ENGINEERING DESIGN ASSOCIATES, P.A.
ENGINEERS ENVIRONMENTAL PLANNERS LANDSCAPE ARCHITECTS

# ENVIRONMENTAL ASSESSMENT

## PROPOSED CONTRACTOR BUILDING

## Block 260, Lots 4.04 and 4.05

## Dennis Township, Cape May County

## Applicant: Ryan Development Group

**February 9, 2023**

**EDA # 9444**

**Cambridge Professional Offices**
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## 1.0 SUMMARY

### 1.1 Introduction

The proposed project entails the construction of a contractor building with office space and associated improvements. This Environmental Impact Assessment accompanies an application for major site plan approval from the Dennis Township Consolidated Land Use Board. This assessment consists of an environmental inventory and assessment of the project site and the project's impacts in accordance with the Dennis Township Zoning Ordinance, Section 185-41 Performance Standards, under item K "Environmental Assessment".

### 1.2 Site and Surrounding Areas Description

The project site is located along the eastern side of New Jersey State Highway (NJSH) Route 83 at the intersection of Ratcliffe Lane and Route 83. The site is designated as Block 260, Lots 4.04 and 4.05 as shown on the Dennis Township Tax Map, sheet number 28. The total area of the project site is 1.966 acres or 85,638,96 square feet. Lot 4.04 consists of .924 acre and Lot 4.05 is 1.042 acres. The property is wooded and vacant. The location of the site is shown on the USGS Quadrangle map and an aerial photograph. Site mapping is provided in Appendix A.

The surrounding development consists of commercial uses located to the southeast of the site, and across Route 83 to the west. Residential properties are located to the northwest, and the property adjacent to the site to the north is vacant and wooded.

## 2.0 PROJECT DESCRIPTION

### 2.1 Development Description

The details of the proposed project are provided on plans prepared by Engineering Design Associates (EDA) entitled "Site Plan for Ryan Development Group" consisting of nine sheets:

Sheet 1 of 9 – Cover Sheet
Sheet 2 of 9 – Existing Conditions/Demolition Plan
Sheet 3 of 9 – Major Site Plan
Sheet 4 of 9 – Grading, Drainage & SESC Plan
Sheet 5 of 9 – Landscaping and Lighting Plan
Sheet 6 of 9 – Engineering Details I
Sheet 7 of 9 – Engineering Details II
Sheet 8 of 9 – Soil Erosion & Sediment control Notes
Sheet 9 of 9 – NJDOT Traffic Control Plan

The proposed project entails the construction of an11,900 square foot contractor building separated into five, 2,380 square foot workshops with associated office space in each workshop area. The project also includes the construction of asphalt and gravel parking areas and two infiltration basins. The project will be serviced by an on-site well and septic system. Access to the site is from Route 83. The northeastern portion of the property will be maintained as an open space buffer and will remain vegetated. Extensive landscaping is provided throughout the project site.

### 2.2 Zoning

The property is within the Clermont Village Center District (CVC), the purpose of which is to promote a mixture of commercial, office and residential land uses within a compact, pedestrian friendly village. The zoning map is provided on sheet 1 of the referenced site plan prepared by EDA. The proposed project is a permitted use within the CVC District.

## 3.0 ENVIRONMENTAL ASSESSMENT

### 3.1 Geology

The site lies within the Outer Coastal Plain Physiographic Province which consists of unconsolidated tertiary deposits of sands, silt, and gravel. The soils are sandy with less clay than the inner coastal plain and are characterized by relatively flat lowlands formed of metamorphic, and igneous rocks that are interbedded with layers formed by oceanic (marine) deposition. According to the New Jersey Department of Environmental Protection (NJDEP) Geographic Information Systems (GIS) data layer entitled "Bedrock Geology" the site is underlain by the Cohansey Formation made up of quartz sand, medium-to coarse grained.

Disturbance will occur from site grading for the drainage basins, parking areas and the proposed septic system. The underlying soils will be modified, but there are no geologic limitations related to site development.

### 3.2 Soils

The U.S. Department of Agriculture Soil Survey Geographic Database (SSURGO) maps the property as being comprised of Downer Loamy Sand, 0 to 5 percent slopes (DocBO). This soil type is located on knolls and low hills and is characterized as well drained with no frequency of ponding or flooding.

EDA analyzed the soil characteristics of the site in the areas of the proposed drainage basins and septic system. Six test pits were dug, the locations of which are shown on sheet 2 of the site plan.

The results of the soil analyses are provided on sheet 7 of the site plan. Depths to the seasonal high table range from 30 inches to 53 inches. The soil is made up of sandy loam to approximately three feet, and sand from approximately eight to ten feet. The depth to the observed groundwater table at the time of the field work in November ranged from 43 inches to 72 inches.

The proposed project will result in the displacement of soils through grading, subsurface utility installation, stormwater basin construction, and associated earth disturbances. As specified on the site plan, restrictive soils will be removed and replaced with K-4 sand material as directed by the design engineer.

The individual subsurface sewage disposal system will be designed in accordance with NJDEP Standards for Individual Subsurface Sewage Disposal Systems (N.J.A.C. 7:9A) requirements. Therefore, the septic disposal system will be properly located, designed, and installed to protect potable water supplies.

The project will include soil stabilization measures necessary to prevent erosion through the adherence to an approved Soil Erosion and Sediment Control Plan. As shown on sheet 8 of the Site Plan, measures to be employed include silt fencing placed around the limit of disturbance, stabilization of stockpiled soil, stabilized construction entrances, topsoil, seeding and soil testing for compaction. Details of the proposed soil erosion and sediment control measures are provided on sheet 12 of the Site Plan.

### 3.3 Surface and Subsurface Water

No streams or surface water bodies are located on or proximate to the subject site. The closest stream is the Sluice Creek tributary located approximately 1,000 feet to the west of the property. Wetlands are not located on or near the site.

The results of the soil analyses performed by EDA are provided on sheet 7 of the Site Plan. Depths to the seasonal high table range from 30 inches to 53 inches. The soil is made up of sandy loam to approximately three feet, and sand from approximately eight to ten feet. The depth to the observed groundwater table at the time of the field work in November ranged from 43 inches to 72 inches.

The project will require clearing and the impervious surface coverage will increase to 35.5 percent. The project will be serviced by an onsite well and septic system.

The stormwater management system was designed in accordance with the New Jersey Department of Environmental Protection (NJDEP) Stormwater Management regulations, N.J.A.C. 7:8. The drainage design follows best management practices (BMPs) as required by the NJDEP. Stormwater will be directed to the infiltration basins which will treat water quality and recharge back to the groundwater table aquifer. The stormwater design will minimize pollutants in stormwater runoff and prevent an increase in nonpoint pollution. Details of the design are provided on sheet 4 of the Site Plan. The septic system will be designed to protect potable water in accordance with NJDEP Chapter 9A standards. The installation of soil conservation measures will prevent physical damage and pollution of surface water areas.

Since the project has been designed to conform to stormwater, septic, and soil erosion requirements, it will not have a negative impact on surface or subsurface water quality.

### 3.4 Topography

As shown on the Existing Conditions/Demo Plan, sheet 2 of 9 of the Site Plan prepared by EDA, the site elevations range from 16 on the northwestern portion of the site to elevation 13 on the southeastern portion of the property. The topography is relatively flat, and the land slopes gradually to the south. Excavation and grading will be required for the building foundation, stormwater management basins and parking.

Grade changes will result in disturbance of surface and subsurface soils. Best management practices for soil erosion and sediment control will be followed to ensure that negative effects of exposed and displaced soil will not occur.

### 3.5 Wetlands

As shown on the NJDEP wetlands mapping of the property in Appendix A, freshwater wetlands are not located on or adjacent to the site.

### 3.6 Floodplains

As shown on the FEMA map provided in Appendix A, the site is not located within a flood hazard area.

### 3.7 Vegetation

The entire site consists of an oak-pine forest comprised of eastern red cedar (*Juniperus virginiana,*), white oak (*Quercus alba*), black oak (*Quercus velutina,*), and pitch pine (*Pinus rigida*).

Site clearing will be necessary to accommodate for the site improvements. Vegetation on the northwesterly side of the site will remain and an open space, vegetated buffer area on the northeastern portion of the site will be preserved.

The site will be ornamentally landscaped with native and varietal species in accordance with the planting schedule on sheet 5 of the Site Plan which also includes details and locations of all landscaping and proposed tree planting. All non-impervious areas will be seeded with a seed mix approved by the Cape Atlantic Soil Conservation District.

### 3.8 Wildlife

The NJDEP Landscape Project (refer to Appendix A) maps the site as a potential habitat for the Pine Barrens treefrog (*Hyla andersonii*). According to information provided on the New Jersey Pinelands Commission website, the Pine Barrens treefrog typically occupies wet areas in pitch pine lowlands, intermittent streams and ponds, small pools, isolated ponds, and Atlantic white cedar swamps. Treefrogs prefer temporary, early successional pond-like habitats dominated by shrub and herbaceous vegetation.

The site does not contain any wetlands, ponded areas, isolated pools or streams, and is not dominated by shrub and herbaceous vegetation. The property is located along NJSH Route 83. Based on the site characteristics, it is not expected that the treefrog inhabits the site.

### 3.9 Air Quality

In this area of the state, air quality monitoring sites are located at Atlantic City for particulate matter (PM), ozone ($O_3$), and sulfur dioxide (SO2). It is expected that air quality in this area is good based on the low to moderate density and types of development surrounding the property. Existing sources of air contaminants surrounding the site would likely be emissions from vehicular traffic associated with Route 83.

Sources of air contaminants resulting from the proposed project would be temporary from heavy machinery and vehicular emissions during the construction phase, and emissions from vehicles associated with the facility during the post-construction phase. Air quality impacts are expected to be minimal and temporary during construction and will not exceed any federal or state air quality standard.

### 3.10 Noise

Contributors to existing noise levels in the area are primarily associated with the traffic from the adjacent roadway and surrounding commercial development.

During the construction phase of this project, noise levels will temporarily increase from heavy equipment, trucks, and construction activities. After construction is complete, increases in local noise levels with the operation of the facility will be from vehicles entering and exiting the property and normal property maintenance activities. The noise levels associated with the project are expected to be minimal and consistent with the existing surrounding development.

### 3.11 Cultural, Historic and Archaeological Resources

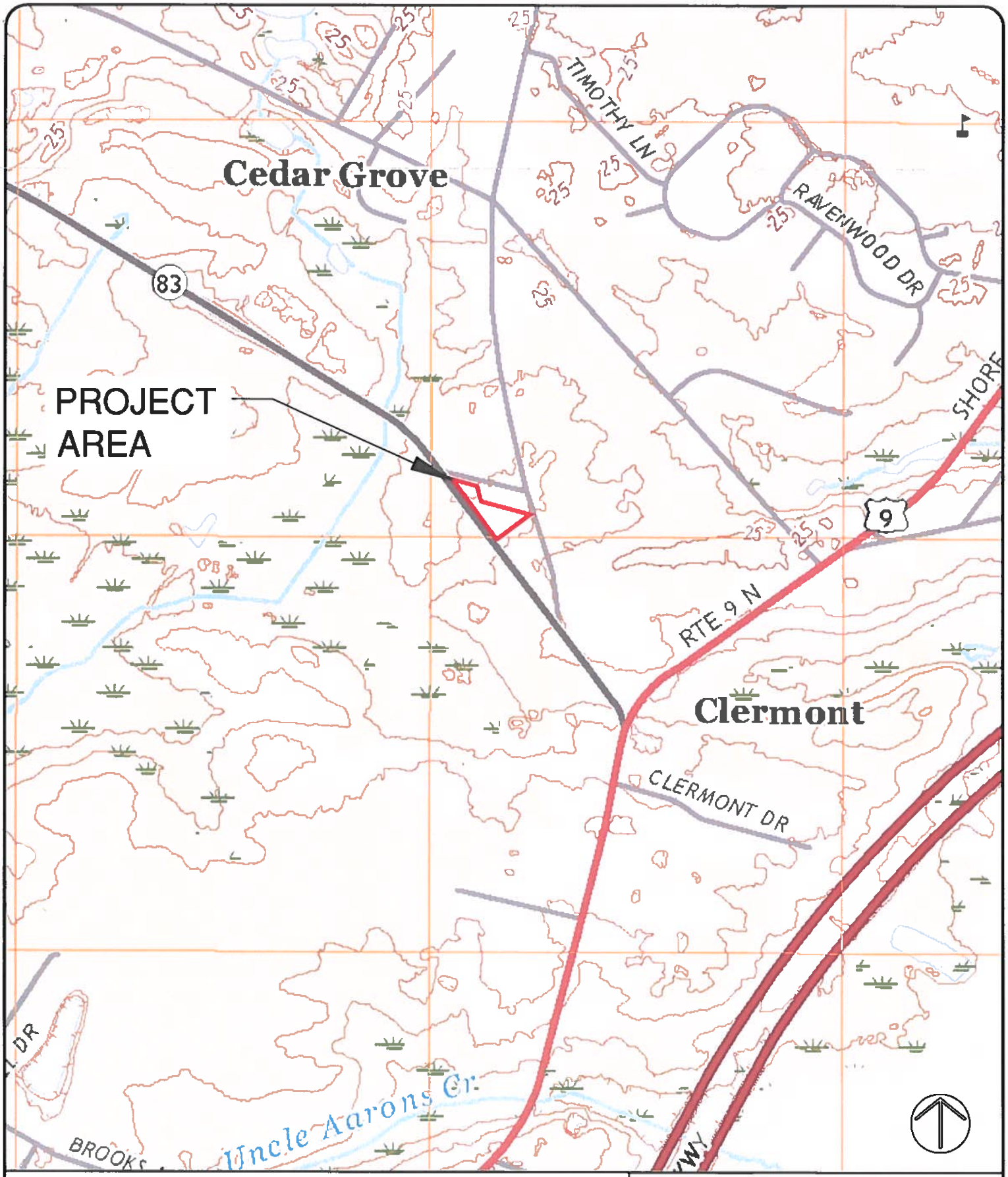
The NJDEP NJ-GeoWeb Map data layers entitled "NJDEP Historic Properties of New Jersey", "NJDEP Historic Districts of New Jersey" and "NJDEP Archaeological Site Grid of New Jersey" were reviewed. No cultural, historical, or archeological resources were identified on the subject site. Therefore, there are no anticipated adverse impacts to cultural, historical, or archeological resources from the proposed project.

## 4.0 CONCLUSION

As determined within this Environmental Assessment, the site is not comprised of critical environmental areas including freshwater wetlands, wetland transition areas, riparian areas, or flood hazard areas. The proposed land use is compatible with the Dennis Township Zoning Ordinance for this area. The project will be compatible with existing development surrounding the site.

Environmental impacts that cannot be avoided such as site clearing and an increase in impervious surface cover will be minimized through the proper implementation of environmental performance controls. These measures are provided in detail on the Site Plan and accompanying Stormwater Management Reports and include soil erosion and sediment control practices, best management practices employed in the stormwater management design, proper design of the septic system and adherence to design standards as set forth by Dennis Township.

# APPENDIX A: SITE MAPPING




USGS MAP
BLOCK 260, LOT 4.04 & 4.05
DENNIS TOWNSHIP, CAPE MAY COUNTY, NJ

DATE: 12/13/22 DRAWN BY: MSB
SCALE: 1" = 1000' PROJECT #: 9444

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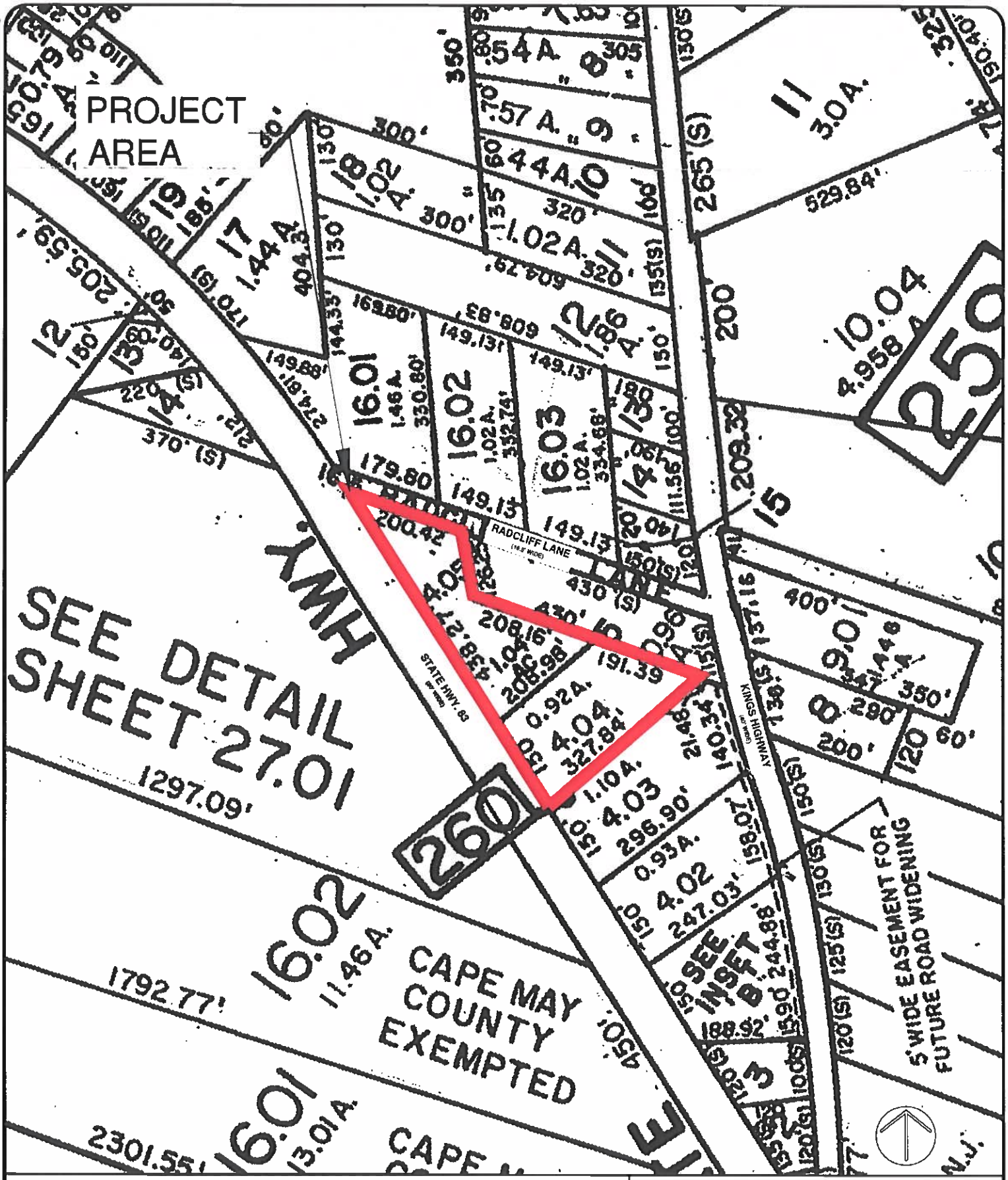


TAX MAP
BLOCK 260, LOT 4.04 & 4.05
DENNIS TOWNSHIP, CAPE MAY COUNTY, NJ

DATE: 2/8/2023 DRAWN BY: MSB
SCALE: 1" = 200' PROJECT #: 9444

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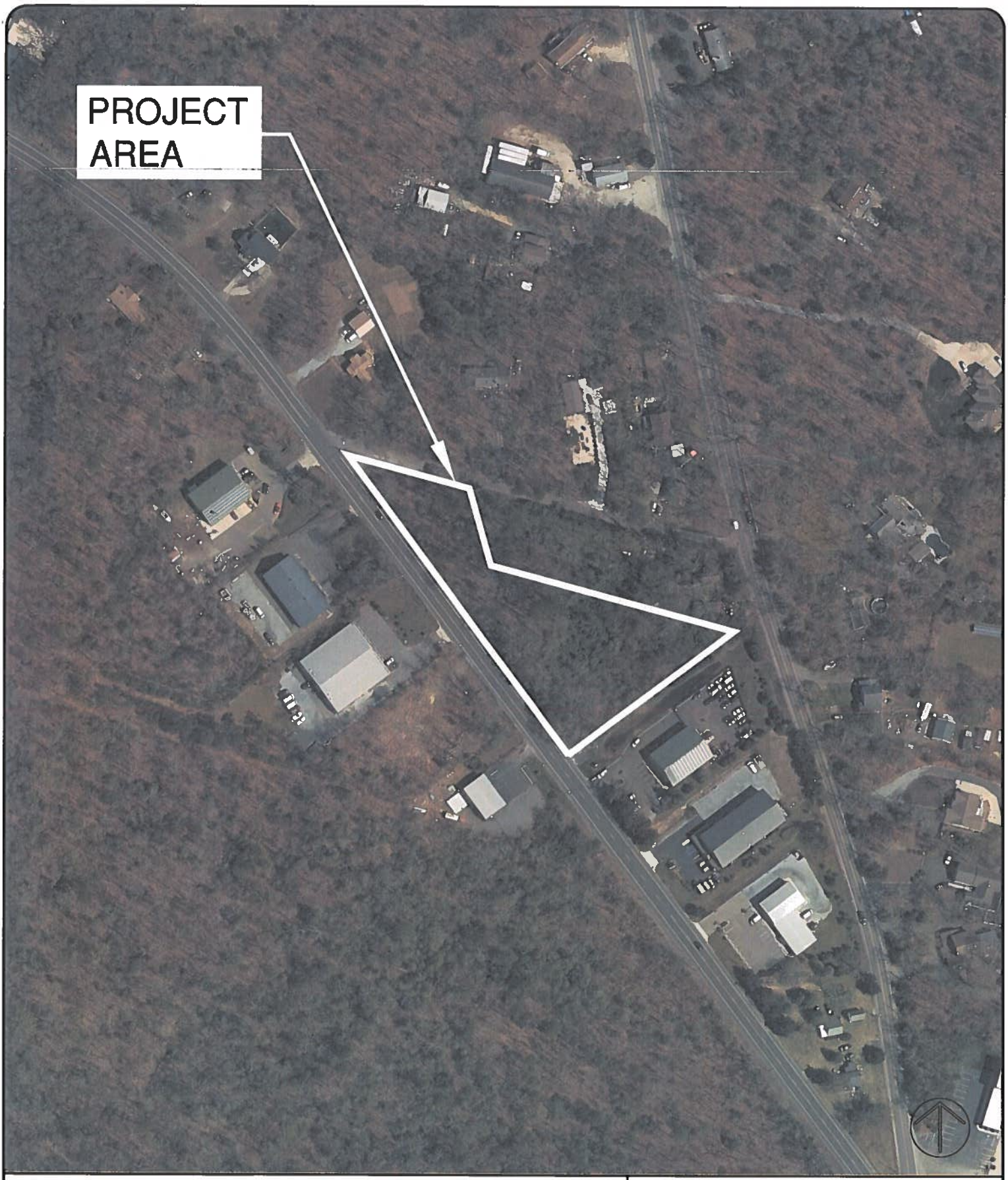


AERIAL
BLOCK 260, LOT 4.04 & 4.05
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DATE: 12/13/22 DRAWN BY: MSB
SCALE: 1" = 200' PROJECT #: 9444

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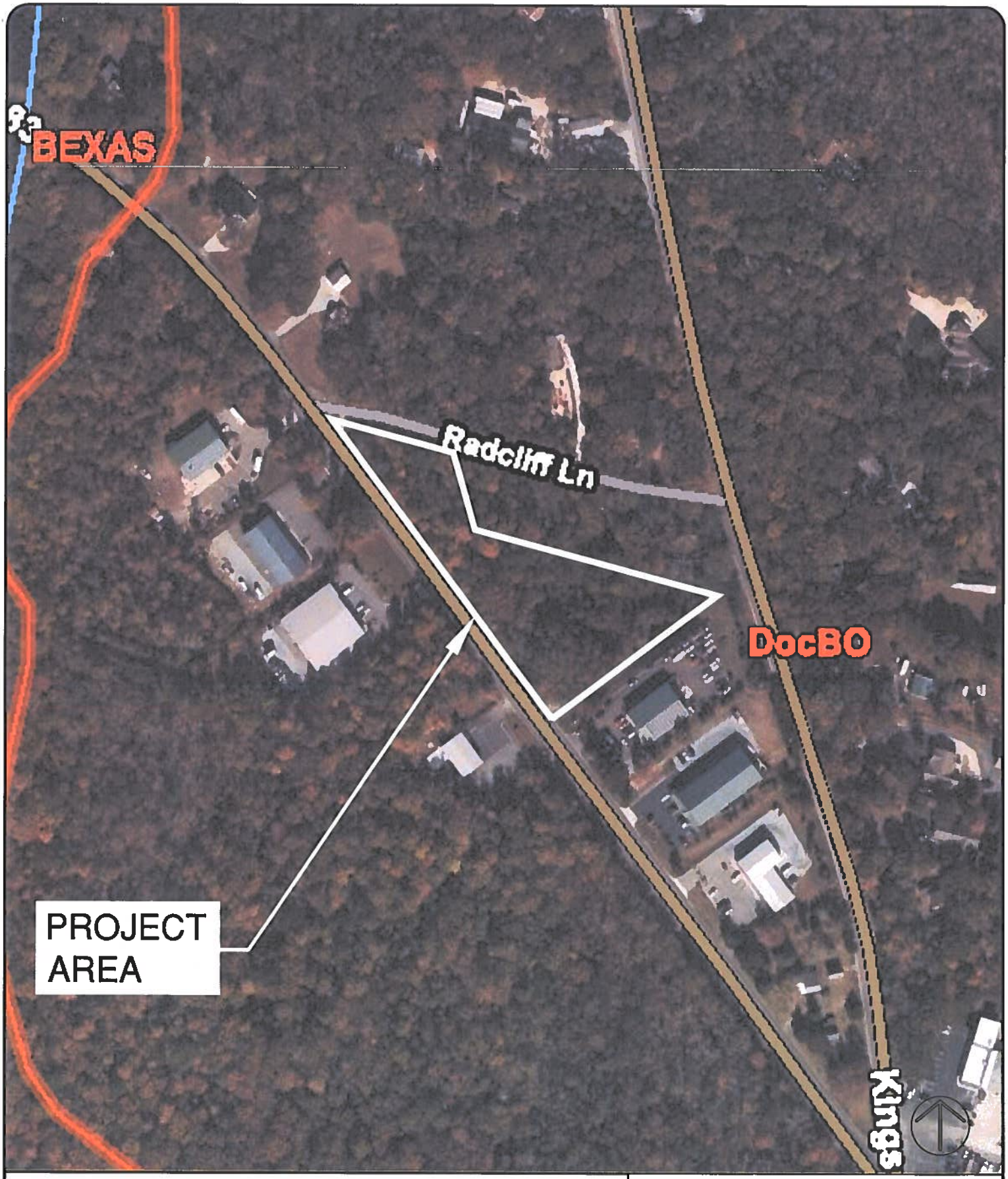


SOIL SURVEY MAP
BLOCK 260, LOT 4.04 & 4.05
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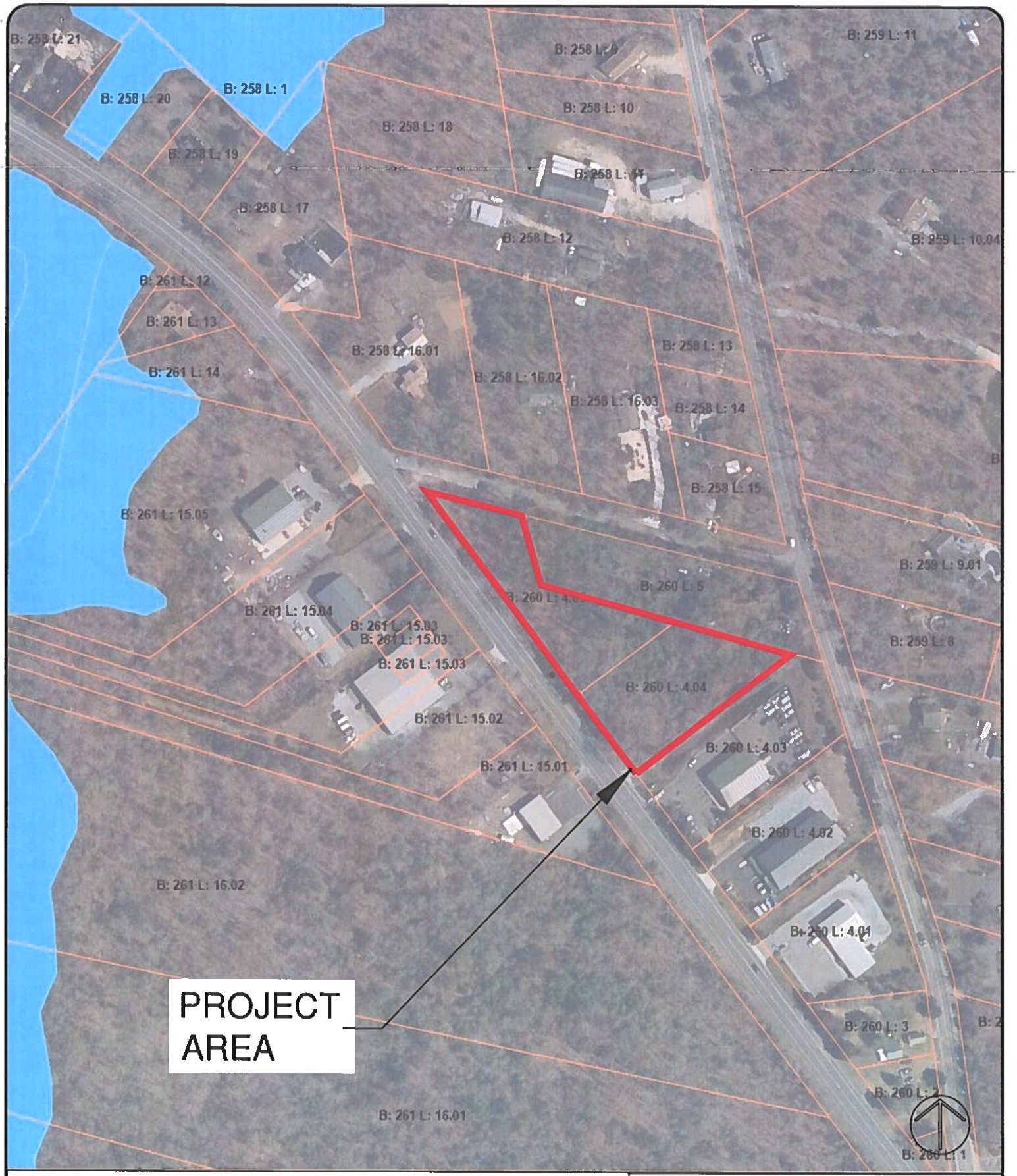


WETLANDS
BLOCK 260, LOT 4.04 & 4.05
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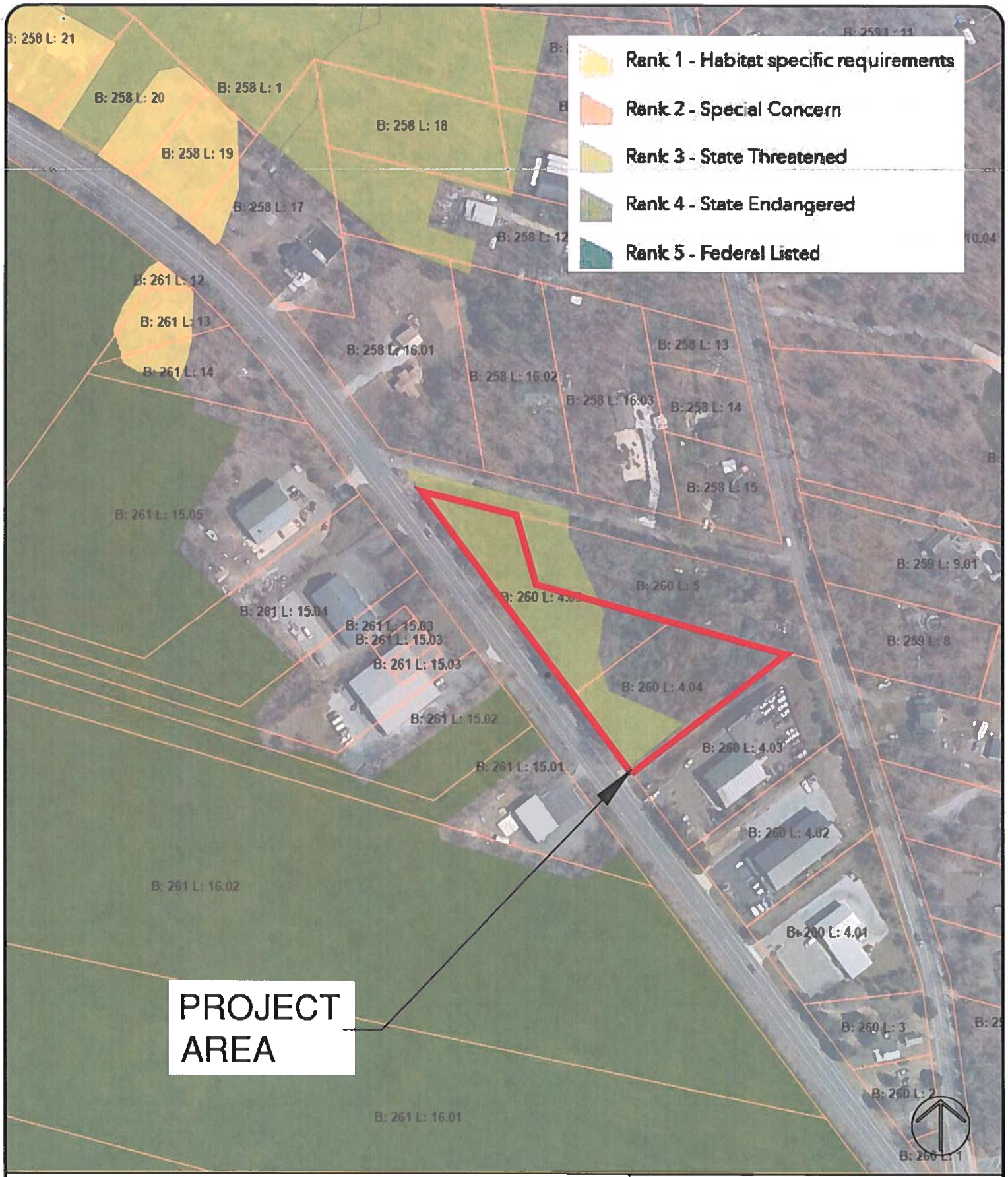


LANDSCAPE MAP
BLOCK 260, LOT 4.04 & 4.05
DENNIS TOWNSHIP, CAPE MAY COUNTY, NJ

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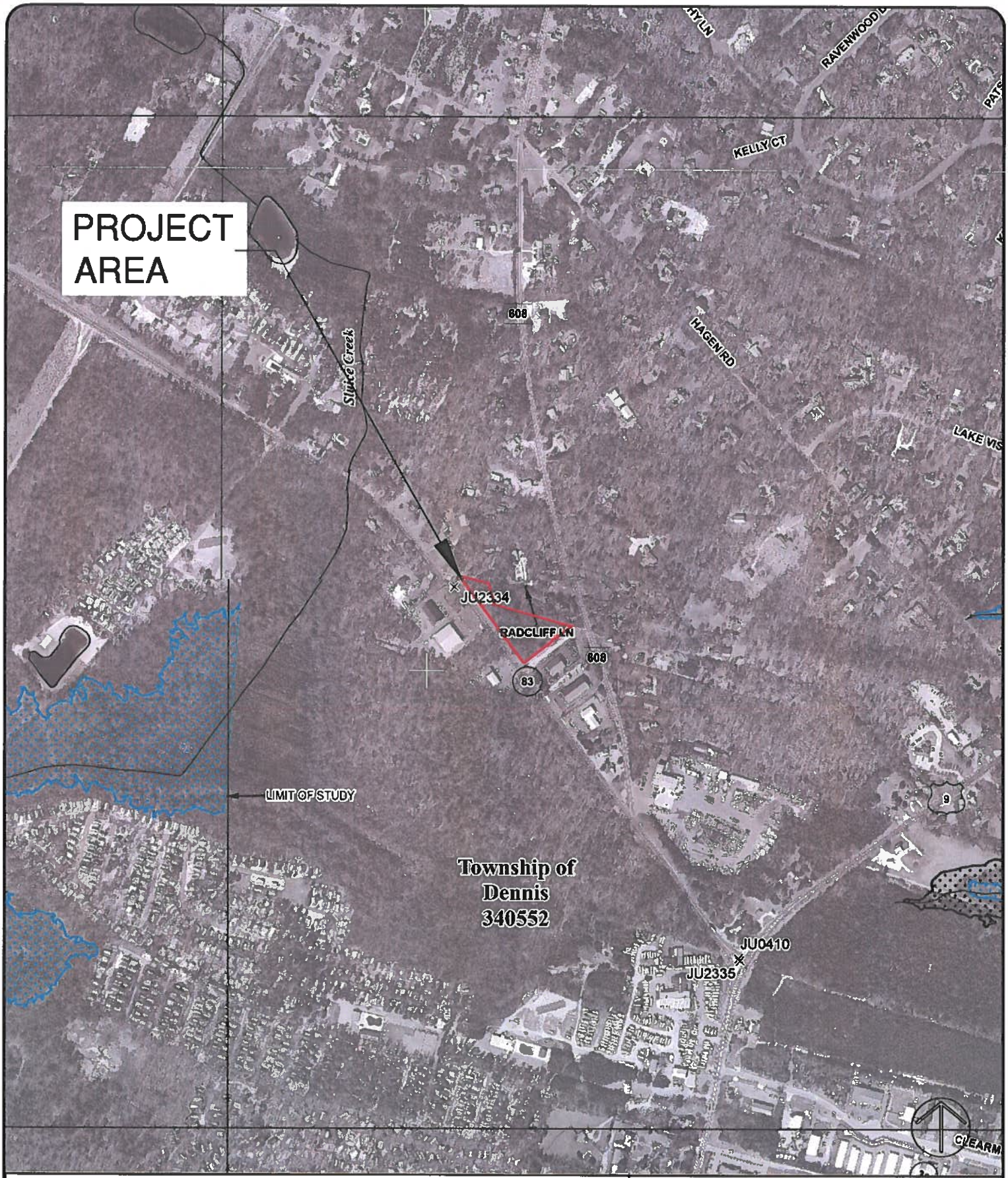


FEMA MAP
BLOCK 260, LOT 4.04 & 4.05
DENNIS TOWNSHIP, CAPE MAY COUNTY, NJ

DATE: 2/8/2023 DRAWN BY: MSB
SCALE: 1" = 500' PROJECT #: 9444

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