
GENERAL DYNAMICS
Electric Boat
Special Permit Public Hearing
30 April 2019

South Yard Assembly Building
Agenda

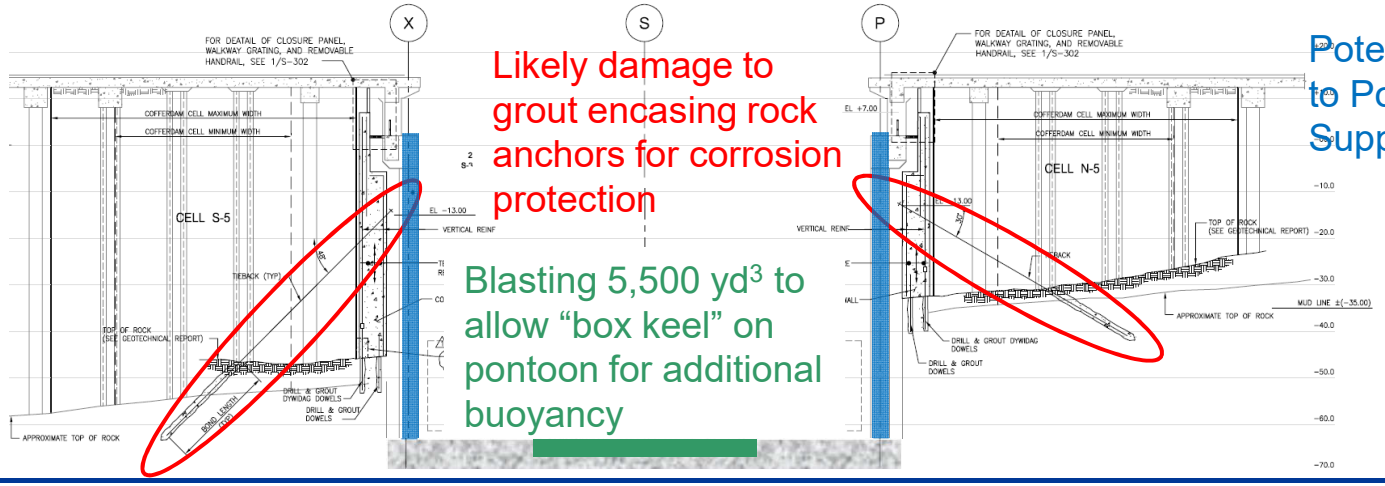
- Building Locations – Alternatives Considered
- Building Height
- Architectural Design
- Site Plan Revisions
- Utilities
- Traffic
- Buffer Strip
- Construction Management
- Compliance with Special Permit Criteria

South Yard Assembly Building
Building Location – Property Constraints

Property, Channel, and Street lines for discussion purposes only – Not Surveyed

South Yard Assembly Building
Analysis of Alternative Locations – North Yard

- Risk to Virginia Class construction
- Risk to structural integrity of Graving Dock 3
- Navy-certified facilities
- Risk determined to be too high



Likely damage to grout encasing rock anchors for corrosion protection

Blasting 5,500 yd^3 to allow "box keel" on pontoon for additional buoyancy

Potential damage to Pontoon Support Columns

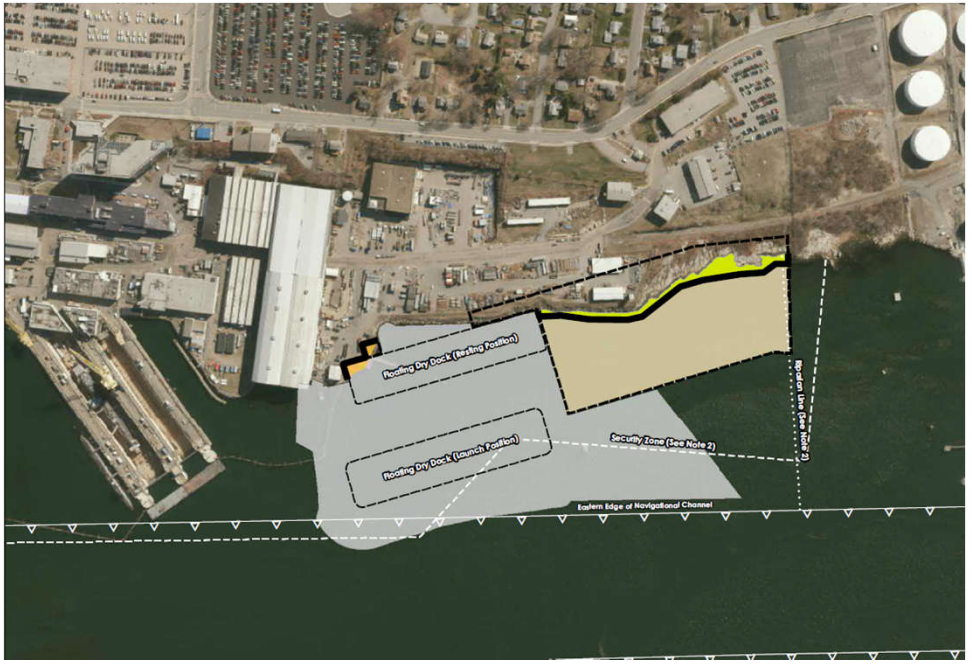
South Yard Assembly Building
Analysis of Alternative Locations – SY Option 1

- Environmentally impactful due to larger amount of permanent fill
- Floating dry dock would block channel for launch evolutions (several days)
  - ↗ Unacceptable for navigation

South Yard Assembly Building

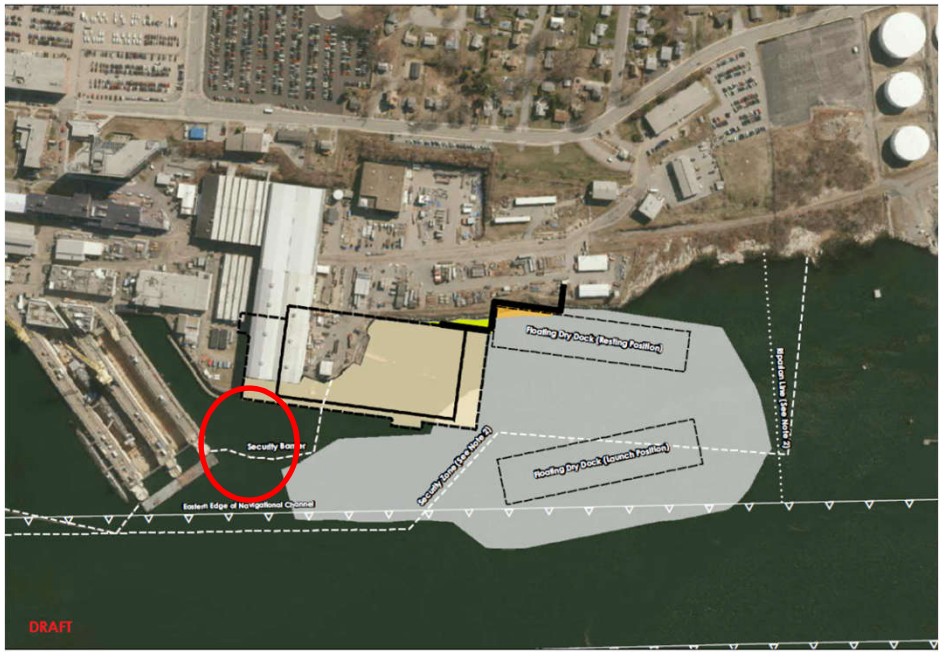
Analysis of Alternative Locations – SY Option 2

- Environmentally impactful due to larger amount of permanent fill, shading, and removal of rocky shoreline
- Security concerns related to proximity to property boundary
- Longer building



South Yard Assembly Building
Analysis of Alternative Locations – SY Option 3

- Requires demolition of 2 buildings that currently support Virginia construction
  - ↗ Requires additional buildings for displaced functions
- Operational conflict between ships moored on South Wing Wall and barge deliveries to north end of building
  - ↗ Not a viable option



South Yard Assembly Building

Analysis of Alternative Locations – SY Option 4

- Most operationally flexible
- Greater environmental impact due to increased shadowing and permanent fill (drilled shafts)

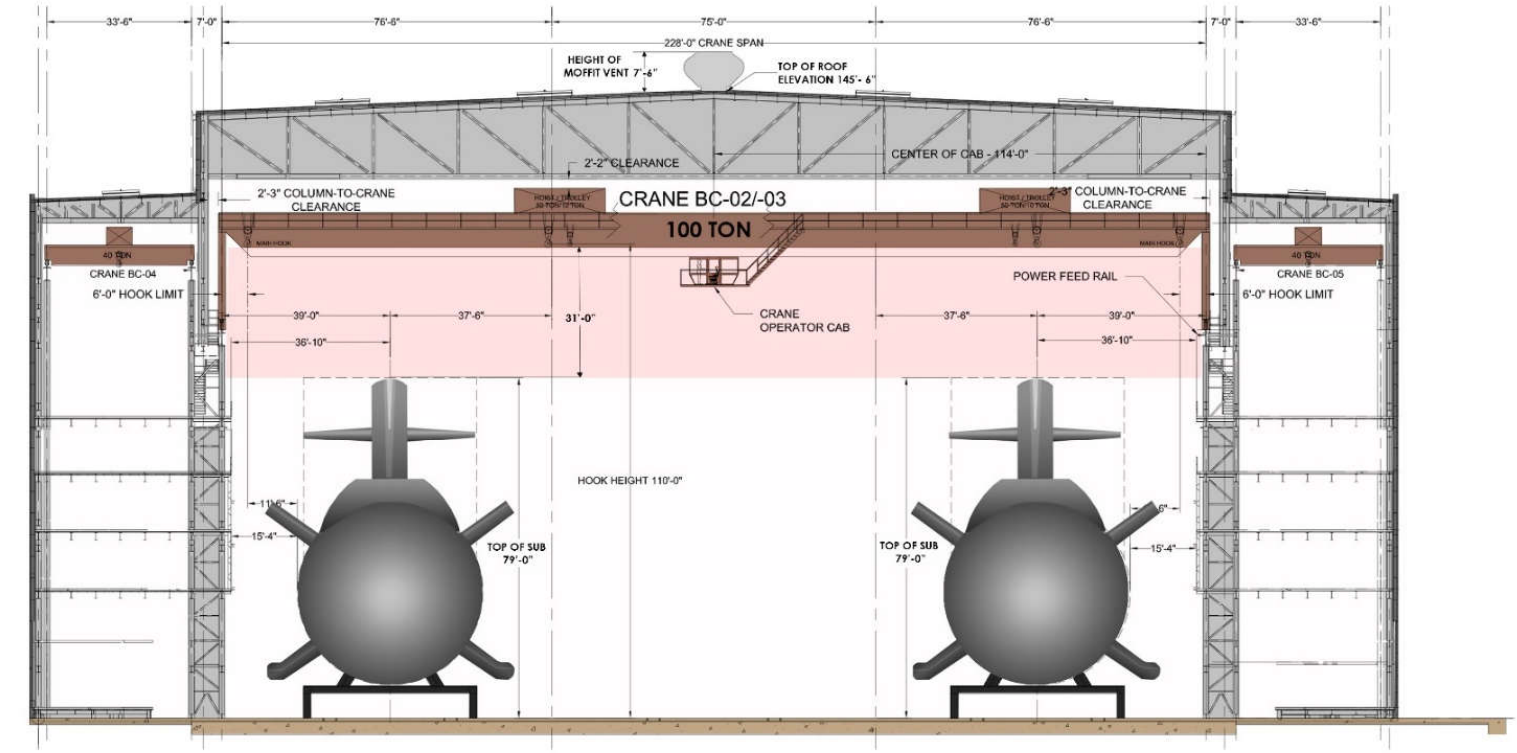
South Yard Assembly Building

Analysis of Alternative Locations – SY Option 5

- Least environmental impact due to reduced shadowing and permanent fill (drilled shafts)
- Building size minimized by allowing barge deliveries to north and south end of building

SELECTED OPTION

South Yard Assembly Building
Manufacturing Need for Building Height



2 CRANE BC-02 AND BC-03 ELEVATION
1" = 20'
SK-IE-001

Questions

South Yard Assembly Building
Architecture

South Yard Assembly Building
Architecture

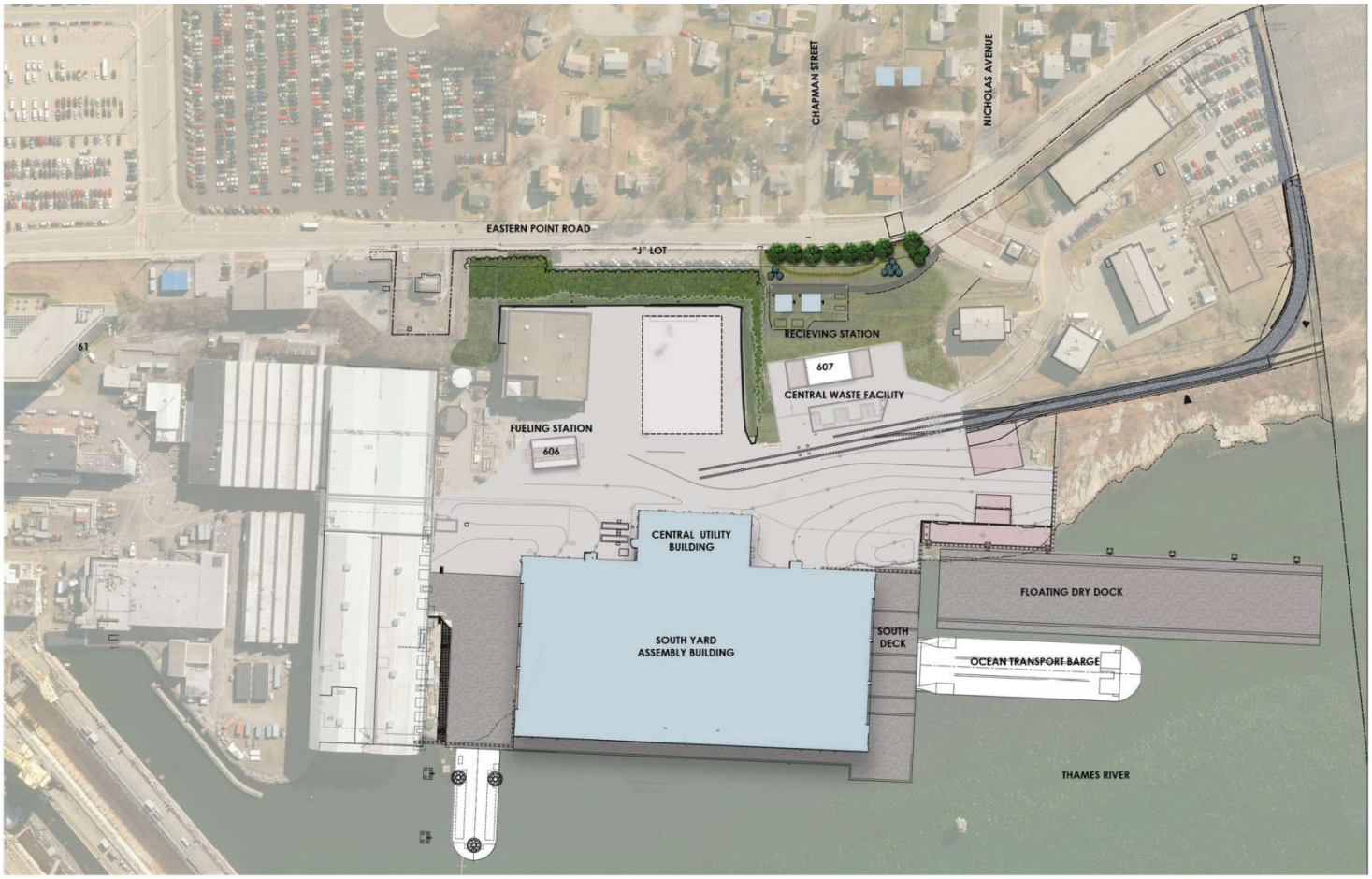
South Yard Assembly Building
Architecture

Consideration of 3-color option:

- Not compatible with shipyard setting
- Less desirable north & south views
- Will draw the eye to the building
- Difficulty matching/complementing large doors with siding

Questions

South Yard Assembly Building
Site Plan



South Yard Assembly Building
Utilities

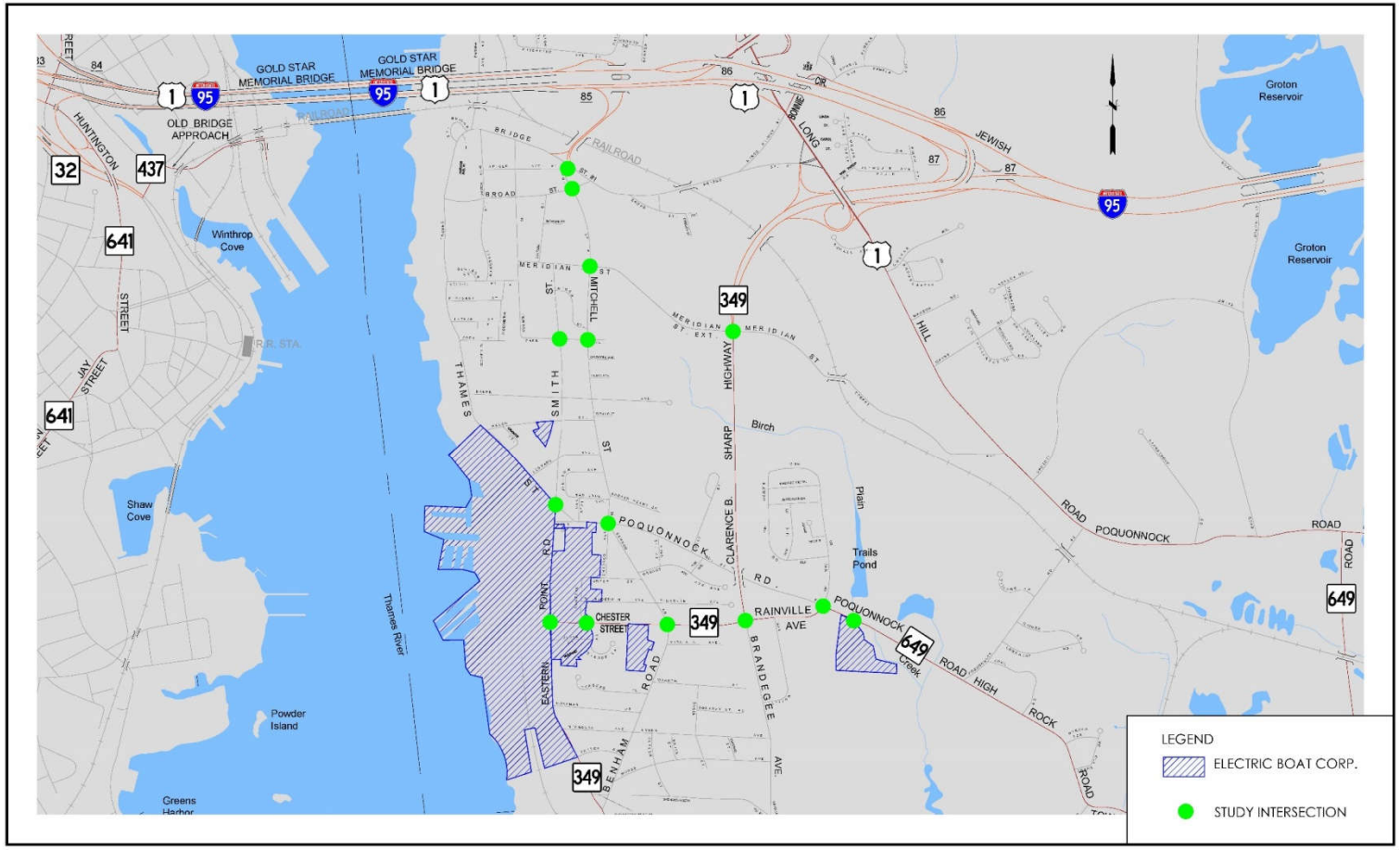
Electric (GU): 20MVA
- Requested redundant power can be provided
- Relocated receiving station and access drive found acceptable

Sewer (GU): 500 – 750 GPM
- Requested flow metering is under contract. Will take 4-6 weeks to complete
- Lift station can be designed to regulate flow as necessary (e.g. storage on site, interlock)

Water (GU): 1,000 GPM
- No increased demand for fire protection

Natural Gas (Eversource): 134,000 SCFH
- Demand letter submitted

South Yard Assembly Building
Traffic



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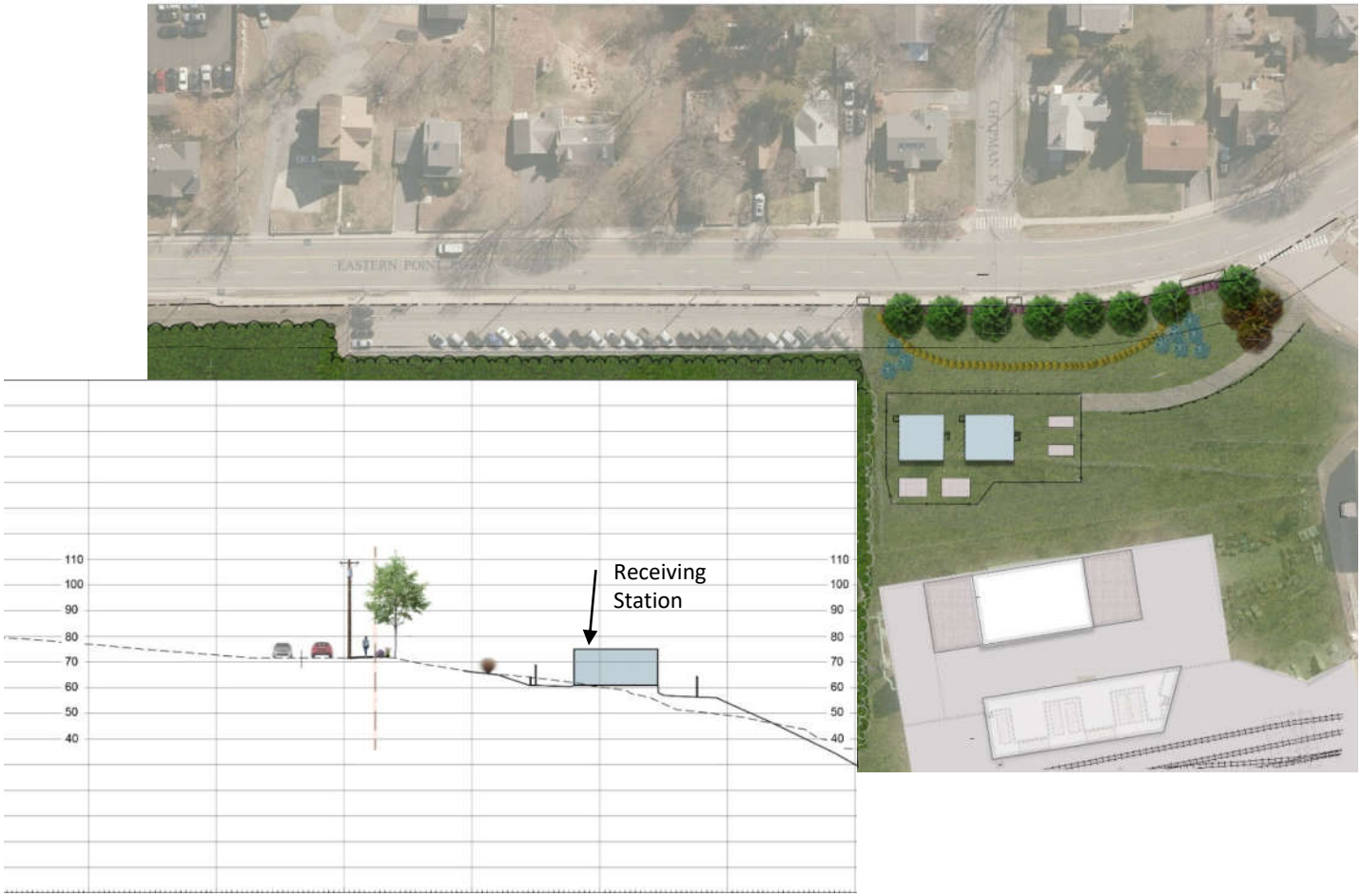
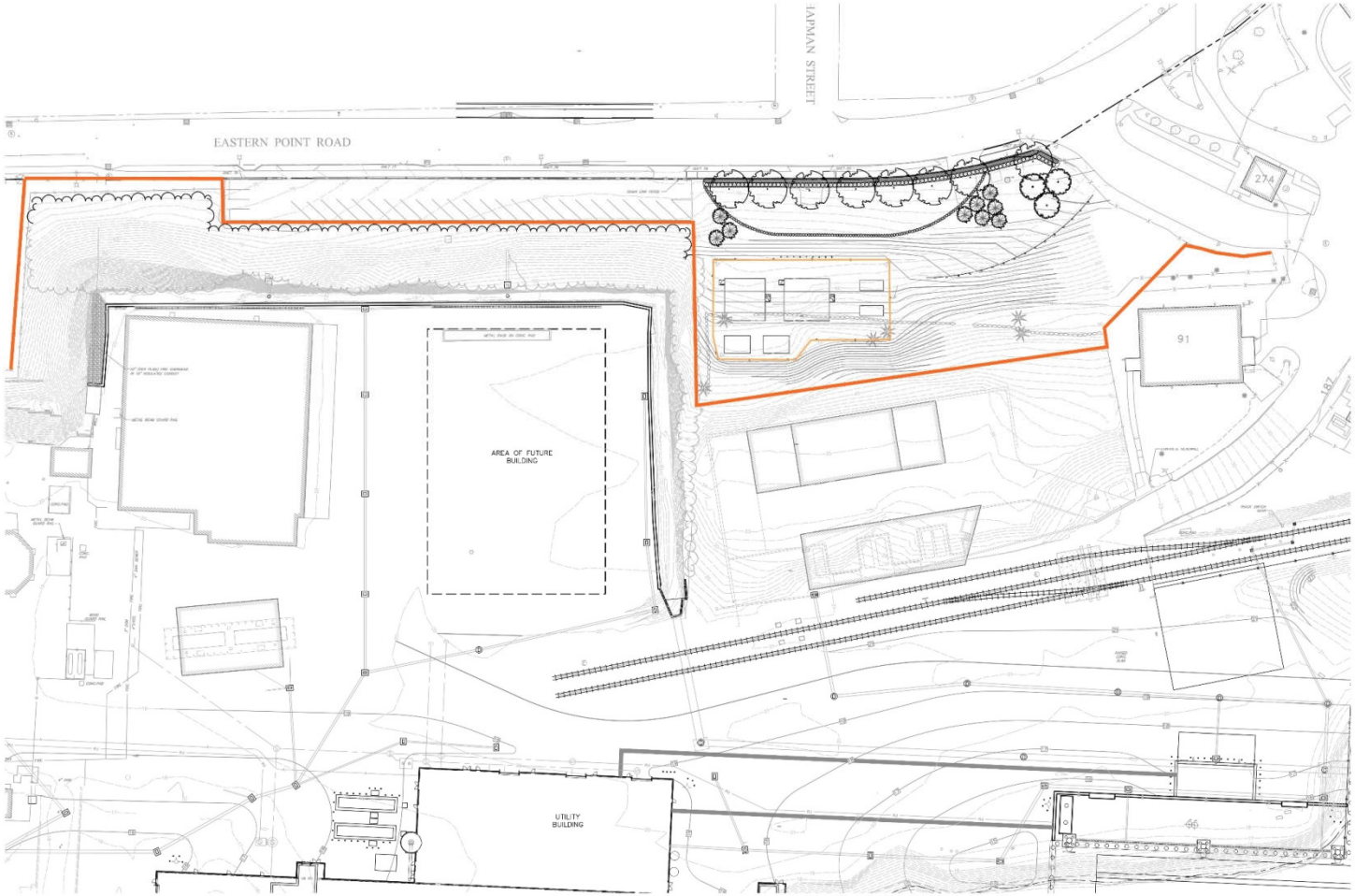
South Yard Assembly Building

Site Plan – Section View at Receiving Station



South Yard Assembly Building
Modified Fencing



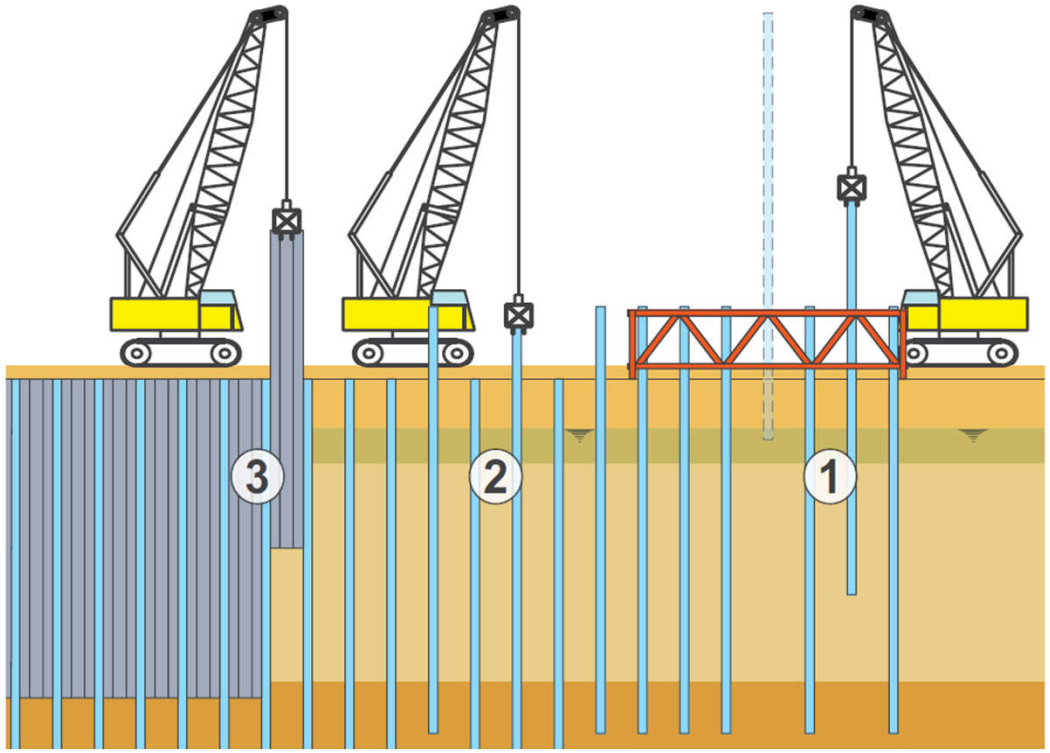
South Yard Assembly Building
Rendering – Walking North

South Yard Assembly Building
Rendering – From Chapman Street

Questions

South Yard Assembly Building
Construction Management

Bulkhead Construction



South Yard Assembly Building
Construction Management

Dust Control

Questions