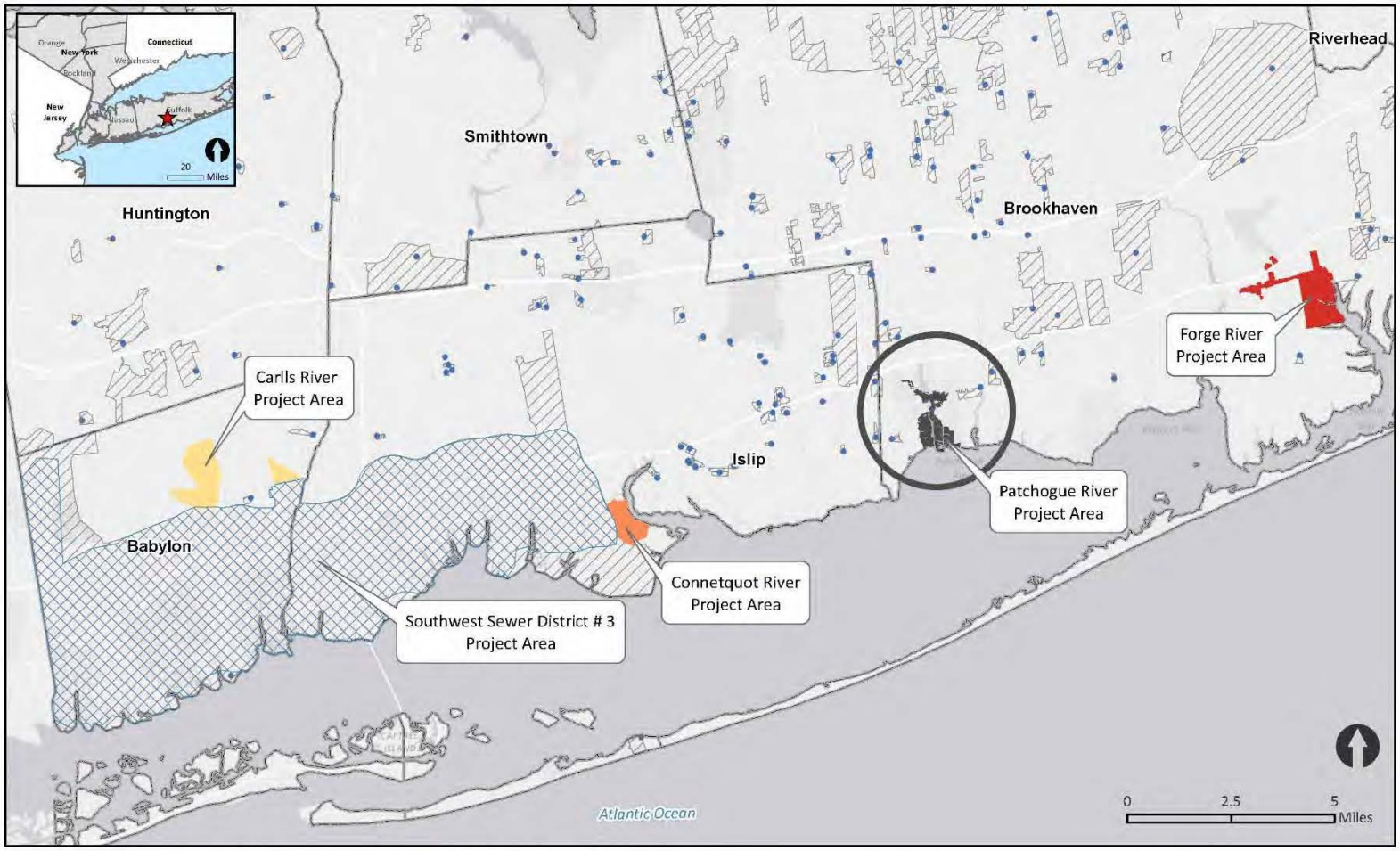
APPENDIX A: FIGURES



Suffolk County Towns
Existing Sewer Districts
Existing Sewage Treatment Plants
Carlls River Project Area
Connetquot River Project Area
Forge River Project Area
Patchogue River Project Area
Southwest Sewer District # 3 Project Area

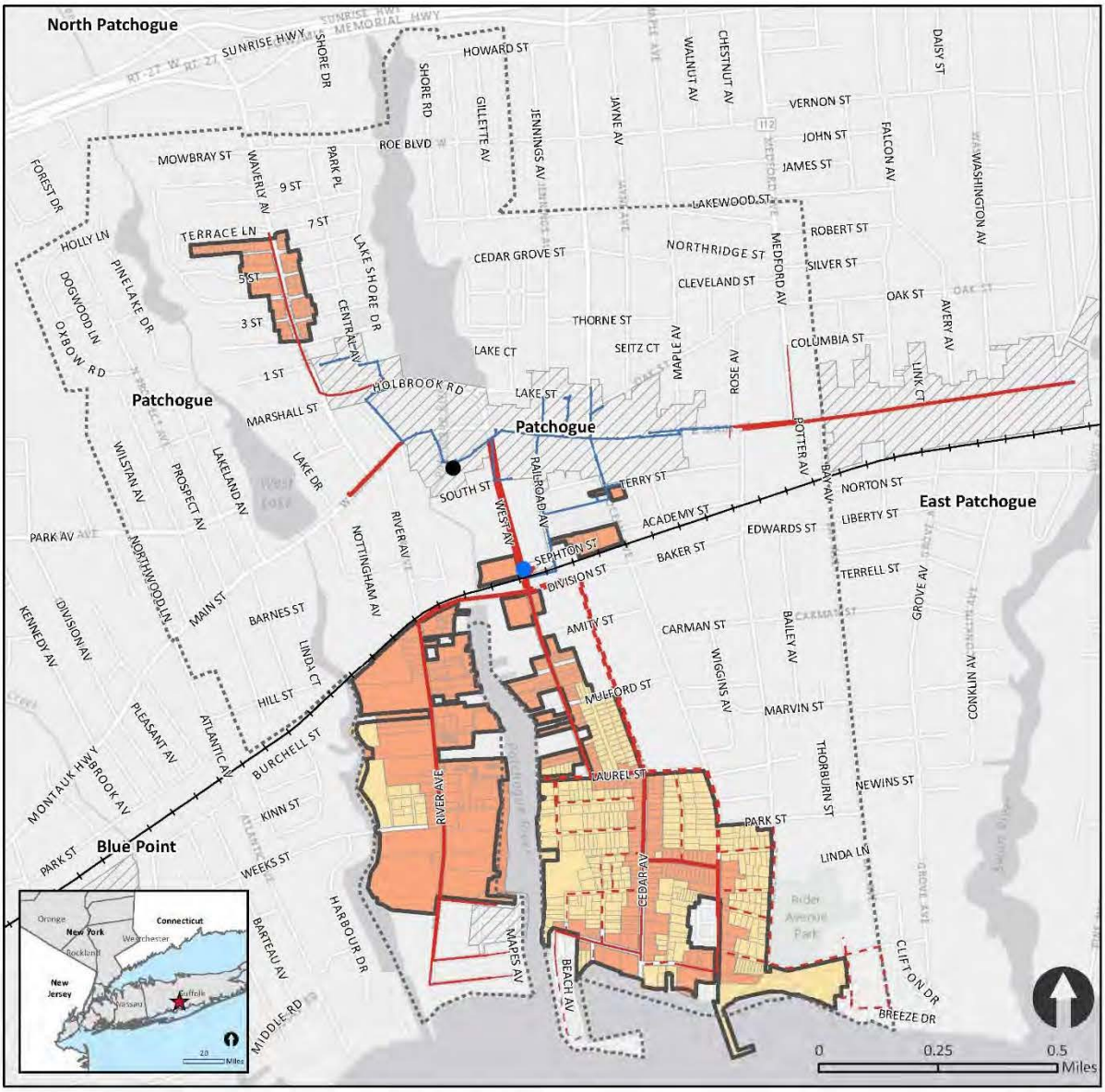
Source: Suffolk County GIS (2014); Gayron deBruin; New York State GIS (2013); ESRI Gray Base Map (2014).

Figure 1

Suffolk County Coastal Resiliency Initiative

Village of Patchogue
Out-of-District Sewer Extension

Louis Berger



- Village Boundary
- Advanced Wastewater Treatment Facility
- West Avenue Pump Station
- Existing Sewer Districts
- Long Island Rail Road
- Project Area
- Project Area Parcels
- Parcels with Existing Sewer Infrastructure that Require Installation of on-lot Grinder Units
- Parcels that Require Sewer Infrastructure and the Installation of on-lot Grinder Units

Sewer Lines

- Existing 2 Inch LPS Force Main
- Existing 3 Inch LPS Force Main
- Existing 4 Inch LPS Force Main
- In-District Gravity System
- Proposed 2 Inch LPS Force Main
- Proposed 3 Inch LPS Force Main
- Proposed 4 Inch LPS Force Main

Figure 2

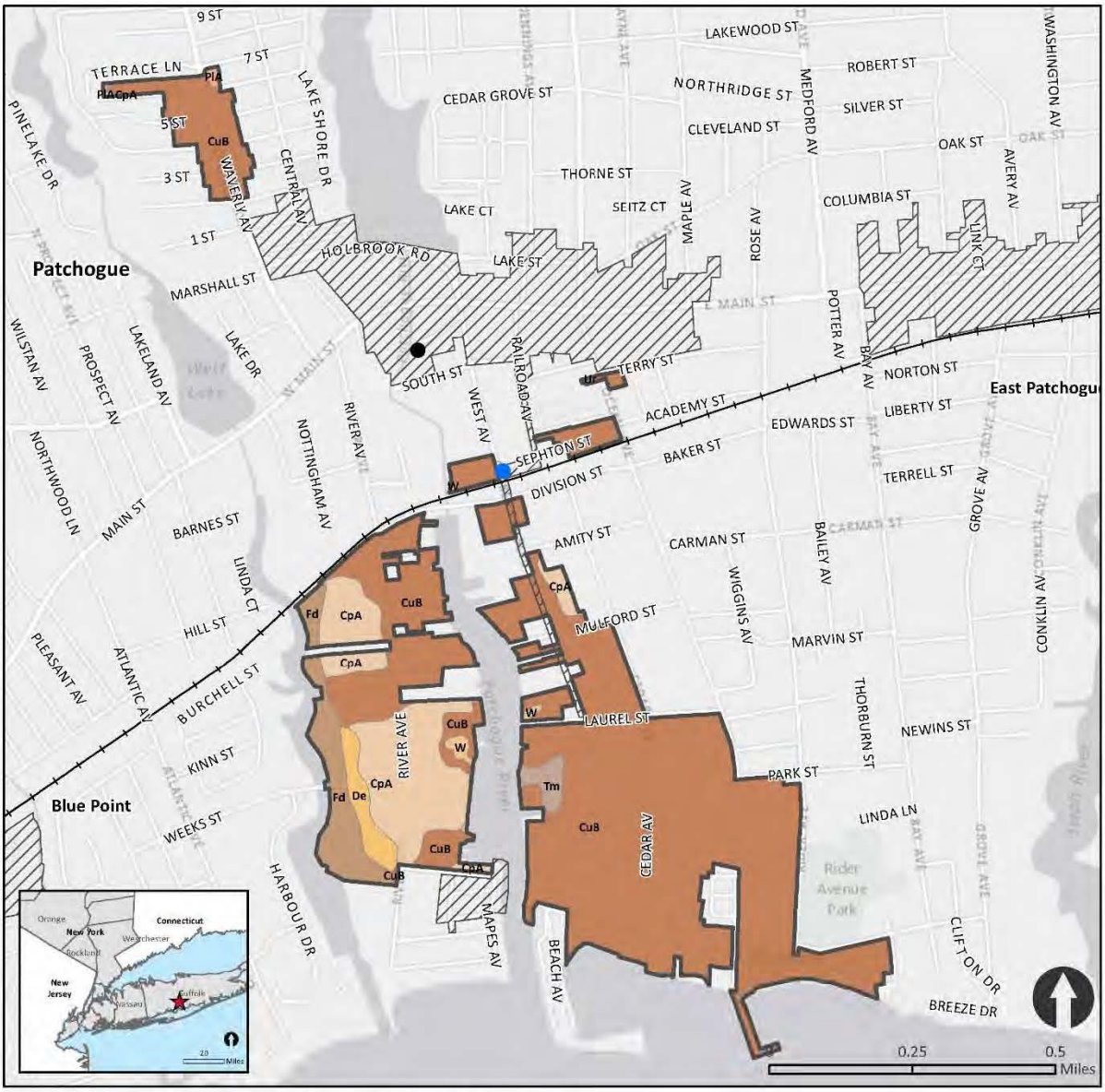
Project Area

Village of Patchogue
Out-of-District Sewer Extension

Source: Suffolk County GIS; ESRI World Imagery; Engineering Report for the Coastal Resiliency & Nitrogen Mitigation Plan (CRNMP) for the Patchogue River (H2M 2014)

*The CRNMP identified 648 parcels for sewer extension illustrated here as the Project Area. The proposed project has been reduced to approximately 616 parcels within the existing project area, with exact parcels to be determined on a priority basis following field work during engineering design.

Louis Berger



- Advanced Wastewater Treatment Facility
- West Avenue Pump Station
- Existing Sewer Districts
- Long Island Rail Road
- Project Area

Soil Type in Project Area

- CpA - Carver and Plymouth Sands
- CuB - Cut and Fill Land, gently Sloping
- De - Deerfield Sand
- Fd - Fill Land, Dredged Material
- PlA - Plymouth Loamy Sand
- Tm - Tidal Marsh
- Ur - Urban Land
- W - Water

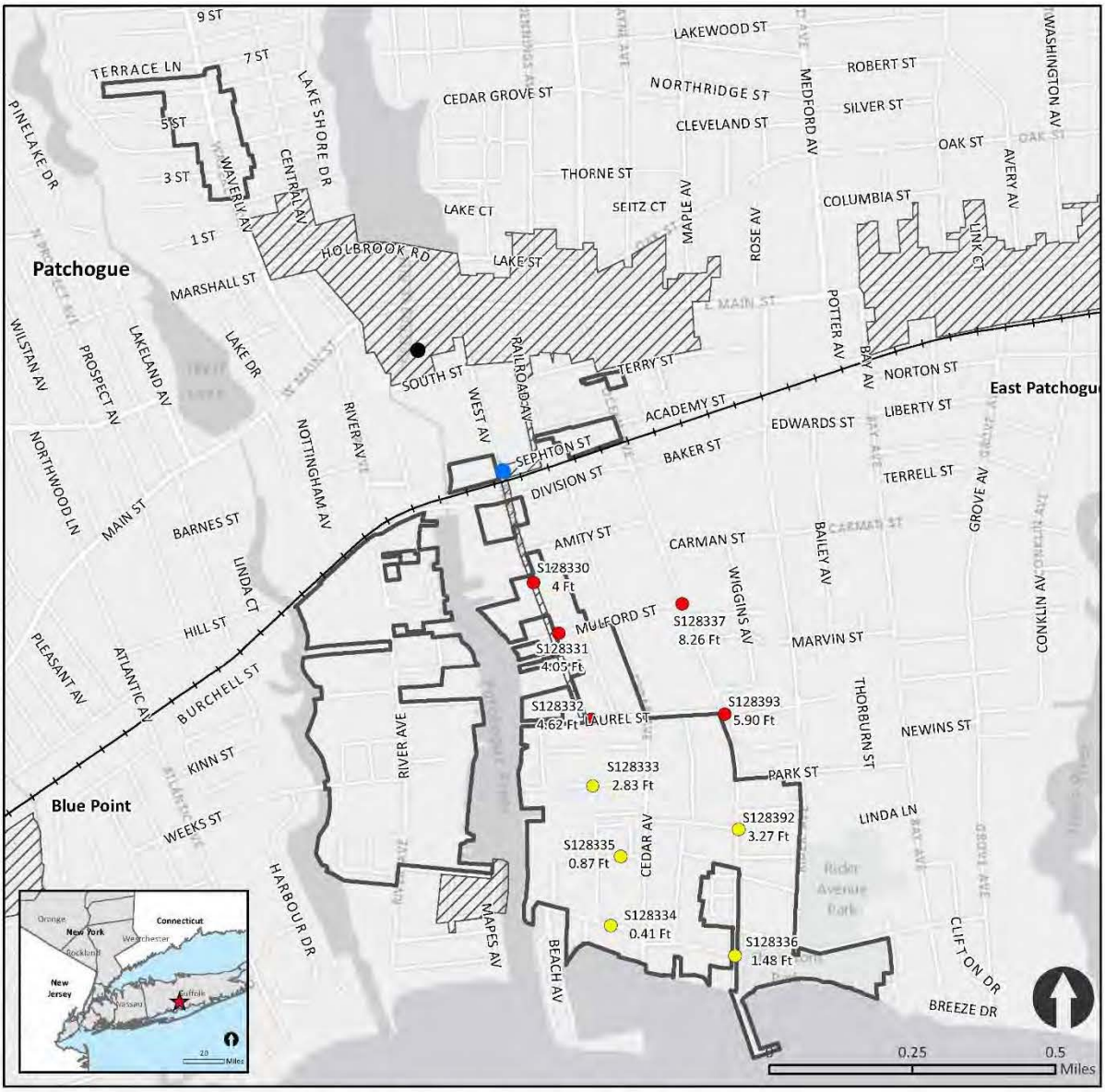
Figure 3

Soils

Village of Patchogue
Out-of-District Sewer Extension

Source: USGS Web Soil Survey; Suffolk County GIS;
ESRI Light Gray Base;
Engineering Report for the Coastal Resiliency & Nitrogen Mitigation Plan (CRNMP) for the Patchogue River (H2M 2014)

Louis Berger



- Advanced Wastewater Treatment Facility
- West Avenue Pump Station
- Existing Sewer Districts
- Long Island Rail Road
- Project Area

Well Depth to Ground Water in Feet

- 0.410000 - 3.900000
- 3.900001 - 8.260000

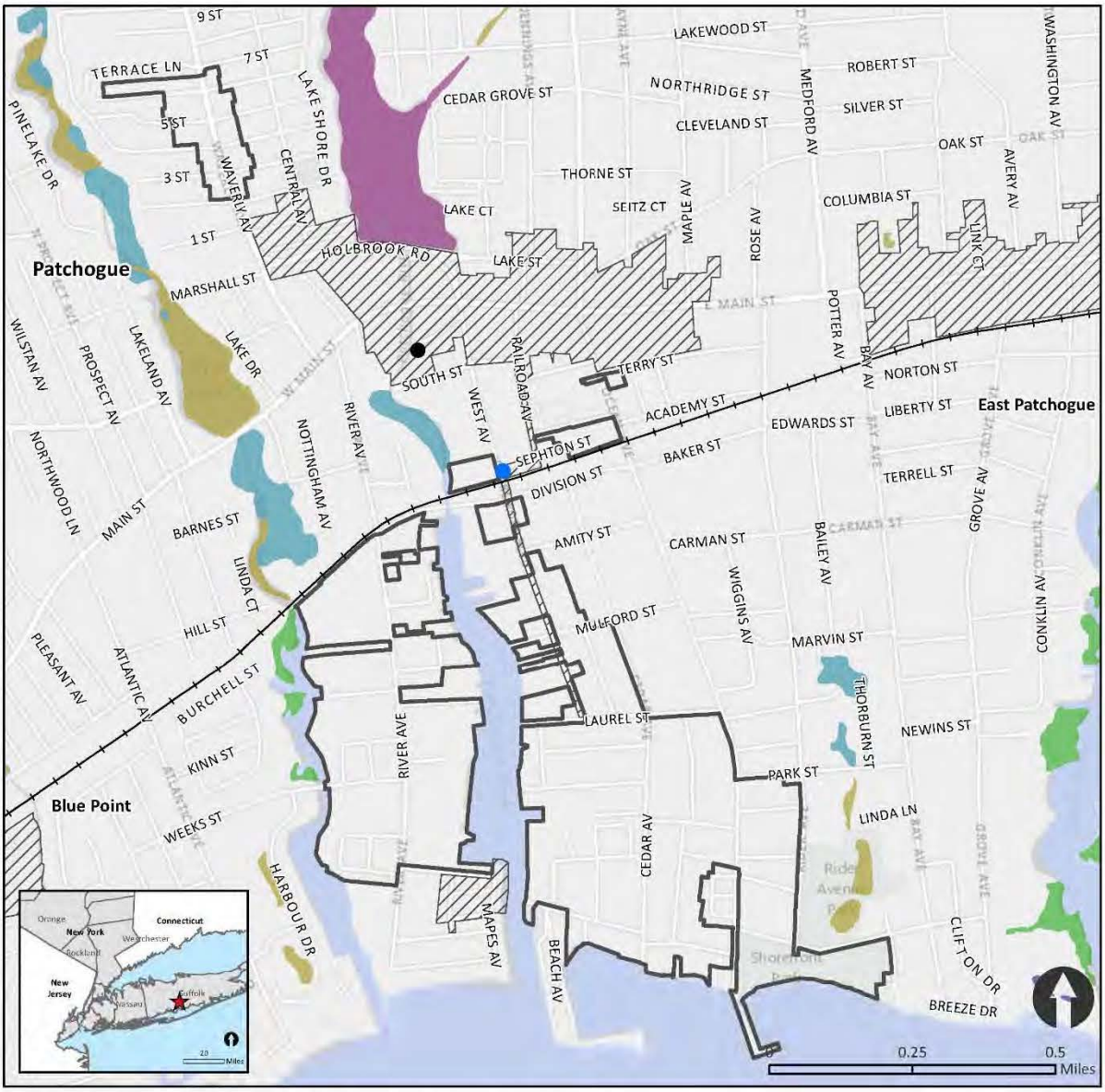
Figure 4

Depth to Groundwater

Village of Patchogue
Out-of-District Sewer Extension

Source: Suffolk County GIS; ESRI Light Gray Base;
Engineering Report for the Coastal Resiliency &
Nitrogen Mitigation Plan (CRNMP) for the Patchogue River (H2M 2014)

Louis Berger



- Advanced Wastewater Treatment Facility
- West Avenue Pump Station
- Existing Sewer Districts
- Long Island Rail Road
- Project Area

NWI - Wetland Type

- Estuarine and Marine Deepwater
- Estuarine and Marine Wetland
- Freshwater Emergent Wetland
- Freshwater Forested/Shrub Wetland
- Freshwater Pond
- Lake

Figure 5

NWI Wetlands

Village of Patchogue
Out-of-District Sewer Extension

Source: US Fish and Wildlife Service National Wetland Inventory; Suffolk County GIS; ESRI Light Gray Base; Engineering Report for the Coastal Resiliency & Nitrogen Mitigation Plan (CRNMP) for the Patchogue River (H2M 2014)

Louis Berger

- Advanced Wastewater Treatment Facility
- West Avenue Pump Station
- Existing Sewer Districts
- Long Island Rail Road
- Project Area
- DEC Wetlands

Figure 6

NYSDEC Wetlands

Village of Patchogue
Out-of-District Sewer Extension

Source: New York State Department of Environmental Conservation; Suffolk County GIS; ESRI Light Gray Base; Engineering Report for the Coastal Resiliency & Nitrogen Mitigation Plan (CRNMP) for the Patchogue River (H2M 2014)

Louis Berger

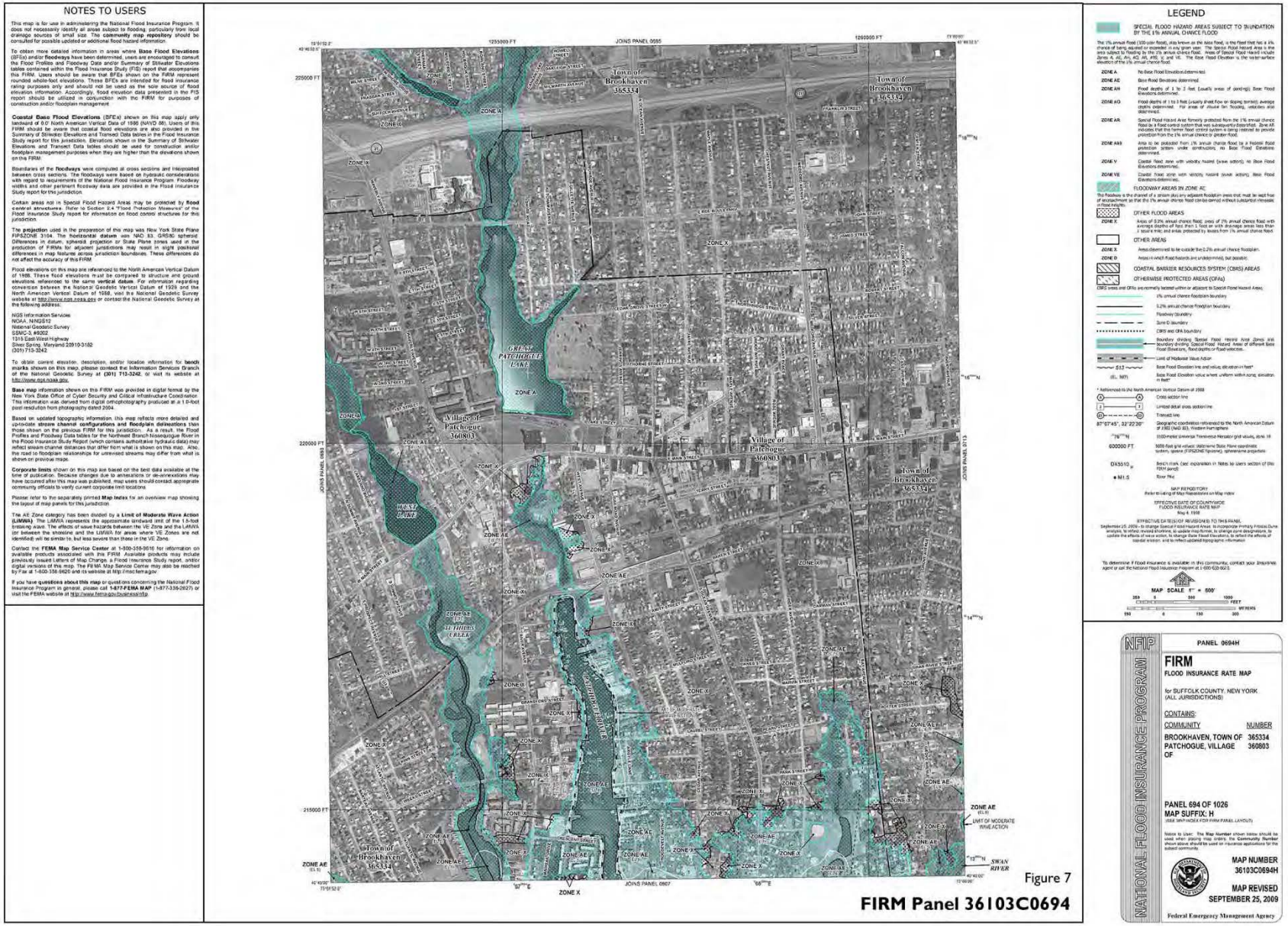


Figure 7

FIRM Panel 36103C0694

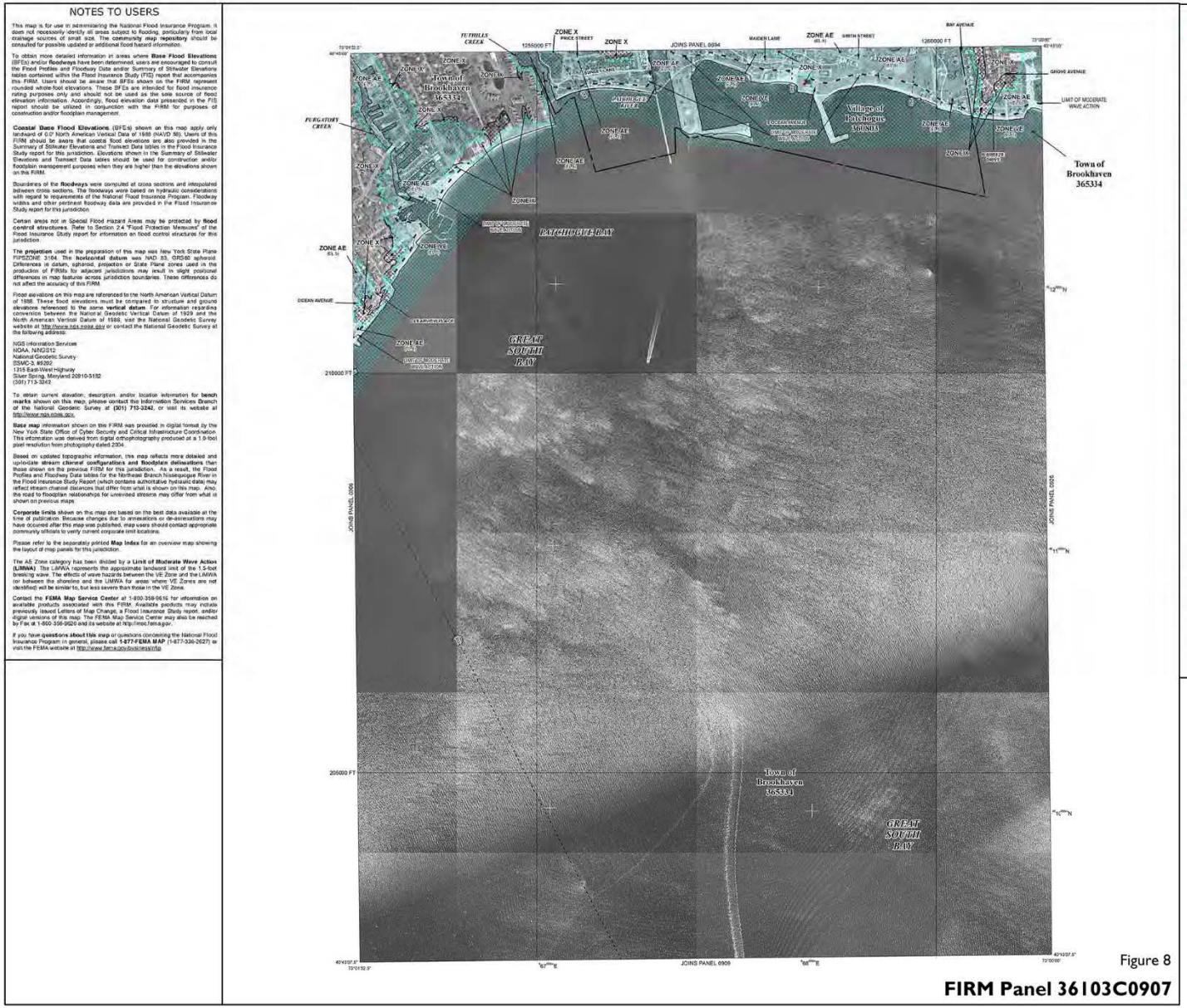
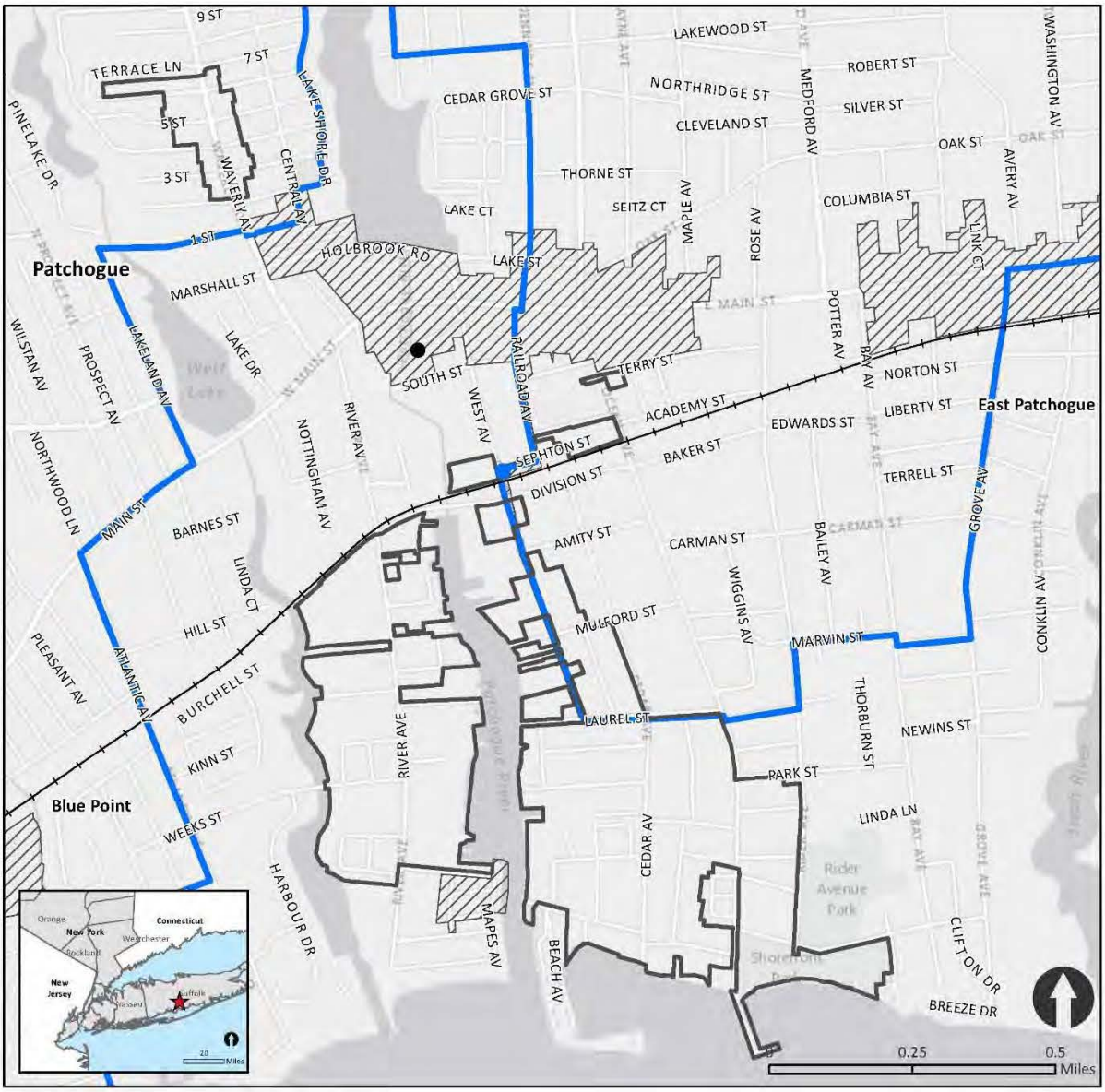


Figure 8

FIRM Panel 36103C0907



- Advanced Wastewater Treatment Facility
- West Avenue Pump Station
- Existing Sewer Districts
- Long Island Rail Road
- Project Area
- Coastal Boundary

Figure 9

Coastal Zone

Village of Patchogue
Out-of-District Sewer Extension

Source: New York State Department of Environmental Conservation; Suffolk County GIS; ESRI Light Gray Base; Engineering Report for the Coastal Resiliency & Nitrogen Mitigation Plan (CRNMP) for the Patchogue River (H2M 2014)

Louis Berger

- Advanced Wastewater Treatment Facility
- West Avenue Pump Station
- Long Island Rail Road
- Project Area
- Coastal Barrier Resource System

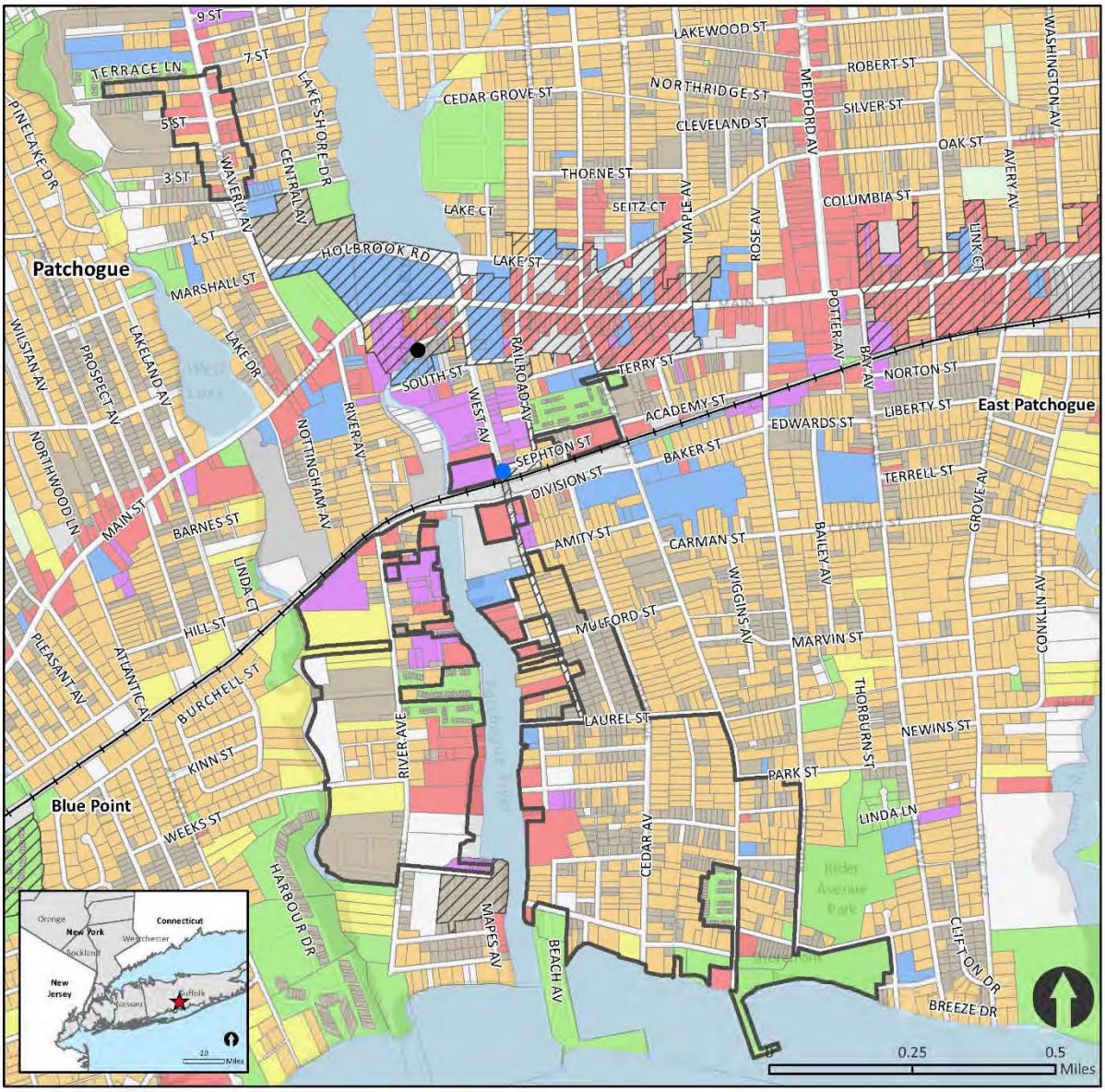
Figure 10

Coastal Barrier Resource System

Village of Patchogue
Out-of-District Sewer Extension

Source: New York State Department of Environmental Conservation; Suffolk County GIS; ESRI Light Gray Base; Engineering Report for the Coastal Resiliency & Nitrogen Mitigation Plan (CRNMP) for the Patchogue River (H2M 2014)

Louis Berger



- Advanced Wastewater Treatment Facility
- West Avenue Pump Station
- Existing Sewer Districts
- Long Island Rail Road
- Project Area

Existing Land Use

- Low Density Residential
- Medium Density Residential
- High Density Residential
- Commercial
- Industrial
- Institutional
- Recreation and Open Space
- Agricultural
- Vacant
- Transportation
- Utilities
- Waste Handling and Management
- Underwater Land

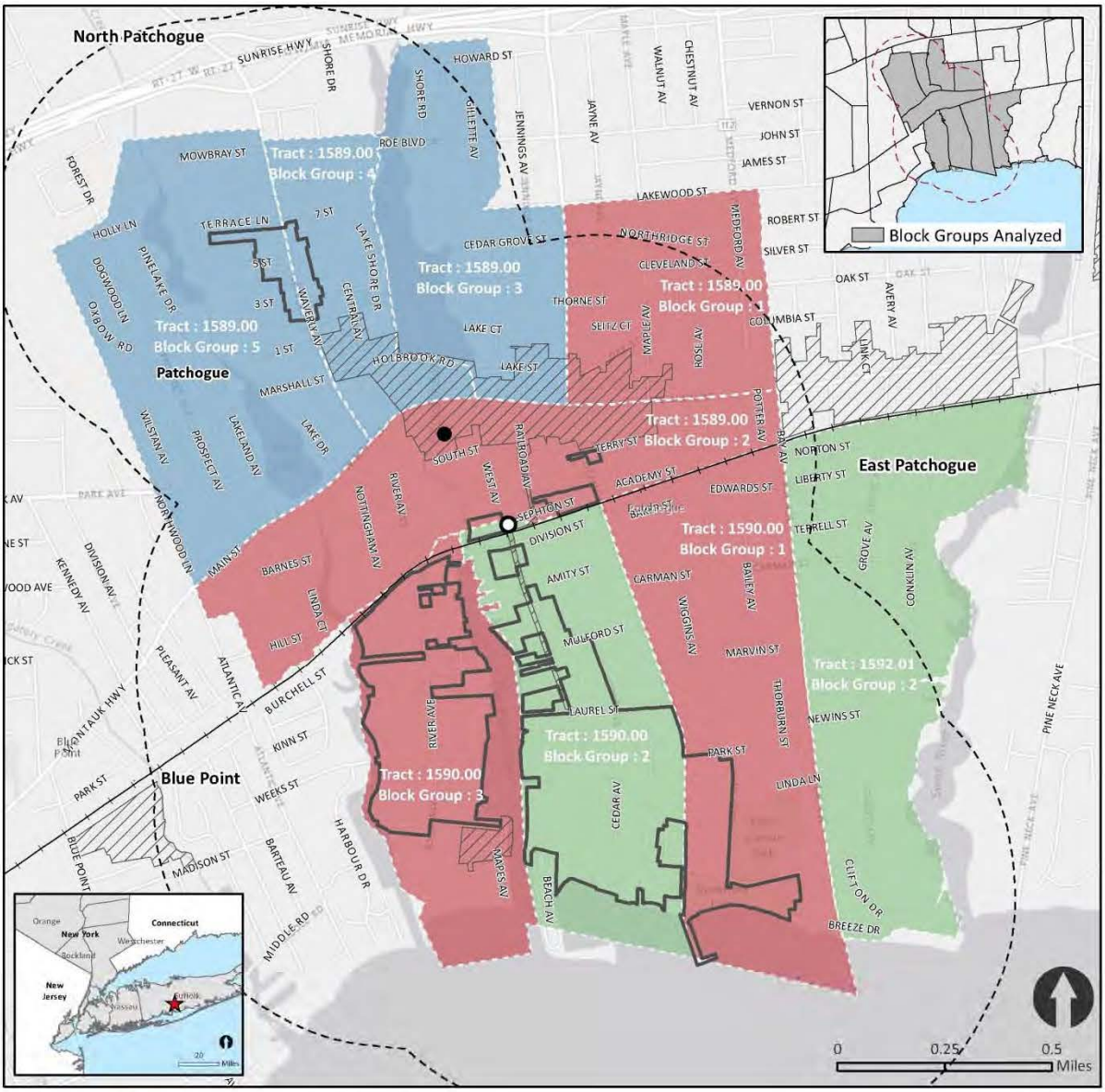
Figure 11

Existing Land Use

Village of Patchogue
Out-of-District Sewer Extension

Source: Suffolk County GIS; ESRI Light Gray Base;
Engineering Report for the Coastal Resiliency & Nitrogen Mitigation Plan (CRNMP) for the Patchogue River (H2M 2014)

Louis Berger



- Advanced Wastewater Treatment Facility
- West Avenue Pump Station
- Existing Sewer Districts
- Long Island Rail Road
- Project Area
- Half-Mile Buffer of Project Area

EJ Communities

- Minority
- Poverty
- Minority and Poverty

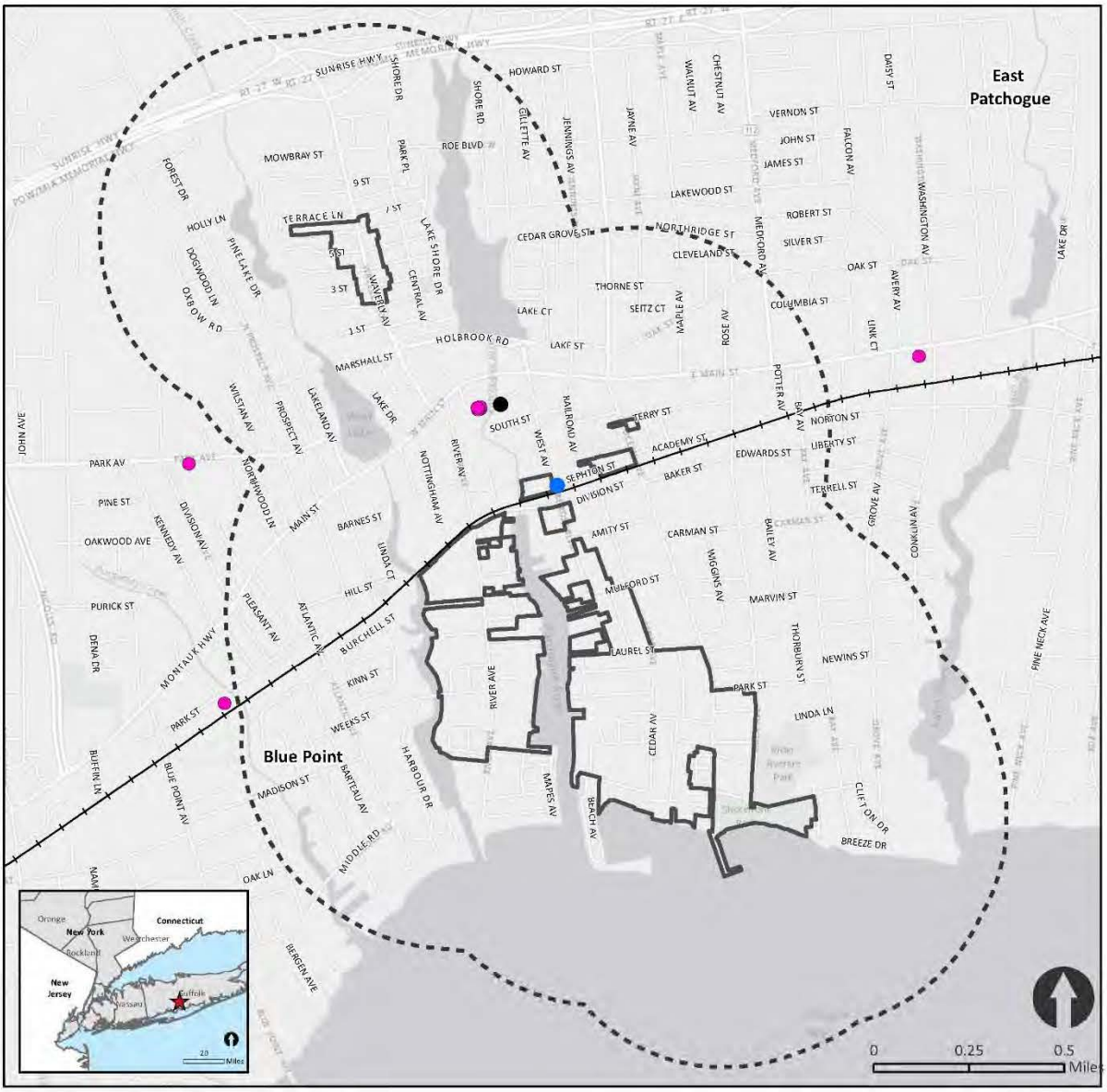
Figure 12

Environmental Justice Areas

Village of Patchogue
Out-of-District Sewer Extension

Source: Suffolk County GIS; ESRI Light Gray Base;
Engineering Report for the Coastal Resiliency &
Nitrogen Mitigation Plan (CRNMP) for the Patchogue River (H2M 2014)

Louis Berger



- Advanced Wastewater Treatment Facility
- West Avenue Pump Station
- Long Island Rail Road
- Project Area
- Remediation Sites

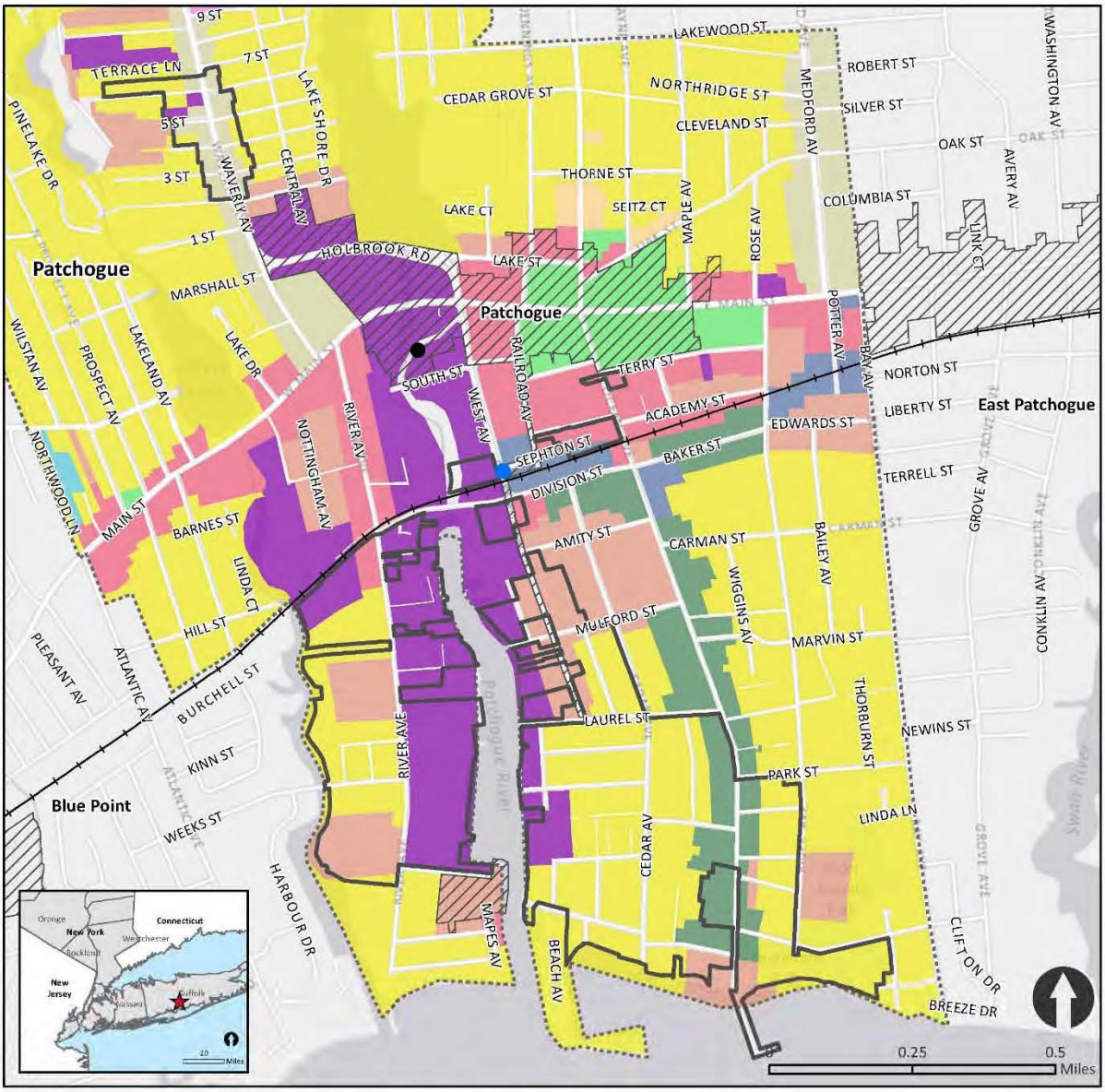
Figure 13

Remediation Sites

Village of Patchogue
Out-of-District Sewer Extension

Source: USGS Web Soil Survey; Suffolk County GIS;
ESRI Light Gray Base;
Engineering Report for the Coastal Resiliency &
Nitrogen Mitigation Plan (CRNMP) for the Patchogue River (H2M 2014)

Louis Berger



- Advanced Wastewater Treatment Facility
- West Avenue Pump Station
- Existing Sewer Districts
- Long Island Rail Road
- Project Area

Zoning District

- Residence A
- Residence and Office B
- Residence C
- Residence RH
- Residence Professional Office
- Business D1
- Business D2
- Business D3
- Business D4
- Business D5
- Industrial E

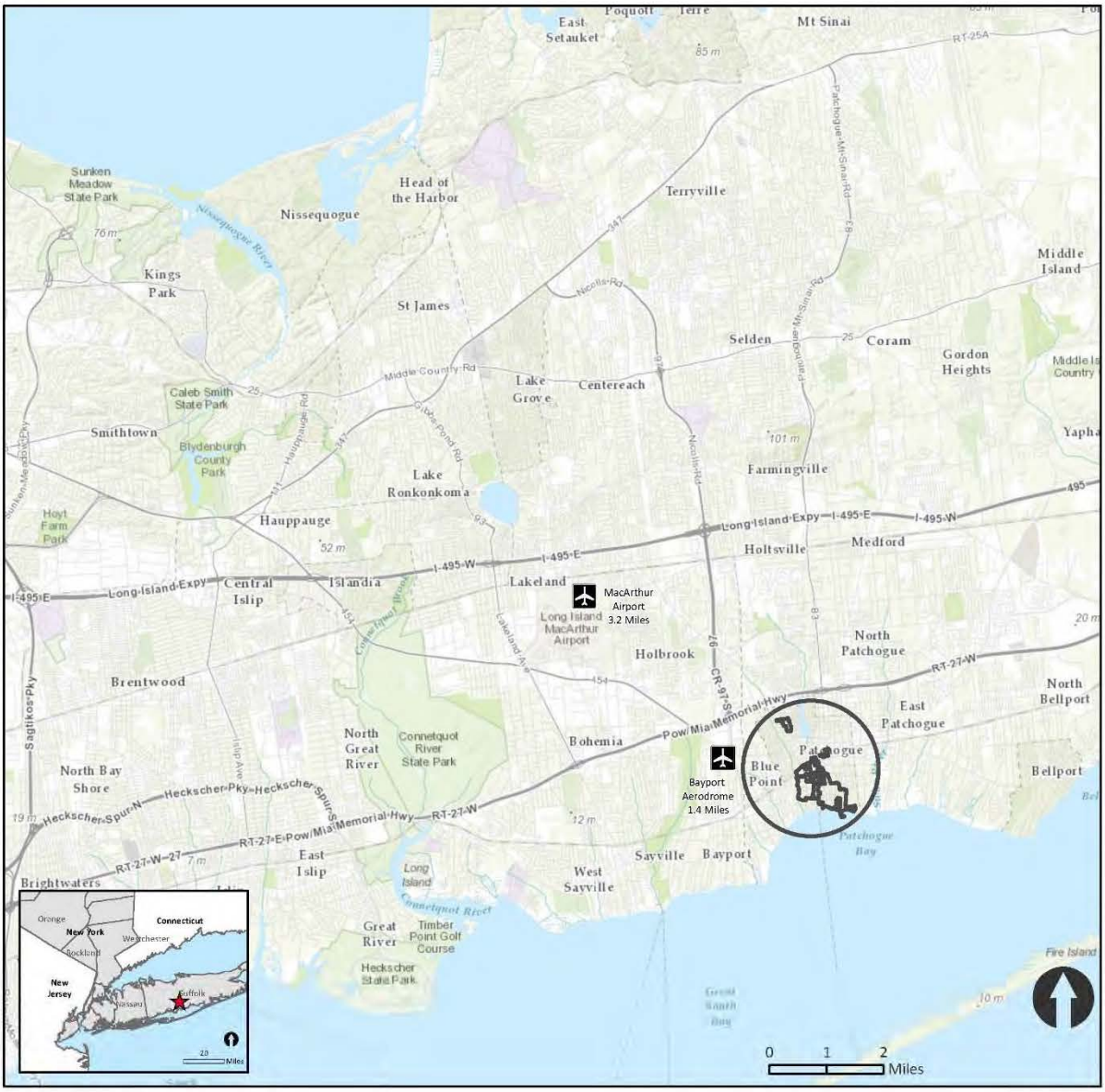
Figure 14

Zoning Districts

Village of Patchogue
Out-of-District Sewer Extension

Source: Suffolk County GIS; ESRI Light Gray Base;
Engineering Report for the Coastal Resiliency &
Nitrogen Mitigation Plan (CRNMP) for the Patchogue River (H2M 2014)

Louis Berger



Project Area

Airport

Figure 15

Airport Hazards

Village of Patchogue
Out-of-District Sewer Extension

Source: Suffolk County GIS; ESRI World Map;
Engineering Report for the Coastal Resiliency &
Nitrogen Mitigation Plan (CRNMP) for the Patchogue River (H2M 2014)

Louis Berger