturbed woodland will remain on the abutting conservation land. A total of 152,563 sf (3.5 acres) of undisturbed buffer (within 250 feet) will remain around the 11,604 sf vernal pool.

Scituate Bylaw - *The proposed project meets all of the performance standards for each of the resource areas altered as follows (as required by section B) 1 & 2 of WPA Form 3 – Notice of Intent):*

COASTAL WETLANDS

Not applicable – The site does not contain any coastal wetland resource areas.

INLAND WETLANDS

-Riverfront Area

Not applicable – The site is not located within a Riverfront area.

- Land Subject to Flooding

Not applicable - The locus lies in a FEMA flood zone x, an area of minimal flood hazard as shown on firm panel 25023c0109k, effective date 11/4/16.

-Buffer Strip

An undisturbed and continuous buffer strip will be maintained between the delineated boundary of the BVW and the stormwater management facilities located within the 100-foot buffer zone. Erosion controls will be installed between the construction activities and the BVW to protect the resource area from sedimentation during construction. The silt sock shall be maintained until the disturbed area is stabilized and/or revegetated.

- a) Sediment removal- The project proposes a silt sock between the proposed limit of work and the resource area during construction and until slope and soil stabilization has occurred which will mitigate the sedimentation of resource areas during construction. Runoff is routed through a water quality swale and infiltration basin prior to discharge. The drainage system is designed to remove over 80% Total Suspended Solids. The basin outlet is designed with an erosion control energy dissipater that protects the ground from scour. The discharge then is dispersed over 50 feet of mature woodland prior to reaching the BVW. The project as designed protects the resource area from sedimentation.
- b) Nutrient removal- The project proposes to maintain the existing vegetation within 50 feet of the BVW. Significant portions of the property will maintain an undisturbed 100 -foot setback to the BVW and will not alter, diminish or reduce the ability of the BVW to function to prevent nitrification. The commission's standard order of conditions includes a condition that no chemical fertilizer, herbicide or pesticide shall be used within 100 feet of a wetland resource area.
- c) Fecal Coliform Removal- The project will include the construction of Title 5 Compliant septic systems outside of the 100-foot buffer zone. The septic systems are designed to dispose of waste using common septic system standard technologies. Fecal coliform will not impact the resource areas as the systems will be maintained properly.
- d) Temperature Moderation- The project proposes to maintain a minimum 50-foot continuous undisturbed buffer between proposed alteration and resource areas. The retained buffer zones and stormwater management system will prevent increases in water temperature within the BVW and the intermittent stream.
- e) Human Impact Deterrence- The project proposes to maintain a minimum of 50 continuous feet of undisturbed vegetative buffer. A four-foot tall post and rail or equal fence is proposed between the development and the resource areas to prevent additional encroachment into the no disturbance buffer.
- f) Wildlife- The project will retain 242,000 square feet of undisturbed woodland and clusters the proposed development which will minimize potential habitat fragmentation. The abutting parcel to the south is Conservation land that ensures connectivity between the available wildlife habitat within the property and a larger area of contiguous habitat. This undisturbed habitat within the buffer zone will maintain the ability of the resource areas to protect the wildlife habitat interest of the Bylaw.