

PROJECT NARRATIVE

Proposed Site Development – Single Family Home **16 Lighthouse Road, Scituate, MA**

1.0 Project Description

The project proponent, Thomas P. McCarthy, proposes to raze and construct a new 2,200 single-family home. The property is located at 16 Lighthouse Road (Assessor's Parcel No. 46-5-37) in Scituate (The Site) with a lot area totaling 11,500 square feet. The site is located within the Town of Scituate's Residential 3 (R-3) Zoning District. The proposed development consists of the razing of an existing single-family home and shed, and the construction of a new single-family home. Existing utility services will be retained where feasible. The proposed house footprint is approximately 2,200 s.f. and will be 3-stories and constructed on 67 wood driven piles.

The proposed and existing site conditions are illustrated on the project *site plans* entitled "Site Development Plan, (Assessor Parcel 46-5-37), 16 Lighthouse Road, Scituate, Massachusetts", prepared by McKenzie Engineering Group, Inc. dated December 28, 2023 and revised hereafter.

Pre-Development Condition

The site is currently comprised of an existing single-family home, a two-story wood frame structure and shed with associated parking area and site infrastructure. The property has frontage on Lighthouse Road to the north and the Atlantic Ocean to the South. The property is bordered by residential homes to the east and west. The Site is located within the Town of Scituate Floodplain & Watershed Protection District. Refer to Figure 1 – USGS Locus Map for the location of the parcel. The Site is located within a Coastal Dune, Barrier Beach Resource Area. A portion of this site is located within the Coastal Beach Resource Area, and the entire site is located as Land Subject to Coastal Storm Flowage.

The topography of the site ranges in elevation from approximately 12 ft. (NAVD 1988) at the frontage on Lighthouse Road to the ocean at approximately 0 ft. (NAVD 1988). The property is exempt from the Massachusetts DEP Stormwater Management Regulations as it is a single-family home.

The site is located within the Town of Scituate Floodplain & Watershed Protection District and within the Zone AE (Elevation 15 ft.), a portion of property is within the Zone VE (Elevation 16 ft), as shown on the current FEMA Flood Insurance Rate Map Panel No. 25023C0128L with an effective date of July 6, 2021. The property is designated as Land Subject to Coastal Storm Flowage. Refer to Figure 2 – FEMA Flood Map.

The soil types as identified by the Soil Survey, Plymouth County, MA prepared by the NRCS Soil Conservation Service (NRCS) are classified as 703-Beaches, Gravel, hydrologic soil group (HSG) A. Refer to Figure 3 - Soil Map for the NRCS delineation of soil types.

The limit of resource areas and other jurisdictional lands on the site were evaluated by Environmental Consulting and Restoration, LLC (ECR) on April 20, 2023. The ECR Report indicates that The Site is not located within a mapped Natural Heritage Area or Area of Critical Environmental Concern. (See Appendix B.)

Post-Development Condition

The proposed project consists of the razing of an existing single-family home and shed, and the proposed construction of a new single-family home. The existing water, electric, gas, and sewer connection will be maintained and reconnected where feasible. The proposed house footprint is approximately 2,200 s.f., and will be constructed on 67 driven wood piles. The project will disturb approximately 5,800 s.f. of the property and the design intends to minimize the exportation of soils. Where practicable disturbed soils will be retained on-site and dispersed over the existing surface of the site. The project is exempt from the Massachusetts DEP Stormwater Management Regulations.

2.0 Resource Area Descriptions

A portion of the property is located within a Barrier Beach and Coastal Dune Beach Resource Area, up to the stone revetment. A portion of the property is located within a Coastal Beach Resource Area, below the existing stone revetment. The resources are jurisdictional under the Wetlands Protection Act and the Town of Scituate Wetlands Protection Rules and Regulations. The performance standards under 310 CMR 10.27 Coastal Beaches, 10.28 Coastal Dunes, and 10.29 Barrier Beaches are addressed within Mitigation Measures below.

The Site is located within Land Subject to Coastal Storm Flowage and the Zone AE (Elevation 15 ft.), a portion of property is within the Zone VE (Elevation 16 ft), as shown on the current FEMA Flood Insurance Rate Map Panel No. 25023C0128L with an effective date of July 6, 2021. Refer to Figure 2 – FEMA Flood Map.

The site is not located within Estimated Habitat of Rare Wetlands Wildlife Habitat Area, as determined by reference to the Massachusetts Division of Fisheries and Wildlife Natural Heritage Atlas or within an Area of Critical Environmental Concern.

3.0 Mitigation Measures

The following are mitigation measures that will be employed to ensure that impacts to wetland resources protected under the Town of Scituate Wetlands Protection Rules and Regulations and the Wetlands Protection Act are minimized to the extent possible.

310 CMR 10.27: Coastal Beaches

A portion of the property is located within a Coastal Beach Resource Area, below the existing stone revetment. This resource is jurisdictional under the Wetlands Protection Act and the Town of Scituate Wetlands Protection Rules and Regulations. The project does not propose any adverse effect by increasing erosion. The project does not decrease the volume or change the form of any such coastal beach or an adjacent or downdrift coastal beach per 310 CMR 10.27(3). The project does not propose any soil excavation, or site disturbance within the Coastal Beach resource area, or any adverse effects or changes significant to Marine Fisheries or the protection of Wildlife Habitat under 310 CMR 10.27(6).

310 CMR 10.28: Coastal Dunes

A portion of the site is located within a Coastal Dune Resource, up to the stone revetment (landward side). This resource is jurisdictional under the Wetlands Protection Act and the Town of Scituate Wetlands Protection Rules and Regulations. The project does not play a role in Storm Damage Prevention, Flood Control, Marine Fisheries or protection of Wildlife Habitat per 310 CMR 10.28(2). The proposed earthwork for the project will be limited to excavation required to construct the proposed

garage and associated driveway, and excavation required to construct the 67 driven wood piles for the single-family dwelling. Such work will be constructed using the best commercially available measures, to minimize the adverse effect on the coastal dune caused by the impacts listed in 310 CMR 10.28(3)(b) through (e). The project does not include coastal engineering structure.

310 CMR 10.29: Barrier Beaches

A portion of the site is located within a Barrier Beach Resource, up to the stone revetment (landward side). This resource is jurisdictional under the Wetlands Protection Act and the Town of Scituate Wetlands Protection Rules and Regulations. The project does not propose any Storm Damage Prevention, Flood Control, Marine Fisheries or protection of Wildlife Habitat per 310 CMR 10.29(3). The proposed earthwork for the project will be limited to excavation required to construct the proposed garage and associated driveway, and excavation required to construct the 67 driven wood piles for the single-family dwelling. The project will not have any adverse effect on specified habitat site of rare vertebrate or invertebrate species, as identified by procedures established under 310 CMR 10.37.

Land Subject to Coastal Storm Flowage

The site is located within Land Subject to Coastal Storm Flowage and the Zone AE (Elevation 15 ft.) as shown on the current FEMA Flood Insurance Rate Map Panel No. 25023C0128L with an effective date of July 6, 2021. The Base Flood Elevation has been determined to be Elevation 15 (referenced to North American Vertical Datum of 1988). Refer to Figure 2 – FEMA Flood Map. The entire site is located below Elevation 15 and therefore, it is located within the limit of the Land Subject to Coastal Storm Flowage resource area. No performance standards are applicable under the Wetlands Protection Act per 310 CMR 10.04.

Flood Control/Storm Damage Control

No Flood Control or Stormwater Damage Control is proposed. The proposed project consists of the razing of an existing single-family home and shed, and the proposed construction of a new single-family home. The proposed single-family dwelling will be constructed on driven wood piles and the proposed first floor elevation (FFE=16) will be located above the FEMA Zone AE (Elevation 15 ft). The proposed project proposes no changes to the site that will affect Flooding or Storm Damage. The single-family dwelling will be sited on driven wood piles which will allow the uninterrupted flow of stormwater beneath the structure. Stormwater runoff from the site will match existing drainage patterns from the site.

Wildlife Habitat/Fisheries

The site is not located within Estimated Habitat of Rare Wetlands Wildlife Habitat Area, as determined by reference to the Massachusetts Division of Fisheries and Wildlife Natural Heritage Atlas No work is proposed within an area designated by The Natural Heritage and Endangered Species Program as an Estimated Habitat of Rare Wetlands Wildlife.

Erosion and Sedimentation Control

The potential for temporary impacts to resource areas due to erosion and migration of sediments into adjacent lands will be mitigated by adherence to basic erosion control practices. These include but are not limited to the following:

1. Install silt sock erosion control barriers (see plan detail) in accordance with the approved plan. This erosion control barrier shall be installed prior to any work at the site. An additional stockpile of siltsock erosion control barriers will be stored on site for use in repairing the erosion control barrier as needed. Inspections of the erosion control barrier shall be made weekly and after all significant rainfall events.

2. Clearly define the limits of work in the field in order to minimize the extent of site disturbance.
3. Regularly inspect and maintain erosion controls and sedimentation traps during construction.
4. Regrade and stabilize exposed soil areas immediately following construction.



Environmental Consulting & Restoration, LLC



SITE REVIEW MEMO

TO: McKenzie Engineering Group
FROM: Brad Holmes
DATE: April 20, 2023
RE: 16 Lighthouse Road, Scituate

Per your request, Environmental Consulting & Restoration, LLC (ECR) performed a review of the existing conditions at the property located at 16 Lighthouse Road in Scituate (the site) on March 31, 2023. The purpose of the review was to identify wetland resource areas on and near the site. The site is located along the southside of Lighthouse Road and contains a small single-family home with concrete patio, stone revetment, shed, etc. ECR confirms that the entire site is located within a Coastal Dune/Barrier Beach system that extends between Sand Hills and Scituate Harbor. There are no vegetated wetland resource areas on or near the site.

As a result of ECR's site review, ECR is able to confirm that the site contains the following wetland resource areas and areas of Conservation Commission jurisdiction:

- Barrier Beach/Coastal Dune up to the stone revetment
- Coastal Beach below the stone revetment
- Land Subject to Coastal Storm Flowage (VE & AE zones)

Also review of the MassGIS wetlands database reveals the following:

1. The site is not located within Estimated/Priority Habitat for Rare Species according to the Massachusetts Natural Heritage & Endangered Species Program (MaNHESP).
2. The site does not contain mapped Certified or Potential Vernal Pools according to the MaNHESP.
3. The site is not located within an Area of Critical Environmental Concern.

Upon review of this wetland delineation memo, please contact me at (617) 529 – 3792 or brad@ecrwetlands.com with any questions or requests for additional information.

Thank you,
Brad Holmes, Professional Wetland Scientist #1464
Manager

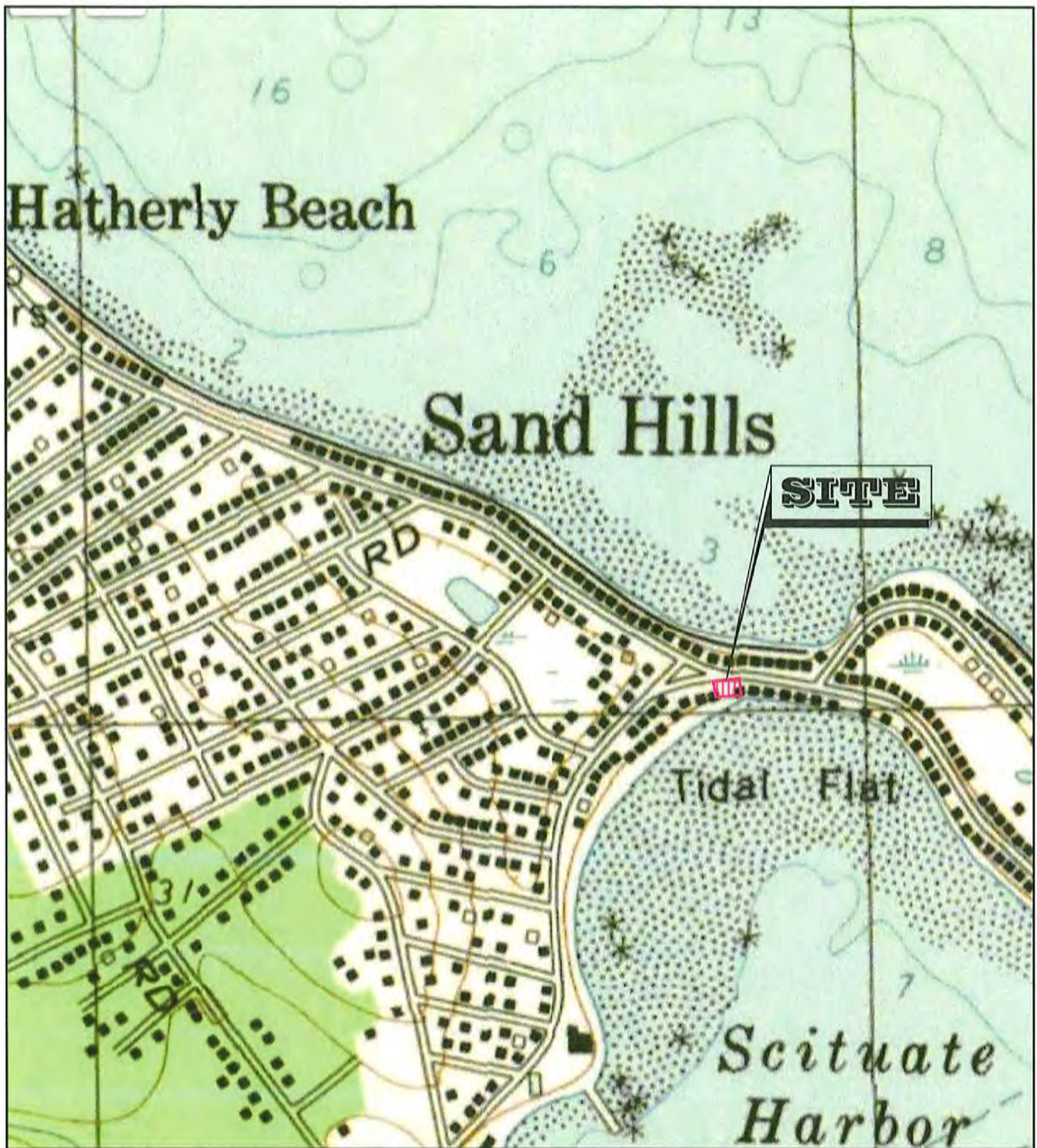
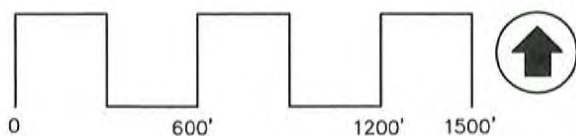


FIGURE - 1



U.S. GEOLOGICAL SURVEY
7.5 X 15 MINUTE SERIES

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USGS LOCUS MAP

16 LIGHTHOUSE ROAD
(ASSESSOR'S PARCEL 46-5-37)
SCITUATE, MASSACHUSETTS



Legend

SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LAYOUT

SPECIAL FLOOD HAZARD AREAS	Without Base Flood Elevation (BFE) Zone A, V, A99
	With BFE or Depth Zone AE, AO, AH, VE, AR
	Regulatory Floodway
OTHER AREAS OF FLOOD HAZARD	0.2% Annual Chance Flood Hazard, Area of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile Zone X
	Future Conditions 1% Annual Chance Flood Hazard Zone X
	Area with Reduced Flood Risk due to Levee. See Notes, Zone X
OTHER AREAS	Area with Flood Risk due to Levee Zone D
	NO SCREEN Area of Minimal Flood Hazard Zone X
	Effective LOMRs
	Area of Undetermined Flood Hazard Zone

GENERAL STRUCTURES

---	Channel, Culvert, or Storm Sewer
	Levee, Dike, or Floodwall

OTHER FEATURES

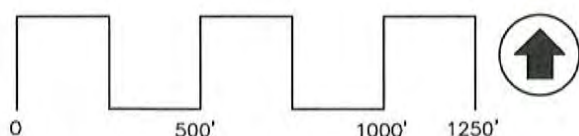
20.2	Cross Sections with 1% Annual Chance
17.5	Water Surface Elevation
---	Coastal Transect
---	Base Flood Elevation Line (BFE)
---	Limit of Study
---	Jurisdiction Boundary
---	Coastal Transect Baseline
---	Profile Baseline
---	Hydrographic Feature

MAP PANELS

□	Digital Data Available
□	No Digital Data Available
□	Unmapped

The pin displayed on the map is an approximate point selected by the user and does not represent an authoritative property location.

FIGURE - 2



COMMUNITY PANEL NO: 25023C0128L
EFFECTIVE DATE: JULY 6, 2021

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FEMA FLOOD MAP

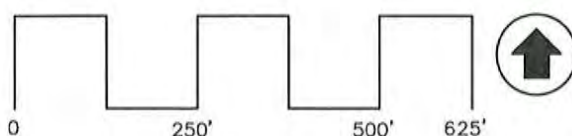
16 LIGHTHOUSE ROAD
(ASSESSOR'S PARCEL 46-5-37)
SCITUATE, MASSACHUSETTS



SOIL KEY

SOIL CLASSIFICATION	DESCRIPTION	HYDROLOGIC SOIL GROUP
66A	IPSWICH - PAWCATYCK COMPLEX, FREQUENTLY FLOODED	A/D
608	WATER, OCEAN	N/A
610	BEACHES, SAND	A
613C	DUNE LAND - HOOKSAN COMPLEX	A
614A	SUCCOTASH SAND	A
623B	WOODBIDGE - SCITUATE - URBAN LAND COMPLEX	C/D
639B	URBAN LAND - HOOKSAN COMPLEX	A
703	BEACHES, GRAVEL	A

FIGURE - 3



NRCS SOIL SURVEY
PLYMOUTH COUNTY

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NRCS SOILS MAP

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SCITUATE, MASSACHUSETTS

