SEQR Supplemental Information

CVE North America

Proposed Cortlandt Mill Solar Farm

Cortlandt, Westchester County, New York

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1.0 INTRODUCTION

On behalf of CVE North America (CVE), TRC Engineers, Inc. (TRC) has prepared this revised supplemental narrative and additional information to support the Revised Full Environmental Assessment Form (FEAF) Part 1 for the proposed Cortlandt Mill Solar Farm.

CVE proposes to construct and operate the Cortlandt Mill Solar Farm, an approximately 5.0 megawatt (MW) alternate current (AC)/4.98-MW direct current (DC) community solar generating facility (SGF) and a battery energy storage system (the Project) on property located in the Town of Cortlandt, Westchester County, New York. The Project Site consists of two parcels totaling approximately 43.12 acres: one 38.67-acre parcel west of Lexington Avenue (Parcel ID: 13.18-2-2.4) and a second 4.45-acre parcel off Red Mill Road (Parcel ID: 13.14-5-25) in the Town of Cortlandt, Westchester County, New York. Figures depicting the Project Site overlaying United States Geological Survey (USGS) maps and aerial imagery are presented as Figure 1 and Figure 2, respectively. Site plans are included as Appendix A.

The existing groundcover at the Project Site is composed primarily of undeveloped forests with laid-up stone walls around most of the perimeter and subdividing multiple interior areas. There are two wetlands and an intermittent stream flowing south in the southeastern portion of the Project Site. These wetlands and stream flow off-site to the south. The Project Site's topography is predominately rolling, generally sloping to the northwest in the smaller parcel, sloping to the northwest in the western third of the larger parcel, and sloping to the south for the middle third and eastern third of the larger parcel. No buildings are present on the Project Site. The Project Site is bordered by residential and forested land on all sides.

1.1 Project Benefits

The Project will produce renewable energy, which will provide global, national, statewide, and local benefits.

The global community's increased focus, demand, commitment, and development of clean renewable energy resources are being driven by immediate and long-term concerns for the environment, energy reliability, and security.

Clean, renewable sources of energy produced domestically, such as the Project, also reduce the United States' need for oil imports, reducing its dependency on foreign nations to meet this demand, and thereby enhancing national energy security. Domestically produced energy also keeps money in the United States, enhancing the national economy and strengthening the value of the dollar. As the United States solar industry grows, so does its benefits to the national economy. There are now nearly 174,000 solar workers in the United States employed at 6,100 businesses in every state, injecting life into the United States' economy (Solar Energy Industries Association, 2021).

In June 2019, New York State passed the New York Climate Leadership and Community Protection Act, which outlines the state's clean energy goals. As stated on the New York State Energy Research and Development Authority's (NYSERDA) website, New York State has some of the most aggressive energy and climate goals in the country, including:

- The Clean Energy Standard (CES), a mandate to get 70 percent of New York's electricity from renewable sources by 2030;
- A proposed target of 100-percent carbon-free electricity by 2040;
- A 40-percent reduction in greenhouse gas (GHG) emissions by 2030 (using 1990 as a baseline); and
- A proposed target of 6,000 MW in distributed solar deployment by 2025.

The Project will support the CES goals, which aim to "fight climate change, reduce harmful air pollution, and ensure a diverse and reliable low carbon energy supply" (NYSERDA, 2021). Renewable energy facilities, such as the Project, will offset the need to import fossil fuels and assist the state in reaching its goal of having 70 percent of its energy production from renewable resources.

The Hudson Valley is part of a high-demand or high "load" area in New York that does not have access to many major hydropower resources or wind energy projects. However, there is still unutilized land in the Hudson Valley, such as the Project Site, available for developing community solar energy facilities (Scenic Hudson, 2019). Therefore, community solar, such as the Project, can help reach the goal "***to rapidly transition the Hudson Valley to a sustainable, low-carbon region increasingly powered by renewable energy in order to mitigate climate change, while protecting and preserving the region's invaluable scenic, historic, agricultural, environmental and economic resources*** (Scenic Hudson, 2018)."

The Project will contribute electrical power from a renewable resource to the local grid, providing electricity to residences and business in the Town of Cortlandt. The Project will also provide increased tax revenue for the Town of Cortlandt.

1.2 FEAF D.1. Proposed and Potential Development

The Project consist of arrays of solar panels separated by access drives. The solar arrays will cover approximately 9.06 acres. The arrays will consist of rows of solar panels installed aboveground on a metal framework. New pervious access drives will cover 1.88 acres. In addition, the Project will also include concrete pads for battery storage and inverter units and transformers. Specifications for the solar panels, battery storage and inverter units are provided in Appendix B. To the extent practicable, electrical connections within the array will be underground.

A 230-foot long pervious gravel access drive will connect the Project to Mill Court. The access drive has been designed to allow access for emergency vehicles. An 8.5-foot-tall wildlife-friendly perimeter fence will surround the solar array and access will only be through a single security

gate. Emergency access will be available through a KnoxBox. The Project also includes a 60-foot long impervious pull-out off Red Mill Road for access to a utility meter enclosure. There will be an underground electric interconnection from the utility meter enclosure to the solar array. This underground electric interconnection will have a temporary limit of disturbance of 0.39 acre.

Areas under and between the solar panels will be seeded with low-growth plants. Other areas throughout the Project will be seeded with pollinator-friendly species of wildflowers to encourage the presence of pollinating insects and other small wildlife. To the extent practicable, the existing forested boundaries of the Project Site will be maintained. This existing vegetation, combined with the proposed landscaping plantings, will provide a visual barrier that will obscure views of the Project from adjacent properties (see Appendix C).

The area within the wildlife-friendly perimeter fence surrounding the solar arrays is approximately 16.31 acres and the total limit of disturbance including the solar arrays, access drives, electrical equipment pads, tree clearing, and construction laydown areas is 19.3 acres. Approximately 0.3 acres of existing impervious cover, in the form of stone walls and rock outcrops, will be converted into meadow and the concrete equipment pads will create 0.12 acres of new impervious covers.

The siting principles in *Clean Energy, Green Communities: A Guide to Siting Renewable Energy in the Hudson Valley* (Scenic Hudson, 2018) were taken into consideration during Project planning. The Project has been carefully designed to meet the following design goals:

- Avoid wetlands and 100-foot adjacent areas to wetlands;
- Minimize impacts to steep slopes;
- Maintain a 200-foot setback from residences;
- Minimize tree clearing and cut and fill; and
- Minimize demand on local services.

2.0 ENVIRONMENTAL AND COMMUNITY CONSIDERATIONS SUPPLEMENTING INFORMATION PROVIDED IN FEAF PART 1

The following sections provide additional information to supplement the answers to the questions on the FEAF Part 1.

2.1 FEAF D.2.e. Stormwater

Prior to the commencement of construction activities, temporary erosion and sediment controls shall be installed to prevent erosion of the soils and prevent water quality degradation in the wetlands and stream. Erosion and sediment controls will be used to limit, control, and mitigate construction-related impacts. The stormwater management and pollution controls shall include practices that involve runoff control, soil stabilization practices, sediment control, and pollution prevention.

Temporary erosion and sediment controls shall be used to reduce erosion, sedimentation, and pollutants in stormwater discharges; and to prevent impacts to undisturbed areas, natural resources, wetlands, water bodies, and downstream areas. Both stabilization techniques and structural methods will be used, as needed, to meet these objectives.

The following Project Site constraints were considered when determining the appropriate stormwater management practices to be implemented:

- Practices cannot impact existing structures or utilities;
- Project Site use limitations;
- Shallow depth to bedrock;
- Steep site slopes of 15 to greater than 25 percent;
- The Project is not located within an area of known contamination or Sole Source Aquifer; and,
- The proposed new development conditions need to mimic the existing runoff patterns to the maximum extent practicable.

The peak runoff rates for the pre-development and post-development conditions have been analyzed to aid in maintaining the pre-development runoff rates. Regulating the runoff rate will minimize the impacts to adjacent and downstream properties, wetlands, and water bodies, and minimize impacts to the stormwater runoff quality. The runoff reduction technique used for the Project is:

- Porous Pavement: Pervious types of pavements that provide an alternative to conventional paved surfaces, designed to infiltrate rainfall through the surface, thereby reducing stormwater runoff from a site and providing some pollutant uptake in the underlying soils. Pervious Haul Drives will be used instead of the traditional gravel drives.

The Project has been classified as a new development site with an increase of approximately 5,231 square feet (0.12 acres) of new impervious cover. However, with the removal of several areas of stone walls and rock outcrops, there will be a net decrease in impervious cover. The proposed Project will result in greater than 1 acre of soil disturbance and in the construction of impervious surfaces; therefore, post-construction stormwater management practices are required for the Project.

Stormwater runoff from the Project will be collected and conveyed to stormwater quality and quantity control practices. A series of stone-filled diaphragms, dry swales, and bioretention practices are proposed to treat changes to runoff characteristics generated by the Project.

A stormwater runoff model was developed for the Project and the results are provided in the Stormwater Pollution Prevention Plan (SWPPP). The runoff model concluded that the Project will

not alter the hydrologic or hydraulic characteristics of the Project Site; therefore, negative impacts to downstream areas are not anticipated.

2.2 FEAF D.2.j. Traffic

During construction, there will be a modest, temporary traffic increase due to commuting construction workers and deliveries of equipment and supplies. Table 1 (below) provides an estimate of vehicle trips during the construction period. During operations, vehicle trips to the Project will be limited to approximately one to two trips per month for routine maintenance; which includes vegetation management, inspection of project components, and repairs to equipment. Regular maintenance and inspection trips to the Project will be conducted as necessary and will account for approximately one to two vehicle trips per month. Day-to-day operations of the Project will be monitored remotely during normal operations; therefore, no daily vehicle trips will result from the operation of the Project.

Table 1. Estimated Vehicles During Construction Activities

Approximate Period	Construction Activity	Estimated Increase in Vehicle Trips
Month 1	Mobilization, Site Clearing, Erosion Control, and Initial Access Drive Improvements	• 8 – 10 personal vehicles per day, • 3 – 6 contractor vehicles per day, • 1 – 2 material delivery (tractor-trailer trucks) per day, • 1 – 2 equipment delivery (30-foot bed, box trucks, dump trucks, concrete trucks) per week, and • 6 – 8 hauling trucks per day removing timber and organic material from the Site.
Months 2 – 5	Fence, Solar Array, Energy Storage Installation, and Final Access Road Improvements	• 20 – 30 personal vehicles per day, • 6 – 8 contractor vehicles per day, • 3 – 4 material deliveries (tractor-trailer truck) per day, and • 1 – 2 equipment delivery (30-foot bed, box trucks, dump trucks, concrete trucks) per day. • 10 – 12 hauling trucks per month for delivery of ~ 740 cubic yards of fill material (*524 cubic yard in-place measure)*
Month 6	Commissioning and Demobilization	• 6 – 8 personal vehicles per day, • 3 – 6 contractor vehicles per day, and • Approximately 1 equipment removal (tractor-trailer truck) per week.

2.3 FEAF D.2.m. Noise

Chapter 197 of the Town of Cortlandt Code limits sound levels at the property line of a noise source to 65 A-weighted decibel (dBA) during the day (8:00 A.M. to 6:00 P.M.) and 55 dBA during the night (6:00 P.M. to 8:00 A.M.) within a residentially zoned district. The New York State Department of Environmental Conservation (NYSDEC) has published a policy memorandum entitled *Assessing and Mitigating Noise Impacts*, dated October 2000 and revised February 2001 (NYSDEC, 2000a). The guidance in this memorandum indicates that a new noise source should not increase sound levels by 6 dBA or more above ambient. Both the Town of Cortlandt and the State of New York have qualitative requirements regarding sounds that produce a "pure tone" or "discrete tone". The inverters and transformers are known to produce pure tones as part of the process of converting DC power to 60 hertz AC. The pure tones are produced at twice this frequency and harmonics (i.e., 120, 240, and 480 hertz). Chapter 197 of the Cortlandt ordinance states that the presence of discrete tones would constitute unnecessary noise. The NYSDEC policy comments on the existence of pure tones, but does not provide specific qualitative or quantitative limitations.

CVE North America commissioned a noise study of the Project (see Appendix D) from Acentech. The predicted noise level for the Project was modeled at six residences on properties directly abutting the Project Site. Three of the residences are north of the Project Site and there is one residence each to the east, south, and west.

The noise-producing elements modeled were the inverters, transformers, and the battery storage units. The inverters will only produce noise during daily hours when the panels are generating electricity. The transformers and battery storage units may continue to produce sound during nighttime hours. Based on the assumed background sound level of 45 dBA, estimated project noise levels will not increase background sound levels at nearby residential receivers more than 4 dBA during the daytime and 2 dBA during nighttime hours. No mitigation is required to meet the Town of Cortlandt's requirements or NYSDEC's guidance for broadband sound levels.

FEAF D.2.p Hazardous Materials

The only potential hazardous materials for the Project will be in the battery storage system (lithium ion electrolyte) and the transformers (dielectric fluid). No other proposed components of the Project will store hazardous materials.

A benefit of Project is that it includes energy storage, allowing the energy generated during the day to be stored and released at night. The Project currently anticipates using the Sungrow fully integrated 1,500 DC coupled photovoltaic (PV) plus energy storage system. The system consists of a pre-fabricated cabinet system that contains racks of lithium batteries, Heating Ventilation and Air Conditioning (HVAC), fire suppression, communication system, controllers, and an inverter. Appendix B includes a manufacturer specification sheet.

The Project is proposing 20 cabinets on the northern portion of the Project Site.

The battery cells contain lithium ion electrolyte, similar to that contained in a cell phone battery. The lithium ion electrolyte is considered a hazardous chemical and has three levels of containment: 1) The lithium ion electrolyte is hermetically sealed within a battery cell; 2) battery cells are combined and hermetically sealed into modules; and 3) the modules are then contained on racks within a sealed cabinet system.

The lithium ion electrolyte is a very viscous material and acts like a paste. The chance for release and surface flow for the lithium ion electrolyte is minimal. A spill response kit would be located on site to help with clean-up of minor spills. A safety data sheet for the lithium ion electrolyte is provided in Appendix B.

The Envirotemp FR3 dielectric fluid, which will arrive on-site pre-sealed in the transformers, is an alternative mineral oil. There are seven transformers to be installed at the Project Site: six are equipped with 750 kilovolt-Ampere (kVA) transformers with 2550 gallons and one pad will be equipped with a 500 kilovolt (kV) transformer that has 200 gallons of the dielectric fluid.

This dielectric fluid does not contain halogens, silicones, sulfur, or any other questionable material. It quickly and thoroughly biodegrades in the environment and is non-toxic in aquatic and oral toxicity tests.

2.4 FEAF E.2.f.Topography

Figure 3 provides a detailed depiction of steep slopes at the Project Site based on recent topographic mapping, which shows significant areas where the slopes exceed 15 percent and 25 percent. The Project Site has 10.0 acres of area with steep slopes (i.e., slopes greater than 15 percent).

The slender configuration and limited size of the 4.45-acre parcel off Red Mill Road is such that it will be used exclusively for utility interconnection purposes. By routing the buried electrical interconnection along a possible former access way, disturbances of steep slopes have been largely eliminated within this northern parcel.

One important physical characteristic of the 38.67-acre parcel west of Lexington Avenue is a delineated NYSDEC freshwater wetland 2.18 acres in size (Figure 4). The eastern third of this parcel will not be developed to avoid all disturbance within the wetland and its 100-foot adjacent area.

The western portion of the 38.67-acre parcel thus represents the area of the Project Site that is conducive to the development of the Project. This area of the 38.67-acre parcel includes two primary steeply sloped areas (totaling 9.2 acres) separated by a flatter area of higher elevation (Figure 4). Setbacks were developed to control steep slope impacts while avoiding visual impacts. There are 1.5 acres with steep slopes in the development area west of the 100-foot wetland adjacent area will be preserved with no grade change. There are 0.82 acres with steep slopes where trees will be cleared but tree stumps will not be removed. Outside of the perimeter fence, there are 0.53 acres with steep slopes where trees will be cleared but tree stumps will not be

removed. To further minimize the amount of regrading in steep slope areas, foundations for the PV panel racking system will be selected to accommodate a slope of up to 20 percent. Finally, the stone-filled diaphragms, dry swales, and bioretention practice were selected, sited, and configured to also minimize regrading of steep slopes. In summary, of the total 10.0 acres of steep slopes at the Project Site, 5.3 acres of steep slope areas will not be disturbed in any way and 1.5 acres of steep slope areas will have trees cleared with no change in grades proposed.

The disturbance of steep slopes is required to accomplish the following objectives in accordance with effective engineering practice:

- Achieve slopes of not greater than 20 percent to accommodate the placement of the anticipated PV panel racking system (This slope is steeper than what is typical for the construction of solar arrays and was selected to minimize the amount of regrading in steep slope areas and preserve financial viability).
- Achieve nominal grades along the access drive network of approximately 10 percent or less in compliance with the New York State Fire Code.
- Clear trees that would cause excessive shading on the solar panels, thus reducing energy production.
- Facilitate stormwater conveyance and management.

During construction, steep slope areas to be disturbed will be subject to erosion and sediment control measures consistent with the Town of Cortlandt's steep slope and topographic alteration standards. These standards include construction phasing and scheduling, prompt temporary and permanent stabilization, topsoil segregation and reuse, and controlled fill material. These elements will be in addition to the requirements of the NYSDEC State Pollution Discharge Elimination System (SPDES) General Permit for Stormwater Discharges from Construction Activity – GP-0-20-001.

Based on the grading depicted in Appendix A, the Project will require 11,898 cubic yards of cut and 12,422 cubic yards of compacted fill for a net fill balance of 524 cubic yards of soil. The area of cut and fill on steep slopes have been minimized to the greatest extent practicable.

2.5 FEAF E.2.h. Surface Water Features

TRC conducted a wetland and stream delineation on October 7, 2019 and November 1, 2019, of the Project Site, and identified two wetlands and one stream (see Figure 4 and Appendix E). of The Project Site has 2.18 acres classified as wetland. Both wetlands delineated at the Project Site coincide with a Class II NYSDEC-mapped freshwater wetland (A-50) (Figure 5), and therefore are NYSDEC jurisdictional. A 100-foot adjacent area around these two delineated wetlands is also regulated by the NYSDEC. Both wetlands extend off site to the south and are likely U.S. Army Corps of Engineers (USACE) jurisdictional. The delineated stream is 306 feet long and has

an intermittent flow regime. This delineated stream corresponds to a NYSDEC-mapped Class C stream (see Figure 5). There are no setback requirements for Class C streams.

The Project has been designed to completely avoid the stream and wetlands. Work will occur outside of the 100-foot adjacent area around the wetlands. No Project components or construction activity will occur within 100 feet of the wetlands. Temporary erosion and sediment controls shall be used to reduce erosion, sedimentation, and pollutants in stormwater discharges, and to prevent impacts to wetlands and water bodies.

The Town of Cortlandt hired a third-party consultant, HVEA Engineers, to peer review the wetland delineation. HVEA Engineers field-verified TRC's wetland delineation on October 5, 2020; and made minor adjustments to the delineated wetland boundaries. TRC incorporated these minor adjustments into the Revised Site Plans to ensure that no Project components or construction activity will occur within 100 feet of the wetlands. HVEA Engineers' comments were addressed in the updated Wetland and Stream Delineation Report (see Appendix E).

2.6 FEAF E.2.o. Threatened and Endangered Species

TRC consulted the United States Fish and Wildlife Service (USFWS) Information for Planning and Conservation (IPaC) system for an unofficial list of federally listed threatened/endangered species, critical habitats, and migratory birds that may be found on the Project Site (Appendix F). IPaC identified one federally listed endangered mammal species, Indiana bat (*Myotis sodalis*); and one federally listed threatened reptile, bog turtle (*Clemmys muhlenbergii*), as potentially occurring within the vicinity of the Project Site. IPaC did not list any critical habitats within the Project Site.

During the site visits, no potential hibernacula were observed and there are no known Indiana bat hibernacula within the vicinity of the Project Site. However, potential bat roosting habitat was identified within the Project Site, because the Project is forested. Based on the tree inventory conducted by Bartlett Tree Experts, there were 88 shagbark hickories (*Carya ovata*) and 54 black locusts (*Robinia pseudoacacia*) (Appendix G). These tree species have exfoliating bark and deep furrows capable of supporting potential Indiana bat roosting habitat (USFWS, 2018). The diameter at breast height (DBH) of trees throughout the Project Site averaged between 4 to 24 inches with a few individuals attaining DBH measurements of over 30 inches. There are various trees on the Project Site that contain exfoliating bark, hollows, or deep furrows and crevices, which could be suitable for summer roosting habitats for bat species, including Indiana bat.

The Project will convert 18.53 acres of forested land to meadow for the solar arrays and associated facilities; however, there will be remaining forested habitat at the Project Site and within the surrounding vicinity. The USWFS recommends maintaining at least 35 percent of forest habitat within the maternity colony home range as a conservation measure for Indiana bats (USFWS, 2018). Based on National Land Cover Database, the Project will maintain 48 percent of potential Indiana bat habitat within a 2.5-mile radius of the Project Site. Tree clearing will be performed during the winter, between October 1 and March 31, in order to avoid impacts to

potentially roosting bats. Chapter 259 of the Town Code requires that disturbance and stabilization of steep slopes occur in the same construction season; therefore, tree clearing will occur in the later portion of this tree clearing window. No hibernacula were identified within the vicinity of the Project Site and therefore, no impacts to Indiana bat wintering habitat are anticipated due to the Project. Based on the factors considered herein, the Project may affect, but is unlikely to adversely affect the Indiana bat, and no "take" is anticipated. Consultation with USFWS will confirm no "take" of Indiana bat is anticipated.

No effect of the operation of the solar array on bat species is expected. As bats are nocturnal, glare is not expected to have an effect. Bats will also be able to forage along the forest edge habitat and above the solar panels.

During the wetland delineation in October and November 2019, no bog turtles were observed at the Project Site. TRC will perform a Phase 1 Bog Turtle Habitat Assessment (Phase 1 Survey) for the Project. A Phase 1 Survey would determine if potential bog turtle habitat is present at the Project Site. The Phase 1 Survey will be conducted in accordance with the *Guidelines for Bog Turtle Surveys for the Northern Population Range Phase 1 and 2 Surveys* (USFWS, 2020). Habitat considerations will include hydrology, soils, and vegetation. A TRC biologist with experience conducting Phase 1 surveys will conduct a Phase 1 survey in Spring 2021.

After the results of the Phase 1 survey have been submitted to the USFWS, TRC will develop conservation measures, if necessary, to prevent bog turtles from being adversely affected by the Project. Conservation measures may include a double row of silt fence around the Project's limit of disturbance to ensure no bog turtles enter during active construction.

Review of the NYSDEC Environmental Resource Mapper indicates that the Project Site is not in an area of known habitat for threatened/endangered species. TRC requested information from the New York Natural Heritage Program (NYNHP) regarding an official state-listed species list. According to the NYNHP, there are no rare or state-listed species at the Project Site or within its immediate vicinity (Appendix H).

2.6.1 Biodiversity Enhancement Plan

The overall the Biodiversity Enhancement Plan is to provide a planting scheme throughout the Project Site using plant species that are native or indigenous to the area, pollinator-friendly, and wildlife-friendly. The landscaping plan proposes pollinator-friendly tree and shrub plantings that will benefit wildlife and increase biodiversity at the Project Site. See the landscaping plan in Appendix A for the specifications of the tree and shrub plantings. Additional Best Management Practices (BMPs) will be implemented to supplement and enhance the existing vegetation and landscape elements at the Project Site.

A low-growing perennial seed mix comprised of native/indigenous warm and cool season grasses, red and white clover (*Trifolium repens* and *Trifolium pratense*), and other pollinator-friendly plant

species, will be sown throughout most of the solar array. This solar farm grass seed mix will minimize shading, erosion concerns, and the need for frequent mowing.

Additionally, a native pollinator-friendly seed mix ground cover is intended to be sown wherever possible in areas where mowing is not of concern in selected locations that will allow pollinator-friendly flower species to develop to the best extent possible. When planted together, these seed mixes, shrubs, and trees can benefit wildlife by providing wildlife habitat, shelter, and food for a variety of wildlife species, thereby increasing and enhancing biodiversity.

In addition to the items cited above, some other BMPs to be implemented include:

- wildlife-friendly chain-link fencing with a 6-inch gap off the ground to allow small wildlife species to pass through the solar array;
- using felled trees to construct wildlife habitat piles strategically located in designated areas;
- a variety of pollinator-friendly (woody-type and perennial) plantings in the laydown area after construction of the Project is complete;
- bird boxes and nest boxes throughout the Project Site; and
- allowing early succession to occur wherever possible throughout the Project Site.

The implementation of these BMPs can increase the diversity of wildlife and plant species, resulting in an increase of biodiversity at the Project Site and beyond. See Sheet L-100 Landscaping Plan, L101 Tree Preservation and Reforestation Plan, and L102 Biodiversity Enhancement Plan in Appendix A for details of the biodiversity enhancement features proposed for the Project.

2.7 FEAF E.3.b. Agricultural Soils

Figure 6 and Table 2 below present the soil units mapped by the United States Department of Agriculture Natural Resource Conservation Service (USDA-NRCS) for the Project Site. The Project Site is not used for agriculture and is not within the Westchester County Agricultural District.

Table 2. NRCS-Mapped Soil Units within Project Site

Soil Map Unit	Name	Prime Farmland	Area (acres)
SuB	Sutton loam, 3 to 8 percent slopes	Prime Farmland	2.17
CrC	Charlton-Chatfield complex, 0- to 15-percent slopes, very rocky	Not Prime Farmland	21.27
ChB	Charlton fine sandy loam, 3- to 8-percent slopes	Prime Farmland	4.87

Table 2. NRCS-Mapped Soil Units within Project Site			
Soil Map Unit	**Name**	**Prime Farmland**	**Area (acres)**
CsD	Chatfield-Charlton complex, 15- to 35-percent slopes, very rocky	Not Prime Farmland	2.10
CID	Charlton loam, 15- to 25-percent slopes, very stony	Not Prime Farmland	0.78
ChC	Charlton fine sandy load, 8- to 15-percent slopes	Farmland of Statewide Importance	0.41
LeB	Leicester loam, 2- to 8-percent slopes, very stony	Not Prime Farmland	10.53

2.8 FEAF E.3.e Historic Resources

A review of cultural resources was completed online using the New York State Cultural Resources Information System (CRIS). The vicinity of the Project Site is not considered to be within an area of high archaeological sensitivity (New York State Historic Preservation Office, 2019).

A previously conducted Phase IB survey in 2007 included approximately 31 acres of the current 43.12-acre Project Site (CITY/SCAPE: Cultural Resource Consultants, 2007). No archaeological resources were identified during the 2007 Phase IB survey. As the remaining un-surveyed portion of the Project Site is located on a similar landform and is not within an archaeologically sensitive area as defined by CRIS, TRC does not recommend further archaeological study.

Aerial imagery dating from 1974 indicates that the property has been consistently forested with no evidence of specialized land use, agricultural or otherwise (Historic Aerials, 2019). A review of historic maps indicates that there were no buildings on or adjacent to the Project Site, as the majority of buildings, in the late 19th century and early 20th century, were located on the northern side of Red Mill Road and displaced east of the Project Site in association with Lexington Avenue (Beers, 1868; USGS, 1892; and USGS, 1936). Given the limited use of the immediate vicinity of the Project Site, it likely has a low sensitivity for significant historic cultural resources.

Within a 1-mile radius of the Project Site, 23 architectural resources have been identified, including 1 National Register of Historic Places (NRHP)-listed resource, 6 NRHP-eligible resources, and 1 resource that has not been evaluated for inclusion in the NRHP (see Appendix I). The remaining 15 resources have been determined to not be eligible for inclusion in the NRHP. Due to distance and obscured lines of sight, CVE North America anticipates that the Project will have no impact on historic architectural resources.

On behalf of CVE, TRC submitted a consultation letter to the Office of Parks, Recreation, and Historic Preservation (OPRHP) in April 2020. The consultation was conducted prior to finalization of the design of the community solar energy facility and the footprint of the proposed community solar energy facility has decreased in the interim. The response from the OPRHP indicates that in OPRHP's opinion, the Project will have no adverse impact on historic or archaeological resources. The consultation and response letters are included as Appendix I.

2.9 FEAF E.3.h. Visual Resources

The Project will have a low profile with an 8.5-foot tall perimeter fence. To the extent practicable, the forested areas around the boundaries of the Project Site will be maintained to provide a visual barrier. Additional plantings of native species of trees and bushes will be installed in accordance with the landscaping plan to further enhance visual screening (see Sheet L-100 Landscaping Plan in Appendix A).

CVE commissioned an updated Visual Impact Assessment (VIA) of the Project Site that included a viewshed analysis, a visual resource inventory, and site photography with visual simulations. The updated VIA is included as Appendix C.

A viewshed analysis combines position and size data of elevated components of the Project with local topography to assess areas from which the Project may be visible. The viewshed analysis for the Project covers an area within 2 miles of the Project Site.

Due to terrain, buildings, and vegetation, the Project has limited potential visibility within the 2-mile study area. The viewshed analysis indicates an area of potential visibility in the following locations:

- Directly north of the Project Site near the end of Mill Court;
- To the northwest of the Project Site on Piano Mountain;
- To the northwest of the Project Site near Tanglewylde Road, west of Lake Peekskill; and
- On the west slope of Jones Hill between Lake Mohegan and Mohegan Highlands Park.

The NYSDEC's policy on "Assessing and Mitigating Visual Impacts" issued in July 2000 (Visual Policy) (NYSDEC, 2000b), provides guidance on what visual resources; including state parks, local parks, scenic byways, and historic sites; should be considered when evaluating the visual impact of developments. Appendix J contains an inventory of the visual resources within 5 miles of the Project Site. In addition to the visual resources required under the Visual Policy, the inventory includes public gathering places, such as schools and churches.

Photographs were taken from 13 locations surrounding the Project Site to evaluate potential visibility during leaf-on and leaf-off conditions from nearby residential areas. During leaf-off conditions, there may be limited views of Project from viewpoints adjacent to the Project, but the proposed landscaping will reduce and mitigate views of the Project's components.

Additional plantings to visually obscure the Project will be installed in accordance with the Landscaping Plan in Appendix A. The visual simulations in Appendix C depict the landscape plantings, at five years. As the plantings mature, they will provide an additional visual barrier with maximum opaqueness at eye-level reached in leaf-on conditions in approximately 7 to 10 years, depending on the species and assuming ideal growing conditions.

3.0 LOCAL AND STATE REGULATORY REQUIREMENTS AND PROJECT CONFORMANCE

3.1 Local Requirements

The Project requires the following local approvals:

- Special Permit Under Chapter 255, Solar Energy Systems, as well as Steep slope and Tree Removal Permits from the Town Board; and
- Site Plan Approval from the Planning Board.

A discussion of the Project's conformance to the following applicable Town Code chapters is provided below:

- Chapter 255: Solar Energy Systems;
- Chapter 179: Freshwater Wetlands, Water Bodies and Watercourse;
- Chapter 188: Historic and Scenic Roads;
- Chapter 259: Steep Slopes;
- Chapter 262: Stormwater Management and Erosion and Sediment Control; and
- Chapter 283: Trees.

3.1.1 Chapter 255: Solar Energy Systems:

The Town of Cortlandt has a solar energy systems bylaw, Chapter 255 of the Town Code of Cortlandt Section 255-5 lists the zoning districts where solar energy systems are prohibited. The R-40 zoning district, where the Project Site is located (Figure 7), is not on the list of prohibited districts, and therefore, is allowed by Special Permit. Under Chapter 255, solar energy systems are ranked in a three-tier system depending on the potential for negative impacts. The proposed Project would be a Tier 3 solar energy system, which is not roof-mounted or integrated into a building and has a nameplate capacity greater than 25 kilowatts AC. The Town Board must approve Special Permits for the installation of Tier 3 solar energy systems. The Special Permits for solar energy systems are subject to all standards and conditions for Special Permits defined in Article X of Chapter 307 of the Town Code of Cortlandt, Zoning.

Issuance of a permit by the Town Board will include review of the Project under the State Environmental Quality Review Act (SEQRA). In addition to Chapter 255, solar energy systems are subject to the requirements of Chapter 179, Freshwater Wetlands, Water Bodies, and Watercourses; Chapter 259, Steep Slopes; and Chapter 283, Trees. Under Chapter 262 of Cortlandt's bylaw, construction activities disturbing one or more acres of land may not receive final approval until the Stormwater Management Officer (SMO) certifies that a SWPPP for the Project complies with the provisions of Chapter 262.

All solar energy systems that require Special Permits under Chapter 255 also require a Site Plan review by the Planning Board as described in Article XII of Chapter 307.

Table 3 presents the required dimensions under Section 307-17 of the zoning bylaw for the R-40 zoning district and additional setback and dimensional requirements for solar energy systems under Chapter 255. Table 3 also shows how the Project complies with these dimensional requirements. Further details on the Project's dimensions can be found in Appendix A.

Table 3. Dimensional Regulations for R-40 Zoning District and Proposed Project Dimensions

Dimensional Regulation	Section 307-17 of Zoning Bylaw	Additional Restrictions under Chapter 255 (Solar Bylaw)	Proposed Project Dimensions
Minimum Lot Area	40,000 square feet	10 Acres	1,873,678 square feet (~43 acres)
Minimum Lot Width	150 feet	-	812/2,073 feet
Maximum Height of Residential Buildings	35 feet (2.5 stories)	25 feet	-
Minimum Front Yard Depth (feet)*	50 feet	200 feet	202 feet
Minimum Side Yard*	20 percent of width to a maximum of 30 feet	200 feet	110 feet (W)/ 763 feet (E)
Minimum Rear Yard Depth *	30 feet	200 feet	150 feet (S)
Minimum Landscape Coverage	50 percent	-	62 percent
Required Fence Height	-	8 feet	8.5 feet
*The Town Board, at its discretion, may vary the required 200-foot setback to a distance of 100 feet from property boundaries or 200 feet from nearest habitable building, whichever is more restrictive.			

In its application to the Town Board, CVE requests that the setback on the south side be reduced to 150 feet and on the west side be reduced to 100 feet from the property boundary. The Project will be set back 200 feet from neighboring residences. This reduced setback is needed to avoid impacting wetlands and minimize impacts to steep slopes on the Project Site. Due to the topography and existing vegetation, the Project is well buffered from adjacent residential properties. The Project meets all other dimensional requirements under Section 317-17 of the zoning bylaw and Chapter 255 (Solar Bylaw).

3.1.2 Chapter 179: Freshwater Wetlands, Water Bodies, and Watercourses

Chapter 179 of the Town Code of Cortlandt, Freshwater Wetlands, Water Bodies, and Watercourses states the following are regulated activities in wetlands, waterbodies, or regulated

areas (i.e., area within 100 linear feet from the perimeter of wetland or water body) that may be applicable to the Project:

- Any form of draining, dredging, grading, excavation or removal of material, including but not limited to peat or other organic soil deposits, except removal of debris or refuse;
- Any form of depositing, dumping, filling or storing of any material;
- Erecting or enlarging any building or structure of any kind, roads, the driving of pilings, digging of wells or placing of any other obstructions, whether or not they change the ebb and flow of the water;
- Any other activity which disturbs any of the several functions served by wetlands, water bodies and watercourses or the benefits derived therefrom;
- Any cutting of trees and brush;
- The introduction or destruction of plant life which would alter the existing pattern of vegetation;
- Any form of activity which could destroy or damage nesting or breeding areas; and
- The use of herbicides, pesticides, and fertilizers in regulated areas.

No activities regulated under Chapter 179 will occur during the installation of the Project.

3.1.3 Chapter 188: Historic and Scenic Roads

Under Chapter 188 of the Town Code of Cortlandt, the Planning Board must consider the impacts to scenic/historic roadways in Cortlandt. Red Mill Road, which is to the north of the Project Site, is on the list of scenic/historic roads identified in Chapter 188. Tree clearing will be limited to the amount necessary to install and operate the solar arrays. To the extent practicable, the natural vegetation between the solar arrays and Red Mill Road will be maintained and will provide a visual buffer.

Appendix C includes a VIA and Appendix J contains an inventory of the visual resources within 5 miles of the Project Site. The viewshed analysis does not indicate any areas along Red Mill Road that are likely to have views of the solar arrays. The pull-out for access to the utility meter enclosure will be visible from Red Mill Road, but will be screened with landscaping plantings of trees and shrubs.

3.1.4 Chapter 259: Steep Slopes

Chapter 259 of the Town Code of Cortlandt establishes the Town's regulations for proposed development on land with steep slope areas. A steep slope is defined within the law as ground areas with grades of 15 percent or greater with a minimum area of 500 square feet, which possesses one dimension of a minimum of 10 feet. Under the law, any activity disturbing or cutting any tree with a diameter greater than 4 inches when measured 1.5 feet from ground level, requires

a written permit from the Town Board as the granting authority of the Special Permit under Chapter 255 of the Town Code of Cortlandt. As discussed in Section 3.1.6.2 of this supplement, a tree inventory has been conducted to estimate the number of trees that meet the criterion of equal to or greater than 4 inches in diameter.

3.1.5 Chapter 262: Stormwater Management and Erosion and Sediment Control

Chapter 262 of the Town of Cortlandt's General Law establishes the Town's regulations for managing stormwater and erosion controls to protect the general health, safety, and welfare of the public as they pertain to proposed development. All land development activities within the Town of Cortlandt are regulated under Chapter 262. Land development activities have been defined by the Cortlandt Law as construction activities including clearing, grading, excavating, soil disturbance, or placement of fill that results in land disturbance of equal to or greater than one acre. The Project is expected to develop an area greater than 1 acre of land; therefore, a permit satisfying Chapter 262 must be obtained. No approval of a land development activity shall be authorized until a SWPPP has been finalized by Town's SMO serving as the approval authority.

A SWPPP for the Project has been prepared in accordance with New York State Standards for Erosion and Sediment Control and the Stormwater Management Design Manual and the requirements for review under Chapter 262 of the Town Code of Cortlandt. The Project is located within a regulated Municipal Separate Storm Sewer System (MS4) for the Town of Cortlandt. The SWPPP has been prepared in accordance with applicable requirements of the permit and will be reviewed by the Town of Cortlandt's MS4 representative. The MS4 SWPPP Acceptance Form and Notice of Intent (NOI) will be submitted to NYSDEC, certifying that the Project complies with the technical requirements of the SPDES General Permit for Stormwater Discharges from Construction (Permit No. GP-0-15-002). The Project shall comply with all applicable local, state, and federal regulations.

Modeling conducted for preparation of the SWPPP demonstrates that the Project will not alter the hydrological or hydraulic characteristics of the site; therefore, no negative impacts to neighboring properties or downstream areas are anticipated.

3.1.6 Chapter 283: Trees

Chapter 283 of the Town of Cortlandt's Code establishes the regulations for managing tree cover and removal as they pertain to sustained and proposed development. Tree cutting or removal has been defined as the clearing, cutting, uprooting, or any similar activity on any tree or trees; except normal maintenance such as trimming, pruning, bracing, and selective removal of dead or diseased trees, as determined by the Town Arborist. Under Chapter 283, no one shall either purposefully or negligently cut down, kill, clear cut, top, or otherwise destroy any tree without a permit to conduct such activities. Any private property owner applying for a site plan approval and/or site building permit whose plans require the remove of four or more trees must obtain a permit satisfying the requirements set forth in Chapter 283. A private property owner proposing

to remove four or more trees shall submit a tree inventory of all trees within 50 feet of the proposed area of disturbance and a tree protection plan to complete the permit application.

3.1.6.1 Preliminary Tree Survey

In order to better understand the composition of tree species within the Project Site and to begin formulating a potential mitigation plan for tree clearing, CVE commissioned a preliminary tree inventory (Appendix K). The study was conducted by TRC on May 28, 2020 and included evaluation of two random 0.25-acre plots.

Every tree within the 0.25-acre square boundary equal to or greater than 4 inches DBH was measured and recorded, excluding dead trees. The DBH of each tree was measured with a measuring tape to record the circumference at approximately 4.5 feet above the ground and the measured circumference was converted to DBH.

Plot 1 (western plot) was surveyed to have 44 trees with a DBH equal to or greater than 4 inches, excluding dead trees. The average DBH of trees surveyed in Plot 1 was 10 inches. The dominant species identified in Plot 1 were red maple (*Acer rubrum*), sugar maple (*Acer saccharum*), white oak (*Quercus alba*), northern red oak (*Quercus rubra*) and black birch (*Betula lenta*). Appendix J shows the conditions of Plot 1 during the tree survey and contains a table indicating the species and DBHs of the trees surveyed in Plot 1. Plot 2 (eastern plot) was surveyed to have 40 trees with a DBH greater than 4 inches, excluding dead trees. The average DBH of trees surveyed in Plot 2 was 11.6 inches. The dominant species identified in Plot 2 were white oak, pignut hickory (*Carya glabra*), northern red oak, and black birch. Appendix K shows the condition of Plot 2 during the tree survey and contains a table indicating the species and DBHs of the trees surveyed in Plot 2.

3.1.6.2 Bartlett Tree Survey

At the request of the Town, Bartlett Tree Experts conducted an inventory and inspection of all trees within 50 feet of the original proposed limits of disturbance at Project Site. The tree inventory report from the certified arborist with Bartlett Tree Experts is included as Appendix G. There were 3,808 trees equal to or greater than 4 inches DBH within 50 feet of the original proposed limits of disturbance at the Project Site The dominant tree species were red oak, black birch, sugar maple, red maple, pignut hickory, and American beech (*Fagus grandifolia*). A majority of the trees inventoried were less than 15 inches DBH (3,070 trees) indicating the relative youth of the trees. The Project Site has a limited number of trees considered invasive species (i.e., Norway maple [*Acer platanoides*], black locust [*Robinia pseudoacacia*], and tree of heaven [*Ailianthus altissima*]). Each of the trees in the inventory is depicted on Sheet 6 – Tree Plan in Appendix A.

3.1.6.3 Summary of Tree Removal, Preservation, and Reforestation

The existing trees proposed to be removed within the Project's limits of disturbance require replacement efforts to satisfy calculations pertaining to tree replacement at a minimum ratio of 1 tree per 1,000 square feet of disturbance and/or for every tree proposed for removal on a steep slope regulated under Chapter 283 of the Town Code (i.e., equal to or greater than 25 percent),

2 trees shall be planted. The Planning Board shall determine the minimum number of trees to be replanted and the total quantity of trees to be replanted shall be set at the more stringent of the two between the total number of trees proposed removal (adjusted for steep slopes) and the ratio of 1 per 1,000 square feet of disturbance.

It was concluded, after comparing calculation totals, that ultimately 841 trees will need to be replanted using the more stringent requirement of 1 tree per 1,000 square feet of disturbance put forth. Calculations for tree replacement can be found on Sheet L-101 (Appendix A).

Additionally, the Landscaping Plan proposes tree plantings that provide visual buffers to potential views into the Project Site to the best extent possible. The Landscaping Plan also proposes tree and shrub plantings that are pollinator-friendly and enhance wildlife habitat, increasing biodiversity in and around the Project Site. The proposed trees shall be planted during appropriate timeframes and stages throughout the construction of the Project so that the reforestation efforts are completed simultaneously with the installation of the solar panels to the best extent possible. It is important to note that additional construction sequencing should be developed once tree planting efforts are better defined through procurement and dig schedules. Some factors that are not conducive to tree transplanting, planting, and installation include, but are not limited to, frozen or snow-covered ground, mid-summer drought conditions, and plant availability, which may affect planting schedules and installation timeframes. The requirements put forth by the Town of Cortlandt allow for credit to be taken for plantings of certain heights and sizes that are proposed to be planted within the Project Site. In this instance, a total tree credit of 304 trees was calculated using the formulas allotted. Please see calculations on Sheet L-101 – Tree Preservation and Reforestation Plan (Appendix A). Once the tree credit is applied, a remaining total of 537 trees will be compensated by CVE's contribution to the Town of Cortlandt Tree Mitigation Fund.

Additionally, the remaining 537 trees will be planted after the Project's decommissioning in the area where the solar array system was sited and removed. As noted on Sheet L-101 – Tree Preservation and Reforestation Plan (Appendix A), the tree species to be planted after decommissioning will be the same as or similar to the original species that existed on the Project Site prior to construction. The tree inventory prepared by Bartlett Tree Experts (Appendix G) will be referenced to ensure that the proper tree species are procured and installed, to the best extent possible, in the same locations as that of the original tree species that existed at the Project Site prior to construction. Any remaining trees that cannot be planted due to spacing, availability, layout limitations, and/or any other reasonable restrictions will be accounted for via an in-lieu fee payment to compensate for any remaining deficiencies in tree quantity totals required.

3.2 State Requirements

This revised SWPPP has been prepared in accordance with the NYSDEC SPDES General Permit for Stormwater Discharges from Construction Activity" General Permit GP-0-20-001, effective January 29, 2020 through January 28, 2025. The NYSDEC requires coverage under GP-0-20-001 for any "construction activities involving soil disturbances of one or more acres; including

disturbances of less than 1 acre that are part of a larger common plan of development or sale that will ultimately disturb one or more acres of land; excluding routine maintenance activity that is performed to maintain the original line and grade, hydraulic capacity or original purpose of a facility" (NYSDEC, 2020).

The Project is classified as a commercial development (solar farm) project, per Table 2 of GP-0-20-001 Appendix B. The Project involves construction activities that require the preparation of a SWPPP that includes post-construction stormwater management practices designed in conformance with Part III.B.2 of the permit.

No other state permits are required.

4.0 RESPONSE TO TOWN COMMENTS

Town of Cortlandt Staff comments on CVE's June 2020 filing is included as part of the revised submittal.

5.0 SUMMARY TO SUPPORT COMPLETION OF SEQR FEAF PART 2

The Project will provide renewable energy to the local electrical grid and help the state of New York meet its renewable energy goals with minimal impact on the infrastructure and services of the Town of Cortlandt. The Project has been thoughtfully designed to minimize negative environmental and community impacts as described in the following sections following headings of the SEQRA Part 2 form.

5.1 Land

- The Project has been carefully designed to meet the following design goals:
    - Avoid wetlands and 100-foot adjacent areas to wetlands;
    - Minimize impacts to steep slopes;
    - Maintain a 200-foot setback from residences; and
    - Minimize tree clearing and cut and fill.
- The final Project will cover 16.3 acres and the construction limit of disturbance is 19.3 acres.
- The Project will include including ***over 500*** new native and pollinator-friendly evergreen and deciduous trees and shrub plantings; pollinator-friendly wildflowers and grasses.
- CVE will contribute to the Town of Cortlandt's Tree Fund to mitigate for tree removal for the Project as required by the Planning Board.

- CVE will also provide reforestation of the Project Site after the Project has been decommissioned as outlined in the Decommissioning Plan.
- The average depth to water table at the Project Site is greater than 8 feet.
- A total of 4.7 acres of land with slopes of 15-percent or greater will be disturbed. A total of 1.5 acres of this area will involve tree-clearing, but no grading.
- During construction, steep slope areas to be disturbed will be subject to erosion and sediment control measures consistent with the Town's steep slope standards. These standards include construction phasing and scheduling, prompt temporary and permanent stabilization, topsoil segregation and reuse, and controlled fill material. Mitigating measures include erosion and sediment controls more stringent than required by the NYSDEC Erosion and Sediment Control Standards and Specifications. For instance, for steep slope areas, the SWPPP mandates the use of more robust erosion control blankets to stabilize disturbed areas. These elements will be in addition to the requirements associated with the NYSDEC SPDES General Permit for Stormwater Discharges from Construction Activity - GP-0-20-001, effective January 29, 2020 through January 28, 2025.
- The average depth to bedrock is greater than 5 feet.
- A net increase of 524 cubic yards of fill is required.
- The Project will not continue for more than one year or in multiple phases.
- The Project is not within a Coastal Erosion hazard area.

5.2 Geological Features

- No impacts to geological features anticipated.

5.3 Surface Water

- The Project has been carefully designed to avoid work in delineated wetlands, stream, and the wetlands' 100-foot adjacent area.
- The Project will not create a new water body.
- As documented in the Project's SWPPP, modeling of stormwater post-construction demonstrates that hydrologic and hydraulic conditions will not be changed so that no negative impacts to neighboring properties or other downstream areas are anticipated.
- Prior to and during construction, the Project will implement BMPs in accordance with the SWPPP to avoid impacting wetlands and water bodies.

5.4 Groundwater

- No impacts to groundwater anticipated.

5.5 Flooding

- No impacts to flooding are anticipated.

5.6 Air

- The Project will produce approximately 5.0 MWac of electrical power without emissions.

5.7 Plants and Animals

- The Project has been carefully designed to minimize ecological impacts.
- The delineated wetlands, stream, and the wetlands' 100-foot adjacent area will not be impacted.
- Compared to the previously proposed and approved residential development at Mill Court Crossing, the Project will have less impervious cover and provide more wildlife habitat.
- According to the NYNHP, there are no rare or state-listed species at the Project Site or within its immediate vicinity (see Appendix H).
- The Project may affect, but is unlikely to adversely affect, Indiana bat. Tree clearing will be performed during the winter, between October 1 and March 31, in order to avoid impacts to potentially roosting bats.
- During the wetland delineation in October and November 2019, no bog turtles were observed at the Project Site. A Phase 1 survey will be conducted to determine if there is potential bog turtle habitat. Conservation measures will be developed, if necessary, to avoid impacts to bog turtles based on the results of the survey.
- The Project will not impact any designated significant natural community.
- Only 43.1 percent (18.57 acres) of the forested area at the Project Site will be converted to a pollinator-enhanced meadow habitat benefiting various wildlife species.
- The Project will have a moderate impact on the nesting/breeding, foraging, or over-wintering habitat for the forest mammals and forest interior birds that occupy or use the Project Site.
- The perimeter fence surrounding the Project will be elevated 6 inches to allow for the passage of small animals. Smaller animals will have access to the fenced in area. Larger and smaller animals will have access to 62 percent (26.8 acres) of the parcel outside the fence (see Figure 8).

- The area around the arrays will be seeded with pollinator-friendly wildflowers.
- CVE will contribute to the Town of Cortlandt's Tree Fund to mitigate for tree removal for the Project as required by the Planning Board.
- CVE will also provide reforestation of the Project Site after the Project has been decommissioned as outlined in the Decommissioning Plan.
- Prior to and during construction, the Project will implement BMPs in accordance with the SWPPP to avoid impacting wetlands, water bodies, and rare, threatened, and endangered species.
- Impacts to wildlife are expected to consist of temporary displacement during construction and maintenance and incidental injury and mortality of sedentary and slow-moving species. The Project will follow BMPs, along with following the required permits in order to avoid, minimize, and/or mitigate impacts.
- The Project will include significant biodiversity enhancement features including ***over 500*** new native and pollinator-friendly evergreen and deciduous trees and shrub plantings; pollinator-friendly wildflowers; a wildlife-friendly fence; wildlife habitat piles; and bird boxes throughout the outside edges of the array area.

5.8 Agricultural Resources

- The Project Site is not used for agriculture and is not within the Westchester County Agricultural District (see Figure 7).
- Three soil units, totaling 17.3 percent (7.45 acres) of the Project Site, are either prime farmland or farmland of statewide importance (see Table 2).
- The Project will not impact agricultural resources.

5.9 Aesthetic Resources

- Existing vegetation supplemented by a robust Landscaping Plan of evergreen and deciduous trees and shrubs (see page L-100 Landscaping Plan of Appendix A) will be maintained at the edge of the Project Site and will serve as a visual barrier between neighboring residences and Red Mill Road, which is designated as a historic roadway by the Town of Cortlandt.
- The viewshed analysis indicates a limited area of visibility (see Appendix C). None of the visual resources on the VIA (see Appendix J) coincide with areas of potential visibility.
- Based on field photography and visual simulations (see Appendix C), there is potential for views of the landscape plantings, the perimeter fence, and minimal views of solar during leaf-off conditions.

5.10 Historic and Archeological Resources

- CVE submitted a consultation letter to OPRHP in April 2020. The consultation was conducted prior to final design of the Project and the footprint of the proposed solar array has decreased in the interim. The response from the OPRHP indicates that in OPRHP's opinion, the Project will have no adverse impact on historic or archaeological resources (see Appendix I).

5.11 Open Space and Recreation

- The Project parcels are private property and are not public or privately designated recreation or open space.

5.12 Critical Environment Areas

- No impacts to critical environmental areas anticipated.

5.13 Transportation

- Minimal impact to traffic during operation with approximately 1 to 2 trips per month (see Table 1).
- Red Mill Road and Mill Court will experience an increase in traffic for the approximately 6 to 8-month construction period. The estimates for the additional traffic are presented in Section 2.2 and Table 1.

5.14 Energy

- The Project will not create the need for energy and will contribute approximately 5.0 MW ac of renewable energy to the local power grid.
- The Project will provide renewable energy to the local electrical grid and help the state of New York meet its renewable energy goals with minimal impact on the infrastructure and services of the Town of Cortlandt.

5.15 Noise, Odor, and Light

- Modeling of the predicted sound levels after installation of the Project indicate that there may be an increase of up to 4 dBA above estimated ambient sound levels during the daytime at neighboring residences considered and up to 2 dBA during nighttime. No mitigation is required to meet the Town of Cortlandt's requirements or NYSDEC guidance for broadband sound levels. See Appendix D. No odors are anticipated.
- No external lighting is proposed.

5.16 Human Health

- The Project will be monitored remotely 24 hours, 7 days a week.

- The Project will be surrounded by a security fence, with a locked gated entry equipped with a KnoxBox available to emergency responders.
- Potentially hazardous materials will be stored on site as pre-sealed components of the electrical equipment. These include a lithium ion electrolyte in storage batteries and a dielectric transformer fluid. All electrical elements will be mounted on impervious concrete pads.

5.17 Consistency with Community Plans

- The Project will not require any new infrastructure and minimal town services, limited to emergency services.
- *Envision Cortlandt: 2016 Sustainable Comprehensive Plan* (Adopted March 2016) includes a policy to encourage residential energy efficiency and renewable energy in residences. The Project will contribute approximately 5.0 MWac of renewable energy to the local grid, providing renewable energy for homes and businesses where installation of renewable energy infrastructure is infeasible.
- Solar facilities are allowed in the R-40 by special permit from the Town Board. In its application to the Town Board, CVE requests that the setback on the south side be reduced to 150 feet and on the west side be reduced to 100 feet from the property boundary. This reduced setback is needed to avoid impacting wetlands and minimize impacts to steep slopes on the eastern side of the Project Site.
- The siting principles in *Clean Energy, Green Communities: A Guide to Siting Renewable Energy in the Hudson Valley* (Scenic Hudson, 2018) were taken into consideration during Project planning.

5.18 Consistency with Community Character

- The Project will not have an impact on any existing facilities, structures, or areas of historic importance.
- The Project will create only minimal demand for additional emergency services. The Project has been designed for access of emergency vehicles.
- The Project will not increase demand for public school services.
- The Project will not use public water or sewer systems.
- To the extent practicable, the existing forest will be maintained as a visual barrier between the Project and neighboring residences. Native species of trees and shrubs will be planted as depicted in the landscaping plan in Appendix A to provide additional visual buffering.

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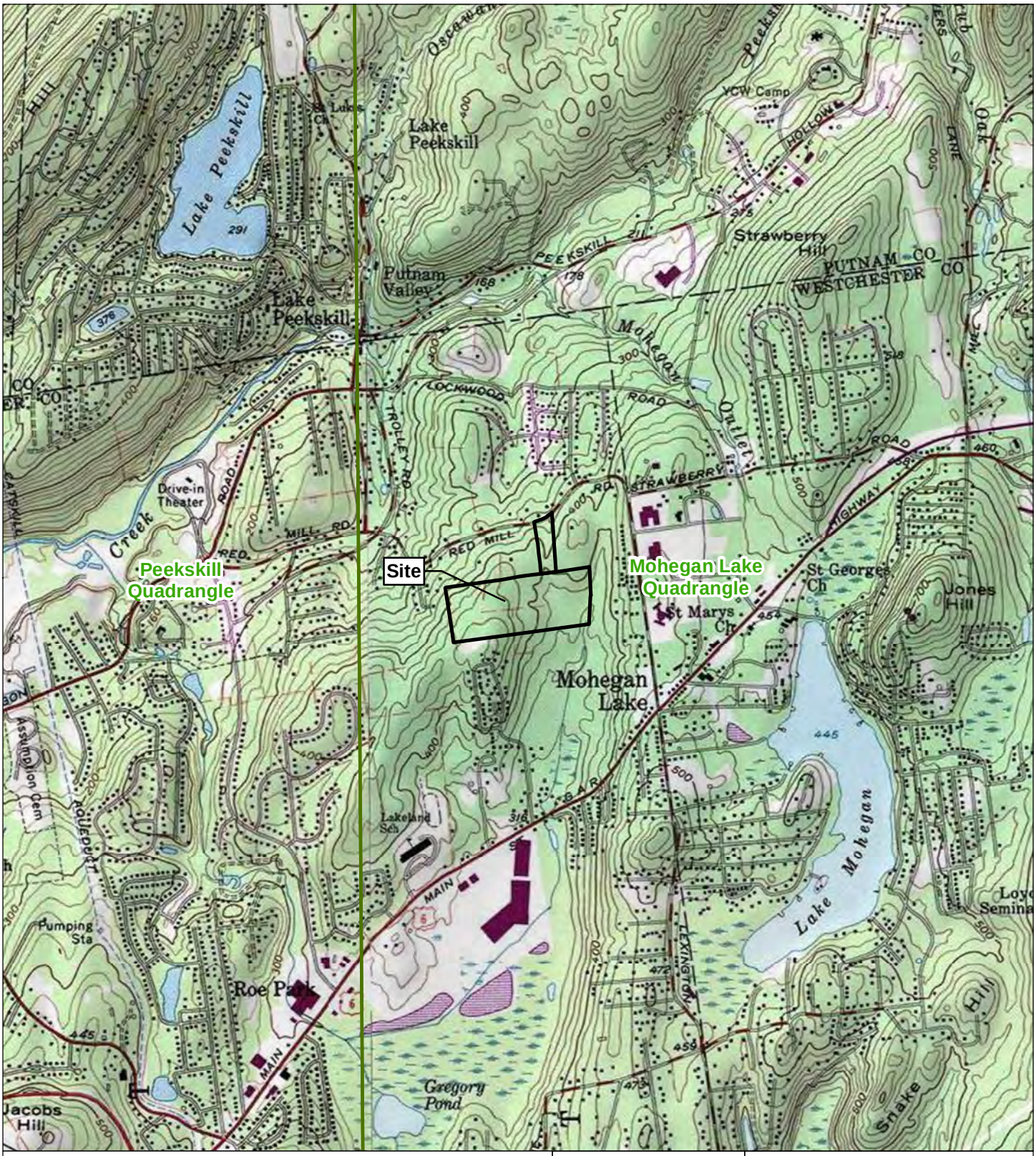
FIGURES



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PROJECT LOCATION

CVE NORTH AMERICA
CORTLANDT MILL SOLAR FARM

CORTLANDT, WESTCHESTER COUNTY
NEW YORK

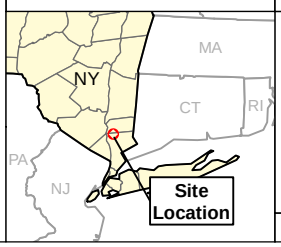
FIGURE 1	JUNE 2020

S:\1-PROJECTS\CVE_NA\360551_Mill_Court_Cortland\Fig1_Cortlandt_USGS_8x11_20200617.mxd

Project Parcel

N

0 200 400
Feet



Data Sources: CVEGroup, TRC
Bae Map: Esri/NAIP, "World Imagery", 2018

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AERIAL MAP

CVE NORTH AMERICA
CORTLANDT MILL SOLAR FARM

CORTLANDT, WESTCHESTER COUNTY
NEW YORK

FIGURE 2	JUNE 2020

S:\1-PROJECTS\CVE_NA\360551_Mill_Court_Cortland\Fig2_Cortlandt_Aerial_8x11_20200615.mxd

LEGEND

- 418 — EXISTING MINOR CONTOUR (FEET)
- 420 — EXISTING MAJOR CONTOUR (FEET)
- PROPOSED FENCE LINE
- PROPERTY LINE SETBACK (100 FT)
- PROPERTY LINE SETBACK (200 FT)
- PARCEL LINE
- PROPOSED UNDERGROUND ELECTRIC
- WETLAND DELINEATION
- 100-FOOT NYSDEC ADJACENT AREA
- STREAM
- HABITABLE BUILDING SETBACK (200 FT)
- STONE WALL
- STONE WALL
- ROCKS
- TREE LINE
- ACCESS DRIVEWAY 7' EQUIPMENT SETBACK
- PERMANENT CHECK DAM
- 10' MIN. BRUSH CUT AREA
- 20' WIDE ACCESS ROAD
- 150' MAX. HOSE PULL DISTANCE

THE PROJECT SHALL BE DESIGNED IN COMPLIANCE WITH ALL APPLICABLE CODES, STANDARDS, AND REQUIREMENTS, INCLUDING BUT NOT LIMITED TO:

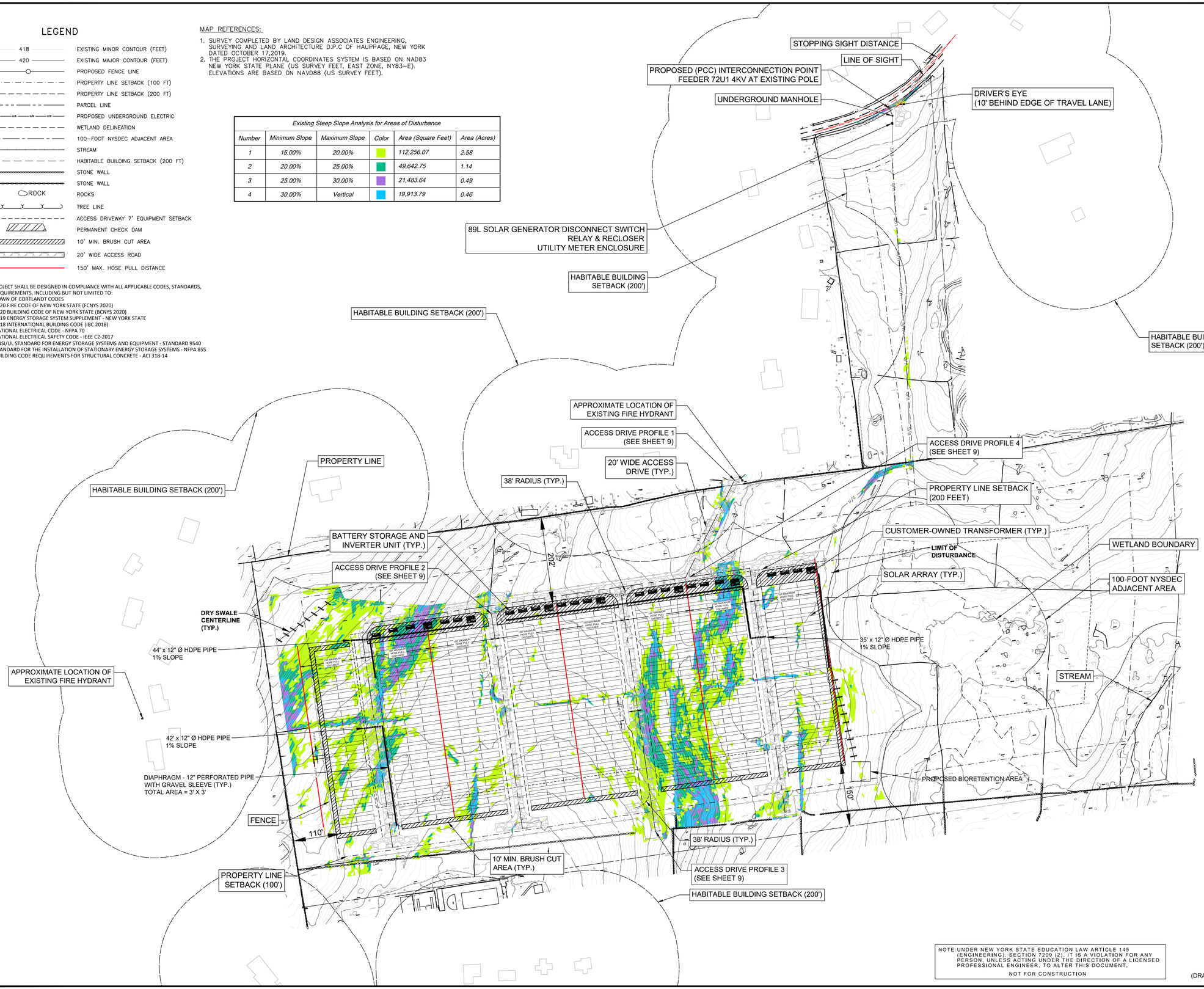
- TOWN OF CORTLANDT CODES
- 2020 FIRE CODE OF NEW YORK STATE (FCNYS 2020)
- 2020 BUILDING CODE OF NEW YORK STATE (BCNYS 2020)
- 2019 ENERGY STORAGE SYSTEM SUPPLEMENT - NEW YORK STATE
- 2018 INTERNATIONAL BUILDING CODE (IBC 2018)
- NATIONAL ELECTRICAL CODE - NFPA 70
- NATIONAL ELECTRICAL SAFETY CODE - IEEE C2-2017
- ANSI/UL STANDARD FOR ENERGY STORAGE SYSTEMS AND EQUIPMENT - STANDARD 9540
- STANDARD FOR THE INSTALLATION OF STATIONARY ENERGY STORAGE SYSTEMS - NFPA 855
- BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE - ACI 318-14

MAP REFERENCES:

1. SURVEY COMPLETED BY LAND DESIGN ASSOCIATES ENGINEERING, SURVEYING AND LAND ARCHITECTURE D.P.C OF HAUPPAGE, NEW YORK DATED OCTOBER 17,2019.
2. THE PROJECT HORIZONTAL COORDINATES SYSTEM IS BASED ON NAD83 NEW YORK STATE PLANE (US SURVEY FEET, EAST ZONE, NY83–E). ELEVATIONS ARE BASED ON NAVD88 (US SURVEY FEET).

Existing Steep Slope Analysis for Areas of Disturbance

Number	Minimum Slope	Maximum Slope	Color	Area (Square Feet)	Area (Acres)
1	15.00%	20.00%		112,256.07	2.58
2	20.00%	25.00%		49,642.75	1.14
3	25.00%	30.00%		21,483.64	0.49
4	30.00%	Vertical		19,913.79	0.46



NOTE: UNDER NEW YORK STATE EDUCATION LAW ARTICLE 145 (ENGINEERING), SECTION 7209 (2), IT IS A VIOLATION FOR ANY PERSON, UNLESS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT.

NOT FOR CONSTRUCTION

0 100' 200'

SHEET SIZE: 24" BY 36"
(DRAWING MAY BE PRINTED AT REDUCED SIZE)

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New York, NY 10018
Phone: 212.221.7822

TRC

TRC Project No: 360551.0000.0000

cve
Changing Visions of Energy

Revisions:

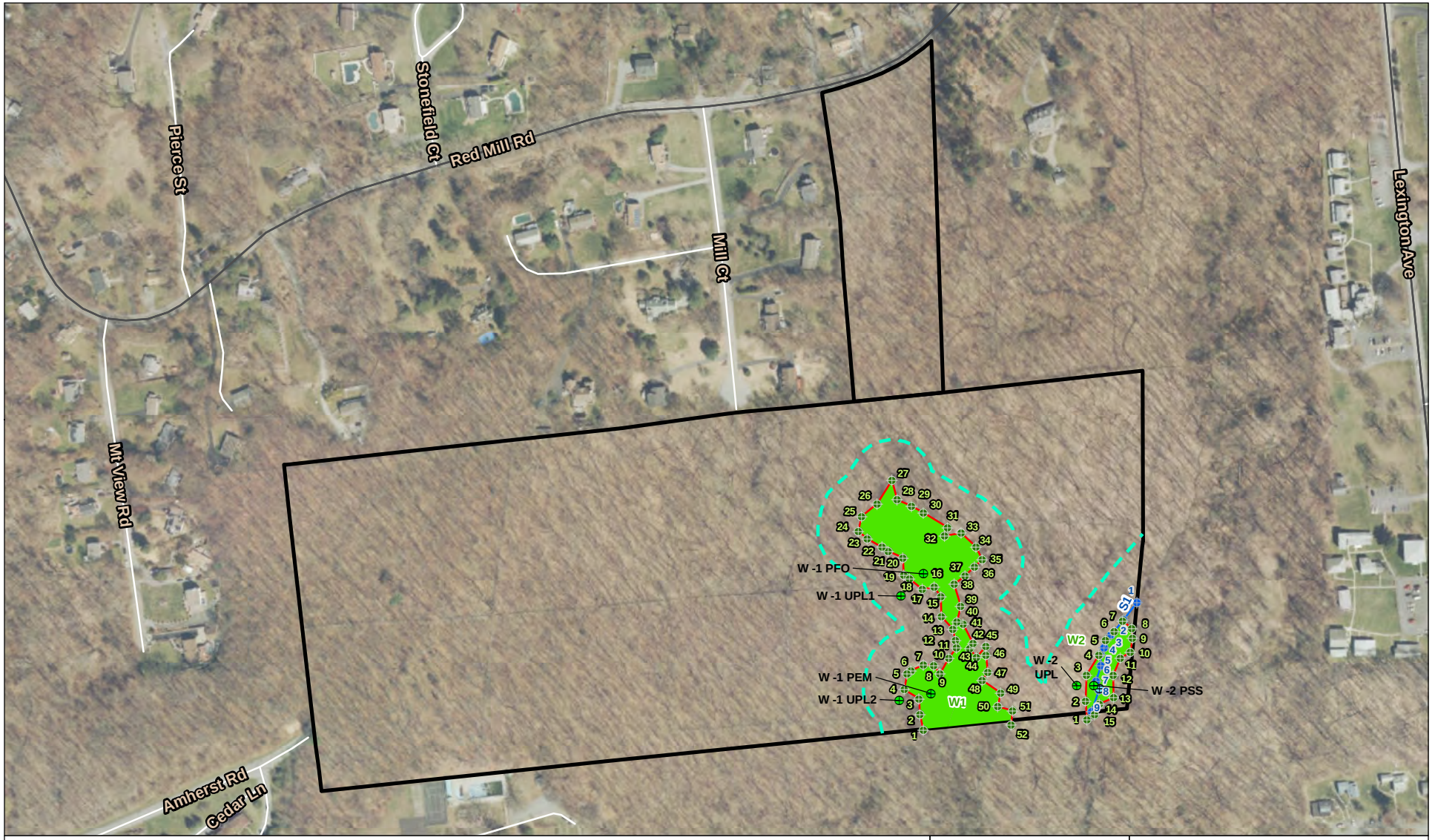
No.	Date:

Drawn by: A. REXROAT
Design by: A. REXROAT
Checked by: S. MEERSMA

CVE NORTH AMERICA, INC.
CORTLANDT MILL SOLAR FARM
5.0 MW GROUND MOUNT SOLAR SYSTEM
0 MILL COURT
CORTLANDT, NEW YORK 10520

Contract No: 360551
Scale: AS NOTED
Date: MARCH 2021
Sheet: SITE PLAN
Drawing No: Figure 3

DRAWING NAME: w:\trc\Shared\Projects\360551\000\01 CAD Files\Civil\Cortlandt Solar\Mylars Drawings\SITE PLAN - ORIGINAL\SITE Cortlandt Site Plan.dwg, 03/30/2021 8:29:39 AM, JAYSON, 1:1, 36.00 x 24.00 in, Adobe PDF



Project Parcel
USACE Plot
Stream Plot
Stream Flag
Wetland Flag
Delineated Intermittent Stream
Wetland Boundary Line
Delineated Wetland
100-ft Wetland Buffer

N

0 175 350
Feet

Data: TRC, 2019
Base Map: Esri & Contributors, "World Imagery (Clarity)"

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(978) 970-5600

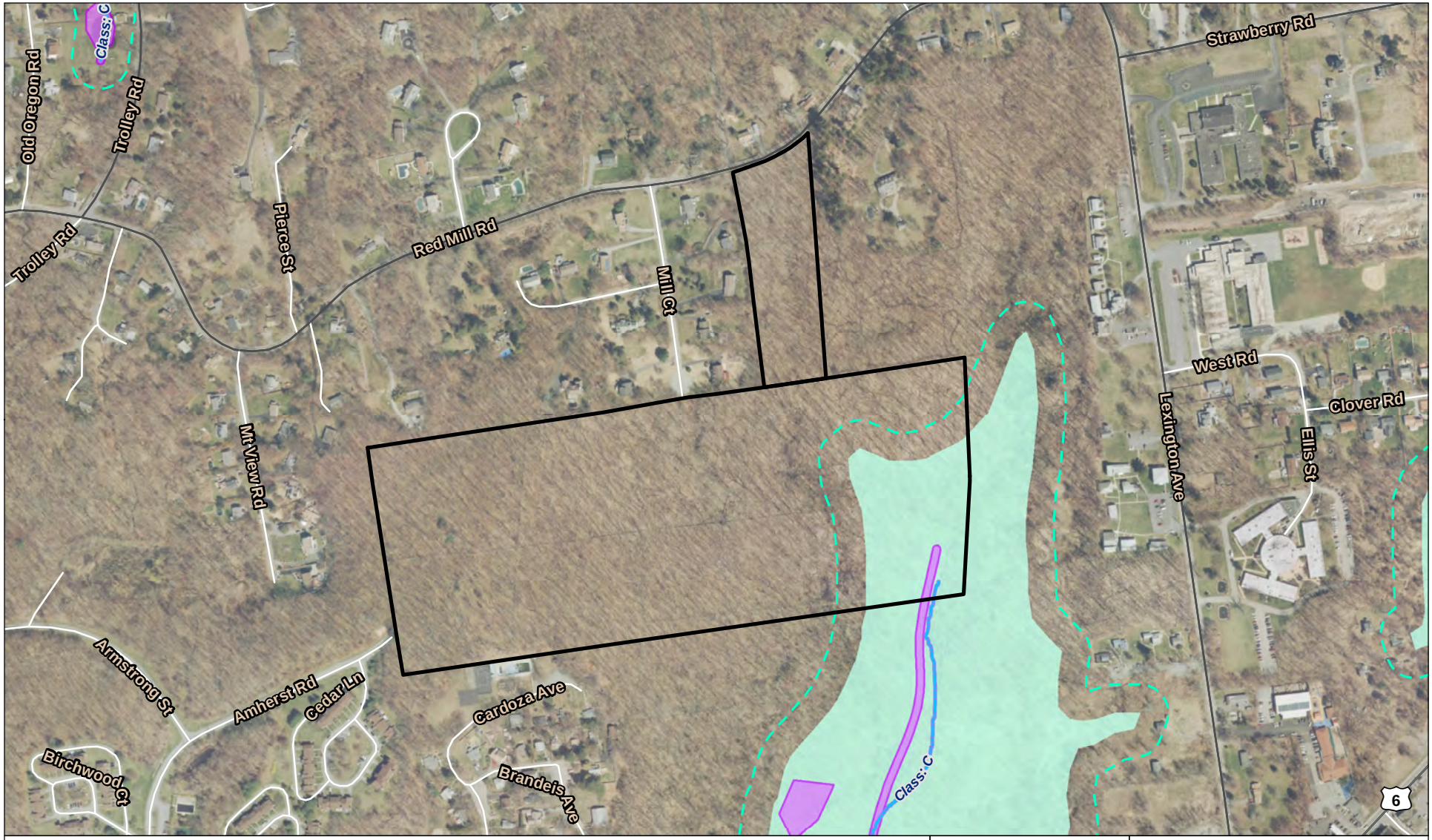
DELINEATED WETLANDS AND STREAMS

CVE NORTH AMERICA CORTLANDT MILL SOLAR FARM

CORTLANDT, WESTCHESTER COUNTY NEW YORK

FIGURE 4 | JUNE 2020

S:\1-PROJECTS\CVE_NA\360551_Mill_Court_Cortland\Fig4_Delineation_8x11L_20200617.mxd



Project Parcel
Streams (NHD)
Unprotected Stream (NYSDEC)
Wetland (NYSDEC)
Wetland (NWI)
100-ft Buffer from DEC Wetland/Stream

Note:
1. The whole map extent is within 500-Year Floodplain (FEMA).

Base Map: Esri/NAIP, "World Imagery", 2018
Data: NYS Geographic Information Gateway, FEMA, TRC, 2019

0 250 500
Feet

N

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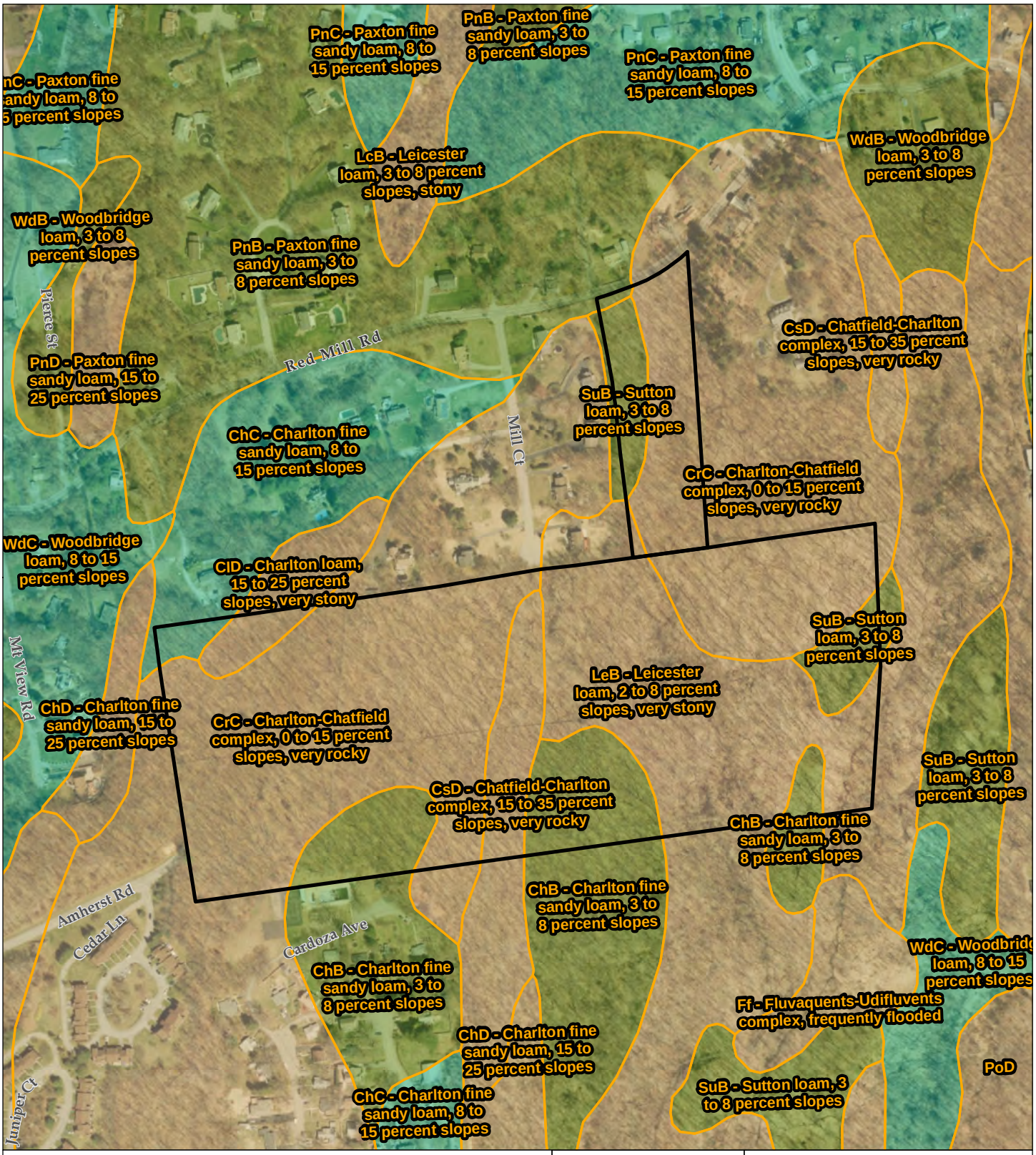
FEDERAL AND STATE-MAPPED WATER RESOURCE AND FLOODPLAIN MAPPING

CVE NORTH AMERICA
CORTLANDT MILL SOLAR FARM

CORTLANDT, WESTCHESTER COUNTY
NEW YORK

FIGURE 5 | JUNE 2020

S:\1-PROJECTS\CVE_NA\360551_Mill_Court_Cortland\Fig11_Federal_State_Resources_8x11L_20200615.mxd



Data Sources: CVEGroup, USDA Web Soil Survey, 2019
Base Map: Esri/NAIP, "World Imagery", 2018

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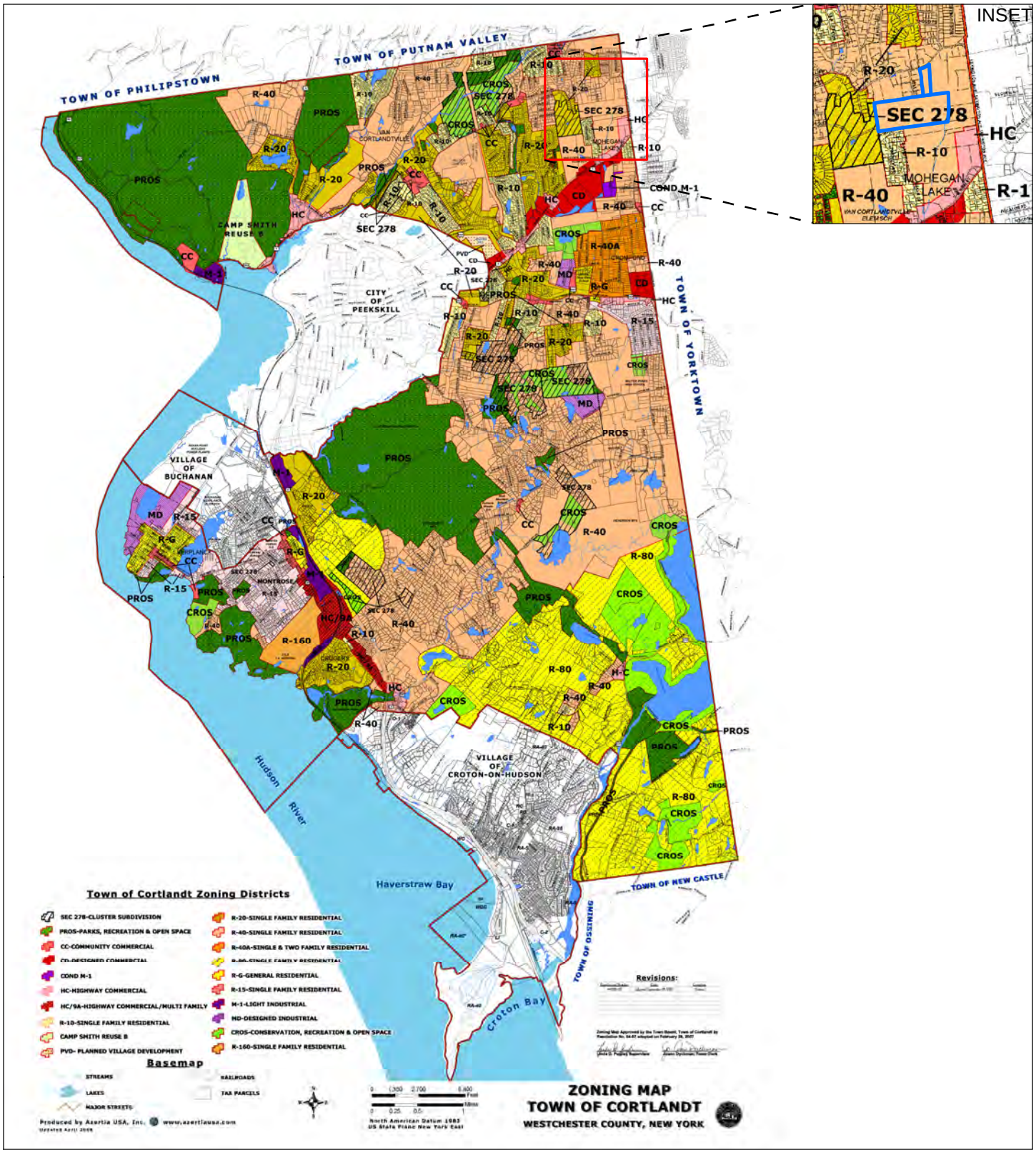
SOILS MAP

CVE NORTH AMERICA
CORTLANDT MILL SOLAR FARM

CORTLANDT, WESTCHESTER COUNTY
NEW YORK

FIGURE 6 | JUNE 2020

S:\1-PROJECTS\CVE_NA\360551_Mill_Court_Cortland\Fig12_Cortlandt_Soils_8x11_20200615.mxd

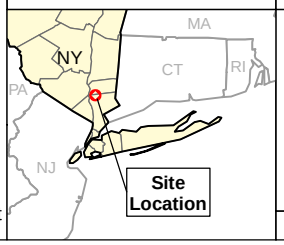


Project Parcel

Project Area Zoning: R-40 Single Family Residential

Data: Zoning Map of Town of Cortlandt

NOT TO SCALE



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ZONING MAP

CVE NORTH AMERICA
CORTLANDT MILL SOLAR FARM

CORTLANDT, WESTCHESTER COUNTY
NEW YORK

FIGURE 7 | JUNE 2020

S:\1-PROJECTS\CVE_NA\360551_Mill_Court_Cortland\Fig3_Cortlandt_Zoning_8x11L_20200615.mxd

Trolley Rd
Pierce St
Stonefield Ct
Red Mill Rd
Mill Ct
Mt View Rd
West Rd
Lexington Ave
Armstrong St
Amherst Rd
Cedar Ln
Cardoza Ave

Landscaping Will Include Wildlife and Pollinator-Friendly Shrub and Tree Plantings

Bird boxes and Habitat Piles of FelledTrees to be Placed Throughout the Project Site

95 ft
159 ft
125 ft
175 ft
588 ft
96 ft
220 ft
94 ft

Wildlife Friendly Fence Will Allow Small Wildlife to Use/Pass Through Solar Array

Proposed Landscaping

Pollinator-Friendly Seed Mix to be Planted Throughout Solar Array

Project Parcel
Adjacent Parcel
Landscaping
Proposed Access Drive
Proposed Fenced Area
Wildlife Corridors
Wildlife Pathway

Design Version	Parcel (Acres)	Fenced Area		Available Wildlife Corridor	
		Acres	% of Parcel	Acres	% of Parcel
Proposed Project Area – 2021	43.12	16.31	38	26.82	62

26.82 acres (62 percent of Parcel) available for large wildlife.

0 125 250
Feet

N

MA
NY
CT
PA
NJ
NY
Site Location

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BIODIVERSITY ENHANCEMENTS AND WILDLIFE CORRIDORS

CVE NORTH AMERICA CORTLANDT MILL SOLAR FARM

CORTLANDT, WESTCHESTER COUNTY NEW YORK

FIGURE 8 | MARCH 2021

S:\1-PROJECTS\CVE_NA\360551_Mill_Court_Cortland\5-MXD\Biodiversity_Assessment\Fig8_Cortlandt_Wildlife_Corridor_11x17L_20210318.mxd

Appendix A

Site Plans

SITE PLAN SET

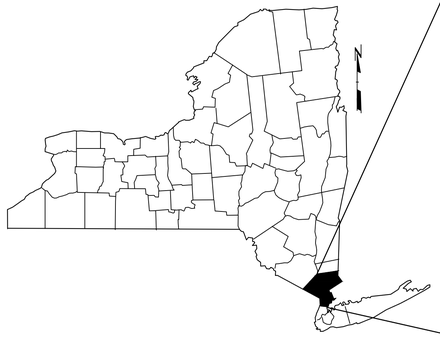
CORTLANDT MILL SOLAR FARM

CORTLANDT MANOR, WESTCHESTER COUNTY, NEW YORK

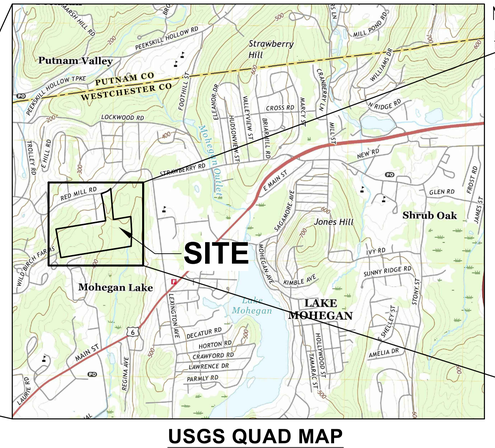
PREPARED FOR: CVE NORTH AMERICA INC.
109 WEST 27TH STREET, 8TH FLOOR
NEW YORK, NEW YORK 10001

PREPARED BY: TRC ENGINEERS, INC.
1430 BROADWAY, 10TH FLOOR
NEW YORK, NEW YORK 10018

DATE: JUNE 2020 - REVISED MARCH 2021

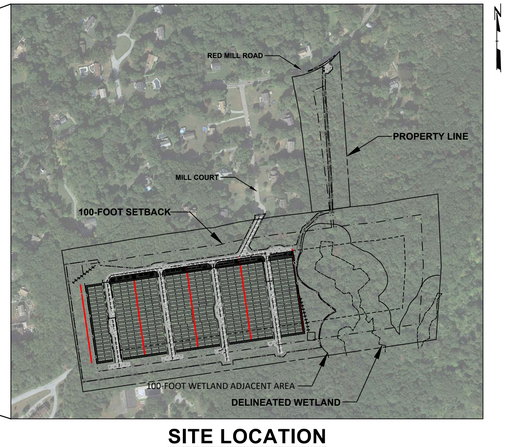


NEW YORK



USGS QUAD MAP

SCALE: 1"=2000'
IMAGE SOURCE: U.S.GEOLOGICAL SURVEY MAPS
PARCEL DATA: WESTCHESTER TAX MAP



SITE LOCATION

SCALE: 1"=400'
IMAGE SOURCE: GOOGLE EARTH
PARCEL DATA: WESTCHESTER TAX MAP

SHEET INDEX

SHEET NUMBER	SHEET TITLE
1	TITLE SHEET
2	GENERAL NOTES
3	EXISTING CONDITIONS
4	SITE PLAN
5	DEMOLITION PLAN
6	TREE PLAN
7	GRADING PLAN
8	EROSION & SEDIMENT CONTROL PLAN
9	ACCESS DRIVE PROFILES
L-100	LANDSCAPING PLAN
L-101	TREE PRESERVATION AND REFORESTATION PLAN
L-102	BIODIVERSITY ENHANCEMENT FEATURES
10	NOTES/DETAILS SHEET 1
11	NOTES/DETAILS SHEET 2
12	NOTES/DETAILS SHEET 3
13	NOTES/DETAILS SHEET 4

NOTE:UNDER NEW YORK STATE EDUCATION LAW ARTICLE 145 (ENGINEERING), SECTION 7209 (2), IT IS A VIOLATION FOR ANY PERSON, UNLESS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT.

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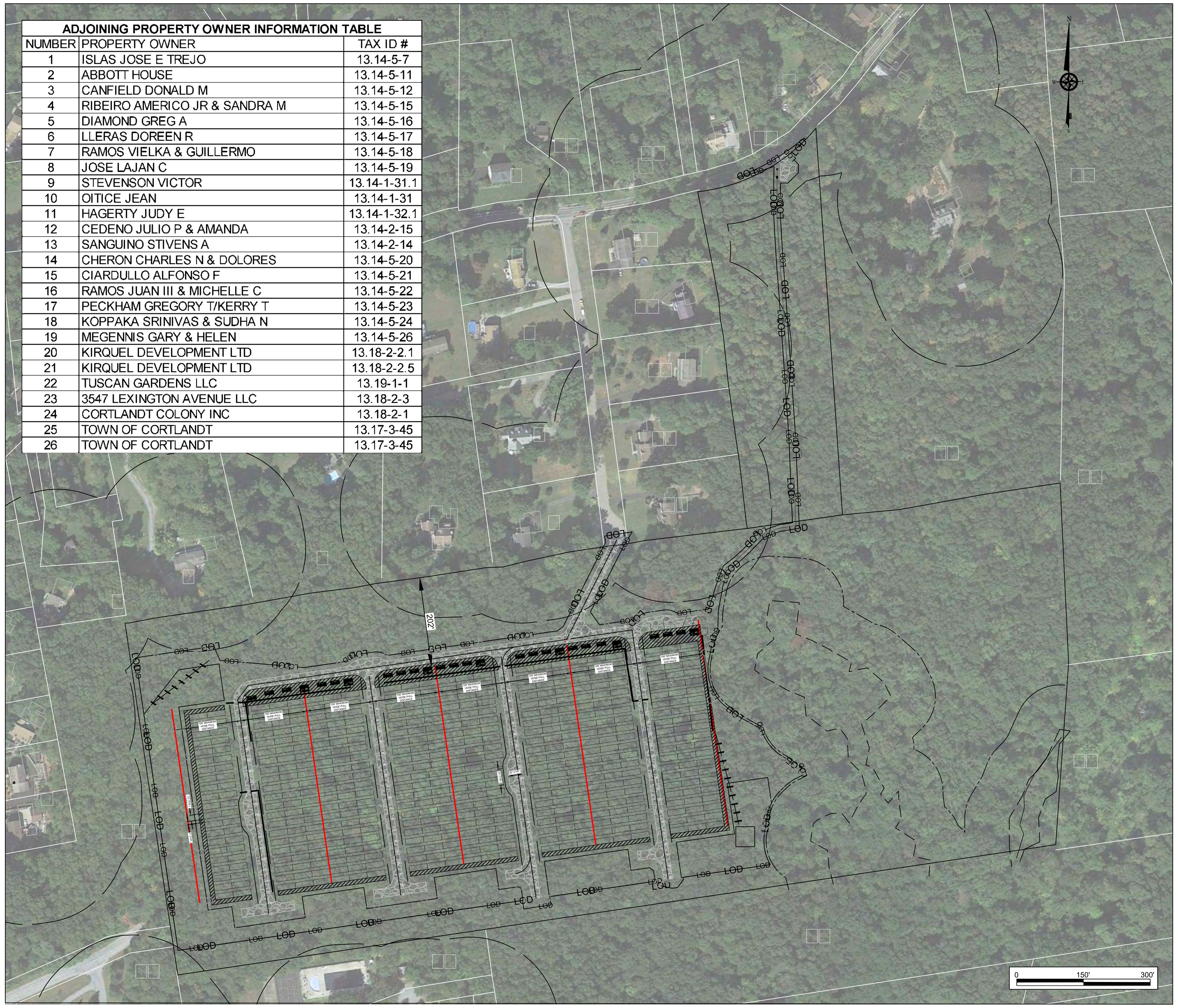
www.TRCcompanies.com

Version: 2017-10-21

ADJOINING PROPERTY OWNER KEY MAP

ADJOINING PROPERTY OWNER INFORMATION TABLE

NUMBER	PROPERTY OWNER	TAX ID #
1	ISLAS JOSE E TREJO	13.14-5-7
2	ABBOTT HOUSE	13.14-5-11
3	CANFIELD DONALD M	13.14-5-12
4	RIBEIRO AMERICO JR & SANDRA M	13.14-5-15
5	DIAMOND GREG A	13.14-5-16
6	LLERAS DOREEN R	13.14-5-17
7	RAMOS VIELKA & GUILLERMO	13.14-5-18
8	JOSE LAJAN C	13.14-5-19
9	STEVENSON VICTOR	13.14-1-31.1
10	OITICE JEAN	13.14-1-31
11	HAGERTY JUDY E	13.14-1-32.1
12	CEDENO JULIO P & AMANDA	13.14-2-15
13	SANGUINO STIVENS A	13.14-2-14
14	CHERON CHARLES N & DOLORES	13.14-5-20
15	CIARDULLO ALFONSO F	13.14-5-21
16	RAMOS JUAN III & MICHELLE C	13.14-5-22
17	PECKHAM GREGORY T/KERRY T	13.14-5-23
18	KOPPAKA SRINIVAS & SUDHA N	13.14-5-24
19	MEGENNIS GARY & HELEN	13.14-5-26
20	KIRQUEL DEVELOPMENT LTD	13.18-2-2.1
21	KIRQUEL DEVELOPMENT LTD	13.18-2-2.5
22	TUSCAN GARDENS LLC	13.19-1-1
23	3547 LEXINGTON AVENUE LLC	13.18-2-3
24	CORTLANDT COLONY INC	13.18-2-1
25	TOWN OF CORTLANDT	13.17-3-45
26	TOWN OF CORTLANDT	13.17-3-45



SITE DATA

TAX ID #	PROPERTY OWNER	SITE ADDRESS
13.18-2-2.4	KIRQUEL DEVELOPMENT LTD	0 MILL COURT ROAD
13.14-5-25	PARR PATRICK J & SHARON	CORTLANDT, NY, 10520

SYSTEM SUMMARY

DC SYSTEM SIZE: 4,984.56 KW
AC SYSTEM SIZE: 5,000.00 KW
MODULE: HANWHA Q CELLS QPEAK DUO (430W)
MODULE QUANTITY: 11,592
INVERTER: SUNGROW SG125HV (LIMITED TO 50% OUTPUT POWER)
INVERTER QUANTITY: 80

LAND USE INFORMATION

LAND USE	UNIT	EXISTING	PROPOSED
DISTURBED AREA	ACRES	N/A	19.30
SOLAR AREA	ACRES	N/A	9.06
WETLAND AREA	ACRES	2.18	2.18

ZONING DATA CHART - R-40
(ONE-FAMILY RESIDENCE DISTRICT)

LOT DESCRIPTION	LOT AREA (SF)	LOT WIDTH (FT)	FRONT YARD SETBACK (FT)	SIDE YARD SETBACK (FT)	REAR YARD SETBACK (FT)	BUILDING COVERAGE (SF)	LANDSCAPE COVERAGE (%)	BUILDING HEIGHT (FT)	BUILDING FLOOR AREA (SF)	FLOOR AREA RATIO
REQUIRED/ PERMITTED	40,000 MIN.	150 MIN.	50 MIN.	30' MAX. OR 20% OF WIDTH	30 MIN.	122,494 MAX. *	50% MIN.	$2^{1/2}$ STORIES OR 35' MAX.	187,548 MAX. **	0.1 MAX. ***
PROPOSED	1,883,099	811.8 / 2,073.1	202	109.8 / 763.3	150.1	---	70%	---	---	---

* BUILDING COVERAGE = 65% OF ALLOWED FLOOR AREA RATIO = (0.65 * (188,453 / 1,883,099)) * 1,883,099 = 122,494 S.F.
** MAXIMUM FLOOR AREA (MFA) = 7,675 + ((1,883,099) / 1,000) x 96) = 188,453 SF PER ZONING REGULATIONS (SEE TABLE OF DIMENSIONAL REGULATIONS, MAXIMUM FLOOR AREA IN RESIDENTIAL DISTRICTS, SECTION 307-17, ATTACHMENT 4, NOTE **)
*** FLOOR AREA RATIO = MAXIMUM BUILDING FLOOR AREA / LOT AREA = 188,453 SF / 1,883,099 SF = 0.1

LOCAL LAW NO.8-2018
REGULATION OF SOLAR ENERGY SYSTEMS WITHIN THE TOWN OF CORTLANDT

LOT DESCRIPTION	LOT SIZE (SF/AC)	FRONT YARD SETBACK (FT)	SIDE YARD SETBACK (FT)	REAR YARD SETBACK (FT)	STRUTURE HEIGHT (FT)	LANDSCAPE COVERAGE (%)	FENCE HEIGHT (FT)
MINIMUM REQUIRED	435,600 / 10	200	200	200	25' / 2 STORIES	50%	8
PROPOSED	1,883,099 / 43.12	202 (N)	109.8* (W) / 763.3 (E)	150.1* (S)	9'	70%	8.5

* - CHAPTER 255-8.A.10.B.2 STATES THE APPROVING AUTHORITY AT ITS DISCRETION MAY VARY THE TIER 3 SOLAR ENERGY SYSTEM SETBACK TO NOT LESS THAN 100 FEET, IN CASES SUCH AS PLANNED HERE WHERE THE SYSTEM IS LOCATED MORE THAN 200 FEET FROM THE NEAREST HABITABLE BUILDING.

GENERAL NOTES

1. THE PROJECT HORIZONTAL COORDINATES SYSTEM IS BASED ON NAD83 NEW YORK STATE PLANE (US SURVEY FEET, EAST ZONE, NY83-E). ELEVATIONS ARE BASED ON NAVD88 (US SURVEY FEET).
2. TOPOGRAPHY SHOWN ON THESE PLANS WAS COMPLETED BY LAND DESIGN ASSOCIATES ENGINEERING, SURVEYING AND LAND ARCHITECTURE D.P.C. USING A BASE & ROVER RTKGPS SYSTEM TO DEVELOP CONTOURS AT A 2 FOOT INTERVAL.
3. PROJECT PROPERTY BOUNDARIES ARE BASED ON INFORMATION PROVIDED BY LAND DESIGN ASSOCIATES ENGINEERING, SURVEYING AND LAND ARCHITECTURE D.P.C. LAND SURVEYING FROM A SURVEY COMPLETED IN OCTOBER 2019.
4. EXISTING UTILITIES ARE APPROXIMATE AND SHOULD BE VERIFIED BY CONTRACTOR. DIG SAFELY NEW YORK (811) SHALL BE NOTIFIED A MINIMUM OF 72-HOURS PRIOR TO COMMENCING ANY EXCAVATION.
5. THIS IS A PRELIMINARY DESIGN PLAN PROVIDED FOR PERMITTING ONLY. FINAL DESIGN SHALL BE MODIFIED TO SUPPORT CONSTRUCTION, MATCH FINAL ELECTRICAL INTERCONNECTION STUDIES, EQUIPMENT PURCHASED, AND POSSIBLE PERMIT CONSTRAINTS REVEALED DURING PROJECT'S REVIEW.
6. ALL WORK DETAILED ON THESE PLANS SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE PROJECT SPECIFICATIONS, AND ANY OTHER APPLICABLE TECHNICAL REPORTS. WHERE INDICATED, STATE AND/OR LOCAL CODES AND STANDARD SPECIFICATIONS SHALL APPLY.
7. THE CONTRACTOR SHALL ABIDE BY ALL LOCAL, STATE, AND FEDERAL LAWS, RULES AND REGULATIONS WHICH APPLY TO THE CONSTRUCTION OF THESE IMPROVEMENTS, INCLUDING STATE AND FEDERAL REQUIREMENTS.
8. THE CONTRACTOR IS RESPONSIBLE FOR PROTECTING ALL EXISTING UTILITY LINES WITHIN OR ADJACENT TO THE CONSTRUCTION AREA. ANY DAMAGE TO EXISTING FACILITIES CAUSED BY CONSTRUCTION ACTIVITY SHALL BE REPAIRED OR REPLACED AT THE CONTRACTOR'S EXPENSE.
9. CONSTRUCTION SHALL NOT OCCUR IN ANY PUBLIC RIGHTS OF WAY, PUBLIC OR PRIVATE EASEMENTS, BEYOND THE LIMITS OF DISTURBANCE, OR OUTSIDE THE PROPERTY LIMITS WITHOUT NECESSARY PERMITS AND APPROVALS. ANY PUBLIC OR PRIVATE PROPERTY OR IMPROVEMENTS DAMAGED DURING CONSTRUCTION SHALL BE REPAIRED TO THE SATISFACTION OF THE OWNER AT THE COST OF THE CONTRACTOR.
10. OVERNIGHT PARKING OF CONSTRUCTION EQUIPMENT SHALL NOT OBSTRUCT DRIVEWAYS OR DESIGNATED TRAFFIC LANES. THE CONTRACTOR SHALL NOT STORE ANY EQUIPMENT OR MATERIAL WITHIN THE PUBLIC RIGHT OF WAY. OVERNIGHT PARKING OF CONSTRUCTION VEHICLES ON PRIVATE PROPERTY IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR.
11. ALL PROPERTY CORNERS OR MONUMENTS DESTROYED DURING CONSTRUCTION SHALL BE REPLACED AT THE CONTRACTOR'S EXPENSE. ALL PROPERTY CORNERS MUST BE RESET BY A PROFESSIONAL LAND SURVEYOR LICENSED IN THE STATE OF NEW YORK.
12. CONTRACTOR IS RESPONSIBLE FOR MAINTAINING DRAINAGE THROUGHOUT THE CONSTRUCTION OF THE PROJECT.
13. CONTRACTOR SHALL FIELD FIT ALL PROPOSED CULVERT INVERTS TO PROVIDE POSITIVE DRAINAGE IN THE DIRECTION OF EXISTING SLOPES. ALL CULVERTS TO BE INSTALLED AT ADEQUATE DEPTHS AND TO DAYLIGHT. INLETS AND OUTLETS OF ALL CULVERTS TO BE STABILIZED WITH RIP RAP IN ACCORDANCE WITH EROSION CONTROL PLAN.
14. THE CONTRACTOR SHALL SECURE PERMITS FROM THE STATE, COUNTY, AND TOWN AUTHORITIES AS NECESSARY BEFORE DRIVING CONSTRUCTION EQUIPMENT OVER AND ACROSS STATE, COUNTY OR TOWN MAINTAINED ROADS.
15. ALL WORK IN THE PUBLIC RIGHT OF WAYS SHALL CONFORM WITH THE NEW YORK DEPARTMENT OF TRANSPORTATION "STANDARD SPECIFICATIONS, CONSTRUCTION AND MATERIALS", DATED JANUARY 1, 2019 OR CURRENT EDITION.
16. WETLANDS AND WATERCOURSES SHOWN IN THIS PLAN ARE SUBJECT TO FUTURE CONFIRMATION BY NYSDEC.
17. THE EROSION AND SEDIMENTATION CONTROL MEASURES FOR THIS PROJECT SHALL BE IN COMPLIANCE WITH THE STORMWATER POLLUTION PREVENTION PLAN (SWPPP) PREPARED FOR THE PROJECT.
18. TREES AND OTHER VEGETATION IN AREAS OF IDENTIFIED CLEARING AND GRUBBING MAY BE REDUCED TO CHIPS BY THE USE OF CHIPPING MACHINES OR STUMP GRINDER AND BE PREPARED FOR USE AS EROSION CONTROL MIX. ALL OTHER CHIPS AND WOOD WASTE RESULTING FROM CLEARING AND GRUBBING OPERATIONS SHALL BE DISPOSED OF OFF-SITE AT AN APPROPRIATELY LICENSED FACILITY AND IN A MANNER AS APPROVED BY THE OWNER.
19. CONTRACTOR SHALL TAKE NECESSARY PRECAUTIONS TO AVOID DAMAGE TO EXISTING IMPROVEMENTS AND FACILITIES TO REMAIN IN PLACE. THE CONTRACTOR IS RESPONSIBLE FOR REPAIR AND REPLACEMENT OF DAMAGED ITEMS AS A RESULT OF CONSTRUCTION OF THE PROPOSED FACILITY.
20. THE WORK SHALL BE CARRIED OUT NEAR AND UNDER ENERGIZED EQUIPMENT. EXTREME CAUTION IS REQUIRED AT ALL TIMES. THE CONTRACTOR SHALL STRICTLY FOLLOW ALL APPLICABLE SAFETY REQUIREMENTS.
21. EARTHWORK: UNLESS EXPLICITLY STATED OTHERWISE, REFER TO THE LATEST EDITION OF THE STATE OF NEW YORK, DEPARTMENT OF TRANSPORTATION, STANDARDS SPECIFICATIONS, CONSTRUCTION AND MATERIALS, FOR GENERAL REQUIREMENTS, PRODUCTS, AND EXECUTION RELATED TO THE COMPLETION OF PROPOSED WORK.
22. THE LIMITS OF DISTURBANCE SHALL BE FIELD STAKED BY A LICENSED LAND SURVEYOR PRIOR TO THE START OF WORK. A COPY OF THE STAKEOUT SKETCH SHALL BE PROVIDED TO THE TOWN OF CORTLANDT.
23. PRIOR TO THE ISSUANCE OF A BUILDING PERMIT, THE APPLICANT SHALL SUBMIT A NOTICE OF INTENT (N.O.I.) TO THE NYSDEC AND PROVIDE PROOF OF COVERAGE UNDER THE SPDES GENERAL PERMIT FOR CONSTRUCTION ACTIVITIES TO THE TOWN OF CORTLANDT.
24. ANY IMPORTED SOIL SHALL MEET THE NYSDEC STANDARDS OF UNRESTRICTED FILL AND BE SUITABLE FOR RESIDENTIAL USE. CONSTRUCTION DEBRIS IS NOT PERMITTED TO BE IMPORTED. ANY MATERIAL MEETING THE NYSDEC DEFINITION OF BENEFICIAL USE SHALL BE CERTIFIED AS SUCH BY THE DESIGN PROFESSIONAL OF RECORD. NOTIFY THE TOWN OF CORTLANDT PRIOR TO IMPORT. SOIL TESTING MAY STILL BE REQUIRED.
25. PRIOR TO THE BACKFILLING OF ANY STORM WATER BEST MANAGEMENT PRACTICE, DOTS-ENGINEERING SHALL BE NOTIFIED TO PERFORM AN INSPECTION. CONTACT ENGINEERING AT 914-734-1060 TO SCHEDULE AN INSPECTION.
26. PRIOR TO THE ISSUANCE OF A CERTIFICATE OF OCCUPANCY, THE ENGINEER/ARCHITECT SHALL SUBMIT A CERTIFICATION ADDRESSED TO "THE TOWN OF CORTLANDT DEPARTMENT OF TECHNICAL SERVICES" THAT THE SITE WORK HAS BEEN COMPLETED IN ACCORDANCE WITH THE APPROVED PLANS ON FILE WITH THE TOWN AND THAT THERE IS NO ADVERSE IMPACTS TO ADJACENT AND ADJOINING NEIGHBORS AS IT PERTAINS TO DRAINAGE AND RUNOFF.
27. THE APPLICANT IS AWARE THAT THE ENTIRE SITE MUST BE 100% STABILIZED PRIOR TO THE ISSUANCE OF A CERTIFICATE OF OCCUPANCY. DISTURBED AREAS SHALL BE RESTORED AND STABILIZED APPROPRIATELY AND IN A TIMELY MANNER. APPLICANT SHALL SUBMIT A NOTICE OF TERMINATION FOR THE SPDES GENERAL PERMIT.
28. PRIOR TO THE ISSUANCE OF A CERTIFICATE OF OCCUPANCY, AN "AS-BUILT" SURVEY PREPARED BY A LICENSED PROFESSIONAL LAND SURVEYOR OF THE PROPERTY SHALL BE SUBMITTED TO THE DEPARTMENT OF TECHNICAL SERVICES.
29. NO RECYCLED MATERIAL (C&D) SHALL BE BROUGHT TO THE SITE WITHOUT PRIOR TOWN OF CORTLANDT WRITTEN ACKNOWLEDGEMENT. ALL RECYCLED MATERIAL MUST BE COMPLIANT WITH THE NYSDEC'S BENEFICIAL USE DETERMINATION AND BE UNCONTAMINATED.
30. ALL DEMOLITION DEBRIS INCLUDING FOUNDATIONS AND SLABS SHALL BE LAWFULLY DISPOSED OF OFF-SITE.
31. ELECTRICAL DESIGN PROVIDED HEREON WAS PREPARED BY CVE NA.

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1430 Broadway
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TRC Project No: 360551.0000.0000

Changing Visions of Energy

STATE OF NEW YORK
STEVEN DONALD MEERSMA
076572-1
LICENSED PROFESSIONAL ENGINEER

Revisions:

No.	Date:

Drawn by: A. REXROAT
Design by: A. REXROAT
Checked by: S. MEERSMA

CVE NORTH AMERICA, INC.
CORTLANDT MILL SOLAR FARM
5.0 MW GROUND MOUNT SOLAR SYSTEM
0 MILL COURT
CORTLANDT, NEW YORK 10520

Contract No: 360551
Scale: AS NOTED
Date: MARCH 2021
Sheet: GENERAL NOTES
Drawing No: 2

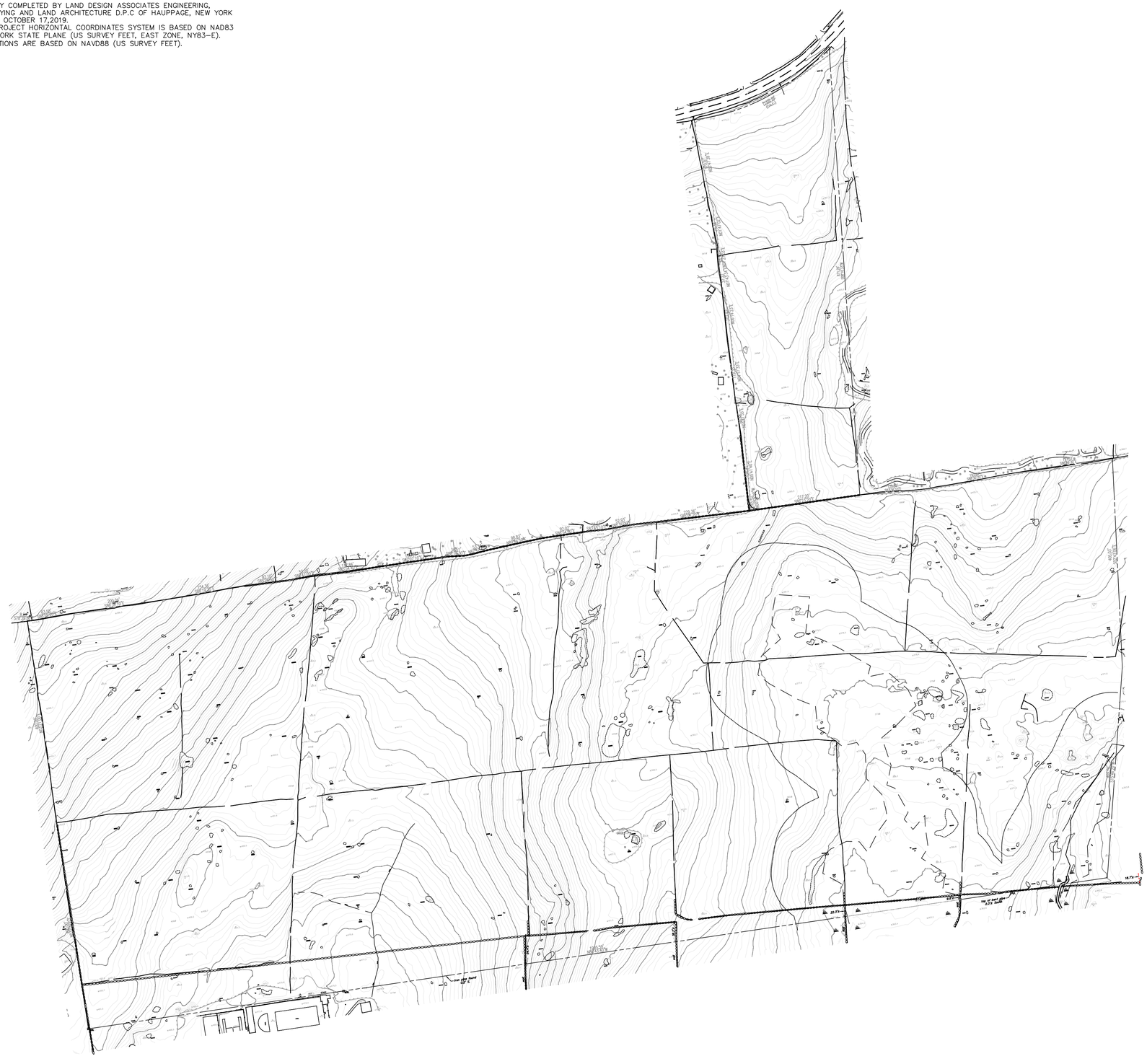
DRAWING NAME: \\nyc-fp1\Shared\Projects\CVE\360551-CVE Mill Court Cortlandt Solar\Working Drawings\SITE PLAN - GRADING\CVE_Cortlandt_General Notes.dwg --- PLOT DATE: March 17, 2021 - 11:32AM --- LAYOUT: 24x36L

LEGEND

418	EXISTING MINOR CONTOUR (FEET)
420	EXISTING MAJOR CONTOUR (FEET)
	PARCEL LINE
	WETLAND DELINEATION
	STREAM
	100–FOOT NYSDEC ADJACENT AREA
	STONE WALL
	STONE WALL
	TREE LINE
	TRAIL
ROCK	ROCKS

MAP REFERENCES:

1. SURVEY COMPLETED BY LAND DESIGN ASSOCIATES ENGINEERING, SURVEYING AND LAND ARCHITECTURE D.P.C OF HAUPPAGE, NEW YORK DATED OCTOBER 17,2019.
2. THE PROJECT HORIZONTAL COORDINATES SYSTEM IS BASED ON NAD83 NEW YORK STATE PLANE (US SURVEY FEET, EAST ZONE, NY83–E). ELEVATIONS ARE BASED ON NAVD88 (US SURVEY FEET).



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SHEET SIZE: 24" BY 36"
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1430 Broadway
10th Floor
New York, NY 10018
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TRC

TRC Project No: 360551.0000.0000

cve Changing Visions of Energy

Revisions:

No.	Date:

Drawn by: R. SANTINI
Design by: R. SANTINI
Checked by: S. MEERSMA

CVE NORTH AMERICA, INC.
CORTLANDT MILL SOLAR FARM
5.0 MW GROUND MOUNT SOLAR SYSTEM
0 MILL COURT
CORTLANDT, NEW YORK 10520

Contract No: 360551
Scale: AS NOTED
Date: MARCH 2021
Sheet: EXISTING CONDITIONS
Drawing No: 3

DRAWING NAME: I:\cve\Shared\Projects\CVE\0004 CVE MM Corp\Cortland Solar\Design Drawings\SITE PLAN - GROUND CVE Cortland 5 Solar Systems.dwg - PLOTDATE: March 17, 2021 - 11:17AM - LAYOUT: Existing Features

LEGEND

- 418 — EXISTING MINOR CONTOUR (FEET)
- 420 — EXISTING MAJOR CONTOUR (FEET)
- PROPOSED FENCE LINE
- PROPERTY LINE SETBACK (100 FT)
- PROPERTY LINE SETBACK (200 FT)
- PARCEL LINE
- PROPOSED UNDERGROUND ELECTRIC
- WETLAND DELINEATION
- 100-FOOT NYSDEC ADJACENT AREA
- STREAM
- HABITABLE BUILDING SETBACK (200 FT)
- STONE WALL
- STONE WALL
- ROCKS
- TREE LINE
- ACCESS DRIVEWAY 7' EQUIPMENT SETBACK
- PERMANENT CHECK DAM
- 10' MIN. BRUSH CUT AREA
- 20' WIDE ACCESS ROAD
- 150' MAX. HOSE PULL DISTANCE

THE PROJECT SHALL BE DESIGNED IN COMPLIANCE WITH ALL APPLICABLE CODES, STANDARDS, AND REQUIREMENTS, INCLUDING BUT NOT LIMITED TO:

- TOWN OF CORTLANDT CODES
- 2020 FIRE CODE OF NEW YORK STATE (FCNYS 2020)
- 2020 BUILDING CODE OF NEW YORK STATE (BCNYS 2020)
- 2019 ENERGY STORAGE SYSTEM SUPPLEMENT - NEW YORK STATE
- 2018 INTERNATIONAL BUILDING CODE (IBC 2018)
- NATIONAL ELECTRICAL CODE - NFPA 70
- NATIONAL ELECTRICAL SAFETY CODE - IEEE C2-2017
- ANSI/UL STANDARD FOR ENERGY STORAGE SYSTEMS AND EQUIPMENT - STANDARD 9540
- STANDARD FOR THE INSTALLATION OF STATIONARY ENERGY STORAGE SYSTEMS - NFPA 855
- BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE - ACI 318-14

MAP REFERENCES:

1. SURVEY COMPLETED BY LAND DESIGN ASSOCIATES ENGINEERING, SURVEYING AND LAND ARCHITECTURE D.P.C OF HAUPPAGE, NEW YORK DATED OCTOBER 17,2019.
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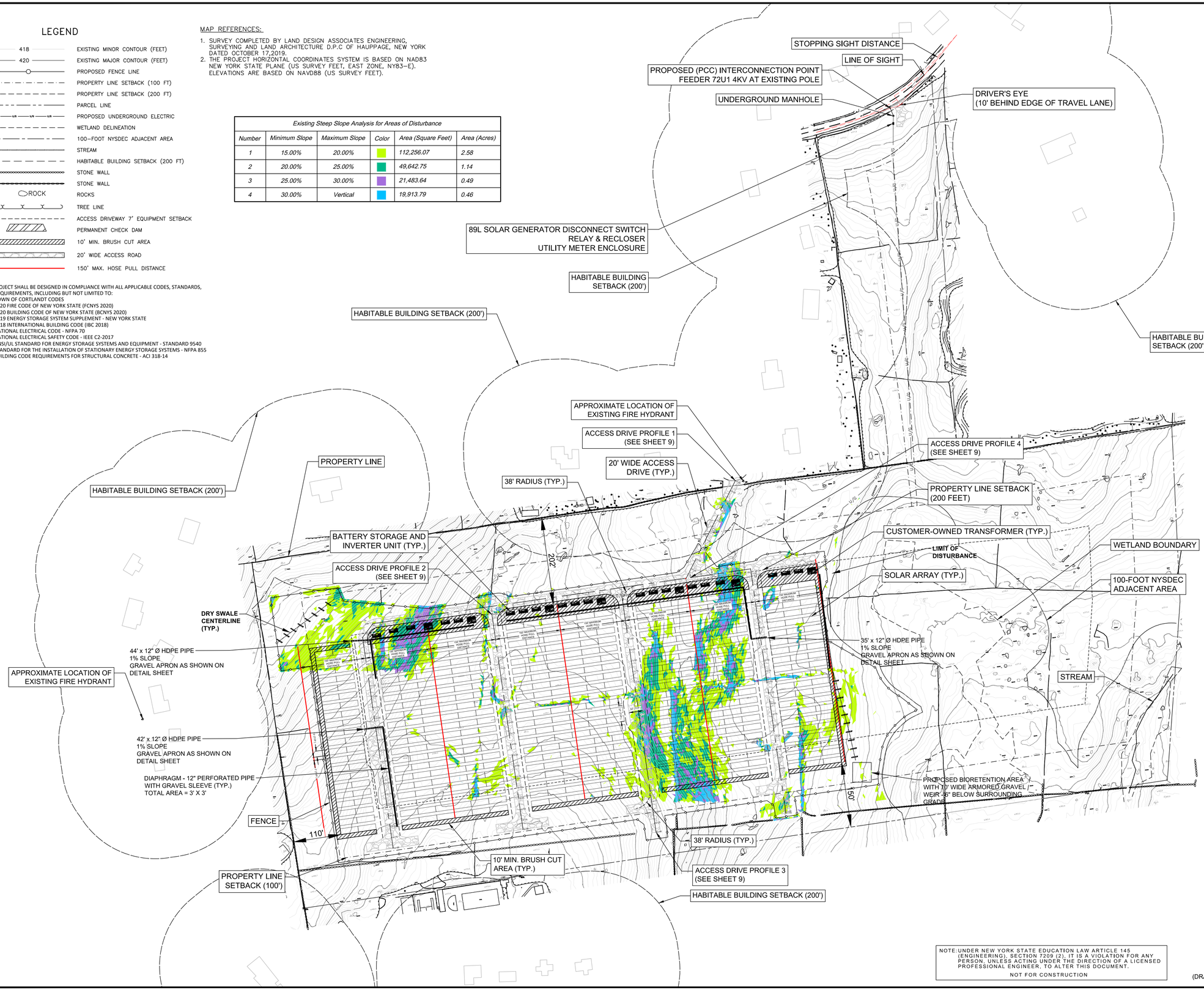
Existing Steep Slope Analysis for Areas of Disturbance

Number	Minimum Slope	Maximum Slope	Color	Area (Square Feet)	Area (Acres)
1	15.00%	20.00%		112,256.07	2.58
2	20.00%	25.00%		49,642.75	1.14
3	25.00%	30.00%		21,483.64	0.49
4	30.00%	Vertical		19,913.79	0.46



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Phone: 212.221.7822

TRC Project No: 360551.0000.0000

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STATE OF NEW YORK — REGISTERED PROFESSIONAL ENGINEER

Revisions:

No.	Date:

Drawn by: A. REXROAT
Design by: A. REXROAT
Checked by: S. MEERSMA

CVE NORTH AMERICA, INC.
CORTLANDT MILL SOLAR FARM
5.0 MW GROUND MOUNT SOLAR SYSTEM
0 MILL COURT
CORTLANDT, NEW YORK 10520

Contract No: 360551
Scale: AS NOTED
Date: MARCH 2021
Sheet: SITE PLAN
Drawing No: 4

DRAWING NAME: I:\cve\NJ\Projects\360551.0000 Mill Court\Civil\Cad\Working Drawings\SITE PLAN - 05x24x36.DWG Layout: 24x36 PLOT DATE: March 18, 2021 - 4:48PM User: JLAVOIE

LEGEND

LOD ——— LOD ——— LOD	LIMIT OF DISTURBANCE
418	EXISTING MINOR CONTOUR (FEET)
420	EXISTING MAJOR CONTOUR (FEET)
	PARCEL LINE
	WETLAND DELINEATION
	100–FOOT NYSDEC ADJACENT AREA
	STREAM
ROCK	ROCKS
	TRAIL
	STONE WALL
	STONE WALL
	TREE LINE
	TREES TO BE REMOVED
	STONE WALLS TO BE REMOVED
	STONE WALLS TO BE REMOVED
ROCK	ROCKS TO BE REMOVED
	REMOVED TRAIL
	LIMIT OF TREE REMOVAL

MAP REFERENCES:

1. SURVEY COMPLETED BY LAND DESIGN ASSOCIATES ENGINEERING, SURVEYING AND LAND ARCHITECTURE D.P.C OF HAUPPAGE, NEW YORK DATED OCTOBER 17,2019.
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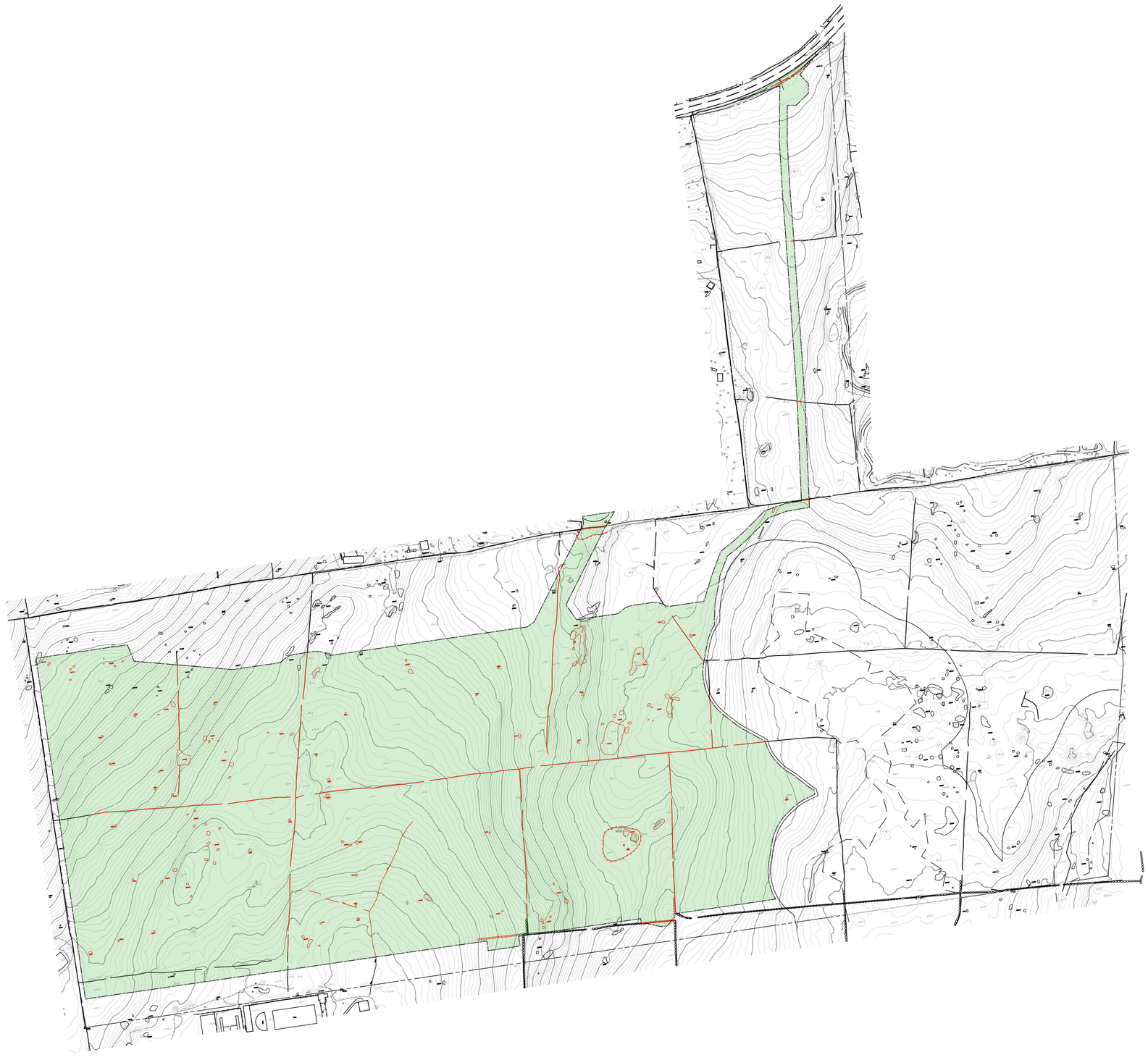

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TRC Project No: 360551.0000.0000

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Revisions:

No.	Date:

Drawn by:
R. SANTINI

Design by:
R. SANTINI

Checked by:
S. MEERSMA

CVE NORTH AMERICA, INC.
CORTLANDT MILL SOLAR FARM
5.0 MW GROUND MOUNT SOLAR SYSTEM
0 MILL COURT
CORTLANDT, NEW YORK 10520

Contract No:
360551

Scale:
AS NOTED

Date:
MARCH 2021

Sheet:
DEMOLITION PLAN

Drawing No:
5

DRAWING NAME: J:\cve-NY\Drawings\Civil\360551.CVE Mill Court\Construction\Drawings\SITE PLAN - GROUND CVE Cortland Pre - Xtnd Plan.dwg - PLOT DATE: March 17, 2021 - 3:50PM - LAYOUT: Pre - Xtnd Plan

LEGEND

LOD LOD LOD	LIMIT OF DISTURBANCE
418	EXISTING MINOR CONTOUR (FEET)
420	EXISTING MAJOR CONTOUR (FEET)
	PARCEL LINE
	WETLAND DELINEATION
	100–FOOT NYSDEC ADJACENT AREA
	STREAM
ROCK	ROCKS
	TRAIL
	STONE WALL
	STONE WALL
	TREE LINE
	TREES TO BE REMOVED
	STONE WALLS TO BE REMOVED
	STONE WALLS TO BE REMOVED
ROCK	ROCKS TO BE REMOVED
	REMOVED TRAIL
	AREAS OF DISTURBANCE NOT INCLUDED IN PREVIOUS TREE SURVEY
	AREA OF 25% OR GREATER EXISTING SLOPE WITHIN AREAS OF DISTURBANCE

MAP REFERENCES:

1. SURVEY COMPLETED BY LAND DESIGN ASSOCIATES ENGINEERING, SURVEYING AND LAND ARCHITECTURE D.P.C OF HAUPPAGE, NEW YORK DATED OCTOBER 17,2019.
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CVE Cortlandt Mill Solar Farm - Tree Inventory Estimates Within Revised LOD		
Total Acreage of Revised LOD	19.3	Acres
Acreage of June LOD in Bartlett Tree Survey	19.5	Acres
Number of Trees in June LOD surveyed	4208	Trees
Acreage of June LOD in Bartlett Survey with slopes greater than 25%	0.92	Acres
Number of Trees on slopes greater than 25%	156	Trees
Acreage of Revised LOD not in Bartlett Tree Survey	1.3	Acres
Estimated number of Trees not in Bartlett Tree Survey	281	Trees
Acreage of Revised LOD not in Bartlett Tree Survey on slopes greater than 25%	0.06	Acres
Estimated number of trees on slopes greater than 25% not in Bartlett Tree Survey	10	Trees
TOTAL Number Trees within Revised LOD – surveyed and estimated	3396	Trees
TOTAL number of trees within Revised LOD – on slopes greater than 25% (surveyed and estimated)	166	Trees

NOTE:
NUMBERS ON TREE PLAN REFERENCE A TREE IDENTIFICATION NUMBER IN BARTLETT SURVEY.

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TRC

TRC Project No: 360551.0000.0000

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Revisions:	
No.	Date:

Drawn by: R. SANTINI

Design by: R. SANTINI

Checked by: S. MEERSMA

CVE NORTH AMERICA, INC.
CORTLANDT MILL SOLAR FARM
5.0 MW GROUND MOUNT SOLAR SYSTEM
0 MILL COURT
CORTLANDT, NEW YORK 10520

Contract No: 360551

Scale: AS NOTED

Date: MARCH 2021

Sheet: TREE PLAN

Drawing No: 6

DRAWING NAME: I:\cve\Active\Projects\360551.0000 Mill Court\Cortland Solar\Mapping\Exports\PDF Exports\360551.0000 Cortlandt Proj - Mill Court Tree Plan_Exp 3-13-2021.dwg - PLOT DATE: March 07, 2021 - 11:05AM - LOGIN: jbrown

LEGEND

- PROPOSED CONTOUR (FEET)
- LOD LOD LOD — LIMIT OF DISTURBANCE
- 418 — EXISTING MINOR CONTOUR (FEET)
- 420 — EXISTING MAJOR CONTOUR (FEET)
- EXISTING FENCE LINE
- PROPERTY LINE SETBACK (100 FT)
- PROPERTY LINE SETBACK (200 FT)
- PARCEL LINE
- U/G U/G U/G U/G — PROPOSED UNDERGROUND ELECTRIC
- WETLAND DELINEATION
- 100–FOOT NYSDEC ADJACENT AREA
- STREAM
- TRAIL
- ROCK — ROCKS
- STONE WALL
- STONE WALL
- TREE LINE
- 10' MIN. BRUSH CUT AREA
- 20' WIDE ACCESS ROAD
- 150' MAX. HOSE PULL DISTANCE

MAP REFERENCES:

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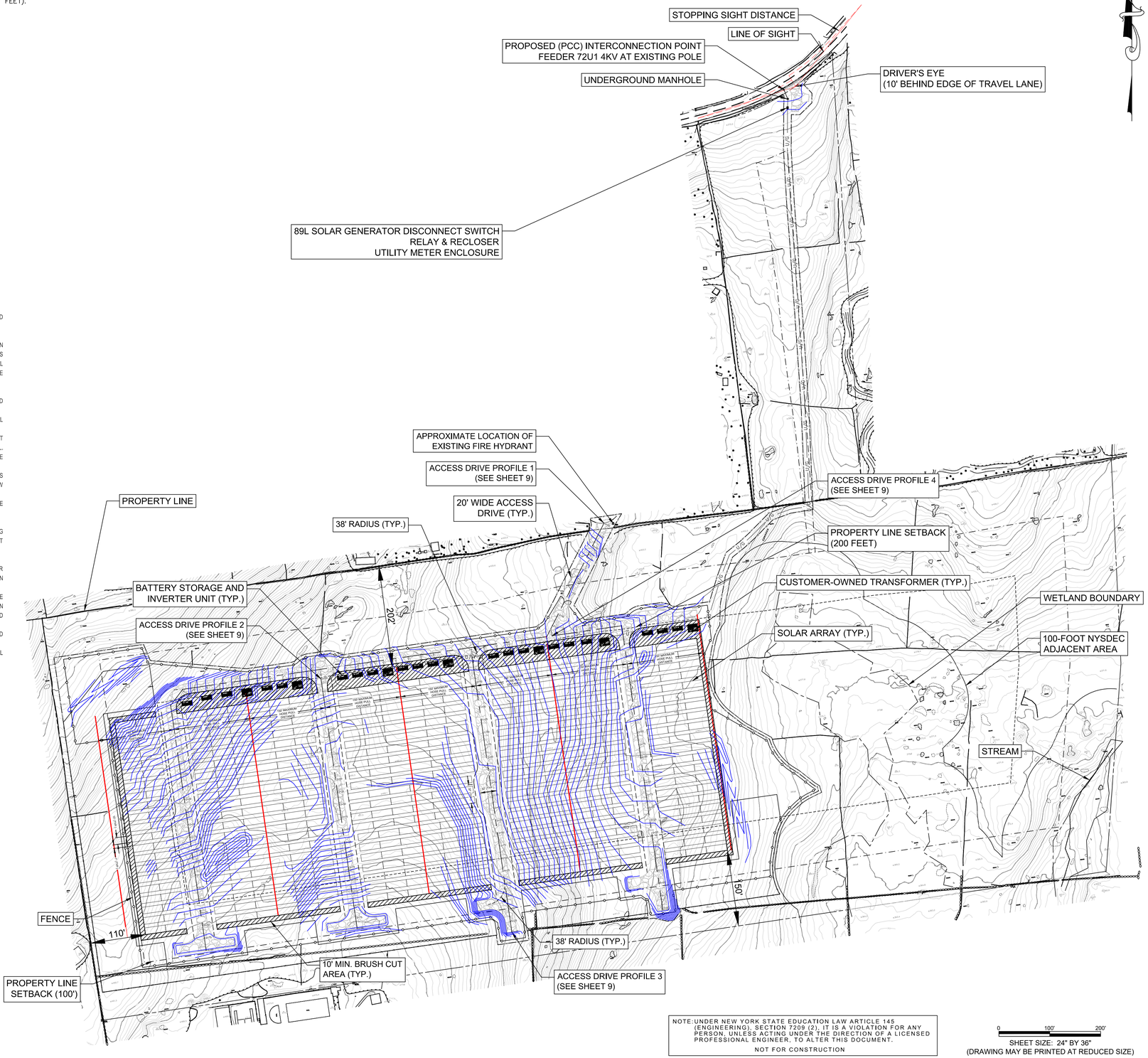
STEEP SLOPE CONSTRUCTION NOTES:

DISTURBANCE OR ALTERATION OF AREAS WITH STEEP SLOPES SHALL ADDITIONALLY BE IN CONFORMANCE WITH THE FOLLOWING PROVISIONS:

1. THE PLANNING, DESIGN AND DEVELOPMENT OF BUILDINGS SHALL PROVIDE THE MAXIMUM IN STRUCTURAL SAFETY, SLOPE STABILITY AND HUMAN ENJOYMENT WHILE ADAPTING THE AFFECTED SITE TO, AND TAKING ADVANTAGE OF, THE BEST USE OF THE NATURAL TERRAIN AND AESTHETIC CHARACTER.
2. THE TERRACING OF BUILDING SITES, INCLUDING THE MOUNDING OF SEPTIC TILE FIELDS, SHALL BE KEPT TO AN ABSOLUTE MINIMUM.
3. ROADS AND DRIVEWAYS SHALL FOLLOW THE NATURAL TOPOGRAPHY TO THE GREATEST EXTENT POSSIBLE IN ORDER TO MINIMIZE THE POTENTIAL FOR EROSION AND SHALL BE CONSISTENT WITH ALL OTHER APPLICABLE ORDINANCES AND REGULATIONS OF THE TOWN OF CORTLANDT AND CURRENT ENGINEERING PRACTICES.
4. REPLANTING SHALL CONSIST OF INDIGENOUS VEGETATION AND SHALL REPLICATE THE ORIGINAL VEGETATION ON THE SITE AS MUCH AS POSSIBLE.
5. THE NATURAL ELEVATIONS AND VEGETATIVE COVER OF RIDGELINES SHALL BE DISTURBED ONLY IF THE CREST OF A RIDGE AND THE TREE LINE AT THE RIDGE REMAIN UNINTERRUPTED. THIS MAY BE ACCOMPLISHED EITHER BY POSITIONING BUILDINGS AND AREAS OF DISTURBANCE BELOW A RIDGELINE OR BY POSITIONING BUILDINGS AND AREAS OF DISTURBANCE AT A RIDGELINE SO THAT THE ELEVATION OF THE ROOFLINE OF THE BUILDING IS NO GREATER THAN THE ELEVATION OF THE NATURAL TREE LINE. HOWEVER, UNDER NO CIRCUMSTANCES SHALL MORE THAN 100 FEET ALONG THE RIDGELINE, TO A WIDTH OF 100 FEET GENERALLY CENTERED ON THE RIDGELINE, BE DISTURBED.
6. ANY REGRADING SHALL BLEND IN WITH THE NATURAL CONTOURS AND UNDULATIONS OF THE LAND.
7. CUTS AND FILLS SHALL BE ROUNDED OFF TO ELIMINATE SHARP ANGLES AT THE TOP, BOTTOM AND SIDES OF REGRADED SLOPES. VISIBLE CONSTRUCTION CUTS AND PERMANENT SCARRING SHOULD BE MINIMIZED.
8. THE ANGLE OF CUT AND FILL SLOPES SHALL NOT EXCEED A SLOPE OF ONE VERTICAL TO TWO HORIZONTAL EXCEPT WHERE RETAINING WALLS, STRUCTURAL STABILIZATION OR OTHER METHODS ACCEPTABLE TO THE DIRECTOR OF TECHNICAL SERVICES ARE USED.
9. TOPS AND BOTTOMS OF CUT AND FILL SLOPES SHALL BE SET BACK FROM STRUCTURES A DISTANCE THAT WILL ENSURE THE SAFETY OF THE STRUCTURE IN THE EVENT OF THE COLLAPSE OF THE CUT OR FILL SLOPES. GENERALLY, SUCH DISTANCE SHALL BE CONSIDERED TO BE SIX FEET PLUS 1/2 THE HEIGHT OF THE CUT OR FILL. NEVERTHELESS, A STRUCTURE BUILT ON A SLOPE OR AT THE TOE OF A SLOPE IS PERMITTED IF IT IS PROPERLY DESIGNED TO RETAIN THE SLOPE AND WITHSTAND THE FORCES EXERTED ON IT BY THE RETAINED SLOPE.
10. DISTURBANCE OF ROCK OUTCROPS SHALL BE BY MEANS OF EXPLOSIVE ONLY IF LABOR AND MACHINES ARE NOT EFFECTIVE AND ONLY IF ROCK BLASTING IS CONDUCTED IN ACCORDANCE WITH ALL APPLICABLE LAWS AND REGULATIONS OF THE TOWN OF CORTLANDT, COUNTY OF WESTCHESTER, AND THE STATE OF NEW YORK.
11. DISTURBANCE OF STEEP SLOPES SHALL BE UNDERTAKEN IN WORKABLE UNITS IN WHICH THE DISTURBANCE CAN BE COMPLETED AND STABILIZED IN ONE CONSTRUCTION SEASON SO THAT AREAS ARE NOT LEFT BARE AND EXPOSED DURING THE WINTER AND SPRING THAW PERIODS (DECEMBER 15 THROUGH APRIL 15).
12. DISTURBANCE OF EXISTING VEGETATIVE GROUND COVER SHALL NOT TAKE PLACE MORE THAN 15 DAYS PRIOR TO GRADING AND CONSTRUCTION.
13. TEMPORARY SOIL STABILIZATION, INCLUDING, IF APPROPRIATE, TEMPORARY STABILIZATION MEASURES SUCH AS NETTING OR MULCHING TO SECURE SOIL DURING THE GROW-IN PERIOD, MUST BE APPLIED TO AN AREA OF DISTURBANCE WITHIN TWO DAYS OF ESTABLISHING THE FINAL GRADE, AND PERMANENT STABILIZATION MUST BE APPLIED WITHIN 15 DAYS OF ESTABLISHING THE FINAL GRADE.
14. SOIL STABILIZATION MUST BE APPLIED WITHIN TWO DAYS OF DISTURBANCE IF THE FINAL GRADE IS NOT EXPECTED TO BE ESTABLISHED WITHIN 60 DAYS.
15. MEASURES FOR THE CONTROL OF EROSION AND SEDIMENTATION SHALL BE UNDERTAKEN CONSISTENT WITH THE WESTCHESTER COUNTY SOIL AND WATER CONSERVATION DISTRICT'S BEST MANAGEMENT PRACTICES MANUAL FOR EROSION AND SEDIMENT CONTROL, AND NEW YORK STATE GUIDELINES FOR URBAN EROSION AND SEDIMENT CONTROL, AS AMENDED, OR THEIR EQUIVALENTS SATISFACTORY TO THE APPROVAL AUTHORITY.
16. ALL PROPOSED DISTURBANCE OF STEEP SLOPES SHALL BE UNDERTAKEN WITH CONSIDERATION OF THE SOILS LIMITATIONS CHARACTERISTICS CONTAINED IN THE IDENTIFICATION LEGEND, WESTCHESTER COUNTY SOILS SURVEY, 1989, AS PREPARED BY THE WESTCHESTER COUNTY SOIL AND WATER CONSERVATION DISTRICT, IN TERMS OF RECOGNITION OF LIMITATION OF SOILS ON STEEP SLOPES FOR DEVELOPMENT AND APPLICATION OF ALL MITIGATING MEASURES AND AS DEEMED NECESSARY BY THE APPROVAL AUTHORITY.
17. TOPSOIL SHALL BE STRIPPED FROM ALL AREAS OF DISTURBANCE, STOCKPILED AND STABILIZED IN A MANNER TO MINIMIZE EROSION AND SEDIMENTATION AND REPLACED ELSEWHERE ON THE SITE AT THE TIME OF FINAL GRADING. STOCKPILING SHALL NOT BE PERMITTED ON SLOPES OF GREATER THAN 10%.
18. NO ORGANIC MATERIAL OR ROCK WITH A SIZE THAT WILL NOT ALLOW APPROPRIATE COMPACTION OR COVER BY TOPSOIL SHALL BE USED AS FILL MATERIAL. FILL MATERIAL SHALL BE NO LESS GRANULAR THAN THE SOIL UPON WHICH IT IS PLACED AND SHALL DRAIN READILY.
19. COMPACTION OF FILL MATERIALS IN FILL AREAS SHALL BE SUCH TO ENSURE SUPPORT OF PROPOSED STRUCTURES AND STABILIZATION FOR INTENDED USES.



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10th Floor
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TRC Project No: 360551.0000.0000

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Revisions:

No.	Date:

Drawn by: A. REXROAT
Design by: A. REXROAT
Checked by: S. MEERSMA

CVE NORTH AMERICA, INC.
CORTLANDT MILL SOLAR FARM
5.0 MW GROUND MOUNT SOLAR SYSTEM
0 MILL COURT
CORTLANDT, NEW YORK 10520

Contract No: 360551
Scale: AS NOTED
Date: MARCH 2021
Sheet: GRADING PLAN
Drawing No: 7

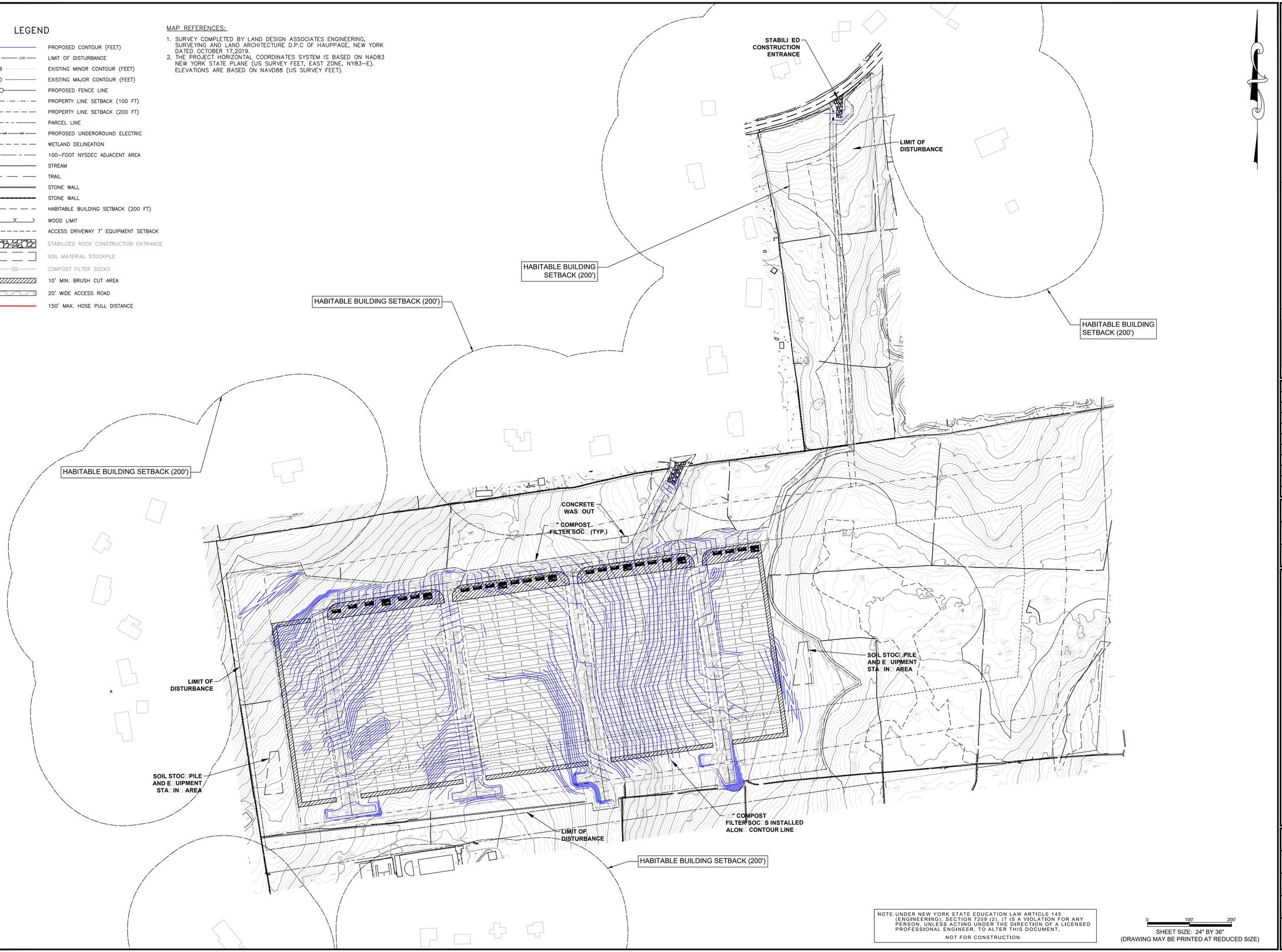
DRAWING NAME: I:\pw\ProjectDir\CVE0004.CVE.MM.CoreCivilnet\Sol\Working\Drawings\SITE PLAN_GRADING.DGN Default, Gravity Plot=0.25,0.25,0.25,0.25 Dgn_Pl=STD DATE: March 31, 2021 - 9:57AM - LAWSON, Gabby Rae

LEGEND

- PROPOSED CONTOUR (FEET)
- LIMIT OF DISTURBANCE
- 418 EXISTING MINOR CONTOUR (FEET)
- 420 EXISTING MAJOR CONTOUR (FEET)
- PROPOSED FENCE LINE
- PROPERTY LINE SETBACK (100 FT)
- PROPERTY LINE SETBACK (200 FT)
- PARCEL LINE
- PROPOSED UNDERGROUND ELECTRIC
- WETLAND DELINEATION
- 100-FOOT NYSDEC ADJACENT AREA
- STREAM
- TRAIL
- STONE WALL
- STONE WALL
- HABITABLE BUILDING SETBACK (200 FT)
- WOOD LIMIT
- ACCESS DRIVEWAY 7' EQUIPMENT SETBACK
- STABILIZED ROCK CONSTRUCTION ENTRANCE
- SOIL MATERIAL STOCKPILE
- COMPOST FILTER SOCKS
- 10' MIN. BRUSH CUT AREA
- 20' WIDE ACCESS ROAD
- 150' MAX. HOSE PULL DISTANCE

MAP REFERENCES:

1. SURVEY COMPLETED BY LAND DESIGN ASSOCIATES ENGINEERING, SURVEYING AND LAND ARCHITECTURE D.P.C OF HAUPPAGE, NEW YORK DATED OCTOBER 17,2019.
2. THE PROJECT HORIZONTAL COORDINATES SYSTEM IS BASED ON NAD83 NEW YORK STATE PLANE (US SURVEY FEET, EAST ZONE, NY83-E). ELEVATIONS ARE BASED ON NAVD88 (US SURVEY FEET).



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0 100' 200'

SHEET SIZE: 24" BY 36"
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TRC
1430 Broadway
10th Floor
New York, NY 10018
Phone: 212.221.7822

TRC Project No: 360551.0000.0000

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Revisions:

No.	Date:

Drawn by: A. REXROAT

Design by: A. REXROAT

Checked by: S. MEERSMA

CVE NORTH AMERICA, INC.
CORTLANDT MILL SOLAR FARM
5.0 MW GROUND MOUNT SOLAR SYSTEM
0 MILL COURT
CORTLANDT, NEW YORK 10520

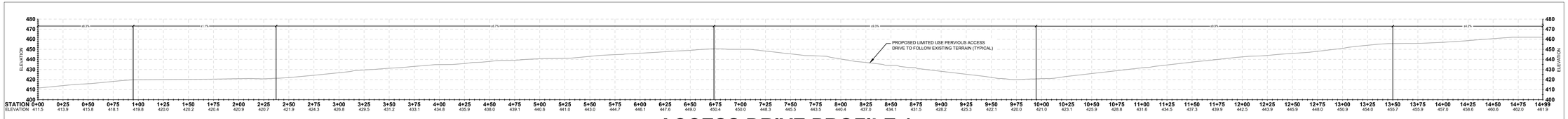
Contract No: 360551

Scale: AS NOTED

Date: MARCH 2021

Sheet: ESC PLAN

Drawing No: 8



ACCESS DRIVE PROFILE 1
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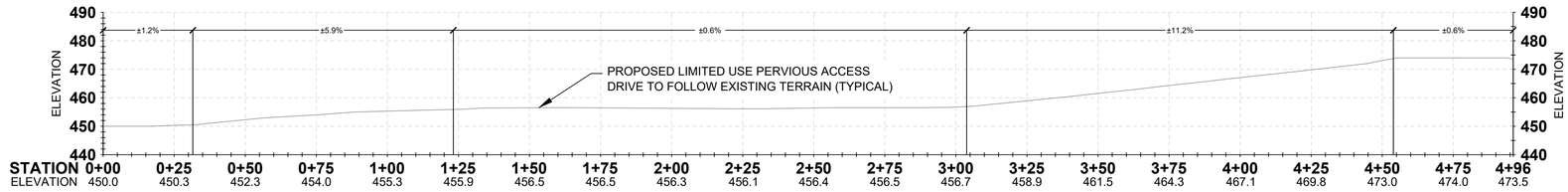

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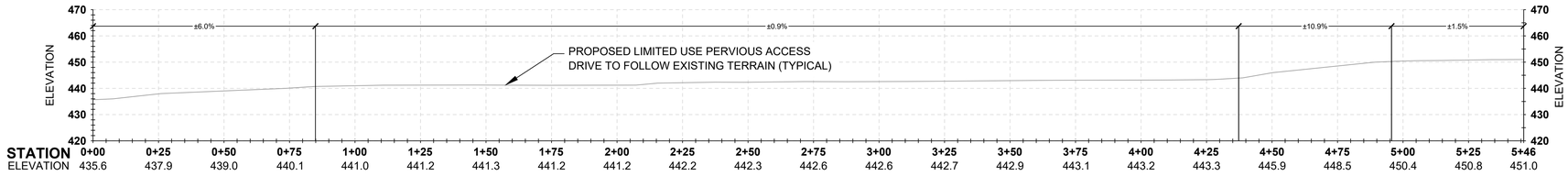

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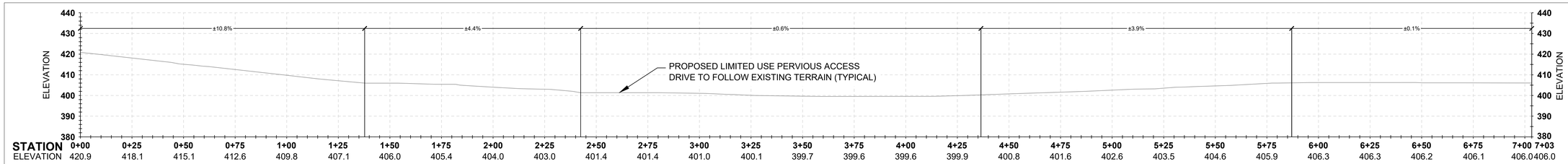

ACCESS DRIVE PROFILE 4
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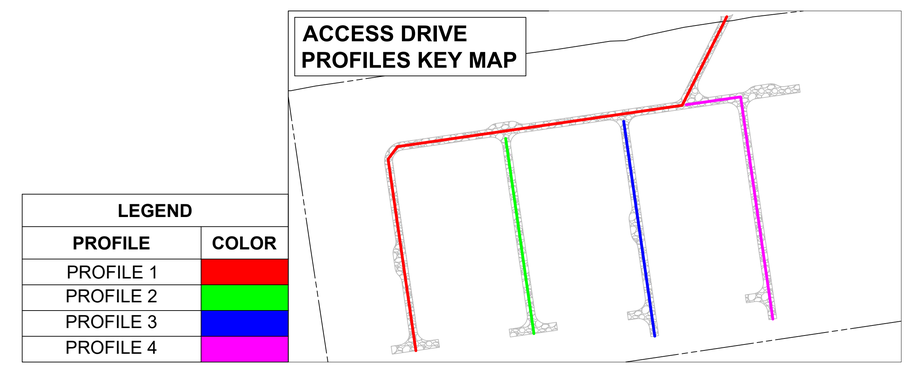

LEGEND	
PROFILE	COLOR
PROFILE 1	
PROFILE 2	
PROFILE 3	
PROFILE 4	

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TRC Project No: 360551.0000.0000

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Revisions:

No.	Date:

Drawn by: A. REXROAT

Design by: A. REXROAT

Checked by: S. MEERSMA

CVE NORTH AMERICA, INC.
CORTLANDT MILL SOLAR FARM
5.0 MW GROUND MOUNT SOLAR SYSTEM
0 MILL COURT
CORTLANDT, NEW YORK 10520

Contract No: 360551

Scale: AS NOTED

Date: MARCH 2021

Sheet: ACCESS DRIVE PROFILES

Drawing No: 9

DRAWING NAME: I:\nyc\Shared\Projects\CVE\360551-CVE Mill Pond Cortland Solar\Mstrs_Drawings\SITE PLAN - ENGR\DWG\CVE Cortland_Access Drive Profile.dwg - PLOT DATE: March 17, 2021 - 11:49AM - J. LAVOIE (RICOH)

LEGEND

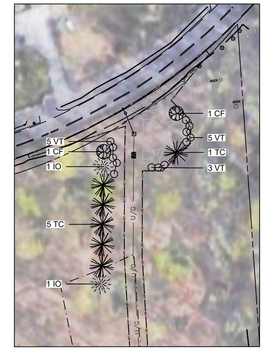
LANDSCAPE PLANTING SCHEDULE

DECIDUOUS AND EVERGREEN TREES

SYMBOL	BOTANICAL NAME/ COMMON PLANT NAME	QUANTITY	SIZE	ROOT
AA	AMELANCHIER ARBOREA SHADBLOW SERVICEBERRY	14	6'-8' HT. CLUMP	B&B
CF	CORNUS FLORIDA FLOWERING DOGWOOD	14	1" CAL. MIN.	B&B
IO	ILEX OPACA AMERICAN HOLLY	53	6'-7' HT.	B&B
TC	TSUGA CANADENSIS EASTERN HEMLOCK	87	6'-7' HT.	B&B
TO	THUJA OCCIDENATALIS NORTHERN WHITE CEDAR	134	6'-7' HT.	B&B

DECIDUOUS SHRUBS AND POLLINATORS

SYMBOL	BOTANICAL NAME/ COMMON PLANT NAME	QUANTITY	SIZE	ROOT
AR	ARONIA ARBUTIFOLIA RED CHOKEBERRY	33	30"-36" HT.	#3/5 CONT.
CS	CORNUS SERICEA RED TWIG DOGWOOD	25	30"-36" HT.	#3/5 CONT.
HV	HAMAMELIS VIRGINIANA COMMON WITCH HAZEL	15	3'-4' HT.	#5/7 CONT.
IV	ILEX VERTICILLATA WINTERBERRY	37	30"-36" HT.	#3/5 CONT.
VC	VACCINIUM CORYMBOSUM HIGHBUSH BLUEBERRY	29	30"-36" HT.	#3/5 CONT.
VT	VIBURNUM TRILOBUM AMERICAN CRANBERRY	74	30"-36" HT.	#3/5 CONT.



INTERCONNECTION ACCESS PLANTINGS

0 60' 120'

SHEET SIZE: 24" BY 36"
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Drawn by: MJR
Design by: MJR
Checked by: MJR

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CORTLANDT MILL SOLAR FARM
4.7 MW GROUND MOUNT SOLAR SYSTEM
0 MILL COURT
CORTLANDT, NEW YORK 10520

Contract No: 360551
Scale: AS NOTED
Date: MARCH 2021
Sheet: LANDSCAPE PLAN
Drawing No: L-100

DRAWING NAME: I:\nyc\k\Groups\Projects\396683\CAD\Mill Court\Sheets\Drawings\Landscaping Plan.dwg - PLOT DATE: Wednesday, March 17, 2021 - 11:43AM - LAYOUT: L-100 Landscape Plan

□ENERAL LANDSCAPE AND SEEDIN□ NOTES

1. THE LANDSCAPE PLAN AND DETAILS ARE FOR LANDSCAPING INFORMATION ONLY. PLEASE REFER TO THE SITE LAYOUT PLAN, GRADING PLAN AND/OR UTILITIES PLAN FOR ALL OTHER INFORMATION.

2. THE CONTRACTOR SHALL MONITOR AND GUARANTEE THAT ALL PLANTS, TREES, AND SHRUBS SHALL BE HEALTHY AND FREE OF DISEASE FOR THE LIFETIME OF THE PROJECT AFTER SUBSTANTIAL COMPLETION AND ACCEPTANCE BY THE OWNER. CONTRACTOR SHALL REPLACE ANY DEAD OR UNHEALTHY PLANTS AT CONTRACTOR'S EXPENSE. FINAL ACCEPTANCE SHALL BE MADE IF ALL PLANTS MEET THE GUARANTEE REQUIREMENTS INCLUDING MAINTENANCE. MAINTENANCE RESPONSIBILITIES INCLUDE INVASIVE SPECIES MONITORING, REMOVAL, AND SUPPLEMENTATION. MONITORING OF THE PROJECT SITE SHALL OCCUR IN THE SPRING AND THE FALL TO DETERMINE THE PRESENCE OF INVASIVE SPECIES. SHOULD ANY INVASIVE SPECIES BE IDENTIFIED WITHIN THE PROJECT SITE, THE INVASIVE SPECIES SHALL BE REMOVED ACCORDING TO METHODS MOST LIKELY TO BE EFFECTIVE IN CONTROLLING THAT SPECIES AND SUPPLEMENTING ITS REPLACEMENT WITH APPROPRIATE VEGETATION AND SEED MIX IDENTIFIED (AND APPROVED) ON THIS PLAN AND/OR AN APPROVED EQUAL. ADDITIONAL MAINTENANCE RESPONSIBILITIES INCLUDE: APPROVED CULTIVATING, SPRAYING, WEEDING, WATERING, TIGHTENING OF TREE STRAP GUYS, PRUNING, FERTILIZING, MULCHING, AND ANY OTHER OPERATIONS NECESSARY TO MAINTAIN PLANT VIABILITY. MAINTENANCE SHALL BEGIN IMMEDIATELY AFTER PLANTING AND CONTINUE FOR THE DURATION OF SOLAR ARRAY USE BY THE OWNER/OPERATOR AFTER FINAL ACCEPTANCE. WATERING OF THE LANDSCAPE BUFFER AREAS SHALL BE IMPLEMENTED BY THE USE OF A WATERING TRUCK.

3. THE CONTRACTOR SHALL SUPPLY ALL LABOR, PLANTS, APPROVED SEEDING MIX, AND MATERIALS IN QUANTITIES SUFFICIENT TO COMPLETE THE WORK SHOWN ON THE DRAWING(S) AND LISTED IN THE PLANT SCHEDULE(S) AND/OR SEEDING TABLE(S). IN THE EVENT OF A DISCREPANCY BETWEEN QUANTITIES SHOWN IN THE PLANT SCHEDULE AND/OR SEEDING TABLE AND THOSE REQUIRED BY THE DRAWINGS, THE LARGER SHALL APPLY. ALL PLANTS SHALL BE ACCLIMATED BY THE SUPPLY NURSERY TO THE LOCAL HARDINESS ZONE AND BE CERTIFIED THAT THE PLANTING MATERIAL HAS BEEN GROWN FOR A MINIMUM OF (2) TWO YEARS AT THE SOURCE AND OBTAINED WITHIN 200 MILES OF PROJECT SITE UNLESS OTHERWISE APPROVED BY OWNER, CERTIFIED LANDSCAPE INSPECTOR, OR LANDSCAPE ARCHITECT.

4. THE LOCATIONS FOR PLANT MATERIAL ARE APPROXIMATE AND ARE SUBJECT TO FIELD ADJUSTMENT DUE TO SLOPE, VEGETATION, AND SITE FACTORS SUCH AS THE LOCATION OF ROCK OUTCROPS. PRIOR TO PLANTING THE CONTRACTOR SHALL ACCURATELY STAKE OUT THE LOCATIONS FOR ALL PLANTS. THE OWNER, CERTIFIED LANDSCAPE INSPECTOR, OR LANDSCAPE ARCHITECT SHALL APPROVE THE FIELD LOCATIONS OR ADJUSTMENTS OF THE PLANT MATERIAL.

5. ALL SHRUB MASSING SHALL BE MULCHED TO A DEPTH OF 2" AND SHREDDED HARDWOOD BARK MULCH SHALL BE USED FOR SHRUB MASSING AREAS.

6. NO PLANT SHALL BE PLACED IN THE GROUND BEFORE ROUGH GRADING HAS BEEN COMPLETED AND APPROVED BY THE OWNER, CERTIFIED LANDSCAPE INSPECTOR, OR LANDSCAPE CONTRACTOR. STAKING THE LOCATION OF ALL TREES AND SHRUBS SHALL BE COMPLETED PRIOR TO PLANTING FOR APPROVAL BY THE OWNER, CERTIFIED LANDSCAPE INSPECTOR, OR LANDSCAPE ARCHITECT. STAKING OF THE INSTALLED TREE MUST BE COMPLETED THE SAME DAY AS IT IS INSTALLED. ALL TREES SHALL BE STAKED OR GUYED AS PER THE DETAIL. SEE LANDSCAPING PLAN(S) FOR PLANTING DETAILS.

7. COORDINATE PLANT MATERIAL LOCATIONS WITH SITE UTILITIES. SEE SITE LAYOUT, GRADING AND/OR UTILITY PLANS FOR STORM, SANITARY, GAS, ELECTRIC, TELEPHONE AND WATER LINES. UTILITY LOCATIONS ARE APPROXIMATE. EXERCISE CARE WHEN DIGGING IN AREAS OF POTENTIAL CONFLICT WITH UNDERGROUND OR OVERHEAD UTILITIES. THE CONTRACTOR IS RESPONSIBLE FOR ANY DAMAGE DUE TO CONTRACTOR'S NEGLIGENCE AND SHALL REPLACE OR REPAIR ANY DAMAGE AT CONTRACTOR'S EXPENSE.

8. LANDSCAPE PLANTING PITS MUST BE FREE DRAINING. PAVEMENT, COMPACTED SUBGRADE, AND BLASTED ROCK SHALL BE REMOVED TO A DEPTH OF 2' OR TO A GREATER DEPTH IF REQUIRED BY PLANTING DETAILS OR SPECIFICATIONS. REPLACE SOIL WITH MODERATELY COMPACTED LOAM OR SANDY LOAM FREE FROM STONES AND RUBBISH 1" OR GREATER IN DIAMETER AND ANY OTHER MATERIAL HARMFUL TO PLANT GROWTH AND DEVELOPMENT. PLANTING INSTALLATION SHALL BE AS DETAILED AND CONTAIN PLANTING MIX AS SPECIFIED UNLESS RECOMMENDED OTHERWISE BY SOIL ANALYSIS.

   PLANTING SOIL MIXTURE:
   2 PARTS PEAT MOSS
   5 PARTS TOPSOIL
   MYCORHIZA INOCULANT – "TRANSPLANT 1–STEP" AS MANUFACTURED BY ROOTS, INC. OR APPROVED EQUAL. USE PER MANUFACTURER'S RECOMMENDATIONS FOR TREES AND SHRUBS. FERTILIZER/LIME APPLY AS RECOMMENDED BY SOIL ANAYLSIS

   - TREES, AND SHRUBS: TREES AND SHRUBS SHALL BE NURSERY GROWN UNLESS OTHERWISE NOTED AND HARDY UNDER CLIMATIC CONDITIONS SIMILAR TO THOSE IN THE LOCATION OF THE PROJECT. THEY SHALL BE TYPICAL OF THEIR SPECIES OR VARIETY, WITH NORMAL HABIT OF GROWTH. THEY SHALL BE SOUND, HEALTHY, VIGOROUS, WELL–BRANCHED AND DENSELY FOLIATED WHEN IN LEAF. THEY SHALL BE FREE OF DISEASE, INSECT PESTS, EGGS OR LARVAE. THEY SHALL HAVE HEALTHY AND WELL–DEVELOPED ROOT SYSTEMS. ALL TREES SHALL HAVE STRAIGHT SINGLE TRUNKS WITH THEIR MAIN LEADER INTACT UNLESS OTHERWISE STATED. THE OWNER, CERTIFIED LANDSCAPE INSPECTOR, LANDSCAPE ARCHITECT SHALL ONLY PERMIT SUBSTITUTIONS UPON WRITTEN APPROVAL. THEIR SIZES SHALL CONFORM TO THE MEASUREMENT SPECIFIED ON THE DRAWINGS. PLANTS LARGER THAN SPECIFIED ON THE DRAWINGS MAY BE USED IF APPROVED. THE USE OF SUCH PLANTS SHALL NOT INCREASE THE CONTRACT PRICE. ALL TREES AND SHRUBS SHALL BE MULCHED IN ACCORDANCE WITH THE RESPECTIVE PLANTING DETAIL(S) PROVIDED IN THE LANDSCAPING PLAN.
   - ALL PRUNING SHALL CONFORM TO THE TREE CARE INDUSTRY ASSOCIATION (TCIA) ANSI A300 (PART 1) – 2017 PRUNING STANDARDS. PRUNING STANDARDS SHALL RECOGNIZE BUT, ARE NOT LIMITED TO, THE FOLLOWING PRUNING OBJECTIVES: MANAGE RISK, MANAGE HEALTH, DEVELOP STRUCTURE, PROVIDE CLEARANCE, MANAGE SIZE OR SHAPE, IMPROVE AESTHETICS, MANAGE PRODUCTION OF FRUIT, FLOWERS, OR OTHER PRODUCTS, AND/OR MANAGE WILDLIFE HABITAT. DEVELOPING STRUCTURE SHALL IMPROVE BRANCH AND TRUNK ARCHITECTURE, PROMOTE OR SUBORDINATE CERTAIN LEADERS, STEMS, OR BRANCHES; PROMOTE DESIRABLE BRANCH SPACING; PROMOTE OR DISCOURAGE GROWTH IN A PARTICULAR DIRECTION (DIRECTIONAL PRUNING); MINIMIZE FUTURE INTERFERENCE WITH TRAFFIC, LINES OF SIGHT, INFRASTRUCTURE, OR OTHER PLANTS; RESTORE PLANTS FOLLOWING DAMAGE; AND/OR REJUVENATE SHRUBS. PROVIDING CLEARANCE SHALL ENSURE SAFE AND RELIABLE UTILITY SERVICES; MINIMIZE CURRENT INTERFERENCE WITH TRAFFIC, LINES OF SITE, INFRASTRUCTURE, OR OTHER PLANTS; RAISE CROWN(S) FOR MOVEMENT OF TRAFFIC OR LIGHT PENETRATION; ENSURE LINES OF SIGHT OR DESIRED VIEWS; PROVIDE ACCESS TO SITES, BUILDINGS, OR OTHER STRUCTURES; AND/OR COMPLY WITH REGULATIONS.
   - TOPSOIL SHALL BE INSTALLED AT A MINIMUM DEPTH OF 4 INCHES. CONTRACTOR SHALL SUBMIT TOPSOIL TO A CERTIFIED TESTING LABORATORY TO DETERMINE PH, FERTILITY, ORGANIC CONTENT AND MECHANICAL COMPOSITION. THE CONTRACTOR SHALL SUBMIT THE TEST RESULTS FROM REGIONAL EXTENSION OFFICE OF USDA TO THE OWNER, CERTIFIED LANDSCAPE INSPECTOR, OR LANDSCAPE ARCHITECT FOR REVIEW AND APPROVAL. CONTRACTOR SHALL INCORPORATE AMENDMENTS FOR GOOD PLANT GROWTH AND PROPER SOIL ACIDITY RECOMMENDED FROM THE TOPSOIL TEST.
   - NO PHOSPHOROUS SHALL BE USED AT PLANTING TIME UNLESS SOIL TESTING HAS BEEN COMPLETED AND TESTED BY A HORTICULTURAL TESTING LAB AND SOIL TESTS SPECIFICALLY INDICATE A PHOSPHOROUS DEFICIENCY THAT IS HARMFUL, OR WILL PREVENT NEW LAWNS/GRASSES AND PLANTINGS FROM ESTABLISHING PROPERLY.
   - IF SOIL TESTS INDICATE A PHOSPHOROUS DEFICIENCY THAT WILL IMPACT PLANT AND LAWN ESTABLISHMENT, PHOSPHOROUS SHALL BE APPLIED AT THE MINIMUM RECOMMENDED LEVEL PRESCRIBED IN THE SOIL TEST FOLLOWING ALL APPLICABLE STANDARDS, REQUIREMENTS, AND/OR REGULATIONS.
   - ALL SLOPES GREATER THAN 3:1 RECEIVING A WILDFLOWER, WETLAND, AND/OR GRASS SEEDING MIXTURE SHALL BE COVERED WITH AN EROSION CONTROL BLANKET.
   - ALL WILDFLOWERS AND GRASSES SOWED SHALL BE ALLOWED TO GROW TO THEIR NATURALLY OCCURRING HEIGHTS WHENEVER POSSIBLE. NATIVE WILDFLOWERS AND/OR GRASSES CAN BE MOWED/MAINTAINED (WITHIN ACCEPTABLE AREAS IDENTIFIED AND/OR APPROVED BY APPROPRIATE REGULATORY AGENCIES) AS OFTEN AS NEEDED TO KEEP THE VEGETATION AT A DESIRED AND/OR MANAGEABLE/MANICURED HEIGHT.

9. INVASIVE SPECIES SHALL NOT BE PERMITTED.

10. ALL PLANT MATERIAL SHALL CONFORM TO THE PLAN SIZE SPECIFICATIONS AS ESTABLISHED BY THE AMERICAN STANDARD FOR NURSERY STOCK LATEST EDITION.

TREE REMO□AL□PRESER□ATION□AND REFORESTATION PLANTIN□ CALCULATIONS

THE EXISTING TREES PROPOSED TO BE REMOVED WITHIN THE PROJECT SITE LIMITS OF DISTURBANCE REQUIRE REPLACEMENT EFFORTS TO SATISFY THE FOLLOWING CALCULATIONS:

- TREES SHALL BE REPLANTED AT A MINIMUM RATIO OF 1 TREE PER 1,000 SF OF DISTURBANCE
- FOR EVERY TREE PROPOSED FOR REMOVAL ON A REGULATED STEEP SLOPE (>25%), TWO TREES SHALL BE PLANTED
- THE PLANNING BOARD SHALL DETERMINE THE MINIMUM NUMBER OF TREES TO BE REPLANTED. THE TOTAL QUANTITY TO BE REPLANTED SHALL BE SET AT THE MORE STRINGENT OF THE TWO BETWEEN TOTAL NUMBER OF TREES PROPOSED REMOVAL (ADJUSTED FOR STEEP SLOPES) AND THE RATIO OF 1 PER 1,000 SF OF DISTURBANCE.

GIVENS:

- 3,396 TOTAL TREES TO BE REMOVED WITHIN THE PROPOSED PROJECT SITE LIMITS OF DISTURBANCE
- TOTAL DISTURBED AREA = 840,994 SF
- 165 TREES TO BE REMOVED ON STEEP SLOPES (>25%)

THEREFORE:

THE TOTAL TREE PLANTING REPLACEMENT CALCULATIONS ARE AS FOLLOWS:

- 1 TREE PER 1,000 SF OF DISTURBANCE REQUIREMENT =
  840,994 DIVIDED BY 1,000 = 841 TREES
- 2 TREES FOR EVERY TREE PROPOSED REMOVED TREE ON REGULATED STEEP SLOPE (>25%) =
  165 x 2 = 330 TREES

CONCLUSION:

THE TOTAL NUMBER/QUANTITY OF TREES REQUIRED TO BE REPLANTED SHALL BE BASED ON THE MOST STRINGENT OF THE TWO REQUIREMENTS SET FORTH ABOVE. THEREFORE, THE TOTAL NUMBER/QUANTITY OF TREES THAT ARE TO SERVE AS APPROPRIATE REPLACEMENT PLANTINGS = 841 TREES

ADDITIONAL GIVENS AND CALCULATIONS AND CONCLUSIONS:

GIVENS:

- THE LANDSCAPING PLAN PROVIDES PROPOSED TREE PLANTINGS THAT PROVIDE MITIGATION TO POTENTIAL VIEWS INTO THE PROJECT SITE TO THE BEST EXTENT POSSIBLE
- THE LANDSCAPING PLAN PROVIDES ADDITIONAL PROPOSED TREE AND SHRUB PLANTINGS THAT ARE POLLINATOR-FRIENDLY AND A BENEFICIAL ENHANCEMENT TO WILDLIFE HABITAT INCREASING BIODIVERSITY IN AND AROUND THE PROJECT SITE
- 274 EVERGREEN TREES (6'-7' MIN. HT.) ARE PROPOSED ON THE LANDSCAPING PLAN
  CREDIT = 1:1 = 274 TREE TOTAL CREDIT
- 28 ORNAMENTAL TREES (6'-8' CLUMP/1" CAL. MIN.) ARE PROPOSED ON THE LANDSCAPING PLAN
  CREDIT = 3:1 = 9 TREE TOTAL CREDIT
- 213 SHRUBS (3/5 GALLON CONTAINERS MIN.) ARE PROPOSED ON THE LANDSCAPING PLAN
  CREDIT = 10:1 = 21 TREE TOTAL CREDIT

THEREFORE:

THE TOTAL TREE CREDIT FOR THE PROPOSED TREE AND SHRUB PLANTINGS ON THE LANDSCAPING PLAN = 274 + 9 + 21 = 304 TREES TOTAL CREDIT

841 TREES ARE REQUIRED TO BE REPLANTED TO SATISFY THE MOST STRINGENT TREE REPLACEMENT REQUIREMENT

304 TREES CAN BE USED AS CREDIT BASED ON THE PROPOSED PLANTINGS ON THE LANDSCAPING PLAN

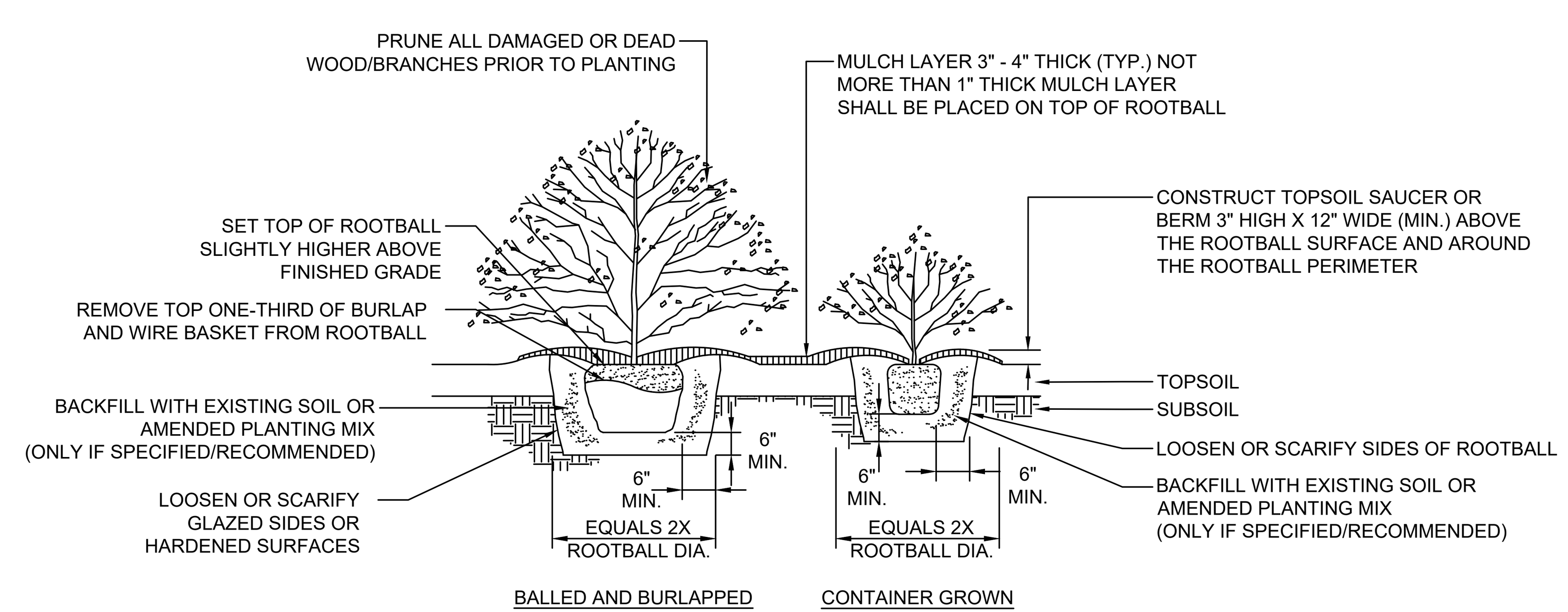
841 - 304 = 537 TREE REPLACEMENT PLANTINGS REMAIN

FINAL CONCLUSIONS:

THE REMAINING 537 TREES WILL BE PLANTED ONCE THE PROJECT HAS BEEN DECOMMISSIONED. THE TREES WILL BE PLANTED IN THE AREA WHERE THE SOLAR ARRAY SYSTEM WAS SITED AND WILL BE REMOVED.

THE TREE SPECIES TO BE PLANTED AFTER DECOMMISSIONING WILL BE LIKE OR SIMILAR TO THE ORIGINAL SPECIES THAT EXISTED ON THE PROJECT SITE PRIOR TO CONSTRUCTION AND THE TREE SURVEY PREPARED BY BARTLETT TREE EXPERTS (DATED NOVEMBER 2, 2020) WILL BE REFERENCED TO ENSURE THAT THE PROPER TREE SPECIES ARE PROCURED AND INSTALLED IN THE SAME LOCATIONS AS THAT OF THE ORIGINAL TREE SPECIES THAT ORIGINALLY EXISTED ON THE SITE PRIOR TO CONSTRUCTION TO THE BEST EXTENT POSSIBLE.

ANY REMAINING TREES THAT CANNOT BE PLANTED DUE TO SPACING, AVAILABILITY, LAYOUT LIMITATIONS, AND/OR ANY OTHER REASONABLE RESTRICTIONS WILL BE ACCOUNTED FOR VIA MONETARY PAYMENT FEE-IN LIEU OF TO COMPENSATE FOR ANY REMAINING DEFICIENCIES IN TREE QUANTITY TOTALS REQUIRED.

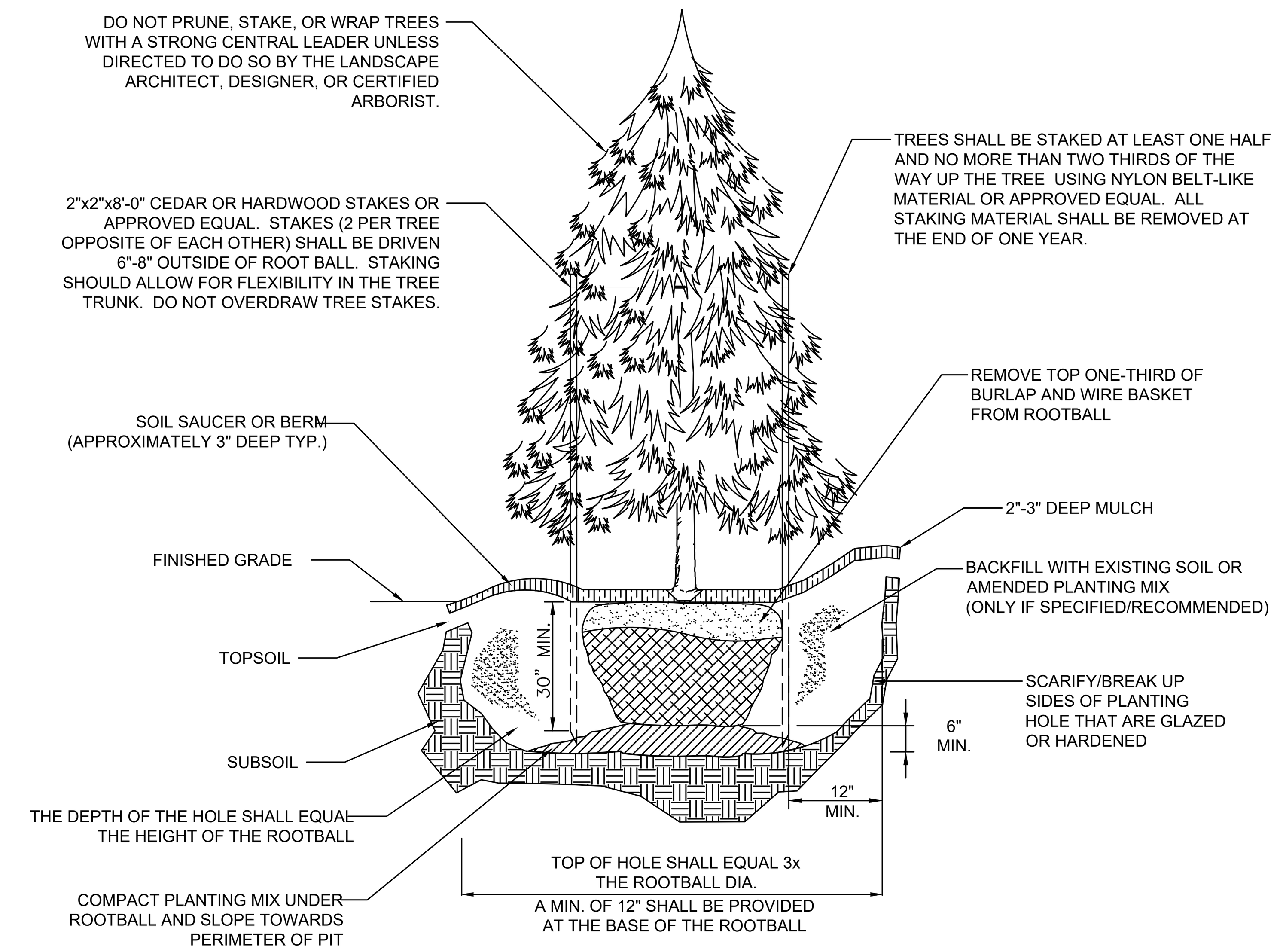


SHRUB PLANTING DETAIL

N.T.S.

NOTE□

- IN AREAS WITH MASS PLANTINGS, CONTINUOUS EXCAVATION AND MULCHING PRACTICES SHALL BE IMPLEMENTED WHENEVER POSSIBLE
- IT IS NOT RECOMMENDED TO AMEND THE EXISTING SOIL BEFORE BACKFILLING THE HOLE UNLESS SOIL CONDITIONS ARE POOR FOR PLANTING.
- WATER THOROUGHLY TO HELP ENSURE THE REMOVAL OF AIR POCKETS.

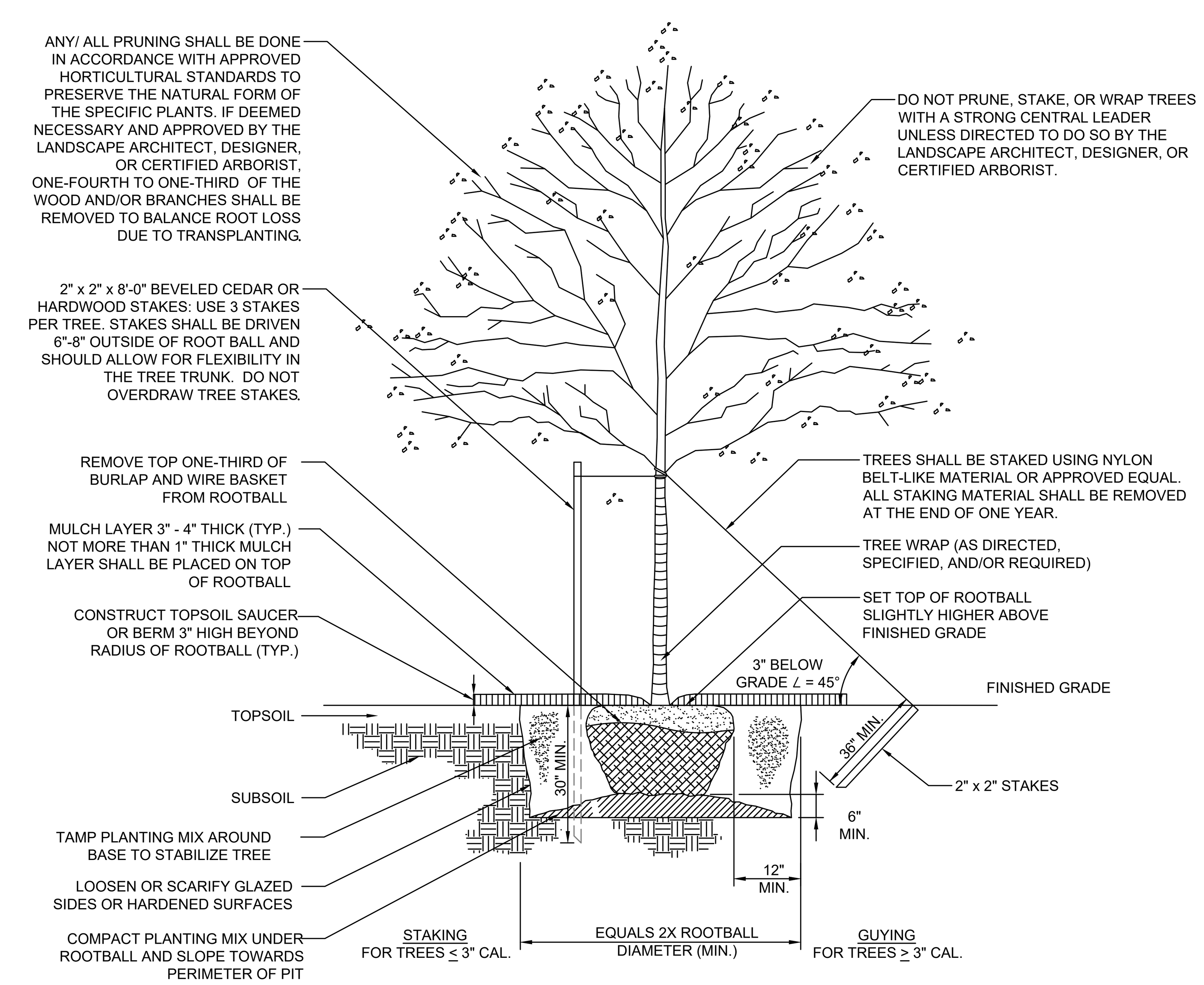


EVERGREEN TREE PLANTING DETAIL

N.T.S.

NOTES□

- TREE PLANTING SHALL BEAR SAME RELATIONSHIP TO FINISH GRADE AS IT WAS PRE-DUG IN THE NURSERY.
- NEVER CUT THE PRIMARY LEADER.
- IT IS NOT RECOMMENDED TO AMEND THE EXISTING SOIL BEFORE BACKFILLING THE HOLE UNLESS SOIL CONDITIONS ARE POOR FOR PLANTING.
- WATER THOROUGHLY TO HELP ENSURE THE REMOVAL OF AIR POCKETS AND PROPERLY SET THE TREE.



NATIVE/DECIDUOUS TREE PLANTING DETAIL

N.T.S.

NOTES□

- TREE PLANTING SHALL BEAR SAME RELATIONSHIP TO FINISH GRADE AS IT WAS PRE-DUG IN THE NURSERY.
- NEVER CUT THE PRIMARY LEADER.
- IT IS NOT RECOMMENDED TO AMEND THE EXISTING SOIL BEFORE BACKFILLING THE HOLE UNLESS SOIL CONDITIONS ARE POOR FOR PLANTING.
- WATER THOROUGHLY TO HELP ENSURE THE REMOVAL OF AIR POCKETS AND PROPERLY SET THE TREE.

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TRC

TRC Project No: 398683.0000.0000

cve Changing Visions of Energy

Revisions:

No.	Date:

Drawn by: MJR
Design by: MJR
Checked by: MJR

CVE NORTH AMERICA, INC.
CORTLANDT MILL SOLAR FARM
4.7 MW GROUND MOUNT SOLAR SYSTEM
0 MILL COURT
CORTLANDT, NEW YORK 10520

Contract No: 360551
Scale: AS NOTED
Date: MARCH 2021
Sheet: TREE PRESERVATION AND REFORESTATION PLAN
Drawing No: L-101

DRAWING NAME: \\nyc-fp11\Shared\Projects\CVE\360551-CVE Mill Court Cortlandt Solar\Working Drawings\Landscaping Plan\CVE_Cortlandt_Landscape Plan.dwg --- PLOT DATE: March 17, 2021 - 11:43AM --- LAYOUT: L-101 Landscape Details-Notes

POLLINATOR-FRIENDLY WILDLIFE ENHANCEMENT PURPOSE AND INTENT

THE PURPOSE AND INTENT OF THIS POLLINATOR-FRIENDLY WILDLIFE EXHIBIT IS TO PROVIDE AN EXPLANATION OF CONCEPT IN APPROACH FOR SUPPLEMENTING AND ENHANCING THE EXISTING VEGETATION AND LANDSCAPE ELEMENTS WITHIN THE PROJECT SITE. LEGITIMATE CONCERTED EFFORTS TO IMPLEMENT BEST MANAGEMENT PRACTICES THAT ARE POLLINATOR-FRIENDLY AND A BENEFIT WILDLIFE ARE CITED BELOW. THE IMPLEMENTATION OF THESE BEST MANAGEMENT PRACTICES CAN INCREASE VARIETIES IN WILDLIFE AND PLANT SPECIES RESULTING IN AN INCREASE OF BIODIVERSITY WITHIN THE PROJECT SITE AND BEYOND. THE BEST MANAGEMENT PRACTICES ARE AS FOLLOWS:

- PROVIDE A PLANTING SCHEME THROUGHOUT THE PROJECT SITE USING PLANT SPECIES THAT ARE NATIVE AND/OR INDIGENOUS TO THE AREA AND ARE POLLINATOR-FRIENDLY. POLLINATOR-FRIENDLY ORNAMENTAL TREES AND SHRUBS MAY INCLUDE DOWNY SHADBUSH (AMELANCHIER ARBOREA), RED CHOKEBERRY (ARONIA ARBUTIFOLIA), COMMON WITCH HAZEL (HAMAMELIS VIRGINIANA), COMMON WINTERBERRY (ILEX VERTICILLATE), AMERICAN CRANBERRY (VIBURNUM TRILOBUM), AND/OR HIGHBUSH BLUEBERRIES (VACCINIUM CORYMBOSUM).
- WITHIN THE PROJECT SITE, A LOW-GROWING PERMANENT SEED MIX WILL MOST LIKELY BE PROPOSED THROUGHOUT MOST OF THE AREA TO MINIMIZE EROSION CONCERNS. IT IS ANTICIPATED THAT THIS SEED MIX WILL BE COMPRISED OF NATIVE/INDIGENOUS WARM AND COOL SEASON GRASSES WITH RED AND WHITE CLOVER POLLINATORS. IT IS IMPORTANT TO NOTE, THAT THIS TYPE OF LONG-TERM PERMANENT GROUND COVER HELPS TO MINIMIZE THE NEED FOR FREQUENT MOWING.
- A NATIVE POLLINATOR-FRIENDLY SEED MIX GROUND COVER IS INTENDED TO BE SOWN WHEREVER POSSIBLE IN AREAS WHERE MOWING IS NOT OF CONCERN. THESE MIXES ARE TYPICALLY COMPRISED OF AN EVEN MIX OF NATIVE WILDFLOWERS AND WARM AND COOL SEASON GRASSES. THE POLLINATOR SEED MIXES THAT MAY BE PROPOSED ARE INTENDED TO SERVE AS PERMANENT EROSION AND SEDIMENT BMPS WITHIN THE PROJECT AREA AS WELL. FURTHERMORE, IT IS RECOMMENDED THAT NATIVE WILDFLOWERS AND GRASSES BE SOWN IN SELECTED LOCATIONS THAT WILL ALLOW THE POLLINATOR-FRIENDLY FLOWER SPECIES TO DEVELOP TO THE BEST EXTENT POSSIBLE. THEY MAY ALSO SERVE AS A FOUNDATION FOR THE LOCAL COMMUNITY TO SUPPORT BEEKEEPING INITIATIVES.
- THE NATIVE POLLINATOR-FRIENDLY PLANT SPECIES THAT ARE LISTED ABOVE ARE WOODY-TYPE (TYPICALLY DECIDUOUS IN NATURE) AND CAN PROVIDE EVEN MORE BENEFITS WHEN PLANTED TOGETHER WITH POLLINATOR GROUNDCOVER SPECIES BY CREATING WILDLIFE HABITAT AREAS, SHELTER, AND FOOD SOURCES THAT DIFFER FROM THE GROUNDCOVERS. IMPLEMENTING THE VARIOUS TYPES OF PLANTS CAN ATTRACT DIFFERENT VARIETIES OF WILDLIFE AND THEREFORE, INCREASE AND ENHANCE BIODIVERSITY.
- WILDLIFE-FRIENDLY CHAIN LINK FENCING IS RECOMMENDED IN SPECIFIC DESIGNATED AREAS WITHIN THE PROJECT SITE TO ALLOW FOR CONTINUED USE OF THE EXISTING WILDLIFE CORRIDORS AND ACCESS TO EXISTING VERNAL POOLS FOUND WITHIN THE PROJECT SITE. THESE VERNAL POOLS PROVIDE ADDITIONAL WILDLIFE BENEFITS AND PROVIDING ACCESS WITHOUT LIMITATION FURTHER ENHANCES AND INCREASES BIODIVERSITY.
- EARLY SUCCESSION WILL OCCUR AS A RESULT OF THE CONSTRUCTION OF THE PROJECT SITE. MANY WILDLIFE SPECIES RELY ON EARLY SUCCESSION HABITATS WHICH REQUIRE OPEN SPACE AND LAND AREAS TO BE MOST EFFECTIVE AND BENEFICIAL. VARIOUS TYPES OF GRASSLAND AND SHRUBLAND BIRDS ALONG WITH OTHER VARIETIES OF WILDLIFE PREFER EARLY SUCCESSION HABITATS FOR THE EXCELLENT COVER AND QUALITY OF FOOD AVAILABLE MAKING THIS TYPE OF HABITAT AN IMPORTANT COMPONENT FOR INCREASING BIODIVERSITY OPPORTUNITIES OF THE PROJECT SITE.
- PROVIDE A VARIETY OF POLLINATOR-FRIENDLY (WOODY-TYPE AND PERENNIAL) PLANTINGS IN THE LAYDOWN AREA AFTER CONSTRUCTION OF THE PROJECT IS COMPLETE TO TAKE ADVANTAGE OF THIS UNIQUE OPEN AREA AND TREAT IT AS ANOTHER OPPORTUNITY TO FURTHER ENHANCE AND INCREASE BIODIVERSITY.
- UTILIZE FELLED TREES TO CONSTRUCT WILDLIFE HABITAT PILES AND STRATEGICALLY LOCATE IN DESIGNATED AREAS - NOTING THE BENEFITS THAT ARE CITED IN THIS EXHIBIT.
- INCORPORATE BIRD AND NEST BOXES THROUGHOUT THE PROJECT SITE - NOTING THE BENEFITS THAT ARE CITED IN THIS EXHIBIT.

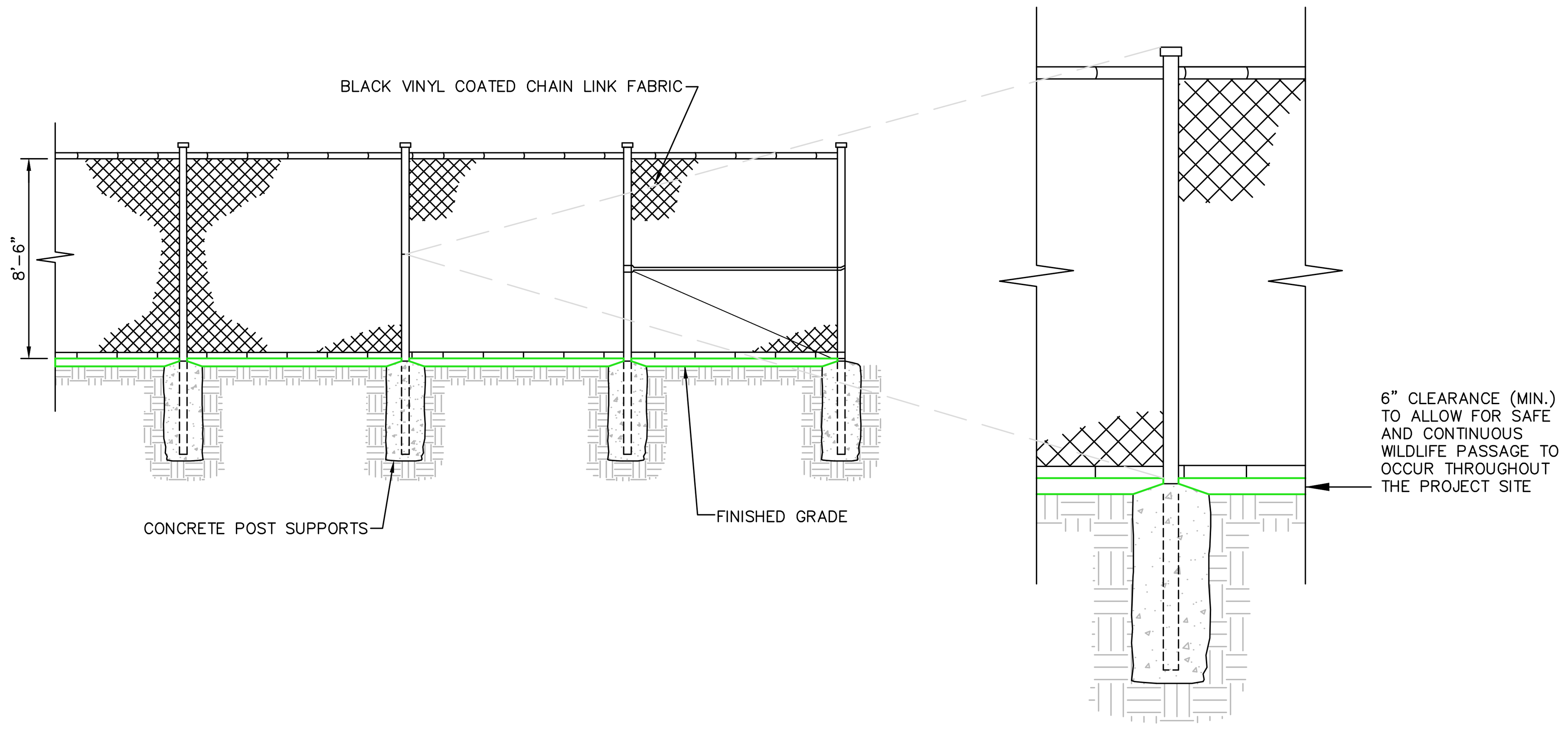
REFERENCES AND RESOURCES

- MASSACHUSETTS DEPARTMENT OF ENVIRONMENTAL PROTECTION - THE MASSACHUSETTS BUFFER MANUAL
- UMASS CLEAN ENERGY EXTENSION - BEST MANAGEMENT PRACTICES FOR POLLINATOR-FRIENDLY SOLAR ARRAYS
- THE PENNSYLVANIA STATE EXTENSION - DEAD WOOD FOR WILD LIFE
- AUDUBON SOCIETY - WHY SOLAR POWER IS GOOD FOR BIRDS
- ERNST SEED COMPANY - SOLAR SPECIFIC AND POLLINATOR-FRIENDLY SEED MIXES
- GOOGLE IMAGES - VARIOUS ONLINE PHOTO IMAGES
- MAINE DEPARTMENT OF ENVIRONMENTAL PROTECTION - VERNAL POOLS: A SIGNIFICANT WILDLIFE HABITAT
- NATURAL RESOURCE CONSERVATION SERVICE (VERMONT) - EARLY SUCCESSION BENEFITS
- NEW YORK STATE DEPARTMENT OF AGRICULTURE AND MARKETS - NYS UTILITY CORRIDOR POLLINATOR HABIT GUIDELINES - POLLINATOR HABITAT SEED MIX: WET AND DRY MESIC SITES

NOTE: THE LANDSCAPING PLAN IS ALSO AN IMPORTANT ELEMENT OF THE BIODIVERSITY PLAN. PLEASE REFERENCE THE LANDSCAPING PLAN (SHEET L-□□□) FOR PLANTING DESIGN, PLANT SCHEDULE, NOTES, AND DETAILS

WILDLIFE-FRIENDLY CHAIN LINK FENCE DETAIL

NOT TO SCALE



FELLED TREES AND WILDLIFE HABITAT PILES

USING FELLED TREES TO CREATE WILDLIFE HABITAT PILES WITHIN THE PROJECT SITE IS A GREAT WAY TO ATTRACT A VARIETY OF WILDLIFE SPECIES. WILDLIFE HABITAT PILES CAN BE IMPLEMENTED IN STRATEGIC LOCATIONS ALONG THE DESIGNATED WILDLIFE CORRIDOR AREAS TO MAXIMIZE THEIR EFFECTIVENESS WITHIN THE PROJECT SITE AND BEYOND.

BENEFITS FROM WILDLIFE HABITATS PILES CONSTRUCTED OUT OF FELLED/DEAD TREES INCLUDE PROVIDING SHELTER AND FOOD TO MANY WILDLIFE SPECIES MAKING THEM A VALUABLE RESOURCE AND EFFECT NATURAL TOOL THAT CAN EASILY BE IMPLEMENTED TO CREATE INCREASED BIODIVERSITY WITHING THE PROJECT SITE AREA.

BIRD BOXES AND NEST BOXES

BIRD BOXES AND NEST BOXES CAN BE ERECTED IN MANY LOCATIONS THROUGHOUT THE PROJECT SITE, ATTRACTING A VARIETY OF BIRD SPECIES THAT MAY INCLUDE BLUE BIRDS, KESTRELS, OWLS, AND SPARROWS TO NAME A FEW. IT IS RECOMMENDED THAT THE BOXES BE FENCE OR POLE-MOUNTED WHENEVER POSSIBLE AND ADDITIONAL PROTECTIVE MEASURES SUCH AS SHIELDING BE IMPLEMENTED TO PREVENT UNWANTED PREDATORS FROM INVADING THE NESTS.

SOLAR FARM GRASS SEED MIXES

NATIVE/NATURALIZED SOLAR FARM SEED MIX				
BOTANICAL NAME	**COMMON NAME**	**MIX CONCENTRATION**	**RATE (LBS/ACRE)**	**RATE (LBS/1000 FT²)**
FESTUCA RUBRA	CREEPING RED FESCUE	34%	262	6
FESTUCA OVINA	SHEEP FESCUE	33%		
FESTUCA BREVIPILA 'BEACON'	HARD FESCUE 'BEACON'	10%		
FESTUCA OVINA VAR. DURIUSCULA 'RHINO'	HARD FESCUE 'RHINO'	5%		
FESTUCA OVINA VAR. GLAUCA (F. ARVERNENSIS) (F. GLAUCA), 'BLUE RAY'	BLUE FESCUE 'BLUE RAY'	5%		
POA PRATENSIS 'ARGYLE'	KENTUCKY BLUEGRASS 'ARGYLE'	5%		
POA PRATENSIS 'SHAMROCK'	KENTUCKY BLUEGRASS 'SHAMROCK'	5%		
AGROSTIS PERENNANS, ALBANY PINE BUSH-NY ECOTYPE	AUTUMN BENTGRASS, ALBANY PINE BUSH-NY ECOTYPE	3%		

NOTES:

GRASS SEED MIXES ARE COMPRISED OF GRASSES THAT ARE NATIVE AND/OR INDIGENOUS TO THE AREA AND/OR CONSIDERED FAVORABLE FOR WILDLIFE HABITAT AND SUSTAINABLE GROWTH. ADDITIONALLY, THE SOLAR FARM SEED MIX WAS DEVELOPED ESPECIALLY FOR THE USE OF WARM AND COOL SEASON NATIVE GRASS PLANTINGS AROUND SOLAR ARRAY FIELDS AND SHALL BE UTILIZED ACCORDINGLY. THE WARM AND COOL SEASON GRASSES WILL MINIMIZE EROSION CONCERNS BY PROVIDING A CONSISTENT GROUNDCOVER THROUGHOUT THE YEAR AND MATURE OUT TO A HEIGHT OF APPROXIMATELY 2 1/2 FEET HIGH MINIMIZING MOWING AND SHADING CONCERNS AS WELL.

THE SEED MIX ABOVE IS A SPECIFICALLY DEVELOPED MIX HOWEVER, POLLINATOR-FRIENDLY SPECIES SUCH AS RED AND WHITE CLOVER (TRIFOLIUM PRATENSE AND TRIFOLIUM REPENS - RESPECTIVELY) WILL ALSO BE ADDED TO THIS MIX TO ENSURE THAT POLLINATOR SPECIES ARE AVAILABLE THROUGHOUT THE SOLAR ARRAY FIELDS WITHOUT INCREASING CONCERNS FOR EROSION, MOWING, AND/OR SHADING OF THE ARRAYS.

FLOWERING HERBACEOUS LAYER NORTHEAST NATIVE POLLINATOR SEED MIXES

NORTHEAST NATIVE WILDFLOWER & GRASS MIX				
BOTANICAL NAME	**COMMON NAME**	**MIX CONCENTRATION**	**RATE (LBS/ACRE)**	**RATE (LBS/1000 FT²)**
SCHIZACHYRIUM SCOPARIUM	LITTLE BLUESTEM	40%	20	0.46
BOUTELOUA CURTIPENDULA	SIDEOATS GRAMA	23.40%		
COSMOS BIPINNATUS	COSMOS	7.30%		
COREOPSIS LANCEOLATA	LANCELEAF COREOPSIS	3.50%		
ECHINACEA PURPUREA	PURPLE CONEFLOWER	3.50%		
ELYMUS VIRGINICUS	VIRGINIA WILDRYE	3%		
SORGHASTRUM NUTANS	INDIANGRASS	2.50%		
LUPINUS POLYPHYLLUS	BIGLEAF LUPINE	2.20%		
CHAMAECRISTA FASCICULATA	PARTRIDGE PEA	2%		
DELPHINIUM AJACIS	ROCKET LARKSPUR	2%		
RUDBECKIA HIRTA	BLACKEYED SUSAN	2%		
GAILLARDIA ARISTATA	BLANKET FLOWER	1.50%		
SENNA HEBECARPA	WILD SENNA	1%		
PENSTEMON DIGITALIS	TALL WHITE BEARDTONGUE	1%		
PAPAVER RHOEAS	SHIRLEY MIX (CORN POPPY, SHIRLEY MIX)	0.60%		
ANDROPOGON GERARDII	BIG BLUESTEM	0.50%		
ELYMUS CANADENSIS	CANADA WILDRYE	0.50%		
COREOPSIS TINCTORIA	PLAINS COREOPSIS	0.50%		
LIATRIS SPICATA	BLAZING STAR	0.40%		
ASCLEPIAS SYRIACA	COMMON MILKWEED	0.40%		
ASCLEPIAS TUBEROSA	BUTTERFLY MILKWEED	0.40%		
ZIZIA AUREA	GOLDEN ALEXANDERS	0.30%		
ASCLEPIAS INCARNATA	SWAMP MILKWEED	0.30%		
MONARDA FISTULOSA	WILD BERGAMONT	0.20%		
PENSTEMON LAEVIGATUS	APPALACHIAN BEARDTONGUE	0.20%		
SENNA MARILANDICA	MARYLAND SENNA	0.20%		
SOLIDAGO NEMORALIS	GRAY GOLDENROD	0.10%		
TRADESCANTIA OHIENSIS	OHIO SPIDERWORT	0.10%		
ASTER LAEVIS	SMOOTH BLUE ASTER	0.10%		
ASTER NOVAE-ANGLIAE	NEW ENGLAND ASTER	0.10%		
ASTER PRENANTHOIDES	ZIGZAG ASTER	0.10%		
HELIOPSIS HELIANTHOIDES	OXEYE SUNFLOWER	0.10%		

NOTES:

NATIVE POLLINATOR SEED MIXES ARE INTENDED TO PROVIDE AN EXCELLENT WILDLIFE FOOD AND SHELTER THAT WILL ATTRACT A VARIETY OF POLLINATORS AND SONGBIRDS. THE NATIVE WILDFLOWERS AND GRASSES IN THIS MIX PROVIDE AN ATTRACTIVE DISPLAY OF COLOR FROM SPRING TO FALL. POLLINATOR SEED MIXES ARE INTENDED TO PROVIDE NECTAR AND FOOD SOURCES FOR A VARIETY OF POLLINATORS AND LARVA. THESE MIXES ARE COMPRISED OF A FAIRLY EVEN MIX OF NATIVE AND/OR INDIGENOUS WILDFLOWERS AND GRASSES.

THE POLLINATOR SEED MIX IS INTENDED TO BE SOWN EVERYWHERE ELSE POSSIBLE WITHIN THE PROJECT SITE - IN AREAS WHERE MOWING IS NOT NECESSARY AND THE POLLINATOR-FRIENDLY PLANT SPECIES ARE ABLE TO GROW TO THEIR NATURALLY OCCURRING HEIGHTS AND DEVELOP FLOWER. AREAS WITHIN THE PROJECT SITE THAT MAY BE CONSIDERED TO SOW THIS SEED MIX ARE IN DESIGNATED PLANTING STRIPS OUTSIDE OF THE SOLAR ARRAY FIELD, OTHER AREAS AROUND THE OUTER PERIMETER OF THE VEGETATIVE PLANTING BUFFER, AND IN AREAS WHERE THE FENCING MAY HAVE ODD ANGLES CREATING PLANTING "POCKETS" FOR THE POLLINATOR-FRIENDLY PLANTINGS.

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TRC Project No: 398683.0000.0000

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Checked by: MJR

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CORTLANDT MILL SOLAR FARM
4.7 MW GROUND MOUNT SOLAR SYSTEM
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Contract No: 360551
Scale: AS NOTED
Date: MARCH 2021
Sheet: BIODIVERSITY ENHANCEMENT FEATURES
Drawing No: L-102

DRAWING NAME: \\nyc-fp11\Shared\Projects\CVE\360551-CVE Mill Court Cortlandt Solar\Working Drawings\Landscaping Plan\ CVE_Cortlandt_Landscape Plan.dwg --- PLOT DATE: March 17, 2021 - 11:43AM --- LAYOUT: L-102 Wildlife Enhancement Exhibit

□ENERAL NOTES□

1. USE OF THIS DETAIL/CRITERION IS LIMITED TO ACCESS ROADS USED ON AN OCCASIONAL BASIS ONLY (I.E. PROVIDE ACCESS FOR MOWING, EQUIPMENT REPAIR OR MAINTENANCE, ETC.).
2. LIMITED USE PERVIOUS ACCESS ROAD IS LIMITED TO LOW IMPACT IRREGULAR MAINTENANCE ACCESS ASSOCIATED WITH RENEWABLE ENERGY PROJECTS IN NEW YORK STATE.
3. REMOVE STUMPS, ROCKS AND DEBRIS AS NECESSARY. FILL VOIDS TO MATCH EXISTING NATIVE SOILS AND COMPACTION LEVEL.
4. REMOVED TOPSOIL MAY BE SPREAD IN ADJACENT AREAS AS DIRECTED BY THE PROJECT ENGINEER. COMPACT TO THE DEGREE OF THE NATIVE INSITU SOIL. DO NOT PLACE IN AN AREA THAT IMPEDES STORMWATER DRAINAGE.
5. GRADE ROADWAY, WHERE NECESSARY, TO NATIVE SOIL AND DESIRED ELEVATION. MINOR GRADING FOR CROSS SLOPE CUT AND FILL MAY BE REQUIRED.
6. REMOVE REFUSE SOILS AS DIRECTED BY THE PROJECT ENGINEER. DO NOT PLACE IN AN AREA THAT IMPEDES STORMWATER DRAINAGE.
7. ROADWAY WIDTH ABOVE MINIMUM TO BE DETERMINED BY CLIENT.
8. THE LIMITED USE PERVIOUS ACCESS ROAD CROSS SLOPE SHALL BE 2% IN MOST CASES AND SHOULD NOT EXCEED 6%. THE LONGITUDINAL SLOPE OF THE ACCESS DRIVE SHOULD NOT EXCEED 15%.
9. THE LIMITED USE PERVIOUS ACCESS ROAD IS NOT INTENDED TO BE UTILIZED FOR CONSTRUCTION WHICH MAY SUBJECT THE ACCESS TO SEDIMENT TRACKING. THIS SPECIFICATION IS TO BE DEVELOPED FOR POST-CONSTRUCTION USE. SOIL RESTORATION PRACTICES MAY BE APPLICABLE TO RESTORE CONSTRUCTION RELATED COMPACTION TO PRE-EXISTING CONDITIONS AND SHOULD BE VERIFIED BY SOIL PENETROMETER READINGS. THE PENETROMETER READINGS SHALL BE COMPARED TO THE RESPECTIVE RECORDED READINGS TAKEN PRIOR TO CONSTRUCTION, EVERY 100 LINEAR FEET ALONG THE PROPOSED ROADWAY.
10. TO ENSURE THAT SOIL IS NOT TRACKED ONTO THE LIMITED USE PERVIOUS ACCESS ROAD, IT SHALL NOT BE USED BY CONSTRUCTION VEHICLES TRANSPORTING SOIL, FILL MATERIAL, ETC. IF THE LIMITED USE PERVIOUS ACCESS IS COMPLETED DURING THE INITIAL PHASES OF CONSTRUCTION, A STANDARD NEW YORK STATE STABILIZED CONSTRUCTION ACCESS SHALL BE CONSTRUCTED AND UTILIZED TO REMOVE SEDIMENT FROM CONSTRUCTION VEHICLES AND EQUIPMENT PRIOR TO ENTERING THE LIMITED USE PERVIOUS ACCESS ROAD FROM ANY LOCATION ON, OR OFF SITE. MAINTENANCE OF THE PERVIOUS ACCESS ROAD WILL BE REQUIRED IF SEDIMENT IS OBSERVED WITHIN THE CLEAN STONE.
11. THE LIMITED USE PERVIOUS ACCESS ROAD SHALL NOT BE CONSTRUCTED OR USED UNTIL ALL AREAS SUBJECT TO RUNOFF ONTO THE PERVIOUS ACCESS HAVE ACHIEVED FINAL STABILIZATION.
12. PROJECTS SHOULD AVOID INSTALLATION OF THE LIMITED USE PERVIOUS ACCESS ROAD IN POORLY DRAINED AREAS, HOWEVER IF NO ALTERNATIVE LOCATION IS AVAILABLE, THE PROJECT SHALL UTILIZE WOVEN GEOTEXTILE MATERIAL AS DETAILED IN FOLLOWING NOTES.
13. THE DRAINAGE DITCH IS OFFERED IN THE DETAIL FOR CIRCUMSTANCES WHEN CONCENTRATED FLOW COULD NOT BE AVOIDED. THE INTENTION OF THIS DESIGN IS TO MINIMIZE ALTERATIONS TO HYDROLOGY, HOWEVER WHEN DEALING WITH 5%–15% GRADES NOT PARALLEL TO THE CONTOUR, A ROADSIDE DITCH MAY BE REQUIRED. THE NYS STANDARDS AND SPECIFICATIONS FOR EROSION AND SEDIMENT CONTROLS FOR GRASSED WATERWAYS AND VEGETATED WATERWAYS ARE APPLICABLE FOR SIZING AND STABILIZATION. DIMENSIONS FOR THE GRASSED WATERWAY SPECIFICATION WOULD BE DESIGNED FOR PROJECT SPECIFIC HYDROLOGIC RUNOFF CALCULATIONS, AND A SEPARATE DETAIL FOR THE SPECIFIC GRASSED WATERWAY WOULD BE INCLUDED IN THIS PRACTICE. RUNOFF DISCHARGES WILL BE SUBJECT TO THE OUTLET REQUIREMENTS OF THE REFERENCED STANDARD. INCREASED POST-DEVELOPMENT RUNOFF FROM THE ASSOCIATED ROADSIDE DITCH MAY REQUIRE ADDITIONAL PRACTICES TO ATTENUATE RUNOFF TO PRE-DEVELOPMENT CONDITIONS.
14. IF A ROADSIDE DITCH IS NOT UTILIZED TO CAPTURE RUNOFF FROM THE ACCESS ROAD, THE PERVIOUS ACCESS ROAD WILL HAVE A WELL-ESTABLISHED PERENNIAL VEGETATIVE COVER, WHICH SHALL CONSIST OF UNIFORM VEGETATION (I.E. BUFFER), 20 FEET WIDE AND PARALLEL TO THE DOWN GRADIENT SIDE OF THE ACCESS ROAD. POST-CONSTRUCTION OPERATION AND MAINTENANCE PRACTICES WILL MAINTAIN THIS VEGETATIVE COVER TO ENSURE FINAL STABILIZATION FOR THE LIFE OF THE ACCESS ROAD.
15. THE DESIGN PROFESSIONAL MUST ACCOUNT FOR THE LIMITED USE PERVIOUS ACCESS ROAD IN THEIR SITE ASSESSMENT/HYDROLOGY ANALYSIS. IF THE HYDROLOGY ANALYSIS SHOWS THAT THE HYDROLOGY HAS BEEN ALTERED FROM PRE- TO POST-DEVELOPMENT CONDITIONS (SEE APPENDIX A OF GP-0-20-001 FOR THE DEFINITION OF "ALTER THE HYDROLOGY..."), THE DESIGN MUST INCLUDE THE NECESSARY DETENTION/RETENTION PRACTICES TO ATTENUATE THE RATES (10 AND 100 YEAR EVENTS) TO PRE-DEVELOPMENT CONDITIONS.

□EO□RID MATERIAL NOTES□

1. THE GEOGRID, OR COMPARABLE PRODUCT, IS INTENDED FOR USE FOR ALL CONDITIONS, IN ORDER TO ASSIST IN MATERIAL SEPARATION FROM NATIVE SOILS AND PRESERVE ACCESS LOADS.
2. GRAVEL FILL MATERIAL SHALL CONSIST OF 1–4" CLEAN, DURABLE, SHARP-ANGLED CRUSHED STONE OF UNIFORM QUALITY, MEETING THE SPECIFICATIONS OF NYSDOT ITEM 703-02, SIZE DESIGNATION 3-5 OF TABLE 703-4. STONE MAY BE PLACED IN FRONT OF, AND SPREAD WITH, A TRACKED VEHICLE. GRAVEL SHALL NOT BE COMPACTED.
3. GEOGRID SHALL BE MIRAFI BXG110 OR APPROVED EQUAL. GEOGRID SHALL BE DESIGNED BASED ON EXISTING SOIL CONDITIONS AND PROPOSED HAUL ROAD SLOPES.
4. IF MORE THAN ONE ROLL WIDTH IS REQUIRED, ROLLS SHOULD OVERLAP A MINIMUM OF NINE INCHES.
5. REFER TO MANUFACTURER'S SPECIFICATION FOR PROPER TYING AND CONNECTIONS.
6. LIMITED USE PERVIOUS ACCESS ROAD SHALL BE TOP DRESSED AS REQUIRED WITH ONLY 1–4" CRUSHED STONE MEETING NYSDOT ITEM 703-02 SPECIFICATIONS.

BASIS OF DESIGN: TENCATE MIRAFI BXG110 GEOGRIDS; 365 SOUTH HOLLAND DRIVE, PENDERGRASS, GA; 800-685-9990 OR 706-693-2226; WWW.MIRAFI.COM

□EOWEB MATERIAL NOTES□

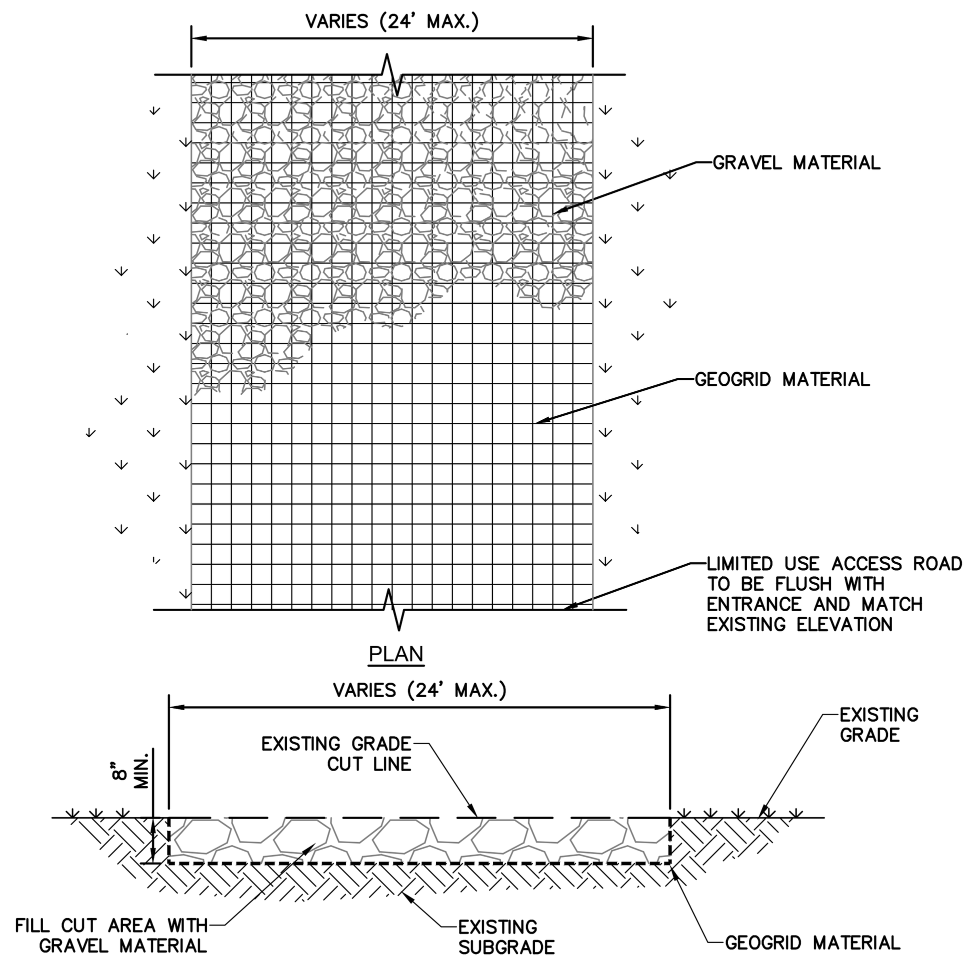
1. THE GEOWEB, OR COMPARABLE PRODUCT, IS SUGGESTED FOR USE ON ROAD PROFILES EXCEEDING 10%. THE GEOWEB PRODUCT IS INTENDED TO LIMIT SHIFTING STONE MATERIAL DURING USE.
2. INSTALLATION TO BE COMPLETED IN ACCORDANCE WITH MANUFACTURER'S SPECIFICATIONS.
3. WHERE REQUIRED, A NATIVE SOIL WEDGE SHALL BE PLACED TO ACCOMMODATE ROAD CROSS SLOPE OF 2%. NATIVE SOIL SHALL BE COMPACTED TO MATCH EXISTING SOIL CONDITIONS.
4. GRAVEL FILL MATERIAL SHALL CONSIST OF 1–4" CLEAN, DURABLE, SHARP-ANGLED CRUSHED STONE OF UNIFORM QUALITY, MEETING THE SPECIFICATIONS OF NYSDOT ITEM 703-02, SIZE DESIGNATION 3-5 OF TABLE 703-4. STONE MAY BE PLACED IN FRONT OF, AND SPREAD WITH, A TRACKED VEHICLE. GRAVEL SHALL NOT BE COMPACTED.
5. GEOWEB SYSTEM SHALL BE PRESTO GEOSYSTEM GEOWEB OR APPROVED EQUAL. GEOWEB SHALL BE DESIGNED BASED ON EXISTING SOIL CONDITIONS AND PROPOSED HAUL ROAD SLOPES.
6. LIMITED USE PERVIOUS ACCESS ROAD SHALL BE TOP DRESSED AS REQUIRED WITH ONLY 1–4" CRUSHED STONE, SIZE 3A, MEETING NYSDOT ITEM 703-02 SPECIFICATIONS.
7. THE TOP EDGES OF ADJACENT CELL WALLS SHALL BE FLUSH WHEN CONNECTING. ALIGN THE I-SLOTS FOR INTERLEAF AND END TO END CONNECTIONS. THE GEOWEB PANELS SHALL BE CONNECTED WITH ATRA KEYS AT EACH INTERLEAD AND END TO END CONNECTIONS. REFER TO MANUFACTURER'S SPECIFICATION FOR PROPER INSTALLATION, TYING, ANCHORING, AND CONNECTIONS.

BASIS OF DESIGN: PRESTO GEOSYSTEMS GEOWEB; 670 NORTH PERKINS STREET, APPLETON, WI; 800-548-3424 OR 920-738-1222; INFO@PRESTOGEO.COM; WWW.PRESTOGEO.COM

WO□EN □EOTE□TILE MATERIAL NOTES□

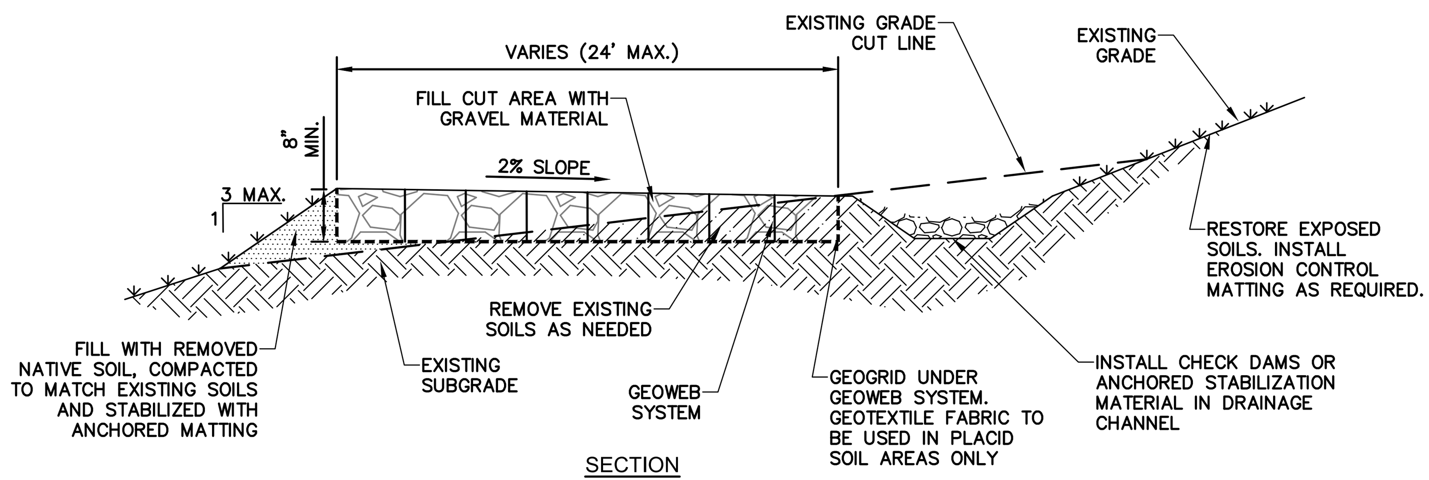
1. SPECIFIED GEOTEXTILE WILL ONLY BE UTILIZED IN PLACID SOILS. PLACID SOILS CONSIST OF POORLY DRAINED SOILS COMPOSED OF FINELY TEXTURED PARTICLES AND ARE PRONE TO RUTTING. PLACID SOILS ARE TYPICALLY PRESENT IN LOW-LYING AREAS WITH HYDROLOGIC SOILS GROUP (HSG) OF C OR D, OR AS SPECIFIED BY AN ENGINEER, ENVIRONMENTAL SCIENTIST, SOIL SCIENTIST, OR GEOTECHNICAL DATA.
2. THE CONCERN FOR POTENTIAL REDUCTION OF NATIVE INFILTRATION RATES DUE TO THE GEOTEXTILE MATERIAL WOULD NOT BE A SIGNIFICANT CONCERN IN POORLY DRAINED SOILS WHERE SEGREGATION OF PERVIOUS STONE AND NATIVE MATERIALS IS CRUCIAL FOR LONG TERM OPERATION AND MAINTENANCE.

BASIS OF DESIGN: TENCATE MIRAFI RSi-SERIES WOVEN GEOSYNTHETICS; 365 SOUTH HOLLAND DRIVE, PENDERGRASS, GA; 800-685-9990 OR 706-693-2226; WWW.MIRAFI.COM



LIMITED USE PERVIOUS ACCESS ROAD – 0% TO 10% SLOPES

NOT TO SCALE

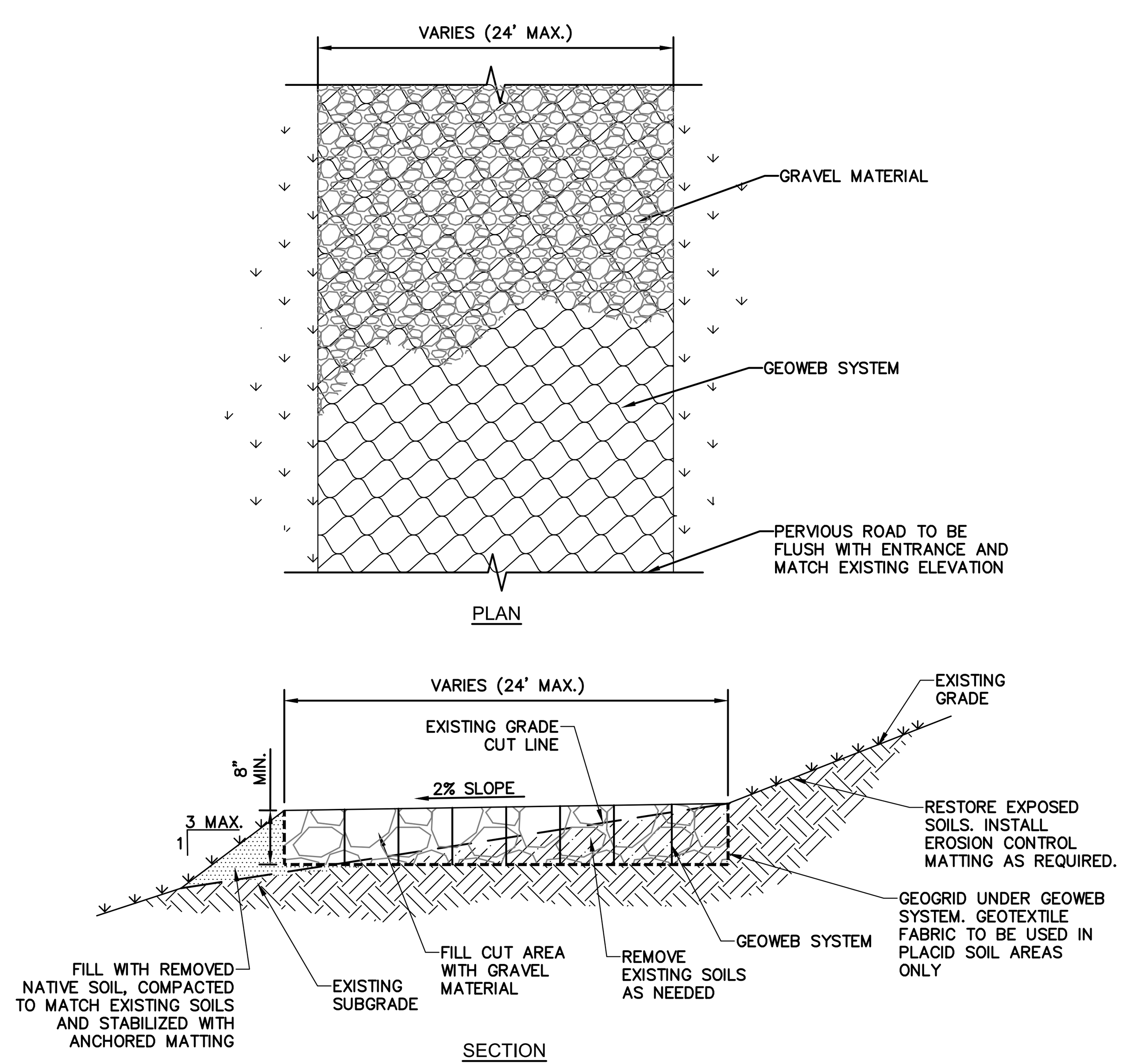


NOTE□

1. THE ROADSIDE DITCH SHALL BE DESIGNED IN ACCORDANCE WITH THE NEW YORK STATE STANDARDS AND SPECIFICATIONS FOR EROSION AND SEDIMENT CONTROLS FOR GRASSED AND VEGETATED WATERWAYS. ADDITIONAL DETAILS WILL BE PROVIDED SPECIFIC TO THE SITE DESIGN.

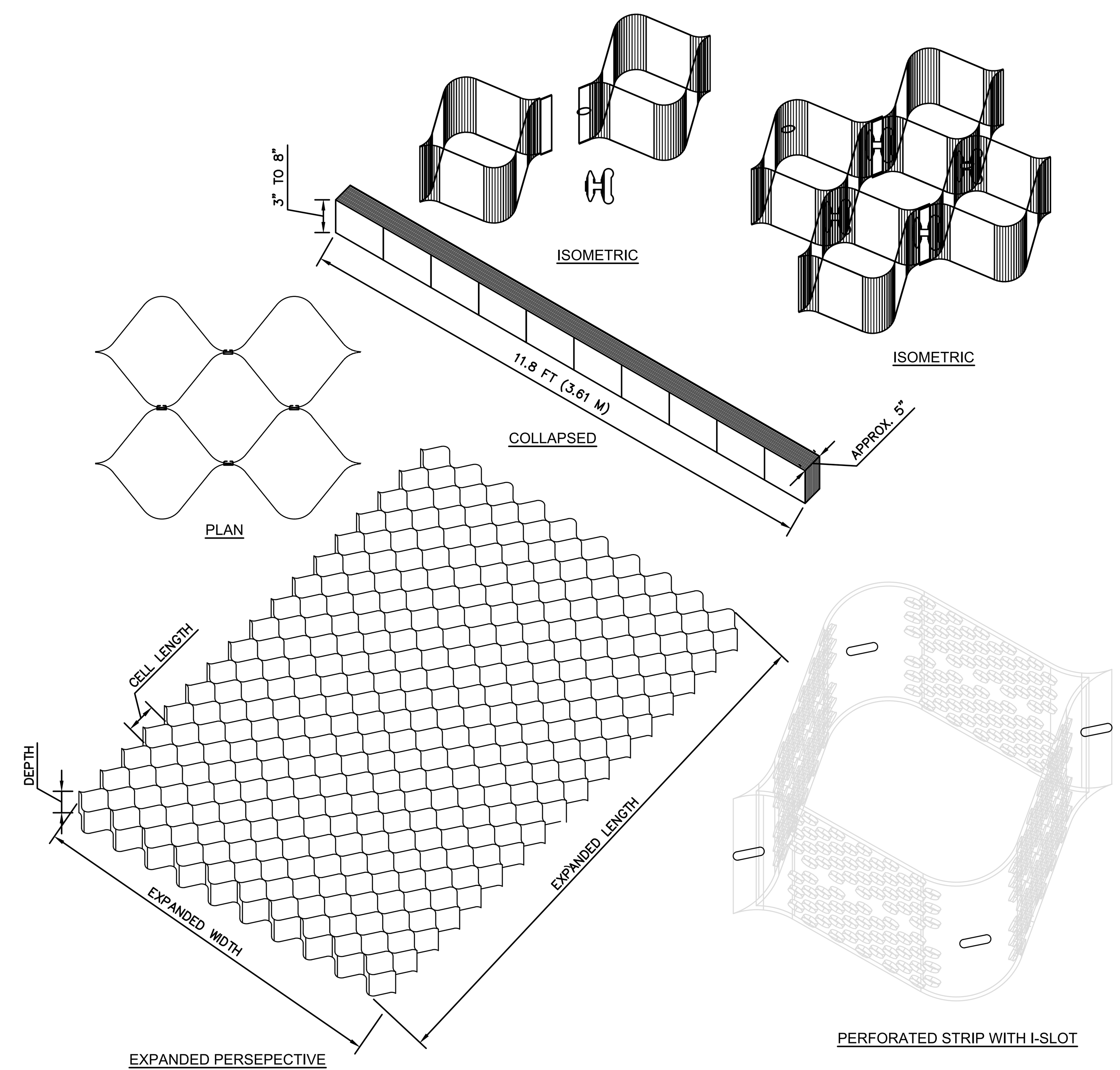
LIMITED USE PERVIOUS ACCESS ROAD – 10% AND GREATER SLOPES WITH DITCH

NOT TO SCALE



LIMITED USE PERVIOUS ACCESS ROAD – 10% AND GREATER SLOPES

NOT TO SCALE



GEOWEB SYSTEM

NOT TO SCALE

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NOT FOR CONSTRUCTION

1430 Broadway
10th Floor
New York, NY 10018
Phone: 212.221.7822

TRC Project No: 360551.0000.0000

Changing Visions of Energy

Revisions:

No.	Date:

Drawn by: T. MILL

Design by: C. CONNELLY

Checked by: S. MEERSMA

CVE NORTH AMERICA, INC.
CORTLANDT MILL SOLAR FARM
5.0 MW GROUND MOUNT SOLAR SYSTEM
0 MILL COURT
CORTLANDT, NEW YORK 10520

Contract No: 360551

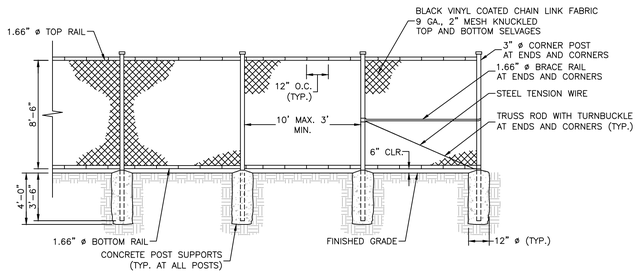
Scale: AS NOTED

Date: MARCH 2021

Sheet: DETAIL SHEET 1

Drawing No: 10

DRAWING NAME: \\nyc-fp1\Shared\Projects\CVE\360551-CVE Mill Court Cortlandt Solar\Working Drawings\SITE PLAN - GRADING\ DETAILS_CVE-Cortlandt_reco er.dwg --- PLOT DATE: March 17, 2021 - 12:12PM --- LAYOUT: C-1



FENCE INSTALLATION NOTES

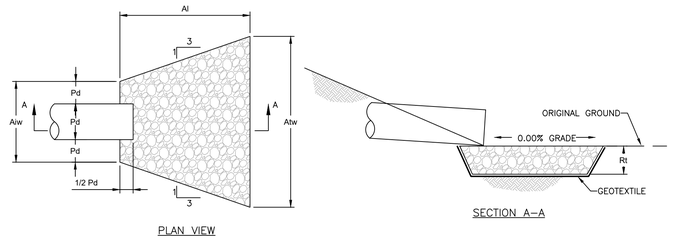
- **THE OPENINGS IN THE LINKS SHALL BE A MAXIMUM OF 2"**
- **CHAIN LINK FENCE IS TO BE FINISHED WITH BLACK VINYL COATING**
- **TERMINAL POSTS TO BE 2½"Ø SCHEDULE 40 PIPING.**

CHAIN LINK FENCE & GATE DETAIL
NOT TO SCALE

MILL COURT
CORTLANDT, NY

SITE OWNER: CVE NORTH AMERICA, INC.
SITE OWNER NUMBER: 914.847.0043

O & M COMPANY: CVE NORTH AMERICA, INC.
O & M COMPANY NUMBER: 914.847.0043



NOTES:

ALL APRONS SHALL BE CONSTRUCTED TO THE DIMENSIONS SHOWN. TERMINAL WIDTHS SHALL BE ADJUSTED AS NECESSARY TO MATCH RECEIVING CHANNELS.

ALL APRONS SHALL BE INSPECTED AT LEAST WEEKLY AND AFTER EACH RUNOFF EVENT. DISPLACED RIPRAP WITHIN THE APRON SHALL BE REPLACED IMMEDIATELY.

EXTEND RIPRAP ON BACK SIDE OF APRON TO AT LEAST 1/2 DEPTH OF PIPE ON BOTH SIDES TO PREVENT SCOUR AROUND THE PIPE.

RIP RAP OUTLET PROTECTION
NOT TO SCALE

PIPE DIA Pd (IN)	RIPRAP SIZE D_{50} (IN)	RIPRAP THICK. Rt (IN)	APRON LENGTH Al (FT)	APRON INITIAL WIDTH Aiw (FT)	APRON TERMINAL WIDTH Atw (FT)
12	9	18	12	4	10

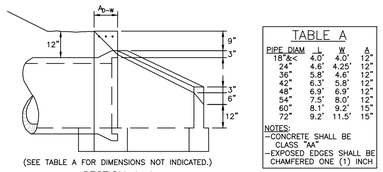
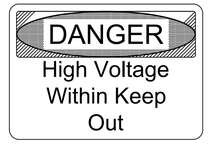


TABLE A

PIPE DIAM	L	W	A
18"&<	4.0'	4.0'	12"
24"	4.6'	4.25'	12"
36"	5.8'	4.6'	12"
42"	6.3'	5.8'	12"
48"	6.9'	6.9'	12"
54"	7.5'	8.0'	12"
60"	8.1'	9.2'	15"
72"	9.2'	11.5'	15"

NOTES:
- CONCRETE SHALL BE CLASS "AA"
- EXPOSED EDGES SHALL BE CHAMFERED ONE (1) INCH

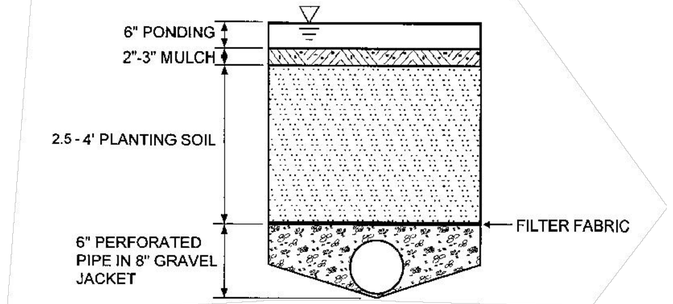
NOTE: ALL ENDWALLS AND HEADWALLS SHALL HAVE A TRASH SCREEN (SEE DETAIL)



NOTES

1. SIGNS SHALL CONFORM TO THE 2013 OSHA AND ANSI REQUIREMENTS.
2. SIGNS SHALL BE 20" WIDE BY 14" HIGH.
3. SIGNS SHALL HAVE A MOUNTING HEIGHT OF BETWEEN 45 TO 66 INCHES.
4. SIGN PANELS SHALL BE 10 GAUGE ALUMINUM WITH HIGH VISIBILITY REFLECTIVE SHEETING.
5. MOUNT A SET OF SIGNS NOT MORE THAN EVERY 100 FEET ALONG PERIMETER FENCING.

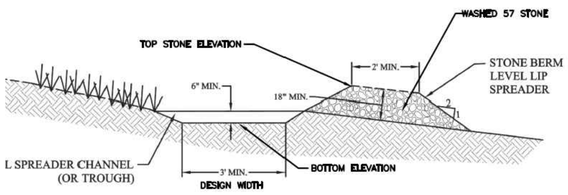
FENCE WARNING SIGNS
NOT TO SCALE



BIORETENTION PROFILE
NOT TO SCALE

BIORETENTION – SOIL SPECIFICATIONS

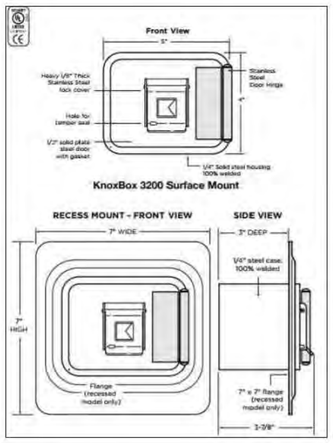
1. SOIL MEDIA COMPOSITION SHALL BE A UNIFORM MIXTURE OF 50% TO 70% SAND (ASTM C-33) AND 50% TO 30% ORGANIC MATERIAL (TOPSOIL) BY VOLUME. THE MEDIA BLEND SHALL CONTAIN SHALL AVERAGE OF 5% ORGANIC MATTER SUCH AS COMPOST OR PEAT, AND BE FREE OF STONES, STUMPS, ROOTS, WOODY MATERIAL OVER 2" IN DIAMETER, ANIMAL WASTE, BRUSH, OR SEEDS FROM NOXIOUS WEEDS.
2. THE SOIL MEDIA SHALL CONTAIN LESS THAN 5% CLAY, HAVE A pH RANGE OF 5.2 TO 7.6, AND A LOW PHOSPHORUS INDEX (BETWEEN 0 AND 25). A PERMEABILITY OF AT LEAST 1.0 FEET PER DAY (0.5"/HR) IS REQUIRED. ONLY COMPOST OR PEAT SHALL BE USED AS A SOIL AMENDMENT TO INCREASE ORGANIC CONTENT AS REQUIRED.
3. THE SOIL MEDIA SHALL BE TESTED FOR TOTAL PHOSPHORUS CONTENT AT A QUALIFIED LABORATORY, ONE THAT IS CERTIFIED BY THE NEW YORK STATE DEPARTMENT OF HEALTH (NYSDOH) ENVIRONMENTAL LABORATORY APPROVAL PROGRAM (ELAP) TO TEST SOIL FOR TOTAL PHOSPHORUS.
4. ACCEPTANCE OF THE SOIL MEDIA SHALL BE BASED UPON THE CONTRACTOR OR SUPPLIER PROVIDING TO THE ENGINEER COPIES OF TESTING RESULTS CERTIFYING THAT THE SAND GRADATION, TOPSOIL GRADATION, ORGANIC MATTER CONTENT, pH, PERMEABILITY, AND TOTAL PHOSPHORUS CONTENT ALL CONFORM TO THE STATED REQUIREMENTS.



LEVEL SPREADER	BOTTOM ELEV.	TOP STONE	WIDTH	LEVEL SPREADER LENGTH
BASIN 1	820'	822'	5'	50'
BASIN 2	696'	698'	5'	50'

LEVEL SPREADER TOE OF SLOPE
NOT TO SCALE

CONTACT PLAQUE
NOT TO SCALE



KNOX BOX
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TRC

TRC Project No: 360551.0000.0000

cve Changing Visions of Energy

Revisions:

No.	Date:

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Design by: C. CONNELLY
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CVE NORTH AMERICA, INC.
CORTLANDT MILL SOLAR FARM
5.0 MW GROUND MOUNT SOLAR SYSTEM
0 MILL COURT
CORTLANDT, NEW YORK 10520

Contract No: 360551
Scale: AS NOTED
Date: MARCH 2021
Sheet: DETAIL SHEET 2
Drawing No: 11

DRAWING NAME: \\ne-fs1\Projects\CVE\MISC\CVE Mill Court\Civil\Draft\Drawings\Drawings\SWPPP Plans_DRAWING DETAILS_CVE Cortland_revised.dwg, 3/5/2021 9:49:54 AM, Mark Hill, 1:1, 22x34, 1, HP PDF.pc3

powered by Q.ANTUM DUO

Q.PEAK DUO L-G8.2

415-430

ENDURING HIGH PERFORMANCE

pv magazine award 2017 top innovation · EUPD RESEARCH TOP BRAND PV MODULES EUROPE 2019 · Photon Q.PRO-G2 235 Best polycrystalline solar module 2014, Q CELLS 174 modules tested · Q CELLS YIELD SECURITY: ANTI PID TECHNOLOGY (APT), HOT-SPOT PROTECT (HSP), TRACEABLE QUALITY (TRA.Q™), ANTI LID TECHNOLOGY (ALT)

Q.ANTUM TECHNOLOGY: LOW LEVELISED COST OF ELECTRICITY
Higher yield per surface area, lower BOS costs, higher power classes, and an efficiency rate of up to 20.3%.

INNOVATIVE ALL-WEATHER TECHNOLOGY
Optimal yields, whatever the weather with excellent low-light and temperature behaviour.

ENDURING HIGH PERFORMANCE
Long-term yield security with Anti LID Technology, Anti PID Technology[1], Hot-Spot Protect and Traceable Quality Tra.Q™.

EXTREME WEATHER RATING
High-tech aluminium alloy frame, certified for high snow (5400 Pa) and wind loads (2400 Pa).

A RELIABLE INVESTMENT
Inclusive 12-year product warranty and 25-year linear performance warranty[2].

STATE OF THE ART MODULE TECHNOLOGY
Q.ANTUM DUO combines cutting edge cell separation and innovative 12-busbar design with Q.ANTUM Technology.

[1] APT test conditions according to IEC/TS 62804-1:2015, method B (−1500V, 168 h)
[2] See data sheet on rear for further information.

THE IDEAL SOLUTION FOR:

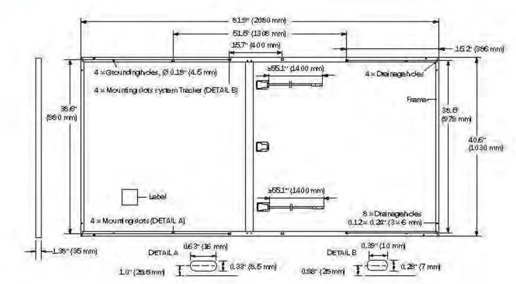
- Rooftop arrays on commercial/industrial buildings
- Ground-mounted solar power plants

Engineered in Germany

Q CELLS

MECHANICAL SPECIFICATION

Format	81.9 in × 40.6 in × 1.38 in (including frame) (2080 mm × 1030 mm × 35 mm)
Weight	55.1 lbs (25.0 kg)
Front Cover	0.13 in (3.2 mm) thermally pre-stressed glass with anti-reflection technology
Back Cover	Composite film
Frame	Anodized aluminum
Cell	6 × 24 monocrystalline Q.ANTUM solar half cells
Junction Box	2.09-3.98 in × 1.26-2.36 in × 0.59-0.71 in (53-101 mm × 32-60 mm × 15-18 mm), IP67, with bypass diodes
Cable	4 mm² Solar cable; (+) ≥55.1 in (1400 mm), (−) ≥55.1 in (1400 mm)
Connector	Stäubli MC4-Evo2, Hanwha Q CELLS HQC4, Amphenol UTX, Renhe 05-8, JMTHY JM601A; Tongling Cable01S-F, IP68 or Friends PV2e; IP67

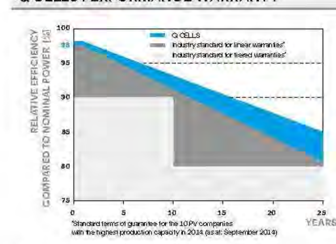


ELECTRICAL CHARACTERISTICS

POWER CLASS				415	420	425	430
MINIMUM PERFORMANCE AT STANDARD TEST CONDITIONS, STC[1] (POWER TOLERANCE +5 W / −0 W)							
Minimum	Power at MPP[1]	P_{MPP}	[W]	415	420	425	430
	Short Circuit Current[1]	I_{SC}	[A]	10.69	10.74	10.78	10.83
	Open Circuit Voltage[1]	V_{OC}	[V]	48.59	48.84	49.09	49.33
	Current at MPP	I_{MPP}	[A]	10.18	10.22	10.27	10.31
	Voltage at MPP	V_{MPP}	[V]	40.77	41.08	41.39	41.70
	Efficiency[1]	η	[%]	≥19.4	≥19.6	≥19.8	≥20.1
MINIMUM PERFORMANCE AT NORMAL OPERATING CONDITIONS, NMOT[2]							
Minimum	Power at MPP	P_{MPP}	[W]	310.8	314.5	318.3	322.0
	Short Circuit Current	I_{SC}	[A]	8.61	8.65	8.69	8.72
	Open Circuit Voltage	V_{OC}	[V]	45.82	46.05	46.29	46.52
	Current at MPP	I_{MPP}	[A]	8.01	8.05	8.08	8.12
	Voltage at MPP	V_{MPP}	[V]	38.79	39.09	39.38	39.67

[1]Measurement tolerances P_{MPP} ±3%; I_{SC}; V_{OC} ±5% at STC: 1000 W/m², 25±2 °C, AM 1.5 according to IEC 60904-3 • [2]800 W/m², NMOT, spectrum AM 1.5

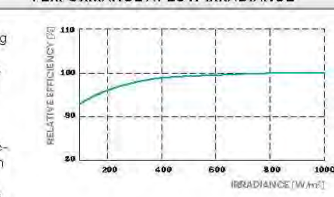
Q CELLS PERFORMANCE WARRANTY



At least 98% of nominal power during first year. Thereafter max. 0.54% degradation per year. At least 93.1% of nominal power up to 10 years. At least 85% of nominal power up to 25 years.

All data within measurement tolerances. Full warranties in accordance with the warranty terms of the Q CELLS sales organisation of your respective country.

PERFORMANCE AT LOW IRRADIANCE



Typical module performance under low irradiance conditions in comparison to STC conditions (25 °C, 1000 W/m²)

TEMPERATURE COEFFICIENTS

Temperature Coefficient of I_{SC}	α	[%/K]	+0.04	Temperature Coefficient of V_{OC}	β	[%/K]	−0.27
Temperature Coefficient of P_{MPP}	γ	[%/K]	−0.35	Normal Module Operating Temperature	NMOT	[°F]	109±5.4 (43±3 °C)

PROPERTIES FOR SYSTEM DESIGN

Maximum System Voltage V_{SYS}	[V]	1500 (IEC)/1500 (UL)	Safety Class	II
Maximum Series Fuse Rating	[A DC]	20	Fire Rating based on ANSI / UL 1703	C (IEC)/TYPE 1 (UL)
Max. Design Load, Push / Pull[3]	[lbs/ft²]	75 (3600 Pa)/33 (1600 Pa)	Permitted Module Temperature on Continuous Duty	−40 °F up to +185 °F (−40 °C up to +85 °C)
Max. Test Load, Push / Pull[3]	[lbs/ft²]	113 (5400 Pa)/50 (2400 Pa)		

[3] See Installation Manual

QUALIFICATIONS AND CERTIFICATES

UL 1703, CE-compliant, IEC 61215:2016, IEC 61730:2016, Application Class II, U.S. Patent No. 9,893,215 (solar cells)

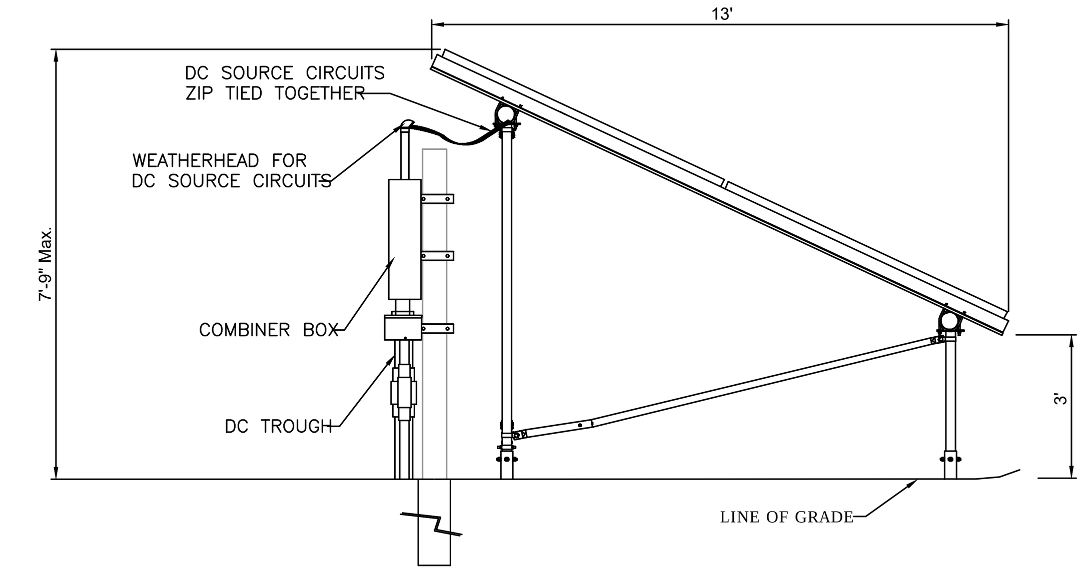
PACKAGING INFORMATION

Number of Modules per Pallet	29
Number of Pallets per 53' Trailer	26
Number of Pallets per 40' HC-Container	22
Pallet Dimensions (L × W × H)	84.6 × 45.3 × 48.0 in (2150 × 1150 × 1220 mm)
Pallet Weight	1717 lbs (779 kg)

Note: Installation instructions must be followed. See the installation and operating manual or contact our technical service department for further information on approved installation and use of this product.

Hanwha Q CELLS America Inc.
400 Spectrum Center Drive, Suite 1400, Irvine, CA 92618, USA | TEL +1 949 748 59 96 | EMAIL inquiry@us.q-cells.com | WEB www.q-cells.us

Specifications subject to technical changes © Q CELLS Q.PEAK DUO L-G8.2_415-430_2019-07_Rev01_NA



NOTE:
-PROVIDE EDGE GUARD OR ADEQUATE PROTECTION FOR PV WIRES AND SHARP EDGES OF RACKING SYSTEM.
-PROVIDE DRIP LOOP AND SUPPORT.

SOLAR PANEL DETAIL
NOT TO SCALE

SUNGROW

SG125HV

String Inverter for 1500 Vdc System

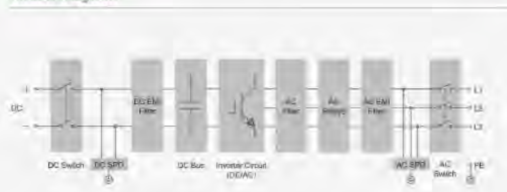
High Yield
- Patent five-level topology, max. efficiency 98.9 %, European efficiency 98.7 %, CEC efficiency 98.5 %
- Full power operation without derating at 50 °C

Easy O&M
- Virtual central solution, easy for O&M
- Compact design and light weight for easy installation

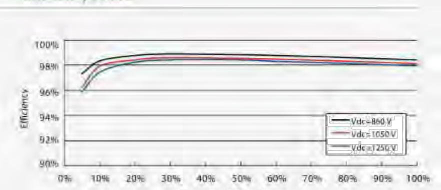
Saved Investment
- DC 1500 V, AC 600 V, low system initial investment
- 1 to 5 MW power block design for lower MV transformer and labor cost
- Max. DC/AC ratio up to 1.5

Grid Support
- Compliance with both IEC and UL safety, EMC and grid support regulations
- Low/High voltage ride through (L/HVRT)
- Active & reactive power control and power ramp rate control

Circuit Diagram



Efficiency Curve



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SUNGROW

SG125HV

Type designation	SG125HV
Input (DC)	
Max. PV input voltage	1500 V
Min. PV input voltage / Startup input voltage	860 V / 920 V
Nominal input voltage	1050 V
MPP voltage range	860 – 1450 V
MPP voltage range for nominal power	860 – 1250 V
No. of independent MPP inputs	1
No. of DC inputs	1
Max. PV input current	148 A
Max. DC short-circuit current	240 A
Output (AC)	
Nominal AC power (at 50 °C)	125000 W
Max. AC output power at PF=1 (at 50 °C)	125000 W
Max. AC apparent power (at 50 °C)	125000 VA
Max. AC output current	120 A
Nominal AC voltage	3 / PE, 600 V
AC voltage range	480 – 690 V
Nominal grid frequency / Grid frequency range	50 Hz / 45 – 55 Hz, 60 Hz / 55 – 65 Hz
THD	< 3 % (at nominal power)
DC current injection	< 0.5 % In
Power factor at nominal power / Adjustable power factor	> 0.99 / 0.8 leading – 0.8 lagging
Feed-in phases / Connection phases	3 / 3
Efficiency	
Max. efficiency / Euro. efficiency / CEC efficiency	98.9 % / 98.7 % / 98.5 %
Protection	
DC reverse connection protection	Yes
AC short-circuit protection	Yes
Leakage current protection	Yes
Grid monitoring	Yes
DC switch / AC switch	Yes / Yes
Overvoltage protection	DC Type II / AC Type II
General Data	
Dimensions (W*H*D)	670*890*296 mm 26.4"*35.0"*11.7"
Weight	72 kg 158.7 lb
Isolation method	Transformerless
Degree of protection	IP65
Night power consumption	< 4 W
Operating ambient temperature range	-25 to 60 °C (> 50 °C derating) -13 to 140 °F (> 122 °F derating)
Allowable relative humidity range (non-condensing)	0 – 100 %
Cooling method	Smart forced air cooling
Max. operating altitude	4000 m (> 3000 m derating) 13123 ft (> 9843 ft derating)
Display / Communication	LED, Bluetooth+APP / RS485
DC connection type	OT or DT terminal (Max. 185 mm²)
AC connection type	OT or DT terminal (Max. 185 mm²)
Compliance	CE, IEC 62109-1/-2, IEC 61000-6-2/-4, IEC 61727, IEC 62116, IEC 61000-3-11/-12, UL 1741, UL 1741 SA, IEEE 1547, IEEE 1547.1, CSA C22.2 107.1-01-2001 and California Rule 21
Grid support	LVRT, HVRT, active & reactive power control and power ramp rate control
Type designation	SG125HV-10

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DRAWING NAME: \\nyc-fp1\Projects\CVE\360551-CVE Mill Court Cortlandt Solar\Working Drawings\SITE PLAN - GRADING\ DETAILS_CVE-Cortlandt_recoiler.dwg --- PLOT DATE: March 18, 2021 - 5:40PM --- LAYOUT: C-3

1430 Broadway
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Phone: 212.221.7822

TRC

TRC Project No: 360551.0000.0000

cve Changing Visions of Energy

STATE OF NEW YORK · STEVEN DONALD MEERSMA · 076572-1 · LICENSED PROFESSIONAL ENGINEER

Revisions:

No.	Date:

Drawn by: T. MILL
Design by: C. CONNELLY
Checked by: S. MEERSMA

CVE NORTH AMERICA, INC.
CORTLANDT MILL SOLAR FARM
5.0 MW GROUND MOUNT SOLAR SYSTEM
0 MILL COURT
CORTLANDT, NEW YORK 10520

Contract No: 360551
Scale: AS NOTED
Date: MARCH 2021
Sheet: DETAIL SHEET 3
Drawing No: 12

EROSION CONTROL MEASURES

EROSION AND SEDIMENT CONTROL MEASURES SHALL CONSIST OF NON-WOVEN FILTER FABRIC MATERIAL WITH A WIRE MESH BACKING, OR A WOVEN FABRIC (SILT FENCE). ALL MATERIAL SHALL BE NEW AND FREE FROM DEFECTS THAT WOULD COMPROMISE THE EFFECTIVENESS OF THE CONTROL MEASURES, AFTER COMPLETION, ALL MATERIAL SHALL BE DISPOSED PROPERLY. LOCATION OF EROSION AND SEDIMENT CONTROL STRUCTURES CAN BE SEEN ON THE SITE PLAN. NOTE: ALL WATER CONTROL MEASURES ARE LOCATED DOWN-GRADIENT FROM DISTRIBUTED STREET. IF TOPSOIL IS TO BE STORED IN AN AREA NOT SHOWN ON THE SITE PLAN, DUE TO UNFORESEEN EVENTS, PRIOR TO STORING, THE DOWN-GRADIENT PERIMETER OF THE STORAGE AREA SHALL BE PROPERLY PROTECTED PER THE SPECIFICATIONS DETAILED ON THIS PLAN.

CONSTRUCTION HOUSEKEEPING

CONTRACTOR SHALL MAINTAIN THE PROJECT SITES IN ACCORDANCE WITH THE FOLLOWING PERFORMANCE STANDARDS:

MATERIAL STOCKPILING: MATERIAL RESULTING FROM CLEARING AND GRUBBING, GRADING, AND OTHER CONSTRUCTION ACTIVITIES, OR NEW MATERIAL DELIVERED TO THE SITE, SHALL BE STOCKPILED UPSLOPE OF DISTURBED AREAS. THE STOCKPILE AREAS SHALL HAVE THE PROPER EROSION AND SEDIMENT CONTROLS INSTALLED TO PREVENT MIGRATION OF SEDIMENTS AND MATERIALS.

STAGING, STORAGE, AND MARSHALLING AREAS: CONSTRUCTION MATERIALS AND EQUIPMENT SHALL BE STORED IN DESIGNATED STAGING AREAS AS INDICATED ON THE CONSTRUCTION DRAWINGS OR AS DIRECTED BY THE OWNER OR OWNER'S REPRESENTATIVE, OR ENGINEER. STAGING, STORAGE, AND MARSHALLING AREAS SHALL BE LOCATED IN AN AREA THAT MINIMIZES IMPACTS TO STORMWATER QUALITY. CHEMICALS, SOLVENTS FERTILIZERS, AND OTHER TOXIC MATERIALS SHALL BE COLLECTED AND DISPOSED OF AT AN APPROVED SOLID WASTE OR CHEMICAL DISPOSAL FACILITY. BULK STORAGE OF FUEL MATERIALS WILL BE STAGED AT THE PROJECT MARSHALLING YARD PER SAFETY DATA SHEET (SDS) SPECIFICATION AND ENVIRONMENTAL HEALTH AND SAFETY STANDARDS, WHICHEVER IS MORE RESTRICTIVE.

EQUIPMENT CLEANING AND MAINTENANCE: ALL ONSITE CONSTRUCTION VEHICLES SHALL BE MONITORED FOR LEAKS AND SHALL RECEIVE REGULAR PREVENTATIVE MAINTENANCE TO REDUCE THE RISK OF LEAKAGE. ANY EQUIPMENT LEAKING OIL, FUEL, OR HYDRAULIC OIL SHALL BE REPAIRED OR REMOVED FROM THE PROJECT SITE IMMEDIATELY. STORAGE, PARKING, MAINTENANCE, AND SERVICING OF CONSTRUCTION VEHICLES SHALL BE A MINIMUM OF 200-FEET FROM A WETLAND , WATERBODY, OR OTHER ECOLOGICALLY SENSITIVE AREA AND STORMWATER CONVEYANCE FEATURES OR WATER QUALITY TREATMENT BMPS. PETROLEUM PRODUCTS AND HYDRAULIC FLUIDS THAT ARE NOT IN VEHICLES SHALL BE STORED IN TIGHTLY SEALED CONTAINERS THAT ARE CLEARLY LABELED. ALL GASOLINE, DIESEL FUEL, OR OTHER FUEL STORAGE VESSELS WITH GREATER THAN 25-GALLON SHELL CAPACITY MUST HAVE SECONDARY CONTAINMENT CONSTRUCTED OF AN IMPERVIOUS MATERIAL CAPABLE OF CONTAINING A MINIMUM OF 110% OF THE SHELL CAPACITY.

DEBRIS AND OTHER MATERIALS: CONTRACTOR SHALL MANAGE ALL LITTER, CONSTRUCTION DEBRIS, AND CONSTRUCTION CHEMICALS EXPOSED TO STORMWATER TO PREVENT MATERIALS FROM BECOMING A SOURCE OF POLLUTION. ALL DEMOLITION WASTE, DEBRIS, AND RUBBISH GENERATED DURING CONSTRUCTION OF THE PROJECT SHALL BE PROPERLY REMOVED FROM THE SITE AS IT OCCURS. ALL MATERIALS SHALL BE PROPERLY DISPOSED OF OFF-SITE IN STRICT ACCORDANCE WITH ALL APPLICABLE LOCAL, STATE, AND FEDERAL REGULATIONS.THE CONTRACTOR SHALL PAY PARTICULAR ATTENTION TO THE PROPER HANDLING, STORAGE, AND DISPOSAL OF HAZARDOUS SUBSTANCES.

TRENCH OR FOUNDATION DEWATERING: TRENCH DEWATERING IS THE REMOVAL OF WATER FROM TRENCHES, FOUNDATIONS, COFFER DAMS, PONDS, SUMPS, BASINS, AND OTHER AREAS WITHIN THE CONSTRUCTION AREA THAT RETAIN WATER AFTER EXCAVATION. IN MOST CASES THE COLLECTED WATER IS HEAVILY SILTED AND HINDERS CORRECT AND SAFE CONSTRUCTION PRACTICES. THE CONTRACTOR SHALL REMOVE COLLECTED WATER FROM THE PONDED AREAS, EITHER THROUGH GRAVITY OR PUMPING, IN A MANNER THAT SPREADS IT THROUGH NATURAL WOODED OR VEGETATED BUFFERS OR TO AREAS THAT ARE SPECIFICALLY DESIGNED TO COLLECT THE MAXIMUM AMOUNT OF SEDIMENT LADEN WATER FROM DEWATERING TO FLOW OVER DISTURBED AREAS OF THE PROJECT SITES. OTHER MEASURES OR METHODS MAY BE UTILIZED AS REVIEWED AND APPROVED BY THE ENGINEER.

NON-STORMWATER DISCHARGES: CONTRACTOR SHALL IDENTIFY AND PREVENT CONTAMINATION BY NON-STORMWATER DISCHARGES.

CONCRETE WASHOUT AREAS: DESIGNATED CONCRETE WASHOUT AREAS SHALL BE PROVIDED AS NEEDED TO ALLOW CONCRETE TRUCKS TO WASHOUT OR DISCHARGE SURPLUS CONCRETE AND WASH WATER ONSITE. CONCRETE WASHOUT AREAS SHALL BE A DIKED IMPERVIOUS AREA LOCATED A MINIMUM OF 100 FEET FROM A DRAINAGE WAY, WATERBODY, WETLAND AREA, OR INFILTRATION BMP. CONCRETE WASHOUT AREAS SHALL HAVE PROPER SIGNAGE AND BE CONSTRUCTED TO PREVENT CONTACT BETWEEN WASHWATER AND STORMWATER. THE CONTRACTOR IS RESPONSIBLE FOR IMPLEMENTATION AND MAINTENANCE OF CONCRETE WASHOUT AREAS. CONCRETE WASHOUT AREAS SHALL NOT BE FILLED BEYOND 95 OF DESIGN CAPACITY AND SHALL BE CLEANED OUT ONCE 75% CAPACITY HAS BEEN MET UNLESS A NEW FACILITY HAS BEEN CONSTRUCTED.

ADDITIONAL REQUIREMENTS: COMPLETION OF THE WORK WILL REQUIRE FREQUENT ACCESS TO VARIOUS PORTIONS OF THE PROJECT AREA FROM STATE AND LOCAL ROADWAYS. CONTRACTOR SHALL MONITOR PUBLIC ROADWAYS AND SHALL CLEAN PAVEMENT BY MEANS NECESSARY IN THE EVENT THAT SEDIMENT OR TRACKING IS OBSERVED. SIGNAGE SHALL BE POSTED AT INTERSECTIONS OF PROJECT ACCESS ROADS AND PUBLIC WAYS, STATING COMPANY NAME AND 24-HOUR CONTACT PHONE NUMBER.

TEMPORARY STABILIZATION FOR FROZEN CONDITIONS

SITE STABILIZATION: MULCHING SHOULD BE TRACKED INTO SOIL PRIOR TO FROZEN CONDITIONS, OR ANCHORED WITH NATURAL FIBER NETTING. APPLICATION OF MULCHING SHOULD BE PERFORMED PRIOR TO SIGNIFICANT SNOW FALL. IF STRAW MULCH ALONE IS USED FOR TEMPORARY STABILIZATION, IT SHALL BE APPLIED AT DOUBLE THE STANDARD RATE OF 2 TONS PER ACRE, MAKING THE APPLICATION RATE 4 TONS PER ACRE. OTHER MANUFACTURED MULCHES SHOULD BE APPLIED AT DOUBLE THE MANUFACTURER'S RECOMMENDED RATE. IN AREAS WHERE SOIL DISTURBANCE ACTIVITY HAS TEMPORARILY OR PERMANENTS CEASED, THE APPLICATION OF SOIL STABILIZATION MEASURES SHOULD BE INITIATED BY THE END OF NEXT BUSINESS DAY AND COMPLETED WITHIN THREE DAYS. ACCUMULATED SNOW AND FROZEN CONDITIONS ALONE ARE NOT CONSIDERED STABILIZATION.

SLOPES: ALL SLOPES AND GRADES MUST BE PROPERLY STABILIZED WITH APPROVED METHODS. ROLLED EROSION CONTROL PRODUCTS MUST BE USED ON ALL SLOPES GREATER THAN 3H:1V, OR WHERE CONDITIONS FOR EROSION DICTATE SUCH MEASURES.

SETBACKS: A MINIMUM 25-FOOT BUFFER SHALL BE MAINTAINED FROM ALL PERIMETER CONTROLS SUCH AS SILT FENCE. MARK SILT FENCE WITH TALL STAKES THAT ARE VISIBLE ABOVE THE SNOW PACK. EDGES OF DISTURBED AREAS THAT DRAIN TO A WATERBODY WITHIN 100-FEET WILL HAVE 2 ROWS OF SILT FENCE, 5-FEET APART, INSTALLED ALONG THE CONTOUR.

SOIL STOCKPILES: STOCKPILED SOILS MUST BE PROTECTED BY THE USE OF ESTABLISHED VEGETATION, ANCHORED -DOWN MULCH, ROLLED EROSION CONTROL PRODUCTS, OR OTHER DURABLE COVERING. SEDIMENT CONTROLS MUST BE INSTALLED DOWNSLOPE OF THE PILE TO CONTROL SEDIMENTATION TO UNDISTURBED LOCATIONS.

CONSTRUCTION ENTRANCE: ALL ENTRANCE AND EXIT LOCATIONS TO THE SITE MUST BE PROPERLY STABILIZED AND MUST BE MAINTAINED TO ACCOMMODATE SNOW MANAGEMENT AS SET FORTH IN THE NEW YORK SSESC.

SNOW MANAGEMENT: SNOW MANAGEMENT SHALL NOT DESTROY OR DEGRADE EROSION AND SEDIMENT CONTROL PRACTICES. PLOWING PERFORMED SHOULD NOT MIGRATE PLACED CRUSHED STONE OR ACCUMULATED MATTING DEBRIS WITHIN WATERBODIES, CONVEYANCES OR PROTECTED AREAS. PREPARE A SNOW MANAGEMENT PLAN WITH ADEQUATE STORAGE FOR SNOW AND CONTROL OF MELT WATER, REQUIRING CLEARED SNOW TO BE STORED IN A MANNER NOT AFFECTING ONGOING CONSTRUCTION ACTIVITIES. ENLARGE AND STABILIZE ACCESS POINTS TO PROVIDE FOR SNOW MANAGEMENT AND STOCKPILING. DRAINAGE STRUCTURES MUST BE KEPT OPEN AND FREE OF SNOW AND ICE DAMS. ALL DEBRIS OR ICE DAMS FROM PLOWING OPERATIONS THAT RESTRICT FLOW OF RUNOFF AND MELT WATER SHALL BE REMOVED.

FROST HEAVES: HEAVING FROST, FROZEN GROUND, WINTER CONDITIONS AND EQUIPMENT CAN AFFECT EROSION AND SEDIMENTATION CONTROL PRACTICES. EROSION AND SEDIMENTATION CONTROL DEVICES SHALL BE CHECKED FOR DAMAGE BY TRAINED CONTRACTOR AND QUALIFIED INSPECTORS. DEFICIENCIES SHALL BE REPAIRED AND OR INSTALLED MEASURES SHALL BE REPLACED AS DEEMED NECESSARY. THIS IS ESPECIALLY IMPORTANT DURING THAWING PERIODS AND PRIOR TO SPRING RAIN EVENTS.

WINTER SHUTDOWN: IN THE EVENT OF TEMPORARY SHUTDOWN TO SOIL DISTURBING ACTIVITIES UNDER WINTER CONDITIONS, TEMPORARY STABILIZATION MEASURES SHALL BE IMPLEMENTED TO ALL DISTURBED AREAS AND SWPPP INSPECTIONS CAN BE REDUCED TO A MONTHLY FREQUENCY. THE CONTRACTOR SHALL REFER TO SOIL STABILIZATION MEASURES IN ACCORDANCE WITH THE NEW YORK STATE STANDARDS AND SPECIFICATIONS FOR EROSION AND SEDIMENT CONTROL (NOVEMBER 2016) AND SPDES GENERAL PERMIT GP-0-20-001.

PERMANENT CONSTRUCTION AREA SEEDING

FINAL STABILIZATION SHOULD BE IMPLEMENTED AT THE COMPLETION OF EACH PHASE. ONCE CONSTRUCTION IS COMPLETE, EXPOSED SOILS REQUIRE FINAL AND PERMANENT STABILIZATION. SOILS SHOULD BE GRADED SMOOTH AND LEVEL TO ELIMINATE RUTTING AND CONCENTRATED FLOWS, PONDING AND UNEVEN SURFACES FOR FUTURE MAINTENANCE ACTIVITIES. UNIMPROVED AREAS SHOULD BE RESTORED TO ORIGINAL GRADE UNLESS PERMITTED AND PLANNED FOR REQUIRED FUTURE MAINTENANCE. CONSERVED STOCKPILED TOPSOIL SHOULD BE UTILIZED FOR TOPDRESSING GRADED SUB-SOILS AT EXCAVATION LOCATIONS. ANY SEVERELY COMPACTED SECTIONS WILL REQUIRE TILLING OR DISKING TO PROVIDE AN ADEQUATE ROOTING ZONE, TO A MINIMUM DEPTH OF 12". THE SEEDBED MUST BE PREPARED TO ALLOW GOOD SOIL TO SEED CONTACT, WITH THE SOIL NOT TOO SOFT AND NOT TOO COMPACT. ADEQUATE SOIL MOISTURE MUST BE PRESENT TO ACCOMPLISH THIS. IF SURFACE IS POWDER DRY OR STICKY WET, POSTPONE OPERATIONS UNTIL MOISTURE CHANGES TO A FAVORABLE CONDITION. REMOVE ALL STONES AND OTHER DEBRIS FROM THE SURFACE THAT ARE GREATER THAN 4 INCHES, OR THAT WILL INTERFERE WITH FUTURE MOWING OR MAINTENANCE.

SOIL AMENDMENTS SHOULD BE INCORPORATED INTO THE UPPER 2 INCHES OF SOIL WHEN FEASIBLE. THE SOIL SHOULD BE TESTED TO DETERMINE THE AMOUNTS OF AMENDMENTS NEEDED. APPLY GROUND AGRICULTURAL LIMESTONE TO ATTAIN A PH OF 6.0 IN THE UPPER 2 INCHES OF SOIL. IF SOIL MUST BE FERTILIZED BEFORE RESULTS OF A SOIL TEST CAN BE OBTAINED TO DETERMINE FERTILIZER NEEDS, APPLY COMMERCIAL FERTILIZER AT 600 LBS. PER ACRE OF 5-5 -10 OR EQUIVALENT.

IF SOILS ARE SOFT, MECHANICAL MULCHING MAY NOT BE AVAILABLE DUE TO THE INEVITABLE RUTTING WITH MULCHING EQUIPMENT.

ANY UPLAND AREAS THAT ARE DISTURBED SHALL BE STABILIZED USING PERMANENT SEED MIX AS SPECIFIED IN THE NEW YORK STATE STANDARDS AND SPECIFICATIONS FOR EROSION AND SEDIMENT CONTROL (SSESC), UNLESS DIRECTED OTHERWISE IN ASSOCIATED PERMITTING DOCUMENTS.

PROJECT CONSTRUCTION SEQUENCING NOTES

THE CONTRACTOR SHALL SUBMIT A CONSTRUCTION SEQUENCING OR CONSTRUCTION PHASING PLAN FOR OWNER APPROVAL THAT COMPLIES WITH THE PERMITTING REQUIREMENTS, THE PROJECT SWPPP, AND OTHER REQUIREMENTS AS IDENTIFIED BY LOCAL AND STATE AUTHORITIES. THE PLAN SHALL SHOW THAT ACTIVE LAND DISTURBANCE WILL BE LIMITED TO LESS THAN FIVE (5) CONTIGUOUS ACRES AND SHALL ADEQUATELY DISCUSS, BUT NOT BE LIMITED TO, THE FOLLOWING ITEMS:

1. THE CONTRACTOR SHALL COMPLY WITH THE REQUIREMENTS FOR TEMPORARY AND PERMANENT EROSION AND SEDIMENTATION CONTROL MEASURES AS OUTLINED IN THE PROJECT SWPPP OR AS DIRECTED BY THE OWNER.
2. PRIOR TO STARTING ANY WORK ON THE SITE, THE CONTRACTOR SHALL NOTIFY APPROPRIATE AGENCIES AND SHALL INSTALL EROSION CONTROL MEASURES AS SHOWN ON THE PLANS. THE CONTRACTOR SHALL OBTAIN ALL PERMITS, NOTIFY CITY OFFICIALS OF CONSTRUCTION COMMENCEMENT, AND SUBMIT CONSTRUCTION TIMETABLE.
3. PRIOR TO COMMENCING ONSITE EARTHWORK ACTIVITIES, THE CONTRACTOR SHALL ESTABLISH THE CONSTRUCTION WORKSPACE LIMITS AND IDENTIFY AND MARK SENSITIVE RESOURCES.
4. THE CONTRACTOR SHALL INSTALL ALL TEMPORARY EROSION AND SEDIMENTATION CONTROL BEST MANAGEMENT PRACTICES (BMPs) IN ORDER TO PROTECT DOWN GRADIENT AREAS. WHERE APPROPRIATE, DIVERSION BMPs SHALL BE IMPLEMENTED TO DIRECT RUNOFF FROM UPGRADIENT AREAS AROUND THE PROJECT SITE.
5. ON-SITE CONSTRUCTION SEQUENCE SHALL START WITH THE MINIMUM AMOUNT OF CLEARING REQUIRED TO INSTALL EROSION CONTROL MEASURES. THIS INCLUDES, SILTATION FENCING, ANTI-TRACK PADS (STABILIZED CONSTRUCTION ENTRANCE), AND OTHER MEASURES NOTED ON THE PLAN. NO WORK SHALL TAKE PLACE UNTIL THE OWNER'S REPRESENTATIVE HAS INSPECTED AND APPROVED INSTALLED MEASURES.
6. AFTER PERMANENT EROSION AND SEDIMENTATION CONTROL MEASURES WITHIN THE CURRENT PHASE OF WORK ARE INSTALLED AND FUNCTIONING, THE CONTRACTOR SHALL OBTAIN OWNER APPROVAL BEFORE BEGINNING EARTHWORK IN THE SUBSEQUENT PHASE.
7. AFTER EROSION CONTROL MEASURES ARE INSTALLED THE TYPICAL SEQUENCE SHALL BE AS FOLLOWS:

a. REMOVE VEGETATION FROM PROPOSED DEVELOPMENT AREA. ALL STUMPS AND WOOD SHALL BE TAKEN OFF-SITE AND DISPOSED ACCORDINGLY.
b. REMOVE AND STOCKPILE TOPSOIL AFTER EROSION AND SEDIMENT CONTROL MEASURES HAVE BEEN INSTALLED. THE TOPSOIL SHALL BE SEEDED IMMEDIATELY AFTER STOCKPILING IN ORDER TO STABILIZE THE SLOPE AND LIMIT SEDIMENT RUNOFF. STOCKPILED TOPSOIL SHALL BE SEEDED AND MULCHED WHEN IT IS TO BE STORED MORE THAN 30 DAYS FROM TIME OF STOCKPILING. THE SITE CAN NOW BE REFORMED TO PROPOSED FINAL ELEVATIONS (LESS TOPSOIL DEPTH).
c. PROCEED WITH ALL WORK DEPICTED ON THE DEMOLITION PLAN, IF ANY.
d. PREPARE AND COMPACT SUBGRADE (IF AND AS DIRECTED) AND INSTALL DRAINAGE AND STORMWATER BMP'S IN ACCORDANCE WITH "GRADING AND STORMWATER MANAGEMENT PLAN".
e. EXCAVATE SOIL TO THE DEPTH NECESSARY TO CONSTRUCT GRAVEL ACCESS ROAD AND POROUS ASPHALT PAVEMENT. ALL REMOVED TOPSOIL SHALL BE UTILIZE ON SITE AS LOAM FOR GRASS AREAS. NO SOILS SHALL BE REMOVED FROM THE SUBJECT PROPERTY.
f. COMPLETE REMAINING GRADING REQUIRED AS SHOWN ON THE GRADING PLANS. INSTALL EROSION CONTROL MATTING ON ALL SLOPES OF 3H:1V OR GREATER (IF ANY), THEN SEED AND MULCH THE AREA.
g. INSTALL CONCRETE UTILITY PADS, FOOTINGS, PHOTOVOLTAIC PANELS, UTILITY POLES, FENCE AND GATES AND OTHER IMPROVEMENTS PER THE PLAN.
h. LOAM AND SEED FRONT YARD AND ALL REMAINING DISTURBED AREAS. UTILIZE EXISTING SITE SOIL WHERE POSSIBLE.
i. REMOVE ALL EROSION AND SEDIMENT STRUCTURES AFTER FINAL STABILIZATION AND ACCEPTANCE. IF STABILIZATION DOES NOT OCCUR (INCLUDING DUE TO SEASONAL CONDITIONS) IN ALL AREAS BEFORE CONTRACTOR HAS SATISFIED ALL OTHER CONDITIONS TO FINAL ACCEPTANCE, CONTRACTOR SHALL PROVIDE A PLAN (INCLUDING APPROPRIATE PERFORMANCE ASSURANCES) TO THE OWNER'S REPRESENTATIVE TO REMOVE SUCH EROSION CONTROL MEASURES AFTER STABILIZATION (AND ALLOWING CONTRACTOR TO ACHIEVE FINAL ACCEPTANCE), FOR ACCEPTANCE IN THE SOLE AND ABSOLUTE DISCRETION BY THE OWNER'S REPRESENTATIVE.
j. DURING THIS TIME ALL EROSION AND SEDIMENT STRUCTURES SHALL BE MAINTAINED IN PROPER WORKING ORDER. DISTURBED AREAS SHALL BE KEPT TO A MINIMUM AND SHALL ONLY TAKE PLACE WHERE IMMEDIATELY REQUIRED TO FURTHER CONSTRUCTION. IT IS DESIRABLE FOR AN EROSION PREVENTION TO MINIMIZE DISTURBED AREAS. FINAL GRADING AND SEEDING SHALL TAKE PLACE AS SOON AS PRACTICAL.

MULCH ANCHORING REQUIREMENTS

ON SLOPES GREATER THEN 3 PERCENT, STRAW MULCH WILL BE FIRMLY ANCHORED INTO SOIL UTILIZING ONE OF THE FOLLOWING METHODS:

- CRIMPING WITH A STRAIGHT OR NOTCHED MULCH CRIMPING TOOL;
- TRACK WALKING WITH DEEP-CLEATED EQUIPMENT OPERATING UP AND DOWN THE SLOPE (MULCH CRIMPED PERPENDICULAR TO THE SLOPE) ON SLOPES <25 PERCENT;
- APPLICATION OF MULCH NETTING;
- APPLICATION OF 500 LB./ACRE OF WOOD FIBER MULCH OVER STRAW/HAY MULCH; AND
- COMMERCIALLY AVAILABLE TACKIFIERS (EXCEPT WITHIN 100 FEET OF WATERBODIES OR WETLANDS).

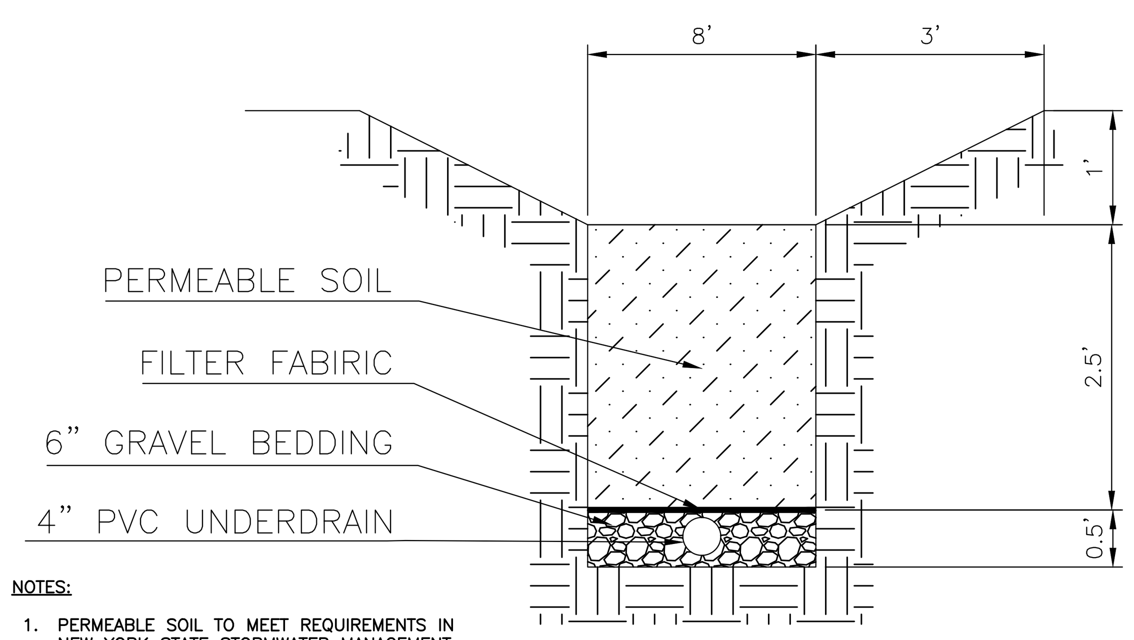
CONSTRUCTION LITTER CONTROL

DURING CONSTRUCTION, ALL WRAPPING, BOXES, SCRAPS OF BUILDING MATERIAL, AND OTHER LITTER ITEMS SHALL BE DISPOSED OF PROPERLY BY USE OF DUMPSTER OR CARTED AWAY. THE SITE SHALL BE INSPECTED AND CLEANED DAILY DURING CONSTRUCTION.

PROTECTION OF POST-CONSTRUCTION STORMWATER BMPs

POST-CONSTRUCTION STORMWATER BMPs DESIGNED FOR WATER QUALITY TREATMENT SHALL NOT BE USED AS A SEDIMENT CONTROL DEVICES DURING CONSTRUCTION PHASE OF THE PROJECT. WHEN POSSIBLE, POST CONSTRUCTION STORMWATER BMP INSTALLATION SHALL OCCUR AFTER FINAL STABILIZATION IS ACHIEVED IN UPGRADIENT AREAS.

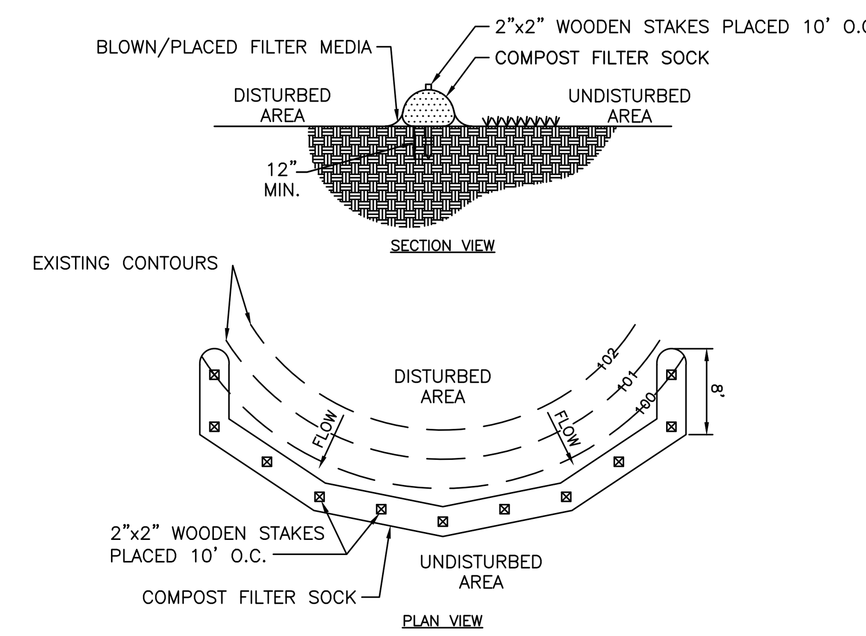
CONSTRUCTION PHASE STORMWATER SHALL BE DIVERTED AROUND POST-CONSTRUCTION STORMWATER QUALITY BMPs UNTIL FINAL STABILIZATION IS ACHIEVED IN UPGRADIENT AREAS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR REPAIR OR REPLACEMENT OF BMP FILTER MATERIAL IN THE EVENT CONSTRUCTION PHASE STORMWATER IS DISCHARGED TO CONSTRUCTED BMPs. NATURE AND DEGREE OF REPAIR SHALL BE AS DIRECTED BY THE OWNER.



NOTES:

1. PERMEABLE SOIL TO MEET REQUIREMENTS IN NEW YORK STATE STORMWATER MANAGEMENT DESIGN MANUAL APPENDIX H.
2. MAINTAIN GRASS HEIGHT OF 4" TO 6" WITHIN DRY SWALE.
3. GRAVEL BEDDING TO CONSIST OF AASHTO NO. 2 STONE.
4. FILTER FABRIC TO BE MIRAFI 140N OR EQUAL.

DRY SWALE SECTION
NOT TO SCALE



COMPOST FILTER SOCK
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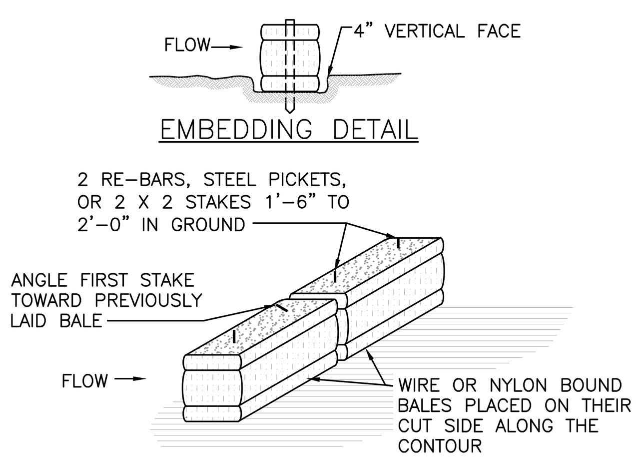
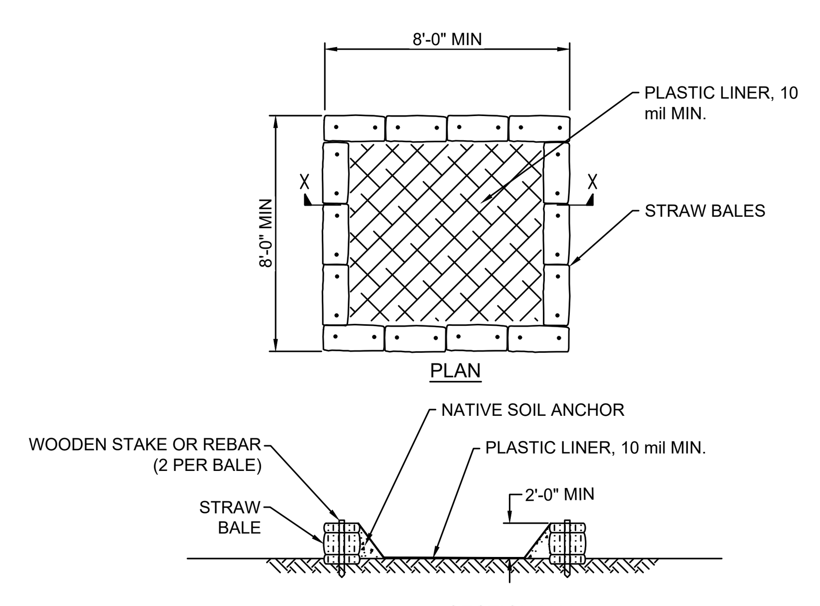


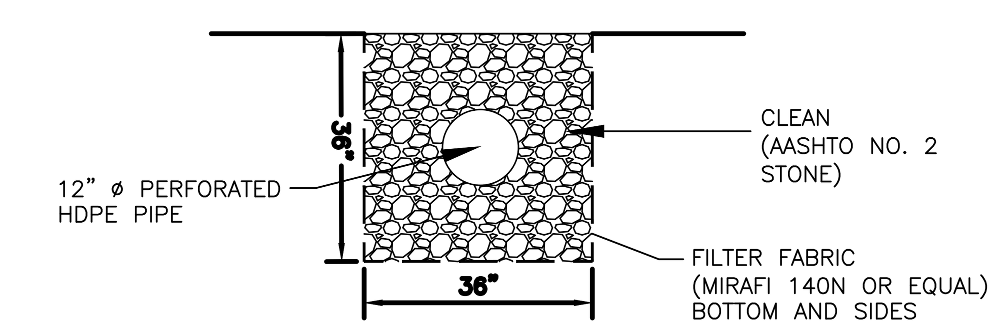
STRAW BALE BARRIER
NOT TO SCALE



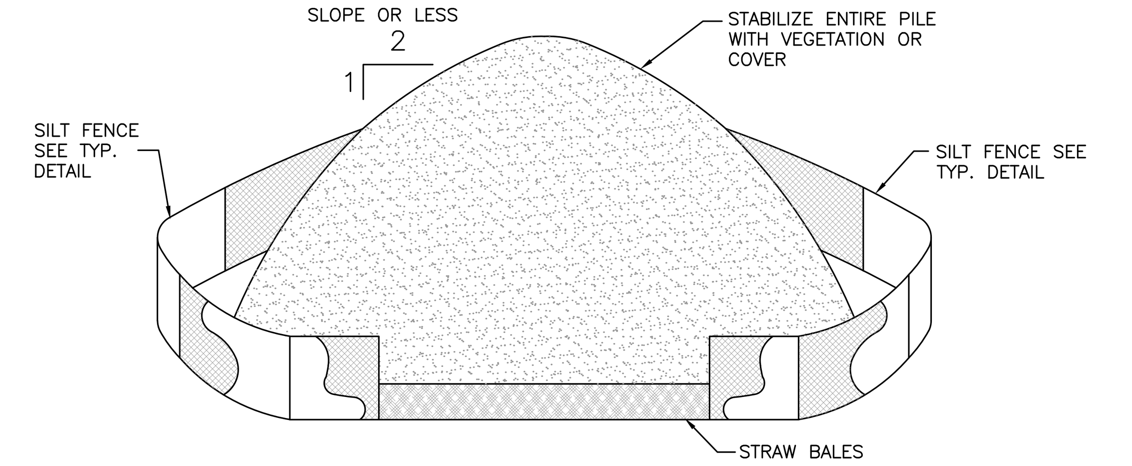
NOTES:

1. SUMP(S) SHALL BE LOCATED NEAR WORK SITES BUT SHALL BE PLACED AS FAR AWAY FROM WETLANDS, BUFFERS AND DRAINAGE SWALES AS PRACTICAL.
2. SUMP(S) SHALL BE CLEANED AND WASTE CONCRETE REMOVED AND PROPERLY DISPOSED OF PERIODICALLY AND UPON COMPLETION OF WORK.
3. A SIGN SHALL BE INSTALLED INDICATING "CONCRETE WASHOUT".

CONCRETE WASHOUT AREA
NOT TO SCALE



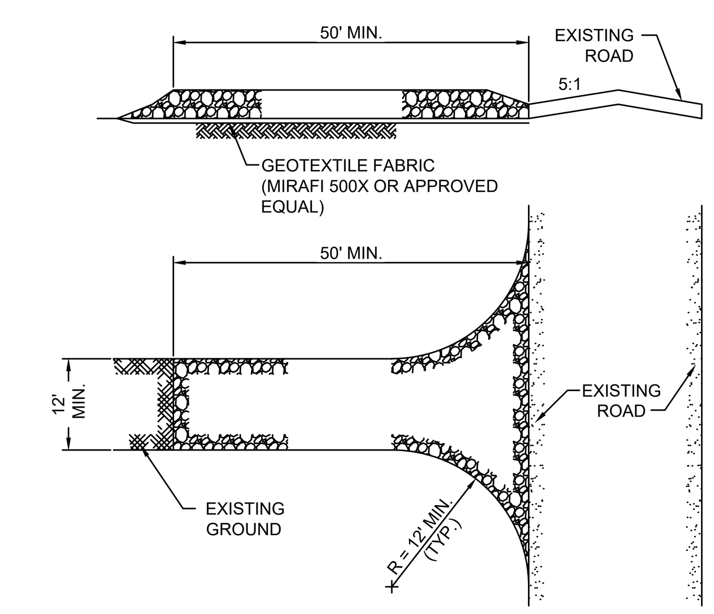
STORMWATER DIAPHRAGM
NOT TO SCALE



INSTALLATION NOTES:

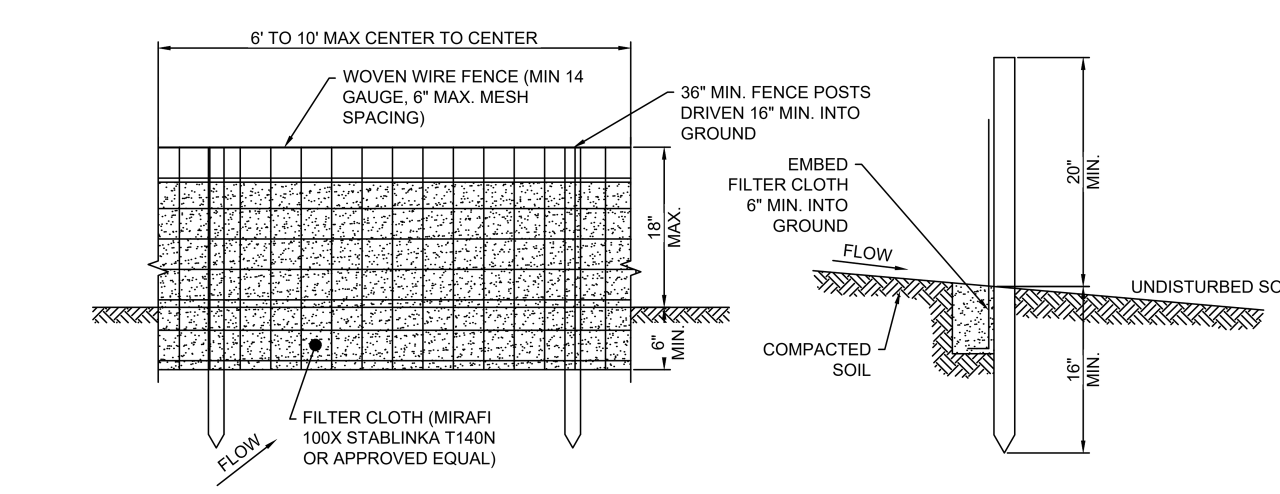
1. AREA CHOSEN FOR STOCKPILING OPERATIONS SHALL BE DRY AND STABLE.
2. MAXIMUM SLOPE OF STOCKPILE SHALL BE 2H:1V.
3. UPON COMPLETION OF SOIL STOCKPILING, EACH PILE SHALL BE SURROUNDED WITH EITHER SILT FENCING OR STRAW BALES, THEN STABILIZED WITH VEGETATION OR COVERED.

TYPICAL SOIL STOCKPILE
NOT TO SCALE



1. WIDTH OF STABILIZED CONSTRUCTION ENTRANCE VARIES PER LOCATION. PROVIDE WIDTHS AS INDICATED ON PLAN SET.
2. STONE SIZE - USE 1" - 4" STONE, OR RECLAIMED OR RECYCLED CONCRETE EQUIVALENT.
3. LENGTH - NOT LESS THAN 50 FEET.
4. THICKNESS - NOT LESS THAN SIX (6) INCHES.
5. WIDTH - TWELVE (12) FOOT MIN. BUT NOT LESS THAN THE FULL ROAD WIDTH AT POINTS WHERE INGRESS OR EGRESS OCCURS. PROVIDE TWENTY-FOUR (24) FOOT WIDTH IF THERE IS ONLY A SINGLE ENTRANCE TO SITE.
6. GEOTEXTILE - SHALL BE PLACED OVER THE ENTIRE AREA PRIOR TO PLACING THE STONE.
7. SURFACE WATER - ALL SURFACE WATER FLOWING OR DIVERTED TOWARD CONSTRUCTION ENTRANCE SHALL BE PIPED BENEATH THE ENTRANCE. IF PIPING IS IMPRACTICAL, A MOUNTABLE BERM WITH 5:1 SLOPES WILL BE PERMITTED.
8. MAINTENANCE - THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHTS-OF-WAY. ALL SEDIMENT SPILLED, DROPPED, WASHED OR TRACKED ONTO PUBLIC RIGHTS-OF-WAY MUST BE REMOVED IMMEDIATELY.
9. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH STONE THAT DRAINS INTO AN APPROVED SEDIMENT TRAPPING DEVICE.

STABILIZED CONSTRUCTION ENTRANCE
NOT TO SCALE



1. WOVEN WIRE FENCE SHALL BE FASTENED TO FENCE POSTS WITH WIRE TIES OR STAPLES.
2. FILTER CLOTH SHALL BE FASTENED SECURELY TO WOVEN WIRE FENCE WITH TIES SPACED EVERY 24" AT TOP AND MIDSECTION.
3. WHEN TWO SECTIONS OF FILTER CLOTH ADJOIN EACH OTHER THEY SHALL BE OVERLAPPED BY 6" AND FOLDED.
4. MAINTENANCE SHALL BE PERFORMED AS NEEDED AND MATERIAL REMOVED WHEN BUILD-UP REACHES ⅓ THE HEIGHT OF THE FENCE.

POSTS:	STEEL "T" OR "U" TYPE OR 2" HARDWOOD.
FENCE:	WOVEN WIRE. 14½ GA 6" MAX MESH OPENING.
FILTER CLOTH:	FILTER X, MIRAFI 100X. STABLINKA T140N OR APPROVED EQUAL.
PREFABRICATED UNIT:	ENVIROFENCE OR APPROVED EQUAL

SILT FENCE DETAILS
NOT TO SCALE

NOTE: UNDER NEW YORK STATE EDUCATION LAW ARTICLE 145 (ENGINEERING), SECTION 7209 (2), IT IS A VIOLATION FOR ANY PERSON, UNLESS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT.
NOT FOR CONSTRUCTION

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TRC Project No: 360551.0000.0000

TRC

cve Changing Visions of Energy

Revisions:

No.	Date:

Drawn by: T. MILL

Design by: C. CONNELLY

Checked by: S. MEERSMA

CVE NORTH AMERICA, INC.
CORTLANDT MILL SOLAR FARM
5.0 MW GROUND MOUNT SOLAR SYSTEM
0 MILL COURT
CORTLANDT, NEW YORK 10520

Contract No: 360551

Scale: AS NOTED

Date: MARCH 2021

Sheet: DETAIL SHEET 4

Drawing No: 13

DRAWING NAME: \\nyc-fp11\Shared\Projects\CVE\360551-CVE Mill Court Cortlandt Solar\Working Drawings\SITE PLAN - GRADING\ DETAILS_CVE-Cortlandt_reco er.dwg --- PLOT DATE: March 17, 2021 - 12:12PM --- LAYOUT: C-4

Appendix B

Project Component Specifications

Three-phase pad-mounted compartmental type transformer

General

At Eaton, we are constantly striving to introduce new innovations to the transformer industry, bringing you the highest quality, most reliable transformers. Eaton's Cooper Power series Transformer Products are ISO 9001 compliant, emphasizing process improvement in all phases of design, manufacture, and testing. In order to drive this innovation, we have invested both time and money in the Thomas A. Edison Technical Center, our premier research facility in Franksville, Wisconsin. Such revolutionary products as distribution-class UltraSIL™ Polymer-Housed Evolution™ surge arresters and Envirotemp™ FR3™ fluid have been developed at our Franksville lab.

With transformer sizes ranging from 45 kVA to 12 MVA and high voltages ranging from 2400 V to 46 kV, Eaton has you covered. From fabrication of the tanks and cabinets to winding of the cores and coils, to production of arresters, switches, tap changers, expulsion fuses, current limit fuses, bushings (live and dead) and molded rubber goods, Eaton does it all. Eaton's Cooper Power series transformers are available with electrical grade mineral oil or Envirotemp™ FR3™ fluid, a less-flammable and bio-degradable fluid. Electrical codes recognize the advantages of using Envirotemp™ FR3™ fluid both indoors and outdoors for fire sensitive applications. The bio-based fluid meets Occupational Safety and Health Administration (OSHA) and Section 450.23 NEC Requirements.

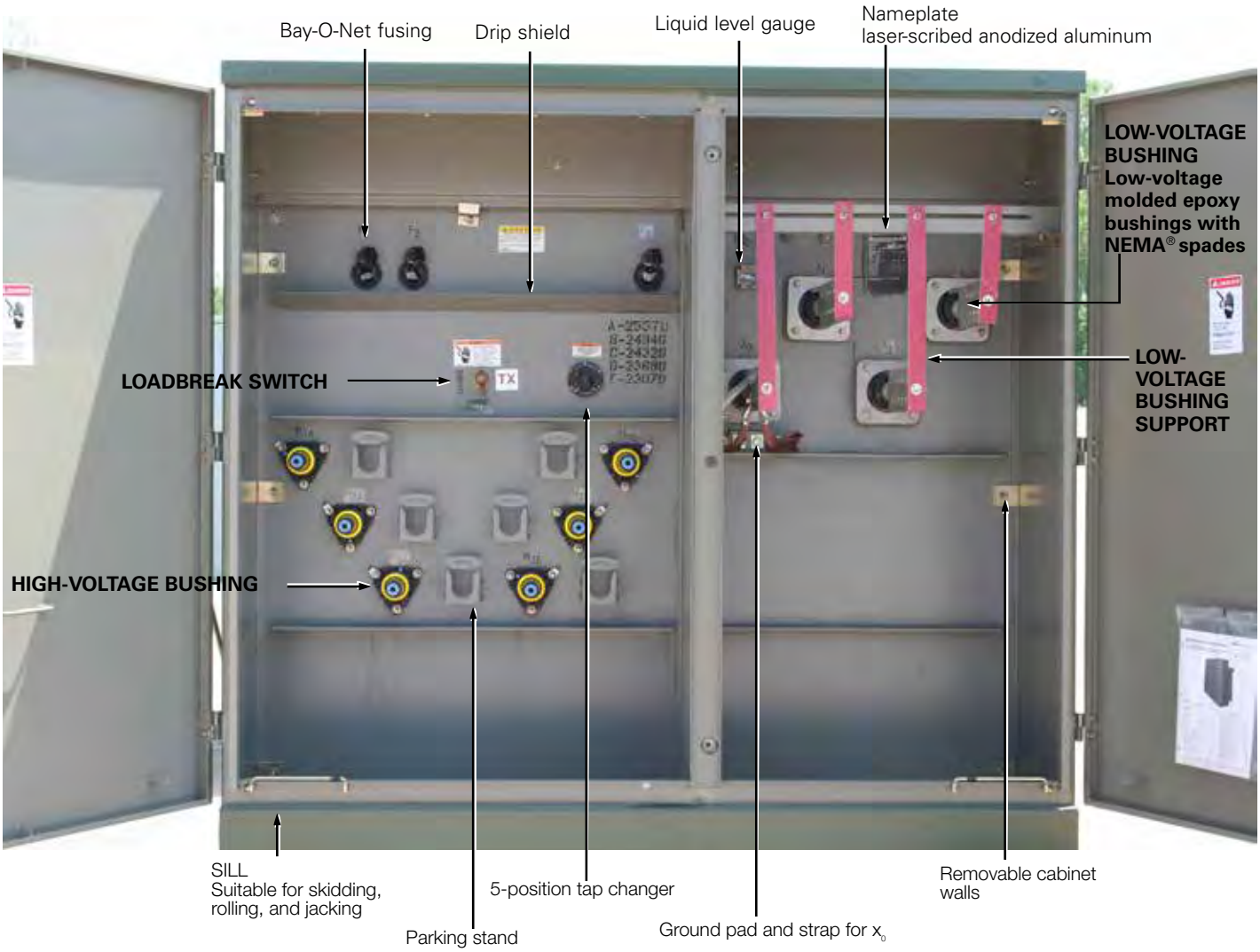

Figure 1. Three-phase pad-mounted compartmental type transformer.

Table 1. Product Scope

Type	Three Phase, 50 or 60 Hz, 65 °C Rise (55 °C, 55/65 °C), 65/75 °C, 75 °C
Fluid Type	Mineral oil or Envirotemp™ FR3™ fluid
Coil Configuration	2-winding or 4-winding or 3-winding (Low-High-Low), 3-winding (Low-Low-High)
Size	45 – 10,000 kVA
Primary Voltage	2,400 – 46,000 V
Secondary Voltage	208Y/120 V to 14,400 V
Specialty Designs	Inverter/Rectifier Bridge
	K-Factor (up to K-19)
	Vacuum Fault Interrupter (VFI)
	UL® Listed & Labeled and Classified
	Factory Mutual (FM) Approved®
	Solar/Wind Designs
	Differential Protection
	Seismic Applications (including OSHPD)
	Hardened Data Center

Table 2. Three-Phase Ratings

Three-Phase 50 or 60 Hz
kVA Available[1]: 45, 75, 112.5, 150, 225, 300, 500, 750, 1000, 1500, 2000, 2500, 3000, 3750, 5000, 7500, 10000

[1]Transformers are available in the standard ratings and configurations shown or can be customized to meet specific needs.

Table 3. Impedance Voltage

	Low-voltage rating		
Rating (kVA)	**≤ 600 V**	**2400 Δ through 4800 Δ**	**6900 Δ through 13800GY/7970 or 13800 Δ**
45-75	2.70-5.75	2.70-5.75	2.70-5.75
112.5-300	3.10-5.75	3.10-5.75	3.10-5.75
500	4.35-5.75	4.35-5.75	4.35-5.75
750-2500	5.75	5.75	5.75
3750	5.75	5.75	6.00
5000		6.00	6.50

Note: The standard tolerance is ± 7.5%

Table 4. Audible Sound Levels

	NEMA® TR-1 Average
Self-Cooled, Two Winding kVA Rating	**Decibels (dB)**
45-500	56
501-700	57
701-1000	58
1001-1500	60
1501-2000	61
2001-2500	62
2501-3000	63
3001-4000	64
4001-5000	65
5001-6000	66
6001-7500	67
7501-10000	68

Table 5. Insulation Test Levels

KV Class	Induced Test 180 or 400 Hz 7200 Cycle	kV BIL Distribution	Applied Test 60 Hz (kV)
1.2	Twice Rated Voltage	30	10
2.5		45	15
5		60	19
8.7		75	26
15		95	34
25		125	40
34.5		150	50

Table 6. Temperature Rise Ratings 0-3300 Feet (0-1000 meters)

	Standard	Optional
Unit Rating (Temperature Rise Winding)	65 °C	55 °C, 55/65 °C, 75 °C
Ambient Temperature Max	40 °C	50 °C
Ambient Temperature 24 Hour Average	30 °C	40 °C
Temperature Rise Hotspot	80 °C	65 °C

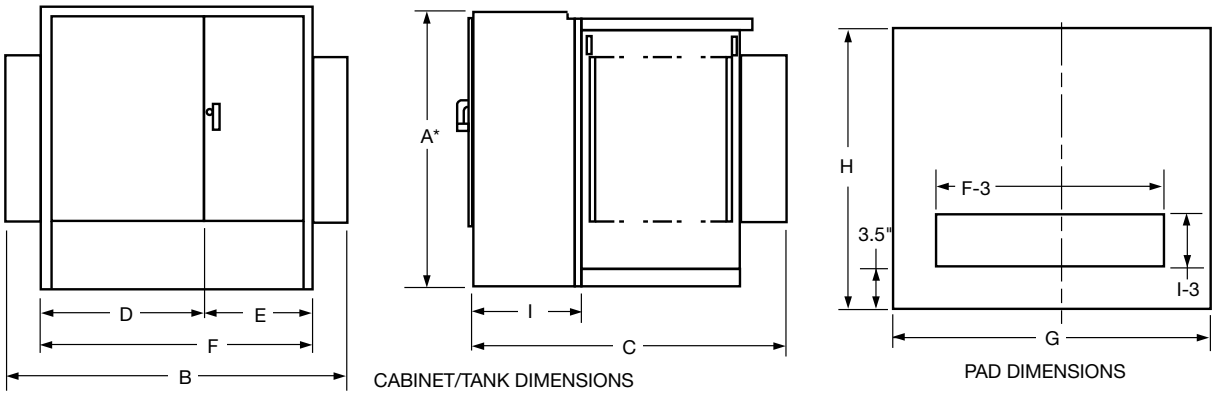

Figure 2. Transformer and pad dimensions.

* Add 9" for Bay-O-Net fusing.

Table 7. Fluid-filled—aluminum windings 55/65 °C Rise[1]

65° Rise	DEAD-FRONT—LOOP OR RADIAL FEED—BAY-O-NET FUSING OIL FILLED—ALUMINUM WINDINGS										
	OUTLINE DIMENSIONS (in.)									Gallons of	Approx. Total
kVA Rating	A*	B	C	D	E	F	G	H	I	Fluid	Weight (lbs.)
45	50	68	39	42	26	68	72	43	20	110	2,100
75	50	68	39	42	26	68	72	43	20	115	2,250
112.5	50	68	49	42	26	68	72	53	20	120	2,350
150	50	68	49	42	26	68	72	53	20	125	2,700
225	50	72	51	42	30	72	76	55	20	140	3,150
300	50	72	51	42	30	72	76	55	20	160	3,650
500	50	89	53	42	30	72	93	57	20	190	4,650
750	64	89	57	42	30	72	93	61	20	270	6,500
1000	64	89	59	42	30	72	93	63	20	350	8,200
1500	73	89	86	42	30	72	93	90	24	410	10,300
2000	73	72	87	42	30	72	76	91	24	490	12,500
2500	73	72	99	42	30	72	76	103	24	530	14,500
3000	73	84	99	46	37	84	88	103	24	620	16,700
3750	84	85	108	47	38	85	88	112	24	660	19,300
5000	84	96	108	48	48	96	100	112	24	930	25,000
7500	94	102	122	54	48	102	100	126	24	1,580	41,900

1 Weights, gallons of fluid, and dimensions are for reference only and not for construction. Please contact Eaton for exact dimensions.

* Add 9" for Bay-O-Net fusing.

Table 8. Fluid-Filled—Copper Windings 55/65 °C Rise[1]

65° Rise	DEAD-FRONT—LOOP OR RADIAL FEED—BAY-O-NET FUSING OIL FILLED—COPPER WINDINGS										
	OUTLINE DIMENSIONS (in.)									Gallons of	Approx. Total
kVA Rating	A*	B	C	D	E	F	G	H	I	Fluid	Weight (lbs.)
45	50	64	39	34	30	64	69	43	20	110	2,100
75	50	64	39	34	30	64	69	43	20	115	2,350
112.5	50	64	49	34	30	64	69	53	20	115	2,500
150	50	64	49	34	30	64	69	53	20	120	2,700
225	50	64	51	34	30	64	73	55	20	140	3,250
300	50	64	51	34	30	64	75	55	20	160	3,800
500	50	81	53	34	30	64	85	57	20	200	4,800
750	64	89	57	42	30	72	93	61	20	255	6,500
1000	64	89	59	42	30	72	93	63	20	300	7,800
1500	73	89	86	42	30	72	93	90	24	410	10,300
2000	73	72	87	42	30	72	76	91	24	420	11,600
2500	73	72	99	42	30	72	76	103	24	500	14,000
3000	73	84	99	46	37	84	88	103	24	720	18,700
3750	84	85	108	47	38	85	88	112	24	800	20,500
5000	84	96	108	48	48	96	100	112	24	850	25,000
7500	94	102	122	54	48	102	100	126	24	1,620	46,900

[1] Weights, gallons of fluid, and dimensions are for reference only and not for construction. Please contact Eaton for exact dimensions.

* Add 9" for Bay-O-Net fusing.

Standard features

Connections and neutral configurations

- Delta - Wye: Low voltage neutral shall be a fully insulated X0 bushing with removable ground strap.
- Grounded Wye-Wye: High voltage neutral shall be internally tied to the low voltage neutral and brought out as the H0X0 bushing in the secondary compartment with a removable ground strap.
- Delta-Delta: Transformer shall be provided without a neutral bushing.
- Wye-Wye: High voltage neutral shall be brought out as the H0 bushing in the primary compartment and the low voltage neutral shall be brought as the X0- bushing in the secondary compartment.
- Wye-Delta: High voltage neutral shall be brought out as the H0 bushing in the primary compartment. No ground strap shall be provided (line to line rated fusing is required).

High and low voltage bushings

- 200 A bushing wells (15, 25, and 35 kV)
- 200 A, 35 kV Large Interface
- 600 A (15, 25, and 35 kV) Integral bushings (dead-front)
- Electrical-grade wet-process porcelain bushings (live-front)

Tank/cabinet features

- Bolted cover for tank access (45-2500 kVA)
- Welded cover with hand hole (>2500 kVA)
- Three-point latching door for security
- Removable sill for easy installation
- Lifting lugs (4)
- Stainless steel cabinet hinges and mounting studs
- Steel divider between HV and LV compartment
- 20" Deep cabinet (45-1000 kVA)
- 24" Deep cabinet (1500-7500 kVA)
- 30" Deep cabinet (34.5/19.92 kV)
- Pentahead captive bolt
- Stainless steel 1-hole ground pads (45-500 kVA)
- Stainless steel 2-hole ground pads (750-10,000 kVA)
- Parking Stands (dead-front)

Valves/plugs

- One-inch upper filling plug
- One-inch drain plug (45-500 kVA)
- One-inch combination drain valve with sampling device in low voltage compartment (750-10,000 kVA)
- Automatic pressure relief valve

Nameplate

- Laser-scribed anodized aluminum nameplate

Figure 3. Drain valve with sampler.

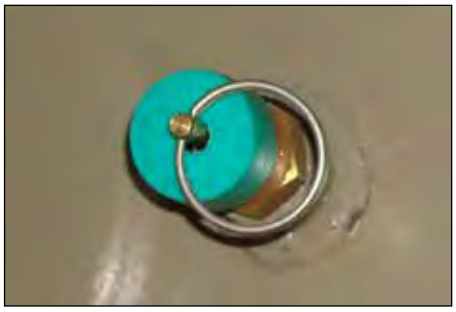

Figure 4. Automatic Pressure relief valve.

Figure 5. Liquid level gauge.

Figure 6. External Gauges.

Figure 7. External visible break with gauges.

Optional features

High and low voltage bushings

- 200 A (15, 25 kV) bushing inserts
- 200 A (15, 25 kV) feed thru inserts
- 200 A (15, 25 kV) (HTN) bushing wells with removable studs
- High-voltage 600 A (15, 25, 35 kV) deadbreak one-piece bushings
- Low voltage 6-, 8-holes spade
- Low voltage 12-, 16-, 20-holes spade (750-2500 kVA)
- Low voltage bushing supports

Tank/cabinet features

- Stainless steel tank base and cabinet
- Stainless steel tank base, cabinet sides and sill
- 100% stainless steel unit
- Service entrance (2 inch) in sill or cabinet side
- Touch-up paint (domestic)
- Copper ground bus bar
- Kirk-Key provisions
- Nitrogen blanket
- Bus duct cutout

Special designs

- Factory Mutual (FM)
- UL® Classified
- Triplex
- High altitude
- K-Factors
- Step-up
- Critical application
- Modulation transformers
- Seismic applications (including OSHPD)

Switches

- One, two, or three On/Off loadbreak switches
- 4-position loadbreak V-blade switch or T-blade switch
- Delta-wye switch
- 3-position V-Blade selector switch
- 100 A, 150 A, 300 A tap changers
- Dual voltage switch
- Visible break with VFI interrupter interlock
- External visible break (15, 25, and 35 kV, up to 3 MVA)
- External visible break with gauges (15, 25, and 35 kV, up to 3 MVA)

Gauges and devices

- Liquid level gauge (optional contacts)
- Pressure vacuum gauge (optional contacts and bleeder)
- Dial-type thermometer (optional alarm contacts)
- Cover mounted pressure relief device (optional alarm contacts)
- Ground connectors
- Hexhead captive bolt
- Molded case circuit breaker mounting provisions
- External gauges in padlockable box

Overcurrent protection

- Bay-O-Net fusing (Current sensing, dual sensing, dual element, high amperage overload)
- Bay-O-Net expulsion fuse in series with a partial range under-oil ELSP current limiting fuse (below 23 kV)
- Cartridge fusing in series with a partial range under-oil ELSP current limiting fuse (above 23 kV)
- MagneX™ interrupter with ELSP current-limiting fuse
- Vacuum Fault Interrupter (VFI)
- Visible break window
- Fuse/switch interlock

Valves/plugs

- Drain/sampling valve in high-voltage compartment
- Globe type upper fill valve

Overvoltage protection

- Distribution-, intermediate-, or station-class surge arresters
- Elbow arresters (for dead-front connections)

Metering/fan/control

- Full metering package
- Current Transformers (CTs)
- Metering Socket
- NEMA® 4 control box (optional stainless steel)
- NEMA® 7 control box (explosion proof)
- Fan Packages

Testing

- Customer test witness
- Customer final inspection
- Zero Sequence Impedance Test
- Heat Run Test
- ANSI® Impulse Test
- Audible Sound Level Test
- RIV (Corona) Test
- Dissolved Gas Analysis (DGA) Test
- 8- or 24-Hour Leak Test

Coatings (paint)

- ANSI® Bell Green
- ANSI® #61 Light Gray
- ANSI® #70 Sky Gray
- Special paint available per request

Nameplate

- Stainless steel nameplate

Decals and labels

- High voltage warning signs
- Mr. Ouch
- Bi-lingual warning
- DOE compliant
- Customer stock code
- Customer stenciling
- Shock and arc flash warning decal
- Non-PCB decal

Construction

Core

The three-legged, step-lap mitered core construction is manufactured using a high-quality cutting machine. For maximum efficiency, cores are precisely stacked, virtually eliminating gaps in the corner joints.

Five-legged wound core or shell-type triplex designs are used for wye-wye connected transformers, and other special transformer designs.

Cores are manufactured with precision cut, burr-free, grain-oriented silicon steel. Many grades of core steel are available for optimizing core loss efficiency.

Coils

Pad-mounted transformers feature a rectangular coil configuration with wire-wound, high-voltage primaries and sheet-wound secondaries. The design minimizes axial stress developed by short circuits and provides for magnetic balancing of tap connections.

Coils are wound using the highest quality winding machines providing exacting tension control and conductor placement for superior short-circuit strength and maximum efficiency.

Extra mechanical strength is provided by diamond pattern, epoxy-coated paper insulation, used throughout the coil, with additional epoxy at heavy stress points. The diamond pattern distribution of the epoxy and carefully arranged ducts, provide a network of passages through which cooling fluid can freely circulate.

Coil assemblies are heat-cured under calculated hydraulic pressure to ensure performance against short-circuit forces.

Core and coil assemblies

Pad-mounted transformer core and coil assemblies are braced with heavy steel ends to prevent the rectangular coil from distorting under short-circuit conditions. Plates are clamped in place using presses, and welded or bolted to form a solid core and coil assembly. Core and coil assemblies exceed ANSI® and IEEE® requirements for short-circuit performance. Due to the rigidity of the design, impedance shift after short-circuit is comparable to that of circular wound assemblies.

Tanks

Transformer tanks are designed for high strength and ease of handling, installation, and maintenance. Tanks are welded using precision-cut, hot rolled, pickled and oiled steel. They are sealed to protect the insulating fluid and other internal components.

Transformer tanks are pressure-tested to withstand 7 psig without permanent distortion and 15 psig without rupture.

Tank finish

An advanced multi-stage finishing process exceeds IEEE Std C57.12.28™-2014 standards. The eight-stage pre-treatment process assures coating adhesion and retards corrosion. It converts tank surfaces to a nonmetallic, water insoluble iron phosphate coating.

The paint method consists of two distinct layers of paint. The first is an epoxy primer (E-coat) layer which provides a barrier against moisture, salt and corrosives. The two-component urethane final coat seals and adds ultraviolet protection.

Vacuum processing

Transformers are dried and filled with filtered insulating fluid under vacuum, while secondary windings are energized. Coils are heated to drive out moisture, ensuring maximum penetration of fluid into the coil insulation system.

Insulating fluid

Eaton's Cooper Power series transformers are available with electrical-grade mineral insulating oil or Envirotemp™ FR3™ fluid. The highly refined fluids are tested and degassed to assure a chemically inert product with minimal acid ions. Special additives minimize oxygen absorption and inhibit oxidation. To ensure high dielectric strength, the fluid is re-tested for dryness and dielectric strength, refiltered, heated, dried, and stored under vacuum before being added to the completed transformer.

Eaton's Cooper Power series transformers filled with Envirotemp™ FR3™ fluid enjoy unique fire safety, environmental, electrical, and chemical advantages, including insulation life extending properties.

A bio-based, sustainable, natural ester dielectric coolant, Envirotemp™ FR3™ fluid quickly and thoroughly biodegrades in the environment and is non-toxic per acute aquatic and oral toxicity tests.

Building for Environmental and Economic Sustainability (BEES) total life cycle assessment software, utilized by the US Dept. of Commerce, reports its overall environmental performance impact score at 1/4th that reported for mineral oil. Envirotemp™ FR3™ fluid has also earned the EPA Environmental Technology Verification of transformer materials.

With a fire point of 360 °C, Envirotemp™ FR3™ fluid is FM Approved® and Underwriters Laboratories (UL®) Classified "Less-Flammable" per NEC® Article 450-23, fitting the definition of a Listed Product per NEC®.

Figure 8. VFI transformer with visible break.

Pad-mounted VFI transformer

Eaton's Cooper Power series VFI transformer combines a conventional distribution transformer with the proven Vacuum Fault Interrupter (VFI). This combination provides both voltage transformation and transformer over current protection in one space saving and money saving package. The pad-mounted VFI transformer protects the transformer and provides proper coordination with upstream protective devices. When a transformer fault or overload condition occurs, the VFI breaker trips and isolates the transformer.

The three-phase VFI breaker has independent single-phase initiation, but is three-phase mechanically gang-tripped. A trip signal on any phase will open all three phases. This feature eliminates single-phasing of three phase loads. It also enables the VFI breaker to be used as a three-phase load break switch.

Due to the resettable characteristics of the VFI breaker, restoring three-phase service is faster and easier.

The sealed visible break window and switch is an option that can be installed to provide visible break contact. This feature provides enhanced safety and allows an operator to see if the loadbreak switch contacts are in an open or closed position before performing maintenance.

Envirotran™ FM Approved special protection transformer

Eaton's Cooper Power series Envirotran™ transformer is FM Approved and suitable for indoor locations. Factory Mutual Research Corporation's (FMRC) approval of the Envirotran transformer line makes it easy to comply with and verify compliance with Section 450.23, 2008 NEC, Less-Flammable Liquid-Filled Transformer Requirements for both indoor and outdoor locations.

Envirotran FM Approved transformers offer the user the benefit of a transformer that can be easily specified to comply with NEC, and makes FM Safety Data Sheet compliance simpler, while also providing maximum safety and flexibility for both indoor and outdoor installations.

Because the "FM Approved" logo is readily visible on the transformer and its nameplate, NEC compliance is now easily verifiable by the inspector.

Envirotran FM Approved transformers are manufactured under strict compliance with FMRC Standard 3990 and are filled with FM Approved Envirotemp™ FR3™ fluid, a fire-resistant dielectric coolant.

FM
APPROVED

Special application transformers

Data Center transformer

With focus rapidly shifting from simply maximizing uptime and supporting demand to improving energy utilization, the data center industry is continually looking for methods to increase its energy efficiency and reliability. Utilizing cutting edge technology, Eaton's Cooper Power series Hardened Data Center (HDC) transformers are the solution. Designed with special attention given to surge protection, HDC liquid-filled transformers provide superior performance under the harshest electrical environments. Contrary to traditional dry-type units, HDC transformers provide unsurpassed reliability, overloadability, operational life, efficiency, thermal loading and installed footprint. These units have reliably served more than 100 MW of critical data center capacity for a total of more than 6,000,000 hours without any reported downtime caused by a thermal or short-circuit coil failure.

The top priority in data center operations is uninterrupted service. Envirotran HDC transformers from Eaton, having substantially higher levels of insulation, are less susceptible to voltage surges. Eaton has experienced zero failures due to switching transients. The ANSI® and IEEE® standard impulse withstand ratings are higher for liquid-filled transformers, making them less susceptible to insulation failure. The Envirotran HDC transformer provides ultimate protection by increasing the BIL rating one level higher than standard liquid-filled transformer ratings. The cooling system of liquid-filled transformers provides better protection from severe overloads—overloads that can lead to significant loss of life or failure.

Data center design typically includes multiple layers of redundancy, ensuring maximum uptime for the critical IT load. When best in class transformer manufacturing lead times are typically weeks, not days, an unexpected transformer failure will adversely affect the facility's reliability and profitability. Therefore, the ability to determine the electrical and mechanical health of a transformer can reduce the probability of costly, unplanned downtime. Routine diagnostic tests, including key fluid properties and dissolved gas analysis (DGA), can help determine the health of a liquid-filled transformer. Although sampling is not required for safe operation, it will provide the user with valuable information, leading to scheduled repair or replacement, and minimizing the duration and expense of an outage. With a dry-type transformer, there is no reliable way to measure the health or likelihood of an impending failure.

Solar transformer

As a result of the increasing number of states that are adopting aggressive Renewable & Alternative Energy Portfolio Standards, the solar energy market is growing—nearly doubling year over year. Eaton, a key innovator and supplier in this expanding market, is proud to offer its Cooper Power series Envirotran transformers specifically designed for Solar Photovoltaic medium-voltage applications. Eaton is working with top solar photovoltaic developers, integrators and inverter manufacturers to evolve the industry and change the way we distribute power.

In accordance with this progressive stance, every Envirotran Solar transformer is filled with non-toxic, biodegradable Envirotemp™ FR3™ dielectric fluid, made from renewable seed oils. On top of its biodegradability, Envirotemp™ FR3™ fluid substantially extends the life of the transformer insulation, saving valuable resources. What better way to distribute green power than to use a green transformer. In fact, delaying conversion to Envirotran transformers places the burden of today's environmental issues onto tomorrow's generations. Eaton can help you create a customized transformer, based on site specific characteristics including: temperature profile, site altitude, solar profile and required system life. Some of the benefits gained from this custom rating include:

- Reduction in core losses
- Improved payback on investment
- Reduction in footprint
- Improved fire safety
- Reduced environmental impact

For the solar photovoltaic industry, Eaton is offering standard step up transformers and dual secondary designs, including 4-winding, 3-winding (Low-High-Low) and 3-winding (Low-Low-High) designs.

Wind transformer

Eaton is offering custom designs for renewable energy power generation. Eaton manufactures its Cooper Power series Generator Step-Up (GSU) transformers for installation at the base of every wind turbine. Additionally, grounding transformers are available for wind power generation.

DOE efficiency

The United States Department of Energy (DOE) has mandated efficiency values for most liquid type, medium voltage transformers. As a result, all applicable Eaton's Cooper Power series transformers 2500 kVA and below conform to efficiency levels as specified in the DOE ruling "10 CFR Part 431 Energy Conservation Program".

Underwriters Laboratories® (UL®) Listed and Labeled/ Classified

The Envirotran transformer from Eaton can be specified as UL® Listed & Labeled, and/or UL® Classified. Underwriters Laboratories (UL®) listing is a verification of the design and construction of the transformer to the ANSI® and IEEE® standards. UL® listing generally is the most efficient, cost-effective solution for complying with relevant state and local electrical codes. UL® Combination Classification/Listing is another way in which to comply with Section 450.23, 2008 NEC® requirements. This combines the UL® listed transformer with a UL® Classified Less-Flammable Liquid and complies with the use restrictions found within the liquid Classification.

c UL US
LISTED

K-Factor transformer

With a drastic increase in the use of ferromagnetic devices, arcing devices, and electric power converters, higher frequency loads have increased significantly. This harmonic loading has the potential to generate higher heat levels within a transformer's windings and leads by as much as 300%. Harmonic loading has the potential to induce premature failure in standard-design distribution transformers.

In addition to standard UL® "K-Factor" ratings, transformers can be designed to customer-provided specifications detailing precise loading scenarios. Onsite measurements of magnitude and frequency, alongside harmonic analysis of the connected load can be performed by Eaton engineers or a third party consultant. These field measurements are used to determine exact customer needs and outline the transformer specifications.

Eaton will design harmonic-resistant transformers that will be subjected to the unique harmonic loads. These units are designed to maintain normal temperature rise under harmonic, full-load conditions. Standard UL® "K-Factor" designs can result in unnecessary costs when the "next-highest" K-Factor must be selected for a calculated design factor. To save the customer these unnecessary costs, Eaton can design the transformer to the specific harmonic spectrum used in the application. Eaton's Cooper Power series K-factor transformers are filled with mineral oil or Envirotemp™ FR3™ fluid and enjoy the added benefits of dielectric cooling such as higher efficiencies than dry-type transformers.

Modulation transformer

Bundled with an Outboard Modulation Unit (OMU) and a Control and Receiving Unit (CRU), a Modulation Transformer Unit (MTU) is designed to remotely achieve two way communication.

The use of an MTU reduces travel time and expense versus traditional meter reading performed by high voltage electricians. Additionally, with MTU it is possible to manage and evaluate energy consumption data, providing reduced metering costs and fewer tenant complaints.

An MTU utilizes existing utility infrastructure, therefore eliminating the need to engineer and construct a dedicated communication network.

Figure 9. Modular transformer.

Inverter/rectifier bridge

Eaton complements its range of applications for transformers by offering dual winding designs. These designs are intended for connection to 12-pulse rectifier bridges.

Product attributes

To set us apart from other transformer manufactures, Eaton includes the following guarantees with every three-phase pad-mounted transformer.

Engineered to order (ETO)

Providing the customer with a well developed, cost-effective solution is the number one priority at Eaton. Using customer specifications, Eaton will work with the customer from the beginning to the end to develop a solution to fit their needs. Whether it is application specific, site specific, or a uniquely specified unit, Eaton will provide transformers with the best in class value and performance, saving the customer time and money.

Made in the U.S.A.

Eaton's three-phase pad-mounted transformers are produced right here in the United States of America. Our manufacturing facilities are positioned strategically for rapid shipment of products. Furthermore, should the need arise, Eaton has a broad network of authorized service repair shops throughout the United States.

Superior paint performance

Protecting transformers from nature's elements worldwide, Eaton's E-coat system provides unrivaled transformer paint life, and exceeds IEEE Std C57.12.28™-2014 and IEEE Std C57.12.29™-2005 standards. In addition to the outside of the unit, each transformer receives a gray E-coat covering in the interior of the tank and cabinet, providing superior rust resistance and greater visibility during service.

If the wide range of standard paint selections does not suit the customer's needs, Eaton will customize the paint color to meet their requirements.

Rectangular coil design

Eaton utilizes a rectangular coil design. This winding technique results in a smaller overall unit footprint as well as reducing the transformer weight. The smaller unit size does not hinder the transformer performance in the least. Units have proven short circuit withstand capabilities up to 10 MVA.

Testing

Eaton performs routing testing on each transformer manufactured including the following tests:

- Insulation Power Factor: This test verifies that vacuum processing has thoroughly dried the insulation system to required limits.
- Ratio, Polarity, and Phase Relation: Assures correct winding ratios and tap voltages; checks insulation of HV and LV circuits. Checks entire insulation system to verify all live-to-ground clearances.
- Resistance: This test verifies the integrity of internal high-voltage and low-voltage connections; provides data for loss upgrade calculations.
- Routine Impulse Tests: The most severe test, simulating a lightning surge. Applies one reduced wave and one full wave to verify the BIL rating.
- Applied Potential: Applied to both high-voltage and low-voltage windings, this test stresses the entire insulation system to verify all live-to-ground clearances.
- Induced Potential: 3.46 times normal plus 1000 volts for reduced neutral designs.
- Loss Test: These design verification tests are conducted to assure that guaranteed loss values are met and that test values are

within design tolerances. Tests include no-load loss and excitation current along with impedance voltage and load loss.

- Leak Test: Pressurizing the tank to 7 psig assures a complete seal, with no weld or gasket leaks, to eliminate the possibility of moisture infiltration or fluid oxidation.

Design performance tests

The design performance tests include the following:

- Temperature Rise: Our automated heat run facility ensures that any design changes meet ANSI® and IEEE® temperature rise criteria.
- Audible Sound Level: Ensures compliance with NEMA® requirements.
- Lightning Impulse: To assure superior dielectric performance, this test consists of one reduced wave, two chopped waves and one full wave in sequence, precisely simulating the harshest conditions.

Thomas A Edison Research and Test Facility

We are constantly striving to introduce new innovations to the transformer industry, bringing you the highest quality transformer for the lowest cost. Eaton's Cooper Power series Transformer Products are ISO 9001 compliant, emphasizing process improvement in all phases of design, manufacture, and testing. We have invested millions of dollars in the Thomas A. Edison Technical Center, our premier research facility in Franksville, Wisconsin affirming our dedication to introducing new innovations and technologies to the transformer industry. This research facility is fully available for use by our customers to utilize our advanced electrical and chemical testing labs.

Three-phase pad-mounted compartmental type transformer

Eaton
1000 Eaton Boulevard
Cleveland, OH 44122
United States
Eaton.com

Eaton's Cooper Power Systems Division
2300 Badger Drive
Waukesha, WI 53188
United States
Eaton.com/cooperpowerseries

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For Eaton's Cooper Power series three-phase transformer product information call 1-877-277-4636 or visit: www.eaton.com/cooperpowerseries.

Powering Business Worldwide

powered by Q.ANTUM DUO

Q.PEAK DUO L-G5.2

380-405

ENDURING HIGH PERFORMANCE

pv magazine award 2017 Top Innovation

EUPD RESEARCH TOP BRAND PV MODULES EUROPE 2019

Photon Q.PRO-G2 235 Best polycrystalline solar module 2014 Q CELLS 174 modules tested

Q CELLS YIELD SECURITY
- ANTI PID TECHNOLOGY (APT)
- HOT-SPOT PROTECT (HSP)
- TRACEABLE QUALITY (TRA.Q™)
- ANTI LID TECHNOLOGY (ALT)

Q.ANTUM TECHNOLOGY: LOW LEVELISED COST OF ELECTRICITY
Higher yield per surface area, lower BOS costs, higher power classes, and an efficiency rate of up to 20.3%.

INNOVATIVE ALL-WEATHER TECHNOLOGY
Optimal yields, whatever the weather with excellent low-light and temperature behaviour.

ENDURING HIGH PERFORMANCE
Long-term yield security with Anti LID Technology, Anti PID Technology[1], Hot-Spot Protect and Traceable Quality Tra.Q™.

EXTREME WEATHER RATING
High-tech aluminium alloy frame, certified for high snow (5400 Pa) and wind loads (2400 Pa).

A RELIABLE INVESTMENT
Inclusive 12-year product warranty and 25-year linear performance warranty[2].

STATE OF THE ART MODULE TECHNOLOGY
Q.ANTUM DUO combines cutting edge cell separation and innovative wiring with Q.ANTUM Technology.

[1] APT test conditions according to IEC/TS 62804-1:2015, method B (–1500 V, 168 h)
[2] See data sheet on rear for further information.

THE IDEAL SOLUTION FOR:

Rooftop arrays on commercial / industrial buildings

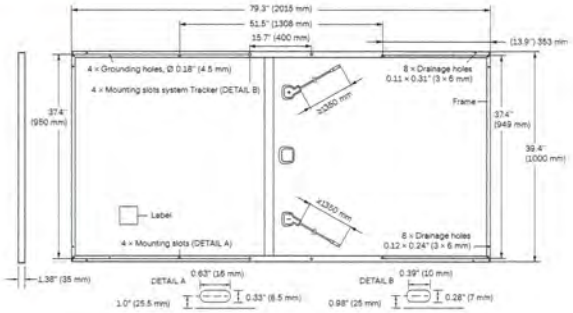
Ground-mounted solar power plants

Engineered in Germany

Q CELLS

MECHANICAL SPECIFICATION

Format	79.3 in × 39.4 in × 1.38 in (including frame) (2015 mm × 1000 mm × 35 mm)
Weight	51.8 lbs (23.5 kg)
Front Cover	0.13 in (3.2 mm) thermally pre-stressed glass with anti-reflection technology
Back Cover	Composite film
Frame	Anodized aluminum
Cell	6 × 24 monocrystalline Q.ANTUM solar half cells
Junction Box	2.09-3.98 × 1.26-2.36 × 0.59-0.71 in (53-101 × 32-60 × 15-18 mm), Protection class IP67, with bypass diodes
Cable	4 mm² Solar cable; (+) ≥53.1 in (1350 mm), (−) ≥53.1 in (1350 mm)
Connector	Stäubli MC4, Stäubli MC4-Evo2, Amphenol UTX, Renhe 05-8, Tonglin TL-Cable01S-F; IP68 or Friends PV2e; IP67

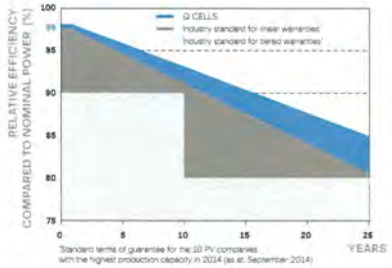


ELECTRICAL CHARACTERISTICS

POWER CLASS				380	385	390	395	400	405
MINIMUM PERFORMANCE AT STANDARD TEST CONDITIONS, STC[1] (POWER TOLERANCE +5 W / −0 W)									
Minimum	Power at MPP[1]	P_{MPP}	[W]	380	385	390	395	400	405
Minimum	Short Circuit Current[1]	I_{SC}	[A]	10.05	10.10	10.14	10.19	10.24	10.28
Minimum	Open Circuit Voltage[1]	V_{OC}	[V]	47.95	48.21	48.48	48.74	49.00	49.26
Minimum	Current at MPP	I_{MPP}	[A]	9.57	9.61	9.66	9.70	9.75	9.79
Minimum	Voltage at MPP	V_{MPP}	[V]	39.71	40.05	40.38	40.71	41.04	41.36
Minimum	Efficiency[1]	η	[%]	≥18.9	≥19.1	≥19.4	≥19.6	≥19.9	≥20.1
MINIMUM PERFORMANCE AT NORMAL OPERATING CONDITIONS, NMOT[2]									
Minimum	Power at MPP	P_{MPP}	[W]	284.4	288.2	291.9	295.6	299.4	303.1
Minimum	Short Circuit Current	I_{SC}	[A]	8.10	8.14	8.17	8.21	8.25	8.28
Minimum	Open Circuit Voltage	V_{OC}	[V]	45.21	45.46	45.71	45.96	46.21	46.45
Minimum	Current at MPP	I_{MPP}	[A]	7.53	7.57	7.60	7.64	7.67	7.71
Minimum	Voltage at MPP	V_{MPP}	[V]	37.77	38.08	38.40	38.71	39.02	39.33

[1]Measurement tolerances P_{MPP} ±3%; I_{SC}; V_{OC} ±5% at STC: 1000 W/m², 25±2°C, AM 1.5G according to IEC 60904-3 • [2]800 W/m², NMOT, spectrum AM 1.5G

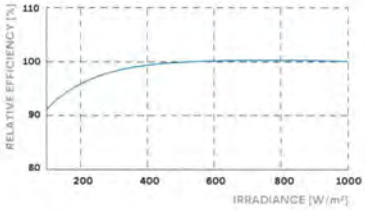
Q CELLS PERFORMANCE WARRANTY



At least 98% of nominal power during first year. Thereafter max. 0.54% degradation per year. At least 93.1% of nominal power up to 10 years. At least 85% of nominal power up to 25 years.

All data within measurement tolerances. Full warranties in accordance with the warranty terms of the Q CELLS sales organisation of your respective country.

PERFORMANCE AT LOW IRRADIANCE



Typical module performance under low irradiance conditions in comparison to STC conditions (25 °C, 1000 W/m²)

TEMPERATURE COEFFICIENTS

Temperature Coefficient of I_{SC}	α	[%/K]	+0.04	Temperature Coefficient of V_{OC}	β	[%/K]	−0.27
Temperature Coefficient of P_{MPP}	γ	[%/K]	−0.36	Normal Module Operating Temperature	NMOT	[°F]	109±5.4 (43±3°C)

PROPERTIES FOR SYSTEM DESIGN

Maximum System Voltage V_{SYS}	[V]	1500 (IEC) / 1500 (UL)	Safety Class	II
Maximum Series Fuse Rating	[A DC]	20	Fire Rating	C / TYPE 1
Max. Design Load, Push / Pull[3]	[lbs / ft²]	75 (3600 Pa) / 33 (1600 Pa)	Permitted Module Temperature on Continuous Duty	−40 °F up to +185 °F (−40 °C up to +85 °C)
Max. Test Load, Push / Pull[3]	[lbs / ft²]	113 (5400 Pa) / 50 (2400 Pa)		

[3]See Installation Manual

QUALIFICATIONS AND CERTIFICATES

UL 1703, CE-compliant, IEC 61215:2016, IEC 61730:2016, Application Class II, U.S. Patent No. 9,893,215 (solar cells)

PACKAGING INFORMATION

Number of Modules per Pallet	29
Number of Pallets per 53' Trailer	27
Number of Pallets per 40' HC-Container	22
Pallet Dimensions (L × W × H)	81.9 × 45.3 × 46.9 in (2080 × 1150 × 1190 mm)
Pallet Weight	1635 lbs (742 kg)

Note: Installation instructions must be followed. See the installation and operating manual or contact our technical service department for further information on approved installation and use of this product.

Hanwha Q CELLS America Inc.
400 Spectrum Center Drive, Suite 1400, Irvine, CA 92618, USA | **TEL** +1 949 748-5996 | **EMAIL** inquiry@us.q-cells.com | **WEB** www.q-cells.com/na

Specifications subject to technical changes © **Q CELLS** Q.PEAK DUO L-G5.2_380-405_2019-03_Rev02_NA

PowerPact™ R-frame Main Circuit Breaker on Left with I-Line™ Distribution Section on Right

Features

- Sections rated to 5000 A horizontal bus, 3000 A vertical bus
- Single mains to 5000 A
- Six subdivision mains to 4000 A
- Individually mounted feeders to 4000 A
- Suitable for service entrance or distribution
- NEMA Type 1 or Type 3R enclosures
- Front or front and rear accessible
- 91.5 in. (2324 mm) high with base channels
- Section widths available: 12 in. (305 mm), 24 in. (610 mm), 30 in. (762 mm), 36 in. (914 mm), 42 in. (1067 mm), 48 in. (1219 mm), or 54 in. (1372 mm) wide
- Frame depths available: 24 in. (610 mm), 36 in. (914 mm), 48 in. (1219 mm), 54 in. (1372 mm), or 60 in. (1524 mm)
- Voltage to 600 Vac or 250 Vdc
- Factory assembled
- Hot or cold sequence utility metering
- Customer metering
- Surge protective devices (SPD)

Power-Style™ QED-2 switchboards provide a convenient and economical means of distributing electric power. These enclosed, free-standing structures contain circuit breaker or fusible overcurrent protection for services rated up to 5000 A with a maximum voltage of 600 Vac. Power-Style QED-2 switchboards are custom-made for use as service entrance equipment or as distribution centers in commercial, institutional, and industrial applications.

An auxiliary section is also available for cable or bus transition or to provide additional space for connecting the service conductors to the line side of the main. The auxiliary section is a full-height section with a depth to match that of the adjacent section. It can contain customer metering or through bus and incoming lug pads.

The QED-2 frame allows various special components to be mounted in the switchboard. These components include automatic throwover systems, transfer switches, and special metering systems. This flexibility means the QED-2 switchboard can meet customer requirements on the most complicated applications.

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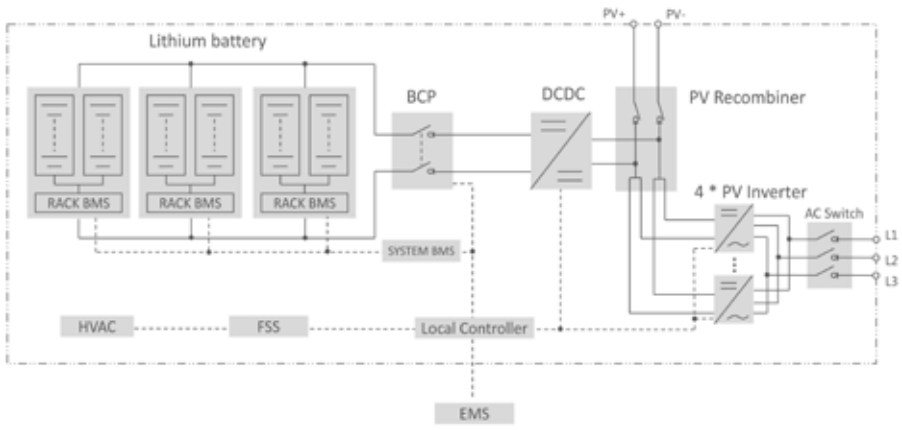
ST556KWH-D250HV +4xSG125HV

Storage System

SYSTEM FEATURES

- Fully integrated 1500V DC coupled PV+ESS system with “one stop shop”
- Intelligent MPPT-Charging control algorithm enable the high-efficient operation

CIRCUIT DIAGRAM



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System Type	ST556KWH-D250HV+4xSG125HV
PV Data	
Max PV input voltage	1,500 V
MPPT voltage range at nominal power	860 ~ 1,250 V
Number of DC inputs	5
Max. PV input current	1,250 A
DCDC Data	
Working voltage range	500 ~ 1,500 V
Nominal power	250 KW
Max. current	344 A
Battery Data	
Cell type	Samsung SDI Mega E3, 3.68 V / 100 Ah
Configuration of system	2P252S * 3
Battery capacity (BOL)	556 kWh
Battery voltage range	806.4 ~1,045.8 V
AC Data	
AC output power	500kVA @ 50 ℃
Max. AC output current	480 A
Nominal AC voltage	3 / PE, 600 V
AC voltage range	480 ~ 690 V
Nominal grid frequency / Grid frequency range	60 Hz / 55 ~ 65 Hz
Power factor at nominal power / Adjustable power factor	> 0.99 / 0.8 leading ~ 0.8 lagging
Feed-in phases / connection phases	3/3
General Data	
Dimensions (W * H * D)	6,058 * 2,896 * 2,438 mm / 238.5" * 114.0" * 96.0"
Weight (with / without battery)	11,000 kg / 7,000 kg 24,250 lbs / 15,432 lbs
Degree of protection	IP 54 / NEMA 3R
Operating temperature range	-30 to 50 ℃ / -22 to 122 ℉
Relative humidity	0 ~ 95 % (non-condensing)
Max. working altitude	2,000 m / 6,562 ft
Cooling concept of battery chamber	Heating, Ventilation and Air Conditioning
Fire suppression system of battery unit	FM-200 extinguishment system
Communication interfaces	RS485, Ethernet
Communication protocols	Modbus RTU, Modbus TCP
Compliance	UL 9540, UL 9540A

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SG125HV Noise Level Test Report

Version	Date	Author	Approved by
V10	2017,May, 28	Bale, Yang	Chen W

1.Introduction

This document describes the noise level test for SG125HV.The test is conducted in the Sungrow Testing Center, which is a WMT testing lab (Witnessed Manufacturer's Testing) accredited by TUV, CSA and UL.

The test procedures are in accordance with the standard ISO3746 and the sound pressure level fulfills the requirements in the IEC62109-1 standard.

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2.Noise Level Test

The noise test was completed in the shielding room using the test platform shown below:

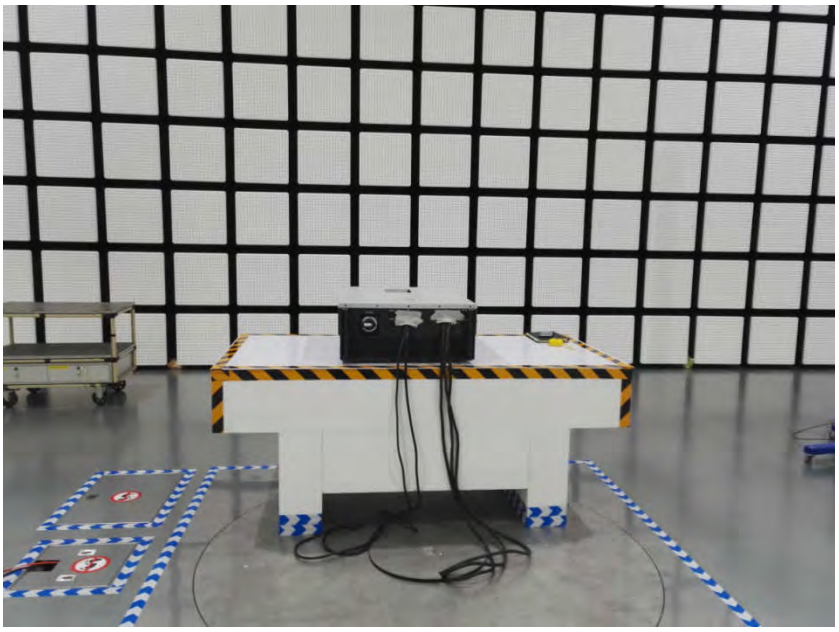

Fig-1 Noise Test Platform

During the test, the noise test instrument is located at a distance of 1m from the inverter, the inverter's operating DC voltage is 1050V and its output power is 125kW.The test data for the four directions and background noise are as follows:

Direction	**Test Data**
Bottom	61.6dB
Left Side	56.9dB
Top	53.7dB
Right Side	53.2dB
Background Noise	31.1dB

Appendix: Testing Pictures

Fig-2 Background Noise

Fig-3 Bottom Side

Fig-4 Left Side

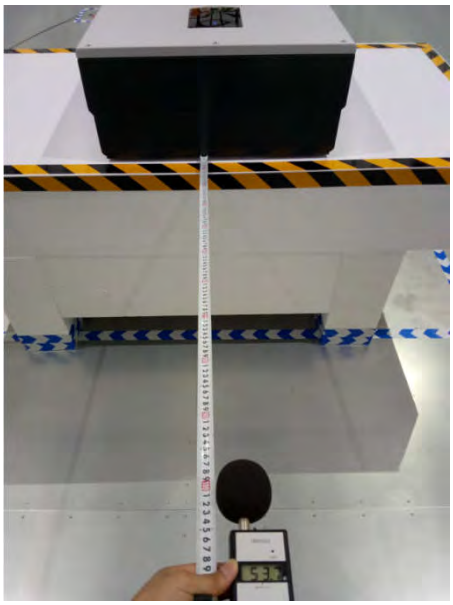

Fig-5Top Side

Fig-6Right Side

SAFETY DATA SHEET

1. Identification of the substance or mixture and of the supplier

A. GHS product identifier : MODEL CS100 (100Ah capacity)

B. Recommended use of the chemical and restrictions on use

Recommended use : Lithium-Ion battery

Restrictions on use : Use for recommended use only.

C. Supplier

Company name : SAMSUNG SDI Co., Ltd.

Address : 150-20, Gongse-ro, Giheung-gu, Yongin-si, Gyeonggi-do, Korea

Emergency phone number : +82-31-288-4415

Respondent : Cell development department

Fax : Not available

D. Further information

Battery-System: Lithium-Ion (Li-ion)

Voltage: 3.68V

Anode (negative electrode): based on intercalation graphite

Cathode (positive electrode): based on lithiated metal oxide (Cobalt, Nickel, Manganese)

Remark:

The information and recommendations set forth are made in good faith and believed to be accurate as of the date of preparation. SAMSUNG SDI Co., Ltd. makes no warranty, expressed or implied, with respect to this information and disclaims all liabilities from reliance on it.

2. Hazards identification

※ This is a product that fulfills a certain function in solid state with specific shape without discharging any chemical substance in its use and has no obligation to write (M)SDS. Since this document contains the pre cautions for safe handling related to its materials or chemical substances consisting of this product, please note that these overall information is irrelevant to this product.

A. GHS classification of the substance/mixture

Not classified according to OSHA 29 CFR 1910.1200

B. GHS label elements, including precautionary statements

Pictogram and symbol :

Not applicable

Signal word :

Not applicable

Hazard statements :

Not applicable

Precautionary statements

Precaution :

Not applicable

Treatment :

Not applicable

Storage :

Not applicable

Disposal :

Not applicable

C. Other hazard information not included in hazard classification :

- Empirical data on effects on humans : If appropriately handled and if in accordance with the general hygienic rules, no damages to health have become known.
- There is no hazard when the measures for handling and storage are followed.
- In case of cell damage, possible release of dangerous substances and a flammable gas mixture.

3. Composition/information on ingredients

Chemical Name	Common Name(Synonyms)	CAS number	EC number	Content (%)
Cobalt lithium manganese nickel oxide	Not available	182442-95-1	695-690-9	23~30
1-methyl-2-pyrrolidone	1-methylpyrrolidin-2-one	872-50-4	212-828-1	15~23
Graphite	Grafito	7782-42-5	231-955-3	10~20
Aluminium	Al	7429-90-5	231-072-3	10~16
Copper	Cu	7440-50-8	231-159-6	2~10
Trade secret 1	Trade secret	Trade secret	Trade secret	1~10
Trade secret 2	Trade secret	Trade secret	Trade secret	1~10
Trade secret 3	Trade secret	Trade secret	Trade secret	1~5
Lithium Nickel Cobalt Aluminium oxide	LNCA	177997-13-6	700-042-6	1~3
Trade secret 4	Trade secret	Trade secret	Trade secret	1~3

Aluminium oxide	Activated Alumina	1344-28-1	215-691-6	1~3
Carbon black	Carbon	1333-86-4	215-609-9	0.1~0.99

4. First aid measures

※ General information

The following first aid measures are required only in case of exposure to interior battery components after damage of the external battery casing. Undamaged, closed cells do not represent a danger to the health.

A. Eye contact

- In case of contact with substance, immediately flush eyes with running water at least 20 minutes.

B. Skin contact

- In case of contact with substance, immediately flush skin with running water at least 20 minutes.
- Remove and isolate contaminated clothing and shoes.
- Wash contaminated clothing and shoes before reuse.
- Get immediate medical advice/attention.

C. Inhalation

- Specific medical treatment is urgent.
- Move victim to fresh air.
- Administer oxygen if breathing is difficult.

D. Ingestion

- Do not let him/her eat anything, if unconscious.
- Get immediate medical advice/attention.

E. Indication of immediate medical attention and notes for physician

- Ensure that medical personnel are aware of the material(s) involved and take precautions to protect themselves.

F. Most important symptoms and effects, both acute and delayed

Not available

5. Fire fighting measures

A. Suitable (and unsuitable) extinguishing media

- When the scale of the fire is small, use a HFC (hydrofluorocarbon) clean-agent fire extinguisher or alcohol resistant foam fire extinguishers. (In case of battery overheating, wear protective gear and immerse heated battery in water)
- In case of large fire, use large amount of water to extinguish.

B. Specific hazards arising from the chemical

- Flammable gas leaks before ignition and then the product ignites.

C. Special protective equipment and precautions for fire-fighters

- The ignited battery has a high temperature, so there is a risk of additional ignition even if the fire is extinguished at early stage. Sprinkle a large amount of water until the battery temperature drops to normal temperature.
- If the battery is ignited in multi-stacked condition, multi-stack should be disassembled and then extinguished so that heat is not transferred between batteries
- In the event of a battery fire, cool it by spraying water directly on the battery.
- When handling a overheated battery, wear heat-resistant protective equipment.

6. Accidental release measures

A. Personal precautions, protective equipment and emergency procedures

- Eliminate all ignition sources.
- Stop leak if you can do it without risk.
- Please note that materials and conditions to avoid.
- Ventilate the area.
- Do not touch or walk through spilled material.

B. Environmental precautions and protective procedures

- Prevent entry into waterways, sewers, basements or confined areas.

C. The methods of purification and removal

- With clean shovel place material into clean, dry container and cover loosely; move containers from spill area.

7. Handling and storage

A. Precautions for safe handling

- Avoid short circuiting the cell.
- Avoid mechanical damage of the cell.
- Do not open or disassemble.
- Please note that materials and conditions to avoid.
- Wash thoroughly after handling.
- Please work with reference to engineering controls and personal protective equipment.
- Be careful to high temperature.

B. Conditions for safe storage

- Storage at room temperature (approx. 20°C) at approx. 20% of the nominal capacity (OCV approx. 3.5 - 3.6 V).
- Store in a closed container.
- Store in cool and dry place.

8. Exposure controls/personal protection

A. Occupational Exposure limits

ACGIH regulation :

- Cobalt lithium manganese nickel oxide : TWA = 0.2 mg/m^3 (inhalable particulate matter, as Ni)(Nickel insoluble inorganic compounds), TWA = 0.1 mg/m^3 (inhalable particulate matter, as Ni)(Nickel soluble inorganic compounds), TWA = 0.02 mg/m^3 (as

Co)(Cobalt inorganic compounds), TWA = 0.02 mg/m^3 (respirable particulate matter, as Mn); 0.1 mg/m^3 (inhalable particulate matter, as Mn)(Manganese inorganic compounds)

- Graphite : TWA = 2 mg/m^3 (all forms except graphite fibers, respirable particulate matter)
- Aluminium : TWA = 1 mg/m^3 (respirable particulate matter)(Aluminum, Aluminum insoluble compounds)
- Copper : TWA = 0.2 mg/m^3 (Copper fume), TWA = 1 mg/m^3 (Copper dust and mist, Copper compounds as Cu)
- Lithium Nickel Cobalt Aluminium oxide : TWA = 0.2 mg/m^3 (inhalable particulate matter, as Ni)(Nickel insoluble inorganic compounds), TWA = 0.1 mg/m^3 (inhalable particulate matter, as Ni)(Nickel soluble inorganic compounds), TWA = 0.02 mg/m^3 (as Co)(Cobalt inorganic compounds), TWA = 1 mg/m³ (respirable particulate matter)(Aluminum insoluble compounds)
- Aluminium oxide : TWA = 1 mg/m^3 (respirable particulate matter)(Aluminum, Aluminum insoluble compounds)
- Carbon black : TWA = 3 mg/m^3 (inhalable particulate matter)

OSHA regulation :

- Cobalt lithium manganese nickel oxide : TWA = 1 mg/m^3 (Nickel compounds), C = 5 mg/m^3 (Manganese compounds)
- Graphite : TWA = 15 mppcf
- Aluminium : TWA = 15 mg/m^3 (Aluminum metal (as Al), Total dust) ; 5 mg/m^3 (Respirable fraction)
- Copper : TWA = 0.1 mg/m^3 (Copper Fume (as Cu)) ; 1 mg/m^3 (Dusts and mists (as Cu), Cotton dust)
- Lithium Nickel Cobalt Aluminium oxide : TWA = 1 mg/m^3 (Nickel compounds)
- Aluminium oxide : TWA = 15 mg/m^3 (Total dust) ; 5 mg/m^3 (Respirable fraction)
- Carbon black : TWA = 3.5 mg/m^3

NIOSH regulation :

- Cobalt lithium manganese nickel oxide : TWA = 0.015 mg/m³ (Nickel metal and other compounds, as Ni), TWA = 1 mg/m³, STEL = 3 mg/m³ (Manganese compounds)
- Graphite : TWA = 2.5 mg/m^3 (resp)
- Aluminium TWA = 10 mg/m^3 (total) ; 5 mg/m^3 (resp)
- Copper : TWA = 1 mg/m^3 (Copper (dusts and mists, as Cu), other copper compounds (as Cu) except Copper fume)
- Lithium Nickel Cobalt Aluminium oxide : TWA = 0.015 mg/m³ (Nickel metal and other compounds, as Ni)
- Carbon black : TWA = 3.5 mg/m^3

Biological exposure index : Not available

B. Appropriate engineering controls

- Provide local exhaust ventilation system or other engineering controls to keep the airborne concentrations of vapors below their respective threshold limit value.

C. Personal protective equipment

Respiratory protection :

- Wear NIOSH or European Standard EN 149 approved full or half face piece (with goggles) respiratory protective equipment when necessary.
- In case exposed to particulate material, the respiratory protective equipments as follow are recommended.
;facepiece filtering respirator or air-purifying respirator, high-efficiency particulate air(HEPA) filter media or respirator equipped with powered fan, filter media of use(dust, mist, fume)
- In lack of oxygen(< 19.5%), wear the supplied-air respirator or self-contained oxygen breathing apparatus.

Eye protection :

- Wear facepiece with goggles to protect.
- An eye wash unit and safety shower station should be available nearby work place.
- Wear breathable safety goggles to protect from particulate material causing eye irritation or other disorder.
- An eye wash unit and safety shower station should be available nearby work place.

Hand protection :

- Wear chemical resistant gloves.
- Wear appropriate protective gloves by considering physical and chemical properties of chemicals.

Body protection :

- Wear appropriate protective chemical resistant clothing.
- Wear appropriate protective clothing by considering physical and chemical properties of chemicals.

9. Physical and chemical properties

A. Appearance
Description : Solid
Color : Various
B. Odor : Odorless
C. Odor threshold : Not available
D. pH : Not available
E. Melting point/freezing point : Not available
F. Initial boiling point and boiling range : Not available
G. Flash point : Not available
H. Evaporation rate : Not available
I. Flammability (solid, gas) : Not available
J. Upper/lower flammability or explosive limits : Not available
K. Vapor pressure : Not available
L. Solubility (ies) : Insoluble
M. Vapor density : Not available
N. Specific gravity : Not available
O. Partition coefficient: n-octanol/water : Not available
P. Auto ignition temperature : Not available

Q. Decomposition temperature : Not available
R. Viscosity : Not available
S. Molecular weight : Not available

10. Stability and reactivity

A. Chemical stability and Possibility of hazardous reactions

- Stable in general.
- In case of open cells, there is the possibility of hydrofluoric acid and carbon monoxide release.
- Fire may produce irritating and/or toxic gases.
- Inhalation of material may be harmful.

B. Conditions to avoid

- Ignition sources (heat, sparks or flames)

C. Incompatible materials

- Combustibles

D. Hazardous decomposition products

- No decomposition if stored and applied as directed.
- Irritating and/or toxic gases

11. Toxicological information

※ This is a product that fulfills a certain function in solid state with specific shape without discharging any chemical substance in its use and has no obligation to write (M)SDS. Since this document contains the pre cautions for safe handling related to its materials or chemical substances consisting of this product, please note that these overall information is irrelevant to this product.

A. Information on the likely routes of exposure

Not available

B. Information of Health Hazardous

Acute toxicity

Oral : Not classified (ATEmix = 1684 mg/kg)

- Cobalt lithium manganese nickel oxide : Rat LD_{50} > 2000 mg/kg(NCIS)
- 1-methyl-2-pyrrolidone : Rat LD_{50} = 4150 mg/kg(OECD Guideline 401)
- Graphite : Rat LD_{50} > 2000 mg/kg(OECD Guideline 423, GLP)
- Aluminium : Rat LD_{50} > 15900 mg/kg(Read-across)(OECD Guideline 401)
- Copper : Rat LD_{50} = 481 mg/kg(OECD Guideline 401, GLP)
- Trade secret 1 : Rat LD_{50} = 10,400 mg/kg(OECD Guideline 401)
- Trade secret 2 : Rat LD_{50} > 5,000 mg/kg(OECD Guideline 401, GLP)
- Trade secret 3 : Rat LD_{50} > 5,000 mg/kg(male/female)(OECD Guideline 401, GLP)
- Lithium Nickel Cobalt Aluminium oxide : Rat LD_{50} > 2000 mg/kg(OECD Guideline 420, GLP)
- Trade secret 4 : Rat LD_{50} = 50~300 mg/kg(OECD Guideline 423, GLP)
- Aluminium oxide : Rat LD_{50} > 10000 mg/kg(OECD Guideline 401, GLP)
- Carbon black : Rat LD_{50} > 10000 mg/kg(OECD Guideline 401, GLP)

Dermal : Not classified (ATEmix = 13200 mg/kg)

- 1-methyl-2-pyrrolidone : Rat LD_{50} > 5,000 mg/kg(OECD Guideline 402)
- Copper : Rat LD_{50} > 2000 mg/kg(OECD Guideline 402, GLP)
- Trade secret 1 : Rat LD_{50} = 2,000 mg/kg(male/female)(OECD Guideline 402, GLP)
- Trade secret 3 : Rabbit LD_{50} > 2,000 mg/kg(male/female)(GLP)

Inhalation : Not classified (ATEmix > 0.888 mg/L / 4 hr)

- 1-methyl-2-pyrrolidone : Rat LC_{50} > 5.1 mg/L / 4 hr(OECD Guideline 403)
- Graphite : Rat LC_{50} > 2000 mg/m³ / 4 hr(OECD Guideline 403, GLP)
- Aluminium : Rat LC_{50} > 0.888 mg/L / 4 hr(OECD Guideline 403)
- Copper : Rat LC_{50} > 5.11 mg/L / 4 hr(OECD Guideline 436, GLP)
- Trade secret 1 : Rat LC_0 = 730 mg/m³ / 8 hr(male/female)(OECD Guideline 403)
- Trade secret 2 : Rat LC_{50} > 17.6 mg/L / 4 hr(OECD Guideline 403, GLP)
- Trade secret 3 : Rat LC_{50} > 5.36 mg/L / 4 hr(male/female)(OECD Guideline 403, GLP)
- Aluminium oxide : Rat LC_{50} > 2.3 mg/L / 4 hr(OECD Guideline 403, GLP)
- Carbon black : Rat LC_0 = 4.6 mg/m³ / 4 hr(OECD Guideline 403)

Skin corrosion/ irritation : Not classified

- Cobalt lithium manganese nickel oxide : the test material was not irritating.
- 1-methyl-2-pyrrolidone : In the skin irritation test using rabbits, the test material was not irritating. (OECD Guideline 404)
- Graphite : In the skin irritation test with rabbits, the test material was not irritating. (OECD Guideline 404, GLP)
- Aluminium : In the skin irritation test using rabbits, the test material was not irritating. (Read-across)(OECD Guideline 404)
- Copper : In the skin irritation test using rabbits, the test material was not irritating. (OECD Guideline 404, GLP)
- Trade secret 1 : In the skin irritation test using rabbits, the test material was not classified. (OECD Guideline 404, GLP)
- Trade secret 2 : In the skin irritation test using rabbits, the test material was not irritating. (OECD Guideline 404, GLP)
- Trade secret 3 : In the skin irritation test using rabbits, the test material was not irritating. (OECD Guideline 404)
- Lithium Nickel Cobalt Aluminium oxide : In the skin irritation test using rabbits, the test material was corrosive. (an exposure period of 1-hour)(OECD Guideline 404, GLP)
- Trade secret 4 : In the skin irritation test using human skin model, the test material was corrosive. (EU Method B.40, GLP)
- Aluminium oxide : In the skin irritation test using rabbits, very slight erythema was observed. it would not lead to classification.(2/12)(OECD Guideline 404)
- Carbon black : In the skin irritation test using rabbits, the test material was not classified. (OECD Guideline 404)

Serious eye damage/ irritation : Not classified

- Cobalt lithium manganese nickel oxide : the test material was not irritating.
- 1-methyl-2-pyrrolidone : In the eye irritation test using rabbits, the test material was irritating. Moderate ocular effects observed, but Corneal and conjunctival effects were reversible within 14 days and 21 days, respectively. (OECD Guideline 405)
- Graphite : In the eyes irritation test with rabbits, the test material was slightly irritating. it was fully reversible within 7 days. (OECD Guideline 405, GLP)

- Aluminium : In the eye irritation test using rabbits, the test material was not irritating. (Read-across)
- Copper : In the eyes irritation test with rabbits, the test material was irritating. but it was fully reversible within 7 days. (OECD Guideline 405, GLP)
- Trade secret 1 : In the eye irritation test using rabbits, the test material was mildly irritating. (OECD Guideline 405, GLP)
- Trade secret 2 : In the eye irritation test using rabbits, the test material was not irritating. (OECD Guideline 405, GLP)
- Trade secret 3 : In the eye irritation test using rabbits, the test material was not irritating. (GLP)
- Lithium Nickel Cobalt Aluminium oxide : In the eye irritation test using The SkinEthic RHC model consists of transformed human keratinocytes, the test material was Iirritating.
- Trade secret 4 : In the eye irritation test using fertilised brown leghorn chicken eggs, the test material was severely irritating. (GLP)
- Aluminium oxide : In the eyes irritation test using rabbits, slight erythema was observed. it would not lead to classification.(OECD Guideline 405)
- Carbon black : In the eye irritation test using rabbits, the test material was not irritating. (OECD Guideline 405)

Respiratory sensitization : Not classified

- Aluminium : In the respiratory sensitization test using mice, the test material was not respiratory sensitization. (Read-across)
- Aluminium oxide : In the respiratory sensitization test using rats, this material was not respiratory sensitizing.(Effects of Asian Sand Dust, Arizona Sand Dust, Amorphous Silica and Aluminium Oxide on Allergic Inflammation in the Murine Lung, 2008)
- Carbon black : This material has not been tested in animals for sensitisation effects on the respiratory tract. In humans, no cases of allergies were reported to the responsible occupational physicians.

Skin sensitization : Not classified

- Cobalt lithium manganese nickel oxide : this material was not skin sensitizing. (Mouse)
- 1-methyl-2-pyrrolidone : In the skin sensitization test using mice, the test material was not skin sensitizing. (OECD Guideline 429, GLP)
- Graphite : In the skin sensitization test using mice, the test material was not skin sensitizing. (OECD Guideline 429, GLP)
- Aluminium : In the skin sensitization test using guinea pigs, the test material was not skin sensitizing.
- Copper : In the skin sensitization test using guinea pigs, the test material was not skin sensitizing. (OECD Guideline 406, GLP)
- Trade secret 1 : In the skin sensitization test using guinea pigs, the test material was not classified. (OECD Guideline 406, GLP)
- Trade secret 2 : In the skin sensitization test using guinea pigs, the test material was not skin sensitizing. (OECD Guideline 406, GLP)
- Trade secret 3 : In the skin sensitization test using guinea pigs, the test material was not skin sensitizing. (OECD Guideline 406, GLP)

- Lithium Nickel Cobalt Aluminium oxide : In the skin sensitization test using mouse, the test material was not skin sensitizing. (OECD Guideline 429, GLP)
- Trade secret 4 : In the skin sensitization test using mice, the test material was not skin sensitizing. (OECD Guideline 429, GLP)
- Aluminium oxide : In the skin sensitization test using guinea pigs, this material was not skin sensitizing.(Landsteiner / Draize method)
- Carbon black : In the skin sensitization test using guinea pigs, the test material was not skin sensitizing. (OECD Guideline 406, GLP)

Carcinogenicity : Not classified

- Cobalt lithium manganese nickel oxide :

  IARC :
  Group 1 (Nickel compounds)
  Group 2B (Cobalt and cobalt compounds)

  ACGIH:
  A1 (Nickel insoluble inorganic compounds),
  A3 (Cobalt inorganic compounds)
  A4 (Nickel soluble inorganic compounds, Manganese inorganic compounds)

  NTP:
  K (Nickel compounds)
  R (Cobalt compounds)

  OSHA:
  Present (Nickel compounds, Cobalt compounds)

- Aluminium :

  ACGIH: A4 (Aluminum, Aluminum insoluble compounds)

- Lithium Nickel Cobalt Aluminium oxide :

  IARC :
  Group 1 (Nickel compounds)
  Group 2B (Cobalt and cobalt compounds)

  ACGIH:
  A1 (Nickel insoluble inorganic compounds),
  A3 (Cobalt inorganic compounds)
  A4 (Nickel soluble inorganic compounds, Aluminum insoluble compounds)

  NTP:
  K (Nickel compounds)
  R (Cobalt compounds)

  OSHA:
  Present (Nickel compounds, Cobalt compounds)

- Carbon black :

  IARC : Group 2B
  ACGIH: A3
  OSHA: Present

Mutagenicity : Not classified

- Cobalt lithium manganese nickel oxide : Nagative : in vitro test ((Ames test, S. typhimurium, E. Coli)(Chromosome aberration test, human lymphocyte)
- 1-methyl-2-pyrrolidone : Negative reactions were observed in in vitro tests(Bacterial Reverse Mutation Assay(OECD Guideline 471), Mammalian Gene

Mutation Test(OECD Guideline 476, GLP) and DNA Damage and/or Repair Study(OECD Guideline 482, GLP)).
Negative reactions were observed in in vivo tests(Mammalian Erythrocyte Micronucleus Test(OECD Guideline 474, GLP) and Mammalian Bone Marrow chromosome Aberration Test(OECD Guideline 475, GLP)).
- Graphite : Negative reactions were observed in in vitro test(Bacterial Reverse Mutation Assay(OECD Guideline 471, GLP)).
- Aluminium : Negative reactions were observed in both in vivo (Mammalian Erythrocyte Micronucleus Test(OECD Guideline 474, GLP)) and in vitro (Mammalian cell gene mutation test(OECD Guideline 476, GLP)).
- Copper : Negative reactions were observed in in vivo test(mammalian somatic cell study: cytogenicity/erythrocyte micronucleus(EU Method B.12, GLP)).
- Trade secret 1 : Negative reactions were observed in vitro (Bacterial Reverse Mutation Assay(OECD Guideline 471, GLP)).
- Trade secret 2 : Negative reactions were observed in vitro (Mammalian Chromosome Aberration Test (OECD Guideline 473, GLP))
- Trade secret 3 : Negative reactions were observed in in vivo (Mammalian Spermatogonial Chromosome Aberration Test (OECD Guideline 483, GLP))
- Lithium Nickel Cobalt Aluminium oxide : Negative reactions were observed in in vitro test(Bacterial Reverse Mutation Assay(OECD Guideline 471, GLP))
- Trade secret 4 : Negative reactions were observed in both in vivo (Mammalian Erythrocyte Micronucleus Test(OECD Guideline 474)) and in vitro (Bacterial Reverse Mutation Assay(OECD Guideline 471, GLP)).
- Aluminium oxide : In in vivo test (Mammalian Bone Marrow Chromosome Aberration Test (OECD Guideline 475)), a positive reation was observed.
- Carbon black : Positive reactions were observed in both in vitro (Chromosomal aberrations test (OECD Guideline 476, GLP)) and in vivo (ypoxanthine-guanine phosphoribosyl transferase gene (hprt) mutations in alveolar epithelial cells).

Reproductive toxicity : Not classified
- 1-methyl-2-pyrrolidone : In the two-generation reproductive toxicity test with rats, developmental toxicity was evidenced by increased pup mortality and reduced body weight gain, including corresponding effects in the investigated organs, in pups treated at 500/350 mg/kg bw/day. (NOAEL(F) = 160 mg/kg bw/day) (OECD Guideline 416, GLP)
- Graphite : In the reproductive toxicity with rats, there were no significant adverse effects on reproductive parameters. (OECD Guideline 422, GLP)
- Aluminium : In the reproductive toxicity and developmental toxicity test using rats, adverse effects were not observed, respectively. (OECD Guideline 422, GLP)(OECD Guideline 414)
- Copper : In the reproductive toxicity and developmental toxicity test with rats, there were no significant adverse effects on reproductive parameters and no evidence of malformations at any doses. (OECD Guideline 416, 414, GLP)
- Trade secret 1 : In the reproductive toxicity test using mouse, adverse effects were not observed, respectively. (GLP)
In the developmental toxicity test using rabbits, adverse effects were not observed, respectively. (GLP)

- Trade secret 2 : In the reproductive toxicity and developmental toxicity test using rats, adverse effects were not observed, respectively. (OECD Guideline 414)
- Trade secret 3 : In the reproductive toxicity test using rats, adverse effects were not observed, respectively. (OECD Guideline 415, GLP)
In the developmental toxicity test using rabbits, adverse effects were not observed, respectively. (OECD Guideline 414, GLP)
- Lithium Nickel Cobalt Aluminium oxide : In the reproductive toxicity and developmental toxicity test with rats, as the 500 mg/kg/day treatment group was terminated early due to excessive dose level no definitive reproductive effect could be established. and no effect of treatment was detected on reproduction or offspring development, at a treatment level up to 150 mg/kg/day. (OECD Guideline 422, GLP)
- Trade secret 4 : In the reproductive toxicity and developmental toxicity test using rats, adverse effects were not observed, respectively. (OECD Guideline 416, GLP)(OECD Guideline 414)
- Aluminium oxide : In the reproductive toxicity test using rats, no toxicologically significant effects were noted. (OECD Guideline 422, GLP)(Read across: Al(OH)13Cl17(in aqueous solution))
- Carbon black : In the reproductive toxicity and developmental toxicity test using mice, adverse effects were not observed, respectively. (OECD Guideline 414, GLP)

Specific target organ toxicity (single exposure) : Not classified
- 1-methyl-2-pyrrolidone : In the acute oral toxicity test with rats, ataxia and diuresis(4,150 mg/kg bw) were observed. (OECD Guideline 401)
- Graphite : In the acute oral toxicity test with rats, no signs of discomfort or toxicity effects. (OECD Guideline 423, GLP)
- Aluminium : In the acute oral toxicity test using rats, adverse effects were not observed, respectively. (Read-across)(OECD Guideline 401) In the acute inhalation toxicity test using rats, adverse effects were not observed, respectively. (OECD Guideline 403)
- Copper : In the acute oral toxicity test with rats, clinical signs observed included lethargy, prostrate posture, green coloured diarrhoea, voiding few faeces and moribundity. (OECD Guideline 401, GLP) In the acute inhalation toxicity test with rats, slight to moderate ataxia, slight to moderate tremor and slight to moderate dyspnoea were observed. (OECD Guideline 436, GLP)
- Trade secret 1 : In the acute dermal/inhalation toxicity test using rats, adverse effects were not observed, respectively. (OECD Guideline 402, GLP)(OECD Guideline 403)
- Trade secret 2 : In the acute oral and inhalation toxicity test using rats, ataxia, hunched posture, lethargy, decreased respiratory rate and laboured respiration are observed. (OECD Guideline 401, GLP) (OECD Guideline 403, GLP)
- Trade secret 3 : In the acute oral toxicity test using rats, hypoactivity, ataxia and loss of the righting reflex were observed. (OECD Guideline 401, GLP)
In the acute dermal toxicity test using rabbits, adverse effects were not observed, respectively. (GLP)
In the acute inhalation toxicity test using rats, adverse effects were not observed, respectively. (OECD Guideline 403, GLP)

- Lithium Nickel Cobalt Aluminium oxide : In the repeated oral toxicity test with rats, no signs of systemic tocicity were noted during the observation period. (OECD Guideline 420, GLP)
- Trade secret 4 : In the acute oral toxcity test with rats, lethargy, hunched posture, uncoordinated movements, piloerection were observed. (OECD Guideline 423, GLP)
- Aluminium oxide : In the acute oral/inhalation toxicity test using rats, no abnormal clinical signs were recorded.(OECD Guideline 401/403, GLP)
- Carbon black : In the acute oral toxicity and acute inhalation toxicity test with rats, adverse effects were not observed, respectively. (OECD Guideline 401, GLP)(OECD Guideline 403)

Specific target organ toxicity (repeat exposure) : Not classified
- Cobalt lithium manganese nickel oxide : In surviving animals in 50 mg / ㎥ (3 weeks recovery group), the minimum degradation / regeneration in lung was observed. NAOEC (no adverse effect observation) was not decided.(Rat, 6 hr/day, 2 times exposure, 28 days observation, 2, 10, 50mg / m3, inhalation test, short term - lung toxicity test)
- 1-methyl-2-pyrrolidone : In the repeated oral toxicity test in 90 days with rats, a specific target organ for compound-related adverse systemic toxicity was not identified. (OECD Guideline 408, GLP)
- Graphite : In the repeated oral toxicity test with rats, no signs of discomfort or toxicity effects. (OECD Guideline 422, GLP) In the repeated inhalation toxicity test with rats, in the Graphite high-dose group, clearly adverse effects such as markedly increased incidence of interstitial fibrosis, were seen in the lung. (OECD Guideline 412, GLP)
- Aluminium : "In the repeated oral toxicity toxicity tests using rats, toxicity to organs was not observed. (Read-across)(OECD Guideline 422, GLP) In the repeated inhalation toxicity toxicity tests using rats, toxicity to organs was not observed. (OECD Guideline 413)"
- Copper : In the repeated oral toxicity and inhalation toxicity test using rats, toxicity to organs was not observed. (EU Method B.26, GLP)(OECD Guideline 412, GLP)
- Trade secret 1 : In the repeated oral toxicity tests using rats, toxicity to organs was not observed. (OECD Guideline 452)
- Trade secret 2 : In the repeated oral toxicity test using rats, toxicity to organs was not observed. OECD Guideline 407, GLP)
- Trade secret 3 : In the repeated oral toxicity tests using rats, toxicity to organs was not observed. (OECD Guideline 408, GLP)
- Lithium Nickel Cobalt Aluminium oxide : In the repeated oral toxicity test with rats, microscopic changes in the spleen and kidneys seen for animals of either sex at 500 and 150 mg/kg/day and males only at 50 mg/kg/day. The changes identified in the kidneys of male rats are specific for male rats only and are considered not to represent “serious damage” to health. (OECD Guideline 422, GLP)
- Aluminium oxide : In the repeated oral toxicity test using rats, no toxicologically significant effects were noted. (OECD Guideline 422, GLP)(Read across: Aluminium chloride basic)

In the repeated inhalation toxicity test using rats, Intratracheal injection of aluminium powder caused nodular pulmonary fibrosis in the lungs of the rats only at the highest dose administered (100 mg). but Progressive fibrosis was not observed in rats on

inhalation exposure to the powders indicating that the intratracheal instillation mode of test compound delivery may lead to artifacts not representative of actual inhalation exposures. (OECD Guideline 413)

- Carbon black : In the sub-chronic inhalation toxicity test using rats, there was clear evidence of inflammation and some alveolar epithelial cell hyperplasia and fibrosis at the high exposure group. In the mid-exposure group there was evidence of inflammation characterised by accumulation of neutrophils and macrophages within the alveolar spaces.

Aspiration Hazard : Not available

12. Ecological information

※ This is a product that fulfills a certain function in solid state with specific shape without discharging any chemical substance in its use and has no obligation to write (M)SDS. Since this document contains the pre cautions for safe handling related to its materials or chemical substances consisting of this product, please note that these overall information is irrelevant to this product.

A. Ecological toxicity

- Acute toxicity : Not classified (L(E)C_{50} = 0.33 mg/L)

Fish :

- 1-methyl-2-pyrrolidone : 96hr-LC_{50}(*Oncorhynchus mykiss*) > 500 mg/L (OBBA-bulletin No. 33, 1975)
- Graphite : 96hr-LC_{50}(*Danio rerio*) > 100 mg/L (OECD Guideline 203, GLP)
- Aluminium : 96hr-LC_{50}(*Pimephales promelas*) = 1.16 mg/L (GLP)
- Copper : 96hr-LC_{50}(*Oncorhynchus mykiss*) = 0.164 mg/L
- Trade secret 1 : 96hr-LC_{50}(*Oncorhynchus mykiss*) > 100 mg/L (OECD Guideline 203, GLP)
- Trade secret 2 : 96hr-LC_{50}(*Oncorhynchus mykiss*) > 100 mg/L (OECD Guideline 203, GLP)
- Trade secret 3 : 96hr-LC_{50}(*Danio rerio*) ≥ 100 mg/L (OECD Guideline 203, GLP)
- Trade secret 4 : 96hr-LC_{50}(*Oncorhynchus mykiss*) = 51 mg/L
- Aluminium oxide : 96hr-LC_{50}(*Pimephales promelas*) = 1.16 mg/L (Read across : aluminum chloride hexahydrate)(PA/600/4-85/013, GLP)
- Carbon black : 96hr-LC0(*Danio rerio*) = 1000 mg/L (OECD Guideline 203, GLP)

crustacean :

- 1-methyl-2-pyrrolidone : 24hr-EC_{50}(*Daphnia magna*) > 1000 mg/L (DIN 38412 Part 11)
- Graphite : 48hr-EC_{50}(*Daphnia magna*) > 100 mg/L (OECD Guideline 202, GLP)
- Aluminium : 48hr-LC_{50}(*Ceriodaphnia dubia*) = 0.72 mg/L (GLP)
- Copper : 48hr-LC_{50}(*Ceriodaphnia dubia*) = 0.014 mg/L
- Trade secret 1 : 48hr-EC_{50}(*Ceriodaphnia dubia*) = 5,900 mg/L
- Trade secret 2 : 48hr-EC_{50}(*Daphnia magna*) > 100 mg/L (OECD Guideline 202, GLP)
- Trade secret 3 : 48hr-EC_{50}(*Daphnia magna*) > 100 mg/L (OECD Guideline 202, GLP)
- Trade secret 4 : 48hr-LC_{50}(*Daphnia magna*) > 100 mg/L (OECD Guideline 202, GLP)
- Aluminium oxide : 48hr-LC_{50}(*Ceriodaphnia dubia*) = 0.72 mg/L (Read across : aluminum chloride hexahydrate)(EPA/600/4-85/013, GLP)
- Carbon black : 24hr-EC_{50}(*Daphnia magna*) > 5600 mg/L (OECD Guideline 202, GLP)

Algae :

- 1-methyl-2-pyrrolidone : 72hr-EC_{50}(*Desmodesmus subspicatus*) = 600.5 mg/L (DIN 38412 Part9)
- Graphite : 72hr-EC_{50}(*Pseudokirchneriella subcapitata*) > 100 mg/L (OECD Guideline 201, GLP)
- Aluminium : 72hr-EC_{50}(*Pseudokirchneriella subcapitata*) = 0.2 mg/L (OECD Guideline 201, GLP)
- Copper : 96hr-EC_{50}(*Chlamydomonas reinhardtii*) = 0.047 mg/L
- Trade secret 1 : 72hr-EC_{50}(*Pseudokirchneriella subcapitata*) > 100 mg/L (OECD Guideline 201,GLP)
- Trade secret 2 : 72hr-EC_{50}(*Desmodesmus subspicatus*) > 62 mg/L (OECD Guideline 201, GLP)
- Trade secret 3 : 72hr-EC_{50}(*Pseudokirchneriella subcapitata*) > 100 mg/L (OECD Guideline 201, GLP)
- Trade secret 4 : 96hr-EC_{50}(*Pseudokirchneriella subcapitata*) > 100 mg/L (OECD Guideline 201, GLP)
- Aluminium oxide : 72hr-EC_{50}(*Selenastrum capricornutum*) = 1.05 mg/L (Read across : Aluminium powder)(OECD Guideline 201, GLP)
- Carbon black : 72hr-EC_{50}(*Desmodesmus subspicatus*) > 10000 mg/L (OECD Guideline 201, GLP)

- Chronic toxicity : Not classified

Fish :

- Aluminium : 33day-NOEC(*Danio rerio*) = 0.0715 mg/L (OECD Guideline 210, GLP)
- Copper : 30day-NOEC(*Perca fluviatilis*) = 0.188 mg/L (OECD Guideline 204)
- Trade secret 4 : 22day-NOEC(*Pimephales promelas*) = 0.2 mg/L (EPA 540/86, GLP)
- Aluminium oxide : 33day-NOEC(*Brachydanio rerio*) = 0.0715 mg/L (OECD Guideline 210, GLP)(Read across : reagent grade aluminum nitrate nonahydrate)

crustacean :

- 1-methyl-2-pyrrolidone : 21day-NOEC = 12.5 mg/L (OECD Guideline 211, GLP)
- Aluminium : 28day-NOEC(*Hyalella azteca*) = 0.0531 mg/L (GLP)
- Copper : 14day-NOEC(*Penaeus mergulensis and Penaeus monodon (prawns*) = 0.033 mg/L
- Trade secret 3 : 21day-NOEC(*Daphnia magna*) = 25 mg/L (OECD Guideline 211, GLP)
- Trade secret 4 : 7day-NOEC(*Ceriodaphnia dubia*) = 2.55 mg/L (EPA/600/4-91/002)
- Aluminium oxide : 17day-NOEC(*Aeolosoma sp.*) = 0.9625 mg/L (GLP)(Read across: Aluminum nitrate nonahydrate)

Algae :

- 1-methyl-2-pyrrolidone : 72hr-EC_{50}(*Desmodesmus subspicatus*) = 672.8 mg/L (DIN 38412 Part9)
- Graphite : 72hr-NOEC(*Pseudokirchneriella subcapitata*) ≥ 100 mg/L (OECD Guideline 201, GLP)
- Copper : 19day-NOEC(*Macrocystis pyrifera*) = 0.0102 mg/L
- Trade secret 1 : 72hr-NOEC(*Pseudokirchneriella subcapitata*) = 100 mg/L (OECD Guideline 201,GLP)
- Trade secret 2 : 72hr-NOEC(*Desmodesmus subspicatus*) = 62 mg/L (OECD Guideline 201, GLP)

- Trade secret 4 : 96hr-NOEC(*Pseudokirchneriella subcapitata*) = 22 mg/L (OECD Guideline 201, GLP)
- Aluminium oxide : 72hr-NOEC(*Selenastrum capricornutum*) = 0.28 mg/L (Read across : Aluminium powder)(OECD Guideline 201, GLP)
- Carbon black : 72hr-NOEC(*Desmodesmus subspicatus*) > 10000 mg/L (OECD Guideline 201, GLP)

B. Persistence and degradability

Persistence :

- 1-methyl-2-pyrrolidone : Low persistency (log K_{ow} is less than 4 estimated.) (log K_{ow} = -0.46)
- Trade secret 1 : Low persistency (log K_{ow} is less than 4 estimated.) (log K_{ow} = 0.11) (20 °C, 5.33 < pH < 5.79)
- Trade secret 2 : Low persistency (log K_{ow} is less than 4 estimated.) (log K_{ow} = 0.972) (40 °C, EU Method A.8, GLP)
- Trade secret 3 : Low persistency (log K_{ow} is less than 4 estimated.) (log K_{ow} = 0.354) (20°C, 6.5 < pH < 7.5)
- Trade secret 4 : Hydrolysis readily in contact with water. According to this it was not possible to determine the partition coefficient. (OECD Guideline 107, GLP)

Degradability :

- Cobalt lithium manganese nickel oxide : Because it is an inorganic substance, it is not decomposed.

C. Bioaccumulative potential

Bioaccumulation :

- 1-methyl-2-pyrrolidone : Bioaccumulation is expected to be low according to the BCF < 500 (BCF = 3.162) (estimated)
- Trade secret 3 : Bioaccumulation is expected to be low according to the BCF < 500 (BCF < 3.2)
- Trade secret 4 : Bioaccumulation is expected to be low according to the BCF < 500 (BCF = 53~58)

Biodegradation :

- 1-methyl-2-pyrrolidone : As well-biodegraded, it is expected to have low accumulation potential in living organisms(73% biodegradation was observed after 28 days) (OECD Guideline 301C)
- Trade secret 1 : As well-biodegraded, it is expected to have low accumulation potential in living organisms(86% biodegradation was observed after 29 days) (OECD Guideline 301B)
- Trade secret 2 : As well-biodegraded, it is expected to have low accumulation potential in living organisms(98% biodegradation was observed after 28 days) (GLP)
- Trade secret 3 : As well-biodegraded, it is expected to have low accumulation potential in living organisms(86% biodegradation was observed after 28 days) (OECD Guideline 301C)

D. Mobility in soil :

- 1-methyl-2-pyrrolidone : No potency of mobility to soil. (K_{oc} = 4.65) (estimated)
- Trade secret 1 : No potency of mobility to soil. (K_{oc} = 11.9)
- Trade secret 2 : No potency of mobility to soil. (K_{oc} = 1.58) (OECD Guideline 121, GLP)

- Trade secret 3 : No potency of mobility to soil. (K_{oc} = 2.9 ~ 6.65) (25 °C)

E. Other hazardous effect : Not available

F. Hazardous to the ozone layer : Not applicable

13. Disposal considerations

A. Disposal method :

- Waste must be disposed of in accordance with federal, state and local environmental control regulations.

B. Disposal precaution :

- Consider the required attentions in accordance with waste treatment management regulation.

14. Transport information

※ If those lithium-ion batteries are packed with or contained in an equipment, then it is the responsibility of the shipper to ensure that the consignment are packed in compliance to the latest edition of the IATA Dangerous Goods Regulations section II of either Packing Instruction 966 or 967 in order for that consignment to be declared as NOT RESTRICTED (non-hazardous/non-Dangerous). If those lithium-ion batteries are packed with or contained in an equipment, UN No. is UN3481.

A. UN Number : 3480

B. UN Proper shipping name : LITHIUM ION BATTERIES (including lithium ion polymer batteries)

C. Transport Hazard class : 9

D. Packing group : II

E. Special provisions : 188

F. Packing instructions : P903

G. Environmental hazards : No

H. Special precautions

in case of fire : F-A

in case of leakage : S-I

I. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code : Not Available

J. IATA Transport : PI 965-Section IB

K. Package labels :

15. Regulatory information

A. U.S.A management information (OSHA Regulation) :

U.S.A Inventory (TSCA)

- Cobalt lithium manganese nickel oxide : Present [PMN; S; 5E] (ACTIVE)
- 1-methyl-2-pyrrolidone : Present [R] (ACTIVE)
- Graphite : Present (ACTIVE)
- Aluminium : Present (ACTIVE)
- Copper : Present (ACTIVE)
- Trade secret 1 : Present (ACTIVE)
- Trade secret 2 : Present (ACTIVE)
- Trade secret 3 : Present (ACTIVE)
- Lithium Nickel Cobalt Aluminium oxide : Present [PMN] (ACTIVE)
- Trade secret 4 : Present [PMN] (ACTIVE)
- Aluminium oxide : Present (ACTIVE)
- Carbon black : Present (ACTIVE)

U.S.A management information (CERCLA Regulation) :

- Copper : 5000lb

U.S.A management information (EPCRA 302 Regulation) : Not regulated

U.S.A management information (EPCRA 304 Regulation) : Not regulated

U.S.A management information (EPCRA 313 Regulation) :

- Cobalt lithium manganese nickel oxide : Regulated (Nickel, Cobalt, Manganese compounds)
- 1-methyl-2-pyrrolidone : Regulated
- Aluminium : Regulated (fume or dust)
- Copper : Regulated
- Lithium Nickel Cobalt Aluminium oxide : Regulated (Nickel Compounds, Cobalt Compounds)
- Aluminium oxide : Regulated (fibrous forms)

Substance of Rotterdam Convention : Not regulated

Substance of Stockholm Convention : Not regulated

Substance of Montreal Protocol : Not regulated

16. Other information

A. Information source and references :

UN Recommendations on the transport of dangerous goods 17th
Emergency Response Guidebook 2008;
http://phmsa.dot.gov/staticfiles/PHMSA/DownloadableFiles/Files/erg2008_eng.pdf
EU CLP; https://echa.europa.eu/information-on-chemicals/cl-inventory-database
REACH information on registered substances; https://echa.europa.eu/information-on-chemicals/registered-substances
U.S. National library of Medicine (NLM) Hazardous Substances Data Bank(HSDB);
http://toxnet.nlm.nih.gov/cgi-bin/sis/htmlgen?HSDB
OECD SIDS; http://webnet.oecd.org/hpv/ui/Search.aspx
ECOTOX; http://cfpub.epa.gov/ecotox/
EPISUITE v4.11; https://www.epa.gov/tsca-screening-tools/download-epi-suitetm-estimation-program-interface-v411
Chemicalbook; http://www.chemicalbook.com/ProductIndex_EN.aspx

LookChem; http://www.lookchem.com/
Chemblink;http://www.chemblink.com/
SIGMA-ALDRICH; http://www.sigmaaldrich.com/united-states.html
Chemspider; http://www.chemspider.com/
IARC Monographs on the Evaluation of Carcinogenic Risks to Humans;
http://monographs.iarc.fr
National Toxicology Program; http://ntp.niehs.nih.gov/results/dbsearch/
TOMES-LOLI®; http://www.rightanswerknowledge.com/loginRA.asp
American Conference of Governmental Industrial Hygienists TLVs and BEIs.
NIOSH Pocket Guide; http://www.cdc.gov/niosh/npg/npgdcas.html

B. Issuing date : 12. JUNE, 2019

C. Revision number and date

revision number : Rev.(00)

date of the latest revision : 12. JUNE, 2019

D. Others :

• The content is based on the latest information and knowledge that we currently possess.

• This SDS was authored to aid buyer, processor or any other third person who handles the chemical of subject in the SDS; additionally, it does not warrant suitability of the chemical for special purposes or the commercial use of statements that approves the use of it in combination with other chemicals as well as technical or legal liabilities.

• The content of the SDS may vary depending on the country or the region and may not coincide with the actual regulations. Therefore, the buyer or the processor of the chemical is responsible for observing responsible government's or the region's regulations.

MATERIAL SAFETY DATA SHEET

1. IDENTIFICATION

Envirotemp® FR3® fluid

Envirotemp FR3 fluid is a dielectric fluid intended for use as an insulation and cooling medium in electrical apparatus such as electrical distribution and power transformers.

Cooper Power Systems
1900 East North Street
Waukesha, Wisconsin 53188-3899 USA

Telephone: +01 262 524 3300
Internet: www.cooperpower.com

Emergency telephone (Chemtrec)
Inside USA: 800 424 9300
Outside USA: +01 703 527 3887

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2. COMPOSITION/INFORMATION ON INGREDIENTS

Envirotemp FR3 fluid is a proprietary formulation using food-grade vegetable oils combined with performance-enhancing additives. All components are listed in the EINECS inventory.

Component	Proportion (wt%)
Vegetable oil	> 98.5
Antioxidant additive	< 1.0
Cold flow additive	< 1.0
Colorant	< 1.0

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3. HAZARDS IDENTIFICATION

Envirotemp FR3 fluid is a preparation not classified as dangerous according to Directive 1999/45/EC. Not expected to cause a severe emergency hazard.

Routes of entry

Eyes: Contact may occur as a result of splash or exposure to mist conditions. May cause irritation and redness.

Skin: Typically non-irritating. In some case, a sensitization to vegetable oils may cause localized redness

Ingestion: May cause gastric irritation.

Inhalation: Exposure may occur as a result of mist exposure. May cause respiratory irritation.

Signs and symptoms of exposure: none known

Medical conditions generally aggravated by exposure: There is a very small risk for an allergic reaction to soybean oil in persons allergic to soybeans themselves.

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4. FIRST AID MEASURES

Inhalation: If inhaled, remove affected person from exposure to mists.

Eye contact: For eye contact, flush the eyes immediately with large amounts of water with the eyelids held away from the eye to ensure thorough rinsing.

Skin contact: For skin contact, remove by washing with soap and water. Get medical attention if irritation persists.

Ingestion: If swallowed, observe for signs of stomach discomfort or nausea. If symptoms persist, seek medical help. Do not induce vomiting.

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5. FIRE-FIGHTING MEASURES

Extinguishing media: CO_2 or dry chemical foam

Special fire fighting procedures: Use approved self-contained breathing apparatus with full facemask and full protective equipment in confined areas. Use water to keep fire-exposed containers cool. Water spray may be used to flush spills away from source of ignition. Application of water to flaming oil can cause spreading.

Unusual fire and explosion hazards: Slight when exposed to flame. Can react with oxidizing materials. Clay materials (Fuller's earth, oil dry products) saturated with Envirotemp FR3 fluid can, under certain conditions, undergo a slow oxidation that releases heat. If the heat so released cannot escape, it is possible that the temperature may increase and ignite combustible materials in close contact.

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6. ACCIDENTAL RELEASE MEASURES

Steps to take in case material is released or spilled: Contain and control the leaks or spills with non-combustible absorbent materials such as sand, earth, vermiculite, or diatomaceous earth in drums for waste disposal. Prevent any material from entering drains or waterways. If the product contaminates waterways, rivers or drains, alert the relevant authorities in accordance with statutory procedures.

In the USA, spills into navigable waters must be reported to the National Response Center, 800-424-8802

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7. HANDLING AND STORAGE

Precautions to take in handling and storage: Avoid extremes of temperature in storage. Store Envirotemp FR3 fluid in labeled, tightly closed containers in cool, dry, isolated and well-ventilated areas, away from sources of ignition or heat. To maintain fluid for intended use as an electrical insulating fluid, eliminate exposure to oxygen and moisture.

Intermediate bulk storage container (tote): Prolonged exposure to ultraviolet radiation (sunlight) may affect color.

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8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure limit values:

	TWA (mg/m^3)	
	OSHA[1] PEL	ACGIH[2] TLV
Vegetable oil mists	–	10
Vegetable oil mists: total dust	15	–
Vegetable oil mists: respirable fraction	5	–

Hazardous Materials Identification System (HMIS):	**Health**	**Flammability**	**Physical Hazard**
	0	1	0

Respiratory protection: Vaporization is not expected at ambient temperature. Therefore, the need for respiratory protection is not anticipated under normal use conditions and with adequate ventilation. If elevated airborne concentrations above applicable workplace exposure levels are anticipated, a NIOSH-approved organic vapor respirator equipped with a dust/mist prefilter should be used. Protection factors vary depending upon the type of respirator used. Respirators should be used in accordance with OSHA requirements (29 CFR 1910.134). For extreme cases, use of approved supplied-air respiratory protection may be necessary.

Ventilation: General mechanical ventilation can be used to control or reduce airborne concentrations of oil.

Protective gloves: Use gloves constructed of chemical resistant materials such as neoprene or heavy nitrile rubber if frequent or prolonged contact is expected. Use heat-protective gloves when handling product at elevated temperatures.

Eye protection: Wear safety glasses or goggles to prevent eye contact. Eye baths should be readily available in the area of handling Envirotemp FR3 fluid.

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[1] U.S. Occupational Health and Safety Administration

[2] American Conference of Governmental Industrial Hygienists

Other protective clothing or equipment: Wear regularly laundered coveralls or lab coat to minimize skin exposure.
Workplace hygienic practices: Wash with soap and water after contact. Avoid exposure to mists.
Environmental exposure controls: Have oil-absorbent materials easily available.

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9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance and odor: clear light-green liquid with slight vegetable oil odor **pH:** neutral
Closed cup flash point: 310 – 320°C **Autoignition temperature:** 401 – 404°C
Boiling point: >360°C **Relative density (H_2O = 1):** 0.92
Vapor pressure (mm Hg): < 0.01 @ 20°C **Pour point:** -18 to -24°C
Vapor density (air = 1): n/a **Evaporation rate (butyl acetate = 1):** nil
Solubility in water: negligible; < 0.1% **Volatile organic compounds:** < 0.001 g/L
Viscosity: 33 – 35 mm^2/s at 40°C **Miscibility:** mixes with other dielectric fluids except silicone

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10. STABILITY AND REACTIVITY

Stability: Envirotemp FR3 fluid is stable under normal conditions of use.
Incompatibility (materials to avoid): Avoid contact with strong oxidizing agents.
Hazardous decomposition products: none
Hazardous Polymerization: will not occur
Stabilizers: not required
Hazardous exothermic reaction: Slight when exposed to flame; can react with oxidizing materials. Class III B liquid. Clay materials (Fuller's earth, oil dry products) saturated with Envirotemp FR3 fluid can, under certain conditions, undergo a slow oxidation that releases heat. If the heat so released cannot escape, it is possible that the temperature may increase and ignite combustible materials in close contact.

---

11. TOXICOLOGICAL INFORMATION

Carcinogenicity: none **NTP:** no **IARC monographs:** no **OSHA regulated:** no

Envirotemp FR3 fluid base oils are "generally recognized as safe" (GRAS) by the U.S. Food and Drug Administration and allowed for human consumption as a food and as a component that is allowed in contact with human food.

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12. ECOLOGICAL INFORMATION

Acute oral toxicity (OECD 420 - rats): LD_{50} >2000 mg/kg
Acute aquatic toxicity (OECD 203 - trout): LC_{50} >1000 mg/kg; NOAEC >1000 mg/kg
Aquatic biodegradation (OPPTS 835.3110): readily biodegradable, >99%
Biological oxidation demand (5-Day SM5210B): 250 ppm
Chemical oxygen demand (SM5220D): 560 ppm **BOD/COD ratio:** 45%
Petroleum hydrocarbon content: none
Environmental physical hazard: Envirotemp FR3 fluid shares physical hazards common to all oils such as coating feathers, fur, and gills.

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13. DISPOSAL CONSIDERATIONS

Recycling: Consult with local used oil recyclers, restaurant grease recyclers, fat rendering companies, or biodiesel producers.

Hazardous Waste: Envirotemp FR3 fluid itself, when discarded or disposed of, is not a hazardous waste.

Disposal: Incinerate or landfill in accordance with local regulations. Do not pour into drains or waterways.

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14. TRANSPORT INFORMATION

Harmonized System Tariff Classification (Schedule B): 1507.90.4050

National Motor Freight Classification (NMFC): 155250

Euro Tariff: 15 07 90 00 00

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15. REGULATORY INFORMATION

Envirotemp FR3 fluid itself, when discarded or disposed of, is not listed as a hazardous waste per 40 CFR 261 and is not a used oil per 40 CFR 279. Envirotemp FR3 fluid is a preparation not classified as dangerous according to Directive 1999/45/EC.

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16. OTHER INFORMATION

Technical information available at the Cooper Power Systems website: www.cooperpower.com

This Material Safety Data Sheet has been prepared in order to help the users of Envirotemp FR3 fluid. The data contained herein is, to the best of our knowledge, accurate as of the date of preparation of this sheet.

Effective Date: September 22, 2011

Appendix C

Visual Impact Assessment

1430 Broadway, 10th Floor
New York, NY 10018

T 212.221.7822
TRCcompanies.com

March 22, 2021

Carson Weinand
CVE North America
109 West 27th Street, 8th Floor
New York, New York 10001

RE: Cortlandt Mill Solar Farm - Cortlandt Mill Westchester County, New York
Revised Visual Assessment Report

Dear Mr. Weinand:

On behalf of CVE North America (CVE), TRC Engineers, Inc. (TRC) conducted a visual assessment for the proposed solar facility off Red Mill Road Cortlandt, New York (the Project Site). TRC original Visual Assessment Report was submitted to the Planning Board in June 2020. On November 18, 2021, the Town of Cortlandt Director of Transportation provided the following comment on the Visual Impact Assessment dated June 2020:

> *"A visual assessment was not performed at 57 Cardoza Avenue, Amherst Road, 143 Red Mill Road, 155 Red Mill Road, 9 Mill Court and 10 Mill Court which are all adjacent to the proposed solar field. Effort shall be made to perform a visual assessment from these properties."*

Additionally, the layout for the Project has been updated since the original application was submitted to the Town of Cortlandt. The attached Visual Assessment Report address the visual impacts at 10 locations including the additional six requested by the Town and revisions to the Project layout. The report includes:

- A viewshed analysis for a radius of 2 miles around the Project Site;
- A graphical visual resource inventory of sensitive receptors within 2 miles of the Project Site;
- A summary of field photography from several vantage points around the Project; and
- Photo-simulations with renderings of proposed conditions.

Please contact Laura Lefebvre at 512-745-0649 or via email at llefebvre@trccompanies.com if you have any questions or require additional information.

Sincerely,

Laura Lefebvre, PE
Senior Project Manager

Steven Meersma, PE
Principal Engineer

Attachments: Visual Assessment Report

Visual Assessment Report

Cortlandt Mill Solar Farm

Cortlandt Mill
Westchester County, New York

Prepared For:

cve | North America
Changing Visions of Energy

Prepared By:

TRC
1430 Broadway, 10th Floor
New York, New York 10018

March 2021

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APPENDIX

Appendix A Visual Resource Inventory

1.0 INTRODUCTION

On behalf of CVE North America (CVE), TRC Engineers, Inc. (TRC) has prepared the following visual assessment report for the Cortland Mill Solar Farm located in Westchester County, New York (the Project). The Project will develop approximately 16.3 acres of a 43.1-acre parcel of vacant land (Project Site) into a 5.0-megawatt community solar generating facility (SGF). The Project Site is located south of Red Mill Road in the Town of Cortlandt, Westchester County, New York. The Project will consist of installation of an array photovoltaic (PV) panels, electrical equipment including energy storage system units, inverters, transformers, security fencing, and an access drive. The Project also includes landscaping plantings of evergreen and deciduous trees and shrubs along the north, south, and westerns sides of the Project to screen views of solar panels.

The following sections provide a viewshed analysis of the Project, a visual resource inventory, and field photography and visual simulations from observation points.

2.0 VIEWSHED ANALYSIS

TRC conducted a viewshed analysis within a 2-mile radius of the Project Site. A viewshed analysis is a geographic information system (GIS) analytical technique that determines locations from where Project features may be visible. The results of the viewshed analysis are combined with location information from other sensitive sites such as schools, parks, historical sites, and public gathering places to analyze potential visual impacts of the Project.

2.1 Viewshed Methodology

Environmental Systems Research Institute, Inc. (ESRI) Spatial Analyst GIS software was used to develop a viewshed for the Project. Position and typical height (x, y, and z data) representing the solar panels and other elevated components of the Project are combined with local terrain and vegetation data to create a model. Terrain and vegetation data is based on 2009 Light Detection and Ranging (LiDAR) data. The area surrounding the Project is broken up into “cells” and the software determines if there is a clear line of sight between each cell and the Project or whether terrain or vegetation would block the line of sight.

2.2 Assumptions and Limitations

The following lists the assumptions and limitations within the viewshed model:

1. Solar panels were modeled with a height of 7 feet, 9 inches above the ground and the fence was modeled with a height of 8.5 feet.

2. The model does not account for the limitations of human vision at greater distances or atmospheric conditions that may cause reduced visibility. Additionally, at increasing

distances away from Project features, they will appear smaller and less detailed and will have a reduced visual impact even if shown as visible in the model.

3. The viewshed can only indicate whether there is a possibility of viewing the Project from a vantage point. It does not specify the how much of the Project may visible. The existing trees and buildings in the area provide visual impediments for all, or the lower portion, of the facility.

4. The viewshed model assumes that any vegetation is opaque and therefore represents a leaf-on condition. During leaf-off conditions or where ground level vegetation is sparse, visibility may be possible where the model did not indicate.

5. The model was developed with the assumption that a viewer would not see the Project if standing amongst tree groups.

6. Due to the large size of the Project and many panel locations, it was not feasible to model every individual structure for the viewshed analysis, as such perimeter and high feature points were used for conducting the viewshed analysis.

2.3 Viewshed Analysis Results

Figure 1 presents the viewshed analysis resulting from the computer modeling described above. The model considers all areas within a 2-mile radius of the Project subject to the assumptions and limitations described in Section 2.2, above. Areas where the elements of the Project are potentially visible have been highlighted in red.

Due to terrain, buildings, and vegetation, the Project has limited potential visibility within the 2-mile study area. The viewshed analysis indicates an area of potential visibility in the following locations:

- Directly north of the Project Site near the end of Mill Court;
- To the northwest of the Project Site on Piano Mountain;
- To the northwest of the Project Site near Tanglewylde Road, west of Lake Peekskill; and
- On the west slope of Jones Hill between Lake Mohegan and Mohegan Highlands Park.

3.0 VISUAL RESOURCE INVENTORY

TRC researched and compiled an inventory of visual resources located within 2 miles of the Project. The list of visual resources is based on the guidance provided in the New York State Department of Environmental Conservation's (NYSDEC) policy on *Assessing and Mitigating Visual Impacts* issued in July 2000, including state parks, local parks, scenic byways, and historic sites. Figure 2 shows mapped locations of the points of interest, preliminary visual resource inventory and viewshed analysis.

In addition, the inventory also includes additional points of interests not specifically listed in the NYSDEC policy such as schools, hospitals, churches, and other places of public gathering in order to provide a more complete picture of areas where the public's view may be affected by the Project. A list of sites on the visual resource inventory is provided as Appendix A.

4.0 SITE PHOTOGRAPHY AND VISUAL SIMULATIONS

TRC conducted field surveys during leaf-on and leaf-off conditions, May 2020 and March 2021, respectively, to acquire photographs to confirm the results of the viewshed analysis and collect images for photo-simulations.

Photographs were taken from publicly accessible locations within the 2-mile study area, including five taken during leaf-on conditions in May 2020 and eight taken during leaf-off conditions in February 2021. The photograph locations are shown on Figure 3. The viewpoints analyzed include the locations recommended by the Town of Cortlandt Director of Transportation including: 57 Cardoza Avenue, Amherst Road, 143 Red Mill Road, 155 Red Mill Road, 9 Mill Court, and 10 Mill Court which are all adjacent to the proposed Project, in addition to other locations selected by CVE.

The photographs were obtained to create visual simulations of the proposed Project, including the proposed robust landscaping plan after five years. As the plantings mature, they will provide additional visual barrier with maximum opaqueness at eye-level reached in leaf-on conditions at approximately seven to ten years, depending on the species and assuming ideal growing conditions.

4.1 Methodology

TRC obtained site photographs with a Canon EOS Rebel T6 digital camera with the focal length set to 28.8 millimeters (mm). Coordinates of the camera and objects used for reference (signs, building, corners, trees, light posts, etc.) for use in the visual simulations were recorded using a sub-meter Global Positioning System (GPS) unit.

To create the visual simulations, TRC used 3DS Max software to position a 3-dimensional (3D) model of the Project into the digital images. TRC created the 3D model of the Project based on preliminary site plans for the Project including the proposed landscaping plan after five years of growth. The software uses terrain data and position data for the Project, the camera, and objects seen in the field of view to render an image showing how the Project may appear once constructed from the vantage point where a photograph was taken.

4.2 Discussion of View Point Photographs and Simulations

Below is a summary of the viewpoint photographs and results of the photo-simulations.

Photo Location 1 (leaf-on conditions, Red Mill Road)

Photo Location 1 is approximately 1,155 feet northeast of the Project on Red Mill Road and looks southeast towards the short pull in that provides access to the Project's utility meter box from Red Mill Road. Figure 4a shows existing conditions and Figure 4b depicts proposed conditions, at five years. The short pull in and trees and shrubs planted as part of the landscaping plan for the Project are visible. No other Project components are visible under the proposed conditions.

Photo Location 2 (leaf-on conditions, end of Mill Court)

Photo Location 2 is approximately 356 feet to the north of the Project, near the end of Mill Court. The photo looks south towards the access drive to the Project. Figure 5a shows existing conditions with leaves on. Figure 5b shows the proposed conditions, at five years. The access drive and trees/shrubs that will planted as part of the landscaping plan are visible under the proposed conditions, but no views of other Project components are anticipated.

Photo Location 3 (leaf-on conditions, Mountain View Road)

Photo Location 3 is approximately 509 feet to the east of the Project on Mountain View Road and looks west. The existing view from Photo Location 3 is depicted on Figure 6. Based on the viewshed analysis and ground observations, no views of the Project are anticipated from this location.

Photo Location 4 (leaf-on conditions, Amherst Road)

Photo Location 4 is located approximately 704 feet to the southeast of the Project in a residential neighborhood on Amherst Road. The existing leaf on view from Photo Location 4 is shown on Figure 7a and proposed conditions are depicted in Figure 7b, at five years. Under the proposed conditions, there is an area of decreased tree density under the proposed conditions, but no Project components are visible.

Photo Location 5 (leaf-on conditions, Lexington Avenue)

Photo Location 5 is located approximately 455 feet to the south of the Project on Lexington Avenue from a vantage point slightly elevated above the Project Site. The existing conditions for Photo Location 5 are shown on Figure 8. Based on viewshed analysis and observations in the field, no views of the Project are anticipated from this vantage point.

Photo Location 6 (leaf-off conditions, Red Mill Road)

Photo Location 6 is located in a residential neighborhood approximately 705 feet to the north of the Project on Red Mill Road during leaf-off conditions. Figure 9 depicts the existing conditions at Photo Location 6. Based on the viewshed analysis and field observations, no views of the Project are anticipated from this vantage point.

Photo Location 7 (leaf-off conditions, end of Mill Court)

Photo Location 7 is located approximately 305 feet to the north of the Project, near the end of Mill Court. Figure 10a shows existing, leaf-off conditions and Figure 10b depicts proposed conditions, at five years. Views of the fence line and some panels are possible during leaf-off conditions from this location.

Photo Location 8 (leaf-off conditions, end of Mill Court)

Photo Location 8 is approximately 356 feet to the north of the Project, near the end of Mill Court. The photograph faces south and was taken during leaf-off conditions. Figure 11a shows existing conditions for Photo Location 8 and Figure 11b depicts proposed conditions, at five years. The fence and some solar panels are visible during these leaf-off conditions.

Photo Location 9 (leaf-off conditions, Red Mill Road)

Photo Location 6 is located on Red Mill Road approximately 871 feet to the north of the Project during leaf-off conditions. Figure 12 depicts the existing conditions at Photo Location 9. Based on the viewshed analysis and field observations, no views of the Project are anticipated from this vantage point.

Photo Location 10 (leaf-off conditions, Cordoza Avenue)

Photo Location 10 is located on Cordoza Avenue approximately 513 feet to the south of the Project during leaf-off conditions. Figure 13a shows existing conditions and Figure 13b shows proposed conditions, at five years. The fence line and trees planted as part of the landscaping plan are visible. Some of the solar panels may be visible through the fence during leaf-off conditions.

Photo Location 11 (leaf-off conditions, Amherst Road

Photo Location 11 is located approximately 81 feet southeast of the Project Site on Amherst Road. Figure 14a shows existing, leaf-off conditions and Figure 14b shows proposed conditions, at five years. The fence and solar panels are potentially visible during leaf-off conditions.

Photo Location 12 (leaf-off conditions, Red Mill Road)

Photo Location 12 is located on Red Mill Road approximately 95 feet north of the western end of the Project, looking south. Figure 15a shows existing, leaf-off conditions and Figure 15b shows proposed conditions, at five years. The fence, landscape plantings, and the back side of some solar panels are partially visible during leaf-off conditions.

Photo Location 13 (leaf-off conditions, Red Mill Road)

Photo Location 13 is on Red Mill Road approximately 190 feet to the west of the Project looking east. Figure 16a shows the existing, leaf-off conditions and Figure 16b depicts proposed

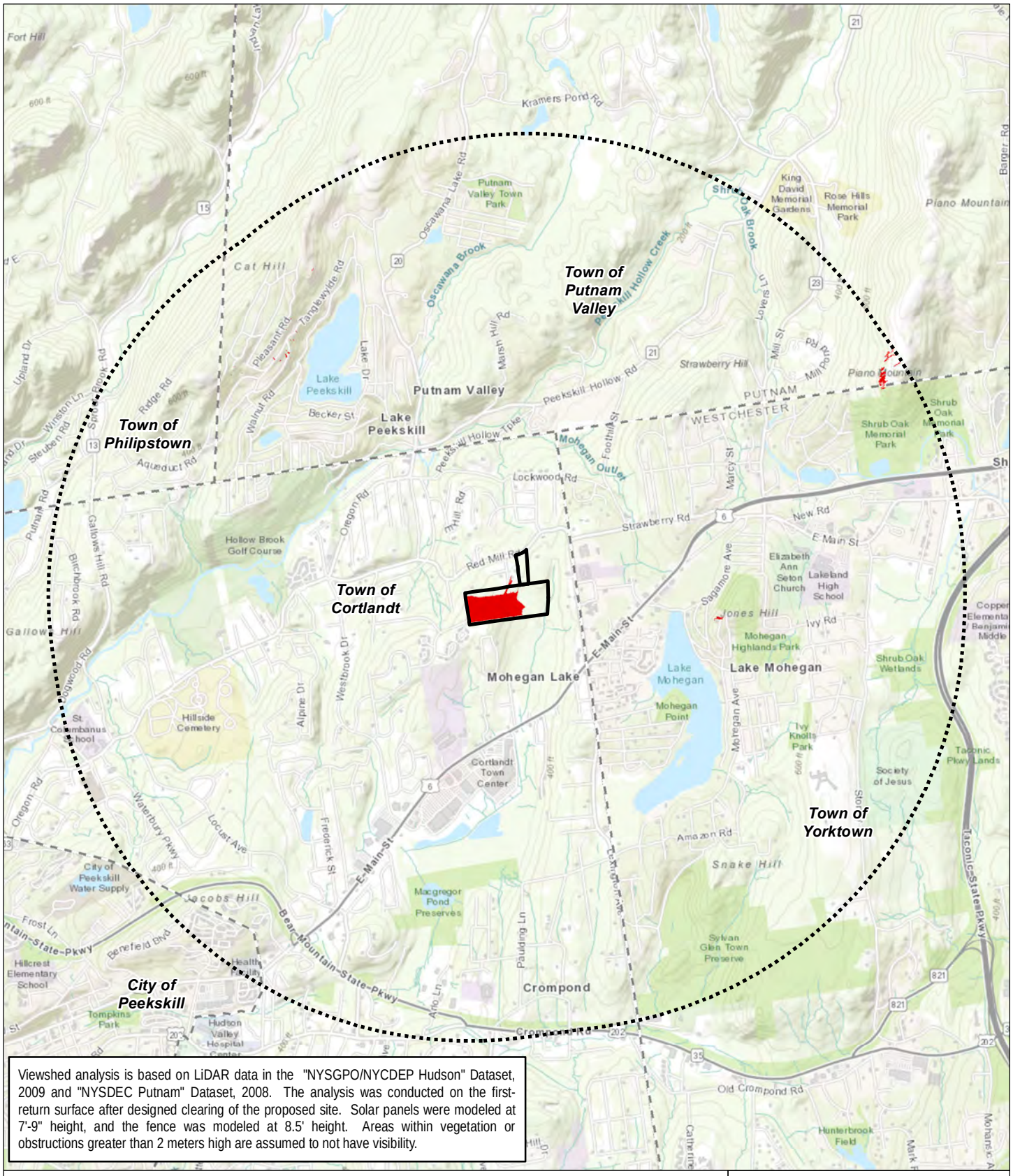
conditions, at five years. The fence, landscape plantings, and the back side of some solar panels are partially visible during leaf-off conditions.

5.0 CONCLUSIONS

Based on a viewshed analysis, photo-simulations, and field reconnaissance:

- Due to terrain, buildings, and vegetation the Project has limited potential visibility within the 2-mile study area.
- In general, the Project will have limited visibility along public roads and surrounding residential areas under leaf-on conditions.
- During leaf-of conditions, there may be limited views of Project from viewpoints adjacent to the Project, but the proposed landscaping will soften and mitigate views of the Project's components. As the plantings mature, they will provide additional visual barrier with maximum opaqueness at eye-level reached in leaf-on conditions at approximately seven to ten years, depending on the species.
- Based on viewshed analysis and field observations, no views of the Project are anticipated for Photo Locations 3, 5, 6, and 9.
- A decrease in tree density is visible in the proposed conditions in Photo Location 4.
- Proposed views from Photo Locations 1 and 2 will include views of access drive and plantings proposed in the landscaping plan.
- There are potential views of the fence, landscaping plantings, and panels during leaf-off conditions from Photo Locations 7, 8, 10, 11, 12, and 13.

Figures



Viewshed analysis is based on LiDAR data in the "NYSGPO/NYCDEP Hudson" Dataset, 2009 and "NYSDEC Putnam" Dataset, 2008. The analysis was conducted on the first-return surface after designed clearing of the proposed site. Solar panels were modeled at 7'-9" height, and the fence was modeled at 8.5' height. Areas within vegetation or obstructions greater than 2 meters high are assumed to not have visibility.

LEGEND

- Project Parcel
- Preliminary 2 Mile Visual Study Area

VIEWSHED ANALYSIS RESULTS

- LIKELY NOT VISIBLE
- POTENTIALLY VISIBLE

N

0 0.5 1 Miles

Data: NYS GIS Program Office, GNIS
Base Map: ESRI World Topography Map

TRC Engineers, Inc.
1430 Broadway, 10th Floor
New York, New York 10018

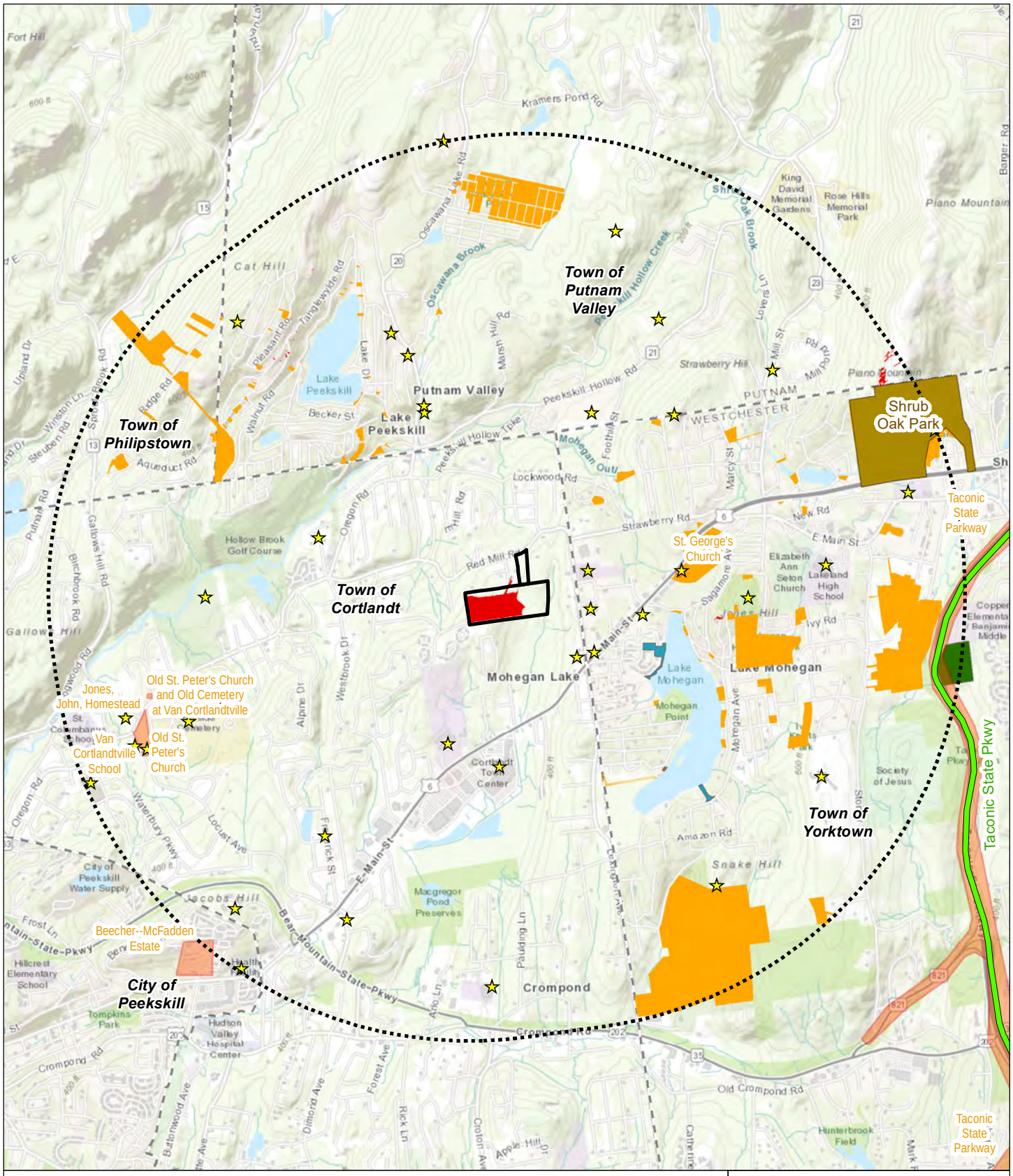
VIEWSHED ANALYSIS

CORTLANDT MILL SOLAR

TOWN OF CORTLANDT, NY

FIGURE 1	MARCH 2021

S:\1-PROJECTS\CVE_NA\360551_Mill_Court_Cortland\9-VISUAL\Figure 1_Preliminary_VS_Map_2021-03-01.mxd



LEGEND

- Project Parcel
- Preliminary 2 Mile Visual Study Area
- Mapped Point of Interest
- Scenic Byways
- National Register of Historic Places
- Parks

Data: NYS GIS Program Office, GNIS
Base Map: ESRI World Topography Map

NY PAD

- Local
- NGO
- Private
- State

VIEWSHED ANALYSIS RESULTS

- LIKELY NOT VISIBLE
- POTENTIALLY VISIBLE

N

0 0.5 1 Miles

TRC Engineers, Inc.
1430 Broadway, 10th Floor
New York, New York 10018

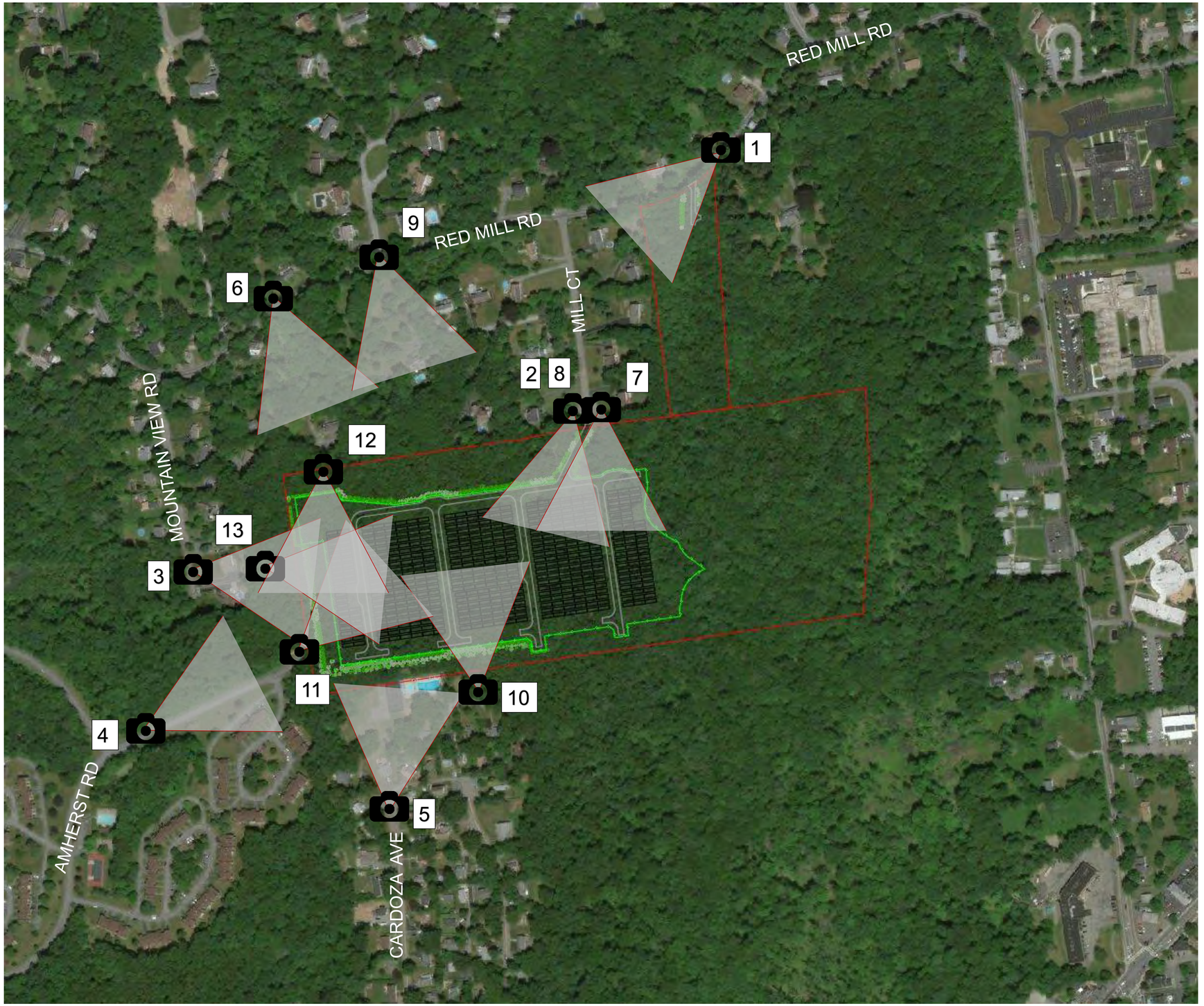
PRELIMINARY VISUAL RESOURCE INVENTORY AND VIEWSHED ANALYSIS

CORTLANDT MILL SOLAR

TOWN OF CORTLANDT, NY

FIGURE 2	MARCH 2021

S:\1-PROJECTS\CVE_NA\360551_Mill_Court_Cortland\9-VISUAL\Figure 2_Preliminary_VRI_VS_Map_2021-03-01.mxd



LEGEND

1 — PHOTO LOCATION AND NUMBER

DIRECTION OF PHOTO

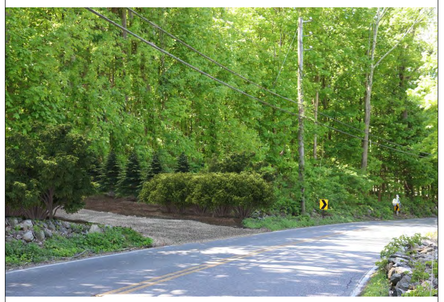
N
W E
S

CVE NORTH AMERICA
CORTLANDT MILL SOLAR FARM
VISUAL SIMULATION
MARCH 2021

FIGURE 3. PHOTO LOCATION MAP

VIEWPOINT LOCATION MAP

PROPOSED CONDITIONS



TECHNICAL INFORMATION

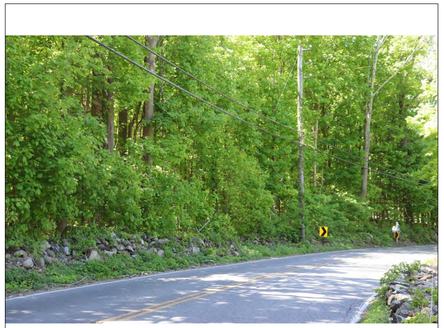
Viewpoint Coordinates in	666571 E
NY East State Plane Feet	908736 N
Viewpoint Location	Red Mill Rd
Viewer Eye Elevation	373 ft msl
Distance to Project	1155 feet
Camera Model	Canon EOS Rebel T7i
Lens Setting	48 mm
Date/Time	5-21-2020/11:34 am

CVE NORTH AMERICA
CORTLANDT MILL SOLAR FARM
VISUAL SIMULATION
MARCH 2021

FIGURE 4a: PHOTO LOCATION 1: EXISTING CONDITIONS

VIEWPOINT LOCATION MAP

EXISTING CONDITIONS



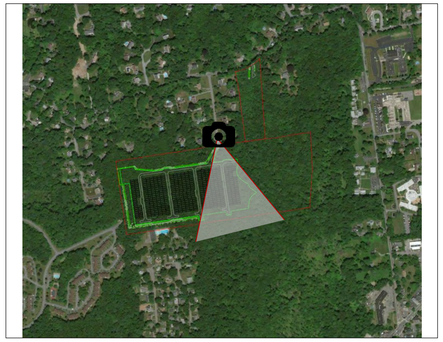
TECHNICAL INFORMATION

Viewpoint Coordinates in	666571 E
NY East State Plane Feet	908736 N
Viewpoint Location	Red Mill Rd
Viewer Eye Elevation	373 ft msl
Distance to Project	1155 feet
Camera Model	Canon EOS Rebel T7i
Lens Setting	48 mm
Date/Time	5-21-2020/11:34 am

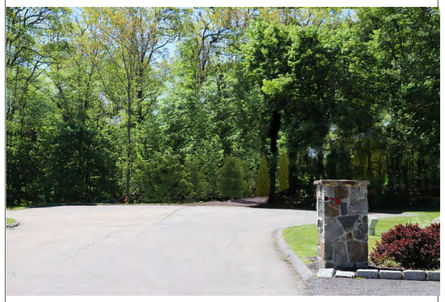
CVE NORTH AMERICA
CORTLANDT MILL SOLAR FARM
VISUAL SIMULATION
MARCH 2021

FIGURE 4b: PHOTO LOCATION 1: PROPOSED CONDITIONS AT 5 YEARS

VIEWPOINT LOCATION MAP



PROPOSED CONDITIONS



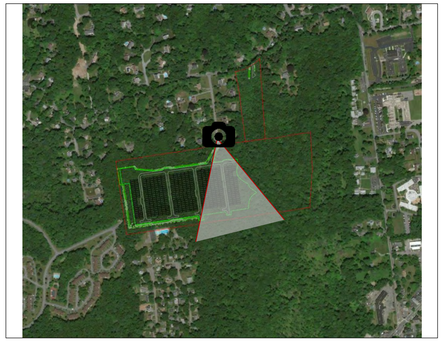
TECHNICAL INFORMATION

Viewpoint Coordinates in	666114 E
NY East State Plane Feet	907924 N
Viewpoint Location	Mill Ct
Viewer Eye Elevation	417 ft msl
Distance to Project	356 feet
Camera Model	Canon EOS Rebel T7i
Lens Setting	48 mm
Date/Time	5-21-2020/11:11 am

CVE NORTH AMERICA
CORTLANDT MILL SOLAR FARM
VISUAL SIMULATION
MARCH 2021

FIGURE 5a: PHOTO LOCATION 2: EXISTING CONDITIONS

VIEWPOINT LOCATION MAP



EXISTING CONDITIONS

TECHNICAL INFORMATION

Viewpoint Coordinates in	666114 E
NY East State Plane Feet	907924 N
Viewpoint Location	Mill Ct
Viewer Eye Elevation	417 ft msl
Distance to Project	356 feet
Camera Model	Canon EOS Rebel T7i
Lens Setting	48 mm
Date/Time	5-21-2020/11:11 am

CVE NORTH AMERICA
CORTLANDT MILL SOLAR FARM
VISUAL SIMULATION
MARCH 2021

FIGURE 5b: PHOTO LOCATION 2: PROPOSED CONDITIONS AT 5 YEARS

VIEWPOINT LOCATION MAP

UNDER PROPOSED CONDITIONS, PROJECT NOT LIKELY VISIBLE FROM THIS LOCATION BASED ON VIEWSHED ANALYSIS AND GROUND OBSERVATIONS

TECHNICAL INFORMATION

Viewpoint Coordinates in	664668 E
NY East State Plane Feet	907278 N
Viewpoint Location	Mountain View Rd
Viewer Eye Elevation	350 ft msl
Distance to Project	509 feet
Camera Model	Canon EOS Rebel T7i
Lens Setting	48 mm
Date/Time	5-21-2020/1:31 pm

CVE NORTH AMERICA
CORTLANDT MILL SOLAR FARM
VISUAL SIMULATION
MARCH 2021

FIGURE 6: PHOTO LOCATION 3: EXISTING CONDITIONS

VIEWPOINT LOCATION MAP

PROPOSED CONDITIONS

TECHNICAL INFORMATION

Viewpoint Coordinates in	664598 E
NY East State Plane Feet	906674 N
Viewpoint Location	Amherst Rd
Viewer Eye Elevation	412 ft msl
Distance to Project	704 feet
Camera Model	Canon EOS Rebel T7i
Lens Setting	48 mm
Date/Time	5-21-2020/1:14 pm

CVE NORTH AMERICA
CORTLANDT MILL SOLAR FARM
VISUAL SIMULATION
MARCH 2021

FIGURE 7a: PHOTO LOCATION 4: EXISTING CONDITIONS

VIEWPOINT LOCATION MAP

EXISTING CONDITIONS

TECHNICAL INFORMATION

Viewpoint Coordinates in	664598 E
NY East State Plane Feet	906674 N
Viewpoint Location	Amherst Rd
Viewer Eye Elevation	412 ft msl
Distance to Project	704 feet
Camera Model	Canon EOS Rebel T7i
Lens Setting	48 mm
Date/Time	5-21-2020/1:14 pm

CVE NORTH AMERICA
CORTLANDT MILL SOLAR FARM
VISUAL SIMULATION
MARCH 2021

FIGURE 7b: PHOTO LOCATION 4: PROPOSED CONDITIONS AT 5 YEARS

VIEWPOINT LOCATION MAP

UNDER PROPOSED CONDITIONS, PROJECT NOT LIKELY VISIBLE FROM THIS LOCATION BASED ON VIEWSHED ANALYSIS AND GROUND OBSERVATIONS

TECHNICAL INFORMATION

Viewpoint Coordinates in	665405 E
NY East State Plane Feet	906397 N
Viewpoint Location	Cardonza Ave
Viewer Eye Elevation	598 ft msl
Distance to Project	455 feet
Camera Model	Canon EOS Rebel T7i
Lens Setting	48 mm
Date/Time	5-21-2020/1:52 pm

CVE NORTH AMERICA
CORTLANDT MILL SOLAR FARM
VISUAL SIMULATION
MARCH 2021

FIGURE 8: PHOTO LOCATION 5: EXISTING CONDITIONS

UNDER PROPOSED CONDITIONS, PROJECT NOT LIKELY VISIBLE FROM THIS LOCATION BASED ON VIEWSHED ANALYSIS AND GROUND OBSERVATIONS

VIEWPOINT LOCATION MAP

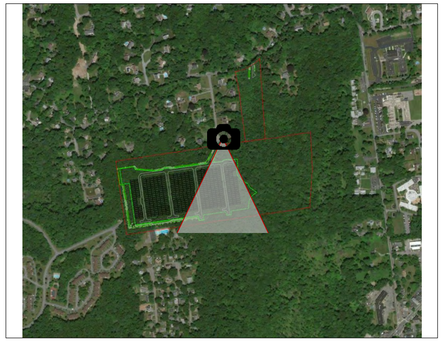
TECHNICAL INFORMATION

Viewpoint Coordinates in	664983 E
NY East State Plane Feet	908182 N
Viewpoint Location	Red Mill Rd
Viewer Eye Elevation	325 ft msl
Distance to Project	705 ft
Camera Model	Canon EOS Rebel T7i
Lens Setting	50 mm
Date/Time	2-17-2021/2:52 pm

CVE NORTH AMERICA
CORTLANDT MILL SOLAR FARM
VISUAL SIMULATION
MARCH 2021

FIGURE 9. PHOTO LOCATION 6: EXISTING CONDITIONS

VIEWPOINT LOCATION MAP



PROPOSED CONDITIONS

TECHNICAL INFORMATION

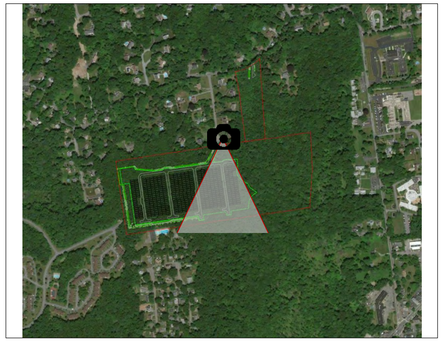
Viewpoint Coordinates in	666199 E
NY East State Plane Feet	907904 N
Viewpoint Location	Mill Ct
Viewer Eye Elevation	414 ft msl
Distance to Project	305 ft
Camera Model	Canon EOS Rebel T7i
Lens Setting	50 mm
Date/Time	2-17-2021/1:29 pm

CVE NORTH AMERICA
CORTLANDT MILL SOLAR FARM
VISUAL SIMULATION
MARCH 2021

FIGURE 10a. PHOTO LOCATION 7: EXISTING CONDITIONS

TRC

VIEWPOINT LOCATION MAP



EXISTING CONDITIONS

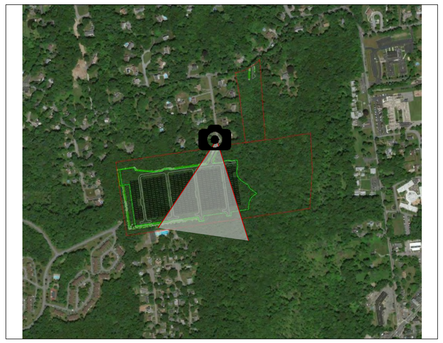
TECHNICAL INFORMATION

Viewpoint Coordinates in	666199 E
NY East State Plane Feet	907904 N
Viewpoint Location	Mill Ct
Viewer Eye Elevation	414 ft msl
Distance to Project	305 ft
Camera Model	Canon EOS Rebel T7i
Lens Setting	50 mm
Date/Time	2-17-2021/1:29 pm

CVE NORTH AMERICA
CORTLANDT MILL SOLAR FARM
VISUAL SIMULATION
MARCH 2021

FIGURE 10b. PHOTO LOCATION 7: PROPOSED CONDITIONS AT 5 YEARS

VIEWPOINT LOCATION MAP



PROPOSED CONDITIONS

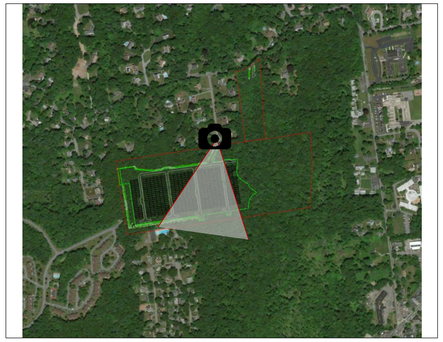
TECHNICAL INFORMATION

Viewpoint Coordinates in	666042 E
NY East State Plane Feet	907895 N
Viewpoint Location	Mill Ct
Viewer Eye Elevation	417 ft msl
Distance to Project	356 ft
Camera Model	Canon EOS Rebel T7i
Lens Setting	50 mm
Date/Time	2-17-2021/1:23 pm

CVE NORTH AMERICA
CORTLANDT MILL SOLAR FARM
VISUAL SIMULATION
MARCH 2021

FIGURE 11a. PHOTO LOCATION 8: EXISTING CONDITIONS

VIEWPOINT LOCATION MAP



EXISTING CONDITIONS

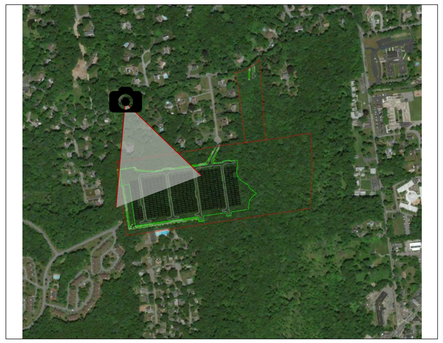
TECHNICAL INFORMATION

Viewpoint Coordinates in	666042 E
NY East State Plane Feet	907895 N
Viewpoint Location	Mill Ct
Viewer Eye Elevation	417 ft msl
Distance to Project	356 ft
Camera Model	Canon EOS Rebel T7i
Lens Setting	50 mm
Date/Time	2-17-2021/1:23 pm

CVE NORTH AMERICA
CORTLANDT MILL SOLAR FARM
VISUAL SIMULATION
MARCH 2021

FIGURE 11b. PHOTO LOCATION 8: PROPOSED CONDITIONS AT 5 YEARS

VIEWPOINT LOCATION MAP



UNDER PROPOSED CONDITIONS, PROJECT NOT LIKELY VISIBLE FROM THIS LOCATION BASED ON VIEWSHED ANALYSIS AND GROUND OBSERVATIONS

TECHNICAL INFORMATION

Viewpoint Coordinates in	665360 E
NY East State Plane Feet	908346 N
Viewpoint Location	Red Mill Rd
Viewer Eye Elevation	345 ft msl
Distance to Project	871 ft
Camera Model	Canon EOS Rebel T7i
Lens Setting	50 mm
Date/Time	2-17-2021/2:44 pm

CVE NORTH AMERICA
CORTLANDT MILL SOLAR FARM
VISUAL SIMULATION
MARCH 2021

FIGURE 12. PHOTO LOCATION 9: EXISTING CONDITIONS

TRC

VIEWPOINT LOCATION MAP

PROPOSED CONDITIONS

TECHNICAL INFORMATION

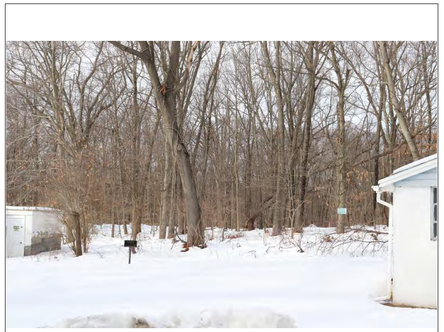
Viewpoint Coordinates in	665689 E
NY East State Plane Feet	906794 N
Viewpoint Location	Cardoza Ave
Viewer Eye Elevation	486 ft msl
Distance to Project	513 ft
Camera Model	Canon EOS Rebel T7i
Lens Setting	50 mm
Date/Time	2-17-2021/3:29 pm

CVE NORTH AMERICA
CORTLANDT MILL SOLAR FARM
VISUAL SIMULATION
MARCH 2021

FIGURE 13a. PHOTO LOCATION 10: EXISTING CONDITIONS

VIEWPOINT LOCATION MAP

EXISTING CONDITIONS



TECHNICAL INFORMATION

Viewpoint Coordinates in	665689 E
NY East State Plane Feet	906794 N
Viewpoint Location	Cardoza Ave
Viewer Eye Elevation	486 ft msl
Distance to Project	513 ft
Camera Model	Canon EOS Rebel T7i
Lens Setting	50 mm
Date/Time	2-17-2021/3:29 pm

CVE NORTH AMERICA
CORTLANDT MILL SOLAR FARM
VISUAL SIMULATION
MARCH 2021

FIGURE 13b. PHOTO LOCATION 10: PROPOSED CONDITIONS AT 5 YEARS

VIEWPOINT LOCATION MAP

PROPOSED CONDITIONS

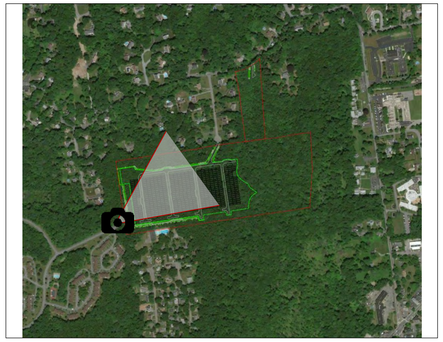
TECHNICAL INFORMATION

Viewpoint Coordinates in	665099 E
NY East State Plane Feet	906937 N
Viewpoint Location	Amherst Rd
Viewer Eye Elevation	455 ft msl
Distance to Project	81 ft
Camera Model	Canon EOS Rebel T7i
Lens Setting	50 mm
Date/Time	2-17-2021/3:13 pm

CVE NORTH AMERICA
CORTLANDT MILL SOLAR FARM
VISUAL SIMULATION
MARCH 2021

FIGURE 14a. PHOTO LOCATION 11: EXISTING CONDITIONS

VIEWPOINT LOCATION MAP



EXISTING CONDITIONS

TECHNICAL INFORMATION

Viewpoint Coordinates in	665099 E
NY East State Plane Feet	906937 N
Viewpoint Location	Amherst Rd
Viewer Eye Elevation	455 ft msl
Distance to Project	81 ft
Camera Model	Canon EOS Rebel T7i
Lens Setting	50 mm
Date/Time	2-17-2021/3:13 pm

CVE NORTH AMERICA
CORTLANDT MILL SOLAR FARM
VISUAL SIMULATION
MARCH 2021

FIGURE 14b. PHOTO LOCATION 11: PROPOSED CONDITIONS AT 5 YEARS

VIEWPOINT LOCATION MAP

PROPOSED CONDITIONS

TECHNICAL INFORMATION

Viewpoint Coordinates in	665189 E
NY East State Plane Feet	907630 N
Viewpoint Location	Red Mill Rd
Viewer Eye Elevation	392 ft msl
Distance to Project	95 ft
Camera Model	Canon EOS Rebel T7i
Lens Setting	50 mm
Date/Time	3-08-2021/11:24 am

CVE NORTH AMERICA
CORTLANDT MILL SOLAR FARM
VISUAL SIMULATION
MARCH 2021

FIGURE 15a. PHOTO LOCATION 12: EXISTING CONDITIONS

TRC

VIEWPOINT LOCATION MAP

EXISTING CONDITIONS

TECHNICAL INFORMATION

Viewpoint Coordinates in	665189 E
NY East State Plane Feet	907630 N
Viewpoint Location	Red Mill Rd
Viewer Eye Elevation	392 ft msl
Distance to Project	95 ft
Camera Model	Canon EOS Rebel T7i
Lens Setting	50 mm
Date/Time	3-08-2021/11:24 am

CVE NORTH AMERICA
CORTLANDT MILL SOLAR FARM
VISUAL SIMULATION
MARCH 2021

FIGURE 15b. PHOTO LOCATION 12: PROPOSED CONDITIONS AT 5 YEARS

VIEWPOINT LOCATION MAP

PROPOSED CONDITIONS

TECHNICAL INFORMATION

Viewpoint Coordinates in	664931 E
NY East State Plane Feet	907279 N
Viewpoint Location	Red Mill Rd
Viewer Eye Elevation	410 ft msl
Distance to Project	190 ft
Camera Model	Canon EOS Rebel T7i
Lens Setting	50 mm
Date/Time	3-08-2021/11:35 am

CVE NORTH AMERICA
CORTLANDT MILL SOLAR FARM
VISUAL SIMULATION
MARCH 2021

FIGURE 16a. PHOTO LOCATION 13: EXISTING CONDITIONS

VIEWPOINT LOCATION MAP

EXISTING CONDITIONS

TECHNICAL INFORMATION

Viewpoint Coordinates in	664931 E
NY East State Plane Feet	907279 N
Viewpoint Location	Red Mill Rd
Viewer Eye Elevation	410 ft msl
Distance to Project	190 ft
Camera Model	Canon EOS Rebel T7i
Lens Setting	50 mm
Date/Time	3-08-2021/11:35 am

CVE NORTH AMERICA
CORTLANDT MILL SOLAR FARM
VISUAL SIMULATION
MARCH 2021

FIGURE 16b. PHOTO LOCATION 13: PROPOSED CONDITIONS AT 5 YEARS

Appendix A

Visual Resource Inventory

Visual Resource Inventory
(2-Mile Radius)

Visual Resource	Type of Resource	Approximate Distance From Project Site (Miles)
George Washington Elementary School	School	0.2
North Westchester Restorative Therapy and Nursing Center	Building	0.2
Mohegan Park Adult Care Facility	Building	0.2
Mohegan Volunteer Fire Association Station 1	Building	0.3
Saint Marys Episcopal Church	Church	0.5
Lakeland School	School	0.6
St. George's Church	NRHP Area	0.6
Saint Georges Church	Church	0.6
Westchester Mall Shopping Center	Locale	0.7
Putnam Valley Middle School	School	0.7
Hollowbrook Drive-In (historical)	Locale	0.8
Putnam Valley Free Library	Building	0.8
Jones Hill	Summit	1.0
Strawberry Hill	Summit	1.0
North American Martyrs Chapel	Church	1.1
Assumption Cemetery	Cemetery	1.2
Saint Lukes Lutheran Church	Church	1.2
Roe Park	Park	1.2
Hollow Brook Golf Course	Locale	1.2
YCW Camp	Locale	1.3
Lakeland Senior High School	School	1.3
Hillside Cemetery	Cemetery	1.4
Saint Ambrose of Milan Orthodox Church	Church	1.5
Loyola Seminary	School	1.5
Calvary Memorial Church	Church	1.5
Snake Hill	Summit	1.5
Jones, John, Homestead	NRHP Area	1.6
CYO Camp	Locale	1.6
Old St. Peter's Church and Old Cemetery at Van Cortlandtville	NRHP Area	1.6

Visual Resource Inventory (2-Mile Radius)		
Visual Resource	**Type of Resource**	**Approximate Distance From Project Site (Miles)**
Old St. Peter's Church	NRHP Area	1.6
Van Cortlandtville School	NRHP Area	1.7
Locust Avenue School	School	1.7
Cat Hill	Summit	1.7
Van Cortlandtville Church	Church	1.7
Hebrew Cemetery	Cemetery	1.7
Lincoln Titus Elementary School	School	1.7
Jacobs Hill	Summit	1.8
John C Hart Memorial Library	Building	1.8
Taconic State Parkway	NRHP Area	1.8
Saint Columbanus School	School	1.9
Taconic State Pkwy	Scenic Byway	1.9
Beecher--McFadden Estate	NRHP Area	2.0
Cortlandt Town Hall	Building	2.0
West Ledge Rehabilitation and Nursing Center	Building	2.0
Shrub Oak Memorial Park	Park	2.0
Putnam Valley Elementary School	School	2.0

Appendix D

Noise Assessment

ACENTECH

33 Moulton Street
Cambridge MA 02138
617 499 8000
acentech.com

March 18, 2021 (Revised from June 5, 2020)

Laura Lefebvre, PE
TRC Companies
650 Suffolk Street
Wannalancit Mills
Lowell, MA 01854

Subject **Cortlandt Mill Solar Farm Noise Evaluation**
Cortlandt, NY
Acentech Project No. 632485

Dear Laura:

Under contract to TRC, we have conducted a noise evaluation for a new solar farm to be located on Red Mill Road in Cortlandt, New York. To determine the impact of the solar farm, we developed an acoustic model to calculate the expected sound levels of each of the noise producing equipment at nearby community receivers. The equipment includes transformers, inverters, and battery storage devices.

PROJECT NOISE REQUIREMENTS

Both the Town of Cortlandt, NY and New York State have project noise requirements.

TOWN OF CORTLANDT

The Town of Cortlandt Bylaws limit sound levels at the property line of a noise source to 65 dBA during the day (8 am to 6 pm) and 55 dBA during the night (6 pm to 8 am) within a residentially zoned district.

STATE OF NEW YORK

New York State has a more conservative noise requirement. The New York State Department of Environmental Conservation (NYSDEC) has published a Program Policy Memorandum entitled “Assessing and Mitigating Noise Impacts” dated 10/6/2000 and revised 2/2/2001. This guidance indicates that a new noise source should not increase the ambient sound levels by 6 dBA or more. We have assumed a background sound level of 45 dBA, per the guidance document, thus the allowable limit is ***50 dBA at the property line of the facility***.

PURE TONE REQUIREMENTS

Both the Town of Cortlandt and the State of New York have qualitative requirements regarding sounds that produce a “pure tone” or a “discrete tone”. This type of sound is of concern here because components at the solar project, in particular the inverters and transformers are known to produce pure tones as part of the process of converting and transforming direct current (DC) power into 60 Hertz alternating current (AC). The pure tones are produced at twice the line frequency and harmonics (120, 240 and 480 Hz). The Town of Cortlandt ordinance Chapter 197, Noise, states that the presence of discrete tones would be defined as unnecessary noise, see sub-section 197-4 L. The NYSEC policy noted above also comments on the existence of pure tones, but does not have specific qualitative or quantitative limitations.

NOISE COMPUTATIONS

Acentech developed an acoustic model of the proposed solar farm and surrounding neighborhood. The acoustic model was developed using Cadna/A software to estimate the contributions of various noise sources to the community sound levels. Cadna/A complies with international standard ISO 9613-2 “Attenuation of sound during propagation outdoors -- Part 2: General method of calculation.”

Figure 1, attached, shows the proposed site plan. The noise producing equipment at the proposed solar farm includes seven (7) customer-owned transformers with a rated maximum of 750 kVA, and twenty (20) battery plus inverter containers. The inverters will only operate during daytime hours. At night, noise-producing equipment includes transformers, which will be energized, and the battery storage devices will have air conditioning active.

Table 1 provides the input sound power level (Lw) for the equipment. The overall Lw values for the inverter plus battery combination, as well as the battery storage HVAC system on its own, were based on A-weighted sound pressure levels measured at 1 meter, provided in manufacturer specification sheets. The transformer sound power level was based on manufacturer NEMA TR-1 data, an average sound pressure level rating at 2 meters. Spectral data for all equipment was based on previous project experience for typical solar farm equipment, but may not accurately represent the tonal character of the equipment used in this project.

TABLE 1: Octave Band Sound Power Level (dB)

Equipment	Octave Band Center Frequency[1] (Hz)									Overall Sound Power (dBA)
	31.5	63	125	250	500	1,000	2,000	4,000	8,000	
	Sound Power Level (dB)									
Battery + Inverter	73	73	72	75	73	69	66	71	61	84
Battery HVAC Unit	89	86	83	73	77	74	72	61	54	79
Transformer (750 kVA)	74	74	76	71	71	65	60	55	48	71

1. Octave band sound power levels assumed based on prior project experience.

We have identified six existing residences in the surrounding neighborhood at which to evaluate noise. Figure 2, attached, shows the receiver locations identified near the proposed solar farm (project sound sources are identified with red crosses). We calculated the daytime sound level at these locations with receiver heights of 4 meters.

RESULTS

Table 2 presents the calculated daytime project only sound levels, the combined future sound levels (project plus ambient), and the increase over ambient at the six receiver locations. Table 3 presents the results for nighttime operation.

TABLE 2: Model Results - Daytime

Receiver	Assumed Ambient (dBA)	Calculated Project Sound Level (dBA)	Combined Future Sound Level (dBA)	Expected Increase over Ambient (dB)
R1	45	42	47	2
R2		46	49	4
R3		43	47	2
R4		38	46	1
R5		39	46	1
R6		31	45	-

TABLE 3: Model Results - Nighttime

Receiver	Assumed Ambient (dBA)	Calculated Project Sound Level (dBA)	Combined Future Sound Level (dBA)	Expected Increase over Ambient (dB)
R1	45	38	46	1
R2		42	47	2
R3		39	46	1
R4		35	45	-
R5		35	46	1
R6		28	45	-

CONCLUSIONS

Based on the assumed background sound level of 45 dBA, estimated project noise levels will not increase background sound levels at nearby residential receivers more than 4 dB during the day, and by more than 2 dB during the night. Based on these assumptions, no mitigation is required to meet New York State or the Town of Cortlandt requirements for broadband sound levels.

While this assessment quantitatively evaluated broadband sound (i.e. total sound of all frequencies), it has not evaluated the impact of tonal sound (i.e. sound of single frequency) because we did not have representative octave band sound levels from equipment vendors. Given the location of the inverters and transformers, a numerical evaluation of pure tones should be performed during the detail design phase of the project.

* * * * *

Please contact me at 617-499-8027 or aodom@acentech.com with any questions or comments.

Sincerely,

ACENTECH INCORPORATED

Alex Odom
Consultant

Cc: Michael Bahtiarian, Acentech

Enclosed: Figures 1-2
Manufacturer Data Sheets

FIGURE 1: Site Plan

FIGURE 2: Proposed Solar Farm Site and Nearby Receptors

Three-phase pad-mounted compartmental type transformer

General

At Eaton, we are constantly striving to introduce new innovations to the transformer industry, bringing you the highest quality, most reliable transformers. Eaton's Cooper Power series Transformer Products are ISO 9001 compliant, emphasizing process improvement in all phases of design, manufacture, and testing. In order to drive this innovation, we have invested both time and money in the Thomas A. Edison Technical Center, our premier research facility in Franksville, Wisconsin. Such revolutionary products as distribution-class UltraSIL™ Polymer-Housed Evolution™ surge arresters and Envirotemp™ FR3™ fluid have been developed at our Franksville lab.

With transformer sizes ranging from 45 kVA to 12 MVA and high voltages ranging from 2400 V to 46 kV, Eaton has you covered. From fabrication of the tanks and cabinets to winding of the cores and coils, to production of arresters, switches, tap changers, expulsion fuses, current limit fuses, bushings (live and dead) and molded rubber goods, Eaton does it all. Eaton's Cooper Power series transformers are available with electrical grade mineral oil or Envirotemp™ FR3™ fluid, a less-flammable and bio-degradable fluid. Electrical codes recognize the advantages of using Envirotemp™ FR3™ fluid both indoors and outdoors for fire sensitive applications. The bio-based fluid meets Occupational Safety and Health Administration (OSHA) and Section 450.23 NEC Requirements.

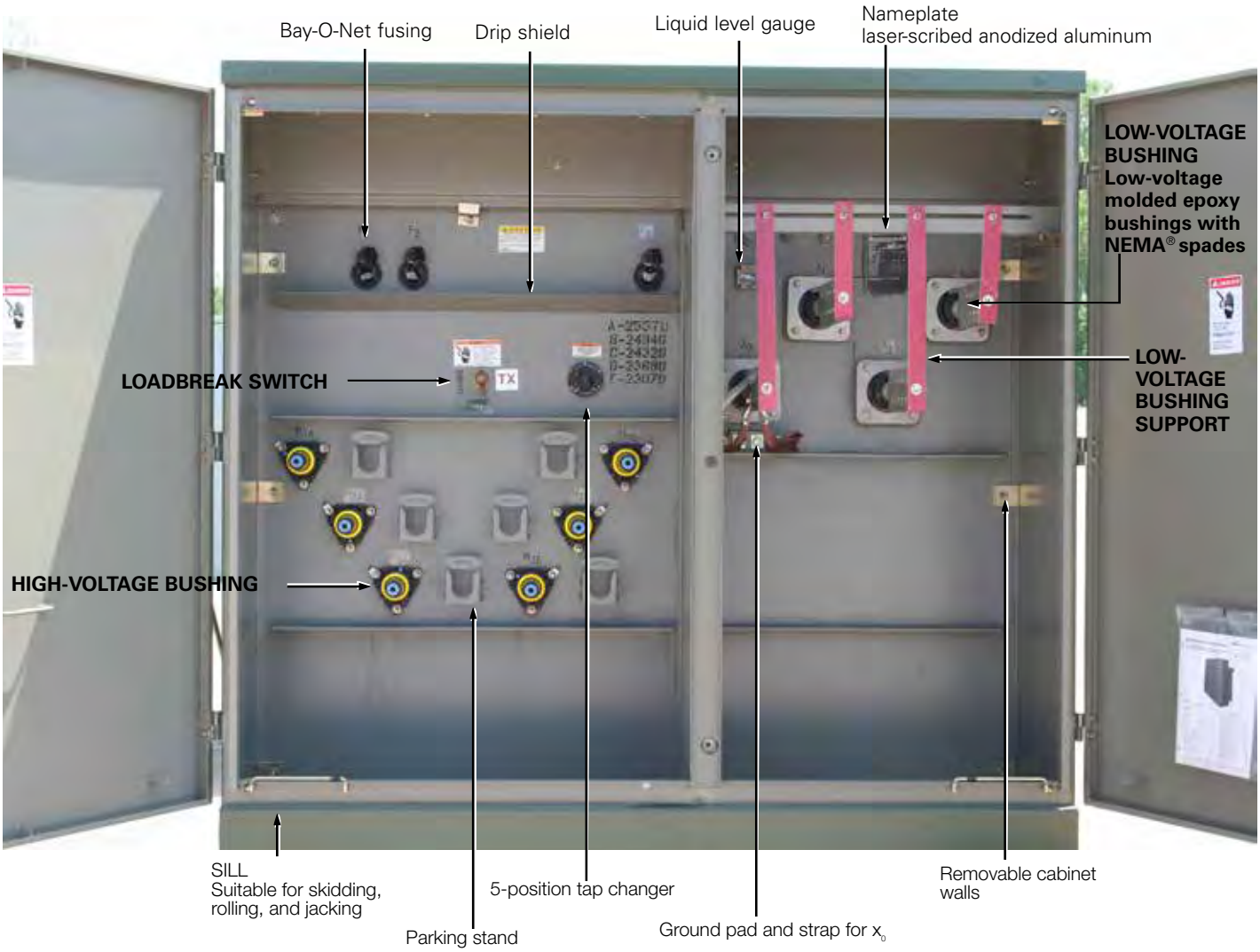


Figure 1. Three-phase pad-mounted compartmental type transformer.

Table 1. Product Scope

Type	Three Phase, 50 or 60 Hz, 65 °C Rise (55 °C, 55/65 °C), 65/75 °C, 75 °C
Fluid Type	Mineral oil or Envirotemp™ FR3™ fluid
Coil Configuration	2-winding or 4-winding or 3-winding (Low-High-Low), 3-winding (Low-Low-High)
Size	45 – 10,000 kVA
Primary Voltage	2,400 – 46,000 V
Secondary Voltage	208Y/120 V to 14,400 V
Specialty Designs	Inverter/Rectifier Bridge
	K-Factor (up to K-19)
	Vacuum Fault Interrupter (VFI)
	UL® Listed & Labeled and Classified
	Factory Mutual (FM) Approved®
	Solar/Wind Designs
	Differential Protection
	Seismic Applications (including OSHPD)
	Hardened Data Center

Table 2. Three-Phase Ratings

Three-Phase 50 or 60 Hz
kVA Available[1]: 45, 75, 112.5, 150, 225, 300, 500, 750, 1000, 1500, 2000, 2500, 3000, 3750, 5000, 7500, 10000

[1]Transformers are available in the standard ratings and configurations shown or can be customized to meet specific needs.

Table 3. Impedance Voltage

	Low-voltage rating		
Rating (kVA)	**≤ 600 V**	**2400 Δ through 4800 Δ**	**6900 Δ through 13800GY/7970 or 13800 Δ**
45-75	2.70-5.75	2.70-5.75	2.70-5.75
112.5-300	3.10-5.75	3.10-5.75	3.10-5.75
500	4.35-5.75	4.35-5.75	4.35-5.75
750-2500	5.75	5.75	5.75
3750	5.75	5.75	6.00
5000		6.00	6.50

Note: The standard tolerance is ± 7.5%

Table 4. Audible Sound Levels

	NEMA® TR-1 Average
Self-Cooled, Two Winding kVA Rating	**Decibels (dB)**
45-500	56
501-700	57
701-1000	58
1001-1500	60
1501-2000	61
2001-2500	62
2501-3000	63
3001-4000	64
4001-5000	65
5001-6000	66
6001-7500	67
7501-10000	68

Table 5. Insulation Test Levels

KV Class	Induced Test 180 or 400 Hz 7200 Cycle	kV BIL Distribution	Applied Test 60 Hz (kV)
1.2	Twice Rated Voltage	30	10
2.5		45	15
5		60	19
8.7		75	26
15		95	34
25		125	40
34.5		150	50

Table 6. Temperature Rise Ratings 0-3300 Feet (0-1000 meters)

	Standard	Optional
Unit Rating (Temperature Rise Winding)	65 °C	55 °C, 55/65 °C, 75 °C
Ambient Temperature Max	40 °C	50 °C
Ambient Temperature 24 Hour Average	30 °C	40 °C
Temperature Rise Hotspot	80 °C	65 °C

Test Report

Report Name	ST556KWH-D250HV+4SG125HV Noise Test Report	**Test Standard**	NB/T 32004-2018
Test Result	1. Noise test Pass		
Hardware Version	V11	**Software Version**	/
Test Number	1	**Test Time**	2020-04-24

Prepared by:	潘圆圆	**Reviewed by:**		**Approved by:**	
Date:	2020-04-24	**Date:**		**Date:**	

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1 Noise Test

1.1 Sample Information

Sample Name	Energy storage system project	**Sample Model**	ST556KWH-D250HV+4SG125HV
Sample Number	/	**Sample Size**	1
Receiving Date	/	**Sample Stage**	TR5
Sample Status	Intact		
Key Device	/		

1.2 Test Information

Applicant	Wu Xiaolei	**Department**	Energy Storage System Product Center
Test Item	Noise test	**Test Process**	/
Test Date	2020-04-24	**Tester**	Pan Yuanyuan
Test Environment	Temperature: 18.1℃ Humidity: 45.0%	**Test Location**	Sungrow industrial park
Test Standard	NB/T 32004-2018 Technical specification of PV grid-connected inverter		

1.3 Test Equipment

Equipment	Manufacturer	Model	Number	Calibration Date	Effective Date
Noise Meter	Hangzhou Aihua Instruments Co., Ltd.	AWA6218C	YQ-026	2019-10-28	2020-10-27

1.4 Test Conclusion and Judgement Basis

Test Position	Test Distance (m)	Test Noise Value（dB）	Limit (dB)	Conclusion (P/F)
Front	1	75.7	80(Specification)	P

Right side	1	63.3	80(Specification)	P
Left side	1	74.6	80(Specification)	P
Back	1	64.2	80(Specification)	P

1.5 Test Details

The machine is running at full power. When the machine is running stably, the fan running at full speed, and the air conditioning system turned on, a noise meter shall be used to measure the noise at a distance of 1m from each side of the EUT.

1.6 Test Record

EUT noise

Fig. 1-1 Front

Fig. 1-2 Right Side

Fig. 1-3 Left Side

Fig. 1-4 Back

Fig. 1-5 AC Cabinet

Fig. 1-6 Background Noise

1.7 Appendix

N/A

Specification, PowerStore 8.0 HVAC System

Parameter / Model		AC3000P
Dimensions, Weight & Mount		
External Dimensions (Height x Width x Depth)	mm	1274×487×250
External Dimensions (Height x Width x Depth) With Flange	mm	1330×543×250
Weight	kg	55
Mounting Method		Door Mounted
Application		Outdoor
Environmental Protection & Performance		
Working Temperature Range	ºC	-40 to +55
Noise Level	dB(A)	68
Protection from Dust, Water and Wind Driven Rain		IP 55
Refrigerant		R134a
RoHS Compliant		Yes
Cooling/Heating Capacity		
Cooling Capacity@L35/L35	W	3000
Heat Exchanger	W/K	/
Heating Capacity	W	1600
Power Consumption		
AC Power Consumption@L35/L35	W	2000
DC Power Consumption@L35/L35	W	/
AC Current@L35/L35	A	9.1
DC Current@L35/L35	A	/
Airflow		
Internal Airflow	m3/h	850
Power Supply		
Power Supply range		220VAC ± 15%
Rated operating voltage - Controller	VAC	220
Rated operating voltage - Fans	VAC	230
Rated operating voltage - Compressor	VAC	220
Max. Current AC	A	11.4
Max. Current DC	A	/
Key Components		
Controller		Blackshields
Fans		Telecom Level
Compressor		Telecom Level
Heater		Telecom Level

Appendix E

Wetland and Stream Delineation Report

CVE North America

Cortlandt Mill Solar Farm
Cortlandt, Westchester County, New York

Prepared For:

Prepared By:

TRC Engineers, Inc.
1430 Broadway, 10th Floor
New York, NY 10018

Wetland and Stream Delineation Report

March 2021

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USACE Routine Wetland Determination Forms
TRC's Stream Inventory Data Forms

1.0 INTRODUCTION

1.1 Project Description and Purpose

CVE North America (the Client) proposes to construct and operate the Cortland Mill Solar Farm, a 3.0-megawatt (MW) alternative current (AC)/4.66-MW Direct Current (DC) solar energy-generating facility and a battery energy storage system (the Project). The Project Site consists of two parcels totaling approximately 43.12 acres: one 38.67-acre parcel west of Lexington Avenue (Parcel ID:13.18-2-2.4) and a second 4.45-acre parcel off Red Mill Road (Parcel ID:13.14-5-25) in the Town of Cortlandt, Westchester County, New York (see Figure 1).

1.2 Report Purpose

TRC Engineers, Inc. (TRC) conducted a wetland and stream delineation of the Project Site on behalf of CVE North America on October 7, 2019 and November 1, 2019. This report details the wetlands and surface waters within the Project Site (including rivers, streams, ponds, and lakes), regardless of jurisdictional status. However, this report's description of potential jurisdictional areas to regulatory agencies lends itself toward assessing jurisdiction and avoiding wetlands and surface waters by implementing setbacks (both required by the State of New York and CVE North America's internal process) during Project planning, to the extent practical.

Delineation efforts included the following tasks:

1. A desktop review of existing, publicly available federal and state agency resources;

2. A field delineation of aquatic features within the Project Site using a handheld Global Positioning System (GPS) with reported sub-meter accuracy; and

3. Documentation of the delineated aquatic features including the assumed agency jurisdiction for each resource based on hydrology, vegetation, and hydric soils data collected in the field.

Conclusions proposed herein provide information necessary to support a permit application to the United States Army Corps of Engineers (USACE), the New York State Department of Environmental Conservation (NYSDEC), and the Town of Cortlandt.

1.3 HVEA Engineers' Review

The Town of Cortlandt hired a third-party consultant, HVEA Engineers, to peer review TRC's wetland and stream delineation. HVEA Engineers field-verified TRC's wetland and stream delineation on October 5, 2020; and made minor adjustments to the delineated wetland boundaries. TRC updated this wetland and stream delineation report to incorporate these minor adjustments and address comments made by HVEA Engineers.

2.0 REGULATORY AUTHORITY

2.1 United States Army Corps of Engineers

In accordance with Section 404 of the Clean Water Act (CWA), the USACE asserts jurisdiction over Waters of the United States (WOTUS). WOTUS are defined as wetlands, streams, and other aquatic resources under the regulatory authority of Title 33 Code of Federal Regulations (CFR) Part 328 and the United States Environmental Protection Agency (EPA), per Title 40 CFR Part 230.3(s). Wetlands are defined as "those areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions" (33 CFR 328.3[b]).

2.1.1 Historical Context

On June 5, 2007, the EPA and the Department of Army issued a memorandum outlining jurisdictional guidance on WOTUS. The document outlined major key points resulting from the United States Supreme Court decision in the matter of *Solid Waste Agency of Northern Cook County v. Army Corps of Engineers* (531 U.S. 159, January 9, 2001) and *Rapanos v. United States* (547 U.S. 715, June 19, 2006). This document defined the federal jurisdiction over WOTUS relative to the CWA.

Applying this approach, the USACE asserted jurisdiction over Traditional Navigable Waters (TNWs), and adjacent wetlands, as well as certain non-navigable tributaries of TNWs that are relatively permanent where the tributaries typically flow year-round or have continuous flow at least seasonally (i.e., typically three months); and wetlands that directly abut such tributaries.

The USACE decided jurisdiction on a case-by-case basis, applying a significant nexus determination, over certain other classes of water. Generally, not determined jurisdictional were swales or erosional features and certain ditches.

2.1.2 Current Status

On June 22, 2020, the Step Two Rule (Navigable Waters Protection Rule) took effect.

The Navigable Waters Protection Rule outlines categories of waters considered jurisdictional, as well as those considered non-jurisdictional. The four categories of waters that are considered WOTUS, and thus jurisdictional to the USACE, include the following:

1. Territorial seas and TNWs:

    - Under the final rule, the territorial seas and traditional navigable waters include large rivers and lakes—such as the Mississippi River, the Great Lakes, Chesapeake Bay, and the Erie Canal—and tidally-influenced waterbodies used in interstate or foreign commerce.

2. Tributaries of such waters:

    - Tributaries include perennial and intermittent rivers and streams that contribute surface flow to traditional navigable waters in a typical year.

    - These naturally occurring surface water channels must flow more often than just after a single precipitation event—that is, tributaries must be perennial or intermittent.

    - Tributaries can connect to a TNW or territorial sea in a typical year either directly or through other WOTUS through channelized non-jurisdictional surface waters, through artificial features (including culverts and spillways), or through natural features (including debris piles and boulder fields).

    - Ditches are to be considered tributaries only where they satisfy the flow conditions of the perennial and intermittent tributary definition and either were constructed in or relocate a tributary or were constructed in an adjacent wetland and contribute perennial or intermittent flow to a TNW in a typical year.

3. Lakes, ponds, and impoundments of jurisdictional waters:

    - Lakes, ponds, and impoundments of jurisdictional waters are jurisdictional where they contribute surface water flow to a TNW or territorial sea in a typical year either directly or through other WOTUS, through channelized non-jurisdictional surface waters, through artificial features (including culverts and spillways), or through natural features (including debris piles and boulder fields).

    - Lakes, ponds, and impoundments of jurisdictional waters are also jurisdictional where they are flooded by a “water of the United States” in a typical year.

4. Adjacent wetlands:

    - Wetlands that physically touch other jurisdictional waters are “adjacent wetlands.”

    - Wetlands separated from a “water of the United States” by only a natural berm, bank or dune are also “adjacent.”

    - Wetlands inundated by flooding from a “water of the United States” in a typical year are “adjacent.”

    - Wetlands that are physically separated from a jurisdictional water by an artificial dike, barrier, or similar artificial structure are “adjacent” so long as that structure allows for a direct hydrologic surface connection between the wetlands and the jurisdictional water in a typical year, such as through a culvert, flood or tide gate, pump, or similar artificial feature.

- An adjacent wetland is jurisdictional in its entirety when a road or similar artificial structure divides the wetland if the structure allows for a direct hydrologic surface connection through or over that structure in a typical year.

Exclusions

Twelve exclusions from the WOTUS definition, or non-jurisdictional waters, include: groundwater; ephemeral streams; stormwater runoff and stormwater control features; ditches that are not jurisdictional; prior converted cropland; artificial lakes and ponds; and artificially irrigated areas, including agricultural areas that would revert to uplands were the irrigation to cease.

Navigable Waters

The USACE also regulates navigable waters under Section 10 of the Rivers and Harbor Act (33 U.S.C. 401 et seq.), which requires a permit be issued by the USACE prior to the construction of any structure in or over a navigable water of the United States, as well as any proposed action (such as excavation/dredging or deposition of materials) that would affect the course, location, condition, or capacity of the navigable water, even if the proposed activity is outside the boundaries of the stream in associated wetlands.

2.2 New York State Department of Environmental Conservation

The Freshwater Wetlands Act (Article 24 and Title 23 of Article 71 of the Environmental Conservation Law [ECL]) gives the NYSDEC jurisdiction over state-protected wetlands and adjacent areas, typically extending 100 feet from the wetland perimeter. To implement this Act, regulations were promulgated by the State under 6 New York Codes, Rules and Regulations (NYCRR) Parts 663 and 664. Part 664 designates wetlands into four class ratings: with Class I being the highest or best quality wetland and Class IV being the lowest. Wetlands regulated by the State are those 12.4 acres (5 hectares) in size or larger, as well as those smaller than 12.4 acres, deemed to be of “unusual local importance.” The Freshwater Wetlands Act requires the NYSDEC to map all state-protected wetlands. This allows landowners and other interested parties a means of determining where state jurisdictional wetlands exist, although the maps are legally only approximations—thus the need for on-site delineations. Under Part 663, approval under an Article 24 permit is required from the NYSDEC prior to most disturbances to a state-protected wetland or its protected adjacent area, including the removal of vegetation.

Article 15 of the ECL (Protection of Waters), and its implementing regulations under 6 NYCRR Part 608, provides the NYSDEC with regulatory jurisdiction over activities disturbing the bed or banks of protected streams, including small lakes and ponds with a surface area of 10 acres or less, located within the course of a protected stream. This law and regulation also provide NYSDEC jurisdiction over navigable waters of the State, including contiguous marshes, estuaries, tidal marshes, and wetlands that are inundated at mean high water level or tide. A protected stream is defined in the ECL as any stream, or particular portion of a stream, that has been assigned by the NYSDEC any of the following classifications or standards: AA, A, B, C(T), or C(TS) (6 NYCRR Part 701). State water quality classifications of unprotected watercourses include Class C and Class D streams. The classifications are defined below.

- A classification of AA or A indicates that the best use of the stream is as a source of water supply for drinking, culinary or food processing purposes, primary and secondary contact recreation, and fishing.

- The best usages of Class B waters are primary and secondary contact recreation and fishing.

- The best usage of Class C waters is fishing. Streams designated (T) indicate that they support trout, while those designated (TS) support trout spawning.

- Waters with a classification of D are generally suitable for fishing and non-contact recreation.

It should be noted, per 6 NYCRR Chapter X, Subchapter B,

> *All streams or other bodies of water which are not shown on the reference maps herein shall be assigned to Class D, as set forth in Part 701, supra, except that any continuous flowing natural stream which is not shown on the reference maps shall have the same classification and assigned standards as the waters to which it is directly tributary.*

2.3 Town of Cortlandt

According to Chapter 179: Freshwater Wetlands, Waterbodies and Watercourses of the Town Code, the Town of Cortlandt regards wetlands, waterbodies, or watercourses and their associated buffer area as regulated areas. Wetland buffer areas are the land within 100 linear feet of the surface, away from, and around the perimeter of the outermost boundary of a wetland, watercourse, or waterbody.

According to Section 179-5 of the Town Code, wetland and watercourse boundaries shall be determined by field inspection and delineated by a qualified environmental professional. The wetland delineation is subject to approval by the approval authority. The approval authority may be the Town of Cortlandt Zoning Board, Planning Board, Town Board, Director of Technical Services or the Deputy Director of Code Enforcement.

3.0 PROJECT SITE CHARACTERISTICS

3.1 Resources

The following publicly available resources were used in the investigation, delineation, and report preparation:

- United States Geological Survey (USGS) Mohegan Lake, New York 7.5-minute quadrangle;

- United States Department of Agriculture (USDA) Ecoregion maps;

- NYSDEC Ecozone mapping;
- USGS National Hydrography Dataset;
- USGS Hydrologic Unit maps;
- Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map (FIRM) Panels 3611C0028F, effective date September 28, 2007;
- United States Fish and Wildlife Service (USFWS) National Wetlands Inventory (NWI) mapping;
- NYSDEC Environmental Resource Mapper (ERM);
- NYSDEC Freshwater Wetlands mapping;
- USDA Natural Resources Conservation Service (NRCS) Web Soil Survey; and
- Recent aerial orthoimagery.

3.2 Vegetation and Ecological Communities

The Project Site resides in the Eastern Broadleaf Forest (Oceanic) Province and Lower New England Section ecoregions of the United States as defined by the USDA Forest Service (Bailey, 1995). Ecoregions are ecosystems of regional extent. The USDA identifies ecoregions by ecosystem characteristics into the following classifications:

- Domains: the largest ecosystem, which are groups of related climates and are differentiated based on precipitation and temperature.
- Divisions: represent the climates within domains and are differentiated based on precipitation levels and patterns, as well as temperature.
- Provinces: Subdivisions of divisions, which are differentiated based on vegetation or other natural land covers.
- Sections: Subdivisions of provinces based on terrain features, sections are the finest level of detail described for each subregion.
- Mountainous Areas: Mountainous regions that exhibit different ecological zones based on elevation.

The Eastern Broadleaf Forest (Oceanic) Province is characterized by a temperate deciduous forest dominated by tall broadleaf trees. Forest vegetation in this province is divided into three major associations: mixed mesophytic, Appalachian oak, and pine-oak (Bailey et al., 1995). The

forest vegetation of the Lower New England Section includes oak-hickory, white-red-jack pine, maple-beech-birch, and aspen-birch cover types (McNab et al., 2007).

Similarly, the NYSDEC has divided New York State into specific ecological regions (Ecozones). Boundaries of the Ecozones of New York State were derived from Will et al. (1982) and Dickinson (1983), then further modified by the NYSDEC. The Ecozones of New York State have been classified into Major and Minor Zones. The Project Site is located within Hudson Highlands Major Zone, which does not have any Minor Zones. The Hudson Major Zone is in the oak natural vegetation zone and young stands of pioneer hardwoods and oaks are common.

Recent aerial orthoimagery of the Project Site and surrounding vicinity, obtained from Google Earth and ESIR, indicates that the Project Site is covered by temperate deciduous forest, forested wetland, scrub-shrub wetland, and emergent wetlands. The following ecological communities, as defined by *Ecological Communities of New York State* (Edinger et al., 2014), were identified on the Project Site at the time of the delineation:

- Shallow emergent marsh,
- Shrub swamp,
- Red maple-hardwood swamp,
- Beech-maple mesic forest, and
- Appalachian oak-hickory.

3.3 Hydrology

3.3.1 Hydrologic Mapping

The USGS has divided and sub-divided the country into hydrologic units based primarily on drainage basins and watershed boundaries. The main hydrologic unit levels are regions, sub-regions, basins, sub-basins, watersheds, and sub-watersheds. The hydrologic units are nested within each other, from the largest geographic area (regions) to the smallest geographic area (sub-watersheds). Each hydrologic unit is identified by a unique hydrologic unit code (HUC) consisting of 2 to 12 digits based on the six levels of classification in the hydrologic unit system. In addition to the hydrologic unit codes, each hydrologic unit is assigned a name corresponding to the unit's principal hydrologic feature, or to a cultural or political feature within the unit.

The region hydrologic unit level contains either the drainage area of a major river or the combined drainage areas of a series of rivers. Regions receive a two-digit code. The following hydrologic unit levels are designated by the addition of another two digits with each level. Each sub-region includes the area drained by a river system, a reach of a river and its tributaries in that reach, a closed basin or basins, or a group of streams forming a coastal drainage area.

The Project Site is located within the USGS-defined Lower Hudson sub-basin (HUC 02030101), Peekskill Hollow Creek – Hudson River watershed (HUC 0203010101), and the Peekskill Hollow Creek sub-watershed (HUC 020301010101).

The Lower Hudson sub-basin is approximately 479,464 acres in area. Approximately 16.3 percent of the sub-basin is wetland or open water. Annual precipitation ranges from 44 to 52 inches (NRCS, 2011).

The NYSDEC also classifies watersheds more generally within the State of New York. Unlike mapping efforts outlined by the USGS above, the NYSDEC uses the definitions of watersheds and drainage basins interchangeably. New York's waters (e.g., lakes, rivers, wetlands, and streams) fall within 1 of the 17 major drainage basins as defined by the NYSDEC. The NYSDEC defines these drainage basins or watersheds as an area of land that drains water into a specific body of water within or adjacent to New York State and includes networks of rivers, streams, lakes, and the surrounding lands. The NYSDEC-classified watersheds are separated by high elevation geographic features (e.g., mountains, hills, and ridges). Each major drainage basin corresponds to one or more USGS sub-basins (USGS HUC eight-digit codes).

The Project Site is located within the Lower Hudson River major drainage basin of New York. Water quality in this major drainage basin varies widely due to a variety of pollutants and sources. Major water quality concerns in this major drainage basin include municipal wastewater, combined sewer overflows, and urban/stormwater runoff. Within this major drainage basin, the Project is in the Lower Hudson sub-basin (HUC 02030101).

3.3.2 Hydrologic Character

The predominant surface waterbody within the Project Site is a tributary to Peekskill Hollow Creek. Most aquatic features within the Project Site act primarily as drainages to Peekskill Hollow Creek and groundwater recharge/discharge features.

The Project Site receives, on average, 50.67 inches of rainfall annually based on information for the Town of West Point, New York, located 6.7 miles from the Project Site (U.S. Climate Data, 2019). In addition to precipitation, on-site hydrology originates from the surrounding uplands and drains to a tributary Peekskill Hollow Creek. The Project Site drains relatively to the east.

3.3.3 FEMA Flood Zone Mapping

FEMA maintains materials developed to support flood hazard mapping for the National Flood Insurance Program. According to FIRM panel 36119C0028F, effective September 28, 2007, the Project Site is not located within a flood zone (see Figure 3).

3.4 Federal and State-Mapped Wetlands and Streams

The USFWS is the principal federal agency tasked with providing information to the public on the status and trends of wetlands on a national scale. The USFWS NWI is a publicly available resource that provides detailed information on the abundance, characteristics, and distribution of

nationwide wetlands (where mapped). NWI mapping data is offered in an effort to promote the understanding, conservation, and restoration of wetlands. Note, unlike NYSDEC wetland maps, NWI wetland maps do not denote federal jurisdiction with their mapped boundaries. TRC field biologists use NWI wetlands as a reference guide to conduct a more informed site survey in the demarcation or delineation of wetlands and streams, which could be subject to federal jurisdiction under the CWA within the target Project Site.

Review of the NWI mapping during the preliminary desktop analysis indicated one federally mapped feature within the Project Site, totaling approximately 0.12 acres (refer to Figure 3). NWI mapping data indicates that a riverine, upper perennial, unconsolidated bottom, permanently flooded (R3UBH) aquatic feature is the only NWI features present within the Project Site.

The field-delineated aquatic features within the Project Site are more than the abundance of features represented by the NWI mapping for the Project Site. Moreover, the field-delineated stream is longer than the corresponding the NWI-mapped R3UBH aquatic stream.

Review of the NYSDEC ERM indicated one NYSDEC freshwater wetlands and its 100-foot adjacent areas mapped within the Project Site, which are regulated under Article 24 of the ECL (refer to Figure 3). Table 1 below provides a summary of the NYSDEC-regulated wetlands mapped within the Project Site.

Table 1. NYSDEC-Mapped Freshwater Wetlands within the Project Site

NYSDEC Wetland ID	Wetland Class (I, II, III, or IV)[1]	Total Wetland Area (Acres)	Wetland Area within the Project Site (Acres)
A-50	II	63.80	4.48
[1]The NYSDEC classification system of freshwater wetlands designates wetlands into four class ratings: with Class I being the highest or best quality wetland and Class IV being the lowest quality.			

Based on NYSDEC stream classification mapping, one mapped stream is within the Project Site. State-protected streams are protected per Article 15 of the ECL (see Section 2.2). Table 2 below provides a detailed summary of the NYSDEC-classified priority (protected and unprotected) streams within the Project Site.

Table 2. NYSDEC-Mapped Streams within the Project Site

NYSDEC Stream Name and Regulatory ID Number	NYS Major Drainage Basin	USGS Sub-basin HUC 8 and Name	NYSDEC Classification[1] and Standard[2]	Cumulative Linear Feet within the Project Site
864-596	Lower Hudson River	02030101 (Lower Hudson)	C	65

[1]A classification of AA or A indicates that the best use of the stream is as a source of water supply for drinking, culinary or food processing purposes, primary and secondary contact recreation, and fishing. The best usages of Class B waters are primary and secondary contact recreation and fishing. The best usage of Class C waters is fishing. Waters with a classification of D are generally suitable for fishing and non-contact recreation.
[2] Streams designated (T) indicate that they support trout, while those designated (TS) support trout spawning.

3.5 Physiography and Soil Characteristics

3.5.1 Physiography and Topography

The Project Site is located within the Hudson Highlands Physiographic Province of New York State (New York State Department of Transportation, 2013). This Physiographic Province is defined by relatively rugged topography with bedrock-controlled landforms. The dominant condition of this province is rocky upland with little to no soil cover. The landforms of the Project Site are breaks/foothills, hills, irregular plains, and drainage channels.

As shown on the USGS Mohegan Lake NY 7.5-minute quadrangle (Figure 1), the terrain slopes downward to the northwest and east from a broad summit in the southwestern region of the Project Site. Despite the presence of sections of steeper terrain (i.e., areas exceeding 15 percent), the average slope across the entire Project Site is approximately 2 percent, and the Project Site topography as a whole would be considered gently sloping. The topography ranges from approximately 480 feet above mean sea level (AMSL) in the southwestern region of the Project Site to approximately 360 feet AMSL in the southeastern region.

3.5.2 Site Soils

The USDA NRCS Web Soil Survey is an online resource mapping tool that provides soil data and information for the vast majority of the nation. This information is produced by the National Cooperative Soil Survey, in partnership with federal, regional, state, and local agencies and private entities and institutions.

A total of seven soil map units were identified within the Project Site. Soil map units represent a type of soil, a combination of soils, or miscellaneous land types. Soil map units are usually named for the predominant soil series or land types within the map unit. Due to limitations imposed by the small scale of the soil survey mapping, it is not uncommon to identify wetlands within areas

not mapped as hydric soil, while areas mapped as hydric often do not support wetlands. This concept is emphasized by the USDA NRCS Web Soil Survey:

> *Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.*

Soil drainage in the Project Site is primarily well drained, with 70.3 percent of the mapped soils classified as well drained, 27.0 percent somewhat poorly drained, and 2.77 percent classified as moderately well drained. Also, most of the soils within the Project Site have been listed as a farmland classification of not prime farmland.

The seven soil map units identified within the Project Site by the NRCS are briefly described below and outlined in Table 3. See Figure 2 for graphically depicted soil map units of the Project Site.

Soil Descriptions

Charlton fine sandy loam, 3- to 8-percent slopes (ChB) - This well-drained soil is mapped in the southern portion of the Project Site. It is composed of 85-percent Charlton and similar soils. Charlton soils are found on ridges, hills, and ground moraines. This map unit has a hydric rating of 1 percent.

Charlton fine sandy loam, 8- to 15-percent slopes (ChC) - This well-drained soil is mapped in the northwest corner of the Project Site. It is composed of 85-percent Charlton and similar soils. Charlton soils are found on ridges, hills, and ground moraines. This map unit has a hydric rating of 0 percent.

Charlton loam, 15- to 25-percent slopes, very stony (ClD) – This well-drained soil is mapped in the northwest corner of the Project Site. It is composed of 85-percent Charlton and similar soils. Charlton soils are found on ridges, hills, and till plains. This map unit has a hydric rating of 0 percent.

Charlton-Chatfield complex, 0- to 15-percent slopes, very rocky (CrC) – This well-drained soil is mapped in the western and northeastern portions of the Project Site. It is composed of 50-percent Charlton, very stony, and similar soils and 30-percent Chatfield, very stony, and similar soil. Charlton, very stony soils and Chatfield, very stony soils are found on hills and ridges. This map unit has a hydric rating of 5 percent.

Chatfield-Charlton complex, 15- to 35-percent slopes, very rocky (Cs) – This well-drained soil is mapped in the central portion of the Project Site. It is composed of 45-percent Chatfield, very stony, and similar soils, and 35-percent Charlton, very stony, and similar soils. Chatfield, very stony soils and Charlton, very stony soils are found on hills and ridges. This map unit has a hydric rating of 6 percent.

Leicester loam, 2- to 8-percent slopes, very stony (LeB) – This somewhat poorly drained soil is mapped in the eastern portion of the Project Site. It is composed of 50-percent Leicester, somewhat poorly drained, and similar soils, and 25-percent Leicester, poorly drained, and similar soils. Leicester, somewhat poorly drained soils and Leicester, poorly drained soils are found on hills, ridges, and till plains. This map unit has a hydric rating of 35 percent.

Paxton fine sandy loam, 3- to 8-percent slopes (PnB) – This well-drained soil is mapped in the northern portion of the Project Site. It is composed of 80-percent Paxton and similar soils and 20 percent minor components. Paxton soils are found on drumlins, ground moraines, and hills. This map unit has a hydric rating of 6 percent.

Sutton loam, 3- to 8-percent slopes (SuB) – This moderately well-drained soil is mapped along the eastern boundary of the Project Site. It is composed of 80-percent Sutton, loam, and similar soils. Sutton, loam, soils are found on hills, ridges, and ground moraines. This map unit has a hydric rating of 5 percent.

Hydric Soil

The Web Soil Survey of the Project Site was consulted prior to conducting the delineation to determine the extent of soils meeting hydric criteria as defined by the NRCS. The *Corps of Engineers Wetlands Delineation Manual* (Environmental Laboratories, 1987) (1987 Manual) defines a hydric soil as "*a soil that in its undrained condition, is saturated, flooded or ponded long enough during the growing season to develop anaerobic conditions that favor the growth and regeneration of hydrophytic vegetation.*"

Of the Project soils, one of the soils mapped within the Project Site contains higher percentages (33 percent or more) of mapping units with hydric soil inclusions (refer to Figure 2). These higher rating percentages indicate the potential presence of a wetland feature on site. Hydric Soil Rating indicates the percentage of map units that meet the criteria for hydric soils. Map units are composed of one or more map unit components or soil types, each of which is rated as hydric or not hydric. Map units that are made up dominantly of hydric soils may have small areas of minor non-hydric components in the higher positions on the landform, and map units that are made up dominantly of non-hydric soils may have small areas of minor hydric components in the lower positions on the landform. As such, each map unit is rated based on its respective components and the percentage of each component within the map unit. Although a soil series will be given a general hydric soil rating on the Web Soil Survey, this rating is for reference only and does not supersede site-specific conditions documented in the field that constitute hydric soil presence in located wetlands.

Table 3. Mapped Soils within the Project Site

Map Unit Symbol	Slope (%)	Drainage Class	Hydric Rating (%)	Acres in Project Site	Percent of Project Site
ChB	3 to 8	Well drained	1	4.87	11.29
ChC	8 to 15	Well drained	0	0.41	0.95
ClD	15 to 25	Well drained	0	0.78	1.81
CrC	0 to 15	Well drained	5	21.27	49.32
CsD	15 to 35	Well drained	6	2.1	4.87
LeB	2 to 8	Somewhat poorly drained	35	10.53	24.41
PnB	3 to 8	Well drained	6	0.1	0.23
SuB	3 to 8	Moderately well drained	5	2.17	5.03

4.0 DELINEATION METHODOLOGY

Prior to initiating field investigations, TRC conducted a desktop review of publicly available data to determine the potential presence of federal and state-mapped wetlands and streams within the Project Site alongside other potential environmental constraints, which could impact the Project. TRC field biologists subsequently performed field investigations to identify aquatic features within the Project Site. Delineations for wetlands and streams were performed in accordance with the criteria set forth in the 1987 Manual (Environmental Laboratory, 1987) and the 2012 Regional Supplement to the USACE Wetland Delineation Manual: Northcentral and Northeast Region (Version 2.0) (USACE, 2012) (Supplement). Data was collected from a sample plot in each delineated wetland. Depending on the size of the delineated area and any change in cover type, multiple sample plots of the delineated wetland may have been taken. Delineation data was recorded on USACE Routine Wetland Determination Forms (see Appendix C). The boundaries of wetlands were demarcated with pink survey ribbon labeled “wetland delineation” and located with a GPS unit with reported sub-meter accuracy.

4.1 Hydrology

The presence of wetland hydrology is determined based on primary and secondary indicators established by the USACE. The 1987 Manual defines the presence of wetland hydrology when at

least one primary indicator or two secondary indicators are identified. One primary indicator is sufficient to determine if hydrology is present; however, if primary indicators are absent, two or more secondary indicators are required to determine the presence of wetland hydrology. If other probable wetland hydrology evidence was found on site, then such characteristics were subsequently documented on the USACE Routine Wetland Determination Form. Wetland hydrology indicators are grouped into 18 primary and 11 secondary indicators as presented in the Supplement.

Wetland hydrology may influence the characteristics of vegetation and soils due to anaerobic and reducing conditions (Environmental Laboratory, 1987). This influence depends on the frequency and duration of soil inundation or saturation which, in turn, depends on a variety of factors including topography, soil stratigraphy, and soil permeability, in conjunction with precipitation, runoff, and stormwater and groundwater influence.

4.2 Vegetation

Hydrophytic vegetation is defined in the 1987 Manual as:

> *…the sum total of macrophytic plant life that occurs in areas where the frequency and duration of inundation or soil saturation produce permanently or periodically saturated soils of sufficient duration to exert a controlling influence on the plant species present.*

Plants are categorized according to their occurrence in wetlands. Scientific names and wetland indicator statuses for vegetation are those listed in *The National Wetland Plant List: 2016 Wetland Ratings* (Lichvar et al., 2016) (NWPL). Due to regional differences in wetland vegetation, among other characteristics, the USACE divided the United States into regions to improve the accuracy and efficiency of wetland delineations. The indicator statuses specific to the "Northcentral and Northeast Region," as defined by the USACE, apply to the Project Site. The official short definitions for wetland indicator statuses are as follows:

- Obligate Wetland (OBL): Almost always occur in wetlands.
- Facultative Wetland (FACW): Usually occur in wetlands but may occur in non-wetlands.
- Facultative (FAC): Occur in wetlands and non-wetlands.
- Facultative Upland (FACU): Usually occur in non-wetlands but may occur in wetlands.
- Upland (UPL): Almost never occur in wetlands.

For species with no indicator status in the Project Site's region, the indicator status assigned to the species in the nearest adjacent region is applied. Plants that are not included on the NWPL within the Project Site's region, nor an adjacent region, are given no indicator status, and are not included in dominance calculations. Plants that are not listed in any region on the NWPL are considered as UPL on USACE Routine Wetland Determination Forms.

Vegetation in both upland and wetland communities was characterized using areal methods for instituting plot measurement. In accordance with USACE methodology, a plot radius of 30 feet around the soil sample location was applied to tree species and vines, a 15-foot radius for saplings/shrubs, and a 5-foot radius for herbaceous plants. After the measurement of percent coverage was determined for each species, an application of the 50/20 rule of dominance determination was used to determine hydrophytic dominance at sample plots. In using the 50/20 rule, the plants that comprise each stratum are ranked from highest to lowest in percent cover. The species that cumulatively equal or exceed 50 percent of the total percent cover for each stratum are dominant species, and any additional species that individually provides 20 percent or more percent cover are also considered dominant species of its respective strata. The total cover for each stratum, and subsequently the plot as a whole, could exceed 100 percent due to vegetation overlap.

It should be noted that where the wetland boundary results of this approach differ meaningfully from the approach outlined within the *New York State Freshwater Wetland Delineation Manual* (Browne et al., 1995), the difference is described within this report if needed to address NYSDEC Article 24 jurisdiction. Though not common, two wetland boundaries, a state and a federal boundary, may arise from subtle differences in the definition of vegetative strata, sampling technique, and wetland indicators between the USACE and the NYSDEC. See Section 5.0 for more detail.

Cover types are also assigned to each wetland. The delineated resources were classified in accordance with the system presented in *The Classification of Wetlands and Deepwater Habitats of the United States, Second Edition* (Federal Geographic Data Committee [FGDC], 2013). Field biologists use this document's classification standard to assign cover types to wetlands. TRC biologists used the definitions for perennial and intermittent streams found in *The Classification of Wetlands and Deepwater Habitats of the United States, Second Edition* (FGDC, 2013) when classifying delineated streams. Ephemeral streams have flowing water primarily from rainfall runoff and are above the water table.

4.3 Soils

Hydric soil indicators were determined using the Supplement with added provision from the *Field Indicators of Hydric Soils in the United States: A Guide for Identifying and Delineating Hydric Soils*, Version 8.2 (USDA NRCS, 2018). Soil characteristics were documented, such as color, texture, layer depth, presence of organic-layers, and evidence of redoximorphic features, which may include indicators such as reduction, oxidation, gleyed matrices, and manganese features. Soil test pits were dug using a spade shovel to a depth of approximately 20 inches. If refusal of a soil sample to 20 inches occurred due to the presence of hardpan layer, rock, or hard fill materials, this occurrence was documented. Soil color was described using the *Munsell Soil Color Book* (Munsell Color, 2015). Texture was determined using the USDA feel method (Thien, 1979).

Hydric soil indicators applicable to the Project Site were determined using the *Land Resource Regions and Major Land Resource Areas of the United States, the Caribbean, and the Pacific*

Basin (NRCS, 2006) (MLRA Handbook). Per the Major Land Resource Area (MLRA) Handbook, the Project Site is within Major Land Resource Area 144A (New England and Eastern New York Upland, Southern Part) of Land Resource Region (LRR) R (Northeastern Forage and Forest Region). Hydric soil indicators that do not apply to this MLRA were not considered.

4.4 Streams

Streams and other non-wetland aquatic features (e.g., lakes and ponds) within the Project Site were identified by the presence of an OHWM, which is the line established by the fluctuations of water (33 CFR 328.3). The OHWM, where not established and available by public record, is indicated by physical characteristics such as a clear, natural line impressed on the bank; shelving; changes in the character of soil; destruction of terrestrial vegetation; the presence of litter and debris; or other characteristics of the surrounding areas.

The streams were delineated from bank to bank with blue flagging and points of the delineated boundaries were located with a handheld GPS unit set for sub-meter accuracy. In streams less than 6 feet wide, sub-meter GPS point capture and post-processing (differential correction) may yield imprecise stream bank measurements due to the narrow nature of the stream. In these circumstances, centerline delineations are applied to maintain accurate representation of stream sinuosity for planning and impact calculation purposes. Stream attributes including width, bank height, and water depth are measured and documented on TRC Stream Inventory Data Forms (see Appendix C).

5.0 RESULTS

5.1 General Overview

The Project Site contains primarily temperate deciduous forest. The estimated average diameter at breast height (DBH) of the trees ranged from 3 to 24 inches, with a few trees attaining DBH measurements of over 30 inches. Dominant vegetation in the tree strata at the Project Site included American beech (*Fagus grandifolia*), sugar maple (*Acer saccharum*), northern red oak (*Quercus rubra*), black oak (*Quercus velutina*), red maple (*Acer rubrum*), sweet birch (*Betula lenta*), and tulip tree (*Liriodendron tulipifera*). Dominant vegetation in the shrub/sapling strata at the Project Site included saplings of the aforementioned trees, spicebush (*Lindera benzoin*), Japanese barberry (*Berberis thunbergii*), and winterberry (*Ilex verticillata*). Dominant vegetation in the herb layer included Christmas fern (*Polystichum acrostichoides*), cinnamon fern (*Osmundastrum cinnamomeum*), and Japanese stiltgrass (*Microstegium vimineum*).

Weather conditions were normal for the time of year. It had rained 0.56 inches the week prior to the wetland and stream delineation in the nearby Town of Shrub Oak, Westchester County, New York, approximately 2.1 miles east of the Project Site.

TRC identified and delineated two wetlands and one stream within the Project Site on October 7, 2019 and November 1, 2019 (see Figure 4). A total of 5.05 percent (2.18 acres) of the 43.12-acre

Project Site is classified as wetland. Tables 4 and 5 below detail the wetlands and stream delineated at the Project Site.

5.2 Delineated Wetlands

Wetland W-1 is a 1.86-acre palustrine forested (PFO)/palustrine emergent (PEM) wetland located in the southeastern portion of the Project Site. This wetland corresponds to NYSDEC-mapped wetland A-50. This wetland continues off site to the south, likely connects to a tributary of Peekskill Hollow Creek, and therefore, is likely USACE jurisdictional. Hydrology originates from the surrounding uplands. Indicators of wetland hydrology include saturation visible on aerial imagery, stunted or stressed plants, geomorphic position, and the FAC-neutral test. Dominant vegetation includes red maple, American sycamore (*Platanus occidentalis*), spicebush, Japanese barberry, Japanese stilt grass, and cinnamon fern. No hydric soil indicator was observed due to refusal at 4 inches, which prevented a full 18 to 20-inch deep soil profile from being observed. However, according to the USDA NRCS, the mapped soil unit for the wetland (i.e., Leicester loam, very stony, 2- to 8-percent slopes) has a higher hydric rating (i.e., 35 percent). Soils were assumed to be hydric due to the presence of inundation, FACW and OBL vegetation species, and a definitive wetland boundary.

Wetland W-2 is a 0.32-acre palustrine scrub-shrub (PSS) wetland located in the southeastern portion of the Project Site. This wetland corresponds to NYSDEC-mapped wetland A-50. This wetland continues off site to the south, likely connects to a tributary of Peekskill Hollow Creek, and therefore, is likely USACE jurisdictional. Hydrology originates from the surrounding uplands. Indicators of wetland hydrology include drainage patterns, saturation visible on aerial imager, and geomorphic position. Dominant vegetation includes red maple, spicebush, American beech, and Japanese stiltgrass. No hydric soil indicator was observed due to refusal at 12 inches, which prevented a full 18 to 20-inch deep soil profile from being observed. However, according to the USDA NRCS, the mapped soil unit for the wetland (i.e., Leicester loam, very stony, 2- to 8-percent slopes) has a higher hydric rating (i.e., 35 percent). Soils were assumed to be hydric due to the presence of inundation, FACW and OBL vegetation species, and a definitive wetland boundary.

Table 4. Delineated Wetlands within the Project Site

Wetland Field Designation	Cover Type Classification[1] and Acreage				Total Wetland Acreage within Project Site	NWI Cover Type	NYSDEC Wetland ID	NYSDEC Wetland Class[2]	Potential Jurisdiction	Associated Buffer	Latitude of Centroid	Longitude of Centroid
	PEM	PSS	PFO	PUB								
W-1	0.28	-	1.58	-	1.86	-	AR-50	II	USACE/ NYSDEC	100 ft	41.322899	-73.864747
W-2	-	0.32	-	-	0.32	-	AR-50	II	USACE/ NYSDEC	100 ft	41.322061	-73.863041
Total Wetland Acreage Delineated:					**2.18**							

[1]PEM – palustrine emergent; PSS – palustrine scrub-shrub; PFO – palustrine forested; PUB – palustrine unconsolidated bottom.
[2]The NYSDEC classification system of freshwater wetlands designates wetlands into four class ratings (I–IV): with Class I being the highest or best quality wetland and Class IV being the lowest quality.

5.3 Delineated Streams

Stream S-1 is an intermittent stream that is approximately 4 feet wide with 0.5-foot high banks and ranging from 0 to 6 inches deep with a sand, silt/clay, and cobble/gravel streambed. This stream originates in the southeastern part of the Project Site and flows off site to the southwest. This stream flows through Wetland W-2. Stream S-2 corresponds to a NYSDEC-mapped Class C stream: a tributary to the middle portion of Peekskill Hollow Creek. Stream S-1 is likely under USACE jurisdiction, as it flows off site and connects to WOTUS.

Table 5. Delineated Streams within the Project Site

Stream Field Designation	Flow Regime Classification	Linear Feet within Project Site	NYSDEC Stream Name and Regulatory ID Number	NYSDEC Classification[1] and Standard[2]	Potential Jurisdiction	Associated Buffer	Latitude of Centroid	Longitude of Centroid
S-1	Intermittent	306	Peekskill Hollow Creek, Middle, and tribs (864-596)	C	USACE	None	41.322113	-73.863073
Total Stream Length Delineated:		**306**						

[1]A classification of AA or A indicates that the best use of the stream is as a source of water supply for drinking, culinary or food processing purposes, primary and secondary contact recreation, and fishing. The best usages of Class B waters are primary and secondary contact recreation and fishing. The best usage of Class C waters is fishing. Waters with a classification of D are generally suitable for fishing and non-contact recreation.
[2] Streams designated (T) indicate that they support trout, while those designated (TS) support trout spawning.

Representative photographs taken of each delineated wetland community and stream within the Project Site are provided in Appendix B. Completed USACE Routine Wetland Determination Forms and TRC Stream Inventory Data Forms are provided in Appendix C.

6.0 CONCLUSIONS

On October 7, 2019 and November 1, 2019, TRC biologists delineated two wetlands and one stream. The two wetlands are likely connected to WOTUS and therefore, are considered jurisdictional by the USACE. There are no setback requirements for USACE-regulated wetlands. These two wetlands coincide with NYSDEC-mapped wetland AR-50 and its 100-foot buffer. Both wetlands continue off site to the south. Wetland W-2 connects to a tributary of Peekskill Hollow Creek and Wetland W-1 likely connects to a tributary of Peekskill Hollow Creek off site to the south. Wetlands W-1 and W-2 are considered NYSDEC jurisdictional and are likely USACE jurisdictional. Stream S-1 flows southwest through the Wetland W-2 and off site to the south and is likely USACE jurisdictional. Stream S-2 corresponds to a NYSDEC-mapped Class C stream and there are no setbacks for Class C streams. The two wetlands and one stream are regulated areas according to the Town of Cortlandt. The 100-foot buffer area around the wetlands and stream is also a regulated area according to the Town of Cortlandt.

Final determination of the jurisdictional status of the wetlands and streams identified on the Project Site must be made by the USACE, NYSDEC, and Town of Cortlandt upon completion of detailed reviews by those agencies.

7.0 REFERENCES

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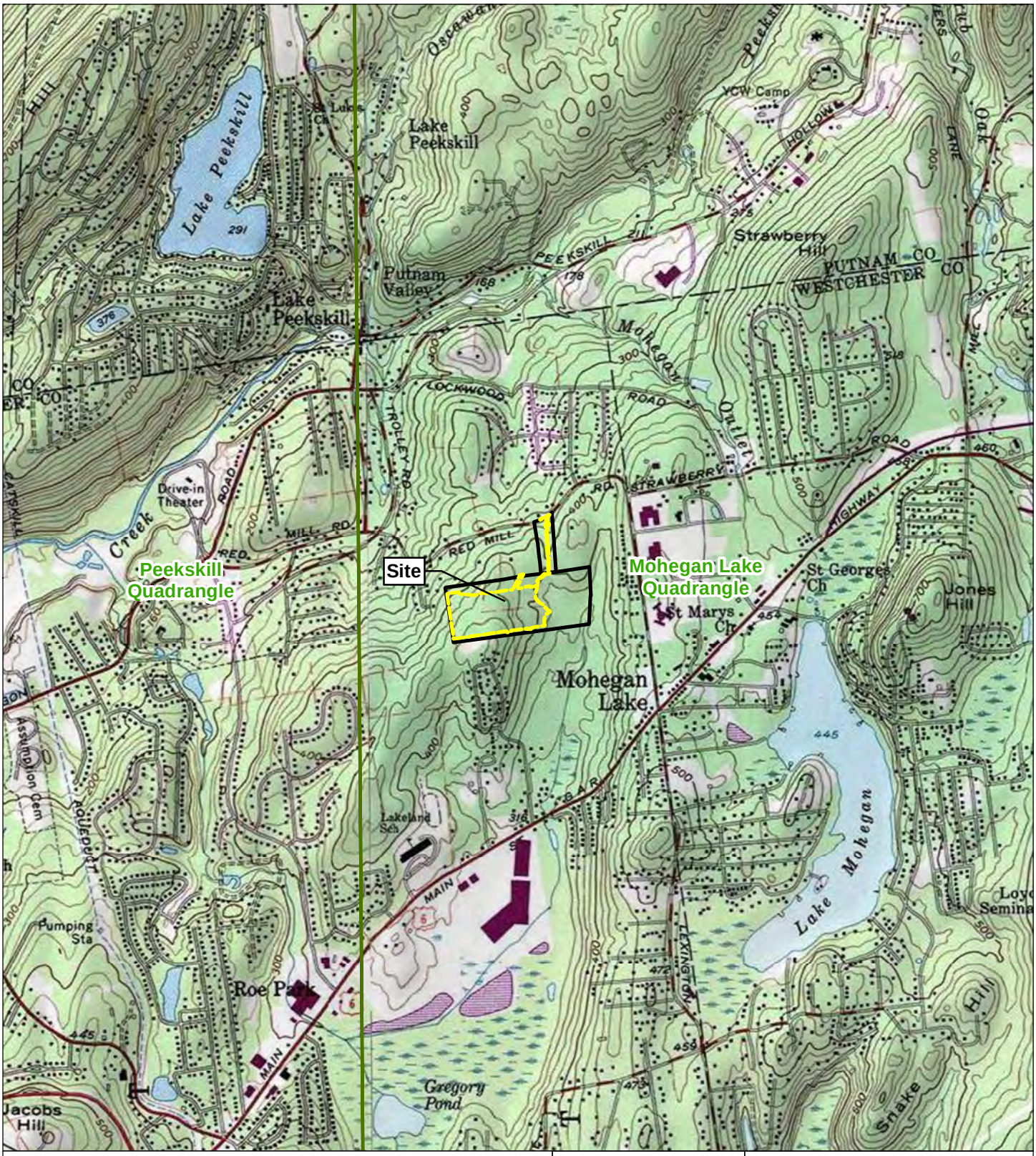
APPENDIX A
Figures



Data Sources: CVEGroup, TRC
Base Map: 2013 National Geographic Society, i-cubed, "USA Topo Maps"

TRC
1430 Broadway
10th Floor
New York
NY 10018

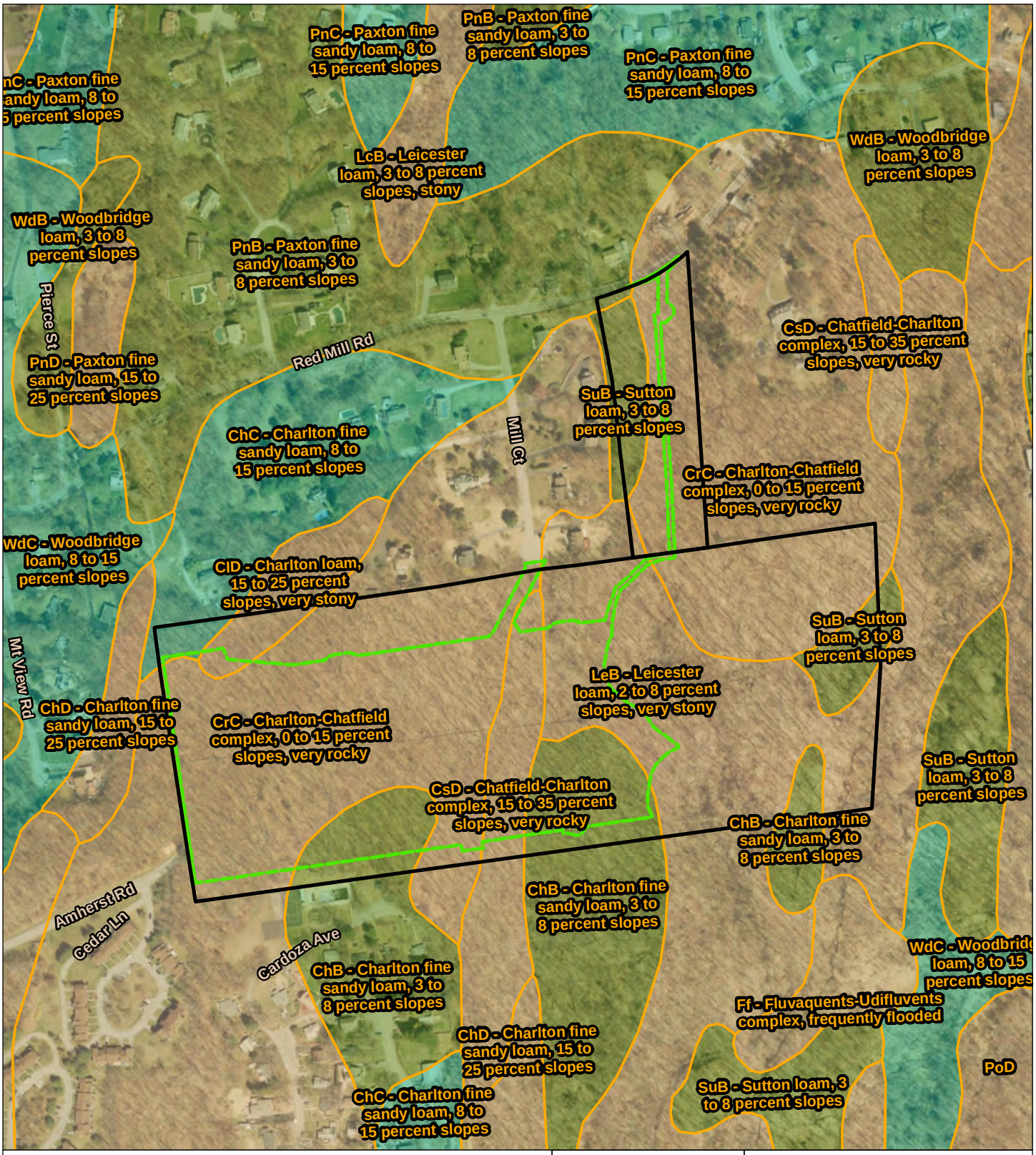
PROJECT LOCATION

CVE NORTH AMERICA
CORTLANDT MILL SOLAR FARM

CORTLANDT, WESTCHESTER COUNTY
NEW YORK

FIGURE 1 | MARCH 2021

S:\1-PROJECTS\CVE_NA\360551_Mill_Court_Cortland\5-MXD\SEQR\Fig1_Cortlandt_USGS_8x11_20210308.mxd

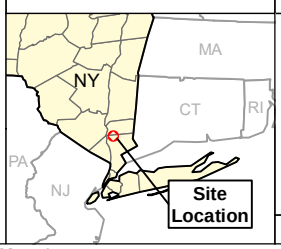


Project Parcel
Limits of Disturbance
Soil Map Unit
All areas are prime farmland
Farmland of statewide importance
Not prime farmland

Data Sources: CVEGroup, TRC, USDA Web Soil Survey, 2019
Base Map: Esri/NAIP, "World Imagery", 2018, Esri & Contributors

0 200 400
Feet

N



TRC

1430 Broadway
10th Floor
New York
NY 10018

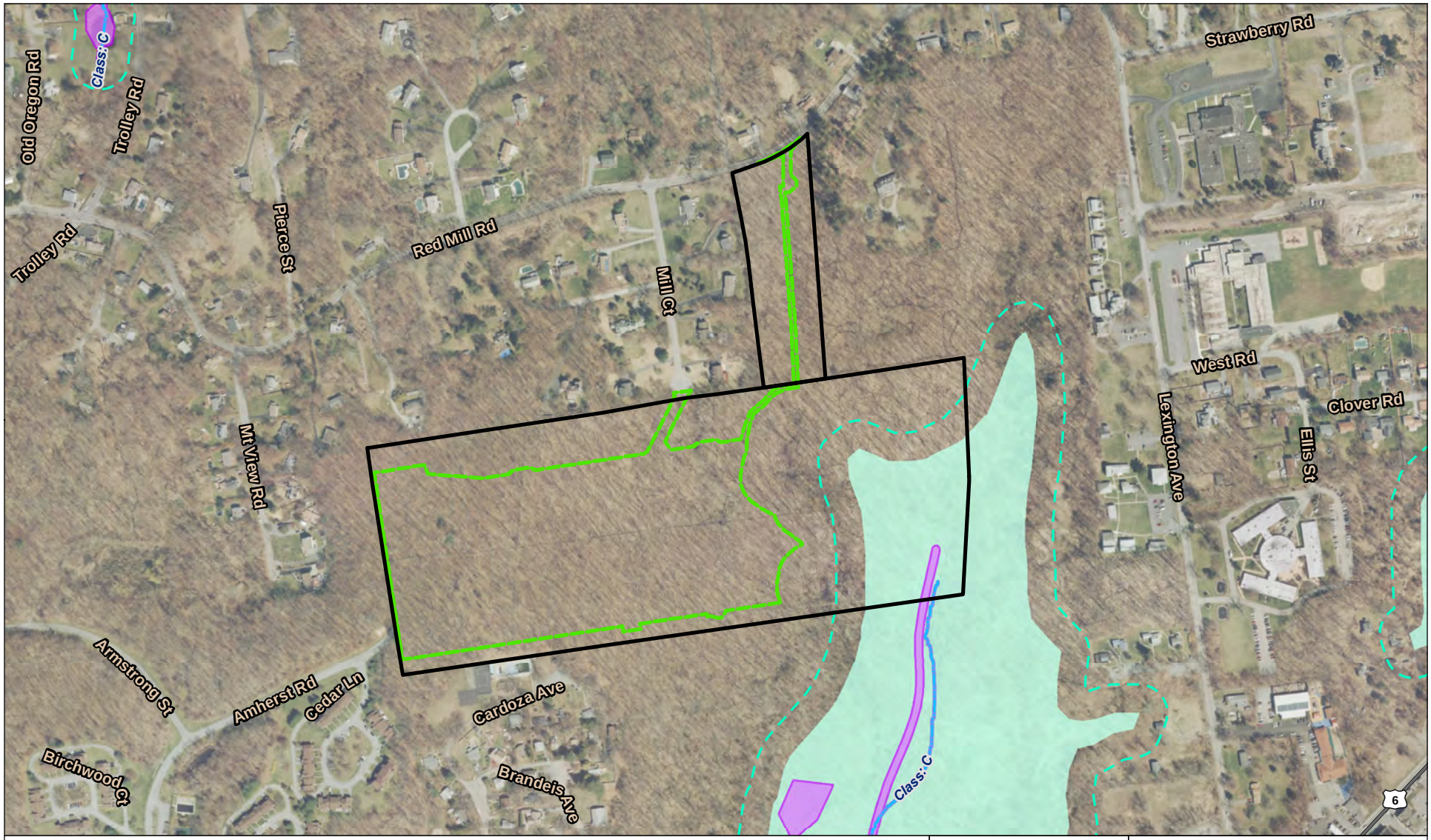
SOILS MAP

CVE NORTH AMERICA
CORTLANDT MILL SOLAR FARM

CORTLANDT, WESTCHESTER COUNTY
NEW YORK

FIGURE 2 | MARCH 2021

S:\1-PROJECTS\CVE_NA\360551_Mill_Court_Cortland\5-MXD\SEQR\Fig6_Cortlandt_Soils_8x11_20210308.mxd



Project Parcel
Limits of Disturbance
Streams (NHD)
Unprotected Stream (NYSDEC)
Wetland (NYSDEC)
Wetland (NWI)
100-ft Buffer from DEC Wetland/Stream

Note:
1. The whole map extent is within 500-Year Floodplain (FEMA).

Data: NYS Geographic Information Gateway, FEMA, TRC, 2019
Base Map: Esri/NAIP, "World Imagery", 2018, Esri & Contributors

N

0 250 500
Feet

TRC

Wannalancit Mills
650 Suffolk Street
Lowell, MA 01854
(978) 970-5600

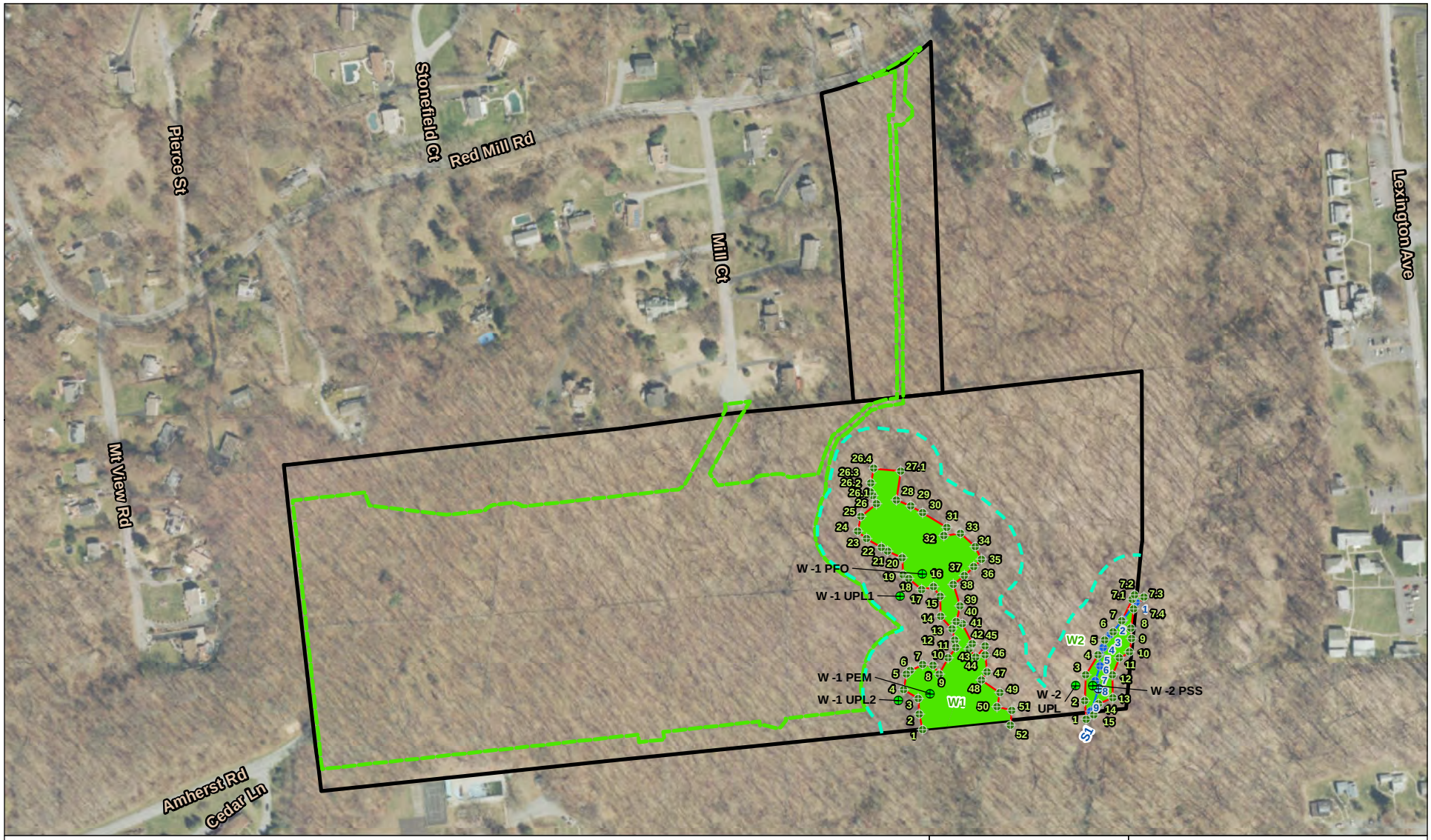
FEDERAL AND STATE MAPPED WATER RESOURCE AND FLOODPLAIN MAPPING

CVE NORTH AMERICA
CORTLANDT MILL SOLAR FARM

CORTLANDT, WESTCHESTER COUNTY
NEW YORK

FIGURE 3 | MARCH 2021

S:\1-PROJECTS\CVE_NA\360551_Mill_Court_Cortland\5-MXD\Biodiversity_Assessment\Fig5_Cortlandt_Env_Resources_8x11L_20210316.mxd



Project Parcel
Limits of Disturbance
USACE Plot
Stream Plot
Stream Flag
Wetland Flag
Delineated Intermittent Stream
Wetland Boundary Line
100-ft Wetland Buffer
Delineated Wetland

0 175 350
Feet

N

Data: CVEGroup,TRC, 2019/2020
Base Map: Esri/NAIP, "World Imagery", 2018, Esri & Contributors

TRC
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DELINEATED WETLANDS AND STREAMS

CVE NORTH AMERICA CORTLANDT MILL SOLAR FARM

CORTLANDT, WESTCHESTER COUNTY NEW YORK

FIGURE 4 | MARCH 2021

S:\1-PROJECTS\CVE_NA\360551_Mill_Court_Cortland\5-MXD\Biodiversity_Assessment\Fig7_Delineation_8x11L_20210316.mxd

APPENDIX B
Photograph Log

Photograph 1. View looking northeast at palustrine emergent (PEM) portion of wetland W-1. Photo taken on 10/7/19.

Photograph 2. View looking northeast at palustrine forested (PFO) portion of wetland W-1. Photo taken on 10/7/19.

Photograph 3. View looking southwest at PFO portion of wetland W-1. Photo taken on 10/7/19.

Photograph 4. View looking north at palustrine scrub-shrub wetland W-2. Photo taken on 10/7/19.

Photograph 5. View looking southeast at intermittent stream S-1. Photo taken on 10/7/2019.

Photograph 6. View looking northwest at the beech maple mesic forest typical of the Project Site. Phot taken on 10/7/19.

Photograph 7. View looking southeast at Appalachian oak-hickory forest typical of the Project Site. Photo taken 10/7/19.

Photograph 8. View looking northeast at one of the rock walls common throughout the Project Site. Photo taken 10/7/19.

Photograph 9. View looking northwest at one of the rock walls common throughout the Project Site. Photo taken 10/7/19.

Photograph 10. View looking northwest at rock outcroppings and steep slopes in the western portion of the Project Site. Photo taken 10/7/19.

APPENDIX C
USACE Routine Wetland Determination Forms
and
TRC's Stream Inventory Data Forms

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: Mill Court **City/County:** Mohegan Lake, Westchester **Sampling Date:** 2019-Oct-07
Applicant/Owner: CVE **State:** NY **Sampling Point:** W-MJR-01_PEM-1
Investigator(s): Matt Regan, Matt Boscow **Section, Township, Range:**
Landform (hillslope, terrace, etc.): Depression **Local relief (concave, convex, none):** Concave **Slope (%):** 0 to 1
Subregion (LRR or MLRA): MLRA 144A of LRR R **Lat:** 41.3218739117 **Long:** -73.8646846824 **Datum:** WGS84
Soil Map Unit Name: Leicester loam 2 to 8 percent slopes very stony **NWI classification:**
Are climatic/hydrologic conditions on the site typical for this time of year? Yes _✓_ No ____ (If no, explain in Remarks.)
Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes _✓_ No ____
Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes _✓_ No ____		
Hydric Soil Present?	Yes _✓_ No ____	**Is the Sampled Area within a Wetland?**	**Yes _✓_ No ____**
Wetland Hydrology Present?	Yes _✓_ No ____	**If yes, optional Wetland Site ID:**	W-MJR-01

Remarks: (Explain alternative procedures here or in a separate report)
Covertype is PEM.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

___ Surface Water (A1)
___ High Water Table (A2)
___ Saturation (A3)
___ Water Marks (B1)
___ Sediment Deposits (B2)
___ Drift Deposits (B3)
___ Algal Mat or Crust (B4)
___ Iron Deposits (B5)
___ Inundation Visible on Aerial Imagery (B7)
___ Sparsely Vegetated Concave Surface (B8)
___ Water-Stained Leaves (B9)
___ Aquatic Fauna (B13)
___ Marl Deposits (B15)
___ Hydrogen Sulfide Odor (C1)
___ Oxidized Rhizospheres on Living Roots (C3)
___ Presence of Reduced Iron (C4)
___ Recent Iron Reduction in Tilled Soils (C6)
___ Thin Muck Surface (C7)
___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

___ Surface Soil Cracks (B6)
___ Drainage Patterns (B10)
___ Moss Trim Lines (B16)
___ Dry-Season Water Table (C2)
___ Crayfish Burrows (C8)
_✓_ Saturation Visible on Aerial Imagery (C9)
_✓_ Stunted or Stressed Plants (D1)
_✓_ Geomorphic Position (D2)
___ Shallow Aquitard (D3)
___ Microtopographic Relief (D4)
_✓_ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ____ No _✓_	Depth (inches):	
Water Table Present?	Yes ____ No _✓_	Depth (inches):	**Wetland Hydrology Present?** Yes _✓_ No ____
Saturation Present? (includes capillary fringe)	Yes ____ No _✓_	Depth (inches):	

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

VEGETATION -- Use scientific names of plants.

Sampling Point: W-MJR-01_PEM-1

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
6.			
7.			
	0	= Total Cover	
Sapling/Shrub Stratum (Plot size: 15 ft)			
1. *Lindera benzoin*	10	Yes	FACW
2.			
3.			
4.			
5.			
6.			
7.			
	10	= Total Cover	
Herb Stratum (Plot size: 5 ft)			
1. *Persicaria arifolia*	40	Yes	OBL
2. *Osmundastrum cinnamomeum*	15	Yes	FACW
3. *Berberis thunbergii*	10	No	FACU
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	65	= Total Cover	
Woody Vine Stratum (Plot size: 30 ft)			
1.			
2.			
3.			
4.			
	0	= Total Cover	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC:	3	(A)
Total Number of Dominant Species Across All Strata:	3	(B)
Percent of Dominant Species That Are OBL, FACW, or FAC:	100	(A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply By:	
OBL species	40	x 1 =	40
FACW species	25	x 2 =	50
FAC species	0	x 3 =	0
FACU species	10	x 4 =	40
UPL species	0	x 5 =	0
Column Totals	75	(A)	130 (B)
Prevalence Index = B/A =	1.7		

Hydrophytic Vegetation Indicators:

✓ 1- Rapid Test for Hydrophytic Vegetation

✓ 2 - Dominance Test is >50%

✓ 3 - Prevalence Index is ≤ 3.0[1]

____ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

____ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic

Definitions of Vegetation Strata:

Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.

Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vines – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? Yes ✓ No ____

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: W-MJR-01_PEM-1

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0 - 20	2.5Y 3/1	100					Silty Clay Loam	
20 - 26	N 4/	100					Silty Clay	

[1]Type: C = Concentration, D = Depletion, RM = Reduced Matrix, MS = Masked Sand Grains. [2]Location: PL = Pore Lining, M = Matrix.

Hydric Soil Indicators:

___ Histosol (A1)
___ Histic Epipedon (A2)
___ Black Histic (A3)
___ Hydrogen Sulfide (A4)
___ Stratified Layers (A5)
___ Depleted Below Dark Surface (A11)
___ Thick Dark Surface (A12)
___ Sandy Mucky Mineral (S1)
___ Sandy Gleyed Matrix (S4)
___ Sandy Redox (S5)
___ Stripped Matrix (S6)
___ Dark Surface (S7) **(LRR R, MLRA 149B)**
___ Polyvalue Below Surface (S8) **(LRR R, MLRA 149B)**
___ Thin Dark Surface (S9) **(LRR R, MLRA 149B)**
___ Loamy Mucky Mineral (F1) **(LRR K, L)**
___ Loamy Gleyed Matrix (F2)
___ Depleted Matrix (F3)
___ Redox Dark Surface (F6)
___ Depleted Dark Surface (F7)
___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

___ 2 cm Muck (A10) **(LRR K, L, MLRA 149B)**
___ Coast Prairie Redox (A16) **(LRR K, L, R)**
___ 5 cm Mucky Peat or Peat (S3) **(LRR K, L, R)**
___ Dark Surface (S7) **(LRR K, L)**
___ Polyvalue Below Surface (S8) **(LRR K, L)**
___ Thin Dark Surface (S9) **(LRR K, L)**
___ Iron-Manganese Masses (F12) **(LRR K, L, R)**
___ Piedmont Floodplain Soils (F19) **(MLRA 149B)**
___ Mesic Spodic (TA6) **(MLRA 144A, 145, 149B)**
___ Red Parent Material (F21)
___ Very Shallow Dark Surface (TF12)
_✓_ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: None

Depth (inches):

Hydric Soil Present? Yes _✓_ No ____

Remarks:

According to the USDA NRCS the mapped soil type is classified as hydric. Soils were assumed to be hydric due to the presence of inundation, FACW and OBL vegetation species, and a definitive wetland boundary.

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: Mill Court **City/County:** Cortlandt Manor, Westchester **Sampling Date:** 2019-Oct-07
Applicant/Owner: CVE **State:** NY **Sampling Point:** W-MJR-01_PFO-1
Investigator(s): Matt Regan, Matt Boscow **Section, Township, Range:**
Landform (hillslope, terrace, etc.): Depression **Local relief (concave, convex, none):** Concave **Slope (%):** 0 to 1
Subregion (LRR or MLRA): MLRA 144A of LRR R **Lat:** 41.3226689352 **Long:** -73.8645240013 **Datum:** WGS84
Soil Map Unit Name: Leicester loam, very stony, 2 to 8 percent slopes **NWI classification:**
Are climatic/hydrologic conditions on the site typical for this time of year? Yes ✓ No ____ (If no, explain in Remarks.)
Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes ✓ No ____
Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ✓ No ____		
Hydric Soil Present?	Yes ✓ No ____	**Is the Sampled Area within a Wetland?**	**Yes ✓ No ____**
Wetland Hydrology Present?	Yes ✓ No ____	**If yes, optional Wetland Site ID:**	W-MJR-01

Remarks: (Explain alternative procedures here or in a separate report)
Covertype is PFO.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

___ Surface Water (A1)
___ High Water Table (A2)
___ Saturation (A3)
___ Water Marks (B1)
___ Sediment Deposits (B2)
___ Drift Deposits (B3)
___ Algal Mat or Crust (B4)
___ Iron Deposits (B5)
___ Inundation Visible on Aerial Imagery (B7)
___ Sparsely Vegetated Concave Surface (B8)
___ Water-Stained Leaves (B9)
___ Aquatic Fauna (B13)
___ Marl Deposits (B15)
___ Hydrogen Sulfide Odor (C1)
___ Oxidized Rhizospheres on Living Roots (C3)
___ Presence of Reduced Iron (C4)
___ Recent Iron Reduction in Tilled Soils (C6)
___ Thin Muck Surface (C7)
___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

___ Surface Soil Cracks (B6)
___ Drainage Patterns (B10)
___ Moss Trim Lines (B16)
___ Dry-Season Water Table (C2)
___ Crayfish Burrows (C8)
✓ Saturation Visible on Aerial Imagery (C9)
___ Stunted or Stressed Plants (D1)
✓ Geomorphic Position (D2)
___ Shallow Aquitard (D3)
___ Microtopographic Relief (D4)
✓ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ____ No ✓	Depth (inches):	
Water Table Present?	Yes ____ No ✓	Depth (inches):	**Wetland Hydrology Present?** Yes ✓ No ____
Saturation Present? (includes capillary fringe)	Yes ____ No ✓	Depth (inches):	

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

VEGETATION -- Use scientific names of plants.

Sampling Point: W-MJR-01_PFO-1

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1. *Acer rubrum*	25	Yes	FAC
2. *Platanus occidentalis*	10	Yes	FACW
3. *Carya cordiformis*	5	No	FAC
4.			
5.			
6.			
7.			
	40	= Total Cover	
Sapling/Shrub Stratum (Plot size: 15 ft)			
1. *Lindera benzoin*	50	Yes	FACW
2. *Berberis thunbergii*	25	Yes	FACU
3. *Ilex verticillata*	10	No	FACW
4.			
5.			
6.			
7.			
	85	= Total Cover	
Herb Stratum (Plot size: 5 ft)			
1. *Microstegium vimineum*	50	Yes	FAC
2. *Glyceria maxima*	10	No	OBL
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	60	= Total Cover	
Woody Vine Stratum (Plot size: 30 ft)			
1.			
2.			
3.			
4.			
	0	= Total Cover	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 4 (A)

Total Number of Dominant Species Across All Strata: 5 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 80 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply By:	
OBL species	10	x 1 =	10
FACW species	70	x 2 =	140
FAC species	80	x 3 =	240
FACU species	25	x 4 =	100
UPL species	0	x 5 =	0
Column Totals	185	(A)	490 (B)

Prevalence Index = B/A = 2.6

Hydrophytic Vegetation Indicators:

____ 1- Rapid Test for Hydrophytic Vegetation

_✓_ 2 - Dominance Test is >50%

_✓_ 3 - Prevalence Index is ≤ 3.0[1]

____ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

____ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic

Definitions of Vegetation Strata:

Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.

Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vines – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? Yes _✓_ No ____

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: W-MJR-01_PFO-1

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0 - 4	10YR 2/2	100					Loam	

[1]Type: C = Concentration, D = Depletion, RM = Reduced Matrix, MS = Masked Sand Grains. [2]Location: PL = Pore Lining, M = Matrix.

Hydric Soil Indicators:

___ Histosol (A1)
___ Histic Epipedon (A2)
___ Black Histic (A3)
___ Hydrogen Sulfide (A4)
___ Stratified Layers (A5)
___ Depleted Below Dark Surface (A11)
___ Thick Dark Surface (A12)
___ Sandy Mucky Mineral (S1)
___ Sandy Gleyed Matrix (S4)
___ Sandy Redox (S5)
___ Stripped Matrix (S6)
___ Dark Surface (S7) **(LRR R, MLRA 149B)**
___ Polyvalue Below Surface (S8) **(LRR R, MLRA 149B)**
___ Thin Dark Surface (S9) **(LRR R, MLRA 149B)**
___ Loamy Mucky Mineral (F1) **(LRR K, L)**
___ Loamy Gleyed Matrix (F2)
___ Depleted Matrix (F3)
___ Redox Dark Surface (F6)
___ Depleted Dark Surface (F7)
___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

___ 2 cm Muck (A10) **(LRR K, L, MLRA 149B)**
___ Coast Prairie Redox (A16) **(LRR K, L, R)**
___ 5 cm Mucky Peat or Peat (S3) **(LRR K, L, R)**
___ Dark Surface (S7) **(LRR K, L)**
___ Polyvalue Below Surface (S8) **(LRR K, L)**
___ Thin Dark Surface (S9) **(LRR K, L)**
___ Iron-Manganese Masses (F12) **(LRR K, L, R)**
___ Piedmont Floodplain Soils (F19) **(MLRA 149B)**
___ Mesic Spodic (TA6) **(MLRA 144A, 145, 149B)**
___ Red Parent Material (F21)
___ Very Shallow Dark Surface (TF12)
_✓_ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: Rock
Depth (inches): 4

Hydric Soil Present? Yes _✓_ No ____

Remarks:

According to the USDA NRCS the mapped soil type is classified as hydric. Soils were assumed to be hydric due to the presence of inundation, FACW and OBL vegetation species, and a definitive wetland boundary. Refusal due to coarse fragments.

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: Mill Court **City/County:** Mohegan Lake, Westchester **Sampling Date:** 2019-Oct-07
Applicant/Owner: CVE **State:** NY **Sampling Point:** W-MJR-01_UPL-1
Investigator(s): Matt Regan, Matt Boscow **Section, Township, Range:**
Landform (hillslope, terrace, etc.): Toe **Local relief (concave, convex, none):** Convex **Slope (%):** 1 to 3
Subregion (LRR or MLRA): MLRA 144A of LRR R **Lat:** 41.3218684635 **Long:** -73.8649034501 **Datum:** WGS84
Soil Map Unit Name: Leicester loam 2 to 8 percent slopes very stony **NWI classification:**
Are climatic/hydrologic conditions on the site typical for this time of year? Yes ✓ No ____ (If no, explain in Remarks.)
Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes ✓ No ____
Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ____ No ✓		
Hydric Soil Present?	Yes ____ No ✓	**Is the Sampled Area within a Wetland?**	**Yes ____ No ✓**
Wetland Hydrology Present?	Yes ____ No ✓	**If yes, optional Wetland Site ID:**	

Remarks: (Explain alternative procedures here or in a separate report)
Covertype is UPL.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

___ Surface Water (A1)
___ High Water Table (A2)
___ Saturation (A3)
___ Water Marks (B1)
___ Sediment Deposits (B2)
___ Drift Deposits (B3)
___ Algal Mat or Crust (B4)
___ Iron Deposits (B5)
___ Inundation Visible on Aerial Imagery (B7)
___ Sparsely Vegetated Concave Surface (B8)
___ Water-Stained Leaves (B9)
___ Aquatic Fauna (B13)
___ Marl Deposits (B15)
___ Hydrogen Sulfide Odor (C1)
___ Oxidized Rhizospheres on Living Roots (C3)
___ Presence of Reduced Iron (C4)
___ Recent Iron Reduction in Tilled Soils (C6)
___ Thin Muck Surface (C7)
___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

___ Surface Soil Cracks (B6)
___ Drainage Patterns (B10)
___ Moss Trim Lines (B16)
___ Dry-Season Water Table (C2)
___ Crayfish Burrows (C8)
___ Saturation Visible on Aerial Imagery (C9)
___ Stunted or Stressed Plants (D1)
___ Geomorphic Position (D2)
___ Shallow Aquitard (D3)
___ Microtopographic Relief (D4)
___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ____ No ✓	Depth (inches):	
Water Table Present?	Yes ____ No ✓	Depth (inches):	**Wetland Hydrology Present?** Yes ____ No ✓
Saturation Present? (includes capillary fringe)	Yes ____ No ✓	Depth (inches):	

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

VEGETATION -- Use scientific names of plants.

Sampling Point: W-MJR-01_UPL-1

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1. *Acer saccharum*	25	Yes	FACU
2. *Fagus grandifolia*	15	Yes	FACU
3. *Liriodendron tulipifera*	10	No	FACU
4. *Betula lenta*	10	No	FACU
5. *Carya ovata*	5	No	FACU
6.			
7.			
	65	= Total Cover	
Sapling/Shrub Stratum (Plot size: 15 ft)			
1. *Lindera benzoin*	25	Yes	FACW
2. *Fagus grandifolia*	10	Yes	FACU
3. *Berberis thunbergii*	5	No	FACU
4.			
5.			
6.			
7.			
	40	= Total Cover	
Herb Stratum (Plot size: 5 ft)			
1. *Athyrium angustum*	10	Yes	FAC
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	10	= Total Cover	
Woody Vine Stratum (Plot size: 30 ft)			
1.			
2.			
3.			
4.			
	0	= Total Cover	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)

Total Number of Dominant Species Across All Strata: 5 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 40 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply By:	
OBL species	0	x 1 =	0
FACW species	25	x 2 =	50
FAC species	10	x 3 =	30
FACU species	80	x 4 =	320
UPL species	0	x 5 =	0
Column Totals	115	(A)	400 (B)

Prevalence Index = B/A = 3.5

Hydrophytic Vegetation Indicators:

_____ 1- Rapid Test for Hydrophytic Vegetation

_____ 2 - Dominance Test is > 50%

_____ 3 - Prevalence Index is ≤ 3.0[1]

_____ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

_____ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic

Definitions of Vegetation Strata:

Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.

Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vines – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? Yes _____ No ✓

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: W-MJR-01_UPL-1

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0 - 7	7.5YR 3/1	100					Loamy Sand	

[1]Type: C = Concentration, D = Depletion, RM = Reduced Matrix, MS = Masked Sand Grains. [2]Location: PL = Pore Lining, M = Matrix.

Hydric Soil Indicators:

___ Histosol (A1)
___ Histic Epipedon (A2)
___ Black Histic (A3)
___ Hydrogen Sulfide (A4)
___ Stratified Layers (A5)
___ Depleted Below Dark Surface (A11)
___ Thick Dark Surface (A12)
___ Sandy Mucky Mineral (S1)
___ Sandy Gleyed Matrix (S4)
___ Sandy Redox (S5)
___ Stripped Matrix (S6)
___ Dark Surface (S7) **(LRR R, MLRA 149B)**
___ Polyvalue Below Surface (S8) **(LRR R, MLRA 149B)**
___ Thin Dark Surface (S9) **(LRR R, MLRA 149B)**
___ Loamy Mucky Mineral (F1) **(LRR K, L)**
___ Loamy Gleyed Matrix (F2)
___ Depleted Matrix (F3)
___ Redox Dark Surface (F6)
___ Depleted Dark Surface (F7)
___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

___ 2 cm Muck (A10) **(LRR K, L, MLRA 149B)**
___ Coast Prairie Redox (A16) **(LRR K, L, R)**
___ 5 cm Mucky Peat or Peat (S3) **(LRR K, L, R)**
___ Dark Surface (S7) **(LRR K, L)**
___ Polyvalue Below Surface (S8) **(LRR K, L)**
___ Thin Dark Surface (S9) **(LRR K, L)**
___ Iron-Manganese Masses (F12) **(LRR K, L, R)**
___ Piedmont Floodplain Soils (F19) **(MLRA 149B)**
___ Mesic Spodic (TA6) **(MLRA 144A, 145, 149B)**
___ Red Parent Material (F21)
___ Very Shallow Dark Surface (TF12)
___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: Rock
Depth (inches): 7

Hydric Soil Present? Yes ____ No ✓

Remarks:

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: Mill Court **City/County:** Cortlandt Manor, Westchester **Sampling Date:** 2019-Oct-07
Applicant/Owner: CVE **State:** NY **Sampling Point:** W-MJR-01_UPL-2
Investigator(s): Matt Regan, Matt Boscow **Section, Township, Range:**
Landform (hillslope, terrace, etc.): Flat **Local relief (concave, convex, none):** None **Slope (%):** 0 to 1
Subregion (LRR or MLRA): MLRA 144A of LRR R **Lat:** 41.3227761398 **Long:** -73.8649384864 **Datum:** WGS84
Soil Map Unit Name: Leicester loam 2 to 8 percent slopes very stony **NWI classification:**
Are climatic/hydrologic conditions on the site typical for this time of year? Yes ✓ No ____ (If no, explain in Remarks.)
Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes ✓ No ____
Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ____ No ✓		
Hydric Soil Present?	Yes ____ No ✓	**Is the Sampled Area within a Wetland?**	**Yes ____ No ✓**
Wetland Hydrology Present?	Yes ____ No ✓	**If yes, optional Wetland Site ID:**	

Remarks: (Explain alternative procedures here or in a separate report)
Covertype is UPL.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

___ Surface Water (A1)
___ High Water Table (A2)
___ Saturation (A3)
___ Water Marks (B1)
___ Sediment Deposits (B2)
___ Drift Deposits (B3)
___ Algal Mat or Crust (B4)
___ Iron Deposits (B5)
___ Inundation Visible on Aerial Imagery (B7)
___ Sparsely Vegetated Concave Surface (B8)
___ Water-Stained Leaves (B9)
___ Aquatic Fauna (B13)
___ Marl Deposits (B15)
___ Hydrogen Sulfide Odor (C1)
___ Oxidized Rhizospheres on Living Roots (C3)
___ Presence of Reduced Iron (C4)
___ Recent Iron Reduction in Tilled Soils (C6)
___ Thin Muck Surface (C7)
___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

___ Surface Soil Cracks (B6)
___ Drainage Patterns (B10)
___ Moss Trim Lines (B16)
___ Dry-Season Water Table (C2)
___ Crayfish Burrows (C8)
___ Saturation Visible on Aerial Imagery (C9)
___ Stunted or Stressed Plants (D1)
___ Geomorphic Position (D2)
___ Shallow Aquitard (D3)
___ Microtopographic Relief (D4)
___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ____ No ✓	Depth (inches):	
Water Table Present?	Yes ____ No ✓	Depth (inches):	**Wetland Hydrology Present?** Yes ____ No ✓
Saturation Present? (includes capillary fringe)	Yes ____ No ✓	Depth (inches):	

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

VEGETATION -- Use scientific names of plants.

Sampling Point: W-MJR-01_UPL-2

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1. *Liriodendron tulipifera*	30	Yes	FACU
2. *Acer saccharum*	10	No	FACU
3. *Quercus rubra*	10	No	FACU
4. *Carya ovata*	5	No	FACU
5.			
6.			
7.			
	55	= Total Cover	
Sapling/Shrub Stratum (Plot size: 15 ft)			
1. *Fagus grandifolia*	10	Yes	FACU
2. *Acer saccharum*	5	Yes	FACU
3. *Lindera benzoin*	5	Yes	FACW
4. *Berberis thunbergii*	5	Yes	FACU
5.			
6.			
7.			
	25	= Total Cover	
Herb Stratum (Plot size: 5 ft)			
1. *Lindera benzoin*	5	Yes	FACW
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	5	= Total Cover	
Woody Vine Stratum (Plot size: 30 ft)			
1.			
2.			
3.			
4.			
	0	= Total Cover	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)

Total Number of Dominant Species Across All Strata: 6 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 33.3 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply By:	
OBL species	0	x 1 =	0
FACW species	10	x 2 =	20
FAC species	0	x 3 =	0
FACU species	75	x 4 =	300
UPL species	0	x 5 =	0
Column Totals	85	(A)	320 (B)

Prevalence Index = B/A = 3.8

Hydrophytic Vegetation Indicators:

_____ 1- Rapid Test for Hydrophytic Vegetation

_____ 2 - Dominance Test is > 50%

_____ 3 - Prevalence Index is ≤ 3.0[1]

_____ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

_____ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic

Definitions of Vegetation Strata:

Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.

Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vines – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? Yes _____ No ✓

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: W-MJR-01_UPL-2

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0 - 6	2.5Y 3/1	100					Loamy Sand	

[1]Type: C = Concentration, D = Depletion, RM = Reduced Matrix, MS = Masked Sand Grains. [2]Location: PL = Pore Lining, M = Matrix.

Hydric Soil Indicators:

___ Histosol (A1)
___ Histic Epipedon (A2)
___ Black Histic (A3)
___ Hydrogen Sulfide (A4)
___ Stratified Layers (A5)
___ Depleted Below Dark Surface (A11)
___ Thick Dark Surface (A12)
___ Sandy Mucky Mineral (S1)
___ Sandy Gleyed Matrix (S4)
___ Sandy Redox (S5)
___ Stripped Matrix (S6)
___ Dark Surface (S7) **(LRR R, MLRA 149B)**
___ Polyvalue Below Surface (S8) **(LRR R, MLRA 149B)**
___ Thin Dark Surface (S9) **(LRR R, MLRA 149B)**
___ Loamy Mucky Mineral (F1) **(LRR K, L)**
___ Loamy Gleyed Matrix (F2)
___ Depleted Matrix (F3)
___ Redox Dark Surface (F6)
___ Depleted Dark Surface (F7)
___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

___ 2 cm Muck (A10) **(LRR K, L, MLRA 149B)**
___ Coast Prairie Redox (A16) **(LRR K, L, R)**
___ 5 cm Mucky Peat or Peat (S3) **(LRR K, L, R)**
___ Dark Surface (S7) **(LRR K, L)**
___ Polyvalue Below Surface (S8) **(LRR K, L)**
___ Thin Dark Surface (S9) **(LRR K, L)**
___ Iron-Manganese Masses (F12) **(LRR K, L, R)**
___ Piedmont Floodplain Soils (F19) **(MLRA 149B)**
___ Mesic Spodic (TA6) **(MLRA 144A, 145, 149B)**
___ Red Parent Material (F21)
___ Very Shallow Dark Surface (TF12)
___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: Rock
Depth (inches): 6

Hydric Soil Present? Yes ____ No ✓

Remarks:

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: Mill Court **City/County:** Mohegan Lake, Westchester **Sampling Date:** 2019-Oct-07
Applicant/Owner: CVE **State:** NY **Sampling Point:** W-MJR-02_PSS-1
Investigator(s): Matt Regan, Matt Boscow **Section, Township, Range:**
Landform (hillslope, terrace, etc.): Channel **Local relief (concave, convex, none):** Concave **Slope (%):** 0 to 1
Subregion (LRR or MLRA): MLRA 144A of LRR R **Lat:** 41.321991887 **Long:** -73.8631035202 **Datum:** WGS84
Soil Map Unit Name: Leicester loam 2 to 8 percent slopes very stony **NWI classification:**
Are climatic/hydrologic conditions on the site typical for this time of year? Yes _✓_ No ____ (If no, explain in Remarks.)
Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes _✓_ No ____
Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes _✓_ No ____		
Hydric Soil Present?	Yes _✓_ No ____	**Is the Sampled Area within a Wetland?**	**Yes _✓_ No ____**
Wetland Hydrology Present?	Yes _✓_ No ____	**If yes, optional Wetland Site ID:**	W-MJR-02

Remarks: (Explain alternative procedures here or in a separate report)
Covertype is PSS.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

___ Surface Water (A1)
___ High Water Table (A2)
___ Saturation (A3)
___ Water Marks (B1)
___ Sediment Deposits (B2)
___ Drift Deposits (B3)
___ Algal Mat or Crust (B4)
___ Iron Deposits (B5)
___ Inundation Visible on Aerial Imagery (B7)
___ Sparsely Vegetated Concave Surface (B8)
___ Water-Stained Leaves (B9)
___ Aquatic Fauna (B13)
___ Marl Deposits (B15)
___ Hydrogen Sulfide Odor (C1)
___ Oxidized Rhizospheres on Living Roots (C3)
___ Presence of Reduced Iron (C4)
___ Recent Iron Reduction in Tilled Soils (C6)
___ Thin Muck Surface (C7)
___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

___ Surface Soil Cracks (B6)
_✓_ Drainage Patterns (B10)
___ Moss Trim Lines (B16)
___ Dry-Season Water Table (C2)
___ Crayfish Burrows (C8)
_✓_ Saturation Visible on Aerial Imagery (C9)
___ Stunted or Stressed Plants (D1)
_✓_ Geomorphic Position (D2)
___ Shallow Aquitard (D3)
___ Microtopographic Relief (D4)
___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ____ No _✓_	Depth (inches):	
Water Table Present?	Yes ____ No _✓_	Depth (inches):	**Wetland Hydrology Present?** Yes _✓_ No ____
Saturation Present? (includes capillary fringe)	Yes ____ No _✓_	Depth (inches):	

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

VEGETATION -- Use scientific names of plants.

Sampling Point: W-MJR-02_PSS-1

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1. *Fagus grandifolia*	10	Yes	FACU
2. *Acer rubrum*	10	Yes	FAC
3.			
4.			
5.			
6.			
7.			
	20	= Total Cover	
Sapling/Shrub Stratum (Plot size: 15 ft)			
1. *Lindera benzoin*	15	Yes	FACW
2. *Acer rubrum*	5	Yes	FAC
3. *Fagus grandifolia*	5	Yes	FACU
4.			
5.			
6.			
7.			
	25	= Total Cover	
Herb Stratum (Plot size: 5 ft)			
1. *Microstegium vimineum*	80	Yes	FAC
2. *Impatiens capensis*	10	No	FACW
3. *Solidago rugosa*	5	No	FAC
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	95	= Total Cover	
Woody Vine Stratum (Plot size: 30 ft)			
1.			
2.			
3.			
4.			
	0	= Total Cover	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC:	4	(A)
Total Number of Dominant Species Across All Strata:	6	(B)
Percent of Dominant Species That Are OBL, FACW, or FAC:	66.7	(A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply By:	
OBL species	0	x 1 =	0
FACW species	25	x 2 =	50
FAC species	100	x 3 =	300
FACU species	15	x 4 =	60
UPL species	0	x 5 =	0
Column Totals	140	(A)	410 (B)

Prevalence Index = B/A = 2.9

Hydrophytic Vegetation Indicators:

____ 1- Rapid Test for Hydrophytic Vegetation

_✓_ 2 - Dominance Test is >50%

_✓_ 3 - Prevalence Index is ≤ 3.0[1]

____ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

____ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic

Definitions of Vegetation Strata:

Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.

Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vines – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? Yes _✓_ No ____

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: W-MJR-02_PSS-1

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0 - 12	2.5Y 2.5/1	100					Silty Clay Loam	

[1]Type: C = Concentration, D = Depletion, RM = Reduced Matrix, MS = Masked Sand Grains. [2]Location: PL = Pore Lining, M = Matrix.

Hydric Soil Indicators:

___ Histosol (A1)
___ Histic Epipedon (A2)
___ Black Histic (A3)
___ Hydrogen Sulfide (A4)
___ Stratified Layers (A5)
___ Depleted Below Dark Surface (A11)
___ Thick Dark Surface (A12)
___ Sandy Mucky Mineral (S1)
___ Sandy Gleyed Matrix (S4)
___ Sandy Redox (S5)
___ Stripped Matrix (S6)
___ Dark Surface (S7) **(LRR R, MLRA 149B)**
___ Polyvalue Below Surface (S8) **(LRR R, MLRA 149B)**
___ Thin Dark Surface (S9) **(LRR R, MLRA 149B)**
___ Loamy Mucky Mineral (F1) **(LRR K, L)**
___ Loamy Gleyed Matrix (F2)
___ Depleted Matrix (F3)
___ Redox Dark Surface (F6)
___ Depleted Dark Surface (F7)
___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

___ 2 cm Muck (A10) **(LRR K, L, MLRA 149B)**
___ Coast Prairie Redox (A16) **(LRR K, L, R)**
___ 5 cm Mucky Peat or Peat (S3) **(LRR K, L, R)**
___ Dark Surface (S7) **(LRR K, L)**
___ Polyvalue Below Surface (S8) **(LRR K, L)**
___ Thin Dark Surface (S9) **(LRR K, L)**
___ Iron-Manganese Masses (F12) **(LRR K, L, R)**
___ Piedmont Floodplain Soils (F19) **(MLRA 149B)**
___ Mesic Spodic (TA6) **(MLRA 144A, 145, 149B)**
___ Red Parent Material (F21)
___ Very Shallow Dark Surface (TF12)
_✓_ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: Rock
Depth (inches): 12

Hydric Soil Present? Yes _✓_ No ____

Remarks:

According to the USDA NRCS the mapped soil type is classified as hydric. Soils were assumed to be hydric due to the presence of inundation, FACW and OBL vegetation species, and a definitive wetland boundary. Refusal due to coarse fragments.

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: Mill Court **City/County:** Mohegan Lake, Westchester **Sampling Date:** 2019-Oct-07
Applicant/Owner: CVE **State:** NY **Sampling Point:** W-MJR-02_UPL-1
Investigator(s): Matt Regan, Matt Boscow **Section, Township, Range:**
Landform (hillslope, terrace, etc.): Hillslope **Local relief (concave, convex, none):** Convex **Slope (%):** 1 to 3
Subregion (LRR or MLRA): MLRA 144A of LRR R **Lat:** 41.3219349739 **Long:** -73.8633102179 **Datum:** WGS84
Soil Map Unit Name: Leicester loam 2 to 8 percent slopes very stony **NWI classification:**
Are climatic/hydrologic conditions on the site typical for this time of year? Yes ✓ No ____ (If no, explain in Remarks.)
Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes ✓ No ____
Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ____ No ✓		
Hydric Soil Present?	Yes ____ No ✓	**Is the Sampled Area within a Wetland?**	**Yes ____ No ✓**
Wetland Hydrology Present?	Yes ____ No ✓	**If yes, optional Wetland Site ID:**	

Remarks: (Explain alternative procedures here or in a separate report)
Covertype is UPL.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

___ Surface Water (A1)
___ High Water Table (A2)
___ Saturation (A3)
___ Water Marks (B1)
___ Sediment Deposits (B2)
___ Drift Deposits (B3)
___ Algal Mat or Crust (B4)
___ Iron Deposits (B5)
___ Inundation Visible on Aerial Imagery (B7)
___ Sparsely Vegetated Concave Surface (B8)
___ Water-Stained Leaves (B9)
___ Aquatic Fauna (B13)
___ Marl Deposits (B15)
___ Hydrogen Sulfide Odor (C1)
___ Oxidized Rhizospheres on Living Roots (C3)
___ Presence of Reduced Iron (C4)
___ Recent Iron Reduction in Tilled Soils (C6)
___ Thin Muck Surface (C7)
___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

___ Surface Soil Cracks (B6)
___ Drainage Patterns (B10)
___ Moss Trim Lines (B16)
___ Dry-Season Water Table (C2)
___ Crayfish Burrows (C8)
___ Saturation Visible on Aerial Imagery (C9)
___ Stunted or Stressed Plants (D1)
___ Geomorphic Position (D2)
___ Shallow Aquitard (D3)
___ Microtopographic Relief (D4)
___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ____ No ✓	Depth (inches):	
Water Table Present?	Yes ____ No ✓	Depth (inches):	**Wetland Hydrology Present?** Yes ____ No ✓
Saturation Present? (includes capillary fringe)	Yes ____ No ✓	Depth (inches):	

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

VEGETATION -- Use scientific names of plants.

Sampling Point: W-MJR-02_UPL-1

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1. *Liriodendron tulipifera*	35	Yes	FACU
2. *Fagus grandifolia*	15	Yes	FACU
3. *Quercus rubra*	5	No	FACU
4.			
5.			
6.			
7.			
	55	= Total Cover	
Sapling/Shrub Stratum (Plot size: 15 ft)			
1. *Fagus grandifolia*	15	Yes	FACU
2. *Lindera benzoin*	5	Yes	FACW
3.			
4.			
5.			
6.			
7.			
	20	= Total Cover	
Herb Stratum (Plot size: 5 ft)			
1. *Berberis thunbergii*	5	Yes	FACU
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	5	= Total Cover	
Woody Vine Stratum (Plot size: 30 ft)			
1.			
2.			
3.			
4.			
	0	= Total Cover	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 5 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 20 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply By:	
OBL species	0	x 1 =	0
FACW species	5	x 2 =	10
FAC species	0	x 3 =	0
FACU species	75	x 4 =	300
UPL species	0	x 5 =	0
Column Totals	80	(A)	310 (B)

Prevalence Index = B/A = 3.9

Hydrophytic Vegetation Indicators:

_____ 1- Rapid Test for Hydrophytic Vegetation

_____ 2 - Dominance Test is > 50%

_____ 3 - Prevalence Index is ≤ 3.0[1]

_____ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

_____ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic

Definitions of Vegetation Strata:

Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.

Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vines – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? Yes _____ No ✓

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: W-MJR-02_UPL-1

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0 - 1	10YR 3/3	100					Silt Loam	
1 - 6	10YR 5/4	100					Sandy Loam	

[1]Type: C = Concentration, D = Depletion, RM = Reduced Matrix, MS = Masked Sand Grains. [2]Location: PL = Pore Lining, M = Matrix.

Hydric Soil Indicators:

___ Histosol (A1)
___ Histic Epipedon (A2)
___ Black Histic (A3)
___ Hydrogen Sulfide (A4)
___ Stratified Layers (A5)
___ Depleted Below Dark Surface (A11)
___ Thick Dark Surface (A12)
___ Sandy Mucky Mineral (S1)
___ Sandy Gleyed Matrix (S4)
___ Sandy Redox (S5)
___ Stripped Matrix (S6)
___ Dark Surface (S7) **(LRR R, MLRA 149B)**
___ Polyvalue Below Surface (S8) **(LRR R, MLRA 149B)**
___ Thin Dark Surface (S9) **(LRR R, MLRA 149B)**
___ Loamy Mucky Mineral (F1) **(LRR K, L)**
___ Loamy Gleyed Matrix (F2)
___ Depleted Matrix (F3)
___ Redox Dark Surface (F6)
___ Depleted Dark Surface (F7)
___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

___ 2 cm Muck (A10) **(LRR K, L, MLRA 149B)**
___ Coast Prairie Redox (A16) **(LRR K, L, R)**
___ 5 cm Mucky Peat or Peat (S3) **(LRR K, L, R)**
___ Dark Surface (S7) **(LRR K, L)**
___ Polyvalue Below Surface (S8) **(LRR K, L)**
___ Thin Dark Surface (S9) **(LRR K, L)**
___ Iron-Manganese Masses (F12) **(LRR K, L, R)**
___ Piedmont Floodplain Soils (F19) **(MLRA 149B)**
___ Mesic Spodic (TA6) **(MLRA 144A, 145, 149B)**
___ Red Parent Material (F21)
___ Very Shallow Dark Surface (TF12)
___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: Rock
Depth (inches): 6

Hydric Soil Present? Yes ____ No ✓

Remarks:

Appendix F

U.S. Fish and Wildlife Information, Planning, and Consultation System Species List

IPaC resource list

This report is an automatically generated list of species and other resources such as critical habitat (collectively referred to as *trust resources*) under the U.S. Fish and Wildlife Service's (USFWS) jurisdiction that are known or expected to be on or near the project area referenced below. The list may also include trust resources that occur outside of the project area, but that could potentially be directly or indirectly affected by activities in the project area. However, determining the likelihood and extent of effects a project may have on trust resources typically requires gathering additional site-specific (e.g., vegetation/species surveys) and project-specific (e.g., magnitude and timing of proposed activities) information.

Below is a summary of the project information you provided and contact information for the USFWS office(s) with jurisdiction in the defined project area. Please read the introduction to each section that follows (Endangered Species, Migratory Birds, USFWS Facilities, and NWI Wetlands) for additional information applicable to the trust resources addressed in that section.

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Project information

NAME

CVE Cortlandt Mill Court

LOCATION

Westchester County, New York

DESCRIPTION

Some(The Project is a ground-mounted solar generating facility comprising two parcels (Parcel ID: 13.18-2.2.4 and Parcel ID: 13.14-5-25) Totaling 42.12 acres in the Town of Cortlandt, Westchester County, New York.)

Local offices

Long Island Ecological Services Field Office

(631) 286-0485
(631) 286-4003

340 Smith Road
Shirley, NY 11967-2258

New York Ecological Services Field Office

(607) 753-9334
(607) 753-9699

3817 Luker Road
Cortland, NY 13045-9385

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

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Endangered species

This resource list is for informational purposes only and does not constitute an analysis of project level impacts.

The primary information used to generate this list is the known or expected range of each species. Additional areas of influence (AOI) for species are also considered. An AOI includes areas outside of the species range if the species could be indirectly affected by activities in that area (e.g., placing a dam upstream of a fish population even if that fish does not occur at the dam site, may indirectly impact the species by reducing or eliminating water flow downstream). Because species can move, and site conditions can change, the species on this list are not guaranteed to be found on or near the project area. To fully determine any potential effects to species, additional site-specific and project-specific information is often required.

Section 7 of the Endangered Species Act **requires** Federal agencies to "request of the Secretary information whether any species which is listed or proposed to be listed may be present in the area of such proposed action" for any project that is conducted, permitted, funded, or licensed by any Federal agency. A letter from the local office and a species list which fulfills this requirement can **only** be obtained by requesting an official species list from either the Regulatory Review section in IPaC (see directions below) or from the local field office directly.

For project evaluations that require USFWS concurrence/review, please return to the IPaC website and request an official species list by doing the following:

1. Log in to IPaC.
2. Go to your My Projects list.
3. Click PROJECT HOME for this project.
4. Click REQUEST SPECIES LIST.

Listed species[1] and their critical habitats are managed by the Ecological Services Program of the U.S. Fish and Wildlife Service (USFWS) and the fisheries division of the National Oceanic and Atmospheric Administration (NOAA Fisheries[2]).

Species and critical habitats under the sole responsibility of NOAA Fisheries are **not** shown on this list. Please contact NOAA Fisheries for species under their jurisdiction.

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1. Species listed under the Endangered Species Act are threatened or endangered; IPaC also shows species that are candidates, or proposed, for listing. See the listing status page for more information. IPaC only shows species that are regulated by USFWS (see FAQ).
2. NOAA Fisheries, also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

The following species are potentially affected by activities in this location:

Mammals

NAME	STATUS

Indiana Bat Myotis sodalis Wherever found There is **final** critical habitat for this species. The location of the critical habitat is not available. https://ecos.fws.gov/ecp/species/5949	Endangered

Reptiles

NAME	STATUS
Bog Turtle Clemmys muhlenbergii No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/6962	Threatened

Critical habitats

Potential effects to critical habitat(s) in this location must be analyzed along with the endangered species themselves.

THERE ARE NO CRITICAL HABITATS AT THIS LOCATION.

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Migratory birds

Certain birds are protected under the Migratory Bird Treaty Act[1] and the Bald and Golden Eagle Protection Act[2].

Any person or organization who plans or conducts activities that may result in impacts to migratory birds, eagles, and their habitats should follow appropriate regulations and consider implementing appropriate conservation measures, as described below.

1. The Migratory Birds Treaty Act of 1918.
2. The Bald and Golden Eagle Protection Act of 1940.

Additional information can be found using the following links:

- Birds of Conservation Concern http://www.fws.gov/birds/management/managed-species/birds-of-conservation-concern.php
- Measures for avoiding and minimizing impacts to birds http://www.fws.gov/birds/management/project-assessment-tools-and-guidance/conservation-measures.php
- Nationwide conservation measures for birds http://www.fws.gov/migratorybirds/pdf/management/nationwidestandardconservationmeasures.pdf

The birds listed below are birds of particular concern either because they occur on the USFWS Birds of Conservation Concern (BCC) list or warrant special attention in your project location. To learn more about the levels of concern for birds on your list and how this list is generated, see the FAQ

below. This is not a list of every bird you may find in this location, nor a guarantee that every bird on this list will be found in your project area. To see exact locations of where birders and the general public have sighted birds in and around your project area, visit the E-bird data mapping tool (Tip: enter your location, desired date range and a species on your list). For projects that occur off the Atlantic Coast, additional maps and models detailing the relative occurrence and abundance of bird species on your list are available. Links to additional information about Atlantic Coast birds, and other important information about your migratory bird list, including how to properly interpret and use your migratory bird report, can be found below.

For guidance on when to schedule activities or implement avoidance and minimization measures to reduce impacts to migratory birds on your list, click on the PROBABILITY OF PRESENCE SUMMARY at the top of your list to see when these birds are most likely to be present and breeding in your project area.

NAME	BREEDING SEASON (IF A BREEDING SEASON IS INDICATED FOR A BIRD ON YOUR LIST, THE BIRD MAY BREED IN YOUR PROJECT AREA SOMETIME WITHIN THE TIMEFRAME SPECIFIED, WHICH IS A VERY LIBERAL ESTIMATE OF THE DATES INSIDE WHICH THE BIRD BREEDS ACROSS ITS ENTIRE RANGE. "BREEDS ELSEWHERE" INDICATES THAT THE BIRD DOES NOT LIKELY BREED IN YOUR PROJECT AREA.)
Bald Eagle *Haliaeetus leucocephalus* This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities. https://ecos.fws.gov/ecp/species/1626	Breeds Sep 1 to Aug 31
Black-capped Chickadee *Poecile atricapillus practicus* This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA	Breeds Apr 10 to Jul 31
Rusty Blackbird *Euphagus carolinus* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds elsewhere
Wood Thrush *Hylocichla mustelina* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds May 10 to Aug 31

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Yellow-bellied Sapsucker sphyrapicus varius — Breeds May 10 to Jul 15

This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA
https://ecos.fws.gov/ecp/species/8792

Probability of Presence Summary

The graphs below provide our best understanding of when birds of concern are most likely to be present in your project area. This information can be used to tailor and schedule your project activities to avoid or minimize impacts to birds. Please make sure you read and understand the FAQ "Proper Interpretation and Use of Your Migratory Bird Report" before using or attempting to interpret this report.

Probability of Presence (▪)

Each green bar represents the bird's relative probability of presence in the 10km grid cell(s) your project overlaps during a particular week of the year. (A year is represented as 12 4-week months.) A taller bar indicates a higher probability of species presence. The survey effort (see below) can be used to establish a level of confidence in the presence score. One can have higher confidence in the presence score if the corresponding survey effort is also high.

How is the probability of presence score calculated? The calculation is done in three steps:

1. The probability of presence for each week is calculated as the number of survey events in the week where the species was detected divided by the total number of survey events for that week. For example, if in week 12 there were 20 survey events and the Spotted Towhee was found in 5 of them, the probability of presence of the Spotted Towhee in week 12 is 0.25.
2. To properly present the pattern of presence across the year, the relative probability of presence is calculated. This is the probability of presence divided by the maximum probability of presence across all weeks. For example, imagine the probability of presence in week 20 for the Spotted Towhee is 0.05, and that the probability of presence at week 12 (0.25) is the maximum of any week of the year. The relative probability of presence on week 12 is 0.25/0.25 = 1; at week 20 it is 0.05/0.25 = 0.2.
3. The relative probability of presence calculated in the previous step undergoes a statistical conversion so that all possible values fall between 0 and 10, inclusive. This is the probability of presence score.

To see a bar's probability of presence score, simply hover your mouse cursor over the bar.

Breeding Season (▪)
Yellow bars denote a very liberal estimate of the time-frame inside which the bird breeds across its entire range. If there are no yellow bars shown for a bird, it does not breed in your project area.

Survey Effort (|)
Vertical black lines superimposed on probability of presence bars indicate the number of surveys performed for that species in the 10km grid cell(s) your project area overlaps. The number of surveys is expressed as a range, for example, 33 to 64 surveys.

To see a bar's survey effort range, simply hover your mouse cursor over the bar.

No Data (–)
A week is marked as having no data if there were no survey events for that week.

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Survey Timeframe

Surveys from only the last 10 years are used in order to ensure delivery of currently relevant information. The exception to this is areas off the Atlantic coast, where bird returns are based on all years of available data, since data in these areas is currently much more sparse.

Tell me more about conservation measures I can implement to avoid or minimize impacts to migratory birds.

Nationwide Conservation Measures describes measures that can help avoid and minimize impacts to all birds at any location year round. Implementation of these measures is particularly important when birds are most likely to occur in the project area. When birds may be breeding in the area, identifying the locations of any active nests and avoiding their destruction is a very helpful impact minimization measure. To see when birds are most likely to occur and be breeding in your project area, view the Probability of Presence Summary. Additional measures or permits may be advisable depending on the type of activity you are conducting and the type of infrastructure or bird species present on your project site.

What does IPaC use to generate the migratory birds potentially occurring in my specified location?

The Migratory Bird Resource List is comprised of USFWS Birds of Conservation Concern (BCC) and other species that may warrant special attention in your project location.

The migratory bird list generated for your project is derived from data provided by the Avian Knowledge Network (AKN). The AKN data is based on a growing collection of survey, banding, and citizen science datasets and is queried and filtered to return a list of those birds reported as occurring in the 10km grid cell(s) which your project intersects, and that have been identified as warranting special attention because they are a BCC species in that area, an eagle (Eagle Act requirements may apply), or a species that has a particular vulnerability to offshore activities or development.

Again, the Migratory Bird Resource list includes only a subset of birds that may occur in your project area. It is not representative of all birds that may occur in your project area. To get a list of all birds potentially present in your project area, please visit the AKN Phenology Tool.

What does IPaC use to generate the probability of presence graphs for the migratory birds potentially occurring in my specified location?

The probability of presence graphs associated with your migratory bird list are based on data provided by the Avian Knowledge Network (AKN). This data is derived from a growing collection of survey, banding, and citizen science datasets .

Probability of presence data is continuously being updated as new and better information becomes available. To learn more about how the probability of presence graphs are produced and how to interpret them, go the Probability of Presence Summary and then click on the "Tell me about these graphs" link.

How do I know if a bird is breeding, wintering, migrating or present year-round in my project area?

To see what part of a particular bird's range your project area falls within (i.e. breeding, wintering, migrating or year-round), you may refer to the following resources: The Cornell Lab of Ornithology All About Birds Bird Guide, or (if you are unsuccessful in locating the bird of interest there), the Cornell Lab of Ornithology Neotropical Birds guide. If a bird on your migratory bird species list has a breeding season associated with it, if that bird does occur in your project area, there may be nests present at some point within the timeframe specified. If "Breeds elsewhere" is indicated, then the bird likely does not breed in your project area.

What are the levels of concern for migratory birds?

Migratory birds delivered through IPaC fall into the following distinct categories of concern:

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1. "BCC Rangewide" birds are Birds of Conservation Concern (BCC) that are of concern throughout their range anywhere within the USA (including Hawaii, the Pacific Islands, Puerto Rico, and the Virgin Islands);
2. "BCC - BCR" birds are BCCs that are of concern only in particular Bird Conservation Regions (BCRs) in the continental USA; and
3. "Non-BCC - Vulnerable" birds are not BCC species in your project area, but appear on your list either because of the Eagle Act requirements (for eagles) or (for non-eagles) potential susceptibilities in offshore areas from certain types of development or activities (e.g. offshore energy development or longline fishing).

Although it is important to try to avoid and minimize impacts to all birds, efforts should be made, in particular, to avoid and minimize impacts to the birds on this list, especially eagles and BCC species of rangewide concern. For more information on conservation measures you can implement to help avoid and minimize migratory bird impacts and requirements for eagles, please see the FAQs for these topics.

Details about birds that are potentially affected by offshore projects

For additional details about the relative occurrence and abundance of both individual bird species and groups of bird species within your project area off the Atlantic Coast, please visit the Northeast Ocean Data Portal. The Portal also offers data and information about other taxa besides birds that may be helpful to you in your project review. Alternately, you may download the bird model results files underlying the portal maps through the NOAA NCCOS Integrative Statistical Modeling and Predictive Mapping of Marine Bird Distributions and Abundance on the Atlantic Outer Continental Shelf project webpage.

Bird tracking data can also provide additional details about occurrence and habitat use throughout the year, including migration. Models relying on survey data may not include this information. For additional information on marine bird tracking data, see the Diving Bird Study and the nanotag studies or contact Caleb Spiegel or Pam Loring.

What if I have eagles on my list?

If your project has the potential to disturb or kill eagles, you may need to obtain a permit to avoid violating the Eagle Act should such impacts occur.

Proper Interpretation and Use of Your Migratory Bird Report

The migratory bird list generated is not a list of all birds in your project area, only a subset of birds of priority concern. To learn more about how your list is generated, and see options for identifying what other birds may be in your project area, please see the FAQ "What does IPaC use to generate the migratory birds potentially occurring in my specified location". Please be aware this report provides the "probability of presence" of birds within the 10 km grid cell(s) that overlap your project; not your exact project footprint. On the graphs provided, please also look carefully at the survey effort (indicated by the black vertical bar) and for the existence of the "no data" indicator (a red horizontal bar). A high survey effort is the key component. If the survey effort is high, then the probability of presence score can be viewed as more dependable. In contrast, a low survey effort bar or no data bar means a lack of data and, therefore, a lack of certainty about presence of the species. This list is not perfect; it is simply a starting point for identifying what birds of concern have the potential to be in your project area, when they might be there, and if they might be breeding (which means nests might be present). The list helps you know what to look for to confirm presence, and helps guide you in knowing when to implement conservation measures to avoid or minimize potential impacts from your project activities, should presence be confirmed. To learn more about conservation measures, visit the FAQ "Tell me about conservation measures I can implement to avoid or minimize impacts to migratory birds" at the bottom of your migratory bird trust resources page.

Facilities

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National Wildlife Refuge lands

Any activity proposed on lands managed by the National Wildlife Refuge system must undergo a 'Compatibility Determination' conducted by the Refuge. Please contact the individual Refuges to discuss any questions or concerns.

THERE ARE NO REFUGE LANDS AT THIS LOCATION.

Fish hatcheries

THERE ARE NO FISH HATCHERIES AT THIS LOCATION.

Wetlands in the National Wetlands Inventory

Impacts to NWI wetlands and other aquatic habitats may be subject to regulation under Section 404 of the Clean Water Act, or other State/Federal statutes.

For more information please contact the Regulatory Program of the local U.S. Army Corps of Engineers District.

Please note that the NWI data being shown may be out of date. We are currently working to update our NWI data set. We recommend you verify these results with a site visit to determine the actual extent of wetlands on site.

This location overlaps the following wetlands:

RIVERINE

R3UBH

A full description for each wetland code can be found at the National Wetlands Inventory website

Data limitations

The Service's objective of mapping wetlands and deepwater habitats is to produce reconnaissance level information on the location, type and size of these resources. The maps are prepared from the analysis of high altitude imagery. Wetlands are identified based on vegetation, visible hydrology and geography. A margin of error is inherent in the use of imagery; thus, detailed on-the-ground inspection of any particular site may result in revision of the wetland boundaries or classification established through image analysis.

The accuracy of image interpretation depends on the quality of the imagery, the experience of the image analysts, the amount and quality of the collateral data and the amount of ground truth verification work conducted. Metadata should be consulted to determine the date of the source imagery used and any mapping problems.

Wetlands or other mapped features may have changed since the date of the imagery or field work. There may be occasional differences in polygon boundaries or classifications between the information depicted on the map and the actual conditions on site.

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Data exclusions

Certain wetland habitats are excluded from the National mapping program because of the limitations of aerial imagery as the primary data source used to detect wetlands. These habitats include seagrasses or submerged aquatic vegetation that are found in the intertidal and subtidal zones of estuaries and nearshore coastal waters. Some deepwater reef communities (coral or tuberficid worm reefs) have also been excluded from the inventory. These habitats, because of their depth, go undetected by aerial imagery.

Data precautions

Federal, state, and local regulatory agencies with jurisdiction over wetlands may define and describe wetlands in a different manner than that used in this inventory. There is no attempt, in either the design or products of this inventory, to define the limits of proprietary jurisdiction of any Federal, state, or local government or to establish the geographical scope of the regulatory programs of government agencies. Persons intending to engage in activities involving modifications within or adjacent to wetland areas should seek the advice of appropriate federal, state, or local agencies concerning specified agency regulatory programs and proprietary jurisdictions that may affect such activities.

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Appendix G

Bartlett Tree Experts Report

BARTLETT TREE EXPERTS
SCIENTIFIC TREE CARE SINCE 1907

2240 SAW MILL RIVER ROAD
ELMSFORD, NY 10523
(914) 592-4520
(914) 592-5068(FAX)

November 2nd, 2020

Town of Cortlandt Planning Board
ATTN: Michael Preziosi
1 Heady Street
Cortlandt Manor, NY 10567

Work Location: Mill Court Solar

Dear Mr. Preziosi:

We performed an inventory and inspection, on the above referenced site to locate and tag all the trees on site as per Town code. The trees were all tagged with a number and were also located by a GPS device and mapped accordingly. We worked with in the marked areas of disturbance.

The site was cleared at some point in the not too distant past. There were 3,808 trees on site over 4" DBH. There were very few species that are undesirable or invasive in nature. The most common species and largest numbers of trees were 871 Red Oaks, 774 Birch, 635 Sugar Maples, 423 Red Maples, 337 Hickory and 198 Beech. The majority are relatively small with a few large trees scattered throughout. There are 3,070 trees under 15" in diameter which makes the vast majority of trees on the site on the very young side.

The site has very few invasive species with only 126 Norway Maples and 28 Ailanthus. It is rather unique to find a site in this area that is not primarily dominated by invasive species. There are even very few if any invasive vines on site. The site overall has an excellent make up of native trees but they are all on the very young side. There are few understory trees as the deer have eaten almost everything.

There was only one tree on the Protected Species list and it was a small 4" Dogwood, which is listed as "vulnerable", but the tree is not in great condition. There are no trees that neatly fit into the definition of Specimen Tree as written in the Town Code, but tree #3454 is an 82" DBH Red Oak with a twin stem. It is a really significant tree but may not fit the definition of a Specimen as outlined in the code. If possible to preserve it, it should be considered. It would require pruning and cabling if it was to remain. The screen shot below shows the location of tree #3454 on the site.

Tree Species Breakdown Total Trees: 3808 (2684)

Genus	Species	Common Name	Additional Taxonomy	Count (Total in Good Condition)	% Distribution Total	Relative Performance Index
Acer	platanoides	Maple-Norway		127 (119)	3%	1.33
	rubrum	Maple-Red		423 (215)	11%	0.72
	saccharum	Maple-Sugar		638 (513)	17%	1.14
Acer Total				**1188**	31%	
Ailanthus	altissima	Tree of Heaven		29 (4)	1%	
Ailanthus Total				**29**	1%	
Amelanchier	sp	Serviceberry		3 (2)	<1%	
Amelanchier Total				**3**	<1%	
Betula	lenta	Birch-Sweet		775 (541)	20%	0.99
Betula Total				**775**	20%	
Carpinus	caroliniana	Hornbeam-American		1 (1)	<1%	
Carpinus Total				**1**	<1%	
Carya	glabra	Hickory-Pignut		250 (221)	7%	1.25
	ovata	Hickory-Shagbark		88 (67)	2%	1.08
Carya Total				**338**	9%	
Cornus	florida	Dogwood-		1 ()	<1%	

		Flowering				
Cornus Total				**1**	<1%	
Fagus	grandifolia	Beech-American		199 (176)	5%	1.25
Fagus Total				**199**	5%	
Fraxinus	americana	Ash-White		8 ()	<1%	
Fraxinus Total				**8**	<1%	
Juniperus	virginiana	Redcedar-Eastern		37 ()	1%	
Juniperus Total				**37**	1%	
Liriodendron	tulipifera	Tuliptree		68 (51)	2%	1.06
Liriodendron Total				**68**	2%	
Nyssa	sylvatica	Tupelo-Black		14 (13)	<1%	
Nyssa Total				**14**	<1%	
Pinus	strobus	Pine-Eastern White		2 (1)	<1%	
Pinus Total				**2**	<1%	
Platanus	x acerifolia	Planetree-London		1 (1)	<1%	
Platanus Total				**1**	<1%	
Populus	deltoides	Poplar-Eastern		14 (10)	<1%	
	grandidentata	Aspen-Bigtooth		1 (1)	<1%	
Populus Total				**15**	<1%	
Prunus	sp	Cherry		78 (21)	2%	0.38
Prunus Total				**78**	2%	
Quercus	alba	Oak-White		63 (53)	2%	1.19
	bicolor	Oak-Swamp White		2 (2)	<1%	
	rubra	Oak-Northern Red		872 (633)	23%	1.03
Quercus Total				**937**	25%	
Robinia	pseudoacacia	Locust-Black		54 (12)	1%	
Robinia				**54**	1%	

Total						
Sassafras	albidum	Sassafras-Common		39 (23)	1%	
Sassafras Total				**39**	1%	
Tsuga	canadensis	Hemlock-Canadian		1 ()	<1%	
Tsuga Total				**1**	<1%	
Ulmus	americana	Elm-American		20 (4)	1%	
Ulmus Total				**20**	1%	
Grand Total				**3808**	**100%**	

I have attached the spreadsheet in the email and please let me know if it is needed in any other format.

If you have any questions please feel free to give me a call.

Sincerely

Trevor Hall
Bartlett Tree Experts
ISA Certified Arborist PD0269

Tree ID	Common Name	Genus	Species	DBH	Height Class	Age Class	Stems	Canopy Radius	Condition Class	Root Zone Infringement	Tree and Shrub Tree Asset Value
1	Hickory-Pignut	Carya	glabra	10	...	...	1	...	Good	...	...	2461.76
2	Beech-American	Fagus	grandifolia	13	...	...	1	...	Good	...	...	4160.37
3	Maple-Sugar	Acer	saccharum	7.5	...	...	1	...	Fair	...	...	1236.38
4	Hickory-Pignut	Carya	glabra	5	...	...	1	...	Good	...	...	615.44
5	Hickory-Pignut	Carya	glabra	4	...	...	1	...	Good	...	...	393.88
6	Oak-Northern Red	Quercus	rubra	6	...	...	1	...	Good	...	...	1107.79
7	Maple-Sugar	Acer	saccharum	6	...	...	1	...	Good	...	...	1107.79
8	Maple-Sugar	Acer	saccharum	9	...	...	1	...	Fair	...	...	2132.06
9	Maple-Red	Acer	rubrum	5	...	...	1	...	Fair	...	...	439.6
10	Maple-Sugar	Acer	saccharum	8	...	...	2	...	Good	...	...	2738.71
11	Maple-Sugar	Acer	saccharum	5	...	...	1	...	Good	...	...	769.3
12	Maple-Sugar	Acer	saccharum	7	...	...	1	...	Good	...	...	1507.83
13	Maple-Sugar	Acer	saccharum	7	...	...	1	...	Good	...	...	1507.83
14	Oak-Northern Red	Quercus	rubra	13	...	...	1	...	Fair	...	...	3714.62
15	Hickory-Pignut	Carya	glabra	8	...	...	1	...	Good	...	...	1575.53
16	Hickory-Pignut	Carya	glabra	10	...	...	1	...	Good	...	...	2461.76
17	Hickory-Pignut	Carya	glabra	5	...	...	1	...	Good	...	...	615.44
18	Hickory-Pignut	Carya	glabra	4	...	...	1	...	Fair	...	...	281.34
19	Hickory-Shagbark	Carya	ovata	5	...	...	1	...	Good	...	...	615.44
20	Oak-White	Quercus	alba	16	...	...	1	...	Good	...	...	7877.63
21	Maple-Red	Acer	rubrum	7	...	...	1	...	Good	...	...	1206.26
22	Maple-Sugar	Acer	saccharum	5	...	...	1	...	Good	...	...	769.3
23	Maple-Sugar	Acer	saccharum	7	...	...	1	...	Good	...	...	1507.83
24	Oak-Northern Red	Quercus	rubra	29	...	...	1	...	Good	...	...	25879.25
25	Oak-Northern Red	Quercus	rubra	16	...	...	1	...	Good	...	...	7877.63
26	Hickory-Pignut	Carya	glabra	4	...	...	1	...	Good	...	...	393.88
27	Birch-Sweet	Betula	lenta	5	...	...	1	...	Good	...	...	307.72
28	Birch-Sweet	Betula	lenta	7	...	...	1	...	Fair	...	...	430.81
29	Maple-Sugar	Acer	saccharum	5	...	...	1	...	Good	...	...	769.3
30	Oak-Northern Red	Quercus	rubra	11	...	...	1	...	Good	...	...	3723.41
31	Oak-Northern Red	Quercus	rubra	18	...	...	1	...	Good	...	...	9970.13
32	Hickory-Pignut	Carya	glabra	6	...	...	1	...	Good	...	...	886.23
33	Oak-Northern Red	Quercus	rubra	15	...	...	1	...	Fair	...	...	4945.5
34	Oak-Northern Red	Quercus	rubra	12	...	...	1	...	Fair	...	...	3165.12
35	Hickory-Pignut	Carya	glabra	4	...	...	1	...	Good	...	...	393.88
36	Oak-Northern Red	Quercus	rubra	18	...	...	1	...	Fair	...	...	7121.52
37	Oak-Northern Red	Quercus	rubra	23	...	...	2	...	Good	...	...	26248.52
38	Hickory-Pignut	Carya	glabra	9	...	...	1	...	Good	...	...	1994.03
39	Oak-Northern Red	Quercus	rubra	14	...	...	1	...	Poor	...	...	2584.85
40	Maple-Sugar	Acer	saccharum	5	...	...	1	...	Good	...	...	769.3
41	Oak-Northern Red	Quercus	rubra	28	...	...	1	...	Good	...	...	24125.25
42	Maple-Sugar	Acer	saccharum	10	...	...	1	...	Good	...	...	3077.2
43	Oak-Northern Red	Quercus	rubra	16	...	...	1	...	Good	...	...	7877.63
44	Cherry	Prunus	sp	4	...	...	1	...	Poor	...	...	84.4
45	Cherry	Prunus	sp	4	...	...	1	...	Fair	...	...	140.67
46	Oak-Northern Red	Quercus	rubra	20	...	...	1	...	Fair	...	...	8792
47	Oak-Northern Red	Quercus	rubra	21	...	...	1	...	Dead	...	...	0
48	Oak-White	Quercus	alba	5	...	...	1	...	Good	...	...	769.3
49	Maple-Sugar	Acer	saccharum	6	...	...	1	...	Good	...	...	1107.79
50	Oak-White	Quercus	alba	8	...	...	1	...	Good	...	...	1969.41
51	Maple-Sugar	Acer	saccharum	10	...	...	1	...	Good	...	...	3077.2

52	Oak-Northern Red	Quercus	rubra	12	...	...	1	...	Good	...	...	4431.17
53	Maple-Sugar	Acer	saccharum	4	...	...	1	...	Fair	...	...	351.68
54	Maple-Red	Acer	rubrum	5	...	...	1	...	Fair	...	...	439.6
55	Beech-American	Fagus	grandifolia	6	...	...	2	...	Fair	...	...	1072.62
56	Beech-American	Fagus	grandifolia	7	...	...	1	...	Good	...	...	1206.26
57	Oak-Northern Red	Quercus	rubra	14	...	...	1	...	Good	...	...	6031.31
58	Maple-Red	Acer	rubrum	9	...	...	1	...	Fair	...	...	1424.3
59	Maple-Red	Acer	rubrum	5	...	...	1	...	Fair	...	...	439.6
60	Cherry	Prunus	sp	5	...	...	1	...	Poor	...	...	131.88
61	Maple-Red	Acer	rubrum	6	...	...	1	...	Good	...	...	886.23
62	Oak-Northern Red	Quercus	rubra	25	...	...	1	...	Good	...	...	19232.5
63	Oak-Northern Red	Quercus	rubra	17	...	...	1	...	Good	...	...	8893.11
64	Birch-Sweet	Betula	lenta	13	...	...	1	...	Dead	...	...	0
65	Beech-American	Fagus	grandifolia	11	...	...	1	...	Good	...	...	2978.73
66	Beech-American	Fagus	grandifolia	10	...	...	1	...	Good	...	...	2461.76
67	Hickory-Pignut	Carya	glabra	11	...	...	1	...	Good	...	...	2978.73
68	Hickory-Pignut	Carya	glabra	10	...	...	1	...	Good	...	...	2461.76
69	Maple-Sugar	Acer	saccharum	4	...	...	1	...	Fair	...	...	351.68
70	Birch-Sweet	Betula	lenta	11	...	...	1	...	Poor	...	...	638.3
71	Beech-American	Fagus	grandifolia	11	...	...	1	...	Good	...	...	2978.73
72	Oak-Northern Red	Quercus	rubra	10	...	...	1	...	Fair	...	...	2198
73	Oak-Northern Red	Quercus	rubra	19	...	...	1	...	Good	...	...	11108.69
74	Oak-Northern Red	Quercus	rubra	8	...	...	1	...	Fair	...	...	1406.72
75	Hickory-Pignut	Carya	glabra	8	...	...	1	...	Good	...	...	1575.53
76	Birch-Sweet	Betula	lenta	5	...	...	1	...	Fair	...	...	219.8
77	Oak-Northern Red	Quercus	rubra	15	...	...	1	...	Good	...	...	6923.7
78	Hickory-Pignut	Carya	glabra	4	...	...	1	...	Good	...	...	393.88
79	Oak-Northern Red	Quercus	rubra	21	...	...	1	...	Good	...	...	13570.45
80	Birch-Sweet	Betula	lenta	4	...	...	1	...	Good	...	...	196.94
81	Oak-Northern Red	Quercus	rubra	21	...	...	1	...	Good	...	...	13570.45
82	Beech-American	Fagus	grandifolia	5	...	...	1	...	Good	...	...	615.44
83	Maple-Sugar	Acer	saccharum	6	...	...	1	...	Good	...	...	1107.79
84	Birch-Sweet	Betula	lenta	18	...	...	1	...	Good	...	...	3988.05
85	Birch-Sweet	Betula	lenta	17	...	...	1	...	Fair	...	...	2540.89
86	Maple-Sugar	Acer	saccharum	9	...	...	1	...	Good	...	...	2492.53
87	Beech-American	Fagus	grandifolia	5	...	...	1	...	Good	...	...	615.44
88	Beech-American	Fagus	grandifolia	5	...	...	1	...	Fair	...	...	439.6
89	Birch-Sweet	Betula	lenta	8	...	...	1	...	Dead	...	...	0
90	Birch-Sweet	Betula	lenta	14	...	...	1	...	Good	...	...	2412.52
91	Birch-Sweet	Betula	lenta	9	...	...	1	...	Good	...	...	997.01
92	Beech-American	Fagus	grandifolia	7	...	...	1	...	Good	...	...	1206.26
93	Beech-American	Fagus	grandifolia	6	...	...	1	...	Good	...	...	886.23
94	Beech-American	Fagus	grandifolia	4	...	...	1	...	Fair	...	...	281.34
95	Cherry	Prunus	sp	6	...	...	1	...	Good	...	...	443.12
96	Hickory-Pignut	Carya	glabra	6	...	...	1	...	Good	...	...	886.23
97	Oak-Northern Red	Quercus	rubra	18	...	...	1	...	Fair	...	...	7121.52
98	Oak-Northern Red	Quercus	rubra	15	...	...	1	...	Fair	...	...	4945.5
99	Oak-Northern Red	Quercus	rubra	19	...	...	1	...	Good	...	...	11108.69
100	Oak-Northern Red	Quercus	rubra	6	...	...	1	...	Good	...	...	1107.79
101	Birch-Sweet	Betula	lenta	9	...	...	1	...	Good	...	...	997.01
102	Oak-Northern Red	Quercus	rubra	25	...	...	2	...	Good	...	...	30341.19
103	Birch-Sweet	Betula	lenta	4	...	...	1	...	Poor	...	...	84.4

104	Oak-Northern Red	Quercus	rubra	16	...	...	1	...	Good	...	...	7877.63
105	Beech-American	Fagus	grandifolia	8	...	...	1	...	Dead	...	...	0
106	Birch-Sweet	Betula	lenta	10	...	...	1	...	Fair	...	...	879.2
107	Oak-Northern Red	Quercus	rubra	18	...	...	2	...	Good	...	...	17847.76
108	Birch-Sweet	Betula	lenta	7	...	...	1	...	Good	...	...	603.13
109	Birch-Sweet	Betula	lenta	6	...	...	1	...	Fair	...	...	316.51
110	Beech-American	Fagus	grandifolia	9	...	...	1	...	Dead	...	...	0
111	Beech-American	Fagus	grandifolia	6	...	...	1	...	Fair	...	...	633.02
112	Oak-Northern Red	Quercus	rubra	21	...	...	1	...	Good	...	...	13570.45
113	Birch-Sweet	Betula	lenta	11	...	...	1	...	Good	...	...	1489.36
114	Oak-Northern Red	Quercus	rubra	16	...	...	1	...	Good	...	...	7877.63
115	Oak-Northern Red	Quercus	rubra	18	...	...	2	...	Fair	...	...	8528.24
116	Oak-Northern Red	Quercus	rubra	20	...	...	1	...	Good	...	...	12308.8
117	Oak-Northern Red	Quercus	rubra	16	...	...	1	...	Good	...	...	7877.63
118	Hickory-Pignut	Carya	glabra	5	...	...	1	...	Good	...	...	615.44
119	Oak-Northern Red	Quercus	rubra	21	...	...	2	...	Good	...	...	18001.62
120	Hickory-Pignut	Carya	glabra	6	...	...	1	...	Good	...	...	886.23
121	Birch-Sweet	Betula	lenta	10	...	...	2	...	Good	...	...	1341.66
122	Birch-Sweet	Betula	lenta	9	...	...	1	...	Good	...	...	997.01
123	Oak-Northern Red	Quercus	rubra	18	...	...	1	...	Good	...	...	9970.13
124	Birch-Sweet	Betula	lenta	11	...	...	1	...	Good	...	...	1489.36
125	Beech-American	Fagus	grandifolia	4	...	...	1	...	Good	...	...	393.88
126	Oak-Northern Red	Quercus	rubra	13	...	...	1	...	Good	...	...	5200.47
127	Birch-Sweet	Betula	lenta	6	...	...	1	...	Good	...	...	443.12
128	Oak-Northern Red	Quercus	rubra	16	...	...	1	...	Good	...	...	7877.63
129	Hickory-Pignut	Carya	glabra	8	...	...	1	...	Good	...	...	1575.53
130	Oak-Northern Red	Quercus	rubra	19	...	...	1	...	Fair	...	...	7934.78
131	Redcedar-Eastern	Juniperus	virginiana	8	...	...	1	...	Dead	...	...	0
132	Birch-Sweet	Betula	lenta	14	...	...	1	...	Good	...	...	2412.52
133	Oak-Northern Red	Quercus	rubra	17	...	...	2	...	Good	...	...	17786.22
134	Hickory-Pignut	Carya	glabra	4	...	...	1	...	Good	...	...	393.88
135	Birch-Sweet	Betula	lenta	11	...	...	1	...	Fair	...	...	1063.83
136	Oak-Northern Red	Quercus	rubra	12	...	...	1	...	Poor	...	...	1899.07
137	Oak-Northern Red	Quercus	rubra	19	...	...	1	...	Poor	...	...	4760.87
138	Oak-Northern Red	Quercus	rubra	13	...	...	1	...	Good	...	...	5200.47
139	Maple-Sugar	Acer	saccharum	4	...	...	1	...	Fair	...	...	351.68
140	Oak-Northern Red	Quercus	rubra	17	...	...	1	...	Good	...	...	8893.11
141	Oak-Northern Red	Quercus	rubra	19	...	...	1	...	Good	...	...	11108.69
142	Oak-Northern Red	Quercus	rubra	8	...	...	1	...	Good	...	...	1969.41
143	Maple-Sugar	Acer	saccharum	4	...	...	1	...	Fair	...	...	351.68
144	Maple-Sugar	Acer	saccharum	8	...	...	1	...	Good	...	...	1969.41
145	Birch-Sweet	Betula	lenta	10	...	...	1	...	Good	...	...	1230.88
146	Oak-Northern Red	Quercus	rubra	15	...	...	1	...	Good	...	...	6923.7
147	Oak-Northern Red	Quercus	rubra	22	...	...	1	...	Good	...	...	14893.65
148	Oak-Northern Red	Quercus	rubra	13	...	...	1	...	Dead	...	...	0
149	Oak-Northern Red	Quercus	rubra	8	...	...	1	...	Fair	...	...	1406.72
150	Oak-Northern Red	Quercus	rubra	13	...	...	1	...	Good	...	...	5200.47
151	Maple-Sugar	Acer	saccharum	4	...	...	1	...	Good	...	...	492.35
152	Oak-Northern Red	Quercus	rubra	18	...	...	1	...	Good	...	...	9970.13
153	Oak-Northern Red	Quercus	rubra	11	...	...	1	...	Dead	...	...	0
154	Maple-Sugar	Acer	saccharum	5	...	...	1	...	Good	...	...	769.3
155	Oak-Northern Red	Quercus	rubra	16	...	...	1	...	Good	...	...	7877.63

156	Maple-Sugar	Acer	saccharum	7	...	...	1	...	Good	...	...	1507.83
157	Maple-Sugar	Acer	saccharum	6	...	...	1	...	Good	...	...	1107.79
158	Oak-Northern Red	Quercus	rubra	15	...	...	1	...	Poor	...	...	2967.3
159	Sassafras-Common	Sassafras	albidum	7	...	...	1	...	Dead	...	...	0
160	Hickory-Pignut	Carya	glabra	10	...	...	1	...	Good	...	...	2461.76
161	Maple-Sugar	Acer	saccharum	6	...	...	1	...	Good	...	...	1107.79
162	Maple-Sugar	Acer	saccharum	5	...	...	1	...	Fair	...	...	549.5
163	Oak-Northern Red	Quercus	rubra	11	...	...	2	...	Fair	...	...	3736.6
164	Hickory-Pignut	Carya	glabra	9	...	...	2	...	Good	...	...	2387.91
165	Redcedar-Eastern	Juniperus	virginiana	7	...	...	1	...	Dead	...	...	0
166	Maple-Sugar	Acer	saccharum	8	...	...	1	...	Good	...	...	1969.41
167	Maple-Sugar	Acer	saccharum	6	...	...	1	...	Good	...	...	1107.79
168	Maple-Sugar	Acer	saccharum	14	...	...	1	...	Poor	...	...	2584.85
169	Oak-Northern Red	Quercus	rubra	10	...	...	1	...	Good	...	...	3077.2
170	Maple-Sugar	Acer	saccharum	4	...	...	1	...	Good	...	...	492.35
171	Maple-Sugar	Acer	saccharum	6	...	...	1	...	Good	...	...	1107.79
172	Pine-Eastern White	Pinus	strobus	24	...	...	1	...	Fair	...	...	10128.38
173	Maple-Sugar	Acer	saccharum	7	...	...	1	...	Good	...	...	1507.83
174	Maple-Sugar	Acer	saccharum	4	...	...	1	...	Good	...	...	492.35
175	Oak-Northern Red	Quercus	rubra	23	...	...	1	...	Good	...	...	16278.39
176	Oak-Northern Red	Quercus	rubra	7	...	...	1	...	Good	...	...	1507.83
177	Beech-American	Fagus	grandifolia	7	...	...	1	...	Good	...	...	1206.26
178	Birch-Sweet	Betula	lenta	7	...	...	1	...	Fair	...	...	430.81
179	Oak-Northern Red	Quercus	rubra	28	...	...	1	...	Good	...	...	24125.25
180	Oak-Northern Red	Quercus	rubra	18	...	...	2	...	Good	...	...	15170.6
181	Maple-Red	Acer	rubrum	4	...	...	1	...	Fair	...	...	281.34
182	Birch-Sweet	Betula	lenta	9	...	...	1	...	Good	...	...	997.01
183	Redcedar-Eastern	Juniperus	virginiana	8	...	...	1	...	Poor	...	...	590.82
184	Oak-Northern Red	Quercus	rubra	15	...	...	1	...	Good	...	...	6923.7
185	Maple-Red	Acer	rubrum	13	...	...	1	...	Fair	...	...	8035.89
186	Oak-White	Quercus	alba	17	...	...	1	...	Good	...	...	8893.11
187	Oak-Northern Red	Quercus	rubra	19	...	...	1	...	Good	...	...	11108.69
188	Hickory-Shagbark	Carya	ovata	14	...	...	1	...	Good	...	...	4825.05
189	Hickory-Pignut	Carya	glabra	13	...	...	1	...	Good	...	...	4160.37
190	Beech-American	Fagus	grandifolia	4	...	...	1	...	Fair	...	...	281.34
191	Oak-Northern Red	Quercus	rubra	4	...	...	1	...	Good	...	...	492.35
192	Oak-Northern Red	Quercus	rubra	13	...	...	1	...	Good	...	...	5200.47
193	Oak-Swamp White	Quercus	bicolor	4	...	...	1	...	Good	...	...	443.12
194	Redcedar-Eastern	Juniperus	virginiana	10	...	...	1	...	Dead	...	...	0
195	Birch-Sweet	Betula	lenta	6	...	...	1	...	Fair	...	...	316.51
196	Birch-Sweet	Betula	lenta	10	...	...	2	...	Fair	...	...	1195.71
197	Maple-Red	Acer	rubrum	13	...	...	2	...	Good	...	...	7705.31
198	Maple-Red	Acer	rubrum	7	...	...	2	...	Dead	...	...	0
199	Maple-Red	Acer	rubrum	4	...	...	1	...	Poor	...	...	168.81
200	Oak-White	Quercus	alba	14	...	...	2	...	Good	...	...	10462.48
201	Beech-American	Fagus	grandifolia	7	...	...	1	...	Good	...	...	1206.26
202	Oak-Northern Red	Quercus	rubra	19	...	...	2	...	Good	...	...	18986.32
203	Beech-American	Fagus	grandifolia	8	...	...	1	...	Good	...	...	1575.53
204	Oak-Northern Red	Quercus	rubra	15	...	...	1	...	Good	...	...	6923.7
205	Beech-American	Fagus	grandifolia	12	...	...	1	...	Good	...	...	3544.93
206	Hickory-Pignut	Carya	glabra	8	...	...	1	...	Good	...	...	1575.53
207	Beech-American	Fagus	grandifolia	6	...	...	1	...	Fair	...	...	633.02

208	Oak-White	Quercus	alba	23	...	...	2	...	Good	...	...	31172.04
209	Maple-Sugar	Acer	saccharum	6	...	...	1	...	Fair	...	...	791.28
210	Oak-Northern Red	Quercus	rubra	17	...	...	1	...	Good	...	...	8893.11
211	Hickory-Pignut	Carya	glabra	10	...	...	1	...	Good	...	...	2461.76
212	Beech-American	Fagus	grandifolia	10	...	...	2	...	Good	...	...	2683.32
213	Beech-American	Fagus	grandifolia	4	...	...	1	...	Fair	...	...	281.34
214	Birch-Sweet	Betula	lenta	10	...	...	1	...	Good	...	...	1230.88
215	Hickory-Pignut	Carya	glabra	18	...	...	1	...	Fair	...	...	5697.22
216	Oak-Northern Red	Quercus	rubra	38	...	...	1	...	Good	...	...	41656.27
217	Maple-Sugar	Acer	saccharum	4	...	...	1	...	Fair	...	...	351.68
218	Maple-Sugar	Acer	saccharum	5	...	...	1	...	Good	...	...	769.3
219	Maple-Sugar	Acer	saccharum	4	...	...	1	...	Good	...	...	492.35
220	Oak-Northern Red	Quercus	rubra	27	...	...	1	...	Good	...	...	22432.79
221	Hickory-Pignut	Carya	glabra	16	...	...	1	...	Good	...	...	6302.11
222	Oak-Northern Red	Quercus	rubra	7	...	...	1	...	Fair	...	...	1077.02
223	Oak-Northern Red	Quercus	rubra	7	...	...	1	...	Dead	...	...	0
224	Oak-Northern Red	Quercus	rubra	8	...	...	1	...	Dead	...	...	0
225	Maple-Sugar	Acer	saccharum	4	...	...	1	...	Good	...	...	492.35
226	Maple-Sugar	Acer	saccharum	18	...	...	1	...	Good	...	...	9970.13
227	Maple-Red	Acer	rubrum	7	...	...	1	...	Good	...	...	1206.26
228	Maple-Sugar	Acer	saccharum	7	...	...	1	...	Good	...	...	1507.83
229	Oak-Northern Red	Quercus	rubra	44	...	...	1	...	Fair	...	...	36781.92
230	Maple-Sugar	Acer	saccharum	4	...	...	1	...	Good	...	...	492.35
231	Birch-Sweet	Betula	lenta	5	...	...	1	...	Fair	...	...	219.8
232	Maple-Red	Acer	rubrum	6	...	...	1	...	Fair	...	...	633.02
233	Oak-Northern Red	Quercus	rubra	13	...	...	1	...	Good	...	...	5200.47
234	Oak-Northern Red	Quercus	rubra	18	...	...	1	...	Good	...	...	9970.13
235	Maple-Red	Acer	rubrum	6	...	...	1	...	Good	...	...	886.23
236	Oak-Northern Red	Quercus	rubra	7	...	...	1	...	Good	...	...	1507.83
237	Oak-Northern Red	Quercus	rubra	20	...	...	1	...	Good	...	...	12308.8
238	Oak-Northern Red	Quercus	rubra	9	...	...	1	...	Good	...	...	2492.53
239	Oak-Northern Red	Quercus	rubra	6	...	...	1	...	Dead	...	...	0
240	Birch-Sweet	Betula	lenta	4	...	...	1	...	Good	...	...	196.94
241	Oak-Northern Red	Quercus	rubra	16	...	...	1	...	Good	...	...	7877.63
242	Maple-Red	Acer	rubrum	21	...	...	6	...	Fair	...	...	26921.1
243	Maple-Sugar	Acer	saccharum	4	...	...	1	...	Fair	...	...	351.68
244	Oak-Northern Red	Quercus	rubra	20	...	...	2	...	Good	...	...	23417.49
245	Oak-Northern Red	Quercus	rubra	39	...	...	1	...	Good	...	...	43361.67
246	Cherry	Prunus	sp	10	...	...	1	...	Poor	...	...	527.52
247	Oak-Northern Red	Quercus	rubra	6	...	...	1	...	Good	...	...	1107.79
248	Oak-Northern Red	Quercus	rubra	16	...	...	1	...	Good	...	...	7877.63
249	Oak-Northern Red	Quercus	rubra	12	...	...	1	...	Good	...	...	4431.17
250	Oak-White	Quercus	alba	9	...	...	1	...	Good	...	...	2492.53
251	Cherry	Prunus	sp	13	...	...	3	...	Poor	...	...	1339.9
252	Oak-Northern Red	Quercus	rubra	7	...	...	1	...	Dead	...	...	0
253	Oak-Northern Red	Quercus	rubra	7	...	...	1	...	Good	...	...	1507.83
254	Oak-Northern Red	Quercus	rubra	15	...	...	1	...	Good	...	...	6923.7
255	Oak-Northern Red	Quercus	rubra	22	...	...	1	...	Good	...	...	14893.65
256	Oak-Northern Red	Quercus	rubra	19	...	...	2	...	Fair	...	...	14287
257	Oak-Northern Red	Quercus	rubra	13	...	...	1	...	Good	...	...	5200.47
258	Oak-Northern Red	Quercus	rubra	11	...	...	1	...	Good	...	...	3723.41
259	Birch-Sweet	Betula	lenta	6	...	...	1	...	Good	...	...	443.12

260	Maple-Sugar	Acer	saccharum	10	...	...	1	...	Dead	...	...	0
261	Birch-Sweet	Betula	lenta	5	...	...	1	...	Good	...	...	307.72
262	Birch-Sweet	Betula	lenta	4	...	...	1	...	Fair	...	...	140.67
263	Birch-Sweet	Betula	lenta	5	...	...	1	...	Fair	...	...	219.8
264	Oak-Northern Red	Quercus	rubra	22	...	...	2	...	Good	...	...	28464.1
265	Birch-Sweet	Betula	lenta	4	...	...	1	...	Fair	...	...	140.67
266	Maple-Red	Acer	rubrum	4	...	...	1	...	Fair	...	...	281.34
267	Oak-Northern Red	Quercus	rubra	19	...	...	1	...	Good	...	...	11108.69
268	Oak-Northern Red	Quercus	rubra	19	...	...	1	...	Good	...	...	11108.69
269	Birch-Sweet	Betula	lenta	7	...	...	1	...	Good	...	...	603.13
270	Birch-Sweet	Betula	lenta	9	...	...	1	...	Good	...	...	997.01
271	Birch-Sweet	Betula	lenta	14	...	...	1	...	Good	...	...	2412.52
272	Oak-Northern Red	Quercus	rubra	6	...	...	1	...	Dead	...	...	0
273	Oak-Northern Red	Quercus	rubra	8	...	...	1	...	Fair	...	...	1406.72
274	Oak-Northern Red	Quercus	rubra	15	...	...	2	...	Good	...	...	9416.23
275	Birch-Sweet	Betula	lenta	4	...	...	1	...	Good	...	...	196.94
276	Oak-Northern Red	Quercus	rubra	6	...	...	1	...	Good	...	...	1107.79
277	Oak-Northern Red	Quercus	rubra	13	...	...	1	...	Good	...	...	5200.47
278	Oak-Northern Red	Quercus	rubra	8	...	...	1	...	Good	...	...	1969.41
279	Oak-Northern Red	Quercus	rubra	9	...	...	1	...	Good	...	...	2492.53
280	Oak-Northern Red	Quercus	rubra	14	...	...	1	...	Good	...	...	6031.31
281	Maple-Red	Acer	rubrum	4	...	...	1	...	Fair	...	...	281.34
282	Oak-Northern Red	Quercus	rubra	14	...	...	1	...	Good	...	...	6031.31
283	Oak-Northern Red	Quercus	rubra	9	...	...	1	...	Fair	...	...	1780.38
284	Birch-Sweet	Betula	lenta	11	...	...	1	...	Good	...	...	1489.36
285	Cherry	Prunus	sp	10	...	...	1	...	Dead	...	...	0
286	Birch-Sweet	Betula	lenta	10	...	...	1	...	Good	...	...	1230.88
287	Oak-Northern Red	Quercus	rubra	8	...	...	1	...	Good	...	...	1969.41
288	Maple-Red	Acer	rubrum	6	...	...	1	...	Fair	...	...	633.02
289	Birch-Sweet	Betula	lenta	4	...	...	1	...	Good	...	...	196.94
290	Oak-Northern Red	Quercus	rubra	24	...	...	1	...	Good	...	...	17724.67
291	Birch-Sweet	Betula	lenta	10	...	...	1	...	Good	...	...	1230.88
292	Oak-White	Quercus	alba	8	...	...	1	...	Good	...	...	1969.41
293	Maple-Red	Acer	rubrum	22	...	...	1	...	Good	...	...	11914.92
294	Birch-Sweet	Betula	lenta	8	...	...	1	...	Poor	...	...	337.61
295	Oak-Northern Red	Quercus	rubra	10	...	...	1	...	Fair	...	...	2198
296	Oak-Northern Red	Quercus	rubra	19	...	...	1	...	Good	...	...	11108.69
297	Maple-Red	Acer	rubrum	9	...	...	1	...	Dead	...	...	0
298	Oak-Northern Red	Quercus	rubra	19	...	...	1	...	Good	...	...	11108.69
299	Cherry	Prunus	sp	6	...	...	1	...	Dead	...	...	0
300	Oak-Northern Red	Quercus	rubra	6	...	...	1	...	Poor	...	...	474.77
301	Maple-Sugar	Acer	saccharum	6	...	...	1	...	Good	...	...	1107.79
302	Birch-Sweet	Betula	lenta	11	...	...	1	...	Good	...	...	1489.36
303	Birch-Sweet	Betula	lenta	11	...	...	1	...	Dead	...	...	0
304	Birch-Sweet	Betula	lenta	7	...	...	1	...	Good	...	...	603.13
305	Birch-Sweet	Betula	lenta	7	...	...	1	...	Fair	...	...	430.81
306	Birch-Sweet	Betula	lenta	13	...	...	1	...	Good	...	...	2080.19
307	Maple-Red	Acer	rubrum	9	...	...	1	...	Good	...	...	1994.03
308	Oak-Northern Red	Quercus	rubra	24	...	...	1	...	Good	...	...	17724.67
309	Maple-Red	Acer	rubrum	14	...	...	2	...	Good	...	...	6400.58
310	Oak-Northern Red	Quercus	rubra	10	...	...	1	...	Good	...	...	3077.2
311	Birch-Sweet	Betula	lenta	4	...	...	1	...	Good	...	...	196.94

312	Cherry	Prunus	sp	7	...	...	1	...	Dead	...	...	0
313	Oak-Northern Red	Quercus	rubra	5	...	...	1	...	Dead	...	...	0
314	Oak-Northern Red	Quercus	rubra	13	...	...	1	...	Good	...	...	5200.47
315	Oak-Northern Red	Quercus	rubra	12	...	...	1	...	Good	...	...	4431.17
316	Oak-Northern Red	Quercus	rubra	15	...	...	1	...	Good	...	...	6923.7
317	Maple-Red	Acer	rubrum	9	...	...	1	...	Good	...	...	1994.03
318	Birch-Sweet	Betula	lenta	11	...	...	1	...	Good	...	...	1489.36
319	Maple-Red	Acer	rubrum	12	...	...	1	...	Good	...	...	3544.93
320	Oak-Northern Red	Quercus	rubra	13	...	...	1	...	Good	...	...	5200.47
321	Maple-Red	Acer	rubrum	12	...	...	3	...	Good	...	...	9551.63
322	Birch-Sweet	Betula	lenta	9	...	...	1	...	Good	...	...	997.01
323	Oak-Northern Red	Quercus	rubra	6	...	...	1	...	Fair	...	...	791.28
324	Maple-Red	Acer	rubrum	6	...	...	1	...	Fair	...	...	633.02
325	Birch-Sweet	Betula	lenta	4	...	...	1	...	Good	...	...	196.94
326	Cherry	Prunus	sp	9	...	...	1	...	Fair	...	...	712.15
327	Oak-Northern Red	Quercus	rubra	14	...	...	1	...	Good	...	...	6031.31
328	Birch-Sweet	Betula	lenta	10	...	...	1	...	Good	...	...	1230.88
329	Birch-Sweet	Betula	lenta	4	...	...	1	...	Fair	...	...	140.67
330	Cherry	Prunus	sp	8	...	...	1	...	Dead	...	...	0
331	Birch-Sweet	Betula	lenta	11	...	...	1	...	Good	...	...	1489.36
332	Birch-Sweet	Betula	lenta	9	...	...	1	...	Good	...	...	997.01
333	Birch-Sweet	Betula	lenta	4	...	...	1	...	Good	...	...	196.94
334	Maple-Red	Acer	rubrum	7	...	...	2	...	Dead	...	...	0
335	Maple-Red	Acer	rubrum	5	...	...	1	...	Poor	...	...	263.76
336	Maple-Red	Acer	rubrum	18	...	...	1	...	Good	...	...	7976.1
337	Birch-Sweet	Betula	lenta	7	...	...	1	...	Dead	...	...	0
338	Oak-Northern Red	Quercus	rubra	7	...	...	1	...	Fair	...	...	1077.02
339	Birch-Sweet	Betula	lenta	6	...	...	1	...	Good	...	...	443.12
340	Oak-Northern Red	Quercus	rubra	4	...	...	1	...	Good	...	...	492.35
341	Oak-Northern Red	Quercus	rubra	19	...	...	1	...	Good	...	...	11108.69
342	Maple-Red	Acer	rubrum	7	...	...	1	...	Fair	...	...	861.62
343	Oak-Northern Red	Quercus	rubra	20	...	...	1	...	Good	...	...	12308.8
344	Beech-American	Fagus	grandifolia	6	...	...	1	...	Good	...	...	886.23
345	Maple-Red	Acer	rubrum	13	...	...	1	...	Good	...	...	4160.37
346	Birch-Sweet	Betula	lenta	7	...	...	1	...	Good	...	...	603.13
347	Cherry	Prunus	sp	14	...	...	1	...	Good	...	...	2412.52
348	Maple-Red	Acer	rubrum	6	...	...	1	...	Good	...	...	886.23
349	Oak-Northern Red	Quercus	rubra	20	...	...	1	...	Good	...	...	12308.8
350	Oak-Northern Red	Quercus	rubra	16	...	...	1	...	Good	...	...	7877.63
351	Maple-Red	Acer	rubrum	6	...	...	1	...	Good	...	...	886.23
352	Birch-Sweet	Betula	lenta	6	...	...	1	...	Good	...	...	443.12
353	Birch-Sweet	Betula	lenta	4	...	...	1	...	Fair	...	...	140.67
354	Oak-Northern Red	Quercus	rubra	18	...	...	1	...	Good	...	...	9970.13
355	Oak-Northern Red	Quercus	rubra	9	...	...	1	...	Good	...	...	2492.53
356	Oak-Northern Red	Quercus	rubra	13	...	...	1	...	Good	...	...	5200.47
357	Birch-Sweet	Betula	lenta	13	...	...	1	...	Good	...	...	2080.19
358	Birch-Sweet	Betula	lenta	14	...	...	1	...	Good	...	...	2412.52
359	Maple-Red	Acer	rubrum	10	...	...	1	...	Fair	...	...	1758.4
360	Oak-Northern Red	Quercus	rubra	11	...	...	1	...	Good	...	...	3723.41
361	Oak-Northern Red	Quercus	rubra	20	...	...	1	...	Good	...	...	12308.8
362	Redcedar-Eastern	Juniperus	virginiana	6	...	...	1	...	Dead	...	...	0
363	Birch-Sweet	Betula	lenta	7	...	...	1	...	Good	...	...	603.13

364	Birch-Sweet	Betula	lenta	6	...	...	1	...	Good	...	...	443.12
365	Birch-Sweet	Betula	lenta	10	...	...	1	...	Fair	...	...	879.2
366	Oak-Northern Red	Quercus	rubra	12	...	...	1	...	Fair	...	...	3165.12
367	Birch-Sweet	Betula	lenta	7	...	...	1	...	Fair	...	...	430.81
368	Oak-Northern Red	Quercus	rubra	12	...	...	1	...	Fair	...	...	3165.12
369	Birch-Sweet	Betula	lenta	7	...	...	1	...	Good	...	...	603.13
370	Oak-Northern Red	Quercus	rubra	14	...	...	1	...	Good	...	...	6031.31
371	Oak-Northern Red	Quercus	rubra	13	...	...	1	...	Good	...	...	5200.47
372	Cherry	Prunus	sp	8	...	...	2	...	Dead	...	...	0
373	Maple-Red	Acer	rubrum	13	...	...	1	...	Good	...	...	4160.37
374	Oak-Northern Red	Quercus	rubra	16	...	...	1	...	Good	...	...	7877.63
375	Oak-Northern Red	Quercus	rubra	9	...	...	1	...	Dead	...	...	0
376	Oak-Northern Red	Quercus	rubra	10	...	...	1	...	Fair	...	...	2198
377	Birch-Sweet	Betula	lenta	7	...	...	1	...	Fair	...	...	430.81
378	Oak-Northern Red	Quercus	rubra	24	...	...	1	...	Good	...	...	17724.67
379	Oak-Northern Red	Quercus	rubra	12	...	...	1	...	Good	...	...	4431.17
380	Oak-Northern Red	Quercus	rubra	14	...	...	1	...	Good	...	...	6031.31
381	Maple-Red	Acer	rubrum	4	...	...	2	...	Good	...	...	615.44
382	Oak-Northern Red	Quercus	rubra	11	...	...	1	...	Good	...	...	3723.41
383	Oak-Northern Red	Quercus	rubra	17	...	...	1	...	Good	...	...	8893.11
384	Oak-Northern Red	Quercus	rubra	10	...	...	1	...	Fair	...	...	2198
385	Oak-Northern Red	Quercus	rubra	16	...	...	1	...	Good	...	...	7877.63
386	Oak-Northern Red	Quercus	rubra	15	...	...	1	...	Good	...	...	6923.7
387	Oak-Northern Red	Quercus	rubra	13	...	...	1	...	Good	...	...	5200.47
388	Oak-Northern Red	Quercus	rubra	13	...	...	1	...	Fair	...	...	3714.62
389	Birch-Sweet	Betula	lenta	17	...	...	1	...	Fair	...	...	2540.89
390	Cherry	Prunus	sp	7	...	...	1	...	Poor	...	...	258.48
391	Cherry	Prunus	sp	7	...	...	1	...	Good	...	...	603.13
392	Birch-Sweet	Betula	lenta	14	...	...	1	...	Good	...	...	2412.52
393	Oak-Northern Red	Quercus	rubra	12	...	...	1	...	Good	...	...	4431.17
394	Oak-Northern Red	Quercus	rubra	12	...	...	1	...	Fair	...	...	3165.12
395	Oak-Northern Red	Quercus	rubra	13	...	...	1	...	Good	...	...	5200.47
396	Cherry	Prunus	sp	10	...	...	1	...	Poor	...	...	527.52
397	Oak-Northern Red	Quercus	rubra	10	...	...	1	...	Fair	...	...	2198
398	Birch-Sweet	Betula	lenta	8	...	...	1	...	Good	...	...	787.76
399	Maple-Red	Acer	rubrum	4	...	...	1	...	Good	...	...	393.88
400	Oak-Northern Red	Quercus	rubra	13	...	...	1	...	Good	...	...	5200.47
401	Hickory-Pignut	Carya	glabra	4	...	...	1	...	Good	...	...	393.88
402	Maple-Sugar	Acer	saccharum	5	...	...	1	...	Good	...	...	769.3
403	Oak-Northern Red	Quercus	rubra	24	...	...	1	...	Good	...	...	17724.67
404	Hickory-Pignut	Carya	glabra	7	...	...	1	...	Good	...	...	1206.26
405	Beech-American	Fagus	grandifolia	7	...	...	1	...	Good	...	...	1206.26
406	Maple-Norway	Acer	platanoides	5	...	...	1	...	Good	...	...	384.65
407	Elm-American	Ulmus	americana	4	...	...	1	...	Good	...	...	295.41
408	Dogwood-Flowering	Cornus	florida	4	...	...	1	...	Fair	...	...	281.34
409	Maple-Red	Acer	rubrum	6	...	...	1	...	Good	...	...	886.23
410	Maple-Red	Acer	rubrum	7	...	...	1	...	Good	...	...	1206.26
411	Maple-Sugar	Acer	saccharum	5	...	...	1	...	Fair	...	...	549.5
412	Maple-Sugar	Acer	saccharum	4	...	...	1	...	Fair	...	...	351.68
413	Maple-Sugar	Acer	saccharum	4	...	...	1	...	Good	...	...	492.35
414	Birch-Sweet	Betula	lenta	4	...	...	1	...	Good	...	...	196.94
415	Birch-Sweet	Betula	lenta	8	...	...	1	...	Good	...	...	787.76

416	Birch-Sweet	Betula	lenta	4	...	...	1	...	Good	...	...	196.94
417	Hickory-Pignut	Carya	glabra	15	...	...	1	...	Good	...	...	5538.96
418	Birch-Sweet	Betula	lenta	4	...	...	1	...	Fair	...	...	140.67
419	Oak-Northern Red	Quercus	rubra	28	...	...	1	...	Good	...	...	24125.25
420	Oak-Northern Red	Quercus	rubra	18	...	...	1	...	Good	...	...	9970.13
421	Birch-Sweet	Betula	lenta	6	...	...	1	...	Good	...	...	443.12
422	Birch-Sweet	Betula	lenta	5	...	...	1	...	Fair	...	...	219.8
423	Birch-Sweet	Betula	lenta	4	...	...	1	...	Good	...	...	196.94
424	Maple-Sugar	Acer	saccharum	7	...	...	1	...	Good	...	...	1507.83
425	Hickory-Pignut	Carya	glabra	4	...	...	1	...	Good	...	...	393.88
426	Birch-Sweet	Betula	lenta	5	...	...	1	...	Poor	...	...	131.88
427	Birch-Sweet	Betula	lenta	10	...	...	1	...	Good	...	...	1230.88
428	Hickory-Pignut	Carya	glabra	7	...	...	1	...	Good	...	...	1206.26
429	Hickory-Pignut	Carya	glabra	11	...	...	1	...	Good	...	...	2978.73
430	Oak-Northern Red	Quercus	rubra	20	...	...	2	...	Good	...	...	16032.21
431	Oak-Northern Red	Quercus	rubra	10	...	...	1	...	Good	...	...	3077.2
432	Oak-Northern Red	Quercus	rubra	14	...	...	1	...	Fair	...	...	4308.08
433	Oak-Northern Red	Quercus	rubra	13	...	...	1	...	Good	...	...	5200.47
434	Oak-Northern Red	Quercus	rubra	12	...	...	1	...	Good	...	...	4431.17
435	Oak-Northern Red	Quercus	rubra	17	...	...	1	...	Good	...	...	8893.11
436	Birch-Sweet	Betula	lenta	7	...	...	1	...	Good	...	...	603.13
437	Oak-Northern Red	Quercus	rubra	14	...	...	1	...	Good	...	...	6031.31
438	Birch-Sweet	Betula	lenta	6	...	...	1	...	Fair	...	...	316.51
439	Birch-Sweet	Betula	lenta	8	...	...	1	...	Good	...	...	787.76
440	Birch-Sweet	Betula	lenta	5	...	...	1	...	Good	...	...	307.72
441	Birch-Sweet	Betula	lenta	5	...	...	1	...	Good	...	...	307.72
442	Birch-Sweet	Betula	lenta	6	...	...	1	...	Good	...	...	443.12
443	Hickory-Pignut	Carya	glabra	7	...	...	1	...	Good	...	...	1206.26
444	Birch-Sweet	Betula	lenta	17	...	...	1	...	Good	...	...	3557.24
445	Beech-American	Fagus	grandifolia	11	...	...	1	...	Good	...	...	2978.73
446	Birch-Sweet	Betula	lenta	15	...	...	1	...	Dead	...	...	0
447	Maple-Sugar	Acer	saccharum	6	...	...	1	...	Good	...	...	1107.79
448	Maple-Norway	Acer	platanoides	7	...	...	1	...	Good	...	...	753.91
449	Oak-Northern Red	Quercus	rubra	7	...	...	1	...	Good	...	...	1507.83
450	Maple-Red	Acer	rubrum	4	...	...	1	...	Good	...	...	393.88
451	Birch-Sweet	Betula	lenta	5	...	...	1	...	Good	...	...	307.72
452	Oak-Northern Red	Quercus	rubra	4	...	...	1	...	Good	...	...	492.35
453	Oak-Northern Red	Quercus	rubra	26	...	...	1	...	Good	...	...	20801.87
454	Birch-Sweet	Betula	lenta	8	...	...	1	...	Fair	...	...	562.69
455	Birch-Sweet	Betula	lenta	16	...	...	1	...	Good	...	...	3151.05
456	Birch-Sweet	Betula	lenta	18	...	...	1	...	Good	...	...	3988.05
457	Beech-American	Fagus	grandifolia	6	...	...	1	...	Good	...	...	886.23
458	Oak-Northern Red	Quercus	rubra	5	...	...	1	...	Good	...	...	769.3
459	Beech-American	Fagus	grandifolia	4	...	...	1	...	Good	...	...	393.88
460	Oak-Northern Red	Quercus	rubra	19	...	...	1	...	Good	...	...	11108.69
461	Birch-Sweet	Betula	lenta	5	...	...	2	...	Fair	...	...	360.47
462	Oak-Northern Red	Quercus	rubra	7	...	...	1	...	Good	...	...	1507.83
463	Beech-American	Fagus	grandifolia	6	...	...	1	...	Good	...	...	886.23
464	Beech-American	Fagus	grandifolia	4	...	...	1	...	Good	...	...	393.88
465	Maple-Sugar	Acer	saccharum	4	...	...	1	...	Good	...	...	492.35
466	Oak-Northern Red	Quercus	rubra	16	...	...	1	...	Good	...	...	7877.63
467	Birch-Sweet	Betula	lenta	8	...	...	2	...	Good	...	...	1230.88

468	Hickory-Pignut	Carya	glabra	13	...	...	1	...	Good	...	...	4160.37
469	Hickory-Pignut	Carya	glabra	9	...	...	1	...	Good	...	...	1994.03
470	Maple-Sugar	Acer	saccharum	4	...	...	1	...	Good	...	...	492.35
471	Hickory-Pignut	Carya	glabra	11	...	...	1	...	Good	...	...	2978.73
472	Hickory-Pignut	Carya	glabra	14	...	...	1	...	Good	...	...	4825.05
473	Birch-Sweet	Betula	lenta	4	...	...	1	...	Fair	...	...	140.67
474	Birch-Sweet	Betula	lenta	5	...	...	1	...	Good	...	...	307.72
475	Birch-Sweet	Betula	lenta	16	...	...	1	...	Dead	...	...	0
476	Beech-American	Fagus	grandifolia	9	...	...	1	...	Good	...	...	1994.03
477	Hickory-Pignut	Carya	glabra	9	...	...	1	...	Good	...	...	1994.03
478	Hickory-Pignut	Carya	glabra	7	...	...	1	...	Fair	...	...	861.62
479	Oak-Northern Red	Quercus	rubra	18	...	...	1	...	Dead	...	...	0
480	Oak-Northern Red	Quercus	rubra	21	...	...	1	...	Good	...	...	13570.45
481	Hickory-Pignut	Carya	glabra	8	...	...	1	...	Good	...	...	1575.53
482	Hickory-Pignut	Carya	glabra	5	...	...	1	...	Good	...	...	615.44
483	Hickory-Pignut	Carya	glabra	4	...	...	1	...	Good	...	...	393.88
484	Oak-Northern Red	Quercus	rubra	17	...	...	2	...	Good	...	...	14924.42
485	Oak-Northern Red	Quercus	rubra	15	...	...	1	...	Good	...	...	6923.7
486	Hickory-Pignut	Carya	glabra	9	...	...	1	...	Good	...	...	1994.03
487	Oak-Northern Red	Quercus	rubra	10	...	...	1	...	Good	...	...	3077.2
488	Oak-Northern Red	Quercus	rubra	13	...	...	1	...	Good	...	...	5200.47
489	Oak-Northern Red	Quercus	rubra	13	...	...	1	...	Good	...	...	5200.47
490	Oak-Northern Red	Quercus	rubra	9	...	...	1	...	Dead	...	...	0
491	Oak-Northern Red	Quercus	rubra	17	...	...	1	...	Good	...	...	8893.11
492	Hickory-Pignut	Carya	glabra	4	...	...	1	...	Good	...	...	393.88
493	Hickory-Pignut	Carya	glabra	7	...	...	1	...	Good	...	...	1206.26
494	Oak-Northern Red	Quercus	rubra	12	...	...	1	...	Good	...	...	4431.17
495	Oak-Northern Red	Quercus	rubra	19	...	...	1	...	Good	...	...	11108.69
496	Oak-Northern Red	Quercus	rubra	12	...	...	1	...	Good	...	...	4431.17
497	Oak-Northern Red	Quercus	rubra	15	...	...	1	...	Good	...	...	6923.7
498	Birch-Sweet	Betula	lenta	4	...	...	1	...	Poor	...	...	84.4
499	Birch-Sweet	Betula	lenta	11	...	...	1	...	Fair	...	...	1063.83
500	Oak-Northern Red	Quercus	rubra	16	...	...	2	...	Good	...	...	15755.26
501	Hickory-Pignut	Carya	glabra	4	...	...	1	...	Good	...	...	393.88
502	Oak-Northern Red	Quercus	rubra	17	...	...	1	...	Good	...	...	8893.11
503	Oak-Northern Red	Quercus	rubra	6	...	...	1	...	Good	...	...	1107.79
504	Oak-Northern Red	Quercus	rubra	13	...	...	1	...	Good	...	...	5200.47
505	Oak-Northern Red	Quercus	rubra	14	...	...	1	...	Good	...	...	6031.31
506	Oak-Northern Red	Quercus	rubra	18	...	...	1	...	Good	...	...	9970.13
507	Birch-Sweet	Betula	lenta	7	...	...	1	...	Good	...	...	603.13
508	Birch-Sweet	Betula	lenta	6	...	...	1	...	Fair	...	...	316.51
509	Birch-Sweet	Betula	lenta	5	...	...	1	...	Fair	...	...	219.8
510	Hickory-Pignut	Carya	glabra	9	...	...	1	...	Good	...	...	1994.03
511	Hickory-Pignut	Carya	glabra	6	...	...	1	...	Good	...	...	886.23
512	Birch-Sweet	Betula	lenta	5	...	...	1	...	Dead	...	...	0
513	Oak-Northern Red	Quercus	rubra	8	...	...	1	...	Good	...	...	1969.41
514	Hickory-Pignut	Carya	glabra	7	...	...	1	...	Good	...	...	1206.26
515	Hickory-Pignut	Carya	glabra	8	...	...	1	...	Good	...	...	1575.53
516	Hickory-Pignut	Carya	glabra	6	...	...	1	...	Good	...	...	886.23
517	Oak-Northern Red	Quercus	rubra	16	...	...	2	...	Good	...	...	13908.94
518	Birch-Sweet	Betula	lenta	5	...	...	1	...	Dead	...	...	0
519	Birch-Sweet	Betula	lenta	7	...	...	1	...	Good	...	...	603.13

520	Oak-Northern Red	Quercus	rubra	15	...	...	1	...	Good	...	...	6923.7
521	Birch-Sweet	Betula	lenta	7	...	...	1	...	Good	...	...	603.13
522	Oak-Northern Red	Quercus	rubra	16	...	...	1	...	Dead	...	...	0
523	Birch-Sweet	Betula	lenta	6	...	...	1	...	Good	...	...	443.12
524	Hickory-Pignut	Carya	glabra	16	...	...	1	...	Good	...	...	6302.11
525	Hickory-Pignut	Carya	glabra	8	...	...	1	...	Good	...	...	1575.53
526	Oak-Northern Red	Quercus	rubra	29	...	...	1	...	Fair	...	...	18485.18
527	Beech-American	Fagus	grandifolia	14	...	...	1	...	Good	...	...	4825.05
528	Hickory-Pignut	Carya	glabra	14	...	...	1	...	Good	...	...	4825.05
529	Beech-American	Fagus	grandifolia	4	...	...	1	...	Good	...	...	393.88
530	Oak-Northern Red	Quercus	rubra	15	...	...	1	...	Good	...	...	6923.7
531	Beech-American	Fagus	grandifolia	5	...	...	1	...	Good	...	...	615.44
532	Oak-White	Quercus	alba	9	...	...	1	...	Good	...	...	2492.53
533	Birch-Sweet	Betula	lenta	8	...	...	1	...	Poor	...	...	337.61
534	Birch-Sweet	Betula	lenta	8	...	...	1	...	Good	...	...	787.76
535	Birch-Sweet	Betula	lenta	7	...	...	1	...	Good	...	...	603.13
536	Birch-Sweet	Betula	lenta	7	...	...	1	...	Good	...	...	603.13
537	Oak-Northern Red	Quercus	rubra	14	...	...	2	...	Good	...	...	11231.78
538	Hickory-Pignut	Carya	glabra	4	...	...	1	...	Good	...	...	393.88
539	Hickory-Pignut	Carya	glabra	6	...	...	1	...	Good	...	...	886.23
540	Beech-American	Fagus	grandifolia	6	...	...	1	...	Good	...	...	886.23
541	Birch-Sweet	Betula	lenta	9	...	...	1	...	Good	...	...	997.01
542	Oak-Northern Red	Quercus	rubra	11	...	...	1	...	Good	...	...	3723.41
543	Beech-American	Fagus	grandifolia	4	...	...	1	...	Good	...	...	393.88
544	Oak-Northern Red	Quercus	rubra	14	...	...	1	...	Good	...	...	6031.31
545	Beech-American	Fagus	grandifolia	5	...	...	1	...	Good	...	...	615.44
546	Beech-American	Fagus	grandifolia	5	...	...	1	...	Good	...	...	615.44
547	Maple-Red	Acer	rubrum	5	...	...	1	...	Good	...	...	615.44
548	Cherry	Prunus	sp	4	...	...	1	...	Good	...	...	196.94
549	Oak-Northern Red	Quercus	rubra	14	...	...	1	...	Good	...	...	6031.31
550	Maple-Sugar	Acer	saccharum	7	...	...	1	...	Good	...	...	1507.83
551	Hickory-Pignut	Carya	glabra	5	...	...	1	...	Good	...	...	615.44
552	Maple-Sugar	Acer	saccharum	4	...	...	1	...	Good	...	...	492.35
553	Birch-Sweet	Betula	lenta	14	...	...	1	...	Poor	...	...	1033.94
554	Beech-American	Fagus	grandifolia	4	...	...	1	...	Good	...	...	393.88
555	Maple-Sugar	Acer	saccharum	4	...	...	1	...	Good	...	...	492.35
556	Oak-Northern Red	Quercus	rubra	10	...	...	1	...	Good	...	...	3077.2
557	Redcedar-Eastern	Juniperus	virginiana	4	...	...	1	...	Poor	...	...	147.71
558	Cherry	Prunus	sp	5	...	...	1	...	Good	...	...	307.72
559	Maple-Red	Acer	rubrum	5	...	...	1	...	Good	...	...	615.44
560	Beech-American	Fagus	grandifolia	6	...	...	1	...	Poor	...	...	379.81
561	Oak-Northern Red	Quercus	rubra	17	...	...	1	...	Good	...	...	8893.11
562	Oak-Northern Red	Quercus	rubra	16	...	...	1	...	Good	...	...	7877.63
563	Oak-Northern Red	Quercus	rubra	10	...	...	1	...	Good	...	...	3077.2
564	Oak-Northern Red	Quercus	rubra	13	...	...	1	...	Good	...	...	5200.47
565	Oak-Northern Red	Quercus	rubra	19	...	...	1	...	Good	...	...	11108.69
566	Oak-Northern Red	Quercus	rubra	15	...	...	1	...	Good	...	...	6923.7
567	Maple-Red	Acer	rubrum	4	...	...	1	...	Good	...	...	393.88
568	Oak-White	Quercus	alba	8	...	...	1	...	Good	...	...	1969.41
569	Beech-American	Fagus	grandifolia	5	...	...	1	...	Good	...	...	615.44
570	Oak-Northern Red	Quercus	rubra	14	...	...	1	...	Good	...	...	6031.31
571	Oak-Northern Red	Quercus	rubra	19	...	...	1	...	Good	...	...	11108.69

572	Oak-Northern Red	Quercus	rubra	13	...	...	1	...	Good	...	...	5200.47
573	Oak-Northern Red	Quercus	rubra	13	...	...	2	...	Fair	...	...	5912.62
574	Birch-Sweet	Betula	lenta	13	...	...	1	...	Dead	...	...	0
575	Beech-American	Fagus	grandifolia	4	...	...	1	...	Good	...	...	393.88
576	Oak-Northern Red	Quercus	rubra	15	...	...	2	...	Good	...	...	12955.01
577	Birch-Sweet	Betula	lenta	10	...	...	1	...	Good	...	...	1230.88
578	Oak-Northern Red	Quercus	rubra	10	...	...	1	...	Good	...	...	3077.2
579	Hickory-Pignut	Carya	glabra	9	...	...	1	...	Good	...	...	1994.03
580	Birch-Sweet	Betula	lenta	9	...	...	1	...	Good	...	...	997.01
581	Birch-Sweet	Betula	lenta	4	...	...	1	...	Good	...	...	196.94
582	Beech-American	Fagus	grandifolia	5	...	...	1	...	Dead	...	...	0
583	Oak-Northern Red	Quercus	rubra	19	...	...	1	...	Good	...	...	11108.69
584	Oak-Northern Red	Quercus	rubra	10	...	...	1	...	Dead	...	...	0
585	Beech-American	Fagus	grandifolia	6	...	...	1	...	Good	...	...	886.23
586	Redcedar-Eastern	Juniperus	virginiana	6	...	...	1	...	Poor	...	...	332.34
587	Oak-Northern Red	Quercus	rubra	14	...	...	1	...	Good	...	...	6031.31
588	Beech-American	Fagus	grandifolia	4	...	...	1	...	Poor	...	...	168.81
589	Beech-American	Fagus	grandifolia	5	...	...	1	...	Good	...	...	615.44
590	Oak-Northern Red	Quercus	rubra	19	...	...	1	...	Good	...	...	11108.69
591	Maple-Red	Acer	rubrum	4	...	...	1	...	Good	...	...	393.88
592	Redcedar-Eastern	Juniperus	virginiana	6	...	...	1	...	Poor	...	...	332.34
593	Redcedar-Eastern	Juniperus	virginiana	8	...	...	1	...	Poor	...	...	590.82
594	Oak-Northern Red	Quercus	rubra	10	...	...	1	...	Good	...	...	3077.2
595	Oak-Northern Red	Quercus	rubra	17	...	...	1	...	Good	...	...	8893.11
596	Maple-Red	Acer	rubrum	4	...	...	1	...	Dead	...	...	0
597	Maple-Red	Acer	rubrum	5	...	...	1	...	Fair	...	...	439.6
598	Oak-Northern Red	Quercus	rubra	7	...	...	1	...	Good	...	...	1507.83
599	Redcedar-Eastern	Juniperus	virginiana	5	...	...	1	...	Fair	...	...	384.65
600	Oak-White	Quercus	alba	6	...	...	1	...	Good	...	...	1107.79
601	Oak-Northern Red	Quercus	rubra	11	...	...	1	...	Good	...	...	3723.41
602	Redcedar-Eastern	Juniperus	virginiana	10	...	...	1	...	Poor	...	...	923.16
603	Oak-Northern Red	Quercus	rubra	4	...	...	1	...	Good	...	...	492.35
604	Maple-Red	Acer	rubrum	5	...	...	1	...	Good	...	...	615.44
605	Beech-American	Fagus	grandifolia	6	...	...	1	...	Good	...	...	886.23
606	Oak-Northern Red	Quercus	rubra	15	...	...	1	...	Good	...	...	6923.7
607	Cherry	Prunus	sp	7	...	...	1	...	Fair	...	...	430.81
608	Cherry	Prunus	sp	8	...	...	1	...	Fair	...	...	562.69
609	Oak-Northern Red	Quercus	rubra	4	...	...	1	...	Poor	...	...	211.01
610	Oak-Northern Red	Quercus	rubra	8	...	...	1	...	Good	...	...	1969.41
611	Maple-Red	Acer	rubrum	4	...	...	1	...	Good	...	...	393.88
612	Redcedar-Eastern	Juniperus	virginiana	10	...	...	1	...	Dead	...	...	0
613	Cherry	Prunus	sp	11	...	...	1	...	Good	...	...	1489.36
614	Oak-White	Quercus	alba	17	...	...	2	...	Good	...	...	14924.42
615	Maple-Red	Acer	rubrum	11	...	...	2	...	Dead	...	...	0
616	Oak-Northern Red	Quercus	rubra	6	...	...	1	...	Good	...	...	1107.79
617	Hickory-Pignut	Carya	glabra	4	...	...	1	...	Good	...	...	393.88
618	Oak-Northern Red	Quercus	rubra	11	...	...	1	...	Good	...	...	3723.41
619	Oak-Northern Red	Quercus	rubra	23	...	...	1	...	Good	...	...	16278.39
620	Oak-Northern Red	Quercus	rubra	5	...	...	1	...	Good	...	...	769.3
621	Oak-Northern Red	Quercus	rubra	20	...	...	1	...	Good	...	...	12308.8
622	Oak-Northern Red	Quercus	rubra	5	...	...	1	...	Dead	...	...	0
623	Oak-Northern Red	Quercus	rubra	12	...	...	1	...	Good	...	...	4431.17

624	Birch-Sweet	Betula	lenta	8	...	...	1	...	Good	...	...	787.76
625	Oak-Northern Red	Quercus	rubra	17	...	...	1	...	Good	...	...	8893.11
626	Birch-Sweet	Betula	lenta	4	...	...	1	...	Poor	...	...	84.4
627	Birch-Sweet	Betula	lenta	7	...	...	2	...	Fair	...	...	571.48
628	Oak-Northern Red	Quercus	rubra	27	...	...	1	...	Good	...	...	22432.79
629	Oak-Northern Red	Quercus	rubra	18	...	...	1	...	Good	...	...	9970.13
630	Birch-Sweet	Betula	lenta	10	...	...	1	...	Good	...	...	1230.88
631	Birch-Sweet	Betula	lenta	6	...	...	1	...	Dead	...	...	0
632	Birch-Sweet	Betula	lenta	7	...	...	1	...	Poor	...	...	258.48
633	Birch-Sweet	Betula	lenta	8	...	...	1	...	Good	...	...	787.76
634	Oak-Northern Red	Quercus	rubra	18	...	...	1	...	Good	...	...	9970.13
635	Birch-Sweet	Betula	lenta	7	...	...	1	...	Dead	...	...	0
636	Birch-Sweet	Betula	lenta	10	...	...	1	...	Good	...	...	1230.88
637	Oak-Northern Red	Quercus	rubra	16	...	...	1	...	Good	...	...	7877.63
638	Birch-Sweet	Betula	lenta	7	...	...	1	...	Fair	...	...	430.81
639	Oak-Northern Red	Quercus	rubra	5	...	...	1	...	Good	...	...	769.3
640	Beech-American	Fagus	grandifolia	11	...	...	1	...	Good	...	...	2978.73
641	Oak-Northern Red	Quercus	rubra	18	...	...	2	...	Fair	...	...	12748.4
642	Beech-American	Fagus	grandifolia	5	...	...	2	...	Good	...	...	1009.32
643	Birch-Sweet	Betula	lenta	8	...	...	1	...	Good	...	...	787.76
644	Birch-Sweet	Betula	lenta	5	...	...	1	...	Dead	...	...	0
645	Birch-Sweet	Betula	lenta	5	...	...	1	...	Good	...	...	307.72
646	Oak-Northern Red	Quercus	rubra	17	...	...	1	...	Good	...	...	8893.11
647	Oak-Northern Red	Quercus	rubra	20	...	...	1	...	Good	...	...	12308.8
648	Birch-Sweet	Betula	lenta	6	...	...	1	...	Poor	...	...	189.91
649	Birch-Sweet	Betula	lenta	12	...	...	1	...	Good	...	...	1772.47
650	Redcedar-Eastern	Juniperus	virginiana	7	...	...	1	...	Poor	...	...	452.35
651	Oak-Northern Red	Quercus	rubra	6	...	...	1	...	Good	...	...	1107.79
652	Redcedar-Eastern	Juniperus	virginiana	8	...	...	1	...	Poor	...	...	590.82
653	Oak-White	Quercus	alba	14	...	...	1	...	Good	...	...	6031.31
654	Redcedar-Eastern	Juniperus	virginiana	11	...	...	1	...	Poor	...	...	1117.02
655	Birch-Sweet	Betula	lenta	12	...	...	1	...	Fair	...	...	1266.05
656	Oak-Northern Red	Quercus	rubra	14	...	...	1	...	Good	...	...	6031.31
657	Oak-Northern Red	Quercus	rubra	8	...	...	1	...	Good	...	...	1969.41
658	Oak-Northern Red	Quercus	rubra	8	...	...	1	...	Good	...	...	1969.41
659	Oak-Northern Red	Quercus	rubra	5	...	...	1	...	Good	...	...	769.3
660	Oak-Northern Red	Quercus	rubra	12	...	...	1	...	Good	...	...	4431.17
661	Maple-Norway	Acer	platanoides	4	...	...	1	...	Good	...	...	246.18
662	Redcedar-Eastern	Juniperus	virginiana	12	...	...	1	...	Fair	...	...	2215.58
663	Oak-Northern Red	Quercus	rubra	18	...	...	1	...	Good	...	...	9970.13
664	Oak-Northern Red	Quercus	rubra	4	...	...	1	...	Good	...	...	492.35
665	Redcedar-Eastern	Juniperus	virginiana	8	...	...	1	...	Dead	...	...	0
666	Oak-Northern Red	Quercus	rubra	23	...	...	1	...	Good	...	...	16278.39
667	Maple-Sugar	Acer	saccharum	7	...	...	1	...	Good	...	...	1507.83
668	Beech-American	Fagus	grandifolia	5	...	...	1	...	Good	...	...	615.44
669	Maple-Red	Acer	rubrum	6	...	...	1	...	Fair	...	...	633.02
670	Maple-Red	Acer	rubrum	4	...	...	1	...	Fair	...	...	281.34
671	Oak-Northern Red	Quercus	rubra	13	...	...	1	...	Good	...	...	5200.47
672	Oak-Northern Red	Quercus	rubra	12	...	...	1	...	Good	...	...	4431.17
673	Maple-Red	Acer	rubrum	7	...	...	1	...	Dead	...	...	0
674	Maple-Sugar	Acer	saccharum	7	...	...	1	...	Good	...	...	1507.83
675	Oak-Northern Red	Quercus	rubra	23	...	...	1	...	Good	...	...	16278.39

676	Maple-Red	Acer	rubrum	7	...	...	1	...	Dead	...	...	0
677	Oak-Northern Red	Quercus	rubra	17	...	...	1	...	Good	...	...	8893.11
678	Beech-American	Fagus	grandifolia	5	...	...	1	...	Good	...	...	615.44
679	Oak-Northern Red	Quercus	rubra	28	...	...	1	...	Fair	...	...	17232.32
680	Birch-Sweet	Betula	lenta	12	...	...	1	...	Good	...	...	1772.47
681	Hickory-Pignut	Carya	glabra	18	...	...	1	...	Good	...	...	7976.1
682	Hickory-Pignut	Carya	glabra	7	...	...	1	...	Good	...	...	1206.26
683	Maple-Sugar	Acer	saccharum	4	...	...	1	...	Good	...	...	492.35
684	Oak-White	Quercus	alba	20	...	...	1	...	Good	...	...	12308.8
685	Hickory-Pignut	Carya	glabra	16	...	...	1	...	Good	...	...	6302.11
686	Birch-Sweet	Betula	lenta	12	...	...	1	...	Good	...	...	1772.47
687	Oak-Northern Red	Quercus	rubra	25	...	...	1	...	Good	...	...	19232.5
688	Maple-Sugar	Acer	saccharum	4	...	...	1	...	Good	...	...	492.35
689	Beech-American	Fagus	grandifolia	5	...	...	1	...	Good	...	...	615.44
690	Oak-Northern Red	Quercus	rubra	12	...	...	1	...	Dead	...	...	0
691	Beech-American	Fagus	grandifolia	6	...	...	1	...	Good	...	...	886.23
692	Birch-Sweet	Betula	lenta	13	...	...	1	...	Dead	...	...	0
693	Beech-American	Fagus	grandifolia	6	...	...	1	...	Good	...	...	886.23
694	Birch-Sweet	Betula	lenta	8	...	...	1	...	Good	...	...	787.76
695	Redcedar-Eastern	Juniperus	virginiana	7	...	...	1	...	Dead	...	...	0
696	Maple-Norway	Acer	platanoides	5	...	...	1	...	Good	...	...	384.65
697	Oak-Northern Red	Quercus	rubra	22	...	...	1	...	Good	...	...	14893.65
698	Birch-Sweet	Betula	lenta	10	...	...	1	...	Good	...	...	1230.88
699	Birch-Sweet	Betula	lenta	9	...	...	1	...	Good	...	...	997.01
700	Maple-Red	Acer	rubrum	11	...	...	1	...	Dead	...	...	0
701	Redcedar-Eastern	Juniperus	virginiana	7	...	...	1	...	Dead	...	...	0
702	Birch-Sweet	Betula	lenta	11	...	...	1	...	Fair	...	...	1063.83
703	Hickory-Pignut	Carya	glabra	14	...	...	1	...	Good	...	...	4825.05
704	Maple-Norway	Acer	platanoides	9	...	...	1	...	Good	...	...	1246.27
705	Hickory-Pignut	Carya	glabra	19	...	...	1	...	Good	...	...	8886.95
706	Maple-Norway	Acer	platanoides	7	...	...	1	...	Good	...	...	753.91
707	Maple-Sugar	Acer	saccharum	5	...	...	1	...	Dead	...	...	0
708	Oak-White	Quercus	alba	19	...	...	1	...	Good	...	...	11108.69
709	Maple-Sugar	Acer	saccharum	5	...	...	1	...	Fair	...	...	549.5
710	Maple-Norway	Acer	platanoides	4	...	...	1	...	Good	...	...	246.18
711	Hickory-Pignut	Carya	glabra	13	...	...	1	...	Good	...	...	4160.37
712	Beech-American	Fagus	grandifolia	4	...	...	2	...	Good	...	...	492.35
713	Beech-American	Fagus	grandifolia	4	...	...	1	...	Fair	...	...	281.34
714	Beech-American	Fagus	grandifolia	5	...	...	1	...	Good	...	...	615.44
715	Oak-Northern Red	Quercus	rubra	21	...	...	1	...	Good	...	...	13570.45
716	Maple-Sugar	Acer	saccharum	9	...	...	1	...	Fair	...	...	1780.38
717	Oak-Northern Red	Quercus	rubra	8	...	...	1	...	Good	...	...	1969.41
718	Hickory-Pignut	Carya	glabra	19	...	...	2	...	Good	...	...	16863.06
719	Hickory-Pignut	Carya	glabra	7	...	...	1	...	Good	...	...	1206.26
720	Hickory-Pignut	Carya	glabra	6	...	...	1	...	Good	...	...	886.23
721	Hickory-Pignut	Carya	glabra	15	...	...	1	...	Good	...	...	5538.96
722	Oak-Northern Red	Quercus	rubra	20	...	...	1	...	Good	...	...	12308.8
723	Hickory-Pignut	Carya	glabra	10	...	...	1	...	Good	...	...	2461.76
724	Hickory-Pignut	Carya	glabra	14	...	...	1	...	Good	...	...	4825.05
725	Hickory-Pignut	Carya	glabra	16	...	...	1	...	Good	...	...	6302.11
726	Maple-Norway	Acer	platanoides	5	...	...	1	...	Good	...	...	384.65
727	Hickory-Pignut	Carya	glabra	9	...	...	1	...	Dead	...	...	0

728	Hickory-Pignut	Carya	glabra	16	...	...	1	...	Good	...	...	6302.11
729	Birch-Sweet	Betula	lenta	17	...	...	1	...	Good	...	...	3557.24
730	Birch-Sweet	Betula	lenta	9	...	...	1	...	Fair	...	...	712.15
731	Birch-Sweet	Betula	lenta	5	...	...	1	...	Fair	...	...	219.8
732	Maple-Norway	Acer	platanoides	6	...	...	1	...	Good	...	...	553.9
733	Birch-Sweet	Betula	lenta	8	...	...	1	...	Good	...	...	787.76
734	Oak-White	Quercus	alba	12	...	...	1	...	Good	...	...	4431.17
735	Maple-Norway	Acer	platanoides	5	...	...	1	...	Good	...	...	384.65
736	Birch-Sweet	Betula	lenta	17	...	...	1	...	Fair	...	...	2540.89
737	Birch-Sweet	Betula	lenta	12	...	...	1	...	Fair	...	...	1266.05
738	Oak-Northern Red	Quercus	rubra	4	...	...	1	...	Good	...	...	492.35
739	Maple-Sugar	Acer	saccharum	5	...	...	1	...	Good	...	...	769.3
740	Cherry	Prunus	sp	8	...	...	1	...	Good	...	...	787.76
741	Maple-Sugar	Acer	saccharum	6	...	...	1	...	Good	...	...	1107.79
742	Oak-Northern Red	Quercus	rubra	6	...	...	1	...	Good	...	...	1107.79
743	Oak-Northern Red	Quercus	rubra	4	...	...	1	...	Dead	...	...	0
744	Maple-Sugar	Acer	saccharum	7	...	...	1	...	Good	...	...	1507.83
745	Maple-Red	Acer	rubrum	18	...	...	1	...	Good	...	...	7976.1
746	Maple-Red	Acer	rubrum	7	...	...	1	...	Fair	...	...	861.62
747	Maple-Norway	Acer	platanoides	9	...	...	1	...	Good	...	...	1246.27
748	Maple-Red	Acer	rubrum	13	...	...	1	...	Good	...	...	4160.37
749	Maple-Norway	Acer	platanoides	4	...	...	1	...	Good	...	...	246.18
750	Oak-Northern Red	Quercus	rubra	10	...	...	1	...	Good	...	...	3077.2
751	Oak-Northern Red	Quercus	rubra	8	...	...	1	...	Good	...	...	1969.41
752	Cherry	Prunus	sp	10	...	...	1	...	Fair	...	...	879.2
753	Cherry	Prunus	sp	13	...	...	1	...	Fair	...	...	1485.85
754	Maple-Red	Acer	rubrum	10	...	...	1	...	Good	...	...	2461.76
755	Maple-Norway	Acer	platanoides	6	...	...	1	...	Good	...	...	553.9
756	Maple-Sugar	Acer	saccharum	9	...	...	1	...	Good	...	...	2492.53
757	Hickory-Pignut	Carya	glabra	4	...	...	1	...	Good	...	...	393.88
758	Hickory-Pignut	Carya	glabra	8	...	...	1	...	Good	...	...	1575.53
759	Hickory-Pignut	Carya	glabra	19	...	...	1	...	Good	...	...	8886.95
760	Maple-Norway	Acer	platanoides	9	...	...	1	...	Good	...	...	1246.27
761	Maple-Norway	Acer	platanoides	8	...	...	1	...	Good	...	...	984.7
762	Maple-Norway	Acer	platanoides	9	...	...	1	...	Fair	...	...	890.19
763	Maple-Norway	Acer	platanoides	4	...	...	1	...	Fair	...	...	175.84
764	Maple-Norway	Acer	platanoides	9	...	...	1	...	Good	...	...	1246.27
765	Maple-Norway	Acer	platanoides	4	...	...	1	...	Good	...	...	246.18
766	Oak-Northern Red	Quercus	rubra	14	...	...	1	...	Good	...	...	6031.31
767	Maple-Norway	Acer	platanoides	8	...	...	1	...	Good	...	...	984.7
768	Maple-Sugar	Acer	saccharum	11	...	...	1	...	Good	...	...	3723.41
769	Maple-Sugar	Acer	saccharum	5	...	...	1	...	Good	...	...	769.3
770	Maple-Sugar	Acer	saccharum	7	...	...	1	...	Good	...	...	1507.83
771	Maple-Norway	Acer	platanoides	4	...	...	1	...	Good	...	...	246.18
772	Hickory-Pignut	Carya	glabra	10	...	...	1	...	Good	...	...	2461.76
773	Cherry	Prunus	sp	7	...	...	1	...	Fair	...	...	430.81
774	Maple-Red	Acer	rubrum	6	...	...	1	...	Good	...	...	886.23
775	Maple-Red	Acer	rubrum	6	...	...	1	...	Good	...	...	886.23
776	Oak-Northern Red	Quercus	rubra	6	...	...	1	...	Good	...	...	1107.79
777	Oak-Northern Red	Quercus	rubra	25	...	...	1	...	Good	...	...	19232.5
778	Maple-Red	Acer	rubrum	6	...	...	1	...	Fair	...	...	633.02
779	Maple-Sugar	Acer	saccharum	5	...	...	1	...	Fair	...	...	549.5

780	Birch-Sweet	Betula	lenta	8	...	...	1	...	Good	...	...	787.76
781	Maple-Red	Acer	rubrum	7	...	...	1	...	Fair	...	...	861.62
782	Oak-Northern Red	Quercus	rubra	11	...	...	1	...	Good	...	...	3723.41
783	Birch-Sweet	Betula	lenta	7	...	...	1	...	Good	...	...	603.13
784	Oak-White	Quercus	alba	13	...	...	1	...	Good	...	...	5200.47
785	Oak-Northern Red	Quercus	rubra	11	...	...	1	...	Good	...	...	3723.41
786	Oak-Northern Red	Quercus	rubra	5	...	...	1	...	Poor	...	...	329.7
787	Oak-Northern Red	Quercus	rubra	20	...	...	2	...	Good	...	...	23417.49
788	Maple-Sugar	Acer	saccharum	5	...	...	1	...	Good	...	...	769.3
789	Maple-Sugar	Acer	saccharum	4	...	...	1	...	Fair	...	...	351.68
790	Maple-Red	Acer	rubrum	6	...	...	1	...	Dead	...	...	0
791	Oak-Northern Red	Quercus	rubra	15	...	...	1	...	Good	...	...	6923.7
792	Maple-Sugar	Acer	saccharum	8	...	...	1	...	Good	...	...	1969.41
793	Oak-Northern Red	Quercus	rubra	13	...	...	1	...	Fair	...	...	3714.62
794	Maple-Red	Acer	rubrum	10	...	...	1	...	Fair	...	...	1758.4
795	Maple-Sugar	Acer	saccharum	8	...	...	2	...	Good	...	...	3477.24
796	Maple-Norway	Acer	platanoides	7	...	...	1	...	Fair	...	...	538.51
797	Maple-Sugar	Acer	saccharum	7	...	...	1	...	Fair	...	...	1077.02
798	Maple-Sugar	Acer	saccharum	10	...	...	1	...	Good	...	...	3077.2
799	Maple-Sugar	Acer	saccharum	8	...	...	1	...	Fair	...	...	1406.72
800	Hickory-Pignut	Carya	glabra	6	...	...	1	...	Good	...	...	886.23
801	Oak-Northern Red	Quercus	rubra	11	...	...	1	...	Good	...	...	3723.41
802	Hickory-Pignut	Carya	glabra	9	...	...	1	...	Good	...	...	1994.03
803	Maple-Norway	Acer	platanoides	5	...	...	1	...	Good	...	...	384.65
804	Maple-Red	Acer	rubrum	12	...	...	1	...	Dead	...	...	0
805	Maple-Sugar	Acer	saccharum	6	...	...	1	...	Poor	...	...	474.77
806	Maple-Norway	Acer	platanoides	7	...	...	1	...	Good	...	...	753.91
807	Oak-Northern Red	Quercus	rubra	11	...	...	1	...	Good	...	...	3723.41
808	Maple-Sugar	Acer	saccharum	8	...	...	1	...	Good	...	...	1969.41
809	Maple-Red	Acer	rubrum	8	...	...	1	...	Good	...	...	1575.53
810	Cherry	Prunus	sp	8	...	...	1	...	Dead	...	...	0
811	Oak-Northern Red	Quercus	rubra	15	...	...	1	...	Good	...	...	6923.7
812	Maple-Sugar	Acer	saccharum	7	...	...	1	...	Fair	...	...	1077.02
813	Maple-Sugar	Acer	saccharum	8	...	...	1	...	Good	...	...	1969.41
814	Maple-Sugar	Acer	saccharum	7	...	...	1	...	Fair	...	...	1077.02
815	Maple-Sugar	Acer	saccharum	6	...	...	1	...	Good	...	...	1107.79
816	Maple-Sugar	Acer	saccharum	7	...	...	1	...	Good	...	...	1507.83
817	Maple-Red	Acer	rubrum	6	...	...	1	...	Dead	...	...	0
818	Maple-Red	Acer	rubrum	10	...	...	2	...	Poor	...	...	1572.01
819	Oak-Northern Red	Quercus	rubra	6	...	...	1	...	Fair	...	...	791.28
820	Maple-Sugar	Acer	saccharum	7	...	...	1	...	Good	...	...	1507.83
821	Oak-Northern Red	Quercus	rubra	10	...	...	1	...	Good	...	...	3077.2
822	Oak-Northern Red	Quercus	rubra	17	...	...	1	...	Good	...	...	8893.11
823	Maple-Red	Acer	rubrum	12	...	...	1	...	Fair	...	...	2532.1
824	Oak-Northern Red	Quercus	rubra	5	...	...	1	...	Dead	...	...	0
825	Maple-Red	Acer	rubrum	5	...	...	1	...	Fair	...	...	439.6
826	Birch-Sweet	Betula	lenta	7	...	...	1	...	Good	...	...	603.13
827	Cherry	Prunus	sp	10	...	...	1	...	Fair	...	...	879.2
828	Maple-Sugar	Acer	saccharum	4	...	...	1	...	Good	...	...	492.35
829	Oak-Northern Red	Quercus	rubra	5	...	...	1	...	Dead	...	...	0
830	Maple-Red	Acer	rubrum	9	...	...	1	...	Good	...	...	1994.03
831	Cherry	Prunus	sp	8	...	...	1	...	Good	...	...	787.76

832	Beech-American	Fagus	grandifolia	5	...	...	1	...	Good	...	...	615.44
833	Oak-Northern Red	Quercus	rubra	21	...	...	1	...	Good	...	...	13570.45
834	Maple-Red	Acer	rubrum	4	...	...	1	...	Fair	...	...	281.34
835	Maple-Red	Acer	rubrum	7	...	...	1	...	Fair	...	...	861.62
836	Birch-Sweet	Betula	lenta	5	...	...	1	...	Fair	...	...	219.8
837	Maple-Sugar	Acer	saccharum	5	...	...	1	...	Fair	...	...	549.5
838	Maple-Red	Acer	rubrum	6	...	...	1	...	Good	...	...	886.23
839	Oak-Northern Red	Quercus	rubra	24	...	...	1	...	Good	...	...	17724.67
840	Maple-Red	Acer	rubrum	5	...	...	2	...	Dead	...	...	0
841	Birch-Sweet	Betula	lenta	10	...	...	1	...	Good	...	...	1230.88
842	Oak-Northern Red	Quercus	rubra	10	...	...	1	...	Good	...	...	3077.2
843	Maple-Red	Acer	rubrum	5	...	...	1	...	Fair	...	...	439.6
844	Oak-Northern Red	Quercus	rubra	12	...	...	1	...	Good	...	...	4431.17
845	Maple-Red	Acer	rubrum	5	...	...	1	...	Dead	...	...	0
846	Oak-Northern Red	Quercus	rubra	16	...	...	1	...	Good	...	...	7877.63
847	Maple-Sugar	Acer	saccharum	5	...	...	1	...	Good	...	...	769.3
848	Birch-Sweet	Betula	lenta	9	...	...	1	...	Fair	...	...	712.15
849	Birch-Sweet	Betula	lenta	16	...	...	1	...	Good	...	...	3151.05
850	Oak-Northern Red	Quercus	rubra	7	...	...	1	...	Good	...	...	1507.83
851	Oak-Northern Red	Quercus	rubra	7	...	...	1	...	Good	...	...	1507.83
852	Maple-Red	Acer	rubrum	10	...	...	1	...	Good	...	...	2461.76
853	Hickory-Pignut	Carya	glabra	7	...	...	1	...	Good	...	...	1206.26
854	Maple-Sugar	Acer	saccharum	7	...	...	1	...	Good	...	...	1507.83
855	Maple-Norway	Acer	platanoides	7	...	...	1	...	Good	...	...	753.91
856	Maple-Sugar	Acer	saccharum	8	...	...	1	...	Good	...	...	1969.41
857	Oak-Northern Red	Quercus	rubra	9	...	...	1	...	Good	...	...	2492.53
858	Oak-Northern Red	Quercus	rubra	5	...	...	1	...	Good	...	...	769.3
859	Birch-Sweet	Betula	lenta	15	...	...	1	...	Fair	...	...	1978.2
860	Oak-Northern Red	Quercus	rubra	7	...	...	1	...	Good	...	...	1507.83
861	Maple-Sugar	Acer	saccharum	5	...	...	1	...	Good	...	...	769.3
862	Maple-Red	Acer	rubrum	9	...	...	1	...	Fair	...	...	1424.3
863	Maple-Sugar	Acer	saccharum	5	...	...	1	...	Good	...	...	769.3
864	Hickory-Pignut	Carya	glabra	15	...	...	1	...	Good	...	...	5538.96
865	Maple-Sugar	Acer	saccharum	5	...	...	1	...	Good	...	...	769.3
866	Oak-Northern Red	Quercus	rubra	6	...	...	1	...	Dead	...	...	0
867	Maple-Red	Acer	rubrum	8	...	...	1	...	Good	...	...	1575.53
868	Maple-Norway	Acer	platanoides	5	...	...	1	...	Fair	...	...	274.75
869	Maple-Sugar	Acer	saccharum	7	...	...	1	...	Good	...	...	1507.83
870	Maple-Red	Acer	rubrum	4	...	...	1	...	Dead	...	...	0
871	Cherry	Prunus	sp	12	...	...	1	...	Good	...	...	1772.47
872	Maple-Sugar	Acer	saccharum	7	...	...	1	...	Good	...	...	1507.83
873	Maple-Red	Acer	rubrum	6	...	...	2	...	Fair	...	...	791.28
874	Birch-Sweet	Betula	lenta	12	...	...	1	...	Good	...	...	1772.47
875	Birch-Sweet	Betula	lenta	5	...	...	1	...	Good	...	...	307.72
876	Birch-Sweet	Betula	lenta	4	...	...	1	...	Fair	...	...	140.67
877	Oak-Northern Red	Quercus	rubra	28	...	...	1	...	Good	...	...	24125.25
878	Birch-Sweet	Betula	lenta	5	...	...	1	...	Good	...	...	307.72
879	Birch-Sweet	Betula	lenta	9	...	...	1	...	Good	...	...	997.01
880	Oak-Northern Red	Quercus	rubra	6	...	...	1	...	Fair	...	...	791.28
881	Cherry	Prunus	sp	8	...	...	1	...	Dead	...	...	0
882	Oak-Northern Red	Quercus	rubra	10	...	...	1	...	Good	...	...	3077.2
883	Beech-American	Fagus	grandifolia	4	...	...	1	...	Good	...	...	393.88

884	Beech-American	Fagus	grandifolia	5	...	...	1	...	Good	...	...	615.44
885	Birch-Sweet	Betula	lenta	10	...	...	1	...	Fair	...	...	879.2
886	Birch-Sweet	Betula	lenta	6	...	...	1	...	Dead	...	...	0
887	Birch-Sweet	Betula	lenta	5	...	...	1	...	Fair	...	...	219.8
888	Oak-Northern Red	Quercus	rubra	23	...	...	1	...	Good	...	...	16278.39
889	Birch-Sweet	Betula	lenta	9	...	...	1	...	Good	...	...	997.01
890	Birch-Sweet	Betula	lenta	5	...	...	1	...	Poor	...	...	131.88
891	Maple-Red	Acer	rubrum	14	...	...	1	...	Good	...	...	4825.05
892	Maple-Red	Acer	rubrum	7	...	...	1	...	Good	...	...	1206.26
893	Maple-Red	Acer	rubrum	21	...	...	1	...	Good	...	...	10856.36
894	Maple-Norway	Acer	platanoides	4	...	...	1	...	Good	...	...	246.18
895	Maple-Sugar	Acer	saccharum	6	...	...	1	...	Good	...	...	1107.79
896	Maple-Red	Acer	rubrum	8	...	...	1	...	Good	...	...	1575.53
897	Maple-Sugar	Acer	saccharum	5	...	...	1	...	Dead	...	...	0
898	Oak-Northern Red	Quercus	rubra	12	...	...	1	...	Good	...	...	4431.17
899	Maple-Red	Acer	rubrum	5	...	...	1	...	Poor	...	...	263.76
900	Cherry	Prunus	sp	9	...	...	1	...	Poor	...	...	427.29
901	Birch-Sweet	Betula	lenta	5	...	...	1	...	Fair	...	...	219.8
902	Birch-Sweet	Betula	lenta	5	...	...	1	...	Good	...	...	307.72
903	Maple-Red	Acer	rubrum	6	...	...	1	...	Good	...	...	886.23
904	Cherry	Prunus	sp	9	...	...	1	...	Fair	...	...	712.15
905	Redcedar-Eastern	Juniperus	virginiana	4	...	...	1	...	Dead	...	...	0
906	Oak-Northern Red	Quercus	rubra	6	...	...	1	...	Dead	...	...	0
907	Maple-Red	Acer	rubrum	13	...	...	1	...	Good	...	...	4160.37
908	Maple-Red	Acer	rubrum	13	...	...	1	...	Good	...	...	4160.37
909	Birch-Sweet	Betula	lenta	6	...	...	1	...	Good	...	...	443.12
910	Maple-Red	Acer	rubrum	5	...	...	1	...	Fair	...	...	439.6
911	Oak-Northern Red	Quercus	rubra	16	...	...	1	...	Good	...	...	7877.63
912	Oak-Northern Red	Quercus	rubra	27	...	...	1	...	Good	...	...	22432.79
913	Maple-Red	Acer	rubrum	7	...	...	1	...	Fair	...	...	861.62
914	Birch-Sweet	Betula	lenta	15	...	...	1	...	Good	...	...	2769.48
915	Birch-Sweet	Betula	lenta	16	...	...	1	...	Good	...	...	3151.05
916	Birch-Sweet	Betula	lenta	17	...	...	1	...	Good	...	...	3557.24
917	Birch-Sweet	Betula	lenta	10	...	...	1	...	Good	...	...	1230.88
918	Birch-Sweet	Betula	lenta	6	...	...	1	...	Good	...	...	443.12
919	Birch-Sweet	Betula	lenta	7	...	...	1	...	Good	...	...	603.13
920	Beech-American	Fagus	grandifolia	4	...	...	1	...	Good	...	...	393.88
921	Birch-Sweet	Betula	lenta	10	...	...	1	...	Good	...	...	1230.88
922	Birch-Sweet	Betula	lenta	5	...	...	1	...	Good	...	...	307.72
923	Birch-Sweet	Betula	lenta	14	...	...	1	...	Good	...	...	2412.52
924	Birch-Sweet	Betula	lenta	18	...	...	1	...	Good	...	...	3988.05
925	Beech-American	Fagus	grandifolia	5	...	...	1	...	Good	...	...	615.44
926	Birch-Sweet	Betula	lenta	11	...	...	1	...	Good	...	...	1489.36
927	Birch-Sweet	Betula	lenta	10	...	...	1	...	Good	...	...	1230.88
928	Birch-Sweet	Betula	lenta	6	...	...	1	...	Good	...	...	443.12
929	Birch-Sweet	Betula	lenta	7	...	...	1	...	Good	...	...	603.13
930	Beech-American	Fagus	grandifolia	4	...	...	1	...	Good	...	...	393.88
931	Oak-Northern Red	Quercus	rubra	16	...	...	1	...	Good	...	...	7877.63
932	Birch-Sweet	Betula	lenta	6	...	...	1	...	Fair	...	...	316.51
933	Redcedar-Eastern	Juniperus	virginiana	7	...	...	1	...	Dead	...	...	0
934	Birch-Sweet	Betula	lenta	7	...	...	1	...	Fair	...	...	430.81
935	Oak-Northern Red	Quercus	rubra	28	...	...	1	...	Good	...	...	24125.25

936	Birch-Sweet	Betula	lenta	10	...	...	1	...	Good	...	...	1230.88
937	Birch-Sweet	Betula	lenta	5	...	...	1	...	Dead	...	...	0
938	Hickory-Pignut	Carya	glabra	12	...	...	1	...	Good	...	...	3544.93
939	Birch-Sweet	Betula	lenta	8	...	...	1	...	Poor	...	...	337.61
940	Birch-Sweet	Betula	lenta	8	...	...	1	...	Dead	...	...	0
941	Hickory-Pignut	Carya	glabra	6	...	...	1	...	Fair	...	...	633.02
942	Birch-Sweet	Betula	lenta	11	...	...	3	...	Good	...	...	3483.39
943	Oak-Northern Red	Quercus	rubra	9	...	...	1	...	Dead	...	...	0
944	Birch-Sweet	Betula	lenta	7	...	...	1	...	Dead	...	...	0
945	Birch-Sweet	Betula	lenta	12	...	...	1	...	Good	...	...	1772.47
946	Birch-Sweet	Betula	lenta	11	...	...	2	...	Fair	...	...	1204.5
947	Oak-Northern Red	Quercus	rubra	17	...	...	1	...	Good	...	...	8893.11
948	Oak-Northern Red	Quercus	rubra	13	...	...	1	...	Good	...	...	5200.47
949	Oak-Northern Red	Quercus	rubra	11	...	...	1	...	Good	...	...	3723.41
950	Birch-Sweet	Betula	lenta	9	...	...	1	...	Good	...	...	997.01
951	Oak-Northern Red	Quercus	rubra	21	...	...	1	...	Good	...	...	13570.45
952	Oak-Northern Red	Quercus	rubra	19	...	...	1	...	Good	...	...	11108.69
953	Birch-Sweet	Betula	lenta	10	...	...	1	...	Good	...	...	1230.88
954	Redcedar-Eastern	Juniperus	virginiana	6	...	...	1	...	Dead	...	...	0
955	Birch-Sweet	Betula	lenta	10	...	...	1	...	Good	...	...	1230.88
956	Oak-White	Quercus	alba	10	...	...	1	...	Good	...	...	3077.2
957	Birch-Sweet	Betula	lenta	7	...	...	1	...	Dead	...	...	0
958	Redcedar-Eastern	Juniperus	virginiana	5	...	...	1	...	Dead	...	...	0
959	Oak-Northern Red	Quercus	rubra	17	...	...	1	...	Good	...	...	8893.11
960	Birch-Sweet	Betula	lenta	6	...	...	1	...	Poor	...	...	189.91
961	Birch-Sweet	Betula	lenta	7	...	...	1	...	Good	...	...	603.13
962	Birch-Sweet	Betula	lenta	7	...	...	1	...	Dead	...	...	0
963	Birch-Sweet	Betula	lenta	9	...	...	1	...	Dead	...	...	0
964	Birch-Sweet	Betula	lenta	7	...	...	1	...	Good	...	...	603.13
965	Birch-Sweet	Betula	lenta	8	...	...	1	...	Good	...	...	787.76
966	Redcedar-Eastern	Juniperus	virginiana	6	...	...	1	...	Dead	...	...	0
967	Birch-Sweet	Betula	lenta	13	...	...	1	...	Good	...	...	2080.19
968	Maple-Norway	Acer	platanoides	5	...	...	1	...	Good	...	...	384.65
969	Beech-American	Fagus	grandifolia	6	...	...	1	...	Good	...	...	886.23
970	Birch-Sweet	Betula	lenta	15	...	...	1	...	Good	...	...	2769.48
971	Birch-Sweet	Betula	lenta	11	...	...	1	...	Good	...	...	1489.36
972	Birch-Sweet	Betula	lenta	14	...	...	1	...	Good	...	...	2412.52
973	Beech-American	Fagus	grandifolia	6	...	...	1	...	Good	...	...	886.23
974	Birch-Sweet	Betula	lenta	9	...	...	1	...	Fair	...	...	712.15
975	Birch-Sweet	Betula	lenta	14	...	...	1	...	Good	...	...	2412.52
976	Oak-Northern Red	Quercus	rubra	10	...	...	1	...	Dead	...	...	0
977	Birch-Sweet	Betula	lenta	8	...	...	1	...	Fair	...	...	562.69
978	Birch-Sweet	Betula	lenta	14	...	...	2	...	Good	...	...	4492.71
979	Oak-Northern Red	Quercus	rubra	28	...	...	1	...	Good	...	...	24125.25
980	Birch-Sweet	Betula	lenta	11	...	...	1	...	Good	...	...	1489.36
981	Birch-Sweet	Betula	lenta	10	...	...	1	...	Good	...	...	1230.88
982	Birch-Sweet	Betula	lenta	7	...	...	1	...	Good	...	...	603.13
983	Oak-Northern Red	Quercus	rubra	12	...	...	1	...	Good	...	...	4431.17
984	Birch-Sweet	Betula	lenta	8	...	...	1	...	Fair	...	...	562.69
985	Birch-Sweet	Betula	lenta	16	...	...	1	...	Good	...	...	3151.05
986	Oak-Northern Red	Quercus	rubra	21	...	...	1	...	Good	...	...	13570.45
987	Birch-Sweet	Betula	lenta	12	...	...	1	...	Poor	...	...	759.63

988	Redcedar-Eastern	Juniperus	virginiana	7	...	...	1	...	Dead	...	...	0
989	Oak-Northern Red	Quercus	rubra	21	...	...	1	...	Good	...	...	13570.45
990	Oak-Northern Red	Quercus	rubra	19	...	...	1	...	Fair	...	...	7934.78
991	Maple-Red	Acer	rubrum	6	...	...	2	...	Good	...	...	1280.12
992	Birch-Sweet	Betula	lenta	12	...	...	1	...	Good	...	...	1772.47
993	Birch-Sweet	Betula	lenta	11	...	...	1	...	Good	...	...	1489.36
994	Oak-Northern Red	Quercus	rubra	16	...	...	1	...	Fair	...	...	5626.88
995	Birch-Sweet	Betula	lenta	6	...	...	1	...	Good	...	...	443.12
996	Redcedar-Eastern	Juniperus	virginiana	6	...	...	1	...	Dead	...	...	0
997	Maple-Norway	Acer	platanoides	4	...	...	1	...	Good	...	...	246.18
998	Birch-Sweet	Betula	lenta	16	...	...	1	...	Good	...	...	3151.05
999	Birch-Sweet	Betula	lenta	11	...	...	1	...	Good	...	...	1489.36
1000	Oak-Northern Red	Quercus	rubra	11	...	...	1	...	Good	...	...	3723.41
1001	Beech-American	Fagus	grandifolia	4	...	...	1	...	Good	...	...	393.88
1002	Oak-Northern Red	Quercus	rubra	15	...	...	1	...	Good	...	...	6923.7
1003	Birch-Sweet	Betula	lenta	12	...	...	1	...	Good	...	...	1772.47
1004	Birch-Sweet	Betula	lenta	7	...	...	1	...	Fair	...	...	430.81
1005	Birch-Sweet	Betula	lenta	7	...	...	1	...	Fair	...	...	430.81
1006	Oak-Northern Red	Quercus	rubra	18	...	...	1	...	Good	...	...	9970.13
1007	Oak-Northern Red	Quercus	rubra	23	...	...	1	...	Good	...	...	16278.39
1008	Beech-American	Fagus	grandifolia	9	...	...	1	...	Good	...	...	1994.03
1009	Birch-Sweet	Betula	lenta	8	...	...	1	...	Good	...	...	787.76
1010	Birch-Sweet	Betula	lenta	9	...	...	1	...	Good	...	...	997.01
1011	Oak-Northern Red	Quercus	rubra	17	...	...	1	...	Good	...	...	8893.11
1012	Birch-Sweet	Betula	lenta	15	...	...	1	...	Good	...	...	2769.48
1013	Birch-Sweet	Betula	lenta	9	...	...	1	...	Good	...	...	997.01
1014	Birch-Sweet	Betula	lenta	17	...	...	1	...	Good	...	...	3557.24
1015	Birch-Sweet	Betula	lenta	15	...	...	1	...	Good	...	...	2769.48
1016	Beech-American	Fagus	grandifolia	4	...	...	1	...	Fair	...	...	281.34
1017	Beech-American	Fagus	grandifolia	11	...	...	1	...	Good	...	...	2978.73
1018	Oak-Northern Red	Quercus	rubra	24	...	...	1	...	Good	...	...	17724.67
1019	Birch-Sweet	Betula	lenta	14	...	...	2	...	Dead	...	...	0
1020	Birch-Sweet	Betula	lenta	5	...	...	1	...	Fair	...	...	219.8
1021	Birch-Sweet	Betula	lenta	14	...	...	2	...	Good	...	...	3200.29
1022	Birch-Sweet	Betula	lenta	8	...	...	1	...	Fair	...	...	562.69
1023	Birch-Sweet	Betula	lenta	7	...	...	1	...	Good	...	...	603.13
1024	Birch-Sweet	Betula	lenta	10	...	...	1	...	Fair	...	...	879.2
1025	Beech-American	Fagus	grandifolia	4	...	...	1	...	Good	...	...	393.88
1026	Birch-Sweet	Betula	lenta	13	...	...	1	...	Good	...	...	2080.19
1027	Birch-Sweet	Betula	lenta	11	...	...	1	...	Fair	...	...	1063.83
1028	Birch-Sweet	Betula	lenta	9	...	...	1	...	Good	...	...	997.01
1029	Birch-Sweet	Betula	lenta	14	...	...	1	...	Good	...	...	2412.52
1030	Oak-Northern Red	Quercus	rubra	20	...	...	1	...	Good	...	...	12308.8
1031	Beech-American	Fagus	grandifolia	4	...	...	2	...	Poor	...	...	211.01
1032	Birch-Sweet	Betula	lenta	8	...	...	1	...	Good	...	...	787.76
1033	Redcedar-Eastern	Juniperus	virginiana	6	...	...	1	...	Dead	...	...	0
1034	Birch-Sweet	Betula	lenta	9	...	...	1	...	Good	...	...	997.01
1035	Redcedar-Eastern	Juniperus	virginiana	7	...	...	2	...	Dead	...	...	0
1036	Birch-Sweet	Betula	lenta	8	...	...	1	...	Good	...	...	787.76
1037	Birch-Sweet	Betula	lenta	8	...	...	1	...	Good	...	...	787.76
1038	Birch-Sweet	Betula	lenta	15	...	...	1	...	Good	...	...	2769.48
1039	Birch-Sweet	Betula	lenta	9	...	...	1	...	Good	...	...	997.01

1040	Birch-Sweet	Betula	lenta	13	...	...	1	...	Good	...	...	2080.19
1041	Birch-Sweet	Betula	lenta	12	...	...	1	...	Good	...	...	1772.47
1042	Maple-Red	Acer	rubrum	6	...	...	2	...	Good	...	...	1280.12
1043	Birch-Sweet	Betula	lenta	13	...	...	1	...	Fair	...	...	1485.85
1044	Birch-Sweet	Betula	lenta	13	...	...	1	...	Good	...	...	2080.19
1045	Pine-Eastern White	Pinus	strobus	25	...	...	3	...	Good	...	...	32125.97
1046	Birch-Sweet	Betula	lenta	9	...	...	1	...	Good	...	...	997.01
1047	Birch-Sweet	Betula	lenta	19	...	...	1	...	Good	...	...	4443.48
1048	Birch-Sweet	Betula	lenta	13	...	...	1	...	Good	...	...	2080.19
1049	Birch-Sweet	Betula	lenta	16	...	...	1	...	Good	...	...	3151.05
1050	Beech-American	Fagus	grandifolia	4	...	...	2	...	Good	...	...	787.76
1051	Oak-Northern Red	Quercus	rubra	17	...	...	1	...	Good	...	...	8893.11
1052	Birch-Sweet	Betula	lenta	13	...	...	1	...	Good	...	...	2080.19
1053	Maple-Sugar	Acer	saccharum	4	...	...	1	...	Good	...	...	492.35
1054	Birch-Sweet	Betula	lenta	10	...	...	2	...	Good	...	...	2227.89
1055	Maple-Red	Acer	rubrum	4	...	...	1	...	Good	...	...	393.88
1056	Birch-Sweet	Betula	lenta	16	...	...	1	...	Good	...	...	3151.05
1057	Redcedar-Eastern	Juniperus	virginiana	8	...	...	1	...	Dead	...	...	0
1058	Birch-Sweet	Betula	lenta	12	...	...	1	...	Good	...	...	1772.47
1059	Birch-Sweet	Betula	lenta	11	...	...	2	...	Good	...	...	2720.24
1060	Birch-Sweet	Betula	lenta	12	...	...	2	...	Good	...	...	3261.83
1061	Birch-Sweet	Betula	lenta	12	...	...	2	...	Good	...	...	2769.48
1062	Oak-Northern Red	Quercus	rubra	21	...	...	1	...	Good	...	...	13570.45
1063	Birch-Sweet	Betula	lenta	11	...	...	1	...	Good	...	...	1489.36
1064	Birch-Sweet	Betula	lenta	12	...	...	1	...	Good	...	...	1772.47
1065	Maple-Sugar	Acer	saccharum	4	...	...	1	...	Good	...	...	492.35
1066	Birch-Sweet	Betula	lenta	11	...	...	1	...	Good	...	...	1489.36
1067	Birch-Sweet	Betula	lenta	11	...	...	1	...	Good	...	...	1489.36
1068	Birch-Sweet	Betula	lenta	9	...	...	1	...	Good	...	...	997.01
1069	Birch-Sweet	Betula	lenta	10	...	...	1	...	Good	...	...	1230.88
1070	Birch-Sweet	Betula	lenta	13	...	...	1	...	Good	...	...	2080.19
1071	Birch-Sweet	Betula	lenta	8	...	...	1	...	Good	...	...	787.76
1072	Birch-Sweet	Betula	lenta	10	...	...	2	...	Good	...	...	2227.89
1073	Beech-American	Fagus	grandifolia	5	...	...	1	...	Good	...	...	615.44
1074	Beech-American	Fagus	grandifolia	7	...	...	1	...	Good	...	...	1206.26
1075	Oak-Northern Red	Quercus	rubra	26	...	...	1	...	Good	...	...	20801.87
1076	Beech-American	Fagus	grandifolia	4	...	...	1	...	Good	...	...	393.88
1077	Birch-Sweet	Betula	lenta	16	...	...	3	...	Good	...	...	7643.76
1078	Birch-Sweet	Betula	lenta	11	...	...	1	...	Good	...	...	1489.36
1079	Birch-Sweet	Betula	lenta	10	...	...	1	...	Poor	...	...	527.52
1080	Birch-Sweet	Betula	lenta	9	...	...	1	...	Good	...	...	997.01
1081	Maple-Red	Acer	rubrum	5	...	...	1	...	Good	...	...	615.44
1082	Birch-Sweet	Betula	lenta	9	...	...	1	...	Good	...	...	997.01
1083	Birch-Sweet	Betula	lenta	9	...	...	1	...	Fair	...	...	712.15
1084	Birch-Sweet	Betula	lenta	7	...	...	1	...	Fair	...	...	430.81
1085	Birch-Sweet	Betula	lenta	14	...	...	1	...	Good	...	...	2412.52
1086	Maple-Sugar	Acer	saccharum	4	...	...	1	...	Good	...	...	492.35
1087	Maple-Sugar	Acer	saccharum	5	...	...	1	...	Good	...	...	769.3
1088	Oak-Northern Red	Quercus	rubra	18	...	...	1	...	Good	...	...	9970.13
1089	Maple-Sugar	Acer	saccharum	5	...	...	1	...	Good	...	...	769.3
1090	Birch-Sweet	Betula	lenta	15	...	...	1	...	Good	...	...	2769.48
1091	Maple-Sugar	Acer	saccharum	6	...	...	1	...	Good	...	...	1107.79

1092	Maple-Sugar	Acer	saccharum	5	...	...	1	...	Good	...	...	769.3
1093	Birch-Sweet	Betula	lenta	7	...	...	1	...	Good	...	...	603.13
1094	Birch-Sweet	Betula	lenta	6	...	...	1	...	Good	...	...	443.12
1095	Birch-Sweet	Betula	lenta	9	...	...	1	...	Good	...	...	997.01
1096	Beech-American	Fagus	grandifolia	4	...	...	1	...	Good	...	...	393.88
1097	Birch-Sweet	Betula	lenta	15	...	...	1	...	Good	...	...	2769.48
1098	Beech-American	Fagus	grandifolia	4	...	...	1	...	Good	...	...	393.88
1099	Birch-Sweet	Betula	lenta	14	...	...	1	...	Good	...	...	2412.52
1100	Maple-Sugar	Acer	saccharum	4	...	...	1	...	Good	...	...	492.35
1101	Birch-Sweet	Betula	lenta	10	...	...	1	...	Good	...	...	1230.88
1102	Oak-Northern Red	Quercus	rubra	14	...	...	1	...	Good	...	...	6031.31
1103	Birch-Sweet	Betula	lenta	6	...	...	1	...	Good	...	...	443.12
1104	Beech-American	Fagus	grandifolia	5	...	...	1	...	Good	...	...	615.44
1105	Birch-Sweet	Betula	lenta	15	...	...	1	...	Good	...	...	2769.48
1106	Oak-Northern Red	Quercus	rubra	11	...	...	1	...	Good	...	...	3723.41
1107	Birch-Sweet	Betula	lenta	12	...	...	1	...	Good	...	...	1772.47
1108	Beech-American	Fagus	grandifolia	4	...	...	1	...	Good	...	...	393.88
1109	Birch-Sweet	Betula	lenta	13	...	...	1	...	Good	...	...	2080.19
1110	Birch-Sweet	Betula	lenta	12	...	...	1	...	Good	...	...	1772.47
1111	Maple-Sugar	Acer	saccharum	5	...	...	1	...	Good	...	...	769.3
1112	Birch-Sweet	Betula	lenta	13	...	...	1	...	Good	...	...	2080.19
1113	Birch-Sweet	Betula	lenta	14	...	...	1	...	Good	...	...	2412.52
1114	Birch-Sweet	Betula	lenta	20	...	...	1	...	Fair	...	...	3516.8
1115	Maple-Red	Acer	rubrum	6	...	...	1	...	Good	...	...	886.23
1116	Oak-White	Quercus	alba	8	...	...	1	...	Good	...	...	1969.41
1117	Oak-Northern Red	Quercus	rubra	26	...	...	1	...	Good	...	...	20801.87
1118	Hickory-Pignut	Carya	glabra	7	...	...	1	...	Good	...	...	1206.26
1119	Oak-Northern Red	Quercus	rubra	18	...	...	1	...	Good	...	...	9970.13
1120	Oak-Northern Red	Quercus	rubra	19	...	...	1	...	Good	...	...	11108.69
1121	Birch-Sweet	Betula	lenta	5	...	...	1	...	Fair	...	...	219.8
1122	Oak-Northern Red	Quercus	rubra	27	...	...	1	...	Good	...	...	22432.79
1123	Oak-Northern Red	Quercus	rubra	10	...	...	1	...	Dead	...	...	0
1124	Birch-Sweet	Betula	lenta	10	...	...	1	...	Good	...	...	1230.88
1125	Birch-Sweet	Betula	lenta	4	...	...	1	...	Poor	...	...	84.4
1126	Beech-American	Fagus	grandifolia	5	...	...	1	...	Good	...	...	615.44
1127	Oak-Northern Red	Quercus	rubra	32	...	...	1	...	Good	...	...	30872.35
1128	Birch-Sweet	Betula	lenta	15	...	...	2	...	Fair	...	...	2294.71
1129	Beech-American	Fagus	grandifolia	4	...	...	1	...	Good	...	...	393.88
1130	Beech-American	Fagus	grandifolia	7	...	...	1	...	Good	...	...	1206.26
1131	Birch-Sweet	Betula	lenta	10	...	...	1	...	Good	...	...	1230.88
1132	Birch-Sweet	Betula	lenta	14	...	...	1	...	Good	...	...	2412.52
1133	Beech-American	Fagus	grandifolia	4	...	...	1	...	Good	...	...	393.88
1134	Oak-Northern Red	Quercus	rubra	30	...	...	1	...	Good	...	...	27694.8
1135	Oak-Northern Red	Quercus	rubra	13	...	...	1	...	Dead	...	...	0
1136	Oak-Northern Red	Quercus	rubra	16	...	...	1	...	Good	...	...	7877.63
1137	Birch-Sweet	Betula	lenta	7	...	...	1	...	Fair	...	...	430.81
1138	Birch-Sweet	Betula	lenta	8	...	...	1	...	Good	...	...	787.76
1139	Hickory-Pignut	Carya	glabra	7	...	...	1	...	Good	...	...	1206.26
1140	Oak-White	Quercus	alba	16	...	...	1	...	Good	...	...	7877.63
1141	Birch-Sweet	Betula	lenta	17	...	...	1	...	Good	...	...	3557.24
1142	Birch-Sweet	Betula	lenta	8	...	...	1	...	Good	...	...	787.76
1143	Hickory-Pignut	Carya	glabra	14	...	...	1	...	Good	...	...	4825.05

1144	Beech-American	Fagus	grandifolia	4	...	...	1	...	Good	...	...	393.88
1145	Birch-Sweet	Betula	lenta	6	...	...	1	...	Fair	...	...	316.51
1146	Birch-Sweet	Betula	lenta	13	...	...	1	...	Good	...	...	2080.19
1147	Beech-American	Fagus	grandifolia	4	...	...	1	...	Good	...	...	393.88
1148	Hickory-Pignut	Carya	glabra	6	...	...	1	...	Good	...	...	886.23
1149	Maple-Red	Acer	rubrum	10	...	...	1	...	Fair	...	...	1758.4
1150	Birch-Sweet	Betula	lenta	13	...	...	1	...	Good	...	...	2080.19
1151	Oak-Northern Red	Quercus	rubra	23	...	...	2	...	Good	...	...	32556.78
1152	Oak-Northern Red	Quercus	rubra	22	...	...	1	...	Fair	...	...	10638.32
1153	Oak-Northern Red	Quercus	rubra	24	...	...	1	...	Good	...	...	17724.67
1154	Birch-Sweet	Betula	lenta	7	...	...	1	...	Good	...	...	603.13
1155	Birch-Sweet	Betula	lenta	9	...	...	1	...	Fair	...	...	712.15
1156	Birch-Sweet	Betula	lenta	11	...	...	1	...	Good	...	...	1489.36
1157	Birch-Sweet	Betula	lenta	7	...	...	1	...	Fair	...	...	430.81
1158	Birch-Sweet	Betula	lenta	11	...	...	1	...	Good	...	...	1489.36
1159	Birch-Sweet	Betula	lenta	11	...	...	1	...	Good	...	...	1489.36
1160	Birch-Sweet	Betula	lenta	11	...	...	1	...	Good	...	...	1489.36
1161	Birch-Sweet	Betula	lenta	10	...	...	1	...	Good	...	...	1230.88
1162	Birch-Sweet	Betula	lenta	11	...	...	1	...	Good	...	...	1489.36
1163	Beech-American	Fagus	grandifolia	4	...	...	1	...	Good	...	...	393.88
1164	Birch-Sweet	Betula	lenta	9	...	...	1	...	Fair	...	...	712.15
1165	Maple-Sugar	Acer	saccharum	4	...	...	1	...	Good	...	...	492.35
1166	Maple-Red	Acer	rubrum	4	...	...	1	...	Fair	...	...	281.34
1167	Birch-Sweet	Betula	lenta	10	...	...	1	...	Good	...	...	1230.88
1168	Birch-Sweet	Betula	lenta	12	...	...	1	...	Good	...	...	1772.47
1169	Oak-Northern Red	Quercus	rubra	17	...	...	1	...	Good	...	...	8893.11
1170	Birch-Sweet	Betula	lenta	9	...	...	1	...	Poor	...	...	427.29
1171	Birch-Sweet	Betula	lenta	7	...	...	1	...	Good	...	...	603.13
1172	Birch-Sweet	Betula	lenta	14	...	...	1	...	Good	...	...	2412.52
1173	Beech-American	Fagus	grandifolia	5	...	...	1	...	Fair	...	...	439.6
1174	Maple-Sugar	Acer	saccharum	4	...	...	1	...	Good	...	...	492.35
1175	Birch-Sweet	Betula	lenta	12	...	...	1	...	Fair	...	...	1266.05
1176	Beech-American	Fagus	grandifolia	5	...	...	2	...	Fair	...	...	509.94
1177	Birch-Sweet	Betula	lenta	9	...	...	1	...	Fair	...	...	712.15
1178	Birch-Sweet	Betula	lenta	13	...	...	1	...	Fair	...	...	1485.85
1179	Birch-Sweet	Betula	lenta	11	...	...	2	...	Good	...	...	2720.24
1180	Birch-Sweet	Betula	lenta	11	...	...	1	...	Good	...	...	1489.36
1181	Maple-Norway	Acer	platanoides	6	...	...	1	...	Good	...	...	553.9
1182	Birch-Sweet	Betula	lenta	7	...	...	1	...	Good	...	...	603.13
1183	Birch-Sweet	Betula	lenta	10	...	...	1	...	Good	...	...	1230.88
1184	Birch-Sweet	Betula	lenta	14	...	...	1	...	Good	...	...	2412.52
1185	Birch-Sweet	Betula	lenta	14	...	...	1	...	Good	...	...	2412.52
1186	Birch-Sweet	Betula	lenta	10	...	...	1	...	Fair	...	...	879.2
1187	Oak-Northern Red	Quercus	rubra	17	...	...	1	...	Good	...	...	8893.11
1188	Maple-Sugar	Acer	saccharum	4	...	...	1	...	Good	...	...	492.35
1189	Birch-Sweet	Betula	lenta	10	...	...	1	...	Good	...	...	1230.88
1190	Birch-Sweet	Betula	lenta	11	...	...	1	...	Good	...	...	1489.36
1191	Birch-Sweet	Betula	lenta	11	...	...	1	...	Fair	...	...	1063.83
1192	Birch-Sweet	Betula	lenta	9	...	...	1	...	Fair	...	...	712.15
1193	Oak-Northern Red	Quercus	rubra	13	...	...	1	...	Good	...	...	5200.47
1194	Birch-Sweet	Betula	lenta	6	...	...	1	...	Fair	...	...	316.51
1195	Birch-Sweet	Betula	lenta	10	...	...	1	...	Good	...	...	1230.88

1196	Birch-Sweet	Betula	lenta	12	...	...	1	...	Good	...	...	1772.47
1197	Maple-Sugar	Acer	saccharum	5	...	...	1	...	Good	...	...	769.3
1198	Birch-Sweet	Betula	lenta	6	...	...	1	...	Good	...	...	443.12
1199	Birch-Sweet	Betula	lenta	8	...	...	1	...	Good	...	...	787.76
1200	Birch-Sweet	Betula	lenta	10	...	...	1	...	Good	...	...	1230.88
1201	Oak-Northern Red	Quercus	rubra	19	...	...	1	...	Good	...	...	11108.69
1202	Oak-Northern Red	Quercus	rubra	12	...	...	1	...	Fair	...	...	3165.12
1203	Oak-Northern Red	Quercus	rubra	13	...	...	1	...	Fair	...	...	3714.62
1204	Birch-Sweet	Betula	lenta	10	...	...	1	...	Good	...	...	1230.88
1205	Birch-Sweet	Betula	lenta	5	...	...	1	...	Good	...	...	307.72
1206	Birch-Sweet	Betula	lenta	6	...	...	1	...	Good	...	...	443.12
1207	Oak-Northern Red	Quercus	rubra	13	...	...	1	...	Good	...	...	5200.47
1208	Oak-Northern Red	Quercus	rubra	10	...	...	1	...	Fair	...	...	2198
1209	Birch-Sweet	Betula	lenta	5	...	...	1	...	Good	...	...	307.72
1210	Birch-Sweet	Betula	lenta	4	...	...	1	...	Good	...	...	196.94
1211	Oak-Northern Red	Quercus	rubra	14	...	...	1	...	Good	...	...	6031.31
1212	Birch-Sweet	Betula	lenta	5	...	...	1	...	Good	...	...	307.72
1213	Birch-Sweet	Betula	lenta	7	...	...	1	...	Good	...	...	603.13
1214	Birch-Sweet	Betula	lenta	4	...	...	1	...	Good	...	...	196.94
1215	Birch-Sweet	Betula	lenta	4	...	...	1	...	Fair	...	...	140.67
1216	Oak-Northern Red	Quercus	rubra	17	...	...	1	...	Good	...	...	8893.11
1217	Oak-Northern Red	Quercus	rubra	8	...	...	1	...	Good	...	...	1969.41
1218	Maple-Red	Acer	rubrum	15	...	...	1	...	Good	...	...	5538.96
1219	Cherry	Prunus	sp	9	...	...	1	...	Fair	...	...	712.15
1220	Birch-Sweet	Betula	lenta	9	...	...	1	...	Fair	...	...	712.15
1221	Oak-Northern Red	Quercus	rubra	13	...	...	1	...	Good	...	...	5200.47
1222	Maple-Red	Acer	rubrum	11	...	...	1	...	Good	...	...	2978.73
1223	Tuliptree	Liriodendr	tulipifera	9	...	...	1	...	Good	...	...	1994.03
1224	Oak-Northern Red	Quercus	rubra	8	...	...	1	...	Dead	...	...	0
1225	Birch-Sweet	Betula	lenta	4	...	...	1	...	Fair	...	...	140.67
1226	Oak-Northern Red	Quercus	rubra	4	...	...	1	...	Fair	...	...	351.68
1227	Oak-Northern Red	Quercus	rubra	28	...	...	1	...	Good	...	...	24125.25
1228	Birch-Sweet	Betula	lenta	5	...	...	1	...	Good	...	...	307.72
1229	Maple-Red	Acer	rubrum	17	...	...	2	...	Fair	...	...	5363.12
1230	Birch-Sweet	Betula	lenta	5	...	...	1	...	Good	...	...	307.72
1231	Birch-Sweet	Betula	lenta	13	...	...	1	...	Good	...	...	2080.19
1232	Maple-Red	Acer	rubrum	4	...	...	1	...	Good	...	...	393.88
1233	Birch-Sweet	Betula	lenta	7	...	...	1	...	Fair	...	...	430.81
1234	Birch-Sweet	Betula	lenta	7	...	...	1	...	Fair	...	...	430.81
1235	Birch-Sweet	Betula	lenta	15	...	...	1	...	Good	...	...	2769.48
1236	Oak-Northern Red	Quercus	rubra	15	...	...	1	...	Good	...	...	6923.7
1237	Oak-Northern Red	Quercus	rubra	7	...	...	1	...	Dead	...	...	0
1238	Oak-Northern Red	Quercus	rubra	7	...	...	1	...	Fair	...	...	1077.02
1239	Oak-Northern Red	Quercus	rubra	17	...	...	1	...	Good	...	...	8893.11
1240	Oak-Northern Red	Quercus	rubra	10	...	...	1	...	Fair	...	...	2198
1241	Maple-Red	Acer	rubrum	5	...	...	1	...	Fair	...	...	439.6
1242	Oak-Northern Red	Quercus	rubra	9	...	...	1	...	Good	...	...	2492.53
1243	Oak-Northern Red	Quercus	rubra	11	...	...	1	...	Fair	...	...	2659.58
1244	Maple-Red	Acer	rubrum	7	...	...	1	...	Fair	...	...	861.62
1245	Birch-Sweet	Betula	lenta	6	...	...	1	...	Fair	...	...	316.51
1246	Redcedar-Eastern	Juniperus	virginiana	4	...	...	1	...	Dead	...	...	0
1247	Oak-Northern Red	Quercus	rubra	23	...	...	3	...	Good	...	...	36464.82

1248	Oak-White	Quercus	alba	7	...	...	2	...	Fair	...	...	1626.52
1249	Oak-Northern Red	Quercus	rubra	17	...	...	1	...	Good	...	...	8893.11
1250	Birch-Sweet	Betula	lenta	8	...	...	1	...	Good	...	...	787.76
1251	Oak-Northern Red	Quercus	rubra	17	...	...	1	...	Good	...	...	8893.11
1252	Oak-Northern Red	Quercus	rubra	8	...	...	1	...	Dead	...	...	0
1253	Birch-Sweet	Betula	lenta	13	...	...	1	...	Good	...	...	2080.19
1254	Hickory-Pignut	Carya	glabra	12	...	...	1	...	Good	...	...	3544.93
1255	Hickory-Pignut	Carya	glabra	8	...	...	1	...	Good	...	...	1575.53
1256	Oak-Northern Red	Quercus	rubra	21	...	...	1	...	Good	...	...	13570.45
1257	Birch-Sweet	Betula	lenta	7	...	...	1	...	Good	...	...	603.13
1258	Maple-Red	Acer	rubrum	15	...	...	1	...	Good	...	...	5538.96
1259	Maple-Red	Acer	rubrum	5	...	...	1	...	Fair	...	...	439.6
1260	Oak-Northern Red	Quercus	rubra	24	...	...	1	...	Good	...	...	17724.67
1261	Birch-Sweet	Betula	lenta	5	...	...	1	...	Fair	...	...	219.8
1262	Birch-Sweet	Betula	lenta	6	...	...	1	...	Fair	...	...	316.51
1263	Birch-Sweet	Betula	lenta	4	...	...	1	...	Fair	...	...	140.67
1264	Hemlock-Canadian	Tsuga	canadensis	6	...	...	1	...	Poor	...	...	284.86
1265	Oak-Northern Red	Quercus	rubra	13	...	...	1	...	Fair	...	...	3714.62
1266	Birch-Sweet	Betula	lenta	4	...	...	1	...	Good	...	...	196.94
1267	Oak-Northern Red	Quercus	rubra	13	...	...	1	...	Good	...	...	5200.47
1268	Oak-Northern Red	Quercus	rubra	11	...	...	1	...	Fair	...	...	2659.58
1269	Oak-Northern Red	Quercus	rubra	10	...	...	1	...	Fair	...	...	2198
1270	Oak-Northern Red	Quercus	rubra	13	...	...	1	...	Fair	...	...	3714.62
1271	Oak-Northern Red	Quercus	rubra	10	...	...	1	...	Good	...	...	3077.2
1272	Oak-Northern Red	Quercus	rubra	12	...	...	1	...	Fair	...	...	3165.12
1273	Maple-Red	Acer	rubrum	7	...	...	1	...	Poor	...	...	516.97
1274	Maple-Sugar	Acer	saccharum	3	...	...	1	...	Fair	...	...	197.82
1275	Maple-Sugar	Acer	saccharum	6	...	...	1	...	Good	...	...	1107.79
1276	Hickory-Pignut	Carya	glabra	12	...	...	1	...	Good	...	...	3544.93
1277	Oak-Northern Red	Quercus	rubra	24	...	...	1	...	Good	...	...	17724.67
1278	Birch-Sweet	Betula	lenta	4	...	...	1	...	Good	...	...	196.94
1279	Birch-Sweet	Betula	lenta	7	...	...	1	...	Good	...	...	603.13
1280	Birch-Sweet	Betula	lenta	4	...	...	1	...	Fair	...	...	140.67
1281	Birch-Sweet	Betula	lenta	4	...	...	1	...	Good	...	...	196.94
1282	Oak-Northern Red	Quercus	rubra	16	...	...	1	...	Fair	...	...	5626.88
1283	Maple-Red	Acer	rubrum	5	...	...	1	...	Fair	...	...	439.6
1284	Birch-Sweet	Betula	lenta	5	...	...	1	...	Fair	...	...	219.8
1285	Birch-Sweet	Betula	lenta	5	...	...	1	...	Fair	...	...	219.8
1286	Birch-Sweet	Betula	lenta	6	...	...	1	...	Fair	...	...	316.51
1287	Birch-Sweet	Betula	lenta	4	...	...	1	...	Fair	...	...	140.67
1288	Oak-Northern Red	Quercus	rubra	19	...	...	1	...	Good	...	...	11108.69
1289	Birch-Sweet	Betula	lenta	5	...	...	1	...	Good	...	...	307.72
1290	Birch-Sweet	Betula	lenta	6	...	...	1	...	Fair	...	...	316.51
1291	Maple-Red	Acer	rubrum	6	...	...	1	...	Good	...	...	886.23
1292	Birch-Sweet	Betula	lenta	7	...	...	1	...	Good	...	...	603.13
1293	Birch-Sweet	Betula	lenta	4	...	...	1	...	Fair	...	...	140.67
1294	Oak-Northern Red	Quercus	rubra	13	...	...	1	...	Good	...	...	5200.47
1295	Oak-Northern Red	Quercus	rubra	17	...	...	1	...	Good	...	...	8893.11
1296	Maple-Red	Acer	rubrum	8	...	...	1	...	Fair	...	...	1125.38
1297	Oak-Northern Red	Quercus	rubra	14	...	...	1	...	Good	...	...	6031.31
1298	Oak-Northern Red	Quercus	rubra	6	...	...	1	...	Poor	...	...	474.77
1299	Maple-Red	Acer	rubrum	11	...	...	1	...	Good	...	...	2978.73

1300	Birch-Sweet	Betula	lenta	4	...	...	1	...	Fair	...	...	140.67
1301	Birch-Sweet	Betula	lenta	5	...	...	1	...	Good	...	...	307.72
1302	Maple-Red	Acer	rubrum	5	...	...	1	...	Good	...	...	615.44
1303	Birch-Sweet	Betula	lenta	4	...	...	1	...	Good	...	...	196.94
1304	Oak-Northern Red	Quercus	rubra	20	...	...	1	...	Fair	...	...	8792
1305	Beech-American	Fagus	grandifolia	5	...	...	1	...	Good	...	...	615.44
1306	Birch-Sweet	Betula	lenta	6	...	...	1	...	Fair	...	...	316.51
1307	Birch-Sweet	Betula	lenta	10	...	...	1	...	Good	...	...	1230.88
1308	Oak-Northern Red	Quercus	rubra	10	...	...	1	...	Good	...	...	3077.2
1309	Birch-Sweet	Betula	lenta	4	...	...	1	...	Good	...	...	196.94
1310	Birch-Sweet	Betula	lenta	5	...	...	1	...	Good	...	...	307.72
1311	Birch-Sweet	Betula	lenta	4	...	...	1	...	Fair	...	...	140.67
1312	Maple-Red	Acer	rubrum	4	...	...	1	...	Good	...	...	393.88
1313	Oak-Northern Red	Quercus	rubra	10	...	...	1	...	Good	...	...	3077.2
1314	Birch-Sweet	Betula	lenta	7	...	...	1	...	Good	...	...	603.13
1315	Birch-Sweet	Betula	lenta	4	...	...	1	...	Fair	...	...	140.67
1316	Oak-Northern Red	Quercus	rubra	13	...	...	1	...	Good	...	...	5200.47
1317	Hickory-Pignut	Carya	glabra	7	...	...	1	...	Good	...	...	1206.26
1318	Oak-Northern Red	Quercus	rubra	18	...	...	2	...	Good	...	...	17847.76
1319	Birch-Sweet	Betula	lenta	7	...	...	1	...	Good	...	...	603.13
1320	Oak-Northern Red	Quercus	rubra	22	...	...	1	...	Good	...	...	14893.65
1321	Birch-Sweet	Betula	lenta	7	...	...	2	...	Fair	...	...	509.94
1322	Birch-Sweet	Betula	lenta	6	...	...	1	...	Poor	...	...	189.91
1323	Maple-Red	Acer	rubrum	6	...	...	1	...	Poor	...	...	379.81
1324	Oak-Northern Red	Quercus	rubra	21	...	...	2	...	Good	...	...	23540.58
1325	Maple-Red	Acer	rubrum	6	...	...	2	...	Good	...	...	984.7
1326	Oak-Northern Red	Quercus	rubra	10	...	...	1	...	Dead	...	...	0
1327	Oak-Northern Red	Quercus	rubra	12	...	...	1	...	Good	...	...	4431.17
1328	Birch-Sweet	Betula	lenta	6	...	...	1	...	Fair	...	...	316.51
1329	Birch-Sweet	Betula	lenta	6	...	...	1	...	Good	...	...	443.12
1330	Birch-Sweet	Betula	lenta	6	...	...	1	...	Fair	...	...	316.51
1331	Birch-Sweet	Betula	lenta	8	...	...	1	...	Good	...	...	787.76
1332	Oak-Northern Red	Quercus	rubra	19	...	...	1	...	Fair	...	...	7934.78
1333	Birch-Sweet	Betula	lenta	8	...	...	1	...	Fair	...	...	562.69
1334	Oak-Northern Red	Quercus	rubra	34	...	...	1	...	Fair	...	...	24694.32
1335	Birch-Sweet	Betula	lenta	7	...	...	2	...	Fair	...	...	747.32
1336	Maple-Red	Acer	rubrum	6	...	...	1	...	Good	...	...	886.23
1337	Oak-Northern Red	Quercus	rubra	18	...	...	1	...	Good	...	...	9970.13
1338	Birch-Sweet	Betula	lenta	8	...	...	1	...	Fair	...	...	562.69
1339	Birch-Sweet	Betula	lenta	16	...	...	2	...	Good	...	...	4640.42
1340	Beech-American	Fagus	grandifolia	5	...	...	1	...	Good	...	...	615.44
1341	Beech-American	Fagus	grandifolia	4	...	...	1	...	Good	...	...	393.88
1342	Maple-Red	Acer	rubrum	4	...	...	1	...	Good	...	...	393.88
1343	Birch-Sweet	Betula	lenta	19	...	...	1	...	Good	...	...	4443.48
1344	Maple-Norway	Acer	platanoides	4	...	...	1	...	Fair	...	...	175.84
1345	Birch-Sweet	Betula	lenta	7	...	...	1	...	Good	...	...	603.13
1346	Birch-Sweet	Betula	lenta	14	...	...	1	...	Good	...	...	2412.52
1347	Maple-Red	Acer	rubrum	4	...	...	1	...	Good	...	...	393.88
1348	Birch-Sweet	Betula	lenta	13	...	...	1	...	Good	...	...	2080.19
1349	Maple-Sugar	Acer	saccharum	4	...	...	1	...	Fair	...	...	351.68
1350	Oak-Northern Red	Quercus	rubra	25	...	...	1	...	Good	...	...	19232.5
1351	Hickory-Pignut	Carya	glabra	8	...	...	2	...	Good	...	...	1797.08

1352	Oak-Northern Red	Quercus	rubra	19	...	...	1	...	Fair	...	...	7934.78
1353	Hickory-Pignut	Carya	glabra	9	...	...	1	...	Good	...	...	1994.03
1354	Maple-Sugar	Acer	saccharum	4	...	...	1	...	Poor	...	...	211.01
1355	Oak-Northern Red	Quercus	rubra	16	...	...	2	...	Good	...	...	13078.1
1356	Maple-Sugar	Acer	saccharum	8	...	...	1	...	Good	...	...	1969.41
1357	Birch-Sweet	Betula	lenta	4	...	...	1	...	Fair	...	...	140.67
1358	Maple-Red	Acer	rubrum	5	...	...	1	...	Fair	...	...	439.6
1359	Elm-American	Ulmus	americana	5	...	...	1	...	Poor	...	...	197.82
1360	Birch-Sweet	Betula	lenta	4	...	...	1	...	Dead	...	...	0
1361	Birch-Sweet	Betula	lenta	4	...	...	1	...	Good	...	...	196.94
1362	Hickory-Pignut	Carya	glabra	5	...	...	1	...	Fair	...	...	439.6
1363	Maple-Sugar	Acer	saccharum	5	...	...	1	...	Good	...	...	769.3
1364	Hickory-Pignut	Carya	glabra	11	...	...	1	...	Good	...	...	2978.73
1365	Oak-Northern Red	Quercus	rubra	22	...	...	1	...	Good	...	...	14893.65
1366	Birch-Sweet	Betula	lenta	4	...	...	1	...	Good	...	...	196.94
1367	Birch-Sweet	Betula	lenta	4	...	...	1	...	Fair	...	...	140.67
1368	Birch-Sweet	Betula	lenta	5	...	...	1	...	Good	...	...	307.72
1369	Maple-Sugar	Acer	saccharum	4	...	...	1	...	Fair	...	...	351.68
1370	Oak-Northern Red	Quercus	rubra	14	...	...	2	...	Poor	...	...	4180.6
1371	Birch-Sweet	Betula	lenta	5	...	...	1	...	Fair	...	...	219.8
1372	Oak-Northern Red	Quercus	rubra	13	...	...	1	...	Good	...	...	5200.47
1373	Oak-Northern Red	Quercus	rubra	17	...	...	1	...	Good	...	...	8893.11
1374	Oak-Northern Red	Quercus	rubra	11	...	...	1	...	Fair	...	...	2659.58
1375	Oak-Northern Red	Quercus	rubra	11	...	...	1	...	Poor	...	...	1595.75
1376	Beech-American	Fagus	grandifolia	7	...	...	1	...	Good	...	...	1206.26
1377	Birch-Sweet	Betula	lenta	5	...	...	1	...	Poor	...	...	131.88
1378	Birch-Sweet	Betula	lenta	6	...	...	1	...	Good	...	...	443.12
1379	Birch-Sweet	Betula	lenta	6	...	...	1	...	Good	...	...	443.12
1380	Oak-Northern Red	Quercus	rubra	7	...	...	1	...	Good	...	...	1507.83
1381	Beech-American	Fagus	grandifolia	4	...	...	1	...	Good	...	...	393.88
1382	Beech-American	Fagus	grandifolia	6	...	...	1	...	Good	...	...	886.23
1383	Beech-American	Fagus	grandifolia	8	...	...	1	...	Good	...	...	1575.53
1384	Beech-American	Fagus	grandifolia	8	...	...	1	...	Good	...	...	1575.53
1385	Beech-American	Fagus	grandifolia	7	...	...	1	...	Good	...	...	1206.26
1386	Birch-Sweet	Betula	lenta	5	...	...	1	...	Good	...	...	307.72
1387	Oak-Northern Red	Quercus	rubra	15	...	...	1	...	Fair	...	...	4945.5
1388	Beech-American	Fagus	grandifolia	5	...	...	1	...	Good	...	...	615.44
1389	Oak-Northern Red	Quercus	rubra	18	...	...	1	...	Fair	...	...	7121.52
1390	Oak-Northern Red	Quercus	rubra	13	...	...	1	...	Dead	...	...	0
1391	Oak-Northern Red	Quercus	rubra	24	...	...	1	...	Good	...	...	17724.67
1392	Oak-Northern Red	Quercus	rubra	15	...	...	1	...	Fair	...	...	4945.5
1393	Birch-Sweet	Betula	lenta	7	...	...	1	...	Fair	...	...	430.81
1394	Oak-Northern Red	Quercus	rubra	32	...	...	3	...	Good	...	...	79369.02
1395	Birch-Sweet	Betula	lenta	9	...	...	1	...	Fair	...	...	712.15
1396	Hickory-Pignut	Carya	glabra	4	...	...	1	...	Good	...	...	393.88
1397	Oak-Northern Red	Quercus	rubra	17	...	...	1	...	Fair	...	...	6352.22
1398	Hickory-Pignut	Carya	glabra	4	...	...	2	...	Good	...	...	615.44
1399	Maple-Sugar	Acer	saccharum	4	...	...	2	...	Fair	...	...	439.6
1400	Oak-Northern Red	Quercus	rubra	10	...	...	1	...	Good	...	...	3077.2
1401	Beech-American	Fagus	grandifolia	5	...	...	1	...	Good	...	...	615.44
1402	Oak-Northern Red	Quercus	rubra	16	...	...	1	...	Fair	...	...	5626.88
1403	Maple-Sugar	Acer	saccharum	7	...	...	1	...	Good	...	...	1507.83

1404	Oak-Northern Red	Quercus	rubra	18	...	...	1	...	Good	...	...	9970.13
1405	Oak-Northern Red	Quercus	rubra	21	...	...	1	...	Good	...	...	13570.45
1406	Hickory-Pignut	Carya	glabra	8	...	...	1	...	Good	...	...	1575.53
1407	Oak-Northern Red	Quercus	rubra	23	...	...	1	...	Good	...	...	16278.39
1408	Maple-Red	Acer	rubrum	8	...	...	5	...	Fair	...	...	3270.62
1409	Oak-Northern Red	Quercus	rubra	5	...	...	1	...	Fair	...	...	549.5
1410	Birch-Sweet	Betula	lenta	7	...	...	1	...	Good	...	...	603.13
1411	Oak-Northern Red	Quercus	rubra	29	...	...	1	...	Good	...	...	25879.25
1412	Hickory-Pignut	Carya	glabra	6	...	...	1	...	Good	...	...	886.23
1413	Oak-Northern Red	Quercus	rubra	6	...	...	1	...	Dead	...	...	0
1414	Hickory-Shagbark	Carya	ovata	4	...	...	1	...	Good	...	...	393.88
1415	Birch-Sweet	Betula	lenta	5	...	...	1	...	Fair	...	...	219.8
1416	Oak-Northern Red	Quercus	rubra	20	...	...	1	...	Good	...	...	12308.8
1417	Beech-American	Fagus	grandifolia	4	...	...	1	...	Good	...	...	393.88
1418	Birch-Sweet	Betula	lenta	9	...	...	1	...	Good	...	...	997.01
1419	Oak-Northern Red	Quercus	rubra	8	...	...	1	...	Fair	...	...	1406.72
1420	Birch-Sweet	Betula	lenta	14	...	...	1	...	Good	...	...	2412.52
1421	Oak-Northern Red	Quercus	rubra	22	...	...	1	...	Good	...	...	14893.65
1422	Maple-Red	Acer	rubrum	10	...	...	1	...	Good	...	...	2461.76
1423	Oak-Northern Red	Quercus	rubra	24	...	...	1	...	Good	...	...	17724.67
1424	Hickory-Pignut	Carya	glabra	4	...	...	1	...	Good	...	...	393.88
1425	Hickory-Shagbark	Carya	ovata	10	...	...	1	...	Good	...	...	2461.76
1426	Beech-American	Fagus	grandifolia	5	...	...	3	...	Fair	...	...	879.2
1427	Beech-American	Fagus	grandifolia	10	...	...	2	...	Good	...	...	2560.23
1428	Oak-Northern Red	Quercus	rubra	23	...	...	2	...	Good	...	...	27387.08
1429	Oak-Northern Red	Quercus	rubra	8	...	...	1	...	Poor	...	...	844.03
1430	Oak-Northern Red	Quercus	rubra	9	...	...	1	...	Good	...	...	2492.53
1431	Oak-Northern Red	Quercus	rubra	8	...	...	1	...	Good	...	...	1969.41
1432	Maple-Sugar	Acer	saccharum	6	...	...	1	...	Good	...	...	1107.79
1433	Maple-Red	Acer	rubrum	7	...	...	1	...	Poor	...	...	516.97
1434	Oak-Northern Red	Quercus	rubra	7	...	...	1	...	Good	...	...	1507.83
1435	Maple-Red	Acer	rubrum	6	...	...	1	...	Fair	...	...	633.02
1436	Birch-Sweet	Betula	lenta	4	...	...	1	...	Good	...	...	196.94
1437	Oak-Northern Red	Quercus	rubra	8	...	...	1	...	Poor	...	...	844.03
1438	Maple-Sugar	Acer	saccharum	4	...	...	1	...	Good	...	...	492.35
1439	Maple-Sugar	Acer	saccharum	5	...	...	1	...	Good	...	...	769.3
1440	Oak-Northern Red	Quercus	rubra	25	...	...	2	...	Good	...	...	27110.13
1441	Sassafras-Common	Sassafras	albidum	10	...	...	1	...	Dead	...	...	0
1442	Maple-Sugar	Acer	saccharum	8	...	...	1	...	Good	...	...	1969.41
1443	Oak-Northern Red	Quercus	rubra	17	...	...	1	...	Good	...	...	8893.11
1444	Beech-American	Fagus	grandifolia	6	...	...	1	...	Good	...	...	886.23
1445	Birch-Sweet	Betula	lenta	12	...	...	1	...	Good	...	...	1772.47
1446	Oak-Northern Red	Quercus	rubra	14	...	...	1	...	Poor	...	...	2584.85
1447	Birch-Sweet	Betula	lenta	5	...	...	1	...	Fair	...	...	219.8
1448	Oak-Northern Red	Quercus	rubra	15	...	...	1	...	Good	...	...	6923.7
1449	Maple-Red	Acer	rubrum	9	...	...	1	...	Fair	...	...	1424.3
1450	Birch-Sweet	Betula	lenta	4	...	...	1	...	Fair	...	...	140.67
1451	Beech-American	Fagus	grandifolia	4	...	...	1	...	Good	...	...	393.88
1452	Birch-Sweet	Betula	lenta	12	...	...	2	...	Good	...	...	2769.48
1453	Oak-Northern Red	Quercus	rubra	18	...	...	1	...	Good	...	...	9970.13
1454	Oak-Northern Red	Quercus	rubra	18	...	...	1	...	Good	...	...	9970.13
1455	Maple-Red	Acer	rubrum	6	...	...	1	...	Good	...	...	886.23

1456	Birch-Sweet	Betula	lenta	4	...	...	1	...	Poor	...	...	84.4
1457	Maple-Sugar	Acer	saccharum	4	...	...	1	...	Good	...	...	492.35
1458	Oak-Northern Red	Quercus	rubra	18	...	...	1	...	Good	...	...	9970.13
1459	Birch-Sweet	Betula	lenta	4	...	...	1	...	Good	...	...	196.94
1460	Oak-Northern Red	Quercus	rubra	12	...	...	1	...	Fair	...	...	3165.12
1461	Maple-Sugar	Acer	saccharum	9	...	...	1	...	Good	...	...	2492.53
1462	Hickory-Shagbark	Carya	ovata	6	...	...	1	...	Good	...	...	886.23
1463	Maple-Sugar	Acer	saccharum	7	...	...	1	...	Dead	...	...	0
1464	Oak-Northern Red	Quercus	rubra	25	...	...	1	...	Good	...	...	19232.5
1465	Oak-White	Quercus	alba	5	...	...	1	...	Good	...	...	769.3
1466	Hickory-Pignut	Carya	glabra	14	...	...	1	...	Good	...	...	4825.05
1467	Cherry	Prunus	sp	12	...	...	1	...	Poor	...	...	759.63
1468	Hickory-Pignut	Carya	glabra	4	...	...	1	...	Good	...	...	393.88
1469	Maple-Sugar	Acer	saccharum	6	...	...	1	...	Good	...	...	1107.79
1470	Maple-Sugar	Acer	saccharum	12	...	...	1	...	Good	...	...	4431.17
1471	Oak-Northern Red	Quercus	rubra	11	...	...	1	...	Dead	...	...	0
1472	Oak-Northern Red	Quercus	rubra	19	...	...	2	...	Good	...	...	20001.8
1473	Oak-Northern Red	Quercus	rubra	6	...	...	1	...	Good	...	...	1107.79
1474	Oak-Northern Red	Quercus	rubra	18	...	...	1	...	Good	...	...	9970.13
1475	Oak-Northern Red	Quercus	rubra	7	...	...	1	...	Good	...	...	1507.83
1476	Oak-Northern Red	Quercus	rubra	26	...	...	1	...	Good	...	...	20801.87
1477	Oak-Northern Red	Quercus	rubra	12	...	...	1	...	Dead	...	...	0
1478	Birch-Sweet	Betula	lenta	4	...	...	1	...	Fair	...	...	140.67
1479	Oak-Northern Red	Quercus	rubra	16	...	...	2	...	Poor	...	...	4444.36
1480	Beech-American	Fagus	grandifolia	11	...	...	2	...	Good	...	...	4554.26
1481	Maple-Sugar	Acer	saccharum	5	...	...	1	...	Good	...	...	769.3
1482	Oak-Northern Red	Quercus	rubra	12	...	...	1	...	Good	...	...	4431.17
1483	Maple-Sugar	Acer	saccharum	4	...	...	1	...	Fair	...	...	351.68
1484	Birch-Sweet	Betula	lenta	7	...	...	1	...	Good	...	...	603.13
1485	Oak-Northern Red	Quercus	rubra	13	...	...	1	...	Fair	...	...	3714.62
1486	Oak-Northern Red	Quercus	rubra	17	...	...	1	...	Good	...	...	8893.11
1487	Oak-Northern Red	Quercus	rubra	9	...	...	1	...	Dead	...	...	0
1488	Maple-Red	Acer	rubrum	8	...	...	1	...	Fair	...	...	1125.38
1489	Maple-Sugar	Acer	saccharum	4	...	...	1	...	Good	...	...	492.35
1490	Maple-Sugar	Acer	saccharum	4	...	...	1	...	Good	...	...	492.35
1491	Birch-Sweet	Betula	lenta	4	...	...	1	...	Good	...	...	196.94
1492	Maple-Sugar	Acer	saccharum	5	...	...	1	...	Good	...	...	769.3
1493	Birch-Sweet	Betula	lenta	4	...	...	1	...	Poor	...	...	84.4
1494	Oak-Northern Red	Quercus	rubra	14	...	...	3	...	Fair	...	...	9671.2
1495	Maple-Sugar	Acer	saccharum	5	...	...	1	...	Good	...	...	769.3
1496	Oak-Northern Red	Quercus	rubra	20	...	...	2	...	Good	...	...	21201.91
1497	Oak-Northern Red	Quercus	rubra	21	...	...	1	...	Good	...	...	13570.45
1498	Oak-Northern Red	Quercus	rubra	7	...	...	1	...	Dead	...	...	0
1499	Maple-Sugar	Acer	saccharum	6	...	...	1	...	Good	...	...	1107.79
1500	Maple-Sugar	Acer	saccharum	8	...	...	1	...	Good	...	...	1969.41
1501	Oak-Northern Red	Quercus	rubra	11	...	...	1	...	Good	...	...	3723.41
1502	Maple-Sugar	Acer	saccharum	5	...	...	1	...	Good	...	...	769.3
1503	Birch-Sweet	Betula	lenta	4	...	...	1	...	Poor	...	...	84.4
1504	Maple-Red	Acer	rubrum	5	...	...	1	...	Good	...	...	615.44
1505	Oak-Northern Red	Quercus	rubra	22	...	...	1	...	Good	...	...	14893.65
1506	Oak-Northern Red	Quercus	rubra	7	...	...	1	...	Dead	...	...	0
1507	Birch-Sweet	Betula	lenta	11	...	...	1	...	Good	...	...	1489.36

1508	Maple-Sugar	Acer	saccharum	4	...	...	1	...	Good	...	...	492.35
1509	Oak-Northern Red	Quercus	rubra	26	...	...	1	...	Good	...	...	20801.87
1510	Oak-Northern Red	Quercus	rubra	6	...	...	1	...	Fair	...	...	791.28
1511	Maple-Sugar	Acer	saccharum	6	...	...	1	...	Good	...	...	1107.79
1512	Maple-Red	Acer	rubrum	6	...	...	1	...	Fair	...	...	633.02
1513	Maple-Red	Acer	rubrum	6	...	...	1	...	Good	...	...	886.23
1514	Birch-Sweet	Betula	lenta	11	...	...	1	...	Good	...	...	1489.36
1515	Maple-Sugar	Acer	saccharum	4	...	...	1	...	Good	...	...	492.35
1516	Maple-Sugar	Acer	saccharum	6	...	...	1	...	Good	...	...	1107.79
1517	Oak-Northern Red	Quercus	rubra	19	...	...	1	...	Good	...	...	11108.69
1518	Maple-Red	Acer	rubrum	4	...	...	1	...	Poor	...	...	168.81
1519	Oak-White	Quercus	alba	7	...	...	2	...	Dead	...	...	0
1520	Oak-White	Quercus	alba	18	...	...	1	...	Good	...	...	9970.13
1521	Maple-Red	Acer	rubrum	6	...	...	1	...	Good	...	...	886.23
1522	Maple-Sugar	Acer	saccharum	4	...	...	1	...	Fair	...	...	351.68
1523	Oak-Northern Red	Quercus	rubra	22	...	...	1	...	Fair	...	...	10638.32
1524	Oak-Northern Red	Quercus	rubra	8	...	...	1	...	Dead	...	...	0
1525	Maple-Sugar	Acer	saccharum	5	...	...	1	...	Good	...	...	769.3
1526	Oak-Northern Red	Quercus	rubra	11	...	...	1	...	Good	...	...	3723.41
1527	Hickory-Pignut	Carya	glabra	6	...	...	1	...	Fair	...	...	633.02
1528	Maple-Red	Acer	rubrum	11	...	...	1	...	Good	...	...	2978.73
1529	Maple-Sugar	Acer	saccharum	5	...	...	1	...	Good	...	...	769.3
1530	Oak-Northern Red	Quercus	rubra	12	...	...	2	...	Poor	...	...	3798.14
1531	Beech-American	Fagus	grandifolia	8	...	...	1	...	Good	...	...	1575.53
1532	Oak-Northern Red	Quercus	rubra	20	...	...	1	...	Good	...	...	12308.8
1533	Maple-Sugar	Acer	saccharum	4	...	...	1	...	Good	...	...	492.35
1534	Oak-Northern Red	Quercus	rubra	10	...	...	1	...	Dead	...	...	0
1535	Maple-Sugar	Acer	saccharum	6	...	...	1	...	Good	...	...	1107.79
1536	Maple-Sugar	Acer	saccharum	4	...	...	1	...	Good	...	...	492.35
1537	Hickory-Shagbark	Carya	ovata	9	...	...	1	...	Good	...	...	1994.03
1538	Hickory-Shagbark	Carya	ovata	6	...	...	1	...	Good	...	...	886.23
1539	Hickory-Shagbark	Carya	ovata	5	...	...	1	...	Good	...	...	615.44
1540	Hickory-Shagbark	Carya	ovata	15	...	...	1	...	Good	...	...	5538.96
1541	Maple-Sugar	Acer	saccharum	5	...	...	1	...	Good	...	...	769.3
1542	Oak-Northern Red	Quercus	rubra	14	...	...	1	...	Fair	...	...	4308.08
1543	Hickory-Pignut	Carya	glabra	7	...	...	1	...	Good	...	...	1206.26
1544	Maple-Sugar	Acer	saccharum	4	...	...	1	...	Good	...	...	492.35
1545	Hickory-Shagbark	Carya	ovata	7	...	...	1	...	Good	...	...	1206.26
1546	Hickory-Shagbark	Carya	ovata	7	...	...	1	...	Good	...	...	1206.26
1547	Oak-Northern Red	Quercus	rubra	6	...	...	1	...	Good	...	...	1107.79
1548	Oak-Northern Red	Quercus	rubra	4	...	...	1	...	Dead	...	...	0
1549	Oak-Northern Red	Quercus	rubra	14	...	...	1	...	Good	...	...	6031.31
1550	Maple-Sugar	Acer	saccharum	4	...	...	1	...	Good	...	...	492.35
1551	Oak-Northern Red	Quercus	rubra	21	...	...	1	...	Good	...	...	13570.45
1552	Hickory-Pignut	Carya	glabra	6	...	...	1	...	Good	...	...	886.23
1553	Maple-Sugar	Acer	saccharum	4	...	...	1	...	Good	...	...	492.35
1554	Maple-Sugar	Acer	saccharum	4	...	...	1	...	Good	...	...	492.35
1555	Oak-Northern Red	Quercus	rubra	6	...	...	1	...	Dead	...	...	0
1556	Oak-Northern Red	Quercus	rubra	25	...	...	1	...	Good	...	...	19232.5
1557	Maple-Sugar	Acer	saccharum	4	...	...	1	...	Good	...	...	492.35
1558	Maple-Red	Acer	rubrum	5	...	...	1	...	Good	...	...	615.44
1559	Hickory-Pignut	Carya	glabra	4	...	...	1	...	Good	...	...	393.88

1560	Hickory-Shagbark	Carya	ovata	4	...	...	1	...	Good	...	...	393.88
1561	Oak-Northern Red	Quercus	rubra	18	...	...	1	...	Good	...	...	9970.13
1562	Beech-American	Fagus	grandifolia	5	...	...	1	...	Good	...	...	615.44
1563	Hickory-Shagbark	Carya	ovata	4	...	...	1	...	Good	...	...	393.88
1564	Oak-Northern Red	Quercus	rubra	24	...	...	1	...	Good	...	...	17724.67
1565	Maple-Sugar	Acer	saccharum	7	...	...	2	...	Good	...	...	2615.62
1566	Hickory-Shagbark	Carya	ovata	4	...	...	1	...	Good	...	...	393.88
1567	Sassafras-Common	Sassafras	albidum	9	...	...	1	...	Fair	...	...	1424.3
1568	Sassafras-Common	Sassafras	albidum	11	...	...	1	...	Good	...	...	2978.73
1569	Maple-Sugar	Acer	saccharum	5	...	...	2	...	Good	...	...	1261.65
1570	Maple-Sugar	Acer	saccharum	4	...	...	1	...	Fair	...	...	351.68
1571	Oak-Northern Red	Quercus	rubra	16	...	...	1	...	Good	...	...	7877.63
1572	Maple-Sugar	Acer	saccharum	4	...	...	1	...	Good	...	...	492.35
1573	Oak-Northern Red	Quercus	rubra	12	...	...	1	...	Fair	...	...	3165.12
1574	Maple-Sugar	Acer	saccharum	4	...	...	1	...	Good	...	...	492.35
1575	Oak-Northern Red	Quercus	rubra	8	...	...	2	...	Dead	...	...	0
1576	Maple-Sugar	Acer	saccharum	4	...	...	1	...	Good	...	...	492.35
1577	Sassafras-Common	Sassafras	albidum	14	...	...	1	...	Fair	...	...	3446.46
1578	Sassafras-Common	Sassafras	albidum	12	...	...	1	...	Fair	...	...	2532.1
1579	Sassafras-Common	Sassafras	albidum	14	...	...	1	...	Fair	...	...	3446.46
1580	Sassafras-Common	Sassafras	albidum	13	...	...	1	...	Fair	...	...	2971.7
1581	Oak-Northern Red	Quercus	rubra	13	...	...	1	...	Fair	...	...	3714.62
1582	Maple-Sugar	Acer	saccharum	11	...	...	1	...	Good	...	...	3723.41
1583	Hickory-Shagbark	Carya	ovata	5	...	...	1	...	Good	...	...	615.44
1584	Oak-Northern Red	Quercus	rubra	19	...	...	1	...	Good	...	...	11108.69
1585	Oak-Northern Red	Quercus	rubra	7	...	...	1	...	Good	...	...	1507.83
1586	Birch-Sweet	Betula	lenta	8	...	...	1	...	Good	...	...	787.76
1587	Hickory-Shagbark	Carya	ovata	7	...	...	1	...	Good	...	...	1206.26
1588	Oak-Northern Red	Quercus	rubra	21	...	...	2	...	Good	...	...	23540.58
1589	Maple-Sugar	Acer	saccharum	7	...	...	1	...	Good	...	...	1507.83
1590	Maple-Sugar	Acer	saccharum	4	...	...	1	...	Good	...	...	492.35
1591	Oak-Northern Red	Quercus	rubra	14	...	...	2	...	Fair	...	...	6088.46
1592	Oak-Northern Red	Quercus	rubra	19	...	...	1	...	Good	...	...	11108.69
1593	Birch-Sweet	Betula	lenta	5	...	...	1	...	Good	...	...	307.72
1594	Oak-Northern Red	Quercus	rubra	16	...	...	1	...	Good	...	...	7877.63
1595	Maple-Sugar	Acer	saccharum	5	...	...	1	...	Good	...	...	769.3
1596	Birch-Sweet	Betula	lenta	6	...	...	1	...	Fair	...	...	316.51
1597	Birch-Sweet	Betula	lenta	4	...	...	1	...	Good	...	...	196.94
1598	Maple-Sugar	Acer	saccharum	4	...	...	1	...	Good	...	...	492.35
1599	Birch-Sweet	Betula	lenta	5	...	...	1	...	Poor	...	...	131.88
1600	Maple-Red	Acer	rubrum	5	...	...	1	...	Poor	...	...	263.76
1601	Beech-American	Fagus	grandifolia	4	...	...	1	...	Good	...	...	393.88
1602	Birch-Sweet	Betula	lenta	10	...	...	1	...	Good	...	...	1230.88
1603	Birch-Sweet	Betula	lenta	14	...	...	1	...	Good	...	...	2412.52
1604	Birch-Sweet	Betula	lenta	12	...	...	1	...	Good	...	...	1772.47
1605	Birch-Sweet	Betula	lenta	8	...	...	1	...	Dead	...	...	0
1606	Birch-Sweet	Betula	lenta	11	...	...	1	...	Good	...	...	1489.36
1607	Birch-Sweet	Betula	lenta	6	...	...	1	...	Fair	...	...	316.51
1608	Birch-Sweet	Betula	lenta	13	...	...	2	...	Good	...	...	3077.2
1609	Birch-Sweet	Betula	lenta	9	...	...	1	...	Good	...	...	997.01
1610	Birch-Sweet	Betula	lenta	11	...	...	1	...	Good	...	...	1489.36
1611	Oak-Northern Red	Quercus	rubra	24	...	...	1	...	Good	...	...	17724.67

1612	Birch-Sweet	Betula	lenta	14	...	...	1	...	Fair	...	...	1723.23
1613	Beech-American	Fagus	grandifolia	7	...	...	1	...	Good	...	...	1206.26
1614	Birch-Sweet	Betula	lenta	14	...	...	1	...	Good	...	...	2412.52
1615	Birch-Sweet	Betula	lenta	8	...	...	1	...	Good	...	...	787.76
1616	Maple-Sugar	Acer	saccharum	4	...	...	1	...	Good	...	...	492.35
1617	Birch-Sweet	Betula	lenta	9	...	...	1	...	Good	...	...	997.01
1618	Birch-Sweet	Betula	lenta	30	...	...	1	...	Good	...	...	11077.92
1619	Birch-Sweet	Betula	lenta	16	...	...	1	...	Good	...	...	3151.05
1620	Beech-American	Fagus	grandifolia	10	...	...	1	...	Good	...	...	2461.76
1621	Birch-Sweet	Betula	lenta	13	...	...	1	...	Good	...	...	2080.19
1622	Birch-Sweet	Betula	lenta	9	...	...	1	...	Good	...	...	997.01
1623	Birch-Sweet	Betula	lenta	9	...	...	1	...	Good	...	...	997.01
1624	Birch-Sweet	Betula	lenta	10	...	...	1	...	Good	...	...	1230.88
1625	Birch-Sweet	Betula	lenta	7	...	...	1	...	Good	...	...	603.13
1626	Birch-Sweet	Betula	lenta	25	...	...	1	...	Good	...	...	7693
1627	Oak-Northern Red	Quercus	rubra	16	...	...	1	...	Good	...	...	7877.63
1628	Oak-Northern Red	Quercus	rubra	12	...	...	1	...	Good	...	...	4431.17
1629	Birch-Sweet	Betula	lenta	7	...	...	1	...	Good	...	...	603.13
1630	Birch-Sweet	Betula	lenta	12	...	...	2	...	Good	...	...	2769.48
1631	Birch-Sweet	Betula	lenta	6	...	...	1	...	Dead	...	...	0
1632	Birch-Sweet	Betula	lenta	8	...	...	1	...	Good	...	...	787.76
1633	Birch-Sweet	Betula	lenta	11	...	...	1	...	Good	...	...	1489.36
1634	Maple-Norway	Acer	platanoides	5	...	...	1	...	Good	...	...	384.65
1635	Birch-Sweet	Betula	lenta	10	...	...	1	...	Good	...	...	1230.88
1636	Maple-Norway	Acer	platanoides	5	...	...	1	...	Good	...	...	384.65
1637	Beech-American	Fagus	grandifolia	5	...	...	1	...	Good	...	...	615.44
1638	Birch-Sweet	Betula	lenta	15	...	...	1	...	Good	...	...	2769.48
1639	Maple-Norway	Acer	platanoides	4	...	...	1	...	Good	...	...	246.18
1640	Birch-Sweet	Betula	lenta	15	...	...	1	...	Good	...	...	2769.48
1641	Birch-Sweet	Betula	lenta	13	...	...	1	...	Dead	...	...	0
1642	Serviceberry	Amelanchi	sp	4	...	...	1	...	Good	...	...	443.12
1643	Birch-Sweet	Betula	lenta	19	...	...	1	...	Dead	...	...	0
1644	Beech-American	Fagus	grandifolia	11	...	...	1	...	Good	...	...	2978.73
1645	Hickory-Pignut	Carya	glabra	22	...	...	1	...	Fair	...	...	8510.66
1646	Birch-Sweet	Betula	lenta	25	...	...	1	...	Good	...	...	7693
1647	Birch-Sweet	Betula	lenta	17	...	...	1	...	Good	...	...	3557.24
1648	Oak-Northern Red	Quercus	rubra	17	...	...	1	...	Good	...	...	8893.11
1649	Maple-Sugar	Acer	saccharum	4	...	...	2	...	Fair	...	...	549.5
1650	Birch-Sweet	Betula	lenta	8	...	...	1	...	Dead	...	...	0
1651	Birch-Sweet	Betula	lenta	12	...	...	1	...	Fair	...	...	1266.05
1652	Beech-American	Fagus	grandifolia	9	...	...	1	...	Good	...	...	1994.03
1653	Beech-American	Fagus	grandifolia	8	...	...	1	...	Good	...	...	1575.53
1654	Birch-Sweet	Betula	lenta	16	...	...	1	...	Good	...	...	3151.05
1655	Maple-Sugar	Acer	saccharum	4	...	...	1	...	Good	...	...	492.35
1656	Maple-Norway	Acer	platanoides	7	...	...	1	...	Good	...	...	753.91
1657	Birch-Sweet	Betula	lenta	14	...	...	1	...	Dead	...	...	0
1658	Beech-American	Fagus	grandifolia	9	...	...	2	...	Good	...	...	2609.47
1659	Maple-Sugar	Acer	saccharum	4	...	...	1	...	Fair	...	...	351.68
1660	Redcedar-Eastern	Juniperus	virginiana	5	...	...	1	...	Dead	...	...	0
1661	Beech-American	Fagus	grandifolia	6	...	...	1	...	Good	...	...	886.23
1662	Beech-American	Fagus	grandifolia	4	...	...	1	...	Poor	...	...	168.81
1663	Beech-American	Fagus	grandifolia	7	...	...	1	...	Fair	...	...	861.62

1664	Beech-American	Fagus	grandifolia	8	...	...	1	...	Good	...	...	1575.53
1665	Birch-Sweet	Betula	lenta	8	...	...	2	...	Good	...	...	1390.89
1666	Beech-American	Fagus	grandifolia	4	...	...	2	...	Good	...	...	615.44
1667	Oak-Northern Red	Quercus	rubra	23	...	...	1	...	Good	...	...	16278.39
1668	Oak-Northern Red	Quercus	rubra	17	...	...	1	...	Good	...	...	8893.11
1669	Beech-American	Fagus	grandifolia	6	...	...	1	...	Good	...	...	886.23
1670	Oak-Northern Red	Quercus	rubra	24	...	...	1	...	Good	...	...	17724.67
1671	Birch-Sweet	Betula	lenta	8	...	...	1	...	Fair	...	...	562.69
1672	Birch-Sweet	Betula	lenta	7	...	...	1	...	Good	...	...	603.13
1673	Birch-Sweet	Betula	lenta	9	...	...	1	...	Dead	...	...	0
1674	Birch-Sweet	Betula	lenta	17	...	...	1	...	Dead	...	...	0
1675	Maple-Norway	Acer	platanoides	4	...	...	1	...	Good	...	...	246.18
1676	Birch-Sweet	Betula	lenta	10	...	...	1	...	Good	...	...	1230.88
1677	Birch-Sweet	Betula	lenta	12	...	...	1	...	Good	...	...	1772.47
1678	Birch-Sweet	Betula	lenta	10	...	...	1	...	Good	...	...	1230.88
1679	Birch-Sweet	Betula	lenta	8	...	...	1	...	Dead	...	...	0
1680	Birch-Sweet	Betula	lenta	6	...	...	1	...	Dead	...	...	0
1681	Oak-Northern Red	Quercus	rubra	16	...	...	1	...	Fair	...	...	5626.88
1682	Maple-Sugar	Acer	saccharum	4	...	...	1	...	Fair	...	...	351.68
1683	Maple-Sugar	Acer	saccharum	11	...	...	1	...	Fair	...	...	2659.58
1684	Birch-Sweet	Betula	lenta	12	...	...	2	...	Good	...	...	4000.36
1685	Beech-American	Fagus	grandifolia	5	...	...	1	...	Good	...	...	615.44
1686	Maple-Sugar	Acer	saccharum	5	...	...	1	...	Good	...	...	769.3
1687	Birch-Sweet	Betula	lenta	10	...	...	1	...	Good	...	...	1230.88
1688	Birch-Sweet	Betula	lenta	6	...	...	1	...	Dead	...	...	0
1689	Birch-Sweet	Betula	lenta	13	...	...	1	...	Fair	...	...	1485.85
1690	Maple-Sugar	Acer	saccharum	4	...	...	1	...	Good	...	...	492.35
1691	Birch-Sweet	Betula	lenta	8	...	...	1	...	Good	...	...	787.76
1692	Birch-Sweet	Betula	lenta	8	...	...	1	...	Good	...	...	787.76
1693	Birch-Sweet	Betula	lenta	6	...	...	1	...	Fair	...	...	316.51
1694	Oak-Northern Red	Quercus	rubra	17	...	...	1	...	Good	...	...	8893.11
1695	Birch-Sweet	Betula	lenta	10	...	...	1	...	Fair	...	...	879.2
1696	Birch-Sweet	Betula	lenta	7	...	...	1	...	Dead	...	...	0
1697	Beech-American	Fagus	grandifolia	4	...	...	1	...	Good	...	...	393.88
1698	Oak-Northern Red	Quercus	rubra	20	...	...	2	...	Good	...	...	22278.93
1699	Oak-White	Quercus	alba	6	...	...	1	...	Dead	...	...	0
1700	Oak-Northern Red	Quercus	rubra	19	...	...	1	...	Good	...	...	11108.69
1701	Maple-Red	Acer	rubrum	7	...	...	2	...	Fair	...	...	1019.87
1702	Maple-Red	Acer	rubrum	5	...	...	2	...	Fair	...	...	597.86
1703	Oak-Northern Red	Quercus	rubra	13	...	...	1	...	Good	...	...	5200.47
1704	Cherry	Prunus	sp	8	...	...	1	...	Dead	...	...	0
1705	Maple-Sugar	Acer	saccharum	4	...	...	1	...	Good	...	...	492.35
1706	Birch-Sweet	Betula	lenta	14	...	...	1	...	Good	...	...	2412.52
1707	Birch-Sweet	Betula	lenta	12	...	...	4	...	Good	...	...	5255.86
1708	Birch-Sweet	Betula	lenta	7	...	...	1	...	Dead	...	...	0
1709	Birch-Sweet	Betula	lenta	9	...	...	2	...	Fair	...	...	1028.66
1710	Birch-Sweet	Betula	lenta	7	...	...	1	...	Fair	...	...	430.81
1711	Oak-Northern Red	Quercus	rubra	23	...	...	1	...	Fair	...	...	11627.42
1712	Birch-Sweet	Betula	lenta	7	...	...	1	...	Fair	...	...	430.81
1713	Maple-Norway	Acer	platanoides	4	...	...	1	...	Good	...	...	246.18
1714	Oak-Northern Red	Quercus	rubra	21	...	...	1	...	Good	...	...	13570.45
1715	Birch-Sweet	Betula	lenta	21	...	...	1	...	Good	...	...	5428.18

1716	Beech-American	Fagus	grandifolia	5	...	...	1	...	Good	...	...	615.44
1717	Birch-Sweet	Betula	lenta	7	...	...	1	...	Good	...	...	603.13
1718	Oak-Northern Red	Quercus	rubra	24	...	...	1	...	Good	...	...	17724.67
1719	Birch-Sweet	Betula	lenta	11	...	...	1	...	Good	...	...	1489.36
1720	Beech-American	Fagus	grandifolia	6	...	...	1	...	Good	...	...	886.23
1721	Birch-Sweet	Betula	lenta	12	...	...	1	...	Good	...	...	1772.47
1722	Oak-Northern Red	Quercus	rubra	4	...	...	1	...	Fair	...	...	351.68
1723	Birch-Sweet	Betula	lenta	11	...	...	1	...	Good	...	...	1489.36
1724	Birch-Sweet	Betula	lenta	7	...	...	1	...	Good	...	...	603.13
1725	Birch-Sweet	Betula	lenta	6	...	...	1	...	Good	...	...	443.12
1726	Oak-Northern Red	Quercus	rubra	23	...	...	1	...	Good	...	...	16278.39
1727	Birch-Sweet	Betula	lenta	6	...	...	1	...	Fair	...	...	316.51
1728	Birch-Sweet	Betula	lenta	5	...	...	1	...	Good	...	...	307.72
1729	Oak-Northern Red	Quercus	rubra	33	...	...	1	...	Good	...	...	32735.33
1730	Maple-Sugar	Acer	saccharum	4	...	...	1	...	Good	...	...	492.35
1731	Oak-Northern Red	Quercus	rubra	23	...	...	1	...	Good	...	...	16278.39
1732	Sassafras-Common	Sassafras	albidum	4	...	...	1	...	Fair	...	...	281.34
1733	Sassafras-Common	Sassafras	albidum	4	...	...	1	...	Dead	...	...	0
1734	Birch-Sweet	Betula	lenta	5	...	...	1	...	Good	...	...	307.72
1735	Maple-Sugar	Acer	saccharum	8	...	...	1	...	Good	...	...	1969.41
1736	Birch-Sweet	Betula	lenta	13	...	...	1	...	Good	...	...	2080.19
1737	Beech-American	Fagus	grandifolia	5	...	...	1	...	Good	...	...	615.44
1738	Birch-Sweet	Betula	lenta	4	...	...	1	...	Fair	...	...	140.67
1739	Birch-Sweet	Betula	lenta	4	...	...	1	...	Fair	...	...	140.67
1740	Birch-Sweet	Betula	lenta	6	...	...	1	...	Good	...	...	443.12
1741	Birch-Sweet	Betula	lenta	5	...	...	1	...	Fair	...	...	219.8
1742	Birch-Sweet	Betula	lenta	17	...	...	2	...	Good	...	...	6326.72
1743	Oak-Northern Red	Quercus	rubra	23	...	...	1	...	Good	...	...	16278.39
1744	Birch-Sweet	Betula	lenta	13	...	...	1	...	Good	...	...	2080.19
1745	Birch-Sweet	Betula	lenta	9	...	...	1	...	Fair	...	...	712.15
1746	Maple-Red	Acer	rubrum	5	...	...	1	...	Fair	...	...	439.6
1747	Birch-Sweet	Betula	lenta	11	...	...	2	...	Good	...	...	2720.24
1748	Birch-Sweet	Betula	lenta	13	...	...	1	...	Good	...	...	2080.19
1749	Birch-Sweet	Betula	lenta	8	...	...	1	...	Good	...	...	787.76
1750	Beech-American	Fagus	grandifolia	5	...	...	2	...	Good	...	...	1009.32
1751	Maple-Red	Acer	rubrum	5	...	...	1	...	Fair	...	...	439.6
1752	Birch-Sweet	Betula	lenta	13	...	...	1	...	Good	...	...	2080.19
1753	Oak-Northern Red	Quercus	rubra	18	...	...	3	...	Good	...	...	26740.87
1754	Birch-Sweet	Betula	lenta	11	...	...	1	...	Good	...	...	1489.36
1755	Birch-Sweet	Betula	lenta	10	...	...	1	...	Good	...	...	1230.88
1756	Birch-Sweet	Betula	lenta	9	...	...	3	...	Good	...	...	2387.91
1757	Cherry	Prunus	sp	10	...	...	1	...	Good	...	...	1230.88
1758	Beech-American	Fagus	grandifolia	4	...	...	1	...	Good	...	...	393.88
1759	Birch-Sweet	Betula	lenta	12	...	...	1	...	Good	...	...	1772.47
1760	Redcedar-Eastern	Juniperus	virginiana	6	...	...	1	...	Dead	...	...	0
1761	Birch-Sweet	Betula	lenta	11	...	...	1	...	Good	...	...	1489.36
1762	Birch-Sweet	Betula	lenta	10	...	...	1	...	Good	...	...	1230.88
1763	Birch-Sweet	Betula	lenta	5	...	...	1	...	Dead	...	...	0
1764	Cherry	Prunus	sp	8	...	...	1	...	Dead	...	...	0
1765	Birch-Sweet	Betula	lenta	9	...	...	1	...	Good	...	...	997.01
1766	Oak-Northern Red	Quercus	rubra	23	...	...	1	...	Good	...	...	16278.39
1767	Birch-Sweet	Betula	lenta	5	...	...	1	...	Fair	...	...	219.8

1768	Beech-American	Fagus	grandifolia	5	...	...	1	...	Good	...	...	615.44
1769	Birch-Sweet	Betula	lenta	9	...	...	1	...	Dead	...	...	0
1770	Cherry	Prunus	sp	4	...	...	1	...	Fair	...	...	140.67
1771	Oak-White	Quercus	alba	15	...	...	1	...	Good	...	...	6923.7
1772	Beech-American	Fagus	grandifolia	4	...	...	1	...	Good	...	...	393.88
1773	Birch-Sweet	Betula	lenta	12	...	...	1	...	Good	...	...	1772.47
1774	Oak-Northern Red	Quercus	rubra	18	...	...	2	...	Fair	...	...	13473.74
1775	Maple-Red	Acer	rubrum	5	...	...	1	...	Good	...	...	615.44
1776	Birch-Sweet	Betula	lenta	9	...	...	1	...	Good	...	...	997.01
1777	Birch-Sweet	Betula	lenta	9	...	...	2	...	Good	...	...	1107.79
1778	Birch-Sweet	Betula	lenta	12	...	...	1	...	Good	...	...	1772.47
1779	Birch-Sweet	Betula	lenta	13	...	...	1	...	Good	...	...	2080.19
1780	Oak-Northern Red	Quercus	rubra	4	...	...	1	...	Good	...	...	492.35
1781	Oak-White	Quercus	alba	12	...	...	1	...	Good	...	...	4431.17
1782	Beech-American	Fagus	grandifolia	5	...	...	1	...	Good	...	...	615.44
1783	Birch-Sweet	Betula	lenta	7	...	...	1	...	Fair	...	...	430.81
1784	Beech-American	Fagus	grandifolia	4	...	...	1	...	Good	...	...	393.88
1785	Birch-Sweet	Betula	lenta	11	...	...	1	...	Good	...	...	1489.36
1786	Oak-Northern Red	Quercus	rubra	14	...	...	1	...	Good	...	...	6031.31
1787	Birch-Sweet	Betula	lenta	12	...	...	1	...	Good	...	...	1772.47
1788	Oak-Northern Red	Quercus	rubra	19	...	...	1	...	Good	...	...	11108.69
1789	Oak-Northern Red	Quercus	rubra	12	...	...	1	...	Good	...	...	4431.17
1790	Birch-Sweet	Betula	lenta	10	...	...	1	...	Fair	...	...	879.2
1791	Birch-Sweet	Betula	lenta	11	...	...	1	...	Good	...	...	1489.36
1792	Birch-Sweet	Betula	lenta	15	...	...	4	...	Good	...	...	4505.02
1793	Birch-Sweet	Betula	lenta	9	...	...	2	...	Good	...	...	1304.73
1794	Birch-Sweet	Betula	lenta	5	...	...	1	...	Poor	...	...	131.88
1795	Birch-Sweet	Betula	lenta	21	...	...	1	...	Fair	...	...	3877.27
1796	Birch-Sweet	Betula	lenta	18	...	...	1	...	Good	...	...	3988.05
1797	Oak-Northern Red	Quercus	rubra	24	...	...	2	...	Good	...	...	22925.14
1798	Birch-Sweet	Betula	lenta	14	...	...	1	...	Good	...	...	2412.52
1799	Birch-Sweet	Betula	lenta	10	...	...	1	...	Fair	...	...	879.2
1800	Birch-Sweet	Betula	lenta	16	...	...	1	...	Good	...	...	3151.05
1801	Birch-Sweet	Betula	lenta	7	...	...	2	...	Fair	...	...	650.61
1802	Birch-Sweet	Betula	lenta	8	...	...	1	...	Good	...	...	787.76
1803	Birch-Sweet	Betula	lenta	4	...	...	1	...	Fair	...	...	140.67
1804	Birch-Sweet	Betula	lenta	6	...	...	1	...	Fair	...	...	316.51
1805	Cherry	Prunus	sp	6	...	...	1	...	Dead	...	...	0
1806	Cherry	Prunus	sp	7	...	...	1	...	Poor	...	...	258.48
1807	Redcedar-Eastern	Juniperus	virginiana	9	...	...	1	...	Dead	...	...	0
1808	Birch-Sweet	Betula	lenta	4	...	...	1	...	Good	...	...	196.94
1809	Birch-Sweet	Betula	lenta	6	...	...	1	...	Good	...	...	443.12
1810	Birch-Sweet	Betula	lenta	15	...	...	1	...	Good	...	...	2769.48
1811	Maple-Sugar	Acer	saccharum	5	...	...	1	...	Good	...	...	769.3
1812	Hickory-Pignut	Carya	glabra	12	...	...	1	...	Good	...	...	3544.93
1813	Birch-Sweet	Betula	lenta	4	...	...	1	...	Fair	...	...	140.67
1814	Birch-Sweet	Betula	lenta	14	...	...	1	...	Dead	...	...	0
1815	Maple-Sugar	Acer	saccharum	8	...	...	1	...	Good	...	...	1969.41
1816	Birch-Sweet	Betula	lenta	13	...	...	1	...	Good	...	...	2080.19
1817	Oak-Northern Red	Quercus	rubra	8	...	...	1	...	Good	...	...	1969.41
1818	Birch-Sweet	Betula	lenta	6	...	...	1	...	Fair	...	...	316.51
1819	Oak-White	Quercus	alba	26	...	...	1	...	Good	...	...	20801.87

1820	Beech-American	Fagus	grandifolia	5	...	...	1	...	Good	...	...	615.44
1821	Birch-Sweet	Betula	lenta	10	...	...	2	...	Good	...	...	2018.64
1822	Hickory-Pignut	Carya	glabra	15	...	...	1	...	Good	...	...	5538.96
1823	Hickory-Pignut	Carya	glabra	4	...	...	1	...	Good	...	...	393.88
1824	Oak-White	Quercus	alba	25	...	...	1	...	Good	...	...	19232.5
1825	Birch-Sweet	Betula	lenta	13	...	...	2	...	Good	...	...	2683.32
1826	Hickory-Pignut	Carya	glabra	5	...	...	1	...	Good	...	...	615.44
1827	Birch-Sweet	Betula	lenta	5	...	...	1	...	Dead	...	...	0
1828	Oak-Northern Red	Quercus	rubra	21	...	...	1	...	Good	...	...	13570.45
1829	Birch-Sweet	Betula	lenta	7	...	...	1	...	Fair	...	...	430.81
1830	Birch-Sweet	Betula	lenta	5	...	...	1	...	Good	...	...	307.72
1831	Oak-White	Quercus	alba	23	...	...	1	...	Good	...	...	16278.39
1832	Oak-Northern Red	Quercus	rubra	13	...	...	1	...	Good	...	...	5200.47
1833	Oak-Northern Red	Quercus	rubra	12	...	...	1	...	Good	...	...	4431.17
1834	Oak-Northern Red	Quercus	rubra	9	...	...	1	...	Good	...	...	2492.53
1835	Beech-American	Fagus	grandifolia	5	...	...	1	...	Good	...	...	615.44
1836	Birch-Sweet	Betula	lenta	10	...	...	1	...	Good	...	...	1230.88
1837	Birch-Sweet	Betula	lenta	5	...	...	1	...	Good	...	...	307.72
1838	Beech-American	Fagus	grandifolia	4	...	...	1	...	Good	...	...	393.88
1839	Beech-American	Fagus	grandifolia	4	...	...	1	...	Good	...	...	393.88
1840	Hickory-Pignut	Carya	glabra	8	...	...	1	...	Good	...	...	1575.53
1841	Maple-Sugar	Acer	saccharum	6	...	...	1	...	Good	...	...	1107.79
1842	Maple-Red	Acer	rubrum	5	...	...	1	...	Good	...	...	615.44
1843	Oak-White	Quercus	alba	37	...	...	1	...	Good	...	...	39924.61
1844	Beech-American	Fagus	grandifolia	8	...	...	1	...	Good	...	...	1575.53
1845	Redcedar-Eastern	Juniperus	virginiana	6	...	...	1	...	Dead	...	...	0
1846	Maple-Red	Acer	rubrum	4	...	...	1	...	Good	...	...	393.88
1847	Beech-American	Fagus	grandifolia	4	...	...	1	...	Good	...	...	393.88
1848	Birch-Sweet	Betula	lenta	15	...	...	1	...	Good	...	...	2769.48
1849	Oak-Northern Red	Quercus	rubra	19	...	...	1	...	Good	...	...	11108.69
1850	Beech-American	Fagus	grandifolia	11	...	...	1	...	Good	...	...	2978.73
1851	Beech-American	Fagus	grandifolia	8	...	...	1	...	Good	...	...	1575.53
1852	Oak-Northern Red	Quercus	rubra	26	...	...	1	...	Good	...	...	20801.87
1853	Birch-Sweet	Betula	lenta	14	...	...	1	...	Good	...	...	2412.52
1854	Beech-American	Fagus	grandifolia	4	...	...	1	...	Good	...	...	393.88
1855	Beech-American	Fagus	grandifolia	7	...	...	1	...	Good	...	...	1206.26
1856	Birch-Sweet	Betula	lenta	9	...	...	2	...	Good	...	...	1784.78
1857	Birch-Sweet	Betula	lenta	8	...	...	1	...	Good	...	...	787.76
1858	Maple-Sugar	Acer	saccharum	6	...	...	1	...	Good	...	...	1107.79
1859	Maple-Red	Acer	rubrum	5	...	...	1	...	Dead	...	...	0
1860	Oak-Northern Red	Quercus	rubra	20	...	...	1	...	Good	...	...	12308.8
1861	Oak-Northern Red	Quercus	rubra	26	...	...	1	...	Good	...	...	20801.87
1862	Oak-Northern Red	Quercus	rubra	7	...	...	1	...	Dead	...	...	0
1863	Cherry	Prunus	sp	7	...	...	1	...	Good	...	...	603.13
1864	Oak-Northern Red	Quercus	rubra	4	...	...	1	...	Good	...	...	492.35
1865	Oak-Northern Red	Quercus	rubra	5	...	...	1	...	Good	...	...	769.3
1866	Maple-Red	Acer	rubrum	4	...	...	1	...	Good	...	...	393.88
1867	Cherry	Prunus	sp	13	...	...	1	...	Good	...	...	2080.19
1868	Sassafras-Common	Sassafras	albidum	7	...	...	1	...	Good	...	...	1206.26
1869	Cherry	Prunus	sp	12	...	...	2	...	Good	...	...	3003.35
1870	Oak-Northern Red	Quercus	rubra	5	...	...	1	...	Good	...	...	769.3
1871	Oak-Northern Red	Quercus	rubra	17	...	...	1	...	Good	...	...	8893.11

1872	Cherry	Prunus	sp	9	...	...	1	...	Poor	...	...	427.29
1873	Maple-Sugar	Acer	saccharum	6	...	...	1	...	Good	...	...	1107.79
1874	Maple-Red	Acer	rubrum	10	...	...	1	...	Good	...	...	2461.76
1875	Cherry	Prunus	sp	11	...	...	1	...	Fair	...	...	1063.83
1876	Oak-Northern Red	Quercus	rubra	4	...	...	1	...	Good	...	...	492.35
1877	Birch-Sweet	Betula	lenta	17	...	...	1	...	Good	...	...	3557.24
1878	Cherry	Prunus	sp	9	...	...	1	...	Good	...	...	997.01
1879	Oak-Northern Red	Quercus	rubra	8	...	...	1	...	Fair	...	...	1406.72
1880	Maple-Red	Acer	rubrum	9	...	...	1	...	Good	...	...	1994.03
1881	Maple-Red	Acer	rubrum	7	...	...	1	...	Good	...	...	1206.26
1882	Maple-Red	Acer	rubrum	4	...	...	1	...	Fair	...	...	281.34
1883	Oak-White	Quercus	alba	26	...	...	2	...	Good	...	...	40034.37
1884	Maple-Red	Acer	rubrum	6	...	...	1	...	Good	...	...	886.23
1885	Maple-Red	Acer	rubrum	4	...	...	1	...	Good	...	...	393.88
1886	Maple-Sugar	Acer	saccharum	7	...	...	1	...	Good	...	...	1507.83
1887	Maple-Sugar	Acer	saccharum	5	...	...	1	...	Good	...	...	769.3
1888	Maple-Red	Acer	rubrum	6	...	...	1	...	Poor	...	...	379.81
1889	Maple-Sugar	Acer	saccharum	6	...	...	1	...	Good	...	...	1107.79
1890	Maple-Norway	Acer	platanoides	5	...	...	1	...	Good	...	...	384.65
1891	Oak-Northern Red	Quercus	rubra	21	...	...	1	...	Good	...	...	13570.45
1892	Maple-Red	Acer	rubrum	7	...	...	1	...	Good	...	...	1206.26
1893	Maple-Red	Acer	rubrum	5	...	...	1	...	Good	...	...	615.44
1894	Maple-Red	Acer	rubrum	5	...	...	1	...	Good	...	...	615.44
1895	Aspen-Bigtooth	Populus	grandidentata	16	...	...	1	...	Good	...	...	5514.34
1896	Maple-Red	Acer	rubrum	12	...	...	1	...	Good	...	...	3544.93
1897	Oak-Northern Red	Quercus	rubra	12	...	...	1	...	Good	...	...	4431.17
1898	Birch-Sweet	Betula	lenta	7	...	...	1	...	Fair	...	...	430.81
1899	Maple-Red	Acer	rubrum	6	...	...	1	...	Good	...	...	886.23
1900	Maple-Red	Acer	rubrum	8	...	...	1	...	Good	...	...	1575.53
1901	Maple-Red	Acer	rubrum	6	...	...	1	...	Good	...	...	886.23
1902	Maple-Red	Acer	rubrum	4	...	...	1	...	Good	...	...	393.88
1903	Maple-Red	Acer	rubrum	5	...	...	1	...	Fair	...	...	439.6
1904	Oak-Northern Red	Quercus	rubra	21	...	...	1	...	Good	...	...	13570.45
1905	Maple-Red	Acer	rubrum	4	...	...	1	...	Good	...	...	393.88
1906	Birch-Sweet	Betula	lenta	4	...	...	1	...	Good	...	...	196.94
1907	Maple-Red	Acer	rubrum	9	...	...	1	...	Good	...	...	1994.03
1908	Oak-Northern Red	Quercus	rubra	7	...	...	1	...	Good	...	...	1507.83
1909	Oak-White	Quercus	alba	16	...	...	1	...	Good	...	...	7877.63
1910	Oak-White	Quercus	alba	24	...	...	2	...	Good	...	...	20801.87
1911	Maple-Red	Acer	rubrum	6	...	...	1	...	Fair	...	...	633.02
1912	Oak-Northern Red	Quercus	rubra	11	...	...	1	...	Good	...	...	3723.41
1913	Oak-Northern Red	Quercus	rubra	11	...	...	1	...	Fair	...	...	2659.58
1914	Maple-Red	Acer	rubrum	4	...	...	1	...	Good	...	...	393.88
1915	Maple-Red	Acer	rubrum	4	...	...	1	...	Fair	...	...	281.34
1916	Oak-Northern Red	Quercus	rubra	7	...	...	1	...	Fair	...	...	1077.02
1917	Maple-Red	Acer	rubrum	6	...	...	1	...	Good	...	...	886.23
1918	Maple-Red	Acer	rubrum	4	...	...	1	...	Good	...	...	393.88
1919	Poplar-Eastern	Populus	deltoides	15	...	...	1	...	Fair	...	...	989.1
1920	Poplar-Eastern	Populus	deltoides	12	...	...	1	...	Good	...	...	886.23
1921	Poplar-Eastern	Populus	deltoides	15	...	...	1	...	Good	...	...	1384.74
1922	Maple-Red	Acer	rubrum	9	...	...	1	...	Good	...	...	1994.03
1923	Poplar-Eastern	Populus	deltoides	14	...	...	1	...	Dead	...	...	0

1924	Maple-Sugar	Acer	saccharum	5	...	...	1	...	Good	...	...	769.3
1925	Maple-Red	Acer	rubrum	7	...	...	1	...	Good	...	...	1206.26
1926	Maple-Norway	Acer	platanoides	5	...	...	1	...	Good	...	...	384.65
1927	Poplar-Eastern	Populus	deltoides	16	...	...	1	...	Good	...	...	1575.53
1928	Poplar-Eastern	Populus	deltoides	14	...	...	1	...	Fair	...	...	861.62
1929	Oak-Northern Red	Quercus	rubra	4	...	...	1	...	Good	...	...	492.35
1930	Poplar-Eastern	Populus	deltoides	16	...	...	1	...	Good	...	...	1575.53
1931	Poplar-Eastern	Populus	deltoides	16	...	...	1	...	Good	...	...	1575.53
1932	Maple-Red	Acer	rubrum	4	...	...	1	...	Fair	...	...	281.34
1933	Maple-Red	Acer	rubrum	5	...	...	1	...	Fair	...	...	439.6
1934	Oak-Northern Red	Quercus	rubra	18	...	...	1	...	Good	...	...	9970.13
1935	Poplar-Eastern	Populus	deltoides	16	...	...	1	...	Good	...	...	1575.53
1936	Poplar-Eastern	Populus	deltoides	15	...	...	1	...	Dead	...	...	0
1937	Poplar-Eastern	Populus	deltoides	12	...	...	1	...	Good	...	...	886.23
1938	Poplar-Eastern	Populus	deltoides	15	...	...	1	...	Good	...	...	1384.74
1939	Maple-Sugar	Acer	saccharum	10	...	...	1	...	Good	...	...	3077.2
1940	Maple-Red	Acer	rubrum	5	...	...	2	...	Good	...	...	837
1941	Oak-Northern Red	Quercus	rubra	12	...	...	1	...	Good	...	...	4431.17
1942	Oak-Northern Red	Quercus	rubra	17	...	...	1	...	Good	...	...	8893.11
1943	Maple-Red	Acer	rubrum	14	...	...	1	...	Good	...	...	4825.05
1944	Maple-Red	Acer	rubrum	6	...	...	1	...	Poor	...	...	379.81
1945	Oak-Northern Red	Quercus	rubra	11	...	...	1	...	Fair	...	...	2659.58
1946	Birch-Sweet	Betula	lenta	9	...	...	1	...	Good	...	...	997.01
1947	Cherry	Prunus	sp	7	...	...	1	...	Dead	...	...	0
1948	Oak-Northern Red	Quercus	rubra	14	...	...	1	...	Good	...	...	6031.31
1949	Maple-Red	Acer	rubrum	19	...	...	2	...	Good	...	...	12431.89
1950	Oak-Northern Red	Quercus	rubra	18	...	...	1	...	Good	...	...	9970.13
1951	Maple-Red	Acer	rubrum	12	...	...	1	...	Fair	...	...	2532.1
1952	Oak-Northern Red	Quercus	rubra	7	...	...	1	...	Good	...	...	1507.83
1953	Maple-Red	Acer	rubrum	11	...	...	1	...	Fair	...	...	2127.66
1954	Redcedar-Eastern	Juniperus	virginiana	4	...	...	1	...	Dead	...	...	0
1955	Oak-Northern Red	Quercus	rubra	12	...	...	1	...	Good	...	...	4431.17
1956	Birch-Sweet	Betula	lenta	5	...	...	1	...	Good	...	...	307.72
1957	Maple-Red	Acer	rubrum	16	...	...	1	...	Fair	...	...	4501.5
1958	Maple-Red	Acer	rubrum	12	...	...	1	...	Dead	...	...	0
1959	Birch-Sweet	Betula	lenta	6	...	...	1	...	Good	...	...	443.12
1960	Oak-Northern Red	Quercus	rubra	18	...	...	1	...	Good	...	...	9970.13
1961	Birch-Sweet	Betula	lenta	13	...	...	1	...	Good	...	...	2080.19
1962	Birch-Sweet	Betula	lenta	6	...	...	2	...	Good	...	...	553.9
1963	Oak-Northern Red	Quercus	rubra	9	...	...	1	...	Poor	...	...	1068.23
1964	Birch-Sweet	Betula	lenta	5	...	...	1	...	Good	...	...	307.72
1965	Oak-Northern Red	Quercus	rubra	15	...	...	1	...	Good	...	...	6923.7
1966	Oak-Northern Red	Quercus	rubra	13	...	...	1	...	Fair	...	...	3714.62
1967	Oak-Northern Red	Quercus	rubra	20	...	...	1	...	Good	...	...	12308.8
1968	Oak-Northern Red	Quercus	rubra	10	...	...	1	...	Good	...	...	3077.2
1969	Cherry	Prunus	sp	6	...	...	1	...	Dead	...	...	0
1970	Birch-Sweet	Betula	lenta	5	...	...	1	...	Good	...	...	307.72
1971	Birch-Sweet	Betula	lenta	4	...	...	1	...	Good	...	...	196.94
1972	Maple-Red	Acer	rubrum	4	...	...	1	...	Poor	...	...	168.81
1973	Maple-Red	Acer	rubrum	17	...	...	1	...	Good	...	...	7114.49
1974	Oak-Northern Red	Quercus	rubra	13	...	...	1	...	Good	...	...	5200.47
1975	Maple-Red	Acer	rubrum	9	...	...	1	...	Poor	...	...	854.58

1976	Maple-Red	Acer	rubrum	8	...	...	1	...	Fair	...	...	1125.38
1977	Maple-Red	Acer	rubrum	6	...	...	1	...	Dead	...	...	0
1978	Oak-Northern Red	Quercus	rubra	6	...	...	1	...	Good	...	...	1107.79
1979	Birch-Sweet	Betula	lenta	5	...	...	1	...	Good	...	...	307.72
1980	Oak-Northern Red	Quercus	rubra	7	...	...	1	...	Dead	...	...	0
1981	Oak-Northern Red	Quercus	rubra	24	...	...	1	...	Good	...	...	17724.67
1982	Oak-Northern Red	Quercus	rubra	9	...	...	1	...	Good	...	...	2492.53
1983	Oak-Northern Red	Quercus	rubra	5	...	...	1	...	Good	...	...	769.3
1984	Oak-Northern Red	Quercus	rubra	15	...	...	1	...	Good	...	...	6923.7
1985	Oak-Northern Red	Quercus	rubra	19	...	...	1	...	Good	...	...	11108.69
1986	Oak-Northern Red	Quercus	rubra	10	...	...	1	...	Good	...	...	3077.2
1987	Birch-Sweet	Betula	lenta	5	...	...	1	...	Good	...	...	307.72
1988	Maple-Red	Acer	rubrum	4	...	...	1	...	Good	...	...	393.88
1989	Maple-Sugar	Acer	saccharum	4	...	...	1	...	Good	...	...	492.35
1990	Hickory-Pignut	Carya	glabra	8	...	...	1	...	Good	...	...	1575.53
1991	Maple-Red	Acer	rubrum	4	...	...	1	...	Good	...	...	393.88
1992	Oak-Northern Red	Quercus	rubra	21	...	...	1	...	Good	...	...	13570.45
1993	Oak-Northern Red	Quercus	rubra	13	...	...	1	...	Good	...	...	5200.47
1994	Maple-Red	Acer	rubrum	4	...	...	1	...	Dead	...	...	0
1995	Maple-Red	Acer	rubrum	7	...	...	2	...	Good	...	...	1600.14
1996	Hickory-Shagbark	Carya	ovata	12	...	...	2	...	Good	...	...	5120.46
1997	Maple-Norway	Acer	platanoides	4	...	...	1	...	Good	...	...	246.18
1998	Oak-Northern Red	Quercus	rubra	20	...	...	1	...	Good	...	...	12308.8
1999	Oak-Northern Red	Quercus	rubra	13	...	...	1	...	Good	...	...	5200.47
2000	Oak-Northern Red	Quercus	rubra	16	...	...	1	...	Fair	...	...	5626.88
2001	Maple-Red	Acer	rubrum	6	...	...	1	...	Good	...	...	886.23
2002	Birch-Sweet	Betula	lenta	5	...	...	1	...	Fair	...	...	219.8
2003	Oak-Northern Red	Quercus	rubra	8	...	...	1	...	Dead	...	...	0
2004	Hickory-Pignut	Carya	glabra	9	...	...	1	...	Good	...	...	1994.03
2005	Oak-Northern Red	Quercus	rubra	13	...	...	1	...	Fair	...	...	3714.62
2006	Birch-Sweet	Betula	lenta	4	...	...	1	...	Good	...	...	196.94
2007	Maple-Red	Acer	rubrum	7	...	...	1	...	Good	...	...	1206.26
2008	Hickory-Shagbark	Carya	ovata	11	...	...	1	...	Good	...	...	2978.73
2009	Maple-Red	Acer	rubrum	8	...	...	1	...	Fair	...	...	1125.38
2010	Oak-Northern Red	Quercus	rubra	8	...	...	1	...	Good	...	...	1969.41
2011	Maple-Norway	Acer	platanoides	4	...	...	1	...	Good	...	...	246.18
2012	Maple-Sugar	Acer	saccharum	4	...	...	1	...	Good	...	...	492.35
2013	Oak-Northern Red	Quercus	rubra	13	...	...	1	...	Fair	...	...	3714.62
2014	Oak-Northern Red	Quercus	rubra	5	...	...	1	...	Dead	...	...	0
2015	Beech-American	Fagus	grandifolia	8	...	...	1	...	Good	...	...	1575.53
2016	Birch-Sweet	Betula	lenta	5	...	...	1	...	Poor	...	...	131.88
2017	Birch-Sweet	Betula	lenta	5	...	...	1	...	Fair	...	...	219.8
2018	Oak-Northern Red	Quercus	rubra	27	...	...	1	...	Good	...	...	22432.79
2019	Maple-Red	Acer	rubrum	5	...	...	1	...	Good	...	...	615.44
2020	Oak-Northern Red	Quercus	rubra	9	...	...	1	...	Good	...	...	2492.53
2021	Maple-Red	Acer	rubrum	6	...	...	1	...	Good	...	...	886.23
2022	Birch-Sweet	Betula	lenta	5	...	...	1	...	Good	...	...	307.72
2023	Hickory-Shagbark	Carya	ovata	8	...	...	1	...	Good	...	...	1575.53
2024	Oak-Northern Red	Quercus	rubra	20	...	...	1	...	Good	...	...	12308.8
2025	Maple-Red	Acer	rubrum	5	...	...	2	...	Good	...	...	713.91
2026	Maple-Red	Acer	rubrum	10	...	...	1	...	Good	...	...	2461.76
2027	Birch-Sweet	Betula	lenta	14	...	...	2	...	Good	...	...	4184.99

2028	Maple-Red	Acer	rubrum	4	...	...	1	...	Poor	...	...	168.81
2029	Oak-Northern Red	Quercus	rubra	18	...	...	1	...	Good	...	...	9970.13
2030	Birch-Sweet	Betula	lenta	7	...	...	1	...	Good	...	...	603.13
2031	Oak-Northern Red	Quercus	rubra	15	...	...	1	...	Fair	...	...	4945.5
2032	Maple-Red	Acer	rubrum	4	...	...	1	...	Fair	...	...	281.34
2033	Birch-Sweet	Betula	lenta	4	...	...	1	...	Good	...	...	196.94
2034	Oak-Northern Red	Quercus	rubra	10	...	...	1	...	Good	...	...	3077.2
2035	Oak-Northern Red	Quercus	rubra	21	...	...	2	...	Good	...	...	23540.58
2036	Birch-Sweet	Betula	lenta	6	...	...	1	...	Good	...	...	443.12
2037	Oak-Northern Red	Quercus	rubra	24	...	...	1	...	Good	...	...	17724.67
2038	Hickory-Pignut	Carya	glabra	6	...	...	1	...	Fair	...	...	633.02
2039	Hickory-Pignut	Carya	glabra	5	...	...	1	...	Fair	...	...	439.6
2040	Oak-Northern Red	Quercus	rubra	25	...	...	1	...	Good	...	...	19232.5
2041	Oak-Northern Red	Quercus	rubra	18	...	...	1	...	Good	...	...	9970.13
2042	Birch-Sweet	Betula	lenta	4	...	...	1	...	Good	...	...	196.94
2043	Birch-Sweet	Betula	lenta	5	...	...	1	...	Fair	...	...	219.8
2044	Oak-Northern Red	Quercus	rubra	10	...	...	1	...	Dead	...	...	0
2045	Birch-Sweet	Betula	lenta	4	...	...	1	...	Good	...	...	196.94
2046	Birch-Sweet	Betula	lenta	4	...	...	1	...	Good	...	...	196.94
2047	Oak-Northern Red	Quercus	rubra	16	...	...	1	...	Good	...	...	7877.63
2048	Birch-Sweet	Betula	lenta	4	...	...	1	...	Good	...	...	196.94
2049	Oak-Northern Red	Quercus	rubra	11	...	...	1	...	Fair	...	...	2659.58
2050	Beech-American	Fagus	grandifolia	4	...	...	1	...	Good	...	...	393.88
2051	Oak-Northern Red	Quercus	rubra	17	...	...	1	...	Good	...	...	8893.11
2052	Hickory-Pignut	Carya	glabra	5	...	...	1	...	Good	...	...	615.44
2053	Oak-Northern Red	Quercus	rubra	6	...	...	1	...	Good	...	...	1107.79
2054	Hickory-Pignut	Carya	glabra	8	...	...	1	...	Good	...	...	1575.53
2055	Maple-Red	Acer	rubrum	4	...	...	1	...	Fair	...	...	281.34
2056	Hickory-Pignut	Carya	glabra	4	...	...	1	...	Good	...	...	393.88
2057	Hickory-Pignut	Carya	glabra	7	...	...	1	...	Good	...	...	1206.26
2058	Oak-Northern Red	Quercus	rubra	18	...	...	2	...	Dead	...	...	0
2059	Oak-Northern Red	Quercus	rubra	8	...	...	1	...	Good	...	...	1969.41
2060	Oak-Northern Red	Quercus	rubra	21	...	...	1	...	Good	...	...	13570.45
2061	Oak-Northern Red	Quercus	rubra	12	...	...	1	...	Good	...	...	4431.17
2062	Oak-Northern Red	Quercus	rubra	22	...	...	1	...	Good	...	...	14893.65
2063	Oak-Northern Red	Quercus	rubra	9	...	...	1	...	Dead	...	...	0
2064	Birch-Sweet	Betula	lenta	6	...	...	2	...	Good	...	...	553.9
2065	Oak-Northern Red	Quercus	rubra	10	...	...	1	...	Good	...	...	3077.2
2066	Oak-Northern Red	Quercus	rubra	17	...	...	1	...	Good	...	...	8893.11
2067	Hickory-Shagbark	Carya	ovata	4	...	...	1	...	Good	...	...	393.88
2068	Oak-Northern Red	Quercus	rubra	22	...	...	1	...	Good	...	...	14893.65
2069	Oak-Northern Red	Quercus	rubra	15	...	...	1	...	Fair	...	...	4945.5
2070	Birch-Sweet	Betula	lenta	15	...	...	1	...	Good	...	...	2769.48
2071	Maple-Sugar	Acer	saccharum	4	...	...	1	...	Good	...	...	492.35
2072	Birch-Sweet	Betula	lenta	21	...	...	1	...	Good	...	...	5428.18
2073	Birch-Sweet	Betula	lenta	9	...	...	1	...	Good	...	...	997.01
2074	Oak-Northern Red	Quercus	rubra	11	...	...	1	...	Fair	...	...	2659.58
2075	Oak-Northern Red	Quercus	rubra	9	...	...	1	...	Dead	...	...	0
2076	Birch-Sweet	Betula	lenta	10	...	...	1	...	Good	...	...	1230.88
2077	Oak-Northern Red	Quercus	rubra	14	...	...	1	...	Good	...	...	6031.31
2078	Birch-Sweet	Betula	lenta	10	...	...	1	...	Good	...	...	1230.88
2079	Oak-Northern Red	Quercus	rubra	9	...	...	1	...	Dead	...	...	0

2080	Oak-Northern Red	Quercus	rubra	21	...	...	2	...	Good	...	...	20494.15
2081	Beech-American	Fagus	grandifolia	4	...	...	1	...	Good	...	...	393.88
2082	Oak-Northern Red	Quercus	rubra	19	...	...	2	...	Good	...	...	20001.8
2083	Oak-Northern Red	Quercus	rubra	12	...	...	1	...	Fair	...	...	3165.12
2084	Oak-Northern Red	Quercus	rubra	13	...	...	1	...	Fair	...	...	3714.62
2085	Oak-Northern Red	Quercus	rubra	18	...	...	3	...	Fair	...	...	8879.92
2086	Birch-Sweet	Betula	lenta	4	...	...	1	...	Good	...	...	196.94
2087	Oak-Northern Red	Quercus	rubra	20	...	...	2	...	Good	...	...	20186.43
2088	Birch-Sweet	Betula	lenta	5	...	...	1	...	Good	...	...	307.72
2089	Birch-Sweet	Betula	lenta	6	...	...	1	...	Good	...	...	443.12
2090	Oak-Northern Red	Quercus	rubra	10	...	...	1	...	Dead	...	...	0
2091	Beech-American	Fagus	grandifolia	5	...	...	1	...	Good	...	...	615.44
2092	Hickory-Pignut	Carya	glabra	6	...	...	1	...	Good	...	...	886.23
2093	Birch-Sweet	Betula	lenta	6	...	...	1	...	Good	...	...	443.12
2094	Oak-Northern Red	Quercus	rubra	10	...	...	1	...	Fair	...	...	2198
2095	Oak-Northern Red	Quercus	rubra	19	...	...	1	...	Fair	...	...	7934.78
2096	Oak-Northern Red	Quercus	rubra	17	...	...	1	...	Good	...	...	8893.11
2097	Oak-Northern Red	Quercus	rubra	21	...	...	1	...	Fair	...	...	9693.18
2098	Oak-Northern Red	Quercus	rubra	15	...	...	1	...	Fair	...	...	4945.5
2099	Hickory-Pignut	Carya	glabra	4	...	...	1	...	Good	...	...	393.88
2100	Oak-Northern Red	Quercus	rubra	12	...	...	1	...	Dead	...	...	0
2101	Oak-Northern Red	Quercus	rubra	22	...	...	2	...	Good	...	...	19324.82
2102	Oak-Northern Red	Quercus	rubra	13	...	...	2	...	Poor	...	...	3072.8
2103	Birch-Sweet	Betula	lenta	6	...	...	1	...	Good	...	...	443.12
2104	Oak-Northern Red	Quercus	rubra	12	...	...	1	...	Good	...	...	4431.17
2105	Birch-Sweet	Betula	lenta	5	...	...	1	...	Good	...	...	307.72
2106	Oak-Northern Red	Quercus	rubra	13	...	...	1	...	Dead	...	...	0
2107	Oak-Northern Red	Quercus	rubra	9	...	...	1	...	Fair	...	...	1780.38
2108	Birch-Sweet	Betula	lenta	4	...	...	1	...	Good	...	...	196.94
2109	Birch-Sweet	Betula	lenta	4	...	...	1	...	Good	...	...	196.94
2110	Oak-Northern Red	Quercus	rubra	15	...	...	1	...	Poor	...	...	2967.3
2111	Oak-Northern Red	Quercus	rubra	12	...	...	1	...	Good	...	...	4431.17
2112	Oak-Northern Red	Quercus	rubra	20	...	...	1	...	Good	...	...	12308.8
2113	Maple-Sugar	Acer	saccharum	4	...	...	1	...	Good	...	...	492.35
2114	Oak-Northern Red	Quercus	rubra	7	...	...	1	...	Dead	...	...	0
2115	Maple-Sugar	Acer	saccharum	4	...	...	1	...	Good	...	...	492.35
2116	Oak-Northern Red	Quercus	rubra	8	...	...	1	...	Good	...	...	1969.41
2117	Birch-Sweet	Betula	lenta	12	...	...	2	...	Good	...	...	3003.35
2118	Oak-Northern Red	Quercus	rubra	12	...	...	1	...	Dead	...	...	0
2119	Hickory-Pignut	Carya	glabra	10	...	...	1	...	Good	...	...	2461.76
2120	Birch-Sweet	Betula	lenta	6	...	...	1	...	Good	...	...	443.12
2121	Oak-Northern Red	Quercus	rubra	11	...	...	1	...	Fair	...	...	2659.58
2122	Oak-Northern Red	Quercus	rubra	14	...	...	1	...	Dead	...	...	0
2123	Oak-Northern Red	Quercus	rubra	21	...	...	1	...	Good	...	...	13570.45
2124	Oak-White	Quercus	alba	8	...	...	1	...	Good	...	...	1969.41
2125	Oak-Northern Red	Quercus	rubra	10	...	...	1	...	Dead	...	...	0
2126	Hickory-Pignut	Carya	glabra	5	...	...	1	...	Good	...	...	615.44
2127	Beech-American	Fagus	grandifolia	8	...	...	2	...	Good	...	...	1797.08
2128	Birch-Sweet	Betula	lenta	8	...	...	1	...	Good	...	...	787.76
2129	Birch-Sweet	Betula	lenta	7	...	...	1	...	Fair	...	...	430.81
2130	Oak-Northern Red	Quercus	rubra	23	...	...	1	...	Good	...	...	16278.39
2131	Birch-Sweet	Betula	lenta	19	...	...	1	...	Good	...	...	4443.48

2132	Birch-Sweet	Betula	lenta	14	...	...	1	...	Good	...	...	2412.52
2133	Birch-Sweet	Betula	lenta	13	...	...	1	...	Good	...	...	2080.19
2134	Birch-Sweet	Betula	lenta	12	...	...	1	...	Good	...	...	1772.47
2135	Oak-Northern Red	Quercus	rubra	18	...	...	1	...	Good	...	...	9970.13
2136	Oak-Northern Red	Quercus	rubra	19	...	...	1	...	Good	...	...	11108.69
2137	Beech-American	Fagus	grandifolia	6	...	...	1	...	Good	...	...	886.23
2138	Oak-Northern Red	Quercus	rubra	15	...	...	1	...	Dead	...	...	0
2139	Birch-Sweet	Betula	lenta	5	...	...	1	...	Good	...	...	307.72
2140	Oak-Northern Red	Quercus	rubra	5	...	...	1	...	Good	...	...	769.3
2141	Birch-Sweet	Betula	lenta	4	...	...	1	...	Fair	...	...	140.67
2142	Oak-Northern Red	Quercus	rubra	6	...	...	1	...	Good	...	...	1107.79
2143	Birch-Sweet	Betula	lenta	4	...	...	1	...	Good	...	...	196.94
2144	Oak-White	Quercus	alba	6	...	...	1	...	Good	...	...	1107.79
2145	Oak-Northern Red	Quercus	rubra	14	...	...	1	...	Good	...	...	6031.31
2146	Oak-Northern Red	Quercus	rubra	20	...	...	1	...	Good	...	...	12308.8
2147	Oak-Northern Red	Quercus	rubra	5	...	...	1	...	Fair	...	...	549.5
2148	Birch-Sweet	Betula	lenta	4	...	...	1	...	Good	...	...	196.94
2149	Maple-Red	Acer	rubrum	12	...	...	1	...	Fair	...	...	2532.1
2150	Oak-Northern Red	Quercus	rubra	23	...	...	1	...	Good	...	...	16278.39
2151	Beech-American	Fagus	grandifolia	4	...	...	1	...	Good	...	...	393.88
2152	Hickory-Shagbark	Carya	ovata	6	...	...	1	...	Good	...	...	886.23
2153	Oak-Northern Red	Quercus	rubra	8	...	...	1	...	Good	...	...	1969.41
2154	Maple-Red	Acer	rubrum	9	...	...	1	...	Good	...	...	1994.03
2155	Beech-American	Fagus	grandifolia	6	...	...	1	...	Good	...	...	886.23
2156	Birch-Sweet	Betula	lenta	13	...	...	1	...	Good	...	...	2080.19
2157	Birch-Sweet	Betula	lenta	15	...	...	2	...	Fair	...	...	2857.4
2158	Oak-Northern Red	Quercus	rubra	19	...	...	1	...	Good	...	...	11108.69
2159	Oak-White	Quercus	alba	4	...	...	1	...	Good	...	...	492.35
2160	Oak-Northern Red	Quercus	rubra	21	...	...	1	...	Good	...	...	13570.45
2161	Birch-Sweet	Betula	lenta	7	...	...	1	...	Dead	...	...	0
2162	Oak-Northern Red	Quercus	rubra	15	...	...	1	...	Good	...	...	6923.7
2163	Oak-Northern Red	Quercus	rubra	16	...	...	1	...	Good	...	...	7877.63
2164	Maple-Sugar	Acer	saccharum	7	...	...	1	...	Good	...	...	1507.83
2165	Oak-Northern Red	Quercus	rubra	5	...	...	1	...	Dead	...	...	0
2166	Oak-Northern Red	Quercus	rubra	28	...	...	1	...	Good	...	...	24125.25
2167	Birch-Sweet	Betula	lenta	4	...	...	1	...	Good	...	...	196.94
2168	Maple-Red	Acer	rubrum	12	...	...	1	...	Good	...	...	3544.93
2169	Birch-Sweet	Betula	lenta	6	...	...	1	...	Dead	...	...	0
2170	Maple-Red	Acer	rubrum	4	...	...	1	...	Poor	...	...	168.81
2171	Hickory-Shagbark	Carya	ovata	7	...	...	1	...	Good	...	...	1206.26
2172	Birch-Sweet	Betula	lenta	7	...	...	1	...	Fair	...	...	430.81
2173	Oak-Northern Red	Quercus	rubra	18	...	...	1	...	Fair	...	...	7121.52
2174	Oak-Northern Red	Quercus	rubra	13	...	...	1	...	Dead	...	...	0
2175	Oak-Northern Red	Quercus	rubra	21	...	...	1	...	Fair	...	...	9693.18
2176	Birch-Sweet	Betula	lenta	16	...	...	1	...	Good	...	...	3151.05
2177	Maple-Red	Acer	rubrum	4	...	...	1	...	Poor	...	...	168.81
2178	Birch-Sweet	Betula	lenta	16	...	...	1	...	Fair	...	...	2250.75
2179	Birch-Sweet	Betula	lenta	17	...	...	1	...	Good	...	...	3557.24
2180	Birch-Sweet	Betula	lenta	6	...	...	1	...	Good	...	...	443.12
2181	Sassafras-Common	Sassafras	albidum	5	...	...	1	...	Good	...	...	615.44
2182	Sassafras-Common	Sassafras	albidum	5	...	...	1	...	Dead	...	...	0
2183	Maple-Red	Acer	rubrum	7	...	...	1	...	Dead	...	...	0

2184	Sassafras-Common	Sassafras	albidum	10	...	...	1	...	Good	...	...	2461.76
2185	Birch-Sweet	Betula	lenta	12	...	...	1	...	Good	...	...	1772.47
2186	Birch-Sweet	Betula	lenta	17	...	...	2	...	Good	...	...	3864.96
2187	Birch-Sweet	Betula	lenta	14	...	...	1	...	Fair	...	...	1723.23
2188	Birch-Sweet	Betula	lenta	9	...	...	1	...	Good	...	...	997.01
2189	Birch-Sweet	Betula	lenta	19	...	...	3	...	Fair	...	...	4598.22
2190	Poplar-Eastern	Populus	deltoides	13	...	...	1	...	Good	...	...	1040.09
2191	Maple-Red	Acer	rubrum	18	...	...	1	...	Good	...	...	7976.1
2192	Maple-Red	Acer	rubrum	13	...	...	1	...	Good	...	...	4160.37
2193	Birch-Sweet	Betula	lenta	7	...	...	1	...	Good	...	...	603.13
2194	Birch-Sweet	Betula	lenta	5	...	...	1	...	Fair	...	...	219.8
2195	Oak-Northern Red	Quercus	rubra	13	...	...	1	...	Fair	...	...	3714.62
2196	Maple-Red	Acer	rubrum	14	...	...	1	...	Fair	...	...	3446.46
2197	Oak-Northern Red	Quercus	rubra	21	...	...	1	...	Good	...	...	13570.45
2198	Oak-Northern Red	Quercus	rubra	17	...	...	1	...	Good	...	...	8893.11
2199	Maple-Red	Acer	rubrum	7	...	...	1	...	Dead	...	...	0
2200	Maple-Red	Acer	rubrum	16	...	...	1	...	Fair	...	...	4501.5
2201	Maple-Red	Acer	rubrum	8	...	...	1	...	Good	...	...	1575.53
2202	Cherry	Prunus	sp	8	...	...	2	...	Poor	...	...	596.1
2203	Ash-White	Fraxinus	americana	5	...	...	1	...	Poor	...	...	131.88
2204	Maple-Sugar	Acer	saccharum	5	...	...	1	...	Good	...	...	769.3
2205	Oak-Northern Red	Quercus	rubra	13	...	...	1	...	Fair	...	...	3714.62
2206	Hickory-Pignut	Carya	glabra	14	...	...	2	...	Fair	...	...	4079.49
2207	Beech-American	Fagus	grandifolia	8	...	...	1	...	Good	...	...	1575.53
2208	Oak-Northern Red	Quercus	rubra	21	...	...	1	...	Fair	...	...	9693.18
2209	Oak-Northern Red	Quercus	rubra	22	...	...	2	...	Dead	...	...	0
2210	Hickory-Pignut	Carya	glabra	8	...	...	1	...	Good	...	...	1575.53
2211	Maple-Red	Acer	rubrum	5	...	...	1	...	Fair	...	...	439.6
2212	Oak-Northern Red	Quercus	rubra	24	...	...	1	...	Good	...	...	17724.67
2213	Hickory-Pignut	Carya	glabra	7	...	...	1	...	Good	...	...	1206.26
2214	Maple-Norway	Acer	platanoides	5	...	...	1	...	Good	...	...	384.65
2215	Birch-Sweet	Betula	lenta	17	...	...	1	...	Fair	...	...	2540.89
2216	Hickory-Pignut	Carya	glabra	15	...	...	2	...	Good	...	...	6745.22
2217	Maple-Sugar	Acer	saccharum	5	...	...	1	...	Good	...	...	769.3
2218	Oak-Northern Red	Quercus	rubra	27	...	...	1	...	Good	...	...	22432.79
2219	Oak-Northern Red	Quercus	rubra	4	...	...	1	...	Dead	...	...	0
2220	Maple-Sugar	Acer	saccharum	4	...	...	1	...	Good	...	...	492.35
2221	Maple-Red	Acer	rubrum	8	...	...	1	...	Good	...	...	1575.53
2222	Birch-Sweet	Betula	lenta	7	...	...	1	...	Dead	...	...	0
2223	Birch-Sweet	Betula	lenta	15	...	...	1	...	Good	...	...	2769.48
2224	Maple-Red	Acer	rubrum	4	...	...	1	...	Good	...	...	393.88
2225	Cherry	Prunus	sp	10	...	...	3	...	Poor	...	...	1213.3
2226	Maple-Red	Acer	rubrum	4	...	...	1	...	Good	...	...	393.88
2227	Maple-Red	Acer	rubrum	14	...	...	1	...	Fair	...	...	3446.46
2228	Maple-Red	Acer	rubrum	6	...	...	2	...	Good	...	...	984.7
2229	Maple-Red	Acer	rubrum	4	...	...	1	...	Dead	...	...	0
2230	Maple-Sugar	Acer	saccharum	5	...	...	1	...	Good	...	...	769.3
2231	Birch-Sweet	Betula	lenta	4	...	...	1	...	Good	...	...	196.94
2232	Oak-Northern Red	Quercus	rubra	11	...	...	1	...	Good	...	...	3723.41
2233	Maple-Sugar	Acer	saccharum	4	...	...	1	...	Good	...	...	492.35
2234	Oak-Northern Red	Quercus	rubra	17	...	...	1	...	Good	...	...	8893.11
2235	Oak-Northern Red	Quercus	rubra	10	...	...	1	...	Good	...	...	3077.2

2236	Cherry	Prunus	sp	6	...	...	1	...	Dead	...	...	0
2237	Oak-Northern Red	Quercus	rubra	5	...	...	1	...	Good	...	...	769.3
2238	Oak-Northern Red	Quercus	rubra	21	...	...	2	...	Good	...	...	24679.14
2239	Oak-White	Quercus	alba	18	...	...	1	...	Good	...	...	9970.13
2240	Maple-Red	Acer	rubrum	6	...	...	1	...	Fair	...	...	633.02
2241	Oak-Northern Red	Quercus	rubra	14	...	...	1	...	Good	...	...	6031.31
2242	Cherry	Prunus	sp	8	...	...	1	...	Good	...	...	787.76
2243	Maple-Red	Acer	rubrum	4	...	...	1	...	Good	...	...	393.88
2244	Birch-Sweet	Betula	lenta	9	...	...	1	...	Good	...	...	997.01
2245	Beech-American	Fagus	grandifolia	6	...	...	1	...	Good	...	...	886.23
2246	Oak-White	Quercus	alba	9	...	...	1	...	Good	...	...	2492.53
2247	Maple-Red	Acer	rubrum	5	...	...	1	...	Fair	...	...	439.6
2248	Oak-White	Quercus	alba	10	...	...	1	...	Fair	...	...	2198
2249	Oak-White	Quercus	alba	12	...	...	2	...	Good	...	...	8862.34
2250	Oak-Northern Red	Quercus	rubra	8	...	...	1	...	Good	...	...	1969.41
2251	Oak-Northern Red	Quercus	rubra	14	...	...	1	...	Good	...	...	6031.31
2252	Oak-Northern Red	Quercus	rubra	7	...	...	1	...	Fair	...	...	1077.02
2253	Cherry	Prunus	sp	14	...	...	1	...	Fair	...	...	1723.23
2254	Maple-Sugar	Acer	saccharum	6	...	...	1	...	Good	...	...	1107.79
2255	Maple-Sugar	Acer	saccharum	5	...	...	1	...	Good	...	...	769.3
2256	Maple-Red	Acer	rubrum	11	...	...	1	...	Fair	...	...	2127.66
2257	Cherry	Prunus	sp	5	...	...	1	...	Dead	...	...	0
2258	Hickory-Pignut	Carya	glabra	7	...	...	1	...	Good	...	...	1206.26
2259	Beech-American	Fagus	grandifolia	4	...	...	1	...	Good	...	...	393.88
2260	Birch-Sweet	Betula	lenta	14	...	...	3	...	Good	...	...	5415.87
2261	Oak-Northern Red	Quercus	rubra	4	...	...	1	...	Good	...	...	492.35
2262	Maple-Red	Acer	rubrum	9	...	...	1	...	Fair	...	...	1424.3
2263	Cherry	Prunus	sp	8	...	...	1	...	Poor	...	...	337.61
2264	Maple-Red	Acer	rubrum	7	...	...	1	...	Good	...	...	1206.26
2265	Maple-Red	Acer	rubrum	6	...	...	1	...	Good	...	...	886.23
2266	Maple-Red	Acer	rubrum	5	...	...	1	...	Good	...	...	615.44
2267	Maple-Red	Acer	rubrum	8	...	...	1	...	Good	...	...	1575.53
2268	Oak-Northern Red	Quercus	rubra	11	...	...	1	...	Fair	...	...	2659.58
2269	Maple-Red	Acer	rubrum	7	...	...	1	...	Fair	...	...	861.62
2270	Oak-Northern Red	Quercus	rubra	11	...	...	1	...	Good	...	...	3723.41
2271	Cherry	Prunus	sp	6	...	...	1	...	Dead	...	...	0
2272	Maple-Red	Acer	rubrum	8	...	...	1	...	Fair	...	...	1125.38
2273	Maple-Red	Acer	rubrum	5	...	...	1	...	Good	...	...	615.44
2274	Oak-Northern Red	Quercus	rubra	4	...	...	1	...	Good	...	...	492.35
2275	Maple-Red	Acer	rubrum	6	...	...	1	...	Fair	...	...	633.02
2276	Oak-Northern Red	Quercus	rubra	18	...	...	1	...	Good	...	...	9970.13
2277	Birch-Sweet	Betula	lenta	11	...	...	1	...	Good	...	...	1489.36
2278	Birch-Sweet	Betula	lenta	11	...	...	2	...	Good	...	...	2720.24
2279	Maple-Red	Acer	rubrum	6	...	...	1	...	Good	...	...	886.23
2280	Oak-Northern Red	Quercus	rubra	20	...	...	1	...	Good	...	...	12308.8
2281	Maple-Red	Acer	rubrum	4	...	...	1	...	Fair	...	...	281.34
2282	Maple-Sugar	Acer	saccharum	4	...	...	1	...	Good	...	...	492.35
2283	Hickory-Pignut	Carya	glabra	17	...	...	3	...	Good	...	...	12234.95
2284	Maple-Sugar	Acer	saccharum	4	...	...	1	...	Good	...	...	492.35
2285	Maple-Norway	Acer	platanoides	7	...	...	1	...	Good	...	...	753.91
2286	Oak-Northern Red	Quercus	rubra	6	...	...	1	...	Good	...	...	1107.79
2287	Maple-Red	Acer	rubrum	5	...	...	1	...	Good	...	...	615.44

2288	Hickory-Pignut	Carya	glabra	6	...	...	1	...	Good	...	...	886.23
2289	Oak-Northern Red	Quercus	rubra	12	...	...	1	...	Good	...	...	4431.17
2290	Hickory-Pignut	Carya	glabra	10	...	...	1	...	Good	...	...	2461.76
2291	Maple-Red	Acer	rubrum	7	...	...	1	...	Good	...	...	1206.26
2292	Maple-Norway	Acer	platanoides	8	...	...	1	...	Good	...	...	984.7
2293	Hickory-Pignut	Carya	glabra	5	...	...	1	...	Good	...	...	615.44
2294	Oak-Northern Red	Quercus	rubra	15	...	...	1	...	Good	...	...	6923.7
2295	Oak-Northern Red	Quercus	rubra	5	...	...	1	...	Dead	...	...	0
2296	Redcedar-Eastern	Juniperus	virginiana	6	...	...	1	...	Dead	...	...	0
2297	Oak-Northern Red	Quercus	rubra	8	...	...	1	...	Good	...	...	1969.41
2298	Oak-Northern Red	Quercus	rubra	11	...	...	1	...	Good	...	...	3723.41
2299	Maple-Sugar	Acer	saccharum	4	...	...	1	...	Good	...	...	492.35
2300	Maple-Sugar	Acer	saccharum	5	...	...	1	...	Good	...	...	769.3
2301	Redcedar-Eastern	Juniperus	virginiana	7	...	...	1	...	Dead	...	...	0
2302	Maple-Norway	Acer	platanoides	4	...	...	1	...	Poor	...	...	105.5
2303	Maple-Red	Acer	rubrum	12	...	...	1	...	Good	...	...	3544.93
2304	Maple-Sugar	Acer	saccharum	4	...	...	1	...	Fair	...	...	351.68
2305	Oak-Northern Red	Quercus	rubra	18	...	...	1	...	Good	...	...	9970.13
2306	Birch-Sweet	Betula	lenta	5	...	...	1	...	Good	...	...	307.72
2307	Birch-Sweet	Betula	lenta	4	...	...	1	...	Good	...	...	196.94
2308	Oak-Northern Red	Quercus	rubra	14	...	...	1	...	Dead	...	...	0
2309	Birch-Sweet	Betula	lenta	8	...	...	1	...	Good	...	...	787.76
2310	Birch-Sweet	Betula	lenta	9	...	...	1	...	Dead	...	...	0
2311	Maple-Norway	Acer	platanoides	7	...	...	1	...	Good	...	...	753.91
2312	Maple-Norway	Acer	platanoides	7	...	...	1	...	Good	...	...	753.91
2313	Maple-Sugar	Acer	saccharum	9	...	...	1	...	Good	...	...	2492.53
2314	Maple-Sugar	Acer	saccharum	5	...	...	1	...	Good	...	...	769.3
2315	Oak-Northern Red	Quercus	rubra	21	...	...	2	...	Good	...	...	25879.25
2316	Birch-Sweet	Betula	lenta	11	...	...	1	...	Good	...	...	1489.36
2317	Oak-Northern Red	Quercus	rubra	22	...	...	1	...	Good	...	...	14893.65
2318	Oak-Northern Red	Quercus	rubra	16	...	...	1	...	Good	...	...	7877.63
2319	Maple-Sugar	Acer	saccharum	5	...	...	1	...	Good	...	...	769.3
2320	Oak-Northern Red	Quercus	rubra	17	...	...	2	...	Good	...	...	15816.81
2321	Cherry	Prunus	sp	12	...	...	1	...	Dead	...	...	0
2322	Oak-White	Quercus	alba	16	...	...	1	...	Good	...	...	7877.63
2323	Oak-Northern Red	Quercus	rubra	9	...	...	1	...	Dead	...	...	0
2324	Beech-American	Fagus	grandifolia	6	...	...	1	...	Good	...	...	886.23
2325	Maple-Red	Acer	rubrum	13	...	...	1	...	Fair	...	...	2971.7
2326	Maple-Sugar	Acer	saccharum	4	...	...	1	...	Good	...	...	492.35
2327	Birch-Sweet	Betula	lenta	5	...	...	1	...	Good	...	...	307.72
2328	Maple-Red	Acer	rubrum	10	...	...	1	...	Good	...	...	2461.76
2329	Oak-Northern Red	Quercus	rubra	15	...	...	3	...	Good	...	...	16555.34
2330	Maple-Red	Acer	rubrum	4	...	...	1	...	Good	...	...	393.88
2331	Maple-Red	Acer	rubrum	5	...	...	1	...	Good	...	...	615.44
2332	Oak-Northern Red	Quercus	rubra	7	...	...	1	...	Good	...	...	1507.83
2333	Oak-Northern Red	Quercus	rubra	16	...	...	1	...	Dead	...	...	0
2334	Birch-Sweet	Betula	lenta	8	...	...	1	...	Good	...	...	787.76
2335	Maple-Red	Acer	rubrum	8	...	...	1	...	Good	...	...	1575.53
2336	Oak-Northern Red	Quercus	rubra	17	...	...	3	...	Good	...	...	23694.44
2337	Birch-Sweet	Betula	lenta	4	...	...	1	...	Fair	...	...	140.67
2338	Birch-Sweet	Betula	lenta	6	...	...	1	...	Good	...	...	443.12
2339	Oak-Northern Red	Quercus	rubra	18	...	...	1	...	Good	...	...	9970.13

2340	Beech-American	Fagus	grandifolia	6	...	...	1	...	Good	...	...	886.23
2341	Oak-Northern Red	Quercus	rubra	15	...	...	1	...	Good	...	...	6923.7
2342	Oak-Northern Red	Quercus	rubra	17	...	...	1	...	Good	...	...	8893.11
2343	Tupelo-Black	Nyssa	sylvatica	4	...	...	1	...	Good	...	...	443.12
2344	Beech-American	Fagus	grandifolia	8	...	...	1	...	Good	...	...	1575.53
2345	Beech-American	Fagus	grandifolia	4	...	...	1	...	Good	...	...	393.88
2346	Maple-Sugar	Acer	saccharum	4	...	...	1	...	Good	...	...	492.35
2347	Birch-Sweet	Betula	lenta	4	...	...	1	...	Good	...	...	196.94
2348	Oak-Northern Red	Quercus	rubra	15	...	...	1	...	Good	...	...	6923.7
2349	Oak-Northern Red	Quercus	rubra	19	...	...	2	...	Good	...	...	14832.1
2350	Beech-American	Fagus	grandifolia	5	...	...	1	...	Good	...	...	615.44
2351	Beech-American	Fagus	grandifolia	7	...	...	1	...	Good	...	...	1206.26
2352	Oak-Northern Red	Quercus	rubra	12	...	...	1	...	Fair	...	...	3165.12
2353	Oak-Northern Red	Quercus	rubra	17	...	...	1	...	Good	...	...	8893.11
2354	Oak-Northern Red	Quercus	rubra	8	...	...	1	...	Dead	...	...	0
2355	Maple-Red	Acer	rubrum	7	...	...	1	...	Fair	...	...	861.62
2356	Oak-Northern Red	Quercus	rubra	16	...	...	1	...	Good	...	...	7877.63
2357	Maple-Sugar	Acer	saccharum	4	...	...	1	...	Good	...	...	492.35
2358	Birch-Sweet	Betula	lenta	5	...	...	1	...	Good	...	...	307.72
2359	Birch-Sweet	Betula	lenta	4	...	...	1	...	Good	...	...	196.94
2360	Oak-Northern Red	Quercus	rubra	12	...	...	2	...	Poor	...	...	3798.14
2361	Maple-Sugar	Acer	saccharum	4	...	...	1	...	Good	...	...	492.35
2362	Oak-Northern Red	Quercus	rubra	16	...	...	1	...	Good	...	...	7877.63
2363	Oak-Northern Red	Quercus	rubra	19	...	...	1	...	Good	...	...	11108.69
2364	Oak-Northern Red	Quercus	rubra	4	...	...	1	...	Dead	...	...	0
2365	Oak-Northern Red	Quercus	rubra	15	...	...	1	...	Good	...	...	6923.7
2366	Hickory-Pignut	Carya	glabra	6	...	...	1	...	Good	...	...	886.23
2367	Maple-Sugar	Acer	saccharum	7	...	...	6	...	Fair	...	...	3231.06
2368	Oak-Northern Red	Quercus	rubra	25	...	...	1	...	Good	...	...	19232.5
2369	Birch-Sweet	Betula	lenta	5	...	...	1	...	Good	...	...	307.72
2370	Oak-Northern Red	Quercus	rubra	11	...	...	1	...	Good	...	...	3723.41
2371	Oak-Northern Red	Quercus	rubra	17	...	...	1	...	Good	...	...	8893.11
2372	Oak-Northern Red	Quercus	rubra	16	...	...	1	...	Good	...	...	7877.63
2373	Birch-Sweet	Betula	lenta	4	...	...	1	...	Good	...	...	196.94
2374	Oak-White	Quercus	alba	17	...	...	2	...	Good	...	...	15816.81
2375	Birch-Sweet	Betula	lenta	8	...	...	1	...	Good	...	...	787.76
2376	Birch-Sweet	Betula	lenta	4	...	...	1	...	Good	...	...	196.94
2377	Birch-Sweet	Betula	lenta	9	...	...	1	...	Good	...	...	997.01
2378	Birch-Sweet	Betula	lenta	4	...	...	1	...	Good	...	...	196.94
2379	Birch-Sweet	Betula	lenta	7	...	...	1	...	Good	...	...	603.13
2380	Birch-Sweet	Betula	lenta	4	...	...	1	...	Good	...	...	196.94
2381	Birch-Sweet	Betula	lenta	6	...	...	1	...	Good	...	...	443.12
2382	Oak-Northern Red	Quercus	rubra	13	...	...	2	...	Dead	...	...	0
2383	Oak-Northern Red	Quercus	rubra	7	...	...	1	...	Dead	...	...	0
2384	Birch-Sweet	Betula	lenta	4	...	...	1	...	Good	...	...	196.94
2385	Maple-Sugar	Acer	saccharum	4	...	...	1	...	Good	...	...	492.35
2386	Oak-Northern Red	Quercus	rubra	12	...	...	1	...	Poor	...	...	1899.07
2387	Hickory-Pignut	Carya	glabra	5	...	...	1	...	Good	...	...	615.44
2388	Oak-Northern Red	Quercus	rubra	16	...	...	1	...	Good	...	...	7877.63
2389	Birch-Sweet	Betula	lenta	4	...	...	1	...	Fair	...	...	140.67
2390	Birch-Sweet	Betula	lenta	5	...	...	1	...	Good	...	...	307.72
2391	Birch-Sweet	Betula	lenta	4	...	...	1	...	Fair	...	...	140.67

2392	Birch-Sweet	Betula	lenta	4	...	...	1	...	Good	...	...	196.94
2393	Oak-Northern Red	Quercus	rubra	21	...	...	2	...	Good	...	...	25879.25
2394	Birch-Sweet	Betula	lenta	4	...	...	1	...	Good	...	...	196.94
2395	Oak-Northern Red	Quercus	rubra	21	...	...	2	...	Good	...	...	25879.25
2396	Birch-Sweet	Betula	lenta	7	...	...	1	...	Good	...	...	603.13
2397	Birch-Sweet	Betula	lenta	4	...	...	1	...	Good	...	...	196.94
2398	Birch-Sweet	Betula	lenta	6	...	...	1	...	Good	...	...	443.12
2399	Oak-Northern Red	Quercus	rubra	20	...	...	2	...	Fair	...	...	14418.88
2400	Maple-Sugar	Acer	saccharum	9	...	...	2	...	Good	...	...	2769.48
2401	Hickory-Pignut	Carya	glabra	5	...	...	1	...	Poor	...	...	263.76
2402	Oak-Northern Red	Quercus	rubra	15	...	...	1	...	Fair	...	...	4945.5
2403	Oak-Northern Red	Quercus	rubra	15	...	...	1	...	Good	...	...	6923.7
2404	Maple-Sugar	Acer	saccharum	4	...	...	1	...	Good	...	...	492.35
2405	Oak-Northern Red	Quercus	rubra	18	...	...	1	...	Good	...	...	9970.13
2406	Beech-American	Fagus	grandifolia	5	...	...	1	...	Good	...	...	615.44
2407	Hickory-Pignut	Carya	glabra	11	...	...	1	...	Good	...	...	2978.73
2408	Maple-Sugar	Acer	saccharum	10	...	...	2	...	Good	...	...	3354.15
2409	Oak-Northern Red	Quercus	rubra	7	...	...	1	...	Dead	...	...	0
2410	Oak-Northern Red	Quercus	rubra	15	...	...	1	...	Good	...	...	6923.7
2411	Oak-Northern Red	Quercus	rubra	11	...	...	1	...	Dead	...	...	0
2412	Hickory-Pignut	Carya	glabra	11	...	...	1	...	Fair	...	...	2127.66
2413	Oak-Northern Red	Quercus	rubra	13	...	...	1	...	Fair	...	...	3714.62
2414	Birch-Sweet	Betula	lenta	4	...	...	1	...	Good	...	...	196.94
2415	Birch-Sweet	Betula	lenta	5	...	...	1	...	Good	...	...	307.72
2416	Oak-Northern Red	Quercus	rubra	22	...	...	1	...	Good	...	...	14893.65
2417	Oak-Northern Red	Quercus	rubra	18	...	...	3	...	Good	...	...	23294.4
2418	Maple-Sugar	Acer	saccharum	6	...	...	1	...	Good	...	...	1107.79
2419	Hickory-Shagbark	Carya	ovata	7	...	...	1	...	Poor	...	...	516.97
2420	Oak-Northern Red	Quercus	rubra	22	...	...	1	...	Good	...	...	14893.65
2421	Oak-Northern Red	Quercus	rubra	18	...	...	1	...	Good	...	...	9970.13
2422	Hickory-Pignut	Carya	glabra	4	...	...	1	...	Good	...	...	393.88
2423	Birch-Sweet	Betula	lenta	7	...	...	1	...	Good	...	...	603.13
2424	Oak-Northern Red	Quercus	rubra	16	...	...	1	...	Dead	...	...	0
2425	Sassafras-Common	Sassafras	albidum	10	...	...	1	...	Good	...	...	2461.76
2426	Sassafras-Common	Sassafras	albidum	10	...	...	1	...	Good	...	...	2461.76
2427	Oak-Northern Red	Quercus	rubra	21	...	...	1	...	Good	...	...	13570.45
2428	Oak-Northern Red	Quercus	rubra	17	...	...	2	...	Fair	...	...	8132.6
2429	Hickory-Pignut	Carya	glabra	4	...	...	1	...	Good	...	...	393.88
2430	Oak-Northern Red	Quercus	rubra	19	...	...	1	...	Good	...	...	11108.69
2431	Oak-Northern Red	Quercus	rubra	17	...	...	1	...	Dead	...	...	0
2432	Hickory-Pignut	Carya	glabra	14	...	...	1	...	Good	...	...	4825.05
2433	Hickory-Pignut	Carya	glabra	5	...	...	1	...	Poor	...	...	263.76
2434	Sassafras-Common	Sassafras	albidum	10	...	...	1	...	Good	...	...	2461.76
2435	Sassafras-Common	Sassafras	albidum	16	...	...	1	...	Good	...	...	6302.11
2436	Sassafras-Common	Sassafras	albidum	10	...	...	1	...	Good	...	...	2461.76
2437	Sassafras-Common	Sassafras	albidum	11	...	...	1	...	Good	...	...	2978.73
2438	Maple-Sugar	Acer	saccharum	5	...	...	2	...	Fair	...	...	637.42
2439	Maple-Sugar	Acer	saccharum	7	...	...	1	...	Good	...	...	1507.83
2440	Maple-Sugar	Acer	saccharum	9	...	...	1	...	Good	...	...	2492.53
2441	Maple-Sugar	Acer	saccharum	12	...	...	1	...	Good	...	...	4431.17
2442	Hickory-Pignut	Carya	glabra	14	...	...	1	...	Good	...	...	4825.05
2443	Hickory-Pignut	Carya	glabra	6	...	...	1	...	Good	...	...	886.23

2444	Hickory-Pignut	Carya	glabra	17	...	...	1	...	Good	...	...	7114.49
2445	Hickory-Shagbark	Carya	ovata	4	...	...	2	...	Poor	...	...	263.76
2446	Hickory-Pignut	Carya	glabra	8	...	...	1	...	Good	...	...	1575.53
2447	Oak-Northern Red	Quercus	rubra	19	...	...	1	...	Fair	...	...	7934.78
2448	Hickory-Pignut	Carya	glabra	15	...	...	1	...	Good	...	...	5538.96
2449	Oak-Northern Red	Quercus	rubra	23	...	...	1	...	Good	...	...	16278.39
2450	Maple-Sugar	Acer	saccharum	4	...	...	1	...	Good	...	...	492.35
2451	Oak-Northern Red	Quercus	rubra	18	...	...	2	...	Good	...	...	18863.24
2452	Birch-Sweet	Betula	lenta	5	...	...	1	...	Good	...	...	307.72
2453	Birch-Sweet	Betula	lenta	5	...	...	1	...	Good	...	...	307.72
2454	Hickory-Pignut	Carya	glabra	4	...	...	1	...	Poor	...	...	168.81
2455	Oak-Northern Red	Quercus	rubra	18	...	...	1	...	Dead	...	...	0
2456	Oak-Northern Red	Quercus	rubra	20	...	...	1	...	Good	...	...	12308.8
2457	Tuliptree	Liriodendr	tulipifera	10	...	...	1	...	Good	...	...	2461.76
2458	Hickory-Pignut	Carya	glabra	4	...	...	1	...	Good	...	...	393.88
2459	Hickory-Pignut	Carya	glabra	13	...	...	2	...	Good	...	...	6154.4
2460	Hickory-Shagbark	Carya	ovata	4	...	...	1	...	Good	...	...	393.88
2461	Hickory-Shagbark	Carya	ovata	12	...	...	1	...	Good	...	...	3544.93
2462	Maple-Sugar	Acer	saccharum	4	...	...	1	...	Good	...	...	492.35
2463	Hickory-Shagbark	Carya	ovata	13	...	...	1	...	Good	...	...	4160.37
2464	Elm-American	Ulmus	americana	11	...	...	1	...	Poor	...	...	957.45
2465	Oak-Northern Red	Quercus	rubra	14	...	...	1	...	Good	...	...	6031.31
2466	Oak-Northern Red	Quercus	rubra	18	...	...	1	...	Good	...	...	9970.13
2467	Beech-American	Fagus	grandifolia	5	...	...	1	...	Good	...	...	615.44
2468	Maple-Sugar	Acer	saccharum	6	...	...	1	...	Good	...	...	1107.79
2469	Birch-Sweet	Betula	lenta	5	...	...	1	...	Good	...	...	307.72
2470	Oak-Northern Red	Quercus	rubra	22	...	...	2	...	Good	...	...	28464.1
2471	Sassafras-Common	Sassafras	albidum	5	...	...	1	...	Dead	...	...	0
2472	Oak-Northern Red	Quercus	rubra	26	...	...	1	...	Good	...	...	20801.87
2473	Maple-Red	Acer	rubrum	5	...	...	1	...	Fair	...	...	439.6
2474	Maple-Red	Acer	rubrum	4	...	...	1	...	Good	...	...	393.88
2475	Birch-Sweet	Betula	lenta	4	...	...	1	...	Good	...	...	196.94
2476	Birch-Sweet	Betula	lenta	5	...	...	1	...	Good	...	...	307.72
2477	Birch-Sweet	Betula	lenta	5	...	...	1	...	Good	...	...	307.72
2478	Maple-Red	Acer	rubrum	4	...	...	1	...	Good	...	...	393.88
2479	Beech-American	Fagus	grandifolia	4	...	...	1	...	Good	...	...	393.88
2480	Oak-Northern Red	Quercus	rubra	13	...	...	1	...	Fair	...	...	3714.62
2481	Maple-Red	Acer	rubrum	5	...	...	1	...	Fair	...	...	439.6
2482	Birch-Sweet	Betula	lenta	5	...	...	1	...	Fair	...	...	219.8
2483	Maple-Red	Acer	rubrum	6	...	...	1	...	Good	...	...	886.23
2484	Maple-Red	Acer	rubrum	5	...	...	1	...	Good	...	...	615.44
2485	Tuliptree	Liriodendr	tulipifera	4	...	...	1	...	Good	...	...	393.88
2486	Oak-White	Quercus	alba	29	...	...	1	...	Good	...	...	25879.25
2487	Birch-Sweet	Betula	lenta	5	...	...	1	...	Good	...	...	307.72
2488	Birch-Sweet	Betula	lenta	6	...	...	1	...	Poor	...	...	189.91
2489	Birch-Sweet	Betula	lenta	12	...	...	1	...	Good	...	...	1772.47
2490	Hickory-Shagbark	Carya	ovata	14	...	...	1	...	Good	...	...	4825.05
2491	Maple-Red	Acer	rubrum	13	...	...	1	...	Fair	...	...	2971.7
2492	Elm-American	Ulmus	americana	6	...	...	1	...	Dead	...	...	0
2493	Maple-Sugar	Acer	saccharum	7	...	...	1	...	Good	...	...	1507.83
2494	Tupelo-Black	Nyssa	sylvatica	17	...	...	1	...	Poor	...	...	3430.2
2495	Oak-Northern Red	Quercus	rubra	17	...	...	1	...	Good	...	...	8893.11

2496	Maple-Sugar	Acer	saccharum	6	...	...	1	...	Good	...	...	1107.79
2497	Maple-Red	Acer	rubrum	12	...	...	1	...	Fair	...	...	2532.1
2498	Maple-Sugar	Acer	saccharum	4	...	...	1	...	Good	...	...	492.35
2499	Maple-Sugar	Acer	saccharum	4	...	...	1	...	Fair	...	...	351.68
2500	Maple-Red	Acer	rubrum	11	...	...	1	...	Poor	...	...	1276.6
2501	Tuliptree	Liriodendr	tulipifera	15	...	...	1	...	Fair	...	...	3956.4
2502	Maple-Red	Acer	rubrum	12	...	...	1	...	Fair	...	...	2532.1
2503	Tuliptree	Liriodendr	tulipifera	6	...	...	1	...	Good	...	...	886.23
2504	Maple-Red	Acer	rubrum	7	...	...	1	...	Fair	...	...	861.62
2505	Maple-Norway	Acer	platanoides	9	...	...	1	...	Good	...	...	1246.27
2506	Tuliptree	Liriodendr	tulipifera	21	...	...	1	...	Dead	...	...	0
2507	Tuliptree	Liriodendr	tulipifera	19	...	...	1	...	Good	...	...	8886.95
2508	Tuliptree	Liriodendr	tulipifera	32	...	...	1	...	Good	...	...	24697.88
2509	Tuliptree	Liriodendr	tulipifera	18	...	...	1	...	Dead	...	...	0
2510	Maple-Red	Acer	rubrum	8	...	...	1	...	Poor	...	...	675.23
2511	Maple-Red	Acer	rubrum	5	...	...	1	...	Poor	...	...	263.76
2512	Maple-Red	Acer	rubrum	6	...	...	1	...	Fair	...	...	633.02
2513	Tuliptree	Liriodendr	tulipifera	5	...	...	1	...	Good	...	...	615.44
2514	Tuliptree	Liriodendr	tulipifera	12	...	...	1	...	Good	...	...	3544.93
2515	Tuliptree	Liriodendr	tulipifera	14	...	...	1	...	Good	...	...	4825.05
2516	Tuliptree	Liriodendr	tulipifera	14	...	...	1	...	Good	...	...	4825.05
2517	Maple-Sugar	Acer	saccharum	10	...	...	1	...	Good	...	...	3077.2
2518	Tuliptree	Liriodendr	tulipifera	5	...	...	1	...	Good	...	...	615.44
2519	Maple-Red	Acer	rubrum	9	...	...	1	...	Good	...	...	1994.03
2520	Maple-Red	Acer	rubrum	10	...	...	1	...	Good	...	...	2461.76
2521	Maple-Red	Acer	rubrum	14	...	...	1	...	Fair	...	...	3446.46
2522	Tuliptree	Liriodendr	tulipifera	12	...	...	1	...	Good	...	...	3544.93
2523	Tuliptree	Liriodendr	tulipifera	6	...	...	1	...	Fair	...	...	633.02
2524	Maple-Red	Acer	rubrum	8	...	...	1	...	Fair	...	...	1125.38
2525	Maple-Red	Acer	rubrum	12	...	...	1	...	Good	...	...	3544.93
2526	Maple-Red	Acer	rubrum	9	...	...	1	...	Good	...	...	1994.03
2527	Maple-Red	Acer	rubrum	6	...	...	1	...	Fair	...	...	633.02
2528	Maple-Red	Acer	rubrum	12	...	...	1	...	Good	...	...	3544.93
2529	Maple-Red	Acer	rubrum	14	...	...	1	...	Good	...	...	4825.05
2530	Maple-Red	Acer	rubrum	4	...	...	1	...	Dead	...	...	0
2531	Maple-Red	Acer	rubrum	9	...	...	1	...	Dead	...	...	0
2532	Tuliptree	Liriodendr	tulipifera	6	...	...	1	...	Good	...	...	886.23
2533	Maple-Red	Acer	rubrum	14	...	...	1	...	Fair	...	...	3446.46
2534	Maple-Red	Acer	rubrum	11	...	...	1	...	Poor	...	...	1276.6
2535	Maple-Red	Acer	rubrum	18	...	...	2	...	Good	...	...	10954.83
2536	Maple-Red	Acer	rubrum	6	...	...	1	...	Fair	...	...	633.02
2537	Maple-Red	Acer	rubrum	7	...	...	1	...	Fair	...	...	861.62
2538	Maple-Red	Acer	rubrum	12	...	...	1	...	Poor	...	...	1519.26
2539	Maple-Red	Acer	rubrum	11	...	...	1	...	Fair	...	...	2127.66
2540	Tuliptree	Liriodendr	tulipifera	17	...	...	1	...	Good	...	...	7114.49
2541	Elm-American	Ulmus	americana	8	...	...	1	...	Dead	...	...	0
2542	Tuliptree	Liriodendr	tulipifera	7	...	...	1	...	Poor	...	...	516.97
2543	Maple-Sugar	Acer	saccharum	6	...	...	1	...	Poor	...	...	474.77
2544	Maple-Red	Acer	rubrum	13	...	...	1	...	Fair	...	...	2971.7
2545	Maple-Red	Acer	rubrum	15	...	...	1	...	Fair	...	...	3956.4
2546	Hickory-Pignut	Carya	glabra	4	...	...	1	...	Fair	...	...	281.34
2547	Tuliptree	Liriodendr	tulipifera	7	...	...	1	...	Poor	...	...	516.97

2548	Cherry	Prunus	sp	10	...	...	1	...	Fair	...	...	879.2
2549	Tuliptree	Liriodendr	tulipifera	7	...	...	1	...	Good	...	...	1206.26
2550	Oak-Northern Red	Quercus	rubra	23	...	...	1	...	Good	...	...	16278.39
2551	Birch-Sweet	Betula	lenta	7	...	...	1	...	Good	...	...	603.13
2552	Oak-Northern Red	Quercus	rubra	25	...	...	2	...	Good	...	...	36957.17
2553	Birch-Sweet	Betula	lenta	5	...	...	1	...	Good	...	...	307.72
2554	Elm-American	Ulmus	americana	8	...	...	1	...	Good	...	...	1181.64
2555	Maple-Red	Acer	rubrum	10	...	...	1	...	Fair	...	...	1758.4
2556	Maple-Red	Acer	rubrum	5	...	...	1	...	Fair	...	...	439.6
2557	Maple-Red	Acer	rubrum	4	...	...	1	...	Poor	...	...	168.81
2558	Birch-Sweet	Betula	lenta	6	...	...	1	...	Good	...	...	443.12
2559	Birch-Sweet	Betula	lenta	16	...	...	2	...	Good	...	...	4923.52
2560	Maple-Red	Acer	rubrum	7	...	...	1	...	Poor	...	...	516.97
2561	Birch-Sweet	Betula	lenta	6	...	...	1	...	Good	...	...	443.12
2562	Maple-Red	Acer	rubrum	5	...	...	1	...	Good	...	...	615.44
2563	Birch-Sweet	Betula	lenta	6	...	...	1	...	Good	...	...	443.12
2564	Oak-Northern Red	Quercus	rubra	24	...	...	1	...	Good	...	...	17724.67
2565	Oak-Northern Red	Quercus	rubra	5	...	...	1	...	Good	...	...	769.3
2566	Oak-Northern Red	Quercus	rubra	6	...	...	2	...	Poor	...	...	804.47
2567	Birch-Sweet	Betula	lenta	7	...	...	1	...	Good	...	...	603.13
2568	Hickory-Pignut	Carya	glabra	6	...	...	1	...	Poor	...	...	379.81
2569	Hickory-Shagbark	Carya	ovata	4	...	...	1	...	Good	...	...	393.88
2570	Oak-Northern Red	Quercus	rubra	15	...	...	1	...	Good	...	...	6923.7
2571	Hickory-Pignut	Carya	glabra	11	...	...	2	...	Good	...	...	3372.61
2572	Beech-American	Fagus	grandifolia	4	...	...	1	...	Good	...	...	393.88
2573	Oak-Northern Red	Quercus	rubra	18	...	...	1	...	Good	...	...	9970.13
2574	Maple-Red	Acer	rubrum	4	...	...	1	...	Poor	...	...	168.81
2575	Oak-Northern Red	Quercus	rubra	21	...	...	1	...	Good	...	...	13570.45
2576	Hickory-Pignut	Carya	glabra	6	...	...	1	...	Good	...	...	886.23
2577	Oak-Northern Red	Quercus	rubra	27	...	...	1	...	Good	...	...	22432.79
2578	Hickory-Pignut	Carya	glabra	18	...	...	1	...	Good	...	...	7976.1
2579	Hickory-Pignut	Carya	glabra	6	...	...	1	...	Poor	...	...	379.81
2580	Birch-Sweet	Betula	lenta	4	...	...	1	...	Good	...	...	196.94
2581	Birch-Sweet	Betula	lenta	6	...	...	1	...	Good	...	...	443.12
2582	Oak-Northern Red	Quercus	rubra	23	...	...	2	...	Good	...	...	31172.04
2583	Beech-American	Fagus	grandifolia	7	...	...	1	...	Good	...	...	1206.26
2584	Maple-Sugar	Acer	saccharum	4	...	...	1	...	Good	...	...	492.35
2585	Oak-Northern Red	Quercus	rubra	4	...	...	1	...	Good	...	...	492.35
2586	Birch-Sweet	Betula	lenta	4	...	...	1	...	Good	...	...	196.94
2587	Oak-White	Quercus	alba	13	...	...	2	...	Good	...	...	8277.67
2588	Birch-Sweet	Betula	lenta	5	...	...	1	...	Good	...	...	307.72
2589	Birch-Sweet	Betula	lenta	4	...	...	1	...	Good	...	...	196.94
2590	Birch-Sweet	Betula	lenta	6	...	...	1	...	Good	...	...	443.12
2591	Birch-Sweet	Betula	lenta	5	...	...	1	...	Good	...	...	307.72
2592	Birch-Sweet	Betula	lenta	6	...	...	1	...	Good	...	...	443.12
2593	Oak-White	Quercus	alba	11	...	...	1	...	Good	...	...	3723.41
2594	Oak-Northern Red	Quercus	rubra	30	...	...	1	...	Good	...	...	27694.8
2595	Birch-Sweet	Betula	lenta	4	...	...	1	...	Good	...	...	196.94
2596	Birch-Sweet	Betula	lenta	5	...	...	1	...	Poor	...	...	131.88
2597	Oak-White	Quercus	alba	11	...	...	1	...	Fair	...	...	2659.58
2598	Birch-Sweet	Betula	lenta	6	...	...	1	...	Good	...	...	443.12
2599	Maple-Red	Acer	rubrum	6	...	...	1	...	Good	...	...	886.23

2600	Birch-Sweet	Betula	lenta	6	...	...	1	...	Good	...	...	443.12
3001	Maple-Red	Acer	rubrum	5	...	...	1	...	Good	...	...	615.44
3002	Birch-Sweet	Betula	lenta	17	...	...	2	...	Good	...	...	6708.3
3003	Birch-Sweet	Betula	lenta	8	...	...	1	...	Good	...	...	787.76
3004	Birch-Sweet	Betula	lenta	7	...	...	1	...	Good	...	...	603.13
3005	Oak-Northern Red	Quercus	rubra	23	...	...	2	...	Good	...	...	27387.08
3006	Birch-Sweet	Betula	lenta	6	...	...	1	...	Good	...	...	443.12
3007	Maple-Sugar	Acer	saccharum	4	...	...	1	...	Good	...	...	492.35
3008	Maple-Red	Acer	rubrum	7	...	...	1	...	Fair	...	...	861.62
3009	Tuliptree	Liriodendr	tulipifera	24	...	...	1	...	Good	...	...	14179.74
3010	Maple-Red	Acer	rubrum	6	...	...	1	...	Fair	...	...	633.02
3011	Maple-Red	Acer	rubrum	7	...	...	1	...	Good	...	...	1206.26
3012	Maple-Red	Acer	rubrum	4	...	...	1	...	Fair	...	...	281.34
3013	Maple-Red	Acer	rubrum	8	...	...	1	...	Good	...	...	1575.53
3014	Tuliptree	Liriodendr	tulipifera	11	...	...	1	...	Dead	...	...	0
3015	Maple-Red	Acer	rubrum	5	...	...	1	...	Good	...	...	615.44
3016	Maple-Red	Acer	rubrum	4	...	...	1	...	Dead	...	...	0
3017	Birch-Sweet	Betula	lenta	4	...	...	1	...	Good	...	...	196.94
3018	Tuliptree	Liriodendr	tulipifera	18	...	...	1	...	Good	...	...	7976.1
3019	Elm-American	Ulmus	americana	4	...	...	1	...	Fair	...	...	211.01
3020	Maple-Red	Acer	rubrum	4	...	...	1	...	Fair	...	...	281.34
3021	Maple-Sugar	Acer	saccharum	4	...	...	1	...	Good	...	...	492.35
3022	Maple-Red	Acer	rubrum	5	...	...	1	...	Good	...	...	615.44
3023	Elm-American	Ulmus	americana	6	...	...	1	...	Poor	...	...	284.86
3024	Tuliptree	Liriodendr	tulipifera	30	...	...	1	...	Good	...	...	22155.84
3025	Maple-Red	Acer	rubrum	8	...	...	1	...	Good	...	...	1575.53
3026	Maple-Red	Acer	rubrum	8	...	...	1	...	Fair	...	...	1125.38
3027	Maple-Red	Acer	rubrum	4	...	...	1	...	Good	...	...	393.88
3028	Maple-Red	Acer	rubrum	11	...	...	1	...	Fair	...	...	2127.66
3029	Maple-Red	Acer	rubrum	4	...	...	1	...	Fair	...	...	281.34
3030	Maple-Red	Acer	rubrum	12	...	...	1	...	Good	...	...	3544.93
3031	Maple-Red	Acer	rubrum	7	...	...	1	...	Fair	...	...	861.62
3032	Maple-Red	Acer	rubrum	9	...	...	1	...	Good	...	...	1994.03
3033	Maple-Red	Acer	rubrum	6	...	...	1	...	Fair	...	...	633.02
3034	Maple-Red	Acer	rubrum	13	...	...	1	...	Good	...	...	4160.37
3035	Maple-Red	Acer	rubrum	10	...	...	1	...	Good	...	...	2461.76
3036	Maple-Red	Acer	rubrum	9	...	...	1	...	Fair	...	...	1424.3
3037	Maple-Red	Acer	rubrum	6	...	...	1	...	Fair	...	...	633.02
3038	Maple-Red	Acer	rubrum	5	...	...	1	...	Fair	...	...	439.6
3039	Maple-Red	Acer	rubrum	8	...	...	1	...	Good	...	...	1575.53
3040	Maple-Red	Acer	rubrum	11	...	...	1	...	Good	...	...	2978.73
3041	Maple-Sugar	Acer	saccharum	4	...	...	1	...	Good	...	...	492.35
3042	Maple-Red	Acer	rubrum	5	...	...	1	...	Fair	...	...	439.6
3043	Maple-Red	Acer	rubrum	5	...	...	1	...	Good	...	...	615.44
3044	Maple-Red	Acer	rubrum	8	...	...	1	...	Fair	...	...	1125.38
3045	Maple-Red	Acer	rubrum	8	...	...	1	...	Poor	...	...	675.23
3046	Oak-Northern Red	Quercus	rubra	12	...	...	1	...	Good	...	...	4431.17
3047	Maple-Red	Acer	rubrum	10	...	...	1	...	Fair	...	...	1758.4
3048	Maple-Red	Acer	rubrum	15	...	...	2	...	Good	...	...	9699.33
3049	Maple-Red	Acer	rubrum	12	...	...	1	...	Good	...	...	3544.93
3050	Maple-Red	Acer	rubrum	7	...	...	1	...	Fair	...	...	861.62
3051	Tuliptree	Liriodendr	tulipifera	6	...	...	1	...	Good	...	...	886.23

3052	Maple-Red	Acer	rubrum	5	...	...	1	...	Fair	...	...	439.6
3053	Tuliptree	Liriodendr	tulipifera	6	...	...	1	...	Poor	...	...	379.81
3054	Maple-Red	Acer	rubrum	9	...	...	1	...	Fair	...	...	1424.3
3055	Maple-Sugar	Acer	saccharum	4	...	...	1	...	Good	...	...	492.35
3056	Maple-Sugar	Acer	saccharum	9	...	...	1	...	Good	...	...	2492.53
3057	Elm-American	Ulmus	americana	7	...	...	1	...	Fair	...	...	646.21
3058	Maple-Red	Acer	rubrum	13	...	...	1	...	Good	...	...	4160.37
3059	Beech-American	Fagus	grandifolia	10	...	...	1	...	Good	...	...	2461.76
3060	Beech-American	Fagus	grandifolia	13	...	...	1	...	Good	...	...	4160.37
3061	Maple-Red	Acer	rubrum	6	...	...	1	...	Fair	...	...	633.02
3062	Elm-American	Ulmus	americana	7	...	...	1	...	Fair	...	...	646.21
3063	Tuliptree	Liriodendr	tulipifera	17	...	...	1	...	Good	...	...	7114.49
3064	Maple-Red	Acer	rubrum	15	...	...	1	...	Good	...	...	5538.96
3065	Maple-Red	Acer	rubrum	18	...	...	1	...	Good	...	...	7976.1
3066	Tuliptree	Liriodendr	tulipifera	4	...	...	1	...	Good	...	...	393.88
3067	Maple-Red	Acer	rubrum	9	...	...	1	...	Poor	...	...	854.58
3068	Tuliptree	Liriodendr	tulipifera	4	...	...	1	...	Fair	...	...	281.34
3069	Maple-Red	Acer	rubrum	15	...	...	1	...	Poor	...	...	2373.84
3070	Maple-Red	Acer	rubrum	21	...	...	1	...	Fair	...	...	7754.54
3071	Maple-Red	Acer	rubrum	14	...	...	1	...	Poor	...	...	2067.88
3072	Beech-American	Fagus	grandifolia	13	...	...	1	...	Good	...	...	4160.37
3073	Maple-Red	Acer	rubrum	19	...	...	1	...	Good	...	...	8886.95
3074	Beech-American	Fagus	grandifolia	8	...	...	1	...	Good	...	...	1575.53
3075	Maple-Red	Acer	rubrum	20	...	...	1	...	Good	...	...	9847.04
3076	Beech-American	Fagus	grandifolia	12	...	...	1	...	Good	...	...	3544.93
3077	Maple-Red	Acer	rubrum	12	...	...	1	...	Fair	...	...	2532.1
3078	Maple-Red	Acer	rubrum	13	...	...	1	...	Fair	...	...	2971.7
3079	Beech-American	Fagus	grandifolia	15	...	...	1	...	Good	...	...	5538.96
3080	Beech-American	Fagus	grandifolia	4	...	...	1	...	Fair	...	...	281.34
3081	Maple-Red	Acer	rubrum	14	...	...	1	...	Good	...	...	4825.05
3082	Hickory-Shagbark	Carya	ovata	4	...	...	1	...	Poor	...	...	168.81
3083	Beech-American	Fagus	grandifolia	14	...	...	1	...	Good	...	...	4825.05
3084	Maple-Red	Acer	rubrum	14	...	...	1	...	Poor	...	...	2067.88
3085	Maple-Red	Acer	rubrum	11	...	...	1	...	Poor	...	...	1276.6
3086	Tuliptree	Liriodendr	tulipifera	5	...	...	1	...	Fair	...	...	439.6
3087	Tuliptree	Liriodendr	tulipifera	10	...	...	1	...	Good	...	...	2461.76
3088	Tuliptree	Liriodendr	tulipifera	7	...	...	1	...	Good	...	...	1206.26
3089	Maple-Red	Acer	rubrum	29	...	...	1	...	Good	...	...	20703.4
3090	Maple-Red	Acer	rubrum	14	...	...	1	...	Fair	...	...	3446.46
3091	Maple-Red	Acer	rubrum	13	...	...	1	...	Good	...	...	4160.37
3092	Maple-Red	Acer	rubrum	30	...	...	1	...	Good	...	...	22155.84
3093	Maple-Red	Acer	rubrum	7	...	...	1	...	Good	...	...	1206.26
3094	Maple-Red	Acer	rubrum	14	...	...	1	...	Fair	...	...	3446.46
3095	Maple-Sugar	Acer	saccharum	5	...	...	1	...	Good	...	...	769.3
3096	Beech-American	Fagus	grandifolia	10	...	...	1	...	Good	...	...	2461.76
3097	Beech-American	Fagus	grandifolia	16	...	...	1	...	Good	...	...	6302.11
3098	Beech-American	Fagus	grandifolia	14	...	...	1	...	Good	...	...	4825.05
3099	Maple-Sugar	Acer	saccharum	4	...	...	1	...	Good	...	...	492.35
3100	Maple-Sugar	Acer	saccharum	12	...	...	1	...	Dead	...	...	0
3101	Maple-Sugar	Acer	saccharum	18	...	...	1	...	Good	...	...	9970.13
3102	Oak-White	Quercus	alba	19	...	...	1	...	Dead	...	...	0
3103	Maple-Sugar	Acer	saccharum	4	...	...	1	...	Good	...	...	492.35

3104	Maple-Sugar	Acer	saccharum	6	...	...	1	...	Good	...	...	1107.79
3105	Maple-Norway	Acer	platanoides	7	...	...	1	...	Good	...	...	753.91
3106	Maple-Sugar	Acer	saccharum	4	...	...	1	...	Good	...	...	492.35
3107	Maple-Sugar	Acer	saccharum	4	...	...	1	...	Good	...	...	492.35
3108	Oak-Northern Red	Quercus	rubra	15	...	...	1	...	Good	...	...	6923.7
3109	Oak-Northern Red	Quercus	rubra	11	...	...	1	...	Good	...	...	3723.41
3110	Maple-Sugar	Acer	saccharum	10	...	...	2	...	Good	...	...	5569.73
3111	Maple-Sugar	Acer	saccharum	14	...	...	1	...	Good	...	...	6031.31
3112	Birch-Sweet	Betula	lenta	4	...	...	1	...	Good	...	...	196.94
3113	Maple-Norway	Acer	platanoides	5	...	...	1	...	Good	...	...	384.65
3114	Oak-Northern Red	Quercus	rubra	23	...	...	1	...	Fair	...	...	11627.42
3115	Birch-Sweet	Betula	lenta	10	...	...	1	...	Good	...	...	1230.88
3116	Birch-Sweet	Betula	lenta	6	...	...	1	...	Good	...	...	443.12
3117	Birch-Sweet	Betula	lenta	8	...	...	1	...	Good	...	...	787.76
3118	Birch-Sweet	Betula	lenta	13	...	...	1	...	Good	...	...	2080.19
3119	Birch-Sweet	Betula	lenta	8	...	...	1	...	Good	...	...	787.76
3120	Birch-Sweet	Betula	lenta	4	...	...	1	...	Good	...	...	196.94
3121	Birch-Sweet	Betula	lenta	12	...	...	1	...	Good	...	...	1772.47
3122	Oak-Northern Red	Quercus	rubra	42	...	...	1	...	Good	...	...	48320.27
3123	Birch-Sweet	Betula	lenta	8	...	...	1	...	Good	...	...	787.76
3124	Birch-Sweet	Betula	lenta	9	...	...	1	...	Fair	...	...	712.15
3125	Birch-Sweet	Betula	lenta	10	...	...	1	...	Good	...	...	1230.88
3126	Birch-Sweet	Betula	lenta	9	...	...	1	...	Good	...	...	997.01
3127	Maple-Sugar	Acer	saccharum	5	...	...	2	...	Good	...	...	1046.25
3128	Hickory-Pignut	Carya	glabra	18	...	...	1	...	Good	...	...	7976.1
3129	Maple-Sugar	Acer	saccharum	11	...	...	1	...	Dead	...	...	0
3130	Oak-White	Quercus	alba	25	...	...	1	...	Good	...	...	19232.5
3131	Maple-Sugar	Acer	saccharum	5	...	...	1	...	Good	...	...	769.3
3132	Maple-Sugar	Acer	saccharum	8	...	...	1	...	Good	...	...	1969.41
3133	Maple-Sugar	Acer	saccharum	9	...	...	1	...	Good	...	...	2492.53
3134	Maple-Sugar	Acer	saccharum	5	...	...	1	...	Good	...	...	769.3
3135	Birch-Sweet	Betula	lenta	11	...	...	1	...	Fair	...	...	1063.83
3136	Oak-Northern Red	Quercus	rubra	24	...	...	1	...	Good	...	...	17724.67
3137	Maple-Sugar	Acer	saccharum	5	...	...	1	...	Good	...	...	769.3
3138	Birch-Sweet	Betula	lenta	8	...	...	1	...	Fair	...	...	562.69
3139	Birch-Sweet	Betula	lenta	6	...	...	1	...	Fair	...	...	316.51
3140	Hickory-Pignut	Carya	glabra	6	...	...	1	...	Good	...	...	886.23
3141	Serviceberry	Amelanchi	sp	5	...	...	1	...	Dead	...	...	0
3142	Hickory-Pignut	Carya	glabra	6	...	...	1	...	Good	...	...	886.23
3143	Hickory-Pignut	Carya	glabra	6	...	...	1	...	Good	...	...	886.23
3144	Maple-Sugar	Acer	saccharum	5	...	...	2	...	Good	...	...	892.39
3145	Birch-Sweet	Betula	lenta	17	...	...	1	...	Fair	...	...	2540.89
3146	Birch-Sweet	Betula	lenta	11	...	...	1	...	Good	...	...	1489.36
3147	Oak-Northern Red	Quercus	rubra	26	...	...	1	...	Fair	...	...	14858.48
3148	Maple-Sugar	Acer	saccharum	9	...	...	1	...	Good	...	...	2492.53
3149	Oak-Northern Red	Quercus	rubra	34	...	...	1	...	Fair	...	...	24694.32
3150	Birch-Sweet	Betula	lenta	10	...	...	1	...	Fair	...	...	879.2
3151	Maple-Sugar	Acer	saccharum	48	...	...	1	...	Good	...	...	57528.35
3152	Beech-American	Fagus	grandifolia	6	...	...	1	...	Good	...	...	886.23
3153	Oak-Northern Red	Quercus	rubra	5	...	...	1	...	Dead	...	...	0
3154	Birch-Sweet	Betula	lenta	11	...	...	1	...	Good	...	...	1489.36
3155	Oak-Northern Red	Quercus	rubra	32	...	...	1	...	Good	...	...	30872.35

3156	Maple-Sugar	Acer	saccharum	4	...	...	1	...	Good	...	...	492.35
3157	Maple-Sugar	Acer	saccharum	7	...	...	2	...	Good	...	...	2000.18
3158	Oak-Northern Red	Quercus	rubra	23	...	...	1	...	Good	...	...	16278.39
3159	Oak-Northern Red	Quercus	rubra	24	...	...	1	...	Good	...	...	17724.67
3160	Maple-Sugar	Acer	saccharum	5	...	...	1	...	Good	...	...	769.3
3161	Maple-Norway	Acer	platanoides	5	...	...	1	...	Good	...	...	384.65
3162	Oak-Northern Red	Quercus	rubra	21	...	...	1	...	Good	...	...	13570.45
3163	Oak-Northern Red	Quercus	rubra	35	...	...	1	...	Good	...	...	36382.5
3164	Maple-Sugar	Acer	saccharum	5	...	...	1	...	Good	...	...	769.3
3165	Maple-Red	Acer	rubrum	5	...	...	1	...	Fair	...	...	439.6
3166	Birch-Sweet	Betula	lenta	14	...	...	1	...	Good	...	...	2412.52
3167	Birch-Sweet	Betula	lenta	15	...	...	1	...	Good	...	...	2769.48
3168	Birch-Sweet	Betula	lenta	11	...	...	1	...	Good	...	...	1489.36
3169	Birch-Sweet	Betula	lenta	13	...	...	1	...	Good	...	...	2080.19
3170	Birch-Sweet	Betula	lenta	13	...	...	1	...	Good	...	...	2080.19
3171	Birch-Sweet	Betula	lenta	13	...	...	1	...	Good	...	...	2080.19
3172	Birch-Sweet	Betula	lenta	15	...	...	1	...	Good	...	...	2769.48
3173	Hickory-Pignut	Carya	glabra	4	...	...	1	...	Good	...	...	393.88
3174	Maple-Red	Acer	rubrum	13	...	...	1	...	Good	...	...	4160.37
3175	Maple-Sugar	Acer	saccharum	4	...	...	1	...	Good	...	...	492.35
3176	Maple-Sugar	Acer	saccharum	24	...	...	1	...	Dead	...	...	0
3177	Maple-Sugar	Acer	saccharum	5	...	...	1	...	Good	...	...	769.3
3178	Maple-Sugar	Acer	saccharum	4	...	...	1	...	Fair	...	...	351.68
3179	Birch-Sweet	Betula	lenta	5	...	...	1	...	Good	...	...	307.72
3180	Maple-Sugar	Acer	saccharum	26	...	...	1	...	Good	...	...	20801.87
3181	Maple-Norway	Acer	platanoides	6	...	...	1	...	Good	...	...	553.9
3182	Maple-Norway	Acer	platanoides	6	...	...	1	...	Good	...	...	553.9
3183	Maple-Norway	Acer	platanoides	4	...	...	1	...	Good	...	...	246.18
3184	Oak-White	Quercus	alba	28	...	...	1	...	Fair	...	...	17232.32
3185	Maple-Norway	Acer	platanoides	5	...	...	1	...	Good	...	...	384.65
3186	Hickory-Pignut	Carya	glabra	16	...	...	1	...	Good	...	...	6302.11
3187	Hickory-Pignut	Carya	glabra	18	...	...	1	...	Good	...	...	7976.1
3188	Maple-Norway	Acer	platanoides	4	...	...	1	...	Good	...	...	246.18
3189	Oak-Northern Red	Quercus	rubra	25	...	...	1	...	Fair	...	...	13737.5
3190	Maple-Sugar	Acer	saccharum	4	...	...	1	...	Good	...	...	492.35
3191	Oak-Northern Red	Quercus	rubra	10	...	...	1	...	Good	...	...	3077.2
3192	Maple-Red	Acer	rubrum	6	...	...	1	...	Fair	...	...	633.02
3193	Sassafras-Common	Sassafras	albidum	14	...	...	1	...	Fair	...	...	3446.46
3194	Sassafras-Common	Sassafras	albidum	11	...	...	1	...	Dead	...	...	0
3195	Oak-Northern Red	Quercus	rubra	6	...	...	1	...	Good	...	...	1107.79
3196	Sassafras-Common	Sassafras	albidum	19	...	...	1	...	Fair	...	...	6347.82
3197	Maple-Red	Acer	rubrum	11	...	...	1	...	Good	...	...	2978.73
3198	Maple-Red	Acer	rubrum	6	...	...	1	...	Good	...	...	886.23
3199	Maple-Sugar	Acer	saccharum	12	...	...	1	...	Good	...	...	4431.17
3200	Maple-Red	Acer	rubrum	8	...	...	1	...	Good	...	...	1575.53
3201	Maple-Sugar	Acer	saccharum	10	...	...	1	...	Good	...	...	3077.2
3202	Tuliptree	Liriodendr	tulipifera	32	...	...	1	...	Good	...	...	24697.88
3203	Hickory-Pignut	Carya	glabra	8	...	...	1	...	Fair	...	...	1125.38
3204	Beech-American	Fagus	grandifolia	5	...	...	1	...	Good	...	...	615.44
3205	Beech-American	Fagus	grandifolia	20	...	...	1	...	Good	...	...	9847.04
3206	Maple-Red	Acer	rubrum	10	...	...	1	...	Poor	...	...	1055.04
3207	Beech-American	Fagus	grandifolia	5	...	...	1	...	Good	...	...	615.44

3208	Beech-American	Fagus	grandifolia	11	...	...	1	...	Good	...	...	2978.73
3209	Elm-American	Ulmus	americana	11	...	...	2	...	Fair	...	...	2914.55
3210	Oak-Northern Red	Quercus	rubra	17	...	...	1	...	Good	...	...	8893.11
3211	Tuliptree	Liriodendr	tulipifera	25	...	...	1	...	Good	...	...	15386
3212	Tuliptree	Liriodendr	tulipifera	4	...	...	1	...	Good	...	...	393.88
3213	Planetree-London	Platanus	x acerifolia	18	...	...	1	...	Good	...	...	6979.09
3214	Tuliptree	Liriodendr	tulipifera	4	...	...	1	...	Good	...	...	393.88
3215	Tuliptree	Liriodendr	tulipifera	9	...	...	1	...	Fair	...	...	1424.3
3216	Beech-American	Fagus	grandifolia	9	...	...	1	...	Good	...	...	1994.03
3217	Maple-Red	Acer	rubrum	18	...	...	1	...	Fair	...	...	5697.22
3218	Beech-American	Fagus	grandifolia	10	...	...	1	...	Good	...	...	2461.76
3219	Tuliptree	Liriodendr	tulipifera	9	...	...	1	...	Fair	...	...	1424.3
3220	Beech-American	Fagus	grandifolia	4	...	...	1	...	Good	...	...	393.88
3221	Tuliptree	Liriodendr	tulipifera	13	...	...	1	...	Good	...	...	4160.37
3222	Hickory-Shagbark	Carya	ovata	13	...	...	1	...	Good	...	...	4160.37
3223	Oak-Northern Red	Quercus	rubra	14	...	...	1	...	Good	...	...	6031.31
3224	Maple-Sugar	Acer	saccharum	4	...	...	1	...	Good	...	...	492.35
3225	Tuliptree	Liriodendr	tulipifera	21	...	...	1	...	Good	...	...	10856.36
3226	Oak-Northern Red	Quercus	rubra	26	...	...	1	...	Good	...	...	20801.87
3227	Beech-American	Fagus	grandifolia	4	...	...	1	...	Poor	...	...	168.81
3228	Beech-American	Fagus	grandifolia	11	...	...	1	...	Good	...	...	2978.73
3229	Maple-Red	Acer	rubrum	5	...	...	1	...	Good	...	...	615.44
3230	Maple-Red	Acer	rubrum	11	...	...	1	...	Good	...	...	2978.73
3231	Birch-Sweet	Betula	lenta	10	...	...	1	...	Good	...	...	1230.88
3232	Maple-Red	Acer	rubrum	10	...	...	1	...	Poor	...	...	1055.04
3233	Hickory-Pignut	Carya	glabra	7	...	...	1	...	Poor	...	...	516.97
3234	Beech-American	Fagus	grandifolia	5	...	...	1	...	Good	...	...	615.44
3235	Hickory-Shagbark	Carya	ovata	16	...	...	1	...	Good	...	...	6302.11
3236	Tuliptree	Liriodendr	tulipifera	23	...	...	1	...	Good	...	...	13022.71
3237	Hickory-Pignut	Carya	glabra	7	...	...	1	...	Good	...	...	1206.26
3238	Oak-Northern Red	Quercus	rubra	13	...	...	1	...	Good	...	...	5200.47
3239	Birch-Sweet	Betula	lenta	5	...	...	1	...	Good	...	...	307.72
3240	Oak-Northern Red	Quercus	rubra	12	...	...	1	...	Fair	...	...	3165.12
3241	Hickory-Pignut	Carya	glabra	4	...	...	1	...	Poor	...	...	168.81
3242	Maple-Red	Acer	rubrum	9	...	...	1	...	Good	...	...	1994.03
3243	Tuliptree	Liriodendr	tulipifera	23	...	...	1	...	Good	...	...	13022.71
3244	Hickory-Pignut	Carya	glabra	7	...	...	1	...	Fair	...	...	861.62
3245	Tuliptree	Liriodendr	tulipifera	13	...	...	1	...	Good	...	...	4160.37
3246	Tuliptree	Liriodendr	tulipifera	14	...	...	1	...	Good	...	...	4825.05
3247	Maple-Red	Acer	rubrum	9	...	...	2	...	Good	...	...	2880.26
3248	Hickory-Shagbark	Carya	ovata	18	...	...	1	...	Good	...	...	7976.1
3249	Tuliptree	Liriodendr	tulipifera	19	...	...	1	...	Good	...	...	8886.95
3250	Tuliptree	Liriodendr	tulipifera	4	...	...	1	...	Good	...	...	393.88
3251	Hickory-Pignut	Carya	glabra	6	...	...	1	...	Good	...	...	886.23
3252	Sassafras-Common	Sassafras	albidum	14	...	...	1	...	Good	...	...	4825.05
3253	Sassafras-Common	Sassafras	albidum	12	...	...	1	...	Good	...	...	3544.93
3254	Sassafras-Common	Sassafras	albidum	8	...	...	1	...	Fair	...	...	1125.38
3255	Oak-Northern Red	Quercus	rubra	24	...	...	1	...	Good	...	...	17724.67
3256	Beech-American	Fagus	grandifolia	6	...	...	1	...	Good	...	...	886.23
3257	Tuliptree	Liriodendr	tulipifera	6	...	...	1	...	Fair	...	...	633.02
3258	Maple-Red	Acer	rubrum	9	...	...	1	...	Good	...	...	1994.03
3259	Tuliptree	Liriodendr	tulipifera	25	...	...	2	...	Good	...	...	29565.74

3260	Maple-Sugar	Acer	saccharum	4	...	...	1	...	Good	...	...	492.35
3261	Tuliptree	Liriodendr	tulipifera	32	...	...	1	...	Good	...	...	24697.88
3262	Hickory-Shagbark	Carya	ovata	13	...	...	1	...	Good	...	...	4160.37
3263	Hickory-Shagbark	Carya	ovata	12	...	...	1	...	Good	...	...	3544.93
3264	Oak-Northern Red	Quercus	rubra	8	...	...	1	...	Good	...	...	1969.41
3265	Oak-Northern Red	Quercus	rubra	24	...	...	1	...	Good	...	...	17724.67
3266	Oak-White	Quercus	alba	15	...	...	1	...	Good	...	...	6923.7
3267	Tuliptree	Liriodendr	tulipifera	6	...	...	1	...	Good	...	...	886.23
3268	Maple-Red	Acer	rubrum	9	...	...	3	...	Fair	...	...	2496.93
3269	Maple-Red	Acer	rubrum	6	...	...	1	...	Dead	...	...	0
3270	Oak-Northern Red	Quercus	rubra	6	...	...	1	...	Dead	...	...	0
3271	Hickory-Shagbark	Carya	ovata	6	...	...	1	...	Good	...	...	886.23
3272	Beech-American	Fagus	grandifolia	4	...	...	1	...	Good	...	...	393.88
3273	Maple-Red	Acer	rubrum	14	...	...	3	...	Good	...	...	10191.69
3274	Tuliptree	Liriodendr	tulipifera	6	...	...	1	...	Good	...	...	886.23
3275	Maple-Red	Acer	rubrum	5	...	...	1	...	Fair	...	...	439.6
3276	Hornbeam-American	Carpinus	caroliniana	4	...	...	1	...	Good	...	...	393.88
3277	Tuliptree	Liriodendr	tulipifera	8	...	...	1	...	Good	...	...	1575.53
3278	Oak-Northern Red	Quercus	rubra	26	...	...	1	...	Good	...	...	20801.87
3279	Maple-Sugar	Acer	saccharum	8	...	...	1	...	Good	...	...	1969.41
3280	Maple-Sugar	Acer	saccharum	4	...	...	1	...	Good	...	...	492.35
3281	Tuliptree	Liriodendr	tulipifera	4	...	...	1	...	Good	...	...	393.88
3282	Maple-Red	Acer	rubrum	16	...	...	1	...	Good	...	...	6302.11
3283	Maple-Red	Acer	rubrum	14	...	...	1	...	Good	...	...	4825.05
3284	Cherry	Prunus	sp	12	...	...	1	...	Fair	...	...	1266.05
3285	Maple-Red	Acer	rubrum	5	...	...	1	...	Good	...	...	615.44
3286	Birch-Sweet	Betula	lenta	4	...	...	1	...	Good	...	...	196.94
3287	Poplar-Eastern	Populus	deltoides	14	...	...	1	...	Good	...	...	1206.26
3288	Maple-Sugar	Acer	saccharum	5	...	...	1	...	Good	...	...	769.3
3289	Oak-Northern Red	Quercus	rubra	5	...	...	1	...	Good	...	...	769.3
3290	Hickory-Pignut	Carya	glabra	17	...	...	2	...	Good	...	...	8690.01
3291	Hickory-Pignut	Carya	glabra	17	...	...	2	...	Good	...	...	8320.75
3292	Maple-Sugar	Acer	saccharum	6	...	...	1	...	Good	...	...	1107.79
3293	Maple-Sugar	Acer	saccharum	5	...	...	1	...	Good	...	...	769.3
3294	Maple-Sugar	Acer	saccharum	6	...	...	1	...	Good	...	...	1107.79
3295	Maple-Sugar	Acer	saccharum	5	...	...	1	...	Good	...	...	769.3
3296	Oak-Northern Red	Quercus	rubra	19	...	...	1	...	Good	...	...	11108.69
3297	Birch-Sweet	Betula	lenta	19	...	...	1	...	Good	...	...	4443.48
3298	Oak-Northern Red	Quercus	rubra	4	...	...	1	...	Good	...	...	492.35
3299	Oak-Northern Red	Quercus	rubra	23	...	...	1	...	Good	...	...	16278.39
3300	Maple-Sugar	Acer	saccharum	4	...	...	1	...	Good	...	...	492.35
3301	Maple-Sugar	Acer	saccharum	5	...	...	1	...	Good	...	...	769.3
3302	Maple-Sugar	Acer	saccharum	15	...	...	2	...	Good	...	...	8431.53
3303	Maple-Red	Acer	rubrum	10	...	...	1	...	Good	...	...	2461.76
3304	Maple-Sugar	Acer	saccharum	9	...	...	1	...	Good	...	...	2492.53
3305	Maple-Red	Acer	rubrum	11	...	...	1	...	Good	...	...	2978.73
3306	Oak-White	Quercus	alba	28	...	...	1	...	Dead	...	...	0
3307	Maple-Red	Acer	rubrum	11	...	...	2	...	Good	...	...	3594.17
3308	Maple-Sugar	Acer	saccharum	5	...	...	1	...	Good	...	...	769.3
3309	Tupelo-Black	Nyssa	sylvatica	5	...	...	1	...	Good	...	...	692.37
3310	Maple-Sugar	Acer	saccharum	6	...	...	1	...	Good	...	...	1107.79
3311	Maple-Red	Acer	rubrum	7	...	...	1	...	Good	...	...	1206.26

3312	Maple-Sugar	Acer	saccharum	6	...	...	2	...	Dead	...	...	0
3313	Oak-White	Quercus	alba	33	...	...	1	...	Good	...	...	32735.33
3314	Maple-Red	Acer	rubrum	11	...	...	1	...	Fair	...	...	2127.66
3315	Maple-Red	Acer	rubrum	17	...	...	1	...	Good	...	...	7114.49
3316	Maple-Norway	Acer	platanoides	4	...	...	1	...	Good	...	...	246.18
3317	Maple-Red	Acer	rubrum	7	...	...	1	...	Fair	...	...	861.62
3318	Maple-Norway	Acer	platanoides	4	...	...	1	...	Good	...	...	246.18
3319	Maple-Red	Acer	rubrum	5	...	...	1	...	Fair	...	...	439.6
3320	Maple-Norway	Acer	platanoides	4	...	...	1	...	Good	...	...	246.18
3321	Maple-Norway	Acer	platanoides	6	...	...	1	...	Good	...	...	553.9
3322	Maple-Sugar	Acer	saccharum	4	...	...	1	...	Good	...	...	492.35
3323	Tupelo-Black	Nyssa	sylvatica	6	...	...	1	...	Good	...	...	997.01
3324	Maple-Sugar	Acer	saccharum	24	...	...	1	...	Good	...	...	17724.67
3325	Maple-Sugar	Acer	saccharum	22	...	...	1	...	Good	...	...	14893.65
3326	Maple-Sugar	Acer	saccharum	4	...	...	2	...	Good	...	...	615.44
3327	Maple-Sugar	Acer	saccharum	14	...	...	1	...	Good	...	...	6031.31
3328	Maple-Sugar	Acer	saccharum	10	...	...	1	...	Good	...	...	3077.2
3329	Oak-White	Quercus	alba	26	...	...	1	...	Dead	...	...	0
3330	Maple-Sugar	Acer	saccharum	7	...	...	1	...	Good	...	...	1507.83
3331	Maple-Sugar	Acer	saccharum	5	...	...	1	...	Good	...	...	769.3
3332	Maple-Sugar	Acer	saccharum	6	...	...	1	...	Good	...	...	1107.79
3333	Maple-Sugar	Acer	saccharum	4	...	...	1	...	Good	...	...	492.35
3334	Maple-Sugar	Acer	saccharum	7	...	...	2	...	Good	...	...	2277.13
3335	Maple-Sugar	Acer	saccharum	7	...	...	1	...	Good	...	...	1507.83
3336	Maple-Sugar	Acer	saccharum	4	...	...	1	...	Good	...	...	492.35
3337	Oak-Northern Red	Quercus	rubra	31	...	...	2	...	Good	...	...	56677.91
3338	Maple-Sugar	Acer	saccharum	4	...	...	1	...	Good	...	...	492.35
3339	Maple-Sugar	Acer	saccharum	5	...	...	1	...	Good	...	...	769.3
3340	Maple-Sugar	Acer	saccharum	4	...	...	1	...	Good	...	...	492.35
3341	Hickory-Pignut	Carya	glabra	4	...	...	1	...	Good	...	...	393.88
3342	Sassafras-Common	Sassafras	albidum	10	...	...	1	...	Good	...	...	2461.76
3343	Sassafras-Common	Sassafras	albidum	11	...	...	1	...	Good	...	...	2978.73
3344	Sassafras-Common	Sassafras	albidum	10	...	...	1	...	Good	...	...	2461.76
3345	Maple-Sugar	Acer	saccharum	6	...	...	1	...	Good	...	...	1107.79
3346	Sassafras-Common	Sassafras	albidum	10	...	...	1	...	Good	...	...	2461.76
3347	Hickory-Pignut	Carya	glabra	18	...	...	1	...	Good	...	...	7976.1
3348	Maple-Sugar	Acer	saccharum	8	...	...	1	...	Good	...	...	1969.41
3349	Maple-Sugar	Acer	saccharum	7	...	...	1	...	Good	...	...	1507.83
3350	Maple-Sugar	Acer	saccharum	8	...	...	3	...	Fair	...	...	2154.04
3351	Oak-Northern Red	Quercus	rubra	25	...	...	1	...	Good	...	...	19232.5
3352	Maple-Sugar	Acer	saccharum	9	...	...	1	...	Good	...	...	2492.53
3353	Maple-Sugar	Acer	saccharum	7	...	...	1	...	Good	...	...	1507.83
3354	Serviceberry	Amelanchi	sp	5	...	...	1	...	Good	...	...	692.37
3355	Hickory-Pignut	Carya	glabra	22	...	...	1	...	Good	...	...	11914.92
3356	Hickory-Pignut	Carya	glabra	13	...	...	1	...	Good	...	...	4160.37
3357	Maple-Sugar	Acer	saccharum	5	...	...	1	...	Good	...	...	769.3
3358	Maple-Sugar	Acer	saccharum	8	...	...	1	...	Good	...	...	1969.41
3359	Hickory-Pignut	Carya	glabra	18	...	...	1	...	Good	...	...	7976.1
3360	Maple-Sugar	Acer	saccharum	4	...	...	1	...	Good	...	...	492.35
3361	Maple-Sugar	Acer	saccharum	13	...	...	1	...	Good	...	...	5200.47
3362	Sassafras-Common	Sassafras	albidum	13	...	...	1	...	Good	...	...	4160.37
3363	Maple-Sugar	Acer	saccharum	11	...	...	1	...	Good	...	...	3723.41

3364	Hickory-Pignut	Carya	glabra	16	...	...	1	...	Good	...	...	6302.11
3365	Maple-Sugar	Acer	saccharum	8	...	...	1	...	Good	...	...	1969.41
3366	Sassafras-Common	Sassafras	albidum	9	...	...	1	...	Good	...	...	1994.03
3367	Maple-Sugar	Acer	saccharum	5	...	...	1	...	Good	...	...	769.3
3368	Maple-Sugar	Acer	saccharum	5	...	...	1	...	Good	...	...	769.3
3369	Tree of Heaven	Ailanthus	altissima	9	...	...	1	...	Good	...	...	249.25
3370	Maple-Sugar	Acer	saccharum	5	...	...	1	...	Good	...	...	769.3
3371	Maple-Sugar	Acer	saccharum	8	...	...	2	...	Good	...	...	3077.2
3372	Maple-Sugar	Acer	saccharum	5	...	...	1	...	Good	...	...	769.3
3373	Maple-Sugar	Acer	saccharum	5	...	...	2	...	Good	...	...	892.39
3374	Maple-Sugar	Acer	saccharum	5	...	...	2	...	Good	...	...	1046.25
3375	Maple-Sugar	Acer	saccharum	9	...	...	1	...	Good	...	...	2492.53
3376	Maple-Sugar	Acer	saccharum	12	...	...	3	...	Good	...	...	9477.78
3377	Maple-Sugar	Acer	saccharum	4	...	...	1	...	Good	...	...	492.35
3378	Maple-Sugar	Acer	saccharum	4	...	...	1	...	Good	...	...	492.35
3379	Maple-Sugar	Acer	saccharum	12	...	...	1	...	Good	...	...	4431.17
3380	Maple-Sugar	Acer	saccharum	7	...	...	2	...	Good	...	...	2000.18
3381	Elm-American	Ulmus	americana	5	...	...	1	...	Dead	...	...	0
3382	Maple-Sugar	Acer	saccharum	5	...	...	1	...	Good	...	...	769.3
3383	Maple-Sugar	Acer	saccharum	19	...	...	1	...	Good	...	...	11108.69
3384	Maple-Sugar	Acer	saccharum	8	...	...	1	...	Good	...	...	1969.41
3385	Maple-Sugar	Acer	saccharum	13	...	...	1	...	Good	...	...	5200.47
3386	Hickory-Pignut	Carya	glabra	25	...	...	1	...	Good	...	...	15386
3387	Maple-Sugar	Acer	saccharum	18	...	...	1	...	Good	...	...	9970.13
3388	Maple-Sugar	Acer	saccharum	5	...	...	1	...	Good	...	...	769.3
3389	Hickory-Shagbark	Carya	ovata	11	...	...	1	...	Poor	...	...	1276.6
3390	Hickory-Shagbark	Carya	ovata	12	...	...	1	...	Good	...	...	3544.93
3391	Maple-Sugar	Acer	saccharum	7	...	...	1	...	Good	...	...	1507.83
3392	Oak-Northern Red	Quercus	rubra	39	...	...	1	...	Good	...	...	43361.67
3393	Hickory-Pignut	Carya	glabra	18	...	...	1	...	Good	...	...	7976.1
3394	Maple-Sugar	Acer	saccharum	6	...	...	2	...	Good	...	...	1600.14
3395	Maple-Sugar	Acer	saccharum	8	...	...	1	...	Good	...	...	1969.41
3396	Hickory-Pignut	Carya	glabra	10	...	...	1	...	Good	...	...	2461.76
3397	Maple-Sugar	Acer	saccharum	12	...	...	1	...	Good	...	...	4431.17
3398	Maple-Sugar	Acer	saccharum	6	...	...	1	...	Good	...	...	1107.79
3399	Maple-Sugar	Acer	saccharum	7	...	...	2	...	Good	...	...	2000.18
3400	Oak-Northern Red	Quercus	rubra	43	...	...	1	...	Good	...	...	49920.61
3401	Sassafras-Common	Sassafras	albidum	12	...	...	1	...	Good	...	...	3544.93
3402	Hickory-Pignut	Carya	glabra	4	...	...	1	...	Good	...	...	393.88
3403	Maple-Sugar	Acer	saccharum	13	...	...	1	...	Good	...	...	5200.47
3404	Maple-Sugar	Acer	saccharum	9	...	...	1	...	Good	...	...	2492.53
3405	Maple-Sugar	Acer	saccharum	14	...	...	1	...	Good	...	...	6031.31
3406	Maple-Sugar	Acer	saccharum	6	...	...	1	...	Dead	...	...	0
3407	Maple-Sugar	Acer	saccharum	12	...	...	1	...	Good	...	...	4431.17
3408	Maple-Sugar	Acer	saccharum	8	...	...	1	...	Good	...	...	1969.41
3409	Oak-Northern Red	Quercus	rubra	48	...	...	1	...	Good	...	...	57528.35
3410	Maple-Sugar	Acer	saccharum	7	...	...	1	...	Good	...	...	1507.83
3411	Maple-Sugar	Acer	saccharum	24	...	...	1	...	Good	...	...	17724.67
3412	Tupelo-Black	Nyssa	sylvatica	6	...	...	1	...	Good	...	...	997.01
3413	Maple-Sugar	Acer	saccharum	5	...	...	1	...	Good	...	...	769.3
3414	Tupelo-Black	Nyssa	sylvatica	9	...	...	1	...	Good	...	...	2243.28
3415	Tupelo-Black	Nyssa	sylvatica	5	...	...	1	...	Good	...	...	692.37

3416	Tupelo-Black	Nyssa	sylvatica	17	...	...	1	...	Good	...	...	8003.8
3417	Tupelo-Black	Nyssa	sylvatica	5	...	...	1	...	Good	...	...	692.37
3418	Tupelo-Black	Nyssa	sylvatica	15	...	...	1	...	Good	...	...	6231.33
3419	Tupelo-Black	Nyssa	sylvatica	4	...	...	1	...	Good	...	...	443.12
3420	Tupelo-Black	Nyssa	sylvatica	14	...	...	1	...	Good	...	...	5428.18
3421	Tupelo-Black	Nyssa	sylvatica	5	...	...	1	...	Good	...	...	692.37
3422	Ash-White	Fraxinus	americana	32	...	...	1	...	Dead	...	...	0
3423	Maple-Sugar	Acer	saccharum	6	...	...	1	...	Good	...	...	1107.79
3424	Hickory-Pignut	Carya	glabra	11	...	...	1	...	Good	...	...	2978.73
3425	Maple-Sugar	Acer	saccharum	4	...	...	1	...	Good	...	...	492.35
3426	Oak-Northern Red	Quercus	rubra	27	...	...	1	...	Good	...	...	22432.79
3427	Tupelo-Black	Nyssa	sylvatica	6	...	...	1	...	Good	...	...	997.01
3428	Hickory-Pignut	Carya	glabra	20	...	...	1	...	Good	...	...	9847.04
3429	Maple-Norway	Acer	platanoides	4	...	...	1	...	Good	...	...	246.18
3430	Sassafras-Common	Sassafras	albidum	12	...	...	1	...	Good	...	...	3544.93
3431	Sassafras-Common	Sassafras	albidum	9	...	...	1	...	Good	...	...	1994.03
3432	Maple-Norway	Acer	platanoides	5	...	...	1	...	Good	...	...	384.65
3433	Maple-Sugar	Acer	saccharum	4	...	...	1	...	Good	...	...	492.35
3434	Hickory-Pignut	Carya	glabra	20	...	...	1	...	Good	...	...	9847.04
3435	Hickory-Pignut	Carya	glabra	13	...	...	1	...	Good	...	...	4160.37
3436	Maple-Red	Acer	rubrum	4	...	...	1	...	Poor	...	...	168.81
3437	Oak-Northern Red	Quercus	rubra	17	...	...	1	...	Good	...	...	8893.11
3438	Maple-Sugar	Acer	saccharum	8	...	...	1	...	Good	...	...	1969.41
3439	Maple-Norway	Acer	platanoides	5	...	...	1	...	Good	...	...	384.65
3440	Maple-Norway	Acer	platanoides	5	...	...	1	...	Good	...	...	384.65
3441	Maple-Norway	Acer	platanoides	6	...	...	1	...	Good	...	...	553.9
3442	Oak-Northern Red	Quercus	rubra	9	...	...	1	...	Good	...	...	2492.53
3443	Hickory-Pignut	Carya	glabra	15	...	...	1	...	Good	...	...	5538.96
3444	Oak-White	Quercus	alba	23	...	...	1	...	Good	...	...	16278.39
3445	Elm-American	Ulmus	americana	9	...	...	1	...	Good	...	...	1495.52
3446	Maple-Norway	Acer	platanoides	6	...	...	1	...	Good	...	...	553.9
3447	Maple-Norway	Acer	platanoides	9	...	...	1	...	Good	...	...	1246.27
3448	Maple-Sugar	Acer	saccharum	5	...	...	1	...	Good	...	...	769.3
3449	Maple-Norway	Acer	platanoides	4	...	...	1	...	Good	...	...	246.18
3450	Maple-Norway	Acer	platanoides	5	...	...	1	...	Good	...	...	384.65
3451	Maple-Norway	Acer	platanoides	4	...	...	1	...	Good	...	...	246.18
3452	Birch-Sweet	Betula	lenta	15	...	...	1	...	Good	...	...	2769.48
3453	Maple-Sugar	Acer	saccharum	5	...	...	1	...	Good	...	...	769.3
3454	Oak-Northern Red	Quercus	rubra	82	...	...	1	...	Good	...	...	91847.95
3455	Elm-American	Ulmus	americana	8	...	...	1	...	Good	...	...	1181.64
3456	Maple-Sugar	Acer	saccharum	8	...	...	1	...	Good	...	...	1969.41
3457	Hickory-Pignut	Carya	glabra	8	...	...	1	...	Good	...	...	1575.53
3458	Oak-Northern Red	Quercus	rubra	34	...	...	1	...	Good	...	...	34572.05
3459	Maple-Red	Acer	rubrum	9	...	...	1	...	Good	...	...	1994.03
3460	Hickory-Pignut	Carya	glabra	6	...	...	1	...	Dead	...	...	0
3461	Ash-White	Fraxinus	americana	10	...	...	1	...	Dead	...	...	0
3462	Maple-Norway	Acer	platanoides	4	...	...	1	...	Good	...	...	246.18
3463	Hickory-Pignut	Carya	glabra	15	...	...	1	...	Good	...	...	5538.96
3464	Maple-Norway	Acer	platanoides	6	...	...	1	...	Good	...	...	553.9
3465	Hickory-Shagbark	Carya	ovata	12	...	...	1	...	Good	...	...	3544.93
3466	Maple-Norway	Acer	platanoides	4	...	...	1	...	Good	...	...	246.18
3467	Oak-Northern Red	Quercus	rubra	24	...	...	1	...	Good	...	...	17724.67

3468	Hickory-Pignut	Carya	glabra	11	...	...	1	...	Good	...	...	2978.73
3469	Maple-Red	Acer	rubrum	5	...	...	1	...	Good	...	...	615.44
3470	Maple-Red	Acer	rubrum	12	...	...	1	...	Good	...	...	3544.93
3471	Oak-Northern Red	Quercus	rubra	7	...	...	1	...	Good	...	...	1507.83
3472	Oak-White	Quercus	alba	11	...	...	1	...	Good	...	...	3723.41
3473	Maple-Norway	Acer	platanoides	7	...	...	1	...	Good	...	...	753.91
3474	Hickory-Pignut	Carya	glabra	6	...	...	1	...	Good	...	...	886.23
3475	Hickory-Pignut	Carya	glabra	15	...	...	1	...	Good	...	...	5538.96
3476	Birch-Sweet	Betula	lenta	17	...	...	1	...	Good	...	...	3557.24
3477	Birch-Sweet	Betula	lenta	11	...	...	1	...	Good	...	...	1489.36
3478	Maple-Sugar	Acer	saccharum	12	...	...	1	...	Good	...	...	4431.17
3479	Maple-Red	Acer	rubrum	10	...	...	1	...	Fair	...	...	1758.4
3480	Maple-Sugar	Acer	saccharum	10	...	...	1	...	Good	...	...	3077.2
3481	Maple-Sugar	Acer	saccharum	7	...	...	1	...	Good	...	...	1507.83
3482	Maple-Sugar	Acer	saccharum	6	...	...	1	...	Good	...	...	1107.79
3483	Maple-Norway	Acer	platanoides	4	...	...	1	...	Good	...	...	246.18
3484	Oak-Northern Red	Quercus	rubra	22	...	...	1	...	Good	...	...	14893.65
3485	Maple-Norway	Acer	platanoides	8	...	...	1	...	Good	...	...	984.7
3486	Maple-Norway	Acer	platanoides	4	...	...	1	...	Good	...	...	246.18
3487	Maple-Norway	Acer	platanoides	4	...	...	1	...	Good	...	...	246.18
3488	Oak-Northern Red	Quercus	rubra	21	...	...	1	...	Good	...	...	13570.45
3489	Maple-Sugar	Acer	saccharum	7	...	...	1	...	Good	...	...	1507.83
3490	Oak-Northern Red	Quercus	rubra	14	...	...	1	...	Good	...	...	6031.31
3491	Maple-Sugar	Acer	saccharum	5	...	...	1	...	Good	...	...	769.3
3492	Oak-Northern Red	Quercus	rubra	28	...	...	1	...	Good	...	...	24125.25
3493	Beech-American	Fagus	grandifolia	9	...	...	1	...	Good	...	...	1994.03
3494	Maple-Sugar	Acer	saccharum	7	...	...	1	...	Good	...	...	1507.83
3495	Maple-Norway	Acer	platanoides	5	...	...	1	...	Good	...	...	384.65
3496	Maple-Norway	Acer	platanoides	5	...	...	1	...	Good	...	...	384.65
3497	Hickory-Pignut	Carya	glabra	9	...	...	1	...	Good	...	...	1994.03
3498	Maple-Norway	Acer	platanoides	8	...	...	1	...	Good	...	...	984.7
3499	Maple-Norway	Acer	platanoides	5	...	...	1	...	Good	...	...	384.65
3500	Maple-Norway	Acer	platanoides	4	...	...	1	...	Good	...	...	246.18
3501	Birch-Sweet	Betula	lenta	8	...	...	1	...	Good	...	...	787.76
3502	Maple-Red	Acer	rubrum	10	...	...	1	...	Good	...	...	2461.76
3503	Oak-White	Quercus	alba	4	...	...	1	...	Good	...	...	492.35
3504	Oak-White	Quercus	alba	11	...	...	1	...	Good	...	...	3723.41
3505	Maple-Red	Acer	rubrum	4	...	...	1	...	Poor	...	...	168.81
3506	Maple-Red	Acer	rubrum	6	...	...	1	...	Dead	...	...	0
3507	Maple-Red	Acer	rubrum	7	...	...	1	...	Good	...	...	1206.26
3508	Oak-Northern Red	Quercus	rubra	28	...	...	1	...	Good	...	...	24125.25
3509	Birch-Sweet	Betula	lenta	6	...	...	1	...	Good	...	...	443.12
3510	Hickory-Pignut	Carya	glabra	13	...	...	1	...	Good	...	...	4160.37
3511	Maple-Red	Acer	rubrum	7	...	...	1	...	Good	...	...	1206.26
3512	Cherry	Prunus	sp	12	...	...	1	...	Fair	...	...	1266.05
3513	Maple-Red	Acer	rubrum	12	...	...	1	...	Good	...	...	3544.93
3514	Oak-Northern Red	Quercus	rubra	13	...	...	1	...	Good	...	...	5200.47
3515	Oak-Northern Red	Quercus	rubra	9	...	...	1	...	Good	...	...	2492.53
3516	Oak-Northern Red	Quercus	rubra	10	...	...	1	...	Good	...	...	3077.2
3517	Maple-Red	Acer	rubrum	7	...	...	1	...	Good	...	...	1206.26
3518	Birch-Sweet	Betula	lenta	7	...	...	1	...	Good	...	...	603.13
3519	Birch-Sweet	Betula	lenta	5	...	...	1	...	Good	...	...	307.72

3520	Birch-Sweet	Betula	lenta	4	...	...	1	...	Fair	...	...	140.67
3521	Maple-Red	Acer	rubrum	9	...	...	1	...	Good	...	...	1994.03
3522	Oak-Northern Red	Quercus	rubra	11	...	...	1	...	Good	...	...	3723.41
3523	Oak-Northern Red	Quercus	rubra	7	...	...	1	...	Fair	...	...	1077.02
3524	Oak-Northern Red	Quercus	rubra	21	...	...	2	...	Good	...	...	18001.62
3525	Birch-Sweet	Betula	lenta	8	...	...	1	...	Good	...	...	787.76
3526	Oak-White	Quercus	alba	29	...	...	1	...	Good	...	...	25879.25
3527	Oak-Northern Red	Quercus	rubra	16	...	...	1	...	Good	...	...	7877.63
3528	Oak-Northern Red	Quercus	rubra	13	...	...	1	...	Good	...	...	5200.47
3529	Maple-Sugar	Acer	saccharum	7	...	...	1	...	Good	...	...	1507.83
3530	Hickory-Pignut	Carya	glabra	8	...	...	1	...	Good	...	...	1575.53
3531	Hickory-Pignut	Carya	glabra	7	...	...	1	...	Good	...	...	1206.26
3532	Hickory-Pignut	Carya	glabra	24	...	...	1	...	Good	...	...	14179.74
3533	Beech-American	Fagus	grandifolia	5	...	...	1	...	Good	...	...	615.44
3534	Oak-Northern Red	Quercus	rubra	8	...	...	2	...	Good	...	...	3477.24
3535	Hickory-Pignut	Carya	glabra	8	...	...	1	...	Good	...	...	1575.53
3536	Birch-Sweet	Betula	lenta	5	...	...	1	...	Good	...	...	307.72
3537	Oak-Northern Red	Quercus	rubra	12	...	...	1	...	Good	...	...	4431.17
3538	Birch-Sweet	Betula	lenta	6	...	...	1	...	Good	...	...	443.12
3539	Birch-Sweet	Betula	lenta	4	...	...	1	...	Good	...	...	196.94
3540	Birch-Sweet	Betula	lenta	4	...	...	1	...	Fair	...	...	140.67
3541	Birch-Sweet	Betula	lenta	4	...	...	1	...	Fair	...	...	140.67
3542	Birch-Sweet	Betula	lenta	7	...	...	1	...	Good	...	...	603.13
3543	Beech-American	Fagus	grandifolia	6	...	...	1	...	Good	...	...	886.23
3544	Oak-Northern Red	Quercus	rubra	4	...	...	1	...	Good	...	...	492.35
3545	Oak-Northern Red	Quercus	rubra	10	...	...	1	...	Dead	...	...	0
3546	Oak-Northern Red	Quercus	rubra	16	...	...	2	...	Fair	...	...	6703.9
3547	Birch-Sweet	Betula	lenta	5	...	...	1	...	Good	...	...	307.72
3548	Oak-Northern Red	Quercus	rubra	25	...	...	1	...	Good	...	...	19232.5
3549	Oak-White	Quercus	alba	7	...	...	1	...	Good	...	...	1507.83
3550	Oak-Northern Red	Quercus	rubra	26	...	...	1	...	Good	...	...	20801.87
3551	Oak-Northern Red	Quercus	rubra	11	...	...	1	...	Dead	...	...	0
3552	Birch-Sweet	Betula	lenta	5	...	...	1	...	Good	...	...	307.72
3553	Hickory-Shagbark	Carya	ovata	5	...	...	1	...	Good	...	...	615.44
3554	Hickory-Pignut	Carya	glabra	12	...	...	1	...	Good	...	...	3544.93
3555	Birch-Sweet	Betula	lenta	4	...	...	1	...	Good	...	...	196.94
3556	Hickory-Pignut	Carya	glabra	7	...	...	1	...	Good	...	...	1206.26
3557	Oak-Northern Red	Quercus	rubra	14	...	...	3	...	Fair	...	...	10132.78
3558	Birch-Sweet	Betula	lenta	7	...	...	1	...	Good	...	...	603.13
3559	Birch-Sweet	Betula	lenta	7	...	...	1	...	Good	...	...	603.13
3560	Maple-Red	Acer	rubrum	5	...	...	1	...	Fair	...	...	439.6
3561	Oak-Northern Red	Quercus	rubra	24	...	...	4	...	Good	...	...	57789.82
3562	Hickory-Pignut	Carya	glabra	5	...	...	1	...	Good	...	...	615.44
3563	Maple-Norway	Acer	platanoides	5	...	...	1	...	Good	...	...	384.65
3564	Hickory-Shagbark	Carya	ovata	10	...	...	1	...	Poor	...	...	1055.04
3565	Hickory-Pignut	Carya	glabra	7	...	...	1	...	Good	...	...	1206.26
3566	Oak-Northern Red	Quercus	rubra	16	...	...	1	...	Good	...	...	7877.63
3567	Oak-Northern Red	Quercus	rubra	15	...	...	1	...	Good	...	...	6923.7
3568	Maple-Sugar	Acer	saccharum	7	...	...	1	...	Good	...	...	1507.83
3569	Hickory-Pignut	Carya	glabra	16	...	...	1	...	Good	...	...	6302.11
3570	Hickory-Pignut	Carya	glabra	5	...	...	1	...	Good	...	...	615.44
3571	Hickory-Pignut	Carya	glabra	5	...	...	1	...	Good	...	...	615.44

3572	Oak-Northern Red	Quercus	rubra	20	...	...	1	...	Good	...	...	12308.8
3573	Maple-Sugar	Acer	saccharum	4	...	...	1	...	Good	...	...	492.35
3574	Maple-Sugar	Acer	saccharum	4	...	...	1	...	Good	...	...	492.35
3575	Hickory-Pignut	Carya	glabra	13	...	...	1	...	Good	...	...	4160.37
3576	Maple-Sugar	Acer	saccharum	14	...	...	2	...	Good	...	...	8523.84
3577	Beech-American	Fagus	grandifolia	4	...	...	1	...	Good	...	...	393.88
3578	Maple-Sugar	Acer	saccharum	13	...	...	1	...	Good	...	...	5200.47
3579	Oak-Northern Red	Quercus	rubra	30	...	...	1	...	Good	...	...	27694.8
3580	Hickory-Pignut	Carya	glabra	16	...	...	1	...	Good	...	...	6302.11
3581	Hickory-Pignut	Carya	glabra	7	...	...	1	...	Good	...	...	1206.26
3582	Elm-American	Ulmus	americana	7	...	...	1	...	Poor	...	...	387.73
3583	Elm-American	Ulmus	americana	6	...	...	1	...	Fair	...	...	474.77
3584	Hickory-Pignut	Carya	glabra	7	...	...	2	...	Poor	...	...	1033.94
3585	Hickory-Pignut	Carya	glabra	7	...	...	1	...	Good	...	...	1206.26
3586	Hickory-Shagbark	Carya	ovata	4	...	...	1	...	Good	...	...	393.88
3587	Hickory-Pignut	Carya	glabra	14	...	...	1	...	Good	...	...	4825.05
3588	Hickory-Pignut	Carya	glabra	4	...	...	1	...	Good	...	...	393.88
3589	Hickory-Shagbark	Carya	ovata	8	...	...	1	...	Good	...	...	1575.53
3590	Hickory-Shagbark	Carya	ovata	6	...	...	1	...	Good	...	...	886.23
3591	Maple-Norway	Acer	platanoides	4	...	...	1	...	Good	...	...	246.18
3592	Maple-Red	Acer	rubrum	24	...	...	1	...	Good	...	...	14179.74
3593	Hickory-Pignut	Carya	glabra	4	...	...	1	...	Good	...	...	393.88
3594	Hickory-Pignut	Carya	glabra	4	...	...	1	...	Good	...	...	393.88
3595	Hickory-Pignut	Carya	glabra	15	...	...	2	...	Good	...	...	8517.69
3596	Hickory-Pignut	Carya	glabra	12	...	...	1	...	Good	...	...	3544.93
3597	Maple-Norway	Acer	platanoides	4	...	...	1	...	Good	...	...	246.18
3598	Hickory-Shagbark	Carya	ovata	7	...	...	1	...	Good	...	...	1206.26
3599	Hickory-Shagbark	Carya	ovata	8	...	...	1	...	Good	...	...	1575.53
3600	Oak-Northern Red	Quercus	rubra	8	...	...	1	...	Good	...	...	1969.41
3601	Hickory-Shagbark	Carya	ovata	12	...	...	2	...	Fair	...	...	3165.12
3602	Hickory-Shagbark	Carya	ovata	12	...	...	1	...	Good	...	...	3544.93
3603	Hickory-Shagbark	Carya	ovata	11	...	...	1	...	Good	...	...	2978.73
3604	Hickory-Shagbark	Carya	ovata	4	...	...	1	...	Good	...	...	393.88
3605	Hickory-Shagbark	Carya	ovata	5	...	...	1	...	Fair	...	...	439.6
3606	Elm-American	Ulmus	americana	4	...	...	1	...	Fair	...	...	211.01
3607	Oak-Northern Red	Quercus	rubra	14	...	...	1	...	Good	...	...	6031.31
3608	Oak-Northern Red	Quercus	rubra	14	...	...	2	...	Good	...	...	11231.78
3609	Oak-Northern Red	Quercus	rubra	22	...	...	1	...	Good	...	...	14893.65
3610	Hickory-Pignut	Carya	glabra	7	...	...	1	...	Good	...	...	1206.26
3611	Maple-Red	Acer	rubrum	11	...	...	2	...	Poor	...	...	1951.82
3612	Oak-Northern Red	Quercus	rubra	6	...	...	1	...	Dead	...	...	0
3613	Hickory-Shagbark	Carya	ovata	10	...	...	1	...	Good	...	...	2461.76
3614	Hickory-Pignut	Carya	glabra	16	...	...	1	...	Good	...	...	6302.11
3615	Hickory-Pignut	Carya	glabra	4	...	...	1	...	Fair	...	...	281.34
3616	Hickory-Shagbark	Carya	ovata	13	...	...	1	...	Good	...	...	4160.37
3617	Hickory-Shagbark	Carya	ovata	6	...	...	1	...	Fair	...	...	633.02
3618	Hickory-Pignut	Carya	glabra	7	...	...	1	...	Fair	...	...	861.62
3619	Hickory-Shagbark	Carya	ovata	14	...	...	1	...	Good	...	...	4825.05
3620	Maple-Sugar	Acer	saccharum	4	...	...	1	...	Good	...	...	492.35
3621	Hickory-Pignut	Carya	glabra	4	...	...	1	...	Good	...	...	393.88
3622	Maple-Sugar	Acer	saccharum	4	...	...	1	...	Good	...	...	492.35
3623	Oak-Northern Red	Quercus	rubra	9	...	...	1	...	Good	...	...	2492.53

3624	Oak-Northern Red	Quercus	rubra	12	...	...	1	...	Fair	...	...	3165.12
3625	Hickory-Pignut	Carya	glabra	17	...	...	1	...	Good	...	...	7114.49
3626	Beech-American	Fagus	grandifolia	10	...	...	1	...	Good	...	...	2461.76
3627	Hickory-Shagbark	Carya	ovata	4	...	...	1	...	Fair	...	...	281.34
3628	Hickory-Shagbark	Carya	ovata	4	...	...	1	...	Fair	...	...	281.34
3629	Hickory-Shagbark	Carya	ovata	14	...	...	1	...	Good	...	...	4825.05
3630	Maple-Norway	Acer	platanoides	6	...	...	1	...	Good	...	...	553.9
3631	Hickory-Shagbark	Carya	ovata	5	...	...	1	...	Fair	...	...	439.6
3632	Hickory-Pignut	Carya	glabra	6	...	...	1	...	Fair	...	...	633.02
3633	Oak-Northern Red	Quercus	rubra	12	...	...	1	...	Good	...	...	4431.17
3634	Hickory-Pignut	Carya	glabra	4	...	...	1	...	Fair	...	...	281.34
3635	Tuliptree	Liriodendr	tulipifera	30	...	...	2	...	Good	...	...	41456.04
3636	Hickory-Shagbark	Carya	ovata	5	...	...	1	...	Fair	...	...	439.6
3637	Oak-Northern Red	Quercus	rubra	18	...	...	1	...	Fair	...	...	7121.52
3638	Tuliptree	Liriodendr	tulipifera	12	...	...	1	...	Dead	...	...	0
3639	Hickory-Pignut	Carya	glabra	4	...	...	1	...	Good	...	...	393.88
3640	Hickory-Pignut	Carya	glabra	6	...	...	1	...	Good	...	...	886.23
3641	Beech-American	Fagus	grandifolia	6	...	...	1	...	Good	...	...	886.23
3642	Maple-Sugar	Acer	saccharum	4	...	...	1	...	Good	...	...	492.35
3643	Tuliptree	Liriodendr	tulipifera	31	...	...	1	...	Good	...	...	23186.49
3644	Tuliptree	Liriodendr	tulipifera	25	...	...	1	...	Fair	...	...	10990
3645	Maple-Red	Acer	rubrum	11	...	...	1	...	Good	...	...	2978.73
3646	Hickory-Pignut	Carya	glabra	4	...	...	1	...	Good	...	...	393.88
3647	Hickory-Shagbark	Carya	ovata	7	...	...	1	...	Good	...	...	1206.26
3648	Hickory-Pignut	Carya	glabra	6	...	...	1	...	Good	...	...	886.23
3649	Maple-Red	Acer	rubrum	14	...	...	1	...	Good	...	...	4825.05
3650	Oak-Northern Red	Quercus	rubra	14	...	...	1	...	Good	...	...	6031.31
3651	Hickory-Pignut	Carya	glabra	5	...	...	1	...	Good	...	...	615.44
3652	Maple-Sugar	Acer	saccharum	4	...	...	1	...	Good	...	...	492.35
3653	Maple-Red	Acer	rubrum	16	...	...	1	...	Dead	...	...	0
3654	Oak-Northern Red	Quercus	rubra	7	...	...	1	...	Good	...	...	1507.83
3655	Oak-Northern Red	Quercus	rubra	24	...	...	1	...	Poor	...	...	7596.29
3656	Oak-Northern Red	Quercus	rubra	21	...	...	1	...	Good	...	...	13570.45
3657	Tuliptree	Liriodendr	tulipifera	22	...	...	1	...	Good	...	...	11914.92
3658	Maple-Red	Acer	rubrum	14	...	...	1	...	Good	...	...	4825.05
3659	Tuliptree	Liriodendr	tulipifera	30	...	...	1	...	Good	...	...	22155.84
3660	Tuliptree	Liriodendr	tulipifera	15	...	...	1	...	Fair	...	...	3956.4
3661	Maple-Red	Acer	rubrum	10	...	...	3	...	Good	...	...	4234.23
3662	Tuliptree	Liriodendr	tulipifera	13	...	...	2	...	Dead	...	...	0
3663	Maple-Red	Acer	rubrum	11	...	...	1	...	Fair	...	...	2127.66
3664	Maple-Red	Acer	rubrum	17	...	...	1	...	Good	...	...	7114.49
3665	Hickory-Pignut	Carya	glabra	7	...	...	1	...	Good	...	...	1206.26
3666	Hickory-Shagbark	Carya	ovata	13	...	...	1	...	Fair	...	...	2971.7
3667	Maple-Red	Acer	rubrum	9	...	...	1	...	Good	...	...	1994.03
3668	Maple-Red	Acer	rubrum	11	...	...	1	...	Good	...	...	2978.73
3669	Hickory-Shagbark	Carya	ovata	4	...	...	1	...	Good	...	...	393.88
3670	Hickory-Shagbark	Carya	ovata	4	...	...	1	...	Fair	...	...	281.34
3671	Maple-Red	Acer	rubrum	31	...	...	1	...	Good	...	...	23186.49
3672	Tuliptree	Liriodendr	tulipifera	7	...	...	1	...	Good	...	...	1206.26
3673	Maple-Red	Acer	rubrum	27	...	...	1	...	Good	...	...	17946.23
3674	Hickory-Shagbark	Carya	ovata	9	...	...	1	...	Good	...	...	1994.03
3675	Hickory-Shagbark	Carya	ovata	6	...	...	1	...	Good	...	...	886.23

3676	Hickory-Shagbark	Carya	ovata	4	...	...	1	...	Good	...	...	393.88
3677	Hickory-Pignut	Carya	glabra	7	...	...	1	...	Good	...	...	1206.26
3678	Hickory-Pignut	Carya	glabra	11	...	...	1	...	Good	...	...	2978.73
3679	Hickory-Pignut	Carya	glabra	4	...	...	1	...	Good	...	...	393.88
3680	Oak-Northern Red	Quercus	rubra	13	...	...	1	...	Good	...	...	5200.47
3681	Hickory-Shagbark	Carya	ovata	12	...	...	1	...	Good	...	...	3544.93
3682	Maple-Norway	Acer	platanoides	4	...	...	1	...	Fair	...	...	175.84
3683	Maple-Norway	Acer	platanoides	20	...	...	1	...	Good	...	...	6154.4
3684	Hickory-Pignut	Carya	glabra	4	...	...	1	...	Good	...	...	393.88
3685	Hickory-Shagbark	Carya	ovata	7	...	...	1	...	Good	...	...	1206.26
3686	Hickory-Shagbark	Carya	ovata	4	...	...	1	...	Good	...	...	393.88
3687	Hickory-Pignut	Carya	glabra	4	...	...	1	...	Good	...	...	393.88
3688	Hickory-Pignut	Carya	glabra	6	...	...	1	...	Good	...	...	886.23
3689	Maple-Sugar	Acer	saccharum	16	...	...	1	...	Fair	...	...	5626.88
3690	Maple-Sugar	Acer	saccharum	4	...	...	1	...	Good	...	...	492.35
3691	Oak-White	Quercus	alba	12	...	...	1	...	Good	...	...	4431.17
3692	Hickory-Shagbark	Carya	ovata	13	...	...	1	...	Good	...	...	4160.37
3693	Maple-Norway	Acer	platanoides	4	...	...	1	...	Good	...	...	246.18
3694	Maple-Sugar	Acer	saccharum	4	...	...	1	...	Good	...	...	492.35
3695	Hickory-Pignut	Carya	glabra	4	...	...	1	...	Good	...	...	393.88
3696	Maple-Sugar	Acer	saccharum	4	...	...	1	...	Good	...	...	492.35
3697	Tuliptree	Liriodendr	tulipifera	29	...	...	3	...	Good	...	...	55291.13
3698	Maple-Norway	Acer	platanoides	5	...	...	1	...	Good	...	...	384.65
3699	Tuliptree	Liriodendr	tulipifera	37	...	...	1	...	Good	...	...	31939.69
3700	Maple-Sugar	Acer	saccharum	5	...	...	1	...	Good	...	...	769.3
3701	Maple-Sugar	Acer	saccharum	7	...	...	1	...	Good	...	...	1507.83
3702	Maple-Red	Acer	rubrum	15	...	...	4	...	Fair	...	...	7279.78
3703	Oak-Northern Red	Quercus	rubra	7	...	...	1	...	Fair	...	...	1077.02
3704	Maple-Sugar	Acer	saccharum	6	...	...	1	...	Good	...	...	1107.79
3705	Hickory-Shagbark	Carya	ovata	14	...	...	1	...	Fair	...	...	3446.46
3706	Hickory-Shagbark	Carya	ovata	5	...	...	1	...	Dead	...	...	0
3707	Hickory-Shagbark	Carya	ovata	10	...	...	1	...	Good	...	...	2461.76
3708	Hickory-Shagbark	Carya	ovata	4	...	...	1	...	Good	...	...	393.88
3709	Hickory-Shagbark	Carya	ovata	8	...	...	1	...	Good	...	...	1575.53
3710	Hickory-Shagbark	Carya	ovata	5	...	...	1	...	Fair	...	...	439.6
3711	Hickory-Shagbark	Carya	ovata	7	...	...	1	...	Good	...	...	1206.26
3712	Hickory-Shagbark	Carya	ovata	7	...	...	1	...	Fair	...	...	861.62
3713	Oak-Northern Red	Quercus	rubra	24	...	...	1	...	Good	...	...	17724.67
3714	Hickory-Pignut	Carya	glabra	7	...	...	1	...	Good	...	...	1206.26
3715	Hickory-Pignut	Carya	glabra	7	...	...	1	...	Good	...	...	1206.26
3716	Maple-Red	Acer	rubrum	6	...	...	1	...	Poor	...	...	379.81
3717	Hickory-Pignut	Carya	glabra	12	...	...	1	...	Good	...	...	3544.93
3718	Oak-Northern Red	Quercus	rubra	8	...	...	1	...	Good	...	...	1969.41
3719	Birch-Sweet	Betula	lenta	4	...	...	1	...	Fair	...	...	140.67
3720	Maple-Norway	Acer	platanoides	4	...	...	1	...	Good	...	...	246.18
3721	Maple-Norway	Acer	platanoides	4	...	...	1	...	Good	...	...	246.18
3722	Maple-Norway	Acer	platanoides	4	...	...	1	...	Good	...	...	246.18
3723	Hickory-Pignut	Carya	glabra	6	...	...	1	...	Good	...	...	886.23
3724	Maple-Norway	Acer	platanoides	5	...	...	1	...	Good	...	...	384.65
3725	Hickory-Shagbark	Carya	ovata	10	...	...	1	...	Good	...	...	2461.76
3726	Tuliptree	Liriodendr	tulipifera	29	...	...	3	...	Good	...	...	41111.39
3727	Maple-Norway	Acer	platanoides	4	...	...	1	...	Good	...	...	246.18

3728	Maple-Norway	Acer	platanoides	4	...	...	1	...	Good	...	...	246.18
3729	Hickory-Shagbark	Carya	ovata	10	...	...	1	...	Fair	...	...	1758.4
3730	Maple-Norway	Acer	platanoides	6	...	...	1	...	Good	...	...	553.9
3731	Maple-Norway	Acer	platanoides	6	...	...	1	...	Good	...	...	553.9
3732	Maple-Norway	Acer	platanoides	6	...	...	1	...	Good	...	...	553.9
3733	Oak-Northern Red	Quercus	rubra	17	...	...	1	...	Dead	...	...	0
3734	Maple-Sugar	Acer	saccharum	15	...	...	1	...	Good	...	...	6923.7
3735	Maple-Norway	Acer	platanoides	4	...	...	1	...	Good	...	...	246.18
3736	Oak-Northern Red	Quercus	rubra	18	...	...	1	...	Good	...	...	9970.13
3737	Sassafras-Common	Sassafras	albidum	11	...	...	1	...	Poor	...	...	1276.6
3738	Sassafras-Common	Sassafras	albidum	12	...	...	1	...	Good	...	...	3544.93
3739	Sassafras-Common	Sassafras	albidum	7	...	...	1	...	Good	...	...	1206.26
3740	Maple-Norway	Acer	platanoides	5	...	...	1	...	Good	...	...	384.65
3741	Maple-Norway	Acer	platanoides	4	...	...	1	...	Good	...	...	246.18
3742	Hickory-Shagbark	Carya	ovata	12	...	...	1	...	Good	...	...	3544.93
3743	Maple-Norway	Acer	platanoides	4	...	...	1	...	Fair	...	...	175.84
3744	Hickory-Pignut	Carya	glabra	11	...	...	1	...	Good	...	...	2978.73
3745	Maple-Norway	Acer	platanoides	4	...	...	1	...	Good	...	...	246.18
3746	Oak-Northern Red	Quercus	rubra	12	...	...	1	...	Good	...	...	4431.17
3747	Maple-Norway	Acer	platanoides	8	...	...	1	...	Good	...	...	984.7
3748	Maple-Norway	Acer	platanoides	6	...	...	1	...	Good	...	...	553.9
3749	Maple-Red	Acer	rubrum	5	...	...	1	...	Dead	...	...	0
3750	Maple-Sugar	Acer	saccharum	6	...	...	1	...	Good	...	...	1107.79
3751	Beech-American	Fagus	grandifolia	14	...	...	1	...	Good	...	...	4825.05
3752	Maple-Norway	Acer	platanoides	4	...	...	1	...	Good	...	...	246.18
3753	Oak-Northern Red	Quercus	rubra	15	...	...	1	...	Good	...	...	6923.7
3754	Maple-Red	Acer	rubrum	4	...	...	1	...	Poor	...	...	168.81
3755	Maple-Red	Acer	rubrum	4	...	...	1	...	Poor	...	...	168.81
3756	Tree of Heaven	Ailanthus	altissima	7	...	...	1	...	Fair	...	...	107.7
3757	Maple-Norway	Acer	platanoides	4	...	...	1	...	Good	...	...	246.18
3758	Oak-Northern Red	Quercus	rubra	24	...	...	1	...	Good	...	...	17724.67
3759	Elm-American	Ulmus	americana	6	...	...	1	...	Fair	...	...	474.77
3760	Maple-Red	Acer	rubrum	7	...	...	1	...	Fair	...	...	861.62
3761	Maple-Norway	Acer	platanoides	7	...	...	1	...	Good	...	...	753.91
3762	Maple-Red	Acer	rubrum	8	...	...	1	...	Fair	...	...	1125.38
3763	Oak-White	Quercus	alba	7	...	...	1	...	Fair	...	...	1077.02
3764	Oak-Swamp White	Quercus	bicolor	26	...	...	1	...	Good	...	...	18721.69
3765	Maple-Norway	Acer	platanoides	8	...	...	1	...	Good	...	...	984.7
3766	Maple-Red	Acer	rubrum	4	...	...	1	...	Good	...	...	393.88
3767	Hickory-Shagbark	Carya	ovata	10	...	...	1	...	Good	...	...	2461.76
3768	Maple-Norway	Acer	platanoides	9	...	...	1	...	Good	...	...	1246.27
3769	Tuliptree	Liriodendr	tulipifera	29	...	...	1	...	Good	...	...	20703.4
3770	Maple-Sugar	Acer	saccharum	8	...	...	1	...	Good	...	...	1969.41
3771	Tree of Heaven	Ailanthus	altissima	9	...	...	1	...	Poor	...	...	106.82
3772	Maple-Red	Acer	rubrum	6	...	...	1	...	Fair	...	...	633.02
3773	Maple-Sugar	Acer	saccharum	10	...	...	1	...	Good	...	...	3077.2
3774	Locust-Black	Robinia	pseudoacacia	19	...	...	1	...	Fair	...	...	4760.87
3775	Maple-Sugar	Acer	saccharum	4	...	...	1	...	Poor	...	...	211.01
3776	Maple-Sugar	Acer	saccharum	9	...	...	1	...	Good	...	...	2492.53
3777	Maple-Sugar	Acer	saccharum	5	...	...	1	...	Good	...	...	769.3
3778	Maple-Sugar	Acer	saccharum	9	...	...	1	...	Good	...	...	2492.53
3779	Maple-Norway	Acer	platanoides	7	...	...	1	...	Good	...	...	753.91

3780	Oak-Northern Red	Quercus	rubra	9	...	...	1	...	Good	...	...	2492.53
3781	Locust-Black	Robinia	pseudoacacia	1	...	...	1	...	Good	...	...	18.46
3782	Maple-Norway	Acer	platanoides	12	...	...	1	...	Good	...	...	2215.58
3783	Locust-Black	Robinia	pseudoacacia	12	...	...	1	...	Fair	...	...	1899.07
3784	Locust-Black	Robinia	pseudoacacia	13	...	...	1	...	Fair	...	...	2228.77
3785	Maple-Sugar	Acer	saccharum	8	...	...	1	...	Good	...	...	1969.41
3786	Hickory-Shagbark	Carya	ovata	8	...	...	1	...	Poor	...	...	675.23
3787	Hickory-Pignut	Carya	glabra	15	...	...	1	...	Good	...	...	5538.96
3788	Hickory-Pignut	Carya	glabra	9	...	...	1	...	Good	...	...	1994.03
3789	Maple-Sugar	Acer	saccharum	4	...	...	1	...	Good	...	...	492.35
3790	Maple-Norway	Acer	platanoides	4	...	...	1	...	Good	...	...	246.18
3791	Maple-Sugar	Acer	saccharum	4	...	...	1	...	Poor	...	...	211.01
3792	Oak-White	Quercus	alba	23	...	...	1	...	Good	...	...	16278.39
3793	Maple-Norway	Acer	platanoides	4	...	...	1	...	Good	...	...	246.18
3794	Maple-Sugar	Acer	saccharum	6	...	...	1	...	Poor	...	...	474.77
3795	Maple-Sugar	Acer	saccharum	4	...	...	1	...	Poor	...	...	211.01
3796	Maple-Sugar	Acer	saccharum	6	...	...	1	...	Good	...	...	1107.79
3797	Maple-Norway	Acer	platanoides	5	...	...	1	...	Good	...	...	384.65
3798	Hickory-Pignut	Carya	glabra	10	...	...	2	...	Fair	...	...	2620.02
3799	Hickory-Shagbark	Carya	ovata	4	...	...	1	...	Fair	...	...	281.34
3800	Hickory-Pignut	Carya	glabra	7	...	...	1	...	Good	...	...	1206.26
3801	Maple-Sugar	Acer	saccharum	4	...	...	1	...	Poor	...	...	211.01
3802	Oak-Northern Red	Quercus	rubra	16	...	...	1	...	Dead	...	...	0
3803	Oak-Northern Red	Quercus	rubra	28	...	...	1	...	Fair	...	...	17232.32
3804	Beech-American	Fagus	grandifolia	9	...	...	1	...	Fair	...	...	1424.3
3805	Tuliptree	Liriodendr	tulipifera	30	...	...	1	...	Good	...	...	22155.84
3806	Beech-American	Fagus	grandifolia	10	...	...	1	...	Good	...	...	2461.76
3807	Birch-Sweet	Betula	lenta	6	...	...	1	...	Poor	...	...	189.91
3808	Beech-American	Fagus	grandifolia	11	...	...	1	...	Good	...	...	2978.73
3809	Maple-Sugar	Acer	saccharum	5	...	...	1	...	Good	...	...	769.3
3810	Hickory-Pignut	Carya	glabra	25	...	...	1	...	Good	...	...	15386
3811	Elm-American	Ulmus	americana	6	...	...	1	...	Fair	...	...	474.77
3812	Oak-Northern Red	Quercus	rubra	9	...	...	1	...	Fair	...	...	1780.38
3813	Oak-Northern Red	Quercus	rubra	8	...	...	1	...	Fair	...	...	1406.72
3814	Oak-Northern Red	Quercus	rubra	21	...	...	1	...	Good	...	...	13570.45
3815	Maple-Sugar	Acer	saccharum	4	...	...	1	...	Good	...	...	492.35
3816	Maple-Sugar	Acer	saccharum	5	...	...	1	...	Good	...	...	769.3
3817	Hickory-Pignut	Carya	glabra	15	...	...	1	...	Good	...	...	5538.96
3818	Maple-Sugar	Acer	saccharum	5	...	...	1	...	Good	...	...	769.3
3819	Maple-Sugar	Acer	saccharum	6	...	...	1	...	Good	...	...	1107.79
3820	Maple-Norway	Acer	platanoides	4	...	...	1	...	Good	...	...	246.18
3821	Hickory-Shagbark	Carya	ovata	4	...	...	1	...	Good	...	...	393.88
3822	Maple-Sugar	Acer	saccharum	6	...	...	1	...	Good	...	...	1107.79
3823	Oak-Northern Red	Quercus	rubra	9	...	...	1	...	Dead	...	...	0
3824	Maple-Sugar	Acer	saccharum	4	...	...	1	...	Good	...	...	492.35
3825	Maple-Sugar	Acer	saccharum	5	...	...	1	...	Good	...	...	769.3
3826	Oak-Northern Red	Quercus	rubra	4	...	...	1	...	Dead	...	...	0
3827	Oak-Northern Red	Quercus	rubra	19	...	...	1	...	Good	...	...	11108.69
3828	Maple-Sugar	Acer	saccharum	6	...	...	1	...	Good	...	...	1107.79
3829	Maple-Sugar	Acer	saccharum	8	...	...	1	...	Good	...	...	1969.41
3830	Oak-Northern Red	Quercus	rubra	7	...	...	1	...	Dead	...	...	0
3831	Maple-Sugar	Acer	saccharum	4	...	...	1	...	Good	...	...	492.35

3832	Oak-Northern Red	Quercus	rubra	19	...	...	1	...	Good	...	...	11108.69
3833	Oak-Northern Red	Quercus	rubra	6	...	...	1	...	Dead	...	...	0
3834	Oak-Northern Red	Quercus	rubra	6	...	...	1	...	Fair	...	...	791.28
3835	Hickory-Shagbark	Carya	ovata	14	...	...	1	...	Good	...	...	4825.05
3836	Maple-Sugar	Acer	saccharum	4	...	...	1	...	Good	...	...	492.35
3837	Oak-Northern Red	Quercus	rubra	26	...	...	1	...	Good	...	...	20801.87
3838	Maple-Sugar	Acer	saccharum	4	...	...	1	...	Fair	...	...	351.68
3839	Maple-Sugar	Acer	saccharum	28	...	...	1	...	Fair	...	...	17232.32
3840	Maple-Sugar	Acer	saccharum	5	...	...	1	...	Good	...	...	769.3
3841	Maple-Sugar	Acer	saccharum	6	...	...	1	...	Good	...	...	1107.79
3842	Oak-Northern Red	Quercus	rubra	12	...	...	1	...	Dead	...	...	0
3843	Maple-Sugar	Acer	saccharum	7	...	...	1	...	Good	...	...	1507.83
3844	Maple-Sugar	Acer	saccharum	7	...	...	1	...	Fair	...	...	1077.02
3845	Maple-Sugar	Acer	saccharum	6	...	...	1	...	Good	...	...	1107.79
3846	Maple-Sugar	Acer	saccharum	10	...	...	1	...	Good	...	...	3077.2
3847	Maple-Sugar	Acer	saccharum	9	...	...	1	...	Good	...	...	2492.53
3848	Maple-Sugar	Acer	saccharum	6	...	...	1	...	Good	...	...	1107.79
3849	Cherry	Prunus	sp	18	...	...	1	...	Good	...	...	3988.05
3850	Cherry	Prunus	sp	16	...	...	1	...	Good	...	...	3151.05
3851	Maple-Red	Acer	rubrum	7	...	...	1	...	Poor	...	...	516.97
3852	Maple-Sugar	Acer	saccharum	9	...	...	1	...	Good	...	...	2492.53
3853	Maple-Sugar	Acer	saccharum	8	...	...	1	...	Good	...	...	1969.41
3854	Maple-Sugar	Acer	saccharum	13	...	...	1	...	Good	...	...	5200.47
3855	Maple-Sugar	Acer	saccharum	17	...	...	1	...	Good	...	...	8893.11
3856	Maple-Sugar	Acer	saccharum	5	...	...	1	...	Good	...	...	769.3
3857	Maple-Norway	Acer	platanoides	13	...	...	1	...	Good	...	...	2600.23
3858	Tree of Heaven	Ailanthus	altissima	10	...	...	1	...	Dead	...	...	0
3859	Maple-Sugar	Acer	saccharum	7	...	...	1	...	Good	...	...	1507.83
3860	Tree of Heaven	Ailanthus	altissima	13	...	...	1	...	Poor	...	...	222.88
3861	Tree of Heaven	Ailanthus	altissima	10	...	...	1	...	Poor	...	...	131.88
3862	Tree of Heaven	Ailanthus	altissima	10	...	...	1	...	Fair	...	...	219.8
3863	Maple-Sugar	Acer	saccharum	6	...	...	1	...	Fair	...	...	791.28
3864	Maple-Sugar	Acer	saccharum	4	...	...	1	...	Good	...	...	492.35
3865	Maple-Sugar	Acer	saccharum	9	...	...	1	...	Good	...	...	2492.53
3866	Tree of Heaven	Ailanthus	altissima	10	...	...	1	...	Dead	...	...	0
3867	Maple-Sugar	Acer	saccharum	18	...	...	1	...	Good	...	...	9970.13
3868	Oak-Northern Red	Quercus	rubra	12	...	...	1	...	Fair	...	...	3165.12
3869	Maple-Sugar	Acer	saccharum	9	...	...	1	...	Good	...	...	2492.53
3870	Cherry	Prunus	sp	12	...	...	1	...	Poor	...	...	759.63
3871	Cherry	Prunus	sp	11	...	...	1	...	Poor	...	...	638.3
3872	Maple-Sugar	Acer	saccharum	4	...	...	1	...	Good	...	...	492.35
3873	Maple-Sugar	Acer	saccharum	4	...	...	1	...	Good	...	...	492.35
3874	Maple-Sugar	Acer	saccharum	4	...	...	1	...	Fair	...	...	351.68
3875	Maple-Sugar	Acer	saccharum	7	...	...	1	...	Good	...	...	1507.83
3876	Maple-Sugar	Acer	saccharum	14	...	...	1	...	Good	...	...	6031.31
3877	Maple-Sugar	Acer	saccharum	4	...	...	1	...	Good	...	...	492.35
3878	Hickory-Shagbark	Carya	ovata	10	...	...	1	...	Good	...	...	2461.76
3879	Maple-Sugar	Acer	saccharum	4	...	...	1	...	Good	...	...	492.35
3880	Maple-Sugar	Acer	saccharum	11	...	...	1	...	Good	...	...	3723.41
3881	Oak-Northern Red	Quercus	rubra	15	...	...	1	...	Good	...	...	6923.7
3882	Birch-Sweet	Betula	lenta	12	...	...	1	...	Good	...	...	1772.47
3883	Maple-Sugar	Acer	saccharum	4	...	...	1	...	Good	...	...	492.35

3884	Maple-Red	Acer	rubrum	6	...	...	1	...	Good	...	...	886.23
3885	Maple-Sugar	Acer	saccharum	5	...	...	1	...	Good	...	...	769.3
3886	Maple-Sugar	Acer	saccharum	5	...	...	1	...	Good	...	...	769.3
3887	Maple-Sugar	Acer	saccharum	4	...	...	1	...	Good	...	...	492.35
3888	Maple-Sugar	Acer	saccharum	6	...	...	1	...	Good	...	...	1107.79
3889	Maple-Sugar	Acer	saccharum	5	...	...	1	...	Good	...	...	769.3
3890	Maple-Red	Acer	rubrum	4	...	...	1	...	Poor	...	...	168.81
3891	Maple-Sugar	Acer	saccharum	8	...	...	1	...	Good	...	...	1969.41
3892	Tree of Heaven	Ailanthus	altissima	13	...	...	1	...	Poor	...	...	222.88
3893	Maple-Red	Acer	rubrum	13	...	...	1	...	Good	...	...	4160.37
3894	Oak-Northern Red	Quercus	rubra	13	...	...	1	...	Good	...	...	5200.47
3895	Oak-Northern Red	Quercus	rubra	5	...	...	1	...	Good	...	...	769.3
3896	Cherry	Prunus	sp	14	...	...	1	...	Poor	...	...	1033.94
3897	Maple-Sugar	Acer	saccharum	29	...	...	1	...	Good	...	...	25879.25
3898	Maple-Sugar	Acer	saccharum	4	...	...	1	...	Good	...	...	492.35
3899	Locust-Black	Robinia	pseudoacacia	12	...	...	1	...	Fair	...	...	1899.07
3900	Locust-Black	Robinia	pseudoacacia	10	...	...	1	...	Fair	...	...	1318.8
3901	Maple-Red	Acer	rubrum	6	...	...	1	...	Good	...	...	886.23
3902	Maple-Sugar	Acer	saccharum	5	...	...	1	...	Good	...	...	769.3
3903	Cherry	Prunus	sp	11	...	...	1	...	Poor	...	...	638.3
3904	Maple-Sugar	Acer	saccharum	4	...	...	1	...	Good	...	...	492.35
3905	Elm-American	Ulmus	americana	4	...	...	1	...	Fair	...	...	211.01
3906	Locust-Black	Robinia	pseudoacacia	9	...	...	1	...	Dead	...	...	0
3907	Cherry	Prunus	sp	14	...	...	1	...	Good	...	...	2412.52
3908	Maple-Sugar	Acer	saccharum	8	...	...	1	...	Good	...	...	1969.41
3909	Locust-Black	Robinia	pseudoacacia	8	...	...	1	...	Poor	...	...	506.42
3910	Tree of Heaven	Ailanthus	altissima	5	...	...	1	...	Fair	...	...	54.95
3911	Maple-Sugar	Acer	saccharum	4	...	...	1	...	Good	...	...	492.35
3912	Maple-Sugar	Acer	saccharum	4	...	...	1	...	Good	...	...	492.35
3913	Maple-Sugar	Acer	saccharum	7	...	...	1	...	Good	...	...	1507.83
3914	Locust-Black	Robinia	pseudoacacia	7	...	...	1	...	Fair	...	...	646.21
3915	Maple-Sugar	Acer	saccharum	9	...	...	1	...	Good	...	...	2492.53
3916	Maple-Sugar	Acer	saccharum	6	...	...	1	...	Good	...	...	1107.79
3917	Cherry	Prunus	sp	13	...	...	1	...	Poor	...	...	891.51
3918	Maple-Sugar	Acer	saccharum	11	...	...	1	...	Good	...	...	3723.41
3919	Maple-Sugar	Acer	saccharum	7	...	...	1	...	Good	...	...	1507.83
3920	Maple-Sugar	Acer	saccharum	5	...	...	1	...	Good	...	...	769.3
3921	Maple-Red	Acer	rubrum	7	...	...	1	...	Good	...	...	1206.26
3922	Maple-Sugar	Acer	saccharum	5	...	...	1	...	Good	...	...	769.3
3923	Maple-Sugar	Acer	saccharum	4	...	...	1	...	Fair	...	...	351.68
3924	Maple-Sugar	Acer	saccharum	7	...	...	1	...	Good	...	...	1507.83
3925	Maple-Sugar	Acer	saccharum	5	...	...	1	...	Good	...	...	769.3
3926	Maple-Sugar	Acer	saccharum	4	...	...	1	...	Good	...	...	492.35
3927	Tree of Heaven	Ailanthus	altissima	5	...	...	1	...	Fair	...	...	54.95
3928	Locust-Black	Robinia	pseudoacacia	8	...	...	1	...	Fair	...	...	844.03
3929	Locust-Black	Robinia	pseudoacacia	9	...	...	1	...	Poor	...	...	640.94
3930	Locust-Black	Robinia	pseudoacacia	5	...	...	1	...	Dead	...	...	0
3931	Maple-Sugar	Acer	saccharum	4	...	...	1	...	Good	...	...	492.35
3932	Locust-Black	Robinia	pseudoacacia	13	...	...	1	...	Good	...	...	3120.28
3933	Tree of Heaven	Ailanthus	altissima	6	...	...	1	...	Fair	...	...	79.13
3934	Tree of Heaven	Ailanthus	altissima	6	...	...	1	...	Poor	...	...	47.48
3935	Locust-Black	Robinia	pseudoacacia	11	...	...	1	...	Good	...	...	2234.05

3936	Tree of Heaven	Ailanthus	altissima	4	...	...	1	...	Poor	...	...	21.1
3937	Locust-Black	Robinia	pseudoacacia	7	...	...	1	...	Poor	...	...	387.73
3938	Locust-Black	Robinia	pseudoacacia	5	...	...	1	...	Dead	...	...	0
3939	Maple-Sugar	Acer	saccharum	5	...	...	1	...	Good	...	...	769.3
3940	Cherry	Prunus	sp	14	...	...	1	...	Good	...	...	2412.52
3941	Maple-Sugar	Acer	saccharum	4	...	...	1	...	Good	...	...	492.35
3942	Maple-Sugar	Acer	saccharum	7	...	...	1	...	Good	...	...	1507.83
3943	Maple-Sugar	Acer	saccharum	6	...	...	1	...	Good	...	...	1107.79
3944	Locust-Black	Robinia	pseudoacacia	13	...	...	1	...	Good	...	...	3120.28
3945	Maple-Sugar	Acer	saccharum	7	...	...	1	...	Good	...	...	1507.83
3946	Maple-Sugar	Acer	saccharum	7	...	...	1	...	Good	...	...	1507.83
3947	Maple-Sugar	Acer	saccharum	4	...	...	1	...	Good	...	...	492.35
3948	Maple-Sugar	Acer	saccharum	6	...	...	1	...	Good	...	...	1107.79
3949	Maple-Red	Acer	rubrum	7	...	...	1	...	Poor	...	...	516.97
3950	Locust-Black	Robinia	pseudoacacia	14	...	...	1	...	Fair	...	...	2584.85
3951	Maple-Sugar	Acer	saccharum	4	...	...	1	...	Fair	...	...	351.68
3952	Maple-Sugar	Acer	saccharum	10	...	...	1	...	Good	...	...	3077.2
3953	Maple-Red	Acer	rubrum	12	...	...	1	...	Good	...	...	3544.93
3954	Maple-Sugar	Acer	saccharum	10	...	...	1	...	Good	...	...	3077.2
3955	Locust-Black	Robinia	pseudoacacia	12	...	...	1	...	Fair	...	...	1899.07
3956	Locust-Black	Robinia	pseudoacacia	11	...	...	1	...	Fair	...	...	1595.75
3957	Maple-Sugar	Acer	saccharum	5	...	...	1	...	Good	...	...	769.3
3958	Maple-Sugar	Acer	saccharum	6	...	...	1	...	Good	...	...	1107.79
3959	Locust-Black	Robinia	pseudoacacia	7	...	...	1	...	Fair	...	...	646.21
3960	Maple-Sugar	Acer	saccharum	5	...	...	1	...	Good	...	...	769.3
3961	Maple-Sugar	Acer	saccharum	5	...	...	1	...	Good	...	...	769.3
3962	Locust-Black	Robinia	pseudoacacia	8	...	...	1	...	Dead	...	...	0
3963	Maple-Sugar	Acer	saccharum	6	...	...	1	...	Good	...	...	1107.79
3964	Locust-Black	Robinia	pseudoacacia	12	...	...	1	...	Good	...	...	2658.7
3965	Tree of Heaven	Ailanthus	altissima	16	...	...	1	...	Poor	...	...	337.61
3966	Locust-Black	Robinia	pseudoacacia	12	...	...	1	...	Fair	...	...	1899.07
3967	Maple-Red	Acer	rubrum	6	...	...	1	...	Poor	...	...	379.81
3968	Maple-Sugar	Acer	saccharum	6	...	...	1	...	Good	...	...	1107.79
3969	Maple-Sugar	Acer	saccharum	9	...	...	1	...	Good	...	...	2492.53
3970	Maple-Sugar	Acer	saccharum	4	...	...	1	...	Fair	...	...	351.68
3971	Oak-Northern Red	Quercus	rubra	20	...	...	1	...	Good	...	...	12308.8
3972	Maple-Red	Acer	rubrum	8	...	...	1	...	Good	...	...	1575.53
3973	Locust-Black	Robinia	pseudoacacia	7	...	...	1	...	Poor	...	...	387.73
3974	Locust-Black	Robinia	pseudoacacia	8	...	...	1	...	Fair	...	...	844.03
3975	Maple-Red	Acer	rubrum	10	...	...	1	...	Good	...	...	2461.76
3976	Oak-Northern Red	Quercus	rubra	10	...	...	1	...	Fair	...	...	2198
3977	Maple-Sugar	Acer	saccharum	7	...	...	1	...	Fair	...	...	1077.02
3978	Maple-Sugar	Acer	saccharum	10	...	...	1	...	Good	...	...	3077.2
3979	Locust-Black	Robinia	pseudoacacia	5	...	...	1	...	Dead	...	...	0
3980	Locust-Black	Robinia	pseudoacacia	7	...	...	1	...	Fair	...	...	646.21
3981	Maple-Red	Acer	rubrum	5	...	...	1	...	Good	...	...	615.44
3982	Locust-Black	Robinia	pseudoacacia	10	...	...	1	...	Fair	...	...	1318.8
3983	Maple-Sugar	Acer	saccharum	10	...	...	1	...	Good	...	...	3077.2
3984	Locust-Black	Robinia	pseudoacacia	8	...	...	1	...	Poor	...	...	506.42
3985	Locust-Black	Robinia	pseudoacacia	5	...	...	1	...	Dead	...	...	0
3986	Tree of Heaven	Ailanthus	altissima	7	...	...	1	...	Fair	...	...	107.7
3987	Locust-Black	Robinia	pseudoacacia	15	...	...	1	...	Good	...	...	4154.22

3988	Tree of Heaven	Ailanthus	altissima	6	...	...	1	...	Fair	...	...	79.13
3989	Locust-Black	Robinia	pseudoacacia	4	...	...	1	...	Dead	...	...	0
3990	Maple-Red	Acer	rubrum	7	...	...	1	...	Poor	...	...	516.97
3991	Maple-Red	Acer	rubrum	6	...	...	1	...	Dead	...	...	0
3992	Maple-Sugar	Acer	saccharum	7	...	...	1	...	Good	...	...	1507.83
3993	Locust-Black	Robinia	pseudoacacia	16	...	...	1	...	Good	...	...	4726.58
3994	Maple-Sugar	Acer	saccharum	4	...	...	1	...	Good	...	...	492.35
3995	Locust-Black	Robinia	pseudoacacia	12	...	...	1	...	Fair	...	...	1899.07
3996	Maple-Sugar	Acer	saccharum	8	...	...	1	...	Good	...	...	1969.41
3997	Maple-Sugar	Acer	saccharum	9	...	...	1	...	Good	...	...	2492.53
3998	Maple-Sugar	Acer	saccharum	8	...	...	1	...	Good	...	...	1969.41
3999	Maple-Sugar	Acer	saccharum	4	...	...	1	...	Fair	...	...	351.68
4000	Maple-Sugar	Acer	saccharum	12	...	...	1	...	Good	...	...	4431.17
4001	Maple-Sugar	Acer	saccharum	6	...	...	1	...	Good	...	...	1107.79
4002	Maple-Sugar	Acer	saccharum	6	...	...	1	...	Fair	...	...	791.28
4003	Maple-Sugar	Acer	saccharum	12	...	...	1	...	Good	...	...	4431.17
4004	Locust-Black	Robinia	pseudoacacia	10	...	...	1	...	Fair	...	...	1318.8
4005	Maple-Sugar	Acer	saccharum	8	...	...	1	...	Good	...	...	1969.41
4006	Maple-Sugar	Acer	saccharum	9	...	...	1	...	Good	...	...	2492.53
4007	Maple-Norway	Acer	platanoides	7	...	...	1	...	Good	...	...	753.91
4008	Maple-Sugar	Acer	saccharum	7	...	...	1	...	Good	...	...	1507.83
4009	Cherry	Prunus	sp	19	...	...	1	...	Fair	...	...	3173.91
4010	Maple-Sugar	Acer	saccharum	8	...	...	1	...	Good	...	...	1969.41
4011	Maple-Sugar	Acer	saccharum	4	...	...	1	...	Poor	...	...	211.01
4012	Maple-Sugar	Acer	saccharum	8	...	...	1	...	Good	...	...	1969.41
4013	Locust-Black	Robinia	pseudoacacia	13	...	...	1	...	Good	...	...	3120.28
4014	Tree of Heaven	Ailanthus	altissima	12	...	...	1	...	Fair	...	...	316.51
4015	Maple-Sugar	Acer	saccharum	4	...	...	1	...	Fair	...	...	351.68
4016	Locust-Black	Robinia	pseudoacacia	13	...	...	1	...	Good	...	...	3120.28
4017	Locust-Black	Robinia	pseudoacacia	8	...	...	1	...	Poor	...	...	506.42
4018	Locust-Black	Robinia	pseudoacacia	11	...	...	1	...	Fair	...	...	1595.75
4019	Tree of Heaven	Ailanthus	altissima	8	...	...	1	...	Good	...	...	196.94
4020	Maple-Red	Acer	rubrum	4	...	...	1	...	Poor	...	...	168.81
4021	Locust-Black	Robinia	pseudoacacia	8	...	...	1	...	Poor	...	...	506.42
4022	Maple-Sugar	Acer	saccharum	4	...	...	1	...	Good	...	...	492.35
4023	Locust-Black	Robinia	pseudoacacia	8	...	...	1	...	Poor	...	...	506.42
4024	Maple-Norway	Acer	platanoides	8	...	...	1	...	Good	...	...	984.7
4025	Cherry	Prunus	sp	11	...	...	1	...	Poor	...	...	638.3
4026	Maple-Sugar	Acer	saccharum	8	...	...	1	...	Poor	...	...	844.03
4027	Maple-Sugar	Acer	saccharum	17	...	...	2	...	Good	...	...	16770.74
4028	Cherry	Prunus	sp	24	...	...	1	...	Fair	...	...	5064.19
4029	Maple-Sugar	Acer	saccharum	6	...	...	1	...	Good	...	...	1107.79
4030	Maple-Norway	Acer	platanoides	7	...	...	1	...	Good	...	...	753.91
4031	Maple-Sugar	Acer	saccharum	4	...	...	1	...	Fair	...	...	351.68
4032	Maple-Sugar	Acer	saccharum	4	...	...	1	...	Good	...	...	492.35
4033	Locust-Black	Robinia	pseudoacacia	9	...	...	1	...	Fair	...	...	1068.23
4034	Locust-Black	Robinia	pseudoacacia	10	...	...	1	...	Poor	...	...	791.28
4035	Tree of Heaven	Ailanthus	altissima	19	...	...	1	...	Good	...	...	1110.87
4036	Maple-Sugar	Acer	saccharum	6	...	...	1	...	Poor	...	...	474.77
4037	Maple-Sugar	Acer	saccharum	15	...	...	1	...	Good	...	...	6923.7
4038	Cherry	Prunus	sp	23	...	...	1	...	Good	...	...	6511.36
4039	Maple-Sugar	Acer	saccharum	19	...	...	1	...	Good	...	...	11108.69

4040	Locust-Black	Robinia	pseudoacacia	11	...	...	1	...	Poor	...	...	957.45
4041	Maple-Sugar	Acer	saccharum	11	...	...	1	...	Good	...	...	3723.41
4042	Locust-Black	Robinia	pseudoacacia	12	...	...	1	...	Good	...	...	2658.7
4043	Cherry	Prunus	sp	14	...	...	1	...	Dead	...	...	0
4044	Maple-Sugar	Acer	saccharum	5	...	...	1	...	Good	...	...	769.3
4045	Maple-Sugar	Acer	saccharum	6	...	...	1	...	Good	...	...	1107.79
4046	Maple-Sugar	Acer	saccharum	6	...	...	1	...	Poor	...	...	474.77
4047	Maple-Sugar	Acer	saccharum	9	...	...	1	...	Fair	...	...	1780.38
4048	Locust-Black	Robinia	pseudoacacia	10	...	...	1	...	Poor	...	...	791.28
4049	Maple-Sugar	Acer	saccharum	5	...	...	1	...	Fair	...	...	549.5
4050	Maple-Sugar	Acer	saccharum	7	...	...	2	...	Good	...	...	2615.62
4051	Maple-Sugar	Acer	saccharum	5	...	...	1	...	Fair	...	...	549.5
4052	Maple-Sugar	Acer	saccharum	4	...	...	1	...	Poor	...	...	211.01
4053	Locust-Black	Robinia	pseudoacacia	10	...	...	1	...	Fair	...	...	1318.8
4054	Maple-Sugar	Acer	saccharum	8	...	...	1	...	Good	...	...	1969.41
4055	Maple-Sugar	Acer	saccharum	9	...	...	1	...	Good	...	...	2492.53
4056	Cherry	Prunus	sp	28	...	...	1	...	Good	...	...	9650.1
4057	Maple-Sugar	Acer	saccharum	8	...	...	1	...	Good	...	...	1969.41
4058	Maple-Sugar	Acer	saccharum	7	...	...	1	...	Good	...	...	1507.83
4059	Maple-Sugar	Acer	saccharum	10	...	...	1	...	Good	...	...	3077.2
4060	Maple-Sugar	Acer	saccharum	5	...	...	1	...	Fair	...	...	549.5
4061	Maple-Sugar	Acer	saccharum	7	...	...	1	...	Good	...	...	1507.83
4062	Maple-Sugar	Acer	saccharum	8	...	...	1	...	Good	...	...	1969.41
4063	Maple-Sugar	Acer	saccharum	22	...	...	1	...	Good	...	...	14893.65
4064	Maple-Sugar	Acer	saccharum	6	...	...	1	...	Good	...	...	1107.79
4065	Maple-Sugar	Acer	saccharum	13	...	...	1	...	Good	...	...	5200.47
4066	Maple-Sugar	Acer	saccharum	7	...	...	1	...	Fair	...	...	1077.02
4067	Maple-Sugar	Acer	saccharum	6	...	...	1	...	Good	...	...	1107.79
4068	Maple-Sugar	Acer	saccharum	12	...	...	1	...	Good	...	...	4431.17
4069	Maple-Sugar	Acer	saccharum	11	...	...	1	...	Good	...	...	3723.41
4070	Maple-Sugar	Acer	saccharum	10	...	...	1	...	Good	...	...	3077.2
4071	Maple-Sugar	Acer	saccharum	9	...	...	1	...	Good	...	...	2492.53
4072	Maple-Sugar	Acer	saccharum	9	...	...	1	...	Good	...	...	2492.53
4073	Maple-Sugar	Acer	saccharum	7	...	...	1	...	Good	...	...	1507.83
4074	Maple-Sugar	Acer	saccharum	6	...	...	1	...	Good	...	...	1107.79
4075	Maple-Sugar	Acer	saccharum	10	...	...	1	...	Good	...	...	3077.2
4076	Ash-White	Fraxinus	americana	12	...	...	1	...	Dead	...	...	0
4077	Maple-Sugar	Acer	saccharum	22	...	...	1	...	Good	...	...	14893.65
4078	Maple-Sugar	Acer	saccharum	8	...	...	1	...	Fair	...	...	1406.72
4079	Maple-Sugar	Acer	saccharum	5	...	...	1	...	Good	...	...	769.3
4080	Maple-Sugar	Acer	saccharum	5	...	...	1	...	Good	...	...	769.3
4081	Maple-Sugar	Acer	saccharum	9	...	...	1	...	Fair	...	...	1780.38
4082	Maple-Sugar	Acer	saccharum	10	...	...	1	...	Good	...	...	3077.2
4083	Maple-Sugar	Acer	saccharum	13	...	...	1	...	Good	...	...	5200.47
4084	Maple-Sugar	Acer	saccharum	9	...	...	1	...	Good	...	...	2492.53
4085	Maple-Sugar	Acer	saccharum	9	...	...	1	...	Good	...	...	2492.53
4086	Maple-Sugar	Acer	saccharum	11	...	...	1	...	Good	...	...	3723.41
4087	Maple-Sugar	Acer	saccharum	8	...	...	1	...	Good	...	...	1969.41
4088	Maple-Sugar	Acer	saccharum	7	...	...	1	...	Good	...	...	1507.83
4089	Ash-White	Fraxinus	americana	10	...	...	1	...	Poor	...	...	527.52
4090	Maple-Sugar	Acer	saccharum	6	...	...	1	...	Good	...	...	1107.79
4091	Maple-Sugar	Acer	saccharum	6	...	...	1	...	Good	...	...	1107.79

4092	Maple-Sugar	Acer	saccharum	10	...	...	1	...	Good	...	...	3077.2
4093	Locust-Black	Robinia	pseudoacacia	15	...	...	1	...	Good	...	...	4154.22
4094	Maple-Sugar	Acer	saccharum	5	...	...	1	...	Fair	...	...	549.5
4095	Maple-Sugar	Acer	saccharum	7	...	...	1	...	Fair	...	...	1077.02
4096	Maple-Sugar	Acer	saccharum	4	...	...	1	...	Good	...	...	492.35
4097	Maple-Red	Acer	rubrum	5	...	...	1	...	Good	...	...	615.44
4098	Locust-Black	Robinia	pseudoacacia	10	...	...	1	...	Fair	...	...	1318.8
4099	Maple-Sugar	Acer	saccharum	9	...	...	1	...	Good	...	...	2492.53
4100	Maple-Sugar	Acer	saccharum	6	...	...	1	...	Good	...	...	1107.79
4101	Maple-Sugar	Acer	saccharum	5	...	...	1	...	Fair	...	...	549.5
4102	Maple-Sugar	Acer	saccharum	15	...	...	1	...	Good	...	...	6923.7
4103	Maple-Sugar	Acer	saccharum	7	...	...	1	...	Good	...	...	1507.83
4104	Maple-Sugar	Acer	saccharum	10	...	...	1	...	Good	...	...	3077.2
4105	Maple-Sugar	Acer	saccharum	8	...	...	1	...	Good	...	...	1969.41
4106	Maple-Sugar	Acer	saccharum	11	...	...	1	...	Fair	...	...	2659.58
4107	Maple-Sugar	Acer	saccharum	8	...	...	1	...	Good	...	...	1969.41
4108	Maple-Sugar	Acer	saccharum	6	...	...	1	...	Fair	...	...	791.28
4109	Maple-Sugar	Acer	saccharum	10	...	...	1	...	Good	...	...	3077.2
4110	Maple-Sugar	Acer	saccharum	7	...	...	1	...	Poor	...	...	646.21
4111	Maple-Red	Acer	rubrum	13	...	...	1	...	Fair	...	...	2971.7
4112	Maple-Sugar	Acer	saccharum	4	...	...	1	...	Fair	...	...	351.68
4113	Maple-Sugar	Acer	saccharum	13	...	...	1	...	Fair	...	...	3714.62
4114	Maple-Sugar	Acer	saccharum	4	...	...	1	...	Poor	...	...	211.01
4115	Maple-Sugar	Acer	saccharum	7	...	...	1	...	Good	...	...	1507.83
4116	Maple-Sugar	Acer	saccharum	6	...	...	1	...	Fair	...	...	791.28
4117	Maple-Sugar	Acer	saccharum	8	...	...	1	...	Good	...	...	1969.41
4118	Maple-Sugar	Acer	saccharum	4	...	...	1	...	Fair	...	...	351.68
4119	Maple-Sugar	Acer	saccharum	12	...	...	1	...	Good	...	...	4431.17
4120	Maple-Red	Acer	rubrum	4	...	...	1	...	Fair	...	...	281.34
4121	Maple-Sugar	Acer	saccharum	10	...	...	1	...	Good	...	...	3077.2
4122	Maple-Sugar	Acer	saccharum	9	...	...	1	...	Good	...	...	2492.53
4123	Maple-Sugar	Acer	saccharum	10	...	...	1	...	Good	...	...	3077.2
4124	Cherry	Prunus	sp	14	...	...	1	...	Fair	...	...	1723.23
4125	Maple-Sugar	Acer	saccharum	5	...	...	1	...	Fair	...	...	549.5
4126	Maple-Sugar	Acer	saccharum	11	...	...	1	...	Good	...	...	3723.41
4127	Maple-Norway	Acer	platanoides	4	...	...	1	...	Good	...	...	246.18
4128	Maple-Sugar	Acer	saccharum	7	...	...	1	...	Good	...	...	1507.83
4129	Maple-Sugar	Acer	saccharum	6	...	...	1	...	Fair	...	...	791.28
4130	Maple-Sugar	Acer	saccharum	11	...	...	1	...	Good	...	...	3723.41
4131	Maple-Norway	Acer	platanoides	13	...	...	1	...	Good	...	...	2600.23
4132	Maple-Norway	Acer	platanoides	12	...	...	1	...	Good	...	...	2215.58
4133	Maple-Sugar	Acer	saccharum	4	...	...	1	...	Good	...	...	492.35
4134	Maple-Sugar	Acer	saccharum	8	...	...	1	...	Good	...	...	1969.41
4135	Maple-Sugar	Acer	saccharum	6	...	...	1	...	Good	...	...	1107.79
4136	Ash-White	Fraxinus	americana	9	...	...	1	...	Dead	...	...	0
4137	Maple-Sugar	Acer	saccharum	8	...	...	1	...	Good	...	...	1969.41
4138	Maple-Sugar	Acer	saccharum	4	...	...	1	...	Fair	...	...	351.68
4139	Maple-Sugar	Acer	saccharum	13	...	...	1	...	Good	...	...	5200.47
4140	Locust-Black	Robinia	pseudoacacia	5	...	...	1	...	Dead	...	...	0
4141	Maple-Sugar	Acer	saccharum	6	...	...	1	...	Fair	...	...	791.28
4142	Maple-Sugar	Acer	saccharum	12	...	...	1	...	Good	...	...	4431.17
4143	Maple-Sugar	Acer	saccharum	5	...	...	1	...	Fair	...	...	549.5

4144	Maple-Sugar	Acer	saccharum	10	...	...	1	...	Good	...	...	3077.2
4145	Locust-Black	Robinia	pseudoacacia	19	...	...	1	...	Good	...	...	6665.22
4146	Locust-Black	Robinia	pseudoacacia	18	...	...	1	...	Fair	...	...	4272.91
4147	Maple-Sugar	Acer	saccharum	4	...	...	1	...	Good	...	...	492.35
4148	Cherry	Prunus	sp	16	...	...	1	...	Fair	...	...	2250.75
4149	Maple-Sugar	Acer	saccharum	8	...	...	1	...	Fair	...	...	1406.72
4150	Maple-Norway	Acer	platanoides	13	...	...	1	...	Good	...	...	2600.23
4151	Locust-Black	Robinia	pseudoacacia	15	...	...	1	...	Poor	...	...	1780.38
4152	Maple-Red	Acer	rubrum	14	...	...	2	...	Good	...	...	7803.78
4153	Maple-Sugar	Acer	saccharum	10	...	...	1	...	Good	...	...	3077.2
4154	Maple-Sugar	Acer	saccharum	6	...	...	1	...	Dead	...	...	0
4155	Maple-Sugar	Acer	saccharum	4	...	...	1	...	Fair	...	...	351.68
4156	Maple-Sugar	Acer	saccharum	9	...	...	1	...	Dead	...	...	0
4157	Maple-Sugar	Acer	saccharum	9	...	...	1	...	Good	...	...	2492.53
4158	Maple-Sugar	Acer	saccharum	6	...	...	1	...	Fair	...	...	791.28
4159	Maple-Sugar	Acer	saccharum	4	...	...	1	...	Fair	...	...	351.68
4160	Maple-Sugar	Acer	saccharum	9	...	...	1	...	Good	...	...	2492.53
4161	Maple-Norway	Acer	platanoides	14	...	...	1	...	Good	...	...	3015.66
4162	Maple-Sugar	Acer	saccharum	10	...	...	1	...	Fair	...	...	2198
4163	Maple-Sugar	Acer	saccharum	6	...	...	1	...	Fair	...	...	791.28
4164	Maple-Sugar	Acer	saccharum	10	...	...	1	...	Good	...	...	3077.2
4165	Maple-Sugar	Acer	saccharum	9	...	...	1	...	Good	...	...	2492.53
4166	Maple-Sugar	Acer	saccharum	11	...	...	2	...	Good	...	...	4492.71
4167	Ash-White	Fraxinus	americana	17	...	...	1	...	Poor	...	...	1524.53
4168	Maple-Sugar	Acer	saccharum	12	...	...	1	...	Good	...	...	4431.17
4169	Maple-Sugar	Acer	saccharum	11	...	...	1	...	Good	...	...	3723.41
4170	Maple-Sugar	Acer	saccharum	7	...	...	1	...	Fair	...	...	1077.02
4171	Maple-Sugar	Acer	saccharum	7	...	...	1	...	Fair	...	...	1077.02
4172	Maple-Sugar	Acer	saccharum	13	...	...	1	...	Good	...	...	5200.47
4173	Maple-Sugar	Acer	saccharum	9	...	...	1	...	Fair	...	...	1780.38
4174	Maple-Sugar	Acer	saccharum	6	...	...	1	...	Poor	...	...	474.77
4175	Maple-Sugar	Acer	saccharum	5	...	...	1	...	Good	...	...	769.3
4176	Maple-Sugar	Acer	saccharum	7	...	...	1	...	Good	...	...	1507.83
4177	Tree of Heaven	Ailanthus	altissima	13	...	...	1	...	Fair	...	...	371.46
4178	Maple-Sugar	Acer	saccharum	6	...	...	1	...	Fair	...	...	791.28
4179	Tree of Heaven	Ailanthus	altissima	14	...	...	1	...	Fair	...	...	430.81
4180	Maple-Sugar	Acer	saccharum	6	...	...	1	...	Poor	...	...	474.77
4181	Maple-Sugar	Acer	saccharum	6	...	...	1	...	Good	...	...	1107.79
4182	Maple-Sugar	Acer	saccharum	7	...	...	1	...	Poor	...	...	646.21
4183	Maple-Sugar	Acer	saccharum	8	...	...	1	...	Fair	...	...	1406.72
4184	Tree of Heaven	Ailanthus	altissima	24	...	...	1	...	Good	...	...	1772.47
4185	Tree of Heaven	Ailanthus	altissima	10	...	...	1	...	Fair	...	...	219.8
4186	Maple-Sugar	Acer	saccharum	7	...	...	1	...	Good	...	...	1507.83
4187	Tree of Heaven	Ailanthus	altissima	15	...	...	1	...	Poor	...	...	296.73
4188	Tree of Heaven	Ailanthus	altissima	10	...	...	1	...	Poor	...	...	131.88
4189	Maple-Sugar	Acer	saccharum	5	...	...	2	...	Fair	...	...	901.18
4190	Maple-Sugar	Acer	saccharum	4	...	...	1	...	Fair	...	...	351.68
4191	Tree of Heaven	Ailanthus	altissima	21	...	...	1	...	Fair	...	...	969.32
4192	Tree of Heaven	Ailanthus	altissima	14	...	...	1	...	Poor	...	...	258.48
4193	Cherry	Prunus	sp	15	...	...	1	...	Poor	...	...	1186.92
4194	Maple-Sugar	Acer	saccharum	14	...	...	1	...	Good	...	...	6031.31
4195	Tree of Heaven	Ailanthus	altissima	19	...	...	1	...	Fair	...	...	793.48

4196	Maple-Sugar	Acer	saccharum	8	...	...	1	...	Fair	...	...	1406.72
4197	Maple-Sugar	Acer	saccharum	7	...	...	1	...	Fair	...	...	1077.02
4198	Maple-Sugar	Acer	saccharum	11	...	...	1	...	Fair	...	...	2659.58
4199	Ash-White	Fraxinus	americana	12	...	...	1	...	Dead	...	...	0
4200	Maple-Sugar	Acer	saccharum	4	...	...	1	...	Fair	...	...	351.68
4201	Maple-Sugar	Acer	saccharum	13	...	...	1	...	Good	...	...	5200.47
4202	Maple-Sugar	Acer	saccharum	12	...	...	1	...	Good	...	...	4431.17
4203	Maple-Sugar	Acer	saccharum	11	...	...	1	...	Fair	...	...	2659.58
4204	Maple-Sugar	Acer	saccharum	4	...	...	1	...	Poor	...	...	211.01
4205	Maple-Sugar	Acer	saccharum	5	...	...	1	...	Poor	...	...	329.7
4206	Maple-Sugar	Acer	saccharum	4	...	...	1	...	Fair	...	...	351.68
4207	Maple-Sugar	Acer	saccharum	4	...	...	1	...	Fair	...	...	351.68
4208	Maple-Sugar	Acer	saccharum	9	...	...	1	...	Good	...	...	2492.53

Appendix H

New York Natural Heritage Program Correspondence

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

Division of Fish and Wildlife, New York Natural Heritage Program
625 Broadway, Fifth Floor, Albany, NY 12233-4757
P: (518) 402-8935 | F: (518) 402-8925
www.dec.ny.gov

January 28, 2020

Laura Lefebvre
TRC
650 Suffolk Street, Wannalancit Mills
Lowell, MA 01854

Re: Cortlandt Solar
County: Westchester Town/City: Cortlandt

Dear Ms. Lefebvre:

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

We have no records of rare or state-listed animals or plants, or significant natural communities at the project site or in its immediate vicinity.

The absence of data does not necessarily mean that rare or state-listed species, significant natural communities, or other significant habitats do not exist on or adjacent to the proposed site. Rather, our files currently do not contain information that indicates their presence. For most sites, comprehensive field surveys have not been conducted. We cannot provide a definitive statement on 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 resources may be required to fully assess impacts on biological resources.

This response applies only to known occurrences of rare or state-listed animals and plants, significant natural communities, and other significant habitats maintained in the Natural Heritage database. Your project may require additional review or permits; for information regarding other permits that may be required under state law for regulated areas or activities (e.g., regulated wetlands), please contact the NYS DEC Region 3 Office, Division of Environmental Permits, at dep.r3@dec.ny.gov.

Sincerely,

Andrea Chaloux

Andrea Chaloux
Environmental Review Specialist
New York Natural Heritage Program

Appendix I

Office of Parks, Recreation, and Historic Preservation Correspondence

4425-B Forbes Blvd.
Lanham, MD 20706

T 301.306.6981
TRCcompanies.com

April 7, 2020

Daniel Mackay, Deputy Commissioner/Deputy SHPO
New York State Office of Parks, Recreation and Historic Preservation
Historic Preservation Field Services Bureau
Peebles Island Resource Center, PO Box 189
Waterford, NY 12188-0189

RE: Request for Consultation: Proposed Cortlandt Solar Project in Town of Cortlandt, Westchester County, New York

Dear Mr. Mackay,

CVE North America (CVE), proposes to construct a solar generating facility, the Cortlandt Solar Project (Project), located at 3479 Lexington Avenue (Parcel ID: 13.18-2-2.4) in Cortlandt, New York (Project area) (**Figure 1**). The Project area comprises approximately 29.5 acres of undeveloped forested lands in Cortlandt's Single Family Residential (R-40) Zoning District and will be reviewed pursuant to the State Environmental Quality Review (SEQR) Act (New York Environmental Conservation Law Article 8) and its implementing regulations (6 NYCRR Part 617). The Project will also be reviewed in accordance with the New York State Historic Preservation Act of 1980 (Section 14.09 of the New York Parks, Recreation and Historic Preservation Law).

The Project will have a generating capability of 5.9 megawatts (MW) of power. Proposed components include commercial-scale solar arrays, access roads, buried (and possibly overhead) electric collection lines, and electrical interconnection facilities. The final solar array specification, as well as locations of arrays, will be finalized as part of micro-siting efforts (**Figure 2**).

TRC Companies, Inc. (TRC) has been retained by CVE North America, to provide environmental review and licensing services in support of the Project. The purpose of this letter is to initiate formal consultation with your agency in determining potential impacts to cultural resources that could result from the Project. The Project will require filing of an Environmental Assessment Form (EAF) Part 1 and Expanded Environmental Assessment with the Town of Cortlandt. TRC completed preliminary background research of the Project area and vicinity using the National Park Service (NPS), National Register of Historic Places (NRHP), and the Office of Parks, Recreation, and Historic Preservation (OPRHP) Cultural Resource Information System (CRIS) website.

Archaeology

Based on a review of CRIS, there are no previously recorded archaeological sites within the Project area and four previously recorded archaeological sites within a one-mile radius of the Project area **(Table 1; Figure 3**).

Table 1: Previously Recorded Archaeological Sites within One Mile of the Project Area

Site Number	Site Name	Site Type	National Register Eligibility Status	Distance and Direction (Approximate)
07905.000043	Farley House Historic Site	Historic	Undetermined	0.72 mi north
07905.000044	Yerks House Historic Site	Historic	Undetermined	0.85 mi north
11902.000132	Frooks Place Precontact Site	Pre-contact	Not Eligible	0.46 mi south
11918.000024	Fry Rd House and Residence 1870 & Lake Mohagan Inn 1915	Historic	Undetermined	0.62 mi southeast

Site 11918.000132 is noted as not eligible for inclusion in the NRHP and the remaining three sites have not been evaluated. The majority of the Project area (25.6 ac) overlaps with a Phase IB archaeological survey (survey 07PR3084) conducted in 2007 by CITY/SCAPE: Cultural Resource Consultants. The previous survey of this area included the excavation of 630 STPs and identified no archaeological resources with the exception of a limited quantity of twentieth-century artifacts interpreted as field scatter.

During a preliminary site visit for feasibility assessment, an undetermined length of fieldstone walls was identified within the Project area (**Photographs 1-3**). The stone walls were likely constructed historically by landowners to clear fields for agriculture and demarcate property boundaries. The stone walls appear to be well preserved and are noted on a 1947 aerial photograph showing the partially forested Project area (**Photograph 4**). The 2007 CITY/SCAPE report notes the presence of stone walls within the overlapping Project area parcels and indicates they are likely boundary markings for former farm fields; several photographs of the stone walls are provided in Appendix B of that report. By 1974, reforestation in the area prevented visibility of the stone walls on aerial photographs. A preliminary review of area historic maps has yet to identify maps showing stone property boundary walls and, as such, the period of construction remains undetermined.

Historic Architecture

Based on a review of CRIS, there are 23 architectural resources identified within a one-mile radius of the Project area (**see Figure 3**). Of these 23 resources, one (1) resource is NRHP listed, six (6) have been determined NRHP eligible, 15 have been determined not eligible for inclusion in the NRHP, and one (1) is of undetermined status (**Table 2**). All 23 resources are located outside of the Project area. The Project area is wooded and contains no above-ground resources; therefore, the Project is expected to have no direct physical impacts to above-ground resources.

Table 2: Previously Identified Historic Architectural Resources within One Mile

USN	Name	Status
11918.00005	St. George's Church (1911-1920), LaFarge & Heins, - US 6	Listed
11918.00003	Franciscan Convent; William B. Osgood Field House - Lexington Ave	Eligible
11918.00009	Franciscan Convent (William B. Osgood Field Hse) Barn - 3980 Lexington Ave	Eligible
11918.00004	Franciscan Gardens/Red House - Lexington Ave	Eligible
11918.00004	Franciscan Gardens/ House 1940s (Contributing) - Lexington Ave	Eligible
11918.00003	Franciscan Gardens/Stucco Gatehouse - Lexington Ave	Eligible
11918.00003	Franciscan Gardens/Tower House - Lexington Ave	Eligible
7905.000042	7 Oscawana Lake Rd	Not Eligible
7905.000045	Putnam Valley Free Library - 30 Oscawana Lake Road 10579	Not Eligible
11902.00013	Frooks Place (Rev. D. Curry House) - 10 - 12 Frooks Place	Not Eligible
11918.0001	Retail complex - 1859 US 6	Not Eligible
7905.000046	Peekskill Hollow Rd Bridge (BIN 3345650) - CR 21	Not Eligible
11902.00002	30 Lakeland Ave	Not Eligible
11902.00013	Van Cortlandtville Elementary School - 3100 East Main Street 10547	Not Eligible
11918.0001	Westchester Restorative Therapy and Nursing Center - 3550 Lexington Avenue 10547	Not Eligible
11918.00011	Barn/carriage house - 1821 east main street 10598	Not Eligible
11918.0001	Lakeland Street at East Main Street, Mohegan Lake - 1851 US 6	Not Eligible
11902.00018	3441 Lexington Avenue 10567	Not Eligible
11918.00003	Franciscan High School - Lexington Ave	Not Eligible
7905.000047	54 Hewitt Street - 54 Hewitt Street 10537	Not Eligible
7905.000051	17 Marsh Hill Road, Putnam Valley - 17 Marsh Hill Road 10579	Not Eligible
7905.000079	142 Peekskill Hollow Road, Putnam Valley - 142 Peekskill Hollow Road 10576	Not Eligible
11918.00006	Freedom Gardens - 1680 Strawberry Rd	Undetermined

Recommendations

Archaeology

There are no previously recorded archaeological sites within the Project area. A previous Phase IB archaeological survey (CITY/SCAPE: Cultural Resource Consultants 2007) overlapped the majority (approximately 25.6 ac.) of the current Project area and did not record archaeological resources. The remaining un-surveyed portion of the Project area (approximately 3.9 acres) is not within an archaeologically sensitive area as depicted on the CRIS webviewer.

The extant fieldstone walls observed within the Project area are interpreted as historic property boundary walls constructed from stone recovered during clearing of agricultural fields. The 2007 Phase IB survey (CITY/SCAPE 2007: 9) notes the presence of stone walls but the report provides no further documentation or interpretation. As currently designed, the historic stone walls will be removed, or to a

limited extent, buried during construction of the solar facility. We look forward to your review to determine if further archaeological documentation or study of the Project area is warranted.

Historic Architecture

There are no buildings or structures within the proposed Project area. Immediately to the west and north of the Project area is a residential area on Mill Court with houses built primarily in the 1990s. One property on Mill Court is a circa 1920 Colonial Revival Style house. The NRHP-listed property, St. George's Church, is located approximately 0.7 mile east of the Project area, and visibility from the listed property is obscured by wooded areas adjacent to the Project area. The buildings associated with the NRHP-eligible Franciscan Convent and Gardens are located approximately 0.2 mile east of the Project area, on the east side of Lexington Avenue. A wooded area between the Project area and Lexington Avenue obscures the line of sight from the NRHP-eligible resources.

Under Chapter 188 of the Town Code of Cortlandt, the impacts to scenic/historic roadways in Cortlandt must be considered. Red Mill Road, located north of the Project area, is listed as a historic/scenic road in Chapter 188 of the Town Code. A proposed access road to the Project area connects with Red Mill Road.

TRC looks forward to receiving your review of this information to determine if additional consultation or further study of potential Project effects is warranted. Should you have any questions or require additional information, please do not hesitate to contact me at (301) 276-8040, or tsara@trccompanies.com.

Sincerely yours,

Timothy R. Sara, RPA
Program Manager, Cultural Resources

cc: Travis Scott, CVE
Laura Lefebvre, TRC

file 360551.0000.0000

References Cited

CITY/SCAPE: Cultural Resource Consultants
2007 *Phase IA Literature Review and Sensitivity Analysis & Phase IB Archeological Field Reconnaissance Survey, Mill Court Crossing (07OPRHP03084) Mill Court and Lexington Avenue, Town of Cortlandt, Westchester County, New York.* Report prepared for Tim Miller Associates, Cold Springs: New York. Report prepared by CITY/SCAPE: Cultural Resource Consultants, White Plains, New York.

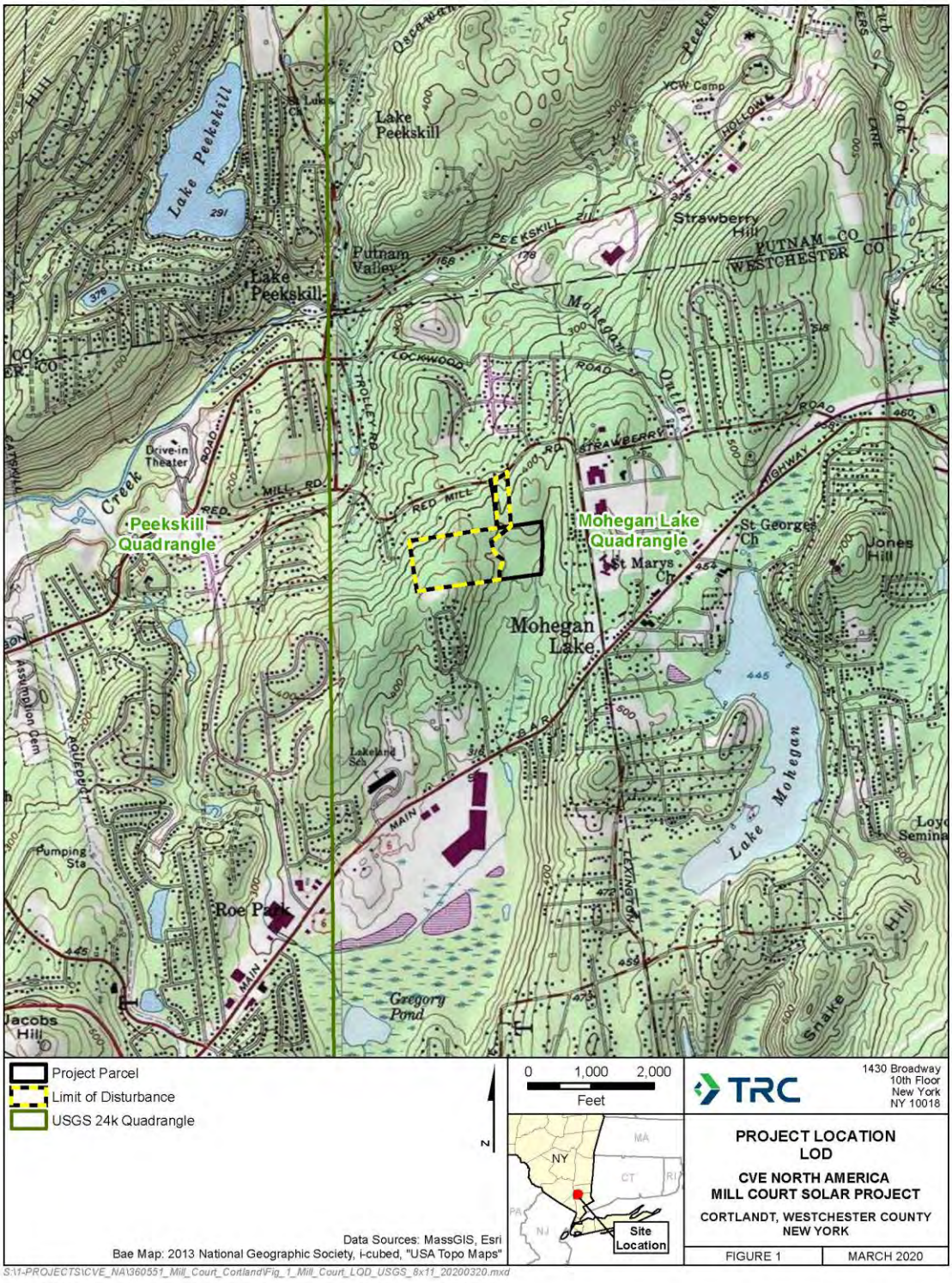


Figure 1: General Project location in Westchester County, New York.

Figure 2: Draft Project design plan.

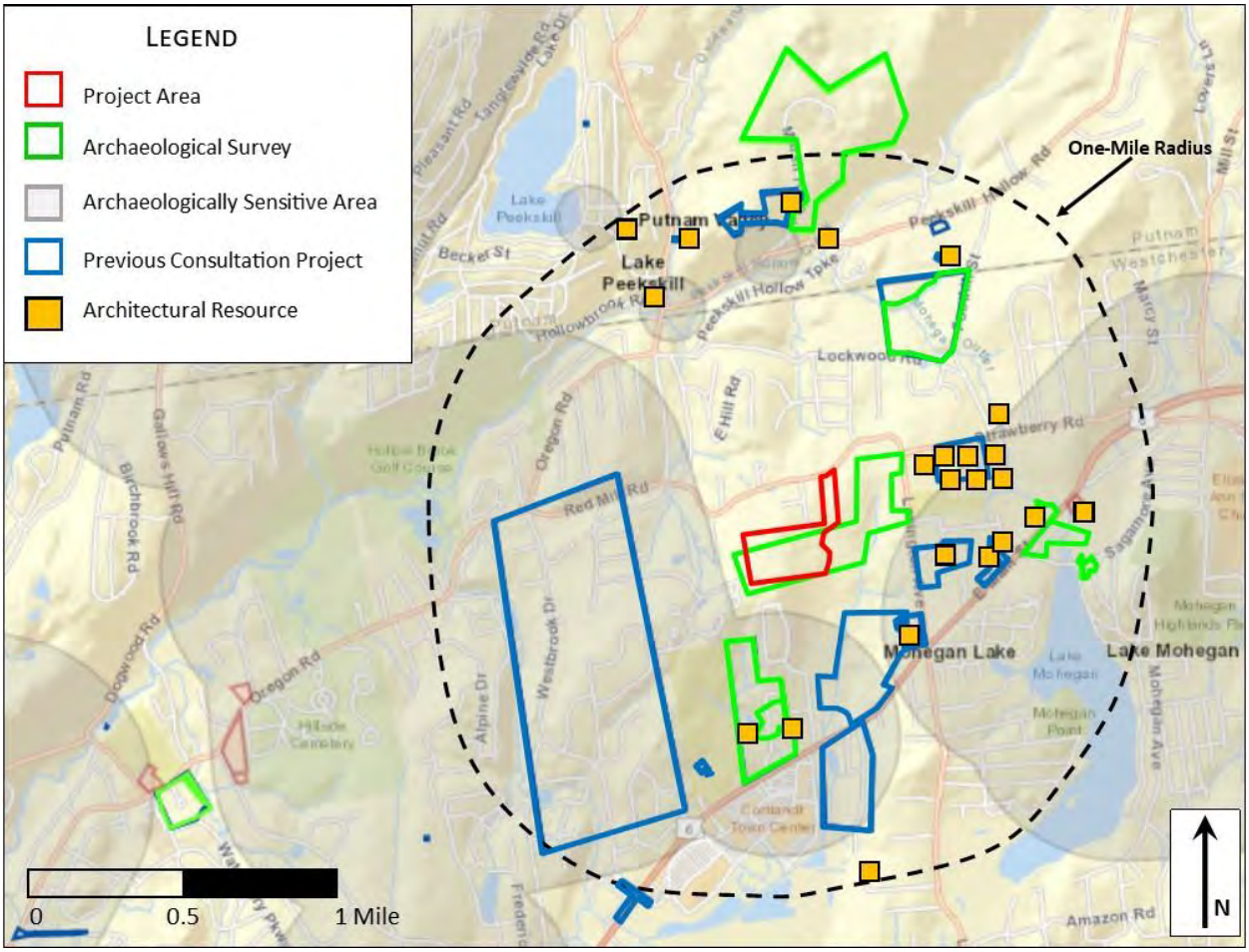
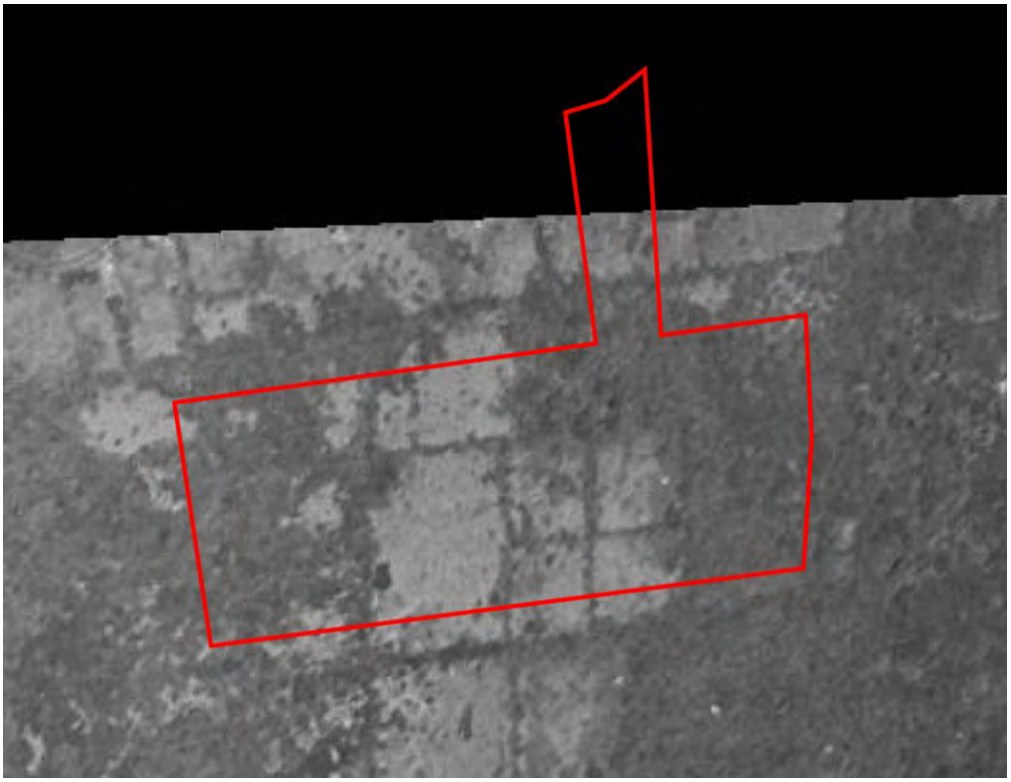


Figure 3: Project area superimposed over OPRHP Cultural Resources Information System (CRIS) Webviewer (*accessed March 2020*).

Photograph 1: Fieldstone walls within Project area.

Photograph 2: Fieldstone walls within Project area.

Photograph 3: Fieldstone walls within Project area.



Photograph 4: Fieldstone walls within Project parcel (red outline) on 1947 aerial photograph.

NEW YORK STATE OF OPPORTUNITY. | Parks, Recreation, and Historic Preservation

ANDREW M. CUOMO
Governor

ERIK KULLESEID
Commissioner

June 9, 2020

Jasmine Gollup
Archaeologist/Laboratory Director - TRC
4425-B Forbes Blvd
Lanham, MD 20706

Re: DEC
Cortlandt Solar Project/5.9MW/29.5acres
3479 Lexington Ave, Mohegan Lake, NY 10547
20PR02349

Dear Jasmine Gollup:

Thank you for requesting the comments of the Division for Historic Preservation of the Office of Parks, Recreation and Historic Preservation (OPRHP). We have reviewed the submitted materials in accordance with the New York State Historic Preservation Act of 1980 (section 14.09 of the New York Parks, Recreation and Historic Preservation Law). These comments are those of the Division for Historic Preservation and relate only to Historic/Cultural resources. They do not include potential environmental impacts to New York State Parkland that may be involved in or near your project. Such impacts must be considered as part of the environmental review of the project pursuant to the State Environmental Quality Review Act (New York Environmental Conservation Law Article 8) and its implementing regulations (6NYCRR Part 617).

We note that there are seven properties within a one-mile radius of the project area that are listed or eligible for listing in the State and National Registers of Historic Places. We have reviewed the consultation packet for the proposed solar project, dated April 7, 2020. None of the historic properties are located within the project area. The project area is obscured by vegetation and will not be visible from the nearby historic resources.

Based upon our review, it is the OPRHP's opinion that the project will have No Adverse Impact on historic or archaeological resources, with the condition the existing vegetative buffer surrounding the project area is retained. If this condition cannot be met or there are substantive changes to the project, consultation with our office should resume.

If you have any questions, I can be reached at (518) 268-2187.

Sincerely,

Derek Rohde
Historic Site Restoration Coordinator
e-mail: derek.rohde@parks.ny.gov

via e-mail only

Appendix J

Visual Resource Inventory Table

VISUAL RESOURCE INVENTORY (5-Mile Radius)		
Visual Resource	**Type**	**Approximate Distance (Miles)**
Westchester Resco Heliport	Airport	4.7
Cortlandt Bridge	Bridge	4.1
North Westchester Restorative Therapy and Nursing Center	Building	0.2
Mohegan Park Adult Care Facility	Building	0.2
Putnam Valley Free Library	Building	0.8
John C Hart Memorial Library	Building	1.8
Cortlandt Town Hall	Building	2.0
West Ledge Rehabilitation and Nursing Center	Building	2.0
Schoolhouse Museum	Building	2.3
The Seabury at Fieldhome Assisted Living Facility	Building	2.8
Putnam Valley Town Hall	Building	2.9
Cortlandt Healthcare Nursing Home	Building	3.4
Colonial Home for the Aged	Building	3.4
Peekskill Municipal Building	Building	3.4
Peekskill City Hall	Building	3.4
Field Library of Peekskill	Building	3.4
Memorial Museum	Building	3.4
Peekskill Museum	Building	3.5
Centennial Hose Company Number 4 (historical)	Building	3.8
Peekskill Fire Department Centennial Hose	Building	4.2
Country House in Westchester Adult Care Facility	Building	4.8
Assumption Cemetery	Cemetery	1.2
Hillside Cemetery	Cemetery	1.4
Hebrew Cemetery	Cemetery	1.7
King David Cemetery	Cemetery	2.1
Beverly Hills Cemetery	Cemetery	2.2
Lawson Cemetery	Cemetery	2.8
Lent Cemetery	Cemetery	2.9
Graymoor Society of the Atonement Cemetery	Cemetery	3.1
Ackerman Cemetery	Cemetery	4.4

VISUAL RESOURCE INVENTORY (5-Mile Radius)		
Visual Resource	**Type**	**Approximate Distance (Miles)**
Crompond Census Designated Place	Census	2.6
Saint Marys Episcopal Church	Church	0.5
Saint Georges Church	Church	0.6
North American Martyrs Chapel	Church	1.1
Saint Lukes Lutheran Church	Church	1.2
Saint Ambrose of Milan Orthodox Church	Church	1.5
Calvary Memorial Church	Church	1.5
Van Cortlandtville Church	Church	1.7
Grace United Methodist Church	Church	2.6
Canopus Church	Church	2.7
Mount Olivet Baptist Church	Church	2.8
First Baptist Church	Church	3.0
Mount Lebanon Baptist Church	Church	3.0
Park Street African Methodist Episcopal Zion Church	Church	3.1
Church of the Comforter	Church	3.1
First Methodist Church	Church	3.2
United Methodist Church	Church	3.2
Union Church	Church	3.2
Saint Peter's Episcopal Church	Church	3.2
Mount of Atonement Monastery	Church	3.2
Spanish Church Tabernacle	Church	3.3
Indian Lake Chapel	Church	3.4
Salvation Army	Church	3.4
First Presbyterian Church	Church	3.4
Guardian Church of the Assumption	Church	3.4
First Baptist Church (historical)	Church	3.4
Refuge Church of Christ	Church	3.4
First Hebrew Congregation	Church	3.5
Peekskill Presbyterian Church	Church	3.6
Lutheran Church of Our Redeemer	Church	3.7

VISUAL RESOURCE INVENTORY (5-Mile Radius)		
Visual Resource	**Type**	**Approximate Distance (Miles)**
First Church of Christ Scientist	Church	3.8
Annsville Baptist Church	Church	3.8
Saint Margaret's Chapel	Church	4.1
Mount Saint Francis Church	Church	4.1
Peekskill Seventh Day Adventist Church	Church	4.2
Saint Andrews Evangelical Lutheran Church	Church	4.3
Saints Peter and Paul Catholic Church	Church	4.3
Leila Leeds Memorial Chapel	Church	4.6
Saint James Chapel	Church	4.7
Manitou Chapel	Church	4.7
Blue Mountain Reservation (County Park)	County Park	3.3
Mohansic County Park	County Park	3.7
Hudson Valley Hospital Center	Hospital	2.3
Saint Elizabeths Hospice	Hospital	3.5
Westchester Mall Shopping Center	Locale	0.7
Hollowbrook Drive-In (historical)	Locale	0.8
Hollow Brook Golf Course	Locale	1.2
YCW Camp	Locale	1.3
CYO Camp	Locale	1.6
Saint Francis Camp	Locale	3.1
Chicory Meadow Farm	Locale	3.4
Wilkens Fruit And Fir Farm	Locale	3.6
Camp Smith	Locale	3.9
Hemlock Hill Farm	Locale	3.9
Peekskill Yacht Club	Locale	4.4
Travis Corners	Locale	4.5
Manitoga	Locale	4.6
Valeria Home	Locale	4.6
Garrison Golf Club	Locale	4.8
Nokomis Camp	Locale	4.8

VISUAL RESOURCE INVENTORY (5-Mile Radius)		
Visual Resource	**Type**	**Approximate Distance (Miles)**
Kings Dock	Locale	4.9
1715 East Main St., Mohegan Lake, NY 10547	NRHP	0.6
Oregon Rd. and Durrin Ave.	NRHP	1.6
Oregon Hill Road at Locust Avenue	NRHP	1.6
Oregon Rd. and Locust Ave.	NRHP	1.6
297 Locust Ave.	NRHP	1.7
Taconic State Parkway	NRHP	1.8
Oregon Rd.	NRHP	1.9
E. Main St.	NRHP	2.0
US 9	NRHP	2.1
Crompond Rd.	NRHP	2.6
1231 Seymour Lane	NRHP	2.8
Main, Division, Park, Brown, Bank Streets	NRHP	3.0
Nelson Avenue, John, Diven, Constant, Orchard, Paulding, Decatur Streets	NRHP	3.1
137 North Division Street	NRHP	3.2
1031 Elm Street	NRHP	3.4
738 South St.	NRHP	3.5
705 South Street	NRHP	3.6
Ringgold St.	NRHP	3.6
41 South Water Street	NRHP	3.8
50 Hudson Avenue	NRHP	3.9
Junction NY 9D and Manitou Road	NRHP	4.2
NY 9D	NRHP	4.4
NY 6/202, between Bear Mt. Bridge	NRHP	4.4
Old Manitou Rd.	NRHP	4.7
Cat Rock Rd.	NRHP	4.7
NY 9-D	NRHP	4.9
Shrub Oak Memorial Park	Park	2.0
Henry Ward Beecher Park	Park	2.6
Monument Park	Park	3.1

VISUAL RESOURCE INVENTORY (5-Mile Radius)		
Visual Resource	**Type**	**Approximate Distance (Miles)**
Pugsley Park	Park	3.2
Fort Hill Park	Park	3.4
Furnace Brook Headwater Preserve	Park	3.4
Wells Park	Park	3.4
Downing Park	Park	3.5
Depew Park	Park	3.7
Mohansic State Park	Park	3.8
Riverfront Green	Park	3.9
Blue Mountain Reservation	Park	4.2
Friendly Town Memorial Park	Park	4.7
Hunterbrook Park	Recreation/Federal Recreation	2.3
Sprout Brook Park	Recreation/Federal Recreation	2.6
New Hope Farms Park	Recreation/Federal Recreation	2.7
Lakeside Park	Recreation/Federal Recreation	2.8
Sprout Brook Park	Recreation/Federal Recreation	2.9
Depew Park	Recreation/Federal Recreation	3.3
Federal Land	Recreation/Federal Recreation	3.3
Downing Park	Recreation/Federal Recreation	3.4
Federal Land	Recreation/Federal Recreation	3.4
Federal Land	Recreation/Federal Recreation	3.5
Federal Land	Recreation/Federal Recreation	3.9
Sparkle Lake Park	Recreation/Federal Recreation	4.2
Castle Rock State Unique Area	Recreation/Federal Recreation	4.4
Charles Cook Recreation Center Park	Recreation/Federal Recreation	5.0
Taconic State Pkwy	Scenic Byway	1.9
Bear Mountain Bridge Rd	Scenic Byway	4.4

VISUAL RESOURCE INVENTORY (5-Mile Radius)		
Visual Resource	**Type**	**Approximate Distance (Miles)**
Bear Mountain-Beacon Hwy	Scenic Byway	4.6
George Washington Elementary School	School	0.2
Lakeland School	School	0.6
Putnam Valley Middle School	School	0.7
Lakeland Senior High School	School	1.3
Loyola Seminary	School	1.5
Locust Avenue School	School	1.7
Lincoln Titus Elementary School	School	1.7
Saint Columbanus School	School	1.9
Putnam Valley Elementary School	School	2.0
Saint Peters School	School	2.0
Benjamin Franklin Elementary School	School	2.1
Lakeland-Copper Beach School	School	2.4
Hillcrest Elementary School	School	2.6
Villa Loretto School	School	2.8
Crompond Elementary School	School	2.8
Mercy College Yorktown Center	School	2.8
Park Street Secondary Alternative School	School	2.9
Uriah Hill Early Childhood Center	School	2.9
Walter Panas High School	School	2.9
Mount Saint Florence School	School	3.1
Fox Meadow Campus	School	3.2
Mercy College Peekskill Center	School	3.4
Peekskill Military Academy (historical)	School	3.4
Oakside Elementary School	School	3.4
Peekskill Middle School	School	3.5
Mohansic School	School	3.5
Drum Hill Junior High School (historical)	School	3.6
Yorktown High School	School	3.7
Saint Marys School	School	3.7

VISUAL RESOURCE INVENTORY (5-Mile Radius)		
Visual Resource	**Type**	**Approximate Distance (Miles)**
Mildred E Strang Middle School	School	3.9
Woodside Elementary School	School	4.1
Franklin School	School	4.1
Saint Josephs School	School	4.1
Blue Mountain Middle School	School	4.2
Furnace Woods Elementary School	School	4.4
McKinley School	School	4.7
Manitou School	School	4.7
Brookside School	School	4.9
French Hill Elementary School	School	4.9
Donald J. Trump	State Park	2.6
Franklin Delano Roosevelt	State Park	3.0
Donald J. Trump	State Park	3.1
Clarence Fahnestock	State Park	4.3
Donald J. Trump	State Park	4.8
Bear Mountain	State Park	4.9
Hudson Highlands	State Park Preserve	3.5
Hudson Highlands	State Park Preserve	3.5
Hudson Highlands	State Park Preserve	3.7
Hudson Highlands	State Park Preserve	3.8
Hudson Highlands	State Park Preserve	4.2
Hudson Highlands	State Park Preserve	4.4
Hudson Highlands	State Park Preserve	4.5
Hudson Highlands	State Park Preserve	5.0

Appendix K

Preliminary Tree Survey Results

TREE SURVEY TABLE		
	Circumference (inches)	**Diameter (DBH) (inches)**
SPECIES PLOT 1		
red maple (*Acer rubrum*)	68	21.66
	18	5.73
	57	18.15
	18	5.73
	26	8.28
	17.5	5.57
	37	11.78
	16.5	5.25
	28	8.92
sugar maple (*Acer saccharum*)	17	5.41
	14	4.46
	21.5	6.85
	30	9.55
	22.5	7.17
	21	6.69
	22	7.01
	33	10.51
white oak (*Quercus alba*)	23	7.32
	29.5	9.39
	24	7.64
	17	5.41
	52	16.56
	21	6.69
pignut hickory (*Carya glabra*)	20	6.37
Northern red oak (*Quercus rubra*)	70	22.29
	86.5	27.55
	50.5	16.08
	38	12.10
	31.5	10.03
	21	6.69
	17	5.41
	106	33.76
black cherry (*Prunus serotina*)	33	10.51

TREE SURVEY TABLE		
	Circumference (inches)	**Diameter (DBH) (inches)**
black birch (*Betula lenta*)	26.5	8.44
	27	8.60
	18.5	5.89
	31	9.87
	28.5	9.08
	49	15.61
	13.5	4.30
	38	12.10
	17	5.41
Beech (*Fagus grandifolia*)	17.5	5.57
	14	4.46
Plot 1 Average DBH		**10.04**
SPECIES PLOT 2		
red maple (*Acer rubrum*)	15	4.78
	14	4.46
sugar maple (*Acer saccharum*)	12.5	3.98
	19.5	6.21
white oak (*Quercus alba*)	56	17.83
	57	18.15
	70.5	22.45
	67	21.34
pignut hickory (*Carya glabra*)	21	6.69
	13	4.14
	18	5.73
	14	4.46
	27.5	8.76
	40	12.74
	33	10.51
	48	15.29

TREE SURVEY TABLE		
	Circumference (inches)	**Diameter (DBH) (inches)**
Northern red oak (*Quercus rubra*)	59	18.79
	38	12.10
	22	7.01
	50.5	16.08
	68	21.66
	67.5	21.50
	50	15.92
	108	34.39
	92	29.30
	50	15.92
	45	14.33
	39	12.42
black birch (*Betula lenta*)	15	4.78
	18	5.73
	24	7.64
	18	5.73
	13	4.14
	19.5	6.21
	17	5.41
	12.5	3.98
shagbark hickory	33	10.51
	14	4.46
tulip poplar	28.5	9.08
sassafrass	30	9.55
Plot 2 Average DBH		**11.60**

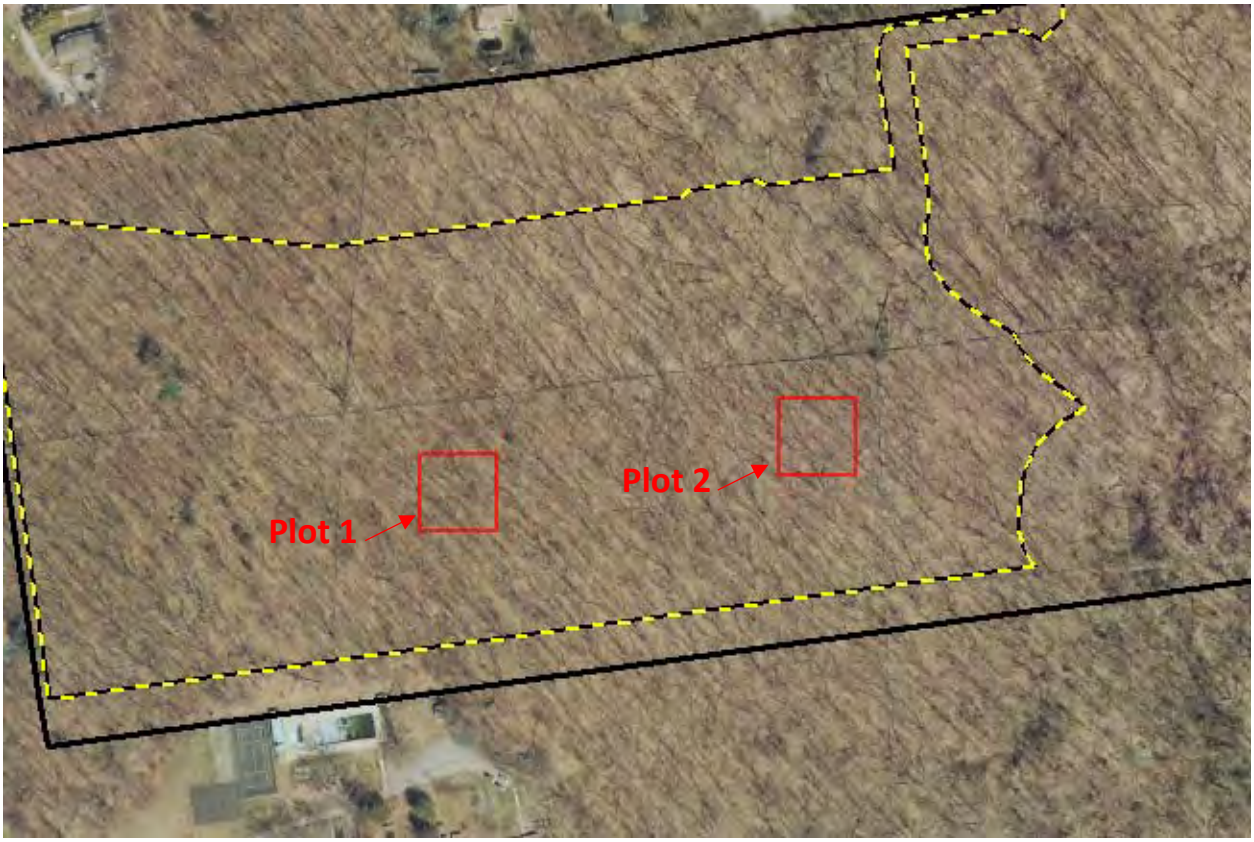


Figure I-1: Representative view of preliminary tree survey area, Plots 1 and 2.

Figure I-2: Representative view of tree survey area, Plot 1, facing northwest corner of plot.

Figure I-3: Representative view of tree survey area, Plot 1, facing southeast corner of plot.

Figure I-4: Representative view of tree survey area, Plot 2, facing northwest corner of plot.

Figure I-5: Representative view of tree survey area, Plot 2, facing southeast corner of plot.