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Environmental Impact Statement

March 1, 2022

Woodhill Alpha Warehouse

Block 100, Lots 1, 1.08 and 1.09
Borough of Alpha, Warren County, New Jersey

Prepared for:

Mr. Steven Varneckas, P.E.
Woodhill Alpha, LLC
100 Passaic Avenue, Suite 240
Fairfield, NJ 07004

Colliers Engineering & Design
Shelbourne at Hunterdon
53 Frontage Road, Suite 110
Hampton New Jersey 08827
Main: 877 627 3772
Colliersengineering.com

Project No. 19004898B

Colliers Engineering & Design

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Introduction

Purpose of Document

This document has been prepared in accordance with the requirements of Municipal Land Use Law. The document analyzes the existing conditions and potential impacts associated with a proposed commercial/industrial development.

Colliers Engineering & Design (Appendix A) reviewed documents related to the subject property. References, including several publications and maps regarding geology (Drake et al. 1996), soils (USDA 1989), and aquifers (Herman et al. 1998), as well as additional reports resulting from recent studies conducted at the property or from readily available mapping and databases, provided important information for our evaluation. Site visits were performed in the Spring of 2017 to photograph the environmental setting, record additional information on the vegetation, and make incidental observations regarding wildlife species, geology, soils, and habitat types.

This document represents one component of the Preliminary and Final Land Development application for the proposed project, which is depicted on the plans prepared by Colliers Engineering & Design.

Site Location and Description

The subject property, Block 100, Lots 1, 1.08 and 1.09 consisting of approximately 13.54± acres, is located in the Borough of Alpha, Warren County, New Jersey as shown on the Borough Tax Map Sheet 20 (Appendix B). The property is currently developed with residential structures, barns and sheds in the northeast portion of the site and agricultural land throughout the balance of the property. The majority of the property has been utilized for agricultural purposes. The property is currently contained within Alpha Borough's I (Industrial) Zone and the redevelopment of the site into a warehouse development is consistent with the permitted principal uses of the zone (Appendix B). The applicant will be applying for both bulk and use variances for conditional use, setbacks, screening and parking.

Based on topographic mapping from available surveys, the site generally drains to the northwest. The elevations vary from an approximate elevation of 332 feet in the southeast portion of the site to an elevation of 272 feet in the northwest. The project site is located in an area that can be characterized by agricultural, industrial and residential land use (Appendix B).

The location of the site is shown on the U.S. Geological Survey Topographic Map (Easton, PA-NJ Quadrangles), Warren County Road Map, Soil Survey Map and the Borough of Alpha Tax Map (see Appendix A). The project site is within the Highlands Planning Area. Alpha Borough has prepared an Ordinance 2011-10 describing intended conformance with the Highlands Master Plan. However, based upon a 2017 pre-application meeting with the Highlands Council, we understand that the Borough of Alpha has not adopted the Highlands Master Plan; and, therefore, the Highlands Rules will not apply to the project.

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Project Description

The property is currently contained within Alpha Borough's I (Industrial) Zone (Appendix A). The applicant, Woodhill Alpha, LLC c/o Woodmont Properties, is proposing to consolidate the lots and develop the site with a 134,400 sf +/- warehouse development including a 3,000 SF +/- office space, 20 loading bays, 1 drive up bay, 81 car parking spaces, 55 banked parking spaces and five (5) stormwater management facilities, consisting of a biorientation basins or BMPs, such as rain gardens, grass swales, vegetated filter strips, porous pavement.

The proposed development will be situated on the consolidated tracts of Block 100, Lots 1, 1.08 and 1.09. The site has frontage along New Brunswick Avenue (Route 122), Industrial Drive and Edge Road and is currently utilized for residential and agricultural purposes.

Required Licenses and Approvals

The following municipal, county and state approvals and permits are required for the project:

Borough of Alpha

- Preliminary and Final Land Development Approval;

Phillipsburg Sewer Treatment Plant

- Sewer Approval (pending).

Alpha Municipal Water Company

- Water Approval (pending).

Warren County Planning Board

- Major Site Plan Approval. (Pending)

Warren County Soil Conservation District

- Certification of Soil Erosion and Sediment Control Plan. (Pending)

Environmental Inventory and Assessment

Water Supply

Based on the NJ-GeoWeb, the project site is located within the Lopatcong Creek watershed of the Upper Delaware drainage basin. More specifically the property is located in the Lopatcong Creek HUC-11 watershed and the Lopatcong Creek (below Rt 57) including UDRV sub- watershed (Appendix B).

The natural hydrology of the property is such that the drainage is directed mainly towards the northwestern property boundary.

The site is located within the drainage area of the Delaware River. According to the NJDEP Surface Water Quality Standards (N.J.A.C. 7:9B), the Delaware River classifications are determined by the Delaware River Basin Commission (DRBC). The DRBC has classified this portion of the Delaware River as Zone E. This region of the river extends from the mouth of the Lehigh River to the Trenton-Morrisville Toll Bridge. The uses assigned to these waters in the "DRBC, Water Quality Regulations, Administrative Manual-Part III" are listed below.

1. a. public water supplies after reasonable treatment,

   b. industrial water supplies after reasonable treatment,

   c. agricultural water supplies;

2. a. maintenance and propagation of resident game fish and other aquatic life,

   b. spawning and nursery habitat for anadromous fish,

   c. passage of anadromous fish,

   d. wildlife;

3. a. recreation.

Potential impacts to surface water quality include an increase in impervious surface area normally associated with land development. Presently, there are no substantial impervious surfaces on the site. The proposed improvements will result in an increase in impervious coverage of the site, which will result in an increase in runoff. An increase in the volume and rate of stormwater runoff will occur as a result. Increasing the impervious cover on a site will decrease infiltration and the time it takes for a particle of water to travel over the land surface to a streambed, resulting in increased peak runoff rates. Total runoff volume increases with impervious coverage, but not as significantly as the peak runoff rate.

The conversion of the site from mainly cleared agricultural land to a permanently landscaped industrial land use will cause some decreases in the amount of runoff from open land on the site, which will offset to some degree the increases due to more impervious coverage on the site. Suburban landscapes usually are completely vegetated with grass shrubs and trees. To minimize the

impact to adjacent properties and storm sewer systems, five (5) stormwater management facilities, consisting of a biorientation basins or BMPs are proposed.

Runoff from the developed portion of the site will be entirely conveyed to the proposed stormwater management facilities. The stormwater management facilities have been designed to contain the 100-year event runoff volume from the disturbed areas. The peak flow rates from the site have been reduced for the 2, 10, 25 and 100- year storm events, please refer to the Stormwater Management Design and Report prepared by Colliers Engineering & Design.

Floodplain Protection

Floodplains are not depicted for the project site on FEMA's Flood Insurance Rate Map - Community Panel Number 34041C0292E. According to this map, the project site is not located in a floodplain of any watercourse. A copy of the map can be found in Appendix B.

Soil Characteristics

The National Cooperative Soil Survey, consisting of the U.S. Department of Agriculture (USDA 1989) and other federal, state, and local agencies published soil surveys for the majority of the New Jersey counties. These soil surveys contain information on soil types and their properties that can be used in land planning. The Soil Survey for Warren County, New Jersey (Appendix B) indicates the presence of five soil map units on the project site. A list of these map units and their properties is provided below (USDA 1989).

Fredon-Halsey complex, 0 to 3 percent slopes, very stony (FrdAb): This soil type is found in drainageways with a parent material of coarse-loamy over sandy and gravelly glaciofluvial deposits derived from limestone, sandstone, and shale. These soils are classified as somewhat poorly drained, with the water table about 6 to 18 inches below the surface. The depth to the restrictive feature, which is a strongly contrasting textural stratification, is 22 to 40 inches. This soil is considered "Not prime farmland". The capability subclass is IIIw and the hydrologic soil group is B/D.

Udorthents-Urban land complex, 0 to 8 percent slopes (UdauB): This soil type is found on low hills with a parent material of fill and/or disturbed original soil material. These soils are classified as well drained, with the water table more than 80 inches below the surface. The depth to the restrictive feature is more than 80 inches. This soil is considered "Not prime farmland". The capability subclass is IIIVs and the soil is unranked for the hydrologic soil group.

Urban land-Hazen-Paulins Kill complex, 0 to 8 percent slopes (USHBPB): This soil type is found on valley trains, outwash deltas with a parent material of buildings, pavement, and other impervious surfaces over glaciofluvial deposits. These soils are classified as well drained, with the water table being more than 80 inches below the surface. The depth to the restrictive feature is more than 80 inches. This soil is considered "Not prime farmland". The capability subclass is IIIV and the hydrologic soil group D.

Washington silt loam, 3 to 8 percent slopes (WafB): This soil type is found on ground moraines with a parent material of pre-wisconsin glacial loamy drift and/or colluvium; over residuum weathered from limestone and/or residuum weathered from gneiss. These soils are classified as

well drained, with the water table is more than 80 inches below the surface. The depth to the restrictive feature is more than 80 inches. This soil is considered “All areas are prime farmland”. The capability subclass is IIe and the hydrologic soil group B.

Washington silt loam, 8 to 15 percent slopes (WafC): This soil type is found on ground moraines with a parent material of pre-wisconsin glacial loamy drift and/or colluvium; over residuum weathered from limestone and/or residuum weathered from gneiss. These soils are classified as well drained, with the water table is more than 80 inches below the surface. The depth to the restrictive feature is more than 80 inches. This soil is considered “Farmland of statewide importance”. The capability subclass is IIIe and the hydrologic soil group B.

In the capability classification system, soils are generally grouped at three levels – capability class, subclass, and unit. Capability classes, the broadest groups, are designated by the numbers I through VIII. 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, woodland, 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, woodland, or wildlife habitat.
- Class VII soils have very severe limitations that make them unsuitable for cultivation and that restrict their use mainly to grazing, woodland, 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 (USDA 1976).

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 (USDA 1989). The aforementioned soils are suitable for the proposed development.

Sewage Disposal

The Borough of Alpha will provide sewer service. The project will be connected by a proposed sewer lateral extension to an existing main located on Industrial Drive. The existing sewer main line is owned and operated by the Borough of Alpha. The Borough has previously indicated they have capacity for the proposed development, however formal approval is pending.

Vegetation Protection

The majority of the site has been cleared for agricultural purposes. No wetland communities were identified on the site. Fallow agricultural fields existed during a site reconnaissance performed in April 2017. It appeared as if the site formerly supported a corn crop. The site also contained hedgerows which contained tree species such as Boxelder, Black locust, Mulberry and Hackberry.

The amount of permanent vegetation will increase once the proposed project is landscaped with trees, shrubs and lawn.

Wildlife

A site reconnaissance was performed in April 2017 to investigate for the presence of vegetation, wetlands, wildlife habitats and signs of wildlife species such as mammals, birds, reptiles and amphibians.

The site is predominantly open with fields that are currently cultivated for agricultural use. Wildlife species expected to utilize the property include species tolerant to the disturbances related to nearby residential and industrial development. Since wildlife is not expected to be diverse, abundant or sensitive to human disturbance, wildlife impacts are not expected to be significant on the site.

Birds Occurring in Agricultural Field and Successional Field Habitats			
Turkey vulture	Black vulture	American kestrel	Red-tailed hawk
Northern harrier	Mourning dove	Bobwhite	Kildeer
American woodcock	Screech owl	Great-horned owl	Chimney swift
Eastern kingbird	Barn swallow	Common crow	Tree swallow
Purple martin	Blue jay	Black-capped chickadee	Carolina chickadee
Northern mockingbird	House wren	Gray catbird	Brown thrasher
European starling	Golden-crowned kinglet	White-eyed vireo	Cedar waxwing
House sparrow	Red-winged blackbird	Brown-headed cowbird)	Common grackle
Northern cardinal	Blue grosbeak	Indigo bunting	House finch
Dark-eyed junco	Vesper sparrow	Grasshopper sparrow	American goldfinch
Savannah sparrow	Chipping sparrow	Song sparrow	White-throated sparrow
Field sparrow			

Mammals likely to utilize agricultural fields or successional field habitats are listed in the table below.

Mammals Occurring in Agricultural Field and Successional Field Habitats[1]			
Eastern mole	Eastern cottontail	Woodchuck	Pine vole
Little brown bat	Meadow vole	Raccoon	Striped skunk
Red fox	White-tailed deer		

Reptiles and amphibians likely to use agricultural or successional field habitats are listed below.

Reptiles and Amphibians Occurring in Agricultural Field and Successional Field Habitat			
Northern brown snake	Eastern garter snake	Eastern ribbon snake	Northern black racer
Eastern milk snake	American toad	Fowler's toad	Pickerel frog

Species observed during the site reconnaissance included a Turkey vulture and evidence (i.e scat, burrows) of White-tailed deer and Woodchuck.

A request was sent to the Natural Heritage Program to search its database for threatened and endangered species that may be present in the vicinity of the project site. The search results indicated that there are no records for rare plants, animals or natural communities on the site. A copy of the search results is included as Appendix E. No threatened or endangered species or suitable habitat for such species was observed during the site reconnaissance.

Air Quality

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 (SO2), carbon monoxide (CO), nitrogen dioxide (NO2) and lead (Pb). 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.

Borough of Alpha is located within the Northern New Jersey Region of the 2019 New Jersey Air Quality Report. The nearest air quality sampling stations are located at Columbia WMA and Flemington. The following air quality assessment is taken from the 2019 Annual Air Quality Report published by the NJDEP Bureau of Air Monitoring.

In 2019, air quality in New Jersey was good on 162 days, moderate on 190 days, unhealthy for sensitive groups on 13 days and unhealthy and very unhealthy on 0 days. The monitoring stations that measure air pollutants in the Northern New Jersey Region are located in the following towns: Knowlton Township and Flemington Borough (NJDEP Bureau of Air Monitoring 2019).

Ozone levels are measured at Columbia WMA and Flemington sampling stations. At Columbia WMA and Flemington, the highest 1-hour average concentration ozone level measured was 0.073 ppm

and 0.087 ppm, respectively, which are lower than the Maximum 1-hour Primary Standard of 0.12 ppm. The highest 1-hour average concentration ozone level measured was 0.062 ppm and 0.073 ppm, respectively. Columbia WMA's ozone level of 0.062 ppm is lower than the 8-hour Secondary Standard of 0.070 ppm, while Flemington had 1 exceedance day (NJDEP Bureau of Air Monitoring 2019).

Fine particulates (> 2.5 μ) are measured at Columbia WMA and Flemington. The maximum 24- hour average levels measured was 36.5 μg/m3 and 26.5 which μg/m3, respectively, where Columbia WMA exceeded the 24-hour Average Primary and Secondary Standard of 35 μg/m3. The annual mean level of fine particulates measured 7.38 μg/m3 and 7.78 μg/m3, respectively, which is below the Mean Primary and Secondary Standard of 12 μg/m3 (NJDEP Bureau of Air Monitoring 2019).

Carbon monoxide is not measured at the monitoring stations previously mentioned. The closest monitoring station is at Elizabeth. The maximum 1-hour Average measured in this location was 2.5ppm. This level does not exceed the 1-hour Average Primary and Secondary Standards or the 1-hour Average National Primary Standard of 35 ppm. The 8-hour Maximum Average for carbon monoxide at the sampling site was 1.9 ppm. This level did not exceed the 8- hour Average Primary and Secondary Standard or the 8-hour Average National Primary Standard of 9 ppm (NJDEP Bureau of Air Monitoring 2019).

Nitrogen oxides are measured at Columbia WMA. Maximum 1-hour Average levels of nitrogen dioxide measured 68 ppb. These levels do not exceed the 1-hour Average Guideline of 100 ppb. The 12-month Maximum Average levels of nitrogen dioxide measured was 11 ppb. These levels do not exceed the 12-month Maximum Average Primary and Secondary Standard of 53 ppb (NJDEP Bureau of Air Monitoring 2019).

Sulfur Dioxide is measured at Columbia WMA. Maximum 1-hour Average levels of sulfur dioxide measured 6.7 ppb. These levels do not exceed the 3-hour Average Guideline of 0.5 ppm. The 12-month Maximum Average level of sulfur dioxide measured was 0.0004 ppm. This does not exceed the 12-month Maximum Average Primary and Secondary Standard of 0.03 ppm (NJDEP Bureau of Air Monitoring 2019).

Historic Landmarks/Archaeological Resources

The NJ-GeoWeb (NJDEP, 2021) documents known "historic areas" such as historic districts, historic properties, and historic archaeological site grids. The subject property is not located within a historic area as per the NJ-Geo Web (Appendix B). The historic areas located within vicinity of the project site are the following:

- Central Railroad of New Jersey Main Line Corridor Historic District (ID#3500)
- Hamlin Historic Archaeological Site (28-Wa-532) (ID#2745)
- Lehigh Valley Railroad Historic District (ID#4154)
- Still Valley Prehistoric District (ID#2746)

The subject property is separated from the documented historic areas by intervening developments and agricultural land that are not valued for historic or cultural properties per the NJ-GeoWeb (Appendix B). Colliers Engineering & Design did not perform a formal historic or cultural resources assessment or survey for the subject property.

Site Aesthetics

The majority of the site is presently agricultural fields. Therefore, the proposed development will shift the character of the site from rural/agricultural to industrial. To improve site aesthetics, landscaping is proposed for the development. Please refer to the Landscaping and Lighting Plan prepared by Colliers Engineering & Design for more details.

Climate

The Warren County website describes the climate of the area as “humid continental”. In 2021, the 30-year average annual rainfall for the County was 48.78 inches and the average annual snowfall was 31.5 inches. The average summer temperature was 70.3 degrees and the average winter temperature was 29.2 degrees (http://www.co.warren.nj.us/).

Environmentally Sensitive Features

Geology

According to Bedrock Geologic Formations of Central and Southern New Jersey (Drake et al. 1996), the Jacksonburg Limestone (Oj) underlies the project site (Appendix B). The Jacksonburg Limestone, created during the Middle Ordovician, consists of medium to dark grey, laminated to thin-bedded shaly limestone and less abundant medium-gray arenaceous limestone containing quartz-sand lenses with minor interbedded medium to dark-gray, fine to medium-grained, very thin to medium-bedded fossiliferous limestone (Drake et al., 1996).

In areas underlain by carbonate rocks, such as dolomite and limestone, karst terrain may occur. This refers to closed depressions, caves and diversion of underground drainage caused by groundwater flow. Due to the slightly acidic nature of groundwater and rainfall, the carbonate rock will gradually dissolve over time, creating sinkholes and other depressions. One of the main factors leading to the formation of karst is the amount of limestone (CaCO3) present in the rock.

A subsurface exploration was performed by Maser Consulting (now Colliers Engineering & Design) to evaluate the stormwater infiltration rates at the site. As part of the exploration, five (5) test pits were performed. During the exploration, no sinkholes were observed.

Aquifer Recharge Areas

Herman, et al (1998), on their map entitled, Aquifers of New Jersey, show that the site is underlain by the Jacksonburg Limestone, Kittatinny Supergroup and Hardyston Quartzite Aquifer. This unit is composed of dolomite and limestone with minor shale, sandstone and quartzite. Groundwater is stored and transmitted in fractures. Fractures in dolomite and limestone are locally enlarged by chemical weathering.

The site currently has ±47,483 SF of existing impervious surfaces. The proposed impervious cover will be 321,908 SF or ±52.4% of the lot. Therefore, impacts to aquifer recharge are not anticipated to be significant as a result of the project. Pursuant to the 'Stormwater Infiltration Evaluation' report prepared by Maser Consulting (now Colliers Engineering & Design) dated April 28, 2017, the infiltration rate at all the five test pit locations (TP1 through TP5) is less than 0.5 in/hr. and does not meet the minimum infiltration rates required by the BMP for groundwater recharge. Therefore, a waiver from groundwater recharge is requested for this development due to the above existing conditions on site.

Highly Acidic Soils

As discussed previously, several soil types are found underlying the project site. The Soil Survey of Warren County, New Jersey lists the reaction as medium acid to neutral for the soils for unlimed areas. Due to the presence of limestone bedrock, the presence of acid-producing deposits is not anticipated. Therefore, no adverse impacts to highly acidic soils are expected as a result of the construction of the proposed residential subdivision. If acidic soils should be encountered, the

appropriate treatment and mitigation measures, in accordance with the soil erosion and sediment control standards, will be utilized.

Topography

The site will be re-graded to construct the proposed warehouse facility. Import of fill and grading will be required and will result in the modification of the topography of the site. The grading plan will be designed to minimize earthwork and maintain drainage patterns as closely as possible to the existing conditions.

Depth to Seasonal High-Water Table

According to the Soil Survey of Warren County, the seasonal high water table can be found at a depth of more than six feet below the surface for the Washington loam soils. Therefore, areas of high water tables will not be impacted by the proposed development. According to the "Stormwater Infiltration Evaluation" report prepared by Maser Consulting P.A. dated April 28, 2017, a perched water table at 10 feet below ground surface was observed.

Erosion Potential

The erosion hazard for the majority of soils is listed as slight in the Soil Survey of Warren County, New Jersey. The Washington soils have a high potential erosion hazard if the soil is cleared of vegetation. Once soils are revegetated on the site, erosion is expected to be less than for the existing agricultural fields.

The greatest hazard of erosion will be present during construction, a short-term impact, which will cease when grading and the required stabilization is complete. A Soil Erosion and Sediment Control Plan has been developed in order to minimize potential soil loss problems. Strict soil erosion and sediment control measures will be implemented to prevent increases in soil erosion to the greatest extent possible. The implementation of measures such as coverage or stabilization of exposed soils either permanently or temporarily through hydroseeding, sod, seed and mulch or jute matting, immediately after rough grading, will reduce erosion during construction. Properly placed silt fences have the potential to reduce the movement of any silt or sediment off the project site. After construction is complete, and the landscaping is established on the site, the potential for soil erosion will be insignificant.

Water Resources

No freshwater wetlands are known to exist on the site. Based on review of the NJDEP Geo-web database and a Letter of Interpretation (LOI), File No. 2102-06-0001.1, expired June 19, 2016, no wetlands or regulated features exist on the site. Please see Appendix D for a copy of the LOI.

The proposed stormwater management facilities and BMPs will regulate the quantity and peak flow of stormwater from the developed portion of the site and will also improve stormwater quality before it drains from the site, please refer to the Stormwater Management Design and Report prepared by Colliers Engineering & Design.

Environmental Concerns

No environmental concerns were identified on the site

Evaluation of Unavoidable Adverse Environmental Impacts

The proposed project has been designed to minimize environmental impacts to the greatest extent possible. However, any land development project will cause certain unavoidable adverse impacts. These are described in the following sections on air pollution, water pollution, noise and sedimentation and siltation.

Air pollution

The traffic generated by the project is not anticipated to cause significant adverse effects on air quality in the project vicinity. A traffic report will be prepared by Colliers Engineering & Design as required by the Borough of Alpha.

Water pollution

An increase in impervious cover on the site will result from the proposed development. Common pollutants exported in stormwater include phosphorus, nitrogen, zinc and lead. According to the standards set forth in the New Jersey Stormwater Best Management Practices Manual, certain measures are to be undertaken in the design of future developments to insure that the quality and quantity of stormwater runoff is not jeopardized. Stormwater quality measures are required to be incorporated into the design to meet the minimum required removal rates of total suspended solids (TSS) from the Water Quality design storm event. For this particular project an 80% TSS removal rate is required for new impervious surface.

The proposed development has the potential to cause both temporary and permanent impacts on water quality. The impacts include the addition of suspended solids and other pollutants associated with soil erosion. Potential impacts to surface water quality resulting from the proposed development are those associated with increased stormwater runoff from the proposed development as a result of the increased impervious cover. Stormwater runoff generated by the proposed development will be directed to stormwater management facilities. Therefore, the increases in impervious cover and associated increases in stormwater runoff are not expected to significantly impact water quality or quantity on or within the immediate vicinity of the subject property. Please refer to the Stormwater Management Report for details.

In addition, agricultural land uses typically involve the use of significant amounts of fertilizer and pesticides and sometimes herbicides. The proposed development will result in fewer of these contaminants in lesser amounts being introduced into the groundwater.

Noise

Construction activities on the site will cause temporary increases in noise levels of short duration in the vicinity of the site. These noise levels will be comparable to normal noise levels for construction.

Following construction, the generated noise from the proposed facility will be slightly increased if not more than the existing agricultural land uses on the project site and the surrounding properties. Noise levels generated from the proposed facility will meet applicable Local and State regulations.

Sedimentation and siltation

The required grading of the site will result in a slight modification of the topography of the site. Erosion will be controlled through the implementation of strict soil erosion and sediment control measures to prevent increases in soil erosion. The landscaping of residential lots, the detention of stormwater in a detention basin and the return of portions of the site to natural vegetation communities will very likely result in less soil erosion and therefore less sedimentation and siltation on the site than occurring presently. Please see the Soil Erosion and Sediment Control Plan for details on measures proposed to minimize soil erosion on the site during construction.

Proposed Mitigation Measures

The project plans have incorporated certain measures to reduce potential environmental impacts associated with the proposed development. The most important of these measures are listed herein. Other measures may be found in the appropriate sections of this report.

A. Construction operations will be performed in accordance with the Standards for Soil Erosion and Sediment Control in New Jersey. An erosion control plan will be approved by the Warren County Soil Conservation District and will be followed during construction.

B. There will be no burning of debris on the site.

C. The contractor, during dry weather, will water areas prone to dust production as required, especially unimproved routes used by trucks.

D. 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.

E. Contractors will take all practical steps to eliminate avoidable noise emanating from construction operations.

F. Construction materials and equipment, when not in use, will be stored to minimize inconvenience to adjacent area inhabitants.

G. To minimize inconvenience to and irritation of neighboring residents, construction operations will be limited to normal working hours.

H. A stormwater management basin will be constructed to minimize impacts to stormwater quality. A construction phase and post-construction phase Stormwater Management Plan will be prepared and implemented for the project.

Summary

The subject property, Block 100, Lots 1, 1.08 and 1.09 consisting of approximately 13.54± acres, is located in the Borough of Alpha, Warren County, New Jersey. The property is currently developed with residential structures, barns and sheds in the northeast portion of the site and agricultural land throughout the balance of the property. The property is currently contained within Alpha Borough's I (Industrial) Zone and the redevelopment of the site to a warehouse facility is consistent with the permitted principal uses of the zone.

The proposed warehouse development will consist of a 134,400 sf +/- warehouse including a 3,000 SF +/- office space, 20 loading bays, 1 drive up bay, 81 car parking spaces, 55 banked parking spaces and five (5) stormwater management facilities, consisting of a biorientation basins or BMPs. The warehouse development will create numerous jobs during construction, as well as additional jobs which will be generated in the community and region that will be needed to support the operations of the facility.

Unavoidable adverse environmental impacts include loss of an agricultural land use. Short-term soil erosion may also occur during the construction phase of the project. An increase in impervious surfaces will also be a potential impact to stormwater runoff. Stormwater management techniques will be designed in the future to reduce the peak runoff of stormwater on the site. With the construction of the aforementioned, water pollution produced by the development will be minimized. The project is not anticipated to cause significant adverse impacts to rare species, hydrologic, water quality, noise, or air resources at the site or in the surrounding area and NJDEP and local permit conditions will ensure the same. Minimal adverse impacts to native vegetation, wildlife habitat, open space, soils and topography may be unavoidable.

In the previous sections, environmental impacts were identified, discussed and some specific mitigation measures were articulated for the various categories of physical, biological, cultural, aesthetic, and community resources. The selection of the project site has eliminated the need for many environmental performance controls, since sensitive natural resources are not present on or adjacent to the site. Due to the location of the project site, no and/or minimal impacts to open water, natural steep slopes, historic places or districts and riparian zones are anticipated. Environmental performance controls to be implemented include the following:

- Impervious surfaces will be minimized by utilizing minimum roadway and driveway widths per the Borough's design standards;
- Low maintenance landscaped areas will be proposed throughout the development to minimize the use of lawn fertilizers, and pesticides. Further, this site will be professionally maintained helping to ensure that fertilizer and pesticides that are used will be correctly and appropriately applied;
- Preventative source controls at the inlets help to contain floatable debris and promote public awareness. Erect sediment filter fences and implement other erosion control measures;
- Soils will be stabilized following construction by implementing a Landscaping Plan and other revegetation measures to control post-construction erosion;
- All construction-related erosion control measures will be maintained until project is complete and revegetation measures have been approved;
- The stormwater management facilities will be maintained for maximum efficiency to reduce impacts to water quality and water quantity;
- The spread of sediment onto public roads by construction vehicles and the increase of dust from trucks transporting crushed rock and other debris from construction site will be prevented by proposed soil erosion and sediment controls;
- The burning of wastes is prohibited, which will minimize impacts to air quality;
- Exhaust and emission control devices on construction machinery will be maintained to reduce impacts to air quality and water quantity;

- Compliance with the Borough's noise ordinance will assure that only acceptable levels of noise are generated by the facility.
- Compliance with Borough, State and Federal air emissions regulation will avoid impacts to air quality.

References

Delaware River Basin Commission. 1996. DRBC, Water Quality Regulations, Administrative Manual-Part III.

Drake, A.A., Jr., Volkert, R.A., Monteverde, D.H., Herman, G.C., Houghton, H.F., Parker, R.A., and Dalton, R.F.1996. Bedrock geologic map of northern New Jersey. U. S. Geologic Survey in cooperation with the New Jersey Geological Survey. Miscellaneous Investigation Series Map 1-2540-A.

Federal Highway Administration (FHA). 1995. Highway Traffic Noise. US Department of Transportation, Federal Highway Administration. (http://www.fhwa.dot.gov/environment/htnoise.htm)

Herman, Gregory C., et. al. 1998. *Aquifers of New Jersey.*

New Jersey Department of Environmental Protection (NJDEP), Division of Fish and Wildlife, Endangered and Nongame Species Program. 2001. *Field Guide to Reptiles and Amphibians of New Jersey.* Trenton, NJ

NJDEP and NJ Dept. of Agriculture (NJDA). 1994. *Stormwater and Nonpoint Source Pollution Control, Best Management Practices Manual.*

NJDEP Bureau of Air Monitoring. 2019. Air Quality Index. New Jersey Department of Environmental Protection.

NJDEP. April 1998. *Surface Water Quality Standards*, N.J.A.C. 7:9B.

NJDEP, Division of Parks and Forestry. *New Jersey and National Registers of Historic Places, 1970 – 1995.*

New Jersey State Soil Conservation Committee. April 1987. *Standards for Soil Erosion and Sediment Control in New Jersey.*

United States Department of Agriculture/Soil Conservation Service. 1989. *Soil Survey of Warren County*.

Warren County Website. 2003. http://www.co.warren.nj.us/.USEPA.

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Appendix

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Appendix A | Qualifications of Preparers

Resume

Joseph P. Layton

Principal Associate | Discipline Leader | Natural Resources

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Education

B.S. Environmental Planning and Natural Resource Management, Rutgers University, Cook College, 1992

Professional Certifications

NJDEP Certified Subsurface Evaluator, License #229606

NJDEP Certified Underground Storage Tank Closure

Environmental Assessment Association - Certified Environmental Specialist

Certified Remediation Specialist

Radon Measurement Specialist #MES11066

40 Hr NJ/EPA Model Lead Inspector/Risk Assessor

OSHA 40 Hr HAZWOPER Training

8-Hour OSHA HAZWOPER Refresher Training

Affiliations & Memberships

Ecological Society of America

Society of Wetland Scientists

Experience

Mr. Layton is an Environmental Scientist with over 24 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, and 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, and environmental sampling design and protocol in accordance with State and Federal regulations. He utilizes Geographic Information Systems (GIS) and Global Positioning Systems (GPS) in environmental sampling and studies, including site remediation design and sampling, groundwater and surface water quality monitoring and management, and lake rehabilitation and restoration.

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

Representative Projects

Groundwater Quality Monitoring/ Management

Responsible for designing, implementing, and preparing groundwater monitoring and management plans. A sampling of representative projects includes the following:

- **New Jersey National Golf Club Groundwater Quality Monitoring Plan**
  Township of Bernards, Somerset County, NJ
  Responsible for determining location and depth of monitoring wells; coordinating and supervising well installation; sampling and analyzing results; and determining groundwater flow and fate of contaminants.
- **Leisure Glen Retirement Community**
  Township of Manchester, Ocean County, NJ
  Responsible for determining the location, depth and sampling parameters of groundwater monitoring wells in a 2,500-unit retirement and 18-hole golf course community widening, complete

resurfacing of all 13 miles of existing roadway, safety improvements and implementation, as well as construction of IVHS systems in this corridor.

- **Trump National Hudson Valley Golf Club Groundwater Quality Monitoring Plan**
  Township of Bernards, Somerset County, NJ
  Responsible for determining location and depth of monitoring wells; coordinating and supervising well installation; sampling and analyzing results; and determining groundwater flow and fate of contaminants.

Watershed Management /Lake Restoration

Responsible for determining sources of non-point pollution using available mapping and field reconnaissance, determining watershed boundaries, and preparing best management practices manuals.

- **The Great Swamp National Wildlife Refuge Watershed Management Study, Morris & Somerset Counties, NJ**
- **Wemaconk Lake Restoration, Borough of Englishtown, Monmouth County, NJ**

Wetland Delineation

Involved in the identification and delineation of numerous freshwater and tidal wetlands (over 10,500 acres) in New Jersey and New York. The assessment of wetland value (resource classification) was involved for many of these wetlands.

- **Runyon Interceptor Trunk Sanitary Sewer Line Alignment**
  Township of Old Bridge, Middlesex County, NJ
  Determined alignment of two miles of sanitary sewer on a 400-acre+ site using aerial photography and site inspections minimizing impacts to numerous wetland communities.
- **Oakwood at Old Bridge**
  Township of Old Bridge, Middlesex County, NJ
  Delineated freshwater wetlands on a 235-acre site, half of which was wetlands.
- **Ashland/Former Hercules Plant**
  Parlin, Middlesex County, NJ
  Delineated freshwater wetlands on a 300-acre site formerly utilized as a munitions plant in 1930s-1960s.
- **MEC Power Generating Facility**
  Sayreville Borough, Middlesex County, NJ
  Delineated freshwater and tidal wetlands on a 40-acre site formerly utilized as a landfill. Site recently delisted as a Superfund site and will be developed as an electric power generating facility.
- **Gates Landfill**
  Jersey City, Hudson County, NJ
  Delineated freshwater and tidal wetlands on a 60-acre site formerly utilized as a fly-ash landfill of a PSEG power generating facility. Site recently delisted as a Superfund site and will be developed as an electric power generating facility.

Permit Applications

Prepared environmental permits for private residential, commercial and industrial projects. This has included U.S. Army Corps of Engineers Permits and New Jersey Department of Environmental Protection

Freshwater Wetland Permits, Freshwater Wetland Transition Area Waivers, Individual Permits, Waterfront Development Permits, and CAFRA Permits.

- **National Lead Redevelopment**
  Borough of Sayreville, Middlesex County, NJ
  Determined alignment of two miles of sanitary sewer on a 400-acre+ site using aerial photography and site reconnaissance minimizing impacts to numerous wetland communities.
- **Transcontinental Gas Pipeline Armoring**
  Township of Hopewell, Mercer County, NJ
  Prepared and obtained an Individual Permit from the NJDEP-LURP to permanently disturb a stream and its associated wetland to construct armoring to protect a Transcontinental Gas Pipeline.
- **The Hills Development**
  Township of Bernards, Somerset County, NJ
  Prepared and obtained majority of wetland permitting for a 5,300 residential unit, 400,000 SF of commercial and professional office space and an 18-hole golf course planned development in an environmentally sensitive ecosystem.
- **Apple Cove Development Township of Middletown,**
  Monmouth County, NJ
  Prepared and obtained freshwater wetland and CAFRA permits for single-family, residential subdivision located along a tidally influenced watercourse.
- **Trump National Pine Hill Golf Club**
  Pine Hill, Camden County, NJ
  Prepared and obtained freshwater wetland Individual permits for redeveloping a former amusement park into a premier golf course. Rehabilitating/reconstructing the only remaining native Brook trout stream in southern New Jersey was required as part of permit approval.
- **Frenchtown Nishisakawick Creek Stream Bank Restoration**
  Borough of Frenchtown, Hunterdon County, NJ
  Through funding by the U.S. Department of Agriculture (USDA), Natural Resources Conservation Service (NRCS), the Borough of Frenchtown sought to restore and stabilize eroded streambanks along Nishisakawick Creek, a highly protected water in the state of New Jersey. Mr. Layton provided oversight and management of the ecological team. The scope included delineation of wetlands and open waters, restoration design oversight, and prepared applications to the NJDEP for a Freshwater Wetlands Individual Permit and Flood Hazard Area Individual Permit.

Environmental Assessments/Regulatory Compliance

Prepared and conducted Environmental Phase I Assessments for residential, commercial, and industrial property transfers in accordance with ASTM and Fannie Mae guidelines. Also prepared and conducted Preliminary Assessments, Site Investigations, Remedial Investigations, and Remedial Action Work Plans in accordance with N.J.A.C. 7:26E.

- **Heavenly Farms**
  Township of East Brunswick, Middlesex County, 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.

Resume

- **Marlboro Psychiatric State Hospital**
  Marlboro Township, Monmouth County, 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, Middlesex County, 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**
  City of South Amboy, Middlesex County, 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.
- **Rolling Acres Subdivision**
  Monroe Township, Middlesex County, NJ
  Prepared and performed Preliminary Assessment, Site Investigation, and Remedial Investigation/Action to obtain a "Letter of No Further Action" for a 168-acre farm with contaminated soils.
- **Stewart International Airport**
  Town of New Windsor, Orange County, NY
  Consultant to potential leaseholders to the Port Authority New York and New Jersey to determine potential environmental areas of concern to development. This included Phase I and Phase II investigations in accordance with ASTM standards.

Subsurface Exploration/Evaluation
Capable of evaluating soils in accordance with NJDEP's Chapter 199 for subsurface sewage disposal systems. Able to establish depth of water tables, evaluate suitability of sites for subsurface disposal systems, perform percolation tests, basin flood tests, pit bail tests and tube permeameter tests. Capable of evaluating subsurface conditions utilizing the Burmister classification system, USDA Soil Taxonomy terminology and the Unified classification system.

Environmental Impact Assessment
Prepared numerous environmental impact statements and assessments for a wide variety of projects, including residential and commercial developments for both the public and private sector.

- **Taconic Homes Site Bog Turtle Survey and Wildlife Inventory**
  Village of Pleasant Valley, Dutchess County, NY
  Performed survey for bog turtle on a 76± acre tract using Phase II survey methods. Also performed a limited wildlife inventory during the spring season. This work was performed to satisfy lead agency requirements under the NY SEQRA.

Resume

- **Middlesex County Educational Services Commission Special Education Facility**
  Borough of Sayreville, Middlesex County, NJ
  Provided environmental services to conduct a Phase I environmental assessment associated with professional engineering services for a 65,000 SF special education facility with a pool, a future building, associated parking lot, and a playground. Tasks included a historical review of project site, industrial / commercial historical review, site visit to identify obvious visual signs of contamination and use of hazardous materials, project approval status review, review of existing, local, state and federal records, review of adjacent lands, preparation of site location map, and report preparation.
- **Capodagli Property Company Phase I Assessment**
  North Arlington Borough, Bergen County, NJ
  Provided environmental services to delineate wetlands, prepare an application for a Letter of Interpretation to the New Jersey Department of Environmental Protection, and prepare a Phase I Environmental Assessment for the property that is between .5 to 1.0 acres and adjacent to the Passaic River, and regulatory permitting (NJDEP upland waterfront development and waterfront development, NJDEP tidelands conveyance, and US Army Corps of Engineers Section 10 – installation of outfall structure).
- **New Gregory Elementary School (NJSCC Funded)**
  City of Long Branch, Monmouth County, NJ
  Provided site design, civil, and environmental engineering services for a proposed three-story, 45,000 SF elementary school to accommodate children from pre-kindergarten through 5th grade located on a six-acre tract of land. Environmental services included wetlands evaluation, preliminary assessment (PA), site investigation (SI), and environmental impact statement (EIS)/ EO 215), and environmental regulatory permitting (NJDEP statewide general, and NJDEP treatment and water works). The preliminary assessment (PA) report indicated four areas of Concern (AOC). Three UST's, waste piles (plastic bottles, plastic bags, aluminum cans, etc.), one pole mounted electrical transformer and capacitor, and a former railroad easement adjacent to property with inactive rail lines with possible polynuclear aromatic hydrocarbons (PAHs). A site investigation (SI) will be performed to evaluate the presence or absence of soil and groundwater impact associated with UST's and the former railroad easement. A report will be prepared containing all lab results and recommendations for further investigation and/or remedial action as well as projected cost estimates for remedial investigation and cleanup.
- **Diversified Developers, LLC – Retail Store and Day Care Facility**
  Jackson Township, Ocean County, NJ
  Provided environmental services to conduct a Phase I environmental assessment associated with the site design and civil engineering services associated with the development of a 35,000 SF retail facility including a day care facility along with typical appurtenant site improvements on approximately 3.8-acres of land. Services included historical review to evaluate past conditions of sites as they relate to existing and proposed uses, industrial/commercial historical review, site visit to identify all obvious visual signs of contamination and the use of hazardous materials, review existing local, State, and federal records, review of adjacent lands, prepared site location map depicting the approximate parcel boundaries, and an area of at least one-mile radius around the site.

- **Thomas Associates – Site Assessment Proposed School Site**
  City of Bordentown, Burlington County, NJ
  Provided environmental services for a Phase I Environmental Assessment for a 75-acre parcel of land previously historically farmed for a proposed new school facility. Services included preliminary assessment, SI & RI historical review, industrial and commercial historical review, review of existing local, state and federal records, review of adjacent lands, preparation site location map, preliminary soil screening, delineation of wetlands and LOI and regulatory permitting (stream encroachment, land use regulations freshwater wetlands and soil erosion and sediment control), Colonial Pipeline Crossing/Encroachment and Environmental Impact Statement (EIS).

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

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Appendix B | Report Figures

- Municipal Tax Map
- U.S.G.S Map
- Aerial Photograph
- County Roads Map
- Zoning Map
- Soil Survey Map
- FEMA FIRM Map
- State Planning Map
- Bedrock Formation Map
- Bedrock Aquifer Map
- Wetlands and Streams Map
- Historic Preservation Map
- Species Based Habitat Map
- Ground Water Recharge Map
- HUC 11,14 & C1 Waters Map

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Appendix B | Report Figures

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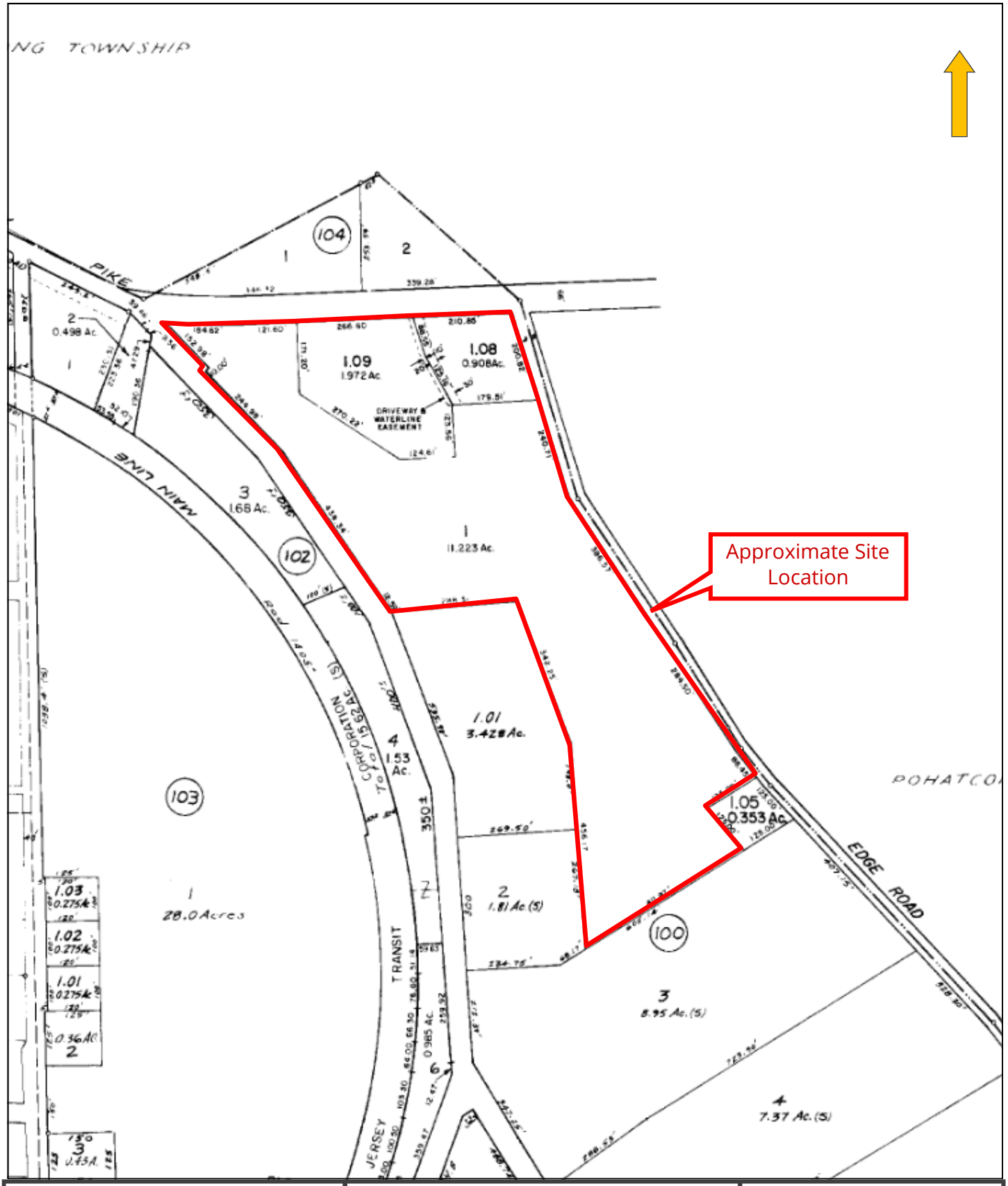
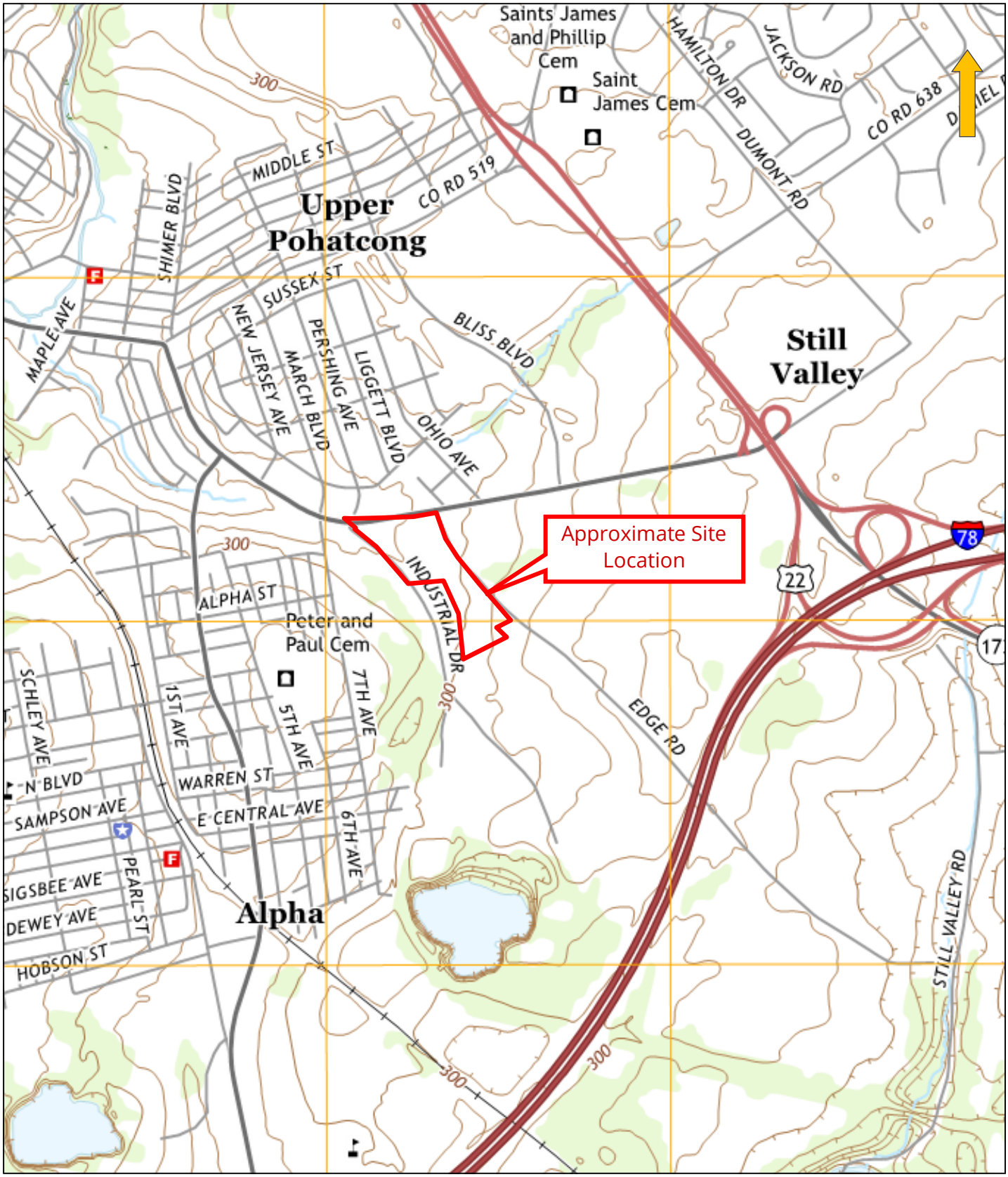
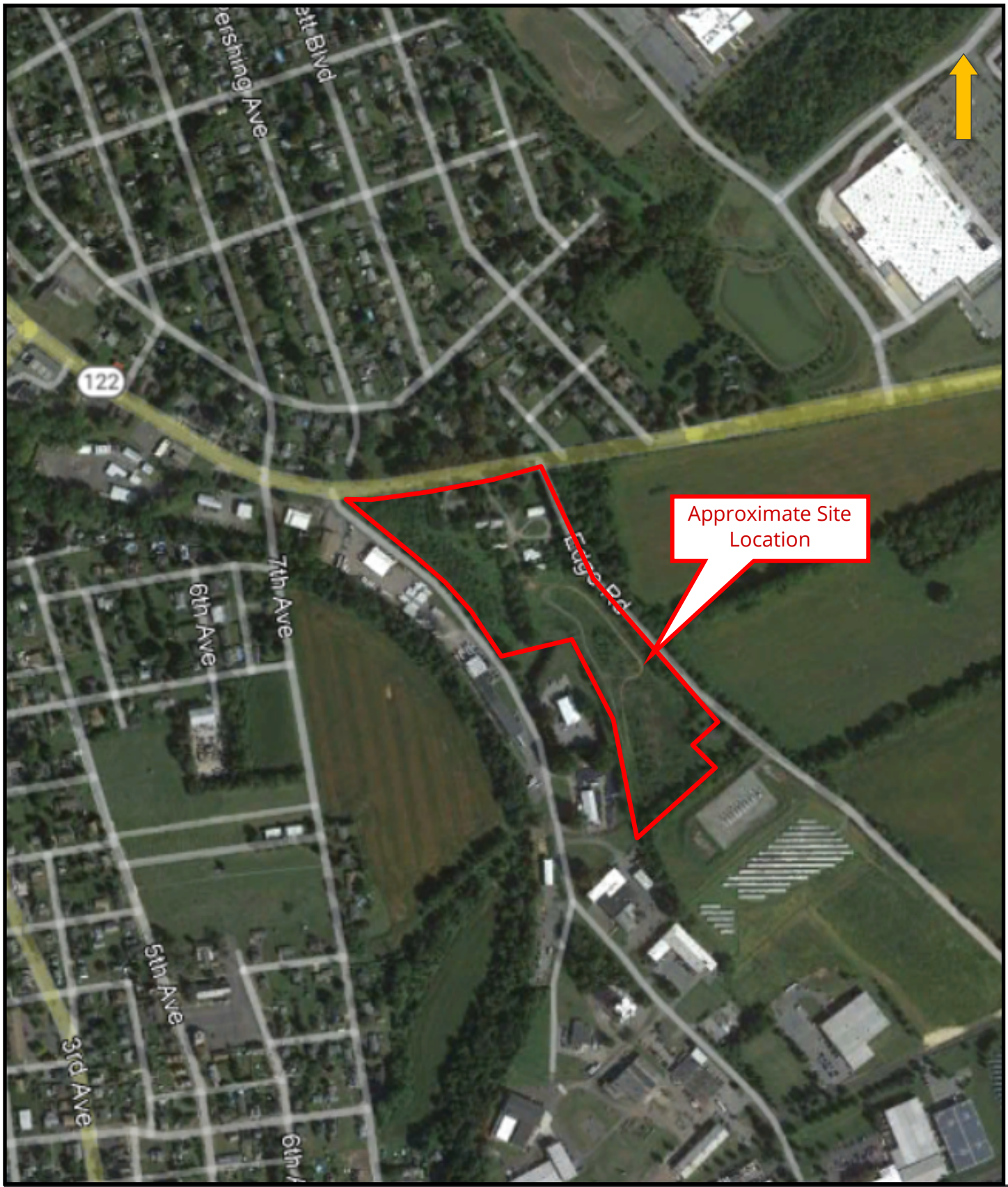
- NJDEP Landscape Project Map
- Groundwater Recharge Map
- HUC 11,14 & C1 Waters Map



Colliers Engineering & Design **Clinton Office** 53 Frontage Road Suite 110 Hampton, New Jersey 08827 T: 908 238 0900 F: 908 238 0901	Municipal Tax Map Block 100, Lots 1, 1.08 and 1.09 Borough of Alpha, Warren County, New Jersey Source: Borough of Alpha Tax Maps Sheet 8	Scale: Not to Scale Date: March 1, 2022 CED Project No. 19004898B



Colliers Engineering & Design **Clinton Office** 53 Frontage Road Suite 110 Hampton, New Jersey 08827 T: 908 238 0900 F: 908 238 0901	USGS Map Block 100, Lots 1, 1.08 and 1.09 Borough of Alpha, Warren County, New Jersey Source: U.S. Geological Survey	Scale: Not to Scale Date: March 1, 2022 CED Project No. 19004898B



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Aerial Map

Block 100, Lots 1, 1.08 and 1.09

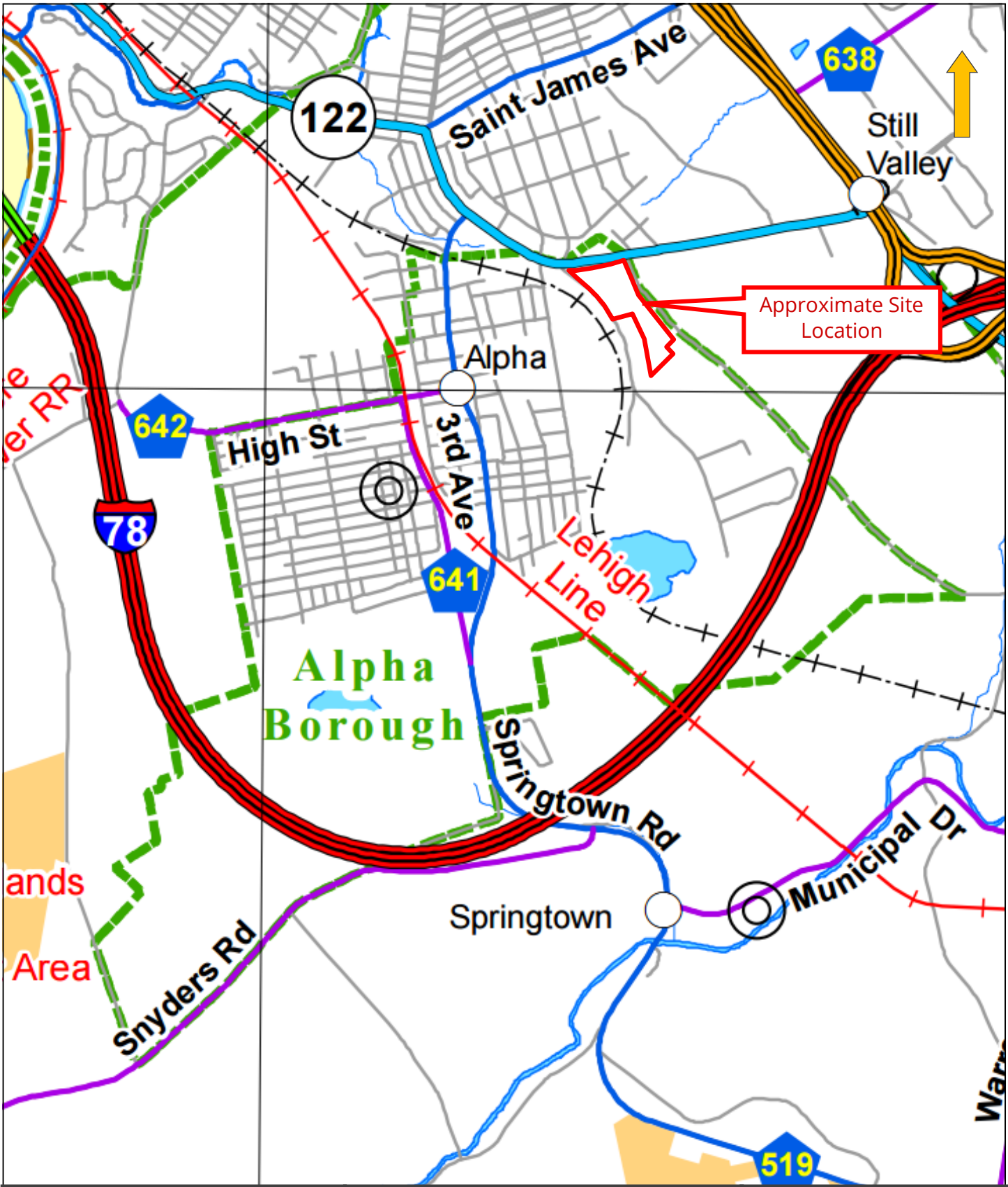
Borough of Alpha, Warren County, New Jersey

Source: Google Earth

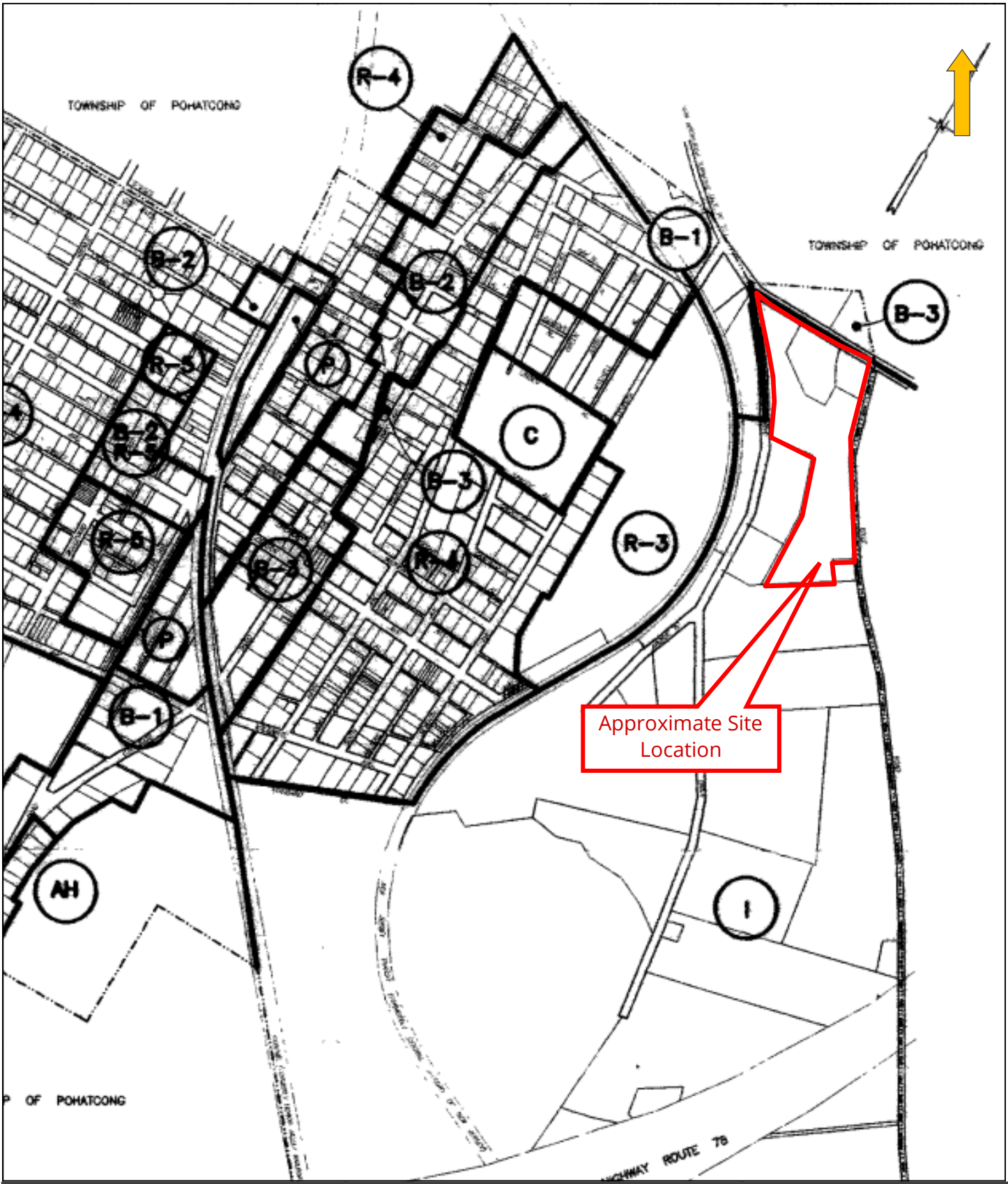
Scale: Not to Scale

Date: March 1, 2022

CED Project No. 19004898B



Colliers Engineering & Design **Clinton Office** 53 Frontage Road Suite 110 Hampton, New Jersey 08827 T: 908 238 0900 F: 908 238 0901	County Road Map Block 100, Lots 1, 1.08 and 1.09 Borough of Alpha, Warren County, New Jersey Source: NJDOT—Warren County	Scale: Not to Scale Date: March 1, 2022 CED Project No. 19004898B



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Zoning Map

Block 100, Lots 1, 1.08 and 1.09

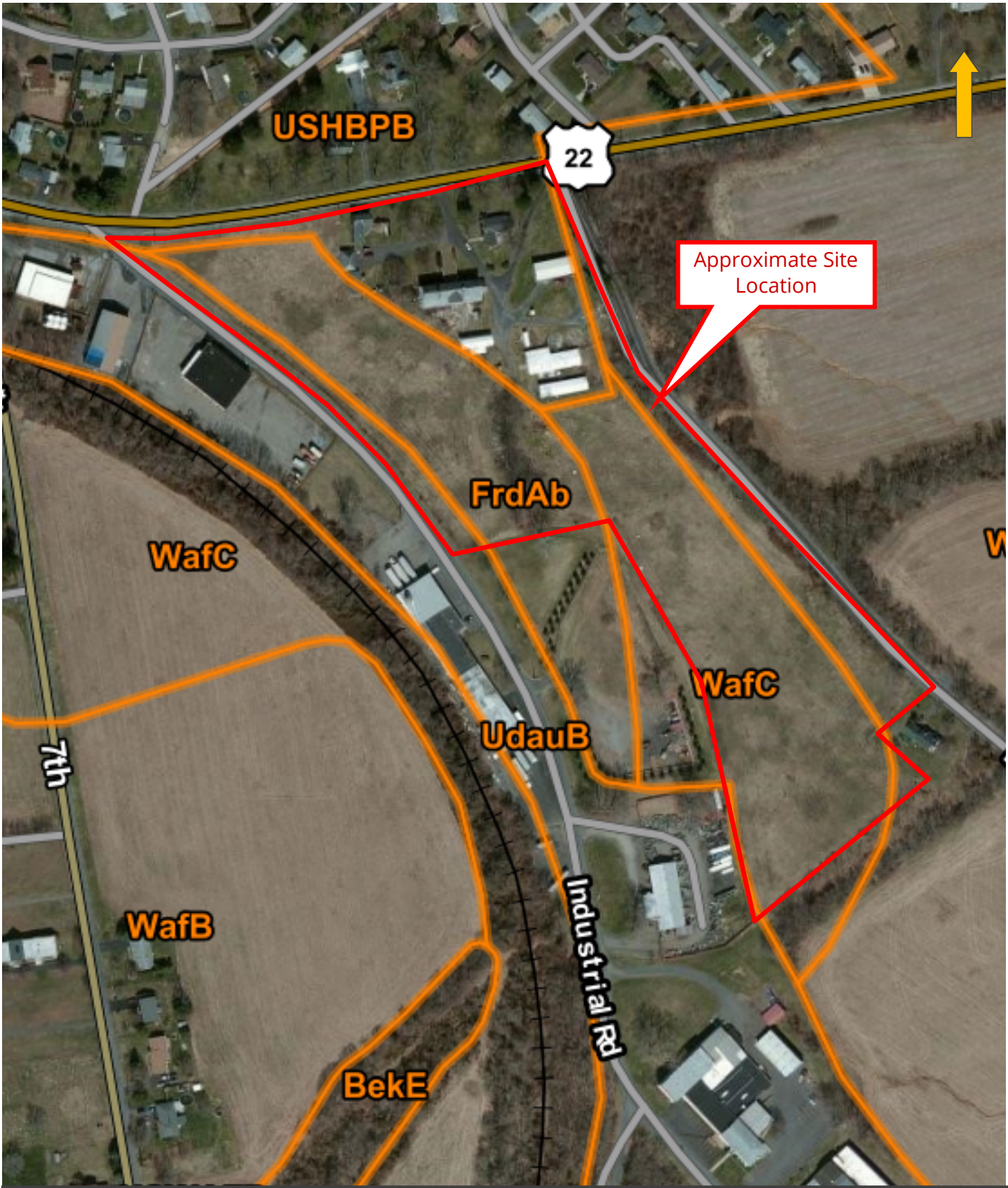
Borough of Alpha, Warren County, New Jersey

Source: Borough of Alpha - Zoning Map

Scale: Not to Scale

Date: March 1, 2022

CED Project No. 19004898B



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Soil Survey Map

Block 100, Lots 1, 1.08 and 1.09

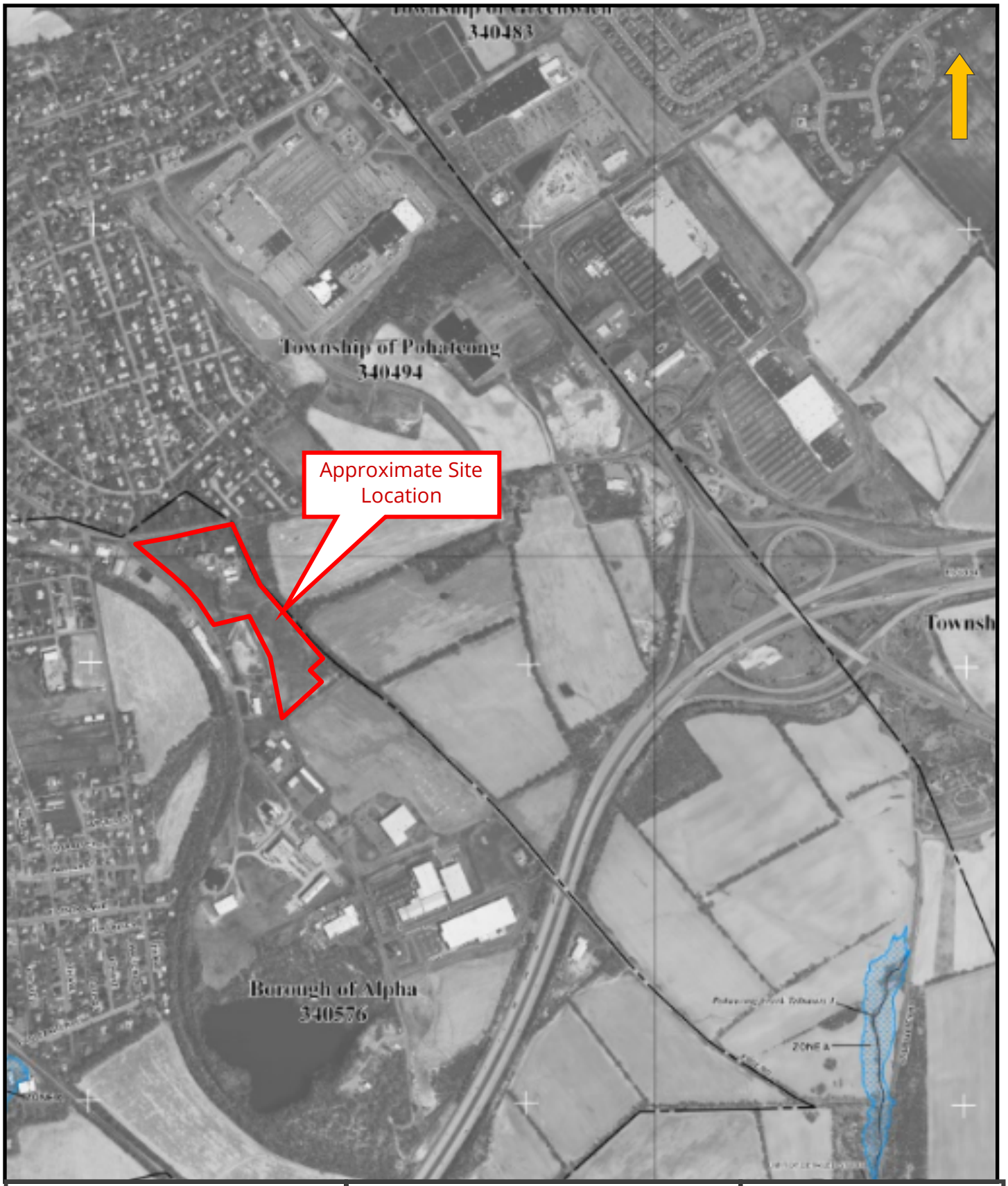
Borough of Alpha, Warren County, New Jersey

Source: Web Soil Survey

Scale: Not to Scale

Date: March 1, 2022

CED Project No. 21000693A



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FEMA FIRM Map

Block 100, Lots 1, 1.08 and 1.09

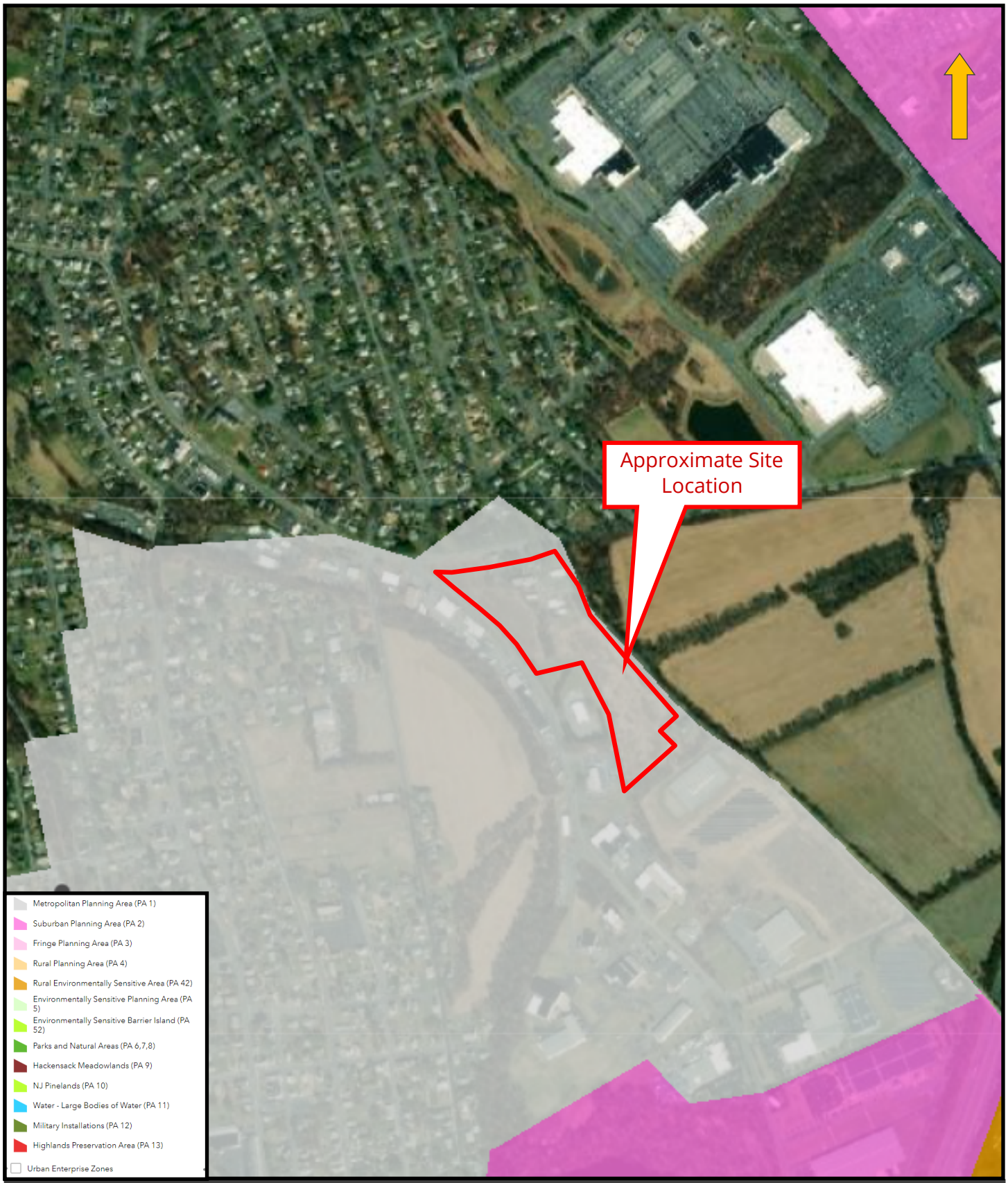
Borough of Alpha, Warren County, New Jersey

Source: FIRM Map No. 34041C0292E dated Effective 9/29/11

Scale: Not to Scale

Date: March 1, 2022

CED Project No. 21000693A



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State Planning Map

Block 100, Lots 1, 1.08 and 1.09

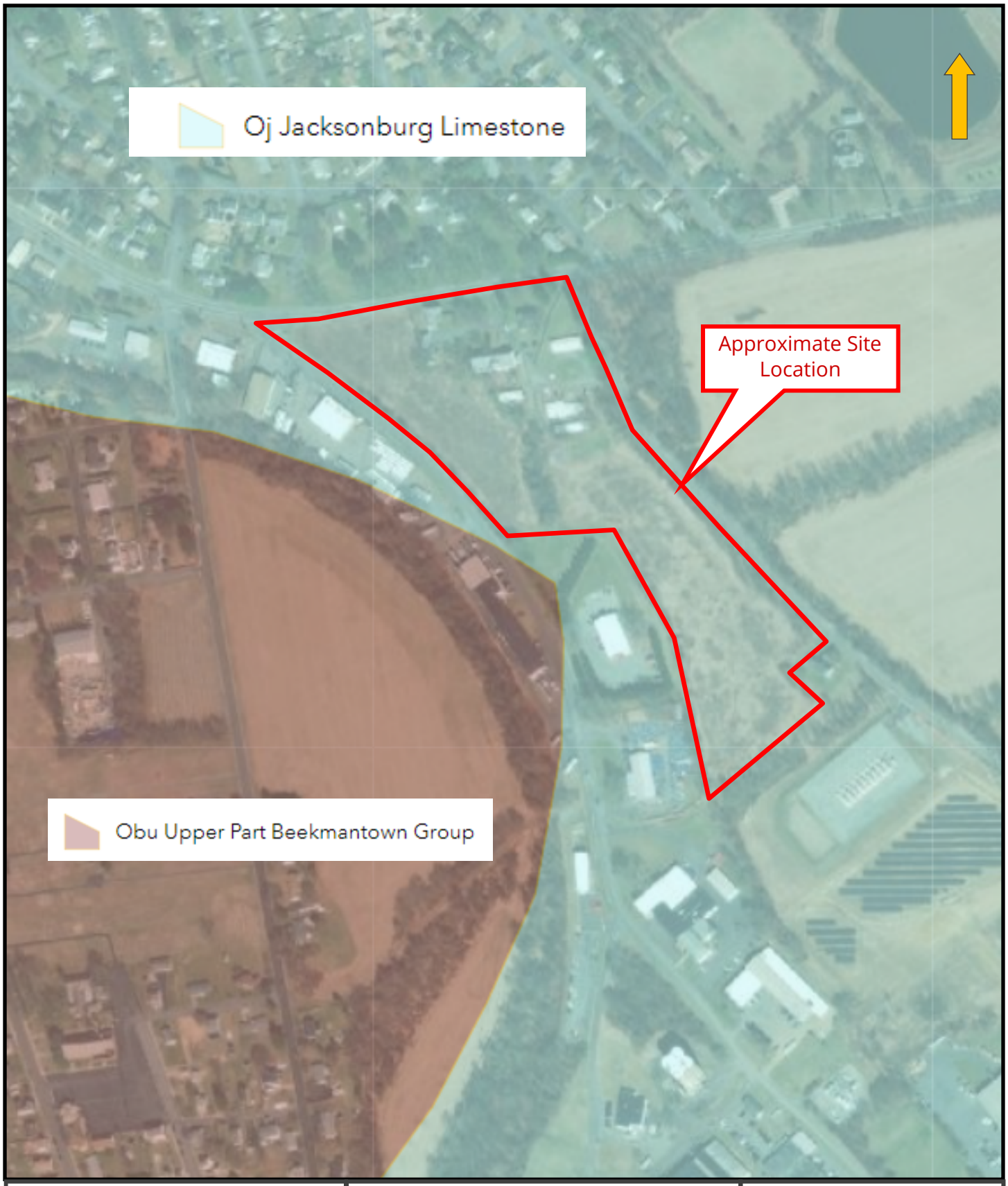
Borough of Alpha, Warren County, New Jersey

Source: NJ –GeoWeb

Scale: Not to Scale

Date: March 1, 2022

CED Project No. 21000693A



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Bedrock Formation Map

Block 100, Lots 1, 1.08 and 1.09

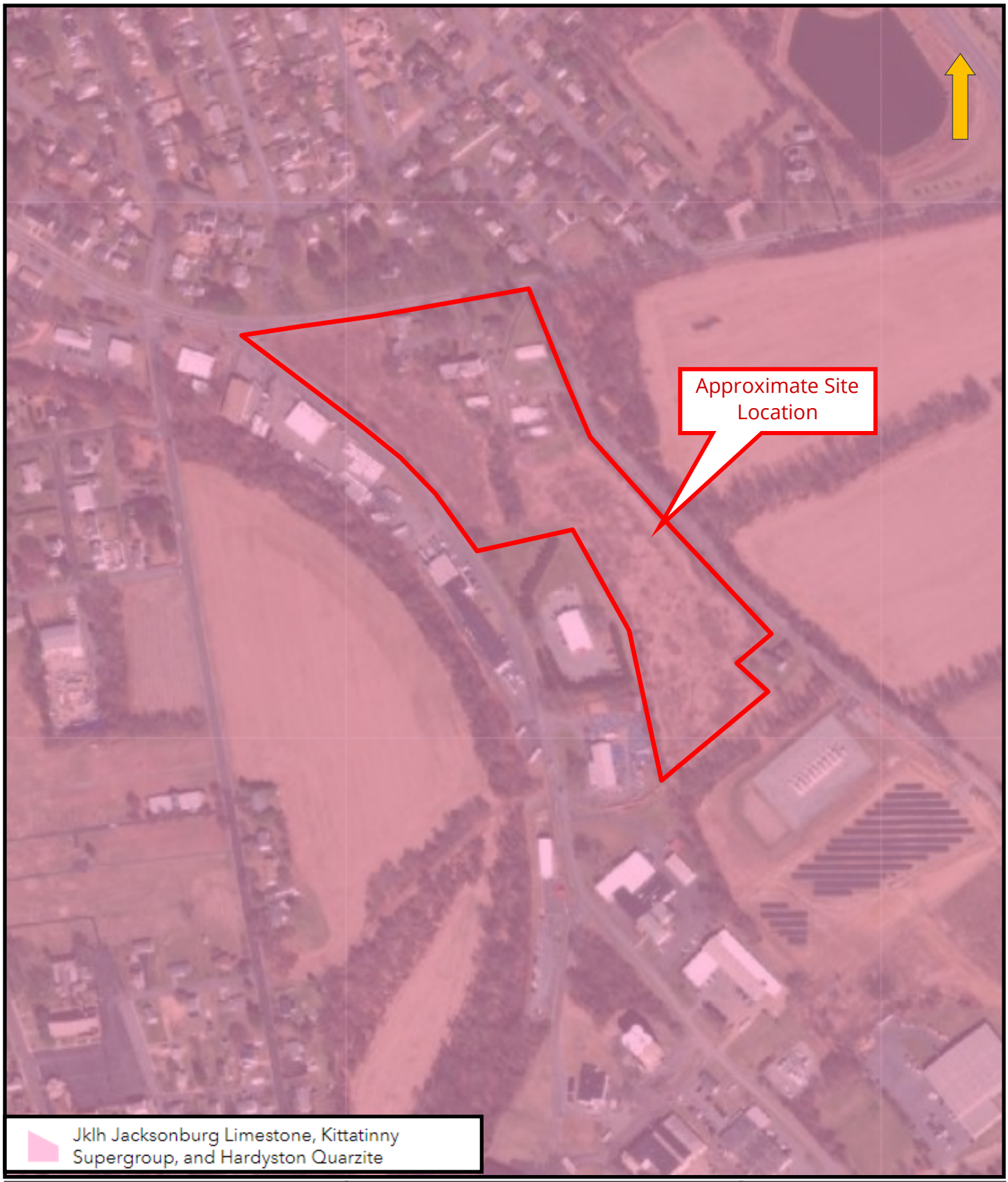
Borough of Alpha, Warren County, New Jersey

Source: NJ-GeoWeb

Scale: Not to Scale

Date: March 1, 2022

CED Project No. 21000693A



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Bedrock Aquifer Map

Block 100, Lots 1, 1.08 and 1.09

Borough of Alpha, Warren County, New Jersey

Source: NJ-GeoWeb

Scale: Not to Scale

Date: March 1, 2022

CED Project No. 21000693A

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Wetlands and Streams Map

Block 100, Lots 1, 1.08 and 1.09

Borough of Alpha, Warren County, New Jersey

Source: NJ-GeoWeb

Scale: Not to Scale

Date: March 1, 2022

CED Project No. 21000693A

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Historic Preservation Map

Block 100, Lots 1, 1.08 and 1.09

Borough of Alpha, Warren County, New Jersey

Source: NJ-GeoWeb

Scale: Not to Scale

Date: March 1, 2022

CED Project No. 21000693A

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Species Based Habitat Map

Block 100, Lots 1, 1.08 and 1.09

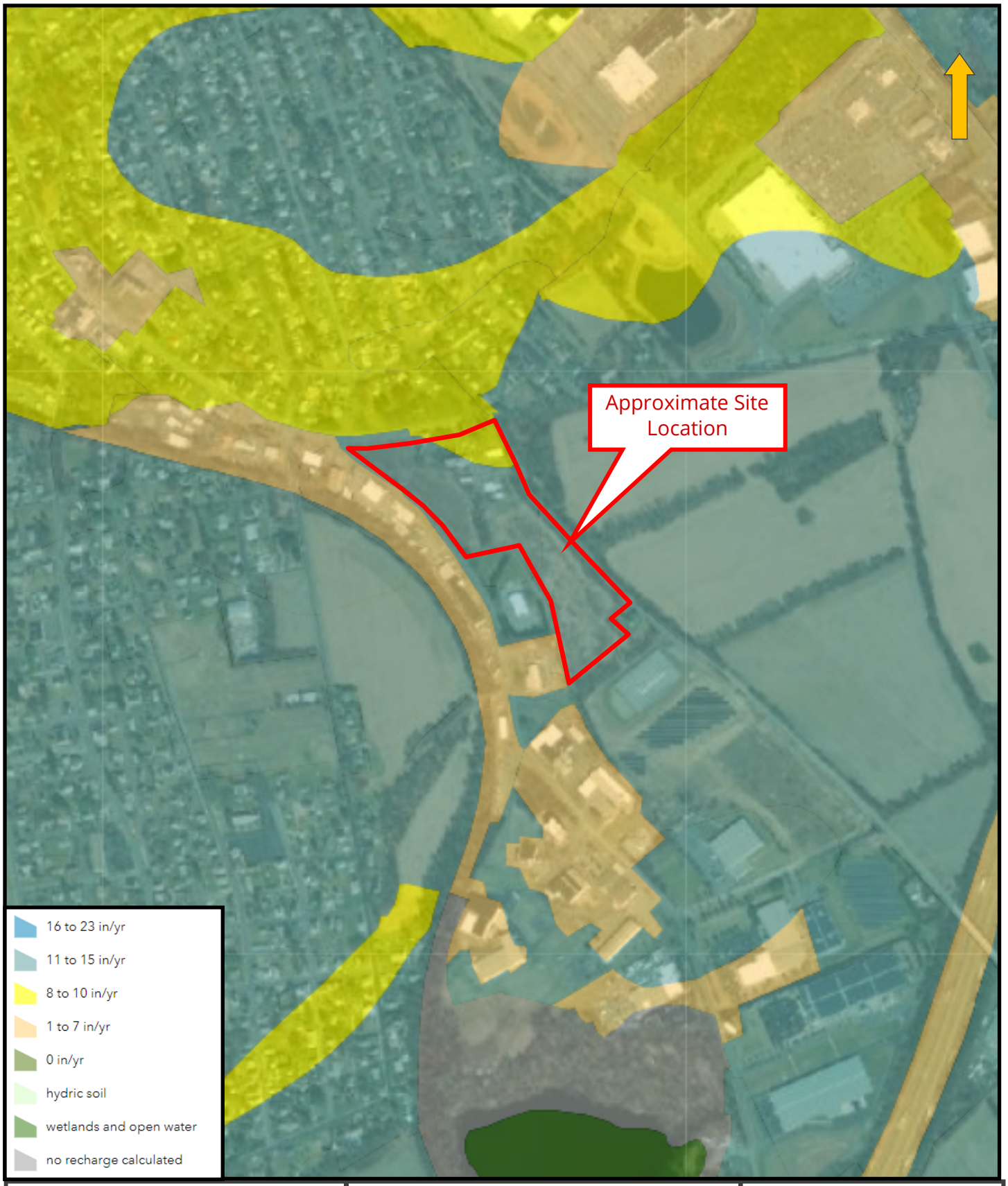
Borough of Alpha, Warren County, New Jersey

Source: NJ-GeoWeb

Scale: Not to Scale

Date: March 1, 2022

CED Project No. 21000693A



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Ground Water Recharge Map

Block 100, Lots 1, 1.08 and 1.09

Borough of Alpha, Warren County, New Jersey

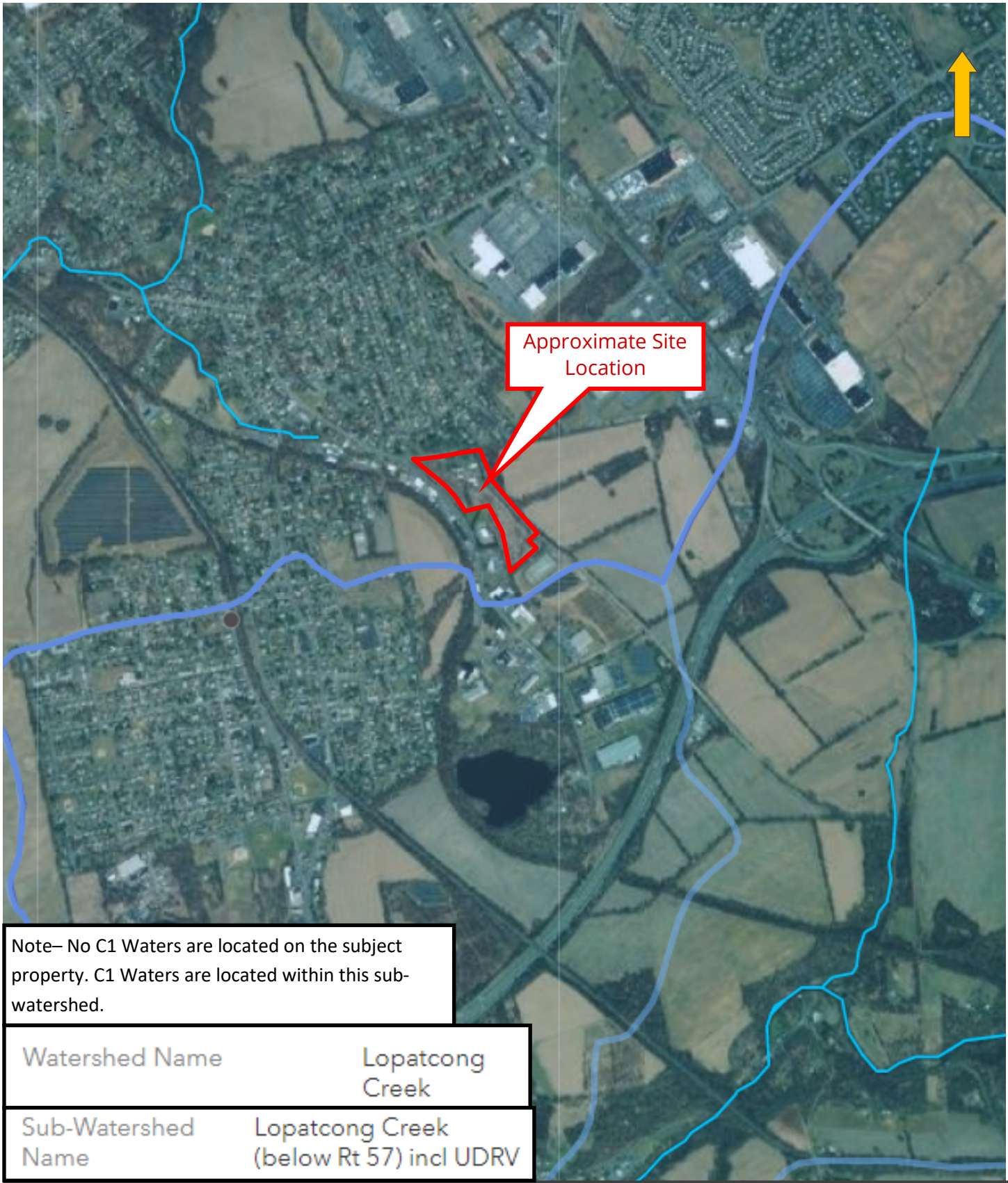
NJ

Source: NJ-GeoWeb

Scale: Not to Scale

Date: March 1, 2022

CED Project No. 21000693A



Note– No C1 Waters are located on the subject property. C1 Waters are located within this sub-watershed.

Watershed Name	Lopatcong Creek
Sub-Watershed Name	Lopatcong Creek (below Rt 57) incl UDRV

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HUC 11, 14 & C1 Waters Map

Block 100, Lots 1 and 1.09

Borough of Alpha, Warren County, New Jersey

Source: NJ-GeoWeb

Scale: Not to Scale

Date: March 1, 2022

CED Project No. 21000693A

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Appendix C | Site Photographs

Site Photographs

Alpha Warehouse

Block 100, Lots 1 and 1.09

Borough of Alpha, Warren County, New Jersey

Project No. 19004898B

Photo 1: Overview of the subject property.

Site Photographs

Alpha Warehouse

Block 100, Lots 1 and 1.09

Borough of Alpha, Warren County, New Jersey

Project No. 19004898B

Photo 2: Overview of the subject property.

Site Photographs

Alpha Warehouse

Block 100, Lots 1 and 1.09

Borough of Alpha, Warren County, New Jersey

Project No. 19004898B

Photo 3: Overview of the subject property.

Site Photographs

Alpha Warehouse

Block 100, Lots 1 and 1.09

Borough of Alpha, Warren County, New Jersey

Project No. 19004898B

Photo 4: Overview of the subject property.

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Appendix D | Letter of Interpretation Presence/Absence Determination

State of New Jersey
DEPARTMENT OF ENVIRONMENTAL PROTECTION
Division of Land Use Regulation
P.O. Box 439, Trenton, New Jersey 08625
FAX # (609) 777-3656
Web Site: www.state.nj.us/dep/landuse

JON S. CORZINE
Governor

LISA P. JACKSON
Commissioner

JUN 19 2006

Bryan J. Kondikoff
RETTEW Associates, Inc.
3020 Columbia Ave.
Lancaster, PA 17602

RE: **Letter of Interpretation-Presence/Absence determination**
File No.: 2102-06-0001.1 (FWW 060001)
Applicant: Bob Cahill, Cahill Properties, LLC
Block: 100 Lots: 1 and 1.09
Alpha Borough, Warren County

Dear Mr. Kondikoff:

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, 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 by the Division's staff on June 6, 2006, the Division of Land Use Regulation has determined that freshwater wetlands and waters are not present on the referenced property. In addition, the Department has determined that no part of the above referenced property occurs within a transition area or buffer as designated in N.J.A.C. 7:7A 2.5(d) and (e).

Pursuant to the Freshwater Wetlands Protection Act Rules (N.J.A.C. 7:7A), you are entitled to rely upon this jurisdictional determination for a period of five years from the date of this letter. This letter in no way legalizes any fill, which may have been placed, or other regulated activities, which may have been conducted on this site. This determination does not affect your responsibility to obtain any State, Federal, county or municipal permits, which may be required.

In accordance with N.J.A.C. 7:7A-1.7, any person who is aggrieved by this decision may request a hearing within 30 days of the decision date by writing to: New Jersey Department of Environmental Protection, Office of Legal Affairs, Attention: Adjudicatory Hearing Requests, P.O. Box 402, Trenton, NJ 08625-0402. This request must include a completed copy of the Administrative Hearing Request Checklist.

Please contact Becky Estep of our staff at (609) 777-0454 should you have any questions regarding this letter. Be sure to indicate the Program's file number in all communication.

Sincerely,

Lou Cattuna, Section Chief
Bureau of Inland Regulation

c: Alpha Borough Municipal Clerk
Alpha Borough Construction Official
Applicant

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

CHRIS CHRISTIE
Governor

KIM GUADAGNO
Lt. Governor

BOB MARTIN
Commissioner

JUN 2 8 2011

Lawrence Bozik
Dresdner Robin
7 Doig Rd.
Wayne, NJ 07470

RE: Authorization for Freshwater Wetlands Letter of Interpretation - Extension
File No.: 2102-06-0001.1
Activity Number: FWW- 110001
Applicant: CAHILL BOB, CAHILL PROPERTIES LLC
Block 100 , Lots: 1 and 1.09
Alpha Borough, Warren County

Dear Mr. Bozik:

The New Jersey Department of Environmental Protection issued a Letter of Interpretation for the above referenced site on June 19, 2006. You have requested that the Letter of Interpretation be extended in accordance with the requirements at N.J.A.C. 7:7A-3.6.

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 by the staff of the Division on June 6, 2006, the Division of Land Use Regulation has determined that freshwater wetlands and waters are **not present** on the referenced property. In addition, the Department has determined that no part of the above referenced property occurs within a transition area or buffer as designated in N.J.A.C. 7:7A-2.4.

Therefore the term of the original Letter of Interpretation is hereby extended to June 19 2016, which is five years from the expiration of the original Letter of Interpretation.

This letter in no way legalizes any fill, which may have been placed, or other regulated activities, which may have been conducted on this site. This determination does not affect your responsibility to obtain any State, Federal, county or municipal permits, which may be required.

In accordance with N.J.A.C. 7:7A-1.7, any person who is aggrieved by this decision may request a hearing within 30 days after notice of the decision is published in the DEP Bulletin by writing to: New Jersey Department of Environmental Protection, Office of Legal Affairs, Attention: Adjudicatory Hearing Requests, 401 East State Street, P.O. Box 402, Trenton, NJ 08625-0402. This request must include a completed copy of the Administrative Hearing Request Checklist which can be downloaded at www.state.nj.us/dep/landuse/forms. The DEP bulletin is available through the Department's website at www.state.nj.us/dep/bulletin.

Please contact Danielle Mullen of our staff at (609) 777-0454 should you have any questions regarding this letter. Be sure to indicate the Department's file number in all communication.

Sincerely,

Lou Cattuna, Supervisor
Division of Land Use Regulation

c: Borough Clerk
Borough Construction Official
Applicant

Colliers
Engineering
& Design

Appendix E | Natural Heritage Program

State of New Jersey
DEPARTMENT OF ENVIRONMENTAL PROTECTION
Division of Parks & Forestry
State Forestry Service
Mail Code 501-04
Office of Natural Lands Management – Natural Heritage Program
P.O. Box 420
Trenton, NJ 08625-0420
Tel. (609) 984-1339 Fax. (609) 984-1427

CHRIS CHRISTIE
Governor

KIM GUADAGNO
Lt. Governor

BOB MARTIN
Commissioner

January 5, 2017

Chloe S. Swansen
Maser Consulting P.A.
555 Hudson Valley Road, Suite 101
New Windsor, NY 12553

Re: Block 100, Lots 1 & 1.09, Borough of Alpha, NJ - 16001663A
Block(s) - 100, Lot(s) - 1 & 1.09
Alpha Borough, Warren County

Dear Ms. Swansen:

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

Searches of the Natural Heritage Database and the Landscape Project (Version 3.1) are based on a representation of the boundaries of your project site in our Geographic Information System (GIS). We make every effort to accurately transfer your project bounds from the topographic map(s) submitted with the Natural Heritage Data Request Form into our Geographic Information System. We do not typically verify that your project bounds are accurate, or check them against other sources.

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

This report does not include information concerning known Northern Long-eared Bat hibernacula and maternity roost trees protected under the provisions of the U.S. Fish & Wildlife Service's 4(d) Rule. You must contact the U.S. Fish & Wildlife Service, New Jersey Field Office, for additional information concerning the location of these features, or visit their website at: http://www.fws.gov/northeast/njfieldoffice/endangered/consultation.html.

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

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

NHP File No. 17-4007562-11171

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

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

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

Status and rank codes used in the tables and lists are defined in EXPLANATION OF CODES USED IN NATURAL HERITAGE REPORTS, which can be downloaded from http://www.state.nj.us/dep/parksandforests/natural/heritage/nhpcodes_2010.pdf.

If you have questions concerning the wildlife records or wildlife species mentioned in this response, we recommend that you visit the interactive NJ-GeoWeb website at the following URL, http://www.state.nj.us/dep/gis/geowebsplash.htm or contact the Division of Fish and Wildlife, Endangered and Nongame Species Program at (609) 292-9400.

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

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

Sincerely,

Robert J. Cartica
Administrator

c: NHP File No. 17-4007562-11171

Mail Code 501-04 Department of Environmental Protection State Forestry Service Office of Natural Lands Management P.O. Box 420 Trenton, New Jersey 08625-0420 Tel. (609) 984-1339 Fax. (609) 984-1427	**Invoice**

	Date	Invoice #
	1/5/2017	11171

Bill to:	Make check payable to:
Maser Consulting P.A. 555 Hudson Valley Road, Suite 101 New Windsor, NY 12553	***Office of Natural Lands Management*** And forward with a copy of this statement to: **Mail Code 501-04** **Office of Natural Lands Management** **P.O. Box 420 Trenton, New Jersey 08625-0420**

Quantity (hrs.)	Description	Rate (per hr.)	Amount
1	Natural Heritage Database search for locational information of rare species and ecological communities. Project: 17-4007562-11171	$ 70.00	$ 70.00
Chloe S. Swansen Project Name: Block 100, Lots 1 & 1.09, Borough of Alpha, NJ - 16001663A		**Total**	$ 70.00

NHP File No. 17-4007562-11171

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

Report Name	Included	Number of Pages
1. Possibly on Project Site Based on Search of Natural Heritage Database: Rare Plant Species and Ecological Communities Currently Recorded in the New Jersey Natural Heritage Database	No	0 pages included
2. Natural Heritage Priority Sites On Site	No	0 pages included
3. Rare Wildlife Species or Wildlife Habitat on the Project Site Based on Search of Landscape Project 3.1 Species Based Patches	No	0 pages included
4. Vernal Pool Habitat on the Project Site Based on Search of Landscape Project 3.1	No	0 pages included
5. Rare Wildlife Species or Wildlife Habitat on the Project Site Based on Search of Landscape Project 3.1 Stream Habitat File	No	0 pages included
6. Other Animal Species On the Project Site Based on Additional Species Tracked by Endangered and Nongame Species Program	No	0 pages included

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

Report Name	Included	Number of Pages
1. Immediate Vicinity of the Project Site Based on Search of Natural Heritage Database: Rare Plant Species and Ecological Communities Currently Recorded in the New Jersey Natural Heritage Database	Yes	1 page(s) included
2. Natural Heritage Priority Sites within the Immediate Vicinity	No	0 pages included
3. Rare Wildlife Species or Wildlife Habitat Within the Immediate Vicinity of the Project Site Based on Search of Landscape Project 3.1 Species Based Patches	Yes	1 page(s) included
4. Vernal Pool Habitat In the Immediate Vicinity of Project Site Based on Search of Landscape Project 3.1	No	0 pages included
5. Rare Wildlife Species or Wildlife Habitat In the Immediate Vicinity of the Project Site Based on Search of Landscape Project 3.1 Stream Habitat File	No	0 pages included
6. Other Animal Species In the Immediate Vicinity of the Project Site Based on Additional Species Tracked by Endangered and Nongame Species Program	No	0 pages included

Immediate Vicinity of the Project Site
Based on Search of Natural Heritage Database
Rare Plant Species and Ecological Communities Currently Recorded in the New Jersey Natural Heritage Database

Scientific Name	Common Name	Federal Protection Status	State Protection Status	Regional Status	Grank	Srank	Identified	Last Observed	Location
Vascular Plants									
Agastache nepetoides	Yellow Giant-hyssop			HL	G5	S2	Y - Yes	1956-08-07	1 MILE NORTH OF SPRINGTOWN.

Total number of records: 1

Rare Wildlife Species or Wildlife Habitat Within the Immediate Vicinity of the Project Site Based on Search of Landscape Project 3.1 Species Based Patches

Class	Common Name	Scientific Name	Feature Type	Rank	Federal Protection Status	State Protection Status	Grank	Srank
Aves								
	Cooper's Hawk	Accipiter cooperii	Breeding Sighting	2	NA	Special Concern	G5	S3B,S4N

Table 3: Within 1 Mile for FHACA Searches (6 possible reports)

Report Name	Included	Number of Pages
1. Rare Plant Species Occurrences Covered by the Flood Hazard Area Control Act Rule Within One Mile of the Project Site Based on Search of Natural Heritage Database	No	0 pages included
2. Natural Heritage Priority Sites within 1 mile	No	0 pages included
3. Rare Wildlife Species or Wildlife Habitat Within One Mile of the Project Site Based on Search of Landscape Project 3.1 Species Based Patches	Yes	1 page(s) included
4. Vernal Pool Habitat Within One Mile of the Project Site Based on Search of Landscape Project 3.1	Yes	1 page(s) included
5. Rare Wildlife Species or Wildlife Habitat Within One Mile of the Project Site Based on Search of Landscape Project 3.1 Stream Habitat File	No	0 pages included
6. Other Animal Species Within One Mile of the Project Site Based on Additional Species Tracked by Endangered and Nongame Species Program	No	0 pages included

Rare Wildlife Species or Wildlife Habitat Within One Mile of the Project Site Based on Search of Landscape Project 3.1 Species Based Patches

Class	Common Name	Scientific Name	Feature Type	Rank	Federal Protection Status	State Protection Status	Grank	Srank
Aves								
	Bald Eagle	Haliaeetus leucocephalus	Foraging	4	NA	State Endangered	G5	S1B,S2N
	Bobolink	Dolichonyx oryzivorus	Breeding Sighting	3	NA	State Threatened	G5	S2B,S3N
	Cooper's Hawk	Accipiter cooperii	Breeding Sighting	2	NA	Special Concern	G5	S3B,S4N
	Northern Harrier	Circus cyaneus	Breeding Sighting	4	NA	State Endangered	G5	S1B,S3N
	Osprey	Pandion haliaetus	Foraging	3	NA	State Threatened	G5	S2B
	Red-headed Woodpecker	Melanerpes erythrocephalus	Breeding Sighting-Confirmed	3	NA	State Threatened	G5	S2B,S2N
	Savannah Sparrow	Passerculus sandwichensis	Breeding Sighting	3	NA	State Threatened	G5	S2B,S4N
	Upland Sandpiper	Bartramia longicauda	Breeding Sighting	4	NA	State Endangered	G5	S1B,S1N
	Vesper Sparrow	Pooecetes gramineus	Breeding Sighting	4	NA	State Endangered	G5	S1B,S3N
	Wood Thrush	Hylocichla mustelina	Breeding Sighting	2	NA	Special Concern	G5	S3B

Vernal Pool Habitat Within One Mile of the Project Site Based on Search of Landscape Project 3.1

Vernal Pool Habitat Type	Vernal Pool Habitat ID
Potential vernal habitat area	2243

Total number of records: 1

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