

ENGINEER'S REPORT

JOHNSON FARM PHOTOVOLTAIC ARRAY CHESTER, NY



121 Johnson Road
Chester, NY 10918
Section 1- Block 1- Lot 4
+/- 83.8 Acres

SIEMENS

FE Project No. 14-159

Prepared For:
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INTRODUCTION

EXISTING AREA

The developer, Siemens Industry Inc., in collaboration with the applicants, SunEdison LLC and Johnson Realty, is proposing to construct a 2 MW ground-mounted photovoltaic solar energy array to reduce the cost of electrical power purchased from Orange & Rockland Utilities. The project site is located at 121 Johnson Road in the Town of Chester, NY. Lot 1-1-4 is approximately 84 acres, within the AR-3 District (Agricultural Residential) and is currently used as a commercial agricultural operation by Johnson Farm.

The site borders the Town of Chester and Town of Goshen municipal boundary to the North, a wooded area to the West, and single-family residences to the South and East. Existing site features include buildings and equipment typical of a commercial farming operation, multiple fields used for growing feed corn, and a small pond at the Northeast corner of the property. The site is mostly covered with crops and areas of trees.

FLOODPLAIN

The provided FEMA FIRMet maps indicate that the project site is within the 100-year floodplain. The proposed photovoltaic arrays will be kept outside of the boundary. See appendix A.

SOILS

The provided Environmental Feasibility Report (appendix A) shows that the underlying soils of the project area are:

- Alden Silt Loam (Ab)
- Erie Gravelly Silt Loam (ErA)
- Madalin Silt Loam (Ma)
- Mardin Gravelly Silt Loam (MdB)

ENVIRONMENTAL RESOURCES

Federal wetlands exist at the Southern portion of the site. They will be delineated to determine the actual extent of the wetlands. A Threatened and Endangered Species Habitat Suitability Assessment will be conducted to confirm the presence of any rare plants or animals on the project site. No impact to wetlands or threatened and endangered species is anticipated. See appendix A.

PROPOSED DESIGN

SITE

The proposed layout will consist of:

- 2 Megawatt ground-mounted solar energy system
- 10.48 Acre solar array area
- Chain-link fencing and gate along the perimeter of the array
- Slow growth grasses underneath the array
- Pad-mounted electrical equipment
- Underground electrical cable
- Overhead electrical cable

PARKING/TRAFFIC

Additional parking will not be required. Access to the solar array and surrounding fields will be provided to maintain existing farming operations and allow for maintenance of the solar equipment.

STORMWATER

Stormwater design shall follow the requirements of the New York State Stormwater Design Manual, August 2010. The total project disturbance will be greater than five (5) acres; therefore, the New York State Department of Environmental Conservation requires that a Stormwater Pollution Prevention Plan (SWPPP) be completed. As this project will not increase runoff over pre-development levels, water quality control measures and water quantity control measures are not required and the SWPPP will consist of an Erosion & Sediment Control Plan.

LANDSCAPING

Approximately 10 acres will be disturbed on the site. Clearing the site will consist mostly of tall brush and corn stalks with a small amount of trees to be removed. Grading of the site is expected to be balanced and not require any removal of material or additional fill at this time.

CONCLUSION

As summarized in this report, the design of the site will include accommodations for the proposed use per Town requirements and other local regulatory agency requirements. Testing and evaluations of the site are anticipated to not identify any significant adverse impacts to the surrounding environment.

APPENDIX A

ENVIRONMENTAL FEASIBILITY REPORT