

DRAFT SCOPE

FOR Lincoln Park Grid Support Center

DRAFT ENVIRONMENTAL IMPACT STATEMENT (DEIS)
(PART 617.8 STATE ENVIRONMENTAL QUALITY REVIEW (SEQR))

TOWN OF ULSTER ULSTER COUNTY, NEW YORK

This Draft Scope identifies and describes the scope of environmental studies to be conducted to analyze the potential significant environmental impacts of the Project. This Draft scope is issued pursuant to Part 617.8 of the implementing regulations pertaining to Article 8 (State Environmental Quality Review Act) of the Environmental Conservation Law.

SEQR STATUS:

Unlisted Action
Positive Declaration February 1, 2018
[Public Scoping held on February 22, 2018](#)
[Deadline for Written Comments March 22, 2018](#)

[SEND WRITTEN COMMENTS TO LEAD AGENCY](#)
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APPLICANT:

Lincoln Park DG, LLC dba (Lincoln Park Grid Support Center)

Draft Scope Approved:
[\(February 1, 2018\)](#)

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DRAFT
PROPOSED FINAL SCOPE

FOR

LINCOLN PARK GRID SUPPORT CENTER

TOWN OF ULSTER

ULSTER COUNTY, NEW YORK

INTRODUCTION

This Proposed Final Scope of the Draft Environmental Impact Statement (DEIS) for Lincoln Park Grid Support Center, has been prepared by the Town Board of the Town of Ulster as lead agency for the review of the proposed project. [This Final Scope reflects comments received at the public scoping session conducted on February 22, 2018](#), written comments received prior to March 22, 2018 and comments prepared by the Town’s planning, environmental and engineering consultants.

Coordinated Review for Lead Agency status was initiated on [November 16, 2017](#) by the Town of Ulster Town Board and completed on [January 8, 2018](#). All involved and Interested Agencies were contacted under this process. A listing of Involved and Interested Agencies is attached to this document. On January 8, 2018, the Town Board Declared Itself Lead Agency for the purposes of conducting the review and making such determinations as are necessary with respect to the Proposed Action as required by 6NYCRR Part 617 of the New York Environmental Conservation Law (State Environmental Quality Review Act) and the regulations promulgated thereunder.

This proposed Unlisted Action was the subject of a Positive Declaration approved by the Town of Ulster Town Board on [February 1, 2018](#) directing the applicant to prepare a DEIS. A copy of the Positive Declaration, which sets forth the potential significant impacts of the project, is attached to this Draft Scoping Document.

I. PROJECT DESCRIPTION

A. Location and Description

1. Location

The Proposed Action is located on a 120.92-acre site consisting of three (3) tax parcels, which are situated (for the most part) south of the Miron Lane (CR162) and Frank Sottile Boulevard (CR163) intersection and west of NYS Route 32 in the Town of Ulster. Surrounding land uses are as follow: *North*: Closed Ulster County Resource Recovery Agency Landfill with an approved Solar Energy Generating Facility; *East*: Tilcon Minerals, Inc., mining operation due east and several 1-family and 2-family residences to the southeast along Old Flatbush Road; *South*: 1-family residences on large lots and undeveloped lands of Ulster Gardens; and *West*: Ulster Gardens Apartments and single-family attached and detached residential neighborhood. The nearest home to the southeast is 1,350 feet from the proposed power plant and to the west approximately 680 feet.

2. Project Description

The Applicant, Lincoln Park DG, LLC, is under contract to acquire three tax parcels which are situated (for the most part) south of the Miron Lane (CR162) and Frank Sottile Boulevard (CR163) intersection in the Town of Ulster, which total 120.92 acres. The Applicant proposes to construct the Lincoln Park Grid Support Center on a 4± acre portion of the property, with access from Frank Sottile Boulevard. The Applicant is seeking *Site Plan and Lot Line Adjustment* (i.e., lot consolidation) approval by the Town of Ulster Town Board and Town of Ulster Planning Board respectively.

- a. The proposed facility is a hybrid battery storage and natural gas-engine power plant that will supply power to the electric grid in the region. The project will provide short-term peaking power generation, assist in the management of short-term frequency and voltage fluctuations, assist in the integration of variable renewable generation from wind and solar projects, and provide critical grid resiliency services such as micro-grid and grid-restart.
- b. The site consists of three tax parcels identified on the Town of Ulster Tax Map as Section 48.12 Block 1 Lot 20, Section 48.16 Block 1 Lot 1, and Section 48.16 Block 1 Lot 2.210. The three parcels will be consolidated into one tax parcel. For the purpose of the Draft Environmental Impact Statement (DEIS), the project area is defined as

the 120.92-acre site which is the subject of the proposed lot consolidation and site plan.

- c. The facility will include a system of containerized batteries and a reciprocating engine generator system that is fueled by natural gas, with the capability to use on-site diesel when the gas supply is disrupted. The batteries and engines will work together to provide the above services to the grid.
- d. The generator system will be housed within a steel Butler building and will require two (2) exhausts with a single stack of 80-feet or less for combustion emissions. Fuel combustion will result in primary emissions of carbon dioxide (CO₂), nitrogen oxides (NO_x), and carbon monoxide (CO), and will require an air permit from the NYSDEC. Some ancillary waste will also be produced including used lubricating oil and reagent as part of equipment maintenance.
- e. The system will be available to the electric grid 24 hours a day and will operate based on the needs of the grid, with very little operation on some days and continuous operations on other days. The facility is expected to operate an average of 6 to 14 hours per day.
- f. The site will be manned during normal business hours and may have up to four (4) employees on-site at any one time. When the site employees are not present the facility will be remotely monitored. A municipal water connection and subsurface sewage disposal system are proposed to provide potable water and sewage disposal for the employees.

Most of the project area, including all of the proposed development area, is situated in the Office Manufacturing (OM) Zoning District as designated by Town of Ulster Zoning Map. A “utility company structure” is a permitted use in the OM zoning district subject to Site Plan approval, and the proposed Site Plan complies with the bulk requirements of the Town of Ulster Zoning Code.

The southernmost portion of the property is located in the R-30 Residential Zoning District. No development is proposed on the R-30 portion of the site, which will remain as open space.

B. Required Approvals

Pursuant to §145-2 the Town Code, the Town of Ulster Town Board retains the authority to approve the *Site Plan* for this action. The Planning Board has advisory powers in the review of the Site Plan, but retains the authority to approve the *Lot Line Adjustment*. The Proposed Action also requires referral to the Ulster County Planning Board pursuant to their referral agreement with the Town since the site abuts NYS Route 32, Frank Sottile Blvd (CR 163) and Miron Lane (CR 162).

At this time, it is anticipated the following local, County and State approvals and permits to authorize the proposed project may be required:

<u>Agency</u>	<u>Type of Approval</u>
Town Board	Site Plan
Town Planning Board	Lot Line Adjustment (consolidation)
Ulster County Health Department service	On-site sewer and town water extension
Ulster County DPW HWP	Driveway Approval
US Army Corps of Engineers	Nationwide permit wetlands disturbance
NYS DEC	SPDES
- SPDES General Permit for Stormwater Discharges from Construction Activities (GP-0-15-002);	
- Petroleum Bulk Storage Permit;	
- Waste Oil Storage Permit; and	
- Air emissions permit	
- Consultation with respect to Threatened and Endangered Species	
NYS OPRHP	Consultation with respect to archeological and historic resources
United States Department of the Interior	Consultation with respect to Threatened and Endangered Species
Federal Aviation Administration	Notice of proposed construction FAA Form 7460-1, if applicable.
Ulster County IDA	Payment-in-Lieu-of-Taxes (PILOT)
Ulster County Planning Board	NYSGML Section 239 l, m review

II. GENERAL GUIDELINES FOR THE DEIS

The applicant should closely examine the SEQR regulations for direction on the required content of a DEIS. Unless otherwise directed by the Final Scoping Document, the provisions of 6 NYCRR 617.9(b) apply to the content of the DEIS and are incorporated herein by reference.

The DEIS will assemble relevant and material facts, evaluate reasonable alternatives, and be analytical but not encyclopedic. It will also be clearly and concisely written in plain language that can be easily read and understood by the public. Highly technical material will be summarized and, if it must be included in its entirety, referenced in the DEIS and included in an Appendix. Narrative discussions will be accompanied to the greatest extent possible by illustrative tables, charts, graphs, and figures. All figures will clearly identify the project area.

Full scale plans will be included with the DEIS as an appendix and where appropriate reduced copies of such plans will be included in the text of the DEIS.

The DEIS will be written in the third person without use of the terms I, we, and our. All assertions will be supported by evidence. Opinions that are unsupported by evidence will be kept to a minimum and shall be identified as such. Footnotes will be used as the form of citing references.

III. POTENTIAL SIGNIFICANT ENVIRONMENTAL IMPACTS

The proposed action may have potentially significant environmental impacts on:

- Air
- Surface Water (wetlands)
- Groundwater
- Plants and Animals
- Stormwater Drainage
- Aesthetic Resources
- Archaeological Resources
- Energy
- Noise, Odor and Light

IV. INITIAL IDENTIFICATION OF MITIGATION MEASURES

Initial mitigation measures identified as part of the project proposal include:

- Stormwater management facilities specifically designed to address water quality and quantity; limiting impervious areas on the site to maintain existing vegetative cover.
- Erosion Control facilities specifically designed to address water quality treatment during construction activities; phasing and limiting disturbance to minimal areas.
- Use of colored building facades, visual barrier fencing, setbacks and buffering to reduce and avoid visual impacts from public highways and reduce impacts to neighboring properties.
- Incorporation of sound barriers or other measures, as required, into the project design to reduce noise levels beyond the project site in order to avoid noise-related impacts.
- A Phase IA Cultural Resource Survey will be required to identify potential resources within the proposed development areas on the subject site.
- Development of spill containment control and countermeasure plan.
- Development of an Emergency Response Plan.

- Incorporation of emissions control equipment to reduce and control air emissions resulting from the operation of the engine system.

Additional mitigative measures may be required to address any new potential adverse environmental impacts identified during the public scoping process.

V. DEIS SCOPE AND CONTENT

A. Executive Summary

1. **DEIS Cover Sheets.** The Cover sheet will include the title of the project, project location (streets, town, county, state), contact persons, list of preparers and project consultants, name and address of Lead Agency, and telephone number of Lead Agency.
2. **DEIS Table of Contents.** The table of contents will include a list of all appendices, tables, figures, maps, charts, and any items that may be submitted under a separate cover (and identified as such). All pertinent SEQR documentation shall be included as appendices to the DEIS, including, but not limited to, the Part 1 of the Full Environmental Assessment Form, Positive Declaration/Circulation Notice, Final Scoping Document, and technical letters from Involved and Interest Agencies. All correspondence relating to the issues addressed in the DEIS such as technical studies and reports will also be included in the appendices.
3. **Description of the Proposed Action.** This section will include a site description including location (streets, town, county, state), parcel identification numbers, acreage, any easements affecting the site, existing zoning, existing access, existing site character, and a description of the applicant's proposed activities to take place on the site or on any abutting parcels.
4. **Purpose, Need, and Public Benefit.** The purpose or objective of the proposed action will be described as well as the public need for and public benefit(s) from the implementation of the proposed action.
5. **Potential Significant Impacts.** A summary of the potential impacts of the proposed action will be listed.
6. **Mitigation Measures.** A summary of the measures to be implemented to mitigate potential impacts.
7. **Project Alternatives Considered.** A summary of the alternatives considered will be provided.
8. **Required Approvals.** An identification of the various approvals and permits needed to implement the proposed action (e.g. Federal, State, and Local) will be listed. An assessment of current zoning requirements and conditions will also be included.
9. **List of Involved Agencies.** A complete listing of all Involved Agencies, their addresses, and the required approvals and permits they are responsible for granting.
10. **List of Interested Agencies.** A complete listing of all Interested Agencies and their addresses.

VI. DESCRIPTION OF THE PROPOSED ACTION

The Description of the Proposed Action shall be a detailed presentation of the proposal, supported as necessary with graphic materials. The description shall address the following issues:

- A. **Site Location.** Provide written and graphical description of geographic boundaries of the project, including area within municipality, tax identification number and list of abutting properties. Map the geographical boundaries of the project on local and regional scale maps. The site shall be described relative to surrounding land uses, zoning designations and other key features such as NYS Route 32, Miron Lane (CR162) and Frank Sottile Boulevard (CR163), streams, ponds, wetlands, and other prominent natural, historic and man-made features on and within 1,000 feet of the project site.
- B. **Site History.** Discussion of the prior and present use of the project site and a discussion of existing deeds, covenants, and restrictions on the subject property.
- C. **Description of Project.** A detailed description of the project will be provided including:
 1. The proposed development to take place, including but not limited to, the proposed number of buildings and locations and purpose of auxiliary facilities.
 2. The proposed energy processing and storage activities to take place on the site, including but not limited to a list of all types of materials to be received and processed on the site, and any incidental management or processing of fuels, oils, fluids, etc..
 3. Identification of the sources of potable water and discuss their capacity to serve the proposed project. If on-site groundwater resources are to be utilized, standard pump testing for capacity and evaluation of the groundwater resources, including potential impacts of use of the resource on other groundwater users, must be evaluated. The requirement for pump testing shall not apply, if the extension of municipal service is anticipated. However, the ability of the public system to provide service must be evaluated.
 4. Identify the methods of wastewater disposal and the locations where wastewater disposal is proposed. Discuss the quantity and waste characteristics of wastewater material that will be disposed on site. Discuss implementation of best management practices to protect sanitary sewer systems from potential impacts from spills or other discharges.
 5. Typical building floor plans and representative building elevations illustrating typical colors and materials.

6. The various types and relative amounts of impervious surfaces consequential to the proposed development, calculations of the size of proposed impervious surfaces and illustrate proposed stormwater control methods.
7. Discuss the general drainage characteristics of the site and also identify subcatchments within the project site. Illustrate grading proposed within development areas and discuss how development will affect sub-catchment boundaries and stormwater runoff. Provide a grading plan showing existing topography and grading on a two-foot contour interval. Provide cut and fill estimates.
8. In the context of existing conditions discuss proposed project-generated traffic, vehicular access, including internal roads, circulation and parking facilities. The maximum vehicular trips generated on hourly, and daily basis shall be analyzed. Discuss hours of operation, queuing capacity at project entrance road.
9. Description of on-site and off-site utility plans and drainage facilities.
10. Proposed signage, including location, size, and materials.
11. Landscaping plans and natural vegetation to be retained.
12. A Lighting Plan, which will include a description of ambient lighting levels on the project site, the proposed lighting fixtures and projected illumination levels. A photometric plan and lighting details will be provided.
13. A discussion of conformance to the Town's Comprehensive Plan, existing zoning and site plan standards as described in the Town of Ulster Zoning Code and other applicable local laws including. The need for variances and/or waivers of such standards or requirements, if any, shall be identified.

D. Phasing and Construction Schedule. This section will discuss:

1. The proposed phasing of on-site and off-site construction, construction schedules, expected year of project completion, construction access routes, type of construction, hours of construction, and the location of construction vehicles and parking during phasing and construction.
2. Construction techniques including methods of grading, blasting, material storage and other major site work will be described.
3. The relative timing for the start and completion of key milestone tasks such as site clearing, grading and fill placement, infrastructure, foundations, and site amenities.

4. The effects of the proposed construction schedule on such things as land disturbance, exposed soils, dust, noise, traffic generation, water use, wastewater disposal and solid waste management will be described.

E. Purpose/Need/Public Benefit.

1. Describe the need for the type of energy generating and storage facility to be provided by the project including information addressing service area.
2. Describe the applicant’s goals and objectives and compatibility with adopted community development plans.
3. Discuss potential environmental protection and socioeconomic benefits offered under the project, including a more resilient energy supply to the grid, added tax revenues for the Town, School District, and other taxing jurisdictions.

VII. EXISTING CONDITIONS/POTENTIAL ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES

This section of the document will describe the existing environmental conditions on the site, potential impacts due to the proposed project, and relevant mitigation measures. Sufficient detail will be provided so that reviewers are able to gain an understanding of current conditions and the context in which potential impacts will be assessed. For each issue, existing site conditions will be defined, potential impacts will be characterized, and on-site and off-site mitigation measures, designed to avoid or minimize potential impacts, will be proposed. The following issues are to be addressed in the DEIS:

A. Soils and Geology

1. **Existing Soils and Geologic Conditions.** This section will include:
 - a. Identification and evaluation of on-site soils according to the United States Department of Agriculture Ulster County Soil Survey. Verification of identified soils by a qualified professional via soil tests may be requested.
 - b. A description of soils that will be disturbed by the proposed project. A table of on-site soils will identify the construction limitations, permeability, erosion hazard, depth to bedrock, and seasonal high water table for each soil.
 - c. The geology of the proposed project site shall be described, including such things as the depth to bedrock, type of bedrock and bedrock outcroppings. Any geologic conditions that could affect site planning shall be illustrated on the site plan.

- d. The topography of the site shall be illustrated on an appropriate topographic map produced from survey. Entire site shall have two-foot contour interval.
- e. Slopes ranging from 0-10%, 10-15%, 15-25% and greater than 25% will be identified. Slope descriptions will include a listing of the slopes as a percentage for the total site area (pre- and post-development).
- f. An evaluation of the constraints imposed by existing soils, geology, and topographic conditions, including the limitations of and suitability for construction of structures, driveways, plantings, and stormwater control structures.

2. **Potential Soils and Geologic Impacts.** This section will include:

- a. A discussion of the proposed Grading Plan for the site. This discussion will include an estimate of proposed cut and fill projections and discussion of whether or not blasting is necessary. If cut and fill projections cannot be balanced on the site, the anticipated volume of earth/rock to be imported to, or exported from, the site shall be defined. A discussion of the number of truck trips associated with such import/export shall be estimated, and the anticipated routing of such truck trips will be identified.
- b. A slopes analysis will be completed and discussed to identify the amount of disturbance within each slope category.
- c. Potential soil erosion impacts and estimated quantities and locations of increased long-term erosion will be identified. The methods of construction and the effects of construction on soils will be identified.
- d. If geologic features identify the potential for blasting, a description of proposed blasting including estimates of material to be removed shall be provided.

3. **Soils and Geologic Mitigation Measures.** This section will include:

- a. A summary of the Storm Water Pollution Preservation Plan (SWPPP) prepared in conformance with the New York State Department of Environmental Conservation (NYSDEC) regulations. The SWPPP will be included in the appendix of the DEIS.
- b. A discussion of construction methods and Best Management Practices that will be employed to reduce erosion and control off-site sedimentation.

- c. Discuss grading plan and mitigation measures to reduce impacts of proposed grading of steep slopes.
- d. If blasting is necessary, a Blasting Mitigation Plan will be prepared. This Plan will include measures to be implemented to protect existing structures and nearby residential groundwater wells located near blasting locations. The Plan will be included in the appendix of the DEIS and its contents described within this section.

B. Surface Water and Wetland Resources

1. Existing Surface Water and Wetland Resources. This section will include:

- a. A description of pre-development conditions including on-site and off-site watershed mapping, hydrologic characteristics of the watershed, drainage patterns, location, size and capacity of existing storm drainage facilities, and identification and classification of on-site or adjacent streams and wetlands in accord with federal and state laws. This will include a depiction of all watersheds, sub-basins and contributing drainage areas for all water bodies, wetlands and streams on-site and adjacent to the site along with connections between onsite and adjacent water resources.
- b. A discussion of the existing stormwater patterns and run-off quantities for 2, 10, 25, and 100-year storm events, using TR-55 curve numbers.
- c. A discussion of any mapped Federal Emergency Management Agency (FEMA) delineated 100-year floodplains and floodways and determination of base flood elevations where not previously calculated.
- d. A discussion of the existing stormwater characteristics and identification of water quality parameters to be analyzed as part of the stormwater management plan.
- e. A Wetland Delineation Report of federal and state wetlands will be prepared and discussed within this section including the extent of all contiguous and hydrologically connected wetlands beyond the site boundaries. Any existing isolated wetlands will also be identified. The wetland delineation map shall indicate all wetlands and required buffers. A verification will be conducted if the United States Army Corps of Engineers (USACOE) chooses to verify after being requested to do so.

2. Potential Surface Water and Wetland Impacts. This section will include:

- a. An evaluation of potential impacts associated with anticipated changes in surface water and runoff quantity and quality, both on-site and off-site. This shall include an assessment of potential impacts to surface

waters from changes in drainage patterns and changes in land use as a result of the proposed project.

- b. A description of post-development conditions including watershed mapping; stormwater quality, total volume of runoff, and peak discharge rates for 2, 10, 25, and 100-year storm events.
 - c. A Hydrologic analysis will be performed using “*Hydrocad*,” a stormwater hydrograph routing model that builds upon the techniques developed by the U.S. Soil Conservation Services.
 - d. An analysis of post-development stormwater runoff quality through the preparation of a Full Stormwater Pollution Prevention Plan (SWPPP) that includes Post Construction Stormwater Management Practices. This analysis will be prepared by a certified licensed NYS Professional Engineer.
 - e. A discussion of the ability of the on-site and off-site receiving surface water bodies to assimilate additional runoff.
 - f. An analysis of the potential impacts (if any) to floodplains due to re-grading, change in runoff conditions or roadway crossings.
 - g. A discussion of the potential impacts (if any) to wetlands due to recharging, change in runoff conditions, or change in long-term use of the site.
 - h. A discussion of the potential construction related impacts to water resources as well as long-term potential impacts relative to the occupation of the site.
 - i. A report describing impacts to wetlands and buffers will be prepared and discussed within this section, including the extent of filling any designated wetlands, if applicable.
 - j. The site plan shall identify the locations where any of the following activities or sources that may be exposed to precipitation/surface runoff: fuel oil, reagent, lube oil or other chemical delivery and/or storage.
3. **Surface Water and Wetland Mitigation Measures.** This section will include:
- a. A discussion of the SWPPP, and compliance with the NYSDEC Phase II Stormwater Regulations, including description of all components such as ponds, embayment, etc. Copies of the SWPPP, and any other plans will be included in the Appendix.

- b. A discussion of the mitigation measures to attain a zero increase in the peak rate of runoff flow from the subject property after development. Any impacts from sheet flow runoff will be addressed.
- c. Proposed mitigation of floodplain impacts.
- d. Proposed mitigation of stream and wetland impacts.
- e. Consideration of specific design measures as mitigation. As applicable, *enhanced site design protocols* and best management practices (BMP's) will be incorporated in the site plan and operation of the project

C. Groundwater Resources

1. Existing Groundwater Conditions. This section will include:

- a. A description of the existing groundwater conditions on and around the site including depth to groundwater.
- b. A discussion of the locations of groundwater resources including any aquifers and recharge areas shall also be provided.
- c. Seasonal high groundwater on the proposed project site shall be discussed in terms of locations, depths, time of year, and its affect on site planning.
- d. The DEIS shall contain well log (s) s well as the results of pump tests, with yield projections, for any wells proposed for use as part of the project.

2. Potential Groundwater Impacts. This section will evaluate effects of proposed development on water resources, including groundwater and surface water resources. Proposed wastewater and stormwater collection and treatment will be considered.

- a. Effects of the proposed action on groundwater quality due to formal or informal waste disposal practices.
- b. Discussion of potential impacts on groundwater recharge and groundwater quantity.
- c. Discussion of impacts, if any, related to the hydrologic connection between groundwater, surface water, and wetlands.

3. **Groundwater Mitigation Measures.** As required.

- a. Design adequate system of treatment for stormwater runoff prior to recharge of groundwater
- b. Employ best management practices to prevent potential contaminants from infiltrating groundwater resources.

D. **Vegetation**

1. **Existing Vegetative Conditions.** This section will include:

- a. A discussion of the vegetative communities (both wetland and upland) on the site including location, extent, acreage, dominant species, and age. Particular emphasis will be given to those communities in the areas of proposed disturbance. A qualified biologist will conduct an on-site investigation, for any endangered, threatened or rare plant species identified as potentially occurring on or near the site based on information from the New York Natural Heritage Program.
- b. Findings and pertinent information from a review of the New York Natural Heritage Program files, and the U.S. Fish and Wildlife Services database.

2. **Potential Vegetative Impacts.** This section will include:

- a. A discussion of the amount of existing vegetative cover likely to be removed or modified and the nature of that modification (e.g. pavement, landscaping, etc.) due to the proposed action.
- b. The potential impacts associated with a reduction of existing vegetative cover and existing habitats will be assessed from the perspective of soil erosion, evapotranspiration, precipitation recharge and providing food and cover for wildlife.
- c. Any impacts to rare plant species or communities will be described.

3. **Vegetative Mitigation Measure.** This section will include:

- a. A discussion of applicable mitigation measures identified as necessary or required by the NYSDEC, U.S. Fish and Wildlife Services or USACOE.
- b. Mitigation measures with respect to restrictive clearing in areas of particular ecological concerns, if any, will be addressed and may include recommendation of fencing or signage in order to avoid significant

impacts to plant communities. Specific, detailed wetland protection plans will be provided including, as appropriate, clearing limits, fencing prior to construction and measures to protect specific threatened plants, if any.

E. Fauna

1. **Existing Faunal Conditions.** This section will include:
 - a. Discussion and identification of known onsite animal species; review of New York Natural Heritage Program files, US Fish and Wildlife Services Databases and; field surveys for currently listed rare, threatened, endangered, or special concerns species.
 - b. This inventory will also include all species of mammal, bird, reptiles and amphibians that might reasonably be found on-site; a qualified biologist will conduct a field survey.
 - c. This work should appropriately reflect the migration and breeding patterns in the development of the census of fauna along with references to existing data sources cited above. Specific studies may be warranted such as breeding bird surveys, springtime amphibian surveys and benthic macro invertebrate surveys. The nature and extent of existing wildlife habitat will be evaluated.
2. **Potential Faunal Impacts.** Discussion of biodiversity on project site and potential impacts of the project, including wetland disturbance and reduction and fragmentation of habitat supporting relevant indigenous fauna due to change in habitat and migration patterns.
3. **Faunal Mitigation Measures.** As necessary including conservation easements, wildlife crossings, tree and understory preservation, replanting native species and establishment of wildlife corridors, as well as timing to avoid impacts on breeding and migration.

F. Cultural Resources

1. **Existing Cultural Resources Conditions.** This section will include:
 - a. An examination of the existing cultural resources to determine the potential for historic and prehistoric activity on the site. A Phase IA Cultural Resource Survey will be completed, and a Phase 1B Report will be completed in areas of the site involving significant ground disturbance. The Phase 1A and 1B reports will be summarized within this section and included as part of the Appendix.

- b. A Phase 2 Report will be completed for sensitive areas identified in the Phase IB report, if any.

2. Potential Cultural Resources Impacts.

- a. Potential impacts as a result of development within or adjacent to culturally sensitive areas identified in the Phase IA Cultural Resource Survey and Phase IB Report.
- b. Examination of the impacts discussed in the Phase 1B Report.
- c. Discussion of impacts found in the Phase 2 Report, if required.

3. Cultural Resources Mitigation Measures.

- a. A plan to implement mitigation measures, if required, by the New York State Office of Parks, Recreation, and Historic Preservation (OPRHP) based upon consultation with OPRHP.
- b. A plan to implement recommendations of the Phase 1A, Phase 1B, and Phase 2 Reports, if required.

G. Visual Resources

1. Existing Visual Conditions. This section will include:

The identification of existing conditions and visual character of the project site from critical receptor points from which the site may be visible based on existing topography. Critical receptors are generally those where the visual environment is an important aspect of the enjoyment or appreciation of the site and include public parks, historic sites, nature preserves, scenic roads, waterways and similar features and may also include local receptors deemed to be significant. The applicant shall first provide a Geographic Information System (GIS) viewshed analysis to show the locations where the project would be visible. The applicant shall arrange to fly balloons to appropriate heights at the corners of buildings to be constructed and the exhaust stack and provide advance notice to the Town Board as to when the balloons will be flown. The existing visual condition inventory should include:

- a. A discussion of the elements that contribute to the visual image and character of the project site will be provided, including a description of the physical character of the vicinity and identification of natural and manmade areas of scenic value with visibility to the site.

b. Inventory and photograph existing views of the site and affected adjacent areas from the following locations.

- View from Hudson Valley Mall on Frank Sottile Boulevard;
- View from westbound lane of the Kingston Rhinecliff Bridge;
- View from Tivoli Bay State Unique Area
- View from Dutchess County Route 103 in vicinity of Ryan Road;
- View from Lucas Avenue near Town-City boundary;
- View from NYS Route 209 in the vicinity of NYS Route 28;
- View from Van Kleeck Lane (Between Quail Dr. and Ledge Road); and
- View from eastern shore of Hudson River looking toward project site.

2. **Potential Visual Impacts.** This section will include:

A visual impact analysis of the proposed development as seen from critical receptors identified. The visual impact analysis will include photographs of the existing conditions during leaf off conditions. Photographic simulations of the built conditions will be required if analysis demonstrates that the project will be visible from any critical receptor point. A description through the use of narrative text, photographs, and graphic representations of proposed conditions will be used. Further, the visual relationship between the project site and the surrounding area will be discussed.

- a. Visual - The NYS DEC Program Policy Memorandum “Assessing and Mitigating Visual Impacts,” 7/31/00, shall be used as a standard reference. The following specific measures shall be included:
 - i. A description of the changes in visual character of the site and surrounding areas will be provided, including impacts caused by lighting.
 - ii. Discussion of the height, building materials, architectural style and design of the proposed structures,
 - iii. Provide illustrative exhibits, such as computer models, color renderings, photo simulations and sketches of building elevations and landscaping plans to demonstrate the architecture, massing, views and potential night time lighting impacts (glare, indirect lighting on adjacent properties) of the proposed development from each of the vantage points or critical receptors which were determined to have a high degree of visibility, as determined by the balloon test, within one mile of project site.
 - vi. Full description of proposed exterior lighting along internal roadways, in parking lots and on building exteriors and impact on adjacent properties and important views.
 - v. Discussion of visual impacts of electrical wires, water tanks and any other exterior features on the project site. Discussion will include descriptions of potential location, size and design of these

features and will include graphic exhibits to illustrate typical examples these on-site features and their potential impacts.

- vi. Discussion of potential impacts caused by loss of existing vegetation.

3. **Visual Mitigation Measures.** As necessary or recommended based on the results of the visual impact analysis, mitigation measures will be proposed. These might include use of natural colors in architectural elevations; supplemental landscaping or other screening, reduction in building height and relocation of proposed buildings, as appropriate.

H. **Traffic**

1. **Existing Traffic Conditions.** This section will include:

- a. A description of all available traffic data from Ulster County DPW.
- b. Roadways and roadway conditions directly serving the site will be described and will include the number of lanes, roadway conditions, traffic controls and signal timing.
- c. Trip Generation for the proposed action.

2. **Potential Traffic Impacts.**

- a. Trip Generation Analysis shall be provided for the Proposed Action. If deemed necessary, based on the estimated number and timing of trips to be generated by the project, capacity analyses will be performed to determine roadway conditions at the study intersections prior to development based on annual growth rate and traffic to be generated by previously approved but not completed projects, as provided by the Town of Ulster.
- b. If deemed necessary by Trip Generation for proposed action, Average daily and peak hour trip generation volumes of the project will be estimated based on generation rates published in Trip Generation 10th Edition (Institute of Transportation Engineers, 2017). Distribution of project generated trips on the area roadway system will be estimated and explained. If required, this project-generated traffic will be used to complete capacity analyses of roadway conditions at the study area roadway intersections for the Build condition. Where project trip generation will add less than 10% of the total “no build” volumes at an intersection, further analysis is not required unless specifically requested by the Planning Board.

- c. Sight distances at the site entrance and conformance of these distances with published standards (e.g., American Association of State Highway and Transportation Officials, AASHTO) will be evaluated.
- d. The routes, frequency and duration of construction vehicle traffic will be identified and impacts on traffic operation and surrounding residential neighborhoods evaluated.

3. **Traffic Mitigation Measures.**

Measures to mitigate traffic impacts, if required, should include, but not be limited to roadway and intersection improvements (e.g., widening and restriping), intersection signalization improvements, emergency access and site distance improvements. The presentation of mitigation measures shall include an identification of the anticipated levels of service to exist following their implementation. Measures to mitigate impacts of construction traffic on surrounding areas will also be identified including route changes and specified hours of operation.

I. **Land Use and Zoning**

1. **Existing Zoning and Land Use.** This section will include:

- a. Discussion of the existing zoning, site plan and subdivision regulations, and land uses associated with the project site and the surrounding area, and the relationship to the proposed project.
- b. Conformance with the Town’s Comprehensive Plan.
- c. Growth inducing impacts of proposed grid support center.

2. **Potential Impacts to Zoning and Land Use.** This section will include:

- a. A discussion of the project’s consistency with zoning, subdivision and other local laws; and land use policies, and compatibility with the surrounding neighborhood and land uses.
- b. The need for any variances or waivers shall be identified.

3. **Zoning and Land Use Mitigation Measures.** This section will include a discussion of any applicable and appropriate mitigation measures. Mitigation may also include mitigation of visual impacts as discussed above.

J. Police, Fire, and Ambulance Services

1. **Existing Police, Fire, and Ambulance Services.** This section will include:
 - a. A discussion of the applicable county, state, and local facilities, station locations, and schedule of patrol activities in the project area. Information will be based on personal communications with service providers and/or review and confirmation of available pertinent literature.
 - b. A discussion of current staffing, number and type of apparatus, average response time to the site, existing water supply, and capacity for fire flow.
2. **Potential Impacts to Police, Fire, and Ambulance Services.** This section will include a discussion of the project's impact to county, state, and local services including impact on staffing, facilities and response time. This section will also include an Emergency Action Plan that describes protocols in the event of an incident at the subject site and necessary training and equipment needed by local emergency responders.
3. **Police, Fire, and Ambulance Services Mitigation Measures.** This section will include a general discussion of any applicable and appropriate mitigation measures.

K. Wastewater Disposal

1. **Subsurface Sewage Disposal System.** This section will include:
 - a. A description of proposed subsurface sewage disposal system will be provided in accordance with Ulster County Health Department requirements and the average daily demand and peak hourly demand for the project will be discussed.
 - b. A proposed subsurface sewage disposal system reserve field will be identified and described on the plan.
2. **Potential Impacts.** This Section will include:

A discussion of potential impacts related to the subsurface disposal system will be discussed. A discussion of the anticipated wastewater generation volume and flow rate will be provided and the ability of on-site soils to accommodate proposed discharge will be evaluated
3. **Mitigation Measures.** This section will include a discussion of appropriate mitigation measures.

L. Water Supply

1. **Existing Water System.** This section will include:
 - a. If water is proposed to be supplied by groundwater, provide a description of existing groundwater supplies in the area and a summary of the average daily demand and peak hourly demand for the project will be discussed.
 - b. A description of the fire flow requirements based on National Fire Protection Agency (NFPA) guidelines will be discussed.
2. **Potential Impacts to the Water System.** This Section will include:

A discussion of potential impacts to groundwater supplies including a discussion of whether the anticipated water demand for the project will reach or exceed the system's capacity.
3. **Mitigation Measures.** This section will include a discussion of appropriate mitigation measures.

M. Solid Waste Disposal

1. **Existing Solid Waste Services.** This section will include a discussion of the existing solid waste services, including current generation, collection, and removal processes.
2. **Potential Impacts to Solid Waste Services.** This section will include a discussion of potential impacts associated with the anticipated solid waste generated from the project site and method of removal.
3. **Solid Waste Services Mitigation Measures.** This section will include applicable solid waste mitigation measures.

N. Noise and Air Resources

1. **Existing Conditions.** Identification of existing level of noise in the community. Conduct noise-monitoring survey to determine ambient noise levels on site at the property lines of the closest residential receptors.

The DEIS shall provide an analysis that identifies major sources of noise from the proposed operation of the electric grid support center. This analysis shall include a description of major electric generating equipment, model numbers and noise ratings for each. A noise screening assessment will be performed to provide an indication of existing noise levels at pre-selected locations along the boundaries of the site. The assessment will be performed during morning and afternoon hours at the site entrance and in proximity to existing residential communities, which abut the project site to determine whether ambient noise levels will be exceeded from noise receptors analyzed.

Existing air quality at the site will be summarized based on NYSDEC monitoring data for the most recent five-year period.

The regulatory review will specify how compliance with specific, applicable emission limits, work practices, monitoring, recordkeeping, and reporting requirements will be achieved and ensured.

2. **Potential Impacts.** Impacts resulting from phased construction activities, if proposed, will be assessed using information obtained during the noise screening assessment process. Expected noise levels produced by typical earth moving equipment will be reviewed against existing noise levels, as well as applicable Town Code thresholds. The NYSDEC program policy document entitled “*Assessing and Mitigating Noise Impacts*” will be used to report on expected noise levels. Distance, topography, vegetation, noise source duration and weather conditions will be evaluated for expected noise impacts associated with construction activities, construction traffic, and traffic flow upon project completion. Analysis of impacts upon project completion from proposed noise producing facilities such as generators shall be provided.

The air quality analysis should be conducted for the full build out year of the project for the No-build and Build conditions. The Consultant shall define the worst case meteorological conditions in the project area. A discussion of wind speed and prevailing wind direction will be provided. The Applicant shall conduct all studies required by the NYSDEC to obtain their air quality permit. For both the dual-fuel and back-up (ultra-low sulfur diesel) operating modes, the air emissions and permitting analysis will include developing a comprehensive summary of actual and potential emissions of all criteria pollutants and hazardous air pollutants (HAP) including, but not limited to, the following:

- Carbon monoxide
- Volatile organic compounds
- Oxides of nitrogen
- Particulate matter
- Fine particulate matter (PM10, PM2.5)
- Sulfur dioxide
- Lead
- Carbon dioxide equivalents

- Single HAPs (e.g., Formaldehyde, Benzene)
- Total HAPs

Emissions will be determined for both short-term (pound per hour) and long-term (tons per year) for each emission point, and will include contributions from primary emission units (engines) as well as exempt or trivial activities (storage tanks, backup generators).

For anticipated engine start/restart events estimates of emissions released to the atmosphere will take into consideration lower pollutant abatement efficiencies for the oxidization catalyst (OxyCat) and selective catalytic reduction (SCR) units that what will be achieved during steady-state operation.

All applicable federal and New York State regulations governing emissions of regulated air pollutants will be identified and evaluated, including, but not limited to, the following:

- 6 CRR-NY 201-4: Minor Facility Registrations;
- 6 CRR-NY 207: Control Measures For Air Pollution Episode;
- 6 CRR-NY 211: General Prohibitions;
- 6 CRR-NY 212: Process Operations;
- 6 CRR-NY 225-1: Fuel Composition and Use--Sulfur Limitations;
- 6 CRR-NY 227: Stationary Combustion Installations;
- 6 CRR-NY 229: Petroleum and Volatile Organic Liquid Storage and Transfer;
- 40 CFR 60, Subpart IIII: New Source Performance Standards (NSPS) for Stationary Compression Ignition Internal Combustion Engines;
- 40 CFR 60, Subpart JJJJ: NSPS for Stationary Spark Ignition Internal Combustion Engines; and
- 40 CFR 63, Subpart ZZZZ: National Emission Standards for Hazardous Air Pollutants for Reciprocating Internal Combustion Engines.

The Consultant shall summarize the results of the air quality analysis in a report which includes a comparison to State and Federal Air Quality Standards. Impacts on air quality due to the grid support center operation will also be evaluated and compared to established air quality parameters.

3. **Mitigation Measures.** Based on the results of the noise screening assessment and evaluation of expected impacts, the Applicant will evaluate mitigation measures to reduce identified noise impacts to ambient levels for critical receptors and comply with applicable Town Codes.

Means to alleviate air quality impacts will be proposed including fugitive dust control during construction and during post-construction operation of the proposed grid support center. The applicant shall describe the inclusion of emissions control equipment into the facility design including all equipment required to comply with state and federal law.

O. **Fiscal Impact Analysis**

1. **Existing Fiscal Conditions.** This section will include a discussion of the existing revenues and taxes generated from the site and any existing municipal costs related to the site for all applicable jurisdictions – Town, County, School District and any special districts affected. The property tax portion of the school costs will be analyzed.
2. **Potential Fiscal Impacts.** A discussion of the projected costs and revenues associated with the project will be prepared for each taxing jurisdiction. The assumptions on which costs and revenues are based shall be clearly presented and, where appropriate, high and low ranges discussed.
3. **Fiscal Mitigation Measures.** As required.

P. Cumulative Impacts

1. **Existing Conditions:** The Town will provide a list of projects in the Town, for which applications have been filed or already approved, but not yet complete that must be considered in the analysis of off-site impacts.
2. **Potential Impacts:** An evaluation of the cumulative potential impacts of the proposed project and projects identified above on streams and tributaries, stormwater, wetlands, steep slopes, wildlife and wildlife habitat, traffic, schools, utilities, emergency services and recreational facilities will be provided.
3. **Mitigation Measures:** As necessary.

VIII. SIGNIFICANT ADVERSE UNAVOIDABLE IMPACTS

A discussion of the adverse environmental impacts identified in Section III that can be expected to occur regardless of the mitigation measures proposed.

IX. ALTERNATIVES

The following alternatives to the proposed project will be considered. The level of detail of each alternative may be conceptual in nature but sufficient to provide an adequate comparison of relative impacts to enable the Planning Board to evaluate the positive and negative effects of each as opposed to the preferred plan:

- A. The “No Build” alternative will be addressed as required under 6 NYCRR 617.9.b.5.
- B. Availability of alternative sites will be discussed.
- C. Alternative site plans and facility design will be discussed.

X. IRREVERSIBLE AND IRRETRIEVABLE COMMITMENT OF RESOURCES

Identification of the natural and human resources listed in Section 3.0 that will be consumed, converted, or made unavailable for future use.

XI. GROWTH INDUCING ASPECTS

Discussion of potential growth inducing aspects as a result of the proposed project.

XII. EFFECTS ON THE USE AND CONSERVATION OF ENERGY RESOURCES

Discussion of the energy sources to be used, anticipated levels of energy consumption, and any applicable energy conservation measures proposed.

XIII APPENDICES

- A.** Correspondence (including all SEQR documentation).
- B.** Wetland Delineation Report
- C.** Ecological Assessment Report
- D.** Cultural Resource Survey
- E.** Visual Impact Analysis
- F.** Trip Generation
- G.** Blasting Mitigation Plan (if necessary)
- H.** Preliminary Storm Water Pollution Prevention Plan
- I.** Engineering Drawings
- J.** Other, as Appropriate
- K.** Consultant Qualifications

Maps: All maps necessary to illustrate subject matter, including but not limited to:

- Boundary Survey
- Site Plan
- Floor Plans and Elevations
- Grading Plan
- Erosion and Sediment Control Plan
- Utility Plan
- Landscaping Plan