MASER CONSULTING P. A.

Engineers Planners Surveyors Landscape Architects Environmental Scientists

Environmental Impact Statement

Block 3, Lots 3 and 3.02
Township of East Windsor, Mercer County, New Jersey

October 2019

Prepared For
OTR East Windsor Investors, LLC
50 East Mt. Pleasant Ave
Livingston, New Jersey 07039

Prepared By
Maser Consulting P.A.
331 Newman Springs Road, Suite 203
Red Bank, NJ 07701

MC Project No. 18001982A

TABLE OF CONTENTS

APPENDICES

LIST OF MAPS

I. INTRODUCTION

A. Purpose of Document

This document has been prepared in accordance with the requirements of Section 19A-2.11 (Environmental Impact Statement) of the Township of East Windsor Land Use Ordinance. The document analyzes the existing conditions and potential environmental impacts associated with the construction of a proposed warehouse on Block 3, Lots 3 and 3.02 in the Township of East Windsor, Mercer County, New Jersey.

The proposed project consists of the construction of eight (8) residential multi-family buildings, one clubhouse, one maintenance building, free standing garages, surface parking, curbing, sidewalk, and associated drainage improvements including two (2) surface detention basins. Disturbance to agricultural fields will be required for the project.

This Environmental Impact Statement (EIS) documents environmental resources on the project site, potential impacts to these resources resulting from the proposed development, and mitigation measures to avoid or reduce impacts. Various documents, databases, and reports referenced herein were utilized in preparing the EIS.

B. Site Location and Description

The subject property consists of approximately 14.27 acres and is located in the Township of East Windsor, Mercer County, New Jersey. The property is designated as Block 3, Lots 3 and 3.02 on the Official Tax Map (Fig. 1) for the Township of East Windsor and appears on the Hightstown, NJ Quadrangle of the U.S. Geological Survey Map (Fig. 2). The subject property is an irregularly-shaped parcel located north of Old Trenton Road, west of the intersection of Princeton Hightstown Road, Old Trenton Road and Millstone Road (Fig. 3). The property frontage is along Old Trenton Road. The project site is situated in an area characterized by agricultural land, and industrial/warehouse development. The project site consists of agricultural fields, as shown on aerial photography (Fig. 4). Photographs which characterize site conditions are in Appendix B.

C. Service Demands

1) Energy Demands

Electric service will be provided by the Jersey Central Power & Light Company. Natural gas service will be provided by Public Service Electric and Gas.

2) Waste Disposal

The two types of waste that will be generated by the proposed development are solid waste and sewage. A private hauler will provide solid waste and recycling services to the proposed development. Sanitary sewer service will be provided by the East Windsor Municipal Utilities Authority (EWMUA). Sanitary sewerage will be conveyed from the site via a proposed gravity sewer lateral to an existing main along the southeastern property boundary that is owned and operated by the EWMUA.

3) Water Supply

Water service will be provided by connection to an existing water main along the southeastern property boundary that is owned and operated by the EWMUA.

4) Traffic and Transit

A traffic impact study has been prepared by Maser Consulting (2019) and is included with this application under a separate cover.

5) Schools

The proposed project will generate students; therefore, direct impacts to private or public schools are anticipated.

6) Public Safety

Impacts are anticipated for police, fire and rescue services due to the proposed project producing new residents.

D. Economic and Fiscal Benefits

The proposed project will bolster the local economy by providing tax ratables. The economic

and fiscal benefits to the local economy will also be realized during the construction and operational phases of the project. The construction phase will generate short term job opportunities which will stimulate the local economy. Due to the short duration of the construction phase of the project, construction workers will likely not seek permanent housing and therefore not result in long-term or permanent changes to the demographics of the community. However, construction workers are expected to contribute to the local economy on a short-term basis through procurement of goods and services from the local community, examples of which may include the purchase of short term housing, food and entertainment, construction equipment, and building materials.

E. Permits and Licenses

The following Municipal, County and State approvals and permits are required for the project:

- Township of East Windsor Planning Board for Preliminary and Final Site Plan approval;
- Mercer County Planning Board for Site Plan approval;
- Mercer County Soil Conservation District for Soil Erosion and Sediment Control Plan Certification;
- Delaware and Raritan Canal Commission Certificate of Approval;
- NJDEP Freshwater Letter of Interpretation;
- Municipal and State Approval for Sanitary Sewer Extension;
- Municipal Approval for Water Main Extension.

F. Operation and Construction Phases

1) Construction Phase

a) Development Schedule

The site development will generally be completed as follows, after necessary permits and approvals are obtained:

1. Install initial soil erosion and sediment control measures including construction driveways and silt fence.
2. Site grading, clearing site, subgrade road and parking areas as shown on the Grading Plans with appropriate erosion control facilities.

3. Provide and install temporary stabilization measures as required.
4. Construction of various drainage and utility facilities, stormwater management basins and installation of erosion control measures for drainage structures.
5. Install of concrete curb and sub-base course as per plan.
6. Maintenance of soil erosion and sediment control.
7. Building construction.
8. Regrading and stabilization of lawn areas.
9. Installation of pavement surface course.
10. Removal of soil erosion and sediment control facilities when permanent erosion control measures are accepted by the Township Engineer.

b) Work Force Required

During the construction phase, it is anticipated that qualified and licensed contractors representing various disciplines and skillsets will be retained to oversee and conduct the day-to-day construction of the overall site development. Construction shall be completed in accordance with the approved Final Construction Plan.

c) Construction Traffic

Construction access to the site will be from Old Trenton Road. A stabilized construction entrance in accordance with the "Standards for Soil Erosion and Sediment Control in New Jersey" will be utilized.

d) Site Preparation

The areas of the site where improvements are proposed will be stripped of existing vegetation and topsoil. All deleterious materials encountered below grade will be removed. Soft or unsuitable materials will also be removed. Subsurface utilities and or abandoned structures present below the ground surface will be relocated or removed.

Areas in the vicinity of the buildings, as well as proposed pavement or concrete areas, will be proof-rolled and compacted. Imported structural material, if required, will be placed in lifts not exceeding 10 inches and compacted.

e) Precautions

To avoid or minimize environmental impacts to the greatest extent practicable, it is anticipated that precautions and preventative measures will be implemented during construction. For example, an approved Soil Erosion and Sediment Control Plan should be followed to reduce erosion and sedimentation. Construction should be performed in accordance with local, State and Federal OSHA safety regulations.

2) Operational Phase

The proposed development operators will be responsible for maintenance of the building maintenance, external structures (e.g. driveway, parking), landscaping and stormwater management facilities.

II. EXISTING ENVIRONMENTAL CONDITIONS

A. Air Quality

Since the passage of the Clean Air Act in 1970, New Jersey's air quality has significantly improved, to the point where New Jersey is in compliance with all National Ambient Air Quality Standards (NAAQS) (NJDEP 2016). The Federal Clean Air Act requires each state to attain and maintain specified air quality standards. Ambient Air Quality Standards have been promulgated by the federal government and by New Jersey for total suspended particulate (TSP), sulfur dioxide (SO_2), carbon monoxide (CO), nitrogen dioxide (NO_2), lead and ozone. The New Jersey standards are generally the same as the federal standards for these pollutants. Primary air quality standards are set to protect human health and secondary standards are set to protect human welfare. The following air quality assessment is taken from the 2018 Annual Air Quality Report published by the NJDEP Bureau of Air Monitoring. In 2018, air quality in New Jersey was good on 156 days, moderate on 182 days, unhealthy for sensitive groups on 26 day, unhealthy on 2 days and very unhealthy on 0 days.

Carbon monoxide (CO) is considered a poisonous gas formed when carbon in fuels is not burned completely. It is a by-product of motor vehicle exhaust, which contributes over 51% of all CO emissions nationwide (NJDEP 2016). In 2016 the Elizabeth lab was the closest area Carbon

Monoxide was measured to the subject property. Carbon monoxide levels measured 3.1 ppm at Elizabeth Lab, during the maximum 1-hr average and 2.4 ppm for the maximum 8-hr average. Carbon monoxide levels have improved dramatically over the past 20 years. The last time the CO standard (35 ppm for the 1-hr average and 9 ppm for the 8-hr average) was exceeded in New Jersey was January 1995 and the entire state was declared as having reached the CO standard on August 23, 2002 (NJDEP Bureau of Air Quality Monitoring 2016).

At ground level, ozone is considered an air pollutant that can have serious health effects. Ground-level ozone is created when nitrogen oxides and volatile organic compounds (VOCs) react in the presence of sunlight and heat (NJDEP 2016). Nitrogen oxides are primarily emitted by motor vehicles, power plants, and other sources of combustion. VOCs are emitted from motor vehicles, chemical plants, factories, consumer and commercial products, and natural sources. Because ozone needs sunlight and heat to form, it is mainly a daytime problem during the summer. Ozone (O_3) is measured at Rider University. The maximum daily 1-hour level averaged 0.094. The State's maximum daily 1-hour average primary Standard is 0.12 ppm. The 8-Hour average was 0.076 ppm. The New Jersey 8-hour standard is 0.08 ppm. Ozone is one of the pollutants responsible for the unhealthful air quality days experienced in the region (NJDEP Bureau of Air Monitoring 2016).

Nitrogen dioxide (NO_2) is a gas that is emitted from exhaust of motor vehicles, the burning of coal, oil or natural gas and industrial processes. In 2016, the closest station that measured NO_2 was Rutgers University. Nitrogen dioxide levels measured 0.053 ppm for the 1-hr average maximum and 0.010 ppm for the 12-month average maximum at the Rutgers University station. The 12-month national standard is 0.053 ppm. None of the monitoring stations in New Jersey recorded exceedances of the National or New Jersey air quality standards in 2018. Since routine monitoring for NO_2 began in 1966, concentrations have never exceeded the national standard in New Jersey (NJDEP Bureau of Air Quality Monitoring 2018).

Particulate air pollution consists of solid particles and liquid droplets suspended in the atmosphere. They can be emitted directly or they can form in the atmosphere from gaseous emissions. Airborne particles can harm vegetation and aquatic ecosystems and can cause damage to paints and building (NJDEP 2018). Coarse particulate matter is defined as particles greater than 2.5 microns in

diameter, whereas fine particular matter is defined as particles less than 2.5 microns in diameter. Inhalable particles (PM_{10}) and fine particles ($PM_{2.5}$) are health concerns because they easily reach the deepest recesses of lungs (NJDEP 2016). New Jersey standards for Total Suspended Particulates (TSP) are 75 micrograms per cubic meter for the 12-month averaging period and 260 micrograms per cubic meter for the 24-hour averaging period. New Jersey standards for inhalable coarse particulates are 50 micrograms per cubic meter for the annual averaging period and 150 for the 24-hour average. Inhalable Particulates (PM_{10}) were measured at Camden in 2016. The highest daily concentration was 127 µg/m and the annual mean concentration was 39 µg/m. Fine particulate matter ($PM_{2.5}$) was measured at Rider University. The highest daily concentration was 23.9 µg/m^3. The annual mean concentration was 8.62 µg/m^3. None of the $PM_{2.5}$ standards were exceeded.

Sulfur dioxide (SO_2) is a gas that forms when fuel containing sulfur is burned or when gasoline is extracted from oil. The Chester station was the closest station that measured SO_2 in 2016. Sulfur dioxide levels measured 0.005 for the 3-hr average maximum and 0.000 ppm for the 12-month average maximum at Chester in 2016. The average annual average health standard is 0.030 ppm and the 24-hr average standard is 0.14 ppm. The welfare-based secondary standard of 0.5 ppm is for the 3-hr average concentration. The last time any National sulfur dioxide standard was exceeded in the state was 1980 (NJDEP Bureau of Air Quality Monitoring 2018).

B. Water Quality

Surface water drainage is towards a unnamed tributary of Bear Brook located north of the property. The subject property is located within the Millstone River watershed. The Millstone River ultimately drains to the Raritan River. There are no streams located on the project site; however, the Bear Brook tributary to which the project site drains is assigned a designation of FW2-NT as per the NJDEP Surface Water Quality Standards N.J.A.C 7:9B (NJDEP 2017). According to the New Jersey Surface Water Quality Standards at N.J.A.C. 7:9B, FW2 waters can be used for:

- Maintenance, migration, and propagation of the natural and established biota;
- Primary and secondary contact recreation;
- Industrial and agricultural water supply;

- Public and potable water supply after such treatment required by law or regulation; and
- Any other reasonable uses.

The NT designation means that this portion of the waterbody is not reserved for trout production, maintenance or special protection. Based on the NT designation, the Millstone River is not reserved for trout production or special protection.

C. Water Supply

The project site is not currently supplied with potable water. A water main owned and operated by the EWMUA occurs within an easement located immediately east of the southeastern property boundary.

D. Hydrology

The subject property is located within the Millstone River watershed. The natural hydrology of the property is such that drainage is towards a tributary of Bear Brook located off-site.

E. Geology

According to the NJDEP's NJ GeoWeb, the subject property is underlain by the Magothy Formation (Kmg) (Fig. 5). The Magothy Formation is upper Cretaceous, middle and lower Santonian in age. It consists of fine- to coarse-grained, locally gravelly quartz sand. Muscovite and feldspar are minor sand constituents. Large wood fragments occur in the clay layers found within the Formation (Owens, et al 1998). According to the map of Coastal Plain Formations New Jersey with Acid-Producing Soils contained in the Soil and Sediment Control Standards; the Magothy Formation is mapped as an acid-producing formation (NJDA SSCC 2014).

According to the NJDEP NJ GeoWeb), the site is underlain by the Potomac-Raritan-Magothy Aquifer System (Fig. 6). This aquifer system is described as consisting of interbedded sand, gravel, silt and clay and exhibits intergranular porosity and permeability. The aquifer system is separated into lower, middle and upper aquifers. The Raritan confining unit is included in the system. This confining unit consists of interbedded sand, silt and clay. Water is fresh and moderately hards with a near neutral pH. Elevated iron and manganese levels commonly occur.

Salinity increases near coastal areas. Calcium bicarbonate water are dominant (Herman, 1998).

NJDEP groundwater recharge mapping for the site shows the majority of proposed development area as recharging groundwater at 11 to 15 inches per year. The northwestern portion of the site is mapped as having a groundwater recharge rate of 8-10 inches per year (Fig. 7).

F. Soils

The Natural Resource Conservation Service (NRCS) Web Soil Survey (WSS) provides soil data and information produced by the National Cooperative Soil Survey, including information that is useful at the planning level to draw general conclusions about the suitability of a site for certain land uses.

The NRCS Soil Survey (Fig 8) indicates the property is underlain by two (2) soil map units which are listed below with its corresponding drainage class and land capability classification:

- Mattapex and Bertie loams, 0 to 5 percent slopes (MBYB)

  Drainage Class: Moderately well drained
  Land capability classification (irrigated): None specified
  Land capability classification (nonirrigated): 2e
  Hydrologic Soil Group: C
  Hydric soil rating: No

- Sassafras sandy loam, 5 to 10 percent slopes (SacC)

  Drainage Class: Well drained
  Land capability classification (irrigated): 3e
  Land capability classification (nonirrigated): 3e
  Hydrologic Soil Group: B
  Hydric soil rating: No

Land capability classification generally determines the suitability of soils for types of field crops. Crops that require special management are excluded. The soils are grouped according to their limitations for field crops, the risk of damage if they are used for crops, and the way they respond to management. The criteria used in grouping the soils do not include major and generally expensive land forming that would change slope, depth, or other characteristics of the soils, nor do they include possible but unlikely major reclamation projects. Capability

classification is not a substitute for interpretations designed to show suitability and limitations of groups of soils for rangeland, for forestland, or for engineering purposes (Kirkham 1989).

In the capability system, soils are generally grouped at three levels - *capability class, subclass,* and *unit*. Capability classes, the broadest groups, are designated by the numbers 1 through 8. The numbers indicate progressively greater limitations and narrower choices for practical use. The classes are defined as follows:

- Class I soils have slight limitations that restrict their use;
- Class II soils have moderate limitations that restrict the choice of plants or that require moderate conservation practices;
- Class III soils have severe limitations that restrict the choice of plants or that require special conservation practices, or both;
- Class IV soils have very severe limitations that restrict the choice of plants or that require very careful management, or both;
- Class V soils are subject to little or no erosion but have other limitations, impractical to remove, that restrict their use mainly to pasture, rangeland, forestland, or wildlife habitat;
- Class VI soils have severe limitations that make them generally unsuitable for cultivation and that restrict their use mainly to pasture, rangeland, forestland, or wildlife habitat;
- Class VII soils have very severe limitations that make them unsuitable for cultivation and that restrict their use mainly to grazing, forestland, or wildlife habitat;
- Class VIII soils and miscellaneous areas have limitations that preclude commercial plant production and that restrict their use to recreational purposes, wildlife habitat, watershed, or aesthetic purposes (Helms 1992).

Capability subclasses are soil groups within one class. They are designated by adding a small letter, e, w, s, or c, to the class numeral, for example, IIe. The letter e shows that the main hazard is the risk of erosion unless close-growing plant cover is maintained; w shows that water in or on the soil interferes with plant growth or cultivation (in some soils the wetness can be partly corrected by artificial drainage); s shows that the soil is limited mainly because it is shallow,

droughty, or stony; and c, used in only some parts of the United States, shows that the chief limitation is climate that is very cold or very dry (Helms 1992).

G. Sewerage Systems

There is no sanitary sewer service on the site under existing conditions; however, the site is within the sewer service area and will be serviced by sanitary sewer under proposed conditions. A main owned and operated by the EWMUA occurs within an easement located immediately east of the southeastern property boundary.

H. Topography

The highest elevations on the subject property are located in the southeastern portion of the site. Elevations on the site range from approximately 112 feet along the southeastern portion of the property along Old Trenton Road to approximately 95 feet in the northern portion of the property. The site is relatively flat, but slopes gradually from the south to the north. No slopes in excess of 10% occur on the project site.

I. Slopes

The site is relatively flat. No slopes in excess of 10% occur on the project site.

J. Vegetation

The vegetative composition of the project site has been largely influenced by historic and current anthropogenic processes. The project site contains agricultural land and was cultivated in soy bean at the time of the site reconnaissance.

K. Wildlife

The term wildlife pertains to zoological (non-plant) resources, such as insects and animals. Terrestrial wildlife includes insects and animals that are not primarily aquatic. Terrestrial wildlife includes species that primarily occur on land and also includes avian species.

The project site primarily consists of agricultural fields consisting of uplands. The use of the project site for agriculture creates a disturbed landscape. Wildlife species utilizing the site would

have to be mobile species adapted to human activity.

1) Threatened Wildlife Species

A Natural Heritage Program (NHP) response is pending. According to NJDEP's Landscape project no documented occurrences of threatened or endangered species, or their habitat, exist on the project site.

2) Wildlife Habitat

Wildlife species expected to utilize the property include species tolerant to the disturbed nature of the project site and surrounding area. The Township of East Windsor Natural Resource Inventory prepared by Coppolla and Copolla (2000) describes wildlife species commonly found in East Windsor and within the types of habitats present on the project site. Species that may utilize the site include mammals such as Eastern chipmunk, Northern gray squirrel, White-tailed deer, and Eastern cottontail. Common bird species are also expected to occur on the project site and may include Woodpeckers, Blue jay, Northern cardinal, Tufted titmouse, Chickadees, and other migrant bird species. The cultivated field is of limited wildlife habitat value; however, some grassland birds potentially occur in the agricultural fields, primarily when fallow, as well as predatory birds such red-tailed hawk and American kestrel.

3) Aquatic Organisms

There are no permanent waterbodies on the project site; therefore, aquatic organisms are expected to be absent.

L. Noise

The project site itself is not a significant source of noise, except during agricultural activities (e.g. planting and harvesting). In general, the existing conditions on the site produce low level noise. Background noise levels at the existing site are generated from surrounding land uses, including traffic on the existing surrounding roads. Other sources of noise include the adjacent commercial and residential uses to the south and the east which produce truck traffic.

M. Demography

The Township of East Windsor had a population of 27,190 residents in 2010, according to the U.S.

Census Bureau (2019).

N. Land Use

The project site is situated in an area characterized by agricultural land, commercial and residential developments. The project site itself consists of agricultural fields

O. Aesthetics

Under existing conditions, the project site and surrounding land uses contain little scenic value to residents and travelers as natural habitats and cover types are absent. The cultivated fields on the site does provide some aesthtic scenic value.

P. History and Archaeology

The *New Jersey & National Registers of Historic Places* was consulted to determine if any historic, archaeological or architectural resources are present on the site. The Township of East Windsor listed the following sites as historical places:

- Jesse Anderson House (Holland House), Old Cranbury Road, SHPO opinion date: 3/28/1996
- Robert Ayres Farm, 261 Dutch Neck Road, SHPO opinion date: 2/24/1994
- Ely-Mount House, SHPO opinion date: 9/3/1986
- Camden and Amboy Railroad Main Line Historic District, Camden and Amboy Railroad right-of-way, 6/26/1975
- Isaac Pullen/Lemuel Black House, 886 Old York Road, SHPO opinion date: 3/30/2010
- James Wilson House, 428 Old Trenton Road, SHPO opinion date: 9/3/1986
- Windsor Hollow Archaeological Site, One Mile Road, SHPO opinion date: 10/23/2002
- Windsor Mill Archaeological Site, One Mile Road, SHPO opinion date: 10/23/2002

The project site neither contains nor is it located within the immediate vicinity of the above mentioned historic places. Furthermore, according to the Historic Preservation data in the NJ-GeoWeb, the project site is not a historic property, and it neither occurs in, nor contains, a historic district or historic property (Fig. 9).

Q. Surface Drainage

The project site drains toward an off-site tributary of Bear Brook. According to FEMA's *Flood Boundary and Floodway Map* of East Windsor Township, Community Panel Numbers 34021C0169F, there are no documented floodplains or floodways on the project site (Fig. 10).

A Letter of Interpretation (LOI) – Presence/Absence Determination has been approved and indicates the absence of wetlands on the site (Appendix D).

R. Climate

The project site is located in a region of New Jersey dominated by a modified continental climate. Although, Mercer County is only approximately forty miles (40 mi.) away from the Atlantic Ocean, prevailing offshore winds significantly reduce the tempering effect of the ocean. On average, the project region receives from forty-two to fifty-one (42-51) inches of precipitation per year. The precipitation is evenly distributed throughout the year. The average temperature ranges from the upper sixties to low seventies in summer and from the mid-twenties to low thirties in winter (USEPA 1988).

S. Solid Waste Disposal and Collection

The project site is currently undeveloped and does not generate solid waste. The Township of East Windsor provides curb side garbage collection to residents. The East Windsor Garbage District includes all parts of East Windsor Township, except for private communities which provide for their own solid waste and recycling services.

III. PROJECT ALTERNATIVES

The property is currently contained within the R-M1 Residential Multi-family zone, in which the proposed use is permitted.

The proposed project is a permitted use; therefore, no other development alternatives were evaluated. However, different design alternatives were evaluated and the preferred alternative (this

application) was selected. The preferred alternative was determined to only have minimal environmental impacts, most of which can be mitigated for as described herein.

IV. ENVIRONMENTAL EFFECTS

A. Air Quality

The proposed development may have minor impacts on air quality during the construction and operational phases.

Minor, localized, short-term effects on air quality will occur during the construction phase of the proposed project. Potential air pollutants generated during the construction phase include carbon monoxide (CO) from the exhaust of vehicles and construction equipment and particulates from dust generated during construction activities. Earth moving and excavation have the highest engine emissions and dust generation (SAEFL, 2004). The levels of CO and particulates are expected to be greatest during the land clearing and site preparation stages of the construction phase, which is when diesel construction vehicles and heavy equipment will be the most prevalent. The CO and particulate levels are expected to diminish upon completion of earthwork and during the construction phase of the project. The minor impacts to air quality during the construction phase are not anticipated to be significant.

Once the project is complete, and during the operational phase, the anticipated outdoor air pollution will primarily be that of vehicle exhaust from commuting workers and truck traffic which is consistent with existing impacts associated with the surrounding land uses. Large equipment such as boilers and generators may also have minor impacts on local air quality. The minor impacts to air quality during the operational phase are not anticipated to be significant.

The acceptable air quality standards are not anticipated to be impacted by the proposed project due to its relatively small scale. While air quality may be locally impacted during construction and operation, no significant net-impacts to air quality are anticipated to result from the proposed project.

B. Water Quality

The project will result in new impervious surfaces and meets the definition of a "major development" pursuant to the NJDEP's Stormwater Management Rules at N.J.A.C. 7:8. Potential impacts to surface water quality resulting from the proposed development are those associated with stormwater runoff from the proposed development. The proposed project will increase impervious surfaces on the site associated with the construction of roads, parking and the development. Based on the proposed increase in impervious surface, changes in stormwater quality can be expected to occur as a result of the proposed project. There are no streams located on the subject property; however, development of the project site may cause minor, temporary and permanent impacts on surface water quality to tributary wetlands associated with the Bear Brook. The temporary impacts are the addition of suspended solids and other pollutants associated with soil erosion during construction. However, these impacts will be mitigated for through the implementation of a stormwater management plan and a soil erosion and sediment control plan. The stormwater management plan includes two (2) bioretention basins. The proposed stormwater management plan for the project will meet the NJDEP's requirements for groundwater recharge, surface water quality, and surface water quantity as set forth by N.J.A.C. 7:8 and as described in greater detail in the Stormwater Management Report (Maser Consulting, 2019) prepared for the project.

C. Water Supply

The proposed development includes an eight building, mulit family residential development which includes an office, clubhouse and pool. The anticipated demand is as follows:

Apartments

1-Bedroom = 24 units x 120 gpd = 2,880 gpd

2-Bedroom = 153 units x 175 gpd = 26,775 gpd

3-Bedroom = 9 units x 270 gpd = 2,430 gpd

Office Space and Pool

2,150 sf office space x 0.125 gpd = 268.75 gpd

1200 sf pool/1 person/25 sf x 10 gpd = 480 gpd

Total = 32,085 gpd + 749 gpd = 32,834 gpd = 0.033 MGD

Peak Daily Demand = 3 x 32,834 gpd = 98,502 gpd = 0.098 MGD

The project will tie into an existing water main along the property's southeastern boundary that is owned and operated by the EWMUA.

D. Hydrology

Under existing conditions, surface water runoff is towards the Old Trenton Road in the southeastern portion of the project site and toward the lower areas in the northern portions of the site. Under proposed conditions, surface water runoff on the site will be directed to the proposed stormwater management facilities and will discharge to the low lying areas in the northern portion of the project site.

E. Geology

There are no areas of shallow bedrock on the project site. The proposed project will not disturb bedrock or unique geologic features.

The NJDEP groundwater recharge mapping depicts rates of 11 to 15 inches per year. One stormwater management basin will have underdrains to help aid in groundwater recharge.

F. Soils

Based on the mapped soil types and descriptions provided in the NRCS Web Soil Survey, the main soil limitations on the site are moderate potential for erosion and moderate potential for wetness. A Soil Erosion and Sediment Control Plan will be implemented for the project site. Impacts to soil as a result of the development, are expected to be minimal.

G. Sewerage Systems

The proposed development includes an eight building, mulit family residential development which includes an office, clubhouse and pool. The anticipated demand is as follows:

Apartments

1-Bedroom = 24 units x 150 gpd = 3,600 gpd

2-Bedroom = 153 units x 225 gpd = 34,425 gpd

3-Bedroom = 9 units x 300 gpd = 2,700 gpd

Office Space and Pool

2,150 sf office space x 0.1 gpd/sf = 215 gpd

1200 sf pool x 15 gpd/25 sf = 720 gpd

Total = 40,725 gpd + 935 gpd = 41,660 gpd = 0.041 MGD

Sanitary sewerage will be conveyed from the site via a proposed gravity sewer lateral to an existing main along the southeastern property boundary that is owned and operated by the EWMUA.

H. Topography

The topography of the site will be altered by the excavation for building foundations and stormwater management facilities and by grading. No significant topographic features (e.g. steep slopes) are present within the area to be developed; therefore, no significant impacts to topography are anticipated.

I. Slopes

The site is relatively flat and no slopes in excess of 10% occur on the project site. Steep slopes will not be impacted by the proposed project.

J. Vegetation

The proposed development will disturb agricultural fields. To enhance the aesthetics of the site, landscaping is proposed for the development and includes planting trees and shrubs. The landscape plans are included within the overall site plan set.

K. Wildlife

Significant impacts to wildlife species are not expected as a result of the proposed development.

The project will disturb cultivated fields of limited wildlife value.

1) Threatened and Endangered Species

A Natural Heritage Program (NHP) response is pending. According to NJDEP's Landscape project no documented occurrences of threatened or endangered species, or their habitat, exist on the project site.

2) Wildlife Habitat

Some habitat for common wildlife species will be lost, including the cultivated field. and fragmented woodland.

3) Aquatic Organisms

Significant impacts to aquatic organisms are not anticipated since there are no waterbodies on site.

L. Noise

Construction activities will cause temporary increases in noise levels of short duration estimated to be within the 60 to 100 dBA range for short durations in the vicinity of the site. Stationary equipment such as pumps, power generators, and air compressors generally run continuously at relatively constant power and speeds. Noise levels at 50 ft. from stationary equipment can range from 68 to 88 dBA, with pumps typically in the quieter range. Average maximum noise levels at 50 feet from heavy equipment range from about 73 to 101 dBA for non-impact equipment. Examples of noise levels associated with construction equipment are included in Table 3.

Table 3. Noise levels for different types of construction equipment and vehicles

Equipment Type	Noise Level at 50 ft. Distance (dBA)
Vehicles and Heavy Equipment	
Backhoe	78
Concrete mixer truck	79
Concrete pump truck	81
Dozer	82
Dump truck	76
Excavator	81
Front end loader	79
Graders	91
Paver	77

Pickup truck	75
Roller	80
Other	
Generator	81
Chain saw	84
Concrete saw	90
Jackhammer	89
Pneumatic tools	85
Pumps	81

The major receptors for the increased noise at the construction site will be the construction equipment operators, laborers, and project management personnel, which will be required to take necessary health and safety precautions such as hearing protection. Following construction, it is anticipated that the main source of noise on the project site will be car traffic, landscape equipment, and other noises associated with a residential development. The noises during operational phases are expected to be consistent with the noises that already occur within adjacent and nearby residential areas. Noise levels during the construction and operational phases are not anticipated to result in significant impacts to the surrounding area.

M. Demography

The proposed project will impact the Township's demographics as eight (8), multi-family residential units are proposed. An increase to the Township's population can be anticipated.

N. Land Use

There will be a change in land use from agricultural to a residential development. The proposed land use is consistent with adjacent land uses that include commercial and residential to the south and east.

O. Aesthetics

The project will result in the loss of agricultural land for the construction of a development. The Landscape Plan prepared for the project will enhance the aesthetics of the site by providing a vegetative buffer along Old Trenton Road and around the stormwater basins and will include a combination of deciduous, evergreen, and flowering trees mixed with shrubs.

P. History and Archaeology

The National Register of Historic Places and the NJDEP's Historic Preservation data in the NJ-GeoWeb do not identify historic resources on or adjacent to the project site; therefore, no impacts to historic or archaeological features are expected to result from the construction of the proposed development. If such resources are encountered during construction, the NJDEP's Historic Preservation Office will be contacted to determine the proper means of protecting the resources.

Q. Surface Drainage

As mentioned previously, the project site drains toward wetlands located in the southeastern of the site. According to FEMA's *Flood Boundary and Floodway Map* of East Windsor Township, Community Panel Numbers 34021C0169F, there are no documented floodplains or floodways on the project site; therefore, floodplains or floodways will not be directly impacted by the project.

Impervious surfaces will increase as a result of the proposed development and associated parking. The resulting increase in stormwater runoff flow rates can be controlled by implementation of an appropriate stormwater management plan. Two (2) bioretention stormwater basins are proposed to reduce the total volume and peak runoff rate of stormwater from the project site, provide water quality treatment, and promote groundwater recharge. The stormwater management basins were designed in accordance with N.J.A.C. 7:8 et seq. No significant impact on flooding or floodplain distribution are anticipated as a result of the proposed project. Please refer to the Stormwater Management Report (Maser Consulting, 2019) for additional details regarding surface water drainage and stormwater management.

R. Climate

The proposed development will require lighting and heating that will be provided by local energy purveyors; however, energy production will not occur on or near the project site. An increase in residents commuting to work in vehicles will generate greenhouse gas to a minor extent in the immediate project vicinity; however, the increase in greenhouse gas is expected to be negligible compared to what already occurs in the region due to existing residential, commercial and industrial developments and the major roadways in the project vicinity (e.g. NJ Turnpike, NJ Route 133). It is not anticipated that the proposed project will have significant impacts on the

local, regional or global climate.

S. Solid Waste Disposal and Collection

A private hauler will provide solid waste and recycling services to the proposed development.

V. ACTIONS BY THE DEVELOPER

A. Reports and Studies Commissioned

1. *Environmental Impact Statement,* prepared by Maser Consulting P.A., dated October 2019 (this report);
2. *Traffic Impact Study,* prepared by Maser Consulting P.A., dated October 2019;
3. *Stormwater Management Report,* prepared by Maser Consulting P.A., dated October 2019;
4. Refer to other reports, maps, and databases referenced herein.

B. Measures Taken During Construction

1. The developer shall implement the Soil Erosion and Sediment Control Plan developed for the project, which will reduce the potential for soil erosion and sedimentation during construction.

2. During the construction phase, all mechanical equipment shall be maintained in conformance with the applicable standards for noise and exhaust emission levels, as well as safety standards. Contractors shall take all practical steps to eliminate avoidable noise and exhaust emissions emanating from construction operations.

C. Measures Taken to Avoid or Reduce Adverse Impacts

The proposed project plans have incorporated measures designed to reduce the potential environmental impacts associated with the proposed development to the greatest extent possible. These measures along with other recommended mitigation measures in Section VI are listed below.

1. A Soil Erosion and Sediment Control Plan has been developed for the project, which

will reduce the potential for soil erosion and sedimentation during construction. The plan has been developed according to the State of New Jersey and Soil Conservation District Standards.

2. A Stormwater Management Plan includes the use of two bioretention basins to mitigate for the increase in stormwater runoff and will provide water quality treatment, reduce peak discharges, and promote groundwater recharge.
3. During the construction phase, all mechanical equipment shall be maintained in conformance with the applicable standards for noise and exhaust emission levels, as well as safety standards.
4. Contractors will take all practical steps to eliminate avoidable noise emanating from construction operations. To minimize inconvenience to and irritations of neighboring inhabitants, construction operations will be limited to normal working hours.

VI. UNAVOIDABLE ADVERSE IMPACTS

Certain undesirable environmental effects are unavoidable during construction. These effects are temporary in nature and are primarily associated with the construction phase of the project but in some cases may be applicable to the operational phase as well (e.g. air quality). Consequences of construction include dust, soil erosion and siltation, noise, minor amounts of additional air pollution, and traffic. The proposed project has been designed to minimize environmental impacts. In addition, measures have been incorporated into the project plans to mitigate adverse environmental impacts.

A. Air Pollution

There may be a minor impacts to the air quality within the vicinity of the subject property during construction due to emissions from construction vehicles and equipment and during the operational phases due to the increase in truck traffic associated with the facility. These impacts will be short in duration and minor. Mitigation measures include the implementation of a Soil Erosion and Sediment Control Plan, dust control measures (e.g. watering trucks), vehicle idling policies to minimize exhausts from idling, and designated truck routes if applicable.

B. Water Pollution

The increase of impervious cover on site will result in an increase in stormwater runoff,

reduction in groundwater recharge, and an increase in certain pollutants commonly found in stormwater runoff from developed sites.

Two (2) bioretention basins, are proposed to reduce the total volume and peak runoff rate of stormwater from the project site, provide water quality treatment, and promote groundwater recharge in accordance with the NJDEP's requirements in the Stormwater Management Rules at N.J.A.C. 7:8.

C. Vegetation

The project site is proposed in agricultural fields and will not result in the loss of natural vegetation. To mitigate for the loss of vegetation and enhance the aesthetics of the site, a Landscape Plan has been prepared for the project and includes planting of trees and shrubs throughout the site, primarily along the road frontage and the detention basins.

D. Wildlife

Significant impacts to wildlife species are not expected as a result of the proposed development; however, some habitat for common wildlife species will be lost, including the existing cultivated field. Additionally, portions of the site to be landscaped will provide habitat value to common wildlife species, namely passerine birds, following construction. There are no documented occurrences of threatened or endangered species, or their habitat, on the project site.

E. Sedimentation and Siltation

Grading during construction will result in a modification of the topography of the site and disturbance to soils. The greatest hazard of erosion will be present during construction and is a short-term impact, which will cease when grading and the required stabilzation is complete. Strict soil erosion and sediment control measures will be implemented during construction to prevent increases in soil erosion and sedimentation to the greatest extent possible. The use of soil erosion and sediment control measures may actually reduce the amount of soil erosion presently occurring at the site under the existing agricultural conditions. The stabilization of the site through development, landscaping, and stormwater management facilities will help reduce soil erosion, sedimentation and siltation on the site.

F. Wetlands

The project will not require any disturbances to freshwater wetlands. The NJDEP has determined no wetlands are present on the site. A copy of the LOI can be reviewed in Appendix D.

G. Municipal Services

The proposed project involves an increase in the demand for water supply and sewer service. As for the Township's schools, slight impacts are anticipated due to the project producing new residents. Due to similar buildings and facilities being within the vicinity of the proposed project, it is assumed the fire department will have all the necessary equipment to handle the development's size and location.

VII. SUMMARY AND CONCLUSIONS

An eight (8) building, multi-family residential development; including one clubhouse, one maintenance building, free standing garages, surface parking, curbing, sidewalk, and associated drainage improvements including two surface detention basins is proposed on an approximate 14.27 acre parcel known as Block 3, Lots 3 and 3.02 in the Township of East Windsor, Mercer County, New Jersey. The project site currently contains agricultural fields. The construction of a multi-family development is a permitted use in the R-M1 Residential Multi-family zone.

Unavoidable adverse impacts to environmental resources as a result of the project include short term impacts to air quality during construction and due to the increase in truck traffic at the site; increase in runoff rates and pollutants due to increase in impervious surfaces; loss of vegetation and coincidentally wildlife habitat; short term increase in soil erosion and sedimentation during construction; and increase in demand for water and sewer service, slight impacts to schools and emergency service providers as the project will produce new residents to the Township.

None of the aforementioned adverse impacts are significant as they are short term and will be mitigated for through planning, construction, and operational measures, most notable the implementation of a Soil Erosions and Sediment Control Plan, Stormwater Management Plan, and Landscape Plan.

Overall, the proposed project plans are compatible with the environmental conditions at the site, the character of the surrounding area, and the Township of East Windsor Zoning.

VIII. REFERENCES

Code of the Township of East Windsor, County of Mercer, State of New Jersey, as last amended.

Coppola and Coppola Associates. 2000. Township of East Windsor Mercer County Natural Resources Inventory September 2000. Princeton Junction, New Jersey.

Helms, Douglas. 1992. The Development of the Land Capability Classification. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/about/history/?cid=nrcs143_021436 Accessed February 29, 2016.

Herman, G.C., R.J. Canace, S.D. Stanford, R.S. Pristas, P.J. Sugarman, M.A. French, J.L. Hoffman, M.S. Serfes, and W.J. Mennel. 1998. *Aquifers of New Jersey*. New Jersey Geological Survey and the New Jersey Department of Environmental Protection.

Maser Consulting. 2019. Traffic Impact Study, prepared by Maser Consulting P.A., dated January 16, 2017.

Maser Consulting. 2019. Stormwater Management Report, prepared by Maser Consulting P.A., dated February 26, 2018.

New Jersey Department of Environmental Protection (NJDEP). *Surface Water Quality Standards* N.J.A.C. 7:9B. .

New Jersey Department of Environmental Protection (NJDEP).

New Jersey Department of Environmental Protection (NJDEP) Bureau of Air Monitoring. 2018. *2018 Air Quality Report*.

NJDEP HPO. 2019. New Jersey and National Registers of Historic Places: Mercer County. http://www.state.nj.us/dep/hpo/1identify/nrsr_lists/Mercer.pdf. Accessed February 2018.

Owens, J.P., P.J. Sugarman, N.F. Sohl, R.A. Parker, H.F. Houghton, R.A. Volkert, A.A. Drake Jr., and R.C. Ornduff. 1999. Bedrock geologic map of central and southern New Jersey. U. S. Geologic Survey in cooperation with the New Jersey Geological Survey. Miscellaneous Investigation Series Map 1-2540-B. http://ngmdb.usgs.gov/Prodesc/proddesc_19458.htm.

Soil Survey Staff, Natural Resources Conservation Service (NRCS), United States Department of Agriculture (USDA). 2018. Web Soil Survey. Available online at http://websoilsurvey.nrcs.usda.gov/. Accessed February 2018

Swiss Agency for the Environment, Forests and Landscape SAEFL. 2004. Guideline Air Pollution Control at Construction Sites. Construction Guideline Air. SAEFL, Berne, Switzerland.

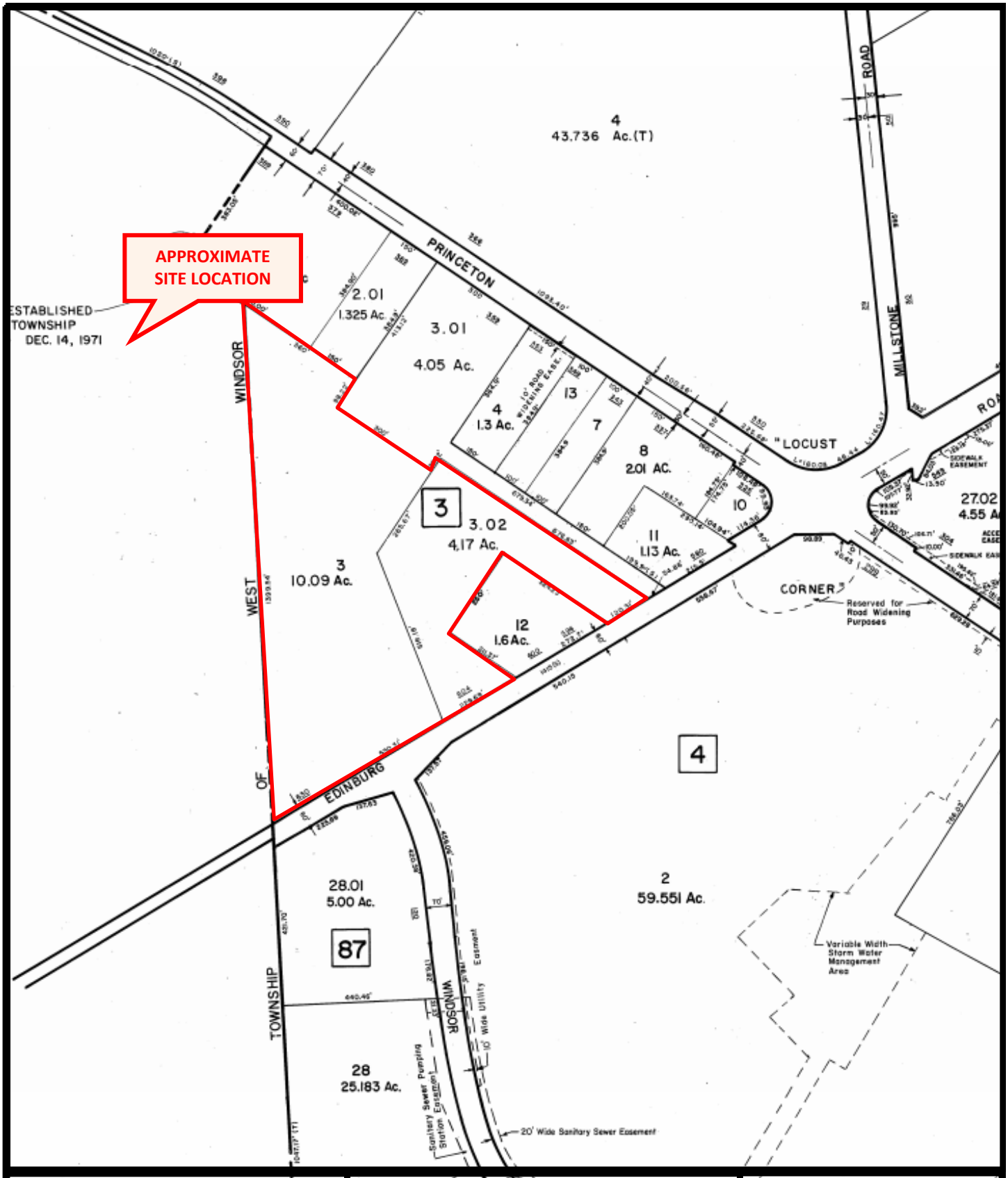
U.S. Census Bureau. 2018. 2011 Census Interactive Map. https://factfinder.census.gov/faces/nav/jsf/pages/community_facts.xhtml?src=bkmk. Accessed February 2018.

U.S. Department of Agriculture (USDA). 1972. Soil Survey of Mercer County, New Jersey. USDA Soil Conservation Service; in cooperation with New Jersey Agricultural Experiment Station, Cook College, Rutgers, The State University; and the New Jersey Department of Agriculture, State Soil Conservation Committee.

U.S. Environmental Protection Agency. 1974. Information on Levels of Environmental Noise Requisite to Protect Public Health and Welfare with an Adequate Margin of Safety. 550/9-74-004. USEPA Office of Noise Abatement and Control. Washington, D.C., U.S.

R:\General\Projects\2018\18001982A\Reports\Ecological\EIS\180226_EIS_FINAL.doc

APPENDIX A
BACKGROUND MAPS



Corporate Headquarters
331 Newman Springs Road
Suite 203
Red Bank, NJ 07701
T: 732.383.1950
F: 732.383.1984
www.maserconsulting.com

Figure 1. Official Tax Map

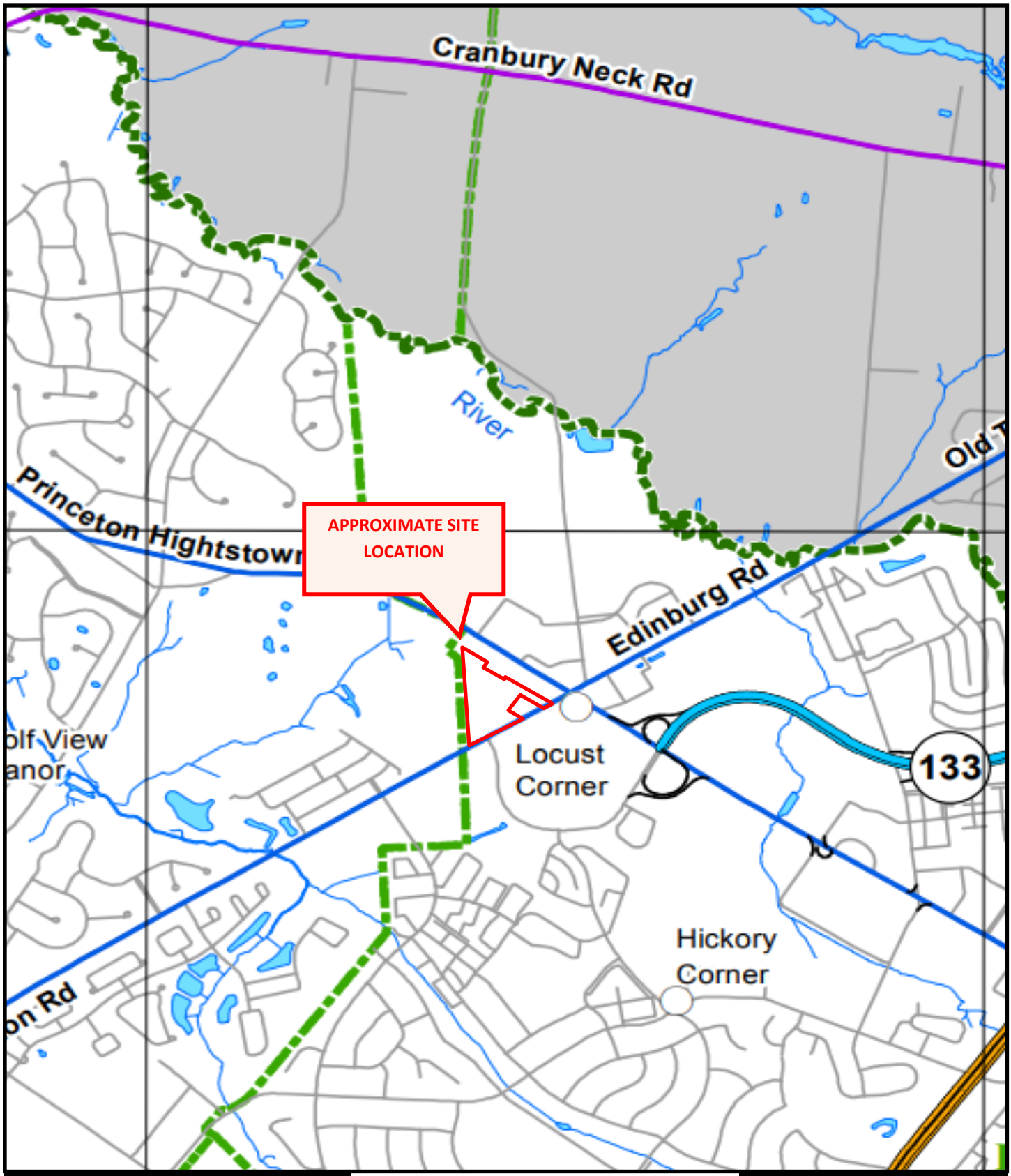
Block 3, Lot Lots 3 & 3.02
East Windsor Township, Mercer County, New Jersey

Source: East Windsor Township Tax Map

Scale: Not to Scale

Date: July 31, 2018

MC Project No. 18001982A



Corporate Headquarters
331 Newman Springs Road
Suite 203
Red Bank, NJ 07701
T: 732.383.1950
F: 732.383.1984
www.maserconsulting.com

Figure 2. County Road Map

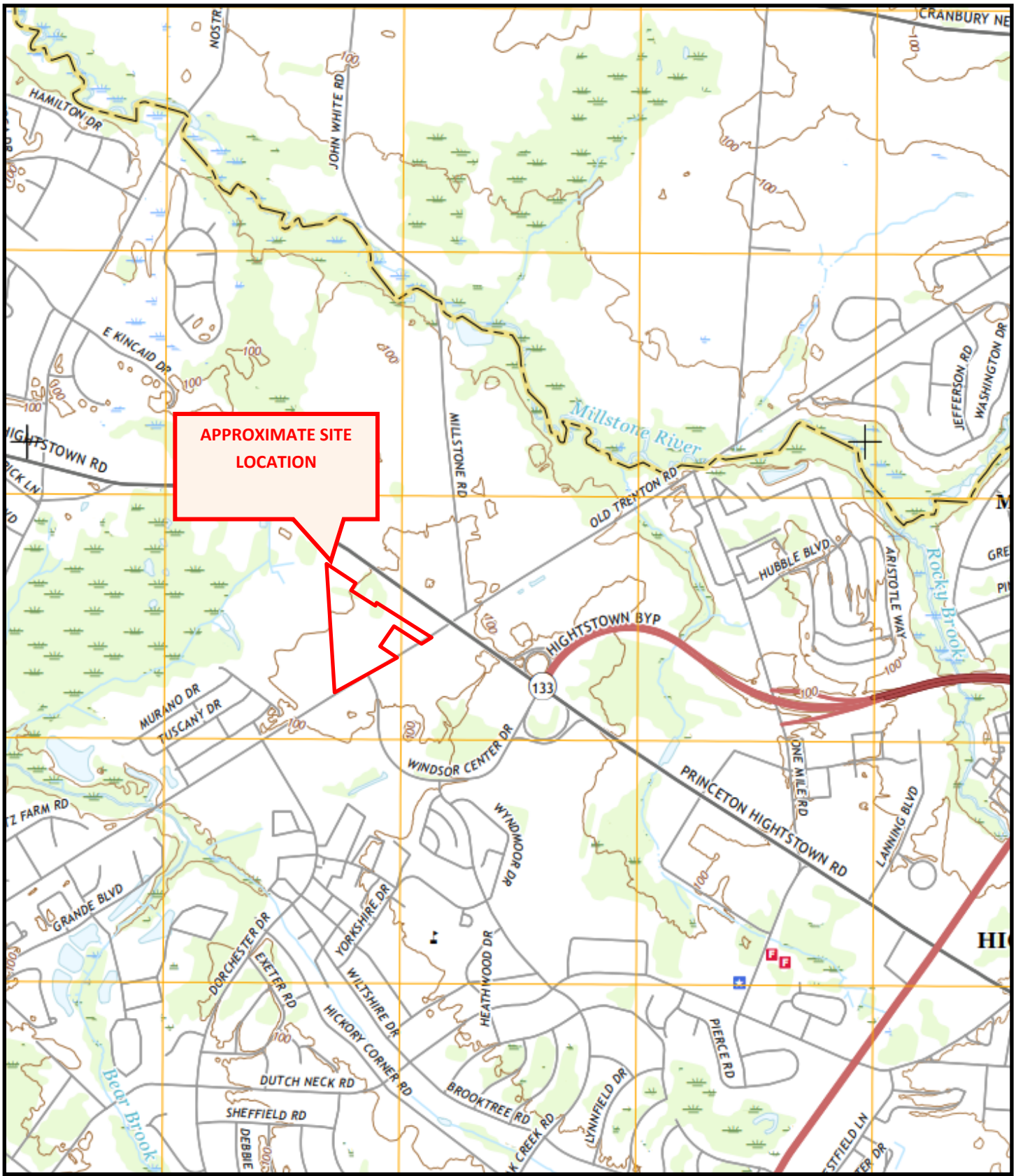
Block 3, Lot Lots 3 & 3.02
East Windsor Township, Mercer County, New Jersey

Source: Mercer County Road Map

Scale: Not to Scale

Date: July 31, 2018

MC Project No. 18001982A



MASER CONSULTING P.A.

Corporate Headquarters
331 Newman Springs Road
Suite 203
Red Bank, NJ 07701
T: 732.383.1950
F: 732.383.1984
www.maserconsulting.com

Figure 3. USGS Map

Block 3, Lot Lots 3 & 3.02
East Windsor Township, Mercer County, New Jersey

Source: Hightstown NJ Quadrangle

Scale: Not to Scale

Date: July 31, 2018

MC Project No. 18001982A

Corporate Headquarters
331 Newman Springs Road
Suite 203
Red Bank, NJ 07701
T: 732.383.1950
F: 732.383.1984
www.maserconsulting.com

Figure 4. Aerial Map

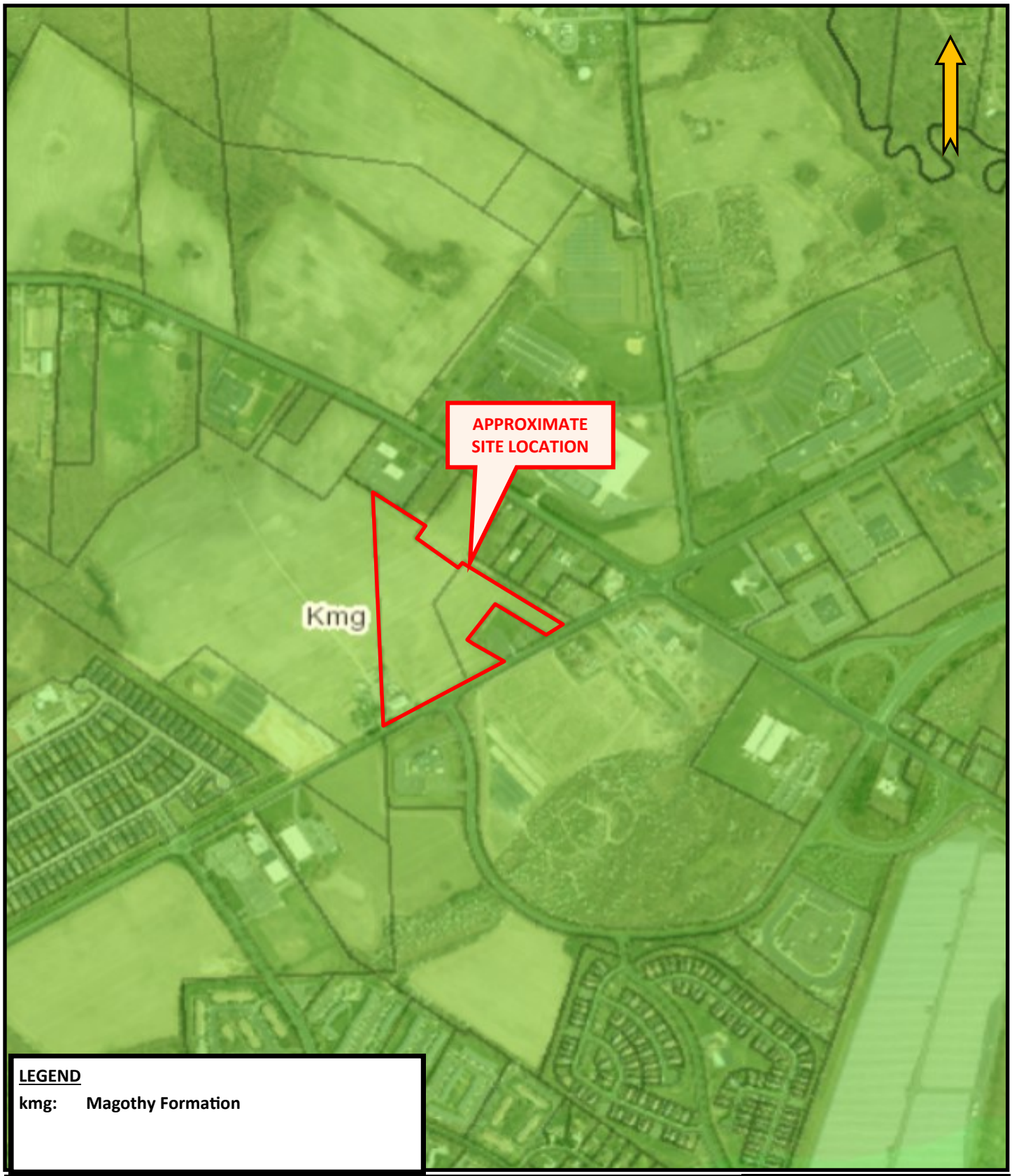
Block 3, Lot Lots 3 & 3.02
East Windsor Township, Mercer County, New Jersey

Source: NJDEP NJ-GeoWeb, 2018

Scale: Not to Scale

Date: July 31, 2018

MC Project No. 18001982A



MASER CONSULTING P.A.

Corporate Headquarters
331 Newman Springs Road
Suite 203
Red Bank, NJ 07701
T: 732.383.1950
F: 732.383.1984
www.maserconsulting.com

Figure 5. Bedrock Geology

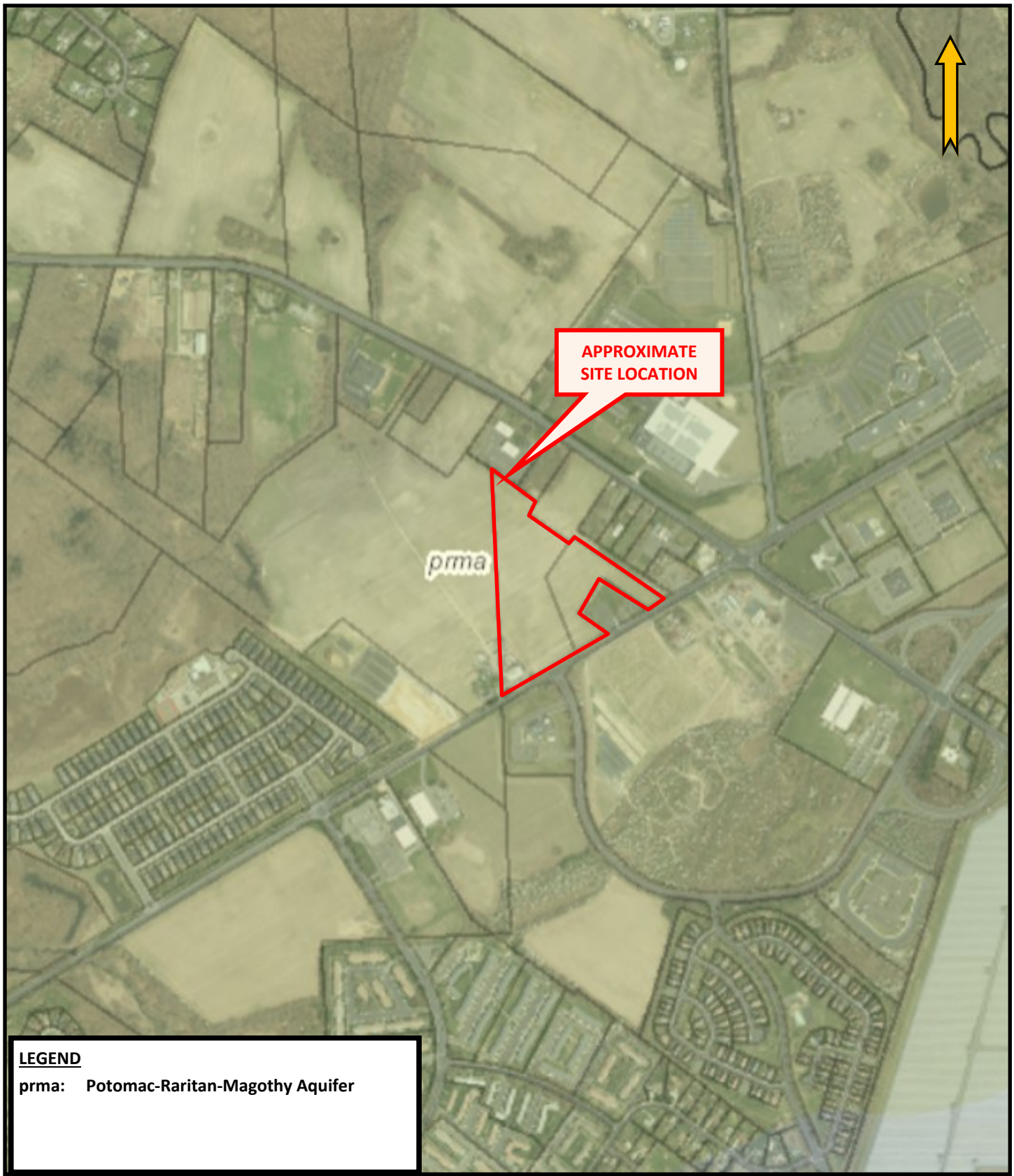
Block 3, Lot Lots 3 & 3.02
East Windsor Township, Mercer County, New Jersey

Source: NJDEP NJ-GeoWeb, 2018

Scale: Not to Scale

Date: July 31, 2018

MC Project No. 18001982A



Corporate Headquarters
331 Newman Springs Road
Suite 203
Red Bank, NJ 07701
T: 732.383.1950
F: 732.383.1984
www.maserconsulting.com

Figure 6. Aquifer Map

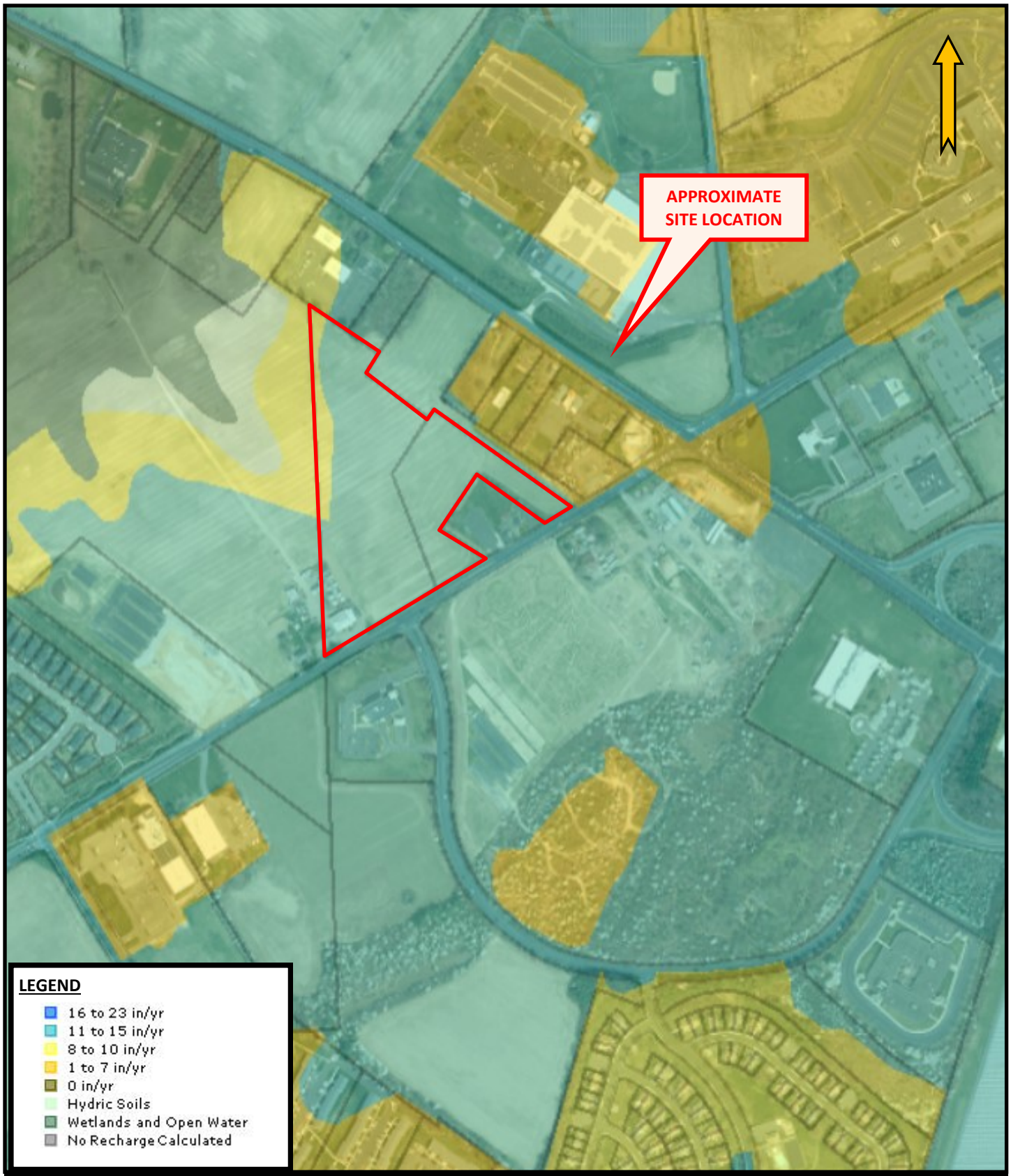
Block 3, Lot Lots 3 & 3.02
East Windsor Township, Mercer County, New Jersey

Source: NJDEP NJ-GeoWeb, 2018

Scale: Not to Scale

Date: July 31, 2018

MC Project No. 18001982A



MASER CONSULTING P.A.

Corporate Headquarters
331 Newman Springs Road
Suite 203
Red Bank, NJ 07701
T: 732.383.1950
F: 732.383.1984
www.maserconsulting.com

Figure 7. Groundwater Recharge Map

Block 3, Lot Lots 3 & 3.02
East Windsor Township, Mercer County, New Jersey

Source: NJDEP NJ-GeoWeb, 2018

Scale: Not to Scale

Date: July 31. 2018

MC Project No. 168001982A

Corporate Headquarters
331 Newman Springs Road
Suite 203
Red Bank, NJ 07701
T: 732.383.1950
F: 732.383.1984
www.maserconsulting.com

Figure 8. Soil Map

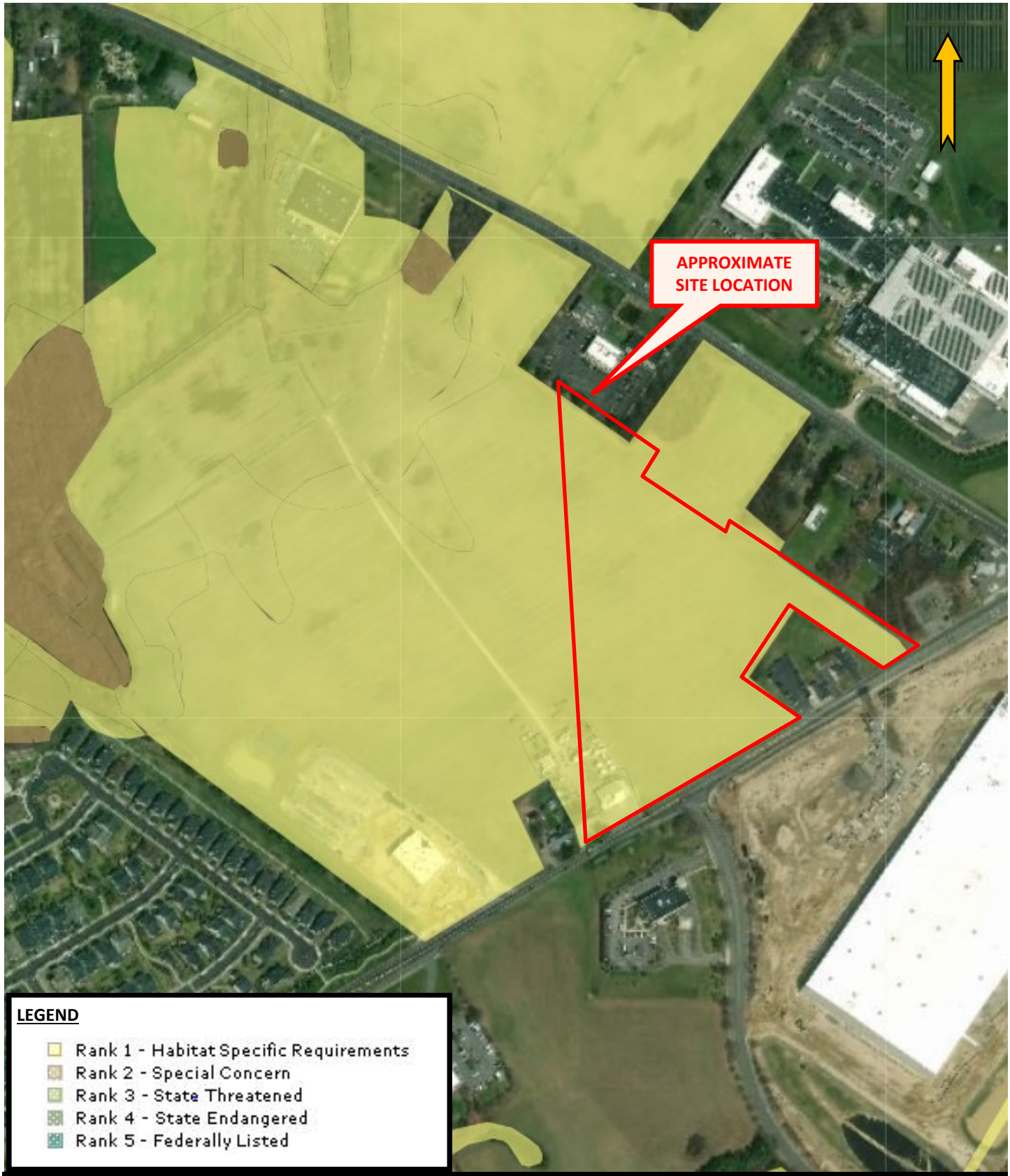
Block 3, Lot Lots 3 & 3.02
East Windsor Township, Mercer County, New Jersey

Source: NRCS Web Soil Survey, 2018

Scale: Not to Scale

Date: July 31, 2018

MC Project No. 18001982A



Corporate Headquarters
331 Newman Springs Road
Suite 203
Red Bank, NJ 07701
T: 732.383.1950
F: 732.383.1984
www.maserconsulting.com

Figure 9. Critical Wildlife Map

Block 3, Lot Lots 3 & 3.02
East Windsor Township, Mercer County, New Jersey

Source: NJDEP Landscape Project 3.3

Scale: Not to Scale

Date: July 31, 2018

MC Project No. 18001982A

MASER CONSULTING P.A.

Corporate Headquarters
331 Newman Springs Road
Suite 203
Red Bank, NJ 07701
T: 732.383.1950
F: 732.383.1984
www.maserconsulting.com

Figure 10. FEMA Flood Map

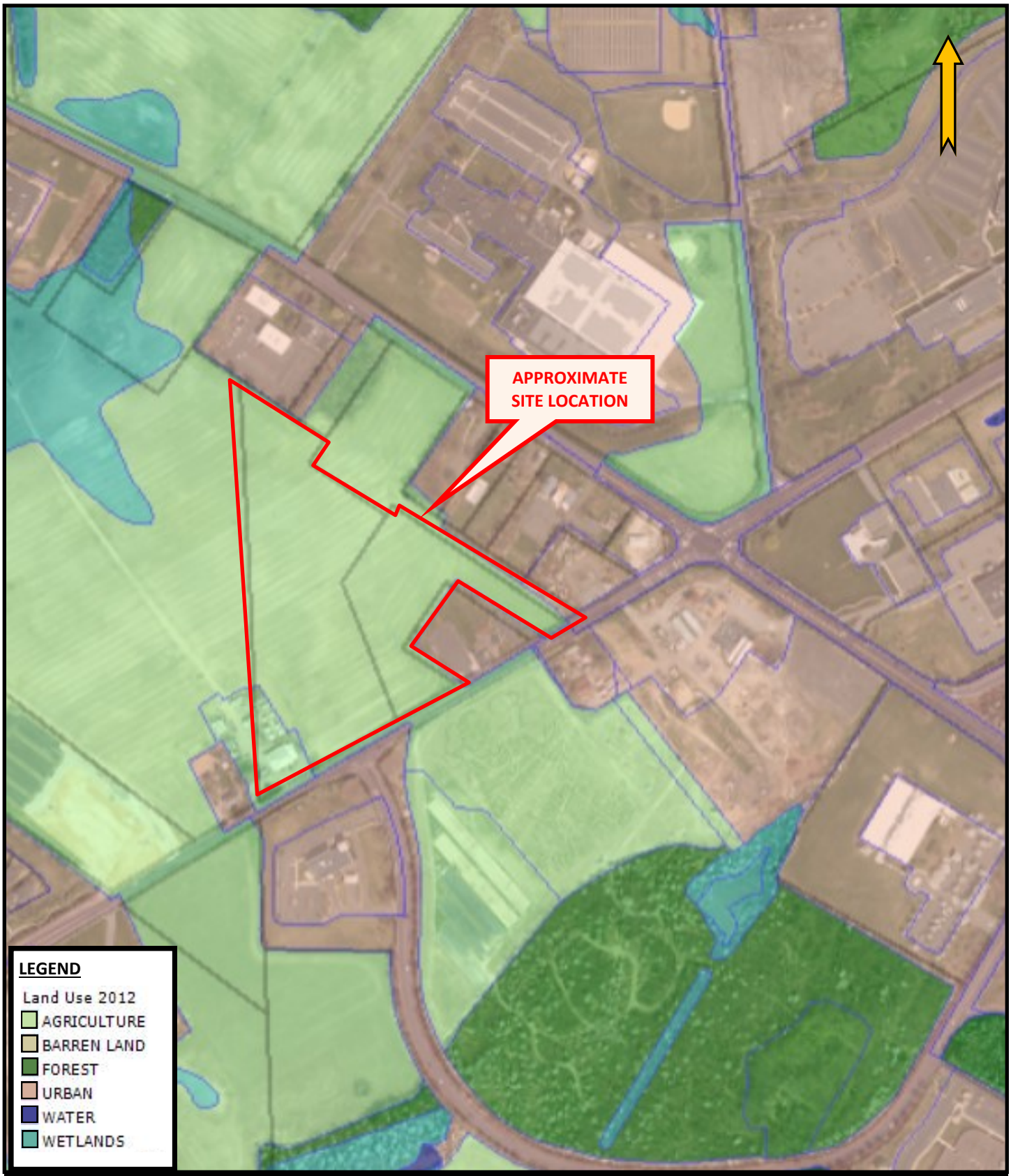
Block 3, Lot Lots 3 & 3.02
East Windsor Township, Mercer County, New Jersey

Source: FEMA FIRM Mercer County, NJ

Scale: Not to Scale

Date: July 31, 2018

MC Project No. 18001982A



MASER CONSULTING P.A.

Corporate Headquarters
331 Newman Springs Road
Suite 203
Red Bank, NJ 07701
T: 732.383.1950
F: 732.383.1984
www.maserconsulting.com

Figure 11. Land Use Map

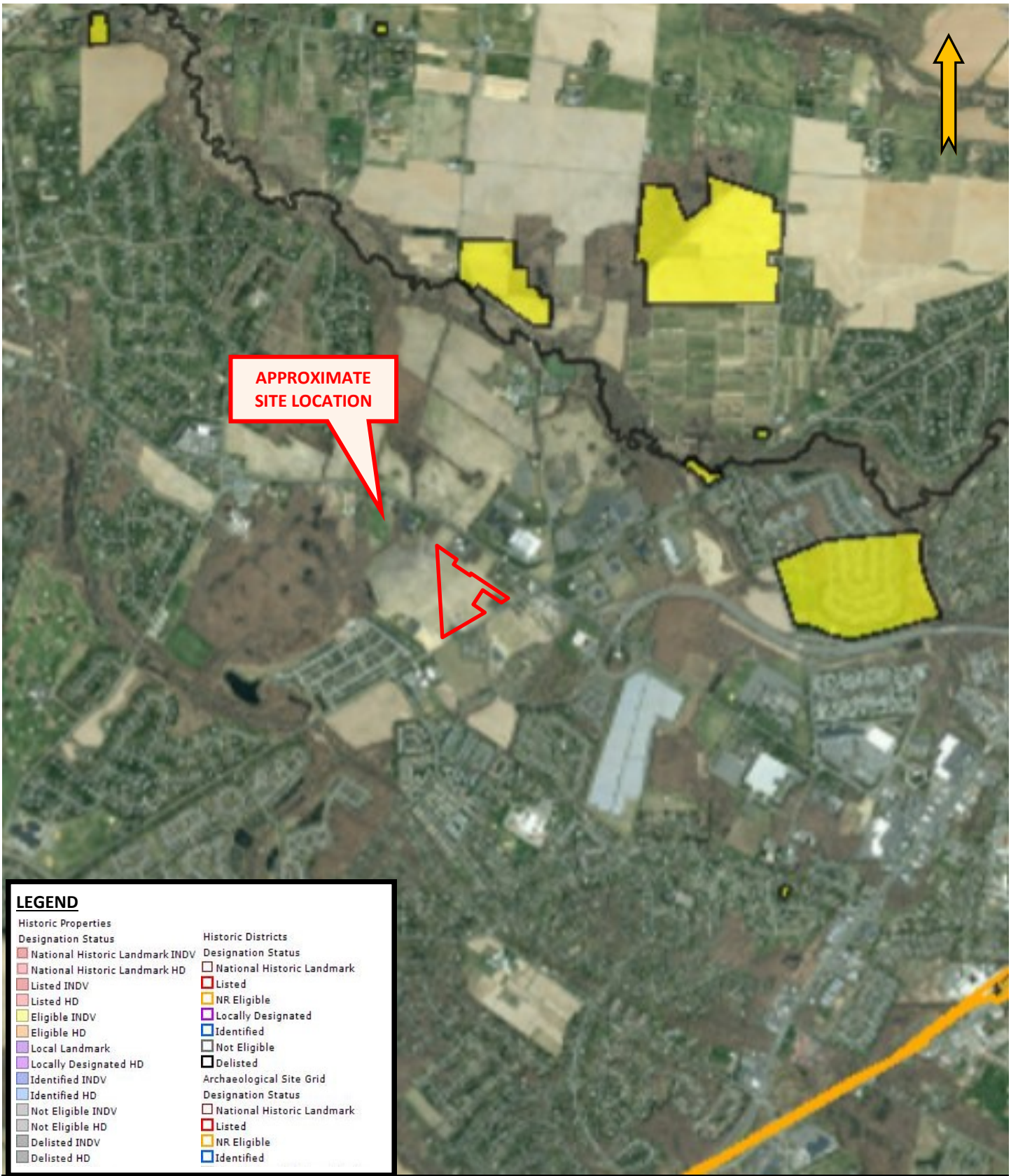
Block 3, Lot Lots 3 & 3.02
East Windsor Township, Mercer County, New Jersey

Source: NJDEP NJ-GeoWeb, 2018

Scale: Not to Scale

Date: July 31, 2018

MC Project No. 18001982A



Corporate Headquarters
331 Newman Springs Road
Suite 203
Red Bank, NJ 07701
T: 732.383.1950
F: 732.383.1984
www.maserconsulting.com

Figure 12. Historical Properties Map

Block 3, Lot Lots 3 & 3.02
East Windsor Township, Mercer County, New Jersey

Source: NJDEP NJ-GeoWeb, 2018

Scale: Not to Scale

Date: July 31, 2018

MC Project No. 18001982A

APPENDIX B
SITE PHOTOGRAPHS

Photo 1: Overview of the project site.

Photo 2: Overview of the project site.

Photo 3: Overview of the project site.

Photo 4: Overview of the project site.

APPENDIX C
NATURAL HERITAGE PROGRAM

State of New Jersey
Mail Code 501-04
Department of Environmental Protection
Natural Heritage Data Request Form

The New Jersey Natural Heritage Program
DEP-Office of Natural Lands Management
P.O. Box 420, Trenton, New Jersey 08625-0420
(609) 984-1339
Fax No.: (609) 984-1427

PLEASE PRINT AND SUBMIT COMPLETED FORM WITH ATTACHMENTS TO THE ADDRESS ABOVE
(Fields shown in bold font must be completed in order for data request to be processed.)

1. **Name:** **Robert Petrillo** Agency/Company: **Maser Consulting P.A.**

   Address: 2000 Midlantic Drive, Suite 100 **City**: Mount Laurel

   State: **NJ** **Zip:** **08054** **Daytime Phone:** **(856) 797-0412** Ext.: **4137**

   Cell Phone: _____ Email: **rpetrillo@maserconsulting.com**
   Please copy Dan Geran for payment (dgeran@maserconsulting.com)

2. **Project Name:** **Block 3, Lots 3 & 3.02 (MC Project No. 18001982A)**

   Municipality(ies): **East Windsor** County(ies): **Mercer**

   Block(s): **3** Lot(s): 3 & 3.02

   N.A.D. 1983 State Plane Coordinates (feet) 6 digits only: E (x): **473544** N (y): **528602**

3. **Project Description:** **Development of the property**

4. **USGS Quad:** ✔ A copy of a USGS quad map(s) that clearly indicates the site boundary is included with this form. Specify name of USGS quad(s): **Hightstown**

   (USGS quad maps are required, unless prior arrangements have been made to submit site boundaries in an alternate format. Responses will be delayed if site locations are not delineated in a suitable format.)

5. **Flood Hazard Control Act Use:** **Is this request submitted as part of a Flood Hazard Area Control Act rule (N.J.A.C. 7:13) application? Yes** ✔ **No** ☐

6. **Acknowledgement & Signature:** Any material supplied by the Office of Natural Lands Management will not be published without crediting the Natural Heritage Database as the source of the material. It is understood that there will be a charge of $70.00 per hour for the services requested. An invoice will be sent with the request response and payment should be made by check or money order payable to "Office of Natural Lands Management."

   Signed _____ **Date** **7/30/2018**

Time Frame for Response:
Data requests are processed in the order in which they are received; please allow 30 days for response. If you would like to send in your data request via email, you may do so by sending it to **Natlands@dep.state.nj.us** . Due to the number of attachments, we cannot fax results. Unless you specifically request that your response be mailed or the response is unusually large, your response will be emailed to the address you provide.

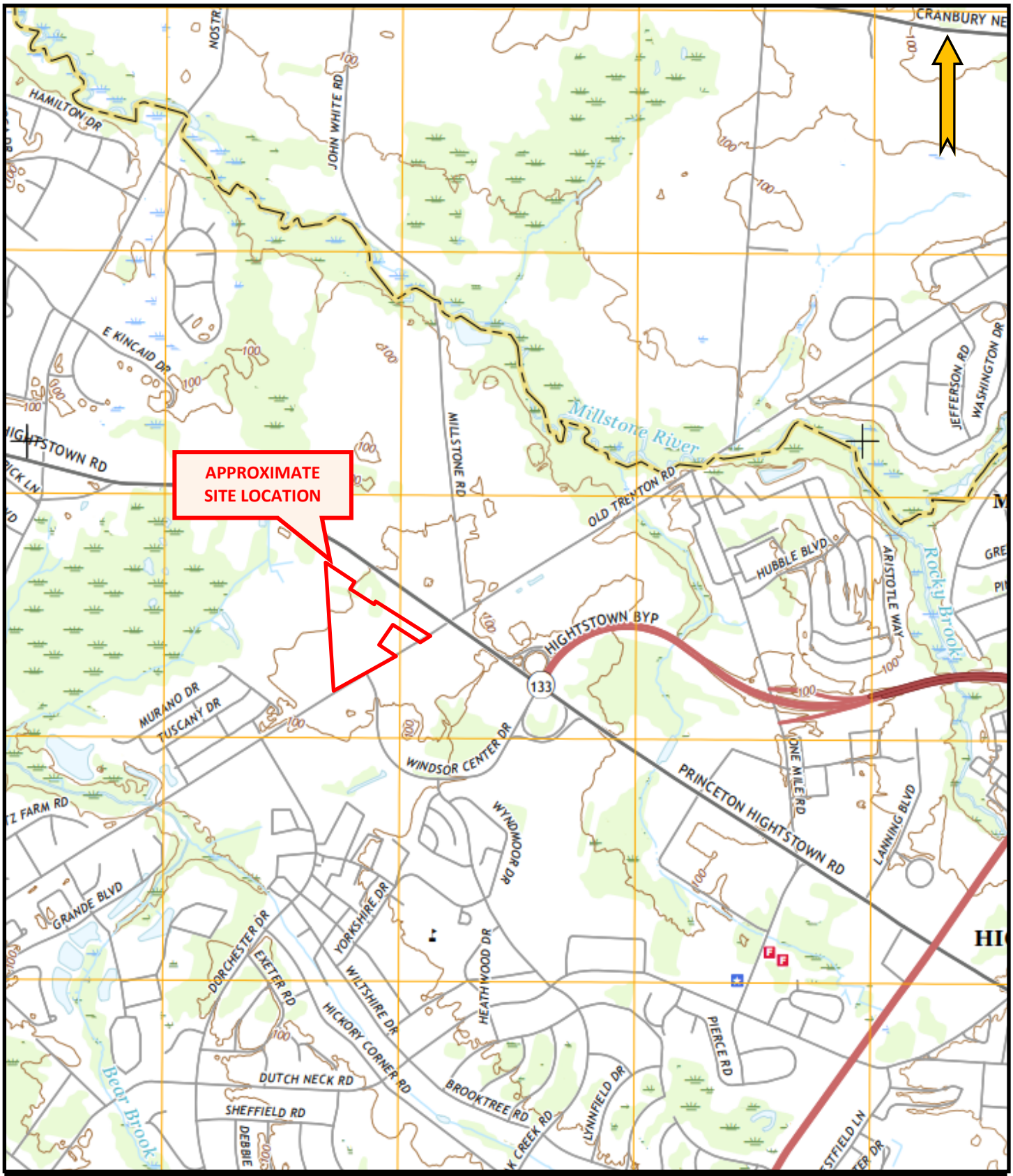
FOR OFFICE USE ONLY

DATE RECEIVED_____

Item Code: REG _____ ST _____ RTC _____ NC _____ REGEO _____ STEO _____ RTCEO _____ NCEO _____

Hrs: _____

Project Code: _____ Inv. #: _____ _____



Corporate Headquarters
331 Newman Springs Road
Suite 203
Red Bank, NJ 07701
T: 732.383.1950
F: 732.383.1984
www.maserconsulting.com

USGS Map

Block 3, Lot Lots 3 & 3.02
East Windsor Township, Mercer County, New Jersey

Source: Hightstown NJ Quadrangle 2016

Scale: Not to Scale

Date: July 30, 2018

MC Project No. 180021982A

APPENDIX D

LETTER OF INTERPRETATION

State of New Jersey

PHILIP D. MURPHY
Governor

SHEILA Y. OLIVER
Lt. Governor

DEPARTMENT OF ENVIRONMENTAL PROTECTION
Division of Land Use Regulation
Mail Code 501-02A
P.O. Box 420
Trenton, New Jersey 08625-0420
www.nj.gov/dep/landuse

CATHERINE R. McCABE
Commissioner

NOV 2 7 2018

Steven W. Katz
OTR East Windsor Investors, LLC.
50 East Mount Pleasant Avenue
Livingston, New Jersey 07039

RE: Letter of Interpretation: Presence/Absence Determination
File No.: 1100-04-0004.2
Activity Number: FWW180001
Applicant: OTR EAST WINDSOR INVESTORS, LLC
Block: 3 and Lots: 3 & 3.02
East Windsor Township, Mercer County

Dear Mr. Katz:

This letter is in response to your request for a Letter of Interpretation from the Division of Land Use Regulation 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 (USACE) Philadelphia and New York Districts, and the U.S. Environmental Protection Agency (USEPA), the 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 USACE 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 November 1, 2018, 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-3.3(d)1 and 2.

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

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-21, any person who is aggrieved by this decision may request a hearing within 30 days of the date the decision is published in the DEP Bulletin by writing to: New Jersey Department of Environmental Protection, Office of Legal Affairs, Attention: Adjudicatory Hearing Requests, Mail Code 401-04L, P.O. Box 402, 401 East State Street, 7th Floor, Trenton, NJ 08625-0402. This request must include a completed copy of the Administrative Hearing Request Checklist found at www.state.nj.us/dep/landuse/forms. Hearing requests received after 30 days of publication notice may be denied. The DEP Bulletin is available on the Department's website at www.state.nj.us/dep/bulletin. In addition to your hearing request, you may file a request with the Office of Dispute Resolution to engage in alternative dispute resolution. Please see the website www.nj.gov/dep/odr for more information on this process.

Please contact Jessica Palilonis of our staff by e-mail at jessica.palilonis@dep.nj.gov or (609) 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: East Windsor Township Clerk
East Windsor Township Construction Official
Agent

APPENDIX E

QUALIFICATIONS OF PREPARERS

JOSEPH P. LAYTON

Assistant Department Manager, Ecological Services

EDUCATION

- B.S., Environmental Planning and Natural Resource Management Rutgers University, Cook College NJ

PROFESSIONAL AFFILIATIONS

- Certified Subsurface Evaluator, License #229606
- Ecological Society of America
- Environmental Assessment Association - Certified Environmental Specialist
- Society of Wetland Scientists
- Radon Measurement Specialist #MES11066
- 40-Hour NJ/EPA Model Lead Inspector/Risk Assessor
- 40-Hour OSHA Hazwoper Training

PROFESSIONAL CERTIFICATIONS

- 40-Hour NJ/EPA Model Lead Inspector/Risk Assessor
- 40-Hour OSHA Hazwoper Training
- 8-Hour OSHA Hazwoper Refresher Training
- Certified Environmental Specialist
- Certified Remediation Specialist
- Professional Ski Instructor of America – Level II Certification Eastern Division

PROFESSIONAL REGISTRATIONS

- NJDEP Certified Subsurface Evaluator, License #229606
- NJDEP Certified Underground Storage Tank Closure
- Radon Measurement Specialist #MES11066

EXPERIENCE

Mr. Layton is an Environmental Scientist with over 19 years of experience including an extensive background and expertise in environmental sciences. His expertise includes an emphasis on wetland delineation, regulatory permitting and compliance, environmental assessment, environmental impact analysis, soil evaluation. His diversified experience also includes natural resource evaluations, ecological research, watershed management, subsurface explorations, underground storage tank exploration and removal, soil classification systems, environmental sampling design and protocol in accordance with State and Federal regulations. Geographic Information Systems (GIS) and Global Positioning Systems (GPS) is utilized in environmental sampling and studies which includes site remediation design and sampling, groundwater and surface water quality monitoring and management, as well as lake rehabilitation/restoration.

As Senior Project Manager, Mr. Layton has utilized the aforementioned experience and technical skills to successfully assist clients with litigation support, regulatory compliance and has been deemed an expert in the field by various Planning and Zoning Boards while providing testimony regarding the same.

Mr. Layton's proven dedication to client satisfaction has resulted in long standing professional relationships. His client base includes private development and redevelopment companies, municipalities, county governments, infrastructure authorities, daycare facilities, higher education institutions, financial institutions, utility companies and law firms.

CONTINUING EDUCATION

- Methodology for Delineating Wetlands, Cook College.
- Vegetation Identification for Wetland Delineation, Cook College
- Hydrology of Wetlands, Cook College
- Endangered & Threatened Species of New Jersey , Cook College
- Lake Management, Cook College
- Soils and Site Evaluation for Septic Disposal Systems & Stormwater BMP's , Cook College
- Site Remediation Basics, Cook College
- Remedial Decision Making, Cook College
- Ecological Risk Management, Cook College

The subsequent page consists of a sampling of highlighted projects Mr. Layton has worked on. A more detailed list of projects can be provided if necessary.

JOSEPH P. LAYTON

HIGHLIGHTED PROJECTS

Wetland Delineation

- **Runyon Interceptor Trunk Sanitary Sewer Line Alignment**
  Township of Old Bridge, NJ
  Determined alignment of 2 miles of sanitary sewer on a 400-acre+ site using aerial photography and site reconnaissance minimizing impacts to numerous wetland communities.

Permit Allocation

- **National Lead Redevelopment**
  Borough of Sayreville, NJ
  Prepared and obtained numerous Coastal and Land Use permits from the NJDEP-DLUR and USACE to effectuate remediation of the largest redevelopment project currently in the State of New Jersey.

- **Transcontinental Gas Pipeline Armoring**
  Township of Hopewell, NJ
  Prepared and obtained an Individual Permit from the NJDEP-DLUR to permanently disturb a stream and its associated wetland to construct armoring to protect a Transcontinental Gas Pipeline.

Environmental Assessments/Regulatory Compliance

- **Heavenly Farms**
  East Brunswick, Township, NJ
  Prepared and performed Preliminary Remedial Investigation/Action to obtain a "Letter of No Further Action" for a 230-acre farm with contaminated soils for development of recreational fields.

- **Marlboro Psychiatric State Hospital**
  Marlboro, NJ
  Consultant to the Township of Marlboro regarding the municipality purchasing a 411-acre State owned psychiatric hospital. Responsible for identifying areas of environmental concern, review of environmental investigation and remediation reporting generated by State contractors and making recommendations to the municipality regarding environmental concerns and purchase of the property.

- **Columbian Chemicals Mapico Iron Oxide Plant**
  South Brunswick Township, NJ
  Prepared and performed preliminary assessment/site investigation, remedial Investigation/Action and Baseline Ecological Evaluation to obtain a "Letter of No Further Action" from the NJDEP to develop an 86-acre former chemical plant in a residential land use. Extensive soil and groundwater contamination was remediated.

- **The Villas at Shoregate**
  South Amboy, NJ
  Prepared and performed Preliminary Assessment/Site investigation to obtain a "Letter of No Further Action" for a 16-acre, former dredge disposal area adjacent to the Raritan Bay.