

# ENVIRONMENTAL IMPACT STATEMENT

*For*

***Sharbell Building Company, LLC  
Planned Residential Development – KT Tract***

***17 Research Road  
Block 28005, Lot 66  
Montgomery Township, Somerset County, New Jersey***

Prepared by:



**DYNAMIC  
ENGINEERING**

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A handwritten signature in blue ink, appearing to read 'Jeffrey S. Haberman', is written over a horizontal line. The signature is fluid and cursive.

**Jeffrey S. Haberman, PE**  
NJ Professional Engineer License #53560

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DEC# 0043-14-015

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## A. Project Description

This Environmental Impact Statement has been prepared in accordance with the requirements of the Township of Montgomery Environmental Impact Statement Ordinance, Section (§16-8.4.c) in support of the Preliminary and Final Major Subdivision and Site Plan Application for the proposed development on Block 28005 in Lot 66, as shown on the official Tax Maps of the Township of Montgomery, Somerset County, New Jersey. The scope of the development includes a subdivision of the tract for the construction of 107 townhome dwellings, a 40-unit condominium building, roadways, parking areas, recreational open space areas and other associated improvements and site amenities as shown on the accompanying Site Plan drawings.

The purpose of this statement is to summarize, highlight or otherwise qualify, the extent of the effects that the proposed development will have on the ecological systems and the environment of the subject property and the lands of the Township of Montgomery.

The Major Subdivision Plan drawings and associated Traffic Impact Analysis, Stormwater Management Report and Stormwater Basin Soils Investigation have been submitted as part of the Application package to the Township of Montgomery.

The subject site is specifically identified as Lot 66 in Block 28005, as shown on the official Tax Maps of the Township of Montgomery, Somerset County, New Jersey. The site is 26.076 acres and currently consists of a vacated office building with associated site improvements and wooded area. According to the Official Zoning Map of the Township of Montgomery, the property is located within the REO-3 (Research Engineering and Office) District. Ordinance #17-1557 was recently adopted to permit the development of this parcel with townhomes and a multi-family condominium pursuant to the PMUD (Planned Mixed Use Development) zoning regulations. The Applicant proposes to demolish the vacated office building and develop the lot with 107 townhome dwellings, a 40-unit condominium building, roadways, parking areas, recreational open space areas and other associated improvements and site amenities as shown on the accompanying Site Plan drawings. The 107 townhome dwellings consist of 55 3-bedroom units and 52 4-bedroom units, and the 40-unit condominium building consists of 2 bedroom units.

The subject site is bound to the west by Research Road and Hartwick Drive with various commercial/retail uses beyond; to the east by various commercial/retail uses with US Route 206 beyond; to the north by a residential development; and to the south by residential dwellings with Georgetown Franklin Turnpike (CR 518) beyond.

The following represents a listing of the project's compatibility in relation to the:

- **Township Master Plan:** The property is located within the REO-3 (Research Engineering and Office) District. Ordinance #17-1557 was adopted to permit the development of this parcel with townhomes and a multi-family condominium pursuant to the PMUD (Planned Mixed Use Development) zoning

regulations. The project is consistent with the PMUD zoning regulations and the Township Master Plan.

- **Montgomery Township Natural Resources Inventory:** Figure 21 of the Township Natural Resources Inventory (Steep Slopes and Ridgelines) identifies areas of critical slopes (in excess of 15% slope) on the subject parcel. In addition, a Steep Slope Analysis Plan has been prepared which is based upon a topographic survey that was conducted for this site. These critical slopes will be removed for the construction of the proposed development. It does not appear that there are any other documented natural resources, including wetlands, flood hazard areas, threatened and endangered species, etc. that will be impacted by the proposed development.
- **Master Plan of Adjacent Municipalities:** The development is consistent with the residential character of the surrounding lots and similar uses on the CR 518 roadway corridor in surrounding Municipalities. Therefore, it is anticipated that the proposed development is consistent with the Master Plans of surrounding Municipalities.
- **Somerset County Master Plan:** The project is consistent with the Somerset County Master Plan regarding development along the Georgetown Franklin Turnpike (CR 518) corridor. An application will be submitted to the Somerset County Planning Board for Subdivision and Site Plan Approval.
- **Regional and State Planning Guides:** The proposed development meets its fair share obligation through the proposed 86 unit affordable housing facility at the southwestern corner of Hartwick Drive and Research Road. A separate entity is currently designing the affordable housing facility and will coordinate the application and permitting process with the Municipality.

## B. Site Description and Inventory

### 1) Types of Soils

Based on a review of the NRCS Web Soil Survey, the soil types native to the site include:

SOIL TYPE	SOIL TYPE NAME	HYDROLOGIC SOIL GROUP
BhnB	Birdsboro silt loam, 2 to 6 percent slopes	B
LbtB	Lansdowne silt loam, 2 to 6 percent slopes	C
RorAt	Rowland silt loam, 2 to 6 percent slopes	C
RoyB	Royce silt loam, 2 to 6 percent slopes	C

\*\* Dynamic Earth, LLC performed numerous test pits within the site to establish seasonal high groundwater table characteristics and percolation tests were conducted for on-site soils to confirm soil classification per the County Soil Survey. The soils encountered during the site investigation consisted of clayey silt, and groundwater and evidence of seasonal high water table were not encountered in test pits. Therefore, it is anticipated that on-site soils will generate permeability readings that are characteristic of a 'D' soil rating. For the purposes of this study, on-site disturbed soils

are assumed to have a 'D' soil classification and therefore are unable to infiltrate stormwater runoff. Off-site undisturbed soils are assumed to be of the aforementioned County Soils Survey 'B' and 'C' ratings as no test pits were performed for off-site soils to confirm otherwise. Supplemental test pit location maps and permeability test results will be provided under separate cover for justification.

## **2) Topography**

In existing conditions, the slopes generally range from moderate to steep with elevations ranging from 152 feet msl near the southerly property line to 106 msl near the northerly property line. Pursuant to the Montgomery Township Critical Areas Map, areas of critical slope (>15%) have been identified on-site and have been confirmed by the recent survey.

## **3) Geology**

The subject site is situated within the Piedmont physiographic province of New Jersey, characterized by a low rolling plain dissected by higher ridges. Specifically, the site is underlain by the Lower Jurassic/Upper Triassic-aged Passaic Formation which consists, primarily, of red beds of argillaceous siltstone, mudstone, and sandstone. The overburden soils include natural Pensauken Formation deposits as well as residual deposits that were formed from the weathering of the parent rock.

## **4) Vegetation**

In existing conditions, a majority of the subject property consists of undeveloped wooded areas with dense underbrush. Tree Preservation Plans depicting species and sizes of trees to be preserved or removed have been prepared and are provided within the Preliminary and Final Major Subdivision & Site Plan drawings, as submitted under separate cover.

## **5) Wildlife**

As previously stated, the existing site primarily consists of undeveloped wooded area with a number of plants and animals. Per NJDEP GeoWeb Mapping, it does not appear that any unique habitats of endangered or protected species are located on the subject site. Existing vegetation and wildlife are typical of a New Jersey suburban condition and will relocate to surrounding wooded areas.

## **6) Subsurface Water**

Per NJDEP GeoWeb mapping, there is an uncoded tributary stream to the northeast of the subject parcel. However, there is the intervening "Hillside at Montgomery" development to the north of the parcel which has already established a conservation easement for the stream and will not be impacted by this development.

An NJDEP Letter of Interpretation: Presence/Absence Determination has been issued on 10/11/17 confirming that there are no wetlands on-site. The Letter of Interpretation can be found in the Appendix of this Report.

Pursuant to the Report of Supplemental Geotechnical Investigation and Stormwater Management Evaluation provided under separate cover, groundwater or evidence of seasonal high groundwater was not encountered. Groundwater control is preliminarily expected to include temporary control of trapped and/or perched groundwater. Groundwater levels are expected to fluctuate seasonally and following periods of significant precipitation. A summary of the seasonal high groundwater levels and permeability testing are presented in the Report of Supplemental Geotechnical Investigation and Stormwater Management Evaluation.

Per the FEMA Flood Insurance Rate Map (FIRM), the subject site is not located within a Flood Hazard Area.

There may be existing inactive potable wells on-site which will be demolished.

#### **7) Distinctive Scenic and/or Historic Features**

Per NJDEP GeoWeb Mapping and the Montgomery Township Mapping Database, it does not appear that there are any distinctive scenic or historic features within the vicinity of the subject site.

#### **8) Existing Development Features**

The subject parcel currently consists of a vacated office building with associated site improvements and wooded area. Per historical photographs, it appears that the office building was developed in the 1960s or prior and lacks aesthetic value.

There is a 48" transmission water main that runs along the easterly property line from County Route 518 to the existing "Hillside at Montgomery" development to the north. NJAW has been contacted and the existing cover will be maintained over the water main.

#### **9) Miscellaneous**

The subject parcel consists of an office building that is currently not in use. Therefore, the site has little to no adverse impact to existing air quality. Existing air quality surrounding the site is typical of a New Jersey suburban setting. There are existing hazardous air pollutants (HAP's) which come from cars, heavy duty trucks, buses and other highway vehicles from the surrounding roadway network. These vehicles may produce diesel particulate matter, diesel exhaust and/or carbon monoxide. There are known health standards associated with these pollutants.

Being that the office building is currently not in use, there is no noise generated by the existing use.

## **C. Impact During and After Construction**

### **1) Soil Erosion and Sedimentation Resulting from Surface Runoff**

There will be an unavoidable increase in sedimentation and siltation as a result of construction activities. The proposed development, however, has been designed in accordance with the 2014 Standards for Soil Erosion and Sediment Control in New Jersey in order to mitigate any impacts of sedimentation and siltation resulting from surface runoff as much as possible. Moreover, proposed grading has been designed to match existing drainage patterns.

In addition, the development proposes two (2) wet pond basins to collect stormwater runoff and sedimentation from a majority of the parcel. The wet ponds will be regularly maintained to remove excess sedimentation. The wet pond basins discharge to the existing bioretention facility to the north which is a stabilized discharge point.

### **2) Flooding and Flood Plain Distribution**

This project consists of more than one acre of land disturbance, and therefore, it qualifies as a “major” development per NJAC 7:8. The development has been designed to meet the water quantity, water quality and groundwater recharge requirements set forth in N.J.A.C. 7:8 by utilizing two (2) wet ponds. Please refer to the Stormwater Management Report, submitted under separate cover, for detailed calculations.

Per the FEMA Flood Insurance Rate Map (FIRM), the subject site is not located within a Flood Hazard Area.

### **3) Degradation of Surface Water Quality**

Per NJDEP GeoWeb mapping, there is an uncoded tributary stream to the northeast of the subject parcel. However, there is the intervening “Hillside at Montgomery” development to the north of the parcel which has already established a conservation easement for the stream and will not be impacted by this development.

Furthermore, the development proposes two (2) wet ponds that have been designed to provide a ratio of permanent pool volume to water quality storm runoff volume greater than 3:1 and a detention time greater than 12 hours. According to the standards set forth by the NJ Stormwater Best Management Practices, the proposed wet ponds produce a TSS Removal Rate of 80%, therefore satisfying the water quality standards set forth by NJAC 7:8.

### **4) Ground Water Pollution**

The proposed development proposes two (2) wet ponds that have been designed to provide a ratio of permanent pool volume to water quality storm runoff volume greater than 3:1 and a detention time greater than 12 hours. According to the standards set forth by the NJ Stormwater Best Management Practices, the proposed wet ponds produce a TSS



Removal Rate of 80%, therefore satisfying the water quality standards set forth by NJAC 7:8. In addition, there are no areas of high pollutant area loading or hazardous waste that will be generated by residents of the proposed development.

#### **5) Reduction of Ground Water Capabilities**

Dynamic Earth, LLC performed numerous test pits within the site to establish seasonal high groundwater table characteristics and percolation tests were conducted for on-site soils to confirm soil classification per the County Soil Survey. The soils encountered during the site investigation consisted of clayey silt, and groundwater and evidence of seasonal high water table were not encountered in test pits. Therefore, it is anticipated that on-site soils will generate permeability readings that are characteristic of a 'D' soil rating. For the purposes of the stormwater management design, on-site disturbed soils are assumed to have a 'D' soil classification and therefore are unable to infiltrate stormwater runoff. Therefore, due to the assumption of a lack of infiltration in existing conditions, it is assumed that groundwater capabilities will not be altered by the proposed development. Supplemental test pit location maps and permeability test results will be provided under separate cover.

#### **6) Sewage Disposal**

The subject parcel is within a sanitary sewer service area. In existing conditions, sanitary sewer service was previously provided to the existing office building via a septic system. There is no public sanitary sewer infrastructure within Georgetown-Franklin Turnpike (CR 518) in the immediate vicinity of the project site.

A Treatment Works Approval was previously granted for the sanitary sewer system that was designed and constructed for the "Hillside at Montgomery" development to the north of the parcel. The existing sanitary sewer collection systems are under the ownership of the Township of Montgomery Department of Public Works.

Due to the topography of the site and lack of an existing conveyance system within the surrounding roadway network, the proposed development will connect to the existing sanitary sewer collection system within the "Hillside at Montgomery" development and will provide an unavoidable increase in sewerage demand to the existing system. The development proposes eight inch SDR-35 PVC sanitary sewer gravity mains which convey sewerage from the individual townhome units, affordable housing facility and condominium building to the existing manhole near the southerly terminus of Hartwick Drive in the "Hillside at Montgomery" development. The proposed sewerage facilities will comply with State and Municipal Health Regulations and will be treated by the Skillman Village Wastewater Treatment Plant. According to Gail Smith, the Township Engineer, per the Will-Serve Letter in the Appendix of this Report, the treatment plant has the capacity to handle the additional generated wastewater from the proposed development.

It is anticipated that the downstream sanitary sewer mains will have the capacity to handle the additional generated wastewater from the proposed development. In addition, the existing pump stations that are downstream of the proposed development will be analyzed for capacity impacts caused by the increase in demand, and if required, will be

upgraded to accommodate the additional wastewater that is generated. Please refer to the Sanitary Sewer Engineer's Report for additional information and calculations.

Upon approval from the Township, our office will submit a formal application for a Treatment Works Approval to the NJDEP to ensure the proposed sewer disposal facilities are in compliance with State Regulations.

#### **7) Solid Waste Disposal**

The proposed townhomes will be serviced by private haulers for curbside garbage removal needs. Each unit will be responsible for obtaining trash receptacles for their home and placing the receptacle on the curb on the correct pickup days. As such, regular trash pickups will be provided to remove the solid waste as needed.

The proposed condominium contains an exterior trash enclosure for recycling/garbage and a private hauler will be contracted regularly to pick up trash. Furthermore, several trash receptacles will be provided at the various open space areas. It is not anticipated that the residential homeowners will produce hazardous waste.

#### **8) Vegetation Destruction**

In existing conditions, a majority of the site consists of wooded area. As such, there will be an unavoidable impact due to the removal of trees and underbrush throughout the parcel. However, existing trees will be preserved to the maximum extent feasible. A Tree Preservation Plan has been prepared and is located within the Major Subdivision drawings, prepared by our office, dated 01/10/18.

In addition to preserving existing trees where feasible, the development proposes an abundance of new trees, shrubs, and groundcover plantings. The landscaping design has been prepared to provide an aesthetic improvement to the interior and perimeter of the site through use of approved native species and other low maintenance vegetation. Landscaping improvements incorporated into the development meet the Township of Montgomery Ordinance requirements.

#### **9) Wildlife**

It is anticipated that any local species impacted by the removal of vegetation and the construction and the operation of the residential units will relocate to surrounding areas. Therefore, it is anticipated that the proposed development will not have an adverse effect on wildlife within the vicinity of the parcel.

Furthermore, it is important to note that per NJDEP GeoWeb Mapping, it does not appear that any unique habitats of endangered or protected species are located on the subject site. Existing vegetation and wildlife are typical of a New Jersey suburban condition

## **10) Destruction or Degradation of Scenic and Historic Features**

Per NJDEP GeoWeb Mapping, it does not appear that there are any scenic or historic resources within the vicinity of the subject site.

## **11) Air Quality Degradation**

The development will impose negligible air quality impacts for the additional traffic generated along the US Route 206 and Georgetown Franklin Turnpike (CR 518) corridors. There may be some temporary airborne dust particulates associated with the construction process but these conditions will be localized and will dissipate with the stoppage of each workday. Dust will be controlled through daily watering of the construction entrance/exits and circulation aisles and cleaning of the streets in close proximity to same, as necessary.

## **12) Noise Levels**

There will be an unavoidable increase in noise generated by construction equipment. However, this effect is mitigated once construction is complete.

In comparison to the existing commercial and residential uses surrounding the parcel, any impacts on ambient noise levels due to the proposed improvements would be negligible. Therefore, the noise generated by the proposed development will not adversely impact the quality of life on the site or in close proximity thereof.

## **13) Energy Utilization**

There will be an unavoidable increase in energy utilization during and following construction activities. Vehicles and equipment will utilize energy during construction, and following construction, residents of the proposed townhome dwellings and 40-unit condominium building will utilize energy of a typical homeowner.

Additionally, all of the proposed dwellings will take part in recycling of those materials accepted for the Township of Montgomery.

## **D. Environmental Performance Controls**

The following steps will be taken to avoid/minimize adverse environmental impacts during construction and operation:

- Effective implementation of soil erosion and sediment control measures, including tree preservation, silt fencing, and inlet filters, as well as utilization of Stormwater Best Management Practices, should successfully minimize the site development's impact on existing natural resources. Strict adherence to the limits of

disturbance parameters and stabilizing the construction entrances on Georgetown Franklin Turnpike (CR 518) will reduce the amount of soil being brought off-site.

- Two (2) wet ponds will be utilized to collect runoff from a majority of the site improvements. The wet ponds have been designed to detain stormwater runoff in order to reduce the peak flow runoff rates for the 2, 10 and 100 year storm frequencies for the subject parcel in accordance with NJAC 7:8, thereby providing a benefit to the site's drainage conditions and surrounding uses. Furthermore, the wet ponds have been designed to provide a 3:1 ratio of permanent pool volume to water quality storm runoff volume and a detention time of 12 hours or greater; therefore, according to the NJ Stormwater Best Management Practices, the Wet Ponds provide a TSS Removal Rate of 80%, satisfying the water quality standards set forth by NJAC 7:8. Stormwater from the wet ponds are discharged to the existing bioretention basin to the north in order to maintain existing drainage patterns.
- The proposed development will connect to the existing sanitary sewer collection system within the "Hillside at Montgomery" development. The development proposes sanitary sewer gravity mains which convey sewerage from the proposed development to the existing manhole near the southerly terminus of Hartwick Drive in the "Hillside at Montgomery" development. Sewerage from this point will ultimately be conveyed through the existing sewer system in the Hillside development to the Skillman Village Wastewater Treatment Plant for treatment. A "Will Serve" letter was procured from the Township of Montgomery Engineering Department and is provided in the Appendix of this Report. Furthermore, please refer to the Sanitary Sewer Engineer's Report for additional information and calculations. Our office will submit a formal application for a Treatment Works Approval to the NJDEP to ensure the proposed sewer disposal facilities are in compliance with State Regulations.
- The subject development proposes an 8" cement lined ductile iron pipe (CLDIP) water main loop within Intermediate Loop Road and Hartwick Drive which will connect to the existing 8" water main within Research Road. The proposed 8" water main will provide domestic water service to the 107 townhomes and 40-unit condominium building as well as the proposed hydrants that are located around the site. Each townhome unit will have an individual water service connection which will provide a meter pit in accordance with New Jersey American Water standards and specifications. The subject development proposes the installation of six (6) fire hydrants located throughout the site in accordance with RSIS Standards. The fire hydrants will be serviced by 6" water service laterals which will tie into the 8" water main loop as previously described. A Will Serve Letter was procured from New Jersey American Water and is provided in the Appendix of this Report. Please refer to the Potable Water Engineer's Report for additional information and calculations. Our office will submit a formal application to the NJDEP Bureau of Safe Drinking Water to obtain written approvals verifying the proposed water service system is in compliance with State Regulations.

- Each residential unit will be responsible for obtaining trash receptacles for their home and placing the receptacle out on the correct pickup days. As such, regular trash pickups will be provided to remove the solid waste as needed.
- Construction is anticipated to take place during normal business hours in order to avoid noise levels during non-business hours.
- Every reasonable effort will be made to protect the existing natural environment and noise levels with the ultimate goal of providing for minimal disruption throughout the course of construction and after completion.

#### **E. Licenses, Permits and Other Approvals Required by Law**

The following represents a list of all known licenses, permits and other forms of approval required:

<b>Township of Montgomery Planning Board</b>	Preliminary and Final Major Subdivision and Site Plan Approval
<b>Somerset County Planning Board</b>	Site Plan and Subdivision Approval
<b>Somerset Union Soil Conservation District</b>	Soil Erosion & Sediment Control Certification
<b>NJDEP Bureau of Water Quality</b>	Treatment Works Approval – Sanitary Sewer Service
<b>NJDEP Bureau of Safe Drinking Water</b>	BSDW Permit – Water Service
<b>New Jersey American Water</b>	Water Main Extension/ Connection Approval
<b>Township of Montgomery Engineering Dept.</b>	Sanitary Sewer Approval
<b>Delaware and Raritan Canal Commission</b>	Site Plan Approval
<b>Montgomery Shade Tree Commission</b>	Site Plan Approval

#### **F. Documentation**

The following represents a list of documentation utilized for the compilation of this report:

- **Township of Montgomery Ordinance**
- **Township of Montgomery Tax Maps**
- **Township of Montgomery GIS Database**
- **Google Aerial Mapping**
- **NJDEP GeoWeb Mapping**
- **FEMA Flood Insurance Rate Maps (FIRM)**
- **NRCS Web Soil Survey**
- **NJDEP NJAC 7:8**
- **NJDEP Wetlands Letter of Interpretation**

- **ALTA/NSPS Land Title Survey**
- **Preliminary and Final Major Subdivision & Site Plan Drawings**

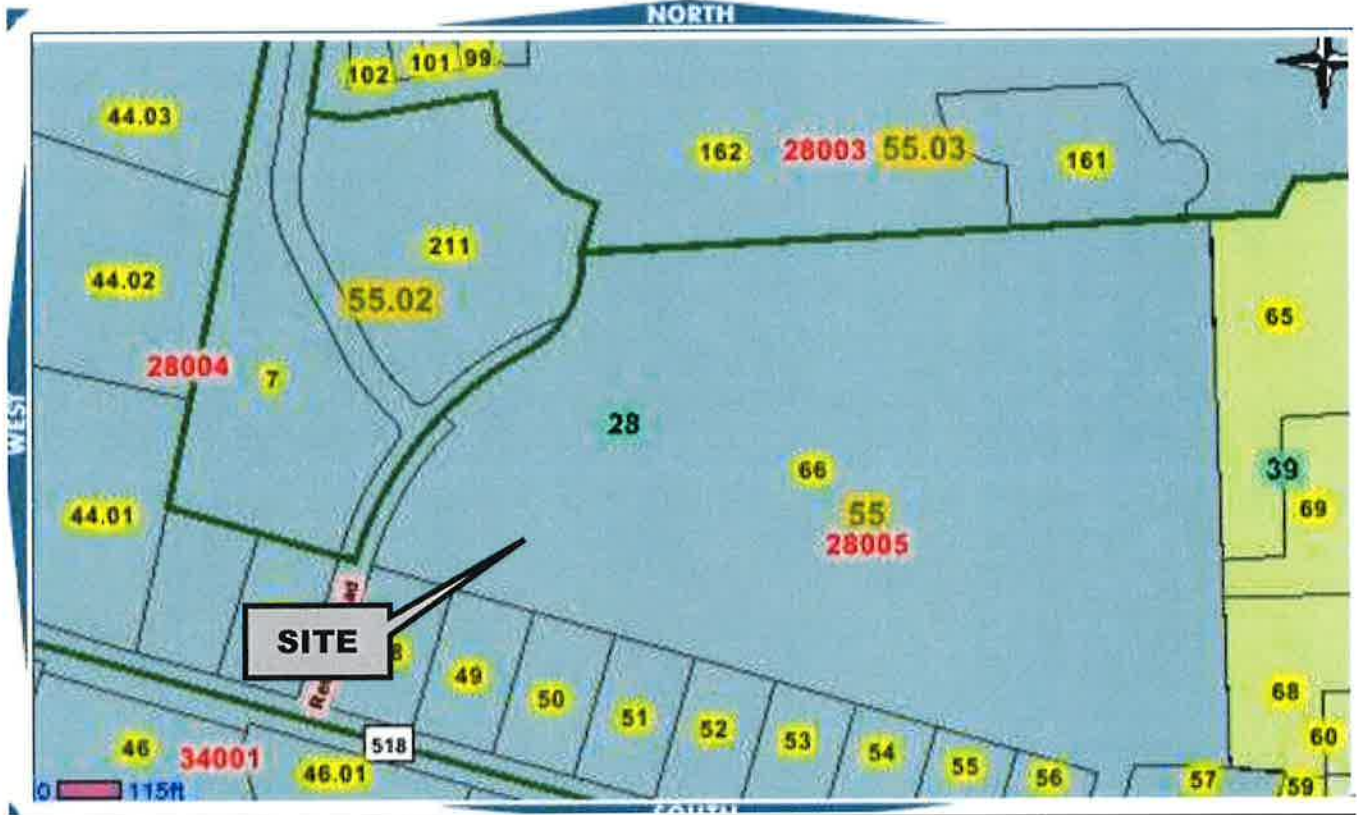
## **APPENDIX**

## **TAX MAP**



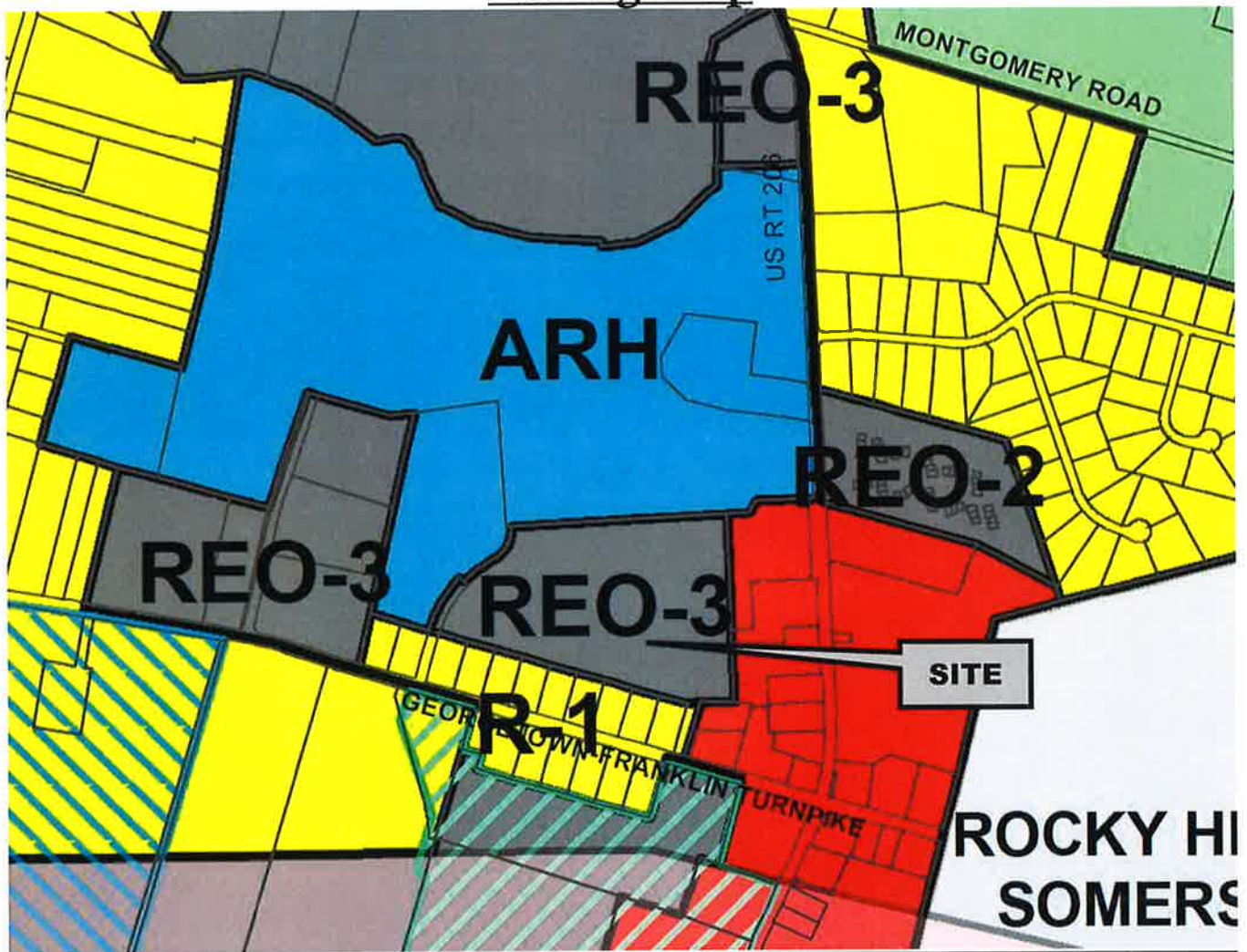


## Tax Map



## **ZONING MAP**

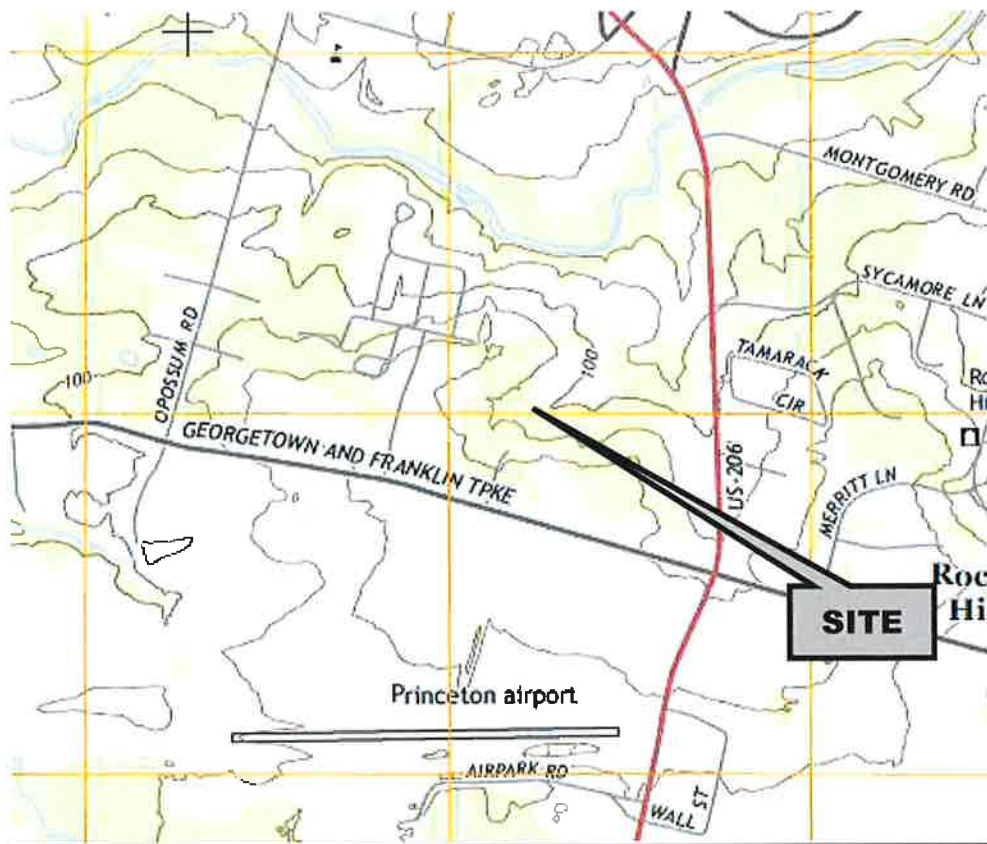
## Zoning Map



**USGS MAP**



## USGS Map Rocky Hill Quad



## **FEMA FLOOD INSURANCE RATE (FIRM) MAP**







MAP SCALE 1" = 500'

250 0 500 1000 FEET

74° 39' 22.5"  
40° 24' 22.5"



4472000 M

NFIP

PANEL 0243E

## FIRM

FLOOD INSURANCE RATE MAP  
SOMERSET COUNTY,  
NEW JERSEY  
(ALL JURISDICTIONS)

PANEL 243 OF 301

(SEE MAP INDEX FOR FIRM PANEL LAYOUT)

### CONTAINS:

COMMUNITY	NUMBER	PANEL	SUFFIX
MONTGOMERY, TOWNSHIP OF	340438	0243	E

Notes to User: The Map Number shown below should be used to identify the map and the community numbers shown above should be used on insurance applications for the subject community.



MAP NUMBER  
34035CD243E

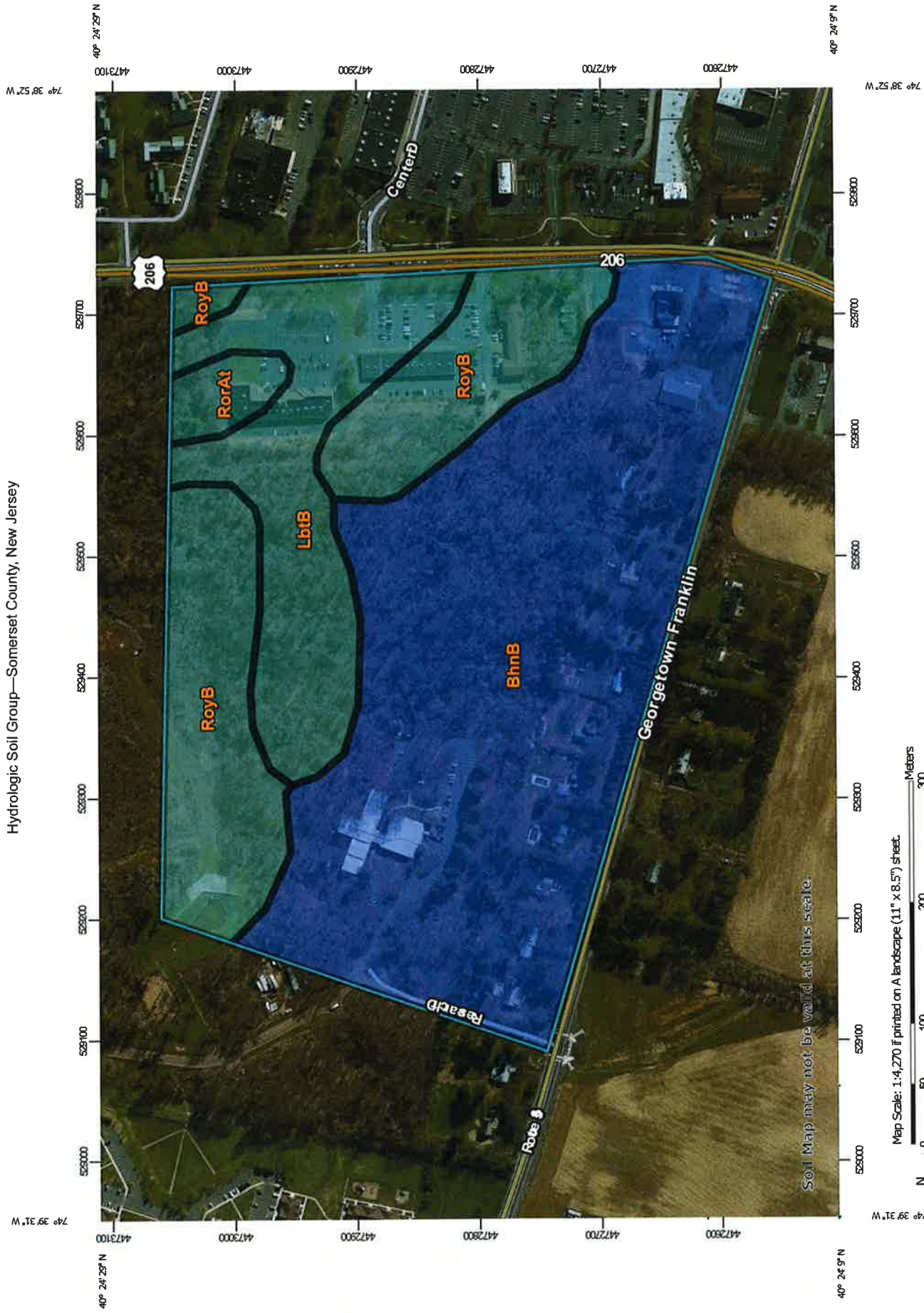
EFFECTIVE DATE  
SEPTEMBER 28, 2007

Federal Emergency Management Agency

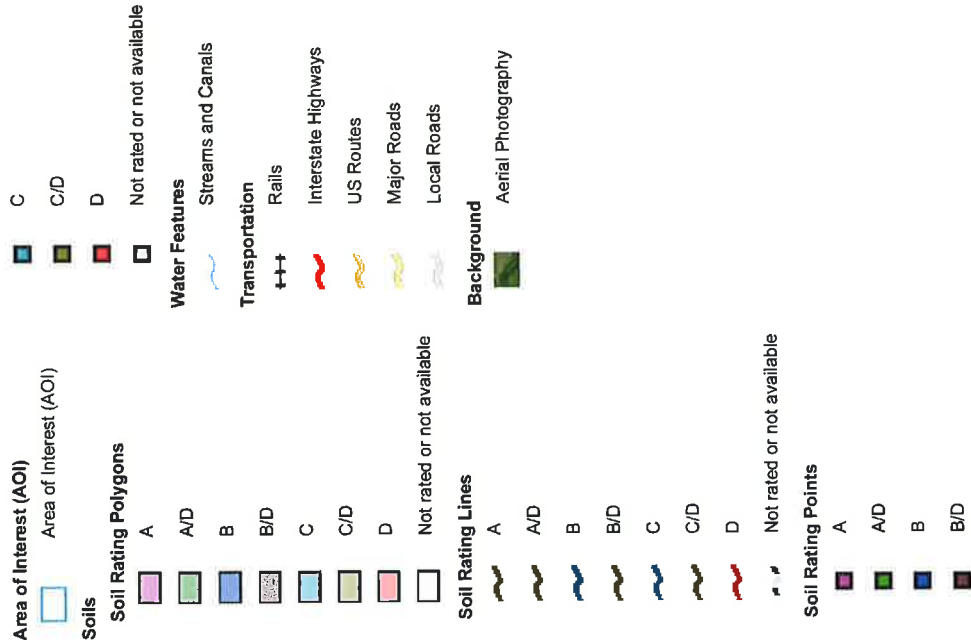
This is an official copy of a portion of the above referenced flood map. It was extracted using F-MIT On-Line. This map does not reflect changes or amendments which may have been made subsequent to the date on the title block. For the latest product information about National Flood Insurance Program flood maps check the FEMA Flood Map Store at [www.msc.fema.gov](http://www.msc.fema.gov)



## **NRCS SOILS SURVEY MAP**



## MAP LEGEND



## 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 14, Sep 28, 2016

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

Date(s) aerial images were photographed: Mar 26, 2011—May 1, 2011

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

Hydrologic Soil Group— Summary by Map Unit — Somerset County, New Jersey (NJ035)				
Map unit symbol	Map unit name	Rating	Acres in AOI	Percent of AOI
BhnB	Birdsboro silt loam, 2 to 6 percent slopes	B	35.4	58.5%
LbtB	Lansdowne silt loam, 2 to 6 percent slopes	C	10.3	17.0%
RorAt	Rowland silt loam, 0 to 2 percent slopes, frequently flooded	C	1.3	2.2%
RoyB	Royce silt loam, 2 to 6 percent slopes	C	13.6	22.4%
<b>Totals for Area of Interest</b>			<b>60.6</b>	<b>100.0%</b>

## 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.

## Rating Options

*Aggregation Method:* Dominant Condition

*Component Percent Cutoff:* None Specified

*Tie-break Rule:* Higher

**TEST PIT LOCATION MAP AND DATA  
(UNDER SEPARATE COVER)**

## **NJDEP GEOWEB – AERIAL PHOTO MAP**



## NJDEP GeoWeb – Aerial Photo Map

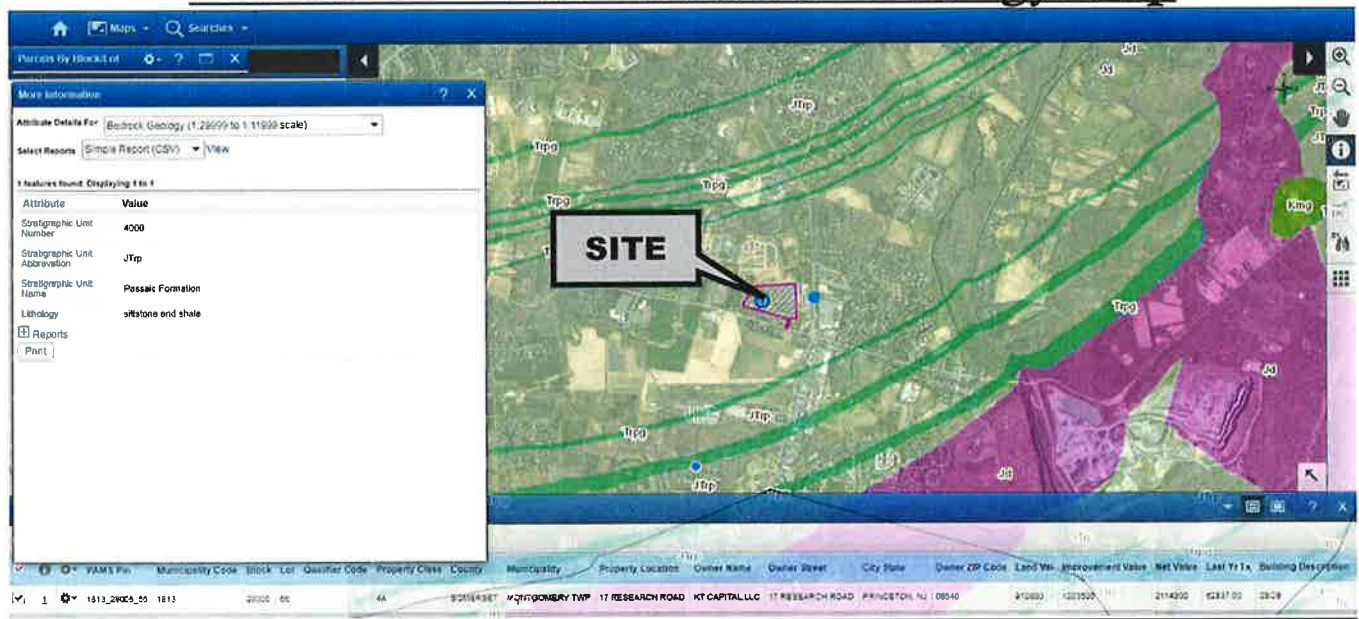




## **NJDEP GEOWEB – BEDROCK GEOLOGY MAP**



## NJDEP GeoWeb – Bedrock Geology Map



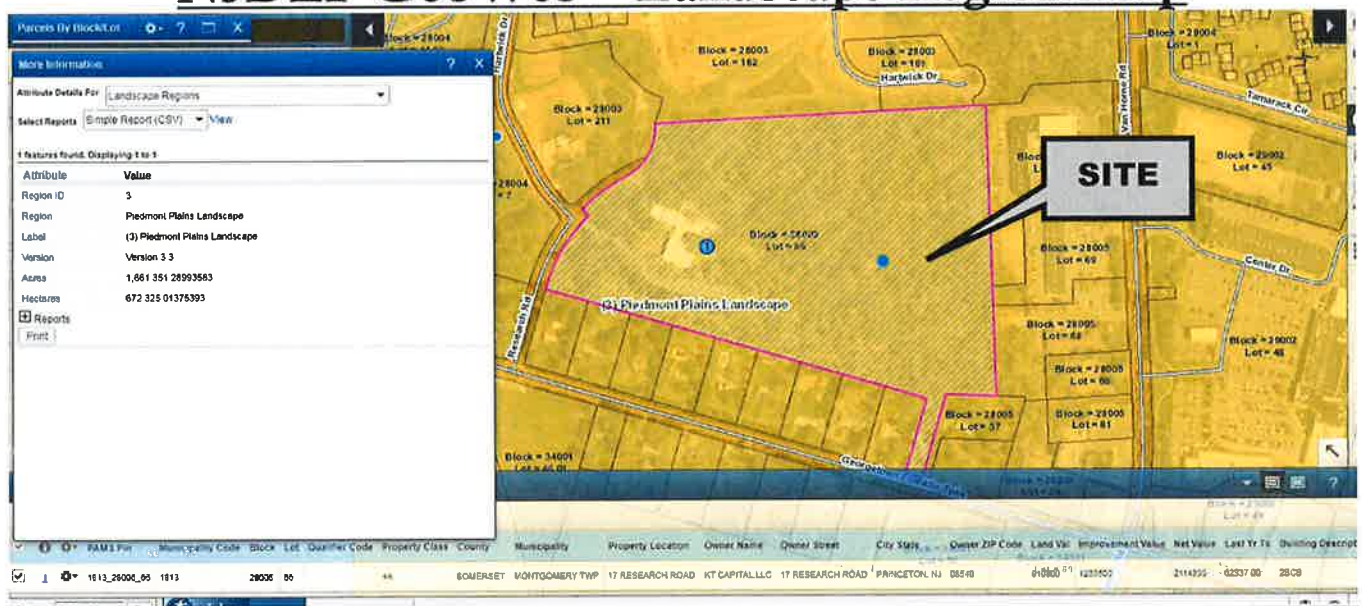
## **NJDEP GEOWEB – HISTORIC AREAS MAP**

## NJDEP GeoWeb – Historic Areas Map



## **NJDEP GEOWEB – LANDSCAPE REGION MAP**

## NJDEP GeoWeb – Landscape Region Map



## **NJDEP GEOWEB – LANDSCAPE SPECIES MAPS**



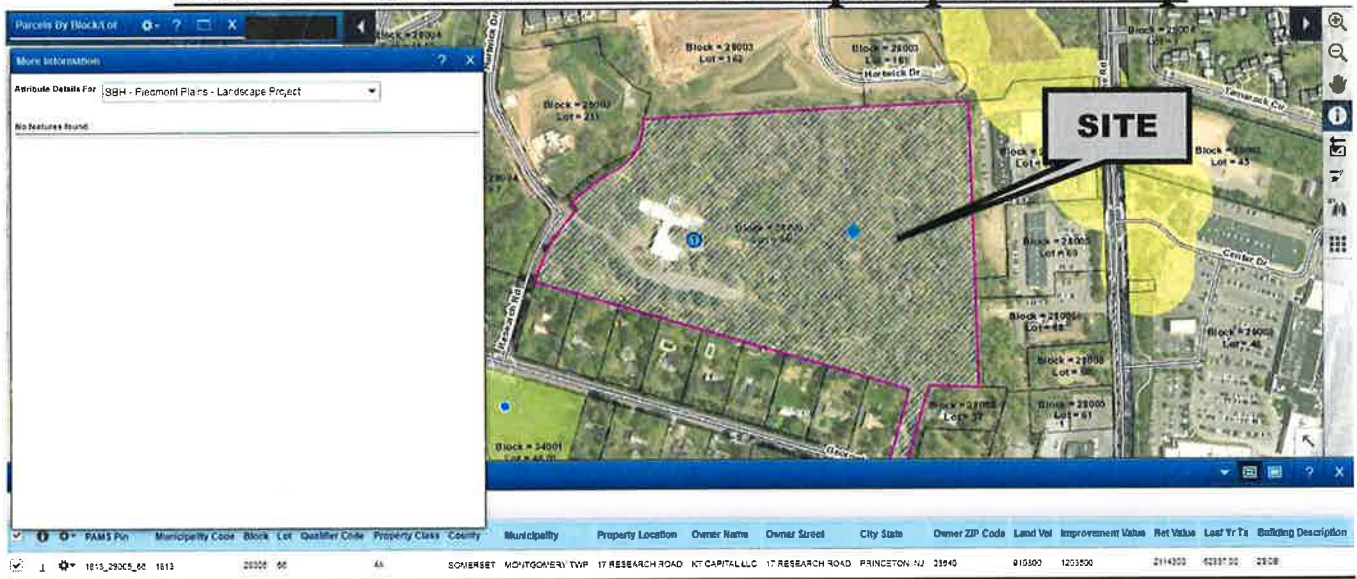


**DYNAMIC  
ENGINEERING**

1904 Main Street  
Lake Como, NJ 07719  
Ph: (732) 974-0198  
Fax: (732) 974-3521

245 Main Street, Suite 113  
Chester, NJ 07930  
Ph: (908) 879-9229  
Fax: (908) 879-0222

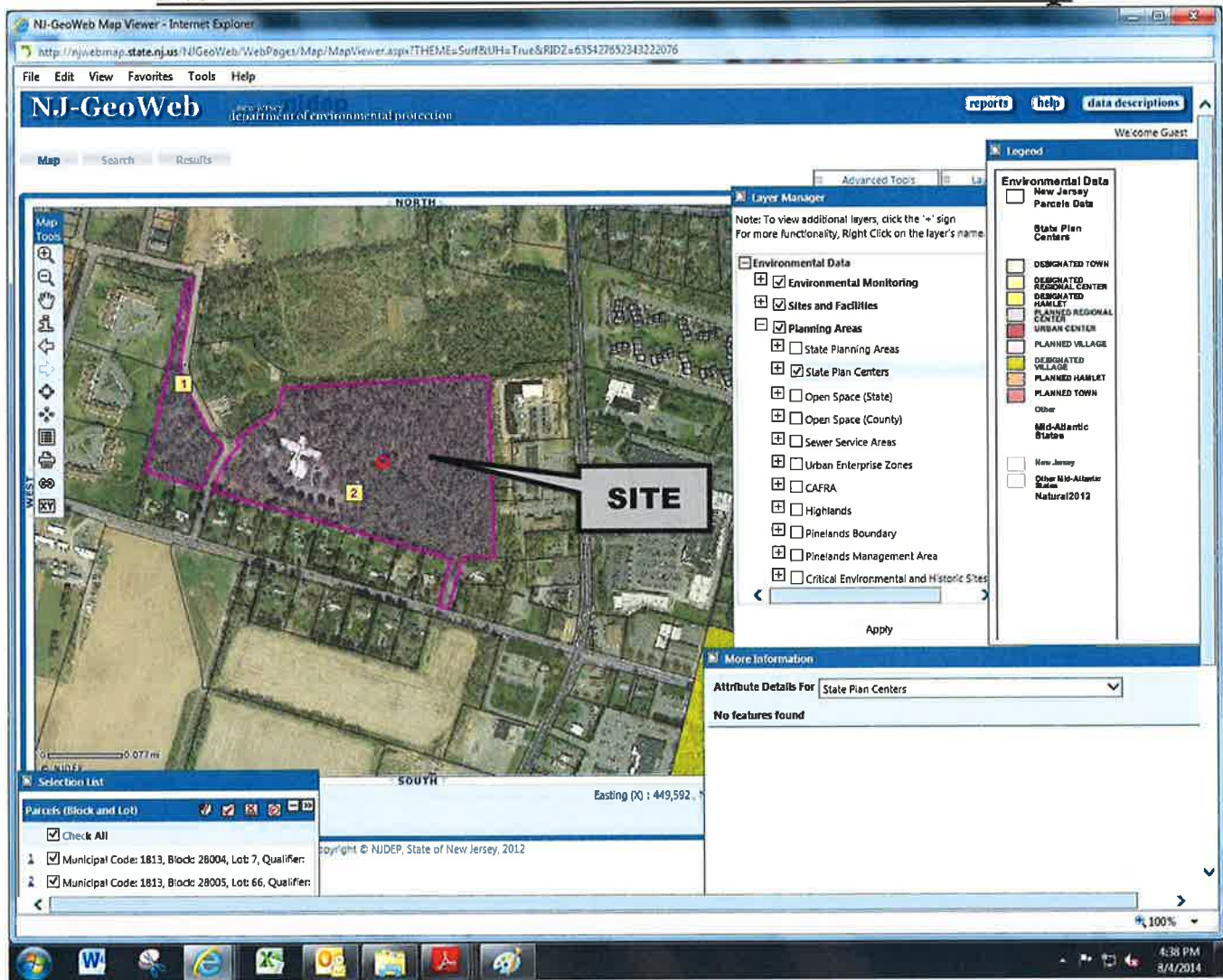
## NJDEP GeoWeb – Landscape Species Map





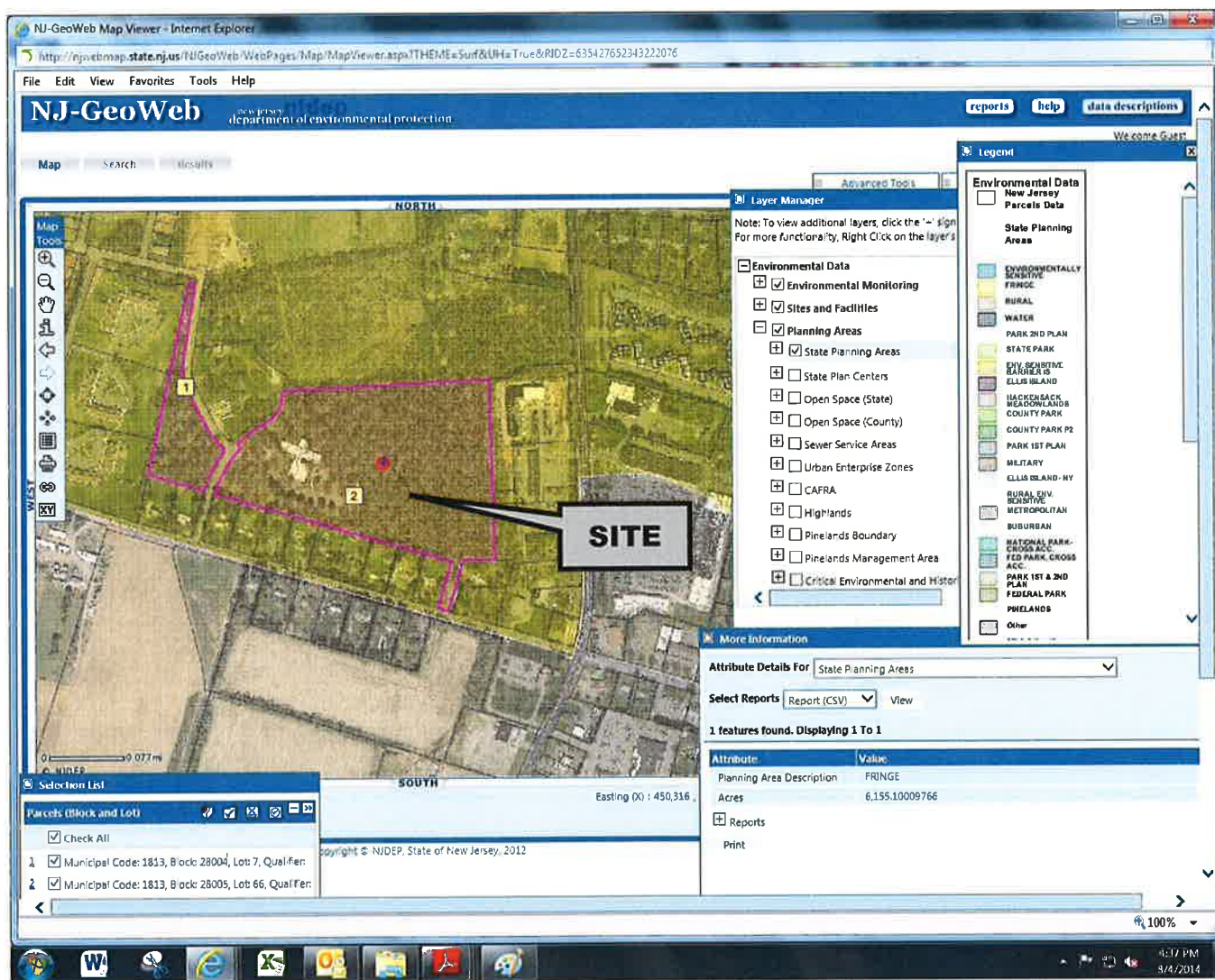
## **NJDEP GEOWEB – STATE PLAN CENTERS MAP**

## NJDEP GeoWeb – State Plan Centers Map



## **NJDEP GEOWEB – STATE PLANNING AREA MAP**

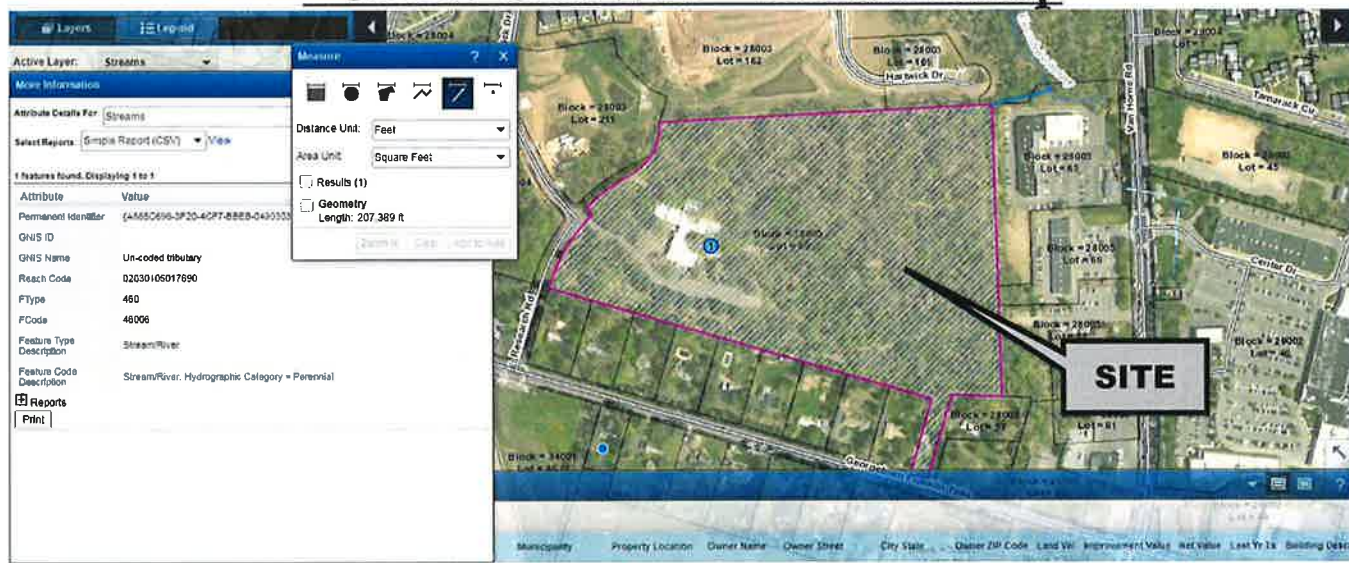
## NJDEP GeoWeb – State Planning Area Map



## **NJDEP GEOWEB – STREAMS MAP**

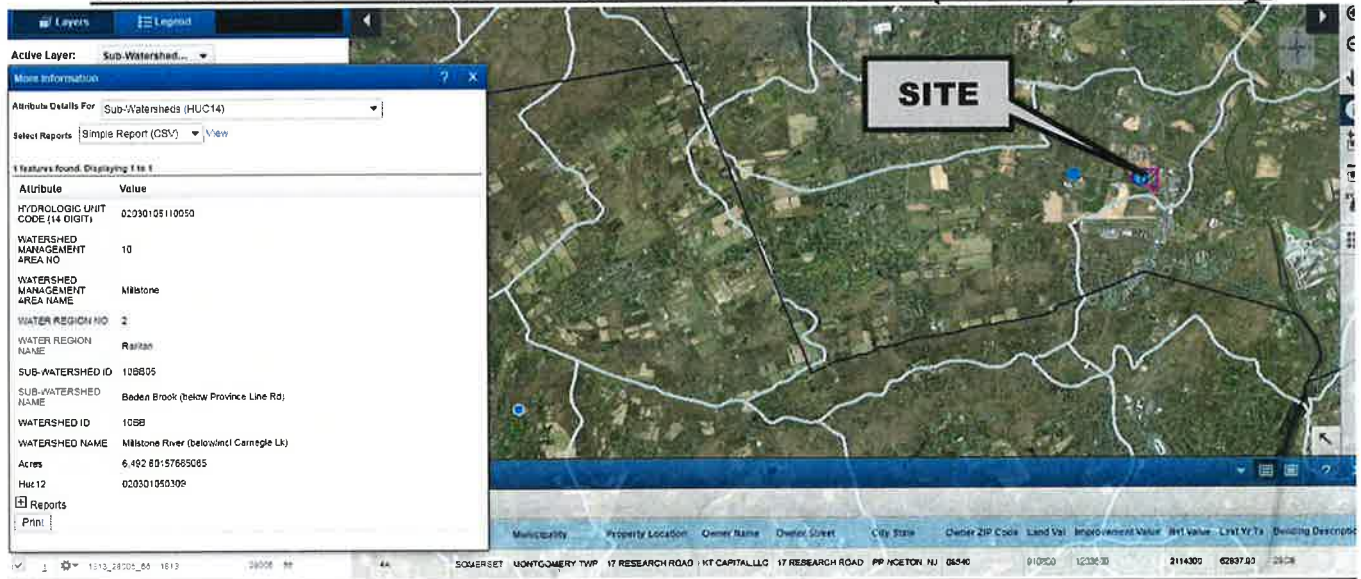


## NJDEP GeoWeb - Streams Map



## **NJDEP GEOWEB – SUB-WATERSHED (HUC) 14 MAP**

## NJDEP GeoWeb – Sub-Watershed (HUC) 14 Map

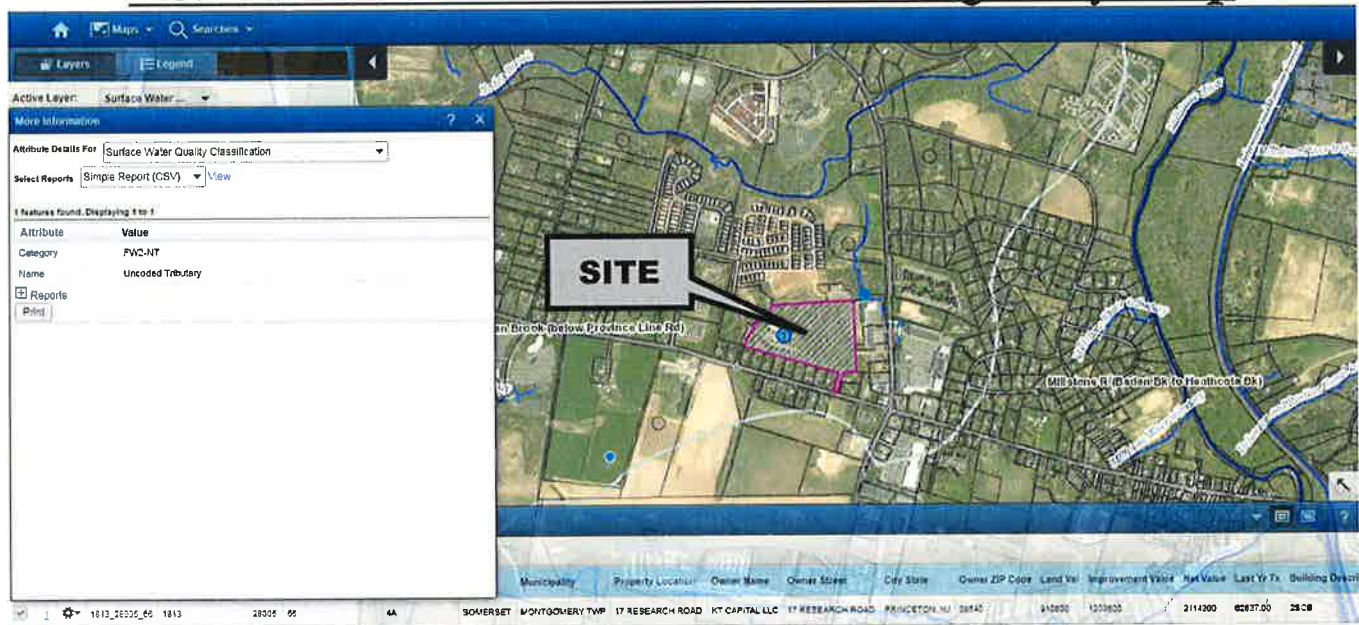




## **NJDEP GEOWEB – SURFACE WATER QUALITY MAP**

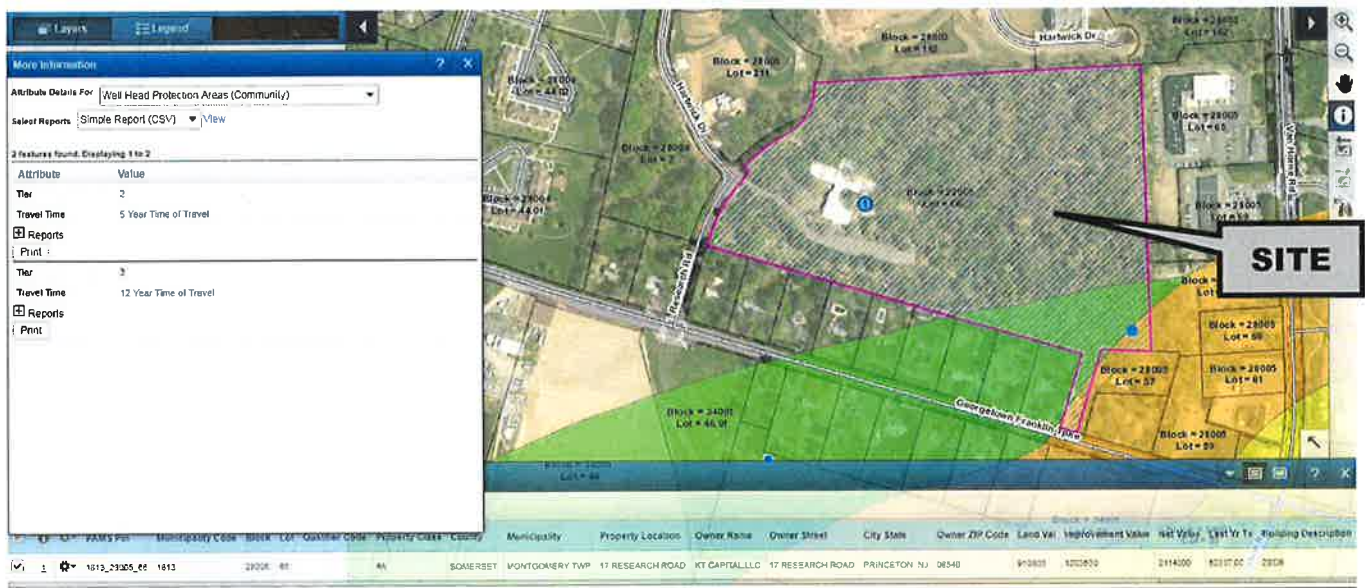


## NJDEP GeoWeb – Surface Water Quality Map



## **NJDEP GEOWEB – WELL HEAD PROTECTION AREA MAP**

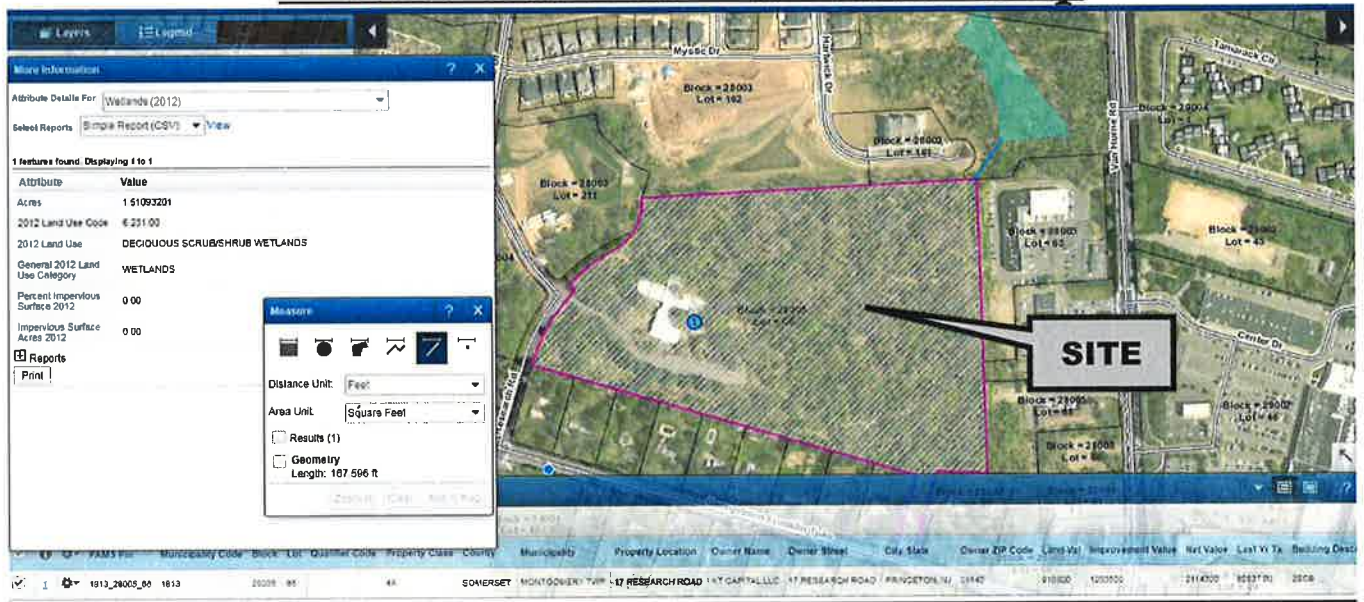
## NJDEP GeoWeb – Well Head Protection Area Map



## **NJDEP GEOWEB – WETLANDS MAP**



## NJDEP GeoWeb – Wetlands Map



## **NJDEP LETTER OF INTERPRETATION**





## State of New Jersey

DEPARTMENT OF ENVIRONMENTAL PROTECTION

Division of Land Use Regulation

Mail code 501-02A, P. O. Box 420

Trenton, New Jersey 08625-0420

[www.state.nj.us/dep/landuse](http://www.state.nj.us/dep/landuse)

CHRIS CHRISTIE  
*Governor*

KIM GUADAGNO  
*Lt. Governor*

BOB MARTIN  
*Commissioner*

OCT 11 2017

Thomas F. Troy  
Sharbell Plainsboro, Inc.  
One Washington Boulevard  
Robbinsville, New Jersey 08691

RE: Letter of Interpretation: Presence/Absence Determination  
File No.: 1813-17-0003.1  
Activity Number: FWW170001  
Applicant: THOMAS F. TROY, SHARBELL PLAINSBORO, INC.  
Block: 28005; Lot: 66  
Montgomery Township, Somerset County

Dear Mr. Troy:

This letter is in response to your request for a Letter of Interpretation from the Division of Land Use Regulation (Division) indicating the presence or absence of freshwater wetlands and waters on the referenced property.

In accordance with agreements between the State of New Jersey Department of Environmental Protection (NJDEP), the U.S. Army Corps of Engineers Philadelphia and New York Districts (USACOE), and the U.S. Environmental Protection Agency (USEPA), the Division is the lead agency for establishing the extent of State and Federally regulated wetlands and waters. The USEPA and/or USACOE retains 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 a site inspection conducted by the staff of the Department on September 27, 2017, the Division of Land Use Regulation has determined that **freshwater wetlands and waters are not present** on the referenced property. In addition, the Department has determined that **no part of the above referenced property occurs within a transition area or buffer** as designated in N.J.A.C. 7:7A-2.5(d) and (e).

Pursuant to the Freshwater Wetlands Protection Act Rules (N.J.A.C. 7:7A), you are entitled to rely upon this jurisdictional determination for a period of five years from the date of this letter. This letter in no way legalizes any fill which may have been placed, or other

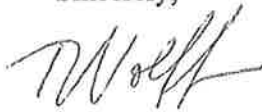


regulated activities which may have been conducted on this site. This determination does not affect your responsibility to obtain any State, Federal, county or municipal permits which may be required.

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 after notice of 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, 401 East State Street, P.O. Box 402, Trenton, NJ 08625-0402. This request must include a completed copy of the Administrative Hearing Request Checklist which can be downloaded at [www.state.nj.us/dep/landuse/forms](http://www.state.nj.us/dep/landuse/forms). The DEP bulletin is available through the Department's website at [www.state.nj.us/dep/bulletin](http://www.state.nj.us/dep/bulletin).

Please contact Mark Harris of our staff by e-mail at [Mark.Harris@dep.nj.gov](mailto:Mark.Harris@dep.nj.gov) or (609) 633-6563 should you have any questions regarding this letter. Be sure to indicate the Department's file number in all communication.

Sincerely,



Tina Wolff

Environmental Specialist 3  
Division of Land Use Regulation

c: Montgomery Township Clerk  
Montgomery Township Construction Official  
Kerri-Ann Matthews, DuBois Environmental Consultants, L.L.C.- Agent

**UTILITY WILL SERVE LETTERS**



***ENGINEERING DEPARTMENT***

June 1, 2017

Mr. Hugh Goode  
Dynamic Engineering  
1904 Main Street  
Lake Como, NJ 07719

**Re: Research Road  
Sanitary Service  
Block 28005, Lot 66 and Block 28004, Lot 7**

Dear Mr. Goode:

This letter is in response to your May 12 and May 31, 2017 e-mails requesting a "will serve" letter for the above referenced parcels. As we understand your service requirements, the project will require approximately 59,100 gpd capacity for sanitary sewer service.

The project site is in the sewer service area and there is adequate capacity in the Skillman Village Wastewater Treatment Plant to accommodate the proposed flow at this time. You will be required to demonstrate that there is adequate capacity in the collection system, including the pump stations, to accommodate the additional flow. Please note that the capacity is not reserved until such time as a sewer capacity agreement is in place and capacity charges have been paid.

As requested, sewerage maps within the vicinity of the parcel have been forwarded to your office via e-mail. Roads in the adjacent Hillside and Tapestry developments may be under moratorium. The current capacity charge is \$50.00/ gpd.

The provision of these services is contingent upon securing all necessary zoning changes and approvals for the project, payment of capacity charges and compliance with Chapter XII of the Montgomery Township Code.

Very truly yours,

Gail Smith, PE  
Township Engineer

Cc: Jason Kiernan, Director of Wastewater Operations  
Donato Nieman, Township Administrator  
Lori Savron, Planning Director  
Arthur Villano, Superintendent of Public Works  
Kristina P. Hadinger, Township Attorney

Montgomery Township • Municipal Building • 2261 Van Horne Road (Route 206) • Belle Mead New Jersey 08502

P: (908) 359-8211 • F: (908) 359-2006

**Public Service Electric & Gas Company**



August 5, 2014

Dynamic Engineering  
Attn: Christopher Morris  
1904 Main St  
Lake Como NJ 07719

Re: Block 24004, Lot 7  
Block 24005, Lot 66  
Montgomery Twp NJ

To Whom It May Concern:

Gas and Electric service can be made available for the above project consistent with service requirements and the PSE&G tariffs for gas and electric services.

Please feel free to give this office a call at 1-800-832-0076 if you need additional information.

Sincerely,  
PSE&G Construction Inquiry Department

## Marc Krichilsky

---

**From:** Joe.Davignon@amwater.com  
**Sent:** Tuesday, August 05, 2014 12:01 PM  
**To:** Christopher Morris  
**Subject:** Re: Will Serve Request  
**Attachments:** pic02368.gif; pic28692.jpg; pic21425.jpg

Thank you for your inquiry with New Jersey American Water (NJAW) regarding water services for your project. This letter is to inform you that your project is within the NJAW franchise service area and we look forward to providing water service for your project. I am your Developer Services Project Manager, and will guide you as you move your project through the main extension process. Please find and use the NJAW Guide for Water and Sewer Main Extensions located at our website below:

<http://www.amwater.com/njaw/working-with-us/doing-business-with-us/developers-customer-resources.html>

The guide is provided to help you understand what is required to obtain new service for your project. In addition, please find the following documents on the website for your information and use:

- Application for a Main Extension, Draft Agreements
- Guide for Applying for NJDEP/BSDW Permits
- Fireflow Worksheet & Demand Calculator Worksheet
- Draft Agreements

Please note that this letter is not a will serve letter, approval or guarantee for water service, as hydraulic and capacity reviews have to be completed once an application is formally submitted.

I look forward to receiving your Application for Main Extension and working with you in the future.  
(Embedded image moved to file: pic02368.gif)

Joseph Davignon  
Sr. Engineering Project Manager  
Developer Service  
New Jersey American Water  
120 Raider Blvd  
Hillsborough, NJ 08844  
Phone: (908) 431-3223

From: Christopher Morris <cmorris@dynamiccec.com>  
To: "Joe.Davignon@amwater.com" <Joe.Davignon@amwater.com>,  
Date: 08/05/2014 11:54 AM  
Subject: Will Serve Request

Mr. Davignon,

**REPORT OF PRELIMINARY/SUPPLEMENTARY  
GEOTECHNICAL INVESTIGATION AND STORMWATER  
MANAGEMENT EVALUATION (UNDER SEPARATE COVER)**

## **STEEP SLOPE ANALYSIS PLAN**





**SLOPES TABLE**

NUMBER	CLASS	MINIMUM SLOPE	MAXIMUM SLOPE	TO SLOPE AREA
1	FLAT	0.00%	0.00%	0.00%
2	FLAT	0.00%	0.00%	0.00%
3	FLAT	0.00%	0.00%	0.00%
4	FLAT	0.00%	0.00%	0.00%



**TOWNSHIP OF MONTGOMERY ORDINANCE  
SECTION §16-8.4.c**

16-8.4

c. *Environmental Impact Statement.*

1. General Provisions. The impact on the environment generated by land development projects necessitates a comprehensive analysis of the variety of problems that may result and the actions that can be taken to minimize the problems. It is further recognized that the level of detail required for various types of applications will vary depending on the size of the proposal, the nature of the site, the location of the project and the information already in the possession of the Township. Therefore, having determined that some flexibility is needed in preparing the Environmental Impact Statement, the requirements for such a document pertaining to different types of development applications are listed below:
  - (a) All agricultural operations conducted in accordance with a plan approved by the Soil Conservation District and all silviculture operations conducted in accordance with a plan prepared by a professional forester are specifically exempt from the Environmental Impact Statement requirements.
  - (b) All variance applications submitted to the Board of Adjustment pursuant to N.J.S.A. 40:55D-70d shall require an Environmental Impact Statement in accordance with the requirements of this section. Any other variance applications to the Zoning Board of Adjustment shall not require an Environmental Impact Statement unless specifically requested by the Board.
  - (c) Any application for subdivision approval where ten (10) lots or less are involved and all applications for minor site plan approval, either to the Planning Board or to the Zoning Board of Adjustment, as the case may be, shall not require an Environmental Impact Statement unless specifically requested by the Board.
  - (d) All preliminary major subdivision and/or preliminary major site plan applications shall be accompanied by an Environmental Impact Statement.
2. Submission Format. When an Environmental Impact Statement is required, the applicant shall retain one (1) or more competent professionals to perform the necessary work. The qualifications and background of the professionals shall be provided, and the method of investigation shall be described. All applicable material on file in the Township pertinent to evaluation of regional impacts shall also be considered including the Township Master Plan and Natural Resources Inventory. Furthermore, as much original research as necessary shall be conducted to develop the Environmental Impact Statement. All Environmental Impact Statements shall consist of written and graphic materials which clearly present the required information utilizing the following format:
  - (a) Project Description. Indicate the purpose and scope of the proposed project. Enumerate the benefits to the public which will result from the proposed project and describe the suitability of the site for the intended use. A description of the proposed project shall be presented to indicate the extent to which the site must be altered, the kinds of facilities to be constructed and the uses intended. The resident population, working population and visitor population shall be estimated. The compatibility or incompatibility of the proposed project shall be described in relation to the following:
    - (1) Township Master Plan.
    - (2) Montgomery Township Natural Resources Inventory.
    - (3) Master Plan of Adjacent Municipalities.
    - (4) Somerset County Master Plan.
    - (5) Regional and State Planning Guides.
    - (6) Other Pertinent Planning Documents.
  - (b) Site Description and Inventory. Provide a description of environmental conditions on the site which shall include the following items:
    - (1) Types of Soils. List and describe each soil type on the site. If applicable, provide percolation data. Where the proposed area of land disturbance will involve soils

- with moderate or severe limitations relative to the type of project proposed, a complete mapping of all soil types where the moderate and severe limitations exist.
- (2) Topography. Describe the topographic conditions on the site.
  - (3) Geology. Describe the geologic formations and features associated with the site as well as depth to bedrock conditions. Delineate those areas where bedrock is within two (2) feet of the surface as well as major rock outcroppings.
  - (4) Vegetation. Describe the existing vegetation on the site. A map shall be prepared showing the location of major vegetative groupings such as woodlands, open fields and wetlands. Where woodlands are delineated, the forest types shall be indicated.
  - (5) Wildlife. Identify and describe any unique habitats of endangered or protected species.
  - (6) Subsurface Water. Describe the subsurface water conditions on the site both in terms of depth to ground water and water supply capabilities. The location, depth, capacity and water quality of all existing water wells on the site and within five hundred (~00) feet of the site shall be indicated.
  - (7) Distinctive Scenic and/or Historic Features. Describe and map those portions of the site that can be considered to have distinctive scenic and/or historic qualities.
  - (8) Existing Development Features. Describe any existing features on the site that are not considered to be part of the natural environment. This may include, but not necessarily be limited to, roads, driveway accesses, housing units, accessory structures, utility lines, etc.
  - (9) Miscellaneous. When warranted, an analysis should be conducted of existing air quality and noise levels as prescribed by the New Jersey State Department of Environmental Protection.
- (c) Impact. Discuss both the adverse and positive impacts during and after construction. Indicate those adverse impacts that are unavoidable. The specific concerns that shall be considered include the following and shall be accompanied by specific quantitative measurements where possible and necessary:
- (1) Soil erosion and sedimentation resulting from surface runoff.
  - (2) Flooding and flood plain disruption.
  - (3) Degradation of surface water quality.
  - (4) Ground water pollution.
  - (5) Reduction of ground water capabilities.
  - (6) Sewage disposal.
  - (7) Solid waste disposal.
  - (8) Vegetation destruction.
  - (9) Disruption of wildlife habitats of endangered and protected species.
  - (10) Destruction or degradation of scenic and historic features.
  - (11) Air quality degradation.
  - (12) Noise levels.
  - (13) Energy utilization.
- (d) Environmental Performance Controls. Describe what measures will be employed during the planning, construction and operation phases which will minimize or eliminate adverse impacts that could result from the proposed project. Of specific interest are:
- (1) Drainage plans which shall include soil erosion and sedimentation controls.
  - (2) Sewage disposal techniques.
  - (3) Water supply and water conservation proposals.
  - (4) Energy conservation measures.
  - (5) Noise reduction techniques.

- (e) Licenses, Permits and Other Approvals Required by Law. The applicant shall list all known licenses, permits and other forms of approval required by law for the development and operation of the proposed project. The list shall include approvals required by the Township, as well as agencies of the County, State and Federal governments. Where approvals have been granted, copies of said approvals shall be attached. When approvals are pending, a note shall be made to that effect.
  - (f) Documentation. All publications, file reports, manuscripts or other written sources of information which were first consulted and employed in compilation of the Environmental Impact Statement shall be listed. A list of all agencies and individuals from whom all pertinent information was obtained orally or by letter shall be listed separately. Dates and locations of all meetings shall be specified.
3. Disposition by the Board. The Board shall review the information furnished in the Environmental Impact Statement in the context of the overall design of the proposed development and the relationship of the proposed development to the environment. The information is to be used solely to help insure that the proposed development will cause no reasonably avoidable damage to any environmental resource.