

## BROWER'S COVE

Mystic Harbor, CT

Brower's Cove residential complex is located just over a causeway on Mason's Island in Stonington, CT and fronts on historic Mystic Harbor. The marina owners razed all of the existing structures on the former trailer park property and redeveloped the four-acre site into upscale residential duplexes. The project consisted of eight wood framed, two-story residential units with approximate footprint size of 45 ft. x 58 ft., located within the A-Zone (Elev. = 12.0 ft.) FEMA flood zone. Five structures were designed to be flood-resistant, supported upon steel reinforced, cast-in-place concrete foundations to elevate the first floor to elevation 13.5 ft. NGVD, allowing vehicular parking below. The remaining three units have existing surrounding grade elevated via compacted structural fill and concrete retaining walls around the building perimeters, supported upon traditional steel-reinforced, cast-in-place concrete foundations.

As part of the site improvements, parking for the marina was expanded and outdoor bathroom facilities were constructed. A new sewer main now connects the proposed structures to the municipal sewer system, replacing the outdated septic systems on the site. Coastal Engineering Co. provided full scope engineering design services as well as extensive permitting with various regulatory agencies to comply with all local and state zoning, Board of Health, and wetlands regulatory requirements. A special coastal permit was required from the Office of Long Island Sound Programs since the property extends into the Mystic River.

### SERVICES

- o Civil engineering site design and plan preparation
- o Structural engineering design for dwellings in a coastal floodplain
- o Marine engineering design and preparation of coastal restoration plan
- o Environmental and regulatory permitting at local, regional, state, and federal levels
- o Preparation of stormwater facilities Operation and Maintenance (O&M) manual

