

ENVIRONMENTAL ASSESSMENT

for a portion of the:

OSCAR & ELLA WILF CAMPUS FOR SENIOR LIVING

Block(s): 386.07

Lot(s): 54.05

Township of Franklin

Somerset County, New Jersey

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INTRODUCTION

The following Environmental Assessment has been prepared by Menlo Engineering Associates, Inc. pursuant to the *Township of Franklin Land Development Ordinance* (Chapter 112-24A), requiring an applicant to complete an environmental quality review for any subdivision or site plans that:

1. Covers more than 75% of the site with improvements.
2. Proposes a building with more than 5,000 square feet: or,
3. Paves more than 5,000 square feet.

This report addresses potential impacts resulting from the construction of a new solar field and the subdivision of the remaining lands within Lot 54.05 into ten new single-family dwellings. This report has been prepared because of an investigation of the site features and a review of available published data. The published information consulted for this report may be viewed within the reference section. This report is intended to be reviewed in conjunction with the project Development Plans prepared by Menlo Engineering Associates, Inc., last revised February 17, 2023.

EXECUTIVE SUMMARY

The applicant proposes the construction of a solar field and subdividing a portion of a 24.46-acre parcel in Franklin Township, Somerset County into eleven lots; ten new single-family dwelling lots and a stormwater parcel while merging the remaining lands of that parcel which includes a proposed solar field into the existing Wilf Senior Campus parcel (Block 386.07 Lot 55.03). The application includes the construction of a new solar field as an accessory use to the Senior Campus. The solar field is proposed for the southwest portion of existing Block 386.07 Lot 544.05. The lands encompassing the solar field will be merged into the existing campus property. Existing Block 386.07, Lot 54.05 (24.46 ac) is located approximately 3,000 feet east of the DeMott Lane and Amwell Road intersection in the northeast portion of the Township. The development tract's only existing frontage is the terminus of Berger Street (60 ft. right-of-way) along the southeast property line. Single family dwellings lie adjacent to the parcel on all sides except for the northwest corner where the property joins the Oscar & Ella Wilf Campus.

The ten proposed single-family lots are a permitted use and comply with the R-20 Single Family Residential Zone and the District's Bulk Standards. The tract's southern twelve acres, where the single-family dwellings are proposed is surrounded by single family homes. The proposed solar field, however, is not listed within the R-20 District standards as a permitted accessory use. While it is not specifically listed and appears to require a Use Variance for the expansion of the existing non-conforming Assisted Living Facility, "renewable energy facilities" are considered an inherently beneficial use and is clearly ancillary to the existing Senior Campus.

The tract is comprised of secondary woodlands in different successional stages of converting the former farmland back to a natural woodland. The woodland adjacent to the Wilf Campus on the tract's north side is younger in age and is dominated by Eastern red cedars and red maples. MEA representatives identified a wetland complex straddling the Wilf Campus lands to the north and the northern portion of Block 386.07, Lot 54.05. The New Jersey Department of Environmental Protection (NJDEP) issued a new Letter of Interpretation (NJDEP DLRP Filer #1808-22-0006.1 LLI220001) for the parcel confirming the presence of this

regulated Freshwater Wetland. (See Appendix) In addition to the wetland area along the northern boundary, fringe wetlands were identified along Seeley's Brook which bisects the tract's midpoint in an east/west direction and along a second tributary that forms the property's southeastern boundary.

The woodland community within the property's southern half, south of Seeley's Brook, is more mature in age and more diverse, including oaks, beech, maples, and ash. While this woodland is older, no significant species or specimens were observed. The vegetation communities identified onsite are typical communities found throughout Franklin Township and the Central Jersey Piedmont. As with all forms of development that require improvements and tree removal, habit loss occurs. Mitigation measures, such as the implementation of a landscape plan and tree replacement aids in offsetting the unavoidable impact.

The parcel is bisected by Seeley's Brook, a tributary of the Delaware and Raritan Canal, which drains from the higher elevations southwest and southeast of the site to the Delaware and Raritan Canal found about 1.7 miles northeast of the property. A tributary of Seeley's Brook creates the property's southeast boundary. This tributary collects the runoff from south of the property and drains to its confluence with Seeley's Brook about 250 feet west of the property's easternmost point. Both tributaries drain more than fifty acres and have floodplains associated with the regulated surface water feature. The plans indicate the extent of the 100-year floodplains and the associated Delaware and Raritan Canal Commission (DRCC) required 100-foot buffers to those floodplains as well as the municipal 150-foot stream corridor buffer.

The project causes only a few minor intrusions into the regulated buffers/transition zones associated with the onsite surface water features. NJDEP Freshwater Wetland Permits/Transition Zone Activities and Flood Hazard Area Permits are required for the construction of two stormwater outlets; one from the bioretention basin associated with the solar field on the northside of Seeley's Brook and a second outfall along the southeast tributary as the outlet for the proposed single-family subdivision's infiltration basin. Since the new sanitary connection is required to be directionally drilled under Seeley's Brook, it will not require a Freshwater Wetland Permit. Since the project requires stormwater out falls and Flood Hazard Area Individual Permit is required for the project. Finally, the construction of the solar field requires a transition area waiver (TAW) for an Averaging Plan modifying the transition zone associated with the existing wetland area identified along the northside of Seeley's Brook adjacent to the solar field. The project includes a stormwater management plan in conformance with the current NJDEP Stormwater Management Rules, therefore, the project will not cause or result in adverse impact on a downstream receiving water body.

The design program and project development planning minimize the adverse impacts to the immediate and adjacent baseline environmental conditions to the greatest extent practicable. These baseline conditions were compiled from local published information, and various Federal, State, and County documents and a site inspection. Potential impacts were evaluated for the period during construction activities and upon occupation of the completed of the facility.

Although the solar field use does not comply with the underlying zoning, it is of an intensity that is consistent with the majority of the Township's Master Plan Zoning Standards. The R-20 Residential Zone restricts the lot (building) cover to a maximum of 15% and maximum impervious cover to 25%, however according to Municipal Land Use Law (MLUL) 40:55D-38.1 elevated solar panels or arrays are not considered impervious cover. Therefore, the application does not exceed the anticipated impacts contemplated by the current

zoning. Furthermore, the development aids in meeting the demand for new housing in the community and supplies a noncarbon producing renewable energy source.

The construction and development of this parcel, as with any form of development, will result in certain unavoidable impacts. These unavoidable impacts have been minimized through mitigation measures employed by the applicant within the development program and all necessary permits will be obtained from the various reviewing agencies prior to construction.

1.0 PROJECT LOCATION AND DESCRIPTION

The applicant proposes the construction of a solar field and subdividing the remaining lands of a 24.46-acre vacant parcel into ten new single-family lots. The parcel is in the northern reaches of Franklin Township, Somerset County, New Jersey, and the municipal tax map identify the property as Block 386.07 Lot 54.05. The existing tract occupies only sixty feet of frontage at the terminus of Berger Street. The remaining boundaries join either single family lots or the Oscar & Ella Wilf Campus. Vehicular access to the property is approximately 3,000 feet east of the DeMott Lane/Amwell Road intersection or from the terminus of Berger Street. The site is located approximately twenty-three miles northeast of Trenton and 3.3 miles west of New Brunswick.

The parcel falls within an area zoned as R-20 Single Family Residential Zone permitting only single-family lots 20,000 square feet and larger. The zone lists conditional uses including, public utility installations, schools, wireless communication antennas, as well as offices in the R-20-H area. The proposed application includes the construction of a solar field and the extension of Berger Street to provide the required frontage for the construction of ten new conforming single family dwelling lots and the stormwater basin parcel. The solar field, however, is not a listed permitted accessory use with the R-20 District, therefore a Use Variance maybe required for that portion of the application. The application proposes merging the lands encompassing the proposed solar field north of Seeley Brook into Block 386.07 Lot 55.03 which contains the existing Assisted Living Facility. The solar arrays are shown facing south in an east-west linear pattern. A 10 to 16-foot-wide access path encircles the array field as well as a four-foot-high chain link fence.

The plans subdivide the tract's southern portion into ten new single-family homes with one parcel (3.78 acres) containing the required stormwater basin. The project extends Berger Street northward onto the property to create the required frontage for each of the new lots. Neither the proposed solar field nor the single-family dwellings encroach into any identified wetland area, transition zone, the required DRCC floodplain buffer or the municipal 150-foot stream corridor buffer.

The New Jersey Department of Environmental Protection (NJDEP) issued a Letter of Interpretation (File #1808-22-0006.1 LLI220001) on January 13, 2023, verifying the extent of wetland and transition zones shown on the plans is accurate. The NJDEP Letter of Interpretation classifies the wetland areas as either intermediate resource value wetlands, establishing 50-foot wetland transition zones or as State Open waters and or a manmade ditch with nor transition zones. Other than a Freshwater Wetlands Statewide General Permit GP#11 for the basin stormwater outfall, the project does not require any other wetland disturbances. As a requirement for a stream crossing under the NJDEP Flood Hazard Control Act Rules, the sanitary sewer connection must directionally drill under the stream from a point outside the regulated riparian zone. In

addition to preserving the 50-foot transition zones associated with all the wetland areas, and the 100-foot buffer to the 100-year floodplain and the 150-foot stream corridor, a 50-foot naturally vegetated buffer will remain along the adjoining residential perimeter of the solar field.

The solar field and the residential subdivision combined disturbance requires the removal of 7.1 acres of trees. The tree removal is minimized to extent practicable encompassing only the area necessary to construct the solar field, the solar field access drive, the single-family dwellings, the extension of Berger Street and the stormwater management facilities required by the NJDEP to manage the stormwater runoff. The composition of the removed treed area changes from the northside of the stream to the south side. The property's northside (solar field area) is consists of a younger plant community dominated by pioneer species such as Eastern red cedars, red maples, and black cherry. The southern side (residential subdivision) is more mature and includes oaks, maples ash and beech trees. The woodlands are indicative of early to mid-stage successional communities returning the previously farmed lands to a Piedmont upland woodland. A review of historic aerials indicates the upland areas along the southern half of the property were farmed into the early 1960's with the northwest portion farmed as late as early 1970's. Neither of the communities contain any rare or endangered species.

The development's stormwater management plan is designed according to the Franklin Township's Land Use Regulations, Middlesex County and the NJDEP Stormwater Regulations. The system restricts the post-development peak flows to match or reduce the pre-development discharge rates, captures, and treats the vehicular use pavement runoff and replicates the pre-construction groundwater recharge in the post development condition thereby resulting in no net loss of groundwater recharge. The project will not cause any off-site flooding or adverse impacts to any downstream receiving bodies.

Only the project's residential portion requires connections to full spectrum of surrounding infrastructure. The tract falls within a highly developed area; therefore, both electric and gas companies expect to have ample service available for the new residential dwellings. The solar field requires only an underground electrical connection from the solar field to each of the Campus buildings. The solar field does not require any other infrastructure connections. Previous contacts with the various utility companies involved did not identify any capacity or allocation problems.

Except for the sanitary sewer, the plans depict extending the required infrastructure from the mains found at the intersection of Berger Street and Lilac Lane. Unfortunately, the existing sanitary line inverts within the Berger Street/Lilac Lane intersection are too high to connect the new single-family homes without a pump station. Instead, a sanitary sewer extension will be installed from the existing 15" sanitary main lying to the northwest across Seeley's Brook to the residential dwellings fronting the new street. While NJDEP Flood Hazard Area Control Act Rules require the sanitary crossing to be directionally drilled, A Flood Hazard Individual Permit is still required for the project's activities that includes two stormwater outfalls. The remaining utility connections, including public water will be via extensions of the services found at the Berger Street/Lilac Lane intersection.

Finally, the development plans depict new plantings to provide an aesthetically pleasing landscape design. Plantings will include ornamental, shade and evergreen trees, and shrubs and ornamental herbaceous vegetation. These plantings serve to provide continuity throughout the development and provide limited cover for generalist wildlife species, which may visit or rest on-site.

The applicant's design philosophy is to construct a new solar field and ten new single-family dwellings with minimal environmental effects, while constructing a viable, attractive development. To achieve this goal, the project team thoroughly evaluated alternative solar field configurations and lot arrangements in relationship to the overall development potential and the associated impacts. The application presented herein represents a solution that achieves the minimum required program, while producing impacts to a magnitude of similar projects and the established zone. In addition, the project has been designed utilizing the Franklin Township Ordinance as guide for development. The single-family development does not require any bulk standard relief; however, the solar field is not listed as a permitted accessory use in the R-20 District and may require a variance. The combined project will not result in any significant adverse impacts.

The application provides an appropriate level of development for an underutilized parcel bounded by a compatible senior living campus and single-family dwellings. The plan furthers the planning goals for the region by providing a non-industrial, residential use within an area completely developed with single family dwellings while taking the site's constraints into consideration. The solar field, which will serve the senior living campus, constitutes an appropriate accessory use to the overall campus. It is an ancillary structure that serves the previously approved uses on-site and surrounding it; therefore, the project meets the goals and objectives of the Franklin Township Master plan. The project site is removed from the municipal boundary therefore has no impact on the surrounding municipalities or Master Plans. The site falls within an area indicted on the NJDEP *NJ-Geo-Web* as a Metropolitan Planning Area (PA-1), which are areas suited for further development.

2.0 SITE DESCRIPTION AND INVENTORY

2.1 Natural Resources

Natural resources include geologic formations, soil formations and types, topography, surface and subsurface hydrologic features, vegetation, and wildlife.

2.2 Geology

The site's underlying geology is consistent with that of Franklin Township and southern Somerset County. The site is found in the Triassic Lowland comprised of the Passaic formation. The region's surficial formation is reddish brown, Brunswick shale or siltstone and mudstone, which are mildly folded and faulted. The solid shale bedrock is found to be at a depth greater than 3½ feet. The *Soil Survey of Somerset County* indicates bedrock depth for the Klinesville soils at between 1.0 to 1.5." As evidenced by the adjacent and previous site construction activities, bedrock was not a hindrance during the construction.

2.3 Soils

Soils mapped on-site within the *Soil Survey of Somerset County, New Jersey* include Klinesville channery loam (KkoC), 6 to 12 percent slopes, and Reaville silt loam (RehA), 0 to 2 percent slopes and Rowland silt loam (RorAt) 0 to 2 percent slopes. The following table demonstrates the limitations of the on-site soils for development:

Limitations	KkoC	RehA	RorAt
Mapped percentage of site	70.4%	12.7%	16.9%
Depth to bedrock	1.0'-1.5'	1.5-3.5'	> 4.0'
Seasonal High-Water Table	> 4.0'	0.5-3.0'	1.0-3.0'
Permeability	2.0-6.0"/hr	0.6-2"/hr.	2.0-6.0"/hr.
pH	4.5-5.5	4.5-6.0	4.5-5.5
Foundations/with basements	Moderate	Severe	Severe
Roads & Streets	Severe	Severe	Severe
Lawns/landscaping	Severe	Moderate	Severe

2.4 Hydrology, Water Quality, Flood Hazard Areas

The New Jersey Freshwater Wetlands Maps, as depicted on the NJDEP *NJ-GeoWeb* interactive website, depict the subject parcel as containing regulated wetland areas. MEA representatives field evaluated the site and reflagged the regulated wetland areas. The NJDEP through the issuance of a Letter of Interpretation on January 13, 2023 (File #1808-22-0006.1 LLI220001) verified the extent of regulated wetland and established the associated Transition Zones.

The plans depict a wetland area along the former property line separating the vacant tract from the Wilf Campus. In addition, narrow wetland bands along with State Open Water segments were identified along both Seeley's Brook and its tributary along the southeast property line along with two small manmade ditches that drain into Seeley's Brook.

The site drains in two directions from the higher elevations found along the perimeter down to the lower elevations along Seeley's Brook. Seeley's Brook flows from the southwest property line to the northeast eventually draining to the D&R Canal about 1.7 miles northeast of the site. A second tributary drains from the higher elevations south of the property at the intersection of Berger Street and Lilac Lane northward to its confluence with Seeley's Brook. The confluence of the two streams occurs along the property's eastern boundary near the site's northeast corner.

The NJDEP *Geoweb* mapping indicates there are no water dependent species within one mile downstream, therefore the NJDEP should assign a standard 50-foot riparian zone to each tributary. MEA representatives observed two small human made ditches; one found along the western property line draining the southwest detention basin on the Wilf campus and the other acting as the outlet of the other detention basin serving the Wilf campus in the property's northwest corner. Neither of the ditches drain more than fifty acres, nor do they appear on the Soil Survey or the USGS quadrangle maps, and they are not a relocated natural stream; therefore, those features should not be assigned a riparian zone. The plans also depict the calculated 100-year floodplains and the DRCC required 100-foot buffer to those floodplains as well as the 150 ft municipal stream corridor for the two tributaries.

Pavement runoff from the existing Wilf campus is directed to two stormwater basins along the proposed development's northwest side. The basin found in site's northeast corner serves the Wilf campus assisted living facility while the second basin adjacent to the property's southwest corner collects runoff from the remainder of the Wilf Campus. The proposed development does not impact the two existing basins. A new stormwater bioretention basin will be constructed to address the green infrastructure requirement for the solar field and an infiltration basin for increased residential subdivision's runoff and to match the site's existing groundwater recharge. The proposal will retain the existing hydrologic characteristics under the post construction condition as required by the 2021 NJDEP Stormwater Management Rules. The Rules require matching the drainage areas, controlling volume and rates and stipulate no net reduction of ground water recharge in the post developed condition.

The NJDEP *Geoweb-Geology* depicts the parcel as a moderately effective recharge area, assigning it the Class B (11 -14 in/yr.) recharge zone for property southeast half and less effective along the northwest side Class C (8-10 in/yr.). The soil textures and descriptions along with the depth to the bedrock support this finding.

2.5 Topography

The undeveloped gently to moderately sloping parcel does not contain any significant topographical features except for eroded stream banks. The stream embankments are steep to very steeply sloping, resulting from the streams' increased volume from previous land development undercutting the side slopes. The NJDEP Flood Hazard Control Act Rules prohibit construction activities within twenty-five feet of the top of banks therefore, with exception of the stormwater outfalls and the sanitary sewer crossing, the steep embankments remain undisturbed by the project. Overall, the property slopes in two directions; the solar field area slopes from the higher elevations along the west side of site eastward down to the lower elevations along the stream corridor. The property's southern portion (the residential area) slopes from the higher elevations along the southern boundary lines northwestward again down to Seeley's Brook which bisects the overall site. The elevations range from a high point elevation of 105 at the site's southernmost point to the low point of elevation sixty-nine within the stream banks as Seeley's Brook flows offsite in the property's northeast corner.

2.6 Vegetation and Wildlife

2.6.1 Vegetation

The previously disturbed, former farmland includes two vegetative communities representing two distinct stages of succession converting former farmland back to woodlands. The northwest side of the site is a younger pioneer community comprised of Eastern red cedars and red maples, black cherry, and black locust while the southeast side an older community of more mature hardwoods such as oaks, ash, walnut, black cherry, and red maple. Based on a review of historical aerials, the farming operation appears to have ceased on this southeast portion of the site in the late 1950's to the early 1960's while farming occurred on northside of the property until the early to mid-1970's. The 25-acre site contains nearly an entirely closed canopy. The wooded areas are typical of a low gradient, upland, Piedmont woodland. The woodlands contain individuals ranging from less than 6-inches D.B.H. up to greater than 18" D.B.H. individuals scattered across the treed areas. MEA representatives did not observe any outstanding or unusual species or specimens during the tree inventory.

Invasive materials dominate the sites' understory along both sides of the Seeley's Brook. The limited shrub understory typically contains multiflora rose (*Rosa multiflora*) and fragrant honeysuckle (*Lonicera fragrantissima*), Russian olive (*Elaeagnus angustifolia*) and black haw viburnum (*Viburnum prunifolium*).

Both woodland communities' herbaceous stratum include poison ivy (*Toxicodendron radicans*), Japanese honeysuckle (*Lonicera japonica*), Japanese stiltgrass, (*Microsetegium vimineum*), Wineberry (*Rubus phoenicolasius*) as well as natives such as, snakeroot, golden rods, and small white aster. No unusual or rare plant species were observed during the site inspections.

2.6.2 Wildlife

Suburban disturbed sites are not typically habitats suitable for a diversity of wildlife. The following list of wildlife can be expected to be present or visit urban disturbed areas:

Mammals:

Common Name

opossum
raccoon
striped skunk
eastern cottontail
little brown bat
eastern chipmunk
white-footed mouse
red-backed vole
white-tail deer

Botanical Name

Didelphis virginiana
Procyon loter
Mephitis mephitis
Sylvilagus flezridanus
Myotis lucifugus
Tamias striatus
Peromyscus leucopus
Clethrionomys gapperi
Odocoileus virginianus

Birds:

Common Name

catbird
American robin

Botanical Name

Dumetella carolinensis
Turdus migratorius

blackcapped chickadee
brown-headed cowbird
crow
bluejay
tufted titmouse
turkey vulture
northern mockingbird

Parus atricapillus
Molothrus ater
Coccyus brachyshynchus
Eyanocitta cristata
Parus bicolor
Cathartes aurea
Mimus polyglottis

During our site inspections, a few of the above-mentioned bird species were sighted and heard in the vicinity. However, the sightings were limited to members on this list and no sightings of other mammals or amphibians were recorded. The limited diversity of the wildlife on-site arises from the relative uniformity in habitat and the intensity of the surrounding land uses.

2.6.3 Endangered or Threatened Species

No evidence or sightings of any endangered or threatened species was recorded during the site inspections. The project area has a low probability index due to the degraded, previously disturbed habitat and the intensity of the surrounding human activity. Furthermore, the NJDEP *NJ-GeoWeb* interactive mapping indicate that there are no records for rare plants, animals, or natural communities on the site or a within one-mile downstream from the site.

2.7 Wetlands

The development plans depict the extent of the regulated freshwater wetland areas Menlo Engineering Associates (MEA) identified on the property. The regulated features include an area that straddles the development parcel's northwest property line (common line with the Wilf campus), areas of fringe wetlands along the two stream corridors and two small ditches that function as discharge conveyances for the two detention basins on the Wilf Campus site. MEA representatives field delineated the features, and a surveyor located the points shown on the plans. Subsequently the NJDEP inspected the site multiple times and issued a NJDEP Letter of Interpretation on January 13, 2023 (NJDEP DLRP File # 1808-22--0006.1 LLI220001) verifying the extent of wetland area shown.

2.8 Man-Made Resources

Human made resources include existing on-site land use, adjacent land use, access and transportation patterns, zoning, Master Plan delineations, and community facilities.

The vacant site contains only minor ancillary drainage features associated with the existing Wilf Campus on the northwest side of the stream. The southeast side does not contain any structures. An existing 15-inch diameter sanitary sewer main parallels Seeley's Brook extending from the western property line across the property to the northeast corner.

Single family homes surround the project on all sides except for the common boundaries with the Wilf Campus.

The proposed use provides an appropriate infill development for an underutilized parcel bounded by a compatible senior living campus and single-family homes. The plan furthers the planning goals for the region

by providing single family residential lots in an area specifically zoned for residential uses while taking the site's constraints into consideration.

The proposed solar field constitutes an ancillary use that serves the previously approved Wilf Campus uses surrounding it; therefore, the project meets the goals and objectives of the Franklin Township Master Plan. The project site is located a significant distance from the municipal boundary that new dwellings will have no direct impact on the surrounding municipalities or Master Plans. The site falls within an area indicted on the NJDEP *NJ-GeoWeb* as a Metropolitan Planning Area (PA-1), which is an area suited for further development.

2.9 Utilities

The tract falls within a highly developed area; therefore, both electric and gas companies expect to have ample service available for the building expansion. Previous contacts with the various utility companies involved did not identify any capacity or allocation problems.

The Franklin Township Department of Public Works supplies water to the site and the surrounding neighborhood. The plans indicate tapping into the water main at the intersection of Lilac Lane and Berger Street about 120 feet south of the property. A new 8-inch water main will be extended northward within the new Berger Street right-of-way to serve the (10) new single-family dwellings. New fire hydrant locations will be coordinated with Franklin Township Fire Department.

An existing 15-inch sanitary sewer main lies within a 25-foot-wide easement that bisects the property in a southwest to northeast direction along the northside of Seely's Brook. Another 8-inch sewer line is found along the westernmost property line draining lands to the northwest and a portion of the Wilf Campus. A third 8-inch sewer line is along the northeast property line which serves the assisted living facility. These two 8-inch lines connect to the 15-inch main bisecting the site along Seeley' Brook.

An additional 8-inch sanitary main is found within the intersection of Berger Street and Lilac Lane, but this main is too high for the new dwelling to connect without the use of an onsite pump station.

The 15-inch main bisecting the site is at an accessible elevation for the new single-family subdivision. The plans indicate connecting a new 8-inch main to the existing 15-inch main at an existing utility access manhole near the southwest property line. Since the NJDEP FHACAR, requires the new sanitary line to be directionally drilled below the stream, no Freshwater Wetland Permit is required.

2.10 Cultural and Historic Resources

According to the *New Jersey & National Registers of Historic Places* (last update 12/20/2022) posted on the NJDEP Historic Preservation Office website, the site is neither adjacent to, nor contains any historic places or structures. Additionally, because the site constitutes a previously developed parcel, there is a low probability that it contains any significant archeological sites.

2.11 Pollution Problems

Information found on the NJDEP *NJ-GeoWeb* indicates there are no identified contaminated sites within the immediate proximity of the property. A residential site to the south across Cedar Brook Drive from the property does appear on the map.

Water and sanitary wastewater facilities are available to the region, which significantly reduces groundwater contamination. The project does not include the use private well water or a septic system; therefore, pollution potential or exposure is extremely limited, if non-existent. A subsurface collection system conveys the stormwater produced by the new residential subdivision to an above-ground infiltration basin that treats the runoff for quality through soil infiltration, retaining the water quality storm event while controlling the discharge rate entering the tributary along the southeast property line. The stormwater management program for the project ensures that the project will not increase any downstream flooding event, improves the exiting stormwater quality, and matches the predevelopment groundwater recharge rates in the post development condition.

The solar field includes a 10 to 16-foot-wide stone access drive for an occasional maintenance vehicle, and under New Jersey State Law, solar panels are considered pervious, the runoff is considered "clean." A bioretention basin collects the solar field access drive runoff treating it for water quality prior to discharge. Therefore, the solar field's increase in total runoff, is controlled and treated for water quality through the provision of the bioretention basin.

Soil erosion and sedimentation are not currently an issue, as the site is well-vegetated, providing stabilization to the soil. As a course of construction, the project will implement all the required aspects of a standard Soil Erosion and Sediment Control Plan reviewed and approved by the local Soil Conservation District.

Air quality is consistent with central New Jersey and, since the project does not include a new industrial use, will not be a factor in the development of the site.

3.0 SITE IMPACT ASSESSMENT

The implementation of the proposed development does not result in impacts that exceed the anticipated unavoidable impacts deemed appropriate for the zone. As with all development, unavoidable impacts occur, the project plans include mitigation measures to reduce those unavoidable impacts to the extent practical.

3.1 Soil Erosion and Sedimentation

Any activity exposing soil results in an increase in sedimentation and erosion due to surface runoff. With the construction of this project, it is imperative that a soil erosion and sediment control plan be developed to ensure averting transportation of soil off-site during construction. The soil erosion and sediment control plan prepared for this application will be submitted to the Somerset-Union Soil Conservation District for review and approval. The Soil Erosion & Sediment Control plan incorporates mitigation measures controlling soil erosion and off-site sediment transportation during construction. The measures include, silt fence, inlet protection, construction entrance, and temporary and permanent seeding.

In addition, if project requires temporary stockpiles on-site, they will have sediment barriers so that, during the regrading of the site, stockpiled soils are prevented from eroding and transported off-site. The installation of a construction entrance stabilizes, if not totally alleviates, soil tracking by trucks off the subject site. Finally, the site's gentle topography aids in reducing the erosion potential of the site's soils.

Certain soils within Somerset County are described as acidic (i.e., a pH factor of less than 4.0, as defined by the Soil Conservation Service), with only moderate to low fertility in their natural state. These soils require rapid re-seeding and considerable amounts of lime and fertilizer to create fertility for quick re-establishment of vegetative cover. Exposing these soils for an extended period may be detrimental to surrounding areas. Therefore, an efficient construction sequence and the provision of a temporary liming program with an expeditious re-seeding program must be implemented to minimize the project impacts. As such, the project's construction sequence minimizes soil exposure to the maximum extent practical through an aggressive timetable.

3.2 Potential for Soil Contamination

Menlo Engineering does not conduct Phased Environmental Audits. A Phase I Environmental Audit is a normal course of action prior to land development for a previously developed or significantly disturbed property.

3.3 Water Quality and Hydrological Impacts

3.3.1 Stormwater Management

According to the drainage calculations prepared by Menlo Engineering, the post-development peak flows from the site will be attenuated to be equal to, or less than, the pre-development conditions. The design criteria utilized for the Stormwater Management Plan is in conformance with the standards and guidelines as required by the NJDEP, SCS, and the Township of Franklin.

The proposed subdivision will increase impervious surfaces, but the construction of the subsurface collection system, lawn areas, swales, along with the infiltration basin ensures the control of stormwater, volume, rate,

and quality. In addition, the infiltration basin ensures no net reduction of ground water recharge in the post development condition. Finally, a bioretention basin is proposed to treat the solar field access drive runoff and slow the rate of runoff effectively addressing the “green infrastructure” requirements. The project effectively mitigates potential adverse environmental impacts to flood prone areas by providing the stormwater management basin as described in the Stormwater Management Report.

3.3.2 Surface and Groundwater Degradation

The development plans minimize the potential for groundwater pollution. A sanitary sewer system collects the sanitary (domestic) sewage generated by the proposed residential dwellings and discharges the waste to Township's system via a new 8" main connected to the existing 15-inch main that bisects the property. The new main connects to the existing 15-inch main at a manhole along the northside of Seeley's Brook near the project's southwest property line. Wastes will be effectively conveyed off the site, eliminating potential groundwater degradation from an on-site system.

3.3.3 Reduction in Groundwater Capabilities

The proposal does not intend to utilize any on-site source for water supply. However, the construction of this project will increase water demand regionally and, to some extent, reduce local groundwater capabilities. The project anticipates accessing potable water through a main found at the intersection of Berger Street and Lilac Lane.

3.4 Topography – Soil Movement and Construction Sequence

3.4.1 Soil Movement

The project plans limit the extent of grading and subsequent soil movement to only those areas required to properly grade and drain the proposed development. If imported material or exported material is required, the soils will be clean, debris-free subsoil. All existing topsoil shall remain on-site and redistributed within the disturbed areas. The redistribution of the topsoil ensures the existing dormant seed bank remains on-site, thereby reducing potential impacts from soil removal and grading.

3.4.2 Construction Sequence

The construction sequence for this project is as follows:

Commencement Date	Fall 2023
1. Installation of Silt Fence	5 Days
2. Installation of Stone at Construction Entrance	1 Day
3. Site Demolition/Temporary Stabilization	1 Day
4. Rough Clearing and Grubbing	2 Weeks
5. Rough Grading & Temporary Seeding	2 Weeks
6. Installation of Utilities & Foundations	6 Weeks
7. Curbing	1 Week
8. Pavement Sub-base	1 Day
9. Finished Grading & Lighting	3 Weeks
10. Scarify all disturbed areas around dwellings	2 Days.
11. Final Pavement	1 Day
12. Landscaping & Permanent Seeding	1 Week

*Note: When a C.O. for each dwelling is applied for, all site work around the dwelling shall be completed (No. 11 subject to weather conditions and sales of individual homes to be completed between 3-6 months).

The above schedule is subject to weather conditions, sales of homesites and material availability.

3.5 Vegetation and Wildlife Impacts

3.5.1 Destruction of Vegetation and Natural Resources

The project's implementation requires plan requires 7.1 acres of tree removal. Destruction of the vegetation decreases the available suitable habitat for resident wildlife on the property. The extent of clearing encompasses only the area necessary for the construction of the project elements. The habitat loss will result in a reduction of native wildlife species residing at the site during construction and in the post construction condition, due to the removal of food sources and cover. However, the resident wildlife species observed and likely to found onsite are very adaptable generalist species and will disperse to surrounding areas.

During our site inspection, we did not observe any unique wildlife residing on-site and the site's proximity to human activity precludes its use as a major wildlife habitat. Only transient visitation by a few bird species and gray squirrels were noted in the vicinity of the tree removal. The commencement of the more intense human activity of construction will temporarily remove the site from transient visitations.

The proposed planting plan provides some mitigation for the loss of vegetative cover and wildlife habitat. The plan incorporates the use of materials that afford limited habitat for resident species. The planting of native trees and evergreens provides a nesting and resting area for birds, while providing shelter for mammal species. The provision of landscape materials serves a two-fold function: first, the plantings contribute a visual continuity assisting in the preservation of the local character; second, the use of trees and evergreens provide food and supply a limited habitat for the return of selective wildlife species. Although these measures will not replace lost habitat, the proposed plans mitigate the impact to the extent practicable. Furthermore, since the parcel does not support unusual or endangered wildlife species, any resident population will return upon completion of the construction activities.

3.6 Desirable Growth Pattern

The proposed use provides an appropriate infill development for an underutilized parcel bounded by a compatible senior living campus and single-family homes. The plan furthers the planning goals for the region by providing single family residential lots in an area specifically zoned for residential uses while taking the site's constraints into consideration. The ten new single-family parcels conform to the R-20 District requirements including not exceeding the district's 15% building coverage requirement or the 25% impervious coverage requirements while the proposed solar field constitutes an ancillary use that serves the previously approved Wilf Campus uses surrounding it; therefore, the project meets the goals and objectives of the Franklin Township Master Plan.

The proposed development is an appropriate intensity for a parcel located in the State Plan's Metropolitan Planning Area PA-1 and compatible with the surrounding development pattern.

3.7 Community Services, Public Health, and Conservation Measures

No severe demand on community services can be expected from this project, when compared with the Township's overall demand for such services. The consumption of energy during construction and operation represents the unavoidable, irreversible commitment of resources associated with human activities. The respective utility companies do not expect any problems meeting the energy needs for the new building.

Water Supply

The Franklin Township Water Department will service the proposed ten single-family residences. Potable water will be conveyed to the new single-family homes via a new 8" Ø main connected to the public water main found at the intersection of Berger Street and Lilac Lane just south of the tract. Water conservation measures are typically employed within new residential building construction that includes flow restrictors to regulate minimum flow and flush rates on faucets and water closets. These architectural details are typically incorporated into the current building construction codes and their application is to be determined by the architect and owner.

The estimated water consumption based on the New Jersey Residential Site Improvement Standards (RSIS) standards (NJAC 5:21-5.1) is as follows:

Establishment Type	Number of Measurement Units		Gallons per Day per Unit		Projected Flow (G.P.D.)
5-bedroom Single Family Dwelling	Ten units	X	475	=	4,750
TOTAL					= 4,750

Sanitary Sewer System

The disposal of solid and liquid waste by application to land presents a substantial threat to surface and ground water quality. The proposed development does not include any on-site disposal of wastes. The project will be connected to the township's sanitary sewer system serving the region. Previous contact with the Sewerage Authority indicated that there are no known capacity problems within the area. The estimated daily sanitary sewer flow discharged from this site is calculated as follows (based on NJAC 7:14A-23.3):

Establishment Type	Number of Measurement Units		Gallons per Day per Unit		Projected Flow (G.P.D.)
5-bedroom Single Family Dwelling	Ten units	X	300	=	3,000
TOTAL					= 3,000

3.8 Consistency with Municipal Plans

The proposed residential development of this site is consistent with, and does not contradict, the State or Township Master Plans, or any municipal ordinances relating to bulk requirements. Furthermore, the proposed development will be compatible with the surrounding existing single-family developments.

The proposed accessory solar field, is not listed as a permitted accessory use however as a renewable energy source, constitutes an inherently beneficial use. The solar field is an appropriate ancillary use to the adjacent senior living campus and will be accessed via an easement through the campus.

4.0 UNAVOIDABLE ADVERSE IMPACTS

The proposed development has been designed to minimize the impacts on the environment. However, with all forms of land development, some environmental impacts are unavoidable. The development of this parcel will remove existing trees providing suitable habitat for some species. The project plans limit the tree removal to only those areas required to properly construct the new solar field, single family dwellings, the new road, and the stormwater management basin. Upon removal of the construction activities, displaced generalist species are expected return to the site. As with any development, habitat loss occurs. Since the parcel's wooded area is surrounded by fully developed residential properties, the wildlife using and residing on this site is limited to highly adaptable species that able to find shelter and food sources in these developed neighborhoods.

An increase in traffic will have a minimal impact on the regional air quality along the adjacent roadway network. However, there is a countervailing trend of improved air quality and increased traffic volumes which results from the more stringent emission control systems required on newer automobiles.

The creation of impervious surfaces results in a site-specific decrease of water-infiltrating underlying aquifers, however, the site's contributing area is negligible compared to the extent of the underlying aquifer. To further mitigate the potential loss of groundwater recharge, the project's Stormwater Management Report indicates that the project matches the pre-development groundwater recharge rates in the post development condition, therefore, it meets the Stormwater Management Rules of no net loss of groundwater recharge.

The increase in runoff is detained within the bioretention and infiltration basins and released at a controlled rate to ensure no increased peak flow rates downstream.

The project has been designed with the minimum environmental impact as practical. Any negative environmental effect resulting from development stems from the cumulative effects of many developments within the surrounding region.

5.0 MITIGATION POTENTIAL

Environmental impacts caused by the construction of the solar field and the ten new single-family homes have been analyzed as required by the *Township of Franklin Land Development Ordinance*. The proposed development plan reduces and/or mitigates the project's impact on several components of the environment:

1. Proposed landscaping will provide visual integration of the project with the surrounding environment, along with providing limited habitat for the return of selective species displaced from project implementation.
2. Sediment and soil erosion controls will mitigate soil loss and runoff pollution.
3. Road access and site circulation have been designed to minimally affect traffic circulation.

4. Energy and water conservation devices may be incorporated into the design of the buildings and other aspects of the project, reducing demand of service.
5. Stormwater peak runoff rates will not be greater than the existing peak flows, the runoff is directed to an infiltration basin treating the runoff for water quality while allowing it to infiltrate into the underlying soil ensuring the project matches the predevelopment ground water recharge rate. The stormwater management plan also incorporates "green infrastructures" to mitigating groundwater recharge, stormwater quality and quantity. The design criteria utilized for the Stormwater Management Plan is in conformance with the standards and guidelines as required by the NJDEP, SCS, and the Township of Franklin.

The impacts have been assessed and, where possible, mitigated to the maximum extent practical for this project. These mitigatory measures have been incorporated into the site development plans.

The proposed development does not represent a substantial detriment to the surrounding environment or the public welfare.

6.0 ALTERNATIVES

During the design process the design team, reviewed alternatives, and evaluated their success on achieving the design program, associated environmental impacts, social impacts, and feasibility. The team evaluated the following alternatives:

1. Design and engineering alternatives.
2. No development.

The design process for this application included studying and discussing alternative methods of layouts and engineering practices. The site development plans are the summation of incorporating the most effective, efficient, and sensitive methods of this type of project development. Different scenarios were developed and were eliminated due to their greater impact or engineering requirements.

The second alternative evaluates the impacts that the no-build scenario would have on Township of Franklin. Although this scenario does not have a greater environmental impact on the site, it would deny the economic and social benefits of supplying housing in an area of high demand and the opportunity of installing a noncarbon producing renewable electric energy source.

Given the mitigation measures taken in the design of the project and the assessment of the impacts of the proposed construction, the proposed commercial development represents an appropriate development along Princeton Turnpike and Benjamin Franklin Road.

7.0 PERMITS AND APPROVALS

1. Township of Franklin Board of Adjustment– Use Variance, Site Plan & Subdivision Approvals-
2. Somerset County Planning Board – Site Plan Approval- Revised
3. Somerset-Union Soil Conservation District – Soil Erosion and Sediment Control Certification
4. NJDEP – RFA for Stormwater Discharge from Construction Activities- Revised
5. NJDEP- Freshwater Wetlands General Permit and Transition Area Waiver- Averaging Plan
6. NJDEP- Flood Hazard Individual Permit
7. NJDEP- Water Extension
8. NJDEP – Treatment Works Approval
9. Delaware and Raritan Canal Commission
10. Franklin Township Water & Sewer Department
11. Local Building Permits

8.0 REFERENCES

1. Farrand, John Jr. Eastern Birds. New York: McGraw-Hill Book Company: Chanticleer Press, Inc.
2. Federal Government. Federal Manual for Identifying and Delineating Jurisdictional Wetlands. Government Printing Warehouse. January 10, 1989.
3. Hightshoe, Gary L. Native Trees, Shrubs, and Vines for Urban and Rural America. New York: Van Nostrand Reinhold Company. 1989.
4. Macbeth Division of Kollmorgan Corporation. Munsell Color. Munsell Soil Color Charts. Baltimore, Maryland. 1975.
5. NJDEP Bureau of GIS. NJ-GeoWeb. August 2021. <<http://www.nj.gov/dep/gis/apps.html>>
6. NJDEP Division of Air Quality. 2021 Air Quality Report. September 2022.
7. NJDEP Division of Parks and Forestry. New Jersey and National Registers of Historic Places. Last updated December 20, 202. <https://www.nj.gov/dep/hpo/1identify/nrsr_lists/Somerset.pdf>
8. NJDEP. Freshwater Wetland Protection Act Rules. (N.J.A.C. 7:7A). Last amended July 15, 2019.
9. NJDEP. Flood Hazard Area Control Act Rules. (N.J.A.C. 7:13). Last amended July 15, 2019.
10. NJDEP. NJ Stormwater Best Management Practices Manual. April 2004, Revised March 2020.
11. NJDEP. Stormwater Management. (N.J.A.C. 7:8). Last updated March 02, 2021.
12. Township of Franklin. Chapter 112 Land Development. Current through November 23, 2021. <https://ecode360.com/6274401>
13. United States Department of Agriculture. Soil Conservation Service, Soil Survey, Somerset County, New Jersey. Washington, D.C.: Government Printing Office. 1972
14. Widmer, Kemble. The Geology and Geography of New Jersey. Princeton, New Jersey: D. Van Nostrand Company, Inc. 1964.

9.0 AUTHOR'S CREDENTIALS

The following credentials are presented to document the professional skills of Mr. Kenneth R. Grisewood, ASLA. This information is presented as an overview of his education, field, and professional experience.

BACHELOR'S DEGREE EDUCATION

Bachelor of Science in Landscape Architecture, College of Agriculture, University of Kentucky, 1980.

POST GRADUATE EDUCATION

Rutgers University, Graduate School of Management

CIVIC & PROFESSIONAL AFFILIATIONS:

Member, Holland Township Planning Board	2013-
Township Councilman, Bloomsbury NJ	1999-2001
Chairman, Tewksbury Township Environmental Commission	1988-1992
Member, Tewksbury Township Parks Committee	1989-1992
Director, Chatham Jaycees	1988-1989
Tewksbury Township Landscape Architect	1995-1996
American Society of Landscape Architect, Member	1985-

PROFESSIONAL REGISTRATION

Licensed Landscape Architect, New Jersey, 1985
Registered Landscape Architect, Delaware, 2012
Registered Landscape Architect, Pennsylvania, 1993
Registered Landscape Architect, New York, 1991
Registered Landscape Architect, Kentucky, 1983
Professional Planner, New Jersey, 2010

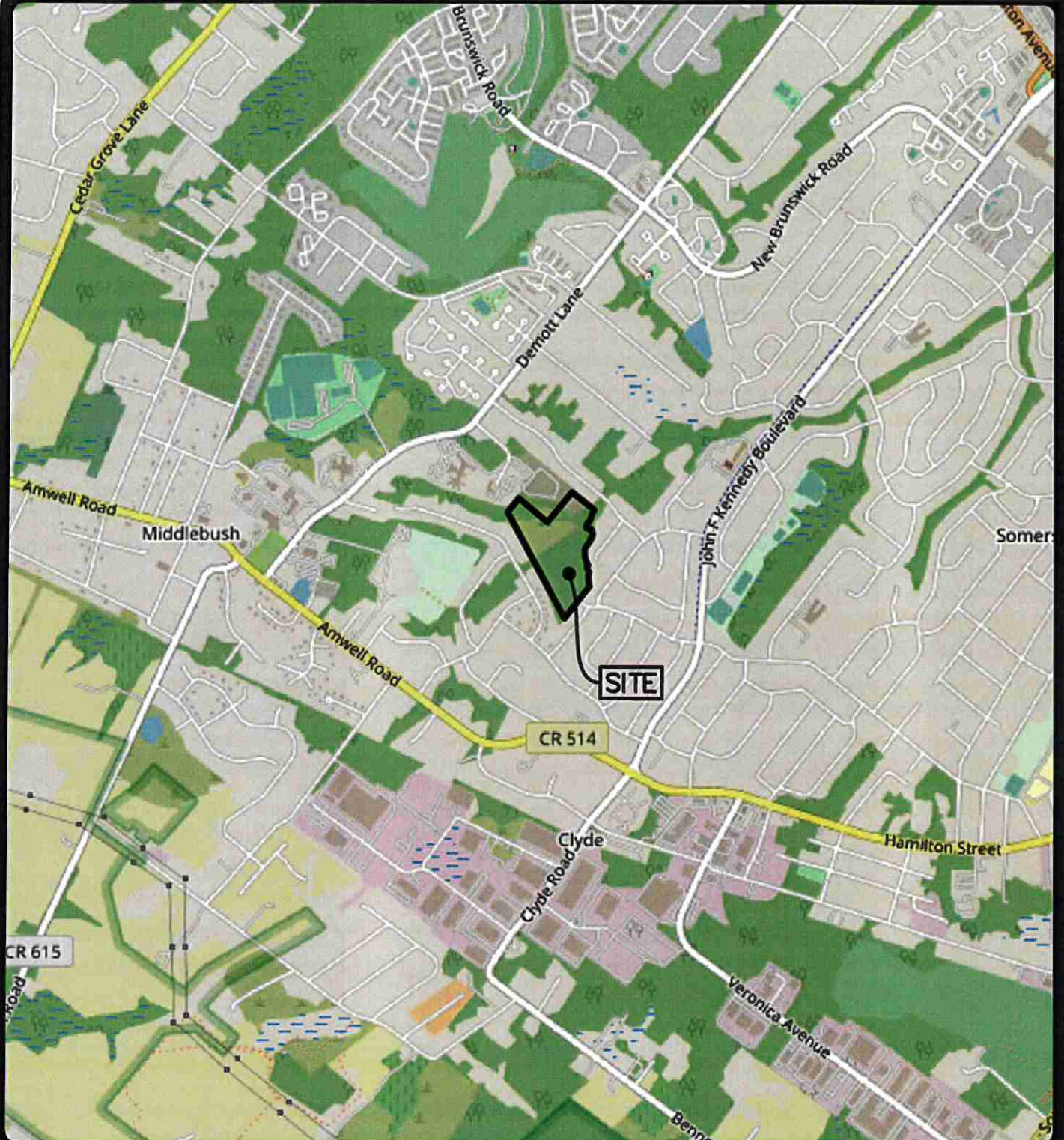
PROFESSIONAL EXPERIENCE

Menlo Engineering Associates, Inc., Principle Senior Landscape Architect, Environmental Specialist, 1993-present
Simoff & Staigar Associates, Landscape Architect, Environmental Specialist and Regulatory Permit Specialist, 1985-1993
John Charles Smith Associates, Landscape Architect, Construction and Project Manager, 1980-1985

The experience acquired over 40 years includes responsibilities within the following:

- Natural Resources Inventories
- Site Development Plans
- Environmental Impact and Analysis
- Development Permitting Process
- Endangered Species Reports
- Wetland Evaluation and Determination
- Expert Testimony
- On-Site Construction Review

APPENDIX



ROAD MAP

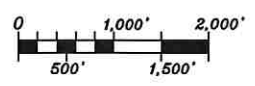
Franklin Township
Somerset County



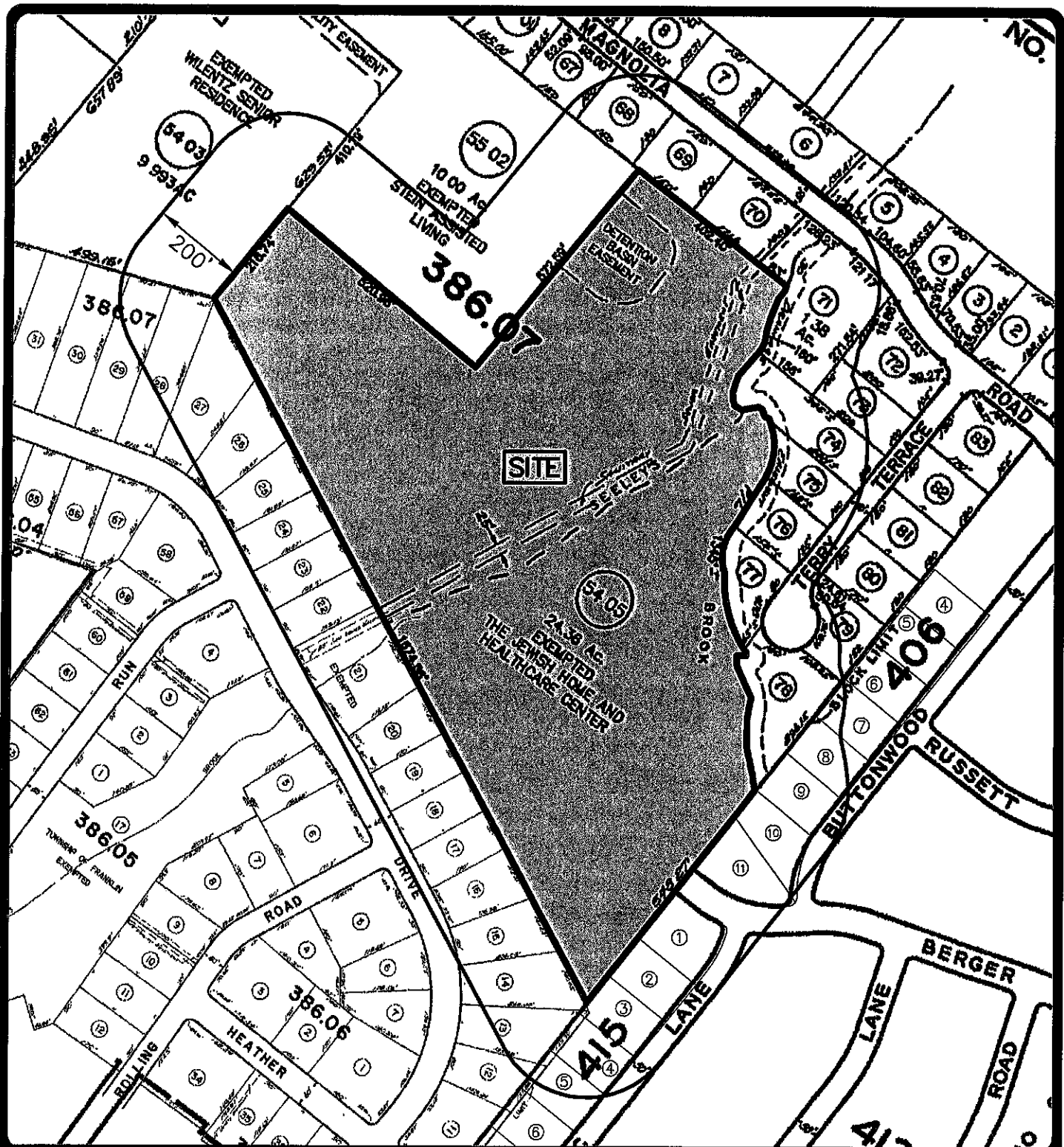
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MENLO ENGINEERING ASSOCIATES, INC.
261 CLEVELAND AVENUE
HIGHLAND PARK, NJ 08904
(732) 846-8585

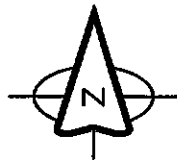


Scale: 1" = 2,000 ± ft Job # 2021.048



TAX MAP

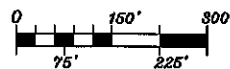
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 Somerset County



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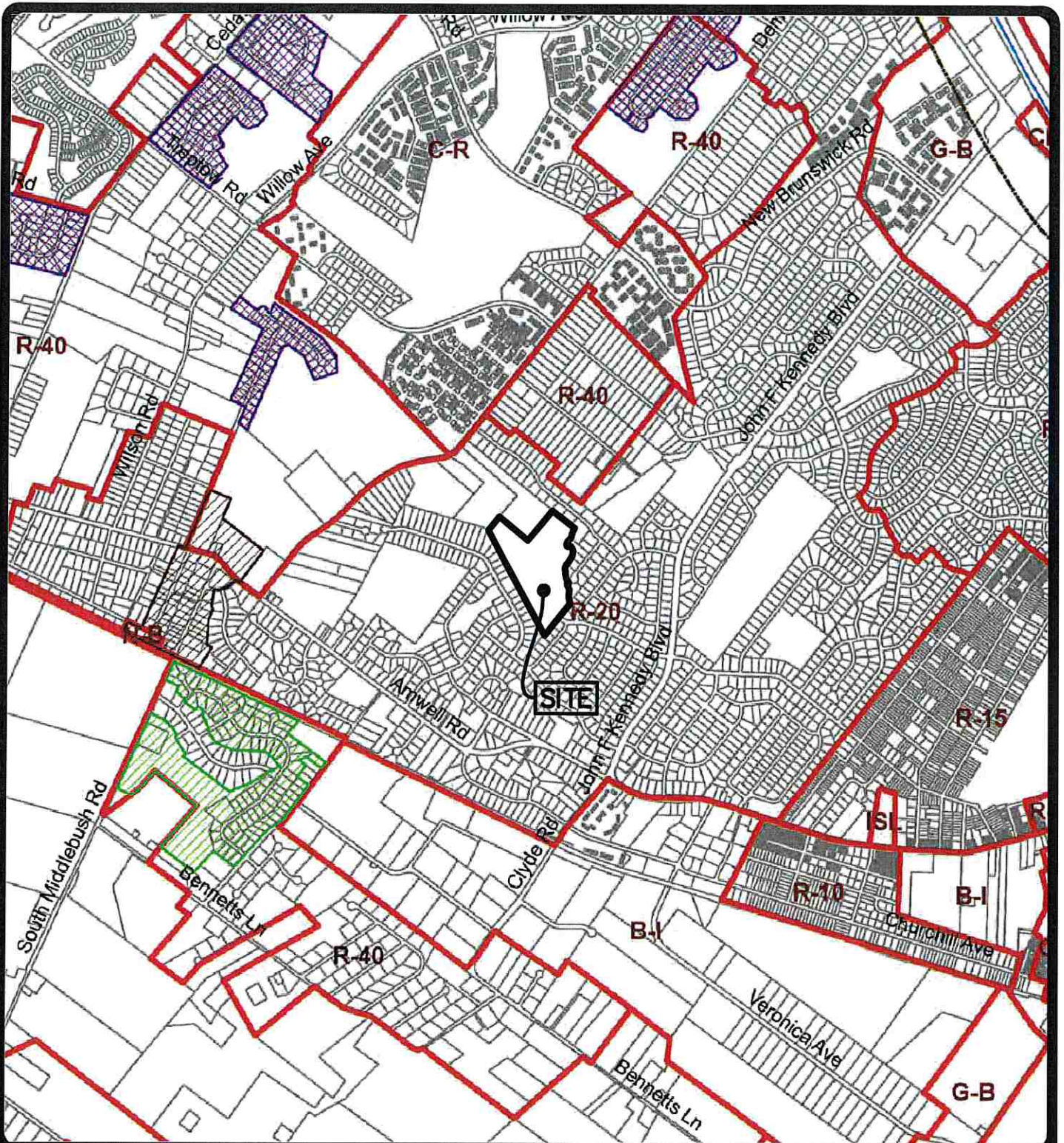
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MENLO ENGINEERING ASSOCIATES, INC.
 261 CLEVELAND AVENUE
 HIGHLAND PARK, NJ 08904
 (732) 846-8585



Scale: 1" = 300 ± ft

Job # 2021.048



ZONING MAP

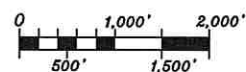
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 Franklin Township
 Somerset County



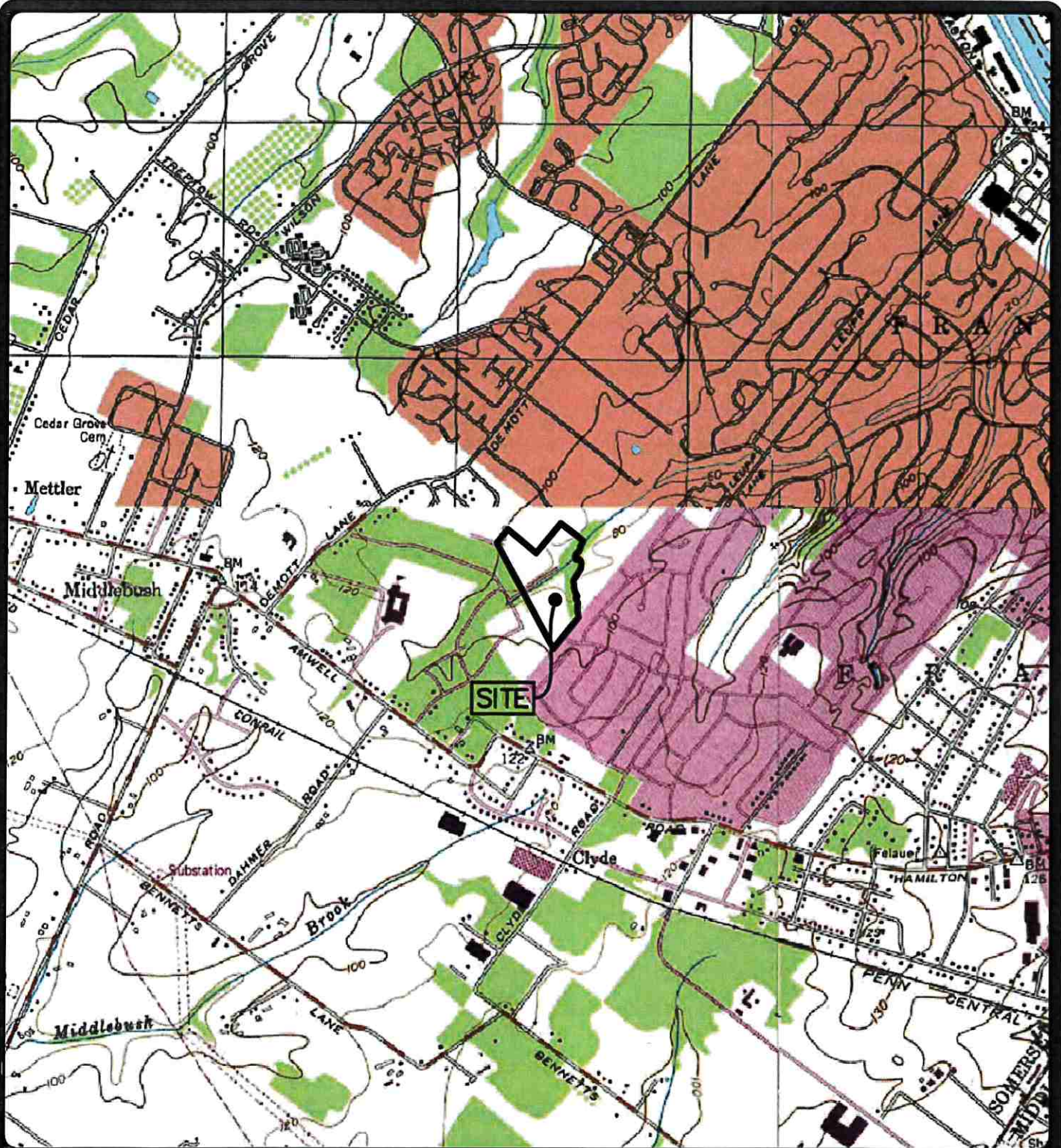
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MENLO ENGINEERING ASSOCIATES, INC.
 261 CLEVELAND AVENUE
 HIGHLAND PARK, NJ 08904
 (732) 846-8585

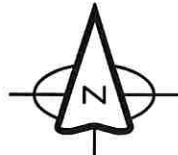


Scale: 1"=2,000±ft Job # 2021.048



U.S.G.S. MAP

Quad Name: Monmouth Junction
 Franklin Township
 Somerset County

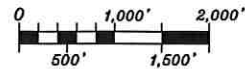


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 261 CLEVELAND AVENUE
 HIGHLAND PARK, NJ 08904
 (732) 846-8585

State Plane Coordinates:
 N: 606,011.45 ft.
 E: 489,028.12 ft.



Scale: 1" = 2,000 ± ft Job # 2021.048

2021.048 - STATE PLANNING AREAS

The screenshot displays the NJ-GeoWeb GIS interface. At the top, the browser address bar shows the URL: njdep.maps.arcgis.com/apps/webappviewer/index.html?id=1e521d874548abdf68cf16e4d4. The page title is "New Jersey Department of Environmental Protection - GIS".

The main map area shows a grid of planning areas, each labeled with a unique ID (e.g., B-38607L-54, B-38607L-55, B-38607L-56). A blue polygon highlights a specific area. A metadata popup window is open over this area, displaying the following information:

plan2_polygon	
Planning Area	1
Detail	METROPOLITAN
Detail 2	METRO
ALTPA	1
Acres	44,625.14
Zoom	30

On the right side, the "Government Data" panel lists various layers with checkboxes:

- Output Query
- Areas in Need of Redevelopment
- Critical Environmental and Historic Sites
- Congressional Districts
- Core Boundaries
- Delaware and Raritan Canal Commission Review Zones
- Legislative Districts
- Nodata
- State Plan Designated Centers
- State Planning Area Boundaries
- Urban Enterprise Zones

The bottom of the interface includes a search bar with the text "Find address or place", navigation controls (home, back, forward, zoom in, zoom out), and a scale bar showing 0, 100, and 200 feet.

Browser: NJ-GeoWeb | URL: njdso.maps.arcgis.com/apps/webappviewer/index.html?id=02251e521d97454a3abaf8ef168e4d4

Map Title: New Jersey Department of Environmental Protection - BGIS

Layers Panel:

- Government Data
 - Output Query
 - Areas in Need of Redevelopment
 - Critical Environmental and Historic Sites
 - Congressional Districts
 - Core Boundaries
 - Delaware and Raritan Canal Commission Review Zones
 - Legislative Districts
 - Neighb
 - State Plan Designated Centers
 - State Planning Area Boundaries
 - Urban Enterprise Zones

Map Content:

Map showing various zones and districts with labels such as "Delaware and Raritan Canal Commission Review Zones".

Pop-up Window: Delaware and Raritan Canal Comm Review

ID	11
Zone	B
Area	104-750.26
Zoname	

Map Navigation: Includes search bar, zoom controls, and a scale bar at the bottom right.

2021.048 - SURFACE WATERS

Bureau of GIS | NJ-GeoWeb | New Jersey Department of Environmental Protection | BGIS

Find address or place

Surface Water Quality Classifications: Delaware and Baritan Canal UNIT

Category	Name	Refer
FW2-NT	Delaware and Baritan Canal UNIT	

Zoom 12

Water

- Output Query
- Canals and Water Receipts
- Category One (C1) Waters
- Drought Regions
- Head of Tide (HOT)
- Funnelor
- Streams
- Sub-Watersheds (HUC14)
- Surface Water Quality Classification
- Surface Water Springs
- Tidelands Claim Lines
- Water Bodies
- Water Source Areas
- Watersheds (HUC11)
- Watershed Management Areas
- Well Head Protection Areas (Community)
- Well Head Protection Areas (Non-Community)

2021.048 - WETLANDS

The screenshot displays the NJ-GeoWeb GIS application. The main map area shows an aerial view of a residential neighborhood with a blue overlay representing wetlands. The wetlands are primarily located in the central and lower-left portions of the map, following a waterway and surrounding areas. The map is overlaid with a grid of property lines and parcel numbers.

The interface includes the following elements:

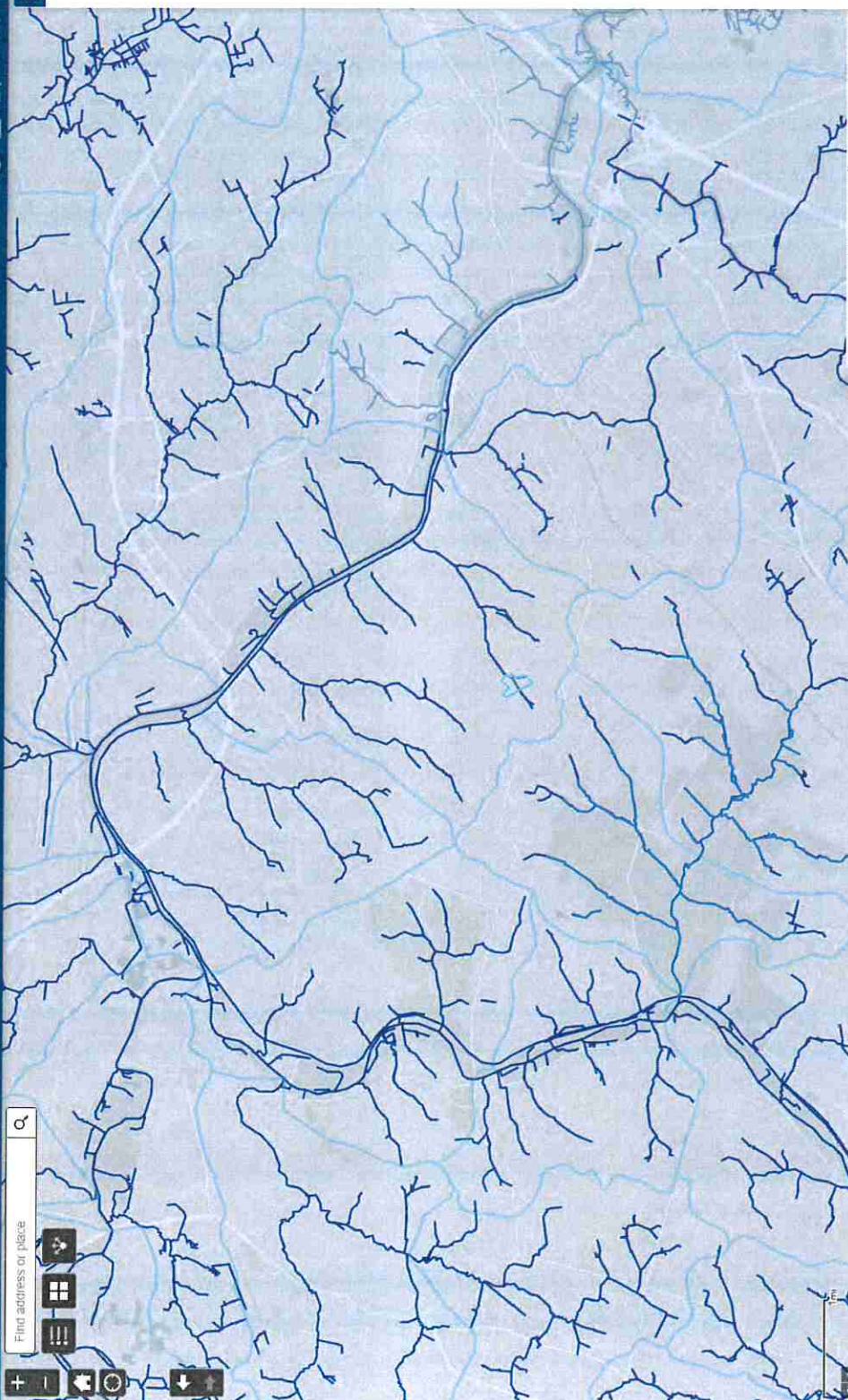
- Search Bar:** Located at the top left, with the text "Find address or place" and a search icon.
- Navigation Tools:** Located at the top left, including zoom in (+), zoom out (-), and home (house icon) buttons.
- Layers Panel:** Located on the right side, titled "Land". It contains a list of layers with checkboxes:
 - Output Query
 - Impervious Surface % (2012)
 - Impervious Surface % (2007)
 - Land Use 2012
 - Land Use 2007
 - Land Use 2002
 - Land Use/Land Cover 2015
 - NJ State Park Service Trails
 - Open Space
 - Wetlands (2012)
 - Wetlands (2007)
- Map Title:** "New Jersey Department of Environmental Protection - BGIS" is displayed at the top center.
- Browser Address Bar:** Shows the URL: "njgeo.maps.arcgis.com/apps/webappviewer/index.html?id=02251e521d97454a3a50f68c1f68e44d".
- Browser Tabs:** Shows "NJ-GeoWeb" and "Bureau of GIS".

2021.048 - HUC-14

Browser tabs: Bureau of GIS, NJ-GeoWeb, nidep.maps.arcgis.com/apps/webappviewer/index.html?id=022518521d97454abab086f169e44d

Page Title: New Jersey Department of Environmental Protection - BGIS

Search: Find address or place



Layers Panel:

- Output Query
- Canals and Water Receipts
- Category One (C1) Waters
- Drought Regions
- Head of Tide (HOT)
- Runoff
- Streams
- Sub-Watersheds (HUC14)
- Surface Water Quality Classification
- Surface Water Springs
- Watershed Level Zones
- Water Bodies
- Water Source Areas
- Watersheds (HUC11)
- Watershed Management Areas
- Well Head Protection Areas (Community)
- Well Head Protection Areas (Non-Community)

Page Footer: Somerset County, NJ, New Jersey Office of GIS, Epi. HERE, GSR, Inc.

NOTES TO USERS

This map is to be used in conjunction with the Flood Insurance Rate Map (FIRM) and Flood Hazard Determination (FHD) maps. The community has responsibility for the maintenance and updating of these maps. The community should consult with the National Flood Insurance Program (NFIP) for the most current information on flood insurance rates and flood insurance policies. The community should also consult with the NFIP for the most current information on flood insurance policies. The community should also consult with the NFIP for the most current information on flood insurance policies.

General Note Flood Elevations: Areas are shown with flood elevations of 17.7 feet above National Mean Sea Level (MNSL) (1988). The community should consult with the NFIP for the most current information on flood insurance rates and flood insurance policies. The community should also consult with the NFIP for the most current information on flood insurance policies.

Other Notes: Areas are shown with flood elevations of 17.7 feet above National Mean Sea Level (MNSL) (1988). The community should consult with the NFIP for the most current information on flood insurance rates and flood insurance policies. The community should also consult with the NFIP for the most current information on flood insurance policies.

Map Accuracy: The community should consult with the NFIP for the most current information on flood insurance rates and flood insurance policies. The community should also consult with the NFIP for the most current information on flood insurance policies.

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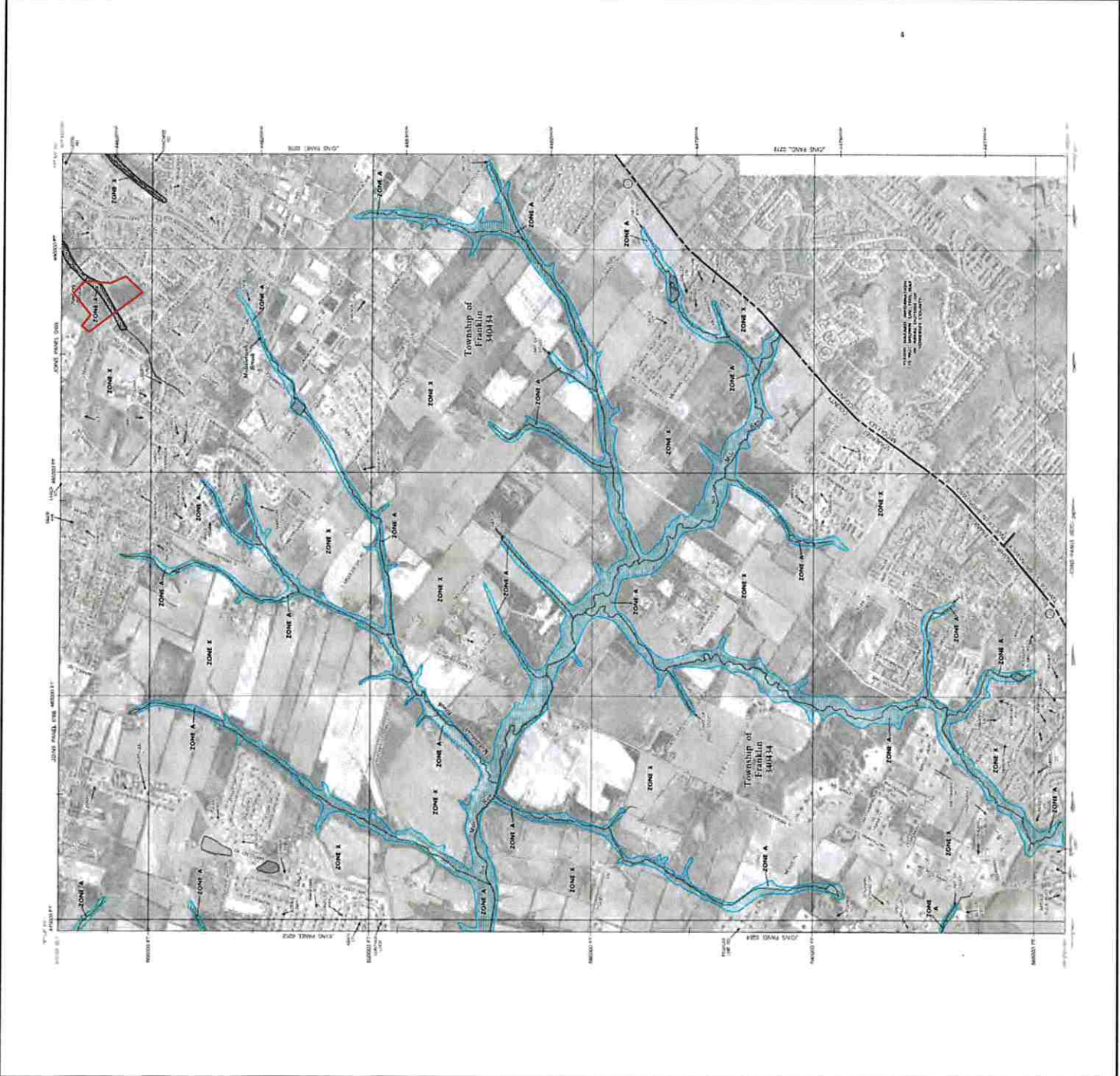
Map Accuracy: The community should consult with the NFIP for the most current information on flood insurance rates and flood insurance policies. The community should also consult with the NFIP for the most current information on flood insurance policies.

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Map Accuracy: The community should consult with the NFIP for the most current information on flood insurance rates and flood insurance policies. The community should also consult with the NFIP for the most current information on flood insurance policies.

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LEGEND

SPECIAL FLOOD HAZARD AREAS SUBJECT TO REGULATION BY THE U.S. ARMY CORP. (SPECIAL FLOOD HAZARD AREAS)

- Zone A:** Areas subject to 1% annual chance flooding.
- Zone X:** Areas subject to 1% annual chance flooding with a 1% annual chance flood depth of 1.0 to 3.0 feet.
- Zone E:** Areas subject to 1% annual chance flooding with a 1% annual chance flood depth of 3.0 to 6.0 feet.

OTHER FLOOD AREAS

- Zone A:** Areas subject to 1% annual chance flooding.
- Zone X:** Areas subject to 1% annual chance flooding with a 1% annual chance flood depth of 1.0 to 3.0 feet.
- Zone E:** Areas subject to 1% annual chance flooding with a 1% annual chance flood depth of 3.0 to 6.0 feet.

OTHER AREAS

- Zone A:** Areas subject to 1% annual chance flooding.
- Zone X:** Areas subject to 1% annual chance flooding with a 1% annual chance flood depth of 1.0 to 3.0 feet.
- Zone E:** Areas subject to 1% annual chance flooding with a 1% annual chance flood depth of 3.0 to 6.0 feet.

CONTOUR BARRIER SYSTEM (CBS) AREAS

- Zone A:** Areas subject to 1% annual chance flooding.
- Zone X:** Areas subject to 1% annual chance flooding with a 1% annual chance flood depth of 1.0 to 3.0 feet.
- Zone E:** Areas subject to 1% annual chance flooding with a 1% annual chance flood depth of 3.0 to 6.0 feet.

CHESAPEAKE PROTECTED AREAS (CPA)

- Zone A:** Areas subject to 1% annual chance flooding.
- Zone X:** Areas subject to 1% annual chance flooding with a 1% annual chance flood depth of 1.0 to 3.0 feet.
- Zone E:** Areas subject to 1% annual chance flooding with a 1% annual chance flood depth of 3.0 to 6.0 feet.

OTHER AREAS

- Zone A:** Areas subject to 1% annual chance flooding.
- Zone X:** Areas subject to 1% annual chance flooding with a 1% annual chance flood depth of 1.0 to 3.0 feet.
- Zone E:** Areas subject to 1% annual chance flooding with a 1% annual chance flood depth of 3.0 to 6.0 feet.

Scale: MAP SCALE 1" = 1000'

Title Block: FIRM NUMBER 340302000, EFFECTIVE DATE SEPTEMBER 28, 2007, PANEL 280 OF 301

NATIONAL FLOOD INSURANCE PROGRAM

FIRM FLOOD INSURANCE RATE MAP

SOMERSET COUNTY, NEW JERSEY (ALL JURISDICTIONS)

PANEL 280 OF 301

MAP NUMBER 340302000

EFFECTIVE DATE SEPTEMBER 28, 2007

Plural Emergency Management Agency

2021.048 – HISTORICAL MAPS

The screenshot displays the NJ-GeoWeb interface. At the top, the browser address bar shows the URL: <https://njdcp.maps.arcgis.com/apps/webappviewer/index.html?id=0225fe521d97454a2abedf8cf168e4d4>. The page title is "New Jersey Department of Environmental Protection - BGIS".

The main map area shows a historical topographic map of the Middlebush area. Key features include:

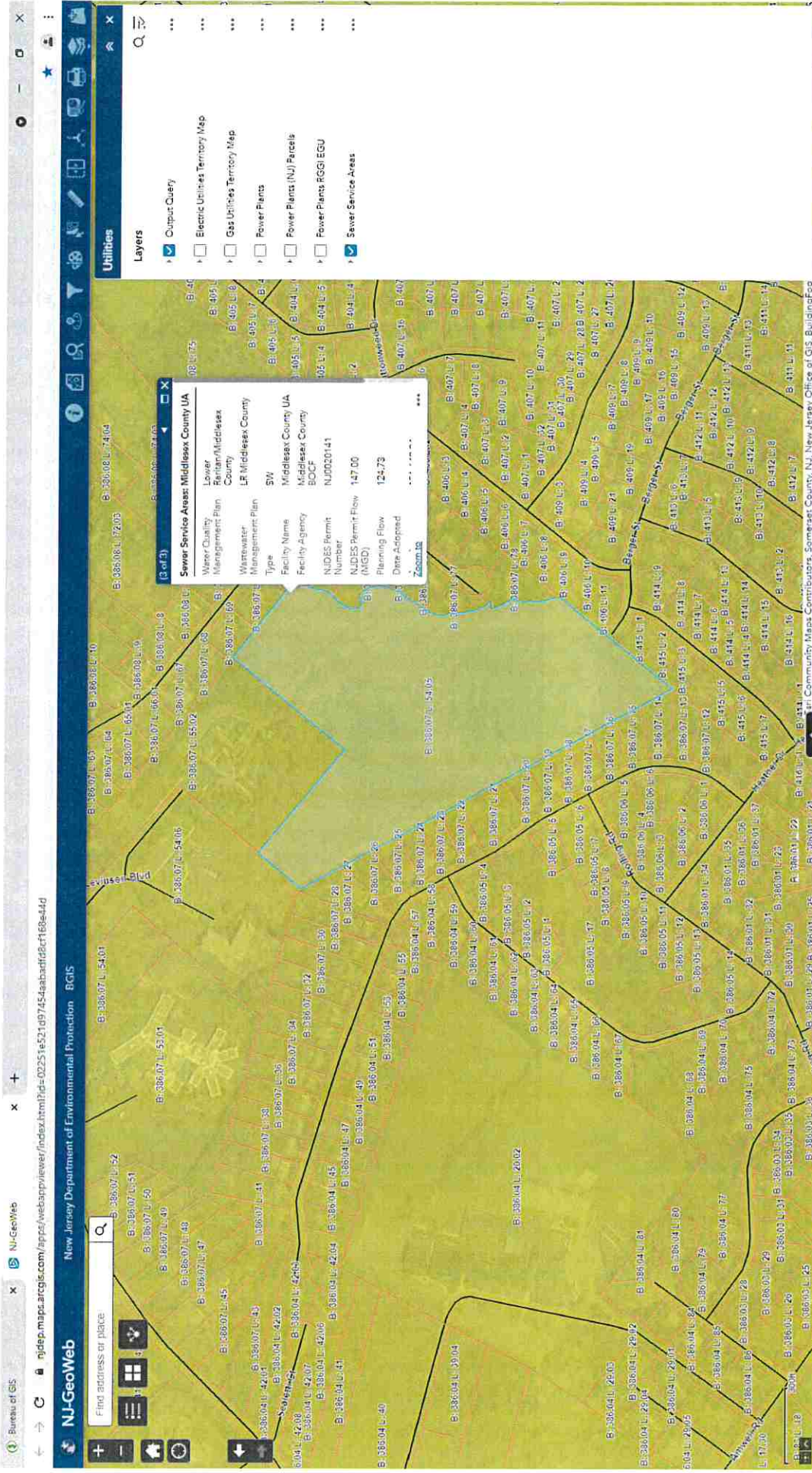
- Topographic Contours:** Brown contour lines indicating elevation, with labels for 100, 150, and 200 feet.
- Water Features:** Blue lines representing streams and brooks, including "Middlebush Brook" and "Voorhees Brook".
- Railroads:** Black lines with cross-ticks representing railroads, labeled "PA R.R. 127", "P.R.R. (MILLSTONE BR.)", and "Clyde 132".
- Settlements:** The name "Middlebush" is prominently displayed in the center.
- Other Labels:** "FRANK" is visible in large letters on the left side of the map.

On the right side, the "Layers" panel is open, listing various map layers:

- Output Query
- NJ 2020 Natural Color Imagery
- NJ 2020 Infrared Imagery
- 2015 Color Imagery
- 2015 Infrared Imagery
- 2013 Color Imagery
- 2012 Color Imagery
- 2012 Infrared Imagery
- 2010 Color Imagery
- 2007 Color Imagery
- 2007 Infrared Imagery
- 2002 Infrared Imagery
- 1995 Infrared Imagery
- 1977 Tidelind Black and White Imagery
- 1970 Wetlands Black and White Imagery
- 1930 Black and White Imagery
- Topographical Images 24K Color
- Topographical Images 24K Black and White
- Topographical Images 100k
- Historical Maps

At the bottom of the interface, there is a search bar with the text "Find address or place", navigation controls (zoom in, zoom out, home, refresh), and a scale bar showing 0.2 miles.

2021.048 - SEWER SERVICE AREAS



2021.048 – WATER PURVEYORS

New Jersey Department of Environmental Protection - BGIS

Find address or place

Output Query

Canals and Water Recessways

Category One (C1) Waters

Drought Regions

Head of Tide (HOT)

Purveyor

Streams

Sub-Watersheds (HUC14)

Surface Water Quality Classification

Surface Water Springs

Tidelands Claim Lines

Water Bodies

Water Source Areas

Watersheds (HUC11)

Watershed Management Areas

Well Head Protection Areas (Community)

Well Head Protection Areas (Non-Community)

Purveyor: Franklin Twp DPW

PHID	89 8065.00
PWID	NJ1600001
Purveyor Name	Franklin Twp DPW
Service Area Type	S
Purveyor Reports	More info
Notes	
Zone	Zone 1

Public Water System Deficit/Surplus

FRANKLIN TOWNSHIP DEPARTMENT PUBLIC WORKS

PWSID: 1808001
County: Somerset

Last Updated: 01/30/2020

► [Glossary of Terms Listed Below](#)

Water Supply Firm Capacity: 7.800 MGD

Available Water Supply Limits

	Allocation	Contract	Total
Monthly Limit	N/A MGM	238.800 MGM	238.800 MGM
Yearly Limit	N/A MGY	2847.000 MGY	2847.000 MGY

Water Demand

	Current Peak	Date	Committed Peak	Total Peak
Daily Demand	6.357 MGD	07/2016	0.619 MGD	6.976 MGD
Monthly Demand	197.081 MGM	07/2016	9.595 MGM	206.676 MGM
Yearly Demand	1832.581 MGY	2015	75.312 MGY	1907.893 MGY

Water Supply Deficit or Surplus

Firm Capacity	Water Allocation Permit
0.824 MGD	32.124 MGM 939.107 MGY

Note: Negative values (a deficit) indicate a shortfall in firm capacity and/or diversion privileges or available supplies through bulk purchase agreements.

Bureau of Water System and Engineering Comments:

Franklin Township Department of Public Works purchases water from NJAW - Raritan; New Brunswick WD and South Brunswick WD.

Bureau of Water Allocation and Well Permitting Comments:

Total Bulk Purchase System. No Allocation Permit.

For more information concerning water supply deficit and surplus, please refer to:

- [Firm Capacity and Water Allocation Analysis](#) (Pdf Format)
- [Currently Effective Water Allocation Permits by County](#)
This report displays all effective water allocation permits issued by the department.
- [Pending Water Allocation and Dewatering Applications](#)
All pending water allocation permits.
- [Water Allocation Permits Made Effective within a Selected Timeframe](#)
This report displays water allocation permits based on a specified date range.

Questions regarding demands and firm capacity please contact the Bureau of Water System and Engineering at 609-292-2957 or for questions concerning water allocation and status please contact the Bureau of Water Allocation and Well Permitting at 609-984-6831.

Questions may also be sent to the [Division of Water Supply and Geoscience](#)

[back to search results](#)

Glossary of Terms

Allocation Limit: The maximum allowed by a valid Water Allocation Permit or Water Use Registration issued by the Bureau of Water Allocation and Well Permitting. This may be surface or ground water, and may be expressed in MGD, MGM, MGY or some combination thereof. Withdrawals may also be limited by other factors and have seasonal or other restrictions such as passing flow requirements.

Committed Peak Demand: The demand associated with projects that have been approved for ultimate connection to the system, but are not yet constructed as indicated through the submission of construction certifications or certificates of occupancy. This is calculated by totaling the demand as included in Water Main Extension (WME) permits and the demand associated with projects not requiring a WME permit. This field may also include bulk sale contractual obligations. For various review purposes this quantity may be represented as MGD, MGM and/or MGY.

Contract Limit: Purchased water, where regulated by an approved service contract, will be included in the overall allocation quantity where appropriate. Contracts may exist with minimum, maximum, seasonal or other restrictions. In some instances, the value is an estimate, not an exact limit.

Current Peak Demand: This is the average day of the highest recorded demand month occurring within the last five (5) years. (For the purpose of this table, the calculation for current peak demand was based on 31 days. Systems will be reviewed on an individual basis.) This includes water from a system's own sources and all other sources of water (i.e. purchased water). This field may also include bulk sale contractual obligations.

Firm Capacity: Adequate pumping equipment and/or treatment capacity (excluding coagulation, flocculation and sedimentation) to meet peak daily demand, when the largest pumping unit or treatment unit is out of service. The value is represented in MGD.

Firm Capacity Deficit or Surplus = (Firm Capacity - Total Peak Daily Demand): The difference between the Firm Capacity and the sum of the peak daily demand and committed daily demand. This is a measure of the physical ability to provide treated water at adequate pressure when the largest pumping unit or treatment unit is out of service. Negative values indicate a shortfall in Firm Capacity.

Total Peak Water Demand: The sum of the public water system's current peak demand and committed peak demand. The value is represented in MGD, MGM, and MGY.

Total Available Water Supply: The sum of the Allocation Limit and Contract Limit. This value is represented in MGM and MGY.

Water Supply Deficit or Surplus = (Total Water Allocation Permit Limit- Total Peak Demand): The monthly and/or annual limitations of an Allocation Permit or Water Use Registration minus the sum of the monthly and/or annual demands recorded based on the water use records plus the monthly and/or annual demand projected for approved but not yet constructed projects. Negative values indicate a shortfall in diversion privileges or available supplies through bulk purchase agreements.

[back to top](#)

2021.048 - LANDSCAPE PROJECT

Bureau of GIS x + NJ-GeoWeb
njdep.maps.arcgis.com/apps/webappviewer/index.html?id=02251e521d97454abaf8f169e44c

New Jersey Department of Environmental Protection - GIS

Find address or place

Layers

- Output Query
- Freshwater Mussel Habitat - Landscape Project
- Landscape Regions
- Natural Heritage Priority Sites
- SBH - Atlantic Coastal - Landscape Project
- SBH - Delaware Bay - Landscape Project
- SBH - Skylands - Landscape Project
- SBH - Marine - Landscape Project
- SBH - Piedmont Plains - Landscape Project
- SBH - Pinelands - Landscape Project
- Vernal Habitat - Landscape Project
- Vernal Pools - Landscape Project

Community Maps Contributors: Somerset County, NJ; New Jersey Office of GIS; Burlington Co.

Browser tabs: Bureau of GIS, NJ-GeoWeb, njdep.maps.arcgis.com/apps/webappviewer/index.html?id=02251e521d97454aabbdf8cf168e44d

Page Title: New Jersey Department of Environmental Protection - BGIS

Search: Find address or place

Layers Panel:

- Output Query
- Freshwater/Mussel Habitat - Landscape Project
- Landscape Regions
- Natural Heritage Priority Sites
- SBH - Atlantic Coastal - Landscape Project
- SBH - Delaware Bay - Landscape Project
- SBH - Stylends - Landscape Project
- SBH - Marine - Landscape Project
- SBH - Piedmont Plains - Landscape Project
- SBH - Pinelands - Landscape Project
- Vernal Habitat - Landscape Project
- Vernal Pools - Landscape Project

Scale: 0.2mi

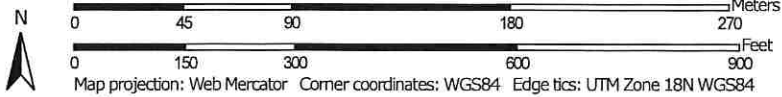
Footer: In Community Maps Contributors, Somerset County, NJ, New Jersey Office of GIS, Enr. HERE, C








































Soil Map—Somerset County, New Jersey



Map Scale: 1:3,090 if printed on A portrait (8.5" x 11") sheet.



MAP LEGEND

-  Area of Interest (AOI)
-  Area of Interest (AOI)
- Soils**
-  Soil Map Unit Polygons
-  Soil Map Unit Lines
-  Soil Map Unit Points
- Special Point Features**
-  Blowout
-  Borrow Pit
-  Clay Spot
-  Closed Depression
-  Gravel Pit
-  Gravelly Spot
-  Landfill
-  Lava Flow
-  Marsh or swamp
-  Mine or Quarry
-  Miscellaneous Water
-  Perennial Water
-  Rock Outcrop
-  Saline Spot
-  Sandy Spot
-  Severely Eroded Spot
-  Sinkhole
-  Slide or Slip
-  Sodic Spot
-  Spoil Area
-  Stony Spot
-  Very Stony Spot
-  Wet Spot
-  Other
-  Special Line Features
- Water Features**
-  Streams and Canals
- Transportation**
-  Rails
-  Interstate Highways
-  US Routes
-  Major Roads
-  Local Roads
- Background**
-  Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:24,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
 Web Soil Survey URL:
 Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Somerset County, New Jersey
 Survey Area Data: Version 18, Jun 1, 2020

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Jun 22, 2019—Jul 13, 2019

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
KkoC	Klinesville channery loam, 6 to 12 percent slopes	17.4	70.4%
RehA	Reaville silt loam, 0 to 2 percent slopes	3.1	12.7%
RorAt	Rowland silt loam, 0 to 2 percent slopes, frequently flooded	4.2	16.9%
Totals for Area of Interest		24.7	100.0%

Data Source Information

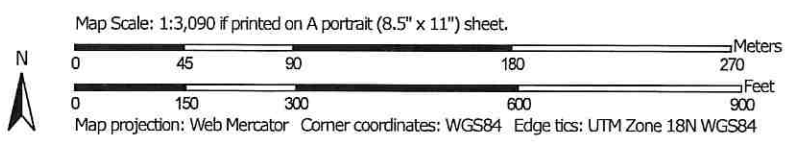
Soil Survey Area: Somerset County, New Jersey
Survey Area Data: Version 18, Jun 1, 2020



Hydrologic Soil Group—Somerset County, New Jersey



Soil Map may not be valid at this scale.



MAP LEGEND

- Area of Interest (AOI)**
 - Area of Interest (AOI)
- Soils**
 - Soil Rating Polygons
 - A
 - A/D
 - B
 - B/D
 - C
 - C/D
 - D
 - Not rated or not available
 - Soil Rating Lines
 - A
 - A/D
 - B
 - B/D
 - C
 - C/D
 - D
 - Not rated or not available
 - Soil Rating Points
 - A
 - A/D
 - B
 - B/D
- Water Features**
 - Streams and Canals
- Transportation**
 - Rails
 - Interstate Highways
 - US Routes
 - Major Roads
 - Local Roads
- Background**
 - Aerial Photography
- Other**
 - C
 - C/D
 - D
 - Not rated or not available

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:24,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
 Web Soil Survey URL:
 Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

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The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Hydrologic Soil Group

Map unit symbol	Map unit name	Rating	Acres in AOI	Percent of AOI
KkoC	Klinesville channery loam, 6 to 12 percent slopes	D	17.4	70.4%
RehA	Reaville silt loam, 0 to 2 percent slopes	C	3.1	12.7%
RorAt	Rowland silt loam, 0 to 2 percent slopes, frequently flooded	C	4.2	16.9%
Totals for Area of Interest			24.7	100.0%

Description

Hydrologic soil groups are based on estimates of runoff potential. Soils are assigned to one of four groups according to the rate of water infiltration when the soils are not protected by vegetation, are thoroughly wet, and receive precipitation from long-duration storms.

The soils in the United States are assigned to four groups (A, B, C, and D) and three dual classes (A/D, B/D, and C/D). The groups are defined as follows:

Group A. Soils having a high infiltration rate (low runoff potential) when thoroughly wet. These consist mainly of deep, well drained to excessively drained sands or gravelly sands. These soils have a high rate of water transmission.

Group B. Soils having a moderate infiltration rate when thoroughly wet. These consist chiefly of moderately deep or deep, moderately well drained or well drained soils that have moderately fine texture to moderately coarse texture. These soils have a moderate rate of water transmission.

Group C. Soils having a slow infiltration rate when thoroughly wet. These consist chiefly of soils having a layer that impedes the downward movement of water or soils of moderately fine texture or fine texture. These soils have a slow rate of water transmission.

Group D. Soils having a very slow infiltration rate (high runoff potential) when thoroughly wet. These consist chiefly of clays that have a high shrink-swell potential, soils that have a high water table, soils that have a claypan or clay layer at or near the surface, and soils that are shallow over nearly impervious material. These soils have a very slow rate of water transmission.

If a soil is assigned to a dual hydrologic group (A/D, B/D, or C/D), the first letter is for drained areas and the second is for undrained areas. Only the soils that in their natural condition are in group D are assigned to dual classes.



State of New Jersey

PHILIP D. MURPHY
Governor

DEPARTMENT OF ENVIRONMENTAL PROTECTION

SHAWN M. LATOURETTE
Commissioner

SHEILA Y. OLIVER
Lt. Governor

Division of Land Resource Protection
Mail Code 501-02A
P.O. Box 420
Trenton, New Jersey 08625-0420
www.nj.gov/dep/landuse

January 13, 2023

Bob Barry
The Foundation of the Wilf Campus
354 DeMott Lane
Somerset, New Jersey 08873

RE: Freshwater Wetlands Letter of Interpretation: Line Verification
File No.: 1808-22-0006.1
Activity Number: LLI220001
Applicant: THE FOUNDATION OF THE WILF CAMPUS
Block and Lot: [386.07, 54.05]
Franklin Township, Somerset County

Dear Mr. Barry:

This letter is in response to your request for a Letter of Interpretation to have Division of Land Resource Protection (Division) staff verify the boundary of the freshwater wetlands and/or State open waters on the referenced property.

In accordance with agreements between the State of New Jersey Department of Environmental Protection, the U.S. Army Corps of Engineers Philadelphia and New York Districts, and the U.S. Environmental Protection Agency, the NJDEP, the Division is the lead agency for establishing the extent of State and Federally regulated wetlands and waters. The USEPA and/or USACOE retain the right to reevaluate and modify the jurisdictional determination at any time should the information prove to be incomplete or inaccurate.

Based upon the information submitted, and upon site inspections conducted by Division staff on September 1, 2022 and October 27, 2022, the Division has determined that the wetlands and waters boundary line(s) as shown on the plan map entitled: "WETLANDS DELINEATION PLAN OSCAR & ELLA WILF CAMPUS FOR SENIOR LIVING-SINGLE-FAMILY & SOLAR FIELD DEVELOPMENT TOWNSHIP OF FRANKLIN SOMERSET COUNTY NEW JERSEY BLOCK 386.07, LOT 54.05 TAX MAP SHEET 62 24.46 ACRES", consisting of three (3) sheets, dated August 5, 2022, last revised December 28, 2022, and prepared by Gregg A. Gaffney, P.L.S. of Menlo Engineering Associates, is accurate as shown.

The freshwater wetlands and waters boundary line(s), as determined in this letter, must be shown on any future site development plans. The line(s) should be labeled with the above file number and the following note:

"Freshwater Wetlands/Waters Boundary Line as verified by NJDEP"

Wetlands Resource Value Classification ("RVC")

In addition, the Division has determined that the resource value and the standard transition area or buffer required adjacent to the delineated wetlands are as follows:

Ordinary: E-1 through E-8. [No wetland buffer]

State Open Water: A-1 through A-16; A-18 through A-26; A-29 through A-31; B-1 through B-18; B-33 through B-38; B-39 through B-42; B-43 through B-45; B-47 through B-49; B-50 through B-52. [No wetland buffer]

Intermediate: All remaining wetlands on site. [50 foot wetland buffer]

RVC may affect requirements for wetland and/or transition area permitting. This classification may affect the requirements for an Individual Wetlands Permit (see N.J.A.C. 7:7A-7), the types of Statewide General Permits available for the property (see N.J.A.C. 7:7A-4) and any modification available through a transition area waiver (see N.J.A.C. 7:7A-6). Please refer to the Freshwater Wetlands Protection Act (N.J.S.A. 13:9B-1 et seq.) and implementing rules for additional information.

Wetlands resource value classification is based on the best information available to the Department. The classification is subject to reevaluation at any time if additional or updated information is made available, including, but not limited to, information supplied by the applicant.

General Information

Pursuant to the Freshwater Wetlands Protection Act Rules, you are entitled to rely upon this jurisdictional determination for a period of five years from the date of this letter unless it is determined that the letter is based on inaccurate or incomplete information. Should additional information be disclosed or discovered, the Division reserves the right to void the original letter of interpretation and issue a revised letter of interpretation.

Regulated activities proposed within a wetland, wetland transition area or water area, as defined by N.J.A.C. 7:7A-2.2 and 2.6 of the Freshwater Wetlands Protection Act rules, require a permit from this office unless specifically exempted at N.J.A.C. 7:7A-2.8. The approved plan and supporting jurisdictional limit information are now part of the Division's public records.

Please be advised, surface water features onsite may possess flood hazard areas and/or riparian zones. Development within these areas may be subject to the Flood Hazard Area Control Act rules at N.J.A.C. 7:13. The Division can verify the extent of flood hazard areas and/or riparian zones through a flood hazard area verification under the application procedures set forth at N.J.A.C. 7:13-5.1.

This letter in no way legalizes any fill which may have been placed, or other regulated activities which may have occurred on-site. This determination of jurisdiction extent or presence does not make a finding that wetlands or water areas are "isolated" or part of a surface water tributary system unless specifically called out in this letter as such. Furthermore, obtaining this determination does not affect your responsibility to obtain any local, State, or Federal permits which may be required.

Recording

Within 90 calendar days of the date of this letter, the applicant shall submit the following information to the clerk of each county in which the site is located, and shall send proof to the Division that this information is recorded on the deed of each lot referenced in the letter of interpretation:

1. The Department file number for the letter of interpretation;
2. The approval and expiration date of the letter of interpretation;
3. A metes and bounds description of the wetland boundary approved under the letter of interpretation;
4. The width and location of any transition area approved under the letter of interpretation; and
5. The following statement: "The State of New Jersey has determined that all or a portion of this lot lies in a freshwater wetland and/or transition area. Certain activities in wetlands and transition areas are regulated by the New Jersey Department of Environmental Protection and some activities may be prohibited on this site or may first require a freshwater wetland permit. Contact the Division of Land Resource Protection at (609) 777-0454 or <http://www.nj.gov/dep/landuse> for more information prior to any construction onsite."

Failure to have this information recorded in the deed of each lot and/or to submit proof of recording to the Division constitutes a violation of the Freshwater Wetlands Protection Act rules and may result in suspension or termination of the letter of interpretation and/or subject the applicant to enforcement action pursuant to N.J.A.C. 7:7A-22.

Appeal Process

In accordance with N.J.A.C. 7:7A-1.7, any person who is aggrieved by this decision may request a hearing within 30 days of the date the decision is published in the DEP Bulletin by writing to: New Jersey Department of Environmental Protection, Office of Legal Affairs, Attention: Adjudicatory Hearing Requests, P.O. Box 402, Trenton, NJ 08625-0402. This request must include a completed copy of the Administrative Hearing Request Checklist found at www.state.nj.us/dep/landuse/forms. Hearing requests received after 30 days of publication notice may be denied. The DEP Bulletin is available on the Department's website at www.state.nj.us/dep/bulletin. In addition to your hearing request, you may file a request with the Office of Dispute Resolution to engage in alternative dispute resolution. Please see the website www.nj.gov/dep/odr for more information on this process.

Please contact Jessica Palilonis of our staff by e-mail at Jessica.palilonis@dep.nj.gov or (609) 777-0454 should you have any questions regarding this letter. Be sure to indicate the Department's file number in all communication.

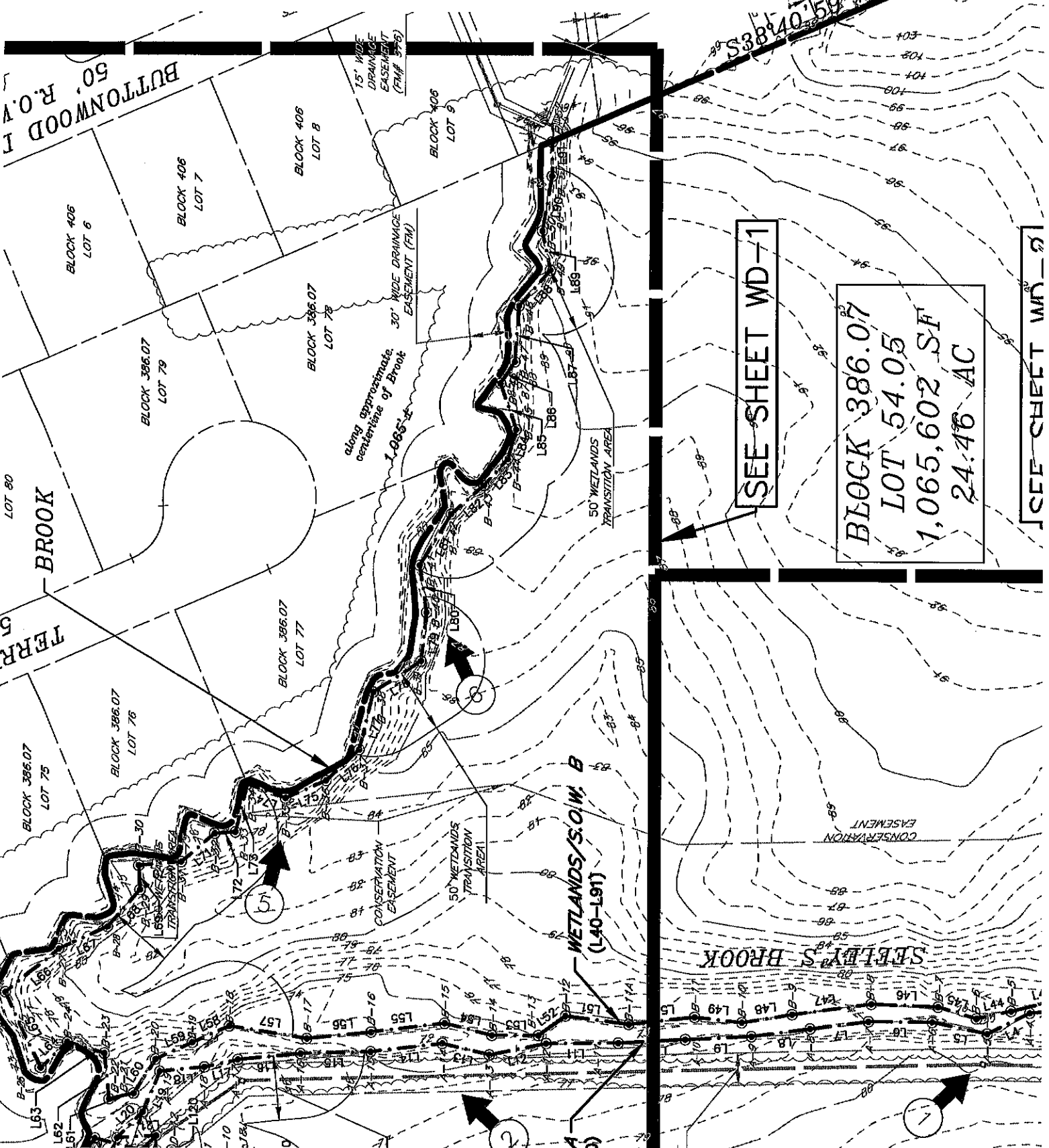
Sincerely,



Tina Wolff, Supervisor
Division of Land Resource Protection

c: Municipal Clerk, Franklin Township
Municipal Construction Official, Franklin Township
Agent (original)

L7	45.62'	N54°22'35"E
L8	46.24'	N54°25'05"E
L9	52.13'	N58°54'48"E
L10	52.13'	N58°54'48"E
L11	56.30'	S61°12'29"W
L12	45.15'	S50°29'44"W
L13	37.77'	S75°17'28"W
L14	56.21'	S55°01'32"W
L15	55.18'	S60°15'19"W
L16	49.22'	S56°20'19"W
L17	26.93'	N49°25'49"E
L18	34.94'	N56°25'49"E
L19	33.92'	N5°33'57"W
L20	28.56'	N16°51'53"E
L21	30.84'	S58°08'36"W
L22	16.19'	N16°33'24"E
L23	38.11'	N76°01'18"E
L24	36.34'	S4°10'36"W
L25	47.98'	S50°32'25"W
L26	42.98'	S14°08'15"E
L27	43.26'	N38°55'55"E
L28	36.29'	N60°33'28"E
L29	31.70'	N48°10'00"E
L30	42.20'	N32°38'30"E
L40	40.75'	S30°36'47"W
L41	20.56'	S63°55'59"W
L42	33.91'	S66°07'46"W
L43	52.17'	S48°11'08"W
L44	27.79'	S49°21'04"W
L45	31.24'	S78°39'20"W
L46	52.83'	S63°37'03"W



BLOCK 415
LOT 2

BLOCK 415
LOT 1

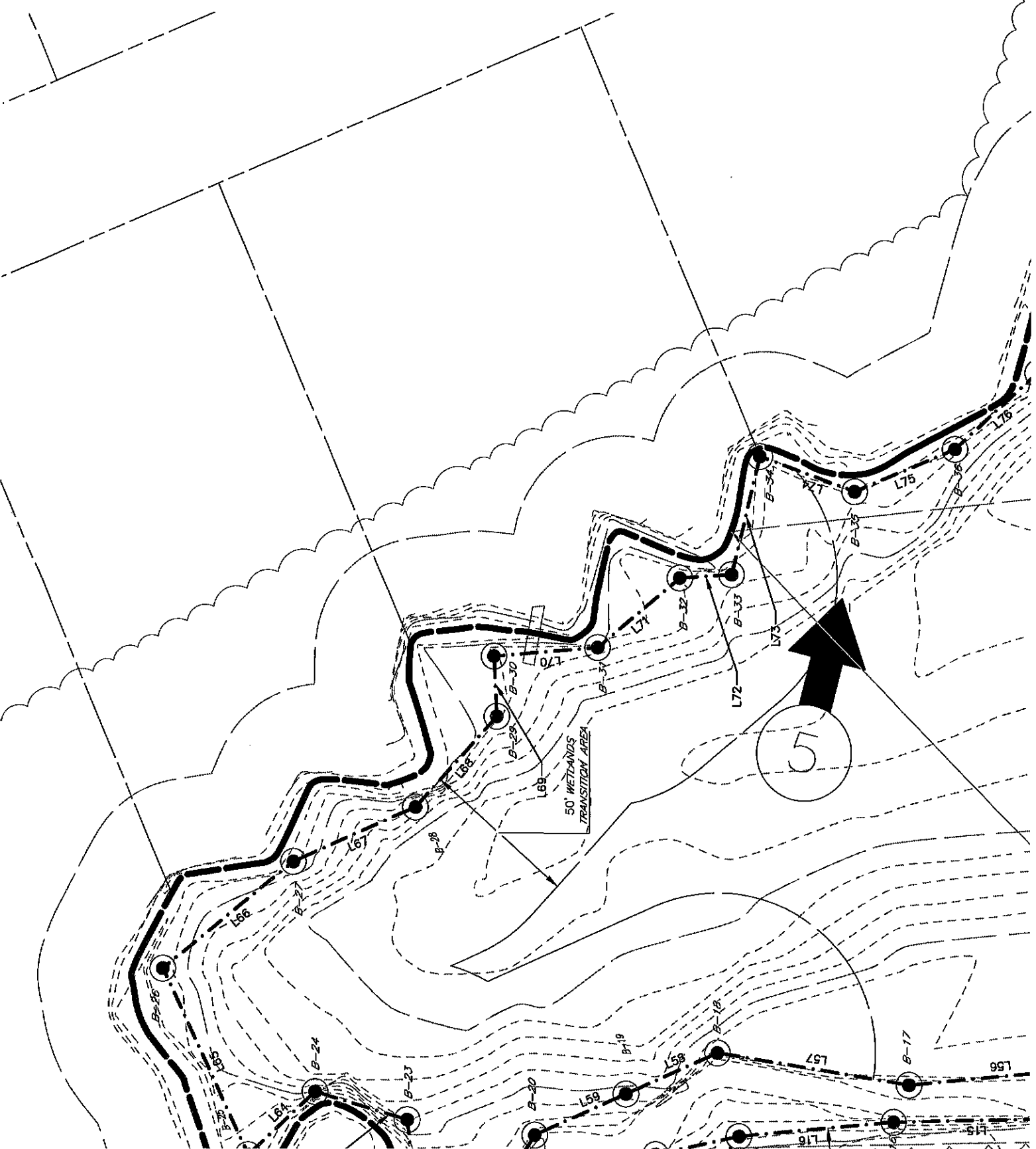
551.77'
301.45' (TR)

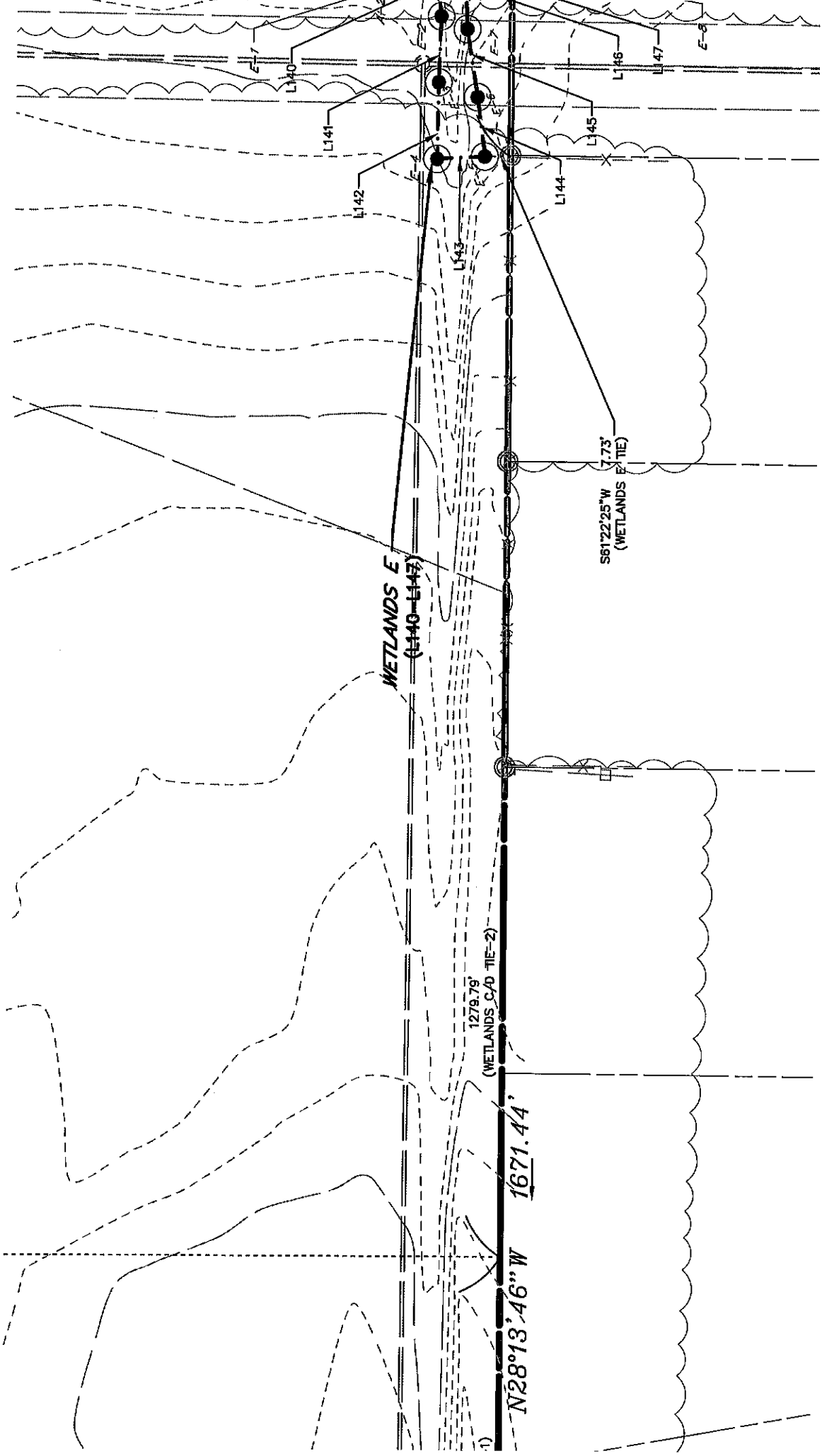
SEE SHEET WD-1

BLOCK 386.07
LOT 54.05
1,065,602 SF
24.46 AC

SEE SHEET WD-2

L7	45.62'	N54°22'35"Y
L8	46.24'	N54°25'05"Y
L9	52.13'	N58°54'48"Y
L10	52.13'	N58°54'48"Y
L11	56.30'	S61°12'29"Y
L12	45.15'	S50°29'44"Y
L13	37.77'	S75°17'28"Y
L14	56.21'	S55°01'32"Y
L15	55.18'	S60°15'19"Y
L16	49.22'	S56°20'19"Y
L17	26.93'	N49°25'49"Y
L18	34.94'	N56°25'49"Y
L19	33.92'	N5°33'57"Y
L20	28.56'	N16°51'53"Y
L21	30.84'	S56°08'36"Y
L22	16.19'	N16°33'24"Y
L23	38.11'	N76°01'18"Y
L24	36.34'	S4°10'36"W
L25	47.98'	S50°32'25"Y
L26	42.98'	S14°08'15"Y
L27	43.26'	N36°55'55"Y
L28	36.29'	N60°33'28"Y
L29	31.70'	N48°10'00"Y
L30	42.20'	N32°38'30"Y
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L44	27.79'	S49°21'04"Y
L45	31.24'	S78°39'20"Y
L46	52.83'	S63°37'03"Y







State of New Jersey

MAIL CODE 501-04

DEPARTMENT OF ENVIRONMENTAL PROTECTION
STATE PARKS, FORESTS AND HISTORIC SITES
OFFICE OF NATURAL LANDS MANAGEMENT

501 East State Street

P.O. Box 420

Trenton, NJ 08625-0420

Tel. (609) 984-1339 • Fax (609) 984-0427

PHILIP D. MURPHY
Governor

SHEILA Y. OLIVER
Lt. Governor

SHAWN M. LATOURETTE
Commissioner

March 25, 2022

Krista Ruh
Menlo Engineering Associates, Inc.
261 Cleveland Avenue
Highland Park, NJ 08904

Re: Oscar & Ella Wilf Campus for Senior Living
Block(s) - 386.07, Lot(s) - 54.05
Franklin Township, Somerset County

Dear Ms. Ruh:

Thank you for your data request regarding rare species information for the above referenced project site.

Searches of the Natural Heritage Database and the Landscape Project (Version 3.3) are based on a representation of the boundaries of your project site in our Geographic Information System (GIS). We make every effort to accurately transfer your project bounds from the map(s) submitted with the Natural Heritage Data Request Form into our GIS. We do not typically verify that your project bounds are accurate, or check them against other sources.

We have checked the Landscape Project habitat mapping and the Biotics Database for occurrences of any rare wildlife species or wildlife habitat on the referenced site. The Natural Heritage Database was searched for occurrences of rare plant species or ecological communities that may be on the project site. Please refer to Table 1 (attached) to determine if any rare plant species, ecological communities, or rare wildlife species or wildlife habitat are documented on site. A detailed report is provided for each category coded as 'Yes' in Table 1.

We have also checked the Landscape Project habitat mapping and Biotics Database for occurrences of rare wildlife species or wildlife habitat in the immediate vicinity (within ¼ mile) of the referenced site. Additionally, the Natural Heritage Database was checked for occurrences of rare plant species or ecological communities within ¼ mile of the site. Please refer to Table 2 (attached) to determine if any rare plant species, ecological communities, or rare wildlife species or wildlife habitat are documented within the immediate vicinity of the site. Detailed reports are provided for all categories coded as 'Yes' in Table 2. These reports may include species that have also been documented on the project site.

We have also checked the Landscape Project habitat mapping and Biotics Database for all occurrences of rare wildlife species or wildlife habitat within one mile of the referenced site. Please refer to Table 3 (attached) to determine if any rare wildlife species or wildlife habitat is documented within one mile of the project site. Detailed reports are provided for each category coded as 'Yes' in Table 3. These reports may include species that have also been documented on the project site.

For requests submitted in order to make a riparian zone width determination as part of a Flood Hazard Area Control Act (FHACA) rule application, we report records for all rare plant species and ecological communities tracked by the Natural Heritage Program that may be on, or in the immediate vicinity of, your project site. A subset of these plant species is also covered by the FHACA rules when the records are located within one mile of the project site. One mile searches for FHACA plant species will only report precisely located occurrences for those wetland plant species identified under the FHACA regulations as being critically dependent on the watercourse. Please refer to Table 3 (attached) to determine if any precisely located rare wetland plant species covered by the FHACA rules have been documented. Detailed reports are

provided for each category coded as 'Yes' in Table 3. These reports may include species that have also been documented on, or in the immediate vicinity of, the project site.

The Natural Heritage Program reviews its data periodically to identify priority sites for natural diversity in the State. Included as priority sites are some of the State's best habitats for rare and endangered species and ecological communities. Please refer to Tables 1, 2 and 3 (attached) to determine if any priority sites are located on, in the immediate vicinity, or within one mile of the project site.

A list of rare plant species and ecological communities that have been documented from the county (or counties), referenced above, can be downloaded from <http://www.state.nj.us/dep/parksandforests/natural/heritage/countylist.html>. If suitable habitat is present at the project site, the species in that list have potential to be present.

Status and rank codes used in the tables and lists are defined in EXPLANATION OF CODES USED IN NATURAL HERITAGE REPORTS, which can be downloaded from http://www.state.nj.us/dep/parksandforests/natural/heritage/nhp_codes_2010.pdf.

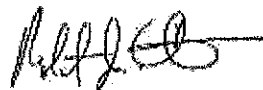
Beginning May 9, 2017, the Natural Heritage Program reports for wildlife species will utilize data from Landscape Project Version 3.3. If you have questions concerning the wildlife records or wildlife species mentioned in this response, we recommend that you visit the interactive web application at the following URL, <https://njdep.maps.arcgis.com/apps/webappviewer/index.html?id=0e6a44098c524ed99bf739953cb4d4c7>, or contact the Division of Fish and Wildlife, Endangered and Nongame Species Program at (609) 292-9400.

For additional information regarding any Federally listed plant or animal species, please contact the U.S. Fish & Wildlife Service, New Jersey Field Office at <http://www.fws.gov/northeast/njfieldoffice/endangered/consultation.html>.

PLEASE SEE 'CAUTIONS AND RESTRICTIONS ON NHP DATA', which can be downloaded from <http://www.state.nj.us/dep/parksandforests/natural/heritage/newcaution2008.pdf>.

Thank you for consulting the Natural Heritage Program. The attached invoice details the payment due for processing this data request. Feel free to contact us again regarding any future data requests.

Sincerely,



Robert J. Cartica
Administrator

c: NHP File No. 22-4007445-24447

Table 1: On Site Data Request Search Results (6 Possible Reports)

<u>Report Name</u>	<u>Included</u>	<u>Number of Pages</u>
1. Possibly on Project Site Based on Search of Natural Heritage Database: Rare Plant Species and Ecological Communities Currently Recorded in the New Jersey Natural Heritage Database	No	0 pages included
2. Natural Heritage Priority Sites On Site	No	0 pages included
3. Rare Wildlife Species or Wildlife Habitat on the Project Site Based on Search of Landscape Project 3.3 Species Based Patches	Yes	1 page(s) included
4. Vernal Pool Habitat on the Project Site Based on Search of Landscape Project 3.3	No	0 pages included
5. Rare Wildlife Species or Wildlife Habitat on the Project Site Based on Search of Landscape Project 3.3 Stream Habitat File	No	0 pages included
6. Other Animal Species On the Project Site Based on Additional Species Tracked by Endangered and Nongame Species Program	No	0 pages included

**Rare Wildlife Species or Wildlife Habitat on the
Project Site Based on Search of
Landscape Project 3.3 Species Based Patches**

Class	Common Name	Scientific Name	Feature Type	Rank	Federal Protection Status	State Protection Status	Grank	Srank
Aves	Great Blue Heron	Ardea herodias	Foraging	2	NA	Special Concern	G5	S3B,S4N

Table 2: Vicinity Data Request Search Results (6 possible reports)

<u>Report Name</u>	<u>Included</u>	<u>Number of Pages</u>
1. Immediate Vicinity of the Project Site Based on Search of Natural Heritage Database: Rare Plant Species and Ecological Communities Currently Recorded in the New Jersey Natural Heritage Database	No	0 pages included
2. Natural Heritage Priority Sites within the Immediate Vicinity	No	0 pages included
3. Rare Wildlife Species or Wildlife Habitat Within the Immediate Vicinity of the Project Site Based on Search of Landscape Project 3.3 Species Based Patches	Yes	1 page(s) included
4. Vernal Pool Habitat In the Immediate Vicinity of Project Site Based on Search of Landscape Project 3.3	No	0 pages included
5. Rare Wildlife Species or Wildlife Habitat In the Immediate Vicinity of the Project Site Based on Search of Landscape Project 3.3 Stream Habitat File	No	0 pages included
6. Other Animal Species In the Immediate Vicinity of the Project Site Based on Additional Species Tracked by Endangered and Nongame Species Program	No	0 pages included

**Rare Wildlife Species or Wildlife Habitat Within the
Immediate Vicinity of the Project Site Based on Search of
Landscape Project 3.3 Species Based Patches**

Class	Common Name	Scientific Name	Feature Type	Rank	Federal Protection Status	State Protection Status	Grank	Srank
<i>Aves</i>	Great Blue Heron	Ardea herodias	Foraging	2	NA	Special Concern	G5	S3B,S4N

**Table 3: Within 1 Mile for Riparian Zone Width Determination
(6 possible reports)**

<u>Report Name</u>	<u>Included</u>	<u>Number of Pages</u>
1. Rare Plant Species Occurrences for Riparian Zone Width Determination (Flood Hazard Area Control Act Rule Application) - Within One Mile of the Project Site Based on Search of Natural Heritage Database	No	0 pages included
2. Natural Heritage Priority Sites for Riparian Zone Width Determination - Within One Mile of the Project Site	No	0 pages included
3. Rare Wildlife Species or Wildlife Habitat for Riparian Zone Width Determination - Within One Mile of the Project Site Based on Search of Landscape Project 3.3 Species Based Patches	Yes	1 page(s) included
4. Vernal Pool Habitat for Riparian Zone Width Determination - Within One Mile of the Project Site Based on Search of Landscape Project 3.3	Yes	1 page(s) included
5. Rare Wildlife Species or Wildlife Habitat for Riparian Zone Width Determination - Within One Mile of the Project Site Based on Search of Landscape Project 3.3 Stream Habitat File	No	0 pages included
6. Other Animal Species for Riparian Zone Width Determination - Within One Mile of the Project Site Based on Additional Species Tracked by Endangered and Nongame Species Program	No	0 pages included

**Rare Wildlife Species or Wildlife Habitat for Riparian Zone Width Determination
Within One Mile of the Project Site
Based on Search of Landscape Project 3.3 Species Based Patches**

Class	Common Name	Scientific Name	Feature Type	Rank	Federal Protection Status	State Protection Status	Grank	Srank	
<i>Aves</i>	American Kestrel	Falco sparverius	Breeding Sighting	3	NA	State Threatened	G5	S2B, S2N	
	American Kestrel	Falco sparverius	Nest	3	NA	State Threatened	G5	S2B, S2N	
	Cooper's Hawk	Accipiter cooperii	Breeding Sighting	2	NA	Special Concern	G5	S3B, S4N	
	Great Blue Heron	Ardea herodias	Foraging	2	NA	Special Concern	G5	S3B, S4N	
	Red-shouldered Hawk	Buteo lineatus	Breeding Sighting	4	NA	State Endangered	G5	S1B, S3N	
	Red-shouldered Hawk	Buteo lineatus	Non-breeding Sighting	2	NA	Special Concern	G5	S1B, S3N	
	Upland Sandpiper	Bartramia longicauda	Breeding Sighting-Confirmed	4	NA	State Endangered	G5	S1B, S1N	
	Wood Thrush	Hylocichla mustelina	Breeding Sighting	2	NA	Special Concern	G4	S3B, S4N	
	<i>Reptilia</i>	Eastern Box Turtle	Terrapene carolina carolina	Occupied Habitat	2	NA	Special Concern	G5T5	S3
		Spotted Turtle	Clemmys guttata	Occupied Habitat	2	NA	Special Concern	G5	S3

**Vernal Pool Habitat for Riparian Zone Width Determination
Within One Mile of the Project Site
Based on Search of Landscape Project 3.3**

Vernal Pool Habitat Type	Vernal Pool Habitat ID
Potential vernal habitat area	1784
Total number of records:	1