Environmental Impact Statement

For

Insurance Auto Auctions Corp.
Block 5201, Lot 8;
Block 5302, Lot 1;
Block 5402, Lots 2, 3, and 4
Township of Waterford, Camden County, New Jersey

April 5, 2021

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1.0 INTRODUCTION

Insurance Auto Auctions Corp. is proposing to redevelop the Project Site into an automobile auction storage yard. The Project Site covers approximately 180.3 acres, including the following tax parcels located in the Township of Waterford, Camden County, New Jersey (Figures 1, 2, and 3):

- Block 5201, Lot 8;
- Block 5302, Lot 1;
- Block 5402, Lots 2, 3, and 4.

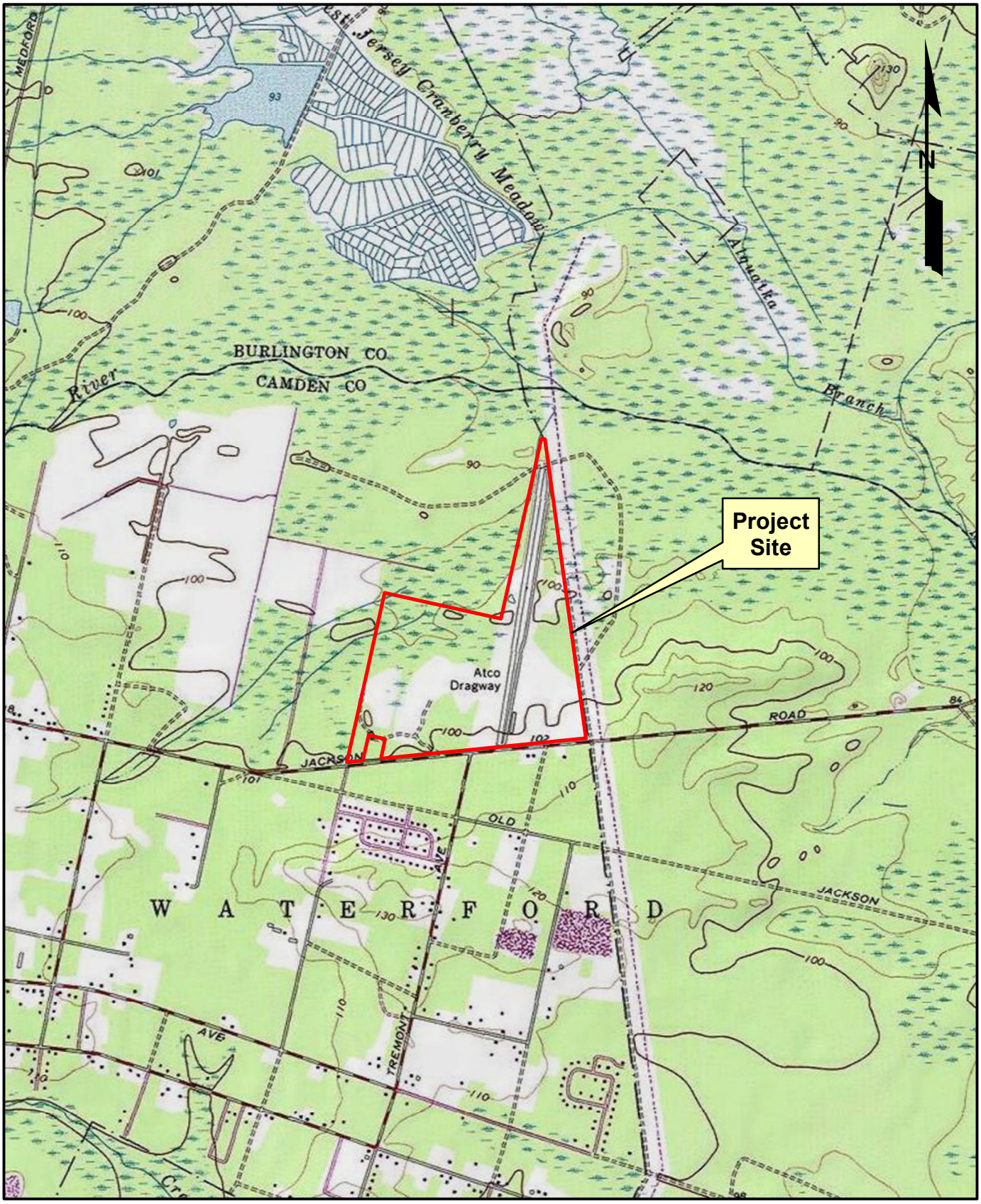
The Project Site is currently developed and operated as an automobile raceway (dragway). The portion of the Project Site to be redeveloped is located within the Planned Light Industrial/Business, Business (PL) District, according to the Waterford Township Zoning Map (dated December 14, 2006). The remaining portions of the Project Site that will not be developed as part of the proposed project are located within the PL District and the Rural Development District, Residential (RR).

An application requesting Preliminary and Final Site Plan Approval for this project is pending with the Waterford Township Planning Board. This Environmental Impact Statement ("EIS") has been prepared to satisfy the Township's requirement of an EIS (§176-107), which is required as part of the Preliminary/Final Site Plan Application for the project.

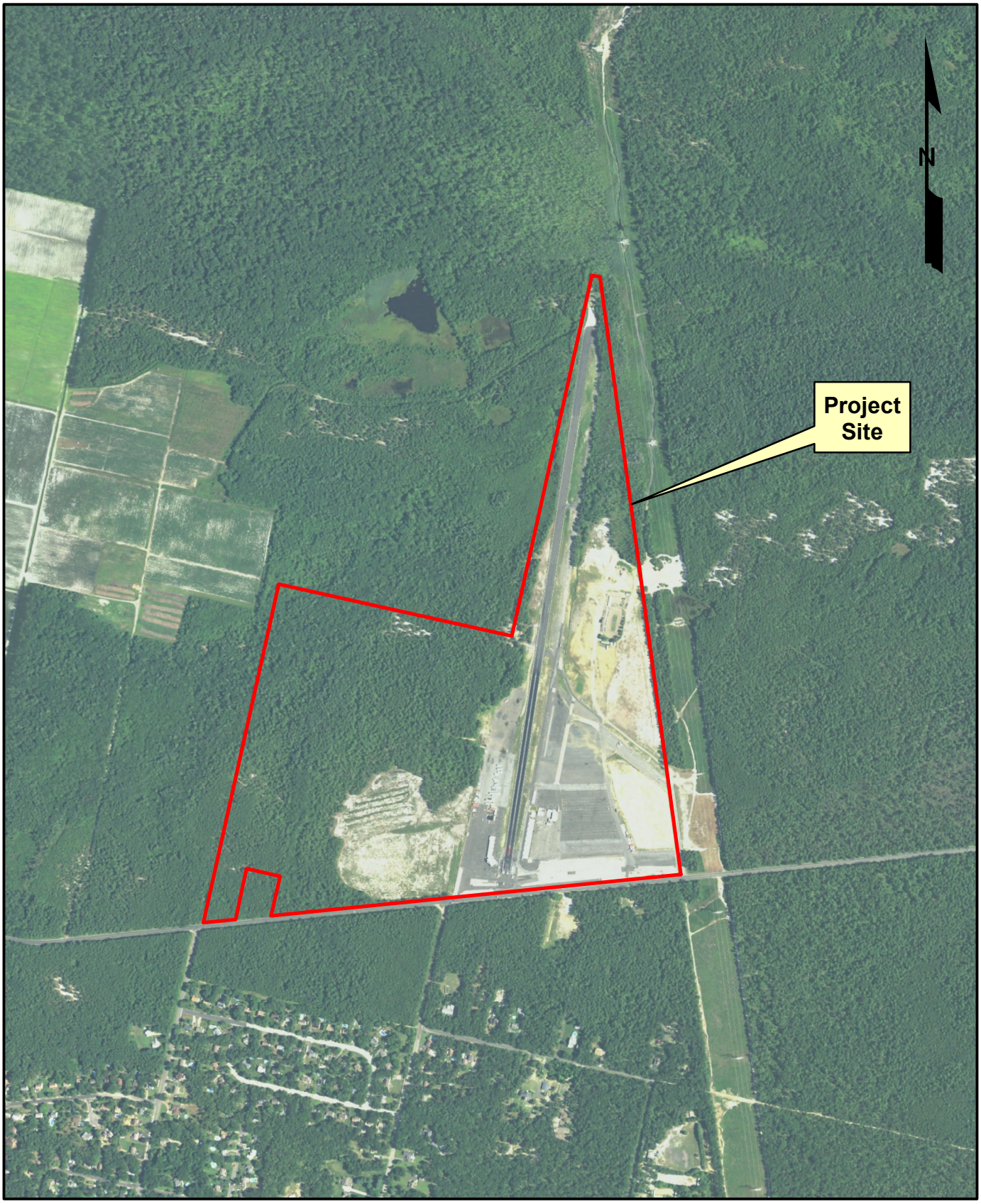
The proposed area of development is located within the Pinelands Protection Area, within the Rural Development Planning Area. Therefore, the project requires a Certificate of Filing from the New Jersey Pinelands Commission ("NJPC"). The development application for this redevelopment project was submitted to the NJPC in June 2020 (Application No. 1987-1183.015) and the NJPC issued a Certificate of Filing (inconsistent) on November 6, 2020.

Project elements evaluated in this report are depicted on the plan set entitled, "Preliminary and Final Site Plans, Proposed Automobile Auction Facility, Block 5201, Lot 8; Block 5302, Lot 1; Block 5402, Lots 2, 3 & 4, Township of Waterford, Camden County, New Jersey;" prepared by David J. Fleming, P.E., Marathon Engineering & Environmental Services, Inc.; dated June 1, 2020; last revised December 7, 2020 (Issue 4). Supplemental information was submitted to the Township Planning Board on January 6, 2021 and March 19, 2021.

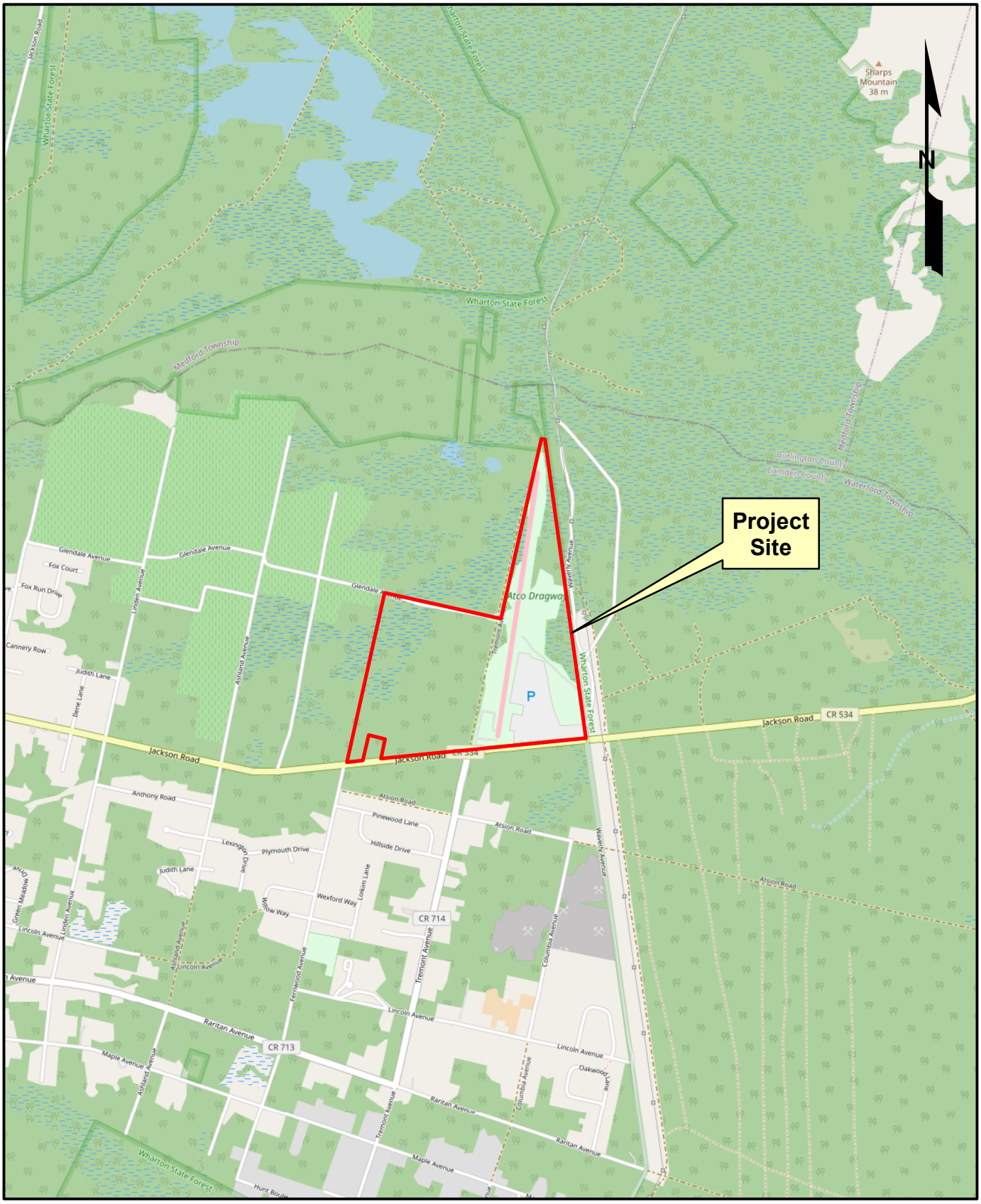
The applicant, the current owner of the Project Site, and members of the project team are identified below:



MARATHON ENGINEERING & ENVIRONMENTAL SERVICES, INC. **3 KILLDEER COURT,** **SUITE 302** **SWEDESBORO, NJ 08085**	**Insurance Auto Auctions** **Waterford Township** **Camden County, New Jersey**	**Figure 1 - Site Location Map** Source: USGS Topographic Quad., Medford Lakes, New Jersey Scale: 1:24,000 IA2 001.01



MARATHON ENGINEERING & ENVIRONMENTAL SERVICES, INC. **3 KILLDEER COURT,** **SUITE 302** **SWEDESBORO, NJ 08085**	**Insurance Auto Auctions** **Waterford Township** **Camden County, New Jersey**	**Figure 2 - Aerial Photograph** Source: 2017 Orthophotography, NJ Geographic Info. Network Scale: 1:12,000 IA2 001.01



MARATHON ENGINEERING & ENVIRONMENTAL SERVICES, INC. **3 KILLDEER COURT,** **SUITE 302** **SWEDESBORO, NJ 08085**	**Insurance Auto Auctions** **Waterford Township** **Camden County, New Jersey**	**Figure 3 - Road Map** Source: ESRI Basemaps; Open Street Map Scale: 1:24,000 IA2 001.01

Applicant:	Insurance Auto Auctions Corp. Two Westbrook Corporate Center, 10th Floor Westchester, Illinois 60154
Property Owner:	Atco Dragway Enterprises, LLC 1000 Jackson Road Atco, New Jersey 08004
Land Use Attorney:	DuBois, Sheehan, Hamilton, Levin & Weissman, LLC Attn: Matthew T. Wait, Esquire & Mark Oddo, Esquire 511 Cooper Street Camden, New Jersey 08102
Civil Engineer:	Marathon Engineering & Environmental Services, Inc. Attn: David J. Fleming, P.E. 3 Killdeer Court, Suite 302 Swedesboro, New Jersey 08085
Nationwide Environmental Consultant:	Tetra Tech, Inc. Attn: Jeffrey L. Hosterman, P.G. 240 Continental Drive, Suite 200 Newark, Delaware 19713
Traffic Consultant:	Shropshire Associates, LLC Attn: Nathan B. Mosley, P.E., C.M.E. 277 White Horse Pike, Suite 203 Atco, New Jersey 08004

2.0 PROJECT DESCRIPTION

2.1 Purpose and Scope

The purpose of the project is to redevelop a portion of the Project Site into an automobile auction storage yard. The automobiles to be stored at this facility, many of which will be in non-drivable condition and sourced from insurance companies, used car dealers, and charitable organizations, will be offered for sale via on-line auction. No retail sales will be made to the general public.

The vehicles will be imported and exported to/from the Project Site using trucks, such as flatbed trucks and multi-vehicle transport trucks. No vehicle repairs will be made on the site and the vehicles will be sold in an “as is” condition. No repairs, dismantling, or modifications to the auction vehicles will be made. The vehicles will leave the site in the same condition as when they arrived.

Auction vehicles (inventory) will be moved within the Project Site using loaders.

2.2 Proposed Structures

The proposed facility consists of one (1) office building, two (2) enclosures for vehicles and motorcycles, one (1) fire water tank (up to 100,000 gallons), one (1) paved parking area for employees and visitors, and a gravel covered area where auction automobiles will be delivered and stored as inventory. The facility will contain approximately 35 acres of vehicular storage space for an anticipated maximum inventory of up to 6,125 vehicles.

The proposed structures are located adjacent to Jackson Road, in the portion of the Project Site that is already developed with structures related to the existing dragway use, including paved dragstrip, paved parking areas, paved drive aisles, bleachers, and several buildings. Existing buildings and structures associated with the Atco Dragway will be demolished, and existing paved areas not utilized for the proposed automobile auction facility will be removed and restored to pervious (grass) surfaces. Approximately 2,500 linear feet of existing paved dragstrip and the paved return road located north of the proposed redevelopment area will be removed and replaced with pervious (grass) cover.

Based on the Site Plan that was submitted to the Township on March 19, 2021, the proposed impervious coverage on the site, consisting of pavement, buildings and concrete, will cover 16.89 acres. Therefore, impervious coverage on the Project Site will be reduced from 36.08 acres to 16.89 acres. The 16.89 acres will account for 18.8% of the area within the Planned Light Industrial District zoned portion of the Project Site, which is less than the maximum permitted impervious coverage of 20% for the conditional use. The project will result in a net decrease of 19.20 acres of impervious cover and requires a disturbance area of approximately 55 acres.

Vehicular access to the proposed facility will be provided via a new driveway connected to Jackson Road, located along the eastern boundary of the Project Site.

The proposed use will be serviced by an on-site subsurface sewage disposal system.

The proposed office building will be serviced by an on-site potable water well.

The project qualifies as "major development," as defined at N.J.A.C. 7:8-1.2, because it involves greater than one (1) acre of land disturbance. Therefore, the project must comply with the New Jersey Stormwater Management Regulations (N.J.A.C. 7:8), which set forth standards for runoff quantity, water quality, and groundwater recharge, and the stormwater management standards in the New Jersey Pinelands Comprehensive Management Plan ("CMP"). Stormwater management will be provided by two (2) proposed surface infiltration basins, infiltration areas in the employee parking lot, underground infiltration for roof runoff, and gravel infiltration areas located within the automobile inventory area. In addition, a manufactured treatment device (Contech StormFilter) is proposed in the low spot of the drop zone. The purpose of the manufactured treatment device, which is certified by the New Jersey Department of Environmental Protection ("NJDEP"), is to remove pollutants from stormwater runoff leaving the drop zone. Although this manufactured treatment device is not required by the New Jersey Stormwater Management Regulations (N.J.A.C. 7:8) or the Pinelands CMP, the applicant decided to include this device as an additional measure aimed at protecting water quality.

2.3 Suitability of Site

The proposed use is consistent with the municipal zoning and is compatible with surrounding uses. The portion of the Project Site to be redeveloped is located within the Planned Light Industrial/Business, Business (PL) District, according to the Waterford Township Zoning Map (dated December 14, 2006). The proposed use (i.e., used car sales/auction) is a permitted conditional use in the Planned Light Industrial/Business District. Automobile new and/or used sales and service establishments are listed as a permitted conditional use in section §176-104.H of the Waterford Township Ordinance (Landgraf 2020).

The Township's approval of a conditional use requires a site plan that satisfies certain conditions outlined in the conditional use section of the code. The proposed used automobile sales facility complies with the conditional use standards at §176-104.H. Since the proposed use satisfies the definition of the permitted and conditional use and will comply with all of the conditional use standards, the proposed use is considered a permitted use in the portion of the

Project Site that is zoned Planned Light Industrial/Business, Business (Landgraf 2020).

The portion of the Project Site to be redeveloped has been historically used as an automobile dragway. Existing buildings and structures associated with the Atco Dragway will be demolished, and existing paved areas not utilized for the proposed automobile auction facility will be removed and restored to pervious (grass) surfaces. Approximately 2,500 linear feet of existing paved dragstrip and the paved return road located north of the proposed redevelopment area will be removed and replaced with pervious (grass) cover. Redevelopment of previously developed/disturbed land minimizes the addition of impervious cover, disturbance to trees, and disturbance to environmentally sensitive areas (e.g., wetlands, wetlands buffer, and wildlife habitat), and is consistent with the land use planning goals set forth by Waterford Township and Camden County.

Adjacent properties are zoned as follows:

- North – Recreation/conservation district, public (RC) and Preservation district, public (PD);
- East – Preservation district, public (PD);
- South – Rural development district, residential (RR);
- West – Rural development district, residential (RR) and Agriculture district, business (AG).

The proposed use on the Project Site will not preclude or conflict with existing or potential uses on adjacent properties, based on the current Township zoning.

2.4 Proposed Demographic

The proposed project does not involve a residential component; no new dwelling unit will be constructed. Therefore, the project will not directly affect the population of Waterford Township.

3.0 COMPLIANCE WITH LOCAL & STATE DEVELOPMENT PLANNING

3.1 Waterford Township

According to the Township of Waterford Township zoning map, last revised December 14, 2006, the Project Site is split-zoned, with the rear wooded area being zoned Rural Development and the existing developed area zoned Planning Light Industrial/Business. The project does not propose development or redevelopment in the Rural Development district. The proposed redevelopment activities are located entirely in the Planning Light Industrial/Business district.

The proposed use (i.e., used car sales/auction) is a permitted conditional use in the Planned Light Industrial/Business District. Automobile new and/or used sales and service establishments are listed as a permitted conditional use in section 176-104.H of the Waterford Township Ordinance (Landgraf 2020). The Township's approval of a conditional use requires a site plan that satisfies certain conditions outlined in the conditional use section of the code.

The Township's approval of a conditional use requires a site plan that satisfies certain conditions outlined in the conditional use section of the code. The proposed used automobile sales facility complies with the conditional use standards at §176-104.H. Since the proposed use satisfies the definition of the permitted and conditional use and will comply with all of the conditional use standards, the proposed use is considered a permitted use in the portion of the Project Site that is zoned Planned Light Industrial/Business, Business (Landgraf 2020).

3.2 Adjacent Municipality

The Project Site is located within 1,000 feet of one (1) adjacent municipality, Medford Township. The boundary between Waterford Township and Medford Township is located approximately 780 feet north of Lot 8 (Block 5201), the northern limit of the Project Site.

The portion of Medford Township located within 1,000 feet of the Project Site is within the Preservation (PD) district, according to the Medford Township Zoning Map (last amended September 9, 2009). The footprint of redevelopment associated with this project is located approximately 3,600 feet (0.68 mile) from the boundary between Waterford Township and Medford Township. As the area of proposed redevelopment is located a substantial distance from Medford Township, and existing impervious cover (i.e., segment of dragway and return road) will be removed from the northern portion of the Project Site, the proposed redevelopment project will not conflict with existing or planned land use in Medford Township.

3.3 Camden County

The Camden County Master Plan (2014)[1] divides Camden County into four (4) planning areas, consistent with the State Strategic Plan. These planning areas provide a general guide as to the most appropriate locations for future growth and preservation to occur. The portion of the Project Site to be redeveloped is located within the "Limited Growth Investment Area." Limited Growth Investment

[1] "Camden County's Land Use Element is intended to provide the County and its 37 municipalities with an actionable vision for the future, providing a clear picture of what the land use landscape in the County could look like by 2040."

Areas “do not have supportive infrastructure for growth, and are best suited for investments in land protection, agriculture, or tourism.”

As defined in the County Master Plan, a Limited Growth Investment Area means “an area that does not have existing or planned infrastructure that will lead to a significant degree of additional new development or redevelopment opportunities. Large scale County investments that may lead to additional development should not be prioritized in these areas. Though to a lesser degree than Priority Preservation Investment Areas (PPIAs), County investments in land protection, and supporting and enhancing the agricultural or tourism industry are encouraged.”

The proposed project is consistent with the policy goals outlined in the Land Use Element of the Camden County Master Plan (2014). Though the Project Site is located in an area that does not have existing infrastructure to support large-scale growth, including public sewer and public water services, the proposed use will not induce secondary development, such as residential or commercial. The project itself does not require an investment to extend public utility infrastructure to the Project Site, and the project will not spur new development that would require such investments. The proposed change in use at the Project Site will not affect planning goals for adjacent tracts of land. In all planning areas, the County Master Plan encourages redevelopment of previously developed sites, which aids in alleviating development pressure on undeveloped sites, such as wooded lots and agricultural land.

The project requires Site Plan Approval from the Camden County Planning Board because the Project Site fronts a county roadway (Jackson Road, County Route No. 534). The application for Site Plan Approval was submitted to the Camden County Planning Board on November 6, 2020. On January 19, 2021, the Camden County Planning Board issued a review letter for this project. The County requested the following additional/supplemental information:

1. Additional right-of-way (roadway easement) to widen Jackson Road from the centerline along the site’s frontage.

2. Plans that show proposed improvements with the right-of-way of Jackson Road.

3. Curbing across the site’s frontage with Jackson Road.

4. Revised traffic analysis report.

5. A note on the plans indicating the type of equipment to be used to move auction vehicles within the site and where the equipment will be stored on the site.

6. Revisions to the plans to confirm areas of existing and proposed land cover.

7. Revisions to the plans to address County Standards for a new driveway connection to a County roadway.

8. Additional information to address the New Jersey Stormwater Management Regulations (N.J.A.C. 7:8).

9. Demolition of the existing paved access driveway located on State property.

3.4 New Jersey State Development and Redevelopment Plan & State Strategic Plan

The Project Site is located in the Pinelands jurisdictional area. For land use planning in the Pinelands jurisdictional area, the New Jersey State Planning Act requires the New Jersey State Planning Commission to rely on the New Jersey Pinelands Comprehensive Management Plan. The project's conformance with the New Jersey Pinelands Comprehensive Management Plan is addressed in the following section.

3.5 New Jersey Pinelands Comprehensive Management Plan

On July 8, 1983, the Pinelands Commission fully certified the Master Plan and Land Use Ordinances of Waterford Township.

The proposed area of development is located within the Pinelands Protection Area, within the Rural Development Planning Area. Therefore, the project requires a Certificate of Filing from the NJPC. The development application for this redevelopment project was submitted to the NJPC in June 2020 (Application No. 1987-1183.015).

On November 6, 2020, the NJPC issued a Certificate of Filing (inconsistent) for this project. The two (2) reasons for the inconsistent determination by the NJPC were as follows:

1. A groundwater mounding analysis indicated that the groundwater mounding to be caused by the proposed stormwater infiltration basin will result in adverse impacts to the adjacent wetlands. Such a condition is inconsistent with the Waterford Township land use ordinance and the New Jersey Pinelands Comprehensive Management Plan [N.J.A.C. 7:50-6.84(a)6iv3].

2. Use of one (1) stormwater infiltration facility, instead of stormwater management measures that are "smaller in size and distributed spatially throughout the parcel" [N.J.A.C. 7:50-6.84(a)6iv4].

To address inconsistency #1, a revised Site Plan was submitted to the Waterford Township Planning Board and the NJPC on March 19, 2021, which depicted existing asphalt to be removed and replaced with gravel in the vehicle inventory areas. Two (2) small infiltration basins are now proposed to meet the stormwater management standards of the Pinelands CMP. According to the groundwater mounding analysis for each proposed infiltration basin, the proposed basins will not generate a groundwater mound that will break out to the land surface or cause adverse impacts.

To address inconsistency #2, the Site Plan was revised to provide two (2) smaller infiltration basins and add several small, stone-surface infiltration areas throughout the vehicle storage yard.

It is expected that these plan revisions will allow the NJPC to "approve" the project by issuing a "no call up" letter following Site Plan approval by the Waterford Township Planning Board.

4.0 EXISTING CONDITIONS

4.1 On-Site

The Project Site encompasses approximately 180 acres with 3,310± feet of frontage along Jackson Road (County Route No. 534).

The Project Site is currently developed and operated as an automobile raceway (dragway). Existing aboveground structures associated with the existing use include a paved two-lane dragway (approximately 4,000 linear feet), paved parking areas, gravel parking areas, paved drive aisles, gravel drive aisles, bleaches for spectators, eight (8) buildings, several trailers, and chain-link fencing. Short concrete walls extend along both sides of the dragway. There are several light fixtures supported by timber utility poles and several pole-mounted signs throughout the site. Under existing conditions, the Project Site contains approximately 36.08 acres of impervious cover.

The existing buildings are serviced by an on-site subsurface sewage disposal system.

The undeveloped portions of the Project Site consist of woodland (92± acres) and cleared land (field). The wooded portions of the Project Site contain uplands and wetlands, according to NJDEP mapping and a field-delineation performed by Marathon in 2020.

There are no stormwater management features on the Project Site, other than man-made ditches.

4.2 Regional

The Project Site is bordered by woodland to the north, east, and west, and by single-family residential properties to the south.

The Wharton State Forest, a public open space owned/controlled by the State of New Jersey, abuts the Project Site to the north and east.

A electric transmission line easement is located to the east of the Project Site, within approximately 100 feet of the eastern boundary of the site, running through the Wharton State Forest property.

The main channel of the Mullica River is located approximately 780 ft north of the Project Site.

The Camden County Master Plan divides the county into four (4) planning areas, consistent with the State Strategic Plan. The portion of the Project Site to be redeveloped is located within the “Limited Growth Investment Area.”

5.0 ENVIRONMENTAL INVENTORY

5.1 Geology

The Project Site is located within the Atlantic Coastal Plain physiographic province, which consists of relatively flat to undulating unconsolidated sediments ranging in age from Cretaceous to Holocene. The unconsolidated sediments dip toward the ocean and thicken southeastward to approximately 4,500 feet near Atlantic City, New Jersey. The sediments consist of layers of sand, clay, green sand marl and gravel deposited alternately in floodplains and in marine environments as sea level fluctuated during Cretaceous and Tertiary times (Wilber 1940).

According to the NJDEP’s GIS database, the Project Site is underlain by the Cohansey formation and the soils of the “Upper Stream Terrace Deposits” surficial geological association. According to the description provided by United States Geologic Survey, the Upper Stream Terrace Deposits are composed of yellow, reddish-yellow, and yellowish-brown; sand and pebble gravel, minor silt, and cobble gravel, as much as 20 feet thick and deposited during the middle to late Pleistocene age (RPM Engineering 2020).

In 2020, RPM Engineering performed 15 geotechnical test borings within the proposed area of redevelopment (RPM Engineering 2020). Two (2) strata were encountered by RPM:

- Stratum I – primarily orange brown to light brown, fine to coarse sand with varying amounts of silt and fine to medium gravel; moderately to poorly graded; non-plastic;

- Stratum II – primarily light brown to orange brown, fine to coarse sand with varying amounts of silty clay; loose to stiff; moderately graded; plastic.

Bedrock was not encountered within 20 feet below the existing ground surface.

5.2 Topography

In general, the Project Site slopes to the north, towards the Mullica River, at 5 percent or less. The highest elevations on the Project Site occur along the site's frontage with Jackson Road, where existing ground elevations range from 99 ft to 102 ft (NAVD 1988). In the northern portion of the proposed footprint of redevelopment, existing ground elevations range from 88 ft to 90 ft (NAVD 1988).

"Steep slopes" are typically defined as land areas with slopes greater than 15 percent. There is no steep slope area in the portion of the Project Site to be redeveloped. Slopes within the Project Site are 5 percent or less.

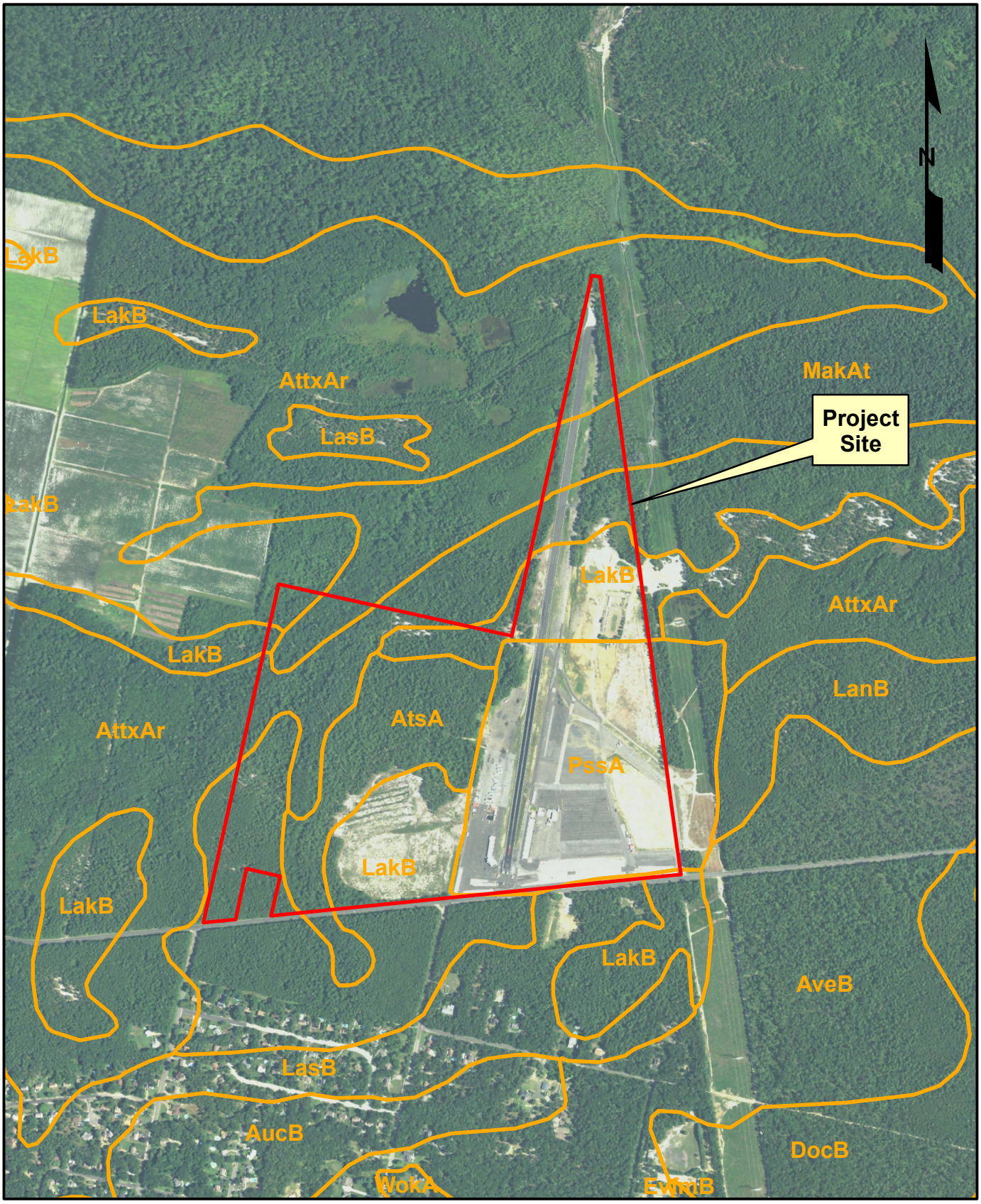
5.3 Soils

The Soil Survey of Camden County, New Jersey (SSURGO 2008) (Figure 4), indicates that the soils listed in Table 1 underlie the footprint of proposed redevelopment.

TABLE 1. SOILS UNDERLYING THE PROJECT SITE

Map Unit	Symbol	Drainage Class	DSHWT* (ft)
Lakehurst sand, 0 to 5 percent slopes	LakB	Moderately well	1.5 - 3.5
Psamments, 0 to 3 percent slopes	PssA	Well	4.0±

* Depth to seasonal high water table, according to the NRCS Web Soil Survey.



MARATHON ENGINEERING & ENVIRONMENTAL SERVICES, INC. **3 KILLDEER COURT,** **SUITE 302** **SWEDESBORO, NJ 08085**	**Insurance Auto Auctions** **Waterford Township** **Camden County, New Jersey**	**Figure 4 - Soils Map** Source: 2008 SSURGO, NRCS; 2017 Orthophotography, NJ Geographic Info. Network Scale: 1:12,000 IA2 001.01

A description of each soil type listed in Table 3 is provided below.

Lakehurst Series

This series consists of moderately well drained and somewhat poorly drained podzols developed in coarse-textured materials. These soils occur in depressed areas in intermediate positions where slopes are low. The Lakehurst soils can be distinguished from Lakewood soils by mottles in the lower B horizon and from the Lakeland soils by the strongly bleached horizon 6 inches or more thick. A representative profile is as follows:

A1 0 to 3 inches, dark-gray (10YR 4/1) sand; many light-gray sand grains; single-grain; loose.

A2 3 to 11 inches, light-gray (10YR 6/1) clean sand; single-grain; loose.

B2 11 to 13 inches, brown (10YR 4/3) sand or loamy sand; loose or weakly cemented concretions in places.

B3 13 to 30 inches, yellowish brown (10YR 6/3) sand; few, faint mottles in the lower part; single-grain; loose.

C1 30 to 60 inches, pale-brown (10YR 6/3) sand; few, medium mottles; single-grain, loose.

Psamments

These soils are sandy in all layers. They are among the most productive rangeland soils in some arid and semiarid climates. Some Psamments that are nearly bare are subject to soil blowing and drifting and provide poor support for wheeled vehicles. Psamments are used mostly as rangeland, pasture, or wildlife habitat.

5.4 Hydrology

Drainage from the Project Site contributes to the Mullica River watershed (Watershed Management Area 14, HUC-14: 02040301160020). The main channel of the Mullica River is located approximately 780 ft north of the Project Site. An unnamed tributary of the Mullica River flows through and adjacent to the western portion of the Project Site. The watercourse in the vicinity of the Project Site are non-tidal (fluvial). The head of tide along the Mullica River is located in the Batsto area, approximately 13.8 miles downstream of the Project Site.

From the Project Site, the Mullica River flows in the southeasterly direction for approximately 29 miles before it discharges into Great Bay. Great Bay is connected to the Atlantic Ocean via the Little Egg Inlet.

5.4.1 Surface Water

Existing surface water features on and adjacent to the Project Site include non-tidal wetlands and non-tidal (fluvial) tributaries to the Mullica River. The main channel of the Mullica River is located approximately 780 ft north of the Project Site.

In 2020, Marathon performed a wetlands delineation that covered the entire footprint of proposed redevelopment and adjacent land within 300 feet, with the exception of offsite, private properties located south of Jackson Road. Marathon's wetlands delineation was performed in accordance with the New Jersey Pinelands Commission Manual for Identifying and Delineating Pinelands Area Wetlands (1991). The wetlands boundaries established by Marathon are plotted on the site plans.

As part of its review of the pending development application, the NJPC performed a site inspection to verify the wetlands boundaries established by Marathon.

5.4.2 Drainage

The Project Site is located within the Mullica River drainage basin (HUC-14: 02040301160020) of Watershed Management Area 14 (Mullica River). The main channel of the Mullica River is located approximately 780 ft north of the Project Site. Stormwater runoff and shallow groundwater follows the natural topography, flowing in the northerly direction towards the Mullica River.

Under existing conditions, stormwater runoff from the developed portions of the Project Site flows via overland sheetflow towards pervious areas and to a man-made ditch located at the center of the Project Site (see wetland flags WA35 to WA66). Other than this man-made ditch, there are no existing structural stormwater management features at the Project Site.

5.4.3 Subsurface Water (Groundwater)

According to the NJDEP's Geographic Information Systems (GIS) database, the Project Site lies within the Kirkwood-Cohansey aquifer system. The Kirkwood Formation is characteristically a gray and tan, very fine to medium-grained, micaceous and quartz sand with a massive, dark-colored diatomaceous clay at its base. Contact of the Cohansey Formation with the underlying Kirkwood Formation is conformable in some locations but unconformable in others. The original thickness of this formation is difficult to interpret due to erosion from subaerial exposure, but reaches an apparent thickness of 351-feet near Atlantic City. The Cohansey Formation is massive to cross-bedded, quartz-rich sands with localized clay lenses and discrete beds or laminations. This stratigraphy led

to the interpretation that the Cohansey Formation was deposited in fluvial environments, which grade to marginal- and shallow- marine environments towards the coast.

Shallow groundwater on the Project Site is expected to follow surface topography and flow in the northerly direction towards the Mullica River.

According to the NRCS Web Soil Survey, the depths to seasonal high water table for the soils underlying the footprint of redevelopment range from 1.5 ft to approximately 4.0 ft (Table 2).

TABLE 2. TYPICAL DEPTHS TO SEASONAL HIGH WATER TABLE

Map Unit	Symbol	DSHWT* (in)
Lakehurst sand, 0 to 5 percent slopes	LakB	1.5 - 3.5
Psamments, 0 to 3 percent slopes	PssA	4.0±

∗ Depth to seasonal high water table, as reported in the Soil Survey of Camden County, NJ (SSURGO 2008).

In 25 test pit explorations performed within the footprint of redevelopment in May and July 2020, Marathon observed depths to seasonal high water table ranging from 1.7 ft to 5.7 ft, with an average of 3.7 ft.

According to the NJDEP GIS database, there is no registered groundwater contamination area underlying the Project Site.

5.5 Vegetation

The proposed footprint of redevelopment is devoid of woody vegetation (i.e., shrubs and trees). Existing vegetation within the pervious portions of the footprint of redevelopment consists of maintained grass and other herbs. The northeastern portion of the redevelopment area consists of a field covered by a patchy mixture of bare ground and un-maintained, early-successional herbaceous vegetation. Based on historic aerial photography and correspondence from the NJPC, trees were cleared from this portion of the site in 2015.

In 2018, DuBois Environmental Consultants, LLC (“DEC”) performed a threatened and endangered species survey of the Project Site (DuBois 2019). DuBois Environmental Consultants found three (3) populations of Barrett’s sedge (*Carex barrattii*), a hydrophytic (wetland) plant, on the Project Site, outside of the proposed footprint of redevelopment. The three (3) populations of Barrett’s sedge discovered by DEC are located west of the existing dragway, within and along the perimeter of the existing woodland. Barrett’s sedge is classified as an endangered plant in the Pinelands Protection Area.

The proposed redevelopment project does not propose disturbance to the documented habitat of Barrett's sedge. The only proposed activity in the vicinity of the Barrett's sedge habitat is demolition of existing pavement and restoration of the area with grass cover.

As part of its review of the pending development application, the NJPC reviewed the proposed redevelopment project for consistency with the threatened and endangered plant species protection standards of the CMP (N.J.A.C. 7:50-6.27). Based on the Certificate of Filing issued for this project on November 6, 2020, the NJPC concluded that the proposed redevelopment project is consistent with the threatened and endangered plant species protection standards of the CMP.

In order to receive the NJPC's approval of the proposed redevelopment project (i.e., a Certificate of Filing), the applicant is required to re-vegetate two (2) portions of the Project Site that were cleared of trees by the current property owner without authorization from the NJPC. The two (2) areas to be re-vegetated are identified on the Site Plans and include a 16-acre area located west of the proposed facility and a 7-acre area located north of the proposed facility. The plan is to allow these two (2) areas to re-vegetate naturally. If natural re-vegetation does not occur within a certain timeframe to be agreed upon by the NJPC and Waterford Township, then pitch pine seedlings will be installed at 10 ft on-center.

5.6 Wildlife

The majority of the footprint of redevelopment is currently developed with impervious surfaces that do not provide habitat for wildlife. The only habitat to be disturbed by this project is the field located within the northeastern portion of the Project Site. Construction of the proposed stormwater management basin and inventory storage area will result in the loss of approximately six acres of field habitat. This field habitat is bordered by field to the north, woodland and an electric transmission line easement to the east (offsite), developed land with pavement to the south, and the existing dragway to the west.

In 2018, DEC performed a threatened and endangered species survey of the Project Site. Based on correspondence from the NJPC, DEC surveyed the Project Site for the following species of threatened/endangered wildlife:

- northern pine snake (*Pituophis m. melanoleucus*) (state threatened);
- timber rattlesnake (*Crotalus horridus*) (state endangered);
- Pine Barrens treefrog (*Hyla andersonii*) (state threatened).

The survey by DEC did not reveal the presence of northern pine snake or timber rattlesnake.

Breeding habitats of Pine Barrens treefrogs were identified on and adjacent to the Project Site, but outside of the footprint of proposed redevelopment.

As part of its review of the pending development application, the NJPC reviewed the proposed redevelopment project for consistency with the threatened and endangered wildlife species protection standards of the CMP (N.J.A.C. 7:50-6.33). Based on the Certificate of Filing issued for this project on November 6, 2020, the NJPC concluded that the proposed redevelopment project is consistent with the threatened and endangered wildlife species protection standards of the CMP.

5.7 Water Quality

Based on the parameters of the "Buffer Delineation Model for New Jersey Pinelands Wetlands (Roman and Good 1985)," the segment of the Mullica River located in the vicinity of the Project Site receives a "high" score for surface water quality, with pH values ≤4.5 and nitrate (NO_3) concentrations of less than 0.05 mg/l. These data are based on surface water samples collected from two (2) nearby monitoring stations along the Mullica River: station AN0560A, located approximately 1.1 miles downstream of the Project Site, and station AN0561, located approximately 1.7 miles downstream of the Project Site, at the intersection of Jackson Road and the Mullica River.

In accordance with the Waterford Township Ordinance (§176-91), Tetra Tech collected surface water samples from three (3) locations along the on-site watercourse, an unnamed tributary of the Mullica River. The surface water samples were submitted to a certified laboratory for chemical analysis. The surface water samples were collected on March 22, 2021. Based on the analytical results, Tetra Tech concluded the following:

> "The sample results were compared to the surface water quality criteria found in the New Jersey Administrative Code (NJAC) Title 7, Chapter 9B, Subchapter 1.14 for Mullica River (Berlin) with Classification PL (i.e., the general surface water classification applied to Pinelands Waters) or the most stringent criteria limit for all other classifications. All of the analytical results were within NJAC criteria limits."

5.8 Air Quality

The following summary is from the website of the NJDEP, Bureau of Air Quality Planning:

> "The Federal Clean Air Act requires the United States Environmental Protection Agency (USEPA) to set National Ambient Air Quality Standards (NAAQS) for six common air pollutants. These commonly found air pollutants (also known as "criteria pollutants") are particle pollution (often

referred to as particulate matter), ground-level ozone, carbon monoxide (CO), sulfur oxides (SO_2), nitrogen oxides (NOx), and lead. The USEPA calls these pollutants "criteria" air pollutants because it regulates them by developing human health-based and/or environmentally-based criteria (science-based guidelines) for setting permissible levels. The Federal Clean Air Act further requires the USEPA to review and, if appropriate, revise the NAAQS for each criteria air pollutant every five years to insure they continue to adequately protect human health and welfare.

When a NAAQS is established or revised, the USEPA goes through a formal process to designate all areas of the country as either in attainment or in nonattainment. The Federal Clean Air Act further classifies ozone, carbon monoxide, and some particulate matter nonattainment areas based on the magnitude of an area's problem. Nonattainment classifications may be used to specify what air pollution reduction measures an area must adopt, and when the area must reach attainment. The technical details underlying these classifications are discussed in the Code of Federal Regulations, Part 81 (40 CFR 81). For a historical perspective of the designations for the criteria pollutants, visit the USEPA's website. States with areas designated as nonattainment for any criteria pollutant must develop plans that show how they will bring those areas into attainment of the standard by their designated attainment dates. Once an area meets its attainment date, it can be re-designated to attainment, but states must submit maintenance plans for these areas to the USEPA to insure continued attainment of the areas over a period of 10 years. These re-designated areas are referred to as 'maintenance areas'."

The Project Site is located in Camden County, NJ, which is currently assigned the following designations for National Ambient Air Quality Standard (NAAQS) pollutants:

- **Ozone**
  - Nonattainment area for 8-hour Ozone standard of 0.08 ppm (1997 standard)
  - Nonattainment area for 8-hour Ozone standard of 0.075 ppm (2008 standard)
- **Particulate Matter (PM)**
  - Attainment area for PM 2.5 standard of 15 $\mu g/m^3$ (1997 annual standard)
  - Attainment area for PM 2.5 standard of 35 $\mu g/m^3$ (2006 24-hour standard)
  - Unclassifiable/attainment area for PM 2.5 standard of 12 $\mu g/m^3$ (2012 annual standard)
- Unclassifiable/attainment area for 1-hour **SO_2** standard of 75 ppb
- Maintenance area for 8-hour **Carbon Monoxide** standard of 9 ppm
- **Nitrogen Dioxide**

- Unclassifiable/attainment area for annual NO_2 standard of 53 ppb (2010 standard)
- Unclassifiable/attainment area for 1-hour NO_2 standard of 100 ppb (2010 standard)

- Unclassifiable/attainment area for **Lead** standard of 0.15 µg/m^3 (2008 standard)

5.9 Historic and Cultural Resources

According to historic aerial photography, the dragway on the Project Site was constructed sometime between 1957 and 1963. The dragway was operating as of the date of this report.

The Project Site does not contain any properties or features that are listed in the New Jersey or National Registers of Historic Places for Camden County (last updated September 30, 2020). There are no existing historic buildings or building ruins within the proposed limit of disturbance.

According to NJDEP's GeoWeb, the Project Site does not contain a documented historic property[2] or historic district[3].

As part of its review of the pending development application, the NJPC reviewed the proposed redevelopment project for consistency with the historic, archaeological, and cultural preservation standards of the CMP (N.J.A.C. 7:50-6.151 *et seq*.). Based on the Certificate of Filing issued for this project on November 6, 2020, the NJPC concluded that the proposed redevelopment project is consistent with the historic, archaeological, and cultural preservation standards of the CMP.

5.10 Scenic Resources

The Project Site does not provide or contribute to a unique scenic resource. The Project Site and surrounding properties exhibit relatively flat terrain. The Project Site does not offer a view of a large body of water, such as a lake or river. The main channel of the Mullica River is not visible from any location on the Project Site.

Standing at the center of the Project Site, the available views include woodland to the north, east, south, and west, irrespective of the existing on-site development. This type of scenery is not unique to this portion of Waterford Township or the Pinelands region.

[2] NJDEP Historic Properties of New Jersey (edition 20190129).
[3] NJDEP Historic Districts of New Jersey (edition 20190129).

6.0 ENVIRONMENTAL PERFORMANCE CONTROLS

The proposed project is designed with engineering controls to minimize environmental impacts to the maximum extent practicable, in accordance with applicable local and state regulations, including those related to water quality, stormwater management, air quality, and noise control.

As described below, the project implements the following Best Management Practices:

- Avoidance measures;
- Stormwater Management; and,
- Soil Erosion & Sediment Control Plan.

6.1 Avoidance Measures

The proposed project involves reconstruction of an existing automobile dragway with an automobile auction facility. Existing structures, such as buildings, paved areas, and gravel areas, will be demolished as part of the proposed project. The project does not propose disturbance to woodland, wetlands, or any other environmentally sensitive area. Redevelopment of previously developed/disturbed land minimizes the addition of impervious cover, disturbance to trees, and disturbance to environmentally sensitive areas (i.e., wetlands, wetlands buffer, and critical wildlife habitat).

6.2 Stormwater Management

The project qualifies as “major development,” as defined at N.J.A.C. 7:8-1.2, because it involves greater than one (1) acre of land disturbance. Therefore, the project must comply with the New Jersey Stormwater Management Regulations (N.J.A.C. 7:8), which set forth standards for runoff quantity, water quality, and groundwater recharge, and the stormwater management standards in the CMP.

The components of the proposed stormwater management system include two (2) surface infiltration basins, infiltration areas in the employee parking lot, underground infiltration for roof runoff, and gravel infiltration strips located within the automobile inventory area. The proposed stormwater management facilities are designed in accordance with the New Jersey Stormwater Management Regulations (N.J.A.C. 7:8), the Pinelands CMP, the New Jersey Stormwater Best Management Practices (“BMP”) Manual, and the New Jersey Soil Erosion and Sediment Control Standards.

In addition, a manufactured treatment device (Contech StormFilter) is proposed in the low spot of the drop zone. The purpose of the manufactured treatment device, which is certified by the New Jersey Department of Environmental Protection (“NJDEP”), is to remove pollutants from stormwater runoff leaving the

drop zone. Although this manufactured treatment device is not required by the New Jersey Stormwater Management Regulations (N.J.A.C. 7:8) or the Pinelands CMP, the applicant decided to include this device as an additional measure aimed at protecting water quality.

The proposed stormwater management structures will be routinely inspected and maintained. Proposed maintenance procedures include grass cutting and maintenance, removal of debris, clearing of accumulated sediment, and structural repairs.

6.3 Water Quality Control Measures

The state water quality standard will be satisfied by use of two (2) infiltration basins. According to the New Jersey Stormwater Best Management Practices Manual (NJDEP, last revised March 2021), the proposed basins are assigned a total suspended solids removal rate (credit) of 80 percent.

In addition, a manufactured treatment device (Contech StormFilter) is proposed in the low spot of the drop zone. The purpose of the manufactured treatment device, which is certified by the NJDEP, is to remove pollutants from stormwater runoff leaving the drop zone. Although this manufactured treatment device is not required by the New Jersey Stormwater Management Regulations (N.J.A.C. 7:8) or the Pinelands CMP, the applicant decided to include this device as an additional measure aimed at protecting water quality.

A subsurface sewage disposal system is present on the Project Site. This septic system will be properly closed prior to the start of construction of the proposed project.

The proposed on-site building will be serviced by a subsurface sewage disposal system to be designed in accordance with current regulations and approved by the Camden County Health Department. Since the proposed use will not generate more than 2,000 gallons of sewage per day, the project does not require a New Jersey Pollutant Discharge Elimination Systems (“NJPDES”) permit or an amendment to the Water Quality Management Plan.

6.4 Soil Erosion & Sediment Control Plan

A Soil Erosion & Sediment Control (“SESC”) Plan Certification will be obtained from the Camden County Soil Conservation District prior to construction. The proposed SESC Plan includes Best Management Practices designed to control soil erosion within the limit of disturbance and prevent water quality impacts within adjacent surface water resources. Proposed SESC measures include:

- Stabilized construction entrance;
- Tire cleaning pads at construction entrance;

- Stormwater inlet protection;
- Standard silt fencing;
- Stabilizing soil stockpiles with temporary vegetative cover;
- Minimizing disturbance to vegetation;
- Minimizing temporary site disturbance during construction;
- Slope protection; and,
- Monitoring for acid-producing soils and containment, if encountered during construction, in accordance with the New Jersey Soil Erosion and Sediment Control Standards and the Technical Manual for the Flood Hazard Area Control Act Rules (N.J.A.C. 7:13).

The proposed SESC Plan is included as Sheet 20 (Drawing No. C1200) of the development plans.

6.5 Sewage Disposal

The proposed on-site building will be serviced by a subsurface sewage disposal system to be designed in accordance with current regulations and approved by the Camden County Health Department. Since the proposed use will not generate more than 2,000 gallons of sewage per day, the project does not require a New Jersey Pollutant Discharge Elimination Systems ("NJPDES") permit or an amendment to the Water Quality Management Plan.

6.6 Solid Waste Disposal

Recyclable material and solid waste generated by the proposed development will be stored in designated areas with routine collection by a private hauler(s).

6.7 Water Supply & Water Conservation

Water service to the proposed on-site office building will be provided by one (1) on-site potable water well. Based on the standard water demand of 0.125 gallons per day (GPD) / SF of office space, the daily water demand for the proposed office building is:

0.125 GPD/SF x 9,940 SF = 1,242.5 GPD

A water tank (100,000 gallons) for fire protection is proposed. It is anticipated that water will be taken from this tank during emergencies only.

No project-specific water conservation measures are proposed.

6.8 Energy Conservation

Electric service will be supplied by Atlantic City Electric. Electrical demand for the proposed project has not yet been estimated, but it is anticipated that the

regional provider has adequate capacity to service the proposed development. The proposed office building will be serviced by natural gas by an on-site tank. No project-specific energy conservation measures are proposed.

6.9 Noise

The Project Site is located in a rural setting and is bordered by woodland to the north, east, and west. The nearest noise receptors are residential properties to the south of the Project Site. There is one (1) existing single-family residential property located immediately south of the Project Site, at 1001 Jackson Road (Block 5301, Lot 6). The next closest residential properties are located along Atsion Road, as close as approximately 750 ft to the south of the Project Site.

The Project Site has been operated as an automobile raceway for decades. The hours of the racing operations vary, with the busiest times during weekend nights.

Automobile trips to/from the Project Site, including truck traffic, will be the only major source of noise generated by the proposed use. As explained in Section 7.14, the project will not result in a "significant increase in traffic," as defined by the New Jersey Department of Transportation Access Code. The vehicle noise to be generated by the proposed use will be less intense and more consistent (routine) than the existing use. A noise study has not been performed for this project.

Noise control equipment to be utilized during construction shall be standard earth moving equipment which meets standards established by state and federal laws regarding the amount of noise produced.

6.10 Site Remediation

According to the NJDEP's GIS database, the Project Site is not identified as any of the following:

- Groundwater contamination area (Classification Exception Area) (dataset edition 20210404);
- Groundwater contamination area (Currently Known Extent) (dataset edition 20180105);
- Known contaminated site (dataset accessed April 5, 2021);
- Deed notice area (dataset edition 20210404);
- Underground storage tank facility (dataset edition 20210408).

The Project Site is within a mapped historic fill area (NJDEP GIS dataset edition 20180314). This GIS dataset identifies areas of historic fill covering more than 5 acres. For the purpose of this NJDEP GIS dataset, historic fill is non-indigenous material placed on a site in order to raise the topographic elevation of the site.

7.0 IMPACT ASSESSMENT

7.1 Flooding & Floodplain

The flood hazard area associated with the segment of the Mullica River in the vicinity of the Project Site has not been studied by the Federal Emergency Management Agency ("FEMA") or NJDEP.

In 2020, Marathon determined the flood hazard area design flood elevation at the Project Site using the "calculation method," as defined in the New Jersey Flood Hazard Area Control Act Rules (N.J.A.C. 7:13-3.6). Marathon determined that the flood hazard area design flood elevation at the Project Site is elevation 88.47 feet (NAVD 1988).

The project does not propose development in the flood hazard area. The flood hazard area is located in the northern portion of the site, adjacent to the northern extent of the existing dragway. The proposed stormwater management system will control runoff quantity and runoff rates in accordance with NJDEP and Pinelands regulations. Therefore, the project will not adversely affect flood conditions.

7.2 Surface Water Quality

The project does not propose a point discharge to a surface water feature.

The project qualifies as "major development," as defined at N.J.A.C. 7:8-1.2, because it involves greater than one (1) acre of land disturbance. Therefore, the project must comply with the New Jersey Stormwater Management Regulations (N.J.A.C. 7:8), which set forth standards for runoff quantity, water quality, and groundwater recharge, and the CMP. Stormwater management will be provided by two (2) proposed surface infiltration basins, infiltration areas in the employee parking lot, underground infiltration for roof runoff, and gravel infiltration strips located within the automobile inventory area.

The proposed redevelopment project includes the following best management practices related to water quality:

- surface stormwater management (infiltration) basins, each assigned a total suspended solids (TSS) removal rate of 80%;

- removal of asphalt in the proposed automobile inventory area and providing a gravel surface in order to promote infiltration throughout the site;

- Soil Erosion & Sediment Control Plan to be certified by the Conservation District.

In addition, approximately 2,500 linear feet of existing paved dragstrip and the paved return road located north of the proposed redevelopment area will be removed and replaced with pervious (grass) cover, which will benefit water quality.

As part of its review of the pending development application, the NJPC reviewed the proposed redevelopment project for consistency with the water quality standards of the CMP (N.J.A.C. 7:50-6.84).

7.3 Groundwater Quality

A subsurface sewage disposal system is present on the Project Site. This septic system will be properly closed prior to the start of construction of the proposed project.

The proposed on-site building will be serviced by a subsurface sewage disposal system to be designed in accordance with current regulations and approved by the Camden County Health Department. Since the proposed use will not generate more than 2,000 gallons of sewage per day, the project does not require a New Jersey Pollutant Discharge Elimination Systems (“NJPDES”) permit or an amendment to the Water Quality Management Plan.

The proposed operations do not include repairs or maintenance to automobiles. The proposed use is not classified as a high pollutant loading use, as defined in the New Jersey Stormwater Management Regulations [N.J.A.C. 7:8-5.4(b)3]. High pollutant loading areas are:

- areas in industrial and commercial developments where solvents and/or petroleum products are loaded/unloaded, stored, or applied;

- areas where pesticides are loaded/unloaded or stored;

- areas where hazardous materials are expected to be present in greater than 'reportable quantities' as defined by the United States Environmental Protection Agency (EPA) at 40 CFR 302.4;

- areas where recharge would be inconsistent with a remedial action work plan approved pursuant to the Administrative Requirements for the Remediation of Contaminated Sites rules, N.J.A.C. 7:26C, or a NJDEP

approved landfill closure plan; and,

- areas with high risks for spills of toxic materials, such as gas stations and vehicle maintenance facilities.

The project qualifies as "major development," as defined at N.J.A.C. 7:8-1.2, because it involves greater than one (1) acre of land disturbance. Therefore, the project must comply with the New Jersey Stormwater Management Regulations (N.J.A.C. 7:8), which set forth standards for runoff quantity, water quality, and groundwater recharge, and the stormwater management standards in the CMP. Stormwater management will be provided by two (2) proposed surface infiltration basins, grassed swales, and several gravel infiltration strips located within the automobile parking area. In addition, a manufactured treatment device (Contech StormFilter) is proposed in the low spot of the drop zone. The purpose of the manufactured treatment device, which is certified by the NJDEP, is to remove pollutants from stormwater runoff leaving the drop zone. Although this manufactured treatment device is not required by the New Jersey Stormwater Management Regulations (N.J.A.C. 7:8), the applicant decided to include this device as an additional measure aimed at protecting water quality.

7.4 Groundwater Quantity

Public potable water utility is not available at the Project Site. The proposed office building will be serviced by an on-site potable water well. In addition, a water tank (100,000 gallons) for fire protection is proposed. It is anticipated that water will be taken from this tank during emergencies only.

The expected water demand for the proposed office building is 1,242.5 gallons per day. The proposed on-site potable water well will be designed and permitted in accordance with applicable regulations.

7.5 Sewage Disposal

The proposed on-site building will be serviced by a subsurface sewage disposal system to be designed in accordance with current regulations and approved by the Camden County Health Department. Since the proposed use will not generate more than 2,000 gallons of sewage per day, the project does not require a NJPDES permit or an amendment to the Water Quality Management Plan.

7.6 Vegetation

The proposed footprint of redevelopment is devoid of woody vegetation (i.e., shrubs and trees). The only vegetative association to be disturbed by this project is field covered by a patchy mixture of bare ground and un-maintained, early-successional herbaceous vegetation.

The project will improve the vegetative conditions of the Project Site by the removal/revegetation of paved areas and reforestation of 23 acres. Approximately 2,500 linear feet of existing paved dragstrip and the paved return road located north of the proposed redevelopment area will be removed and replaced with pervious (grass) cover.

As illustrated on the Landscaping Plan (Drawing No. C0701), a row of deciduous shade trees is proposed along the site's frontage with Jackson Road. The tree species to be planted along the site's frontage with Jackson Road area black gum (*Nyssa sylvatica*) and red maple (*Acer buergerianum*).

In order to receive the NJPC's approval of the proposed redevelopment project (i.e., a Certificate of Filing), the applicant is required to re-vegetate two (2) portions of the Project Site that were cleared of trees by the current property owner without authorization from the NJPC. The two (2) areas to be re-vegetated are identified on the Site Plans and include a 16-acre area located west of the proposed facility and a 7-acre area located north of the proposed facility. The plan is to allow these two (2) areas to re-vegetate naturally. If natural re-vegetation does not occur within a certain timeframe to be agreed upon by the NJPC and Waterford Township, then pitch pine seedlings will be installed at 10 ft on-center.

The proposed redevelopment project does not propose disturbance to the documented habitat of Barrett's sedge, an endangered plant in the Pinelands Protection Area. The only proposed activity in the vicinity of the Barrett's sedge habitat is demolition of existing pavement and restoration of the area with grass cover.

As part of its review of the pending development application, the NJPC reviewed the proposed redevelopment project for consistency with the threatened and endangered plant species protection standards of the CMP (N.J.A.C. 7:50-6.27). Based on the Certificate of Filing issued for this project on November 6, 2020, the NJPC concluded that the proposed redevelopment project is consistent with the threatened and endangered plant species protection standards of the CMP.

7.7 Wildlife & Wildlife Habitats

The majority of the footprint of redevelopment is currently developed with impervious surfaces that do not provide habitat for wildlife. The only habitat to be disturbed by this project is the field located within the northeastern portion of the Project Site. Construction of the proposed stormwater management basin and inventory storage area will result in the loss of approximately six acres of field habitat. This field habitat is bordered by field to the north, woodland and an electric transmission line easement to the east (offsite), developed land with pavement to the south, and the existing dragway to the west.

In 2018, DEC performed a threatened and endangered species survey of the Project Site. Based on correspondence from the NJPC, DEC surveyed the Project Site for the following species of threatened/endangered wildlife:

- northern pine snake (*Pituophis m. melanoleucus*) (state threatened);
- timber rattlesnake (*Crotalus horridus*) (state endangered);
- Pine Barrens treefrog (*Hyla andersonii*) (state threatened).

The survey by DEC did not reveal the presence of northern pine snake or timber rattlesnake.

Breeding habitats of Pine Barrens treefrogs were identified on and adjacent to the Project Site, but outside of the footprint of proposed redevelopment.

As part of its review of the pending development application, the NJPC reviewed the proposed redevelopment project for consistency with the threatened and endangered wildlife species protection standards of the CMP (N.J.A.C. 7:50-6.33). Based on the Certificate of Filing issued for this project on November 6, 2020, the NJPC concluded that the proposed redevelopment project is consistent with the threatened and endangered wildlife species protection standards of the CMP.

Unique wildlife habitat will not be disturbed by the project. There is no Natural Heritage Priority Site on or in the vicinity of the Project Site. According to the New Jersey Natural Heritage Program, “a Natural Heritage Priority Site is a critically important area to conserve New Jersey's biological diversity, with particular emphasis on rare plant species and ecological communities.”

The Wharton State Forest, a public open space owned/controlled by the State of New Jersey, abuts the Project Site to the north and east. The proposed redevelopment project does not involve development on the Wharton State Forest property.

7.8 Cultural Resources

The proposed project will not affect a documented cultural resource. The Project Site does not contain any properties or features that are listed in the New Jersey or National Registers of Historic Places for Camden County (last updated September 30, 2020). There are no existing historic buildings or building ruins on the Project Site.

According to NJDEP’s GeoWeb, the Project Site does not contain a documented historic property or historic district. Further, the Project Site does not adjoin a documented historic property or historic district.

As part of its review of the pending development application, the NJPC reviewed the proposed redevelopment project for consistency with the historic, archaeological, and cultural preservation standards of the CMP (N.J.A.C. 7:50-6.151 *et seq*.). Based on the Certificate of Filing issued for this project on November 6, 2020, the NJPC concluded that the proposed redevelopment project is consistent with the historic, archaeological, and cultural preservation standards of the CMP.

7.9 Recreation

The Project Site is privately owned and does not offer open space recreation for the public.

The Wharton State Forest, a public open space owned/controlled by the State of New Jersey, abuts the Project Site to the north and east. The following is from the NJDEP's website[4]:

> "Wharton State Forest is the largest single tract of land within the New Jersey State Park System. It is also the site of Batsto Village, a former bog iron and glassmaking industrial center from 1766 to 1867 that currently reflects the agricultural and commercial enterprises that existed here during the late 19th century.
>
> Throughout Wharton are rivers and streams for canoeing, hiking trails (including a major section of the Batona Trail), miles of unpaved roads for mountain biking and horseback riding and numerous lakes, ponds and fields ideal for wildlife observation. Bald eagles, red-tailed hawks, marsh hawks, ospreys, great blue herons, swans, screech owls, great-horned owls, bluebirds, hummingbirds, purple martins, goldfinch, turkeys, beavers, river otters, fox and deer are only some of the wildlife the alert visitor can see."

The proposed redevelopment project does not involve development or disturbance on the Wharton State Forest property and the proposed use will not adversely affect the recreational use of the adjacent public open space.

7.10 Noise Levels

The project does not involve construction of an unusual source of noise. Considering existing noise levels and existing and proposed uses on and surrounding the Project Site, noise attenuation measures are not applicable to this project.

[4] https://www.state.nj.us/dep/parksandforests/parks/wharton.html.

The Project Site is located in a rural setting and is bordered by woodland to the north, east, and west. The nearest noise receptors are residential properties to the south of the Project Site. There is one (1) existing single-family residential property located immediately south of the Project Site, at 1001 Jackson Road (Block 5301, Lot 6). The next closest residential properties are located along Atsion Road, as close as approximately 750 ft to the south of the Project Site.

The Project Site has been operated as an automobile raceway for decades. The hours of the racing operations vary, with the busiest times during weekend nights.

Automobile trips to/from the Project Site, including truck traffic, will be the only major source of noise generated by the proposed use. The vehicle noise to be generated by the proposed use will be less intense and more consistent (routine) than the existing use. A noise study has not been performed for this project.
Noise control equipment to be utilized during construction shall be standard earth moving equipment which meets standards established by state and federal laws regarding the amount of noise produced.

7.11 Energy Utilization

The proposed use requires an electrical demand similar to a commercial office building. Electric service will be supplied by Atlantic City Electric. Electrical demand for the proposed project has not yet been estimated, but it is anticipated that the regional provider has adequate capacity to service the proposed development. The proposed office building will be serviced by natural gas by an on-site tank. No project-specific energy conservation measures are proposed.

7.12 Air Quality

The proposed use does not include a major source of air pollution and does not require an air quality permit under either state or federal regulations.

Use of motor vehicles is a source of air pollution associated with most development projects. As summarized in Section 7.14 of this report, the project will not result in a “significant increase in traffic,” as defined by the New Jersey Department of Transportation Access Code. Therefore, the project does not trigger the need for an air quality assessment or air quality permit.

7.13 Aesthetics

The Project Site does not provide or contribute to a unique scenic resource. The Project Site and surrounding properties exhibit relatively flat terrain. The Project Site does not offer a view of a large body of water, such as a lake or river. The main channel of the Mullica River is not visible from any location on the Project Site.

Standing at the center of the Project Site, the available views include woodland to the north, east, south, and west, irrespective of the existing on-site development. This type of scenery is not unique to this portion of Waterford Township or the Pinelands region.

The proposed fence and a proposed row of deciduous shade trees along the site's frontage with Jackson Road will function to visually screen the proposed on-site development from Jackson Road and properties to the south. The proposed fence will be chain-link with privacy slats. As illustrated on the Landscaping Plan (Drawing No. C0701), a row of deciduous shade trees is proposed along the site's frontage with Jackson Road. The tree species to be planted along the site's frontage with Jackson Road area black gum (*Nyssa sylvatica*) and red maple (*Acer buergerianum*).

There are no existing uses on adjacent properties to the north, east, or west that could be affected by the proposed project.

7.14 Traffic

The proposed facility is expected to have 15 to 20 employees working at the site during normal business hours.

Auction vehicles will be transferred to and from the site by trucks. The anticipated frequency of trips by delivery and export trucks carrying auction vehicles is approximately seven (7) trips per hour during typical weekday conditions, or 30 total trips (15 inbound and 15 outbound) during both the AM and PM peak hours.

Total vehicle trips, including passenger vehicles and vehicle transport trucks, during both the AM and PM peak hours is estimated at 50 trips.

According to the Traffic Analysis performed by Shropshire Associates (Mosley 2021), the project will not result in a "significant increase in traffic," as defined by the New Jersey Department of Transportation ("NJDOT") Access Code. Shropshire Associates concluded that the project will generate a total of 44 vehicle trips during the AM and PM peak hours, which is less than one (1) total trip per minute, under the modeled "worst-case" scenario. In comparison, the NJDOT Access Code defines a significant increase to be a case in which the redevelopment of a site will add 100 or more additional peak hour trips when compared to the existing of formerly approved development.

8.0 ALTERNATIVES

Alternative sites were not evaluated as part of this Environmental Impact Statement. The Project Site is suitable for the proposed project as the proposed use is a permitted conditional use in the Planned Light Industrial/Business District.

The proposed use (single-family detached dwellings) is a permitted conditional use in the Planned Light Industrial/Business District and consistent with the applicant's objectives for the Project Site. Therefore, alternative uses were not considered for the Project Site.

The project's Site Plan has been revised to address comments by the Waterford Township Planning Board and the NJPC. On the original Site Plan (October 2020), the vehicle inventory area was shown with a paved surface. In response to comments from the Township Planning Board, the vehicle inventory area has been changed to a gravel surface. The drive aisles that will provide access to the inventory area remain as paved surfaces.

On the original Site Plan (October 2020), one (1) large stormwater infiltration basin was proposed. In response to comments from the NJPC, the Site Plan was revised to include two (2) smaller infiltration basins instead of the one (1) larger basin.

A manufactured treatment device (Contech StormFilter) is proposed in the low spot of the drop zone. The purpose of the manufactured treatment device, which is certified by the NJDEP, is to remove pollutants from stormwater runoff leaving the drop zone. This manufactured treatment device was not included on the original Site Plan (October 2020). Although this manufactured treatment device is not required by the New Jersey Stormwater Management Regulations (N.J.A.C. 7:8), the applicant decided to include this device as an additional measure aimed at protecting water quality.

9.0 REQUIRED PERMITS AND APPROVALS

Permits and approvals that are required for the proposed development include, but are not limited to, the following:

Permit/Approval	Administering Agency	Status
Conditional Use, Preliminary and Final Site Plan Approval	Waterford Township Joint Land Use Board	Pending
Certificate of Filing	New Jersey Pinelands Commission	Issued 11/06/2020 (inconsistent) (Application No. 1987-1183.015)
No Call Up Letter	New Jersey Pinelands Commission	To be Requested (Application No. 1987-1183.015)
Site Plan Approval	Camden County Planning Board	Pending (Application No. SP-35-1-20)
Soil Erosion and Sediment Control Plan Certification	Camden County Soil Conservation District	Issued 12/03/2020 (Application No. 2020-7026)
Stormwater Discharge General Permit (5G3) – Construction Activity	NJ Department of Environmental Protection, Division of Water Quality	To be submitted
Septic System Permit	Camden County Health Department	To be submitted
Potable Water Well Permit	NJ Department of Environmental Protection, Division of Water Supply and Geoscience	To be submitted

10.0 CONCLUSION

The applicant is proposing to redevelop the Project Site, the "Atco Dragway," into an automobile auction facility. The majority of the footprint of redevelopment is currently developed with impervious surfaces. The only vegetated area to be disturbed by the project is a field. Impervious coverage on the Project Site will be reduced from 36.08 acres (20.10%) to 16.9 acres (9.4%), less than the maximum permitted impervious coverage of 20%.

Redevelopment of previously developed/disturbed land minimizes the addition of impervious cover, disturbance to trees, and disturbance to environmentally sensitive areas (i.e., wetlands, wetlands buffer, and wildlife habitat), and is consistent with the land use planning goals set forth by Waterford Township and Camden County.

The project is not expected to cause substantial environmental impact. The following mitigation measures are intended to minimize the project's environmental impact:

- stormwater management system designed in accordance with local and State regulations (N.J.A.C. 7:8, N.J.A.C. 7:50);
- Soil Erosion and Sediment Control (SESC) Plan to be certified by the Camden County Soil Conservation District; this SESC Plan includes best management practices designed to control soil erosion within the limit of disturbance and prevent water quality impacts within adjacent surface water resources;
- a manufactured treatment device (Contech StormFilter) to trap any pollutants leaving the drop zone via stormwater runoff;
- conversion of approximately 2,500 linear feet of existing paved dragstrip and the paved return road to pervious (grass) cover;
- re-vegetation of two (2) areas totaling approximately 23 acres that were cleared of trees without authorization from the NJPC.

11.0 REFERENCES

- "Aquifers of New Jersey, Open-File Map OFM-24;" NJDEP & NJGS; 1998.
- Camden County Board of Chosen Freeholders. 2014. Camden County Land Use Master Plan.
- DuBois Environmental Consultants, LLC. 2019. Threatened/endangered species survey report, Application #1987-1183.015, Block 5402, Lots 2 & 3, Block 5302, Lot 1, Block 5201, Lot 8, Waterford Township, Camden County, New Jersey.
- Landgraf, L.B. 2020. Planning report for Insurance Auto Auctions Corp., IAA, Inc. used car sales/auction, Block 5201, Lot 8; Block 5302, Lot 1; Block 5402, Lots 2 and 3; Block 5402, Lot 4, Atco, Waterford Township, New Jersey. L.B. Landgraf & Associates, LLC, Ventnor City, New Jersey.
- Mosley, N.B. March 26, 2021. Traffic analysis letter, Atco Raceway Redevelopment. Shropshire Associates, LLC, Atco, New Jersey.
- Marathon Engineering & Environmental Services, Inc., Stormwater Management Report for Proposed Automobile Auction Facility, Township of Waterford, Camden County, New Jersey, dated June 1, 2020.
- Markley, M. 1961. Soil Survey of Camden County, New Jersey. United States Department of Agriculture, Soil Conservation Service, Washington D.C.
- Natural Resources Conservation Service, National List of Hydric Soils; All States, December 2015.
- Natural Resources Conservation Service, Web Soil Survey. U.S. Department of Agriculture. Retrieved November 1, 2017. websoilsurvey.nrcs.usda.gov/app/
- NJDEP GIS dataset, "Classification Exception Areas-Well Restriction Areas for New Jersey," edition 20210404.
- NJDEP GIS dataset, "New Jersey Groundwater Contamination (currently known extent)," edition 20180105.
- New Jersey Department of Environmental Protection. 2004 (last revised September 2017). New Jersey Stormwater Best Management Practices Manual. NJDEP, Division of Watershed Management, Trenton, New Jersey.
- New Jersey Department of Environmental Protection, Bureau of Air Quality Planning. "Attainment Areas Status." <http://www.nj.gov/dep/baqp/aas.html>.
- New Jersey Department of Environmental Protection. County open space and recreation areas in New Jersey (GIS dataset), edition 20160307. NJDEP, Bureau of Geographic Information Systems, Trenton, New Jersey.
- New Jersey Department of Environmental Protection, Historic Preservation Office. New Jersey and National Registers of Historic Places, Camden County, New Jersey. Last updated September 30, 2020.
- New Jersey Department of Environmental Protection. NJ-GeoWeb. NJDEP, Bureau of Geographic Information Systems, Trenton, New Jersey. <http://www.state.nj.us/dep/gis/geowebsplash.htm>.

- New Jersey Department of Environmental Protection. State owned, protected open space and recreation areas in New Jersey (GIS dataset), edition 20160527. NJDEP, Bureau of Geographic Information Systems, Trenton, New Jersey.
- New Jersey Division of Fish and Wildlife. 2017. New Jersey Landscape Project, Version 3.3. New Jersey Department of Environmental Protection, Division of Fish and Wildlife, Endangered and Nongame Species Program, Trenton, New Jersey.
- New Jersey Flood Hazard Area Control Act (N.J.S.A. 58:16A-50 et seq.).
- New Jersey Freshwater Wetlands Protection Act of 1987 (N.J.S.A. 13:9B-1 et seq.).
- New Jersey State Planning Commission. (2001, updated 2004). New Jersey State Development and Redevelopment Plan. New Jersey State Planning Commission and New Jersey Office of Smart Growth, Trenton, New Jersey.
- Owens, J.P., P.J. Sugarman, N.F. Sohl, and R.C. Orndorff. 1995. Geologic Map of New Jersey: Southern Sheet. USGS Open-File Report 95-254. U.S. Department of the Interior, U.S. Geological Survey, Washington D.C.
- Roman, C.T. and R.E. Good. 1985. Buffer Delineation Model for New Jersey Pinelands Wetlands. Rutgers, The State University of New Jersey, Division of Pinelands Research, New Brunswick, New Jersey.
- RPM Engineering, LLC. August 18, 2020. Geotechnical engineering report, proposed automobile auction facility. RPM Engineering, LLC, West Deptford, New Jersey.
- Site Plan set entitled, “Preliminary and Final Site Plans, Proposed Automobile Auction Facility, Block 5201, Lot 8; Block 5302, Lot 1; Block 5402, Lots 2, 3 & 4, Township of Waterford, Camden County, New Jersey;” prepared by David J. Fleming, P.E., Marathon Engineering & Environmental Services, Inc.; dated June 1, 2020; last revised December 7, 2020 (Issue 4).
- Tetra Tech. letter report regarding “Surface water sampling results – additional lab tests, Atco Dragway, 1000 Jackson Road, Atco, New Jersey. April 7, 2021. Tetra Tech, Superior, Colorado.
- U.S. Environmental Protection Agency. Water Quality Exchange. accessed April 2, 2020. https://www.epa.gov/waterdata/water-quality-data.
- Wilber, C.P. 1940. Geology of New Jersey. State of New Jersey Department of Conservation and Development, Trenton, New Jersey.
- Zepecza, O.S. 1984. Hydrogeologic framework of the New Jersey Coastal Plain. U.S. Geological Survey Open-File Report 84-730. U.S. Department of the Interior, Geological Survey, Trenton, New Jersey.

APPENDIX A

MARATHON
Engineering & Environmental Services

Donald W. Brickner, Senior Environmental Scientist

CREDENTIALS:

- ❑ B.S., Environmental Science, Elon University, NC, 1999
- ❑ M.S., Biology, Rutgers University, Camden, NJ, 2006

PROFESSIONAL AFFILIATIONS:

- ❑ Society of Wetland Scientists, Member since 1999

PROFESSIONAL REGISTRATIONS/CERTIFICATIONS:

- ❑ Certified Professional Wetland Scientist
- ❑ Wetland Delineator Program, Cook College, Rutgers University
- ❑ OSHA 40-Hour Health and Safety Training
- ❑ Standard First Aid and Adult CPR, National Safety Council

TECHNICAL EXPERTISE:

Project management; wetland mapping and mitigation; threatened and endangered species surveys; habitat assessments; environmental land use permitting; environmental inventories and assessments; Environmental Impact Statements; Geographic Information Systems; and, soil evaluations.

EXPERIENCE SUMMARY:

Mr. Brickner has 20 years of experience in the environmental consulting industry focusing on land use permitting and ecological investigations throughout New Jersey, Pennsylvania, and Delaware. He is responsible for the management of environmental projects and performing the following technical services: field investigations and preparation of permit applications in support of projects requiring approvals from state and federal regulatory programs, such as Coastal Area Facility Review Act (CAFRA), Waterfront Development, Freshwater Wetlands, Coastal Wetlands, Flood Hazard Area, New Jersey Pinelands Commission, Section 404 of the federal Clean Water Act, Section 10 of the U.S. Rivers and Harbor Act; delineation of freshwater and coastal wetlands utilizing methods presented in the Federal Manual for Identifying and Delineating Jurisdictional Wetlands (Federal Interagency Committee for Wetland Delineation, 1989), the Corps of Engineers Wetlands Delineation Manual (USACE, 1987) and regional supplements, and the New Jersey Pinelands Commission Manual for Identifying and Delineating Pinelands Area Wetlands (NJ Pinelands Commission, 1991); services associated with all phases of freshwater and coastal wetland mitigation projects, including coordination of mitigation credit transfer (credit banking), habitat evaluation, wetland functional assessment, soil and hydrologic analysis, site design and landscaping, construction oversight, and post-construction monitoring; surveys for rare flora and fauna; habitat assessments; soil evaluations to determine site suitability for development; and natural resource evaluations to assess potential environmental impacts. Mr. Brickner has testified on various environmental issues, including wetlands and rare species, at the local and state levels and has served as a third-party expert in civil actions involving wetlands.

MARATHON
Engineering & Environmental Services

Rick Ricciardi, P.P., A.I.C.P., President

CREDENTIALS:

- ❑ B.S., Environmental Sciences and Sociology, Stockton University
- ❑ Business Essentials Certification, University of Pennsylvania, The Wharton School
- ❑ Licensed Professional Planner in New Jersey
- ❑ Certified by the American Institute of Certified Planners

PROFESSIONAL AFFILIATIONS:

- ❑ Atlantic County Solid Waste Advisory Council
- ❑ Builders League of South Jersey, Board of Directors
- ❑ New Jersey Builders Association, Board of Directors
- ❑ New Jersey Foundation for Housing, Board of Directors
- ❑ Voorhees Township Bicycle and Pedestrian Pathway Committee

TECHNICAL EXPERTISE:

Project management, environmental land use permitting, wetland mapping and mitigation, environmental inventories and assessments, soil evaluations

EXPERIENCE SUMMARY:

Mr. Ricciardi is responsible for the management of environmental projects for residential, commercial, institutional and industrial clients and governmental agencies from proposal preparation to final close out. He is responsible for the development of the technical approach; maintaining QA/QC; providing coordination between the client, attorney and the various disciplines on the technical design and scheduling; and interfacing with regulatory agencies on securing timely approvals through monitoring of applications and insuring that technical deficiencies are addressed.

He has over 35 years of experience in all phases of federal and state permitting procedures and regulatory agency compliance including the preparation of permit applications under Section 404 of the federal Clean Water Act; Section 10 of the U.S. Rivers and Harbor Act; CAFRA; Freshwater and Coastal Wetlands, Waterfront Development; New Jersey Pinelands Commission, and Water Quality Management Plan Amendments. He has completed numerous environmental inventories, environmental assessment/impact statements, and wetland delineations and mitigation proposals.