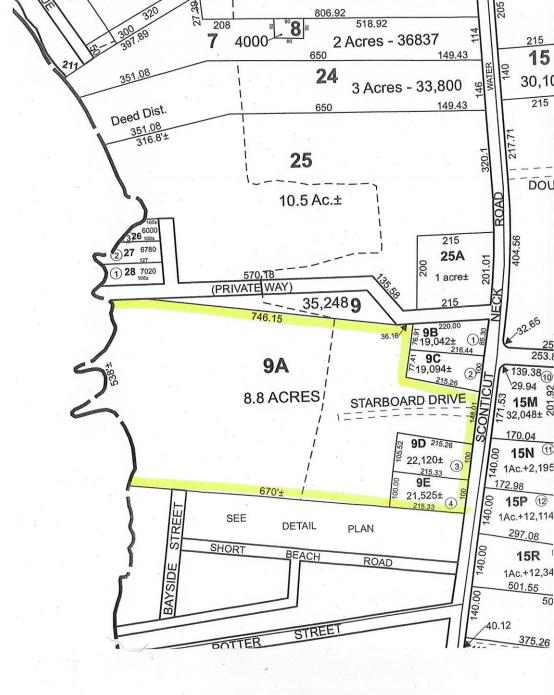
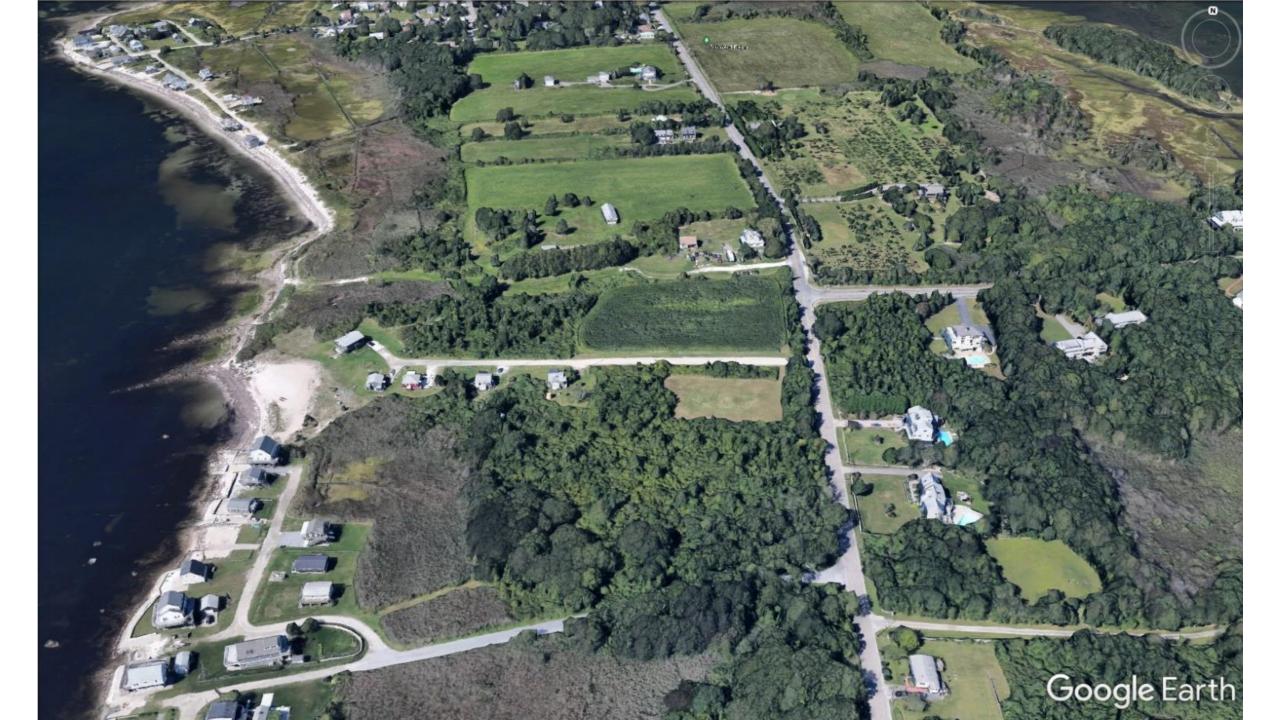
Starboard Drive Definitive Subdivision

- The Assessors Map depicts lots #9D, #9E and #9A
- Reconfigured last year through an ANR Plan.
- The ANR Plan reconfigured lots #9B and #9C to comply with the minimum zoning requirements and merged lots #9D and #9E with #9A.
- Property has 9.53 acres & 266.66' of frontage.
- The property has <u>contained five (5) single family</u> dwellings since 1970's, possible earlier, on a single parcel with shared access from Sconticut Neck Road via a gravel roadway of variable width.
- Zoning District Rural Residence (RR) which requires that a building lot contain a minimum lot area of 30,000 sf and 140' of frontage.





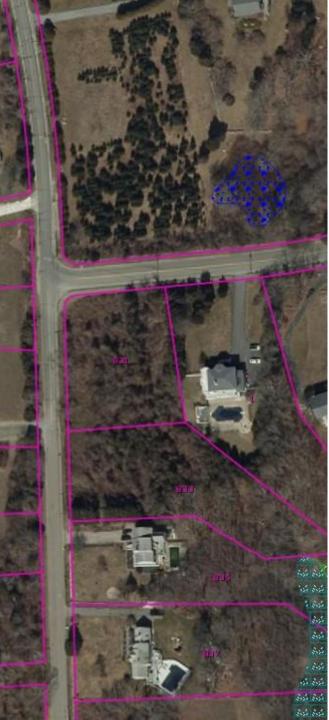




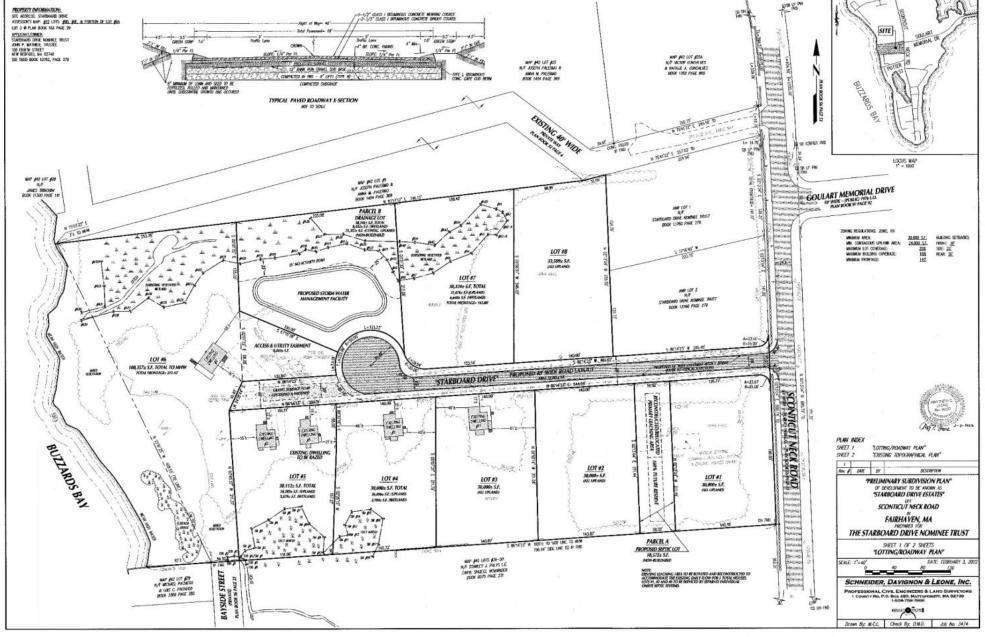




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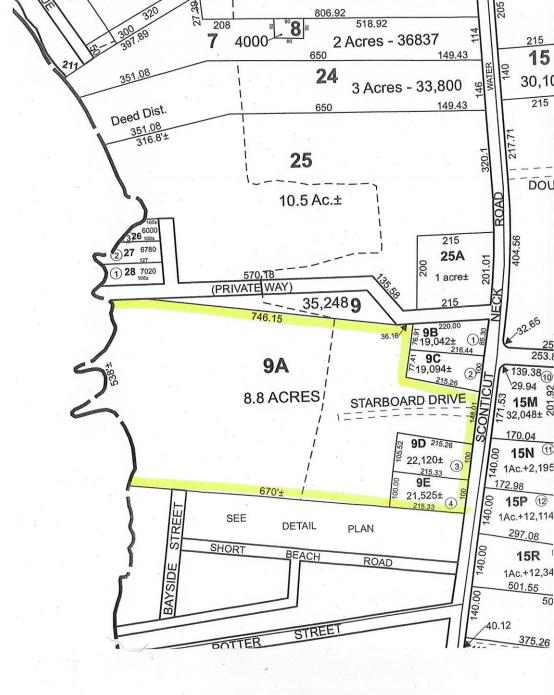


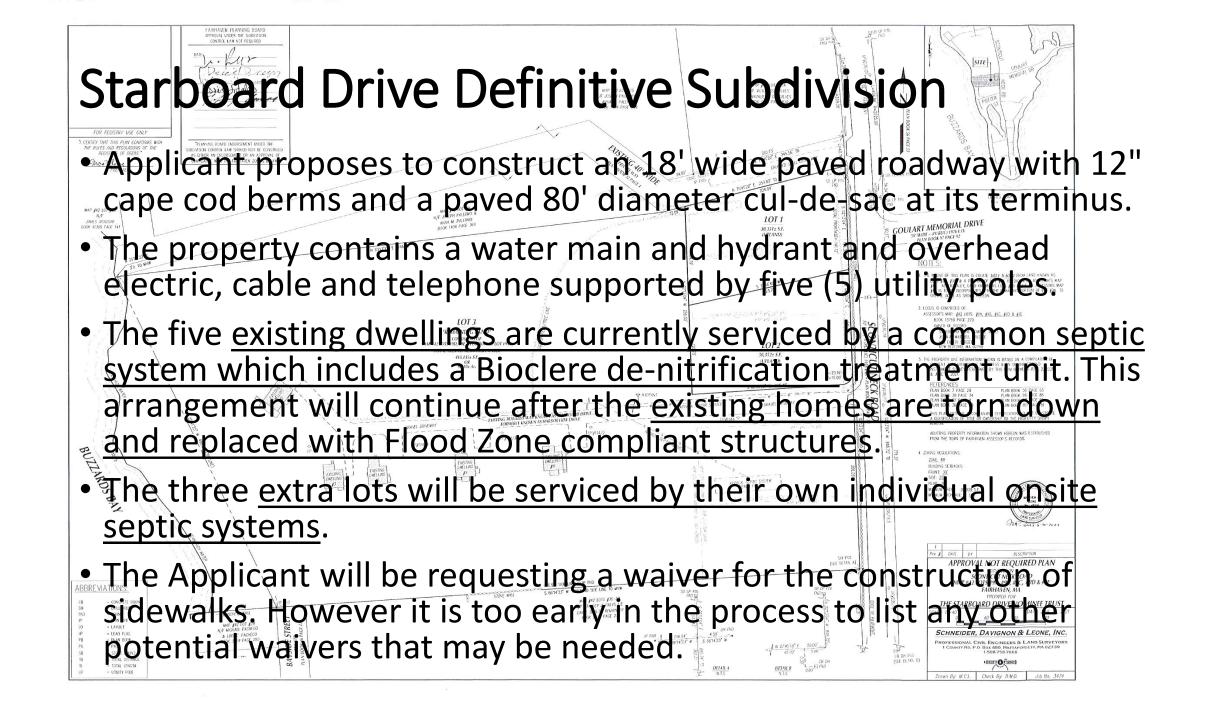
DS 2022-01 Starboard Drive Definitive Subdivision



Starboard Drive Definitive Subdivision

- The Assessors Map depicts lots #9D, #9E and #9A
- Reconfigured last year through an ANR Plan.
- The ANR Plan reconfigured lots #9B and #9C to comply with the minimum zoning requirements and merged lots #9D and #9E with #9A.
- Property has 9.53 acres & 266.66' of frontage.
- The property has <u>contained five (5) single family</u> dwellings since 1970's, possible earlier, on a single parcel with shared access from Sconticut Neck Road via a gravel roadway of variable width.
- Zoning District Rural Residence (RR) which requires that a building lot contain a minimum lot area of 30,000 sf and 140' of frontage.





- Applicant: The Starboard Drive Nominee Trust, John P. Mathieu, Trustee
- **Project Location:** 2, 3, 5, 9 and 11 Starboard Drive, Map 42 Lots 9D, 9E and a portion of 9A.
- **Proposal:** 8-lot subdivision on Starboard Drive on 9.5 acres with 5 existing cottages.
- Zoning: Rural Residence (RR) which requires that a building lot contain a minimum lot area of 30,000 sf and 140' of frontage. The property contains 9.53 acres and 266.66' of frontage along Sconticut Neck Road. A new road will be developed with lots meeting the requirements.
- Local Permits: PB Subdivision; Conservation Commission; Building.
- Surrounding Land Uses: Farms and seaside residences.

Project History:

- The property has historically contained five cottages on a single parcel with shared access from Sconticut Neck Road via a gravel driveway.
- The property was slightly reconfigured last year through an ANR Plan
- The ANR Plan reconfigured lots #98 and #9C to comply with the minimum zoning requirements and merged lots #9D and #9E with #9A. The property now contains 9.53 acres and 266.66' of frontage along Sconticut Neck Road.

Project Summary:

- Applicant proposes to construct an 18' wide paved roadway with 12" Cape Cod berms and a paved 80' diameter cul-de-sac at its terminus.
- The property contains a water main and hydrant and overhead electric, cable and telephone supported by five (5) utility poles.
- The five existing dwellings are currently serviced by a common septic system which includes a Bioclere de-nitrification treatment unit. This arrangement will continue after the existing homes are torn down and replaced with Flood Zone compliant structures.
- The three extra lots will be serviced by their own individual onsite septic systems.
- The Applicant will likely be requesting numerous waivers from the subdivision regulations.
- The entire subdivision will be in the velocity zone under elevation 10'.
- Future homes will use existing municipal water and onsite septic systems.
- A stone wall along Sconticut Neck Road will be impacted.

Stormwater Peer Review:

- GCG Associates reviewed under Chapter 322; 194; and 198. Conservation will review under 192.
- Development requires a Land Disturbance Permit with the Fairhaven Board of Public Works. Permit could be exempted per 194-4. A.3.
- This project requires an US-EPA National Pollutant Discharge Elimination System (NPDES) permit and associated Stormwater Pollutant Prevention Plan (SWPPP) filing.
- There are wetland resource areas delineated on the property. The property is in the Zone VE Costal Flood Zone with Velocity Hazard (wave action).
- A Notice of Intent will be filed with the Town of Fairhaven, Conservation Commission.

Stormwater Peer Review:

- Existing Conditions Plan:
 - Need to show and clarify soil test pit locations and demonstrate the system meets the minimum separation from the estimated seasonal high groundwater (ESHW).
- Grading & Utility Plan
 - Lots #1 & #2 roof drain chambers system do not meet the 50-foot setback to the Title V soil absorption systems.
 - Roof drain infiltration system do not meet the 2-foot separation to ESHW.
- Roadway Plan & Profile Sheet 5
 - Proposed Water Quality Swales (#1 & #2) do not have a pretreatment device and do not have the soil
 media thickness required and are close to the ESHW.
 - 198-31.1. C.(2)(k)[1][d] Design standards, Pond A forebay is only 0.5 feet deep, waiver requested.
 - Approximately 75 % of Pond-A and 100% of Pond-B are in the Hydrologic Soil Group 'D' area and not suitable for exfiltration.
 - GCG recommends the width of earth berm be increased to minimum 10-foot width
- Roadway Plan & Profile Sheet 6
 - Bottom of the forebay should be at a minimum of 2 feet above seasonal high groundwater. The cul-de-sac forebay bottom grade is approximately 0.5 feet below existing grade.
 - Applicant should demonstrate that forebay exfiltrating/draining between storm events.
 - New-development and requires a 90% TSS removal and 60% of Total Phosphorus
 - 198-31.1. C. (2). (n).[6] Requires storm drains shall be at least 12 inches diameter, Wavier has been requested

Stormwater Peer Review:

- Stormwater Report:
 - Re-development impervious areas are limited to the existing five building roofs only.
 - 198-31.1. A. (1)[2] Tables 2, 3, and 4 should provide comparison of the 10-year, 24hour design storm pre-development and post-development volumes to demonstrate the net increases. There appeared to be increased in runoff volume during the 10-yr storm event and **the applicant is requesting a waiver**.
- Review Summary:
 - The general drainage mitigation concept is based on soil media pre-treatments and in infiltration/detention ponds with sediment forebay pre-treatments which requires a deep ESHW and well drained soils. The ESHW is within two feet of the ground surface which also affects the exfiltration rate.
 - GCG recommends utilizing wet BMPs as recommended by the MSH to provide treatment for high ESHW.

The Applicant respectfully requests the following waivers:

Section 322-14 D. (7) Construct Cost Estimate The applicant proposes to provide a Form D Covenant and the roadway will remain private in perpetuity.

Section 322-14 F. Staking of the centerline of the roadway,

This has not been provided at the time of the submission because the proposed roadway improvements fall within the existing gravel roadway which is currently in use.

Section 322-26 d. – BMP is located within a common easement vs. common parcel The BMP will be maintained by a HOA in perpetuity & therefore never conveyed to the town.

Appendix A – Stormwater Management Systems The following waivers are required due to the existing flat topography and location within the velocity zone.

B. (3) (c) [2] [b] - 10 year volume control has not been provided

C. Design Standards (1) (a) 10 year volume control has not been provided

(2) (k) [d] 4 foot deep forebay has not been provided

(2) (m) [7] 12 inch reinforced concrete drainage pipe has not been provided

Section 322-16. B. Street Design Standards – Table A and Section 322-32: No curbing or cape cod berms have been provided because the roadway has been designed to fit the site sloping south to north to divert stormwater into a water quality swale.

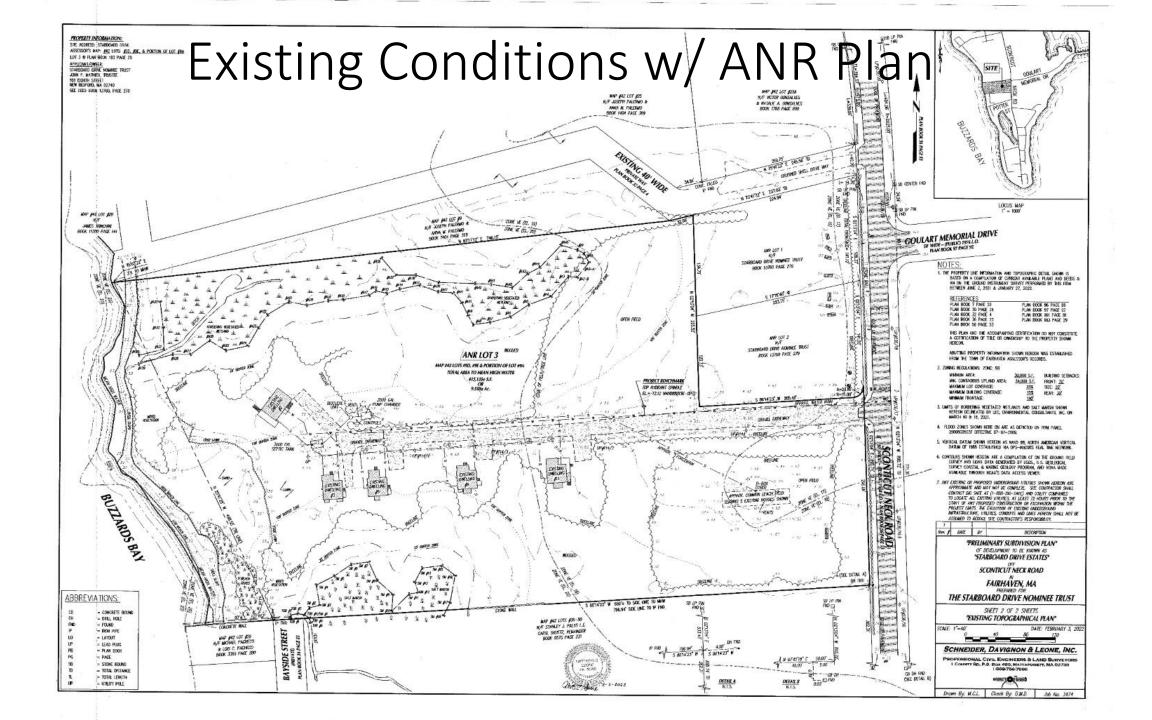
Section 322-17 Sidewalks and Section 322-16. B. – Table A Sidewalks have not been provided as none exist in Sconticut Neck Road

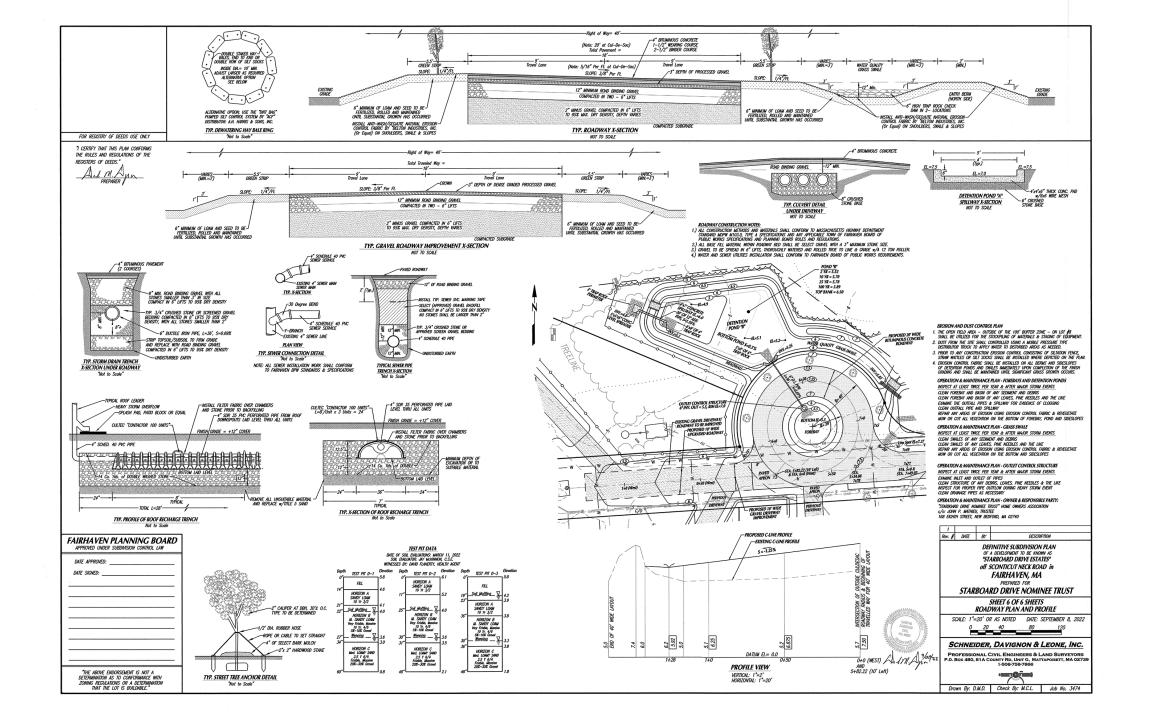
Section 322-25 - Landscape Street Tree Belts

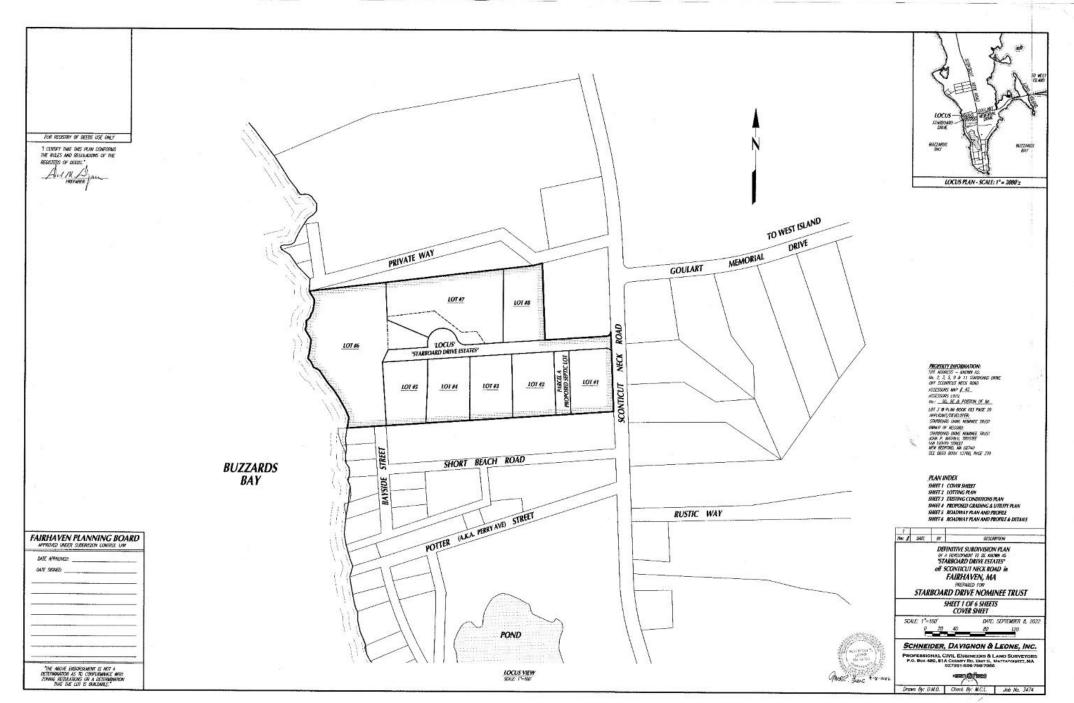
Trees are only proposed along the southerly side and cannot be place along the northerly side due to the existing water main, existing sewer forcemain pipe and proposed water quality swale.

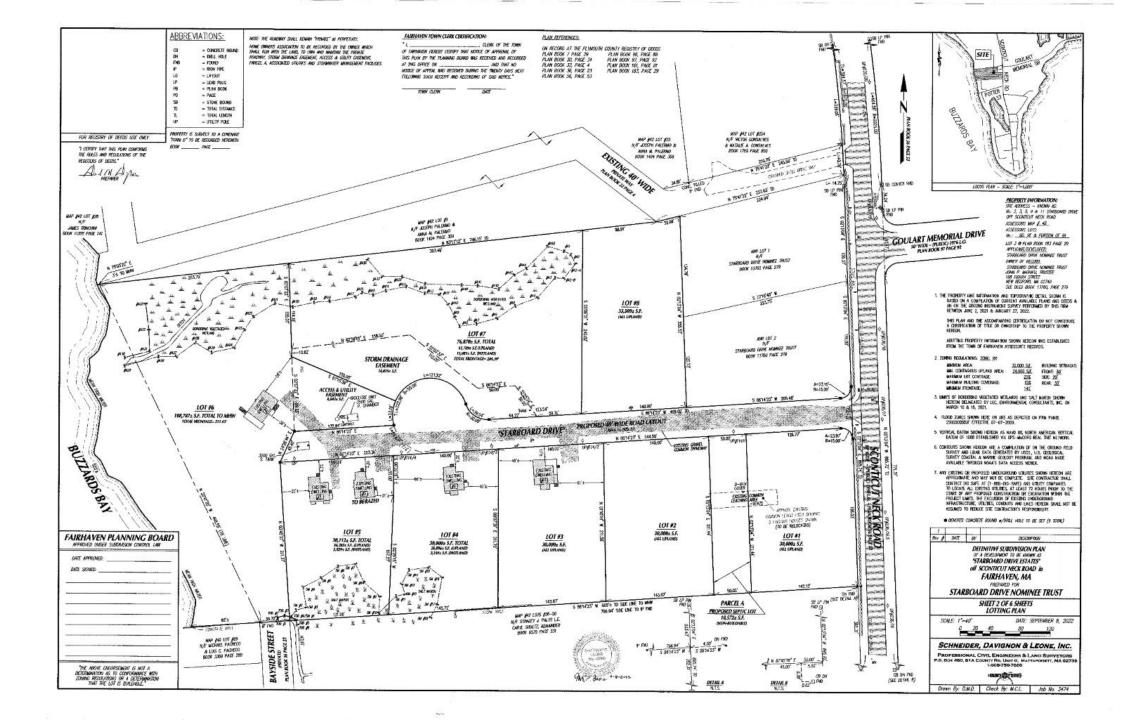
ADMINISTRATIVE SUMMARY

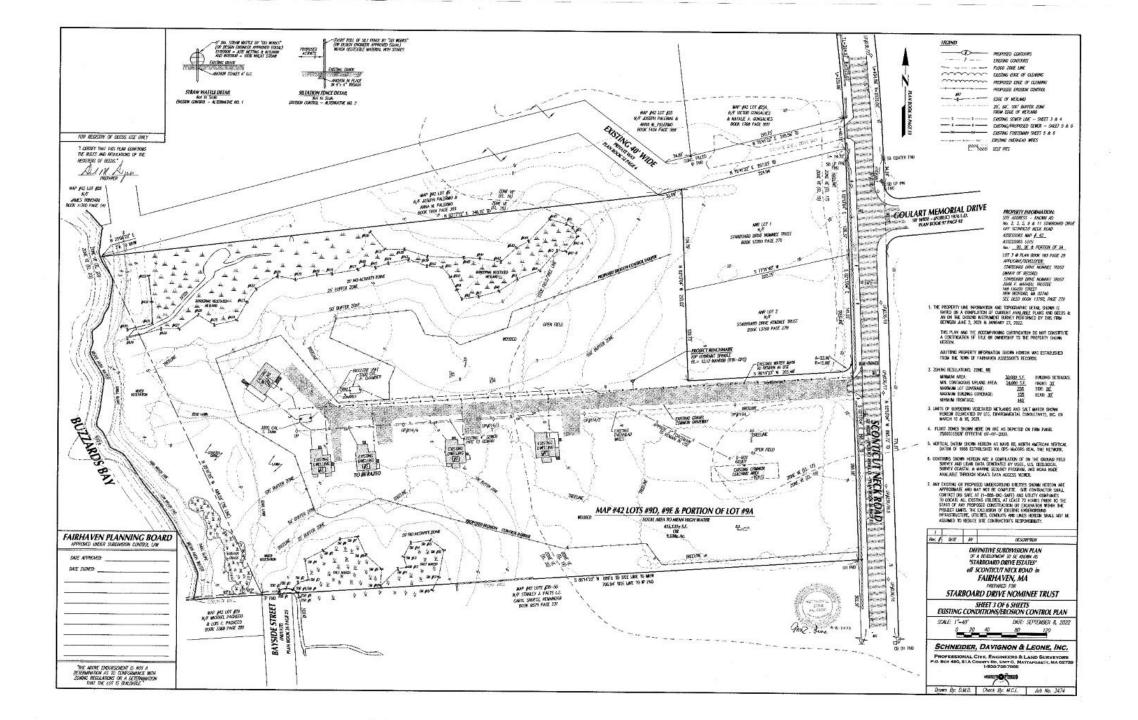
- Preliminary Subdivision stamped: February 8, 2022
- Advertisement: FNN October 20 & 27, 2022
- Routing Sent: September 26, 2022
- Public Hearing: November 10, 2022



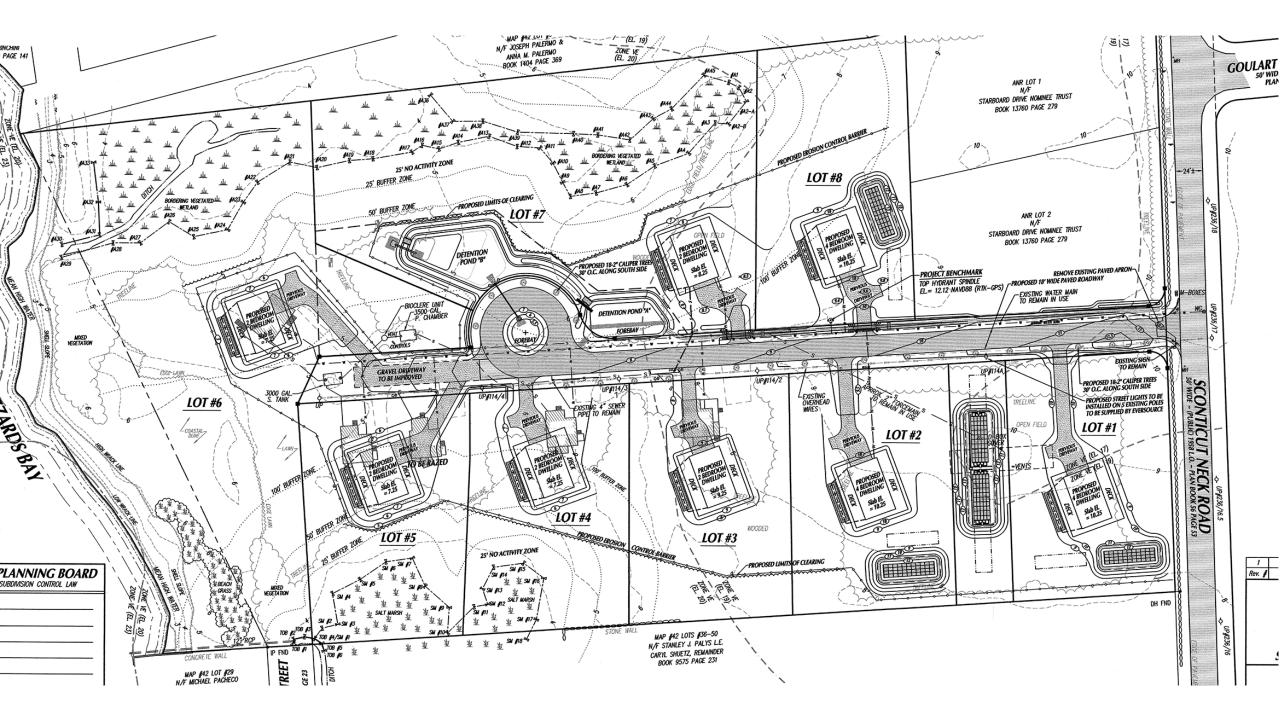


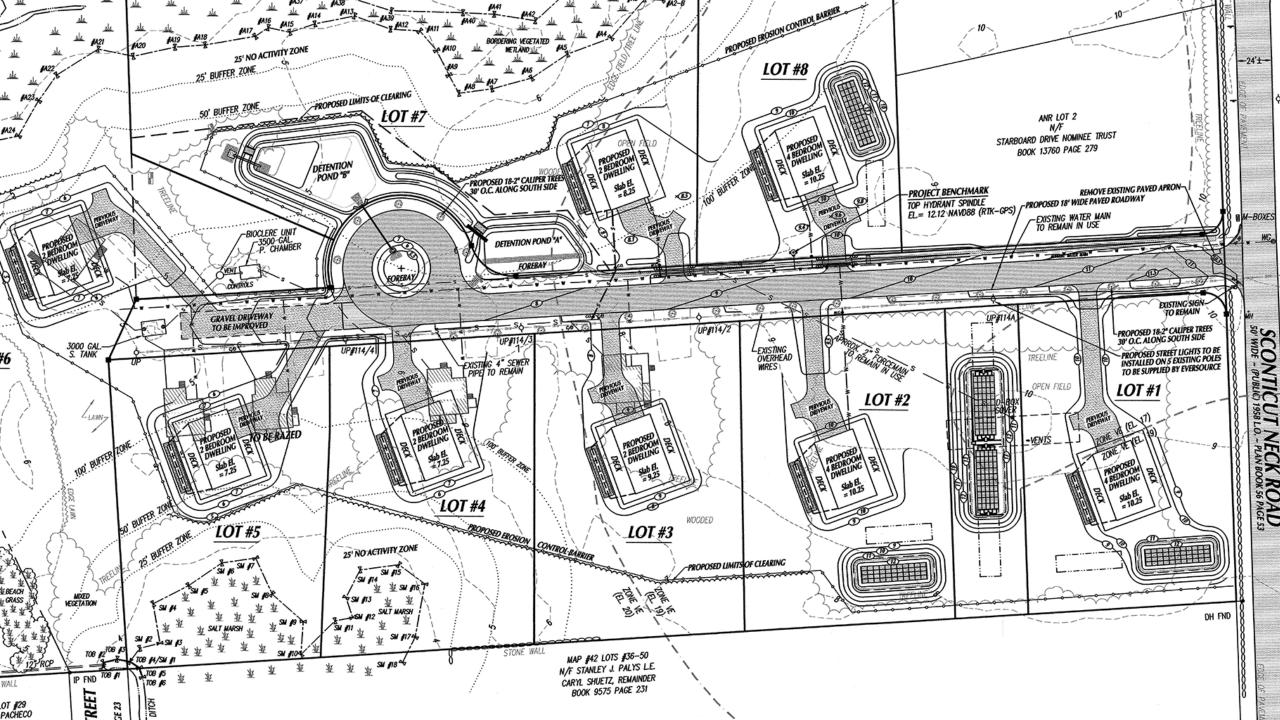


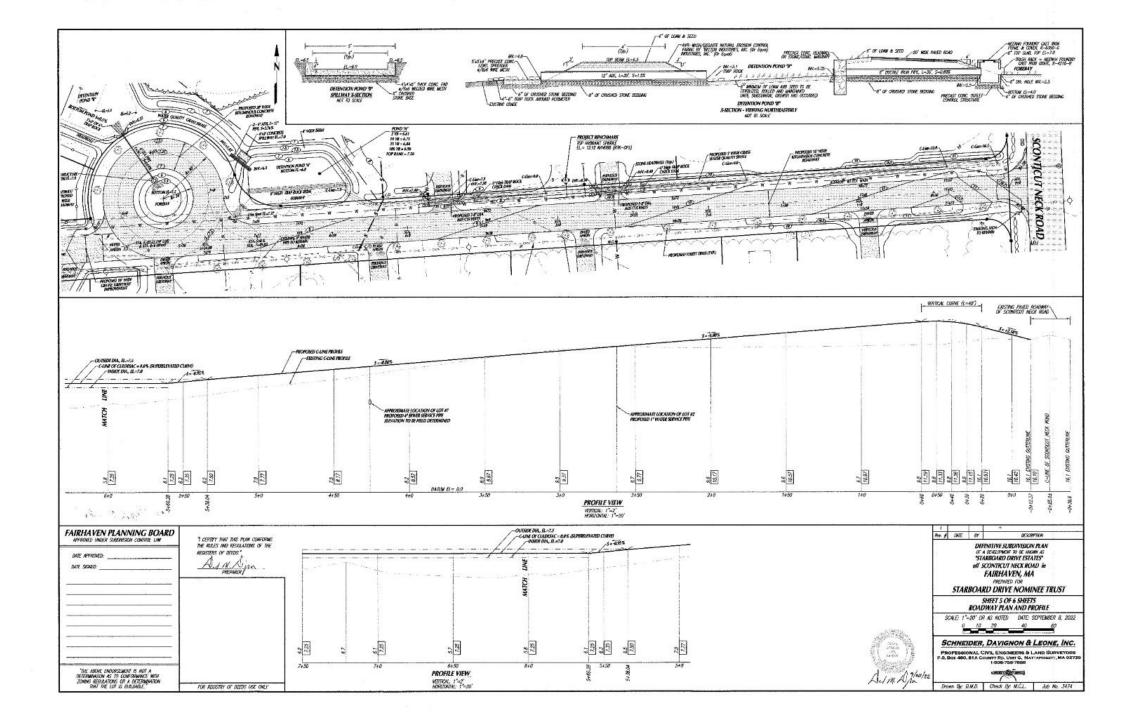


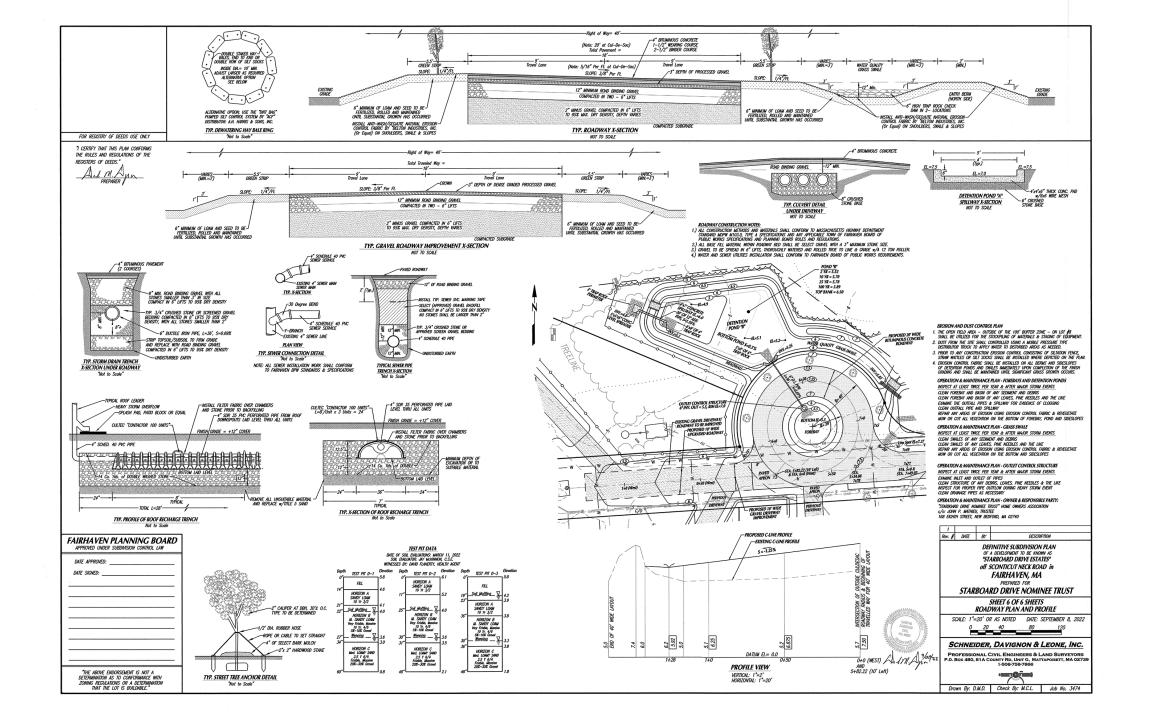










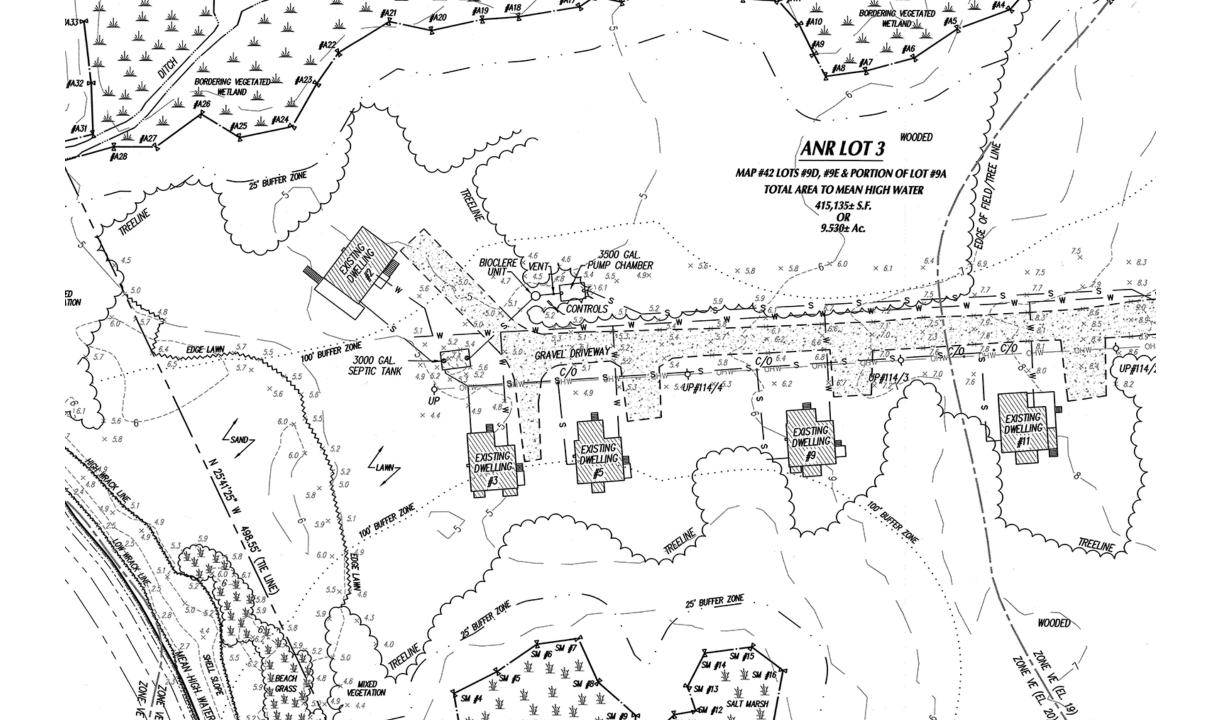


Comments from Town Departments:

- <u>Fire Department (Chief Correia)</u>: No major issues with the proposed project. Fire will yield to the water department to ensure the water main and hydrants are consistent with other developments along with hydrant placements.
- <u>Police Department (Chief Meyers)</u>: The Police department has no issue.
- <u>Highway Department</u> (John Charbonneau): Highway will be looking for the drainage plans and roadway profile plan in the Definitive Plan. Highway believes the street should be 20' wide.
- <u>Water</u>: Does not like that plan shows water and sewer lines would be crossing. Asks that they run the sewer line behind the homes to the septic leach field instead of crossing the road to the field. (*Note: possibly existing*)
- <u>Sewer</u>: Everything is on septic. They should reach out to a specific septic hauler that would maintain the pumping of the holding tanks for that development. Probably going to need advanced denitrification septic system.
- <u>Conservation & Sustainability (Whitney McClees)</u>:
 - The wetland line for this property has not yet been verified. The applicant's representative has contacted the conservation agent about setting up a preliminary site visit, but there is nothing on file.
 - The resource areas include coastal beach, barrier beach, salt marsh, bordering vegetated wetland, & flood zone.
 - <u>Entire property falls within the velocity flood zone</u>, so all structures will have to be constructed on columns and in compliance with all flood zone regulations. May also be FEMA reg.s regarding the road & emergency egress.
 - The conservation agent attached a map created by the Buzzards Bay National Estuary Program showing areas that are likely to be critical for salt marsh migration to adapt to sea level rise. The yellow is DEP mapped salt marsh and the red are the areas that may be crucial to supporting coastal resiliency and salt marsh migration.
- <u>Finance/Treasurer/Collector (Wendy Graves)</u>: No issue
- <u>Board of Health</u>: Not in a Zone II so denitrification is not necessarily an issue. Agent would need a working plan, not necessarily a final plan, to give further guidance.

Planning comments/questions

- Entire development is in the Velocity Zone
 - VE, V1-V30: Areas <u>subject to inundation by the 1-percent-annual-chance flood event</u> <u>with additional hazards due to storm-induced velocity wave action</u>. Base Flood Elevations (BFEs) derived from detailed hydraulic analyses are shown. Mandatory flood insurance purchase requirements and floodplain management standards apply.
- Entire roadway is under elevation 10'
- Loss of farmland
- Will new septic systems be advanced de-nitrification systems?
- Wetlands need to be delineated to confirm buildable area.
- Proposal requires numerous waivers.
- Proposal would potentially benefit with cluster zoning.



BBC/TNC/NHESP BioMap2 Coastal Adaptation Analysis

2 Starboard Drive (Map 42, Lot 9A)

DEP Wetlands: Salt Marsh

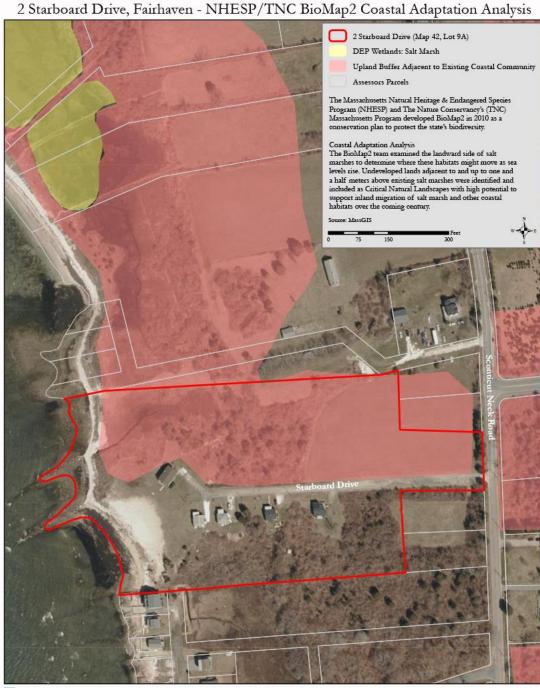
Upland Buffer Adjacent to Existing Coastal Community

Assessors Parcels

The Massachusetts Natural Heritage & Endangered Species Program (NHESP) and The Nature Conservancy's (TNC) Massachusetts Program developed BioMap2 in 2010 as a conservation plan to protect the state's biodiversity.

Coastal Adaptation Analysis

The BioMap2 team examined the landward side of salt marshes to determine where these habitats might move as sea levels rise. Undeveloped lands adjacent to and up to one and a half meters above existing salt marshes were identified and included as Critical Natural Landscapes with high potential to support inland migration of salt marsh and other coastal habitats over the coming century.



Source: MassGIS



Map prepared by: Buzzards Bay National Estuary Program, 2870 Cranberry Highway, East Wareham, MA 02538. www.buzzardsbay.org. Pebruary 3, 2022.

Hazard Mitigation Plan – Recommended Actions

- Mitigation Action #1 <u>Review and Amend Zoning Bylaws to Reduce Risk</u>: Conduct review of existing zoning bylaws and identify specific opportunities to incorporate additional <u>measures to reduce the long-term risk to life and</u> <u>property from natural hazard events</u>. This includes but is not limited to the adoption of higher regulatory standards and/or incentives for development that considers projected changes in future climate and/or hazard conditions.
- Mitigation Action #4 <u>Hazard Avoidance through Development Regulations</u>: Minimize or eliminate the potential for future damage and loss through the incorporation of best practices for hazard mitigation and climate adaptation into existing development regulations under the Town's authority.
- Mitigation Action #6 <u>Incorporate Anticipated Future Conditions into Town</u> <u>Bylaws</u>: Incorporate existing and projected future climate conditions into the Town's zoning bylaw to promote (re)development patterns that minimize exposure to known hazards. This action is linked to the same recommendation included in the Town's Master Plan under Sustainability Goal #3.