



Item #2025 – 027

Sandy Neck Coastal Resiliency Project

October 10, 2024

Town of Barnstable – DPW

Town of Barnstable – Marine & Environmental Affairs

Sandy Neck Board



Objective of Appropriation

- Accept Municipal Vulnerability Preparedness (MVP) FY25/26 Grant Funds \$2,833,849
- Secure Remaining Balance of Funds \$3,826,327

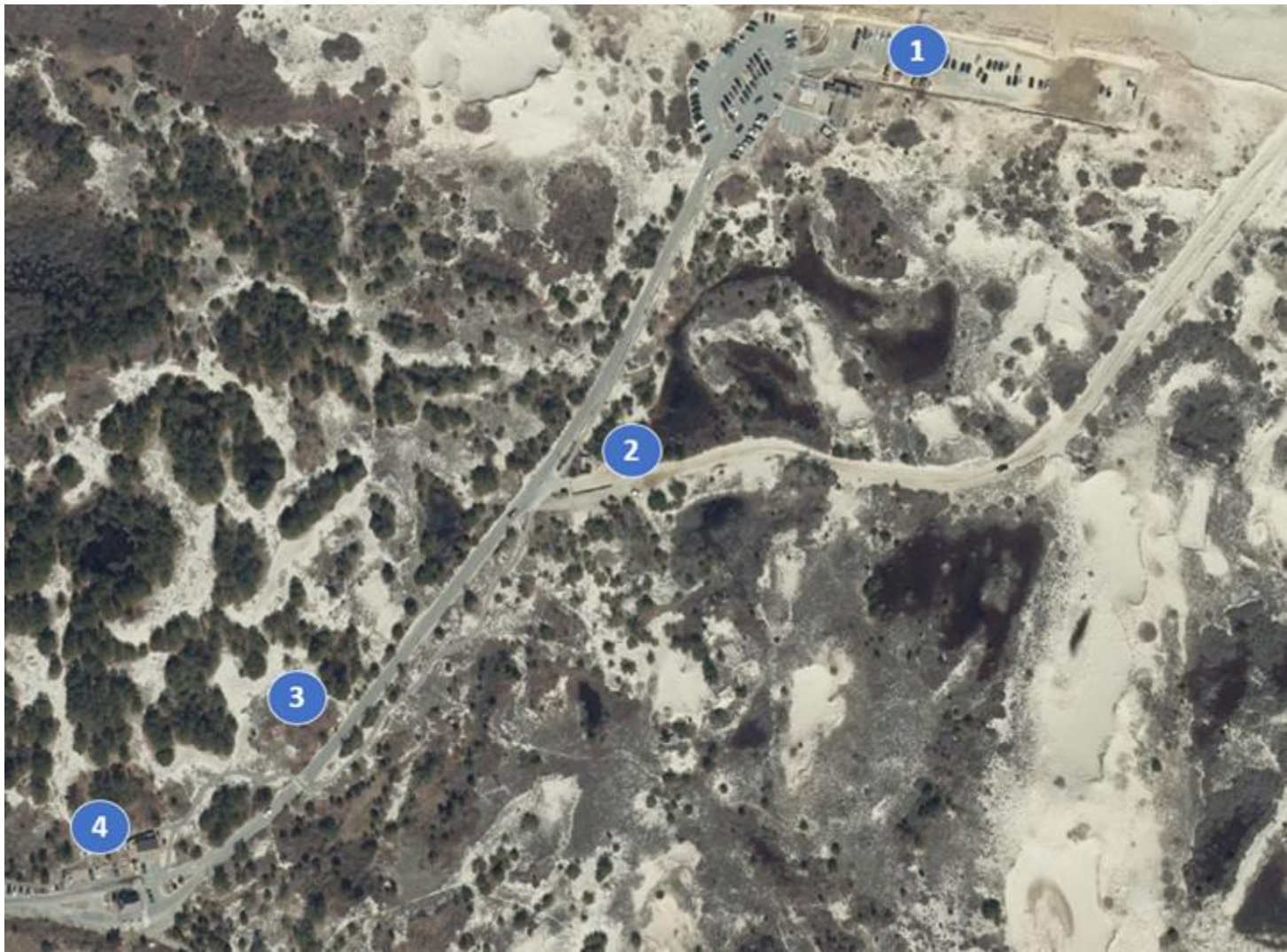


Project Goals

The Town's primary goals for this Project were to develop a long-term coastal resiliency project that:

1. Addressed coastal vulnerability to erosion, dune loss, and flooding;
2. Was sustainable for at least 50 years;
3. Supported current uses of the site that are safe for the public;
4. Enhanced and protected coastal resources;
5. Was economically viable; and
6. Was permissible under current environmental regulations.





Past Public Engagement

- **January 10 & 12, 2023**
 - Reviewed Site Vulnerabilities and Constraints
 - Established Project Goals
 - Presented Three and Selected One Conceptual Alternatives to Address Vulnerabilities
- **April 5, 2023**
 - Presented Two and Selected One Refined Conceptual Design
- **June 22, 2023**
 - Present Preliminary Design
- **March 14, 2024**
 - Present 90% Design

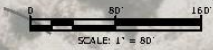
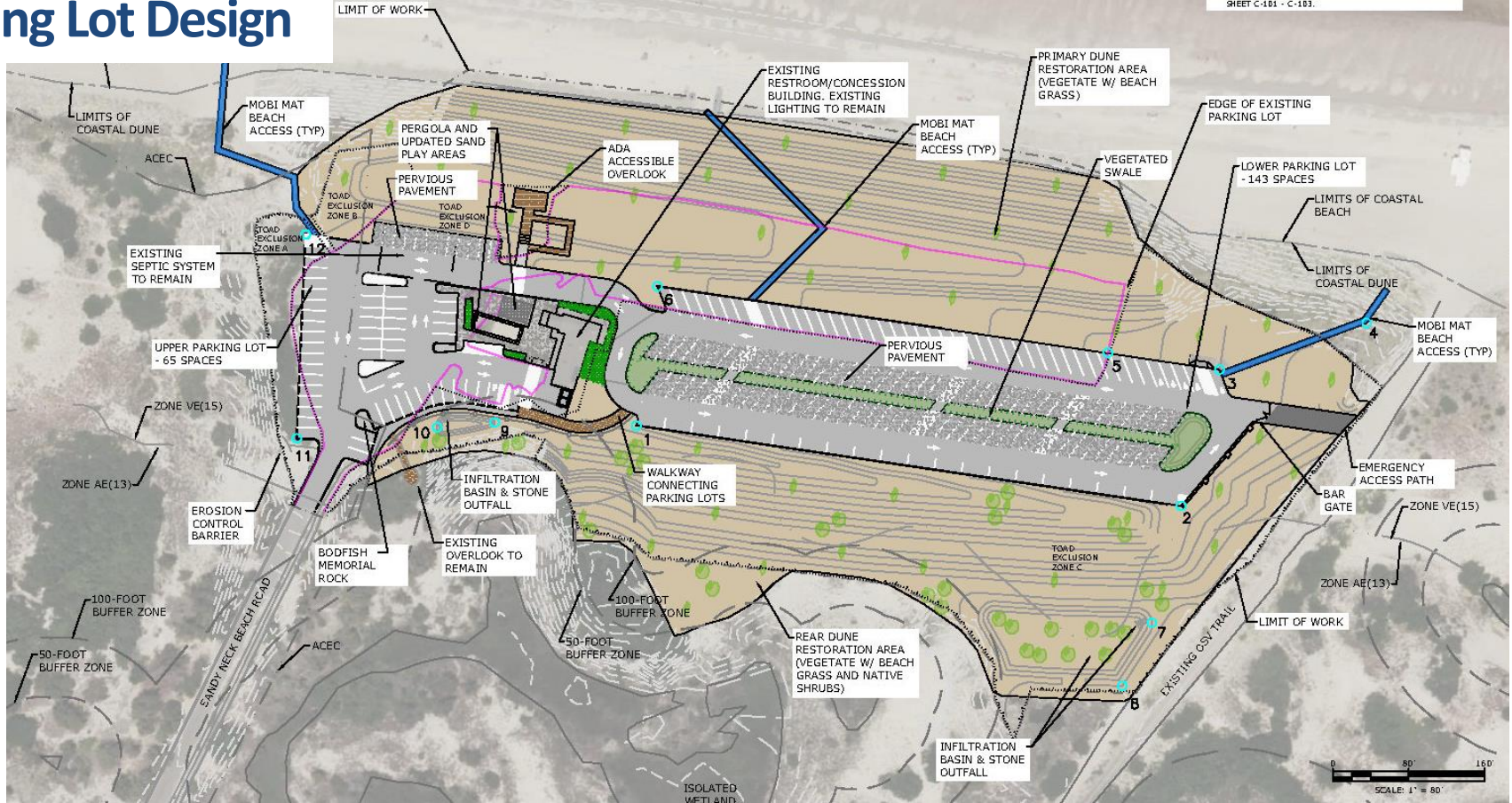


March 2022



Relocated Upper Parking Lot Design

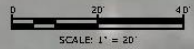
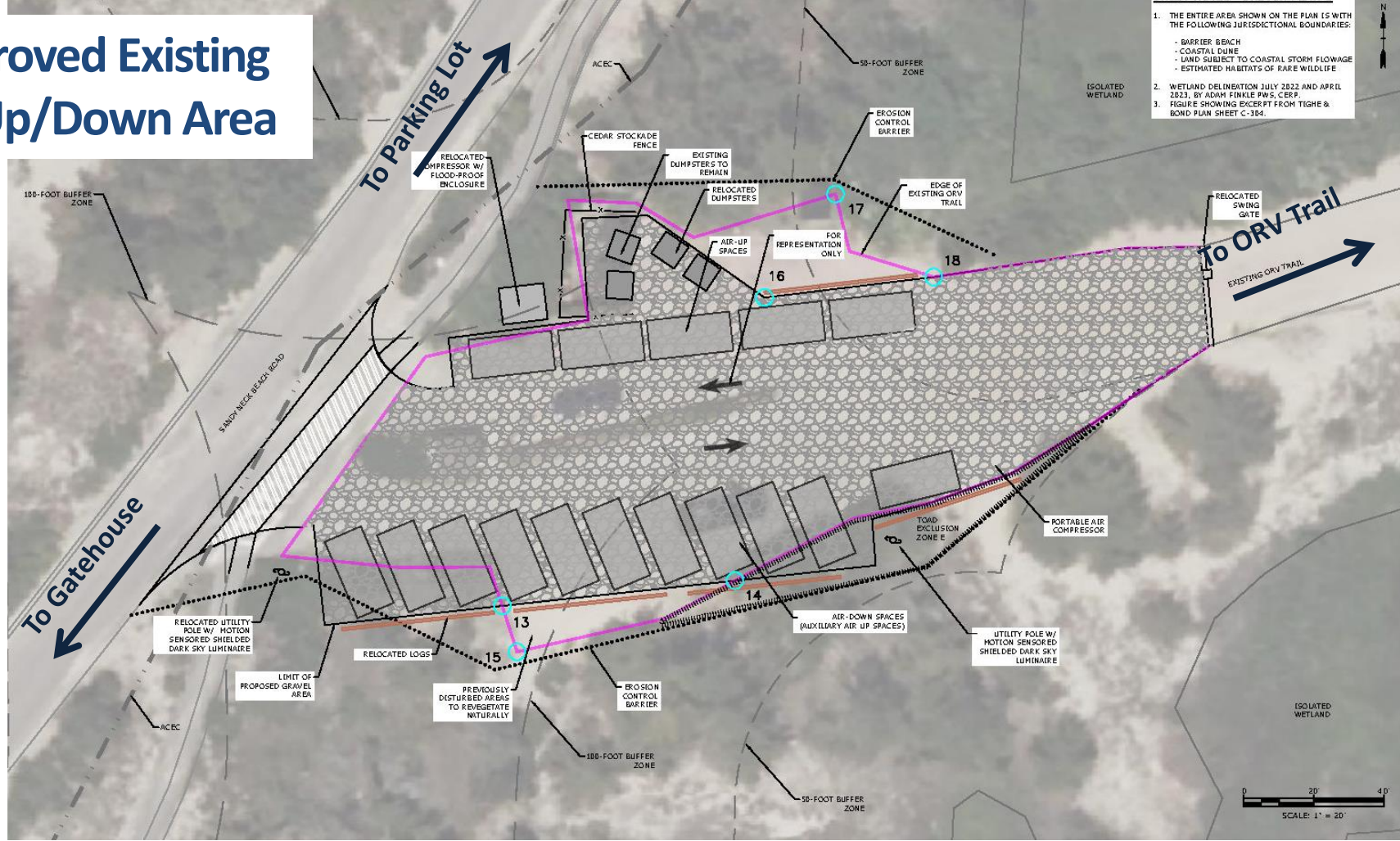
- SHEET NOTES - SKETCH PLAN 1**
- THE ENTIRE AREA SHOWN ON THE PLAN IS WITH THE FOLLOWING JURISDICTIONAL BOUNDARIES:
 - BARRIER BEACH
 - LAND SUBJECT TO COASTAL STORM FLOWAGE
 - ESTIMATED HABITATS OF RARE WILDLIFE
 - WETLAND DELINEATION JULY 2022 AND APRIL 2023, BY ADAM FINKLE PWS, CERP
 - FIGURE SHOWING EXCERPT FROM TIGHE & BOND PLAN SHEET C-101 - C-103.



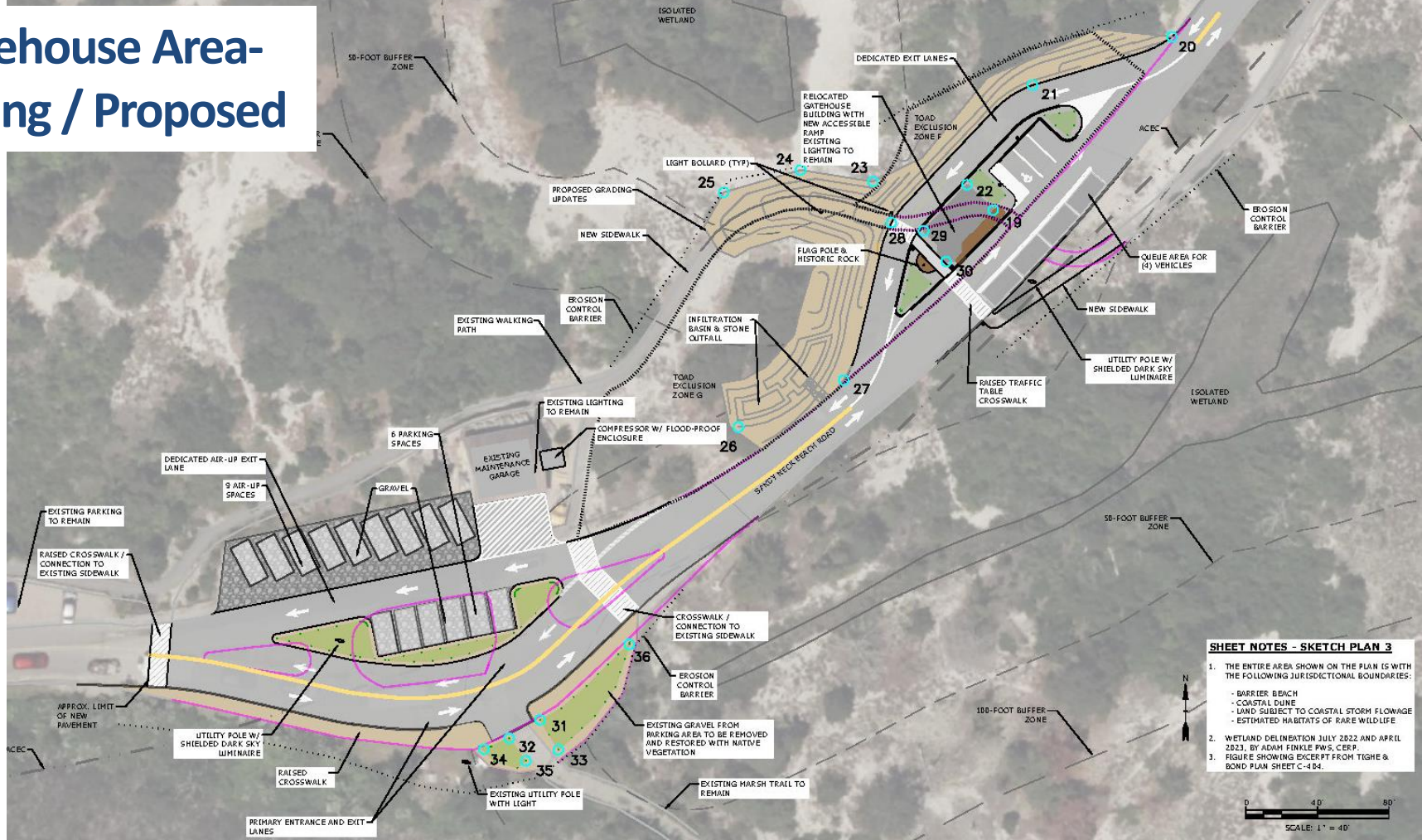
Improved Existing Air Up/Down Area

SHEET NOTES - SKETCH PLAN 2

1. THE ENTIRE AREA SHOWN ON THE PLAN IS WITH THE FOLLOWING JURISDICTIONAL BOUNDARIES:
 - BARRIER BEACH
 - COASTAL DUNE
 - LAND SUBJECT TO COASTAL STORM FLOWAGE
 - ESTIMATED HABITATS OF RARE WILDLIFE
2. WETLAND DELINEATION JULY 2022 AND APRIL 2023, BY ADAM FINKE PWS, CERF
3. FIGURE SHOWING EXCERPT FROM TIGHE & BOND PLAN SHEET C-304.



Gatehouse Area- Existing / Proposed



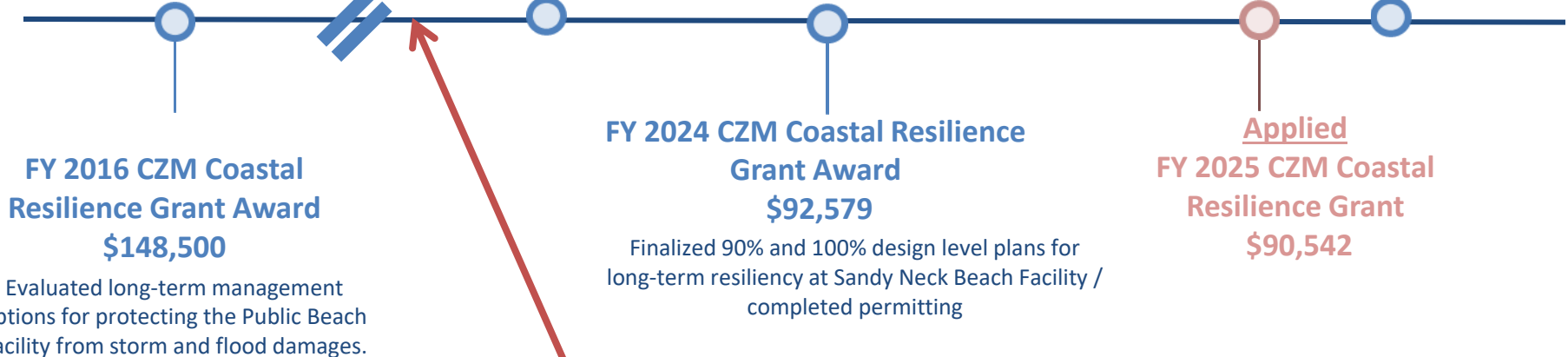
Grant Funding Received to Date

FY2023 CZM Coastal Resilience Grant Award \$128,127

Evaluated alternatives, selected a preferred alternative, developed 30% design plans, and initiated permitting with MEPA.

FY2025/2026 MVP Action Grant \$2,833,849

Awarded to fund the project's construction / on-the-ground implementation and to execute the Spadefoot toad Protection Plan



FY 2016 CZM Coastal Resilience Grant Award \$148,500

Evaluated long-term management options for protecting the Public Beach Facility from storm and flood damages.

FY 2024 CZM Coastal Resilience Grant Award \$92,579

Finalized 90% and 100% design level plans for long-term resiliency at Sandy Neck Beach Facility / completed permitting

Applied FY 2025 CZM Coastal Resilience Grant \$90,542

Enterprise account has spent \$123,091 on grant matches to date

Since 2013, the Enterprise account has spent \$549,160 to nourish the dunes at the Sandy Neck Facility



Proposed Funding

Total Project Cost	\$6,660,176
FY 25/26 MVP Grant	\$2,833,849
Town Council Appropriation	\$3,826,327 Deficit - \$1,000,000 Enterprise Reserves <hr/> \$2,826,327 Loan Order*

**Potential funding sources that will be utilized to reduce/eliminate the amount of money needed from the General Fund:*

- Enterprise Account
- CZM - FY 26 Grant
- NFWF
- CPC Funding



An aerial photograph of a coastal area. In the top left, a large body of blue water meets a sandy beach. A paved road winds through a landscape of green trees and sandy patches. In the bottom right, there are several houses, including a large grey one with a brown roof and a smaller white one with a dark roof. A red truck and a black pickup truck are parked near the houses. A semi-transparent white box with a blue border is centered in the image, containing the word "Questions" in a blue, italicized font.

Questions

Cost Development

Alternatives Assessment Tech Memo (October 2022)	\$4,188,970	Has a "new entrance booth" for \$20,000 does not include modifications to existing GH
65% OPC (June 2023)	\$5,600,000	Includes some changes to the GH, changes to dune design and new rear dune restoration increased costs by ~1million
90% OPC (April 2024)	\$6,200,000	Changes to the GH (cost goes from \$450,000 at 65% to \$800,000 at 90% design) / Includes modifications to the ORV entrance / Includes stormwater management changes that were required
100% OPC (June 2024)	\$6,400,000	Includes new observation deck design (\$75,000 at 90% and \$230,000 at 100% design)

- Unit costs used for items listed are developed from bid results of similar work, MassDOT bid result data, and our experience with the design and bidding other projects in the area
- A few items will require more specialized work such as the relocation of the existing gatehouse, installation of the foundations needed for the overlook structure, and modifications to the existing septic system
- Significant increase in contractors' costs (labor, some materials, and insurance) over the past few year have impacted bid results



**Endangered Species
Habitat**

**50-Year Limit of Dune
Loss**

