

Section 4

Environmental and Natural Resources

The Study Area was screened for the following natural and cultural resources and physical environment features:

- Surface Water Resources
- Ground Water Resources
- Floodplains
- Wetlands
- Threatened and Endangered Species and Critical Habitats
- Historic Register Properties
- Section 4(f) and 6(f) Properties
- Sensitive Noise Receivers
- Hazardous Risk Sites

In addition to reviewing aerial images of the Study Area, current Geographic Information Systems (GIS) data from the Connecticut Department of Environmental Protection (CTDEP) and the Town were obtained and reviewed during this screening analysis.

4.1 Surface Water Resources

The Study Area lies within the Connecticut River watershed. The Connecticut River is located about one-half mile east of the study area and flows from north to south toward Long Island Sound.

Surface water resources within the Study Area include an unnamed pond in the southwestern portion of the Study Area near the Rocky Hill-Cromwell town line, as well as Dividend Brook which runs west to east through the center of the Study Area. In addition, there are several unnamed smaller streams in the Study Area. Figure 4-1, Environmental Resources, displays the surface water resources, as well as the environmental resources identified and screened in the Study Area.

4.2 Groundwater Resources

Most of the groundwater in the Study Area is designated by the CTDEP as Class GA. Designated uses of Class GA groundwater include existing private and potential public or private supplies of water suitable for drinking without treatment. The base flow is connected to nearby surface water bodies. Discharges to Class GA groundwater is restricted to treated domestic sewage, certain agricultural wastes, and certain water treatment discharges.

A few locations in the Study Area are listed as GA impaired, meaning that the actual quality of the groundwater does not currently meet the assigned GA classification. In addition, there is one area designated as GAA-Well Impaired located in the southeast corner of the Study Area; a Class GAA-

Well-Impaired area is an impaired area that surrounds a public water supply well. The areas of impaired groundwater are displayed in Figure 4-1.

4.3 Wetlands

According to the U.S. Army Corps of Engineers (ACOE) 1987 Wetlands Delineation Manual, federal wetlands can generally be defined as areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. The State of Connecticut defines wetlands as land, including submerged land, which consists of any of the soil types designated as poorly drained, very poorly drained, alluvial, and floodplain by the Natural Resources Conservation Services (NRCS).

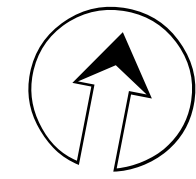
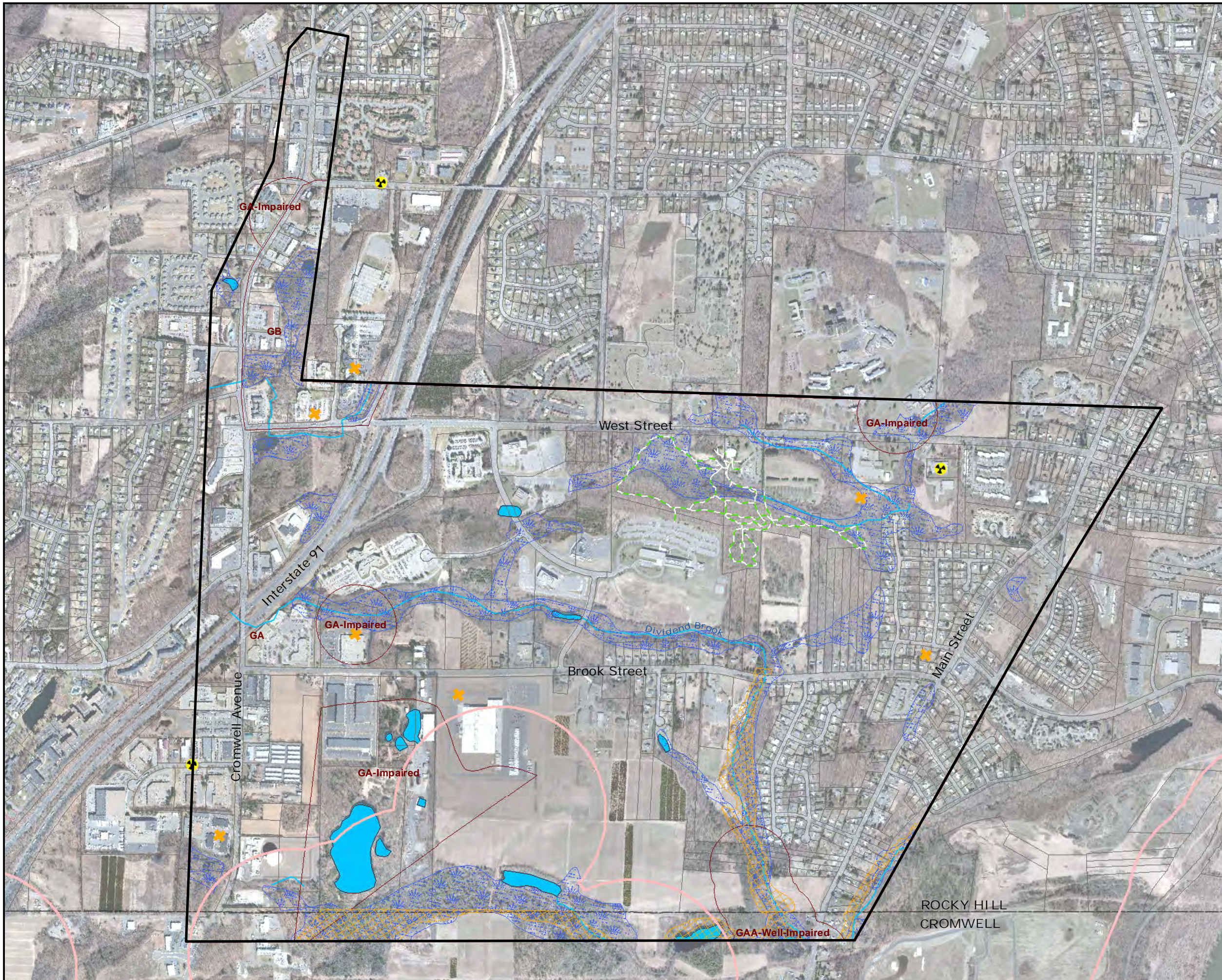
Based on a review of CTDEP GIS mapping, there are a number of wetland areas within the Study Area. Wetlands are located along the Dividend Brook corridor; the area totals about 58 acres. A linear wetland (about 8 acres) runs north-south to the east of Route 3 between West Street and Elm Street. Another area of wetlands (about 17 acres) is associated with an unnamed stream near Westbrook Road and West Street in the northeast corner of the Study Area. A larger wetland (about 75 acres) associated with an unnamed stream connecting several small surface water bodies is located in the southern portion of the study area, running east-west along the Cromwell town border. Figure 4-1 displays potential wetlands as identified by NRCS.

4.4 Floodplains and Stream Channel Encroachment Lines

Floodplains are low-lying areas adjacent to rivers or streams that are inundated periodically by floodwaters. A 100-year floodplain is an area that has a one percent chance of being inundated by floodwaters in a given year, whereas a 500-year floodplain is an area that has a one-five hundredth chance (0.2%) of being inundated by floodwaters in a given year. Floodways are located within floodplains and consist of the river or stream channel plus any portion of the 100-year floodplain which carries stream flows during flood events. Floodplains and floodways are important for storing floodwaters so that adjacent properties and downstream areas are not damaged during flood events. In Connecticut, stream channel encroachment lines (SCELs) are jurisdictional boundaries established by the CTDEP that generally outline riverine floodplain areas and which may also include portions of 100-year floodplains and floodways.

There are 100-year floodplains and 500-year floodplains within the Study Area associated with Dividend Brook, which runs through the center of the Study Area. In addition, there are 100-year and 500-year floodplains associated with an unnamed stream connecting small surface water bodies located along the Cromwell town line. Along the southeastern boundary of the Study Area, there are 100-year and 500-year floodplains associated with an unnamed stream which runs parallel to Pleasant Valley Road. The floodplains are delineated in Figure 4-1.

There are no Stream Channel Encroachment Lines within the Study Area.



0 375 750 1,500 2,250 3,000 Feet

Legend

- Study Area
- Leachate Wastewater Discharge
- Hazardous Material
- Multi-Use Trail
- Natural Diversity Database
- 100 Year Flood Zone
- Ground Water Quality
- State Wetland
- Municipal Boundary
- Parcel Boundary
- Open Water

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Rocky Hill, Connecticut

Figure 4-1
Environmental Resources

4.5 Threatened and Endangered Species and Critical Habitats

Rare, threatened, and endangered species are protected by federal and state legislation. Information on species designated (listed) as threatened and endangered at the state and federal levels is compiled and made available through the CTDEP's Natural Diversity Data Base (NDDDB).

The CTDEP NDDDB GIS data layer was consulted to determine if there were any records in the Study Area. Due to the sensitivity of the information, the GIS data layer only depicts approximate locations of protected species, their habitats, and/or significant natural communities. The GIS data review revealed NDDDB records in the southernmost portions of the Study Area.

4.6 Historic Register Properties

There are no properties listed on the 2008 National Register of Historic Places within the project Study Area.

4.7 Section 4(f) and 6(f) Properties

There are a number of parks and open space properties that could potentially be adversely affected by improvement alternatives. These include Section 4(f) properties, Section 6(f) properties, and private open space. Section 4(f) of the Department of Transportation Act of 1966 protects historic resources eligible for listing or listed on the National Register of Historic Places, as well as public parks, recreation areas, and wildlife/waterfowl refuges from adverse impacts. All park and open space properties that have the potential to be affected are displayed in Figure 4-2.

There are four 4(f) properties that are all or partially within the Study Area. All 4(f) properties are open to the public without a fee. The schools listed below are identified as 4(f) sites due to the on-site playgrounds / athletic fields that are open for public recreation outside of school session hours. The properties include:

- Dinosaur State Park (82 acres)
- Hoye Memorial Field (6 acres)
- Moser School (6 acres)
- Dividend Pond Open Space (121 acres)

In addition, Dinosaur State Park is listed as a Section 6(f) property, and is the only 6(f) property in the Study Area. Section 6(f) of the Land and Water Conservation Funding Act of 1965 (LWCFA) states that any lands purchased or improved with Federal LWCFA funding may not be "converted" to another use without being replaced in kind by land of like size and value.

4.8 Sensitive Noise Receivers

The Federal Highway Administration's Noise Abatement Criteria (NAC) documented in 23 CFR 772, Procedures for Abatement of Highway Traffic Noise and Construction Noise is based on Land Use Activity Categories. Land uses considered most sensitive to highway/roadway noise are designated as either Land Use Activity Category A or B. Land Use Activity Category A includes lands on which serenity and quiet are of extraordinary significance and serve an important public need and where the preservation of those qualities is essential if the area is to continue to serve its intended purpose. Such uses include outdoor amphitheatres, outdoor concert pavilions, and National Historic Landmarks with significant outdoor use. There are no Category A land uses in the project Study Area.

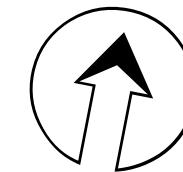
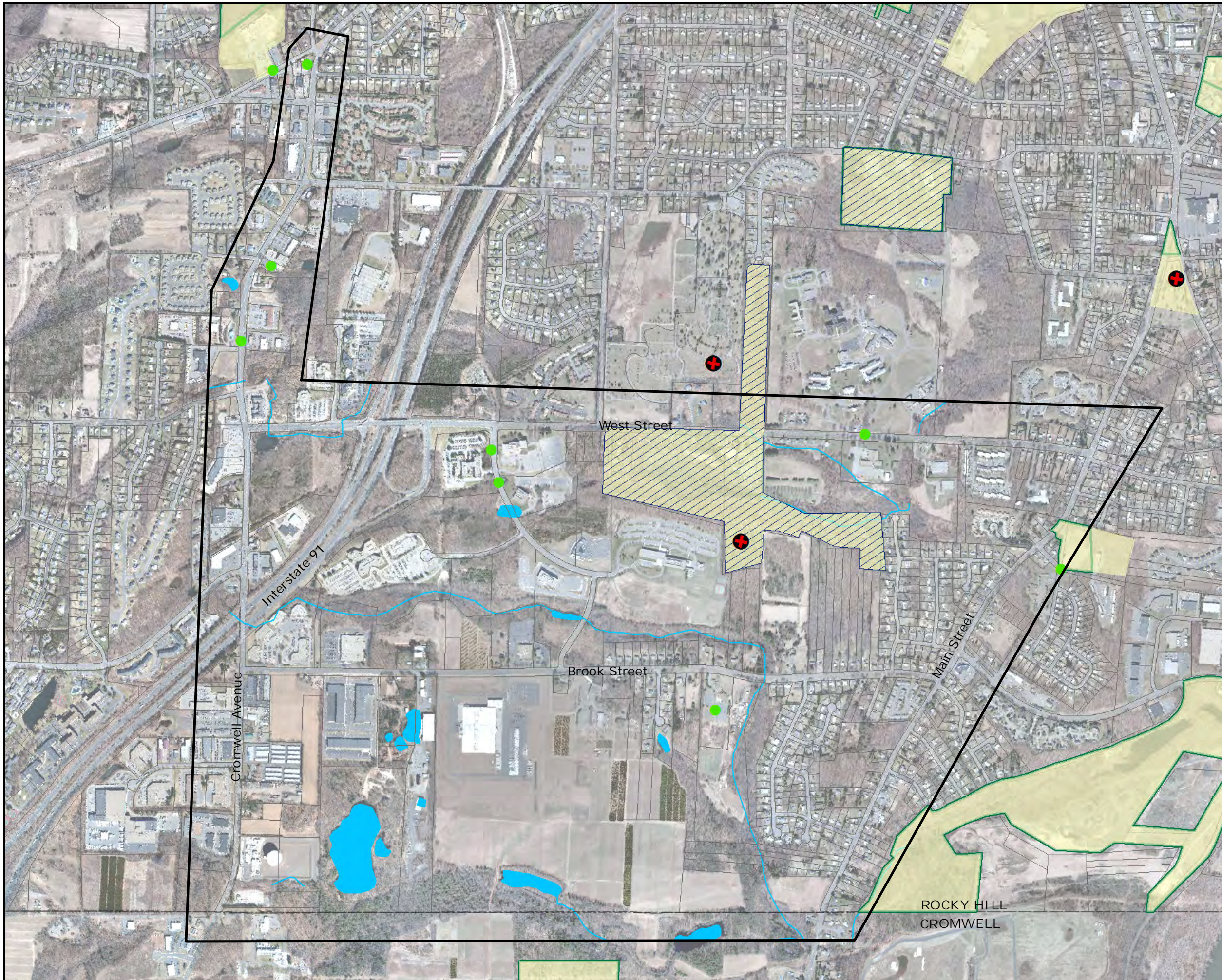
Land Use Activity Category B includes picnic areas, recreation areas, playgrounds, active sports areas, parks, residences, motels, hotels, schools, churches, libraries, and hospitals. For this planning study, Category B land uses were identified using existing land use maps and GIS data. Noise sensitive land uses, such as schools, churches, hotels, and hospital facilities, are listed below and are depicted on Figure 4-2, Community Resources. Section 4(f) properties, which are public parks and recreational areas in the Study Area, should also be considered noise sensitive land uses for the purpose of this evaluation. In addition, the existing neighborhoods located in the eastern portion of the Study Area on either side of Main Street are sensitive noise receptors. They should be considered when evaluating roadway improvements and development proposals, especially for noise impacts during construction.

- Veterans' Home & Hospital, 287 West Street
- Residence Inn, 680 Cromwell Avenue
- Hartford Marriott, 100 Capitol Boulevard
- St. Elizabeth Seton Church, 280 Brook Street
- Stork Club Daycare., 558 Cromwell Avenue
- Dr. Oran A. Moser School, 10 School Street
- KinderCare Learning Center, 303 Cromwell Avenue
- West Hill School, 95 Cronin Drive

4.9 Hazardous Risk Sites

Data sources that were reviewed to identify potential hazardous materials and environmental risk sites within the study area include the Environmental Protection Agency's (EPA) Comprehensive Environmental Response, Compensation, and Liability Information System (CERCLIS) GIS database, and the CTDEP GIS coverage entitled Landfill Leachate and Wastewater Discharges.

According to these sources, there is one location listed as a hazardous materials site located at 485 West Street in the northeast corner of the Study Area (see Figure 4-1). The site is the Connecticut Department of Transportation Research and Materials Laboratory.



0 375 750 1,500 2,250 3,000 Feet

Legend

- Study Area
- + Cemetery
- Noise Sensitive Receptor
- 6f Property
- 4f Property
- Preserved Open Space
- Recreational Area
- Municipal Boundary
- Parcel Boundary
- Open Water

Route 3 Traffic and Development Study
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Figure 1-2
Community Facilities Located
Within the Study Boundary

ROCKY HILL
CROMWELL