Hartford and East Hartford, CT
Section 216 Levee Rehabilitation
Flood Risk Management
Feasibility Study

Draft Feasibility Report & Draft Environmental Assessment

APPENDIX 2-A
ARCHITECTURAL

U.S. Army Corps of Engineers
North Atlantic Division
New England District

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1.0 PUMP STATIONS

1.1 MEADOW HILL (EAST HARTFORD)

The Meadow Hill Pump Station is located at 143 Pitkin Street, East Hartford, CT and was built in 1941. It is a brick walled structure with steel columns and a roof construction of concrete encased steel beams with a reinforced concrete roof slab, and is approximately 64 feet long x 27 feet wide x 23 feet tall with a 30-inch high concrete watertable. There are two levels, the ground level Engine Room, and a lower-level Pump Room, which is separated into a large and small chamber. The large Pump Room chamber houses (4) main axial pumps. The small Pump Room chamber houses a small centrifugal pump as well as a small mezzanine with a bathroom and fuel tanks.

The Meadow Hill Pump Station has numerous building envelope deficiencies. The 12”x12” glass block windows have failing grout joints between the blocks and failing perimeter caulk joints; the exterior doors do not properly close and have rusting hardware; the interior wall paint is peeling and flaking; the wet-well stair handrail is rusting; the EPDM roof is showing signs of age, and a damaged exterior roof scupper and downspout allows roof runoff to flow down the building façade, facilitating organic growth and efflorescence on the façade.

No hazardous material survey was available for the pump station during the feasibility study phase. A survey will be performed prior to future design work.

The proposed architectural scope of work is to re-grout the damaged block window joints and install new perimeter window caulking on both the interior and exterior; replace both man-doors with new insulated metal doors, frames, and stainless-steel hardware; powerwash the entire interior of the pump station, including the lower Pump Rooms, and repaint the Engine Room with epoxy paint, and install a new aluminum handrail at the wet-well stair.

On the exterior, replace the aging roof with a new white EPDM membrane, over coverboard and sloped rigid insulation and new prefinished metal coping; repair the existing damaged roof scupper and downspout to provide proper roof drainage; clean all exterior brick surfaces, window sills, concrete medallions and watertable, and apply a water repellant to the entire exterior masonry façade.

In conjunction with the Mechanical and Electrical scope of work, provide, as required, new exterior wall penetrations for new louvers, ductwork, conduit or other accessories.

1.2 NORTH MEADOWS (HARTFORD)

The North Meadow Pump Station is located at 25 Leibert Road, Hartford, CT and was built in 1939. It is a brick walled structure with steel columns and a roof construction of concrete encased steel beams with a reinforced concrete roof slab and is approximately 72 feet long x 29 feet wide x 22 feet tall with a 9-foot x 10-foot-high overhead door on one end. A 9-foot-tall one-story brick and masonry office addition (16 feet x 18 feet) was added

in 1965, above the existing boiler room. There are two main levels, the ground level Engine Room and office addition, and lower-level Pump Room with a 24-foot-high ceiling. The Pump Room houses (4) main centrifugal pumps and (1) small centrifugal pump. There is a steel catwalk system in the Pump Room that provides multiple levels of access to various pump components. The boiler room beneath the office addition is accessed by an elevated catwalk system in the Pump Room.

The North Meadows Pump Station has numerous building envelope deficiencies. The 5”x5” glass block windows have failing grout joints between the blocks and failing perimeter caulk joints, and the exterior protective expanded metal mesh sheets are rusting; the exterior doors do not properly close; the interior wall paint is peeling and flaking; the lower-level steel stair and catwalk systems are rusting; the roof was repaired using the AlphaGuard BIO Tremco Roof Restoration System in 2025; and the painted exterior façade has various graffiti markings and is weathered.

No hazardous material survey was available for the pump station during the feasibility study phase. A survey will be performed prior to future design work.

The proposed architectural scope of work is to re-grout the damaged block window joints and install new perimeter window caulking on both the interior and exterior; replace the existing man-door with new insulated metal door, frame, and stainless-steel hardware; replace the existing overhead door with a new overhead sectional door with integral man-door; power-wash the entire interior of the pump station, including the lower Pump and Boiler Rooms, and repaint the Engine Room and Office with epoxy paint.

The Pump Room will have a new aluminum stair and catwalk system installed to provide access to all appropriate components.

On the exterior, replace the roof with a new white EPDM membrane, over coverboard and sloped rigid insulation and new prefinished metal coping; remove, clean, paint, and reinstall the extruded metal mesh window protection; powerwash, clean and repaint the painted pumphouse walls; and powerwash the exposed office brick walls and apply a water repellant to the exposed exterior masonry façade.

In conjunction with the Mechanical and Electrical scope of work, provide new exterior wall penetrations for new required louvers, ductwork, conduit or other accessories.

1.3 SOUTH MEADOWS (HARTFORD)

The South Meadows Pump Station is located next to 1014 Wethersfield Ave, Hartford, CT and was built around 1932. It is a brick walled structure with steel columns and a roof construction of steel beams and purlins with precast concrete roof panels. The building is approximately 67 feet long x 40 feet wide x 22 feet tall. A 15-foot-tall one-story brick and steel garage addition (16 feet x 30 feet) was added in 1956, and a 10-foot-tall one-story brick and block office (13 feet x 16 feet) was added in 1965. There are three levels to the main structure, the ground level Engine Room (along with the garage and office

additions); a lower mid-level, located at the center third of the building, that contains a furnace, air compressors, and storage space; and a 2-story high lower-level. The lower-level is separated by the mid-level into an East and West Pump Room. Each Pump Room contains (3) centrifugal pumps and is accessed via a separate steel stair from the mid-level.

The South Meadows Pump Station has numerous building envelope deficiencies. The main building's sliding windows are faulty and drafty, and the garage and office windows have failing caulk; the exterior doors do not close properly and/or are missing weatherstripping; the garage door has graffiti and does not close completely; the interior wall paint is peeling and flaking; the lower-level steel stairs and metal gratings are rusting; the roof was repaired using the AlphaGuard BIO Tremco Roof Restoration System in 2025; and the exterior brick façade has various graffiti markings and is weathered.

No hazardous material survey was available for the pump station during the feasibility study phase. A survey will be performed prior to future design work.

The proposed architectural scope of work is to replace the main building's windows and apply new perimeter window caulking on both the interior and exterior at the existing garage and office windows; replace the existing man-doors with new insulated metal door, frame, and stainless-steel hardware; replace the existing overhead door with a new overhead sectional door; power-wash the entire interior of the pump station, including the lower Pump and mid-level Rooms, and repaint the Engine Room, Garage, and Office with epoxy paint.

The Pump Rooms will have new aluminum stairs and aluminum catwalk/grating systems installed to provide access to all appropriate components.

On the exterior, replace the roof with a new white EPDM membrane, over coverboard and sloped rigid insulation and new prefinished metal coping; repair existing downspouts and install diverters to prevent water from running down building façade; re-stucco and paint around window openings; powerwash all exterior surfaces, and apply a water repellant to the entire exterior masonry façade.

In conjunction with the Mechanical and Electrical scope of work, replace existing thru-wall muffler flanges and provide new exterior wall penetrations for new required louvers, ductwork, conduit or other accessories.