

**NEW GREENE COUNTY JAIL
Draft Environmental Impact Statement**

**Route 9W, Town of Coxsackie
Greene County, New York**

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GREENE COUNTY JAIL DEIS SUMMARY

The Greene County Legislature, as Lead Agency, is conducting a coordinated State Environmental Quality Review (SEQR) of the proposed new Greene County Jail. The County is planning the construction of a new 130 bed County Jail with administration and operations spaces for the County Sheriff on 50 acres of land in the Town of Coxsackie. The facility will be located on the east side of Route 9W immediately south of the Coxsackie Correctional Facility and will replace the existing aged and inadequate County Jail in the Village of Catskill. The new facility will include approximately 84,000 square feet of floor space incorporating a public entrance, visitation area, central command, Sheriff and jail administration and staff spaces, intake/release/transport area with vehicle sally port, medical area, mechanical and maintenance spaces, food service and inmate housing areas with recreational yards. The project also involves extension of public utility services include electricity, natural gas and telecommunications as well as public water and sewer services from the Village of Coxsackie. Site improvements will include roads, parking areas and stormwater management. This document describes the project in detail, and identifies potential impacts and mitigation measures aimed at construction and operation of the project in an environmentally sound and cost effective manner.

In May 2016, the Greene County Legislature determined that the proposed jail project has potentially significant environmental impacts and issued a Positive Declaration directing preparation of a Draft Environmental Impact Statement (DEIS) to further assess these impacts and recommend mitigations. The DEIS has identified impacts and mitigations in five major areas:

Impact on Surface Water – Wetlands

Approximately 2.13 acres of jurisdictional wetlands have been delineated on the proposed jail site and will be avoided to the extent possible during design and construction. The New York State Department of Environmental Conservation (NYSDEC) has determined that the 0.57 acre wetland in the southwest corner of the jail site is under their jurisdiction as it is hydraulically connected to NYSDEC freshwater wetland HN-105 located on the west side of Route 9W via a culvert. All other on site wetlands are under the jurisdiction of the US Army Corps of Engineers (ACOE) which issued a Jurisdictional Determination in August 2015.

Approximately 0.02 acres of a small ACOE wetland may be impacted by the rear ring driveway and will require an ACOE Nationwide Permit. In addition, construction of the southern entry drive may impact the 100' buffer around the NYSDEC jurisdictional wetland, although no direct impacts are anticipated. Any physical disturbance within the boundary of this wetland or within the regulated 100-foot buffer area will require an Article 24 Freshwater Wetlands Permit. A Wetland Mitigation Plan will also be required to mitigate any direct impacts to this wetland on a 2:1 basis. If required, the Mitigation Plan will include a justification for the direct impacts to the wetland area, rationale for site selection, invasive species control and management of the mitigation area.

Impact on Plants and Animals – Northern Harriers and Short-eared Owls Habitat

The New York Natural Heritage Program has identified the jail site as potential habitat for the state endangered Short-eared Owl and threatened Northern Harrier, and as a raptor winter concentration area. The US Fish and Wildlife Service has identified the site as being within the range of the federally endangered Indiana Bat and threatened Northern Long-eared Bat.

The jail project will disturb a maximum of 17.5 acres of grassland which is habitat for the Northern Harrier and Short-eared Owl. A NYSDEC Incidental Taking Permit will be required and a Habitat Mitigation Plan will be prepared at a 1:1 ratio for the loss of grassland habitat. The mitigation plan will include site identification to demonstrate appropriate habitat, invasive species control and management of the mitigation area. It is anticipated that the mitigation area will be created by putting a deed restriction on a portion of the adjacent County-owned parcel 70.00-4-5 to south, and that the Greene Land Trust will manage the mitigation area. It is possible that the mitigation area could also be partially created in the northern unused area of the jail site. No trees will be removed by the project, and a qualified biologist has reviewed the jail site and determined that habitat to support the federally listed bat species is not present.

Impact on Transportation – County Route 42

A Traffic Evaluation was conducted that indicates the existing roadway network is adequate to service the proposed Greene County Jail site with no mitigation. However, as part of the project the hazardous County Route 42/US Route 9W Y-intersection located near the northern entrance will be eliminated. Although this skewed intersection currently encounters minimal traffic, removal of the intersection will result in a standard intersection layout at the proposed northern site driveway and will improve traffic safety.

Impact on Surface Water – Wastewater Treatment

The estimated wastewater flow for the proposed Greene County Jail is 22,500 gallons per day (gpd) to be directed to the Town of Coxsackie sewer system and then to the Village of Coxsackie wastewater treatment plant (WWTP) for treatment and discharge to the Hudson River. The existing Village WWTP is permitted to discharge 1.25 million gallons per day (mgd) on a 30 day average basis. Current flows average 850,000 gpd; however, the sewer system is subject to significant infiltration and inflow during wet weather events resulting in peak flows at or above the plant's hydraulic capacity as well as discharges of untreated wastewater combined with stormwater into the environment at the remote pump station sites.

As a result, the Village wastewater system is currently subject to an Order on Consent executed by the NYSDEC and the Village which mandates repairs to the sewer system and incorporates a moratorium on new connections to the system until the repairs that eliminate the Sanitary Sewer

Overflows (SSOs) are functional. New connections to the system are also permitted through the conduct of mitigation activities that result in reducing SSOs in an amount exceeding the estimated introduction of new wastewater to the system. The Village has conducted a detailed engineering analysis and developed a \$10.3 million wastewater improvement project. Engineering design will occur in the fall of 2016 through mid-year 2017 with bidding of improvements planned for the summer of 2017 and construction to occur from late 2017 through 2018.

If connection of the new jail to the Town of Coxsackie sewer system is made when the Village's overall improvement project has reached a stage of completion whereby SSOs have been eliminated, it may be possible for the jail extension to be made without mitigation required by the Village's Order on Consent. However, if the extension is to be connected to the Town/Village system prior to the elimination of the SSOs, mitigation may be required.

At this time, Greene County is working with the State of New York, the Town and the Village to determine if a contribution by the County is required. It would most likely involve sewer lining or replacement of sewer lines and/or manholes. If such a contribution is required it may be bundled with the overall wastewater improvement project. While the County will benefit from connecting the new Jail to the Town and Village sewer systems, the communities will benefit from a new customer that will share in the costs of operations and maintenance of the sewer system.

Impact on Historic and Archeological Resources – Precontact Site

Hartgen Archeological Associates conducted a comprehensive *Phase I Archeological Investigation and Phase II Site Evaluation* of the 50 acre Greene County Jail site during 2015 and 2016. The initial Phase I investigation identified three precontact site locations. The subsequent Phase II site evaluation determined that one of these sites is a National Register eligible site that has been named the Greene County Correctional Facility Precontact (GCCF) Site. The GCCF Site is a precontact lithic workshop with evidence of heat treatment to harden tools. It is located in a very limited area of the site and not near any planned ground disturbance. As mitigation for any potential impacts to archeological resources, an Avoidance Plan has prepared with both short-term and long-term avoidance measures. The site will be marked and avoided during construction so as not to be disturbed. Furthermore, the site will be demarked and dedicated in a deed filing for continued preservation.

All potentially significant adverse effects of the new Greene County Jail have been identified and considered in this DEIS. The jail project can be designed and constructed using demonstrated methods that will minimize impacts and in some cases, bring value to the environment beyond the project boundaries.

1.0 INTRODUCTION

1.1 ENVIRONMENTAL IMPACT STATEMENT PURPOSE AND PROCESS

This Draft Environmental Impact Statement (“DEIS”) was prepared by the Greene County Legislature, acting as Lead Agency for the New Greene County Jail project in compliance with the New York State Environmental Quality Review Act, Environmental Conservation Law Article 8 and implementing regulations set forth in 6 NYCRR Part 617 (SEQR). Any activity that commits a governmental entity to a particular course of action or that involves issuance of a discretionary approval that may have an impact on the environment is subject to SEQR.

The proposed project involves the construction of a new 130 bed Greene County Jail with administration and operations spaces for the County Sheriff on 50 acres of land in the Town of Coxsackie. The facility will be located on the east side of Route 9W immediately south of the Coxsackie Correctional Facility and will replace the existing aged and inadequate County Jail in the Village of Catskill. The new facility will include approximately 84,000 square feet of floor space incorporating a public entrance, visitation area, central command, Sheriff and jail administration and staff spaces, intake/release/transport area with vehicle sally port, medical area, mechanical and maintenance spaces, food service and inmate housing areas with recreational yards. The project involves extension of public utility services include electricity, natural gas and telecommunications as well as public water and sewer services from the Village of Coxsackie. Site improvements will include roads, parking areas and stormwater management. The DEIS describes the project in detail, and identifies potential impacts and mitigation measures aimed at construction and operation of the project in an environmentally sound and cost effective manner.

On April 20, 2016, the Greene County Legislature initiated a coordinated SEQR review by adopting Resolution No. 132-16 which classified the New Greene County Jail as a Type 1 Action and declared their intent to act as Lead Agency in the environmental review of the project. Copies of this resolution, Part 1 of the Full Environmental Assessment Form (EAF), a location map and conceptual site plan were circulated to other Involved and Interested Agencies.

No objections were received from other Involved Agencies during the prescribed time period, therefore on May 18, 2016, after review of Parts 2 and 3 of the EAF, the County Legislature adopted Resolution No. 164-16. This resolution declared the County Legislature as Lead Agency, determined that the project had potentially significant impacts on plants and animals and archeological resources, and issued a Positive Declaration directing preparation of a DEIS to further assess these impacts and recommend mitigations. Notification of the Positive Declaration was circulated to all Involved Agencies and published in the Environmental Notice Bulletin.

Comments on this DEIS will be accepted during the public comment period and all substantive questions will be addressed and incorporated in the Final Environmental Impact Statement (FEIS)

which will be circulated to Involved Agencies and made available for public review. A Findings Statement will be adopted and published by the Greene County Legislature at the conclusion of the SEQR process which will including a summary of the potential environmental impacts that were identified and the mitigation measures required for the project to advance to construction. No decision to fund, undertake or approve the project may be issued by the County or any Involved Agency prior to the conclusion of the SEQR process.

1.2 PURPOSE AND NEED FOR THE PROJECT

The existing Greene County Jail in the Village of Catskill is the oldest jail in New York State. The original structure was built in 1905 on Bridge Street on a small site immediately behind the Greene County Courthouse, and an addition was constructed in approximately 1930. The majority of the existing structure is over 110 years old and has exceeded its useful life. The existing jail has 56 beds, but routinely has between 90 and 110 inmates, exceeding its capacity and requiring the County to board prisoners in surrounding facilities at a cost of approximately \$1 million per year. The County needs a larger facility to house its current inmates, but the existing jail site is extremely constrained and offers no room for expansion.

The New York State Commission of Correction (NYSCOC) issued letters in 2010 and 2013 noting concerns with the deterioration of the physical plant and the jail's structural integrity. Delaware Engineering staff conducted a visual inspection of the jail in July 2013 and prepared a structural assessment report which determined that the structure is safe for occupancy if the maintenance and repair recommendations included in the report are followed.

Greene County has been dealing with the structural, capacity and operational challenges of the existing jail for decades. Operational costs at the jail are high due to poor building infrastructure and a lack of technological advancements that could improve the function of the jail and its administration. A new facility would contain modern features which would save energy, time and money in the jail operations. Greene County therefore began to actively consider alternative sites to build a new jail. In 2015, New York State offered to transfer approximately 50 acres of land in the Town of Coxsackie immediately south of the Coxsackie Correctional Facility to the County at virtually no cost.

In February 2016, RicciGreen Associates prepared a *Jail Needs Assessment* which is available on the County website at www.greenegovernment.com/greene-government/proposed-jail-project. This report includes "Population Projections and Jail Bedspace Requirements" and a "Functional and Architectural Program." The population projections extend to 2035. The report concludes that 119-149 beds is an appropriate planning range and that the high end of the range could be achieved by double bunking no more than 20% of the general population cells, in accordance with NYSCOC standards.

2.0 DESCRIPTION OF THE PROPOSED ACTION

2.1 PROJECT LOCATION

The project site is located on the east side of Route 9W in the Town of Coxsackie immediately south of the Coxsackie Correctional Facility. The 50 acre site is currently part of two larger Greene County Tax Parcels (70.-3-23 and 70.-3-6) which are both owned by New York State. The site has generally flat topography with poorly drained soils and is a fallow agricultural field. The site is divided by a drainage swale running in a north/south direction bordered by Federal wetlands. The new jail facility will be located in the western section of the site, west of the drainage swale. A Location Map is included as **Figure 2.1**.

2.2 DETAILED PROJECT DESCRIPTION

SMRT Architects and Engineers prepared a *Schematic Design Report* in July 2016 which is the basis for this project description. The report includes a detailed description of the proposed Greene County Jail project, including Architectural, Site Design, Permits, Security, Construction Durability, Security Electronics, Food Service, Structural, Mechanical, Plumbing, Fire Protection and Electrical narratives. It also includes architectural and site material specifications, design for energy and environment considerations, an updated “Functional and Architectural Program”, a Fire and Life Safety Code Review, and preliminary site and building plans and renderings. The current Conceptual Site Plan for the Greene County Jail is included as **Figure 2.2**.

2.2.1 Architectural Description

The proposed Greene County Jail facility includes two structures. The main building is ~77,000 SF and contains the Jail and the Sheriff’s administrative offices. It is nominally a single story structure with a maximum height of 27 feet and includes an upper cell tier in some of the housing units. The small ~7,000 SF secondary structure is a multiple bay vehicle and storage garage.

The main building is rotated diagonally on the site and faces the southwest corner in order to offer a clear view of the main entrance and approach from Route 9W. The covered entry will create an inviting public area for visitors with a glazed façade and plaza area with benches and landscaping. The main building will house all activity areas of the facility including general and special management housing, medical programs, visitation, administration, intake/release, food service, laundry, and facility maintenance.

The exterior walls will be constructed of concrete masonry with reinforcing and grout to suit structural needs or security needs, whichever is greater. Variations in material color and texture and brick accent bands are proposed for architectural interest. Administrative and public area windows and entrances will be aluminum systems with insulated glazing. Insulated pre-cast concrete wall panels and pre-cast cell units are proposed for the housing units.

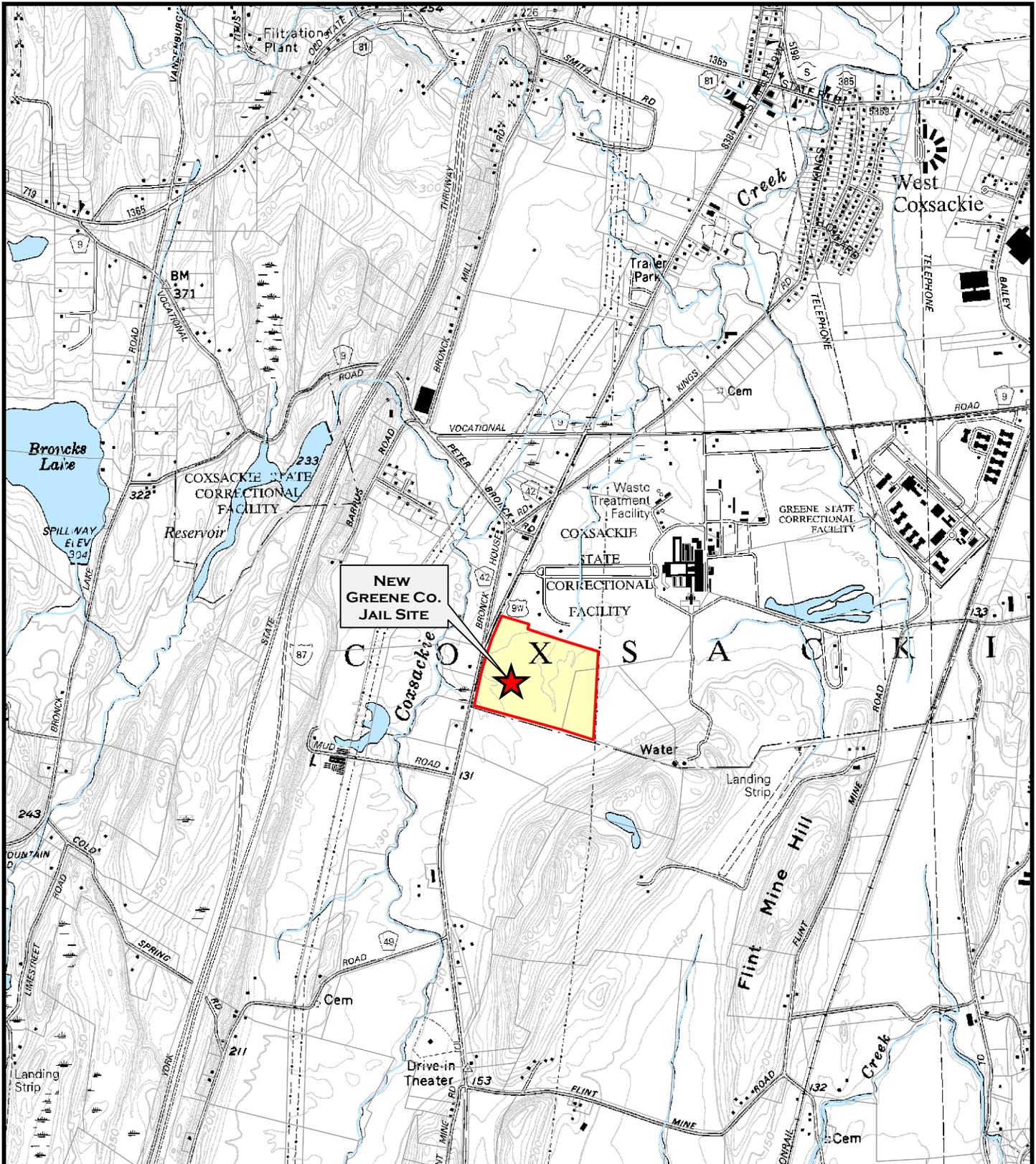
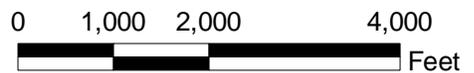


FIGURE 2.1

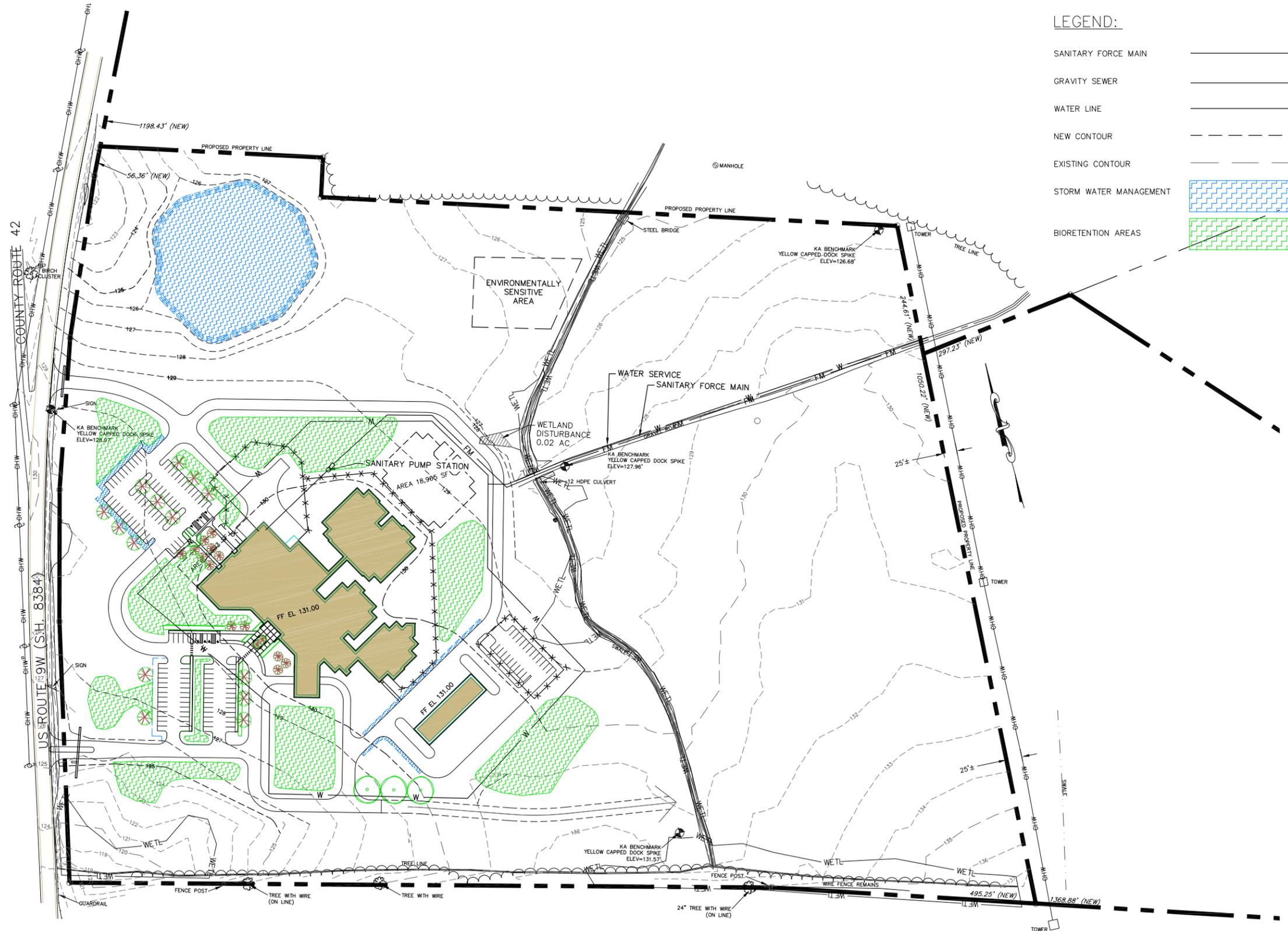
LOCATION MAP

NEW GREENE COUNTY JAIL

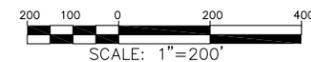
TOWN OF COXSACKIE, NEW YORK



Prepared by: Delaware Engineering, D.P.C. March 2016
 Source: NYS DOT Digital Quads, Hudson North (V48)
 Greene Co. RPS 2016 Digital Tax Parcels



CONCEPTUAL SITE PLAN
SCALE: 1" = 200'



LEGEND:

- SANITARY FORCE MAIN _____
- GRAVITY SEWER _____
- WATER LINE _____
- NEW CONTOUR - - - - -
- EXISTING CONTOUR _____
- STORM WATER MANAGEMENT
- BIORETENTION AREAS

DATE:	12/15
DRAWN BY:	TJ
SCALE:	AS SHOWN
REVIEWED BY:	MBB
PROJECT NO.:	15-1174
FILE/FILE NAME	

DELAWARE ENGINEERING, D.P.C.
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NO.	DATE	DESCRIPTION

PROPOSED GREENE COUNTY JAIL SITE
TOWN OF COXSACKIE
GREENE COUNTY, NY COUNTY, NY

CONCEPTUAL SITE PLAN

WARNING - IT IS A VIOLATION OF NEW YORK EDUCATION LAW SECTION 7209.2, FOR ANY PERSON, UNLESS HE IS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER OR LAND SURVEYOR, TO ALTER THIS DOCUMENT IN ANY WAY. IF ALTERED THE ALTERING PERSON SHALL COMPLY WITH THE REQUIREMENTS OF NEW YORK EDUCATION LAW, SECTION 7209.2.

The jail roof will be nominally flat with steel joists and deck pitched to interior roof drains. The roof assembly will include rigid insulation, an insulating cover board and fully adhered EPDM rubber roofing. Daylighting will be provided where possible through insulating polycarbonate dome skylights sized to fit between roof framing members.

2.2.2 Site Access

Vehicular access to the site is proposed from Route 9W via two new entry points. The northern entrance will be designated for staff, service and delivery vehicles. A secured service and loading area at the northern end of the building will be directly accessed from this driveway. The County Route 42/US Route 9W intersection across from the northern entrance is hazardous with very poor sight lines. As part of the jail project, County Route 42 will be closed south of the Peter Bronck House historic site and this dangerous Y-intersection will be eliminated. The southern entrance will be the main public entry designated for visitors and intake traffic and will include lighted signage to identify the facility.

Creighton Manning Engineering conducted a Traffic Evaluation for the proposed jail project in order to evaluate sight distances, estimate trip generation and identify any potential impacts and mitigation measures associated with the operation of the facility. A copy of the Traffic Evaluation is included as **Appendix A**. The report determined that the magnitude of site generated trips at peak hours is less than the New York State Department of Transportation (NYSDOT) and Institute of Traffic Engineers (ITE) thresholds and therefore the jail facility will be adequately served by the surrounding roadway network and no roadway improvements are required. The evaluation also determined that the two proposed unsignalized site driveway intersections will adequately serve the site with single lanes entering and exiting.

2.2.3 Parking

Principal public parking for the facility will be located southwest of the main building entrance and will be used primarily by visitors and vendors. Parking accommodations will be provided for persons with disabilities in accordance with the Americans with Disabilities Act (ADA) and an entry drop-off area will be provided. Administrative staff parking will be located to the northwest of the facility. A total of 64 spaces are proposed for the southern public parking lot and 45 spaces for the northern staff lot. Walkways for pedestrian access will be installed connecting the parking areas with building entrances as needed. The main public entrance will include an expanded plaza area with benches, plantings and flagpoles.

2.2.4 Water

Water supply for the proposed Greene County Jail will be provided by the Village of Coxsackie water system via an extension of existing publicly owned distribution infrastructure through the

lands of the Coxsackie Correctional Facility. These services will be provided to the Greene County Jail through a three-party Intermunicipal Agreement which will outline the operational requirements and financial conditions.

The Village of Coxsackie water system is a robust system which has been recently improved to provide high quality water with excess capacity. With a permitted capacity of nearly 2.0 million gallons per day (gpd) and a demand of less than 600,000 gpd, the Village system has more than ample capacity to provide service to the proposed Greene County Jail which has an estimated demand of 22,500 gpd for potable water uses.

2.2.5 Sewer

Wastewater conveyance and treatment for the proposed Greene County Jail will be provided by the Village of Coxsackie through the extension of existing publicly owned conveyance infrastructure through the lands of the Coxsackie Correctional Facility. These services will be provided to the County Jail through a three-party Intermunicipal Agreement which will outline the operational requirements and financial conditions.

The Village wastewater system is currently subject to a NYSDEC Order on Consent which mandates repairs to the system and incorporates a moratorium on new connections until repairs that eliminate Sanitary Sewer Overflows (SSOs) are functional, or until mitigation activities are completed that reduce SSOs in an amount exceeding the estimated introduction of new wastewater into the system. The Village has conducted an engineering analysis and developed an SSO elimination project which is anticipated to be completed in 2018. If the new County Jail is connected to Town of Coxsackie sewer system prior to completion of the SSO elimination project, the County may be required to contribute to the mitigation project.

2.2.6 Drainage and Stormwater Management

Drainage on the jail site presents a challenge due to shallow grades and poorly drained soils. New York State stormwater regulations require that runoff is captured and treated as close to the source of generation as possible and the use of green infrastructure that incorporates infiltration practices is highly encouraged. Stormwater runoff from impervious surfaces will be captured, attenuated and treated using numerous practices customized to the jail site. Infiltration practices, to the extent practicable, will be designed to accommodate the very slow percolation rates of the native soils. Bioswales and bio-retention basins are the most appropriate measures for this site. A Storm Water Pollution Prevention Plan (SWPPP) is currently being designed to meet the requirements of the NYSDEC State Pollution Discharge Elimination System (SPDES) General Permit for Stormwater Discharges from Construction Activity.

2.2.7 Electric, Gas and Communications

Electric, gas and communications facilities will be extended to the site of the proposed jail by the local service providers. Each of these services is available in proximity to the jail site. The extension of services will require coordination with the utility providers once the demands of the Jail have been determined and the site plan is fixed.

Central Hudson Gas & Electric Corporation is the provider of both electricity and natural gas in close proximity to the site. It is anticipated that primary electric service will come from a new Central Hudson utility pole on Route 9W. Primary wiring will be run underground to a new utility owned pad mount transformer outside the main electrical room. The transformer will feed a new main distribution switchboard in the electrical room and the fire pump. It is anticipated that a new gas service line will connect to the existing gas main on Plank Road at the entrance to Coxsackie Correctional Facility and run southward through Coxsackie Correctional to the new jail site. The State Telephone Company provides local, long distance, internet and fiber service in the vicinity of the project. Mid-Hudson Cablevision also provides cable television and internet service in the area and is working to expand its fiber optic network.

2.2.8 Landscaping

Landscape planting will include large and medium sized shade trees, small ornamental trees, and various shrubs, groundcovers, and perennials. Tree plantings will be located to provide shade, mitigate the visual impact of the mass of the building, and temper winds across the currently open and treeless expanse of the site. Shrubs and perennials will be introduced to provide accent at key points of entry and visual focus. The location, size, and opacity of plantings will be determined such that concerns for security will be addressed. Specifically, no new planting other than lawn is proposed for the eastern “secure” side of the facility, and planting on the western “public” side will be restrained to minimize places of concealment.

2.2.9 Lighting

Site lighting will be provided based on Illuminating Engineering Society of North America (IESNA) standards to achieve sufficient safe and secure lighting for all public and secure areas of the site. To the extent practicable, lighting will be ‘dark sky’ compliant. Exterior lighting will utilize LED fixtures with full-cutoff distribution to reduce the effects of light pollution. Lighting will include pole mounted fixtures in parking areas and roadways. Wall mounted lights will be utilized to illuminate the outer perimeter of the building and their locations will be selected to minimize glare in camera views.

2.2.10 Security

The Greene County Sheriff's Department will operate the facility and provide on-site security at all times. The Jail will be constructed as a secure facility with multiple containment perimeters. The facility perimeter describes the total secured zone of the facility and is made up of the exterior structure including specially designed components including walls, glazing, doors, sally ports, louvers, roof and skylights. It does not include a fence, however a nuisance/emergency containment fence will restrict access to offender area windows and yards and provide a security barrier should an emergency require offenders to exit the building. There are also internal security perimeters around each housing unit and specific areas such as medical, kitchen, laundry and intake-release areas. Central control will have its own security perimeter designed at the same level as the facility perimeter.

The facility will have a hydraulically designed fire protection system and will be fully sprinklered to provide full fire protection as required by NFPA 13. Fire protection water will be stored in a dedicated 50,000 gallon underground storage tank. The tank will supply a wet well that will be drawn by a fire pump located in an exterior pump house.

In the event that emergency medical services are required, the Town of Coxsackie Ambulance Service or Greene County EMS paramedics will be called. Greene County shall pay a pro-rata share of any increased costs related to demands on police, fire, emergency and health care services attributable to the jail site.

A diesel generator will be installed to provide 100% standby power to the facility. It will be located near the emergency electrical room and will be sized to provide a minimum of 96 hours of power at full load.

2.3 CONSTRUCTION ACTIVITIES

Hours for construction activities as well as truck routes will be established and reviewed with local authorities prior to the initiation of any construction. Hours for construction operations may range from 7:00 AM to 5:00 PM Monday through Friday. It is anticipated that construction will take 24 months and the typical construction season is considered to be from early spring to late fall/early winter. Construction related traffic will be minimal as equipment will be brought on-site and left in staging areas throughout the construction season.

Normal operations during the construction phase will consist of on-site personnel (laborers, foremen, vehicle operators, drivers, engineers, surveyors, etc.), entering and departing of vehicles from designated entrances (both personal, large construction vehicles, and material transport trucks), and establishment of trailers for base of operations. The contractors will follow a comprehensive development plan to ensure that infrastructure is installed in accordance with design standards, code, and permits.

A detailed description of construction activities together with a phasing plan and a schedule for the installation of the infrastructure will be developed. Due to the size and scope of this project and the proximity to water resources in the area, a NYSDEC SPDES General Permit for Stormwater Discharges from Construction Activity (Permit No. GP-0-15-002) must be obtained prior to the initiation of construction. As part of the requirements of this permit, the Owner/Operator must supply comprehensive construction drawings and a detailed report or Stormwater Pollution Prevention Plan. The SWPPP will incorporate a number of key components including:

- A comprehensive Erosion and Sediment Control Plan as per the standards and practices listed in “*New York State Standards and Specification for Erosion and Sediment Control Manual, July 2016*”; and,
- Post-construction Stormwater Quality Controls as per the “*New York State Stormwater Management Design Manual, January 2015.*”

2.4 PERMITS AND APPROVALS

Prior to commencement of construction activities for the new Greene County Jail, the following permits and approvals must be obtained:

- **U.S. Army Corps of Engineers Section 404 Nationwide Permit**
Delaware Engineering wetland biologists surveyed the wetlands and drainage swales on the proposed jail site and the U.S. Army Corps of Engineers (ACOE) issued a jurisdictional determination approving the delineation in the summer of 2015. Although the site plan avoids disturbance of these wetlands, some minor impacts may occur for construction of driveways, therefore a Nationwide permit for disturbance/fill in the waters of the United States will be required. A copy of the delineated wetland map and jurisdictional determination are included in **Appendix B**.
- **New York State Department of Environmental Conservation**
 - **Section 401 Water Quality Certification**
The jail project will impact federally regulated wetlands which require a Section 404 Nationwide Permit and will therefore require a NYSDEC Water Quality Certification.
 - **Article 24 Freshwater Wetlands Permit**
NYSDEC has determined that the wetland in the southwest corner of the jail site is under their jurisdiction as it is hydraulically connected to NYSDEC freshwater wetland HN-105 located on the west side of Route 9W via a culvert. Any physical disturbance within the boundary of this wetland or within the regulated 100-foot buffer area will require an Article 24 Freshwater Wetlands Permit. A Wetland Mitigation Plan will also be required to mitigate any direct impacts to this wetland on a 2:1 basis.

- **Article 15 Protection of Waters Permit**

The central north-south drainage swale on the site connects to a Class C tributary of the Cossackie Creek. NYSDEC will require an Article 15 Protection of Waters Permit for any excavation or fill below the mean high water level. Part of the on-site stormwater system will outfall to this drainage swale and may therefore require this permit.
- **Article 11 Incidental Take Permit Endangered and Threatened Species**

The proposed jail site has been identified as foraging habitat for Northern Harrier Hawks, a NYS threatened species and the Short-eared Owl, a NYS endangered species. It has also been identified as a raptor winter concentration area. Construction of the jail project is unlikely to directly impact an individual of these species, however the project will eliminate a quantity of foraging habitat. As a result, an Article 11 Incidental Take Permit will be required. A Habitat Mitigation Plan will be prepared at a 1:1 ratio for the permanent conservation and maintenance of other habitat lands that contribute to the connected corridors of continuous grassland habitat important to support these species.
- **State Pollutant Discharge Elimination System (SPDES) General Permit for Stormwater Discharges GP-0-15-002**

In New York State, disturbance of the soil over an acre in area requires a SPDES General Permit (GP-0-15-002). SPDES GPs are issued on the basis of either a five or 60 business day review. The five day review permit is issued if the engineer can certify that the construction and post-construction stormwater controls embodied in the SWPPP are in full conformance with the *NYS Stormwater Design Manual*. A 60 day review is required if the site and/or site plan are not in conformance with the Design Manual. In either case, the permit requires periodic inspection of the stormwater controls during construction and self-reporting of compliance with the permit. Given that the Design Manual relies heavily on infiltration practices which will be challenging on the Jail site due to the nature of the soils, it is possible that this project will require a 60 day review.
- **Plan Review for Extension of Sewer Service**

Upon development of detailed design plans and specifications, a submission of the utility plans showing both water and sewer lines will be made to the New York State Department of Environmental Conservation for plan review and approval. Typically, 90% plans and specifications are submitted. Upon positive review by the State, a set of final construction plans is submitted for formal endorsement.
- **New York State Department of Health Plan Review for Extension of Water Service**

Upon development of detailed design plans and specifications, a submission of the utility plans showing both water and sewer lines will be made to the New York State Department of Health for plan review and approval. Typically, 90% plans and specifications are submitted. Upon positive review by the State, a set of final construction plans is submitted for formal endorsement.

- **New York State Department of Transportation Highway Work Permit**

The two vehicular access-ways into the site from US Route 9W will require curb cuts on the highway, which will be permitted by the State Department of Transportation. The results of the traffic impact analysis will be shared with the Department and any comments or concerns addressed, then embodied in the Highway Work permit.
- **Greene County Highway Department Work Permit**

As part of the project, Greene County Route 42 south of Peter Bronck Road will be closed to facilitate the access to the jail site and eliminate a presently dangerous intersection. As such, permission of the Greene County Highway Department will be required.
- **Town of Coxsackie Balancing of Interests Exemption from Local Land Use Regulation**

The project site is located in the Town of Coxsackie. While the Town Code incorporates land use laws including zoning and site plan review, as with other projects conducted by the County for the benefit of all County residents, the Town of Coxsackie will conduct a Balancing of Interests test resulting in the adoption of a Resolution of Exemption from Local Land Use Regulation for the proposed Jail Project. The County is committed to engaging the Town throughout the SEQR process.
- **Village of Coxsackie/Town of Coxsackie Intermunicipal Agreements for Water and Sewer Service**

Water supply and wastewater conveyance and treatment will be conducted by the Village of Coxsackie via distribution and conveyance infrastructure owned by the Town of Coxsackie. As with the two State Correctional Facilities, these services will be provided to the County Jail through a three-party Intermunicipal Agreement (IMA) which will outline the operational requirements and financial conditions.
- **New York State Department of State Building Permits**

Because the project is sponsored by a County government, the New York Department of State will issue building permits for this project. Local codes will not apply; State building and fire protection codes govern this project.
- **New York State Office of Parks, Recreation and Historic Preservation Determination**

The NYS Office of Parks, Recreation and Historic Preservation will review the Phase 1 Archeological Investigation, Phase II Site Evaluation and Avoidance Plan prepared by Hartgen Archeological Associates and issue a determination on the project's impact on cultural and archeological resources.

3.0 ENVIRONMENTAL SETTING, POTENTIAL IMPACTS AND MITIGATIONS

3.1 TOPOGRAPHY, GEOLOGY AND SOILS

A number of resources were used to inventory and assess the project site's natural features related to topography, geology and soils. Resources used in the final analysis included existing maps and GIS databases, as well as numerous site visits by consultants to collect information about on-site conditions. Sources for this analysis included the New York State Museum (NYSM) Bedrock and Surficial Geology Hudson Mohawk GIS files, the Natural Resource Conservation Service (NRCS) Greene County Digital Soil Survey, a topographic site survey prepared by Kaaterskill Associates and site investigations by Hartgen Archeological Associates.

3.1.1 Existing Conditions

Land elevations in the Town of Coxsackie range from 0 feet above mean sea level (AMSL), along the Hudson River, to 850 feet AMSL at the highest peak of the Potic Mountain formation. Elevations on the proposed project site range from a low of 120 AMSL to a high of 137 feet AMSL. In general, the region where the proposed project site is located is characterized by a relatively flat former glacial lake plain along the Route 9W corridor which slopes gently to the east towards the Hudson River. Immediately adjacent to the river, topography is steep to very steep where the former lake plain drops quickly to the Hudson River.

The proposed project site is located on the east side of Route 9W, immediately south of the Coxsackie State Correctional Facility and west of the National Grid transmission power lines. The highest point of the site is in the southeast corner with low points in the northwest and southwest corners along Route 9W. The site slopes gently to a central drainage swale that bisects the site and flows northward to a tributary of the Coxsackie Creek. The topography is primarily very flat (0-3% grade) with some areas classified as gently sloping (3-8% grade). The new jail will be located on a high flat area on the west side of the swale.

The "General Geology Map" in the Greene County Soil Survey classifies the local geology as part of the Normanskill Formation. The bedrock consists of greywacke, shale and chert. The Normanskill Formation is described as deposits that "underlie an area 1 to 3 miles wide in the extreme eastern part of Greene County. Deepkill shale is mainly green, siliceous shale; sandy shale; black graptolite bearing shale; and some thin beds of limestone and chert. Normanskill is chiefly a gray, arkosic sandstone with some chert and a gray to black shale. The chert consists of black, red, or green nodules that weather to white. The entire formation is greatly folded and faulted."

The NYSM Bedrock Geology GIS files classify the site as the Austin Glen Formation. The bedrock consists of greywacke sandstone and shale. The greywacke is composed of sand-sized grains in a fine-grained clay matrix. The sand-sized grains frequently include rock fragments of wide-ranging mineralogy (e.g., pyroxenes, amphiboles, feldspars, and quartz). The clay matrix may constitute up to 50% of the volume. Of the clay minerals, chlorite and biotite are most abundant. The matrix tends to bind the grains strongly and form a relatively hard rock.

The NYSM Surficial Geology GIS files classify the surface geology as Lacustrine sand, described as generally quartz sand, well sorted, stratified, usually deposited in proglacial lakes, but may have been deposited on remnant ice. It is generally a near shore deposit or near a sand source, permeable, with a variable thickness of 2-20 meters.

The site is located on a glacial lake plain covered by a large area of glaciolacustrine sediment (Lake Albany clays). The soils are composed primarily of Kingsbury and Rhinebeck soils with several small areas of Covington and Madalin soils. All of these soils are generally poorly drained and are not classified as prime farmland. Specific soil types on the project site include:

- **Kingsbury & Rhinebeck soils, 0-3% slopes (KrA):** This unit consists of very deep, somewhat poorly drained, nearly level soils in lake plains near the Hudson River. They formed in lucastrine and marine deposits of silt and clay. KrA soils make up approximately 73% of soils found on the project site. The capability class is IIIw and the erosion hazard is slight.
- **Kingsbury & Rhinebeck soils, 3-8% slopes (KrB):** This unit consists of very deep, somewhat poorly drained, nearly level soils in lake plains near the Hudson River. These soils formed in lucastrine and marine deposits of silt and clay. KrB soils make up approximately 11% of soils found on the project site. The capability class is IIIw and the erosion hazard is slight.
- **Covington and Madalin soils, 0-3% slopes (Co):** This unit consists of very deep soils in the lower parts of lake and marine plains that are poorly and very poorly drained. They formed in lucastrine and marine sediments. The soil is deep and fine textured. The capability class is VIw and the erosion hazard is slight. This unit comprises approximately 16% of the project site.

3.1.2 Potential Impacts

Potential impacts to topography, geology and soils will be minimal on the project site. In regards to topography and geology, impacts will primarily result from site grading to accommodate the buildings, driveways, and stormwater system features. The impact associated with soils would be erosion and sedimentation during construction. Impacts to topography may be expected from stormwater runoff. Although the property has been intermittently hayed in the past, none of the soils are classified as Prime Farmland.

3.1.3 Mitigation Measures

Impacts to topography at the site will be minimized by siting the project on the flatter portions of the site to reduce earthwork requirements. Other features such as stormwater basins will be located to take advantage of existing site topography and drainage patterns and reduce grading.

The project exceeds one acre of disturbance, therefore future development activities must fully comply with the NYSDEC SPDES General Permit for Stormwater Discharges from Construction Activity (GP-0-15-002). Protection of soils from erosion and sedimentation both during and after construction will be addressed fully in a project specific Erosion and Sediment Control Plan (ESC Plan), a component of the project's SWPPP. The purpose of the ESC Plan is to minimize the impacts of erosion and sedimentation to the maximum extent practicable. It will address both on-site and off-site impacts during the construction process, and will be developed based on the standards set forth in the *New York State Guidelines for Urban Erosion and Sediment Control*. The ESC Plan will utilize a variety of Best Management Practices (BMPs) including silt fences, temporary sediment basins, temporary/permanent seeding and waterway protection.

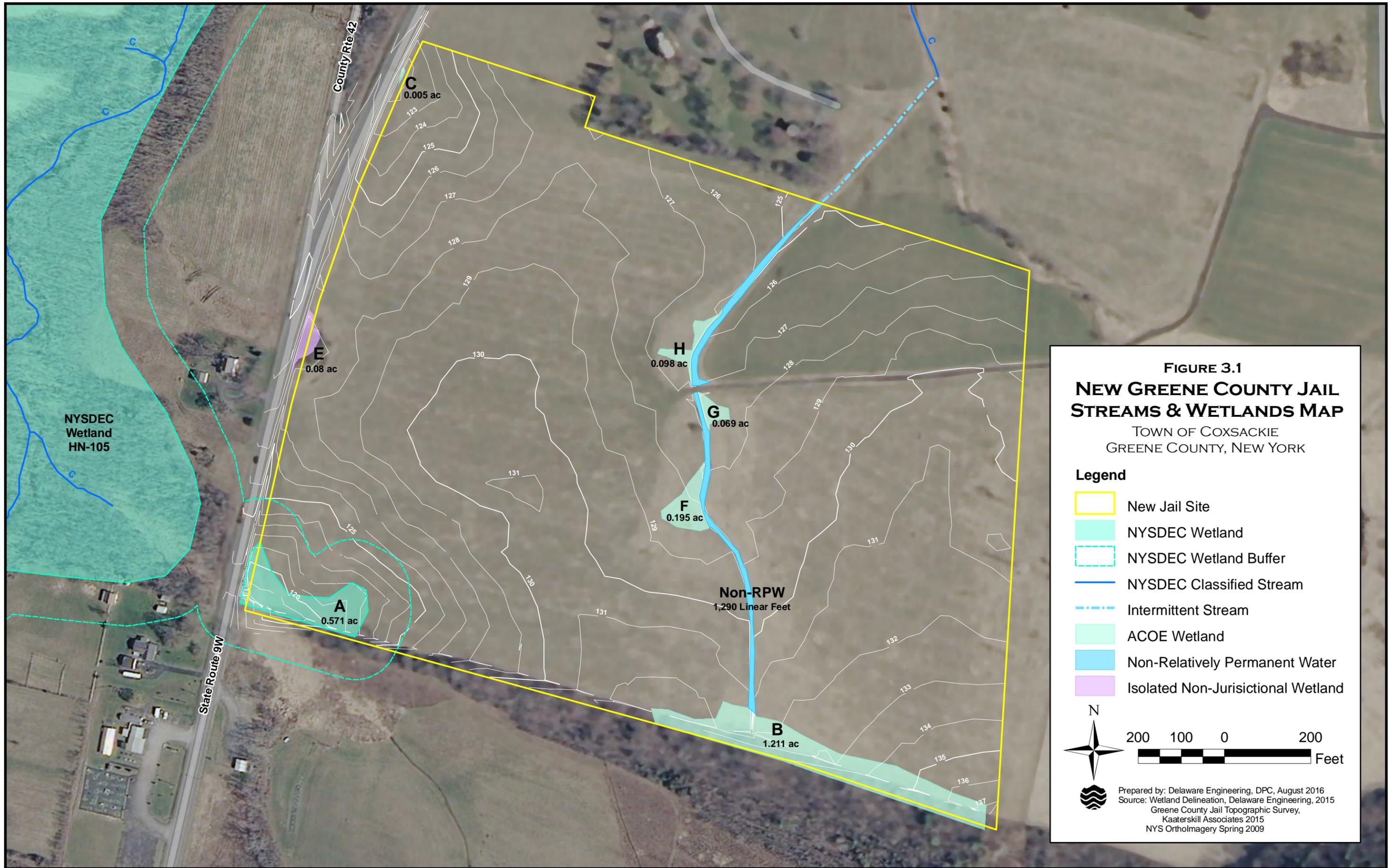
3.2 WATER RESOURCES

3.2.1 Existing Conditions

3.2.1.1 Streams

The Town of Coxsackie is characterized by a diverse assemblage of streams. In the eastern portion of the Town, the streams are characterized as being low gradient, with low velocities, and are formed in fine soils. In the western portion of the Town, topography, soils and geology present conditions where the stream systems have a steeper gradient, higher velocity, and increased erosion and are generally formed in a gravel or small cobble substrate. The primary stream systems in the eastern portion of the Town are the Coxsackie Creek, Murderers Kill stream, two larger unnamed tributaries and the Climax Brook. The flow of most of the main stream channels is perennial in nature, while most of their tributaries are intermittent.

The only surface water feature on the project site is a manmade drainage swale that bisects the site and flows northward to an unnamed Class C tributary of the Coxsackie Creek (Stream ID 863-504) approximately 400' north of the project site. The drainage swale is approximately 1,280 feet long and covers approximately 0.37 acres. It varies in width from 5-15 feet, and is approximately 2 feet deep. A narrow incised channel approximately one foot wide and six inches deep is present along approximately 430 feet of the southern section of the swale. The swale is vegetated along its entire length and functions as a wetland. However, the ACOE classifies it as an artificial non-Relatively Permanent Water (non-RPW) and NYSDEC has indicated they consider it part of the Class C Stream 863-504 to the north. A Streams and Wetlands Map is included as **Figure 3.1**.



3.2.1.2 Wetlands

The majority of the wetlands within the Town of Coxsackie are located in the eastern portion, where the soils are more poorly drained and the topography is flatter. In most cases, wetland areas are associated with local stream networks, but they are also frequently located in association with smaller streams and drainageways in former agricultural fields. While the highest density of these wetlands is located along the main stem of the Coxsackie Creek and Murderers Kill Stream, a network of small streams and wetlands is present throughout the entire watershed. In several areas, former farmlands are experiencing conversion to wetlands as the former drainage networks are no longer maintained.

NYSDEC wetland HN-105, a Class 1 wetland, is located on the west side of Route 9W and is connected via a culvert to a small wetland in the southwest corner of the site. Delaware Engineering staff conducted a wetland delineation in the summer of 2015 to determine the boundaries of on-site wetlands and other jurisdictional waters. Wetland/Upland data points were collected along the wetland boundaries. At each data point, information on hydrology, soils and vegetation was documented. A wetland determination was made for a data point if it exhibited all three wetland characteristics: hydric soils, wetland hydrology and wetland vegetation. Delaware submitted the Delineation Report to the US Army Corps of Engineers in June 2015. After ACOE staff visited the site, Delaware made several minor adjustments to the delineation based on agency comments and field review. A final delineation was approved by the ACOE in August of 2015. Based on this delineation there are 2.13 acres of federal wetlands on the proposed jail site. A copy of the Jurisdictional Determination is included in **Appendix B**.

- Wetland Area A, located in the southwest corner of the site, is approximately 0.571 acres of wet clay meadow wetland with herbaceous wetland vegetation. It is located adjacent to a non-RPW located off the site to the south which flows through a culvert beneath Route 9W and ultimately flows into the Coxsackie Creek approximately 560 feet to the west. The NYS DEC has recently determined that this wetland is hydraulically connected to DEC freshwater wetland HN-105 and is therefore under their jurisdiction. The soils are hydric Covington and Madalin silty clays/clay that exhibit reducing and mottled conditions in the top 12 inches indicating a fluctuating water table. The hydrology is controlled by runoff during precipitation events from upslope areas. The dominant vegetation is Reed Canary Grass, Carex species and Purple Loosestrife.
- Wetlands B, F, G and H total approximately 1.552 acres and are located adjacent to the non-RPW artificial swale that bisects the site from north to south. Wetland B (1.211 acres) is located in the southeast corner of the site at the southern end of the drainage swale and continues off-site. Wetland F (0.195 acres) and Wetland H (0.098 acres) are located centrally on the west side of the drainage swale, and Wetland G (0.069 acres) is located on the east side. These wetlands are typical wet clay meadows. The soils are hydric

Covington and Madalin silty clays/clay that exhibit reducing and mottled conditions in the top 12 inches indicating a fluctuating water table. The primary hydrological source is runoff from slightly higher areas in the surrounding fields. The dominant vegetation is Carex species and Reed Canary Grass.

- Wetland C is approximately 0.005 acres and is located in the northwest corner of the site at the headwaters of an ephemeral non-RPW located off-site to the west. This non-RPW flows through a culvert beneath Route 9W, then through a second culvert beneath Peter Bronck Road and ultimately flows into the Cocksackie Creek approximately 600 feet to the west. The soils are Kingsbury/Rhinebeck soils on 3-8 percent slopes and are silty clays/clay. They exhibit reducing conditions in the top 12 inches indicating a fluctuating water table. The primary hydrological source is runoff from slightly higher areas in the surrounding fields. The dominant vegetation is Carex species and Reed Canary Grass.
- Wetland E is a small 0.08 wetland centrally located on the western border of the site that was determined to be isolated and non-jurisdictional.

3.2.2 Potential Impacts

3.2.2.1 Streams

Impacts to the on-site drainage swale will be minimal as there are no new stream crossings. The primary impacts will be related to increased stormwater run-off and a portion of the stormwater management system that will discharge to the swale. An increase in the amount of impervious surface associated with buildings, roads, and parking could increase both pollutant loading from runoff (water quality), as well as alter the volume and rate of stormwater runoff leaving the site (water quantity). Unmitigated changes in the quality and quantity of stormwater runoff may ultimately impact the Cocksackie Creek (i.e. decrease in water quality, increase in stream bank erosion, increased incident of flooding).

3.2.2.2 Wetlands

The delineated wetlands will be avoided to the extent possible during design and construction. It is anticipated that the proposed project will impact approximately 0.02 acres of Wetland H, an ACOE wetland along the central drainage swale, due to grading and construction of the rear site driveway. Construction of the southern entry drive may impact the 100' buffer around Wetland A, the NYSDEC jurisdictional wetland located in the southwest corner of the site. The impacts to wetlands and wetland buffers will be quantified during final site design.

3.2.3 Mitigation Measures

3.2.3.1 Streams

The primary mitigation measures for surface water impacts will be accomplished via a detailed Stormwater Pollution Prevention Plan. The SWPPP will be designed to mitigate increased runoff from new impervious surfaces and will be designed to maintain as much of the site's natural hydrology as possible. Stormwater quality and water quantity mitigation will be designed and implemented in accordance with the NYSDEC Technical Standards as found in the "*New York State Stormwater Design Manual*", and will meet or exceed NYSDEC requirements.

3.2.3.2 Wetlands

A US Army Corps of Engineers Nationwide Permit will be obtained for the minor wetland impacts (approximately 0.02 acres) on the site. The site design will avoid any direct impacts to NYSDEC Wetland A by the southern entrance drive, although it may impact the buffer area. The impacts to wetlands and buffer zones will be quantified during final site design. NYSDEC has requested that the southwest corner of the site be further investigated to determine how far the wetland extends into the adjacent parcel 70.00-4-5 to the south, owned by Greene County. In addition, if there are any direct impacts to Wetland A, NYSDEC has requested a 2:1 mitigation. In that case, a Mitigation Plan will be prepared that includes a justification for the direct impacts to the wetland area, rationale for site selection, invasive species control and management of the mitigation area.

3.3 AIR RESOURCES

3.3.1 Existing Conditions

As part of the SEQRA process, an air quality assessment for the proposed project was conducted. The air quality assessment conforms to the procedures followed by the NYSDEC. Currently the NYSDEC follows the procedures of the New York State Department of Transportation (NYSDOT) as outlined in Chapter 1.1 of the Environmental Procedures Manual (EPM), last updated in December 2012. These procedures address the Clean Air Act Amendments of 1990 and guidance from the United States Environmental Protection Agency (EPA).

The evaluation and assessment of air resources are to be defined as two different sources for the purpose of this DEIS, "*Stationary and Mobile.*" *Stationary* sources refer to power generating facilities which concentrate exhaust and pollutant loading in one area and are permanent structures on-site. *Mobile* sources refer to the truck and automobile traffic in and out of the site and analysis of air quality and pollutant loading at various intersections based on the traffic control measures proposed (e.g. signalized, signalized, etc.)

3.3.1.1 Stationary

Air quality characterization of the proposed project site was conducted. The air quality of a site is characterized in terms of whether the concentrations of criteria pollutants and hazardous air pollutants (HAPs) in the ambient air are measured or are deemed to be in compliance with applicable standards for ambient air quality. An area that complies with applicable standards for ambient air quality is classified as an Attainment Area.

The project site is located in Greene County which is currently classified by the EPA as an Attainment Area meeting all National Ambient Air Quality Standards (NAAQS) for the criteria pollutants listed in **Table 3.3.1**. All of New York State is located in the Northeast Ozone Transport Region. Consequently, under New York and federation regulations, the thresholds for classification as a Major Source of pollutants are included in **Table 3.3.2**.

Table 3.3.1 National Ambient Air Quality Standards for Criteria Pollutants

Pollutant [final rule cite]		Primary/ Secondary	Averaging Time	Level	Form	
Carbon Monoxide (CO) [76 FR 54294, Aug 31, 2011]		primary	8-hour	9 ppm	Not to be exceeded more than once per year	
			1-hour	35 ppm		
Lead (Pb) [73 FR 66964, Nov 12, 2008]		primary and secondary	Rolling 3 month average	0.15 µg/m ³ ⁽¹⁾	Not to be exceeded	
Nitrogen Dioxide (NO₂) [75 FR 6474, Feb 9, 2010] [61 FR 52852, Oct 8, 1996]		primary	1-hour	100 ppb	98th percentile, averaged over 3 years	
		primary and secondary	Annual	53 ppb ⁽²⁾	Annual Mean	
Ozone (O₃) [80 FR 65291, Oct 26, 2015]		primary and secondary	8-hour	0.070 ppm ⁽³⁾	Annual fourth-highest daily maximum 8-hr concentration, averaged over 3 years	
Particle Pollution (PM) Dec 14, 2012		primary	Annual	12 µg/m ³	annual mean, averaged over 3 years	
			secondary	Annual	15 µg/m ³	annual mean, averaged over 3 years
		PM _{2.5}	primary and secondary	24-hour	35 µg/m ³	98th percentile, averaged over 3 years
			primary and secondary	24-hour	150 µg/m ³	Not to be exceeded more than once per year on average over 3 years
Sulfur Dioxide (SO₂) [75 FR 35520, Jun 22, 2010] [38 FR 25678, Sept 14, 1973]		primary	1-hour	75 ppb ⁽⁴⁾	99th percentile of 1-hour daily maximum concentrations, averaged over 3 years	
		secondary	3-hour	0.5 ppm	Not to be exceeded more than once per year	

(1) Final rule signed October 15, 2008. The 1978 lead standard (1.5 µg/m³ as a quarterly average) remains in effect until one year after an area is designated for the 2008 standard, except that in areas designated nonattainment for the 1978, the 1978 standard remains in effect until implementation plans to attain or maintain the 2008 standard are approved.

(2) The official level of the annual NO₂ standard is 0.053 ppm, equal to 53 ppb, which is shown here for the purpose of clearer comparison to the 1-hour standard.

(3) Final rule signed October, 2015, and effective December 28, 2015. The previous (2008) O₃ standards additional remain in effect in some areas Revocation of the previous (2008) O₃ standards and transition to the current (2015) standards will be addressed in the implementation rule for current standards.

(4) The previous SO₂ standards (0.14 ppm 24-hour and 0.03 ppm annual) will additionally remain in effect in certain areas: (1) any area for which it is not yet 1 year since the effective date of designation under the current (2010) standards, and (2) any area for which implementation plans providing for attainment of the current (2010) standard have not been submitted and approved and which is designated nonattainment under the previous SO₂ standards or is not meeting the requirements of a SIP call under the previous SO₂ standards (40 CFR 50.4(3)), A SIP call is an EPA action requiring a state to resubmit all or part of its State Implementation Plan to demonstrate attainment of the require NAAQS.

Table 3.3.2 Major Source Pollution Thresholds at new Jail Site

Air Pollutant	Major Source Thresholds, tons/year (tpy)
Carbon Monoxide (CO)	100 tpy
Nitrogen Oxides (NOx)	100 tpy
Volatile Organic compounds (VOCs)	50 tpy
Particulate Matter (PM-10)	100 tpy
Sulfur Dioxide (SOx)	100 tpy
Hazardous air pollutants (HAPs)	10 tpy for a single HAP 25 tpy for any combination of HAPs

3.3.1.2 Mobile

New York State collects air quality data for numerous pollutants at monitoring stations in each County through a program operated by the Bureau of Air Quality Surveillance. The EPA prescribes what pollutants are required to be monitored at different locations based on the characteristics of each region. Therefore, monitoring stations are disbursed throughout New York State with each station monitoring certain pollutants. In addition to the continuous and manual monitors in each County, ambient air quality data from private networks (utilities) is also an integral part of the state database for pollutants. The data from each monitoring station is recorded and summarized in the New York State Air Quality Report. The latest data tables available are for the year 2015.

There are no air monitoring stations located in Greene County. The closest comprehensive air monitoring station is located to the north in Albany County in Loudonville. The Loudonville station (#0101-33) monitors sulfur dioxide, inhaled particulates, carbon monoxide, and ozone. The most recent data tables indicate that the Loudonville station was in compliance with the New York State and National Ambient Air Quality Standards (NAAQS) for all the monitored pollutants in 2015.

3.3.2 Potential Impacts

3.3.2.1 Stationary

Stationary facilities that emit pollutants that exceed the identified Major Source thresholds in **Table 3.3.2** would be required to obtain a Title V Facility Permit from NYSDEC under 6 NYCRR Part 201-6, Title V Facility Permits. Non-major source facilities would require a State Facility Permit, or facility registration if they meet the criteria of Subpart 201-4.1.

3.3.2.2 *Mobile*

In order to accurately determine, within a low margin of error, the impacts from additional vehicle exhaust on air quality on-site, several analyses would be conducted including: Microscale air quality analysis, Mesoscale air quality analysis, Particulate Matter Microscale analysis, and Particulate Matter Mesoscale analysis.

Microscale Air Quality Analysis

A microscale air quality analysis is performed to determine carbon monoxide concentrations at various worst case receptors adjacent to the roadways in a project area. Based on the procedures outlined in the EPM, worst case receptors are typically chosen at signalized intersections where a level of service D, E, or F exists for the build conditions. Unsignalized intersections do not typically warrant a detailed air quality analysis since the major-street high volume approaches at these intersections operate as free flow conditions. Any intersection requiring a detailed air quality analysis based on the level of service criteria undergoes additional screenings based on an analysis of the site conditions with respect to the reduction in source-receptor distances, traffic volume increases, vehicle emission increases, and speed reduction. The screening process is used to pinpoint locations where vehicle emissions will be the highest and will contribute to the background air quality. Any detailed air quality analysis is conducted using CAL3QHC, Version 2.0, which is a computer based air quality dispersion model. This model is based on traffic parameters from the Highway Capacity Manual (HCM) and is capable of analyzing intersection and free flow receptors.

Mesoscale Analysis

A mesoscale air quality analysis is conceptually similar to the microscale air quality analysis; however it covers a larger geographic area, typically larger than the immediate project area. In addition to carbon monoxide, a mesoscale air quality analysis monitors for volatile organic compounds (VOC) and nitrogen oxides (NO_x). Guidelines in the EPM state that, in general, a mesoscale air quality analysis is required for projects involving the following:

- HOV lanes versus general use lanes
- New or significant modification to interchanges on access-controlled facilities
- Large-scale signal coordination projects
- In attainment areas, projects having alternatives (including the no-build) with significantly different (10%) VMT
- Widening to provide additional travel lanes more than a mile in length.

Particulate Matter Analysis

Particulate Matter (PM) is a mixture of substances that include elements such as carbon and metals; compounds such as nitrates, organic and ammonium compounds, and sulfates; and complex mixtures such as diesel exhaust and soil. Some of these particles are emitted directly into the

atmosphere. Others, referred to as secondary particles, result from gases that are transformed into particles through physical and chemical processes in the atmosphere. As noted, there are two types of inhalable particulates; those with aerodynamic diameters of 10 microns or less (PM10) and those with aerodynamic diameters of 2.5 microns or less (PM2.5).

Many scientific studies have linked breathing PM to a series of significant health problems including aggravated asthma, increase in respiratory symptoms like coughing and difficult or painful breathing, chronic bronchitis, decreased lung function, and premature death. As a result, NYSDOT requires that transportation project level air quality impact analyses consider both PM10 and PM2.5. NYSDOT is requiring all non-Categorical Exclusion and non-Type II Action projects that result in increased traffic volumes to undergo microscale and mesoscale emissions analysis for both PM10 and PM2.5 as outlined in Chapter 1 of the EPM.

Particulate Matter Microscale Analysis

Similar to the CO microscale air quality analysis, unsignalized intersections do not typically warrant a detailed air quality analysis since the major-street high volume approaches at these intersections operate as free flow conditions. The intersections at the entrance of the new jail facility will not be signalized. Therefore, based on a review of the proposed project and mitigation, a particulate matter analysis is not required.

Particulate Matter Mesoscale Analysis

Projects requiring a mesoscale analysis are those that could have a significant impact on emissions on a regional basis. The proposed jail project is not expected to result in changes to the regional travel patterns in the surrounding area. New traffic to the proposed project site is expected to be traffic specifically traveling to and from the proposed project site. Since regional travel patterns are not expected to change, a particulate matter mesoscale air analysis is not required for the project.

Construction Impacts

The air quality within the project area may experience short-term impacts due to the construction of the project. During construction, airborne particulates will increase as dust is raised by construction vehicles in motion. This increase is expected to be sporadic and short-term in nature and will be most noticeable in the area immediately adjacent to the construction.

3.3.3 Mitigation Measures

3.3.3.1 Stationary

Facilities on-site that would be classified as Major Sources of regulated pollutants would be subject to regulations under the federal Prevention of Significant Deterioration PSD program for Attainment Areas at 40 CFR 51, which is administered by NYSDEC under delegated respon-

sibility from the EPA. Such facilities would be required to install pollution control equipment that meets the standards for Best Available Control Technology (BACT), and would be required to conduct air dispersion modeling to demonstrate that the area's air quality will not be significantly degraded as a result of the major sources of pollution.

The new jail facility does not include a land use that would be classified as a Major Source of pollutants, thus mitigation measures for stationary air emissions are not required.

3.3.3.2 Mobile

Microscale Air Quality Analysis

Based on the above site screening analysis, a detailed microscale air quality analysis is not necessary since this project will not increase traffic volumes, reduce source-receptor distances or change other existing conditions to such a degree as to jeopardize attainment of the National and New York State ambient air quality standards for carbon monoxide.

Mesoscale Analysis

The proposed project is not expected to result in changes to the regional travel patterns in the surrounding area. Since regional travel patterns are not expected to change, a mesoscale air analysis is not required for the project.

Particulate Matter Microscale Analysis

No mitigation efforts are needed.

Particulate Matter Mesoscale Analysis

No mitigation efforts needed.

Construction Impacts

Construction related impacts will be minimized by the use of dust inhibitors, such as calcium chloride and other dust-control provisions found in the NYSDOT Standard Specifications for construction.

3.4 TERRESTRIAL ECOLOGY

3.4.1 Existing Conditions

3.4.4.1 Land Cover

The terrestrial ecology of the 50 acre project site is characterized by the presence of three primary land cover types: Grassland, Hedgerow, and Wet Meadow and Emergent Wetlands. Grassland is the dominant land cover on the project site. Hedgerows and Wet Meadow and Emergent Wetland land covers are present in smaller, discrete quantities.

- **Grasslands:** The vast majority of the proposed project site has been in limited or intermittent agricultural production and can be categorized as upland field. Grasslands comprise approximately 46.95 acres of the site.
- **Hedgerow:** The central portion of the southern edge of the site is bordered by a hedgerow consisting of a mixture of small trees and hedges. Hedgerow comprises approximately 0.45 acres of the site.
- **Wet Meadow and Emergent Wetlands:** Wetlands border the north-south drainage swale and the low-lying western and eastern portions of the southern site boundary. The dominant vegetation is Reed Canary Grass, Carex species and Purple Loosestrife. The total wetland area on site is approximately 2.23 acres.

3.4.4.2 Wildlife

The NYSDEC Natural Heritage Program was contacted to determine if there are any known records of endangered, threatened or special concern wildlife species, rare plant, animal or natural community occurrences or other significant habitats in the vicinity of the site. Their response letter indicates that the jail site has been identified as potential habitat for the state endangered Short-eared Owl and threatened Northern Harrier, and as a raptor winter concentration area.

The USFWS Information, Planning and Consultation System (IPaC) website was also consulted to determine the potential presence of federally listed threatened or endangered species in the project vicinity. This preliminary screening determined that the project may be within the range of the Indiana Bat, a federally endangered species, and the Northern long-eared Bat, a federally threatened species. These bats winter in hibernacula and during the summer roost in crevices of old dead trees or under the loose, craggy bark of living trees.

Copies of the NYSDEC Natural Heritage correspondence and the USFWS IPaC consultation are included in **Appendix C**.

3.4.2 Potential Impacts

3.4.4.1 Land Cover

Development of this site will have permanent impacts primarily to the grassland area. The impacts will be the conversion of grassland to impervious surfaces associated with buildings, parking and driveways. To a lesser extent, impacts will also be associated with conversion of existing vegetative cover to manicured green space or open water and green infrastructure stormwater features. A maximum of 17.5 acres of vegetative cover may be disturbed during construction, with approximately 6.25 acres of the disturbance being permanent conversion to impervious surfaces. The final areas of disturbance and impervious surfaces will be calculated during preparation of the SWPPP and final site design.

3.4.4.2 Wildlife

The Greene County Jail site has been documented as habitat for Northern Harriers and Short-eared Owls and as a raptor winter concentration area. Approximately 17.5 acres of grassland habitat may be affected by the project. A qualified biologist has reviewed the jail site and determined that habitat to support the Indiana Bat and Northern Long-eared Bat is not present on the site. The only trees on the project site are in the hedgerow area, a narrow strip of small young trees and bushes along the southern border. There are no dead trees or live trees with loose, shaggy bark on the project site. No trees will be removed during construction.

Loss of habitat as a result of construction would displace wildlife currently inhabiting the area. Areas immediately adjacent to the site show similar characteristics and may provide habitat for species displaced by the construction. Larger, more able wildlife species such as rabbits and birds would easily relocate to adjoining properties when construction begins. Some competition between similar species may occur as a result. Other species that are not able to relocate as easily, such as insects, reptiles, amphibians and small mammals may be impacted. The majority of the species that would be displaced as a result of construction are common throughout the Hudson Valley.

3.4.3 Mitigation Measures

A NYSDEC Incidental Taking Permit is required for the disturbance of the Northern Harrier and Short-eared Owl habitat. A Habitat Mitigation Plan will be prepared at a 1:1 ratio for areas that will no longer be grassland on the site (the area of disturbance) which is anticipated to be a maximum of 17.5 acres. The mitigation plan will include site identification to demonstrate appropriate habitat, invasive species control and management of the mitigation area. It is anticipated that the mitigation area will be created by putting a deed restriction on a portion of the adjacent County-owned parcel 70.00-4-5 to south, and that the Greene Land Trust will manage the mitigation area. It is possible that the mitigation area could also be partially created in the northern unused area of the jail site.

3.5 TRANSPORTATION

Creighton Manning Engineering, LLP conducted a Traffic Evaluation for the Greene County Jail in the late summer of 2016. A copy of the traffic evaluation is included in **Appendix A**.

The new Greene County Jail will be served by two full access driveways on US Route 9W, with the northern driveway serving staff, service and delivery vehicles and the southern driveway serving as the main public entrance for visitors and intake traffic. The new jail is expected to be completed and in operation in late 2018.

The existing jail is a 56 bed facility with 37 full time staff. The proposed 130 bed facility is expected to require up to an additional six staff members equating to a total staff of 43 persons working three eight hour shifts, with approximately 14 staff per shift. It is also anticipated that between 12 and 18 Sheriff's department staff will be at the facility primarily on day shifts Monday through Friday. Visitation during the week will be limited to legal and professional visits, while public visitation will be limited to the weekends.

3.5.1 Existing Conditions

US Route 9W is a state roadway extending in a north/south direction through Greene County. It is classified as a rural minor arterial and based upon the latest available data published by the NYSDOT carries approximately 6,500 vehicles per day. Near the project site, US Route 9W consists of a single travel lane in each direction, paved shoulders and a posted speed limit of 55 mph. There are no existing sidewalks or pedestrian accommodations in the project vicinity. Land uses surrounding the site include institutional, light industrial, agricultural, residential and undeveloped land. The Y-intersection of County Route 42 and US Route 9W is hazardous and has very poor sight lines.

3.5.2 Potential Impacts

3.5.2.2 Trip Generation

Trip generation determines the quantity of traffic expected to travel to and from a given site. The Institute of Transportation Engineers' (ITE) *Trip Generation*, 9th Edition is the industry standard used for estimated trip generation for proposed land uses based on data collected at similar land uses. ITE *Trip Generation* has limited information available for jail facilities. Based on the total site staffing of 61 persons (43 Jail and 18 Sheriff) the ITE peak hour trip generation is 26 AM peak hour trips (17 enter, 9 exit) and 14 PM peak hour trips (4 enter, 10 exit). Trip generation estimates were also calculated using site specific employee and shifting data and is summarized in **Table 3.5.1**. The assessment assumes that a small number of professional visitors may visit the site during peak hours.

Table 3.5.1. New Greene County Jail Trip Generation Summary

Employee	AM Peak Hour			PM Peak Hour		
	Enter	Exit	Total	Enter	Exit	Total
43 Jail full time staff 14 per shift	14	14	28	14	14	28
18 Sheriff staff - daytime shift	18	0	18	0	18	18
Professional visitation	3	3	6	3	3	6
TOTAL Peak Hour Trips	25	17	42	17	35	52

Table 3.5.1 shows that the proposed site is anticipated to generate up to 42 AM peak hour trips and 52 PM peak hour trips. During the peak hour, the majority of the trips will occur at the northern driveway for staff and service vehicles. The trip generation shown in the table is likely a conservatively high estimate of the peak hour trip generation that may occur at the site based on the assumption that all shift traffic will enter and exit the site during a single hour and when compared to the ITE trip generation which shows the potential for less peak hour trips.

Both methods of trip calculation show that the site generated trips distributed onto the adjacent roadway network will result in less than the NYSDOT and ITE threshold of 100 site generated vehicles on any one intersection approach which determines the need for detailed off-site intersection analysis. This guidance was developed as a tool to identify locations where the magnitude of traffic generated has the potential to impact operations at off-site intersections and screen out locations from requiring detailed analysis that do not reach the 100 vehicle threshold and are unlikely to require mitigation, therefore indicating that the site will be serviced by the existing roadway network. The two proposed site driveway intersections will adequately service the new jail site as unsignalized driveways with single lanes entering and exiting.

On weekends it is anticipated that the staff will continue to service the facility on three eight hour shifts. Public visitation is anticipated to be spread out and likely not be focused during a single hour of the day, therefore, the weekday trip generation represents the worst case peak travel conditions at the site. In addition, review of the NYSDOT data shows that traffic volumes on US Route 9W are higher during the weekdays than on the weekends.

3.5.2.3 Sight Distance Analysis

NYSDOT data indicates that 85th percentile travel speeds on US Route 9W in the project area are approximately 60 mph. At 60 mph travel speeds, the intersection site distance guidelines presented in the American Association of State Highway Transportation Officials (AASHTO) *A Policy on Geometric Design of Highway and Streets 2011* are between 575 feet and 665 feet. A review of the sight distances at the project site and proposed driveway locations indicates that adequate sight distance is available to meet or exceed the AASHTO recommended distances.

3.5.3 Mitigation Measures

The traffic evaluation indicates that the existing roadway network is adequate to service the proposed Greene County Jail site with no mitigation. However, as part of the project the hazardous Route 42/US Route 9W Y-intersection located near the northern entrance will be eliminated. Although this skewed intersection currently encounters minimal traffic, removal of this intersection will result in a standard intersection layout at the proposed northern site driveway and will improve traffic safety.

3.6 LAND USE AND ZONING

3.6.1 Existing Conditions

The Town of Coxsackie Zoning Law, Chapter 201 of the Code of the Town of Coxsackie, was adopted in 1987 and amended in 2008 by Local Law No. 4-2008. The purpose of the Town's Zoning Ordinance is to:

“promote the health, safety, morals and general welfare of the community. In accordance with the Town's Master Plan, this chapter is designed to secure safety from fire, flood, panic and other dangers; to promote health and general welfare, to provide adequate light and air; to prevent crowding the land and undue concentration of population; to facilitate transportation, water, sewerage, schools, parks and other public services; to assure privacy for residents and freedom from nuisance and things harmful to the senses.”

The Town is divided into 10 base zoning districts: Waterfront Residential, Residential Agricultural 1, Residential Agricultural 2, Rural Residential, High Density Residential 1, High Density Residential 2, Mixed Use, Commercial, Corridor Industrial and Industrial. The Zoning Code also has provisions for Planned Unit Development Districts and four overlay districts: Hamlet, Residential Density, Residential over Commercial, and Public Water Supply.

The new Greene County Jail project site is located in the Residential Agricultural 2 zoning district. The purpose of this district is to maintain the rural nature of the Town, to preserve prime agricultural land, to discourage development on land unsuitable for development, and to protect and preserve natural features. This district allows for agricultural uses, low-density residential development and limited rural commercial and institutional uses.

Schedule A - Use Regulations for Residential Districts and *Schedule B - Use Regulations for Nonresidential/ Mixed Use Districts* are included as part of the Zoning Code and were last updated in 2015 by Local Law No. 1-2015. A review of these tables indicates that Jails, Correctional Facilities, and Public Facilities/Institutions are not listed as Permitted or Special Permit Uses in any of the zoning districts in the Town of Coxsackie.

The land uses surrounding the proposed jail site include residential, agricultural, commercial, light industrial, institutional and undeveloped land. Of note, the existing NYS Coxsackie and Greene Correctional Facilities are also located in the Residential Agricultural 2 zoning district.

3.6.2 Potential Impacts

The proposed jail is not listed as a Permitted or Special Permit Use in the Residential Agricultural 2 zoning district, however the two existing adjacent New York State Correctional Facilities are located in this district. A use that is not included in a municipality's list of Permitted or Special Permit Uses requires a Use Variance from the Zoning Board of Appeals or a Zoning Amendment adopted by the Town Board.

However, the New York Court of Appeals established a method In the Matter of the County of Monroe, 72 NY2d 338 (1988) for governmental entities to request exemption from land use laws and undertake development activities in other communities under a "balancing of public interests" analytic approach. The host community must weigh several factors to determine whether or not it is in the public interest to exempt the encroaching government from its land use regulations. The host community is to weigh the following nine factors:

1. The nature and scope of the instrumentality seeking immunity;
2. The encroaching government's legislative grant of authority;
3. The kind of function or land use involved;
4. The effect local land use regulation would have upon the enterprise concerned;
5. Alternative locations for the facility in less restrictive zoning areas;
6. The impact upon legitimate local interests;
7. Alternative methods of providing the proposed improvement;
8. The extent of the public interest to be served by the improvements; and
9. Intergovernmental participation in the project development process and an opportunity to be heard.

Construction of the new Greene County Jail is in the public interest and the proposed site is in an appropriate location given its proximity to similar facilities. As with other County projects conducted for the benefit of all County residents, the Greene County Legislature will request the Town of Coxsackie to conduct a Balancing of Public Interests test resulting in the adoption of a Resolution of Exemption from Local Land Use Regulations for the proposed jail project. The County is committed to engaging the Town throughout the SEQR process.

3.6.3 Mitigation Measures

No mitigation measures are necessary because the project will not have a negative impact on land use or zoning.

3.7 COMMUNITY SERVICES

3.7.1 Existing Conditions

3.7.1.1 Water

The Village of Coxsackie water system is a robust system which has been recently improved to provide high quality water with excess capacity. The newly upgraded water plant has a permitted capacity of nearly 2.0 million gallons per day (gpd) and a demand of less than 600,000 gpd,

The Village owns and operates a series of surface water sources, a state-of-the-art water treatment plant, and a storage and distribution system located in the towns of New Baltimore and Coxsackie and which provides potable water service to the Village and towns. Both towns provide water service through special improvement districts (Water Districts) facilitated by separate intermunicipal agreements between the Village and the towns.

The Greene Correctional Facility, located to the northeast of the Greene County Jail Site, is not within a Town Water District; water is provided through a contractual agreement between the New York State Department of Corrections and the Village of Coxsackie that outlines the terms of service and costs. Presently, potable water is supplied through a 10" ductile iron water main owned by the Town of Coxsackie that traverses Plank Road from the east with a connection to the Village water system via Bailey Street as well as a connection to the water main on Kings Road to the north. The Kings Road main terminates north of a culvert that conveys a drainage swale under the road. At the termination point, an 8" ductile iron water line runs southeast through a field and connects to an 8" water line on Plank Road near the westernmost Greene Correctional Facility driveway. Greene Correctional connects to the Plank Road line in the vicinity of its central driveway and operates and maintains a main, valve house, and meter pit prior to an elevated water storage tank through which water is supplied to the facility. The storage tank was installed at a time when water pressure was insufficient to allow for fire flows at the facility. Subsequent improvements to the Village and Town water systems as well as operational changes instituted by Greene Correctional have rendered the elevated water storage tank unnecessary for fire flows; nevertheless, it remains in operation.

The water line that traverses the field from Kings Road to Plank Road has been subject to numerous breaks over the years due to soil conditions affecting the ductile iron pipe. The existing water loop that provides water service to Greene Correctional Facility consists of both 8" and 10" service lines. Due to the uneven size, it is suspected that the majority of flow to Greene Correctional is via the 10" water line on Bailey Street and 8" line on Plank Road. In addition, the 8" water line on Kings Road is extended south past its termination point via a small 4" service lateral that serves a number of homes on Kings Road. This line was privately installed, turned over to the Town, and is buried deeply, inadequately sized and subject to frequent breaks.

The Coxsackie Correctional Facility, located to the north of the Greene County Jail site, is supplied with water via an on-site State-owned water system which includes on-site wells and a water treatment plant and an off-site backup supply at Bronck Lake. The Coxsackie Correctional system also serves as an emergency backup connection to the Greene Correctional Facility water system. Review of New York State Department of Health records indicates that the capacity of the Coxsackie Correctional Facility water system is limited to the demands of the existing facility and thus is not a viable source of water for the proposed Greene County Jail. The Department of Health further reports that the emergency interconnection between the Coxsackie and Greene facilities is less than robust.

3.7.1.2 Sewer

Both Greene and Coxsackie Correctional Facilities collect sanitary wastewater on-site through a series of small pump stations and force mains as well as gravity sewers. Wastewater is directed on each site to a central location where it is processed through mechanical fine screens to remove solids which are collected in on-site receptacles, the contents of which are landfilled. After screening, the wastewater is pumped via dedicated on-site pump stations to a sewer force main owned by the Town of Coxsackie located on Plank Road which crosses the railroad tracks and continues east on Sunset Boulevard and New Street in the Village, eventually contributing flow to the Village wastewater treatment plant located on South River Street on the Hudson River.

Similar to the function of the water system, the Village provides treatment of wastewater from properties located within the Village as well as certain geographic areas in the towns of New Baltimore and Coxsackie. The towns operate special improvement districts (Sewer Districts) which contract for services with the Village of Coxsackie. As with the provision of water service, neither Greene nor Coxsackie Correctional Facilities are located within Town Sewer Districts; rather, conveyance and treatment of wastewater is facilitated by inter-municipal agreements between the correctional facilities and the Village.

The Village of Coxsackie sewer system consists of a collection system with three remote pump stations and accompanying force mains and gravity sewers as well as a wastewater treatment plant. The Village WWTP was initially constructed in 1971 and consisted of a contact stabilization activated sludge process incorporating influent screening, influent pumping, settling, sludge dewatering and disinfection. The 1971 system was permitted for 0.75 million gallons per day (mgd) on a 30 day average basis. In 1996, portions of the facility were upgraded to 1.25 mgd with an additional aeration basin, aeration system, secondary clarifier and disinfection chamber. This upgrade also included modifications to existing process tanks. The existing facility discharges treated effluent to the Hudson River through a combination of 14" and 18" outfall piping under NYSDEC SPDES Permit Number NY-0033545. The existing facility is permitted to discharge 1.25 mgd on a 30 day average basis. Current flows average 850,000 gpd; however, the sewer system is subject to significant infiltration and inflow during wet weather events resulting in peak

flows at or above the plant's hydraulic capacity as well as discharges of untreated wastewater combined with stormwater into the environment at the remote pump station sites.

As a result, the Village wastewater system is currently subject to an Order on Consent executed by the NYSDEC and the Village which mandates repairs to the Village system and incorporates a moratorium on new connections to the sewer system until the repairs that eliminate the Sanitary Sewer Overflows (SSOs) are functional. New connections to the system are also permitted through the conduct of mitigation activities that result in reducing SSOs in an amount exceeding the estimated introduction of new wastewater to the system. The Village has conducted a detailed engineering analysis and developed a \$10.3 million wastewater improvement project. Engineering design will occur in the fall 2016 through mid-year 2017 with bidding of improvements planned for summer 2017 and construction to occur from late 2017 through 2018.

3.7.1.3 Police, Fire, Emergency, and Health Care Services

Law enforcement in the Town of Coxsackie is primarily met by the Greene County Sheriff's Department and New York State Police. The Village of Coxsackie Police Department is primarily focused on law enforcement within the Village, however they provide mutual aid support outside the Village boundaries.

The Greene County Sheriff's Department is currently located on Bridge Street in the Village of Catskill and maintains road patrols throughout the county. In addition, the Towns of Coxsackie, Athens and New Baltimore jointly contribute funding to New York State for provision of a local State Police sub-station located on Route 9 near the Coxsackie Correctional Facility.

Fire protection services in the Town and Village are provided by volunteers that belong to one of several fire companies. In the Town, fire protection is provided by two companies that operate as Fire Protection Districts funded directly by the Town's general budget. The Earlton Fire Department provides service west of the Thruway and the Coxsackie Hose Company #3 serves the area east of the Thruway, including the Village. Although the two companies act as independent units, both participate in the Greene County Mutual Aid program, providing support to others when additional manpower or equipment is needed.

In late 2006 the Town and Village of Coxsackie developed a strategy to insure that the community would have effective Emergency Services coverage. Under the plan, the Town of Coxsackie would take over the EMS service responsibility with the formation of a municipal ambulance service that would include paid staff as well as volunteers. The Coxsackie Rescue Squad, located at 117 Mansion Street next to the Village offices, transferred its assets, ambulance and associated equipment, to the Town. The local ambulance service is supplemented by Town and Village participation in the county paramedic service.

Local emergency services in Greene County are supplemented by a paid paramedic service run by a non-profit EMS corporation that works at the county scale. Each community contributes to the budget for this organization on a use basis, and is provided access to a paramedic staffed fly car that supplements local rescue squads as needed for the more critical patients. To facilitate participation in Greene County EMS, the Town of Coxsackie established a formal ambulance district in 2006 to allow for establishing a taxing structure to support EMS service.

The closest hospital serving the proposed jail site is Columbia Memorial Hospital in Hudson, New York. Columbia Memorial serves more than 100,000 residents in Columbia, Greene and northern Dutchess counties. The hospital focuses on advanced surgery, primary care and health-based education. It is a 192-bed acute care facility and also operates a 120-bed long-term care facility as well as numerous outlying primary care centers and outpatient specialties centers. The hospital has recently invested more than \$20 million in new facilities and equipment including surgical instrumentation, patient information systems and medical imaging technologies. The Kellner Wing houses state-of-the-art emergency and surgical departments. An advanced computer system in the Emergency Department reduces patient waiting time, assists doctors and nurses in tracking patient care, and is also being used as a "preparedness tool" to help track health information and identify public health emergencies.

3.7.1.4 Telecommunications, Electricity and Natural Gas

The State Telephone Company provides local, long distance, Internet and fiber service in the vicinity of the project. Their existing fiber line terminates at a box in the vicinity of the County Route 42/Route 9W intersection which then serves Coxsackie and Greene Correctional Facilities.

Central Hudson Electric & Gas Corporation (CHE&G) is the provider of both electricity and natural gas in the project area. There are currently CHE&G electrical power lines along the west side of Route 9W across from the project site. The electric system in the area is ultimately interconnected with the main transmission system of the Independent System Operator of New York, Inc. (ISONY), which operates the bulk power generation and transmission system in New York, through major transmission lines owned by National Grid USA (formerly Niagara Mohawk Power Company).

The closest gas distribution lines are located along Kings Road and Plank Road to the north with a connection to Coxsackie Correctional Facility. Central Hudson also operates a gas turbine near its substation in Coxsackie to provide voltage support for the local system as needed during periods of peak demand. Generally, the Central Hudson natural gas system is well situated for delivery of natural gas supplies from outside its service territory, having interconnections with four interstate natural gas pipelines: the CNG, Iroquois and Tennessee pipelines, which intersect near the Wright Hub northwest of the Park, and the Algonquin pipeline, which feeds the southern portion of the Central Hudson service territory.

3.7.2 Potential Impacts

3.7.2.1 Water Impacts

The water supply for the proposed Greene County Jail will be provided by the Village of Coxsackie water system through the extension of existing publicly owned infrastructure in the vicinity of the site. The recently upgraded Village water plant has a permitted capacity of 2 million gpd, a current demand of less than 600,000 gpd, and excess capacity of approximately 400,000 gpd. The demand for 22,500 gpd of potable water by the proposed Greene County Jail project will not significantly diminish the excess capacity of the Village water supply.

Given the existing configuration of water mains in proximity to the proposed Greene County Jail site, there are several alternatives for the extension of water service to the site. For the purposes of conceptual planning, improvements to the water line on Kings Road, elimination of the cross-field water line and new service lines along Plank Road and through Coxsackie Correctional Facility property are recommended.

The water supply for the proposed jail could be provided by replacing the 4" diameter service line on Kings Road with a new 8" water line that extends from the end of the existing 8" line to Plank Road. The existing 8" line that traverses the field would be eliminated. A new 8" line would be installed along Plank Road from Kings Road to the end of the existing 8" water line near the Greene Correctional Facility westernmost driveway. A water main would be extended from Plank Road through the lands of the Coxsackie Correctional Facility to the proposed Greene County Jail site. This main could also be configured to allow Greene Correctional to have an emergency backup or permanent connection to the Town/Village system, and to replace or augment the existing emergency connection to Coxsackie Correctional Facility.

The Village of Coxsackie, Town of Coxsackie, and Greene County will enter into an inter-municipal agreement that will outline the operational requirements and financial conditions of water supply to the new jail. Implementation of the proposed concept would require cooperation and cost sharing between the County and the Town and Village of Coxsackie and the Department of Corrections. Preliminary discussions with each entity indicate that such cooperation and cost sharing should be explored due to the many benefits offered to all parties through this method of water service for the County Jail. The benefits include:

- The Town of Coxsackie will eliminate a failing water line and run a new water line down Kings and Plank Roads to create a loop with the existing line serving Greene Correctional.
- Coxsackie Correctional can connect to the new water line extension in the vicinity of their existing water treatment plant to serve as a backup or permanent water supply.
- Fire hydrants can be provided along the new water line to benefit Coxsackie Correctional.
- The Village of Coxsackie gains a water customer in the proposed Greene County Jail.
- Greene County is provided with a reliable water supply for the new jail.

3.7.2.2 Sewer Impacts

Wastewater conveyance and treatment for the proposed Greene County Jail will be provided by the Village of Coxsackie through extension of existing publicly owned infrastructure located in the vicinity of the site. Aside from the Village wastewater collection and conveyance system, there are no other reasonably proximate large-scale wastewater collection and treatment systems that could service the proposed jail.

The estimated wastewater flow for the proposed Jail is 22,500 gpd to be directed to the Town of Coxsackie sewer system and then to the Village of Coxsackie wastewater treatment plant for treatment and discharge to the Hudson River. The existing Village WWTP is permitted to discharge 1.25 mgd on a 30 day average basis. Current flows average 850,000 gpd; however, the sewer system is subject to significant infiltration and inflow during wet weather events resulting in peak flows at or above the plant's hydraulic capacity as well as discharges of untreated wastewater combined with stormwater into the environment at the remote pump station sites.

As discussed in **Section 3.7.1.2** the Village wastewater system is currently subject to an Order on Consent executed by the NYSDEC and the Village which mandates repairs to the Village system and incorporates a moratorium on new connections to the sewer system until the repairs that eliminate the Sanitary Sewer Overflows are functional. New connections to the system are also permitted through the conduct of mitigation activities that result in reducing SSOs in an amount exceeding the estimated introduction of new wastewater to the system. The Village has conducted a detailed engineering analysis and developed a wastewater improvement project anticipated to be completed in 2018.

The proposed jail site is located south west of the Coxsackie Correctional Facility and given that this facility is connected to the Town of Coxsackie force main, connection options for the new jail are available. While the two State Correctional Facilities were required to install mechanical fine screens due to the character of their waste streams, the waste stream from the proposed jail is assumed to be similar to domestic sewage and a mechanical fine screen is likely unnecessary.

Given the very flat topography and the fact that the sewer line on Plank Road is a force main, it is envisioned that the proposed jail will utilize a small on-site pump station with a force main to direct the jail wastewater to a point of interconnection with the Plank Road force main.

The Village and Town of Coxsackie and Greene County will enter into an intermunicipal agreement that will outline the operational requirements and financial conditions of conveyance and treatment of wastewater from the new jail. Greene County will benefit from connecting the new jail to the Town and Village sewer systems, and the communities will benefit from a new customer that will share in the costs of operations and maintenance of the sewer system.

3.7.2.4 Police, Fire, Emergency, and Health Care Services

The proposed jail site will have minimal need for police services provided by the New York State Police as the Greene County Sheriff's Department will operate the facility and provide on-site security at all times.

Several issues need to be considered to identify the impacts upon local fire departments and emergency services. The new jail facility will be designed and constructed of flame retardant materials. It will have a hydraulically designed fire protection system and be fully sprinklered to provide full fire protection as required by NFPA 13. Fire protection water will be stored in a dedicated 50,000 gallon underground storage tank. The tank will supply a wet well that will be drawn by a fire pump located in an exterior pump house. Externally, fire hydrants will be located to ensure easy access for connection to pumper trucks and optimal proximity to the structures.

In the event that emergency medical services are required at the jail facility, the Town of Coxsackie Ambulance Service or Greene County EMS paramedics will be called for transport to Columbia Memorial Hospital in Hudson, New York.

3.7.2.5 Telecommunications, Electricity and Natural Gas

State Telephone has indicated that extending fiber down Route 9W to the new Greene County Jail will be a simple aerial run of about 10-15 poles and a road crossing. Discussions with Central Hudson Gas & Electric Corporation are ongoing. It is anticipated that the new jail will require less than 1,460,000 KWH/year. Primary electric service will come from a new utility pole on Route 9W and wiring will be run underground to a new utility owned pad mount transformer outside the main electrical room. The transformer will feed a new main distribution switchboard in the electrical room and the fire pump. It is anticipated that the new jail will require less than 900 MBTU/year of natural gas and that the service line will connect to the existing gas main on Plank Road at the entrance to Coxsackie Correctional Facility. The gas service line will run southward through Coxsackie Correctional to the new jail site parallel to the new potable water line and sanitary forcemain.

3.7.3 Mitigation Measures

3.7.3.1 Water

The Village of Coxsackie water plant has more than adequate capacity to provide 22,500 gpd of potable water for the Greene County Jail. Extension of the water lines to the site will be reviewed and approved by the New York State Department of Health. The review will take into account sanitary provisions, protection of the integrity of the existing water system, capacity of the water plant and system, and other similar factors.

A potential impact to the hydraulics of the water system for the fire suppression system will be mitigated by the installation of an on-site 50,000 gallon dedicated water storage tank and fire pump station that will provide adequate flow and pressures for a wet sprinkler system for the structures. Furthermore, the Town and Village will require that firefighting apparatus is installed and operated in such a way as to prevent backflow into the potable water system and to protect the integrity of the distribution system (e.g. pressure drops in the system will not be permitted).

3.7.3.2 Sewer

Sewer extensions are reviewed and approved by the NYSDEC through implementation of 6 NYCRR Part 750. In the case of this extension, the timing of the Greene County Jail connection will dictate the steps in the process to secure regulatory approval for the extension. If the connection is made at a time such that the Village's overall improvement project has reached a stage of completion whereby SSOs have been eliminated, it may be possible for the extension to be approved by NYSDEC without mitigation required by the Village's Order on Consent.

However, if the extension is connected to the Town/Village system prior to the elimination of the SSOs, mitigation may be required. At this time, the County is working with the State of New York, the Town and the Village to determine if a contribution by the County is required. It would most likely involve sewer lining or replacement of sewer lines and/or manholes. If such a contribution is required it may be bundled with the overall wastewater improvement project.

3.7.3.3 Police, Fire, Emergency, and Health Care Services

Greene County shall pay a pro-rata share of any increased costs related to demands on police, fire, emergency and health care services attributable to the jail site.

3.7.3.4 Telecommunications, Electricity and Natural Gas

No mitigations are needed as the existing utility and communication systems have sufficient capacity to serve the new Greene County Jail.

3.8 COMMUNITY CHARACTER

3.8.1 Existing Conditions

3.8.1.1 *Aesthetics and Noise*

Aesthetic Conditions

Aesthetic conditions in the area are strongly impacted by the presence of the two existing New York State Correctional Facilities along Route 9W and Plank Road. These facilities dominant the immediate project landscape and the view from the NYS Thruway due to their size and nighttime lighting. The project area is otherwise characterized by flat agricultural fields and several residential and commercial properties located on the west side of Route 9W. A National Grid transmission line borders the eastern edge of the site, and a wooded hillside rises in the background to the southeast. The Pieter Bronck House and Bronck Farm 13 Sided Barn, two historic structures listed on the National Register of Historic Places, are located on Peter Bronck Road northwest of the site and behind a large self-storage facility on Route 9W.

Noise Conditions

The site is comprised of an open field surrounded by limited residential, commercial and institutional uses with significant highways (Route 9W and I-87 to the west) in the vicinity. Because there are currently no direct sources of noise on the site, noise monitoring was not conducted. However, published noise data indicates that a vacant field in a suburban to rural area generally has a noise level between 50 and 80 decibels (dBA) with an average of 60 dBA. This ambient noise level is created by the rustling of grass and trees in the wind, wind itself, vehicle noise from adjacent highways and agricultural machinery, and the common sounds of animals (e.g. birds and insects). For informational purposes, the threshold of human hearing is around 10 dBA and a gas lawn mower at 3 feet generates approximately 100 dBA. Heavy commercial traffic at 300 feet generates 70 dBA of sound.

3.8.1.2 *Historic and Archeological Resources*

Hartgen Archeological Associates (Hartgen) conducted a comprehensive *Phase I Archeological Investigation and Phase II Site Evaluation* of the 50 acre Greene County Jail site during 2015 and 2016. A copy of this report is included in **Appendix D** and has been submitted to the New York State Office of Parks, Recreation and Historic Preservation (OPRHP) for review and approval. OPRHP has assigned the new Greene County Jail project number 16PR02420.

The initial Phase I investigation identified three precontact site locations. The subsequent Phase II site evaluation determined that one of these sites is a National Register eligible site that has been named the Greene County Correctional Facility Precontact (GCCF) Site.

The GCCF Site, Locus 1 contains a lithic workshop that utilized chert from nearby Flint Mine Hill. The lithic material was heat treated during the process of making tools and the site has the potential to yield important information about the technological strategies involved with the production of stone tools. In addition, these strategies were used on chert that was sourced from one of the largest precontact chert quarries in the Northeast. Evidence that fire was used at the site implies that an array of other forms of data could be present. If the fire was also used to cook, there may be faunal and floral remains that would provide insight on the diet of the individuals, what the environment was like at the time, and what other types of behaviors occurred at the site besides the making of stone tools.

3.8.2 Potential Impacts

3.8.2.1 Aesthetics and Noise

Aesthetics Assessment

Visual impact is assessed in terms of the anticipated change in visual resources, including whether there would be a change in character or quality of the view with respect to significant scenic and aesthetic resources. The proposed Greene County Jail will not affect the character or quality of view with respect to any identified scenic or aesthetic resources. In addition, the jail complex will not be visible from the historic Pieter Bronck House or Bronck Farm 13 Sided Barn as it will be screened by existing vegetation and the self-storage facility on Route 9W.

The primary visual impact of the project will be conversion of a former agricultural field to an institutional facility with associated driveways, parking, landscaping and stormwater features. However, construction of the new jail facility is in keeping with the existing built environment, namely the two adjacent NYS correctional facilities. Preliminary architectural renderings indicate the Greene County Jail will be an attractive addition to the community. The facades facing Route 9W will be primarily brick with a glazed main public entry and landscaped courtyard.

Site lighting will be carefully designed to minimize glare and to the extent practicable will be 'dark sky' compliant. Exterior lighting will utilize LED fixtures with full-cutoff distribution to reduce the effects of light pollution. Lighting will include pole mounted fixtures in parking areas and roadways. Wall mounted lights will be utilized to illuminate the outer perimeter of the building and their locations will be selected to minimize glare.

Noise Assessment

Potential impacts to the ambient noise setting include noise generated during construction and noise generated during operations of the Greene County Jail. The following factors were considered in determining the potential for a change in the existing noise environment:

- Replacement of soft surfaces like existing grass fields with parking areas and buildings
- Heating and ventilation systems for the proposed buildings
- Traffic volume, speed, or vehicle distribution changes to the affected roadway network
- Construction related noise and potential mitigation

Noise during construction will be generated at above current levels. The sounds of vehicles, heavy equipment, earth moving, building construction and people are expected. Fortunately, due to soil conditions, blasting, pile driving, the ripping of rock and similar very loud activities will not be conducted.

After construction, it is expected that noise levels will increase slightly due to the changes in terrain and introduction of hard surfaces such as buildings and parking lots. Traffic noise level changes due to the increase in traffic are expected to be less than 1 dBA and not be discernable to human hearing. The introduction of heating and ventilation equipment and the operating noises associated with the proposed development will increase the noise level on the site.

Receptors to the increase in noise include a number of residential parcels that border the site. No receptor is close enough to the site to substantially perceive the 1 dBA increase in noise that is predicted. The site is relatively isolated and landscaping is anticipated to buffer the noise generated on the site during operations.

3.8.2.2 Historic and Archeological Resources

A buffer area surrounding the environmentally sensitive GCCF site has been delineated by Hartgen as an avoidance area. The design of the new jail specifically avoids this approximately ½ acre area and it will not be disturbed during construction or operation of the facility.

3.8.3 Mitigation Measures

3.8.3.1 Aesthetics and Noise

Noise Mitigation

Noise levels during and after construction are anticipated to increase slightly, although not to levels that could be harmful to humans or wildlife. Mitigation measures are planned to temper the expected minimal increases in noise.

During construction, noise levels will be mitigated by not allowing vehicles and equipment to idle for long periods of time, reducing trips of vehicles and equipment by following a thoroughly considered construction sequence that takes into account material handling, lay down areas, storage areas and phasing of clearing and construction works. In addition, construction hours will be limited to natural daylight hours; thus avoiding excessive noise during times when residents are home and enjoying peaceful quiet. Operational noise levels will be tempered through site design elements and landscaping which absorb sound waves before reaching receptors.

Aesthetics Mitigation

Aesthetics mitigation will not be required. The proposed jail project is in keeping with the surrounding built environment and there are no impacts on significant scenic or aesthetic resources.

3.8.3.2 Historic and Archeological Resources

As mitigation for impacts to archeological resources, an Avoidance Plan has prepared for the GCCF Site, Locus 1, with both short-term and long-term avoidance measures. Hartgen archeologist Adam Luscier (aluscier@hartgen.com or 518.588.2033) will be the Avoidance Plan Coordinator for the project. A copy of the Avoidance Plan is included in the *Phase II Site Evaluation* in **Appendix D**.

Short-Term Avoidance

Short-term avoidance involves the protection/preservation of the site during construction and Greene County will ensure that the following measures are implemented:

- At the preconstruction meeting, the Engineer in Charge (EIC) shall be notified regarding the need to protect/avoid the site.
- Temporary fencing (orange snow fence) shall be installed around the limits of the site prior to any clearing or construction activities within the Area of Potential Effect (APE), and shall be maintained until all construction has ceased. The specifications for the fencing should be made part of the project construction plans and drawings.
- The fence should encompass no less than $\pm 2,139$ square meters (23,024 ft²).
- To ensure the fence is erected on the correct location, construction plans and drawings should illustrate the avoidance fence with the state plane coordinates as shown on Map 11 of the Phase II Site Evaluation.
- Signs noting “Environmentally Sensitive Area - No Access” shall be installed on the fencing.

- Inadvertent construction impacts are to be reported to the Avoidance Plan Coordinator and the State Historic Preservation Office (SHPO) immediately. Activity shall cease in the vicinity of the site so the damage can be assessed and a recommendation provided to remediate the situation.
- Once construction is fully completed, the protective fence can be removed.

Long-Term Avoidance

Long-term avoidance involves the preservation of sites after construction is complete and the client is to ensure that the following measures are implemented:

- A deed restriction should be completed for the site area that covers 2,139 square meters (23,024 ft²). The deed restriction for the GCCF Site, Locus 1 should be filed with the Greene County Clerk and the Town of Coxsackie.

If the SHPO agrees with the avoidance plan and Greene County agrees to execute the avoidance plan as stated above no further archeological work is recommended.

4.0 ALTERNATIVES ANALYSIS

4.1 ALTERNATIVE SITES

When Greene County initiated planning for the new jail project they investigated the possibility of expanding the current facility on Bridge Street in the Village Catskill. However, it was quickly determined that the 0.4 acre site is too constrained to make this a feasible alternative and it posed a logistics problem related to housing the inmates during construction of an addition. Greene County also reviewed improved County owned properties but none had characteristics that supported siting the new jail.

In 2015 New York State offered to transfer approximately 50 acres of land in the Town of Coxsackie to Greene County at virtually no cost for construction of a new jail. The proposed site seemed to be an ideal location due to its proximity to the existing State correctional facilities and to sewer and water infrastructure. Further alternatives were therefore not investigated.

4.2 NO-ACTION ALTERNATIVE

As described in **Section 1.2**, the existing Greene County Jail is the oldest jail in New York State and has exceeded its useful life. The facility was built in 1905 and is too small to house the existing or projected inmate population. If the County takes the No-Action Alternative, they must continue to board excess inmates at surrounding facilities at a cost to taxpayers of approximately \$1 million per year. Costs will continue to rise due to poor building infrastructure, outdated technology and inefficient energy systems. The administration of the jail and Sheriff's department will be hindered in execution of their jobs by the structural, capacity and operational challenges of the deteriorating facility, which at some point in the future will require replacement.

5.0 UNAVOIDABLE ADVERSE IMPACTS

NYCRR Part 617.9(b)(5)(iii)(b) states that an environmental impact statement must identify and discuss adverse environmental impacts that cannot be avoided or adequately mitigated if the proposed action is implemented where applicable and significant.

Potential environmental impacts associated with the construction of the new Greene County Jail have been identified in a number of areas including grassland habitat, wetlands, archeological resources, and wastewater treatment.

Section 3.0 incorporates a planning level analysis of these impacts and offers a variety of sound mitigation measures to demonstrate that the adverse nature of these actions can be alleviated to nominal levels.

Further development of a Habitat Mitigation Plan and a potential Wetland Mitigation Plan incorporating details as well as requirements and restrictions for habitat and wetland mitigation are anticipated as a result of the permitting process.

As such, unavoidable adverse impacts associated with the proposed action are unlikely. All potentially significant adverse effects have been identified and considered. The Greene County Jail project can be designed and constructed using demonstrated methods that will minimize impacts and in some cases, bring value to the environment beyond the project boundaries, including planned improvements to the County Route 42 /US Route 9W intersection and the Town of Coxsackie water distribution system.

6.0 IRREVERSIBLE AND IRRETRIEVABLE RESOURCE COMMITMENTS

A number of facets of the proposed project involve the irreversible and irretreivable commitment of resources. These involve the commitments made during construction as well as operations of the proposed project.

During construction, water resources and raw materials such as concrete, wood, gravel and other construction supplies will be permanently committed. In addition, energy resources required to operate construction equipment will be irretreivably committed.

The use of the land for this project is an irreversible commitment. With approved site plans and development of the project, the site cannot be used for any other purpose and it is irreversibly committed. The project will replace approximately 6.25 acres of existing vegetation with impervious surfaces. The remaining land within the developed area will be graded and revegetated and either left as open space or utilized for stormwater controls. While approximately 17.5 acres of grassland will be irretreivably committed to development of the site, at least as much similar landscape will be irreversibly committed to conservation and preservation resulting in a neutral or at best positive environmental impact.

During the operational phase of the project, resources such as energy for building heating and cooling, lighting and other equipment operations will be permanently and irretreivably committed. However, a key objective of Greene County is to encourage and accommodate approaches to efficient utilization of energy resources within the project.

7.0 EFFECTS ON USE AND CONSERVATION OF ENERGY

The proposed action involves the use of energy. The consumption of fossil fuels and other power sources will be required by the Greene County Jail project during both the construction and operational phases. Construction activities will involve the consumption of fossil fuels to operate construction equipment and to transport construction workers and materials to the project site. This activity causes a temporary and unavoidable increase in energy use. Some of the activities involving the use of energy during construction are clearing, grubbing, excavation, grading, and building and road construction. Electricity and fossil fuel powered pumps will be needed to provide water during some construction phases such as ground compaction during road construction and as construction vehicle washing areas.

Once constructed, the staff will use energy in the form of fossil fuels for transportation to and from the site. The new Greene County Jail will be designed to meet current energy codes and ASHRAE Standard 90.1-2010 Energy Standard for Buildings. The SMRT *Schematic Design Report* includes a description of the building system features that will enhance energy performance:

- **Air Barrier.** The jail facility will be equipped with a full air barrier between interior and exterior, fully flashed at wall and roof transitions, to foundations, and at openings. By provision of such a system, uncontrolled air exchanges between interior and exterior will be limited and so improve energy efficiency.
- **Moisture Control.** A moisture barrier will be an integral part of the air barrier and insulation system to control moisture migration through the building enclosure. Humidification is not proposed to be provided in the building which will limit the impacts of moisture migration through walls and roofs. Wall drying will be a consideration in the placement of the moisture barrier and its performance. As a basis of the Schematic Design, spray-applied urethane foam insulation will perform this function within the wall system with a perm rating that approximates 1 but which is less at the insulation thickness proposed.
- **Thermal Enclosure.** A high level of insulation between interior conditioned spaces and the exterior is proposed.
 - With a 6” roof insulation system composed of rigid polyisocyanurate insulation and cover board, an R-Value of 35 is to be provided, greatly reducing heat loss and gain through the roof system.
 - Walls are proposed to be insulated with 3” of rigid insulation. Depending upon the wall system selected, this will result in a wall performance of between R16 and R21. Wall assembly selection will depend upon relative costs of the alternatives:
 - A. Multi-wythe concrete masonry with 3” of spray applied foam insulation, or
 - B. Concrete sandwich panel construction with 3” rigid polystyrene insulation.

- Foundations will be insulated with 2” of rigid polystyrene insulation on the wall interior to a depth of 4’ below floor level. A thermal break at the slab edge will enhance the performance of this assembly.
- Interior slab thermal performance will be enhanced with under-slab insulation. Under-slab insulation will be 3” rigid polystyrene insulation extended from outside walls to 4’ inside of the building perimeter.

- **Ventilation** will be provided mechanically via the HVAC systems. Ventilation rates will meet the most stringent requirement of all applicable codes and will provide all make-up air necessary for building exhaust systems. All air handling systems will allow for economizer cooling. Automatic control sequences will maintain minimum ventilation quantities except when outside air can be utilized for economizer cooling.

- **Energy Recovery.** Where fresh air exchanges with the exterior are at a high rate and where practical to collect exhausted air, energy recovery of both sensible and latent heat will be provided by energy wheel sections within the air handlers.

- **Lighting.** All lamps will be selected for energy performance.
 - Exterior site lighting will be LED lamps for energy performance and long lamp life.
 - Interior lighting will be LED lamps for energy performance and long lamp life.
 - Lighting controls in offices and common use rooms will be provided by occupancy sensors to turn off lighting within rooms not being used.

- **Motors.** All large motors will be selected as high-efficiency motors and, where beneficial, will be controlled by Variable Frequency Drives (VFD). VFD controls allow the energy use of a motor to match the demand being placed on the motor, saving energy when the demand is less than 100 percent of its capacity.

APPENDIX A

Traffic Evaluation

September 12 2016

Ms. Mary Beth Bianconi
Delaware Engineering
28 Madison Avenue Extension
Albany, New York 12203

RE: Traffic Evaluation, Greene County Jail, US Route 9W, Town of Coxsackie, Greene County, New York; CM Project No. 116-110

Dear Ms. Bianconi:

Creighton Manning Engineering, LLP (CM) has conducted a Traffic Evaluation for the proposed *Greene County Jail* facility located on the east side of US Route 9W, just south of the Coxsackie State Correctional Facility in the Town of Coxsackie. This evaluation is based on the "Conceptual Site and Grading Plan" dated December 2015 prepared by your office, included under Attachment A.

1.0 Project Description

The project includes the construction of a 130 bed county jail which will replace the existing 56 bed jail located about 8 miles to the south on Bridge Street in the Village of Catskill. Access to the site is proposed via two full access driveways on US Route 9W, with the northerly driveway serving staff, service, and delivery vehicles and the southerly driveway the main public entrance serving visitors and intake traffic. The proposed project is expected to be completed in 2018 and the location is shown on the google image below.



2.0 Existing Conditions

US Route 9W is a state roadway extending in a north/south direction through Greene County. US Route 9W is classified as a rural minor arterial and based upon the latest available data published by the New York State Department of Transportation (NYSDOT) carries approximately 6,500 vehicles per day. Near the project site, US Route 9W consists of a single travel lane in each direction, paved shoulders, and a posted speed limit of 55 mph. There are no existing sidewalks or pedestrian accommodations provided on US Route 9W in the project vicinity. Land uses surrounding the site include institutional, light industrial, agricultural, residential, and undeveloped land.

Data available from NYSDOT indicates the 85th percentile travel speeds on US Route 9W in the project area are approximately 60 mph. At 60 mph travel speeds the intersection sight distance guidelines presented in the American Association of State Highway Transportation Officials (AASHTO) *A Policy on Geometric Design of Highways and Streets 2011* are between 575 feet and 665 feet and stopping sight distance along US Route 9W is 570 feet. A cursory review of the sight distance at the project site and proposed driveway locations indicates that adequate sight distance is available to meet or exceed the AASHTO recommended distances. To maintain clear lines of site, any proposed landscaping and/or signage related to the site should be placed a minimum of 15-feet back from the travel lane on US Route 9W.

3.0 Traffic Assessment

The existing jail located in Catskill is a 56 bed facility that supports 37 full time staff. The proposed site is a 130 bed facility that is expected to support up to an additional six staff equating to total staff of 43 persons working three eight hour shifts; approximately 14 staff per shift. It is also anticipated that between 12 and 18 sheriff will be at the facility primarily on day shifts Monday through Friday. Visitation during the week will be limited to legal and professional visitations, while public visitation will be limited to the weekends.

Trip generation determines the quantity of traffic expected to travel to and from a given site. The Institute of Transportation Engineers' (ITE) *Trip Generation*, 9th Edition, is the industry standard used for estimating trip generation for proposed land uses based on data collected at similar land uses. ITE *Trip Generation* has limited information available for prison facilities. Based on the total site staffing of 61 persons (43 staff and 18 sheriff) the ITE peak hour trip generation is 26 AM peak hour trips (17 enter, 9 exit) and 14 PM peak hour trips (4 enter, 10 exit). Trip generation estimates were also calculated using the site specific employee and shifting data and is summarized in Table 1. The assessment assumes that a small number of professional visitors may visit the site during the peak hours.

Table 1 – Trip Generation Summary

Employee	AM Peak Hour			PM Peak Hour		
	Enter	Exit	Total	Enter	Exit	Total
43 full time staff 14 per shift	14	14	28	14	14	28
18 sheriff daytime shift	18	0	18	0	18	18
Professional visitation	3	3	6	3	3	6
Total peak hour trips	25	17	42	17	35	52

Table 1 shows that the proposed site is anticipated to generate up to 42 AM peak hour trips and 52 PM peak hour trips. During the peak hour, the majority of the trips will occur at the northerly driveway for staff and service vehicles. The trip generation shown in Table 1 is likely a conservatively high estimate of the peak hour trip generation that may occur at the site based on the assumption that all shift traffic will enter and exit the site during a single hour and when compared to the ITE trip generation which shows the potential for less peak hour trips. Regardless, the site generated trips distributed onto the adjacent roadway network will result in less than the NYSDOT and ITE threshold of 100 site generated vehicles on any one intersection approach which determines the need for detailed off-site intersection analysis. This guidance was developed as a tool to identify locations where the magnitude of traffic generated has the potential to impact operations at off-site intersections and screen out locations from requiring detailed analysis that do not reach the 100 vehicle threshold and are unlikely to require mitigation indicating that the site will be serviced by the existing roadway network. The two proposed site driveway intersections will adequately service the site as unsignalized driveways with single lanes entering and exiting.

On weekends it is anticipated that the staff will continue to service the facility on three eight hour shifts. Public visitation is anticipated to be spread out and likely not focused during a single hour of the day; therefore, the weekday trip generation represented the worst case peak travel conditions at the site. In addition, review of the NYSDOT data shows that traffic volumes on US Route 9W are higher during the weekdays than on the weekends.

It is noted that the site development will include the elimination of the Y intersection leg of Peter Bronk Road (County Road 42) that intersects US Route 9W across from the proposed northerly site driveway. Although this intersection encounters minimal traffic, removal of this skewed intersection will result in a standard intersection layout at the proposed site driveway.

4.0 Conclusions

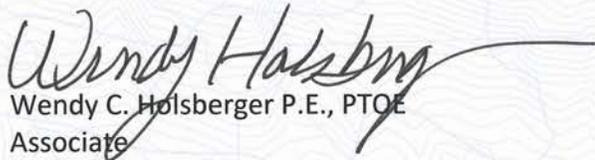
The proposed project includes the relocation of the existing Greene County jail from downtown Catskill to a new site located on US Route 9W south of the existing Coxsackie Correctional Facility in the Town of Coxsackie. The new facility will have 130 beds and be supported 24 hours a day by up to 43 staff on three shifts and approximately 18 sheriff on

weekday day shifts. Weekday visitation to the site will be restricted to professional staff and public visitations will occur on the weekends.

The maximum peak hour trips to the site based on the site specific staffing estimates are anticipated to be 42 during the AM peak hour and 52 during the PM peak hour. The magnitude of the site generated trips is less than the NYSDOT and ITE threshold of 100 site generated vehicles indicating that the site will be adequately serviced by the existing surrounding roadway network. The two proposed site driveway intersections will adequately service the site as unsignalized driveways with single lanes entering and exiting.

If you have any questions regarding the above analysis, please feel free to contact our office.

Respectfully submitted,
Creighton Manning Engineering, LLP


Wendy C. Holsberger P.E., PTOE
Associate

Attachment

N:\Projects\2016\116-110 Greene County Jail\116-110 greene county jail traffic.docx

Attachment A
Conceptual Site and Grading Plan

Greene County Jail
Town of Coxsackie, New York

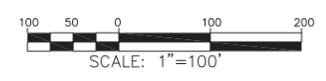
H:\Drawings\Greene County Jail\GC Jail Site Plan 3.dwg, Site 1, 6/27/2016 5:58:06 PM



LEGEND:

SANITARY FORCE MAIN	FM
GRAVITY SEWER	S
WATER LINE	W
NEW CONTOUR	- - - - -
EXISTING CONTOUR	- · - · -
STORM WATER MANAGEMENT	[Blue hatched pattern]

CONCEPTUAL SITE AND GRADING PLAN
SCALE: 1" = 100'



DATE: 12/15
DRAWN BY: T.J.
SCALE: AS SHOWN
REVIEWED BY: MBB
PROJECT NO.: 15-1174
FILE: FILE NAME

DELAWARE ENGINEERING, D.P.C.
CIVIL AND ENVIRONMENTAL ENGINEERING



28 MADISON AVENUE EXTENSION, ALBANY, NY 12203-518, 452, 1290
8-12 DIETZ STREET, SUITE 303, ONEONTA, NY 13820-607, 432, 8073

REVISIONS	
NO.	DESCRIPTION

PROPOSED GREENE COUNTY JAIL SITE
TOWN OF COXSACKIE
GREENE COUNTY, NY COUNTY, NY

CONCEPTUAL SITE AND GRADING PLAN

SHEET: **G1**

WARNING - IT IS A VIOLATION OF NEW YORK EDUCATION LAW SECTION 7209.2, FOR ANY PERSON, UNLESS HE IS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER OR LAND SURVEYOR, TO ALTER THIS DOCUMENT IN ANY WAY. IF ALTERED THE ALTERING PERSON SHALL COMPLY WITH THE REQUIREMENTS OF NEW YORK EDUCATION LAW, SECTION 7209.2.

CONCEPTUAL

APPENDIX B

Army Corps of Engineers Wetland Jurisdictional Determination



DEPARTMENT OF THE ARMY
US Army Corps of Engineers, ATTN: CENAN-OP-RU
Upstate Regulatory Field Office
1 Buffington St., Building 10, 3rd Fl. North
Watervliet, New York 12189-4000

RECEIVED
AUG 31 2015
DELAWARE ENGINEERING

AUG 27 2015

Upstate New York Section

SUBJECT: Permit Application Number NAN-2015-00857-UDA
by Greene County
Town of Coxsackie, Greene County, New York

Mr. Shaun Groden, County Administrator
Greene County
411 Main Street
Catskill, NY 12414

Dear Mr. Groden:

On July 13, 2015 the New York District of the U.S. Army Corps of Engineers received a request for a Department of the Army jurisdictional determination for a 41.07 acre site, currently owned by Greene County. This request was made by Delaware Engineering, DPC, as consultant for Greene County. The site is located in the Hudson River watershed, along NYS Route 9N, in the Town of Coxsackie, Greene County, New York.

The submittal received by this office on July 13, 2015, included a proposed delineation of the extent of waters of the United States within the project boundary. A site inspection was conducted by representatives of this office on July 27, 2015, in which it was agreed that changes would be made to the delineation and that the modified delineation would be submitted to this office. On July 31, 2015 this office received the modified delineation.

Based on the material submitted and the observations of the representatives of this office during the site inspection, this site has been determined to contain jurisdictional waters of the United States based on: the presence of wetlands determined by the occurrence of hydrophytic vegetation, hydric soils and wetland hydrology according to criteria established in the 1987 "Corps of Engineers Wetlands Delineation Manual," Technical Report Y-87-1, and current guidance, that are part of a tributary system to the Hudson River.

These jurisdictional waters of the United States are shown on the drawing entitled "Greene County Proposed Jail Site, U.S. Army Corps of Engineers Wetland Jurisdictional Map", prepared by Delaware Engineering, DPC, dated June 2015 and last revised on July 27, 2015. This drawing indicates that there are 2.13 acres of waters of the United States, including wetlands, within the subject property which are considered to be part of a tributary system to the Hudson River.

It should be noted that, in light of the U.S. Supreme Court decision (Solid Waste Agency of Northern Cook County v. U.S. Army Corps of Engineers, No. 99-1178, January 9, 2001), the remaining wetland shown on the above referenced drawing does not meet the current criteria of waters of the United States under Section 404 of the Clean Water Act. This wetland is identified as Wetland E, and consists of a total of 0.08 acre within the subject property. The Court ruled that isolated, intrastate waters can no longer be considered waters of the United States, based solely upon their use by migratory birds.

This determination regarding the delineation shall be considered valid for a period of five years from the date of this letter unless new information warrants revision of the determination before the expiration date.

This determination was documented using the Approved Jurisdictional Determination Form, promulgated by the Corps of Engineers in June 2007. A copy of that document is enclosed with this letter, and will be posted on the New York District website at:

<http://www.nan.usace.army.mil/Missions/Regulatory/JurisdictionalDeterminations.aspx>

This determination has been conducted to identify the limits of the Corps Clean Water Act jurisdiction for the particular site identified in this request. If you object to this determination, you may request an administrative appeal under Corps regulations at 33 CFR Part 331. Enclosed is a combined Notification of Appeal Process (NAP) and Request For Appeal (RFA) form. If you request to appeal this determination you must submit a completed RFA form to the North Atlantic Division Office at the following address:

James W. Haggerty, Regulatory Program Manager
North Atlantic Division, U.S. Army Engineer Division
Fort Hamilton Military Community
General Lee Avenue, Building 301
Brooklyn, New York 11252-6700

In order for an RFA to be accepted by the Corps, the Corps must determine that it is complete, that it meets the criteria for appeal under 33 CFR Part 331.5, and that it has been received by the Division Office within 60 days of the date of the NAP. Should you decide to submit an RFA form, it must be received at the above address by **OCT 25 2015**. It is not necessary to submit an RFA form to the Division Office if you do not object to the determination in this letter.

This determination may not be valid for the wetland conservation provisions of the Food Security Act of 1985, as amended. If you or your tenant are USDA program participants, or anticipate participation in USDA programs, you should request a certified wetland determination from the local office of the Natural Resources Conservation Service prior to starting work.

It is strongly recommended that the development of the site be carried out in such a manner as to avoid as much as possible the discharge of dredged or fill material into the delineated waters of the United States. If the activities proposed for the site involve such discharges, authorization from this office may be necessary prior to the initiation of the proposed work. The extent of such discharge of fill will determine the level of authorization that would be required.

In order for us to better serve you, please complete our Customer Service Survey located at:

<http://www.nan.usace.army.mil/Missions/Regulatory/CustomerSurvey.aspx>

If any questions should arise concerning this matter, please contact Andrew Dangler, of my staff, at (518) 266-6356.

Sincerely,

A handwritten signature in black ink, appearing to read "Amy L. Gitchell". The signature is written in a cursive, flowing style.

Amy L. Gitchell
Chief, Upstate New York Section

Enclosures

cc: K. Cady-Poulin - NYSDEC Region 4, Schenectady
Town of Coxsackie
E. Fahrenkopf - Delaware Engineering, DPC



Greene County Proposed Jail Site
U.S. Army Corp of Engineers
Wetland Jurisdictional Map
June 2015/Revised July 27, 2015



Total Site Acreage/Jurisdictional Area 41.07 acres

WETLANDS AREA (Acres)
Wetland A: 0.571
Wetland B: 1.211
Wetland C: 0.005
Wetland D: 0.336
Wetland E: 0.08 (Isolated Non Jurisdictional)
Wetland F: 0.195
Wetland G: 0.069
Wetland H: 0.098
Total Jurisdictional Wetland Acres: 2.128
Total Non-Jurisdictional Wetland Acres: 0.08

Legend

	Wetland Boundary
	Wetland Delineation Point
	Jurisdictional Determination Limit



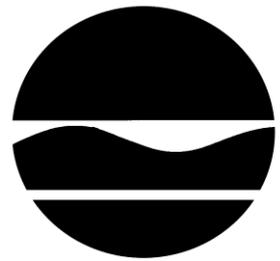
Prepared by: Delaware Engineers OPC, June 2015
Source: NYS Digital Ortho Imagery, Spring 2009
Katerini Associates Property Boundary Survey April 2015

APPENDIX C

Endangered Species

NYSDEC Natural Heritage Correspondence
USFWS IPaC Consultation

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
Division of Fish, Wildlife & Marine Resources
New York Natural Heritage Program
625 Broadway, 5th Floor, Albany, New York 12233-4757
Phone: (518) 402-8935 • **Fax:** (518) 402-8925
Website: www.dec.ny.gov



April 28, 2016

Kathleen Tatara
Delaware Engineering, D.P.C.
28 Madison Avenue Extension
Albany, NY 12203

Re: New Greene County Jail
Town/City: Coxsackie. County: Greene.

Dear Kathleen Tatara:

In response to your recent request, we have reviewed the New York Natural Heritage Program database with respect to the above project.

Enclosed is a report of rare or state-listed animals and plants, and significant natural communities that our database indicates occur, or may occur, on your site or in the immediate vicinity of your site.

For most sites, comprehensive field surveys have not been conducted; the enclosed report only includes records from our database. We cannot provide a definitive statement as to the presence or absence of all rare or state-listed species or significant natural communities. Depending on the nature of the project and the conditions at the project site, further information from on-site surveys or other sources may be required to fully assess impacts on biological resources.

Our database is continually growing as records are added and updated. If this proposed project is still under development one year from now, we recommend that you contact us again so that we may update this response with the most current information.

The presence of the plants and animals identified in the enclosed report may result in this project requiring additional review or permit conditions. For further guidance, and for information regarding other permits that may be required under state law for regulated areas or activities (e.g., regulated wetlands), please contact the appropriate NYS DEC Regional Office, Division of Environmental Permits, as listed at www.dec.ny.gov/about/39381.html.

Sincerely,

A handwritten signature in black ink that reads "Andrea Chaloux". The signature is written in a cursive, flowing style.

Andrea Chaloux
Environmental Review Specialist
New York Natural Heritage Program



**The following state-listed animals have been documented
at your project site.**

The following list includes animals that are listed by NYS as Endangered, Threatened, or Special Concern; and/or that are federally listed or are candidates for federal listing. The list may also include other rare animals and rare plants found with listed animals.

For information about any permit considerations for your project, please contact the Permits staff at the NYSDEC Region 4 Office at dep.r4@dec.ny.gov, 518-357-2456. For information about potential impacts of your project on these species and how to avoid, minimize, or mitigate any impacts, contact the Region 4 Wildlife staff at 518-357-2355.

The following species have been documented at your project site. Potential onsite and offsite impacts from the project may need to be addressed.

<i>COMMON NAME</i>	<i>SCIENTIFIC NAME</i>	<i>NY STATE LISTING</i>	<i>FEDERAL LISTING</i>
Birds			
Northern Harrier <i>Nonbreeding</i>	<i>Circus cyaneus</i>	Threatened	11128
Short-eared Owl <i>Nonbreeding</i>	<i>Asio flammeus</i>	Endangered	11089

The following animals have been documented at your project site. While not listed by New York State as Endangered or Threatened, they are of conservation concern to the state and are considered rare by the New York Natural Heritage Program.

<i>COMMON NAME</i>	<i>SCIENTIFIC NAME</i>	<i>NY STATE LISTING</i>	<i>HERITAGE CONSERVATION STATUS</i>
Animal Assemblages			
Raptor Winter Concentration Area <i>Nonbreeding</i>			12207

This report only includes records from the NY Natural Heritage database. For most sites, comprehensive field surveys have not been conducted, and we cannot provide a definitive statement as to the presence or absence of all rare or state-listed species. Depending on the nature of the project and the conditions at the project site, further information from on-site surveys or other sources may be required to fully assess impacts on biological resources.

If any rare plants or animals are documented during site visits, we request that information on the observations be provided to the New York Natural Heritage Program so that we may update our database.

Information about many of the listed animals in New York, including habitat, biology, identification, conservation, and management, are available online in Natural Heritage's Conservation Guides at www.guides.nynhp.org, and from NYSDEC at www.dec.ny.gov/animals/7494.html.



The following rare plants, rare animals, and significant natural communities have been documented in the vicinity of your project site.

We recommend that potential onsite and offsite impacts of the proposed project on these species or communities be addressed as part of any environmental assessment or review conducted as part of the planning, permitting and approval process, such as reviews conducted under SEQR. Field surveys of the project site may be necessary to determine the status of a species at the site, particularly for sites that are currently undeveloped and may still contain suitable habitat. Final requirements of the project to avoid, minimize, or mitigate potential impacts are determined by the lead permitting agency or the government body approving the project.

The following significant natural communities are considered significant from a statewide perspective by the NY Natural Heritage Program. They are either occurrences of a community type that is rare in the state, or a high-quality example of a more common community type. By meeting specific, documented criteria, the NY Natural Heritage Program considers these community occurrences to have high ecological and conservation value.

<i>COMMON NAME</i>	<i>SCIENTIFIC NAME</i>	<i>NY STATE LISTING</i>	<i>HERITAGE CONSERVATION STATUS</i>
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Upland/Terrestrial Communities

Calcareous Cliff Community

High-quality Occurrence of Uncommon Community Type

Hans Vosen Kill: Very long, moderately high (very high at one location), in good condition with minimal disturbance and some exotic plant species. Good habitat diversity, not in a remote area, but in landscape of associated communities.

8416

Calcareous Talus Slope Woodland

High-quality Occurrence of Uncommon Community Type

Hans Vosen Kill: The community is large in size, extensive length, and has high species diversity, few exotic species, and some patches of disturbance.

709

This report only includes records from the NY Natural Heritage database. For most sites, comprehensive field surveys have not been conducted, and we cannot provide a definitive statement as to the presence or absence of all rare or state-listed species. Depending on the nature of the project and the conditions at the project site, further information from on-site surveys or other sources may be required to fully assess impacts on biological resources.

If any rare plants or animals are documented during site visits, we request that information on the observations be provided to the New York Natural Heritage Program so that we may update our database.

Information about many of the rare animals and plants in New York, including habitat, biology, identification, conservation, and management, are available online in Natural Heritage's Conservation Guides at www.guides.nynhp.org, from NatureServe Explorer at www.natureserve.org/explorer, and from USDA's Plants Database at <http://plants.usda.gov/index.html> (for plants).

Information about many of the natural community types in New York, including identification, dominant and characteristic vegetation, distribution, conservation, and management, is available online in Natural Heritage's Conservation Guides at www.guides.nynhp.org. For descriptions of all community types, go to www.dec.ny.gov/animals/97703.html for Ecological Communities of New York State.



United States Department of the Interior



FISH AND WILDLIFE SERVICE
New York Ecological Services Field Office
3817 LUKER ROAD
CORTLAND, NY 13045
PHONE: (607)753-9334 FAX: (607)753-9699
URL: www.fws.gov/northeast/nyfo/es/section7.htm

Consultation Code: 05E1NY00-2016-SLI-1286

March 30, 2016

Event Code: 05E1NY00-2016-E-02906

Project Name: New Greene County Jail

Subject: List of threatened and endangered species that may occur in your proposed project location, and/or may be affected by your proposed project

To Whom It May Concern:

The enclosed species list identifies threatened, endangered, proposed and candidate species, as well as proposed and final designated critical habitat, that may occur within the boundary of your proposed project and/or may be affected by your proposed project. The species list fulfills the requirements of the U.S. Fish and Wildlife Service (Service) under section 7(c) of the Endangered Species Act (ESA) of 1973, as amended (16 U.S.C. 1531 *et seq.*). This list can also be used to determine whether listed species may be present for projects without federal agency involvement. New information based on updated surveys, changes in the abundance and distribution of species, changed habitat conditions, or other factors could change this list.

Please feel free to contact us if you need more current information or assistance regarding the potential impacts to federally proposed, listed, and candidate species and federally designated and proposed critical habitat. Please note that under 50 CFR 402.12(e) of the regulations implementing section 7 of the ESA, the accuracy of this species list should be verified after 90 days. This verification can be completed formally or informally as desired. The Service recommends that verification be completed by visiting the ECOS-IPaC site at regular intervals during project planning and implementation for updates to species lists and information. An updated list may be requested through the ECOS-IPaC system by completing the same process used to receive the enclosed list. If listed, proposed, or candidate species were identified as potentially occurring in the project area, coordination with our office is encouraged. Information on the steps involved with assessing potential impacts from projects can be found at: <http://www.fws.gov/northeast/nyfo/es/section7.htm>

Please be aware that bald and golden eagles are protected under the Bald and Golden Eagle Protection Act (16 U.S.C. 668 *et seq.*), and projects affecting these species may require development of an eagle conservation plan (

http://www.fws.gov/windenergy/eagle_guidance.html). Additionally, wind energy projects should follow the Services wind energy guidelines (<http://www.fws.gov/windenergy/>) for minimizing impacts to migratory birds and bats.

Guidance for minimizing impacts to migratory birds for projects including communications towers (e.g., cellular, digital television, radio, and emergency broadcast) can be found at: <http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/towers.htm>; <http://www.towerkill.com>; and <http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/comtow.html>.

We appreciate your concern for threatened and endangered species. The Service encourages Federal agencies to include conservation of threatened and endangered species into their project planning to further the purposes of the ESA. Please include the Consultation Tracking Number in the header of this letter with any request for consultation or correspondence about your project that you submit to our office.

Attachment



United States Department of Interior
Fish and Wildlife Service

Project name: New Greene County Jail

Official Species List

Provided by:

New York Ecological Services Field Office

3817 LUKER ROAD

CORTLAND, NY 13045

(607) 753-9334

<http://www.fws.gov/northeast/nyfo/es/section7.htm>

Consultation Code: 05E1NY00-2016-SLI-1286

Event Code: 05E1NY00-2016-E-02906

Project Type: DEVELOPMENT

Project Name: New Greene County Jail

Project Description: Greene County is planning to construct a new 130 bed County Jail with administration and operations spaces for the County Sheriff on 50 acres of land located on Route 9W immediate south of Cossackie State Correctional Facility. The New County Jail will include approximately 84,000 SF of floor area incorporating a public entrance, visitation area, central command, Sheriff and jail administration and staff spaces, intake/release/transport area with vehicle sally port, medical area, mechanical and maintenance spaces, food service, and inmate housing areas with recreational yards. The project involves extension of utility services to the site, including electricity, natural gas and telecommunications as well as public water and sewer services from the Village of Cossackie. Site improvements will include roads, parking and stormwater management.

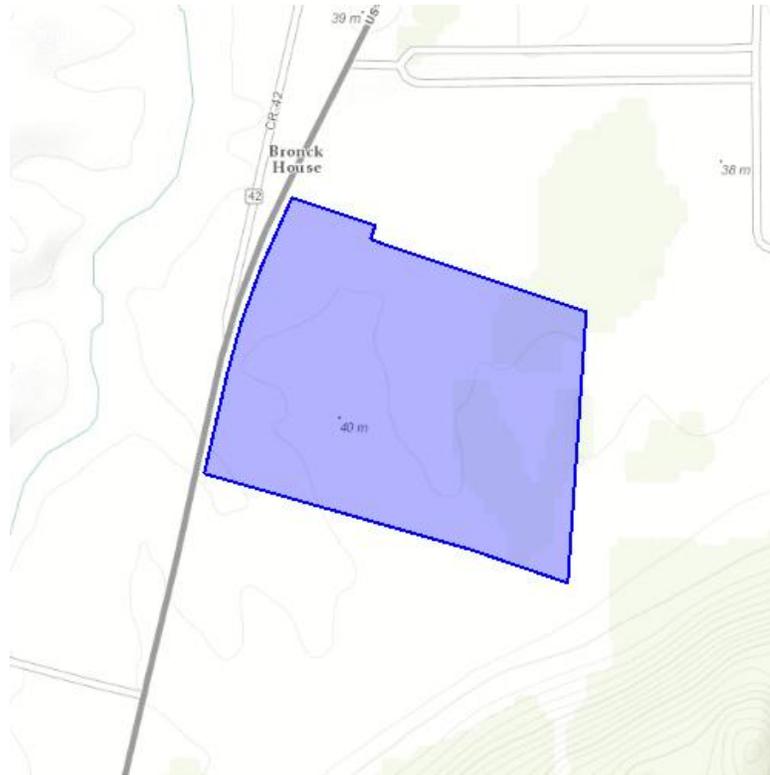
Please Note: The FWS office may have modified the Project Name and/or Project Description, so it may be different from what was submitted in your previous request. If the Consultation Code matches, the FWS considers this to be the same project. Contact the office in the 'Provided by' section of your previous Official Species list if you have any questions or concerns.



United States Department of Interior
Fish and Wildlife Service

Project name: New Greene County Jail

Project Location Map:



Project Coordinates: MULTIPOLYGON (((-73.84482241623269 42.34135660372027, -73.84131770737287 42.340497399511506, -73.84163963794475 42.33695221301274, -73.8433725972902 42.33739258541227, -73.84806404677721 42.33838000695615, -73.84765037055305 42.33968672548232, -73.84740645399026 42.34033944519555, -73.84705603454307 42.34107534053007, -73.84650166226619 42.34198331837173, -73.84503227301761 42.34162313042299, -73.84511864216893 42.34142921963591, -73.84482241623269 42.34135660372027)))

Project Counties: Greene, NY



United States Department of Interior
Fish and Wildlife Service

Project name: New Greene County Jail

Endangered Species Act Species List

There are a total of 2 threatened or endangered species on your species list. Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species. Critical habitats listed under the **Has Critical Habitat** column may or may not lie within your project area. See the **Critical habitats within your project area** section further below for critical habitat that lies within your project. Please contact the designated FWS office if you have questions.

Mammals	Status	Has Critical Habitat	Condition(s)
Indiana bat (<i>Myotis sodalis</i>) Population: Entire	Endangered		
Northern long-eared Bat (<i>Myotis septentrionalis</i>)	Threatened		



United States Department of Interior
Fish and Wildlife Service

Project name: New Greene County Jail

Critical habitats that lie within your project area

There are no critical habitats within your project area.