ENVIRONMENTAL ASSESSMENT

for:

ALL SEASONS SPORTS

Block: 476
Lot: 3

Borough of South Plainfield
Middlesex County, New Jersey

Prepared For:
All Seasons Sports Academy, LLC
2700 Hamilton Boulevard
South Plainfield, New Jersey, 07080

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menlo engineering associates

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1.0 Introduction & Executive Summary

The following Environmental Assessment has been prepared by Menlo Engineering Associates, Inc. pursuant to the Borough of South Plainfield's Land Development Site Plan Checklist requiring an applicant filing a site plan or major subdivision to complete an Environmental Impact Assessment for the proposed development. This report has been prepared as a result of an investigation of the site features and a review of available published data and is intended to be reviewed in conjunction with the Site Plans prepared by Menlo Engineering Associates, Inc. and submitted to the South Plainfield Zoning Board. It does not encompass a Phase 1 Environmental audit nor did representatives from Menlo Engineering conduct any research or field investigation of the previous land uses or activities across the project area relative to any potential contaminants.

The applicant anticipates an additional use on this underutilized property. This is a 6.2 -acre parcel, located at 2700 Hamilton Boulevard in the Borough of South Plainfield, Middlesex County, with a previously developed with a one story metal frame building totaling 36,000 square feet. The existing development includes (120) passenger vehicle parking spaces, with 33 landbanked spaces and two existing access driveway entrances.

The site falls within the M-3 Industrial District allowing for up to 50% lot (building cover as defined by the Ordinance) coverage with no restriction listed for impervious cover. The proposal is substantially below the lot coverage allowance containing only 13.2% lot (building) cover. The proposal is to construct multipurpose recreational fields and recovery zone, for an existing indoor sports facility.
Previously, a Use Variance was granted by the Zoning Board of Adjustment for a recreational use facility indoors. The applicant is now seeking an additional Variance and Site Plan approval for outdoor recreational use.

The minimization of building and impervious cover, the new onsite drainage improvements, as well as the landscape plan improves the environmental conditions onsite. Menlo Engineering Associates, Inc. established and evaluated the potential impacts of the proposed development on the existing baseline environmental conditions. These baseline conditions were compiled from site inspections, local published information, and various federal, state, and municipal documents. Potential impacts were evaluated for the period during construction activities and upon occupation of the completed sports development. Based on this review, the project will reduce existing onsite impacts and is not expected to result in any measurable increase of offsite environmental impacts.

2.0 Project Location & Description

The applicant, All Seasons Sports Academy , proposes a sports field development 6.2-acre parcel known as Block 476, Lot 3 within the Borough of South Plainfield, Middlesex County, New Jersey. The site has a frontage on Hamilton Boulevard. The parcel is located in the Borough's M-3 District, where this facility received a Use Variance previously for the indoor sports facility. Hamilton Boulevard serves as frontage for industrial and commercial properties and is largely developed.

The subject parcel with frontage along Hamilton Boulevard, directly adjoins a trucking company to the east, an engineering and surveying company to the west, and is bordered to the north by the Port Reading Railroad. Across Hamilton Boulevard are various commercial developments.

The development of sports fields on this parcel will have lesser impact than further impervious coverage associated with additional parking, and a larger building. The parcel's gentle topography falls from a high point in the southeast corner along the Hamilton Boulevard right-of-way to the lowest elevations in the railroad bed located to the northwest. The gentle slopes lends well to the development of the fields in the rear.

The development of the proposed fields will bring an underutilized site to adequate usage. Ancillary to the proposed buildings, the plans depict the parking areas and access drives. The plans require a parking variance, (120 existing spaces and 33 landbanked) whereas the total of spaces that are required is 302 by the South Plainfield Land Use Code. However, the anticipated needs of the sports facility is met by the proposed 155 spaces . The parking areas are arranged to distribute the parking in close proximity to the main entrances using an efficient, convenient layout. The parking lot design provides for a safe and attractive scheme with planting islands at the ends of all rows and a within the parking area corners.

Stormwater Management & Water Quality

The Stormwater Management Report, prepared by Menlo Engineering Associates, Inc., provides more information on the design of the system and water quality. Underground storage has been provided beneath the fields in order to achieve water balance. The site design maintains 100% of the average annual preconstruction groundwater recharge volume which complies with the requirements stated in N.J.A.C. 7:8-5.4(a)2.

Soil Erosion and Sediment Control

A Soil Erosion and Sediment Control Plan has been prepared for this application, which details the mitigation measures to be implemented for the project. Soil erosion measures, including silt fence and inlet protection will be utilized to reduce erosion in the area of the site.

The applicant previously received an NJDEP GP-6 Permit (# 1222-09-0002.1) and executed the permitted filling of the wetlands. Given the proposed drainage plan, the area will be well suited for the sports fields.

The proposal's intensity is consistent with the Borough's Master Plan and Zoning Standards. The proposed development is well below District bulk standards limiting lot (building) to a 50% maximum lot cover. The project plans require an additional Variance for the outdoor sport use, and a parking variance.

The redevelopment of this property does not anticipate creating any significant adverse environmental impacts to the site or its adjacent areas. The redevelopment expects to alleviate the detrimental impacts currently onsite and is not expected to result in furthered adverse impacts to the immediate and adjacent baseline environmental conditions. These baseline conditions were compiled from site inspections, local published information, and various Federal, State, and County documents. Potential impacts were evaluated for the period during construction activities and upon occupation of the completed use.

The construction and development of this parcel, as with any form of development, will result in certain unavoidable impacts. These unavoidable impacts will be 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.

3.0 Site Inventory

3.1 Natural Resources

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

3.1.1 Geology

The area falls within the eastern edges of the Piedmont Region, one of the four Physiographic Provinces of the state. The Piedmont Province is largely comprised of low rolling terrain with a series of higher ridge lines. The width of the Piedmont Province in New Jersey is only 16 miles at the New York border and 30 miles wide along the Delaware River. The project area is underlain by the Passaic bedrock formation, which is generally comprised of siltstone and shale.

The surficial geology is described as silty, clay with shale. The Soil Survey of Middlesex County indicates the shallow but soft bedrock depth is typically 30 inches below the surface for the areas mapped as Reaville soils series .

3.1.2 Soils

Soils mapped onsite within the Soil Survey of Middlesex County, New Jersey include Reaville Variant silt loam for the percentage of the site proposed to be developed with sports fields. This unit is described as nearly level and poorly drained. Typically, the surface layer is dark reddish brown silt loam, 8" thick. The subsoil is mottled silty brown reddish clay loam about 12" thick.
The depth to bedrock (shale) is listed as 30" inches, The typically soft nature of the underlying shale in the area usually does not pose an extreme hardship for construction. The seasonally high water table is six inches deep from December through April.

3.1.3 Topography

Topography on-site typically slopes gently south to north to the lowest surface elevations along the rear boundary line of 90 leading to the Port Reading Railroad bed. The highest elevations (elevation 106 above sea level) occur in the property's southeast corner adjacent to Hamilton Boulevard. Generally, the topography is gentle with only a few minor inclusions of slopes exceeding 5%. The gentle topography of this site furthers the suitability of development and poses no constraints for construction.

3.1.4 Surface Hydrology

The site is not within a Flood Hazard area.

3.1.5 Subsurface Hydrology

The depth to the seasonal high water table is 6 inches from December to April expected for parcels mapped with Reaville silty loam soils.

3.1.6 Vegetation

The site in the northern half is comprised of a pioneer plant community. The community is dominated by invasives, Mulberry, Ailanthus and herbaceous plants. The ground plane is a mixture of upland plants dominated by ragweed (*Ambrosia artemisiifolia*), golden rods (*Solidago spp.*), mugwort (*Artemsia vulgaris*), and Japanese honeysuckle (*Lonicera japonica.*) Some mature trees are found largely along the perimeter of the parcel. The species which typically occupy these types of highly disturbed sites include ailanthus (*Ailanthus altissima*)white mulberry (*Morus alba*), black cherry (*Prunus serotina*), and some oak.
The vegetation is typical of a disturbed site and no unusual or unique specimens were observed across the project site.

3.1.7 Wildlife

Wildlife on the site is limited to generalists, such as species associated with the rodent family, as well as songbirds and the local deer population. Limited wildlife species reside within sites such as this because surrounding development has fragmented and isolated small parcels reducing food and habitat. While the native trees such as maples and willows provide food sources and cover, this fragmented community is very small in size, does not include high wildlife value trees and surrounded by higher intensity development precluding its use as a substantial source of food and shelter to large quantities and diversity of species. During the site inspections conducted by Menlo Engineering Associates, no evidence or sightings of any endangered or threatened species was recorded. A review of the NJDEP GIS *I-Map* also indicates that the site is not mapped as containing any water dependent threatened or endangered species.

3.2 Man-Made Resources

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

The underutilized site is now a sports facility. The proposal minimizes the total impervious cover onsite. The land uses immediately adjacent to the project site along the east and west sides include an engineering and a trucking company. The return of this site to an active use establishes a cleaner, fresh development enhancing the area without causing any significant environmental impact.

The project plans demonstrate compliance with the Borough's (M-3) Industrial District bulk standards, not requesting any major relief from site plan provisions, providing a designated loading zone for the structure. The parcel falls within a State Planning Area 1,is a permitted land use in the zone, falls within the sewer service and water service areas, lies adjacent to a major road network with infrastructure in place, adjacent to a similar use east of the site, across from a residential district, but substantially buffered, and contains no significant environmental constraints in the area of development. This underutilized industrial parcel is ideally suited for the proposed expansion of the sports facility, a clean ratable, that will generate tax revenue for the Borough.

Community facilities typically include various utilities, emergency response services, schools, and other public facilities. The project is not immediately adjacent to any public buildings or schools. The site falls in the Metropolitan State Planning Area (PA1), therefore these facilities are typically found within each municipality with short response times. The surrounding underground utilities include a water and gas

mains. Above ground utilities include electric, telephone and cable services which are also found along Hamilton Boulevard. All of these services exist for the existing facility.

Human resources include cultural and historic resources, social forces that could impact the project, and unique aesthetic features. According to the *New Jersey & National Registers of Historic Places*, there are no cultural or historic structures associated with the subject property or within 1000 feet of the site. Typical with all development, converting a property from one land use to another developed use alters the perceived aesthetic values. In this case the property has not reverted to natural environment and remains in a state of derelict, rather than attractive fully operational facility. Therefore, the site improvements significantly enhance the aesthetics of the property. The new structures and proposed plantings serve a two-fold function: first, it will improve the aesthetic integrity of the area while providing a landscape that is consistent with surrounding built fabric; and second, the onsite plantings will encourage some native wildlife to return to site. There are also no unusual or distinctive social circumstances (i.e., heavy industrial use adjacent to or in the vicinity) that would impact this project.

3.3 Pollution Problems

Menlo Engineering has not reviewed nor conducts any investigation or research into any potential site contaminations. The new development is not expected to use private well water or a septic system. The implementation of the proposed development will eliminate the potential for downstream sedimentation as a result of the construction operation through the provisions outlined on a Soil Erosion Sediment Control Plan. 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 through the local Soil Conservation District. Air quality is consistent with northern New Jersey and since no new industrial use is proposed, will not be a factor in the development of the site.

4.0 Required Approvals

The following municipal and agency approvals are expected to be required for this project:

- South Plainfield Borough Zoning Board
- Middlesex County Planning Board
- Freehold Soil Conservation District
- NJDEP Land Use - Freshwater Letter of Interpretation – **Previously Rec'd 2009-09-09**
- NJDEP Division of Water Quality – RFA for storm water discharge –
- NJDEP Freshwater Wetlands Individual Permit- **General Permit 6 granted and executed File no. 1222-09-0002.1 FWW 140001 – Approved 2018-11-19**

5.0 Impacts & Mitigation Measures

Any potential impacts from this project are expected to be minimal.

5.1 Water Quality

The use of public water and sanitary sewer utilities will ensure that the project has fully mitigated any potential impacts on downstream water quality to extent required by the NJDEP.

5.2 Traffic and Air Quality

Traffic impacts will be addressed under a separate report prepared by others.

With respect to air quality, since the proposed development does not involve emissions, with the exception of heat/hot water furnace exhaust there will not be discharge to the atmosphere. In addition, as a result of improved pollution emission controls on vehicles, and since the level of proposed automobile traffic is expected to be similar to the surrounding land uses; there is no indication that this project will adversely impact air quality.

5.3 Noise

Noise from this project is not expected to have a measurable impact on the surrounding neighborhood partially because the ambient background noise from other sources such as roadway traffic is relatively high. The traffic-related noise on from Hamilton Boulevard, as well as the existing noise from nearby commercial uses provides higher ambient noise levels then more suburban residential neighborhoods. The location of the fields behind the Indoor Sports building, adjacent to the Railroad line minimizes any noise impact. There is no residential use or zone in the vicinity to potentially disturb.

The sound pressure levels on-site are composed of noise from various off-site sources, the most prominent include adjacent roadways, overhead jets and aircraft, as well as construction activities. The site's proximity to the traffic on Hamilton Boulevard represents the greatest influence. In a suburban site in close proximity to intense human activities, noise levels are expected to be between 60-80 decibels (dB). The following table provides a comparison of the decibel scale to perceived loudness of common activities.

DECIBEL LEVELS ASSOCIATED WITH COMMON ACTIVITIES *

	dB**	
Threshold of Hearing	0	Absence of Activity
Upper Limit of "Quiet" (Subjective Classification)	10	Gentle Rustle of Leaves
	20	Inside Empty Theater
	30	Inside Quiet Apartment
	40	Private Office
Normal Vocal Communication (Face to Face Classification)	50	Inside an Active (Noisy) Office
	60	Window Mounted Air Conditioner
Vocal Communication Difficult	70	Vacuum Cleaner, Air Compressor
	80	Inside Speeding Automobile, Busy City St.
Possibility of Hearing Loss	90	Newspaper Press
Vocal Communication Impossible	100	Power Lawn Mower
Threshold of Pain	110	Amplified Rock Band
	120	Pneumatic Hammer
	130	Jet Aircraft Take-off
	140	Jet Aircraft, Artillery Fire (close proximity)

*Perceived sound levels for specific activities are normally distributed as a range centered at the specified decibel level.
**Decibel levels listed reflect measurement of sound on an A-weighted sound level meter.

The following standards apply to the proposed facility:

Noise Quality Regulations for New Jersey

In 1974, the State of New Jersey developed standards in a document entitled, The State of New Jersey Noise Control Regulations (New Jersey Administrative Code, Chapter #29, adopted and effective January 18, 1974, with revisions to June 26, 2012), which stipulates that:

"No person shall allow or permit sound from any industrial and commercial operation which when measured at any residential property line is in excess of the following:

1. **From 7:00 A.M. to 10:00 P.M.:**
   Continuous airborne sound which has sound levels in excess of 65 decibels, or an impulsive sound level in excess of 80 decibels.
2. **From 10:00 P.M. to 7:00 A.M.:**
   Continuous airborne sound which has sound levels in excess of 50 decibels, or an impulsive sound in air which has a maximum sound level in excess of 80 decibels and such impulse sound shall not be repeated more than four times in any hour. Impulsive sound which repeats more than four times in any hour shall not exceed 50 decibels ."

The major generators of noise in the area neighboring the site are the roadways and jet fly-by. Noise emitted from the roadways can be characterized as "moderate to heavy" with a level within the mid-sixties to low 70 dB immediately adjacent to roadways such as Interstate 287.

The primary amount of noise from this project will be generated during construction. This noise will be limited to the normal working day and will be subject to any restrictions of the Municipal codes. Construction and commercial noise, as characterized above, will be intermittent and vary in intensity depending upon the type of equipment and its use. Noise suppressers, where applicable, will be installed on equipment and the hours of construction operation shall be restricted to a normal working day operation.

The proposed development, during its operational phase will be an average noise generator, typical of the many surrounding commercial operations. Noise will be generated on-site by pedestrian and vehicular traffic. Noise will also be created in the subject area by additional vehicular trips generated on the neighboring thoroughfares by the proposed project.

Because of the logarithmic nature by which independent sources of noise (e.g., pedestrian, vehicular) are accumulated in the decibel formulation, the peak impacts of combined pedestrian and vehicular noise generated on the proposed development site will be between 60 and 65 decibels. The average operational on-site levels would be expected to be in the upper 50's to mid 60's dB level with the levels dropping lower during the night.

Noise dissipates at a rate of six (6) dB for the first 50 feet from the source, and an additional six (6) dB with each doubling of distance thereafter (e.g., 12 dB at 100 feet; 18 dB at 200 feet). Therefore, overall noise character for the proposed development will be well in compliance with the recommended standards.

Based upon the aforementioned studies, the proposed development will generate noise levels that are equal to present noise levels being contributed from similar land uses. Thus, the proposed redevelopment will not adversely impact the ambient noise levels of the surrounding community during its operational phase.

5.4 Undesirable Land Use Patterns

The parcel lies adjacent to the Port Reading Railroad bed line, in an Industrial Zone with commercial and industrial uses adjacent in this M3 Zone. The redeveloped property includes a new landscape planting along the street frontage to screen the parking and enhance the building's curb appeal. Since the property does not contain any significant environmental constraints in the area to be redeveloped, it is ideally suited for this use.

5.5 Tree Removal

Tree removal will be necessary to accommodate the proposed development. The loss of the invasive saplings will not pose a significant hardship to the Borough. The site was previously disturbed, and the secondary woodland growth does not represent quality trees within the area of disturbance. The fragmented growth does not contain any significant or unusual species and the implementation of the landscaping plan will help to mitigate tree removal.

Furthermore, the proposed plantings incorporate a high percentage native materials to the area, the plantings will partially restore shelter and habitat for generalist wildlife species and improve the natural plant community. 29 deciduous shade trees, along with over 100 shrubs and ground cover are proposed to mitigate the removal Tree removal, however, is an unavoidable impact associated with many developments.

5.6 Wildlife Displacement

The displacement of wildlife is unavoidable, as with any development. Since the amount and quality of habitat on this tract is limited and the intensity of surrounding development is relatively high, the species typically found are classified as generalists (i.e., can survive in a variety of disturbances and habitats). The number of species and individuals found on-site is estimated to be low due to the developed nature of the eastern half of the parcel and the young age of the pioneer community in the area to be redeveloped. The parcel's unpaved portions will largely remain undeveloped. As a result of these site conditions, the impact on the existing wildlife is anticipated to minimal. During the construction phase, the native wildlife will seek habitat in neighboring areas. Upon completion of the site, it is likely some of the wildlife will return to the site and seek shelter in the perimeter buffer and the proposed landscaping. An aggressive planting plan and use of native landscape materials encourages greater return of local species.

5.7 Aesthetic Values

Aesthetic values, by their subjective nature, are not ones easily measured. With the conversion of the site from a previously abandoned industrial site to a clean sports facility, with fields, with a planted buffer, the aesthetic value will certainly in some respects improved. The appreciation of the change is subjective. An appreciable aesthetic improvement however can be expected through the implementation of a landscaping schedule. The completed development should provide an aesthetically pleasing development blending into the surrounding built landscape fabric.

5.8 Displacement of People and Businesses

The site currently does not contain any residential structures and is reusing an industrial building for the existing sports academy. The expansion of new sports facility will not displace people or businesses.

5.9 Displacement of Viable Farms

This site is not viable for farming and there will be no impact to nearby farms as a result of this project.

5.10 Employment and Property Taxes

This project will provide employment opportunities in its construction phase and its operational phase. Returning this underutilized parcel to a fully built-out sports facility will supply additional employment opportunities as well as increased tax revenue for the Borough.

5.11 Destruction of Man-made Resources

This project will not result in the destruction of any significant man-made resources.

5.12 Desirable Community and Regional Growth

The site will be improved, and adequate buffering to environmentally sensitive areas on site will be maintained. The parcel falls within a State Planning Area 1, with sewer service and water service areas. It lies adjacent to a road network with access leading to the State and Interstate Highway network and represents a permitted use within the zone district. The parcel does not contain any environmental constraints or significant features which will either be lost nor represent significant construction obstacles; therefore, this redevelopment parcel is ideally suited for a higher intensity development such as the expanded sports facility.

5.13 Public Health and Safety

This project is not expected to result in more than negligible impacts to traffic, air quality, noise, and public utilities. The sports facility use does not create a potentially dangerous site and it is highly unlikely that this project poses any risk to public health or safety. Locating the fields behind the sports academy has a positive impact on the surrounding development.

5.14 Soil Erosion and Sediment Control

Any activity exposing soil results in a potential increase of sedimentation and erosion due to surface runoff. A Soil Erosion and Sediment Control Plan will be developed for this application and submitted to the Freehold Soil Conservation District for review and approval. The plan incorporates several methods mitigating soil erosion and off-site sediment transportation during construction including silt fence, inlet protection, construction entrance, and temporary and permanent seeding. If temporary stockpiles are created on-site, they will have silt fence perimeters as well to prevent erosion and sedimentation during the re-grading of the site. Furthermore, the installation of a construction entrance stabilizes soil tracking off of the subject site by trucks. The site's gentle topography aids in reducing the erosion potential of the site's soils.

6.0 Unavoidable Adverse Impacts

The proposed recreational development is designed to minimize potential impacts resulting from the project on the environment. However, with development, some environmental impacts are unavoidable. The site consists of existing impervious cover with the remaining undeveloped portion comprised of wetland community, which provides limited habitat for selected rodents, other small mammals and birds. As with any development, habitat loss occurs; however, for this project the reduction of habitat is limited. It is expected that, upon removal of the construction activities, some displaced fauna will return to the site.

An increase in traffic will ultimately have a minimal impact on the regional air quality along the adjacent roadway network. The reduction in air quality as a result of traffic volumes however is ever decreasing. The countervailing trend of improved air quality and increased population based traffic volumes results from the more stringent emission control systems required on newer automobiles.

The creation of additional impervious surface area results in a decrease water infiltration to underlying aquifers; however, the decrease as a result of this particular project is negligible due to the minimization of impervious coverage, and adequate storm water management.

The project's layout is designed to achieve the applicant's program with the minimum environmental impact as practical. Any negative effect of this development stems from the cumulative effects of many developments within the surrounding region.

7.0 Mitigation Potential

Environmental impacts potentially caused by the construction of this development have been analyzed as required by the Borough of South Plainfield's Site Plan checklist and in a format consistent with the Borough's Land Use Code. The applicant's development plan expects to reduce and/or mitigate the project's potential 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 are contemplated with an effort to minimally affect traffic circulation and neighborhood streets.

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.

The impacts have been assessed and, where possible, will be mitigated to the maximum extent practical for a project of this scale and magnitude. These mitigation measures are expected to be incorporated into the site development plans. Therefore, the proposed development is not expected to represent a substantial detriment to the surrounding environment or the public welfare.

8.0 Project Alternatives

Possible alternatives to this project include:

No-build Option: This option would reject a project that is consistent with Borough rules, regulations, policies, and development plans found within the Borough. It would prevent a landowner from utilizing a property to its potential and it would remove an opportunity to construct a viable commercial development within the Borough.

Alternative Layout: Additional layouts were reviewed during the conceptual planning stages of this project. None of the alternative layouts resulted in less site disturbance or reduction of impacts to other resources. The layout proposed is largely consistent with zoning regulations found within the Borough. The proposed development's intensity is consistent with similar projects and of a level anticipated within the Master Plan.

Alternatives layouts not explored involved developing this site with other permissible land uses, such as commercial or light manufacturing complexes, multi story office buildings with greater parking and impervious coverage demands or any non-permitted residential uses.

APPENDIX

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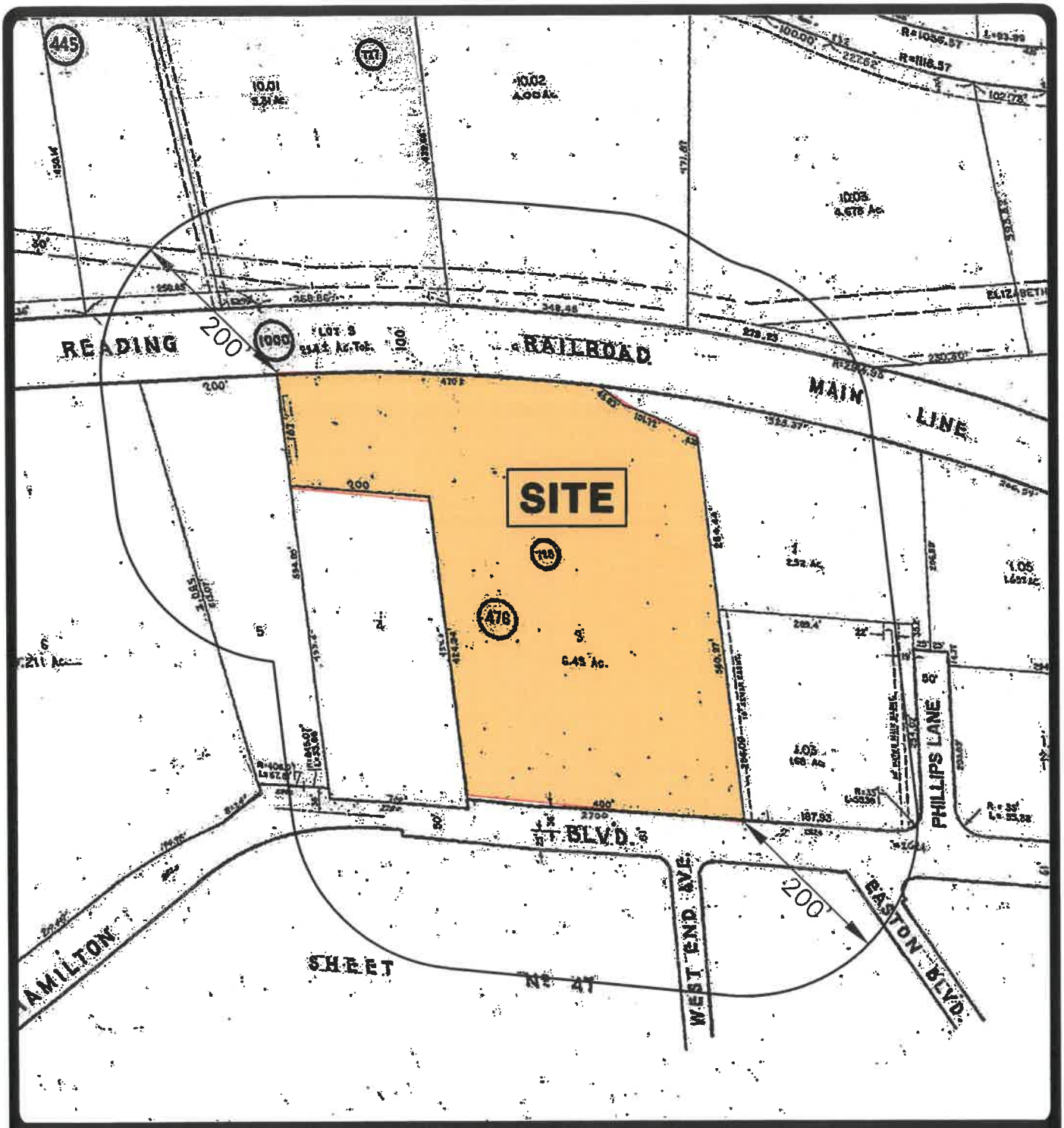


TAX MAP

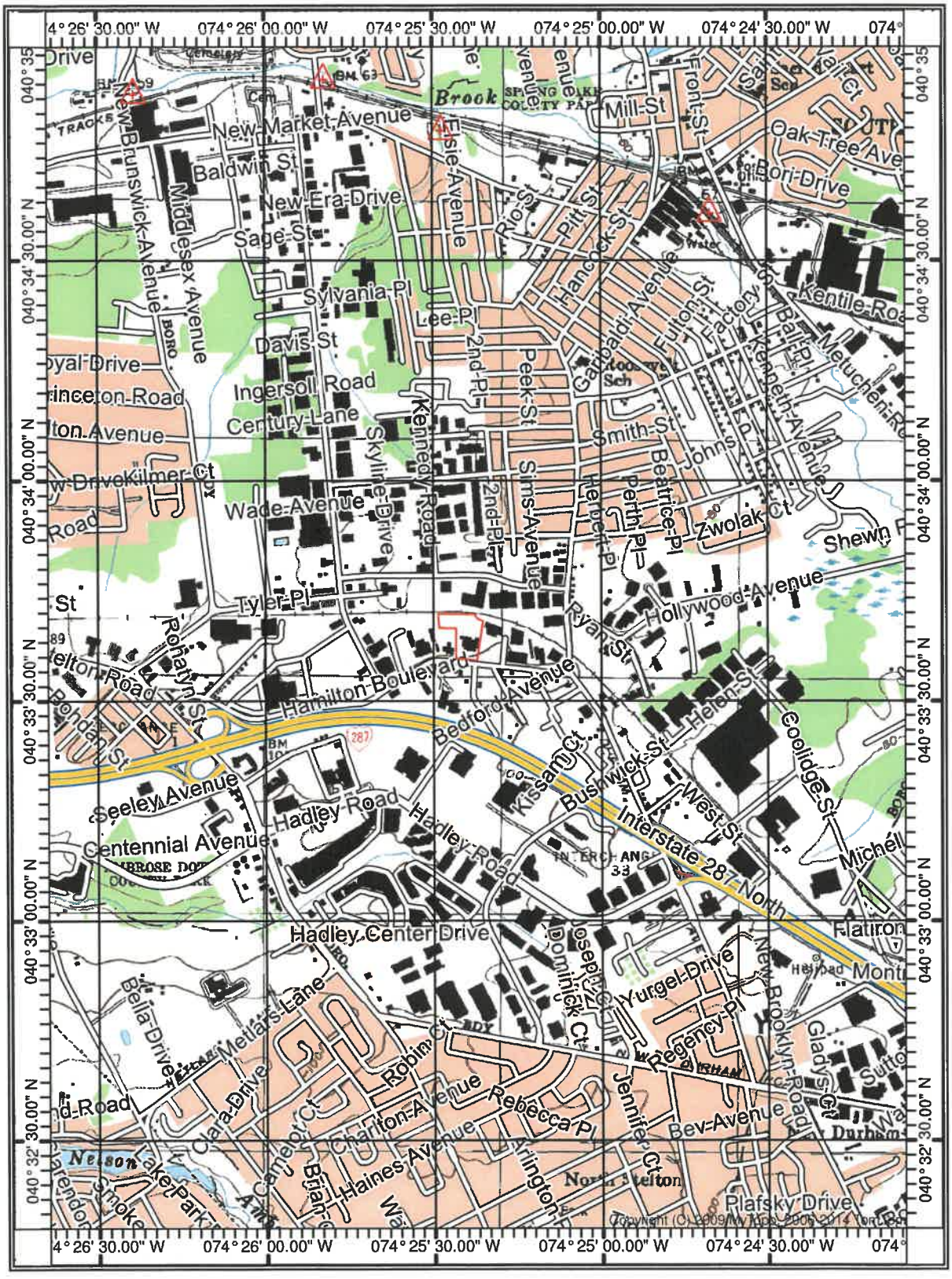
Sheet Number: 42
Borough of South Plainfield
Middlesex County

BLOCK	LOT
476	3

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

0 100' 200'
60' 150'

Scale: 1"=200±ft *Job # 2014.039*



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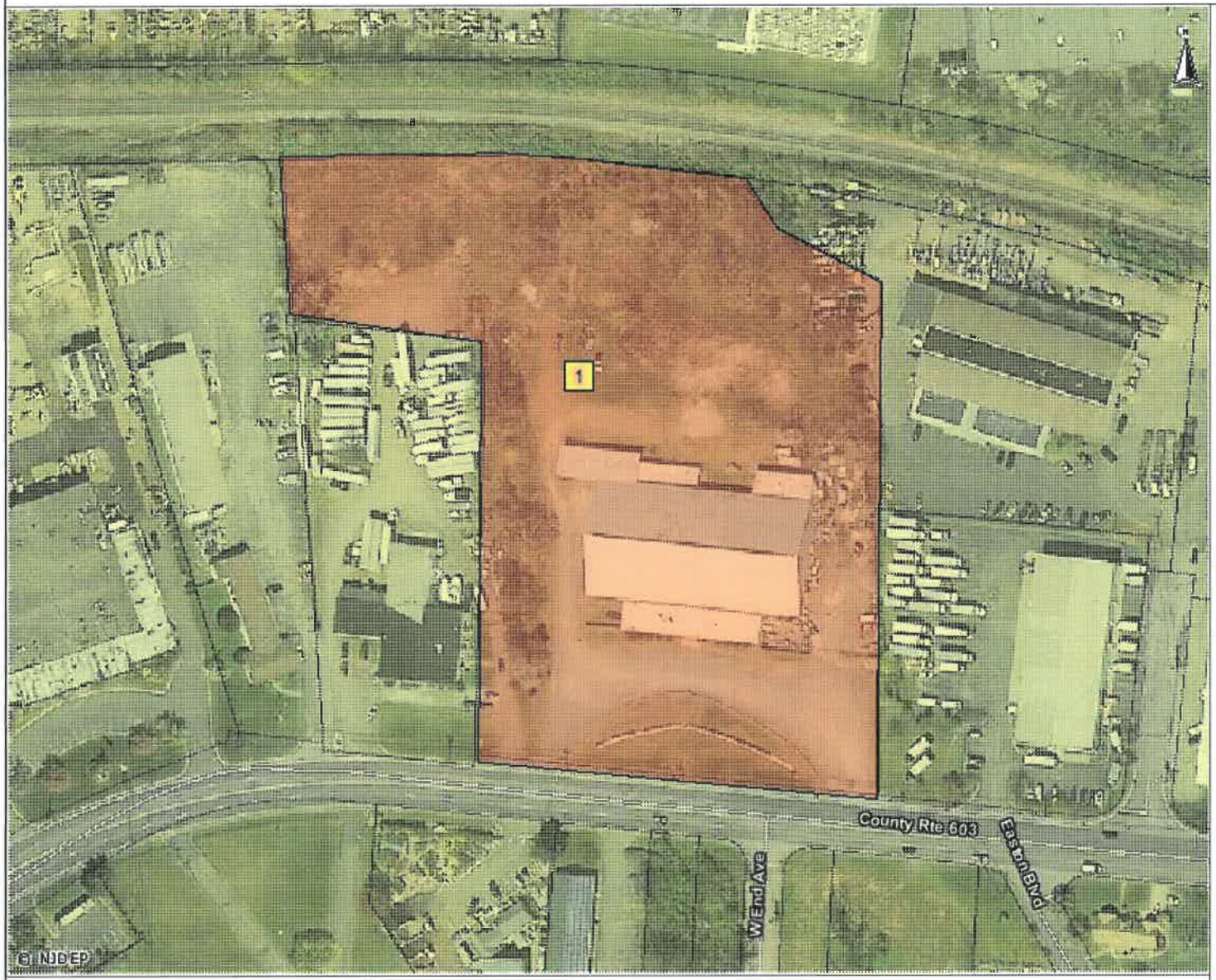
FEET

2014.039 - Sewer Service Areas

NJ-GeoWeb



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Selections

1 polygon

Legend

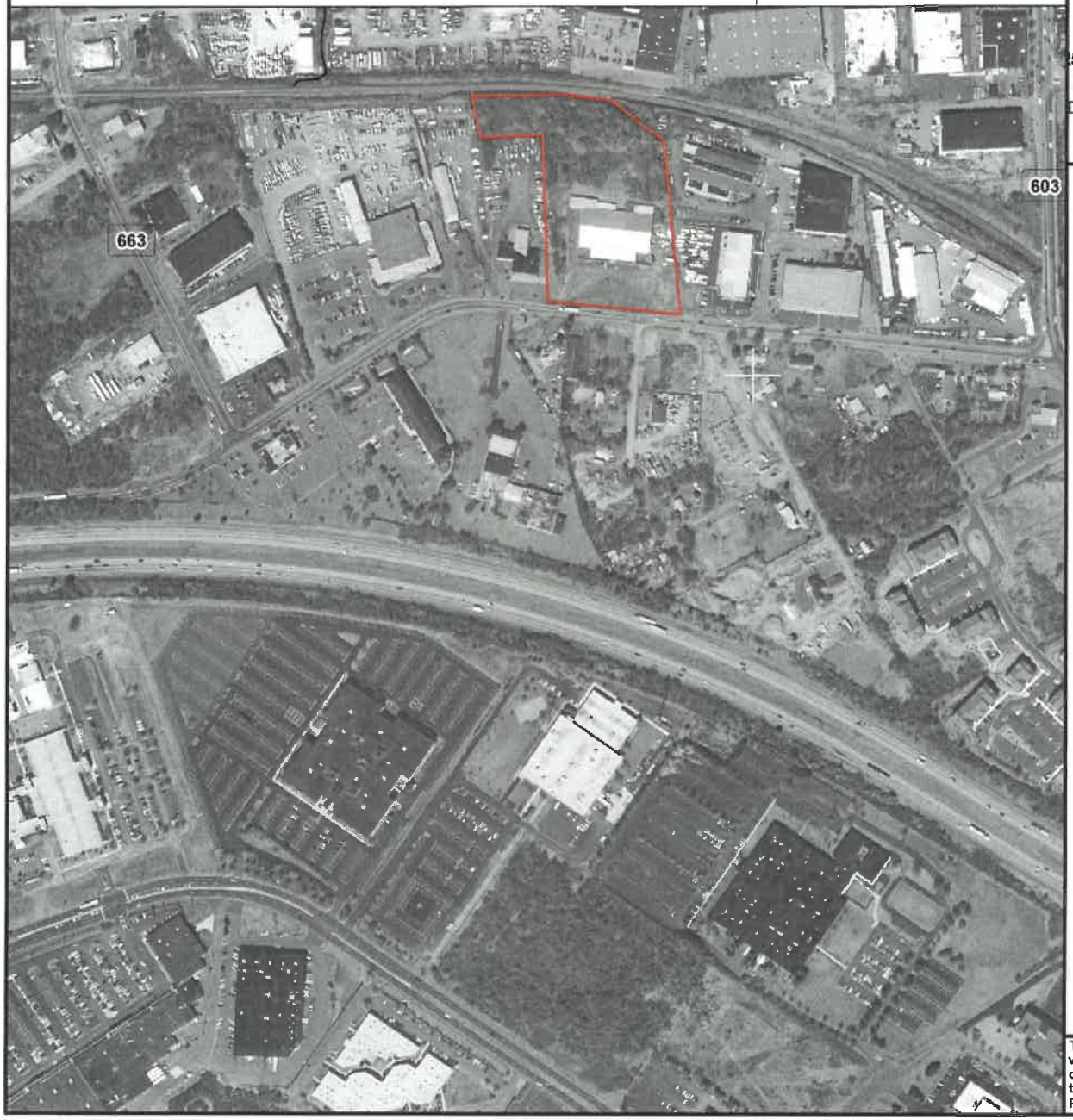
Environmental Data

- New Jersey Parcels Data
- Roads
- Category One Waters
- Surface Water Quality Standards
- Sewer Service Areas

Mid-Atlantic States

- New Jersey
- Other Mid-Atlantic States

Natural2012



MAP SCALE 1" = 500'

250 0 500 1000

FEET

METER

NFIP

NATIONAL FLOOD INSURANCE PROGRAM

PANEL 0041F

FIRM

FLOOD INSURANCE RATE MAP

MIDDLESEX COUNTY, NEW JERSEY
(ALL JURISDICTIONS)

PANEL 41 OF 286

(SEE MAP INDEX FOR FIRM PANEL LAYOUT)

CONTAINS:

COMMUNITY	NUMBER	PANEL	SUFFIX
EDISON, TOWNSHIP OF	340261	0041	F
PISCATAWAY, TOWNSHIP OF	340274	0041	F
SOUTH PLAINFIELD, BOROUGH OF	340279	0041	F

Notice to User: The Map Number shown below should be used when placing map orders; the Community Number shown above should be used on insurance applications for the subject community.

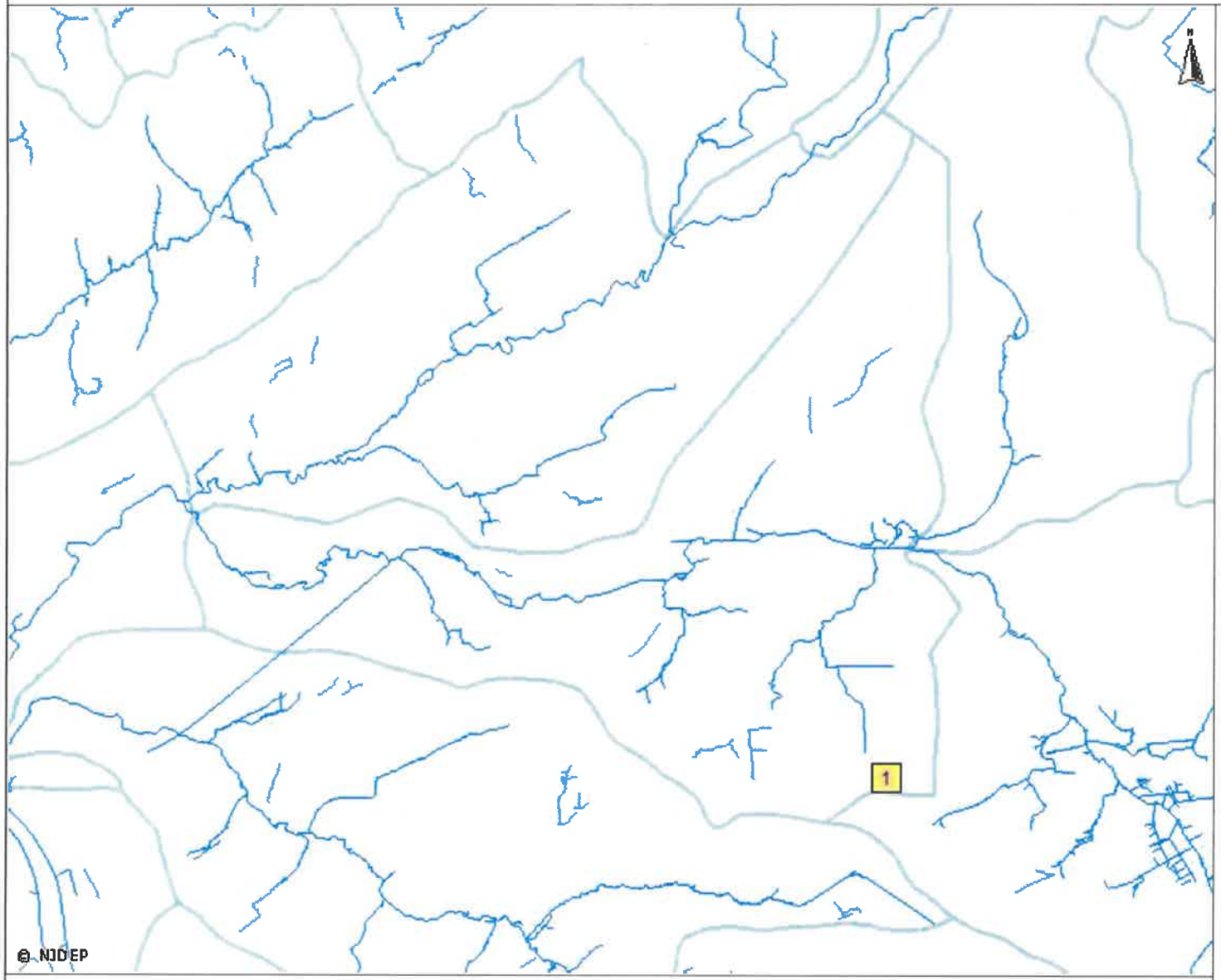
MAP NUMBER
34023C0041F

EFFECTIVE DATE
JULY 6, 2010

Federal Emergency Management Agency

2014.039 - HUC-14

NJ-GeoWeb



Legend

Environmental Data

- Category One Waters
- Surface Water Quality Standards
- Sub-Watersheds (HUC14)
- Mid-Atlantic States
- New Jersey
- Other Mid-Atlantic States

Map Printed On {2014-06-03 15:12}

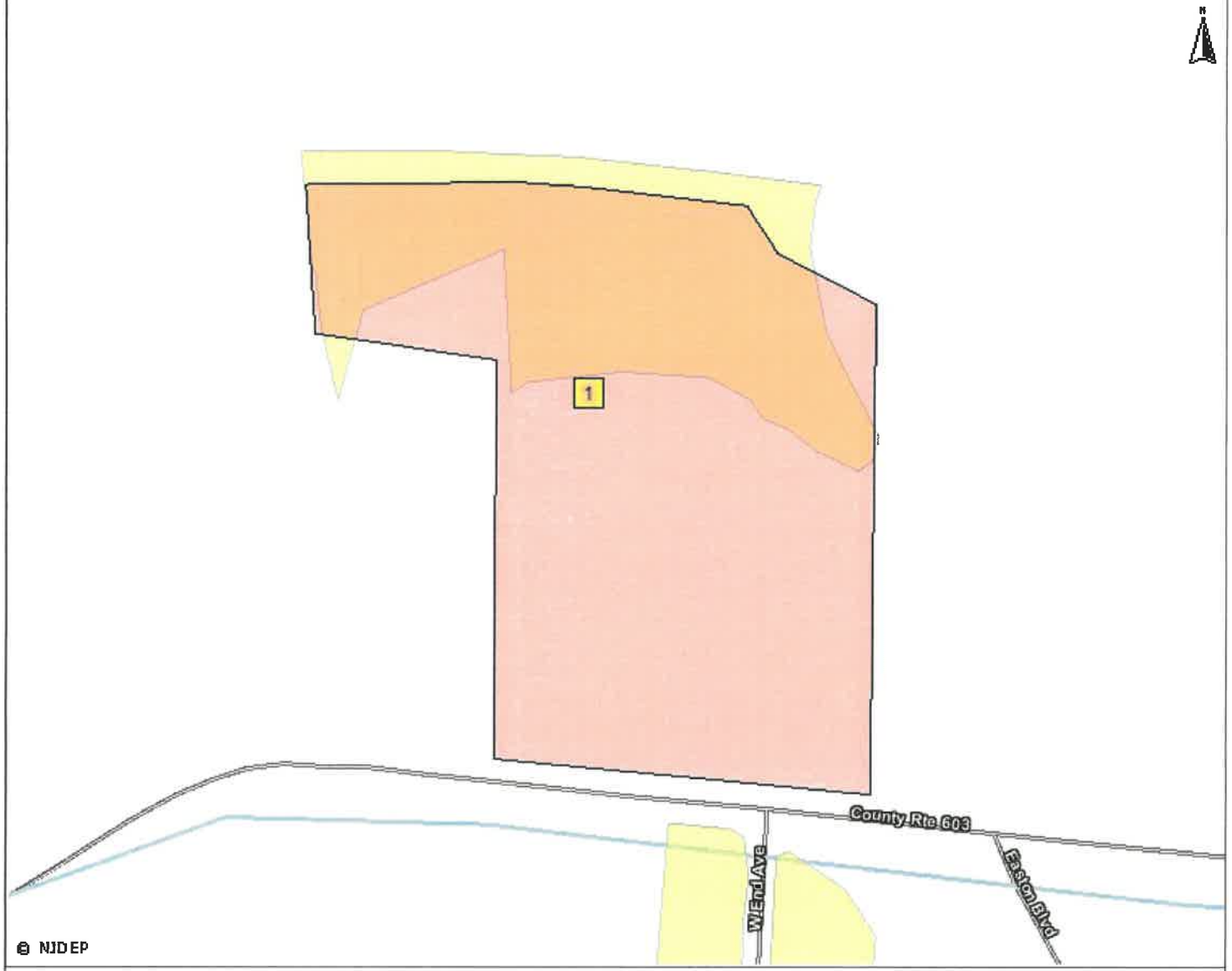
0 0.748mi

Selections

1 polygon

2014.039 - Landscape Project

NJ-GeoWeb



Legend

Map Printed On {2014-06-03 15:30}

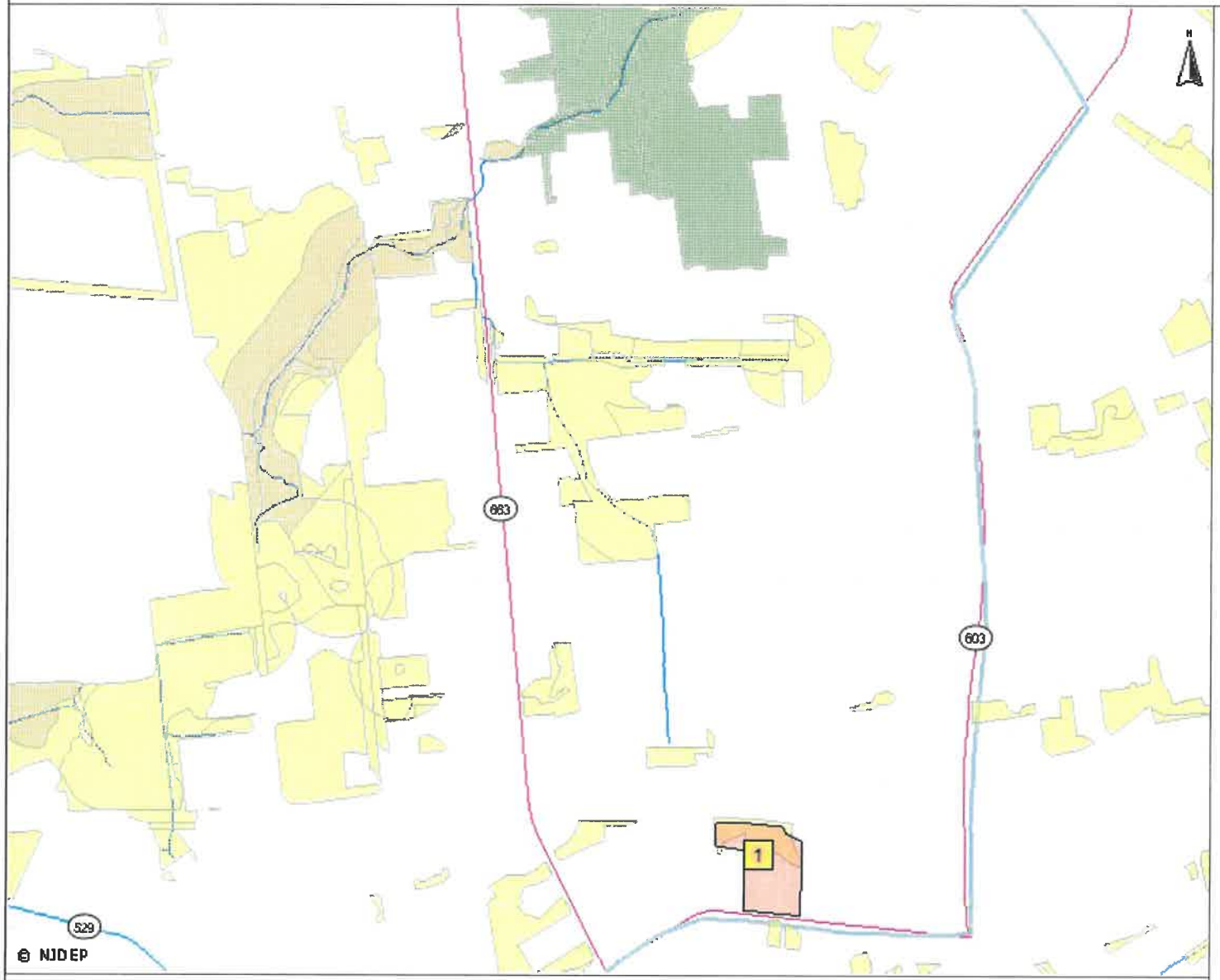
0 0.025mi

Selections

1 polygon

2014.039 - Landscape Project

NJ-GeoWeb



Legend

Map Printed On {2014-06-03 15:32}

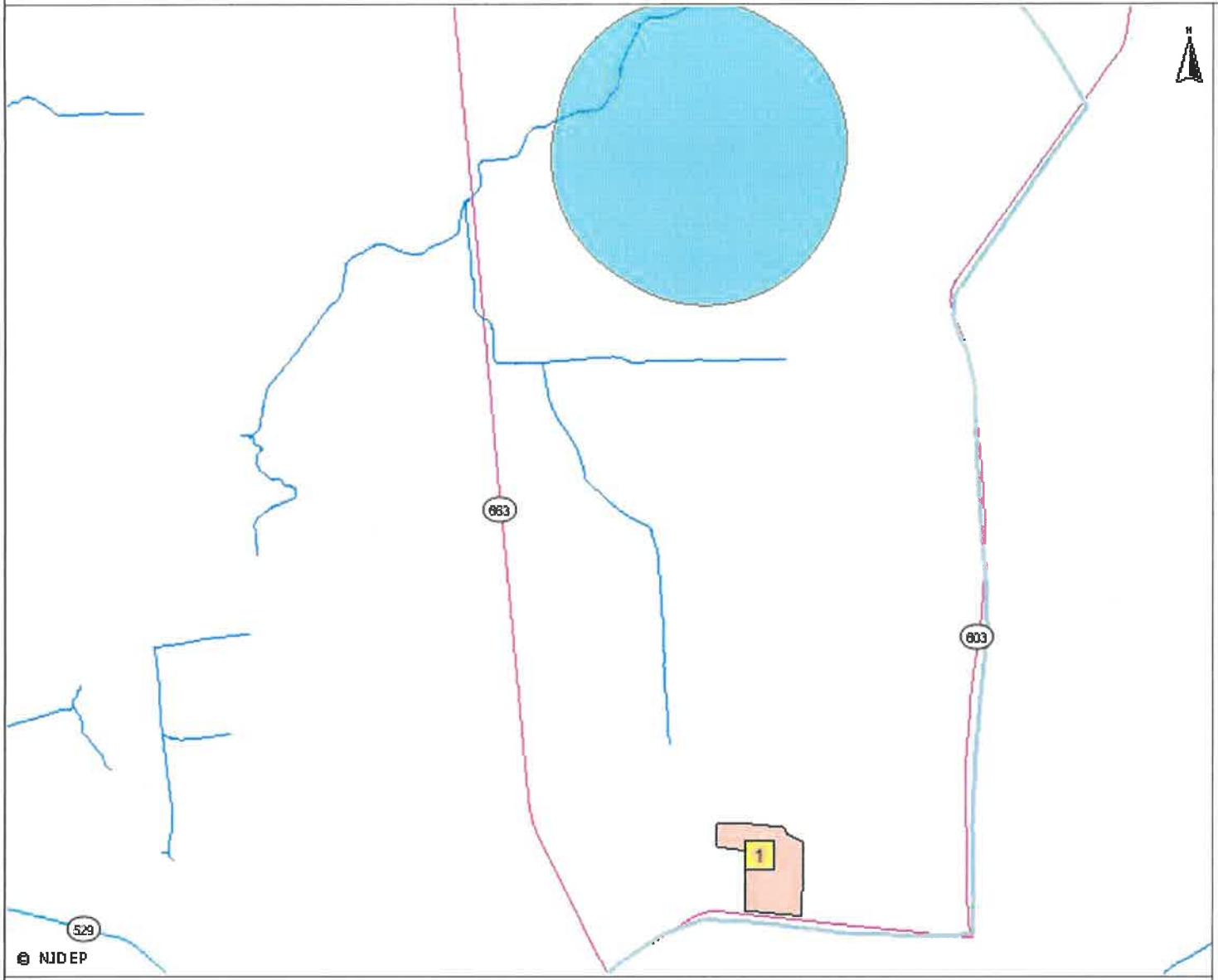
0 0.183mi

Selections

1 polygon

2014.039 - Vernal Habitat

NJ-GeoWeb



Legend

Map Printed On {2014-06-03 15:33}

0 0.183mi

Selections

1 polygon

2014.039 - Soils

NJ-GeoWeb

Map Printed On {2014-06-03 15:14}

0 0.024 mi

Selections

1 polygon

Legend

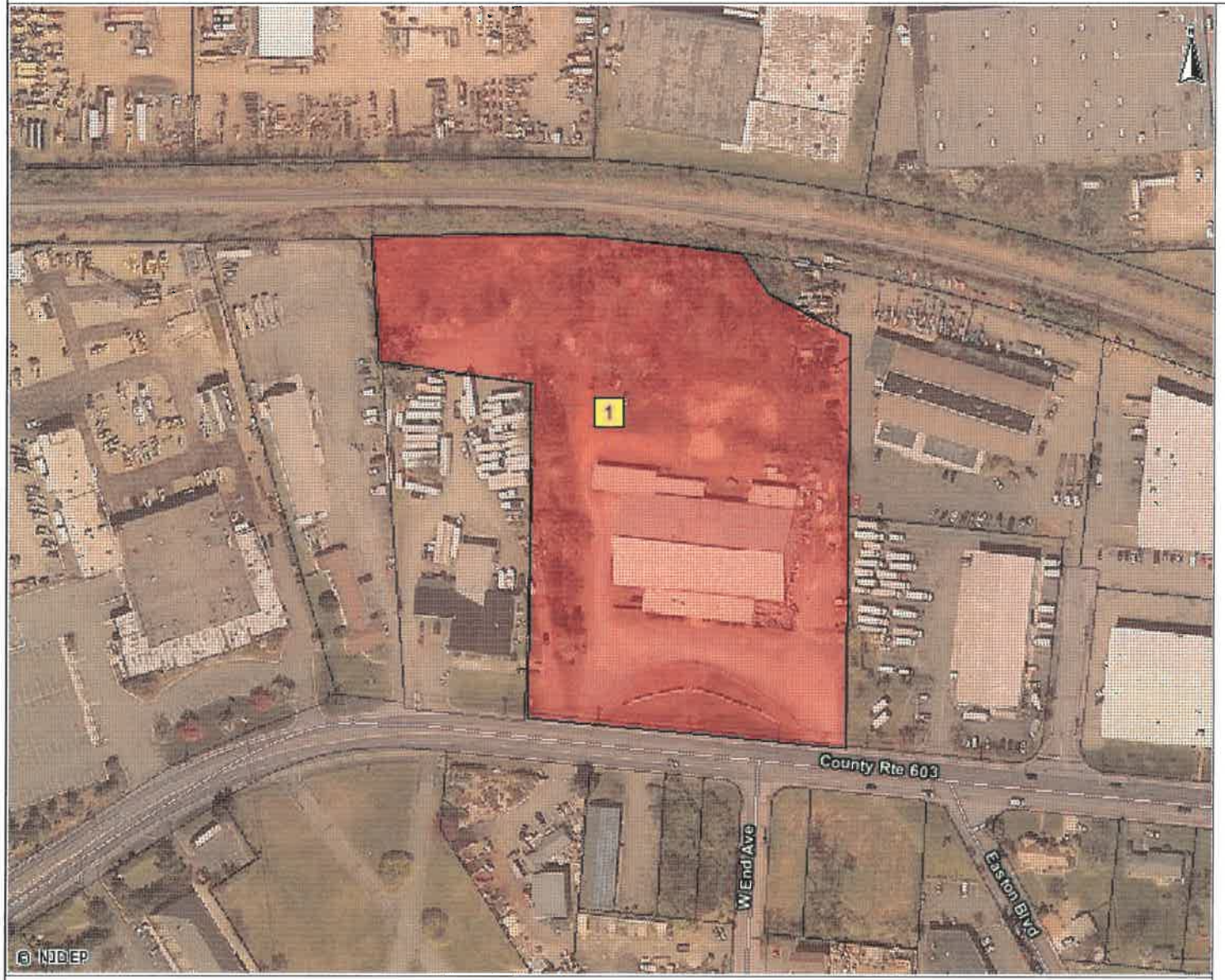
Environmental Data

- New Jersey Parcels Data
- Roads
- Category One Waters
- Surface Water Quality Standards
- Soils (SSURGO)
- Mid-Atlantic States
- New Jersey
- Other Mid-Atlantic States
- Natural2012

Chemical Soil Properties–Middlesex County, New Jersey								
Map symbol and soil name	**Depth**	**Cation-exchange capacity**	**Effective cation-exchange capacity**	**Soil reaction**	**Calcium carbonate**	**Gypsum**	**Salinity**	**Sodium adsorption ratio**
	In	*meq/100g*	*meq/100g*	*pH*	*Pct*	*Pct*	*mmhos/cm*	
RehA—Reaville silt loam, 0 to 2 percent slopes								
Reaville	0-10	10-20	—	5.1-6.5	0	0	0	0
	10-15	10-20	—	5.1-6.5	0	0	0	0
	15-22	10-20	—	5.1-6.5	0	0	0	0
	22-28	10-20	—	5.1-6.5	0	0	0	0
	28-80	—	—	—	—	0	0	0
Bucks	0-8	—	10-20	4.5-5.5	0	0	0	0
	8-13	—	10-20	4.5-5.5	0	0	0	0
	13-18	—	8.0-12	4.5-5.5	0	0	0	0
	18-27	—	8.0-12	4.5-5.5	0	0	0	0
	27-48	—	4.0-12	4.5-5.5	0	0	0	0
	48-80	—	—	—	0	—	0	0
Readington	0-7	—	12-20	4.5-5.0	0	0	0	0
	7-14	—	12-20	4.5-5.0	0	0	0	0
	14-26	—	8.0-16	4.5-5.5	0	0	0	0
	26-46	—	8.0-12	4.5-6.0	0	0	0	0
	46-80	—	—	—	—	0	0	0
Reaville, poorly drained	0-8	12-22	—	5.1-6.0	0	0	0	0
	8-20	12-16	—	5.1-6.0	0	0	0	0
	20-25	12-16	—	5.1-6.0	0	0	0	0
	25-30	11-14	—	5.1-6.0	0	0	0	0
	30-80	—	—	—	—	0	0	0
Croton	0-9	—	14-22	4.5-5.5	0	0	0	0
	9-18	—	9.0-15	4.5-6.0	0	0	0	0

2014.039 - State Planning Areas

NJ-GeoWeb



Legend

Map Printed On {2014-06-03 15:06}

0 0.031 mi

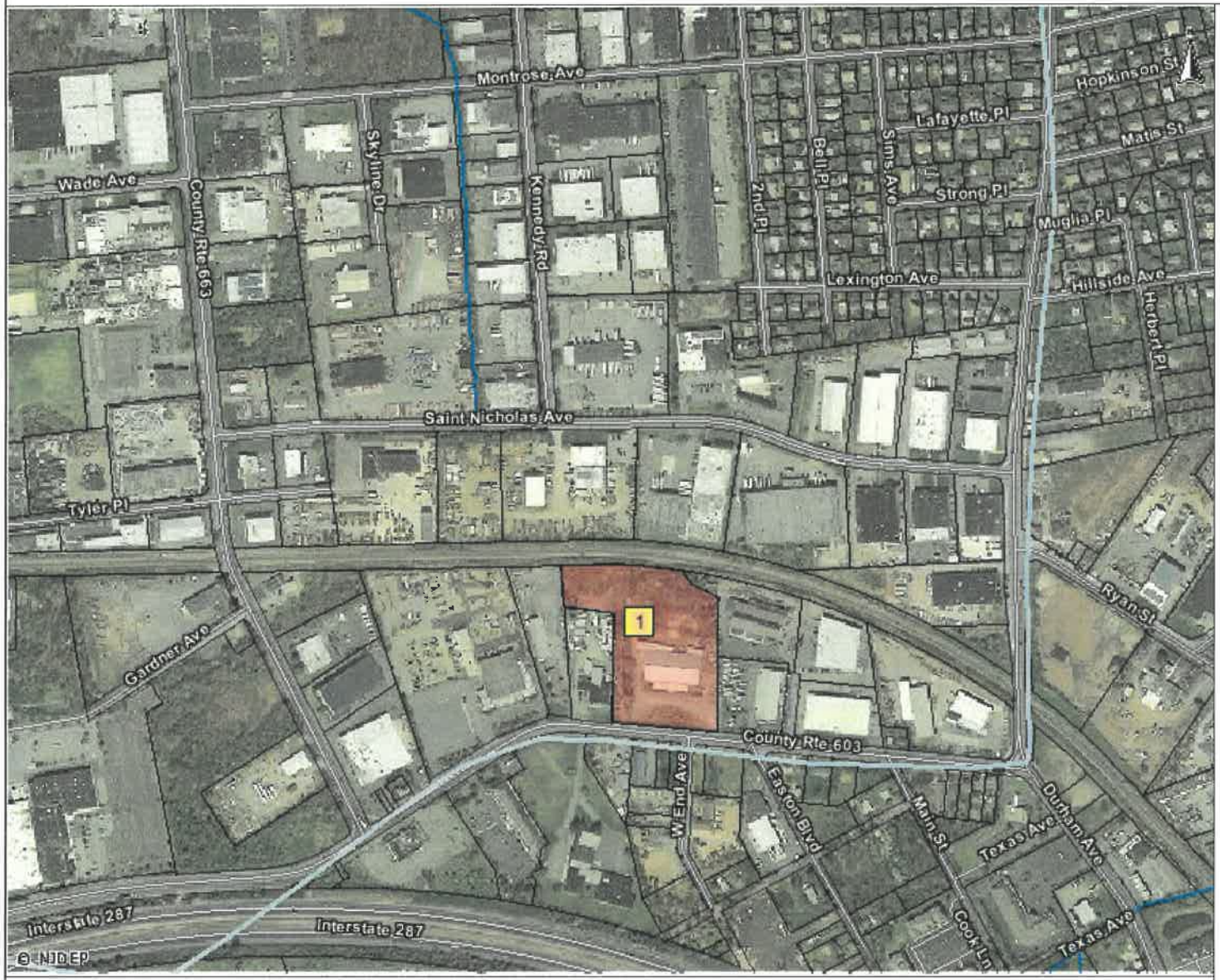
Selections

1 polygon

State Planning Areas	
Planning Area Description	METROPOLITAN
Acres	465,255.000

2014.039 - Surface Waters

NJ-GeoWeb



Map Printed On {2014-06-03 15:11}

0 0.094 mi

Selections

1 polygon

Legend

Environmental Data

- New Jersey Parcels Data
- Roads
- Category One Waters
- Surface Water Quality Standards
- Sub-Watersheds (HUC14)

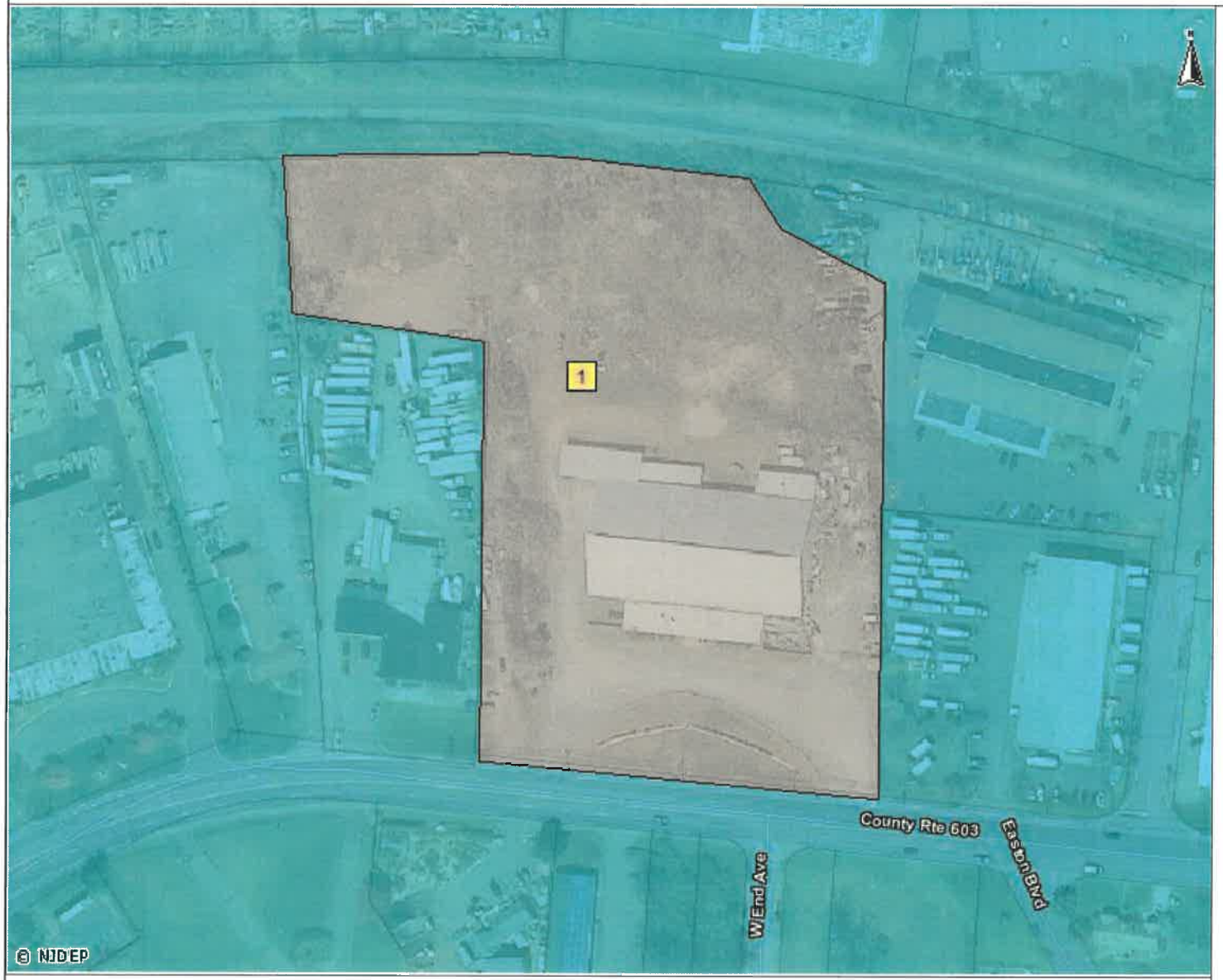
Mid-Atlantic States

- New Jersey
- Other Mid-Atlantic States

Natural2012

2014.039 - Water Purveyors

NJ-GeoWeb



Map Printed On {2014-06-03 15:26}

0 0.024 mi

Selections

1 polygon

Legend

Environmental Data

- New Jersey Parcels Data
- Roads
- Category One Waters
- Surface Water Quality Standards
- Purveyor
- Mid-Atlantic States
- New Jersey
- Other Mid-Atlantic States

Natural2012

Public Water System Deficit/Surplus

NEW JERSEY AMERICAN WATER COMPANY - RARITAN SYSTEM

PWSID: 2004002
County: Union

Last Updated: 12/10/2013

▸ Glossary of Terms Listed Below

Water Supply Firm Capacity: 251.500 MGD

Available Water Supply Limits

	Allocation	Contract	Total
Monthly Limit	6761.500 MGM	N/A MGM	6761.500 MGM
Yearly Limit	65022.500 MGY	N/A MGY	65022.500 MGY

Water Demand

	Current Peak	Date	Committed Peak	Total Peak
Daily Demand	186.245 MGD	07/2010	6.613 MGD	192.858 MGD
Monthly Demand	5773.580 MGM	07/2010	102.502 MGM	5876.082 MGM
Yearly Demand	52877.872 MGY	2008	804.582 MGY	53682.454 MGY

Water Supply Deficit or Surplus

Firm Capacity	Water Allocation Permit
58.642 MGD	885.418 MGM
	11340.046 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:
Well source capacity as reported is 16.50 MGD

Bureau of Water Allocation and Well Permitting Comments:
Contractual commitments for the bulk sale of water may reduce any water supply surplus

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 alloction 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

State of New Jersey

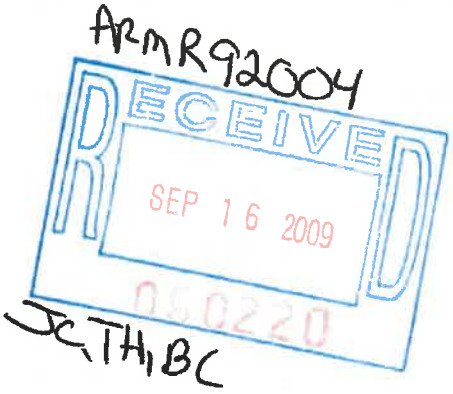
DEPARTMENT OF ENVIRONMENTAL PROTECTION
Division of Land Use Regulation
P.O. Box 439, Trenton, NJ 08625-0439
Fax # (609) 777-3656
www.state.nj.us/dep/landuse

JON S. CORZINE
Governor

MARK N. MAURIELLO
Acting Commissioner

SEP 09 2009

ARMR920004



John Crow
C & H Environmental, Inc
224 Stiger Street
Hacketstown, NJ 07840

RE: Letter of Interpretation; Line Verification
File No.: 1222-09-0002.1FWW090001
Applicant: Wilma M. Dourney
Block: 476; Lot: 3
South Plainfield, Middlesex County

Dear Mr. Crow:

This letter is in response to your request for a Letter of Interpretation to verify the jurisdictional boundary of the freshwater wetlands and 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, Division of Land Use Regulation 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 on July 24, 2009 the Division of Land Use Regulation has determined that the wetlands and waters boundary line(s) as shown on plan sheet entitled "WETLANDS DELINEATION PLAN LOT 3 BLOCK 476 BOROUGH OF SOUTH PLAINFIELD MIDDLESEX COUNTY NEW JERSEY", dated June 2, 2009, unrevised and prepared by Charles Surmonte P.E. & P. L. S., is accurate as shown.

Any activities regulated under the Freshwater Wetlands Protection Act proposed within the wetlands or transition areas or the deposition of any fill material into any water area, will require a permit from this office unless exempted under the Freshwater Wetlands Protection Act, N.J.S.A. 13:9B-1 et seq., and implementing rules, N.J.A.C. 7:7A. A copy of this plan, together with the information upon which this boundary determination is based, has been made part of the Division's public records.

Pursuant to the Freshwater Wetlands Protection Act Rules (N.J.A.C. 7:7A-1 et seq.), you are entitled to rely upon this jurisdictional determination for a period of five years from the date of this letter.

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
Telephone: (609) 777-0454 or Fax: (609) 777-3656
www.state.nj.us/dep/landuse

PERMIT

In accordance with the laws and regulations of the State of New Jersey, the Department of Environmental Protection hereby grants this permit to perform the activities described below. This permit is revocable with due cause and is subject to the limitations, terms and conditions listed below and on the attached pages. For the purpose of this document, "permit" means "approval, certification, registration, authorization, waiver, etc." Violation of any term, condition or limitation of this permit is a violation of the implementing rules and may subject the permittee to enforcement action.

Approval Date
NOV 19 2014

Expiration Date
NOV 18 2019

Permit Number(s):	**Type of Approval(s):**	**Enabling Statute(s):**
1222-09-0002.1 FWW140001	FWGP6 filling of NSWC	NJSA 13:9B FWPA NJSA 58:10A WPCA

Permittee:

DPE 2700 South Plainfield Assoc., LLC
c/o Philip Richards
20 Community Place
Morristown, NJ 07960

Site Location:

Block: 476 Lot: 3
Municipality: South Plainfield Borough
County: Middlesex

Description of Authorized Activities:

This permit authorizes the filling of 0.25 acres (10,890 SF) of isolated wetlands under Freshwater Wetlands General Permit No. 6 for construction of a gravel parking area.

Prepared by:

Tina Wolff

Received and/or Recorded by County Clerk:

THIS PERMIT IS NOT EFFECTIVE AND NO CONSTRUCTION APPROVED BY THIS PERMIT, OR OTHER REGULATED ACTIVITY, MAY BE UNDERTAKEN UNTILTHE APPLICANT HAS SATISFIED ALL PRE-CONSTRUCTION CONDITIONS AS SET FORTH HEREIN.

This permit is not valid unless authorizing signature appears on the last page.