

Environmental Impact Statement

Elk Cannabis Cultivation Facility

Township of Elk, Gloucester County, New Jersey



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Introduction

Pennoni Associates Inc (Pennoni) has prepared this Environmental Impact Statement (EIS) on behalf of Country Roads Realty LLC (the Applicant), in accordance with the Township of Elk requirements at Chapter 96 Article VII Section 44 Environmental Impact Statement. It is intended to be used in conjunction with the Major Site Plan application submitted on behalf of the Applicant for proposed improvements located at 730 Buck Road in Elk Township. The site is identified as Block 44 Lot 4, within the Township of Elk, Gloucester County, New Jersey (the Site). The Applicant proposes to construct a cannabis facility on the subject site including primary and accessory buildings, access driveway, parking area, stormwater management facilities, and necessary utilities. The project area subject to this environmental review and analysis is limited to the proposed limit of disturbance which equals approximately 1,040,777 square feet (SF) (23.90 acres).

For ease of review, the format of this report follows, sequentially, the requirements identified by the Township of Elk Municipal Code Chapter 96, Article VII, §96-44 Environmental Impact Statement.

Description of the Proposed Project

The Applicant is proposing to construct a 15,000 square foot metal frame building, fthe (4) 44,570 square foot Greenhouses, a 3,000 square foot Greenhouse Incubator Building, install 8' security fencing, employee parking, truck loading spaces, and provide landscape buffering as required by the ordinance for the proposed use. Additional improvements will include, stormwater management basins and conveyance, site lighting, a guard booth, driveway improvements, and utility extensions to service the proposed head house and greenhouses.

Existing Environmental Conditions

The following section presents a description of existing environmental conditions as enumerated in the referenced ordinance.

Physical Characteristics

Site Description

The site presently consists of agricultural farmland, a single-family residence, a barn, and paved/unpaved access roads. Intermittent wooded areas are present along the north, east, south and west sides of the site, Buck Road along the eastern side of the site, agricultural uses to the north and south, and wooded area to the west. The site is owned and maintained by Country Roads Realty LLC. Site location maps are included in Appendix A as Figures 1-4.

The site contains freshwater wetlands, wetland transition areas, State open waters, flood hazard area, and riparian zone which are regulated by the New Jersey Department of Environmental Protection (NJDEP).

Air Quality

As the Site is primarily agricultural farmland and is mostly surrounded by farmland, wooded areas, and residential development, there are currently no factors significantly affecting air quality. The current site does not generate a significant amount of air emissions.

Hydrology and Water Resources

The Site is within the Still Run / Little Ease Run watershed and Reed Branch (Still Run) sub watershed. The site does not contain any surface waters mapped by NJDEP pursuant to the NJDEP *Surface Water Quality Standards* (NJAC 7:9B). However, an unnamed tributary to Reed Branch is mapped just beyond the Site, near the western property boundary. It flows from east to west. The tributary is classified by the NJDEP as general freshwater non-trout waterctheses (FW2-NT) under NJAC 7:9B. There are various medium sized ponds on the Site that are not mapped by NJDEP. An existing 12" pipe connects the two eastern ponds under the existing driveway and the ponds are tributary to another unnamed tributary to Reed Branch.

Flood Hazard Area

Per FEMA FIRM panel number 34015C0194E, effective January 20, 2010, the project area is within Zone X (i.e. not within a floodplain). A copy of the FEMA Map is included in Appendix A as Figure 6. However, the contributory drainage area of the onsite ponds exceeds 50 acres and requires a flood hazard area under the NJDEP *Flood Hazard Area Control Act Rules* (NJAC 7:13). As part of this project, a flood study has been conducted, establishing a preliminary FHA Base Flood

Elevation (BFE) of 121.20 feet. An application will be submitted to the NJDEP for an FHA Individual Permit for the proposed improvements and establishment of the BFE.

Wetlands

The Site contains freshwater wetlands and State open waters regulated by NJDEP under the *Freshwater Wetlands Protection Act Rules* (NJAC 7:7A). Onsite wetlands were delineated by DuBois and Associates in May 2022 and an application for a Freshwater Wetland Letter of Interpretation (FWW LOI) to verify the extent of wetlands and State open waters on the Site was submitted to NJDEP on April 16, 2024 (File No. 0804-04-0007.3 FWW240001). Emergent wetlands were delineated onsite that surround man-made ponds. The expected width of the wetland transition area is 50 feet, subject to final approval by NJDEP under the LOI.

A copy of the wetland survey submitted to NJDEP is included in Appendix B.

Ground Water

Per review of NJ-GeoWeb, both the eastern and western sides of the site are mapped by NJDEP as recharge category "W" for wetlands/waters and no recharge value was calculated. The central portion of the site is mapped by NJDEP as recharge categories "B" and "C". Category "B" has a recharge value of 11 to 15 inches per year while category "C" has a value of 8 to 10 inches per year. Based on a field investigation performed by Pennoni on 1/20/2025, seasonal high groundwater was observed at elevations ranging from 117.5' to 120.5'.

The Site is located with the Coastal Plain Sole Sthee Aquifer designated by the US Environmental Protection Agency (EPA).

Geology

The Site is located within the Coastal Plain physiographic province of New Jersey. According to NJDEP GeoWeb online application (GeoWeb), the project area is underlain by the Cohansey Formation (Tch) bedrock geologic formation. The lithology is reported by NJDEP as quartz sand, medium- to coarse grained.

Soils

Per review of the NRCS Web Soil Survey, the Site contains the following soil types:

- AtsAr - Atsion sand, 0 to 2 percent slopes, rarely flooded, *rated hydric soil*
- AugB - Aura sandy loam, 2 to 5 percent slopes, Northern Tidewater Area
- AvtB - Aura-Sassafras sandy loams, 2 to 5 percent slopes
- DoeA - Downer sandy loam, 0 to 2 percent slopes, Northern Coastal Plain
- FamA - Fallsington sandy loams, 0 to 2 percent slopes, northern coastal plain, *rated hydric soil*
- HbmaB - Hammonton loamy sand, 0 to 5 percent slopes, Northern Coastal Plain, *hydric inclusions*
- WokA - Woodstown-Glassboro complex, 0 to 2 percent slopes, *hydric inclusions*

The Soil Map is included as Figure 7 in Appendix A.

Topography and Slope

The topography of the project area is generally flat and does not contain significant slopes. Existing elevation is approximately 122 to 129 feet within the Project area. The high point is situated in the approximate center of the site and existing drainage patterns continue east and west from the high point.

Drainage

The project site contains a split drainage pattern whereby half the site drains to the west and the other half drains to the east from the high point of elevation 129. Each onsite drainage pattern flows into the two (2) separate unnamed tributaries to Reed Branch.

Vegetation

A large majority of the Site presently comprises agricultural land with areas of forested land and herbaceous wetlands throughout. Pursuant to the LOI application prepared by DuBois and Associates, areas of fallow and unfarmed uplands include species typical in these areas such as purple deadnettle (*Lamium purpureum*), mugwort (*Artemisia vulgaris*),

English plantain (*Plantago lanceolata*), common plantain (*Plantago major*), field sorrel (*Rumex acetosella*), dandelion (*Taraxacum officinale*), foxtail grass (*Setaria italica*), bushclover (*Lespedeza cuneata*), red clover (*Trifolium pratense*), yellow rocket (*Barbarea vulgaris*), and white clover (*Trifolium repens*). Overstory canopy species along edge and developed areas include white oak (*Quercus alba*), and sweet gum (*Liquidambar styraciflua*).

DuBois and Associates also reports onsite emergent wetland areas exhibit species such as softrush (*Juncus effusus*), common reed (*Phragmites australis*), spikerush (*Eleocharis* spp.), smartweed (*Polygonum*, spp.), occasional tussocks sedge (*Carex stricta*), seed box (*Ludwigia alternifolia*) and red maple (*Acer rubrum*) and sweet gum saplings. Wetland areas in the greenhouse facilities also include cattail (*Typha latifolia*).

Wildlife

Fish and Aquatic Organisms

As discussed above an unnamed tributary to Reed Branch is located on the Site. Additionally, the Site contains three (3) freshwater ponds. These waterbodies are classified as a general freshwater non-trout waterbodies per NJAC 7:9B. It is expected that the onsite waters contain populations of small fish, reptiles, amphibians, as well as other aquatic organisms (i.e. macroinvertebrates). A detailed survey for aquatic organisms was not completed as part of this EIS submission. Per review of GeoWeb, there are no aquatic organisms considered threatened or endangered associated with the onsite surface waters.

Wild Animals

The existing agricultural farmland does not lend itself to high quality wildlife habitat. The information published by the NJDEP under the Landscape Project (v3.4) indicates that a large majority of the Site is not mapped habitat for threatened or endangered animal or plant species. However, limited portions of the wooded areas on the Site are mapped as breeding for the barred owl (*Strix varia*), a State threatened bird species.

The Site is expected to contain wildlife common to the vicinity including, small mammals, reptiles, amphibians, insects, and bird species.

Man-Made Conditions and Structures

Sanitary and Storm Sewer Systems

The Site is outside of the Sewer Service Area (SSA). The existing single-family dwelling utilizes a septic system. The proposed facility will be serviced by an on-site septic system, not exceed 2,000 gallons per day.

Noise Characteristics and Levels

Due to the location of the Site on Buck Road (CR 533) and adjacent to residential development, existing noise levels are primarily associated with these sources. The Site currently does not produce a significant amount of noise levels.

Traffic Volume

The Site currently does not produce a significant amount of vehicular traffic.

Land Use

The current land use of the Site is agriculture. There is one single-family dwelling located on the Site.

The Site is located in the Cannabis Establishment Overlay Zone (CEO) zoning district of Elk Township. Therefore, the Project is consistent with current municipal zoning. Please refer to the Area and Bulk Regulations Table on Sheet 5 of the Site Plans for compliance with zoning requirements.

Aesthetics

The Site exists as undeveloped forested land, agricultural land and limited associated structures, including one single-family dwelling. Therefore, the Site does not possess or exhibit a high aesthetic value or character.

Community Character

Historic/Archaeological Resources

Per review of GeoWeb, there are no listed historic properties or districts on or near the Site. The Site is within identified archaeological grid AU236.

The Cultural Resources Map is included as Figure 9 in Appendix A.

Demography

Per the 2023 Census, Elk Township has a median age of 44.4. Approximately 58% of residents are age 18-64, 26% are under 18, and 16% are 65 and over. The racial/ethnic makeup of the Township is as follows, 77% white, 13% black, 5% Hispanic, and 2% two or more racial/ethnic backgrounds.

The NJDEP does not map the Site as an overburdened community (2020).

Culture

The project Site does not possess or exhibit any significant cultural aspects (i.e. art, fashion, language) since it exists as farmland, wetlands, waters, and a residential dwelling.

Required License, Permits, and/or Other Approvals

Anticipated required permits include the following:

- NJDEP Letter of Interpretation (LOI)
- Gloucester County Soil Conservation District (GCSCD) Soil Erosion and Sediment Control Certification (SESC)
- Gloucester County Planning Board (GCPB) Site Plan Approval
- Township of Elk Municipal Approval
- NJDEP FHA IP

Assessment of Probable Impacts

Physical Characteristics

This section presents an assessment of probable impacts associated with the above Existing Site Characteristics.

Air Quality

Although traffic entering and existing the Site creates a potential pollution source, significant degradation of the air quality of the surrounding area is not expected. The projected traffic volume from the Project represents a minimal percentage of the overall volumes of air pollution in the area. Additional vehicles that may access the building are not expected to result in an adverse impact to air quality.

Boiler Air pollution onsite at 730 Buck Road:

The boilers utilized by the systems are Certified low NOx systems.

Certified low NOx (nitrogen oxide) boilers are designed to minimize the amount of nitrogen oxides released into the atmosphere during combustion. NOx is a harmful pollutant that contributes to smog, acid rain, and respiratory issues. A certified low NOx boiler typically emits significantly lower levels of NOx compared to standard boilers.

The emission levels for certified low NOx boilers usually range from less than 30 ppm (parts per million) to around 40-50 ppm of NOx, depending on the type of boiler and the specific certification standards it meets. These emissions are much lower than those of traditional boilers, which can emit up to 80 ppm or more. The boilers selected are less than 30 ppm.

The key to low NOx emission is the advanced burner technology, staged combustion, or flue gas recirculation methods used in these boilers. These systems reduce the formation of NOx by lowering the flame temperature and controlling the combustion process, which minimizes the conversion of nitrogen in the air into nitrogen oxides.

The Certified low NOx boilers that can be an important part of reducing the environmental impact of heating systems, especially in areas with stringent air quality regulations.

Metal Building (headhouse) sealed build and odor mitigation:

The main building that houses the employees and base operations is called the "Head House". This building has been designed to meet standard requirements for odor mitigation. Currently the project does not house or plan to house any flowering or cannabis blooming areas in the head house, which is the source of strong odors from the cannabis plant.

Construction

The metal building has a 2.5-in metal shell and cavity back filled base insulation. The rooms are finished in framing/dry wall, or a 4-in thick engineered panel system for rooms that require frequent cleaning and airtight seals. Panels specs and door information is provided below.

Item 1

PRODUCT			
4" PIR Sandwich panel			
Thickness	100mm [4 inch]	Core	PIR
Width	1120mm [44.1"]		
Length	Per drawings	Density	40 kg/m ³
Use		Fire Grade	
	External		Internal
Gauge	0.5mm	Gauge	0.5mm
Material	Galvalume	Material	Galvalume
Color	White	Color	White

Item 2

PRODUCT			
Single Swing Door			
Thickness	50mm [2 inch]	Core	Honeycomb
Width	915mm [3ft]	Color	White
Height	2130mm [7']		
Use			
Galvanized steel on surface of both sides: 0.5mm			
Door frame: Sheet thickness 1.2 mm, Galvanized steel, With all-round weather seal rubber			
Door Lock, Door Closer, SS Handle type			

Both style rooms (panels or drywall) have floor, seam, and ceiling trim to seal them completely. Areas that have plant handling, extraction, or grow, are equipped with carbon filters as well to clean air flow in and out. The 4-inch thick insulated panels are designed to offer both thermal insulation and airtight sealing, which stops odors from exiting or entering the building.

Structure design and materials:

1. Insulated Panel Construction: The 4-inch insulated panels are made of a metal exterior layer with a foam core (polyisocyanurate, expanded polystyrene, and or fiberglass). These panels not only provide insulation against temperature but also help seal the building by limiting air movement. The foam core is dense and acts as a barrier to air leakage, thus preventing any odors from escaping.
2. Tight Seals Between Panels: The panels are designed to fit tightly together with minimal gaps from tongue and groove connections. The seams between the dry wall panels are sealed using weather-resistant tape and silicone caulking. This ensures that air (and odors) cannot pass through the joints, further improving the

building's airtightness.

3. **Weatherstripping and Gaskets:** Doors and windows in the building are equipped with weatherstripping and gaskets that create a secure seal when closed. These materials prevent odors from escaping through these openings, which are often weak points in terms of air and odor control.
4. **Prevention of Airflow:** The combination of the insulated panels and tight seals essentially prevents any uncontrolled airflow within or out of the building. This is important for controlling the movement of any odor, as odors are typically carried by moving air. A sealed environment ensures that any odor-producing air is contained within the building, or kept from entering.
5. **Ventilation Control:** Ventilation systems within the building are designed to control the flow of fresh air in and contaminated air out. Using carbon filters and with proper sealing, the ventilation system can be managed to keep odors from escaping without compromising air quality inside.
6. **Temperature and Humidity Control:** The 4-inch insulation helps stabilize the temperature and humidity inside the building. This can also play a role in controlling the development of odors caused by mold or other environmental factors. By maintaining a consistent internal climate, the building becomes less conducive to odor production.

Building HVAC Odor Mitigation and Filtration system

The project utilizes several points of contact in each room where air is moved in and out to equip carbon filters and HEPA filters. Carbon filters in the air handling systems play a crucial role in odor mitigation, improving indoor air quality, and removing mold forming/viral particles.

The primary function of carbon filters in air handling systems is to remove odors. This is achieved through a process called adsorption:

- Activated Carbon is highly porous, meaning it has a vast surface area with tiny holes (pores) that trap molecules.
- Odor molecules (from cultivation, extraction, cleaning products, and VOCs—volatile organic compounds) are drawn into the filter as air flows through it.
- These odor molecules adhere to the surface of the activated carbon (they don't get absorbed into the carbon, but instead stick to it due to attractive forces).
- As the air passes through, these unwanted smelly compounds are effectively removed from the air stream, leaving the air smelling fresher and cleaner.

Carbon filters themselves are not particularly effective at removing larger airborne particles (like dust, pollen, or dander), as they are designed primarily to deal with gases and odors. However, the system combines carbon filters with filtration media that target particles.

- Carbon Filters handle gaseous pollutants like odors, VOCs, and smoke.
- HEPA Filters or MERV Filters (Minimum Efficiency Reporting Value) capture particulate matter (such as dust, allergens, and airborne pathogens). HEPA filters can capture particles as small as 0.3 microns with very high efficiency (99.97%).

Maintenance:

- Over time, the carbon in these filters becomes saturated with trapped gases and odors, meaning it loses its effectiveness. This is why carbon filters need to be replaced periodically to continue cleaning the air properly.
- Particulate filters (IHEPA or MERV filters) are scheduled to be replaced regularly to ensure they remain effective at trapping particles.

The mesh pre filters catch larger particles before entering the air handling, preventing them from clogging the carbon filter too quickly. The monthly maintenance schedule ensures that the owner change and service air filtration set up, ensuring efficiency.

In summary, carbon filters in air handling systems are specialized for removing odors and gases, while particles are generally removed by other types of filters, often in a multi-stage filtration process. We have all approaches covered to ensure there is no release of odor or particles from the facility.

The metal building equipped with added insulated panels seals the building by tightly fitting together panels, seals, weatherstripping, and insulation to prevent airflow seepage. This airtight environment prevents the escape of odors, ensuring that they remain confined within the building unless controlled by a ventilation system. Filtration of air movement into, inside, and exiting the building, are additional measures insured to prevent

Hydrology and Water Resources

A stormwater analysis has been performed showing that the proposed outflow from the basins reduces the runoff in the 2, 10, and 100 year events per N.J.A.C. 7:8 requirements.

Flood Hazard Area

As part of this project, a flood study has been conducted, establishing a preliminary FHA Base Flood Elevation (BFE) of 121.20 feet. An application will be submitted to the NJDEP for an FHA Individual Permit for the proposed improvements and establishment of the BFE. Proposed work within the calculated BFE includes maintenance of the existing access drive, and expansion of the drive outside the wetlands buffers.

Wetlands

Wetlands are present on the site and the Client has provided an LOI from the NJDEP as part of this application. Except for maintenance of the existing driveway, all other proposed improvements and grading activities will occur outside any wetlands buffers on the property.

Ground Water

Based on a field investigation performed by Pennoni on 1/20/2025, seasonal high groundwater was observed at elevations ranging from 117.5' to 120.5'. The proposed stormwater basins have been designed to maintain a minimum 2' separation from the observed seasonal high groundwater table.

Surface Water

No impacts to the ponds are proposed.

In general, land development tends to increase the pollutant load to streams and water bodies. Non-point source pollutants such as petrochemical compounds, sand, silt, salt, pesticides, nitrates and phosphates are carried in storm water runoff from roadways and lawns. Storm water from regulated motor vehicle surface, buildings, and maintained lawn areas will be collected into bio-retention basins, and treated to a TSS removal of 80%, prior to discharge to the identified points of interest.

Geology

The proposed project is not expected to result in an adverse impact to onsite geology. Deep excavation, mining, and rock excavation and the need for blasting are not required.

Soils

The proposed project will impact the following four (4) onsite soil types:

- AtsAr - Atsion sand, 0 to 2 percent slopes, rarely flooded, *rated hydric soil*
- AvtB - Aura-Sassafras sandy loams, 2 to 5 percent slopes
- DoeA - Downer sandy loam, 0 to 2 percent slopes, Northern Coastal Plain
- HbmaB - Hammonton loamy sand, 0 to 5 percent slopes, Northern Coastal Plain, *hydric inclusions*

Soils within proposed impervious surfaces will be eliminated or covered by proposed structures. Soil erosion and sediment control measures consistent with Gloucester County Soil Conservation District will be utilized to help prevent offsite impacts and transport of sediment.

The Soil Map is included as Figure 7 in Appendix A.

Topography and Slope

Due to the absence of significant or steep slopes, the project is not expected to adversely affect onsite topography.

Drainage

Stormwater will be collected in landscape inlets and header pipes, and conveyed to three separate bio-retention basins. Each will be equipped with an outlet control structure. The outfalls for two of the basins will be to existing wetlands, and one basin will outfall into another, providing additional TSS removal.

Vegetation

A permanent loss of the existing agricultural vegetation will occur within the limit of disturbance. This impact and loss of vegetation is not a significant adverse impact and is acceptable in relation to the Project purpose and need. The project proposes evergreens in the perimeter landscape buffers per the requirements in the ordinance.

Wildlife

Fish and Aquatic Organisms

The project discharges to an existing pond and wetlands, maintaining existing drainage patterns. Adverse impacts to onsite aquatic organisms are not anticipated due to the stormwater management practices proposed, providing 80% TSS removal as required per the NJBMP and NJAC 7:8. Proper stormwater management will help prevent adverse impacts to onsite surface waters.

Wild Animals

As the Project area is limited to the existing agricultural field and no trees are located within this area, impacts to barred owl habitat not anticipated. Therefore, loss of wildlife habitat is expected to be minimal.

Man-Made Conditions and Structures

Sanitary and Storm Sewer Systems, Including Planned Construction

A proposed storm conveyance system will collect roof and surface runoff, and collect in the (4) stormwater management basins. Each basin is proposed to function as a Bio-Retention basin, providing 80% TSS removal, with a maximum contributory drainage area of 2.5-acres. The 15,000 SF Headhouse is the only proposed building with sanitary effluent. The sanitary effluent from the Headhouse will be collected into a gravity system and managed onsite utilizing a septic tank, pump station, and leach field.

Noise Characteristics and Levels

During construction, there will be an increase in noise due to construction vehicles. The raised noise level will be temporary, limited to normal working hours, and subject to restrictions of the Elk Township Code. After construction, noise impacts will be related to vehicular traffic entering and existing the Site, which are expected to be minimal due to low volume.

Noise impacts after completion of construction will be minimal and as follows:

Running Equipment Noise Summary (no direct air pollutant for use)

Noise Summary for Chillers (66 dB)

Noise Level: The chiller produces a noise level of approximately 66 decibels (dB), which is similar to the sound of normal conversation or background music.

Distance of Audibility: At 66 dB, the noise can typically be heard clearly from up to 50-60 feet away, depending on environmental conditions (e.g., wind, buildings, or other obstructions).

Perceived Loudness: At close proximity (within 10-15 feet), the noise will be noticeable and might be disruptive in quieter environments. However, at distances beyond 30-40 feet, the noise may blend into the ambient sound and be less intrusive. This range can vary depending on factors like background noise, terrain, and specific acoustics of the area. The farm at 730 Buck Rd has high winds that diffuse sounds over distances. Traffic noise from Buck rd also contributes to noises in the area that drowns out or diffuse the equipment noise.

Air Handlers and Dehumidification

The air handlers and dehumidification units produce sounds ranging from 59 decibels up to 101 dB at max operation. They are located outside of the building in isolated areas. They rest on concrete pads.

When an Air Handling Unit (AHU) produces noise levels ranging from 59 dB to 101 dB, the perceived loudness in the surrounding area will vary significantly based on both the sound power level and the distance from the unit.

Factors:

1. Sound Power Levels (59 dB to 101 dB)

- 59 dB: This is relatively quiet in the context of mechanical equipment. It's about the noise level of a quiet conversation or the background noise in a quiet office. At this level, the sound would not be overly disruptive in most environments.
- 101 dB: This is the maximum level of operation and is loud. It's comparable to the noise produced by a motorcycle, lawnmower, or a chainsaw at close range. At this sound level, the AHU would produce a noticeable noise depending on the distance and environment. The units are outdoors and away from employee work areas. The distance between the units and any residential location is over 1,000 feet.

2. Perceived Loudness at Different Distances

The sound intensity will decrease with distance due to the inverse square law. The further you are from the source of the noise, the quieter it will seem. Let's estimate how the sound might be perceived at various distances from the AHU, for both the 59 dB and 101 dB levels.

- At a distance of 3 feet:
 - 59 dB: Will sound like a normal conversation or a quiet office.
 - 101 dB: This will be very loud, similar to a lawnmower or motorcycle.
- At a distance of 15 feet:
 - 59 dB: This would sound like background noise, still similar to a quiet office, and likely not very distracting.
 - 101 dB: The sound will reduce to approximately 95 dB, which is still loud but more like city traffic or a vacuum cleaner.
- At a distance of 30 feet:

- 59 dB: You might perceive this sound as barely noticeable in a quiet environment. It would still be akin to a very low background hum.
- 101 dB: The sound will drop to about 85 dB, which is similar to city traffic or a vacuum cleaner. This is still noticeable but not as loud as when close to the source.
- At a distance of 60 feet:
 - 59 dB: This will likely blend into the background noise and be hard to distinguish unless the environment is very quiet.
 - 101 dB: The sound will drop to around 75 dB, which is comparable to a normal conversation or a dishwasher in operation. It's much quieter, but still noticeable in the background.

3. Environmental Factors

The environment around the AHU will also significantly affect how the noise is heard. The farm is wide open space with a lot of wind:

- Open spaces: The sound will dissipate more quickly in open areas. The AHU is located outdoors, the perceived loudness will decrease faster with distance.

4. Impact on the Surrounding Area

- 59 dB noise will generally be heard as background noise and is unlikely to cause significant disturbance unless the environment is extremely quiet. In an office or residential area, it would likely be noticed but not considered disruptive.
- 101 dB noise, on the other hand, could be disruptive. The placement of the units outdoors and in areas that are away from office space is important. The 1,000+ feet of space between the building and residential homes will make the noise unable to be heard.

In Summary:

- 59 dB is relatively quiet and would likely be heard as background noise in most environments.
- 101 dB is much louder, comparable to the noise of a motorcycle or lawnmower, and could be disruptive, especially in close proximity.
- The perceived loudness of the noise will decrease with distance, but factors such as the environment, presence of reflective surfaces, and the design of the AHU all affect how the sound is experienced in the surrounding area.

Air Pollution:

The max unit, a 35-ton AAON unit, does not produce air pollution. It can indirectly contribute to air pollution, mainly through the energy it consumes (depending on how that energy is generated IE coal fired power plants or other combustion methods of generating electricity).

Cut Sheets:

AAON Condenser Radiated Sound Levels

AAON Condenser Radiated Sound Levels														Sound Pressure Level in a Hemispherical Free Field										Dist (ft)
														25										
					Sound Power Level										Sound Pressure Level									
Fans Dia RPM					63	125	250	500	1000	2000	4000	8000	LwA	63	125	250	500	1000	2000	4000	8000	dBA		
#1	RQ 2 & 3 Ton	Inlet	1	30	850	79	74	72	70	66	62	59	59	72	54	48	46	44	40	37	34	33	46	
		Outlet				81	77	71	71	67	62	59	58	73	55	52	45	45	41	37	34	32	47	
		Total				83	79	74	73	69	65	62	61	75	58	53	49	48	44	40	37	36	49	
#2	RQ 4-6 Ton & RN 6 & 7 Ton	Inlet	1	30	1085	85	79	77	75	71	68	65	64	77	59	53	52	49	45	42	39	38	51	
		Outlet				86	83	76	76	72	68	65	63	78	61	57	50	51	46	42	39	38	52	
		Total				89	84	80	79	75	71	68	67	80	63	59	54	53	49	45	42	41	55	
	RN 8 & 10 Ton	Inlet	1	30	1085	92	86	85	82	78	75	72	71	84	66	61	59	56	52	49	46	46	59	
		Outlet				94	90	83	83	79	75	72	71	85	68	64	57	58	54	49	46	45	59	
		Total				96	91	87	86	82	78	75	74	88	70	66	61	60	56	52	49	48	62	
	RN 09 & 11 Ton	Inlet	2	30	1085	88	82	80	78	74	71	68	67	80	62	56	55	52	48	45	42	41	54	
		Outlet				89	86	79	79	75	71	68	66	81	64	60	53	54	49	45	42	41	55	
		Total				92	87	83	82	78	74	71	70	83	66	62	57	56	52	48	45	44	58	
	RN 13-20 Ton	Inlet	2	30	1085	95	89	88	85	81	78	75	74	87	69	64	62	59	55	52	49	49	62	
		Outlet				97	93	86	86	82	78	75	74	88	71	67	60	61	57	52	49	48	62	
		Total				99	94	90	89	85	81	78	77	91	73	69	64	63	59	55	52	51	65	
#3	RN 25 & 30 Ton	Inlet	3	30	1085	97	91	89	87	83	80	77	76	89	71	65	64	61	57	54	51	50	63	
		Outlet				98	95	88	88	84	80	77	75	90	73	69	62	62	58	54	51	50	64	
		Total				101	96	92	91	86	83	80	79	92	75	71	66	65	61	57	54	53	67	
	RN 26,31 & 40 Ton	Inlet	4	30	1085	98	92	91	88	84	81	78	77	90	72	67	65	62	58	55	52	52	65	
		Outlet				100	96	89	89	85	81	78	77	91	74	70	63	64	60	55	52	51	65	
		Total				102	98	93	92	88	84	81	80	94	76	72	67	66	62	58	55	54	68	
	RN 50,60 & 70 Ton	Inlet	6	30	1085	100	94	92	90	86	83	80	79	92	74	68	67	64	60	57	54	53	66	
		Outlet				101	98	91	91	87	83	80	78	93	76	72	65	65	61	57	54	53	67	
		Total				104	99	95	94	89	86	83	82	95	78	74	69	68	64	60	57	56	70	
	RN 55,65 & 75 Ton MC	Total	4	30	1170	89	84	84	84	84	83	83	79	90	63	58	58	58	58	57	57	53	64	
		Total				92	87	87	87	87	86	86	82	93	66	61	61	61	61	60	60	56	67	

Tested in Accordance with AMCA 300 - Updated 6-15-15

RTU-2, 3, 6, 8, 9, 11, 13, 14 #1

RTU-1, 7, 10 - #2

RTU-4 A/B, 5 A/B, 12 #3

AIR HANDLING UNIT SCHEDULE

PLAN MARK	MANUFACTURER	MODEL NUMBER
AHU-1	AAON	RNA-007
AHU-2	AAON	RQA-003
AHU-3	AAON	RQA-003
AHU-4A	AAON	RNA-030
AHU-4B	AAON	RNA-030
AHU-5A	AAON	RNA-030
AHU-5B	AAON	RNA-030
AHU-6	AAON	RQA-003
AHU-7	AAON	RQA-004
AHU-8	AAON	RQA-005
AHU-9	AAON	RQA-003
AHU-10	AAON	RNA-008
AHU-11	AAON	RQA-003
AHU-12	AAON	RNA-030
AHU-13	AAON	RQA-003
AHU-14	AAON	RQA-003

DEHUMIDIFICATION UNIT

TAG	DESIGN BASE: QUEST	LOCATION
DHU-1A	335 77V	FLOWER ROOM 1
DHU-1B	335 77V	FLOWER ROOM 1
DHU-1C	335 77V	FLOWER ROOM 1
DHU-1D	335 77V	FLOWER ROOM 1,2
DHU-1E	335 77V	FLOWER ROOM 1,2
DHU-1F	335 77V	FLOWER ROOM 1,2

Traffic Volume

As the Project is proposing construction of a cannabis cultivation facility, a limited increase in vehicular traffic accessing the facility is anticipated; however, this extremely small increase is not expected to result in an adverse impact to traffic. The anticipated maximum shift employee count for the proposed operations is 11 employees. Please reference the traffic study for additional information.

Land Use

The Site is located in the Cannabis Establishment Overlay Zone (CEO) zoning district. Therefore, the Project is consistent with municipal zoning requirements. Please refer to the Area and Bulk Regulations Table on Sheet 5 of the Site Plans for compliance with zoning requirements.

Aesthetics

The project will remove a portion of agricultural land, associated structures, and one single-family dwelling. That loss will be mitigated with landscaping proposed for the Project, depicted on the landscaping plans included in the Preliminary and Final Major Subdivision and Site Plan application. The proposed project will not adversely affect the aesthetic value of the Site.

Community Character

Historic/Archaeological Resources

Due to an absence of listed historic resources onsite, no adverse impact will result.

Demography

There are no impacts to the demography anticipated as a result of the Project since it does not involve housing which could affect the population and community services. There are no expected adverse impacts to any social or economic aspect of the community as a result of the Project.

Culture

As described above there are no cultural aspects associated with the Site. Therefore, adverse are not anticipated.

Evaluation of Environmental Impacts Which Cannot be Avoided

This section presents an assessment of environmental impacts which cannot be avoided. Natural and man-made resources that will be impacted include noise, air, vegetation, sedimentation and siltation, flooding, and traffic.

The project is not expected to result in adverse impacts to natural resources, trees, displacement of people and businesses, municipal services, health and safety of the public, and offsite tracts.

Vegetation

As described above, certain vegetation will be permanently removed by the project. Most vegetation to be removed comprises agricultural variety or weed species associated with fallow fields. Existing forested land will remain undisturbed. Impacts to onsite vegetation are acceptable and consistent with typical construction projects of similar size and scope.

Implementation of site landscaping as noted on the Landscape Plan will help mitigation adverse impacts.

Sedimentation and Siltation

Typical expected impacts occurring to soils during construction including grading, compaction, vegetation clearing, exposed soils, and erosion due to wind and precipitation, resulting in increased surface water flows, increased sedimentation and siltation, and a decrease in surface water quality. Impacts to disturbed areas will be mitigated to a great extent by implementation of an approved Soil Erosion and Sediment Control Plan approved by Gloucester County Soil Conservation District.

Construction of the Project will result in an increase in impervious surface coverage. Onsite stormwater management facilities will collect and detain peak stormwater runoff volumes to maintain existing peak discharge rates.

Flooding

The project site has been evaluated to have a flood hazard elevation of 121.20. The flood analysis will be submitted to the NJDEP for review and approval. The proposed development lies outside of the identified flood hazard area, except for some driveway improvements.

Minimization of Impacts

The project will implement certain measures to minimize potential impacts.

The project design includes utilization of proper soil erosion and sediment control techniques to help prevent offsite transport of silt and sediment. Negative impacts occurring to soils during construction include grading, excavation, compaction, exposed soils, and erosion due to wind and precipitation. These impacts will be mitigated by use of a Soil Erosion and Sediment Control plan approved by the Gloucester County Soil Conservation District. Anticipated BMP's to be included in the Soil Erosion and Sediment Control Plan will include non-structural soil erosion BMP's to be implemented during construction, including minimizing the area of disturbance, placement of silt fencing around the limit of disturbance, and temporary soil stockpiles surrounded with silt fencing.

Construction will be conducted during the daytime and following is a discussion of applicable mitigation measures. Raised noise levels during construction will be temporary, limited to normal working hours and subject to restrictions of Elk Township Codes. No adverse noise level impacts are expected after completion of the Project to warrant mitigation.

Irreversible and Irretrievable Commitments of Resources

The project will result in certain minor impacts to resources as described herein. These impacts are considered acceptable in relation to the scope of the project. The project avoids impacts to forested land, surface water resources, and wetland habitats. Unavoidable impacts to soil and low-quality vegetation are unavoidable and the project avoids impacts to sensitive resources.

Alternatives to the Proposed Action

There are three (3) apparent alternatives to the Project, reducing the scale of the project, utilizing an alternate site, and the no-build option.

Reduction in Scale

An alternative to the Project would be to reduce the scale to construct a smaller building and facility. However, due to the nature of the Site as farmland suitable for development this option was not pursued. Additionally, a reduction in scale would impose financial hardship in developing the property and reduce the economic benefit of the Project to the Township.

Alternate Site

An alternative project site may result in greater impact to natural resources. The alternate site could contain more forested land, wetlands, historic resources, and natural vegetation. Utilization of this site, particularly an actively disturbed portion of the Site, greatly minimizes adverse impacts. This site is also appropriately zoned for this use.

No-Build Option

An alternative to reducing the scale of the Project is to not build the Project. The existing farmland would remain.

As the Project would not be constructed under the no-build option, there would be no change to the current landscape of the Project area. A no-build option is a suitable option when severe environmental or community impacts may result from the Project. No significant environmental or community impacts were identified from the Project that would warrant consideration of the no-build option.

Conclusion

Pennoni has prepared this EIS on behalf of Country Roads Realty LLC, in accordance with the Township of Elk requirements for the proposed Elk Cannabis Cultivation Facility. It is intended to be used in conjunction with the Major

Site Plan application submitted on behalf of the Applicant for proposed improvements located at 730 Buck Road in Elk Township.

As documented in this EIS, the project is not expected to result in a significant adverse impact to a sensitive environmental resource including air quality, water quality, socioeconomics, wetlands, wetland transition areas, flood hazard areas, wildlife species and habitats, and cultural resources. The positive benefit to be realized far outweighs any minor impact that may result.

It has been concluded that the subject Site is suitable and acceptable for the proposed development.

References

Federal Emergency Management Agency, United States Department of Homeland Security. National Flood Hazard Layer Viewer. Available online. Accessed January 31, 2025. <<https://hazards-fema.maps.arcgis.com/apps/webappviewer/index.html?id=8b0adb51996444d4879338b5529aa9cd>>

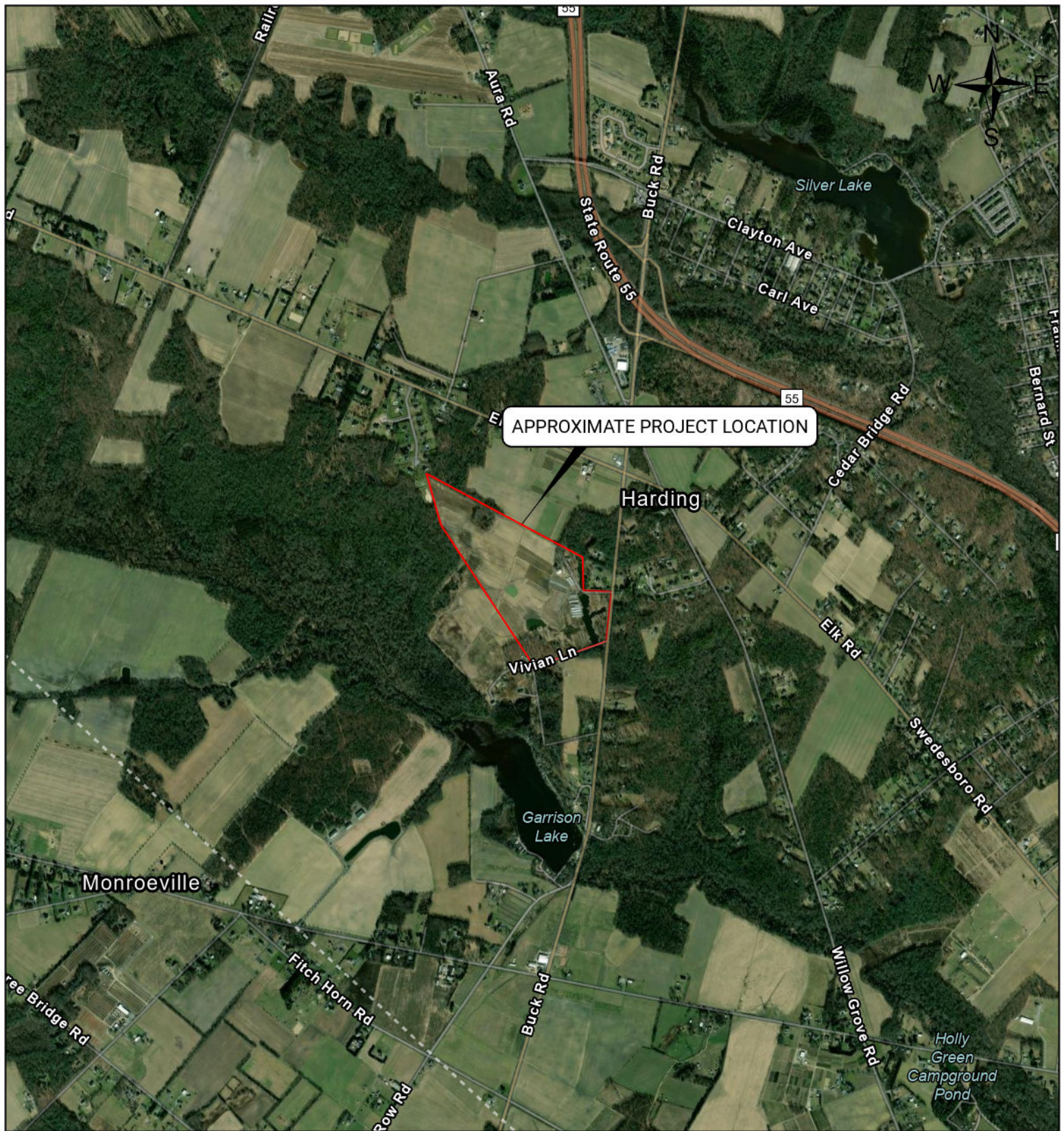
New Jersey Department of Environmental Protection. NJ-GeoWeb. Available online. Accessed January 31, 2025. <<https://njdep.maps.arcgis.com/apps/webappviewer/index.html?id=02251e521d97454aabadfd8cf168e44d>>

Soil Survey Staff, Natural Resources Conservation Service, United States Department of Agriculture. Web Soil Survey. Available online. Accessed January 31, 2025. <<https://websoilsurvey.nrcs.usda.gov/app/WebSoilSurvey.aspx>>

U.S. Census Bureau (2023). *American Community Survey 5-year estimates*. Retrieved from *Census Reporter Profile page for Elk township, Gloucester County, NJ* <<http://censusreporter.org/profiles/06000US3401521060-elk-township-gloucester-county-nj/>>

Appendix A: Site Figures





Legend

 Project Area

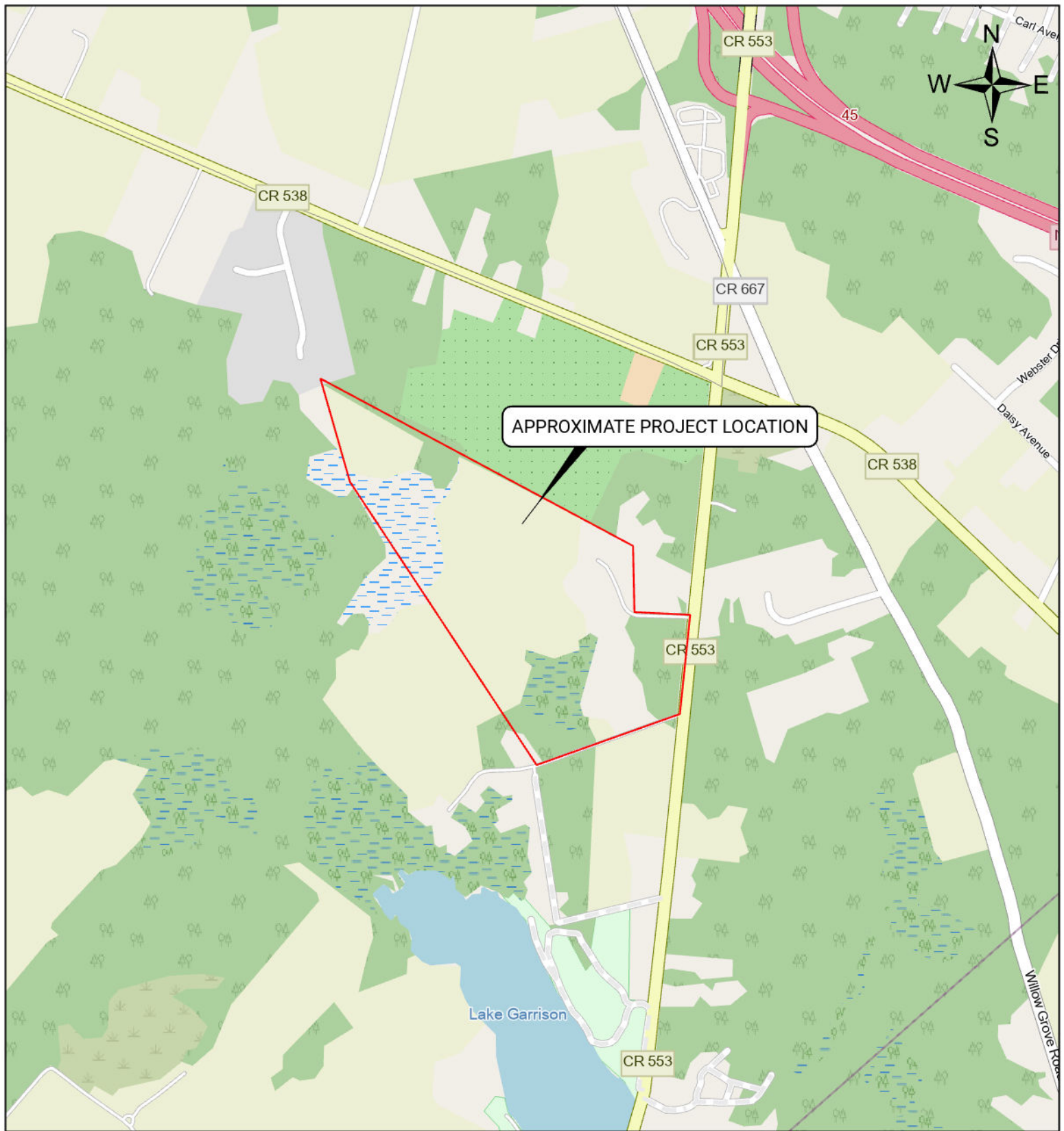
FIGURE 1
KEY MAP
of
ELK CANNABIS CULTIVATION FACILITY
at
730 BUCK ROAD
BLOCK 44 LOT 4
prepared for
COUNTRY ROADS REALTY LLC
E(x): 314,971 N(y): 294,488



0 2,000
 Feet

TOWNSHIP OF ELK

GLOUCESTER COUNTY, NJ



Legend

 Project Area

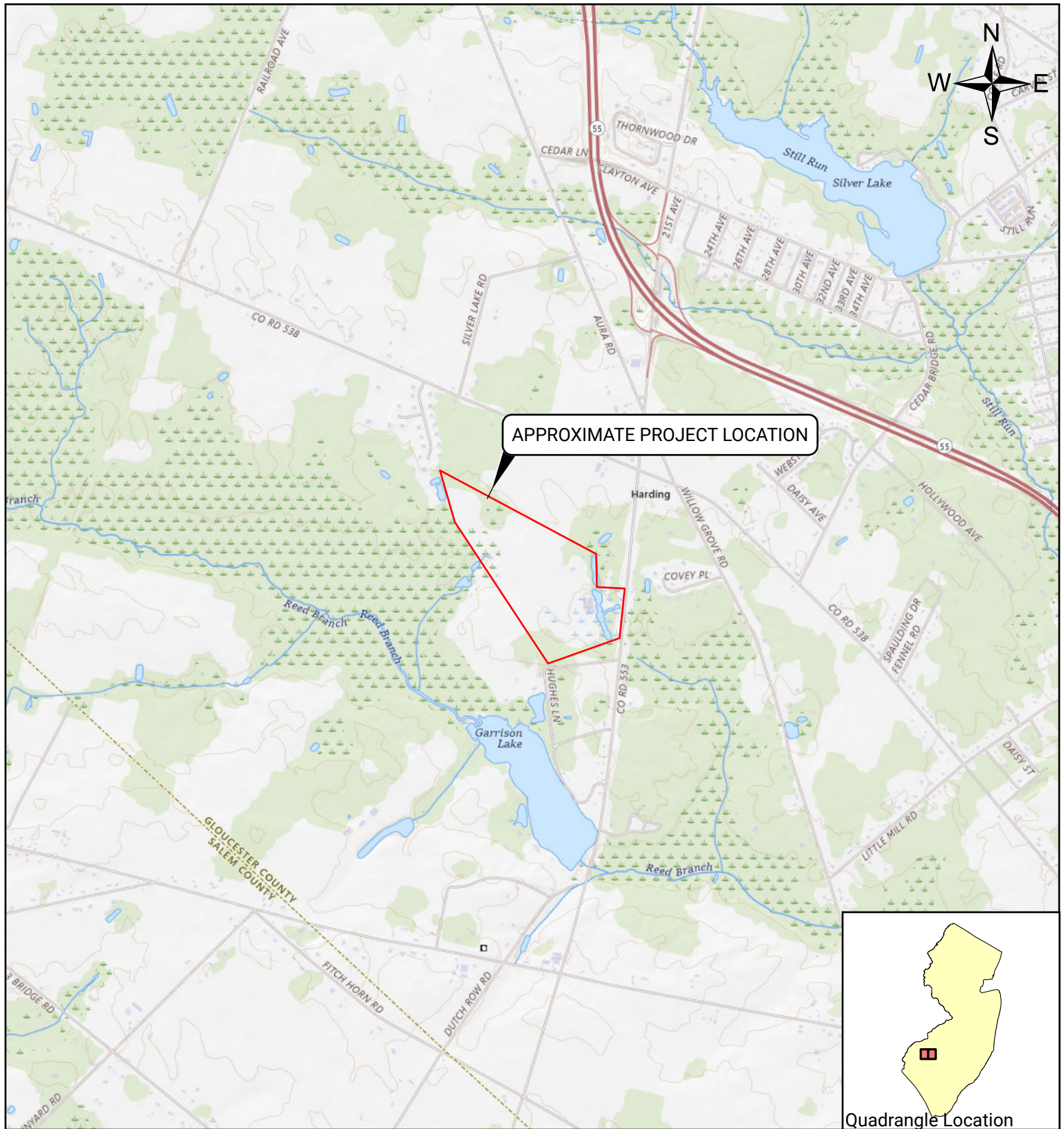
FIGURE 2
STREET MAP
of
ELK CANNABIS CULTIVATION FACILITY
at
730 BUCK ROAD
BLOCK 44 LOT 4
prepared for
COUNTRY ROADS REALTY LLC
E(x): 314,971 N(y): 294,488



0 1,000
 Feet

TOWNSHIP OF ELK

GLOUCESTER COUNTY, NJ



Legend

Project Area

FIGURE 3
USGS MAP
of
ELK CANNABIS CULTIVATION FACILITY
at
730 BUCK ROAD
BLOCK 44 LOT 4
prepared for
COUNTRY ROADS REALTY LLC
E(x): 314,971 N(y): 294,488

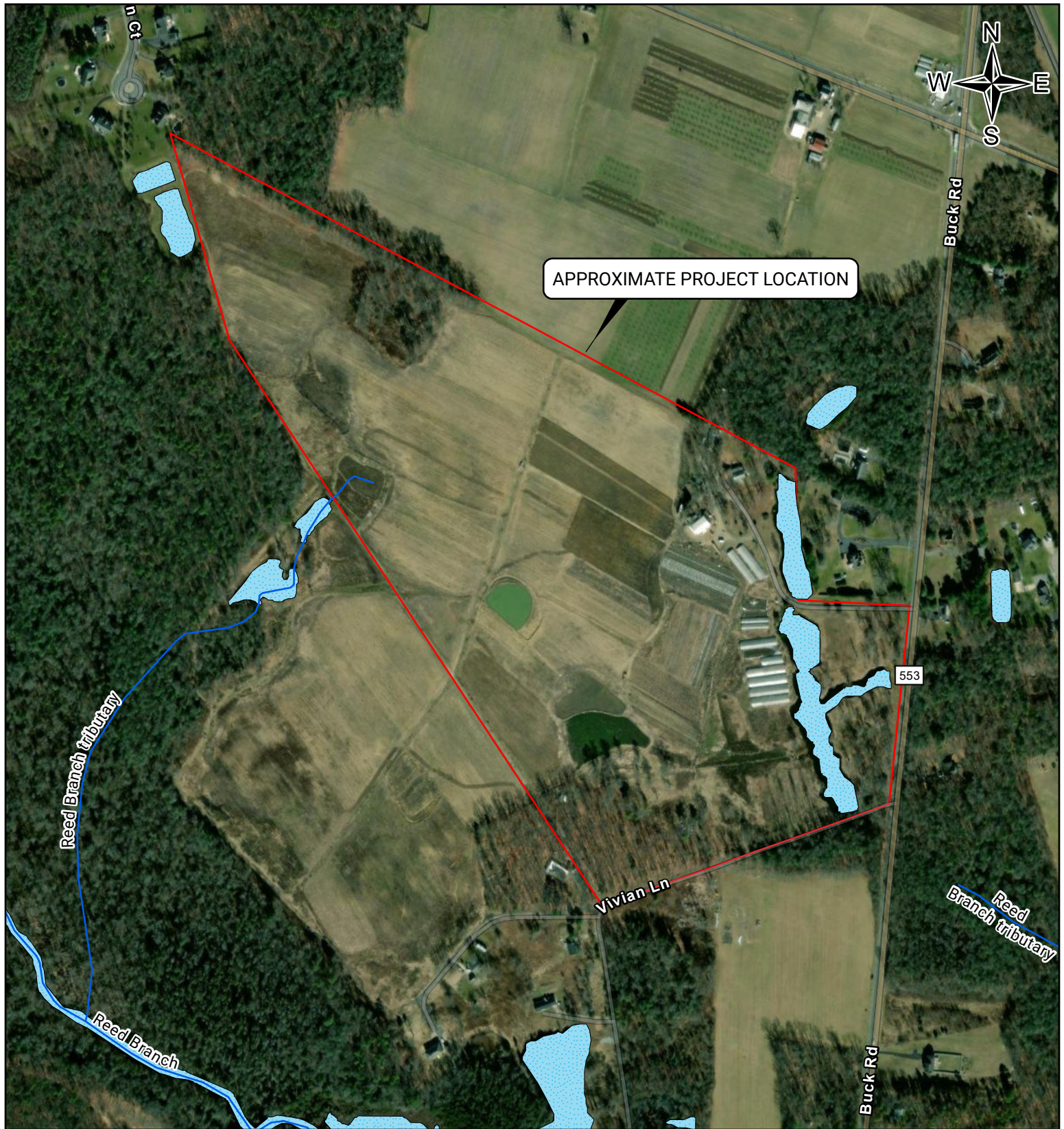


0 2,000
Feet

TOWNSHIP OF ELK

GLOUCESTER COUNTY, NJ





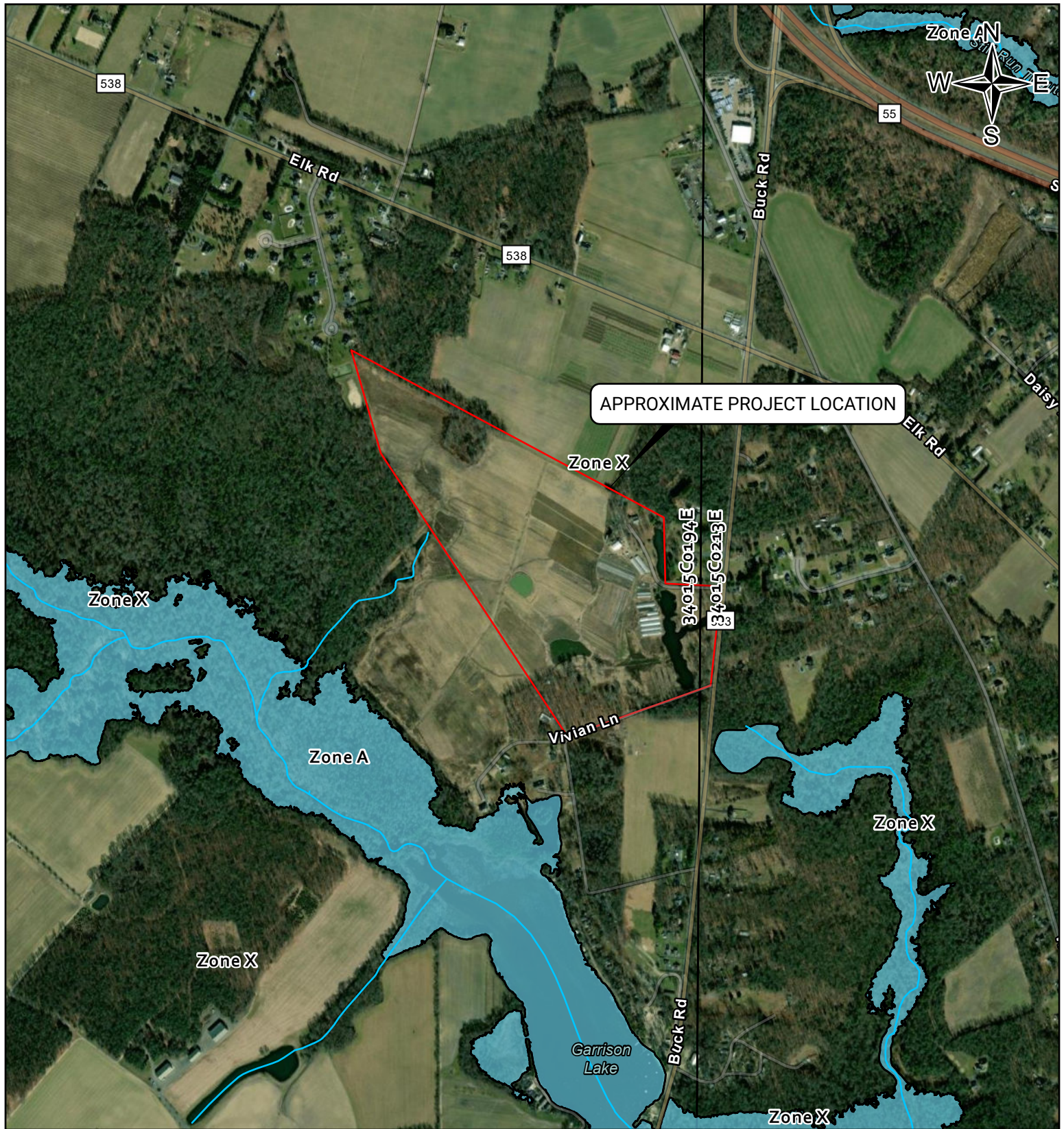
Legend

- Project Area
- Stream
- Water Body

FIGURE 5
 STREAMS AND WATER BODIES MAP
 of
 ELK CANNABIS CULTIVATION FACILITY
 at
 730 BUCK ROAD
 BLOCK 44 LOT 4
 prepared for
 COUNTRY ROADS REALTY LLC
 E(x): 314,971 N(y): 294,488



TOWNSHIP OF ELK GLOUCESTER COUNTY, NJ



Legend

- ▬ Project Area
- ▬ Stream Line
- FIRM Panel

Flood Hazard Area

Flood Hazard Area

- 1 PCT ANNUAL CHANCE FLOOD HAZARD
- 0.2 PCT ANNUAL CHANCE FLOOD HAZARD
- AREA OF MINIMAL FLOOD HAZARD
- FLOODWAY

FIGURE 6
FEMA MAP
of
ELK CANNABIS CULTIVATION FACILITY
at
730 BUCK ROAD
BLOCK 44 LOT 4
prepared for
COUNTRY ROADS REALTY LLC
E(x): 314,971 N(y): 294,488

TOWNSHIP OF ELK

GLOUCESTER COUNTY, NJ



0 1,000
Feet



Legend

Project Area

Soil Map Units

- AtsAr - Atsion sand, 0 to 2 percent slopes, rarely flooded
- AugB - Aura sandy loam, 2 to 5 percent slopes, Northern Tidewater Area
- AvtB - Aura-Sassafras sandy loams, 2 to 5 percent slopes
- DoeA - Downer sandy loam, 0 to 2 percent slopes, Northern Coastal Plain
- FamA - Fallsington sandy loams, 0 to 2 percent slopes, northern coastal plain
- HbmaB - Hammonton loamy sand, 0 to 5 percent slopes, Northern Coastal Plain
- WokA - Woodstown-Glassboro complex, 0 to 2 percent slopes

FIGURE 6
SOIL MAP
of
ELK CANNABIS CULTIVATION FACILITY
at
730 BUCK ROAD
BLOCK 44 LOT 4
prepared for
COUNTRY ROADS REALTY LLC
E(x): 314,971 N(y): 294,488



0 500
Feet

TOWNSHIP OF ELK

GLOUCESTER COUNTY, NJ



Legend

Project Area

Habitat Rank

- Rank 1 - Habitat Specific Requirement
- Rank 2 - Special Concern
- Rank 3 - State Threatened
- Rank 4 - State Endangered
- Rank 5 - Federal Listed

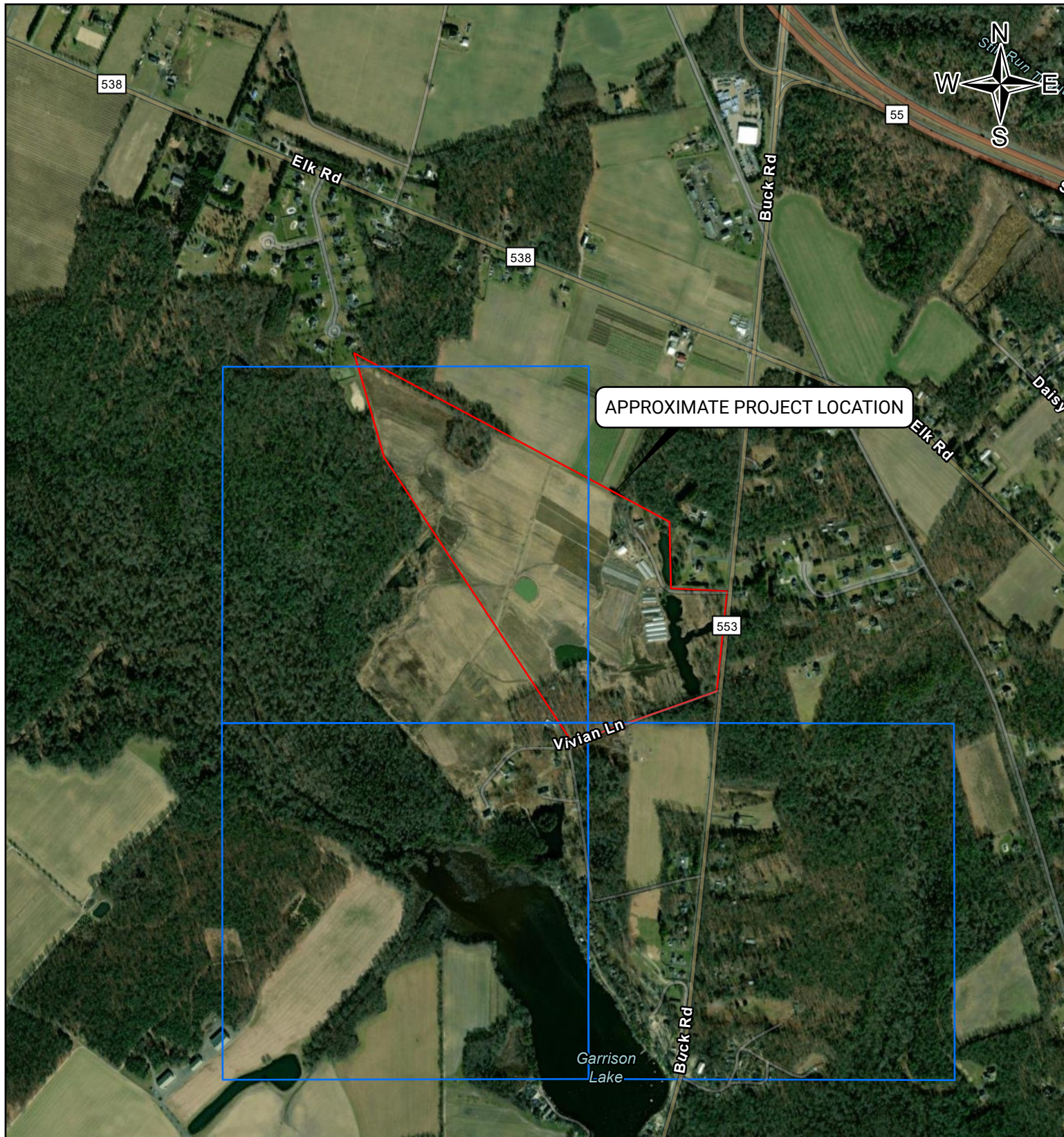
FIGURE 8
LANDSCAPE PROJECT MAP
of
ELK CANNABIS CULTIVATION FACILITY
at
730 BUCK ROAD
BLOCK 44 LOT 4
prepared for
COUNTRY ROADS REALTY LLC
E(x): 314,971 N(y): 294,488



0 500
Feet

TOWNSHIP OF ELK

GLOUCESTER COUNTY, NJ



Legend

Project Area

Archaeological Site Grid

STATUS

NR Eligible

Identified

FIGURE 9
CULTURAL RESOURCES MAP
of
ELK CANNABIS CULTIVATION FACILITY
at
730 BUCK ROAD
BLOCK 44 LOT 4
prepared for
COUNTRY ROADS REALTY LLC
E(x): 314,971 N(y): 294,488

TOWNSHIP OF ELK

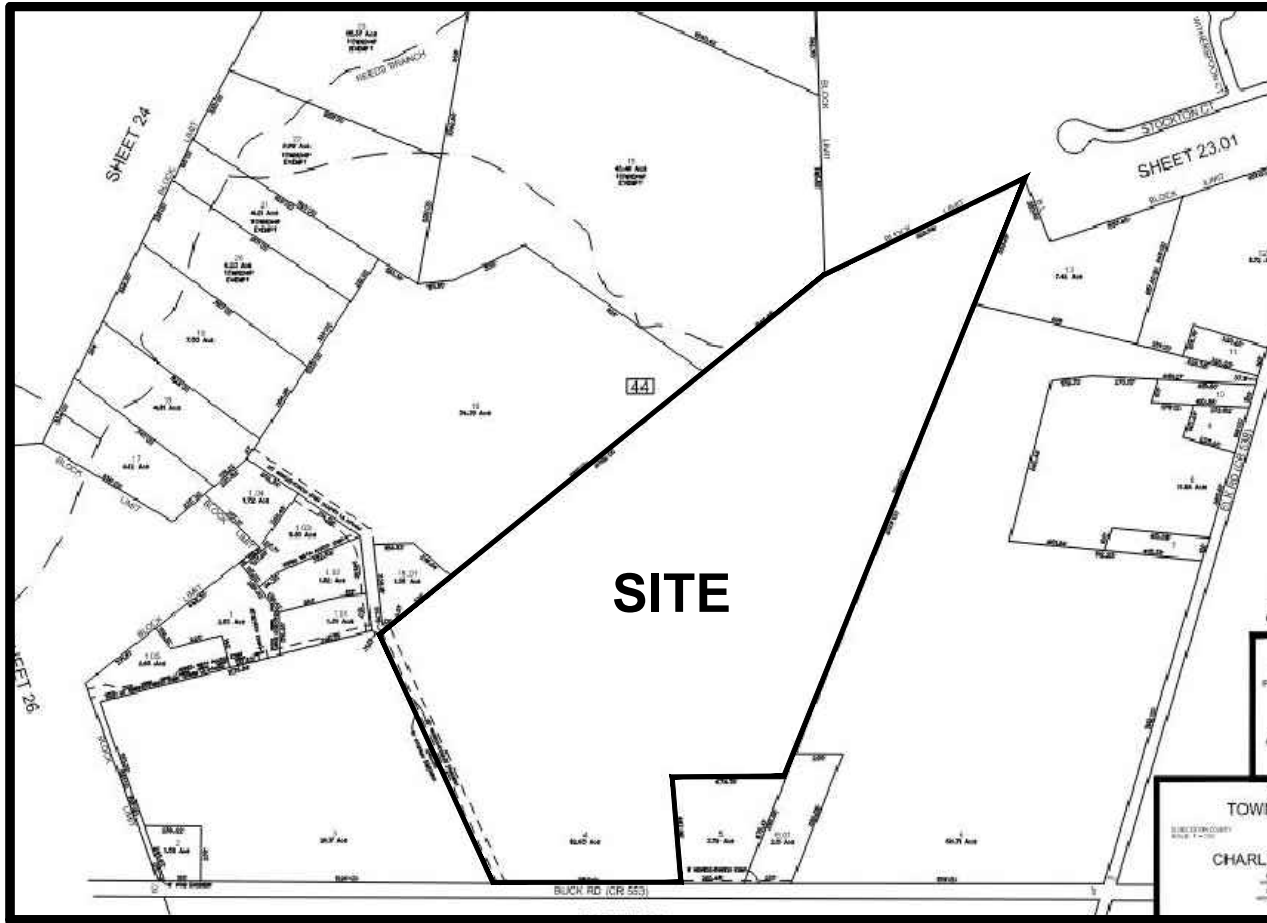
GLOUCESTER COUNTY, NJ



0 1,000
Feet

**Appendix B:
Wetland Survey**





TAX MAP

DEED DESCRIPTION

ALL THAT CERTAIN PLOT, PIECE OR PARCEL OF LAND SITUATE LYING AND BEGINNING IN THE TOWNSHIP OF ELK, COUNTY OF GLOUCESTER, STATE OF NEW JERSEY, AS SHOWN ON A PLAN BY PENNONI ASSOCIATES ENTITLED "ELK CANNABIS - BOUNDARY & TOPOGRAPHIC SURVEY", DATED 5/24/2022, BOUNDED AND DESCRIBED AS FOLLOWS:

BEGINNING AT A POINT ON THE WESTERLY SIDE OF BUCK ROAD (66 FEET WIDE) (COUNTY ROUTE 533) (AKA BUCKTON - CENTER TOWN ROAD), WHERE IT INTERSECTS WITH THE NORTHERLY LINE OF BLOCK 44, LOT 3:

1) THENCE: FROM SAID BEGINNING POINT, LEAVING SAID THE WESTERLY SIDE OF BUCK ROAD AND COINCIDENT WITH THE NORTHERLY LINE OF BLOCK 44, LOT 3, S 70°43'58" W, A DISTANCE OF 1165.09 TO A POINT COMMON CORNER TO BLOCK 44, LOT 16;

2) THENCE: COINCIDENT WITH THE NORTHEASTERY LINE OF BLOCK 44, LOTS 16, 01, 16 AND 15, N 34°15'02" W, A DISTANCE OF 2559.90 TO A STONE FOUND, COMMON CORNER TO BLOCK 42, LOT 1;

3) THENCE: COINCIDENT WITH THE WESTERLY LINE OF BLOCK 42, LOT 1, N 12°23'32" W, A DISTANCE OF 790.06 TO A STONE FOUND, COMMON CORNER TO BLOCK 44, LOT 13;

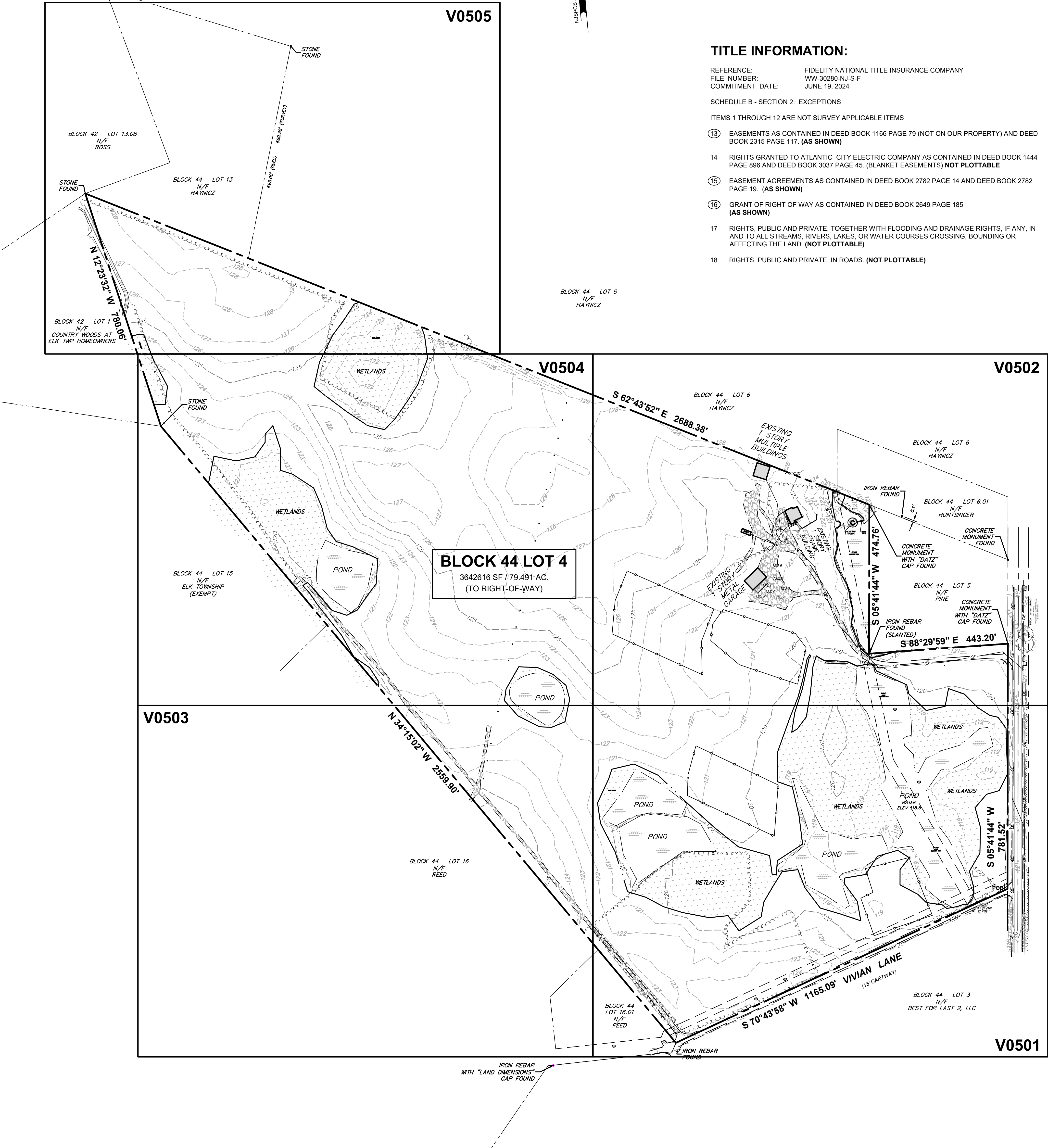
4) THENCE: COINCIDENT WITH THE SOUTHWESTER LINE BLOCK 44, LOTS 13, 6 AND 6.01, S 62°43'52" E, A DISTANCE OF 2688.38 TO A MONUMENT FOUND, COMMON CORNER TO BLOCK 44, LOT 5;

5) THENCE: COINCIDENT WITH THE WESTERLY LINE OF BLOCK 44, LOT 5, S 05°41'44" W, A DISTANCE OF 474.76 TO A POINT, COMMON CORNER TO BLOCK 44, LOT 5;

6) THENCE: COINCIDENT WITH THE SOUTHERLY LINE OF BLOCK 44, LOT 5, S 88°29'59" E, A DISTANCE OF 443.20 TO A MONUMENT FOUND ON THE WESTERLY SIDE OF BUCK ROAD;

7) THENCE: COINCIDENT WITH THE WESTERLY SIDE OF BUCK ROAD, S 05°41'44" W, A DISTANCE OF 781.52 TO THE POINT OF BEGINNING

CONTAINING 3.642,616 S.F. / 79.491 AC. OF LAND, MORE OR LESS.



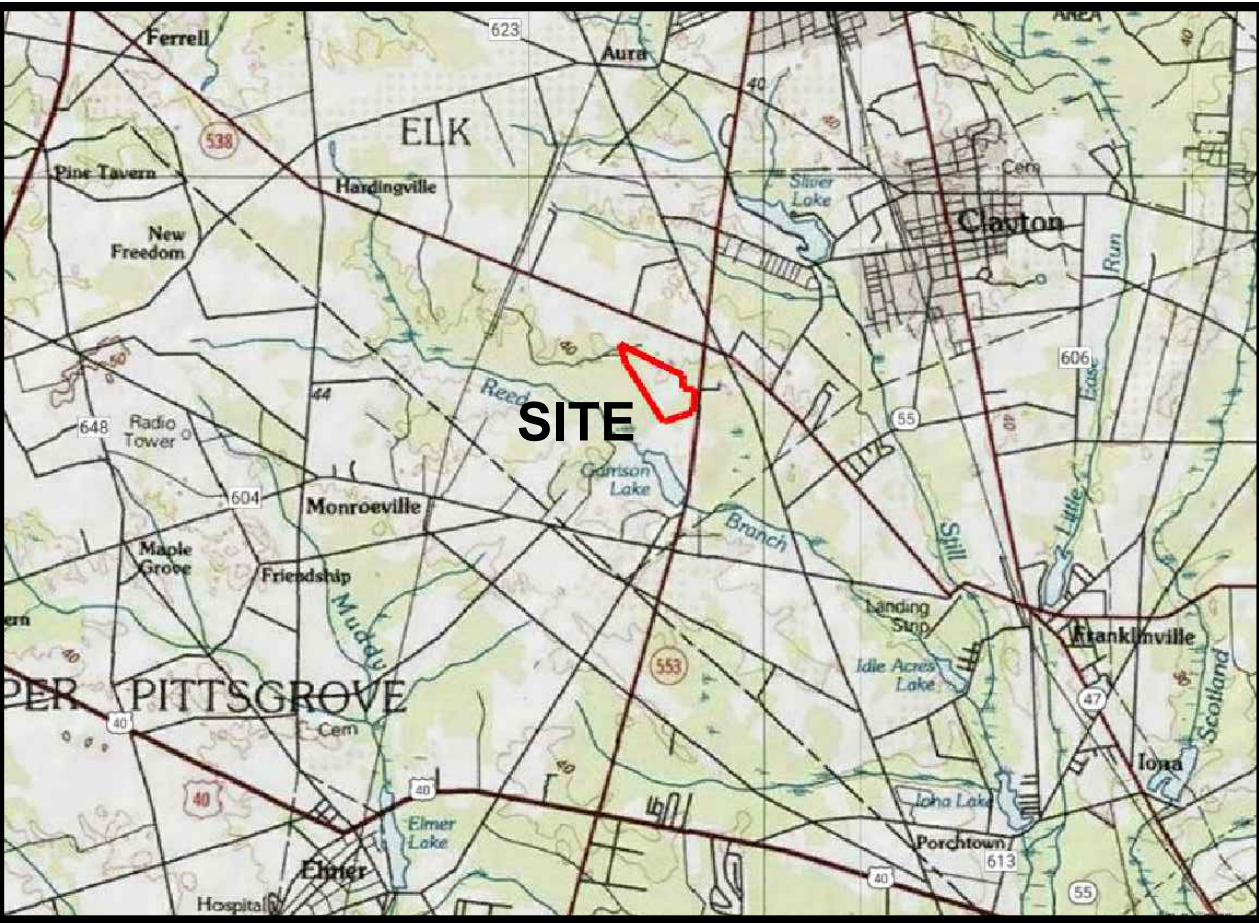
TITLE INFORMATION:

REFERENCE: FIDELITY NATIONAL TITLE INSURANCE COMPANY
FILE NUMBER: WW-30280-NJ-S-F
COMMITMENT DATE: JUNE 19, 2024

SCHEDULE B - SECTION 2: EXCEPTIONS

ITEMS 1 THROUGH 12 ARE NOT SURVEY APPLICABLE ITEMS

- 13 EASEMENTS AS CONTAINED IN DEED BOOK 1166 PAGE 79 (NOT ON OUR PROPERTY) AND DEED BOOK 2315 PAGE 117. (AS SHOWN)
- 14 RIGHTS GRANTED TO ATLANTIC CITY ELECTRIC COMPANY AS CONTAINED IN DEED BOOK 1444 PAGE 896 AND DEED BOOK 3037 PAGE 45. (BLANKET EASEMENTS) NOT PLOTTABLE
- 15 EASEMENT AGREEMENTS AS CONTAINED IN DEED BOOK 2782 PAGE 14 AND DEED BOOK 2782 PAGE 19. (AS SHOWN)
- 16 GRANT OF RIGHT OF WAY AS CONTAINED IN DEED BOOK 2649 PAGE 185 (AS SHOWN)
- 17 RIGHTS, PUBLIC AND PRIVATE, TOGETHER WITH FLOODING AND DRAINAGE RIGHTS, IF ANY, IN AND TO ALL STREAMS, RIVERS, LAKES, OR WATER COURSES CROSSING, BOUNDING OR AFFECTING THE LAND. (NOT PLOTTABLE)
- 18 RIGHTS, PUBLIC AND PRIVATE, IN ROADS. (NOT PLOTTABLE)



LOCATION MAP
N 39-38-23 W 75-07-42

NOTES:

1. THIS SURVEY WAS PREPARED IN ACCORDANCE WITH THE FOLLOWING SOURCES OF INFORMATION:
- A. DEEDS OF RECORD
B. AN ACTUAL FIELD SURVEY PERFORMED BY PENNONI ASSOCIATES
C. PLAN ENTITLED "FINAL PLAN OF LOTS - PLATE 25, BLOCK 44, LOT 1", BY LAND DIMENSIONS ENGINEERING, DATED 11/2009, REVISED 10/02/2017.
3. BLOCK AND LOT NUMBERS REFER TO THE OFFICIAL TAX MAPS OF THE TOWNSHIP OF ELK, GLOUCESTER COUNTY, NEW JERSEY, PLATE #25.
4. PLANIMETRIC & TOPOGRAPHIC FEATURES SHOWN ARE TAKEN FROM AN ACTUAL FIELD SURVEY PERFORMED BY PENNONI ASSOCIATES ON 5/23/2022 & 9/20/2024.
5. THIS SURVEY IS NOT INTENDED TO GUARANTEE OWNERSHIP.
6. SURVEY BASED ON N.J.S.P.C.S. NAD 83 (2011), S SURVEY SCALED TO GROUND AT POINT 9999
- GROUND SCALE FACTOR: 1.0000648802
GROUND COORDINATES: N:294700.00 E:314800.00 Z:127.00
VERTICAL DATUM: NAVD 1988
7. IT IS BEYOND THE SCOPE OF THIS SURVEY TO DETERMINE THE EXISTENCE OR NON-EXISTENCE OF ANY REGULATED ENVIRONMENTAL CONDITION ON OR NEAR THE SUBJECT PARCELS. UNDERGROUND EXPLORATIONS WERE NOT CONDUCTED OR UTILIZED DURING THE PREPARATION OF THIS SURVEY. CONCERNED PARTIES SHOULD PURSUE ANY ENVIRONMENTAL MATTERS SEPARATE AND APART FROM THIS SURVEY.
8. THIS PLAN HAS BEEN DIGITALLY SIGNED IN ACCORDANCE WITH N.J.A.C. 13-40-1A AND THUS CARRIES THE SAME WEIGHT, AUTHORITY AND EFFECT AS A HANDWRITTEN SIGNATURE AND IMPRESSION-TYPE SEAL.
9. THE LOCATION OF UNDERGROUND UTILITIES ARE APPROXIMATE. ALL LOCATIONS ILLUSTRATED ARE BASED UPON UTILITY MARKOUT AND ABOVE GROUND STRUCTURES THAT WERE VISIBLE & ACCESSIBLE IN THE FIELD. THE STATE OF NEW JERSEY REQUIRES NOTIFICATION PRIOR TO ANY EXCAVATION BY UTILIZING THE NEW JERSEY ONE-CALL SYSTEM (1-800-272-1000).
10. A SIGNED WAIVER AND DIRECTION NOT TO SET CORNER MARKERS IN ACCORDANCE WITH THE STATE BOARD OF PROFESSIONAL ENGINEERS AND LAND SURVEYORS REGULATION (N.J.A.C. 13-46-5.3) HAS BEEN RECEIVED FROM THE ULTIMATE USER.
11. THE WETLANDS SHOWN HEREON WERE DELINEATED BY DUBOIS ENVIRONMENTAL CONSULTANTS, LLC ON 5/9/2022. SKETCH DATED: 5/9/2022. AND FIELD LOCATED BY PENNONI ASSOCIATES ON 5/10/2022.

LEGEND

- PROPERTY LINE
ADJACENT PROPERTY LINE
RIGHT-OF-WAY LINE
FENCE
CURB
DEPRESSED CURB
CONTOUR
OVERHEAD ELECTRIC
STORM PIPE
TREE LINE
WATER LINE
WETLANDS LINE
WETLANDS FLAG
UTILITY POLE
GUY
TELEPHONE PANEL BOX
MAILBOX
SIGN
SPOT GRADE
BENCH MARK
MONUMENT FOUND
IRON PIN FOUND
STONE FOUND
- CONCRETE
GRAVEL
WETLANDS
POND

Pennoni

PENNONI ASSOCIATES INC.
515 Grove Street, Suite 1B
Haddon Heights, NJ 08035
T 856.547.0505 F 856.547.9774
NJ COA NO. G42603300

THIS PLAN WAS PREPARED UNDER MY IMMEDIATE SUPERVISION

Keith M. Ludwig, PLS
New Jersey LIC 24550432400

ELK CANNABIS
730 BUCK ROAD
TOWNSHIP OF ELK, GLOUCESTER COUNTY, NEW JERSEY

BOUNDARY & TOPOGRAPHIC SURVEY

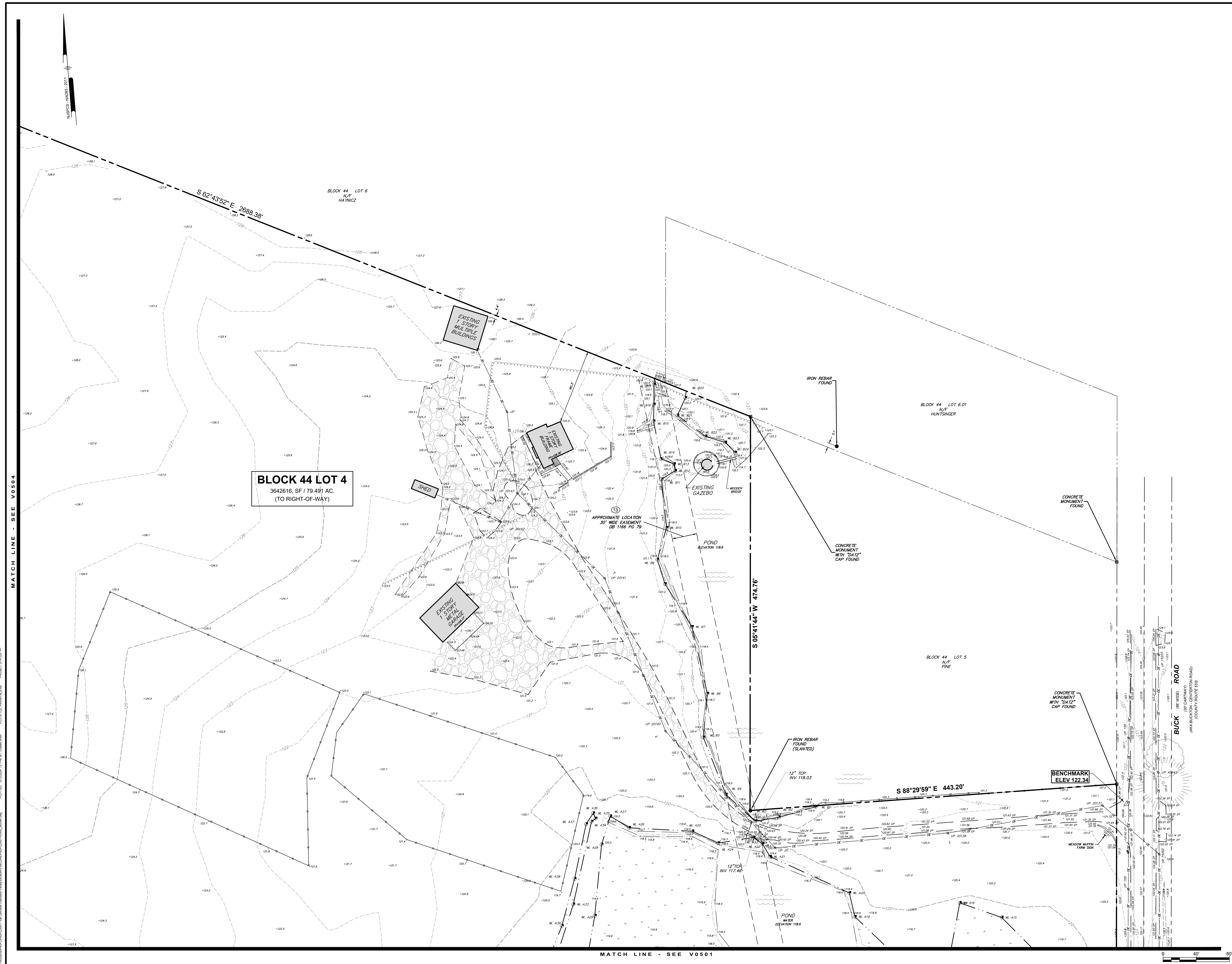
PAUL PLOSKONKA
210 N VINEYARD BOULEVARD
COLLINGSWOOD, NJ 08108

NO.	DATE	REVISIONS
1	10/14/24	UPDATED TO CURRENT CONDITIONS & TITLE REPORT

PROJECT: PAUPL23001
DATE: 2022.10.03
DRAWING SCALE: 1"= 150'
DRAWN BY: CWS/ER
APPROVED BY: KML

V0500

SHEET 1 OF 6





BLOCK 44 LOT 4
3642616, SF / 79.491 AC.
(TO RIGHT-OF-WAY)

BLOCK 44 LOT 16
N/F
REED

N 34°15'02" W 2559.90'

MATCH LINE - SEE V0501

ELK CANNABIS

730 BUCK ROAD
TOWNSHIP OF ELK, GLOUCESTER COUNTY, NEW JERSEY

BOUNDARY & TOPOGRAPHIC SURVEY

PAUL PLOSKONKA
19 N VINEYARD BOULEVARD
COLLINGSWOOD, NJ 08108

Keith M. Ludwig, PLS
New Jersey LIC. 24GS04324400



PENNONI ASSOCIATES INC.
515 Grove Street, Suite 1B
Haddon Heights, NJ 08035
T 856.547.0505 **F** 856.547.9174
NJ COA NO. GA28033300

[illegible]

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PROJECT PAUPL23001

DATE	2022 10 03
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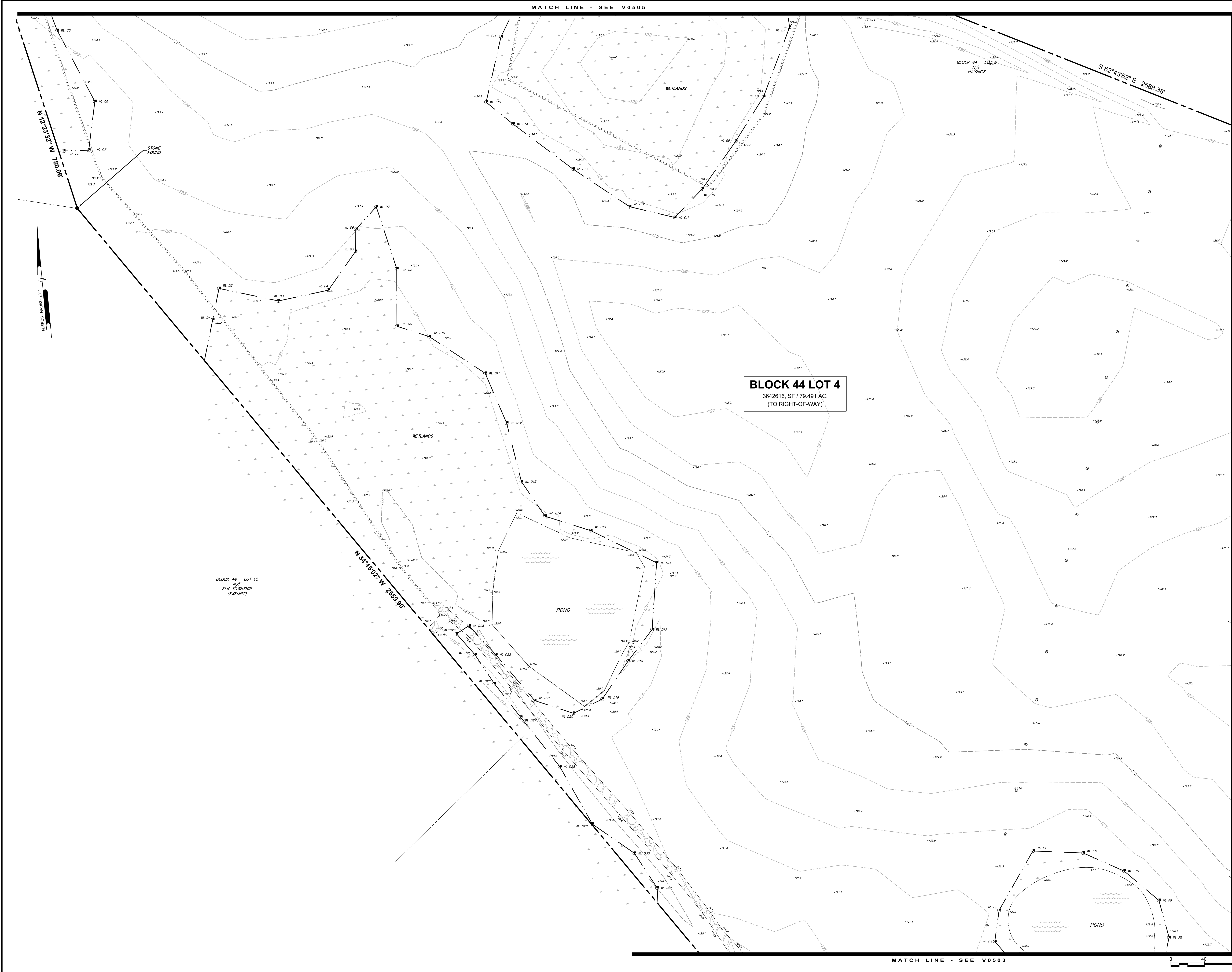
DRAWING SCALE 1"= 40'

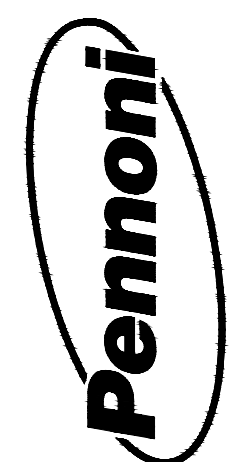
DRAWN BY CWS/ER

V0503

SHEET 4 OF 6

\\houston\planning\2001-28\Canada\Canada\Public\GIS\DWG\SETUP\2001\0000_0000.dwg PLOTTED: 01/20/2024 12:04:07 Charles Smith PLOTTED BY: Pennon Associates, Inc. PROJECT STATUS: ---





PENNON ASSOCIATES INC.
515 Grove Street, Suite 1B
Haddon Heights, NJ 08035
T 856.547.0505 F 856.547.9774
NJ COA NO. G42633300

THIS PLAN WAS PREPARED UNDER MY IMMEDIATE SUPERVISION.

Keith M. Ludwig, PLS
New Jersey LIC. 243504324400

ELK CANNABIS
739 BUCK ROAD
TOWNSHIP OF ELK, GLOUCESTER COUNTY, NEW JERSEY

BOUNDARY & TOPOGRAPHIC SURVEY

PAUL PLOSKONKA
219 N VINEYARD BOULEVARD
COLLINGSWOOD, NJ 08108

NO.	DATE	REVISIONS	BY
1	10/14/24	UPDATED TO CURRENT CONDITIONS & TITLE REPORT	ER

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PROJECT: PAUPL23001
DATE: 2022.10.03
DRAWING SCALE: 1"= 40'
DRAWN BY: CWS/ER
APPROVED BY: KML

V0504
SHEET 5 OF 6



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PROJECT	PAUP/L23001
DATE	2022 10 03
DRAWING SCALE	1" = 40'
DRAWN BY	CWS/ER
APPROVED BY	KML

Appendix C:
Elk Township Zoning Map



Mantua Township

Glassboro Borough

Clayton Borough



BACH Associates, PC
ENGINEERS • ARCHITECTS • PLANNERS

304 White Horse Pike
Haddon Heights, New Jersey 08035

Tel: 856-546-8611
Fax: 856-546-8612

www.BachDesignGroup.com

*This map was developed using NJGIN/NJDEP
Geographic Information System digital data,
but this is a secondary product which has not
been verified by NJGIN/NJDEP and is not state
authorized

ZONING MAP
Township of Elk
Gloucester County, NJ

Map Data & Source:

Data Source: NJGIN

Scale: 1" = 3,000'

Project Number: ELK2023

Date: March 2023

Drafted by: Chloe Bach

Prepared by:
Candace Kanaplue, AICP, PP

REVISIONS		
Revision	Description	Date
1	Per Ordinance O-3-2022	March 2023



Legend

Parcels

Blocks

Elk Township Boundary

Municipal Boundaries

Zoning

C1-Neighborhood Commercial

C2-Highway Commercial

M1-Light Manufacturing

MHP-Mobile Home Park

MD-Moderate Density Residential

LD-Low Density Residential

R-Rural Residential

RE-Rural Environmental Residential

RR-Recreational Residential

Lake Gilman Overlay Zone

Neighborhood Commercial Overlay

Cannabis Establishment Overlay (CEO) Zone

APPROXIMATE
SITE LOCATION

Upper
Pittsgrove
Township

South
Harrison
Township

Franklin
Township

Appendix D:
Natural Heritage Program Letter





State of New Jersey

DEPARTMENT OF ENVIRONMENTAL PROTECTION

STATE PARKS, FORESTS & HISTORIC SITES
OFFICE OF NATURAL LANDS MANAGEMENT

501 East State Street

P.O. Box 420, Mail Code 501-04

Trenton, New Jersey 08625-0420

Tel. (609) 984-1339 * Fax (609) 984-1427

<https://www.nj.gov/dep/parksandforests/natural/index.html>

PHILIP D. MURPHY

Governor

TAHESHA L. WAY

Lt. Governor

SHAWN M. LATOURETTE

Commissioner

March 10, 2025

Susie Harvey
Van Note - Harvey Associates, P.C.
103 College Road East, Third Floor
Princeton, NJ 08540

Re: Elk Cannabis Cultivation Facility / 730 Buck Road
Block(s) - 44, Lot(s) - 4
Elk Township, Gloucester County

Susie Harvey:

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 3.4) 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 map(s) submitted with the Natural Heritage Data Request Form into our GIS. 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 for occurrences of any rare wildlife species or wildlife habitat on the referenced site. The Natural Heritage Biotics 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.

We have also checked the Landscape Project habitat mapping for occurrences of rare wildlife species or wildlife habitat in the immediate vicinity (within ¼ mile) of the referenced site. Additionally, the Natural Heritage Biotics 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 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.

For requests submitted in order to make a riparian zone width determination 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 is 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

NHP File No. 25-3907562-32863

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 <https://nj.gov/dep/parksandforests/natural/heritage/database.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 https://nj.gov/dep/parksandforests/natural/docs/nhpcodes_2010.pdf.

Beginning January 6, 2025, the Natural Heritage Program reports for wildlife species will utilize data from Landscape Project Version 3.4. If you have questions concerning the wildlife records or wildlife species mentioned in this response, we recommend that you visit the interactive web application at the following URL, <https://dep.nj.gov/njfw/landscapeapp/>, or contact the Division of Fish and Wildlife, Endangered and Nongame Species Program at (609) 292-9400.

Occurrences of Bald Eagle nest and roost habitat have "special concern" rank and are included in Landscape Project Version 3.4. The DEP also recognizes that the U.S. Fish & Wildlife Service maintains additional jurisdiction pursuant to the Bald and Golden Eagle Protection Act (BGEPA). They provide guidance to avoid negative impacts in the "National Bald Eagle Management Guidelines" document found at https://www.fws.gov/sites/default/files/documents/national-bald-eagle-management-guidelines_0.pdf. They also provide a screening tool to help identify activities that may require a Federal permit, at <https://www.fws.gov/media/northeast-bald-eagle-project-screening-form>.

For occurrences of Osprey nests and other bird nests that persist year to year, active nests continue to be protected from disturbance that can result in "take" (i.e., disturbance that can cause abandonment or loss) pursuant to the NJ Endangered and Nongame Species Conservation Act (ENSCA) and the Federal Migratory Bird Treaty Act. As a result of delisting of Osprey to "stable" conservation status, Osprey nests are not represented in Landscape Project maps, but nest locations are available online at www.Osprey-Watch.org.

For additional information regarding any Federally listed plant or animal species, please contact the U.S. Fish & Wildlife Service, New Jersey Field Office at <http://www.fws.gov/northeast/njfieldoffice/endangered/consultation.html>.

Information supplied by the Natural Heritage Program summarizes existing data known to the program at the time of the request regarding the biological elements (species and/or ecological communities) or their locations. They should never be regarded as final statements on the elements or areas being considered, nor should they be substituted for on-site surveys required for environmental assessments.

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. 25-3907562-32863

NHP File No. 25-3907562-32863

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

<u>Report Name</u>	<u>Included</u>	<u>Number of Pages</u>
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 3.4 Species Based Patches	Yes	1 page(s) included
4. Vernal Pool Habitat on the Project Site Based on Search of Landscape Project 3.4	Yes	1 page(s) included
5. Rare Wildlife Species or Wildlife Habitat on the Project Site Based on Search of Landscape Project 3.4 Stream Habitat File	No	0 pages included

**Rare Wildlife Species or Wildlife Habitat on the
Project Site Based on Search of
Landscape Project 3.4 Species Based Patches**

Class	Common Name	Scientific Name	Feature Type	Rank	Federal Protection Status	State Protection Status	Grank	Srank
Aves	Barred Owl	Strix varia	Breeding Sighting	3	NA	State Threatened	G5	S2B,S2N
	Great Blue Heron	Ardea herodias	Foraging	2	NA	Special Concern	G5	S3B,S4N

**Vernal Pool Habitat on the
Project Site Based on Search of
Landscape Project 3.4**

Vernal Pool Habitat Type

Vernal Pool Habitat ID

Potential vernal habitat area

1783

Total number of records: 1

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

<u>Report Name</u>	<u>Included</u>	<u>Number of Pages</u>
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	No	0 pages 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 3.4 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 3.4	Yes	1 page(s) included
5. Rare Wildlife Species or Wildlife Habitat In the Immediate Vicinity of the Project Site Based on Search of Landscape Project 3.4 Stream Habitat File	No	0 pages included

Rare Wildlife Species or Wildlife Habitat Within the Immediate Vicinity of the Project Site Based on Search of Landscape Project 3.4 Species Based Patches

Class	Common Name	Scientific Name	Feature Type	Rank	Federal Protection Status	State Protection Status	Grank	Srank
<i>Aves</i>								
	Bald Eagle	Haliaeetus leucocephalus	Foraging	2	NA	Special Concern	G5	S3B,S4N
	Barred Owl	Strix varia	Breeding Sighting	3	NA	State Threatened	G5	S2B,S2N
	Eastern Meadowlark	Sturnella magna	Breeding Sighting	3	NA	State Threatened	G5	S2B,S3N
	Grasshopper Sparrow	Ammodramus savannarum	Breeding Sighting	3	NA	State Threatened	G5	S2B,S3N
	Great Blue Heron	Ardea herodias	Foraging	2	NA	Special Concern	G5	S3B,S4N
	Vesper Sparrow	Poocetes gramineus	Breeding Sighting	4	NA	State Endangered	G5	S1B,S3N

**Vernal Pool Habitat
In the Immediate Vicinity of
Project Site Based on Search of
Landscape Project 3.4**

Vernal Pool Habitat Type

Vernal Pool Habitat ID

Potential vernal habitat area

1783

Total number of records: 1

***Table 3: Within 1 Mile for Riparian Zone Width Determination
(6 possible reports)***

<u>Report Name</u>	<u>Included</u>	<u>Number of Pages</u>
1. Rare Plant Species Occurrences for Riparian Zone Width Determination (Flood Hazard Area Control Act Rule Application) - Within One Mile of the Project Site Based on Search of Natural Heritage Database	No	0 pages included
2. Natural Heritage Priority Sites for Riparian Zone Width Determination - Within One Mile of the Project Site	No	0 pages included
3. Rare Wildlife Species or Wildlife Habitat for Riparian Zone Width Determination - Within One Mile of the Project Site Based on Search of Landscape Project 3.4 Species Based Patches	Yes	2 page(s) included
4. Vernal Pool Habitat for Riparian Zone Width Determination - Within One Mile of the Project Site Based on Search of Landscape Project 3.4	Yes	1 page(s) included
5. Rare Wildlife Species or Wildlife Habitat for Riparian Zone Width Determination - Within One Mile of the Project Site Based on Search of Landscape Project 3.4 Stream Habitat File	No	0 pages included

Rare Wildlife Species or Wildlife Habitat for Riparian Zone Width Determination Within One Mile of the Project Site Based on Search of Landscape Project 3.4 Species Based Patches
--

Class	Common Name	Scientific Name	Feature Type	Rank	Federal Protection Status	State Protection Status	Grank	Srank
<i>Aves</i>								
	American Kestrel	Falco sparverius	Breeding Sighting	3	NA	State Threatened	G5	S2B,S2N
	Bald Eagle	Haliaeetus leucocephalus	Foraging	2	NA	Special Concern	G5	S3B,S4N
	Bald Eagle	Haliaeetus leucocephalus	Nest	2	NA	Special Concern	G5	S3B,S4N
	Barred Owl	Strix varia	Breeding Sighting	3	NA	State Threatened	G5	S2B,S2N
	Barred Owl	Strix varia	Non-breeding Sighting	3	NA	State Threatened	G5	S2B,S2N
	Eastern Meadowlark	Sturnella magna	Breeding Sighting	3	NA	State Threatened	G5	S2B,S3N
	Grasshopper Sparrow	Ammodramus savannarum	Breeding Sighting	3	NA	State Threatened	G5	S2B,S3N
	Great Blue Heron	Ardea herodias	Foraging	2	NA	Special Concern	G5	S3B,S4N
	Horned Lark	Eremophila alpestris	Breeding Sighting	3	NA	State Threatened	G5	S2B,S3N
	Savannah Sparrow	Passerculus sandwichensis	Breeding Sighting	3	NA	State Threatened	G5	S2B,S4N
	Vesper Sparrow	Poocetes gramineus	Breeding Sighting	4	NA	State Endangered	G5	S1B,S3N

Rare Wildlife Species or Wildlife Habitat for Riparian Zone Width Determination
Within One Mile of the Project Site
Based on Search of Landscape Project 3.4 Species Based Patches

Class	Common Name	Scientific Name	Feature Type	Rank	Federal Protection Status	State Protection Status	Grank	Srank
<i>Mammalia</i>	Northern Myotis	Myotis septentrionalis	Inactive Season Sighting	5	Federally Listed Endangered	State Endangered	G2G3	S1

**Vernal Pool Habitat for Riparian Zone Width Determination
Within One Mile of the Project Site
Based on Search of Landscape Project 3.4**

Vernal Pool Habitat Type	Vernal Pool Habitat ID
Vernal habitat area	2974
Potential vernal habitat area	1783
Total number of records:	2