

Saratoga Street Bank Stabilization and Mitigation MEPA Consultation

December 18, 2025



Background

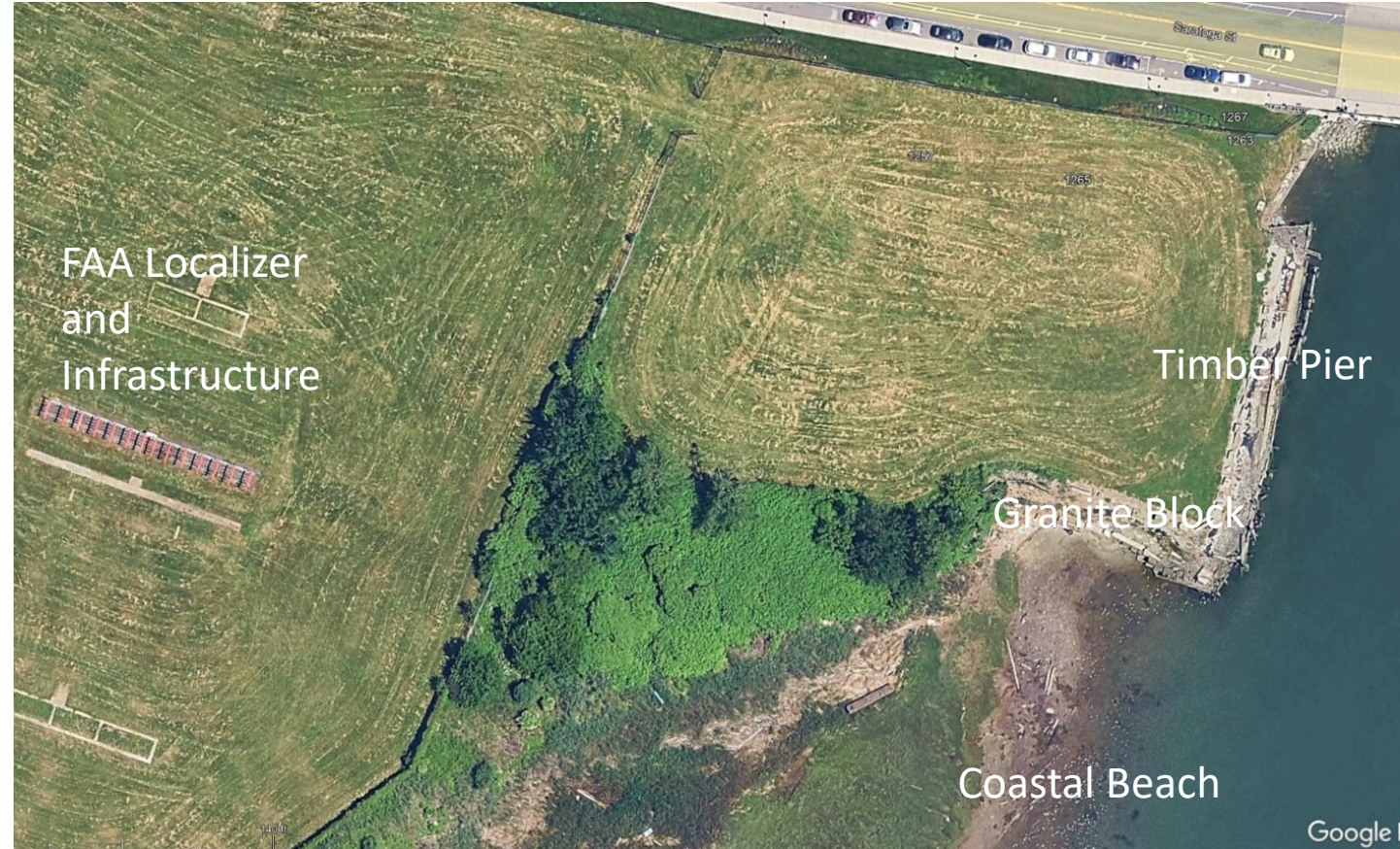
Site is Massport owned and located adjacent to Saratoga St. and the Belle Isle Inlet in East Boston.



Existing Conditions



- Timber Pier in disrepair
- Granite and concrete block
- Coastal Beach to the south
- FAA Localizers/Infrastructure to the west

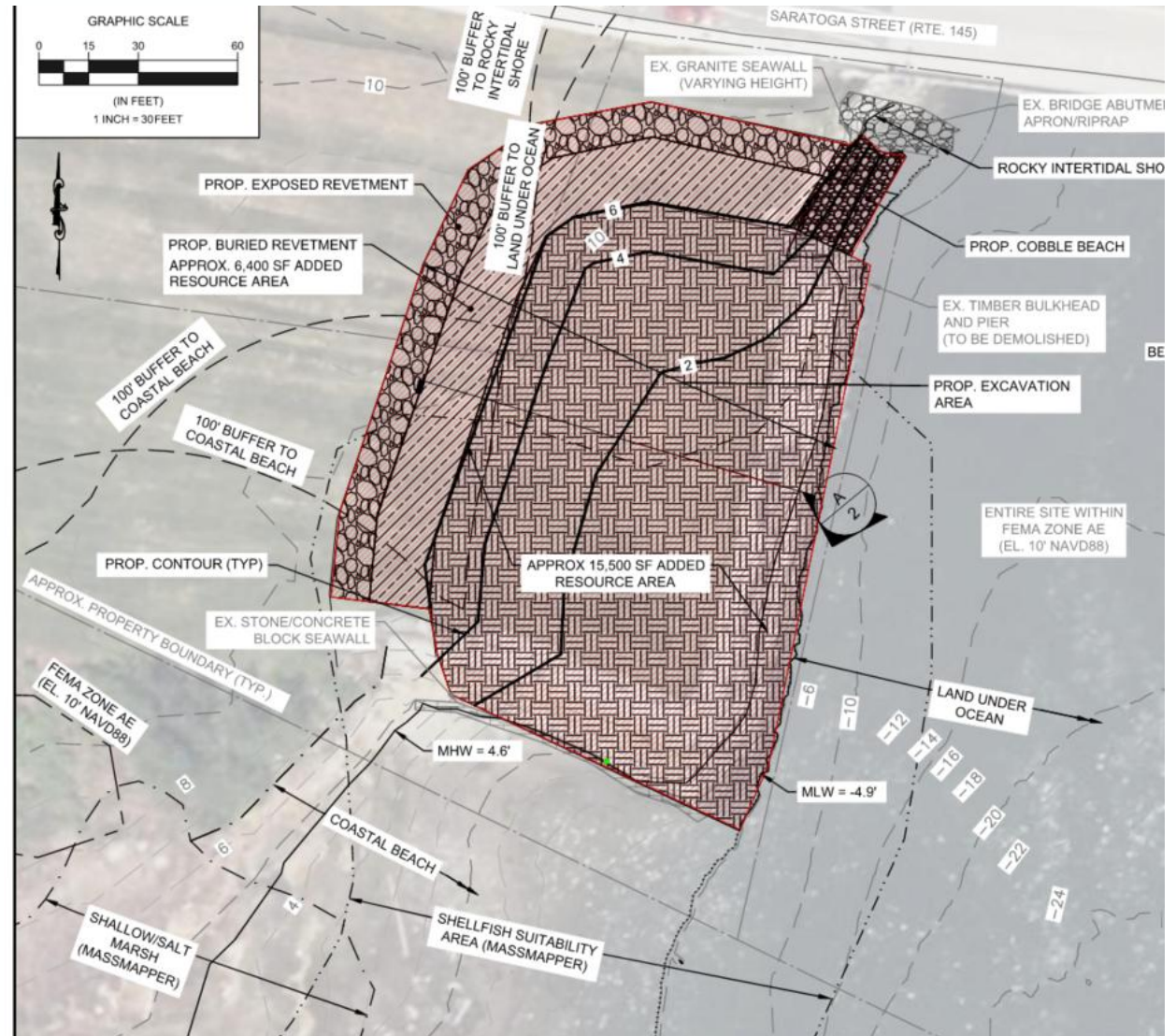


Resource Areas & Chapter 91

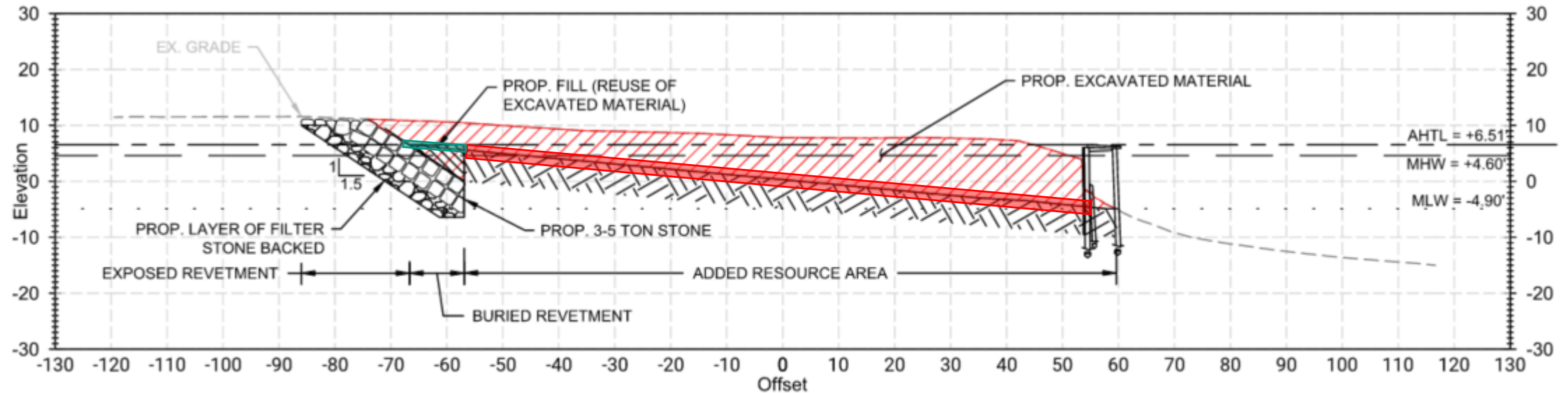


Proposed Plan

- Demolition of existing timber pier and bulkhead
- Excavation of ~6,500 CY to facilitate revetement construction and create coastal beach
- Installation of a partially buried 1.5H:1V stone revetement, cobble beach adjacent to bridge abutment
- Small portion of material may be used on site (~1,000 CY), remainder trucked and disposed off site
- Creates approximately 22,000 SF of Coastal Beach
- Topography to match natural contours and coastal beach to the south



Proposed Cross Section



B
5 PROPOSED TYPICAL SECTION
SCALE: 1" = 20'

- 1.5H:1V, partially buried revetement
- Resulting coastal beach approx. 10:1 slope from MLW up to high tide line high on the revetment
- Toe stone at or below MLLW

Existing Conditions – Concept Side By Side



Alternatives Analysis/Design Selection

- No-Build
- Vertical Sheet Pile Bulkhead
- Engineered Vegetated Bank
- Sloped Armor Stone Revetment
- Removal of Existing Timber Pier Structure Only
- Partially Buried 2:1 Revetement

- Preferred Alternative – Partially Buried 1.5:1 Revetement
 - Addresses community concern over the pier condition
 - Creates 21,890 SF+ of coastal beach
 - Minimal exposed new structure ensures resiliency of the bank and created resource area
 - Creates shallowest slope of coastal beach creation for energy absorption and resource area

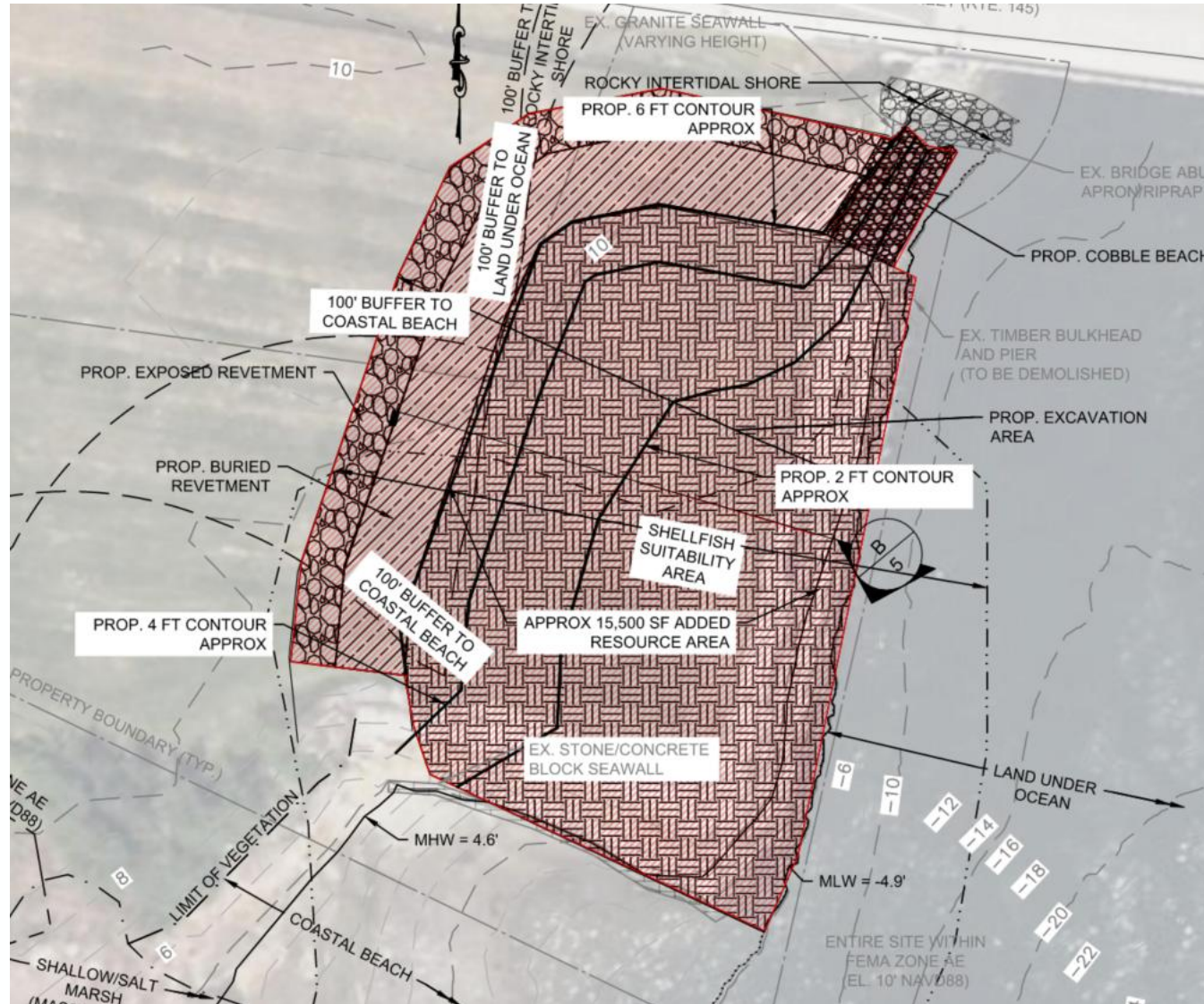
Agency Comment

- CZM – Asked to look at wave reflection regarding 1.5:1 revetement design versus previous 2:1.
 - The current design with 1.5:1 revetement maximizes area of mitigation and minimizes the resulting coastal beach slope leading up to revetement.
- CZM asked we look at roadway impacts.
 - A buffer between proposed projects and Saratoga Street has been considered. Appropriate City and State departments will be engaged during final Design.
- CZM asked that we look at storm flowage.
 - The proposed revetement will not impede the ability for storm water to return to the water body.

Supplemental Sediment Sampling and Analysis

- Supplemental sampling in September 2025
 - Samples for LSP risk assessment of proposed exposed material
 - Preliminary assessment has revealed no issues with proposed design
 - Final report in progress
 - Samples for selection of suitable upland disposal sites
 - Assessment currently underway

Proposed Design – Q&A



Thank You

