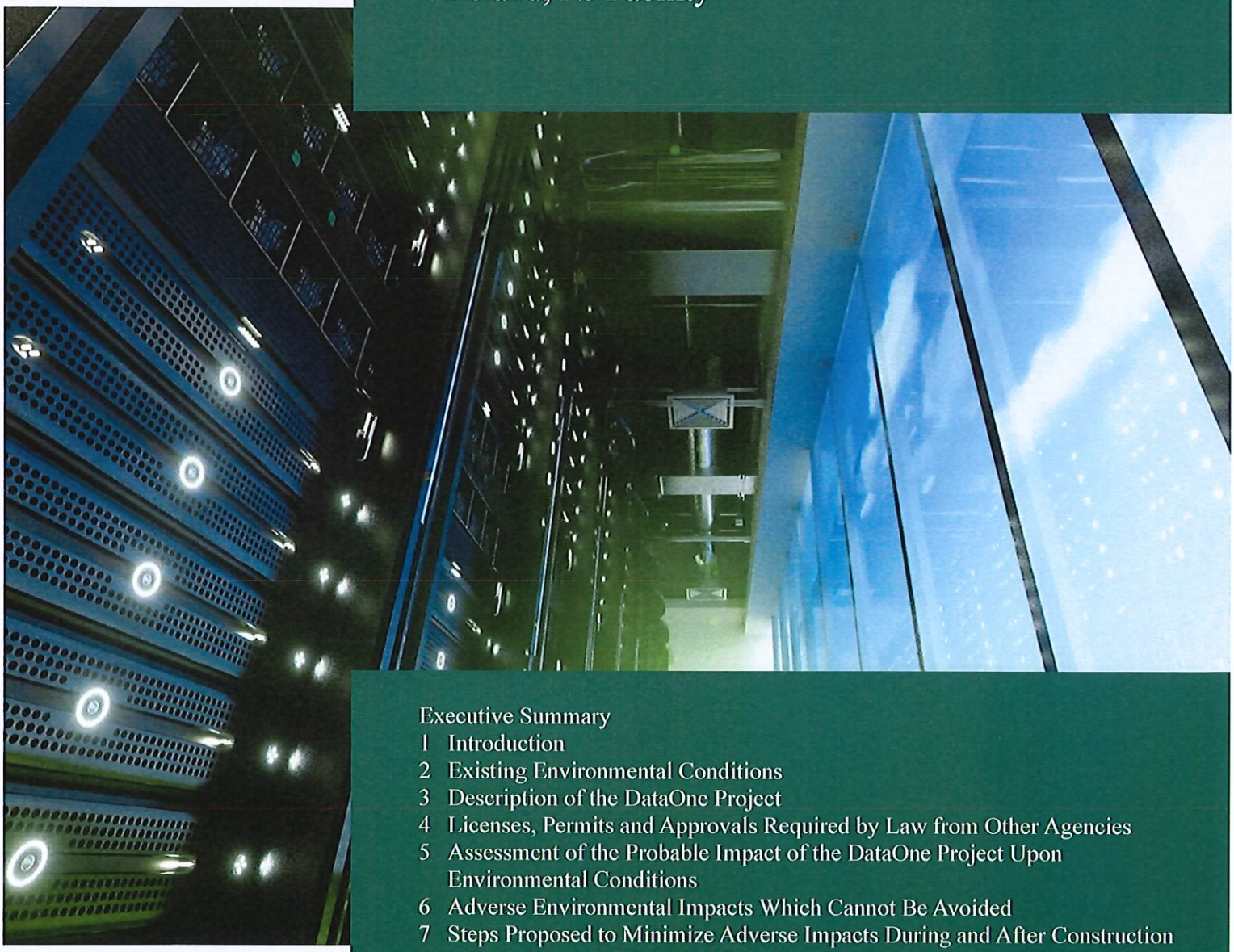
DATA ONE
SUSTAINABLE DATACENTER

February 24, 2026

Environmental Impact Statement

Vineland, NJ Facility



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Executive Summary

DataOne is developing a modern AI data center facility within the City of Vineland, Cumberland County, New Jersey ("Project") having received City of Vineland Planning Board major site approval by Resolution No. 6652, and amended major site plan approval by Resolution No. 6720. The Project is located in an area designated for industrial and commercial development and is consistent with the City of Vineland Master Plan and Land Development Ordinance. This Environmental Impact Statement (EIS) has been prepared to support Planning Board review of the second amended site plan approval application, and to evaluate the potential environmental effects associated with construction and/or operation of the Project.

Existing Environmental Conditions (Section 2.0)

Section 2.0 of this EIS documents existing environmental conditions at and around the Project site, including land use (Section 2.17), topography (Section 2.11), soils and geology (Sections 2.9 and 2.10), hydrology and water resources (Sections 2.6 through 2.8), air quality (Section 2.5), ecology (Section 2.15), history / archeology (Section 2.19), aesthetics (Section 2.18), and demographic conditions (Section 2.16).

Environmental conditions are typical of an industrial and commercial area within Vineland and do not present unusual constraints to development. No significant wetlands, surface waters, historic resources, or archaeological resources were identified that would preclude development of the Project.

Project Description (Section 3.0)

The Project consists of the construction of one AI data center building and associated site/structure improvements, including electrical and mechanical infrastructure, power generation building, a chiller building, emission control apparatus, a 1.5 million-gallon liquified natural gas (LNG) tank and related facilities, water treatment and storage facilities, internal access drives, parking areas, stormwater management facilities, and landscaped buffers (see Section 3.0).

The facility will operate on a continuous basis with approximately 200 employees operating over three shifts and relatively low daily traffic volumes compared to traditional industrial uses. The Project site is generally flat, accessible from an existing roadway, and served by City water and sewer. The Project will generate 85% of its required electricity using onsite natural gas generating equipment.

Permits and Approvals (Section 4.0)

As described in Section 4.0, development of the Project will require approvals from the Vineland Planning Board and permits from applicable state, county, and utility agencies, including the New Jersey Department of Environmental Protection, the County Planning Board and the Cumberland Salem Conservation District. All required preconstruction permitting and approvals will be in place prior to construction.

Environmental Impacts and Mitigation (Sections 5.0, 6.0, and 7.0)

Section 5.0 evaluates the probable environmental impacts of the Project during construction and operation. Construction-related impacts, including noise, dust, and temporary increases in traffic, are expected to be short-term and temporary in nature. Operational impacts are limited and manageable due to the low-intensity characteristics of data center use.

Section 6.0 identifies unavoidable adverse impacts, which are typical of industrial development and include permanent changes to land use, vegetation removal within the development footprint, increased impervious surface coverage, and visual changes.

Section 7.0 describes the steps proposed to minimize adverse impacts during and after construction. These measures include soil erosion and sediment control, stormwater management systems designed in accordance with NJDEP and municipal requirements, dust suppression, noise controls, landscaping and buffering, spill prevention measures, and use of state-of-the-art air pollution control devices.

Alternatives Analysis (Section 8.0)

Section 8.0 evaluates reasonable alternatives to the proposed Project, including the No-Action Alternative, alternative permitted land uses, alternative site layouts, reduced-scale development, and alternative locations. The analysis demonstrates that the proposed DataOne Project represents a balanced and appropriate use of the site and would result in fewer environmental impacts than many other permitted industrial uses.

Other Information Necessary to Evaluate the Impact of the Development Upon the Environment (Section 9.0)

Section 9.0 includes additional information on sustainability, energy efficiency, climate resilience, and emergency planning to support a comprehensive evaluation. The Project incorporates high-efficiency systems, is designed for resilience to environmental events, and includes plans for emergency response, environmental monitoring, construction management, and regulatory compliance. The Project will coordinate with utility providers to minimize environmental disturbance from infrastructure upgrades. This information supplements technical analyses and demonstrates a commitment to environmental protection and responsible development practices.

Project Benefits

In addition to meeting land use and environmental planning objectives, the DataOne Project provides several public and community benefits, including:

- **Consistency with Municipal Planning Goals:** The Project supports the City of Vineland's Master Plan objectives by promoting technology-oriented and employment-generating development in a designated industrial area.

- **Economic and Fiscal Benefits:** The Project will contribute to the local tax base and support construction-related and long-term employment opportunities, as discussed in Section 5.13.

- **Efficient Use of Industrial Land:** Compared to other permitted industrial uses, the data center represents a relatively low-traffic use, with controlled operational characteristics, resulting in reduced demands on local roadways and public services (see Sections 5.10 and 5.13).

- **Modern Infrastructure Investment:** The Project will incorporate modern utility, stormwater, and building systems that enhance site functionality and long-term sustainability (Sections 3.5 and 7.3.1).

Conclusions (Section 10.0)

As summarized in Section 10.0, the analyses presented in this EIS demonstrate that the proposed DataOne Project can be constructed and operated in an environmentally responsible manner. With implementation of appropriate mitigation measures and compliance with applicable regulations, the Project will not result in significant adverse environmental impacts and is consistent with the City of Vineland's planning, environmental protection, and economic development objectives.

1.0 Introduction

This Environmental Impact Statement (EIS) has been prepared on behalf of DataOne USA, LLC (the "Applicant") in accordance with the environmental submission requirements of the City of Vineland Land Use Ordinance. This EIS accompanies an application for second amended site plan approval for the DataOne data center project located at the intersection of Lincoln Avenue and Sheridan Avenue in the City of Vineland, Cumberland County, New Jersey, on property known as Block 7503, Lot 35.01 (the "Project") (see Figure 1).

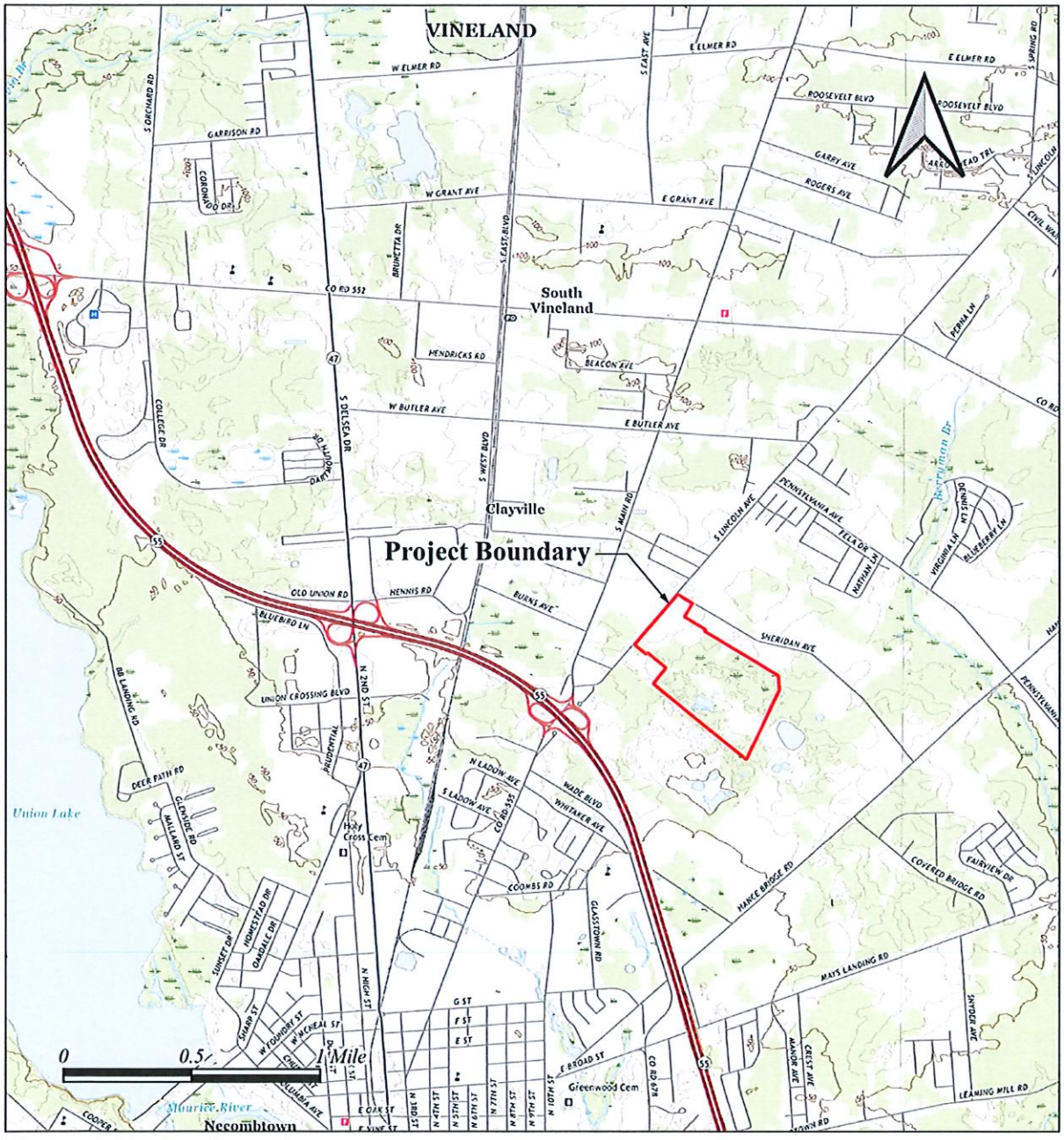

Figure 1: Project Location

The purpose of this EIS is to document existing environmental conditions at the Project site and surrounding area, to evaluate the potential environmental impacts associated with the construction and operation of the data center, and to demonstrate compliance with applicable provisions of the Vineland Land Development Ordinance and other relevant municipal, county, and state requirements. The scope of this EIS has been prepared to address the requirements of Section 425-81 of the City of Vineland, New Jersey Land Development Ordinance.

The Project consists of the development of a modern AI data center facility designed to support secure, reliable, and energy-efficient digital infrastructure. Data centers are a permitted and appropriate use within industrial and commercial zoning districts and are increasingly essential to regional economic development, business continuity, and technological advancement. The Project has been designed to be compatible with surrounding land uses while incorporating best management practices to minimize environmental impacts.

The Project site is located within an area of Vineland characterized by a mix of industrial, farming, and residential lands. The Applicant has undertaken this EIS to assess preconstruction site conditions and to identify potential impacts related to land use, traffic, utilities, water resources, stormwater management, air quality, noise, energy use, ecological resources, and public services. Where potential impacts are identified, the EIS describes mitigation measures and design features intended to avoid or minimize adverse effects.

This EIS is intended to assist the Vineland Planning Board in their evaluation of the application for second amended site plan approval. The analysis is based on available environmental data, site investigations, and engineering studies prepared in support of the Project's development application. The Applicant has coordinated the Project design with applicable municipal ordinances, Cumberland County standards, and relevant state regulatory requirements.

In summary, this EIS demonstrates that the DataOne AI Data Center with related facilities can be constructed and operated in a responsible manner that supports economic investment while protecting environmental resources and maintaining the character and welfare of the surrounding community. The following sections of this report provide a detailed description of the Project, an analysis of preconstruction environmental conditions, an evaluation of potential impacts, and a discussion of mitigation measures and alternatives considered.

2.0 Existing Environmental Conditions

This section of the Environmental Impact Statement describes the existing environmental conditions at the Project site and within the surrounding area of influence. The purpose of this section is to establish baseline conditions against which potential environmental impacts associated with the construction and operation of the Project can be evaluated, as required by the City of Vineland Planning Board EIS checklist.

The information presented herein is based on a review of available environmental resource mapping, municipal and county planning documents, site reconnaissance, and technical studies prepared in support of the development application. The geographic scope of analysis varies by resource topic and reflects accepted planning and engineering practice, with site-specific conditions evaluated in detail and off-site conditions assessed where the Project has the potential to generate secondary effects.

This section gives a description of environmental conditions that existed at the Project site prior to initiation of construction for the current project. The site has a long history of widely varying activities that are not the subject of this section.

2.1 Site Location and Surrounding Area

As shown in Figure 1, the Project site is located within the City of Vineland, Cumberland County, New Jersey. The site is situated in an area characterized by industrial and residential development, interspersed with undeveloped and agricultural lands. Trout National The Reserve golf course is located adjacent and immediately to the east to the Project site; the Northeast Precast (NEP) manufacturing facility is located to the south of the Project site; and the Vineland Municipal Electric Utility (VMEU) Clayville Power Plant facility is located to the southwest of the Project site. Agricultural use lands are located to the west and north of the Project site, together with sparse residential uses. These facilities/uses are shown on Figure 2 below.

The site is accessed by an existing public roadway (Lincoln Avenue) and is served by available municipal and utility infrastructure. The surrounding area reflects land use patterns and development intensities consistent with the City of Vineland Master Plan and the applicable zoning district.

2.2 Existing Land Use and Zoning

The Project site is currently partially developed and is zoned for industrial or commercial use under the City of Vineland Land Development Ordinance. The property is located within the Energy and Minerals Redevelopment Area, and benefits from the underlying I-B Industrial – Business Zoning. Existing land uses on the site and in the immediate vicinity are consistent with the permitted uses and development standards of the zoning district.

There are no known nonconforming uses on the Project site. Adjacent properties are similarly zoned and developed in a manner consistent with municipal planning objectives for employment-generating and infrastructure-supportive uses.

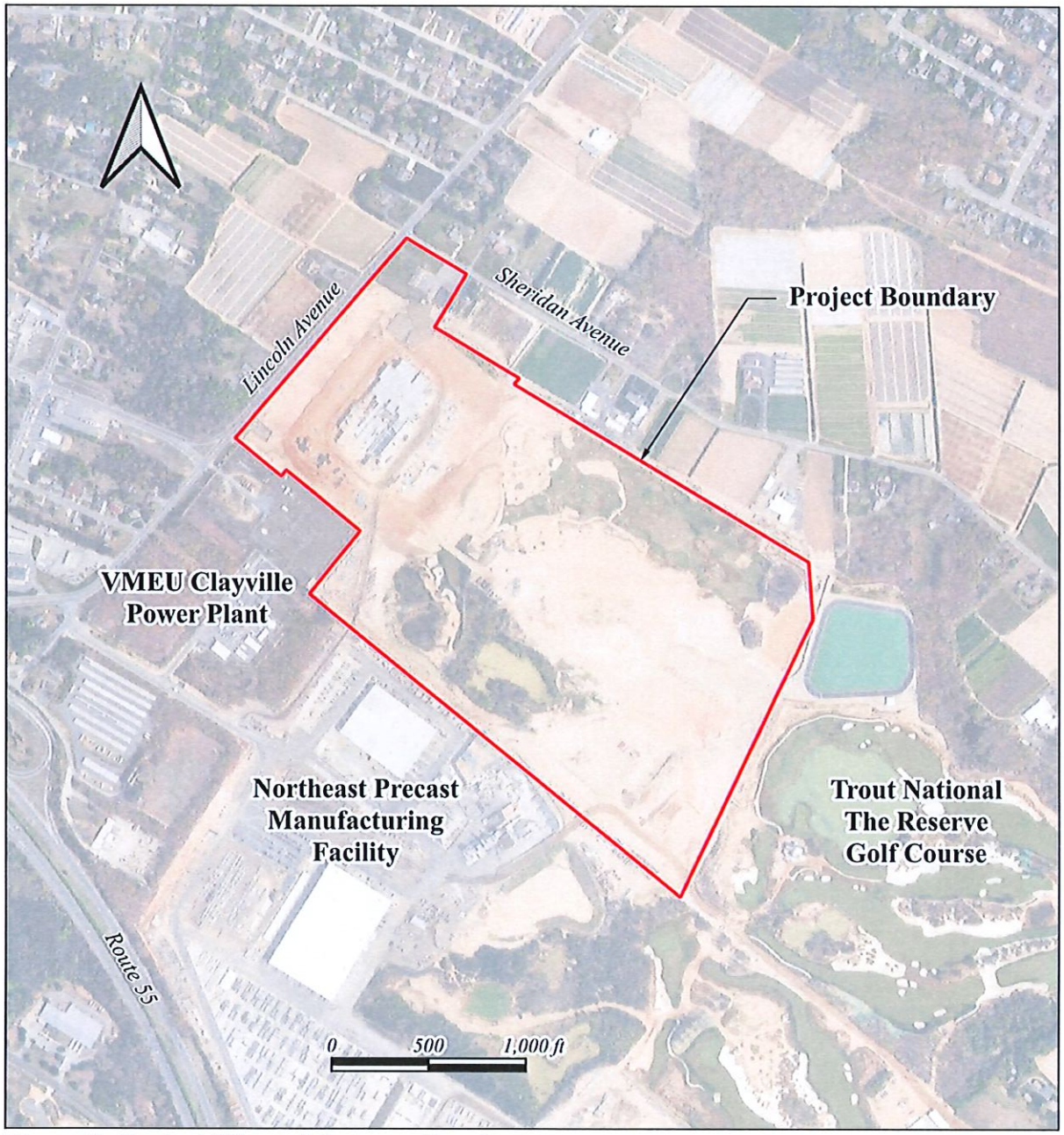

Figure 2: Project Site and Surrounding Areas

2.3 Physical Characteristics of the Site

The Project site is situated upon a topographic ridgeline with relatively level to gently sloping terrain grading away from the Project to the north, west and south. Preconstruction site conditions included previously disturbed areas as well as undeveloped portions containing wetlands and wetlands buffer vegetation. The site's topography, soils, and drainage patterns

influence the design of approved and proposed site improvements and stormwater management systems.

Soils within the site generally consist of sandy or loamy soils common to Cumberland County, with infiltration characteristics that vary from high recharge potential (hydrologic soil group [HSG] "A") to low recharge potential (HSG "D"). Portions of the site are underlain by the clays that gave the area the name of "Clayville."

2.4 Regulatory Context

The Project site is subject to review by the City of Vineland Planning Board, Cumberland County Planning Board, the Cumberland Salem Conservation District (CSCD), and the New Jersey Department of Environmental Protection (NJDEP). Section 4.0 of this EIS more fully describes what permits/regulations are applicable to the Project and the following sections describe existing conditions and applicable permitting. Environmental resources such as wetlands, are regulated under state programs where present. Existing mapped environmental constraints are identified and addressed in subsequent sections of this EIS.

2.5 Air Quality

2.5.1 Existing Conditions

Ambient air quality in the City of Vineland and Cumberland County is influenced by a combination of regional background conditions and localized emission sources, including vehicular traffic, industrial operations, residential and commercial activities. The natural gas and oil-fired VMEU Clayville Generating Station is located adjacent to the Project site to the southwest. The Project site is located in an area characterized by industrial and commercial land uses, where air quality conditions are typical of similar developed areas within southern New Jersey.

The New Jersey Department of Environmental Protection (NJDEP) regulates air quality under the New Jersey Air Pollution Control Act and implements the federal National Ambient Air Quality Standards (NAAQS) established by the U.S. Environmental Protection Agency (USEPA). Cumberland County is currently designated as being in attainment for the following criteria air pollutants regulated under the NAAQS: carbon monoxide, nitrogen dioxide, sulfur dioxide, particulate matter ($PM_{2.5}$ and PM_{10}), and lead. Cumberland County, along with the entire state of New Jersey is classified as non-attainment for the criteria pollutant ozone. A "nonattainment" designation for this pollutant indicates that the currently measured levels of ozone exceed the NAAQS and special rules, designed to reduce these levels, are in force. The Project has been designed to comply with these rules through use of state-of-the-art controls on precursors to ozone formation as further discussed in Section 5.5 of this report.

Existing air quality conditions in the vicinity are primarily affected by emissions from on-road vehicles on local and regional roadways, as well as lawful emissions from nearby industrial and commercial facilities operating under NJDEP air permits.

2.5.2 Regulatory Context

Any permanent emission sources associated with operation of the proposed DataOne Data Center will be subject to applicable NJDEP air quality regulations, including limitations on the quantity of pollutant emissions to ensure that emissions do not adversely affect local or regional air quality.

2.5.3 Summary of Baseline Conditions

Based on available pollutant measurements at NJDEP's Millville air monitoring station and the nature of surrounding land uses, existing air quality conditions at and around the Project site are generally "good" and have been improving over the last decade. These baseline conditions provide the framework for evaluating potential construction-related and operational air quality impacts, which are addressed in subsequent sections of this EIS.

2.6 Water Quality

2.6.1 Surface Water Quality – Existing Conditions

Water quality at the Project site is limited to the onsite wetlands and their associated ponds all of which are isolated and were created as a result of historical clay and soil mining operations on high land. There are no water features on the Project site that are part of a surface water tributary system. As such, the water quality of these surface water features is influenced primarily by runoff generated on the Project site. The surface waters are regulated by the New Jersey Department of Environmental Protection (NJDEP) and are classified under the New Jersey Surface Water Quality Standards (N.J.A.C. 7:9B) based on designated uses such as aquatic life support, recreation, and water supply. There is no offsite runoff from the onsite wetlands or their surface water features.

2.6.2 Stormwater and Nonpoint Source Conditions

Stormwater runoff from the Project site under existing conditions occurs in accordance with existing topography and drainage patterns and is conveyed through on-site and off-site swales, stormwater structures, municipal, and county systems. As with other properties in the area, stormwater runoff may transport sediments and pollutants associated with existing land uses.

Stormwater management within the City of Vineland is regulated pursuant to the Vineland Land Development Ordinance and the City's stormwater control regulations, which are consistent with the NJDEP Stormwater Management Rules at N.J.A.C. 7:8. These regulations establish design and performance standards intended to protect surface water quality, reduce erosion, and minimize nonpoint source pollution.

Existing site drainage conditions and downstream conveyance systems are evaluated as part of the development application to establish baseline conditions against which compliance with applicable stormwater standards is assessed.

2.6.3 Groundwater – Existing Conditions

Groundwater underlying the Project site is part of the regional Kirkwood-Cohansey aquifer system that principally serves Vineland and surrounding communities. This aquifer is an important source of potable water and is protected under NJDEP groundwater quality standards (N.J.A.C. 7:9C). Groundwater quality in the area is influenced by soil characteristics, recharge rates, and surrounding land uses (principally surrounding agricultural uses).

Soils at the site are characteristic of the Coastal Plain and generally consist of sandy or loamy materials that allow for groundwater recharge. Existing groundwater conditions in the vicinity are typical of southern New Jersey and are subject to regulatory oversight to prevent contamination and protect drinking water supplies. Groundwater depths at the Project site vary from about 15 to 25 feet below the land surface and the flow direction is generally to the southeast.

There are no known groundwater contamination issues associated with the Project site based on available environmental data and mapping. Based on recent permitting activities of the City of Vineland, the Project site lies partially within Tiers 1, 2 and 3 of the proposed Vineland Well #17 Well Head Protection Areas for Public Community Water Supply Wells. Existing groundwater conditions provide the baseline for evaluating potential impacts related to stormwater infiltration, utility installation, and long-term site operation.

2.6.4 Regulatory Context

Surface water, groundwater, and stormwater resources in the Project area are regulated under multiple state and local programs, including:

- New Jersey Water Pollution Control Act
- NJDEP Surface Water Quality Standards (N.J.A.C. 7:9B)
- NJDEP Ground Water Quality Standards (N.J.A.C. 7:9C)
- NJDEP Stormwater Management Rules (N.J.A.C. 7:8)
- NJDEP Safe Drinking Water Regulations (N.J.A.C. 7:10)
- City of Vineland Land Development Ordinance stormwater and environmental protection provisions
- Cumberland County Planning Board
- Cumberland Salem Conservation District

Wetlands, flood hazard areas, and riparian zones, where present, are regulated under NJDEP programs intended to protect water quality and hydrologic function. Regulated features identified on or near the Project site are discussed in subsequent sections of this EIS.

2.6.5 Summary of Baseline Conditions

Based on available environmental data, regulatory classifications, and site reconnaissance, existing surface water and groundwater quality conditions at and near the Project site are consistent with regional conditions in Vineland and Cumberland County and are subject to

comprehensive state and municipal regulatory oversight. These baseline conditions establish the framework for evaluating potential project-related impacts to water resources, which are addressed in subsequent impact and mitigation sections of this EIS.

2.7 Water Supply

2.7.1 Existing Water Supply Conditions

The Project site is located within the City of Vineland, which is served by a municipal public water supply system designed to support industrial, commercial, and residential development. Potable water is supplied through groundwater sources and distributed via the City's water treatment and distribution infrastructure. This site is served by a 12" water main located within the right of way of Lincoln Avenue.

The municipal water supply system is operated in compliance with the New Jersey Safe Drinking Water Act and NJDEP regulations at N.J.A.C. 7:10, which establish standards for water quality, system capacity, and reliability. The City of Vineland's Water Utility is currently operating with ample water capacity. According to the NJDEP web site Vineland has a surplus of 5.163 MGD in firm capacity. Firm capacity is defined as the ability of a utility to meet the peak daily demand with the largest pumping station or treatment unit out of service. The peak daily demand is the average daily demand of the peak month for the last 5 years, plus anticipated peak daily demand (approved but not built) future development. The anticipated peak daily demand is then multiplied by 3 for the purposes of the firm capacity calculation. If the firm capacity is greater than the peak daily demand the result is a surplus of firm capacity. Conversely, if the firm capacity is less than the peak daily demand in the result is a deficit of firm capacity. Vineland's Water Allocation Permit regulates monthly and annual allocation limits. Currently these allocations are 502 MGM and 3,645 MGY respectively. After the demand of approved future development is deducted, the result is a surplus of 126 MGM and 743 MGY. These operation conditions along with the existing water service in the vicinity of the Project site provide baseline conditions for evaluating proposed water demands associated with the Project.

2.7.2 Existing On-Site and Off-Site Water Infrastructure

Public water mains are located within or adjacent to the Project site, providing access to municipal water service. The size, location, and condition of existing distribution mains establish the framework for evaluating proposed service connections and any system improvements that may be required.

Hydrants serving the surrounding area are connected to the municipal distribution system and are spaced in accordance with local fire protection standards. Existing infrastructure is typical of industrial and commercial areas within the City of Vineland.

2.7.3 Fire Flow and Emergency Water Supply

Fire protection for properties in the Project area is provided through the municipal water distribution system and the existing network of fire hydrants. Available fire flow in the vicinity

of the Project site is subject to review and verification by the City of Vineland Fire Department as part of the site plan and building permit review process.

Emergency water supply for fire suppression is governed by municipal standards and applicable fire codes. Existing baseline conditions include access to municipal water infrastructure capable of supporting fire protection requirements for permitted industrial and commercial uses. Any project-specific fire flow requirements or system enhancements will be addressed through coordination with the Fire Department and City Engineering staff.

2.7.4 Regulatory Context

Water supply and fire protection systems serving the Project site are regulated by NJDEP and the City of Vineland pursuant to the New Jersey Safe Drinking Water Act and implementing regulations at N.J.A.C. 7:10. Fire flow and hydrant requirements are subject to review under applicable municipal ordinances and fire safety codes.

Any proposed modifications to existing water infrastructure or fire protection systems will require approval from the City of Vineland and other agencies having jurisdiction.

2.7.5 Summary of Baseline Conditions

The Project site is located within an area served by an established municipal public water supply system and existing fire protection infrastructure. These baseline water supply and fire flow conditions provide a suitable framework for evaluating the Project's water demand, emergency service requirements, and consistency with municipal utility and public safety standards, which are addressed in subsequent sections of this EIS.

2.8 Hydrology

2.8.1 Regional Hydrologic Setting

The Project site is located within the Coastal Plain physiographic province of southern New Jersey, an area characterized by relatively flat topography, permeable soils, and groundwater-dominated hydrology. Surface water drainage in the region occurs through a network of streams, wetlands, drainage swales, and man-made stormwater conveyances that ultimately discharge to downstream waterways within the applicable watershed.

Hydrologic conditions in Vineland are influenced by seasonal precipitation patterns, soil infiltration capacity, groundwater elevations, and existing land use. These systems support surface water resources, wetlands, and groundwater recharge areas that contribute to municipal water supplies.

2.8.2 Site Topography and Drainage Patterns

The Project site is situated upon a topographic ridgeline with relatively level to gently sloping terrain grading away from the Project to the north, west and south. Existing drainage patterns are

controlled by site topography and direct stormwater runoff toward on-site low points and adjacent drainage features. Runoff ultimately enters downstream stormwater conveyance systems, principally to the Cumberland County drainage system on Lincoln Avenue to the west and to the NEP stormwater management system to the southeast, with a small portion of the site draining to the northeast.

Existing drainage conditions reflect current site development and land cover and establish the baseline for evaluating proposed stormwater management and hydrologic controls.

2.8.3 Floodplains and Flood Hazard Areas

Flood hazard areas and floodplains within the City of Vineland are regulated by the New Jersey Department of Environmental Protection (NJDEP) under the Flood Hazard Area Control Act and implementing regulations at N.J.A.C. 7:13. Available NJDEP mapping and Federal Emergency Management Agency (FEMA) Flood Insurance Rate Maps identify regulated flood hazard areas in association with mapped surface water features.

There are no mapped floodplains within the Project site and the closest FEMA mapped floodplain is approximately one-half mile to the northeast (FEMA 2026).

2.8.4 Wetlands and Riparian Areas

Wetlands and associated transition areas are regulated by NJDEP under the Freshwater Wetlands Protection Act and implementing regulations at N.J.A.C. 7:7A. Wetlands in the region perform important hydrologic and ecological functions, including stormwater attenuation, water quality improvement, and groundwater recharge.

Based on available NJDEP freshwater wetlands mapping and site reconnaissance, wetlands and wetland transition areas, if present near the Project site, are associated with low-lying areas and drainage features typical of the Coastal Plain. Riparian areas, where applicable, are regulated in conjunction with surface water features under NJDEP flood hazard regulations.

Existing mapped wetlands and riparian areas provide the baseline conditions for evaluating site design constraints and potential impacts. Wetlands existing on the Project site have been mapped and their transition areas (wetland buffers) have been delineated as shown in Figure 3. A Freshwater Wetlands Letter of Interpretation (LOI) for the wetlands shown on Figure 3 was issued by NJDEP on September 19, 2024 (File and Activity No.: 0614-24-0013.1 LLI240001). The LOI classified the on-site wetlands as intermediate resource value, with 50-foot-wide transition area buffers, and confirmed that the wetlands do not contain documented or potential habitat for threatened and/or endangered species.

2.8.5 Groundwater and Recharge Characteristics

Groundwater is a key component of the regional hydrologic system. Soils underlying the Project site are characteristic of the Coastal Plain and generally consist of sandy or loamy materials that facilitate infiltration and groundwater recharge. Groundwater underlying the Project site is part

of the regional Kirkwood-Cohansey aquifer system that principally serves Vineland and surrounding communities. This aquifer system is recharged almost entirely by surface water recharge and supplies the surface water streams, rivers and lakes as well as providing recharge to underlying aquifers. Groundwater elevations within the Kirkwood-Cohansey aquifer system fluctuate seasonally and are influenced by precipitation patterns and regional groundwater withdrawals.

Recharge areas within Vineland contribute to the underlying aquifer system serving municipal water supply wells. Existing recharge characteristics at the Project site establish the baseline for evaluating changes associated with impervious cover and stormwater management measures.

2.8.6 Regulatory Context

Hydrologic resources in the Project area are regulated under multiple state and local programs, including:

- NJDEP Flood Hazard Area Control Act (N.J.A.C. 7:13)
- NJDEP Freshwater Wetlands Protection Act (N.J.A.C. 7:7A)
- NJDEP Stormwater Management Rules (N.J.A.C. 7:8)
- City of Vineland Land Development Ordinance stormwater and environmental protection provisions
- Cumberland County Development Regulations

These regulations establish standards for protecting flood storage capacity, wetlands, riparian corridors, groundwater recharge, and downstream hydrology.

2.8.7 Summary of Baseline Conditions

Existing hydrologic, wetlands, and riparian conditions at and surrounding the Project site are typical of developed and undeveloped lands within Vineland and Cumberland County. Drainage patterns, flood hazard areas, wetlands, and groundwater characteristics are well defined through available mapping and site observations and are subject to comprehensive state and municipal regulation. These baseline conditions provide the framework for evaluating potential project-related hydrologic and wetland impacts and applicable mitigation measures, which are addressed in subsequent sections of this EIS.

2.9 Geology

2.9.1 Regional Geologic Setting

The Project site is located within the Atlantic Coastal Plain physiographic province of southern New Jersey. This region is characterized by unconsolidated to semi-consolidated sedimentary deposits consisting primarily of sands, silts, clays, and gravels that were deposited during the Cretaceous and Tertiary geologic periods. Bedrock is generally located at significant depth and does not influence surface development or shallow foundation design in the Vineland area.

Geologic conditions in the region are relatively uniform and have supported extensive commercial, industrial, agricultural, and residential development throughout Vineland and Cumberland County.

2.9.2 Site-Specific Geologic Conditions

Subsurface conditions at the Project site are typical of the Coastal Plain and consist of unconsolidated soils and sediments overlying deeper geologic formations. These materials generally provide suitable bearing conditions for conventional building foundations when designed in accordance with standard engineering practices.

There are no known geologic hazards at or near the Project site, such as faults, karst features, sinkholes, or areas of unstable bedrock. Seismic risk in southern New Jersey is considered low, and no unique geologic constraints affecting site development have been identified based on available mapping and regional data.

2.9.3 Mineral Resources

Historically, the Project site was used for part of the Jesse S. Morie & Son, Inc. Clayville mining operations. Clay, sand and gravel were mined at the site and processed, packaged and shipped to various locations in the mid-Atlantic region.

2.9.4 Regulatory Context

Geologic conditions related to site development are evaluated through geotechnical investigations conducted in accordance with accepted engineering standards and municipal requirements. Earth disturbance, grading, and foundation design are subject to review under the City of Vineland Land Development Ordinance and applicable construction codes.

Where soil and subsurface conditions affect stormwater management, groundwater recharge, or foundation design, those conditions are addressed through compliance with NJDEP Stormwater Management Rules (N.J.A.C. 7:8) and applicable building and engineering standards.

2.9.5 Summary of Baseline Conditions

Existing geologic conditions at the Project site are typical of the Atlantic Coastal Plain and are well suited to support the proposed development. The absence of significant geologic hazards or unique subsurface constraints establishes a stable baseline for evaluating site design, construction practices, and related environmental considerations addressed in subsequent sections of this EIS.

2.10 Soils

2.10.1 Regional Soil Characteristics

The Project site is located within the Atlantic Coastal Plain region of southern New Jersey, where soils are predominantly derived from sandy and loamy sediments. These soils are generally well-

drained to moderately well-drained and are characteristic of Cumberland County. Soil conditions in the region have supported a wide range of agricultural, industrial, commercial, and residential development.

Soil characteristics influence drainage, erosion potential, groundwater recharge, and the suitability of land for development. Regional soils typically exhibit moderate to high permeability, which is an important consideration for stormwater management and site grading.

2.10.2 Site-Specific Soil Conditions

Soils at the Project site generally consist of sandy or loamy soils common to Cumberland County. Portions of the site are underlain by the clays that gave the area the name of "Clayville." These soils generally provide suitable conditions for site development when managed in accordance with accepted engineering and construction practices.

Existing soil conditions reflect current site land cover and prior disturbance. Areas of undisturbed soils may support vegetation and infiltration, while previously disturbed areas exhibit altered soil structure. Final soil conditions will be confirmed through site-specific geotechnical and soil testing conducted in support of engineering design.

2.10.3 Soil Limitations and Constraints

Soils in the Vineland area may be subject to erosion when exposed during construction activities. Proper soil stabilization and erosion control measures are therefore necessary to prevent sediment transport to adjacent properties and water resources.

Some soils in the region may exhibit seasonal high groundwater tables or reduced load-bearing capacity in localized areas. These conditions are typically addressed through appropriate grading, foundation design, and stormwater management practices and do not represent unusual constraints for development in Vineland.

2.10.4 Regulatory Context

Soil disturbance associated with site development is regulated under the City of Vineland Land Development Ordinance and applicable state requirements. Soil erosion and sediment control measures are subject to review and approval by the Cumberland Salem Conservation District in accordance with the New Jersey Soil Erosion and Sediment Control Act (N.J.A.C. 2:90).

Soil characteristics related to stormwater infiltration and groundwater recharge are evaluated pursuant to the NJDEP Stormwater Management Rules (N.J.A.C. 7:8), which establish standards for managing runoff quantity and quality.

2.10.5 Summary of Baseline Conditions

Existing soil conditions at the Project site are typical of the Atlantic Coastal Plain and are suitable for development consistent with the applicable zoning district. Soil characteristics,

including permeability and erosion potential, are well understood and subject to established regulatory controls. These baseline soil conditions provide the framework for evaluating construction practices, stormwater management, and potential soil-related impacts, which are addressed in subsequent sections of this EIS.

2.11 Topography

2.11.1 Regional Topographic Setting

The Project site is located within the Atlantic Coastal Plain region of southern New Jersey, which is characterized by relatively flat to gently rolling terrain. Elevation changes across the City of Vineland are generally modest, and steep slopes are uncommon. These regional topographic conditions have historically supported agricultural, industrial, and commercial development.

2.11.2 Site-Specific Topography

Topography at the Project site is generally flat to gently sloping, with gradual changes in elevation across the property. Slopes are typically mild and do not present unusual constraints to site development. The absence of steep slopes minimizes the potential for slope instability and excessive erosion under existing conditions.

Existing elevations and contours influence surface drainage patterns and have been incorporated into the preliminary site design. Topographic conditions are consistent with those found throughout similar industrial and commercial areas in Vineland.

2.11.3 Topographic Constraints

There are no steep slopes, ridgelines, or abrupt elevation changes on the Project site that would restrict development or require extensive grading. Minor elevation variations are typical of Coastal Plain landscapes and can be accommodated through standard grading and site design practices.

Topography does not create visual prominence or obstruction concerns and does not contribute to off-site drainage issues under existing conditions.

2.11.4 Regulatory Context

Topographic modifications associated with site development are regulated under the City of Vineland Land Development Ordinance and applicable site plan approval standards. Grading and earth disturbance activities are further subject to soil erosion and sediment control requirements administered by the Cumberland Salem Conservation District pursuant to the New Jersey Soil Erosion and Sediment Control Act (N.J.A.C. 2:90).

Topographic considerations related to drainage and stormwater management are evaluated under the NJDEP Stormwater Management Rules (N.J.A.C. 7:8).

2.11.5 Summary of Baseline Conditions

Existing topographic conditions at the Project site are typical of the Atlantic Coastal Plain and are well suited for the proposed development. The generally flat to gently sloping terrain presents no unusual constraints and provides a stable baseline for evaluating grading, drainage, and visual considerations addressed in subsequent sections of this EIS.

2.12 Vegetation and Wildlife

2.12.1 Existing Vegetation

Vegetation within and surrounding the Project site reflects existing land use patterns typical of industrial, commercial, and undeveloped properties in the City of Vineland. Undisturbed vegetation in the area typically consists of oak-pine dominant forest. The forest canopy primarily consists of a mixture of red (*Quercus falcata*), black (*Q. velutina)*, and white (*Q. alba)* oaks and pitch pine (*Pinus rigida)* and shortleaf pine (*P.* echinata) in the drier areas. Areas with more available soil moisture may have dominant species of red maple (*Acer rubrum*), black gum (*Nyssa sylvatica*), and sweet gum (*Liquidambar styraciflua*). The forest understory is typically dominated by black huckleberry (*Gaylusaccia baccata*). Areas formerly utilized for agriculture, resource extraction, or residential uses will have varied species comprised of a mix of native and non-native species.

2.12.2 Wildlife Resources

Wildlife observed or expected in the vicinity of the Project site consists primarily of common species adapted to developed and semi-developed environments. These may include small mammals, birds, reptiles, and amphibians typical of Cumberland County. Wildlife use of the site is generally transient and influenced by the availability of vegetated cover, water, and food sources.

The site does not contain critical or specialized habitat features. There are no significant sources of forage or cover associated with the site. Wildlife movement in the area occurs through fragmented habitat corridors associated with undeveloped lands, drainage features, and wooded areas. The properties adjoining the Project site are generally disturbed and developed, thus eliminating the Project site's potential use as wildlife corridor.

2.12.3 Threatened and Endangered Species

The New Jersey Department of Environmental Protection (NJDEP) regulates threatened and endangered species and critical habitat under the Endangered and Nongame Species Conservation Act and implementing regulations. Based on a review of available NJDEP mapping and publicly available data, the Project site is not located within an area identified as containing documented critical habitat for state-listed threatened or endangered species.

The presence or absence of regulated species or habitat, if applicable, is evaluated through agency coordination and site review as required. Any additional requirements related to protected species would be addressed in accordance with NJDEP guidance. Through the Letter of Interpretation issued by NJDEP in September 2024, NJDEP indicated that the wetlands are intermediate resource value and do not contain documented or potential habitat for threatened and/or endangered species (See discussion of wetlands in Section 2.8).

2.12.4 Wetlands and Vegetated Riparian Areas

Vegetated wetlands and riparian areas, where present, are discussed in detail in Section 2.8 (Hydrology). These areas support both vegetation and wildlife functions and are regulated under NJDEP freshwater wetlands and flood hazard regulations. Existing vegetated wetland areas provide ecological value through habitat support, water quality improvement, and flood attenuation. The site does not contain vegetated riparian areas. The wetlands and wetland buffers on site consist of forested and scrub/shrub habitat that provide some forage, cover, and water resources for wildlife and bird species.

2.12.5 Regulatory Context

Vegetation clearing and disturbance associated with development are regulated under the City of Vineland Land Development Ordinance and applicable state regulations. Wetlands, transition areas, and habitat associated with threatened or endangered species are regulated by NJDEP pursuant to N.J.A.C. 7:7A and related programs. Vegetative disturbance in wetlands and wetland buffers is strictly regulated by NJDEP.

Landscaping and buffer requirements are subject to municipal site plan standards intended to maintain visual quality and environmental protection.

2.12.6 Summary of Baseline Conditions

Existing vegetation and wildlife conditions at the Project site are typical of developed and partially undeveloped lands within Vineland and Cumberland County. Vegetative communities consist primarily of common species, and wildlife resources are limited to species adapted to existing land use conditions. These baseline conditions provide the framework for evaluating potential project-related impacts to vegetation and wildlife resources, which are addressed in subsequent sections of this EIS.

2.13 Aquatic Organisms

2.13.1 Existing Aquatic Habitat

Aquatic habitats in the vicinity of the Project site consist of surface water features such as streams, drainage swales, wetlands, and man-made stormwater conveyances typical of the Coastal Plain region of southern New Jersey. Where present, these features provide habitat for aquatic organisms adapted to low-gradient waterways, variable flow conditions, and seasonal water levels.

Aquatic habitats in the area generally support common species of fish, macroinvertebrates, amphibians, and other organisms tolerant of developed and semi-developed watershed conditions. The quality and diversity of aquatic habitat are influenced by surrounding land uses, hydrologic conditions, and water quality characteristics.

2.13.2 Existing Aquatic Species

Aquatic organisms expected to occur in surface waters near the Project site include common warm-water fish species, aquatic invertebrates, and amphibians typically found in southern New Jersey. These species are generally adapted to slow-moving or intermittent water bodies and man-made drainage features.

Wetlands and shallow water areas may provide seasonal breeding and foraging habitat for amphibians and aquatic invertebrates. The presence of aquatic organisms is dependent on water permanence, connectivity to other water bodies, and existing environmental conditions.

2.13.3 Water Quality and Habitat Condition

The condition of aquatic habitat in the area reflects regional background water quality and existing stormwater inputs. Surface waters are regulated under the New Jersey Surface Water Quality Standards and are managed to support designated uses, including aquatic life. Aquatic habitat quality is influenced by sedimentation, nutrient levels, and flow variability associated with existing land uses. Man-made stormwater facilities generally provide limited aquatic habitat value but may support opportunistic species.

The wetlands on the Project site have 50-foot-wide transition area buffers assigned by NJDEP. These wetland buffers provide filters of stormwater runoff to protect the water quality in the aquatic habitat. The wetlands on site historically receive stormwater runoff from open soils from prior resource extraction activities, agricultural fields, and residential areas. These historic and partially on-going sources increase nutrient load and potential sedimentation affecting the water quality.

2.13.4 Threatened and Endangered Aquatic Species

The New Jersey Department of Environmental Protection (NJDEP) regulates threatened and endangered aquatic species and associated habitat. Based on a review of available NJDEP data and mapping, the Project site is not located within a documented critical habitat area for state-listed threatened or endangered aquatic species.

Any potential presence of regulated aquatic species or habitat would be evaluated through agency coordination and field verification as required.

2.13.5 Regulatory Context

Aquatic organisms and their habitats are protected through multiple state and federal programs, including:

- NJDEP Surface Water Quality Standards (N.J.A.C. 7:9B)
- Freshwater Wetlands Protection Act (N.J.A.C. 7:7A)
- Flood Hazard Area Control Act (N.J.A.C. 7:13)

These regulations are intended to maintain water quality, protect aquatic habitat, and minimize impacts to aquatic life.

2.13.6 Summary of Baseline Conditions

Aquatic organisms and habitats in the vicinity of the Project site are typical of developed and semi-developed areas within Vineland and Cumberland County. Aquatic communities consist primarily of common species adapted to existing hydrologic and water quality conditions. These baseline conditions establish the framework for evaluating potential project-related impacts to aquatic organisms, which are addressed in subsequent sections of this EIS.

2.14 Water, Soil and Solid Waste Pollution Sources

2.14.1 Existing On-Site Conditions

The Project site does not contain any known active sources of pollution based on available environmental records, site reconnaissance, and review of publicly available regulatory data. Existing conditions reflect either undeveloped land or lawful industrial or commercial use consistent with the applicable zoning district.

There are no known underground storage tanks, hazardous material storage areas, or waste disposal facilities currently located on the Project site. Any historic uses of the property, if applicable, are typical of land uses permitted within the area and have not been identified as sources of ongoing contamination.

2.14.2 Surrounding Area Pollution Sources

Potential off-site sources of pollution in the surrounding area may include nearby industrial or commercial operations, and municipal infrastructure. These sources are common to developed areas within Vineland and Cumberland County and are regulated under applicable state and federal environmental programs.

2.14.3 Soil and Groundwater Contamination

Based on available environmental data and mapping, there are no known documented cases of soil or groundwater contamination associated with the Project site. Regional groundwater quality is regulated by the New Jersey Department of Environmental Protection (NJDEP), and any known contaminated sites in the broader area are addressed through established remediation programs.

If site investigations conducted as part of due diligence identify any environmental conditions requiring further evaluation, such conditions would be addressed in accordance with NJDEP requirements.

2.14.4 Solid and Hazardous Waste Sources

There are no known sources of solid or hazardous waste generation currently located on the Project site. Existing waste generation in the surrounding area is associated with lawful residential, commercial, and industrial activities and is managed through municipal and private waste collection systems.

Hazardous materials, if present in the surrounding area, are regulated under NJDEP and U.S. Environmental Protection Agency programs intended to protect public health and the environment.

2.14.5 Regulatory Context

Existing pollution sources and environmental conditions in the Project area are regulated under multiple state and federal programs, including:

- New Jersey Spill Compensation and Control Act
- NJDEP Site Remediation Program
- New Jersey Water Pollution Control Act

These regulatory programs establish standards for identifying, managing, and remediating pollution sources and protecting environmental quality.

2.14.6 Summary of Baseline Conditions

Marshall Geoscience, Inc. (MGI. 2024) completed a Preliminary Assessment investigation issued December 30, 2024 of this site (then known as Block 7503, Lots 1.01 and 35.01) in accordance with the Department regulatory requirements and applicable technical guidance documents. The results of the Preliminary Assessment concluded that no areas of concern are suspected to contain contamination above the applicable remediation standards and no further investigation or remediation is required. Based on this Preliminary Assessment and available information, there are no known significant pollution sources located on the Project site, and surrounding area pollution sources are typical of developed areas within the City of Vineland. Existing environmental conditions are subject to comprehensive regulatory oversight and establish an appropriate baseline for evaluating potential project-related pollution sources and mitigation measures, which are addressed in subsequent sections of this EIS.

2.15 Ecology

2.15.1 Regional Ecological Setting

The Project site is located within the Atlantic Coastal Plain region of southern New Jersey, an area that supports a variety of terrestrial and aquatic ecosystems influenced by soil conditions, hydrology, and land use patterns. Ecological resources in Vineland and the surrounding area include upland forests, wetlands, grasslands, and surface water features typical of Cumberland County.

Regional ecological conditions reflect a combination of natural habitats and areas altered by agricultural, industrial, and commercial development. As a result, ecological communities are often fragmented, with remaining natural areas providing localized habitat value.

2.15.2 Site Ecology

Ecological conditions at the Project site are representative of developed and partially undeveloped lands within Vineland. Terrestrial habitats consist primarily of common vegetation communities described in Section 2.12, with limited structural complexity in previously disturbed areas. Undeveloped portions of the site may provide low to moderate habitat value for wildlife adapted to edge and disturbed environments.

Aquatic and wetland-associated ecological resources, where present, are discussed in Sections 2.8 (Hydrology) and 2.13 (Aquatic Organisms). These areas contribute to local ecological function by supporting species diversity and hydrologic processes.

2.15.3 Habitat Connectivity and Fragmentation

Habitat connectivity in the Project area is influenced by existing development patterns, roadway networks, and utility corridors. Ecological habitats are generally fragmented, with limited continuous corridors for wildlife movement. Undeveloped parcels and vegetated drainage features provide localized connectivity but do not function as regionally significant wildlife corridors.

The Project site does not lie within a designated ecological corridor or preserve area identified by state or regional conservation plans.

2.15.4 Sensitive Ecological Resources

Sensitive ecological resources, including wetlands, riparian areas, and habitats supporting threatened or endangered species, are regulated by the New Jersey Department of Environmental Protection (NJDEP). Based on available mapping and data, the Project site is not located within an area identified as containing documented critical habitat for state-listed species.

Any regulated ecological features present on or near the site are subject to NJDEP oversight and are addressed in detail in resource-specific sections of this EIS.

2.15.5 Regulatory Context

Ecological resources within the Project area are protected under multiple state and federal regulatory programs, including:

- Freshwater Wetlands Protection Act (N.J.A.C. 7:7A)
- Endangered and Nongame Species Conservation Act
- Flood Hazard Area Control Act (N.J.A.C. 7:13)

Municipal environmental protection standards and landscaping requirements further support the maintenance of ecological quality within the City of Vineland.

2.15.6 Summary of Baseline Conditions

Ecological conditions at and surrounding the Project site are typical of developed and semi-developed areas within Vineland and Cumberland County. Ecological resources consist primarily of common species and habitats adapted to existing land use patterns, with regulated sensitive resources addressed through established state and municipal programs. These baseline conditions provide the framework for evaluating potential ecological impacts and mitigation measures associated with the proposed Project, which are discussed in subsequent sections of this EIS.

2.16 Demography

2.16.1 Regional and Municipal Population Characteristics

The City of Vineland is the largest municipality in Cumberland County and serves as a regional center for employment, commerce, and public services. Population characteristics in Vineland reflect a mix of urban, suburban, and rural influences, with residential development distributed across established neighborhoods and lower-density areas.

Cumberland County has experienced relatively stable population trends in recent years, with demographic changes influenced by regional economic conditions, employment opportunities, and housing availability. Vineland's population composition includes a diverse age distribution and workforce base that supports industrial, commercial, agricultural, and service-oriented uses.

2.16.2 Local Area Demographic Setting

The Project site is located within an area characterized primarily by industrial and commercial land uses, with limited residential development in the immediate vicinity. As a result, population density near the site is low relative to other portions of the City.

Nearby residential neighborhoods are generally separated from the Project site by distance, zoning boundaries, and existing infrastructure. This land use pattern is consistent with municipal planning objectives that concentrate employment-generating uses in designated industrial and commercial areas while protecting established residential communities.

2.16.3 Employment and Workforce Characteristics

Vineland's economy includes a mix of manufacturing, logistics, agriculture, healthcare, retail, and service industries. Industrial and technology-oriented facilities contribute to local employment and the municipal tax base.

The Project use is consistent with existing employment patterns in the area and is located within a zoning district intended to support non-residential development. Baseline employment conditions provide the context for evaluating potential socioeconomic effects associated with the Project, which are addressed in later sections of this EIS.

2.16.4 Housing and Community Facilities

Residential housing in Vineland is primarily located outside of the immediate Project area. Community facilities such as schools, parks, and public institutions are distributed throughout the City to serve residential neighborhoods and are not concentrated near the Project site.

Existing demographic conditions indicate that the Project site is not located in or adjacent to a high-density residential area, and current population patterns reflect planned separation between industrial uses and residential communities.

2.16.5 Regulatory and Planning Context

Demographic trends and population distribution in Vineland are addressed through the City's Master Plan and Land Development Ordinance, which guide the location and intensity of development. Industrial and commercial zoning districts are intended to support employment growth while minimizing conflicts with residential land uses.

Demographic conditions form part of the Planning Board's evaluation of land use compatibility, public services, and community impacts.

2.16.6 Summary of Baseline Conditions

Existing demographic conditions at and around the Project site reflect Vineland's role as a regional employment center with designated areas for industrial and commercial development. Population density in the immediate Project area is low, with residential uses located at greater distances. These baseline demographic conditions provide the framework for evaluating potential Project-related socioeconomic and community impacts, which are addressed in subsequent sections of this EIS.

2.17 Land Uses

2.17.1 Existing Land Use on the Project Site

The Project site is currently partially developed consistent with the applicable zoning designation. Existing conditions reflect lawful use of the Project site which is intended for future industrial or commercial development.

There are no known nonconforming uses located on the Project site. Existing land use conditions provide the baseline for evaluating the proposed development's compatibility with municipal land use objectives.

2.17.2 Surrounding Land Uses

Land uses surrounding the Project site consist primarily of industrial and commercial development, interspersed with undeveloped and agricultural parcels. These land use patterns are typical of designated employment areas within the City of Vineland.

Residential land uses are located at greater distances from the Project site and are generally separated by zoning boundaries, roadways, and other infrastructure. Public and quasi-public uses, where present, are consistent with municipal planning objectives and do not conflict with existing industrial and commercial activities.

2.17.3 Zoning and Master Plan Context

The Project site is located within a zoning district intended to accommodate industrial and commercial uses. Permitted and conditional uses within the district are designed to support employment-generating development while minimizing land use conflicts.

The City of Vineland Master Plan identifies the Project area as suitable for non-residential development consistent with the City's economic development and land use policies. Existing land uses in the vicinity reflect implementation of these planning objectives.

2.17.4 Compatibility and Land Use Relationships

Existing land use relationships in the Project area reflect a planned pattern of development that concentrates industrial and commercial uses within designated districts. The separation of employment uses from residential neighborhoods reduces the potential for land use conflicts.

The scale and character of existing development in the area establish the context for evaluating the proposed Project's compatibility, which is addressed in subsequent sections of this EIS.

2.17.5 Regulatory Context

Land use within the Project area is regulated under the City of Vineland Land Development Ordinance and guided by the City's Master Plan. Site plan and land use approvals are subject to review by the City of Vineland Planning Board to ensure consistency with zoning standards, permitted uses, and planning objectives.

2.17.6 Summary of Baseline Conditions

Existing land uses at and around the Project site are consistent with designated zoning and Master Plan policies for industrial and commercial development. The Project site is located within an area planned for economic development and industrial uses, with residential development located at appropriate distances. These baseline land use conditions provide the framework for evaluating Project compatibility and potential land use impacts, which are addressed in subsequent sections of this EIS.

2.18 Aesthetics

2.18.1 Visual Character of the Project Area

The visual character of the Project area is defined primarily by existing industrial and commercial development, roadway infrastructure, and utility features typical of designated employment districts within the City of Vineland. Buildings in the surrounding area are generally utilitarian in design, with large footprints, limited architectural detailing, and functional site layouts.

Undeveloped and partially vegetated parcels within the area provide intermittent visual relief and transitional views between developed properties. Overall, the visual environment reflects a working landscape consistent with municipal land use planning objectives.

2.18.2 Site Visibility and Viewsheds

The Project site is visible from adjacent roadways and neighboring properties consistent with other industrial and commercial parcels in the area. For security and aesthetic reasons, an architectural precast fence wall has been constructed around the perimeter of the Project. Views into the site are influenced by perimeter wall, setbacks, topography, and the orientation of surrounding development.

There are no designated scenic vistas, historic view corridors, or visually sensitive resources located within or immediately adjacent to the Project site. Long-range views are limited due to relatively flat terrain and existing development patterns.

2.18.3 Surrounding Land Uses and Visual Context

Surrounding land uses contribute to a visual context characterized by industrial buildings, public utilities, parking areas, service drives, and associated site features. Residential neighborhoods,

where present, are located at greater distances and are generally buffered by intervening land uses or infrastructure.

The visual setting of the Project site is consistent with the expectations for development within an industrial or commercial zoning district.

2.18.4 Regulatory and Planning Context

Aesthetic considerations in Vineland are addressed through site plan review, landscaping requirements, building setback standards, and buffering provisions of the City of Vineland Land Development Ordinance. These standards are intended to maintain visual compatibility between adjacent uses and enhance the appearance of non-residential development.

The Planning Board evaluates visual and aesthetic considerations as part of its review of site design, building placement, landscaping, and lighting.

2.18.5 Summary of Baseline Conditions

Existing aesthetic conditions at and around the Project site reflect an industrial and commercial visual environment consistent with municipal planning objectives. The area does not contain visually sensitive or scenic resources, and existing views are typical of employment districts in Vineland. These baseline conditions provide the framework for evaluating potential visual impacts and design enhancements associated with the proposed Project, which are addressed in subsequent sections of this EIS.

2.19 History/Archeology

2.19.1 Regional and Local Historical Context

The City of Vineland was established in the mid-19th century and has a history closely tied to agriculture, glass manufacturing, food processing, and later industrial and commercial development. Over time, Vineland evolved into a regional center for manufacturing and logistics, with designated areas developed to accommodate industrial and employment-generating uses.

Historic resources within the City include districts, structures, and sites that reflect Vineland's early settlement patterns and industrial heritage. These resources are generally concentrated in established neighborhoods and historic districts separate from modern industrial areas.

2.19.2 Site History

The Project site is located within an area historically planned and used for agricultural, industrial, or undeveloped purposes consistent with the City's growth patterns. The site was used as part of the Jesse S. Morie & Son, Inc. Clayville mining operations. Clay, sand and gravel were mined at the site and processed, packaged and shipped to various locations in the mid-Atlantic region. In more recent times, a portion of the site near Lincoln Avenue was developed as a baseball and softball complex known as the Dunrite Field at Morie Park. Farming, residential and office uses

have also been present along Lincoln Avenue dating from the 1930s (NJOGIS. 2026) and possibly earlier.

Available records indicate that the site has not been associated with historically significant events or uses that would qualify it as a historic resource. There are no known historic structures, districts, or landmarks located on the Project site. In 2017 the Vineland City Council determined much of this area to be designated as a Redevelopment Area in accordance with NJSA 40A:12A-1 et seq. This was due to the absence of any substantial development of much of these lands for over 10 years, the lack of access, the difficult topography (after mining) and the condition of existing soil made it unlikely that the land would be developed.

2.19.3 Surrounding Historic Resources

Based on a review of available municipal and state historic resource listings, there are no properties listed on or eligible for listing on the New Jersey or National Registers of Historic Places located on the Project site or in its immediate vicinity. Surrounding land uses consist primarily of modern industrial and commercial development, farmland and sparse residential development that do not possess historic designation.

Historic districts and recognized historic resources within the City of Vineland are generally located outside of the Project area and are not visually or physically affected by development at the site.

2.19.4 Regional Archaeological Resources/Context

Southern New Jersey contains archaeological resources associated with both prehistoric Native American occupation and historic-era settlement and land use. Prehistoric sites are often located near surface water features, wetlands, and well-drained soils, while historic archaeological resources may be associated with early agricultural, industrial, or transportation-related activities.

The Atlantic Coastal Plain region has been subject to extensive land alteration over time, including agriculture, infrastructure installation, and modern development, which has reduced the likelihood of intact archaeological deposits in many areas.

2.19.5 Site Conditions and Prior Disturbance

The Project site is located within an area that has experienced prior ground disturbance consistent with agricultural use, infrastructure development, and/or industrial or commercial activity. Such disturbance reduces the potential for intact archaeological resources to remain on-site.

Based on available mapping, aerial imagery, and records review, there are no known documented archaeological sites located on the Project site.

2.19.6 Regulatory Context

Historic and archaeological resources in New Jersey are protected under the New Jersey Register of Historic Places Act and related state and federal regulations. Review and oversight are coordinated by the New Jersey Historic Preservation Office (HPO) when archaeological resources may be affected by development.

While no known archaeological resources are present on the Project site, any unanticipated discoveries during construction would be handled in accordance with applicable state guidelines, including notification of appropriate authorities and implementation of protective measures as necessary.

2.19.7 Summary of Baseline Conditions

On May 26, 2023 Richard Grubb & Associates, Inc. (RGA. 2023) completed a Phase IA Archaeological Survey of the Project site, referred to within the Survey as the Area of Potential Affect (APE). The purpose of the Phase IA archaeological survey was to assess the potential for the presence of archaeological resources within the APE and to identify any archaeological and historical resources listed in the New Jersey and/or National Register of Historic Places (NRHP) or eligible for listing in the NRHP in order to determine if the project will affect such resources.

The Phase 1A Archaeological Survey concluded: "Background research and an archaeological reconnaissance survey were conducted to assess the archaeological sensitivity of the APE. No registered archaeological sites are located within the APE, nor within a 1-mile radius of the APE. Located within the APE is a landscaping facility and associated gravel pits, agricultural fields, a baseball diamond, a former golf course, and additional gravel pits. During the reconnaissance, significant ground disturbance was identified associated with these mining, agricultural, and recreational activities, and no intact ground surfaces were identified. These activities have compromised the integrity of the APE and reduced the potential for both pre-Contact and historic archaeological sites. No further archaeological survey is recommended."

Based on the Phase 1A Archaeological Survey and available information, the Project site does not contain historic or archaeological resources, and no designated historic properties are located in the immediate Project area. Existing historical conditions are consistent with the site's location within a planned industrial and commercial district. These baseline conditions provide the framework for evaluating potential impacts to historic and cultural resources, which are addressed in subsequent sections of this EIS.

3.0 Description of the Project

3.1 Project Overview

The Project consists of the development of an AI data center with related site improvements and facilities. The Project is intended to provide secure, reliable, and energy-efficient AI data processing and storage services to regional and national clients.

The DataOne Project is designed as a modern, purpose-built AI data center consistent with current industry standards and best practices. The Project represents an employment-generating use that aligns with Vineland's planning objectives for industrial and technology-oriented development.

3.2 Project Site

The Project site is located within an area designated for industrial and commercial development under the City of Vineland Land Development Ordinance. The site is accessible from existing public roadways and is served by available municipal infrastructure and utilities.

The property is characterized by relatively flat topography typical of the Atlantic Coastal Plain and is suitable for development without unusual site constraints. Existing environmental conditions at the site are described in detail in Section 2: Existing Environmental Conditions.

3.3 Project Development

The Project includes construction of one (1) AI data center building, associated electrical and mechanical infrastructure, a Power Generation Building, Chiller Building, emissions control apparatus, an LNG (Liquified Natural Gas) Tank, internal access drives, parking areas, stormwater management facilities, and landscaped buffer areas.

Key components of the Project include:

- Data center building designed to house information technology equipment
- Natural Gas Power Generation Building
- Cooling Water Plant (Chiller Building)
- Water Treatment facility and water storage areas
- Electrical infrastructure, substation and backup power systems
- Mechanical systems required for cooling and climate control
- LNG Tank and related facilities
- Emissions control apparatus including SYKLEA Facilities
- On-site parking and circulation for employees, service vehicles, and emergency access
- Stormwater management facilities designed in accordance with applicable regulations
- Landscaping, buffering, and site amenities consistent with municipal standards

Building layout, orientation, and site design have been developed to comply with zoning requirements, setback standards, and site plan criteria established by the City of Vineland.

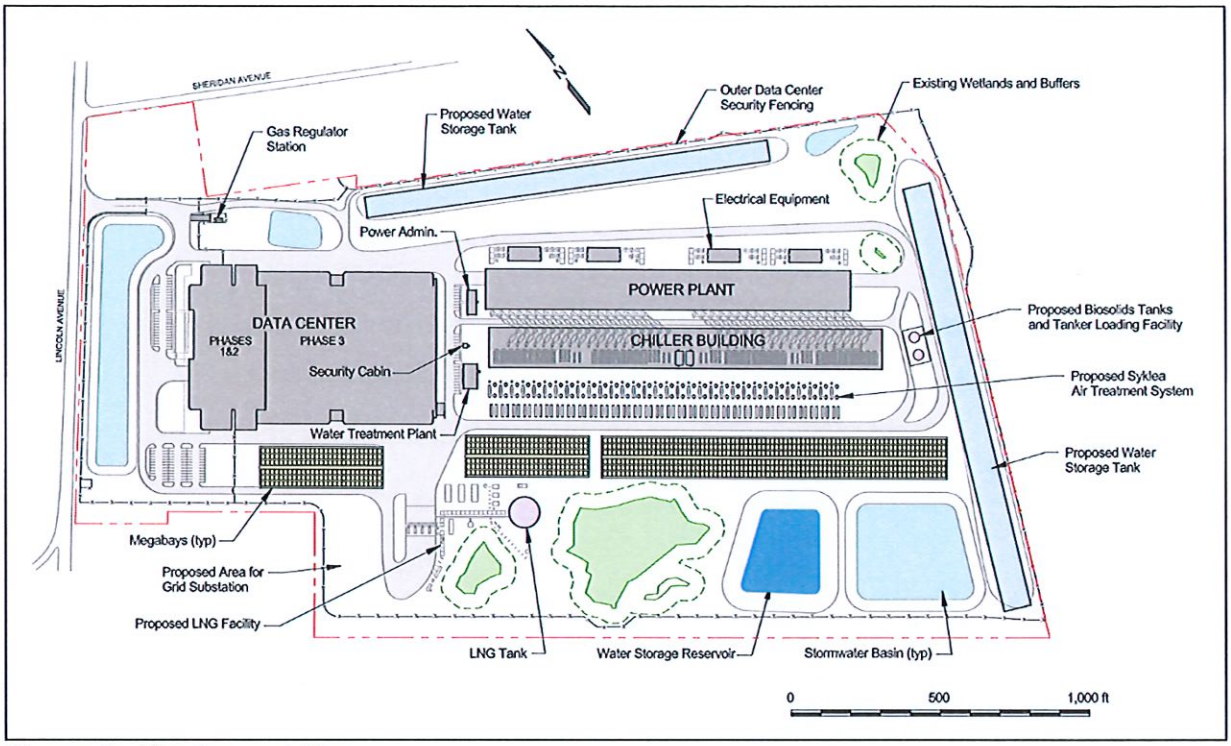

Figure 3: Site Layout Plan

3.4 Operations and Staffing

The DataOne data center will operate on a continuous basis, consistent with the operational requirements of data center facilities. Staffing levels are expected to be around 200 employees operating around the clock over three shifts, with employees primarily engaged in technical, administrative, security and facility management functions.

Routine operations will include administrative operations, equipment monitoring, IT engineering, maintenance activities, security operations, and limited deliveries. Traffic volumes associated with the facility are anticipated to be low relative to traditional industrial uses.

3.5 Utilities and Infrastructure

The Project will utilize existing and proposed utility infrastructure, including electric service, water supply, sanitary sewer, and telecommunications. Utility demands and service availability are evaluated in detail in subsequent sections of this EIS.

Primary and backup power generation systems will be provided to ensure operational reliability and continuity. Fuel storage and associated systems will be designed and operated in compliance with applicable state and federal regulations.

Onsite Power Generation and Support Systems

The proposed facility includes an onsite natural gas Power Generation Building comprised of thirty-two (32) high-efficiency, natural-gas-fired reciprocating Bergen engine generator units, each capable of generating 11.2 MW, operating in a coordinated configuration. The generation system is designed to provide reliable, continuous electrical power to the associated data center while reducing dependence on the regional electric grid. Electrical support infrastructure includes voltage and frequency stabilization equipment, medium-voltage switchgear, step-up transformers, and integrated control and protection systems. Ancillary mechanical systems support safe and efficient operation and include fuel gas conditioning, lubrication oil handling, ventilation, and noise attenuation features. Exhaust emissions are controlled using advanced aftertreatment technologies to comply with and exceed the requirements of applicable federal and state air quality regulations.

Cooling Water and Heat Rejection Systems

The facility incorporates a closed-loop cooling water system to capture waste heat generated by power production. Waste heat recovered from engine exhaust and jacket water systems is utilized to drive thermal cooling equipment, including heat exchangers and absorption chillers, which produce chilled water for data center cooling. The cooling system is designed to maximize heat recovery efficiency, minimize water consumption through recirculation, and limit thermal and water-quality impacts to surrounding environmental resources.

SYKLEA Facilities

Each natural-gas-fired reciprocating engine (Bergen Engine) will be supplied with a SYKLEA Facility. The SYKLEA Facility is an integrated environmental control platform that captures, neutralizes, and transforms through a proprietary process the residual emissions produced by the Bergen engines after conventional treatment through Selective Catalytic Reduction (SCR) and wet scrubber cooling units. Its purpose is to ensure that all major regulated pollutants, including nitrogen oxides, sulfur oxides, carbon monoxide, volatile organic compounds, particulate matter, and trace hazardous air pollutants, are addressed in a continuous and verifiable manner. The air quality results are detailed in section 5.5.

LNG Tank and Related Facilities

The LNG storage and vaporization facility will serve as a backup natural gas supply for the power generation units supporting DataOne's data center. The facility will include one (1) 1.5-million-gallon full-containment LNG storage tank, four (4) truck offloading skids with four (4) bays, and three (3) vaporization units in a 3 × 50% configuration. The system will be designed to provide, when needed, fifty-six (56) million standard cubic feet per day (MMSCFD) of natural gas to the power generation facility.

3.6 Environmental Review Context

This Environmental Impact Statement has been prepared to support Planning Board review of the proposed Project in accordance with municipal requirements. The EIS evaluates existing environmental conditions, potential impacts associated with construction and operation of the DataOne facility, and proposed mitigation measures where appropriate.

The Project description provided herein establishes the framework for the technical analyses presented in subsequent sections of this document.

4.0 Licenses, Permits and Approvals Required by Law from Other Agencies

4.1 Overview

Development and operation of the proposed DataOne data center Project will require coordination with various, local, state, county, and utility agencies. In addition to approvals granted by the City of Vineland Planning Board, certain licenses, permits, and approvals are required by law from other governmental entities. This section identifies the principal external approvals anticipated for the Project based on current design information and applicable regulations.

4.2 New Jersey Department of Environmental Protection (NJDEP)

The following NJDEP approvals may be required, as applicable:

- **NJPDES Stormwater Discharge Permit**
  Construction activity permit for stormwater discharges associated with land disturbance, in accordance with N.J.A.C. 7:14A.
- **Treatment Works Approval (TWA)**
  If required for sanitary sewer extensions, modifications, or on-site treatment systems.
- **Air Quality Permits**
  Permits or registrations for the primary and backup electrical generators, the LNG facility and other regulated equipment pursuant to the New Jersey Air Pollution Control Act.
- **Noise Control**

  Operational noise limits (N.J.A.C. 7:29) and construction noise City of Vineland Code Chapter 469.
- **Spill Prevention and Control Requirements**
  Compliance with the Spill Compensation and Control Act for fuel storage associated with emergency generators.

4.3 Cumberland County Agencies

Approvals from Cumberland County agencies may include:

- **Soil Erosion and Sediment Control Plan Certification**
  Issued by the Cumberland Salem Conservation District pursuant to the New Jersey Soil Erosion and Sediment Control Act (N.J.A.C. 2:90).
- **County Planning Board Approval**
  As required under County site plan review authority.

4.4 Utility Providers and Authorities

The Project will require coordination and approvals from utility providers, which may include:

- **Electric Utility Approvals**
  For service connections, substations, and system upgrades.
- **Water Utility Approval**
  For water service connections and capacity confirmation.
- **Sanitary Sewer Authority Approval**
  For wastewater service and capacity allocation.
- **Telecommunications Providers**
  For installation and connection of communication infrastructure.

4.5 Other State and Federal Agencies

Depending on final design and site conditions, the following agencies may require notification or approval:

- **New Jersey Historic Preservation Office (HPO)**
  Consultation if archaeological or historic resources are encountered.
- **U.S. Environmental Protection Agency (EPA)**
  Oversight related to air emissions, hazardous materials, or spill prevention programs, as applicable.

4.6 Building and Safety Approvals

The Project will also be subject to applicable construction and safety approvals, including:

- **Uniform Construction Code (UCC) Permits**
  Issued by the appropriate construction code enforcing agency.
- **Fire Safety and Life Safety Approvals**
  Coordination with local fire officials, including review of fire protection and emergency access systems.

4.7 Summary

The DataOne Project will obtain all licenses, permits, and approvals required by law from applicable federal, state, county, local and utility agencies as required for construction and operation. Coordination with these agencies will occur concurrently with municipal review to ensure compliance with all applicable regulations. Final permit requirements will be confirmed as engineering design advances and agency consultations are completed.

5.0 Assessment of the Probable Impact of the DataOne Project Upon Environmental Conditions

5.1 Introduction

This section evaluates the probable environmental impacts associated with construction and operation of the proposed DataOne data center in Vineland, New Jersey. The assessment is based on existing environmental conditions described in Section 2.0, the proposed project description, and applicable regulatory standards.

The analysis addresses both short-term construction-related impacts and long-term operational impacts. Where potential impacts are identified, mitigation measures and regulatory controls are noted. Detailed technical analyses are provided in the corresponding resource-specific sections of this EIS.

5.2 Land Use and Zoning

The Project is consistent with the existing zoning designation and the City of Vineland Master Plan objectives for industrial and technology-oriented development. The Project will not introduce incompatible land uses and is located within an area planned for economic development and industrial activities.

No adverse land use impacts are anticipated. The Project reinforces established development patterns and utilizes land designated for non-residential use.

5.3 Topography, Soils, and Geology

Construction activities will require grading and earth disturbance typical of industrial development. These activities will result in localized and temporary alterations to existing topography.

Potential impacts related to soil erosion and sedimentation will be minimized through implementation of a Soil Erosion and Sediment Control Plan approved by the Cumberland Salem Conservation District. No significant adverse impacts to geological conditions are anticipated.

5.4 Water Resources

5.4.1 Surface Water, Stormwater, and Hydrology

The Project will increase impervious surface coverage; however, stormwater management facilities will be designed in compliance with NJDEP Stormwater Management Rules and

applicable City ordinances. Stormwater quantity and quality impacts will be mitigated through on-site detention, treatment, and controlled discharge.

No adverse impacts to downstream surface waters or drainage patterns are anticipated.

5.4.2 Groundwater

The Project is not expected to result in significant groundwater impacts. In fact, the Project will be a net generator of water, meaning it will produce more than it will use, which will reduce the amount currently being pumped from the Kirkwood/Cohansey aquifer. Water is generated as a byproduct of natural gas combustion and is recovered through the wet scrubber and SYKLEA exhaust gas treatment systems described in Section 3.5. It is DataOne's intent to provide any necessary treatment to generated water and provide it to the City of Vineland Water Utility to reduce its current aquifer withdrawal.

Stormwater infiltration measures, where utilized, will be designed to protect groundwater quality. Fuel storage and chemical handling associated with emergency generators and emission control systems will comply with spill prevention and secondary containment, as required. The LNG facility will be supplied with LNG by over the road trucks. The truck unloading area is sloped to contain a potential LNG spill and direct it to an impoundment sump basin where it can be recovered. The impoundment area has sump pumps designed to only remove rainwater and discharge it to the data center stormwater management system.

LNG BOG compressors require lubricating oil and greases for proper lubrication of the rotating components. The BOG compressors are mounted on a skidded structure that contains a drip pan under the key lubricated areas to avoid incidental spills and collect any fluids during maintenance.

There is an oil filled electrical transformer located at the facility. It will be mounted on a concrete pad with a containment curb that can be monitored by site personnel to ensure any incidental spills or leaks are contained and properly disposed of during the life of the facility.

5.4.3 Water Supply and Fire Flow

As stated above the Project will be a net generator of water. However, City water will be utilized for start-up water demand, potable water, and fire suppression systems, all of which will be well within the City Water Utility's approved water allocation as discussed in Section 2.7.1. Fire flow and emergency water supply requirements will be met in coordination with the local water utility and fire officials.

5.5 Air Quality

Short-term construction-related emissions will include dust and exhaust from construction equipment. These impacts will be temporary and controlled through standard best management practices.

Operational air quality impacts will primarily be associated with the power generation facility and the LNG storage facility. A total of thirty-two (32) natural gas-fired reciprocating engines, each capable of generating 11.2 MW will be located in the power house and will provide power to the data center. At any given time, twenty-seven (27) of these engines will be in operation with the remainder available for backup or use during maintenance events. The exhaust from each engine will be processed by a state-of-the-art pollution control system dedicated to that engine. The pollution control system includes innovative technologies which greatly reduce emissions. Oxidation catalysts and selective catalytic reduction ("SCR") systems, a standard design for use with reciprocating internal combustion engines, forms the first stage of control for the pollutants CO, VOC and NO_x. While most new reciprocating engine installation designs emit the exhaust gas to the atmosphere at this stage, the DataOne design includes extensive additional pollution control equipment. Following the SCR, the DataOne design includes wet scrubbers and the SYKLEA system, which is a multi-stage exhaust gas treatment train designed to control regulated air pollutants prior to discharge to the atmosphere.

The SYKLEA system addresses the following pollutant categories through dedicated treatment steps:

- Residual Nitrogen Oxides (NO_x)
    - Controlled by an upstream SCR-based process with remainder further controlled by reaction with hydrogen peroxide followed by wet scrubbing in the SYKLEA Process.

- Particulate Matter (PM)
    - Controlled via a wet scrubbing (gas washing) stage in the SYKLEA Process.

- Residual Volatile Organic Compounds (VOCs)
    - Controlled by upstream catalytic oxidation equipment with remainder further controlled by wet absorption in the SYKLEA Process.

- Residual Carbon Monoxide (CO)
    - Controlled by upstream catalytic oxidation equipment with remainder further controlled by biofiltration in the SYKLEA Process.

    - Carbon Dioxide SYKLEA Process uses biofiltration to remove CO_2. The removal of CO_2 is not required by New Jersey or federal law but has been responsibly designed into the post-combustion pollution control systems by DataOne, recognizing the importance of managing the emissions of greenhouse gas (GHG) when fossil fuels are utilized.

Each treatment stage operates in series as part of a single integrated control system. Each engine unit routes the exhaust gas through a system where a hydrogen peroxide solution is injected into the gas and reacts with the remaining NO_x in the exhaust. The resulting product of this reaction is removed from the exhaust stream in a series of two wet scrubbers. Beyond that point in the engine exhaust path, additional pollution control is afforded by the SYKLEA process which uses

biofiltration to further remove CO, particulate and CO_2. The Projected emissions and emissions reductions are as follows:

Pollutant	Emission Rate (tpy)	Reduction Efficiency
SO_2	0.058	98.9%
NO_x	6.33	99.8%
CO	72.56	97.3%
VOC	17.41	87.8%
CH_2O	3.30	98.4%
NH_3	77.57	40.0%
TSP	4.49	95.0%
PM_{10}	4.49	95.0%
$PM_{2.5}$	4.49	95.0%
CH_4	19.82	0.0%

Note: 'tpy' is an abbreviation for "tons per year."

GHGs as well as conventional pollutant emissions are also reduced by the high efficiency of the power generation system and the beneficial use of waste heat. The engines are highly efficient, with an overall efficiency of 48% in converting the energy contained in the natural gas fuel into electrical energy. Beyond that, the waste heat from the engines is used in the chiller plant for equipment cooling. This replaces other forms of energy that would otherwise be consumed in keeping equipment at specified temperatures.

The use of the highly efficient engines coupled with the recovery of a substantial portion of their waste heat offers valuable efficiency advantages for this data center application by minimizing the amount of fuel required. The state-of-the-art pollution control capability minimizes any air pollution impacts in areas surrounding the site, and both the high efficiency and removal of CO_2 by the SYKLEA biofiltration process serve to minimize the emissions of GHG.

5.6 Noise

Noise during construction is expected to be temporary in overall duration and variable in intensity based on the types of active construction. Minimization of noise impacts during construction is typically addressed by limiting certain types of higher impact activities to permitted working hours when within 1,000 feet of any dwelling or business property. The project will make every effort to limit higher impact activities to the permitted working hours and will coordinate with local officials and potentially impacted residents in the event the activities must be conducted outside this permitted work window. It should be noted that construction noise is typically louder during the early phases of construction during heavy site preparation and excavation activities and less impactful as activities move to locations internal to structures.

DataOne continues to work with vendors and equipment suppliers to evaluate opportunities to reduce impacts from operational noise sources including mechanical equipment, electrical generating equipment, HVAC equipment and emergency generators. The equipment and

operating procedures will be designed to minimize impacts and comply with applicable state noise regulations.

5.7 Ecology, Vegetation, and Wildlife

The Project will result in the removal of existing vegetation within the development footprint. Portions of the site outside of the disturbance area will remain vegetated, including wetlands, wetland buffers, and setback buffers. Affected vegetation consists primarily of scrub/shrub and common species typical of disturbed or semi-developed areas.

Impacts to wildlife habitat will be limited and localized to the disturbance area. No impacts to threatened or endangered species or critical habitats are anticipated. Landscaping and buffer plantings, in addition to plantings around the stormwater management system, will provide replacement vegetation and provide food and cover resources for wildlife.

5.8 Wetlands and Aquatic Resources

Regulated wetlands, wetland buffers, and aquatic resources will be avoided and protected in accordance with applicable NJDEP rules. No disturbance to wetlands or wetland buffers is proposed at this time.

No significant adverse impacts to aquatic organisms or wetland functions are anticipated.

5.9 Pollution Sources and Hazardous Materials

The Project will not introduce significant sources of pollution. Fuel storage for emergency generators will be designed with secondary containment and spill prevention measures.

Construction and operational activities will comply with applicable state and federal environmental regulations, minimizing the risk of soil, water, or air contamination.

5.10 Traffic and Transportation

The data center use is characterized by limited daily traffic volumes. Traffic generated by the Project is anticipated to be minimal compared to traditional industrial uses.

Construction traffic will be temporary and managed through established traffic control measures. No significant long-term traffic impacts are anticipated.

5.11 Aesthetics and Visual Character

The Project will introduce new building massing and site features consistent with surrounding industrial development. Landscaping, buffering, and site design elements will mitigate visual impacts and enhance site appearance.

No adverse impacts to scenic vistas or visually sensitive resources are anticipated.

5.12 Historic and Archaeological Resources

No historic or archaeological resources have been identified on the Project site. Therefore, no adverse impacts to cultural resources are anticipated. Procedures will be in place to address any unanticipated discoveries during construction.

5.13 Socioeconomic and Demographic Conditions

The Project is expected to have a positive socioeconomic effect by contributing to local employment and expanding the municipal tax base. No adverse impacts to housing, community facilities, or population patterns are anticipated.

5.14 Cumulative Impacts

When considered in combination with existing and reasonably foreseeable development in the area, the Project is not expected to result in significant cumulative environmental impacts. The Project is consistent with planned growth patterns and infrastructure capacity.

5.15 Summary

Based on the analyses presented in this EIS, the DataOne Project is not anticipated to result in significant adverse environmental impacts. Potential impacts associated with construction and operation will be mitigated through compliance with applicable regulations, implementation of best management practices, and adherence to municipal, state, and federal permit requirements.

6.0 Adverse Environmental Impacts Which Cannot Be Avoided

6.1 Introduction

This section identifies adverse environmental impacts associated with the construction and operation of the proposed DataOne data center that cannot be fully avoided, even with implementation of applicable regulations, design standards, and best management practices. These impacts are typical of non-residential development and are considered unavoidable due to the nature of site development.

6.2 Temporary Construction-Related Impacts

6.2.1 Noise

Construction activities will result in temporary increases in noise levels due to operation of construction equipment, construction generators and vehicle traffic. While the project will make every effort to limit higher impact activities to the permitted working hours, some temporary noise impacts to nearby properties are unavoidable during active construction periods.

6.2.2 Air Emissions and Dust

Construction will generate temporary air emissions, including exhaust from construction equipment and fugitive dust from earthmoving activities. Dust control measures will be implemented; however, minor short-term impacts to air quality are unavoidable during certain construction activities.

6.2.3 Traffic and Access

Construction traffic will temporarily increase vehicle activity on local roadways. Traffic control and scheduling measures will be employed to minimize disruptions, but short-term impacts to traffic flow are unavoidable during construction.

6.3 Permanent Changes to Land and Vegetation

6.3.1 Loss of Vegetation

Development of the Project site will require clearing of existing vegetation within the building and infrastructure footprint. While landscaping and buffer plantings will be provided, the removal of existing vegetation and conversion of land to developed use is a permanent and unavoidable impact.

6.3.2 Increased Impervious Surface

The Project will result in an increase in impervious surface area due to buildings, parking, and paved accessways. Stormwater management measures will mitigate runoff impacts; however, the increase in impervious coverage is an unavoidable consequence of development.

6.4 Visual Changes

Construction and operation of the data center will permanently alter the visual character of the Project site by introducing new building massing, security wall fencing and site features. While design and landscaping measures will minimize visual impacts, changes to the existing visual environment are unavoidable.

6.5 Energy and Resource Consumption

Operation of the Project will require ongoing consumption of electricity, water, and other resources. However, the Project will generate 85% of its required electricity on site, and will be a net generator of water. Although the facility will incorporate energy-efficient design features, the use of natural and utility resources associated with Project operations is unavoidable.

6.6 Operational Noise

Mechanical systems, including cooling equipment and primary and emergency backup generators, will generate operational noise. These systems will be designed to comply with applicable noise regulations; however, some level of continuous or intermittent operational noise is unavoidable.

6.7 Summary

The unavoidable adverse environmental impacts associated with the DataOne Project are primarily short-term construction-related disturbances and permanent changes typical of industrial and commercial development. These impacts have been minimized through project design, regulatory compliance, and implementation of best management practices. When balanced against the Project's consistency with municipal planning objectives and its economic and infrastructure benefits, the remaining unavoidable impacts are not considered significant.

7.0 Steps Proposed to Minimize Adverse Impacts During and After Construction

7.1 Overview

The Project has been designed to avoid and/or minimize adverse environmental impacts to the maximum extent practicable. During both construction and operation, the Applicant will implement industry-standard best management practices, comply with all applicable municipal, state, and federal regulations, and incorporate design features intended to reduce environmental effects. This section outlines the measures proposed to minimize impacts identified in preceding sections of this EIS.

7.2 Construction-Phase Mitigation Measures

7.2.1 Soil Erosion and Sediment Control

- Preparation and implementation of a Soil Erosion and Sediment Control Plan certified by the Cumberland Salem Conservation District.
- Installation and maintenance of silt fencing, stabilized construction entrances, sediment traps, and other erosion control measures.
- Sequencing of grading activities to limit the extent and duration of exposed soils.
- Prompt stabilization of disturbed areas through seeding, mulching, or paving.

7.2.2 Stormwater and Water Quality Protection

- Compliance with NJDEP NJPDES construction stormwater permitting requirements.
- Implementation of temporary stormwater controls to prevent sediment-laden runoff from leaving the site.
- Proper storage and handling of fuels, lubricants, and construction materials to prevent spills.
- Spill response procedures and availability of spill containment materials on-site.

7.2.3 Air Quality and Dust Control

- Application of water or other dust suppressants to exposed soils and haul roads as needed.
- Covering or stabilizing stockpiled materials.
- Limiting vehicle idling and maintaining construction equipment in good working order.
- Compliance with applicable local and state air quality regulations.

7.2.4 Noise Control

- Use of properly maintained equipment with functional mufflers.
- Sequencing of high-noise activities to minimize duration and intensity.

7.2.5 Traffic and Site Access Management

- Designation of construction access points to minimize disruption to local roadways.
- Implementation of traffic control measures, including signage and flaggers, as necessary.
- Coordination of material deliveries to avoid peak traffic periods where feasible.

7.2.6 Protection of Ecological Resources

- Avoidance of disturbance to regulated wetlands, riparian areas, and protected features.
- Installation of protective fencing or demarcation around sensitive areas.
- Compliance with all applicable NJDEP permit conditions related to ecological resources.

7.3 Post-Construction and Operational Mitigation Measures

7.3.1 Stormwater Management

- Construction of permanent stormwater management facilities designed in accordance with NJDEP Stormwater Management Rules and City of Vineland ordinances.
- Long-term operation and maintenance of stormwater systems to ensure continued performance.
- Implementation of water quality treatment measures to reduce pollutant loading.

7.3.2 Landscaping and Visual Mitigation

- Installation of landscaping, buffering, and screening consistent with site plan approval conditions.
- Use of native or adaptive plant species to enhance survivability and ecological value.
- Ongoing landscape maintenance to preserve visual quality.

7.3.3 Noise Mitigation

- Design and placement of mechanical equipment to minimize off-site noise.
- Use of acoustical enclosures, barriers, or setbacks as appropriate.
- Compliance with applicable state and municipal noise standards during operations.

7.3.4 Energy and Resource Efficiency

- Incorporation of energy-efficient building systems and equipment.
- Use of water-efficient fixtures and operational practices to reduce water consumption.
- Use of waste heat from the engines to drive chiller equipment and thereby reduce electricity use for refrigeration.
- Ongoing monitoring of utility usage to identify opportunities for efficiency improvements.

7.3.5 Hazardous Materials and Spill Prevention

- Design of fuel storage and regulated material systems with secondary containment
- Development and implementation of spill prevention and response procedures.
- Proper handling, storage, and disposal of regulated materials in accordance with applicable regulations.

7.3.6 Air Quality

- Use of continuous air pollution control measures to clean the exhaust of each engine, including good combustion practices, selective catalytic reduction, oxidation catalysts, SYKLEA control technologies, and exclusive use of natural gas for engine fuel.

7.3.7 Monitoring and Compliance

- Compliance with all conditions of municipal, state, and federal approvals.
- Routine inspection and maintenance of environmental control systems.
- Prompt correction of any deficiencies identified during inspections.

7.4 Summary

Through implementation of the measures described above, the DataOne Project will minimize adverse environmental impacts during construction and long-term operation. These mitigation measures, combined with regulatory oversight and responsible facility management, will ensure that the Project is developed and operated in a manner consistent with environmental protection goals and the City of Vineland's planning objectives.

8.0 Alternatives to the Proposed Development

8.1 Purpose of Alternatives Analysis

This section evaluates reasonable alternatives to the proposed DataOne Project, including alternatives related to site use, project design, and development intensity. The purpose of this analysis is to demonstrate that the proposed development represents a balanced approach that meets the Project's objectives while minimizing environmental impacts and remaining consistent with municipal planning policies.

8.2 No-Action Alternative

Under the No-Action Alternative, the Project site would remain in its current condition or continue under its existing use. While this alternative would avoid the environmental impacts associated with construction, it would not advance the City of Vineland's land use and economic development objectives for designated industrial and commercial areas.

The No-Action Alternative would forgo opportunities for employment generation, tax base expansion, and infrastructure investment associated with the proposed Project. As such, this alternative is not consistent with the intent of the applicable zoning or the City's Master Plan.

8.3 Alternative Land Uses

Alternative land uses permitted within the applicable zoning district could include other industrial, warehouse, or manufacturing facilities. Such uses typically generate higher daily traffic volumes, greater employee density, increased truck activity, and potentially greater noise and air emissions than this Project.

Compared to these alternatives, the Project represents a relatively low-intensity industrial use with limited traffic, modest staffing levels, and controlled operational characteristics. Accordingly, alternative permitted land uses could result in equal or greater environmental impacts.

8.4 Alternative Site Design and Layout

Various site design and layout alternatives were considered during the planning process, including building placement, access points, and stormwater management configurations. The selected site layout reflects consideration of environmental constraints, regulatory requirements, and operational needs. The proposed design represents an efficient and environmentally responsible use of the property.

8.5 Reduced-Scale Development

A reduced-scale version of the Project was considered as an alternative. While a smaller facility could marginally reduce certain environmental impacts, it would not meet the operational

objectives of the Project and would reduce the economic benefits associated with the development.

Additionally, many environmental impacts related to site access, infrastructure, and stormwater management would still occur under a reduced-scale alternative.

8.6 Alternative Locations

Alternative locations within Vineland or the broader region were considered; however, the Project site was selected due to its industrial zoning, availability of infrastructure, accessibility, and compatibility with surrounding land uses.

Relocating the Project to a less suitable site could result in greater environmental impacts, increased infrastructure demands, or land use conflicts.

8.7 Summary

The alternatives analysis demonstrates that the proposed DataOne Project represents a reasonable and appropriate development option for the Project site. Compared to the No-Action Alternative and other feasible alternatives, the proposed development best balances operational needs, environmental protection, and consistency with municipal land use planning objectives.

9.0 Other Information Necessary to Evaluate the Impact of the Development Upon the Environment

9.1 Purpose of This Section

This section presents additional information relevant to evaluating the environmental impacts of the proposed DataOne Project that is not fully addressed in other sections of this Environmental Impact Statement. The information provided herein supports a comprehensive understanding of the Project's design, operation, and regulatory compliance.

9.2 Sustainability and Energy Efficiency

The DataOne Project is designed to incorporate energy-efficient building systems and operational practices consistent with current data center industry standards. Measures include high-efficiency cooling systems, advanced building management systems, and equipment selection intended to reduce overall energy consumption.

While data centers are energy-intensive facilities, the Project's design emphasizes efficient use of resources to minimize environmental effects over the operational life of the facility.

9.3 Climate Considerations and Resilience

The Project site is located outside of mapped coastal flood zones and is not subject to coastal hazard regulations. Site design accounts for regional precipitation patterns and incorporates stormwater management measures to accommodate extreme rainfall events.

Building systems and infrastructure will be designed to enhance resilience to power disruptions and weather-related events, supporting reliable operation without increasing off-site environmental risk.

9.4 Emergency Planning and Public Safety

The Project will include emergency response planning consistent with applicable fire safety, building code, and operational requirements. Coordination with local emergency services will occur during design and operation.

Fire protection systems, emergency access, and backup power infrastructure are addressed in other sections of this EIS and are included here to provide context for public safety considerations.

9.5 Environmental Monitoring and Reporting

Where required by permit conditions, the Applicant will implement monitoring and reporting programs related to stormwater management, air emissions, and other regulated activities. Monitoring data will be maintained in accordance with agency requirements and made available to regulatory authorities upon request.

9.6 Construction Management Practices

Construction activities will be conducted in accordance with approved plans, permits, and environmental protection measures. A construction management approach will be implemented to ensure compliance with erosion control, stormwater, noise, and traffic mitigation requirements.

9.7 Compliance with Applicable Regulations

The Project will comply with all applicable municipal, county, state, and federal environmental regulations. Required permits and approvals are identified in Section 4.0. Compliance with these requirements provides additional assurance that environmental impacts will be appropriately managed.

9.8 Public Utilities and Infrastructure Coordination

Coordination with utility providers will ensure that infrastructure upgrades, if required, are completed in a manner that minimizes environmental disturbance and avoids service disruptions.

9.9 Summary

The additional information provided in this section supplements the technical analyses contained elsewhere in this EIS and supports the Planning Board's evaluation of the current Project application. Collectively, this information demonstrates that the Project has been planned and will be implemented in a manner that considers environmental protection, regulatory compliance, and responsible development practices.

10.0 Conclusions

This Environmental Impact Statement has been prepared to evaluate the potential environmental effects associated with the DataOne data center in the City of Vineland, Cumberland County, New Jersey. The analyses contained herein address existing environmental conditions, the nature of the development, potential impacts during construction and operation, unavoidable adverse impacts, mitigation measures, alternatives, and other relevant considerations required for Planning Board review.

Based on the information presented in this EIS, the following conclusions are offered:

- The proposed DataOne Project is consistent with the City of Vineland Master Plan and the applicable zoning designation, which encourages industrial and technology-oriented development in appropriate locations.
- Existing environmental conditions at the Project site and in the surrounding area are typical of designated industrial and commercial districts and do not contain unusual constraints that would preclude development.
- Potential environmental impacts associated with construction are generally short-term and temporary in nature, including noise, dust, and construction-related traffic. These impacts will be minimized through compliance with approved plans, permit requirements, and standard best management practices.
- Long-term operational impacts are limited and manageable. The data center use is characterized by low traffic volumes, modest staffing levels (approximately 200 employees over a 24 hour period), and controlled operational characteristics compared to other permitted industrial uses.
- Stormwater management, water quality protection, air quality, noise, and other environmental factors will be addressed through compliance with municipal, county, state, and federal regulations and permit conditions.
- No significant adverse impacts to wetlands, surface waters, groundwater, ecological resources, historic resources, or archaeological resources are anticipated.
- Unavoidable adverse impacts are limited to those typically associated with development, including permanent changes to land use, increased impervious surface coverage, and visual changes, all of which have been minimized through site design and mitigation measures.
- The alternatives analysis demonstrates that the proposed Project represents a reasonable and appropriate use of the site when compared to the No-Action Alternative and other feasible development options.

In conclusion, the analyses presented in this Environmental Impact Statement demonstrate that the proposed DataOne Project can be constructed and operated in an environmentally responsible manner. With implementation of the mitigation measures and regulatory controls identified herein, the Project will not result in significant adverse environmental impacts and is consistent

with the planning, environmental protection, and economic development objectives of the City of Vineland.

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