



Environmental Desktop Review Memo



Reference: R0255-00 WO#2 (GBRC-Solar PPA)
Green Brook Regional Center
275 Greenbrook Road
Green Brook Township, NJ 08812

Submitted to: **Mr. Ripenrai Nagar**
New Jersey Department of Human Services
Office of Property Management and Construction
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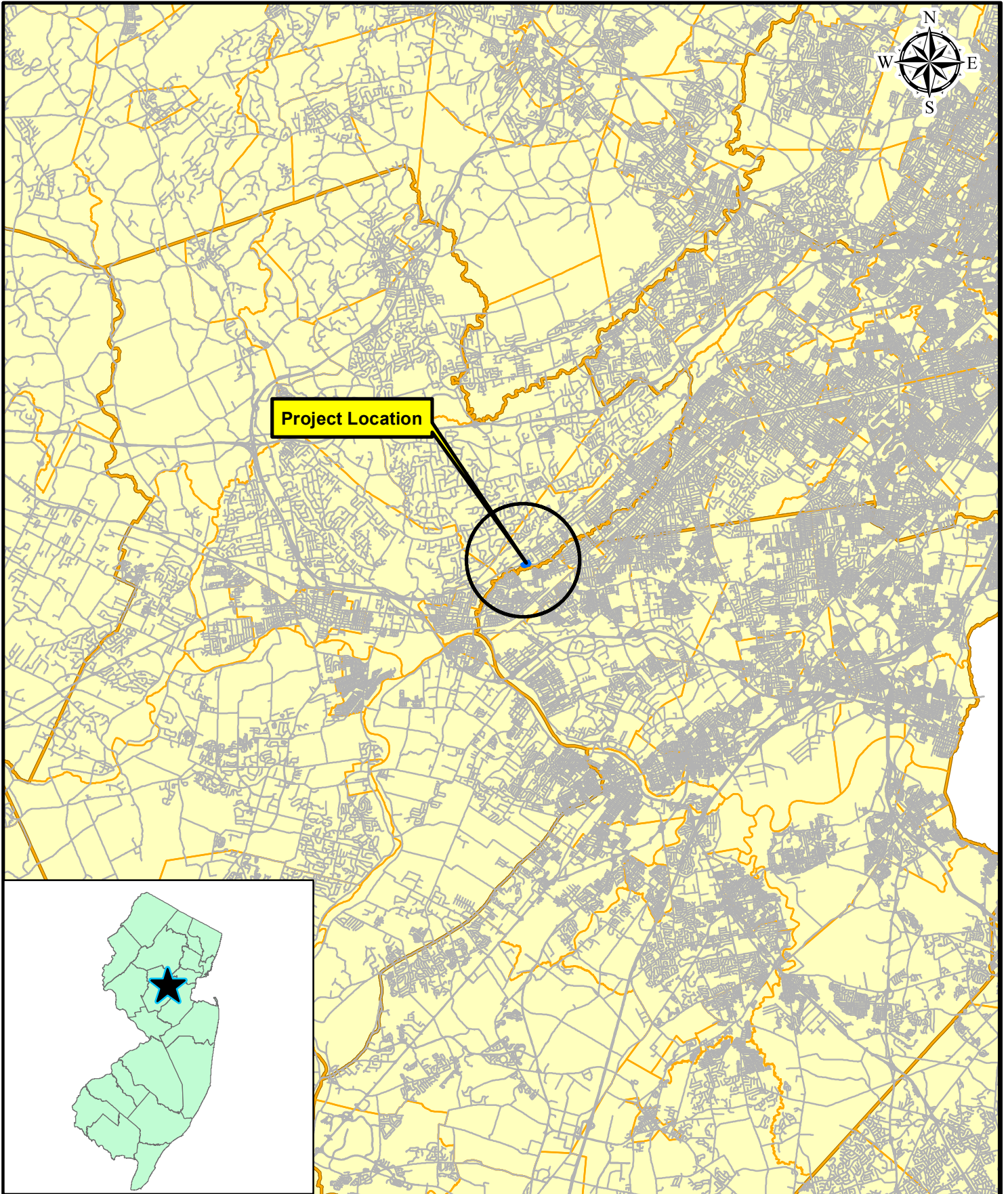
September 12, 2024

Introduction

At the request of the New Jersey (NJ) Department of Human Services (DHS), Office of Property Management and Construction (DPMC), Gannett Fleming, Inc. (Gannett Fleming) has completed an Environmental Desktop Review of the Green Brook Regional Center located at 275 Green Brook Road, Green Brook Township, NJ 08812 (Subject Property). See Figure 1: Regional Location Map.

The Subject Property is currently operated by NJ DHS as a developmental center for individuals with severe disabilities. The Subject Property houses disabled residents who receive training, medical care, and therapy. The Subject Property is developed with 71,500 square feet building with basement, and adjoining parking lot. The Subject Property can be accessed via Green Brook Road to the north. See Figure 2: USGS Project Location Map.

The Environmental Desktop Review evaluated federal and state on-line databases for the potential presence of regulated natural and historic resources and the ramifications of their presences. A Phase I ESA has been prepared under separate cover that identified potential hazardous materials concerns.



Source: NJDEP, NJDOT

0 7,000 14,000 28,000 42,000 Feet

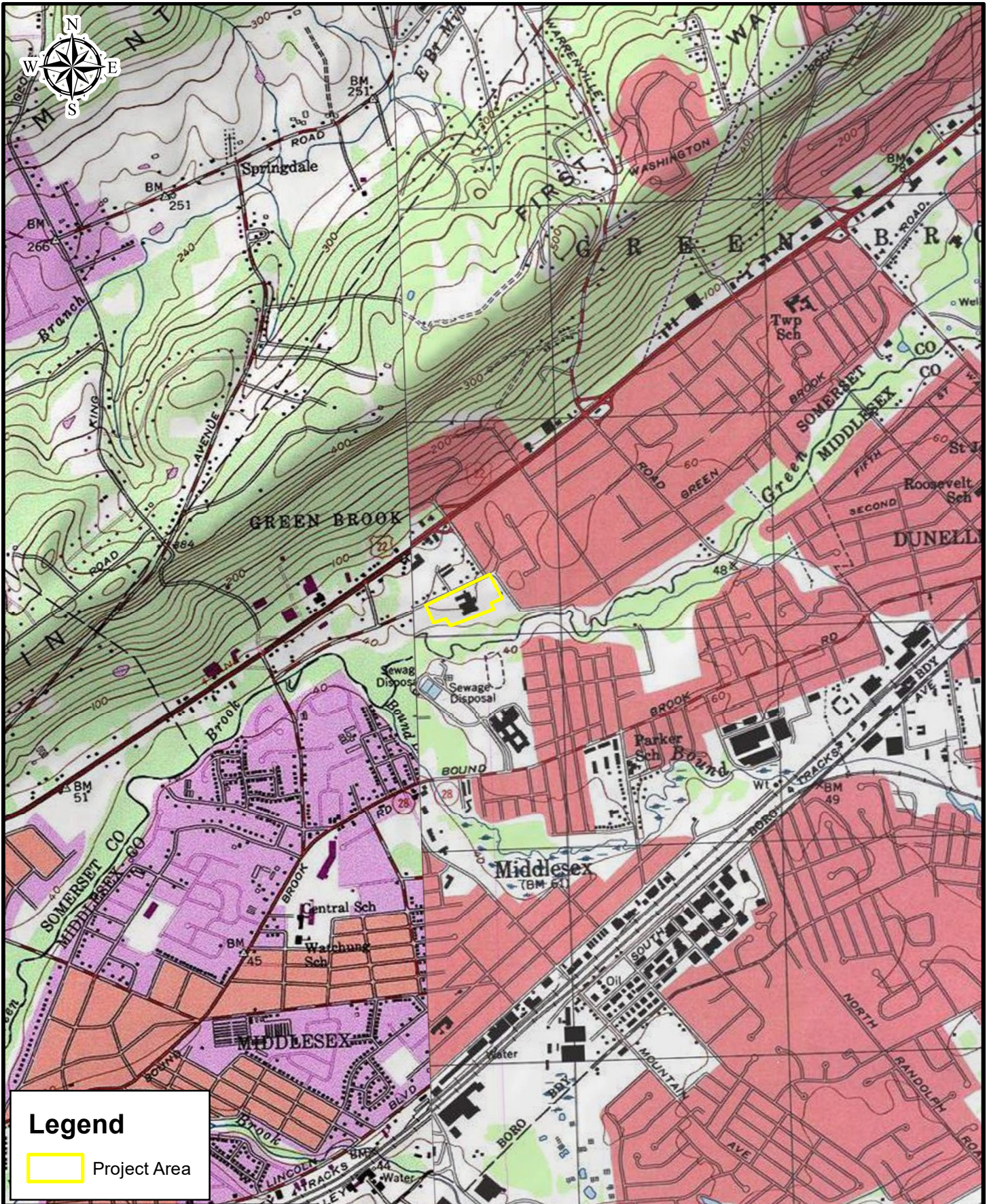
1 inch = 20,000 feet

Regional Location Map


Green Brook Regional Center Solar PPA
Green Brook Township
Somerset County, NJ

Note: Site locations and resource
boundaries are approximate.

Produced 9/5/2024



Legend

 Project Area

Source: ArcGIS Map Service

0 500 1,000 2,000 3,000 4,000 Feet

1 inch = 2,000 feet

USGS Project Location Map

Green Brook Regional Center Solar PPA

Green Brook Township,
Somerset County, NJ

Note: Site locations and resource boundaries are approximate.

Produced: 7/26/2024

Resources Present

Soil:

According to the USDA-NRCS Web Soil Survey, the project study area (PSA) contains three soil units; two of the three soil series contain inclusions of hydric soil. The PSA contains soil drainage ranging from well drained to poorly drained. The soils mapped within the PSA are listed below in Table 1.

Map Unit Symbol	Map Unit Name	Drainage Class	Hydric Soils	Relative Percent	Soil Classification
DunB	Dunellen sandy loam, 3 to 8 percent slopes	Well drained	No 0%	24.7%	COARSE-LOAMY, MIXED, ACTIVE, MESIC TYPIC HAPLUDULTS
DuxA	Dunellen moderately well drained sandy loam, 0 to 2 percent slopes	Moderately Well Drained	Yes 1-32%	40.5%	COARSE-LOAMY, MIXED, ACTIVE, MESIC TYPIC HAPLUDULTS
HcuAt	Hatboro-Codorus complex, 0 to 3 percent slopes, frequently flooded	Poorly Drained	Yes 33-65%	34.8%	FINE-LOAMY, MIXED, ACTIVE, NONACID, MESIC FLUVAQUENTIC ENDOAQUEPTS

Restrictions

Hatboro-Cordorus (HcuAt) soil has a “poorly drained” drainage class. This makes it unsuitable for construction and could cause issues if developed on unless modifications are made to drain the soils. HcuAt is located on the southern third of the PSA. See Figure 3: NWI & Soils Map.

Streams & Wetlands:

The U. S. Fish and Wildlife Service National Wetland Inventory on-line mapping was reviewed for potential features within and surrounding the PSA. NWI mapping displayed one wetland located within the study area. The wetland is associated with Green Brook and is located within the southern boarder of the PSA. The wetland is classified as a palustrine, forested, broad-leaved deciduous, temporary flooded wetland (PF01A). The project area contains one stream, Green Brook Tributary, classified as non-trout waters (FW2-NT) and flows through the eastern boarder of the PSA. Along Green Brook Tributary there is a Zone EA floodplain which extends

well into the eastern parking lot on the property and touches the south side of the western parking lot.

Restrictions

As seen in Figure 3, the National Wetland Inventory (NWI) website identified a wetland along the boarder of the tributary within the Green Brook Regional Center PSA. This wetland restricts the area of which construction can take place. If it is decided that construction must take place within this location, additional coordination will be required with the NJDEP. Wetlands in New Jersey require a 50-foot buffer around wetlands to protect them from damage during construction. The eastern parking lot in the PSA is within the 50-foot buffer. If construction occurs here, it will require a wetland delineation which will require coordination with NJDEP including a Letter of Interpretation and potentially a wetlands permit.

Threatened & Endangered:

Coordination was conducted with the New Jersey Natural Heritage Database to search for locational information of rare species and ecological communities within the Green Brook Solar Project PSA. It was concluded that there potentially is two rare wildlife species or associated habitat within the 100 ft buffer of the project site. Bald Eagles, a State Endangered Species, and Great Blue Herons, a Species of Concern were documented. These species were discovered based on a Search of Landscape Project (Version 3.3) Species Based Patches. There is one Other Animal Species on the Project Site Based on Additional Species Tracked by Endangered and Nongame Species Program, which is the Coastal Bog Metarranthus, an invertebrate moth. There are no Natural Priority Sites on Site or Rare Plant Species. Provided construction remains with the parking lots, there will be no impacts to the species or their habitat. No further coordination would be required.

The generalized vicinity search resulted in 6 reports. Redbud is listed as a rare plant species and ecological communities currently recorded, the Bald Eagle and Great Blue Heron are listed as rare wildlife species or wildlife habitat, two potential vernal habitat areas were documented, and Coastal Bog Metarranthus are listed as other influenced animal species.

Restrictions

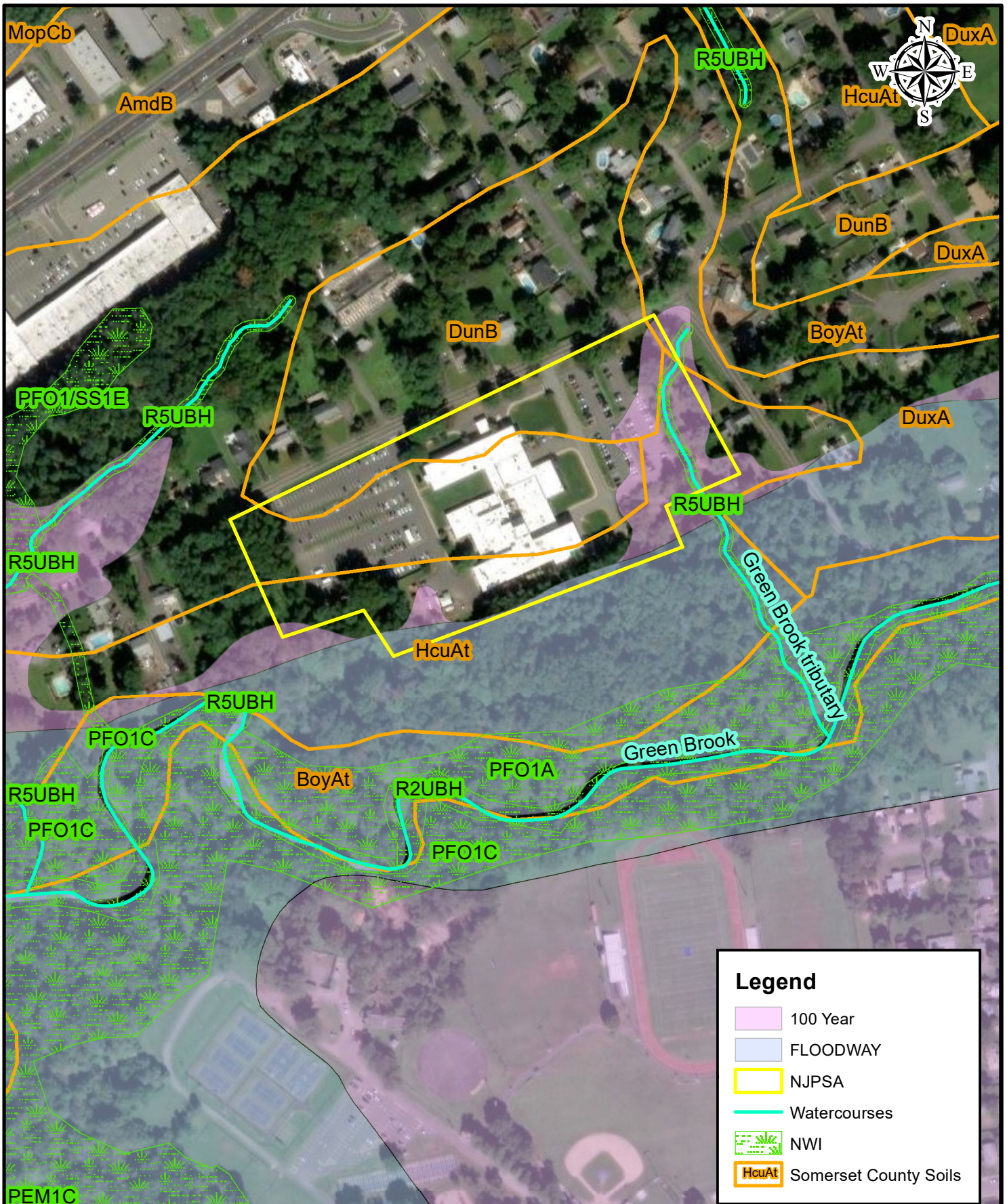
Bald Eagles and Great Blue Herons are listed as a State Endangered Species and a Species of Concern found within the Green Brook PSA. The habitat they occupy is located in the forested area surrounding the Green Brook Regional Center and its parking lots. If construction extends beyond the limits of the building and the parking lots, further coordination will be required with the NJDEP.

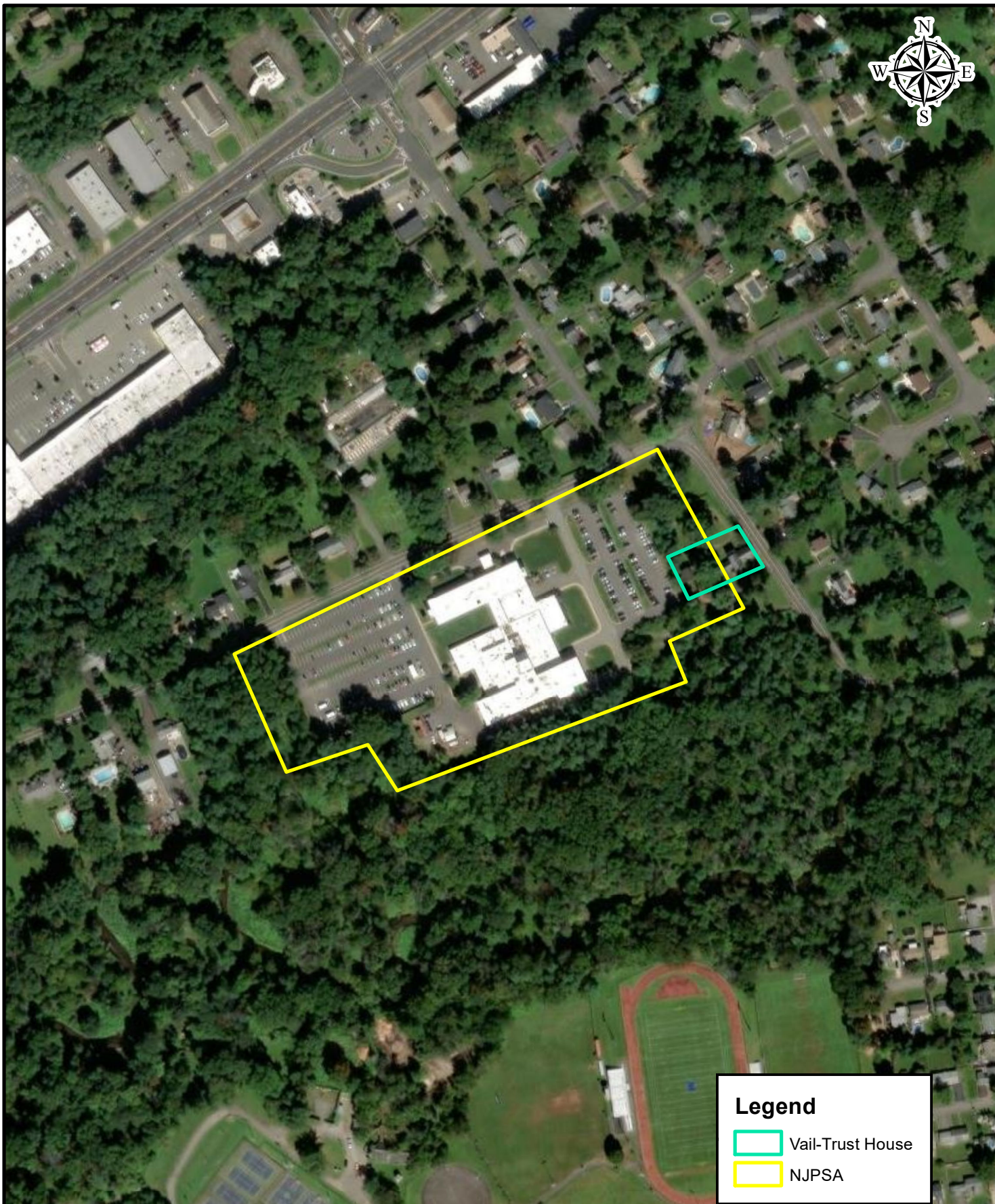
Historic Sites:

There is one historical property within the PSA and adjacent to the work site. The Vail-Trust House is a historic farmstead located off Greenbrook Road within the PSA. See Figure 4: Historic Properties Location. This farmstead is a protected plantation and has several structures listed within its historical title.



Restrictions

Located at the eastern boarder of the Green Brook PSA, the Vail-Trust House is documented as a protected historical structure. So long as construction is contained within the Green Brook Regional Center property limits and avoids the need for state/federal NPDES and wetland permits, this will not pose any additional restriction to construction. Should a state or federal permit be required, it will be necessary to coordinate the project with the State Historic Preservation Officer (SHPO) to determine if there would be an affect on the historic property in order to obtain the permit.





Legend

-  Vail-Trust House
-  NJPSA

Source: MAXAR 2020
0 75 150 300 450 600 Feet
1 inch = 300 feet

Historic Properties Location
Green Brook Regional Center Solar PPA
Green Brook Township,
Somerset County, NJ

Note: Site locations and resource
boundaries are approximate.
Produced 9/4/2024

Resources and Restrictions

The Environmental Review for the Green Brook Regional Center Solar PPA Project identified the presence of several resources that would affect the use of the eastern parking lot. Hatboro-Cordorus (HcuAt) soil, located in the southern third of the PSA, has a “poorly drained” drainage class. This is likely due to its proximity to the Green Brook Tributary floodplain. This potential for standing water could cause issues if developed on unless modifications are made to drain the soils. Green Brook Tributary watercourse flows south along the eastern boarder of the Green Brook project study area (PSA). If it is decided that construction will take place in the eastern parking lot, a 50-foot buffer must be added around the tributary to represent the NJDEP regulated area. Construction within the buffer will require additional wetland delineation, coordination, and permitting including a letter of interpretation from the New Jersey Department of Environmental Protection (NJDEP). Construction within the FEMA defined floodplain will require a NJDEP Flood Hazard Area Permit. Bald Eagles and Great Blue Herons are listed as a State Endangered Species and a Species of Concern found within the Green Brook PSA. Construction activities occurring beyond the paved areas of the PSA would require further coordination with NJDEP to clear any potential concerns with the species. A historic property, the Vail-Trust House, is located off Greenbrook Road within the PSA. This is a protected property that must be considered during construction planning. Should a state or federal permit be required, it will be necessary to coordinate the project with the State Historic Preservation Officer (SHPO) to determine if there would be an effect on the historic property in order to obtain the permit.