



**BROOKSIDE SOLAR, LLC**

**Matter No. 21-00917**

**900-2.16 Exhibit 15**

**Agricultural Resources**

**Contents**

Acronym List ..... iii

Glossary Terms..... iv

Exhibit 15: Agricultural Resources ..... 1

    15(a) Assessment of Agricultural Resources ..... 1

        (1) NYS-Certified Agricultural Districts ..... 2

        (2) Real Property Agricultural Value Assessment ..... 3

        (3) Zoning Districts or Overlay Zones ..... 3

        (4) Agricultural Land Uses Compared to Non-agricultural Land Uses ..... 5

        (5) Existing Energy Infrastructure and Completed Renewable Energy Facilities ..... 7

        (6) Active Agricultural Businesses, Facilities, and/or Infrastructure ..... 8

        (7) Potential Construction Impacts and Methods to Facilitate Farming ..... 8

        (8) Temporary and Permanent Impacts on Agricultural Resources ..... 9

    15(b) Agricultural Resource Maps..... 11

        (1) Agricultural Land Use ..... 11

        (2) Production Acreage Retained for Agricultural Use ..... 13

        (3) Landowner Imposed Development Restrictions ..... 14

        (4) Agricultural Drainage Systems ..... 14

        (5) USDA Soil Map ..... 15

        (6) NYS Agricultural Land Classification Mineral Soil Group Map..... 27

    15(c) Agricultural Plan ..... 28

    15(d) Drainage Remediation Plan..... 28

        (1) Likelihood of Drainage Impacts Within and Adjacent to the Facility ..... 29

        (2) Anticipated Repair Methods..... 31

    15(e) Feasibility of Agricultural Co-utilization ..... 31

Conclusions ..... 32

References..... 33

**Tables**

Table 15-1. Cropland within the Facility Site and Study Area ..... 6  
Table 15-2. Mineral Soil Groups 1-4 in Various Geographic Areas ..... 10  
Table 15-3. Agricultural Use by Parcel within the Facility Site ..... 12  
Table 15-4. Mapped Soils within the Facility Site and Study Area..... 15

**Figures**

- Figure 15-1. Agricultural Land within the Study Area
- Figure 15-2. Location of Drainage Features within the Study Area
- Figure 15-3. Agricultural Soils within the Facility Site

**Appendices**

- Appendix 15-1. Real Property Agricultural Assessment Records
- Appendix 15-2. Agricultural Viability Landowner Survey and Responses
- Appendix 15-3. Agricultural Plan
- Appendix 15-4. Drainage Remediation Plan

## Acronym List

AES	The AES Corporation, Inc.
BMP	best management practice
C	Countryside District
CDL	Cropland Data Layer
CUGIR	Cornell Geospatial Information Repository
EM	Environmental Monitor
ft	feet
GPS	Global Positioning System
HDD	horizontal directional drilling
LOD	limit of disturbance
m	meters
MW	megawatt
MSG	Mineral Soil Group
NAACC	North Atlantic Aquatic Connectivity Collaborative
NASS	National Agricultural Statistics Service
NLCD	National Land Cover Database
NRCS	Natural Resources Conservation Service
NYCRR	New York Codes, Rules and Regulations
NYS	New York State
NYSAGM	New York State Department of Agriculture and Markets
NYSAGM Guidelines	NYSAGM guidance document “Guidelines for Solar Energy Projects – Construction Mitigation for Agricultural Lands”, dated October of 2019
NYSORPTS	New York State Office of Real Property Tax Services
ORES	Office of Renewable Energy Siting
R-S	Residential Seasonal District
SWPPP	Stormwater Pollution Prevention Plan
USCs	Uniform Standards and Conditions
USDA	United States Department of Agriculture
USGS	United States Geological Survey

## Glossary Terms

<b>Applicant</b>	Brookside Solar, LLC, a subsidiary of The AES Corporation, Inc. (AES), the entity seeking a siting permit for the Facility from the Office of Renewable Energy Siting (ORES) under Section 94-c of the New York State Executive Law.
<b>Facility</b>	The proposed components to be constructed for the collection and distribution of energy for the Brookside Solar Project, which includes solar arrays, inverters, electric collection lines, and the collection substation.
<b>Facility Site</b>	The parcels encompassing Facility components, which totals 1,471 acres in the Towns of Burke and Chateaugay, Franklin County, New York (Figure 2-1).
<b>Limit of Disturbance</b>	The area to which construction impacts will occur, totaling approximately 645 acres.
<b>Study Area</b>	In accordance with the Section 94-c Regulations, the Study Area for the Facility includes a radius of five miles around the Facility Site boundary, unless otherwise noted for a specific resource study or Exhibit. The 5-mile Study Area encompasses 69,963 acres, inclusive of the 1,471-acre Facility Site.

## Exhibit 15: Agricultural Resources

This Exhibit provides information required in accordance with the requirements of Section 900-2.16 of the Section 94-c Regulations.

### 15(a) Assessment of Agricultural Resources

This section includes an assessment within the five-mile Study Area on the New York State (NYS)-certified agriculture districts, Real Property Agricultural Assessments, zoning districts, agricultural land uses compared to non-agricultural land uses, existing energy infrastructure and completed renewable energy facilities, and active agricultural businesses, facilities, and/or infrastructure.

As the NYSDEC explains, climate change threatens numerous disruptions to agriculture, from frequent droughts, flooding, and unseasonal heat or frost events, to altered growing and storage conditions that will challenge those raising and attempting to bring to market crops and livestock, threatening the food supply and increasing the potential for the emergence of pests, pathogens and disease (<https://www.dec.ny.gov/energy/94702.html>), and climate change has been shown to have potentially harmful effects on agricultural lands throughout New York State. According to *A Profile of Agriculture in New York State*, the effects of climate change are wide-ranging and will affect various agricultural practices (New York State Comptroller, 2019). Potential climate change vulnerabilities for agriculture include heightened weed, insect, and disease pressure on crops, heat stress on livestock and its effects on productivity, and poor spring bloom and yields of apples because of inadequate winter chill hours. Emerging challenges for farmers include threats from climate change, such as summer heat stress, rain intensity and increased flooding risk. Farmers who are not able to invest in new technologies to adapt to climate change may not be able to compete in future agricultural economies. Utilizing up-to-date technology by installing farming-compatible renewable energy technologies, such as windmills and solar panels, can help the agricultural sector and farmers prepare for climate change. Renewable energy projects, such as this Facility, proposed across the state, would result in reduced emissions, further advancing State energy goals described in Exhibit 17 (Consistency with Energy Planning Objectives) and work to stop the potentially harmful effects of climate change on the agricultural community.

### **(1) NYS-Certified Agricultural Districts**

There is one certified agricultural district within Franklin County. Portions of the Facility Site are located within Franklin County Agricultural District 1. Agricultural District 1 consists of 118,163 acres, of which 66,983 acres are farmed (New York State Department of Agriculture and Markets [NYSAGM], 2021a). Franklin County Agricultural District 1 was created in September of 1988, last reviewed in November of 2020, and is up for its next 8-year review in September of 2028 (NYSAGM, 2021b Cornell Geospatial Information Repository [CUGIR], 2021). Within the Study Area, there are 38,364 acres of land designated as agricultural districts. Of the 30 tax parcels within the Facility Site, 15 are designated as within the agricultural district. Specifically, six parcels are currently enrolled within the Town of Burke and nine parcels are currently enrolled within the Town of Chateaugay. All are enrolled in Franklin County Agricultural District 1. This accounts for 1.8 percent of agricultural district land within the Town of Burke and 2.6 percent within the Town of Chateaugay. Tax parcels within certified agricultural districts within the Facility Site are inventoried below and can be viewed on Figure 3-4 in Exhibit 3:

#### Town of Burke:

- Tax Parcel No.: 59.-3-16.100
- Tax Parcel No.: 59.-3-16.200
- Tax Parcel No.: 59.-3-2
- Tax Parcel No.: 59.-3-3
- Tax Parcel No.: 59.-3-6.100
- Tax Parcel No.: 73.-3-2

#### Town of Chateaugay:

- Tax Parcel No.: 60.-1-9.300
- Tax Parcel No.: 60.-3-20.200
- Tax Parcel No.: 60.-3-22
- Tax Parcel No.: 60.-3-3
- Tax Parcel No.: 60.-3-4
- Tax Parcel No.: 60.-3-6.200
- Tax Parcel No.: 74.-1-5.300
- Tax Parcel No.: 74.-2-1.200
- Tax Parcel No.: 74.-2-9

## **(2) Real Property Agricultural Value Assessment**

The NYSAGM in conjunction with the New York State Department of Taxation and Finance administer the agricultural assessment program (NYSAGM, 2021c). This program allows landowners to receive a reduction in property tax bills for land in agricultural production based on the agricultural assessment values determined through the New York State Land Classification System (NYSAGM, 2021c). To gather this information, the Applicant consulted with the Franklin County Tax Assessor to obtain data on the Real Property Agricultural Assessments for the towns within the five-mile Study Area, including the Towns of Burke, Belmont, Chateaugay, Constable, and Malone, and the Villages of Burke and Chateaugay. The Applicant requested records of parcels within each town or village that receive a Real Property Agricultural Assessment. Based on the records provided, there are 306 parcels within the Town of Burke and 138 parcels within the Town of Chateaugay receiving Real Property Agricultural Assessments. Within the facility, this includes parcels 59.-3-6.100, 59.-3-16.100, 59.-3-16.200, 59.-3-2.100, 59.-3-3, and 73.-3-2 in the Town of Burke and parcels 60.-1-9.300, 60.-3-3, 60.-3-20.200, and 74.-2-9 in the Town of Chateaugay. Additionally, there are 42 parcels within the Town of Belmont that are receiving Real Property Agricultural Assessment, 17 within the Town of Malone, and one within the Town of Constable. At the time of filing the Application, data from the Town of Clinton in Clinton County has not been received. The Facility components are not proposed within the Town of Clinton. The records received by the Applicant have been included as Appendix 15-1 of this Exhibit.

## **(3) Zoning Districts or Overlay Zones**

The proposed Facility is located within the Towns of Burke and Chateaugay in Franklin County, New York. The Facility Study Area consists of several townships and villages, including the Towns of Burke, Belmont, Chateaugay, Constable, and Malone, and the Villages of Burke and Chateaugay, Franklin County, and the Town of Clinton, Clinton County. Existing and proposed zoning districts within the Study Area and the associated permitted and prohibited uses have previously been discussed in Exhibit 3. Zoning within the Study Area can be viewed on Figure 3-3.



***Town of Burke***

According to the Town of Burke's Solar Energy Law adopted in 2019, included in Appendix 24-2, large-scale solar energy facilities are a permitted use anywhere within the Town through the issuance of a Special Use Permit.

***Town of Bellmont***

According to the Town of Bellmont's Solar Energy Law adopted in 2019, large-scale solar energy facilities are a permitted use anywhere within the Town through the issuance of a Special Use Permit. There are no Facility parcels proposed within the Town of Bellmont.

***Town of Chateaugay***

According to the Town of Chateaugay's Solar Energy Law adopted in 2018, included in Appendix 24-2, large-scale solar energy facilities are a permitted use in every zone within the Town through the issuance of a Special Use Permit.

***Town of Clinton***

According to the Town of Clinton's Local Law to regulate Solar Energy Facilities in the Town, adopted in 2019, large-scale solar energy facilities may be permitted when authorized by site plan review and Special Use Permit from the Town Board; there are no zoning restrictions laid out within the law. There are no Facility parcels proposed within the Town of Clinton.

***Town of Constable***

The Town of Constable does not have an adopted solar energy law. There are no Facility parcels proposed within the Town of Constable.

***Town of Malone***

According to the Town of Malone's Solar Energy Law adopted in 2018, large-scale solar energy facilities may be permitted with a Zoning Permit and a Special Use Permit. Large-scale solar energy facilities must comply with all other requirements of the Town of Malone Zoning Law (2013) and applicable guidelines, unless expressly superseded by this law. According to the Town of Malone Zoning Law, public utility facilities are a primary permitted use within the

following zones: Residential Seasonal District (R-S) and Countryside District (C). There are no Facility parcels proposed within the Town of Malone.

***Village of Burke***

The Village of Burke does not have an adopted zoning or solar law. There are no Facility parcels proposed within the Village of Burke.

***Village of Chateaugay***

The Village of Chateaugay does not have an adopted zoning or solar law. There are no Facility parcels proposed within the Village of Chateaugay.

***(4) Agricultural Land Uses Compared to Non-agricultural Land Uses***

According to the most recent United States Department of Agriculture (USDA) National Agricultural Statistics Service (NASS) Cropland Data Layer (CDL), there are approximately 27,165 acres of agricultural land within the Study Area (i.e., corn, sorghum, soybeans, grass/pasture, rye, oats, alfalfa, other hay/non alfalfa, dry beans, clover/wildflower, sod/grass seed, fallow/idle cropland, durum wheat, winter wheat, potatoes, cherries, apples, Christmas trees, triticale, pumpkins, and blueberries), covering approximately 39 percent of the total land cover within the Study Area. There are approximately 42,798 acres of land cover, or approximately 61 percent of the Study Area that consists of non-agriculture land cover (i.e., developed, woodland/forested area, successional non-agriculture areas, wetlands, and barren land).

Of the approximately 1,471 acres within the Facility Site, there are approximately 1,143 acres of agriculture land as identified by the CDL, accounting for approximately 78 percent of the total Facility Site. The remaining 329 acres of land, or approximately 22 percent of the Facility Site, consists of non-agriculture land cover.

Table 15-1 below summarizes the land cover within the Facility Site and the Study Area according to the USDA 2020 CDL, and the results can be seen in Figure 15-1.

**Table 15-1. Cropland within the Facility Site and Study Area**

<b>Land Cover Classification</b>	<b>Acreage within Facility Site</b>	<b>Acreage within Study Area</b>
Other Hay/Non-Alfalfa	539.3	10,856.6
Corn	393.6	8,202.4
Alfalfa	96.5	4,212.4
Grass/Pasture	91.4	2,592.5
Fallow/Idle Cropland	14.7	638.9
Soybeans	2.0	230.6
Oats	1.6	215.7
Dry Beans	0.9	1.3
Clover/Wildflowers	0.9	26.5
Sod/Grass Seed	1.6	14.5
Rye	0.9	138.8
Sorghum	0.2	35.1
Deciduous Forest	208.2	21,805.3
Woody Wetlands	28.2	9,855.1
Mixed Forest	22.7	2,054.9
Evergreen Forest	26.7	5,675.7
Shrubland	2.9	149.7
Herbaceous Wetlands	1.6	103.6
Developed/Open Space	31.8	2,592.2
Developed/Low Intensity	3.6	350.3
Developed/Medium Intensity	0.4	75.8
Developed/High Intensity	0.2	20.9
Barren	1.3	46.5
Open Water	0.2	51.4
Durum Wheat	0	2.4
Winter Wheat	0	3.1
Potatoes	0	3.1
Cherries	0	0.2
Apples	0	3.1

**Table 15-1. Cropland within the Facility Site and Study Area**

<b>Land Cover Classification</b>	<b>Acreage within Facility Site</b>	<b>Acreage within Study Area</b>
Christmas Trees	0	1.1
Triticale	0	1.3
Pumpkins	0	1.6
Blueberries	0	0.4

**(5) Existing Energy Infrastructure and Completed Renewable Energy Facilities**

Existing utility and energy infrastructure including existing overhead and underground lines for gas and electric have previously been discussed in Exhibit 3 and are included on Figure 3-3. Based on the United States Geologic Survey (USGS) Wind Turbine Database, there are two active wind turbines located within the Facility Site, specifically located on tax parcel ID 60.-3-2. They are both a part of the Jericho Rise Wind Farm Facility, which went online in 2016. Each turbine has the energy generating capacity of 2.10 megawatts (MW), a hub height of 305.12 feet (ft) (93.00 meters (m)), a rotor diameter of 374.02 ft (114.00 m), and a total height of 492.13 ft (150.00 m). The turbine manufacturer and model are Gamesa, G114-2.1.

The Jericho Rise Wind Farm is composed of 37 wind turbines with a total generating capacity of 77.7 MW. The two wind turbines are located within the Facility Site (parcel ID: 60.-3-2) and will not be impacted by the Facility. The remaining 35 wind turbines are located within the southeastern portion of the Study Area (USGS, 2021). Within the Study Area, four wind turbines are located on parcels adjacent to the Facility Site.

The Noble Chateaugay Windpark is a wind turbine energy facility located to the east of the Jericho Rise Wind Farm and 1.5 miles east of the Facility Site. The Noble Chateaugay Windpark went online in 2009 and is composed of 71 wind turbines with a total generating capacity of 107 MW, each turbine generating 1.5 MW. Of the 71 wind turbines, 68 of them are within the eastern and southeastern portion of the Study Area (USGS, 2021). None of the turbines are adjacent to the Facility Site.

The Noble Clinton Windpark is a wind turbine energy facility located to the east of the Noble Chateaugay Windpark and 4.2 miles east of the Facility Site. The Noble Clinton Windpark went

online in 2008 and is composed of 67 wind turbines with a total generating capacity of 100.5 MW, each turbine generating 1.5 MW. Of the 67 wind turbines, 17 of them are within the eastern most portion of the Study Area (USGS, 2021). None of the turbines are adjacent to the Facility Site.

The two closest solar facilities to the Facility Site are the Malone Solar Site (1.1 MW) and the Franklin Solar Site (1.6 MW). Both solar facilities are located within the Town of Malone, approximately nine miles west from the Facility Site (SEIA, 2020).

### ***(6) Active Agricultural Businesses, Facilities, and/or Infrastructure***

Based on the results of the Agricultural Viability Landowner Survey, which is discussed in further detail below in Section 15(b), active farming operations and current land uses were identified on 11 parcels including 3 parcels producing corn, hay and pasture; 4 parcels producing hay; 1 parcel having a pasture; 2 parcels producing hay and having a pasture; and 1 parcel having a dairy farm. Active agriculture within the Study Area can be viewed on Figure 15-1 and Figure 11-1.

Exhibit 3(h) discusses the Facility and its compatibility with the Franklin County Industrial Development Agency adopted a comprehensive economic development strategy in December 2014 (Appendix 3-1) and the North Country Regional Sustainability Plan in May 2013 (Appendix 3-2).

### ***(7) Potential Construction Impacts and Methods to Facilitate Farming***

The Facility will be constructed in accordance with the NYSAGM guidance document “Guidelines for Solar Energy Projects – Construction Mitigation for Agricultural Lands,” dated October 2019 (NYSAGM Guidelines), which is discussed further below in Section 15(c). It is anticipated that the site development activities will consist of installation of posts for solar module racking, small foundation slabs, and limited, narrow excavations for installation of cables. The construction of haul roads across the site will also be accomplished with minimal cut and fill. In situations where haul roads traverse an existing grade that exceeds the maximum design slope, construction of the road is proposed on a side slope, or if there is need to flatten the top of an existing high point, limited cut-and-fill activities may occur. For a detailed analysis on the evaluation of suitable building and equipment foundations within the Facility Site, see Exhibit 10(b).

During the construction and operational life of the Facility, 522 acres of land within the Facility fence line will be taken out of agricultural production and be used for solar energy components. However, following the decommissioning of the Facility, the land will be restored per NYSAGM Guidelines. While in operation, the Facility will use agricultural land for solar energy production. This will ensure that parcels remain intact during the life of the Facility, rather than being sold or subdivided for other purposes that may not allow the land to be reverted to agricultural use. The Facility will allow for continued agricultural use on parcels excluded from the Facility and will protect the viable agricultural land being used by the Facility for future use following decommissioning at the end of the Facility's useful life.

The solar panels for the Facility will be selected primarily for efficiency and effectiveness to harness the maximum amount of solar power at any given time (with consideration to limiting factors including shading, cloud cover, etc.), which concurrently minimizes the amount of land required for generation. While the solar panel arrays are sited on agricultural lands within the Facility Site, the proposed solar panels will be mounted on racking systems supported by driven posts and will result in minimal ground disturbance since no excavation will be required for their installation. Where grading and excavation is proposed, topsoil will be stripped, stockpiled, and returned to reduce impacts during decommissioning of the Facility.

The Facility contributes to environmental sustainability of farms through harnessing solar energy within the Facility Site and providing renewable energy to the surrounding communities. Concurrently, the Facility will contribute to climate change mitigation by providing utilities clean energy for distribution and consequently reducing the need for other fossil fuel technology operation to meet energy demands.

### ***(8) Temporary and Permanent Impacts on Agricultural Resources***

Approximately 522 acres of disturbance to agricultural land is anticipated to occur within the Facility's proposed limit of disturbance (LOD). Of these 522 acres, only approximately 168 acres will be permanently impacted by grading, haul roads, fencing, gravel areas, inverters, culverts, riprap, and clearing. Facility components that will result in approximately 354 acres of temporary disturbance to farmland include laydown yards, collection trenches, horizontal directional drilling (HDD) pits, construction entrances, fenced area, and selective clearing. Additionally, within the Facility Site, approximately 4.5 acres (0.3 percent) of agricultural soils are classified as NYS

Agriculture Land Classification's Mineral Soil Groups (MSGs) 1 through 4. The 4.5 acres of MSG soil within the Facility Site will be avoided and unimpacted for the life of the Facility.

It is important to note that not all of the agricultural land within the fence line will be physically disturbed. To the maximum extent practicable, the Applicant has sited Facility components to minimize impacts to agricultural lands within the Facility Site. For example, the solar panel array area will have only 0.2 acres of permanent ground disturbance that will occur for the installation of mounting posts; however, the areas directly beneath the panels will not be disturbed. The solar panels will cover approximately 128 acres of agricultural land (none of which are MSGs 1 through 4). Ground disturbance for the life of the Facility will be limited to the installation of posts for the racking systems, footings for equipment in the collection substation, and construction of haul roads. The Facility will not impede adjacent agricultural land uses. The useful economic life of the Facility is estimated to be a minimum of 25 years and as detailed in the Site Decommissioning and Restoration Plan (Appendix 23-1), the Applicant will return lands within the Facility Site to their original condition through reseeding and careful mobilization of equipment. As such, agricultural land sited within the Facility Site will be able to return to its pre-construction use following decommissioning of the Facility.

Additionally, there are zero acres of soil that are designated as MSGs 1-4 within the Facilities LOD. Since there are no impacts to MSGs 1-4 soils within the LOD, the Facility will not have an impact to MSGs 1-4 soils within the Study Area, the Town of Burke, the Town of Chateaugay, Franklin County, or the State, which is illustrated in Table 15-2. below:

**Table 15-2. Mineral Soil Groups 1-4 in Various Geographic Areas**

<b>Geographic Area</b>	<b>Total Area (Sq. Mi.)</b>	<b>Mapped MSGs 1- 4 (Sq. Mi.)</b>
<b>Brookside Facility LOD</b>	2.3	0
<b>Town of Burke</b>	44.5	0.3
<b>Town of Chateaugay</b>	49.6	0.7
<b>5-Mile Study Area</b>	109.3	1.8
<b>Franklin County</b>	1696.4	18.0
<b>New York State</b>	48,422.00	6,093

## 15(b) Agricultural Resource Maps

In order to help better identify agricultural resources and agricultural structures within the Facility Site, an Agricultural Viability Landowner Survey was distributed via mail to landowners of tax parcels within the Facility Site. The survey was designed to gain landowner insight and feedback into agricultural use, agricultural production, development restrictions, and drainage systems within the Facility Site. A copy of the survey and the responses have been included in Appendix 15-2. Results of the survey are discussed further in the sections below. Of the 31 surveys that were distributed, 18 responses were received.

According to the most recent USDA NASS CDL data provided in Table 15-1, there are 27,181 acres of land classified as “agricultural” with the Study Area. The agricultural land in the Study Area is dominated by “other hay/non-alfalfa” (10,856.6 acres), corn (8,202.4 acres), alfalfa (4,212.4 acres), and grass/pasture (2,592.5 acres). Within the Study Area, historic aerial imagery from 2018, 2016, 2015, 2014, 2012, 2011, 2009, 2008, 2007, 2006, 1994, 1993, and 1985 depicts agricultural uses within open areas dating back to at least the mid-1980s. The agricultural areas mostly consist of hay, corn, and soybean fields. The Study Area was classified through a review of the most recent National Land Cover Database (NLCD) (NLCD, 2016), aerial photography, and onsite observations during field visits conducted in June, October, and December 2020 and May 2021. Active agriculture within the Study Area can be viewed on Figures 15-1 and 11-1.

### ***(1) Agricultural Land Use***

Within the Facility Site, there are 17 parcels (1,187 acres) of land categorized as New York State Office of Real Property Tax Services (NYSORPTS) agricultural land, which can be seen on Figure 3-3. In order to further analyze this land use, a portion of the Agricultural Viability Landowner Survey asked landowners to discuss the current uses of their land, any agricultural uses currently in place, and how these agricultural uses serve the community. They were also asked to describe the history of the land over the last three to five years, specifically in relation to agricultural uses. Of the 18 responses, landowners responded with current or past agricultural uses on their tax parcels over the last three to five years: five indicated hay production; six indicated crop productions; one indicated pasture use; one indicated a dairy farm; two indicated hay production and pasture use; and three indicated pasture use, hay and corn production.



In addition to the survey mentioned above, the Applicant contacted landowners within the Facility Site to discuss the agricultural uses of their property, the details of which have been provided below in Table 15-3.

**Table 15-3. Agricultural Use by Parcel within the Facility Site**

Parcel ID	Acreage of Parcel	Acreage for Facility Site Use	Description of Agricultural Use in Recent Years
59.-3-16.100	9.97	2.64	Corn, Hay
59.-3-16.200	51.53	39.54	Hay
59.-3-2	73.39	29.69	Corn, Hay
59.-3-3	49.88	20.90	Corn, Hay
59.-3-6.100	93.70	55.91	Hay
59.-4-12	48.08	27.53	Hay, Corn, Soybean
59.-4-9	81.68	5.83	Hay
60.-1-1	34.68	8.13	Hay
60.-1-10.100	98.43	73.72	Hay
60.-1-11	29.16	14.10	Hay
60.-1-6.100	62.14	34.77	Hay
60.-1-9.300	46.95	0	Hay, Corn, Soybean
60.-2-21.100	24.17	1.36	Hay
60.-2-21.200	28.79	12.86	Corn
60.-2-21.300	1.84	0	Hay
60.-2-23	97.27	43.59	Corn
60.-3-19	3.52	0	Residential
60.-3-2	109.63	0	Hay, Corn, Soybean
60.-3-20.200	54.20	18.75	Hay, Corn, Soybean
60.-3-22	5.33	0.09	Unplanted
60.-3-3	85.86	0	Hay, Corn, Soybean
60.-3-4	33.14	17.39	Corn
60.-3-6.200	22.30	0	Hay
73.-3-2	102.99	41.28	Corn
74.-1-2.400	7.40	0	Hay, Corn, Soybean

**Table 15-3. Agricultural Use by Parcel within the Facility Site**

Parcel ID	Acreage of Parcel	Acreage for Facility Site Use	Description of Agricultural Use in Recent Years
74.-1-3.100	49.94	26.15	Hay, Corn, Soybean
74.-1-4	51.75	25.82	Unplanted / pasture
74.-1-5.300	29.78	13.24	Hay, Corn, Soybean
74.-2-1.200	71.92	25.93	Hay / Pasture
74.-2-9	11.26	4.93	Hay / Pasture

Expanding beyond the Facility Site to the Study Area, data was analyzed using the USDA CropScape data available from 2016 to 2020 to further assess agricultural land use over the past 5 years. The acreage of lands classified as “agricultural” vs “non-agricultural” within the Study Area remained consistent over the past five years. The agricultural acreage ranged from 27,019.5 acres in 2017 to 27,587.4 acres in 2018; and the non-agricultural acreages ranged from 42,407.2 acres in 2018 to 42,975.2 acres in 2017. For each year that was analyzed, the top four agricultural categories remained the same; other hay/non-alfalfa was consistently the crop that covered the greatest amount of land in the Study Area, followed by corn, alfalfa, and grass/pasture classifications.

## ***(2) Production Acreage Retained for Agricultural Use***

As previously discussed, 1,187 acres of agricultural land exist within the Facility Site. Of the 1,187 acres of agriculture lands, 1,019 acres (85.8 percent) will not be permanently impacted from the Facility. However, land within the Facility fence line will be taken out of agricultural production during the life of the Facility. This area will be used for solar production purposes throughout the useful economic life of the Facility and will therefore, not be used for agricultural production during that time. Remaining land outside the Facility fenced area will remain under its existing uses, including agricultural production. Additionally, upon decommissioning, land previously used for the Facility will be restored to its original use and can be converted back to agricultural use.

### **(3) *Landowner Imposed Development Restrictions***

The Applicant has consulted with landowners to identify areas of landowner-imposed development restrictions within the Facility Site. At the request of a landowner, the western half of parcel 59.-4-9 will remain as non-buildable land, and it is the Applicant's understanding that it will remain as active agricultural land (this portion of the parcel includes 15 acres of agricultural land and 15 acres of forested land). In addition, 27 acres of the 100-acre parcel 73.-3-2 will remain as non-buildable land, and it is the Applicant's understanding that it will remain as active agricultural land. Approximately 17 acres of parcel 60.-3-3 will be used for underground collection lines. The remainder of that parcel (68 acres) will remain as non-buildable land, and it is the Applicant's understanding that it will remain as active agricultural land. Approximately 2.1 acres of parcel 60.-1-9.300 will be used for underground collection lines. The remainder of that parcel (45.7 acres) will remain as non-buildable land, and it is the Applicant's understanding that it will remain as active agricultural land and forested land. Areas of landowner-imposed development restrictions can be seen on Figure 11-1 of Exhibit 11.

### **(4) *Agricultural Drainage Systems***

As part of the Agricultural Viability Landowner Survey, landowners are asked to identify any drainage tile, active irrigation lines, and surface drainage or other unique agricultural facilities on their property. During the onsite wetland delineation, 32 culverts were observed onsite, and their positions were located with sub-meter Global Positioning System (GPS) accuracy. Additionally, in their responses to the Agricultural Viability Landowner Survey, two landowners identified infrastructure related to drainage or irrigation on their property (Parcel IDs: 59.-3-3 and 59.-3-16.100).

Publicly available culvert data produced by the North Atlantic Aquatic Connectivity Collaborative (NAACC) identifies the locations of stream road crossing culverts. The NAACC identified five culverts within the Facility Site within the Town of Chateaugay. All culverts were on unnamed streams. Within the Town of Burke and the Facility Site, the NAACC identified eight culverts. Of the eight culverts, six were along Allen Brook and the other two culverts were located on unnamed streams. Within the Study Area, the NAACC identified 110 culverts within the Town of Burke, 100 within the Town of Chateaugay, 30 within the Town of Bellmont, nine within the Town of Malone, seven within the Town of Constable, and four within the Town of Clinton. Additionally, a dataset from the National Center for Atmospheric Research was utilized which

used multiple US Department of Agriculture and US Geological Survey datasets to show a 30-meter resolution layer of suspected drain tile areas (Valayamkunnath et. al., 2020). Based on this data set there are approximately 147 acres of land within the Facility Site where drain tile may be likely to occur.

Culverts within the Facility Site that were identified during onsite wetland delineations, drainage tile identified by the Agricultural Viability Landowner Survey, and the sources mentioned above can be seen on Figure 15-2. Additionally, further discussion of drainage remediation can be found in Section 15(d) below.

### (5) USDA Soil Map

Table 15-4 below identifies the 32 USDA soil map units identified within the Facility Site and 95 soil map units identified within the Study Area (USDA, 2018). This table includes the county, soil texture, percent slopes, farmland classification, MSG, acres in the Facility Site and Study Area, and the percentage of the Facility Site and Study Area. Figure 15-3 illustrates the soil map units within the Facility Site.

**Table 15-4. Mapped Soils within the Facility Site and Study Area**

Map Unit Symbol	Map Unit Name	Farmland Classification	MSG	Acres in Facility Site	Percent of Facility Site	Acres in Study Area	Percent of Study Area	County
Aaa	Adams and Wallace loamy sands, 0 to 3-percent slopes	Farmland of statewide importance	5	0.0	0.0	16.9	0.0	Franklin
Aab	Adams and Wallace loamy sands, 3 to 8-percent slopes	Farmland of statewide importance	5	0.0	0.0	271.1	0.4	Franklin
Aad	Adams and Wallace loamy sands, 12 to 25-percent slopes	Not prime farmland	8	0.0	0.0	37.8	0.1	Franklin
Abb	Adams loamy sand, 3 to 8-percent slopes	Farmland of statewide importance	5 <sup>a</sup> , 7 <sup>b</sup>	0.0	0.0	4.6 <sup>a</sup> 37.9 <sup>b</sup>	0.0 <sup>a</sup> 0.1 <sup>b</sup>	Clinton and Franklin
Abd	Adams and Colton soils, 8 to 25-	Not prime farmland	8	0.0	0.0	100.9	0.1	Franklin

**Table 15-4. Mapped Soils within the Facility Site and Study Area**

Map Unit Symbol	Map Unit Name	Farmland Classification	MSG	Acres in Facility Site	Percent of Facility Site	Acres in Study Area	Percent of Study Area	County
	percent slopes, severely eroded							
Ace	Adams and Colton soils, 25 to 60-percent slopes	Not prime farmland	9	0.0	0.0	113.4	0.2	Franklin
Agb	Adirondack loam, 3 to 8-percent slopes	Farmland of statewide importance	7	0.0	0.0	2.5	0.0	Clinton
Ahb	Adirondack loam, gently sloping, very bouldery	Not prime farmland	5	0.0	0.0	46.0	0.1	Clinton
Bac	Becket and Skerry soils, 8 to 15-percent slopes	Farmland of statewide importance	7	0.0	0.0	5.4	0.0	Franklin
Bbb	Becket, Skerry, and Hermon soils, 3 to 8-percent slopes, very stony	Not prime farmland	8	0.0	0.0	11.3	0.0	Franklin
Bbd	Becket, Skerry, and Hermon soils, 8 to 25-percent slopes, very stony	Not prime farmland	8	0.0	0.0	22.0	0.0	Franklin
Bda	Birdsall loam, 0 to 2-percent slopes	Not prime farmland	8	0.0	0.0	4.1	0.0	Franklin
Bea	Brayton stony loam, 0 to 3-percent slopes	Farmland of statewide importance	6	257.1	17.6	5,071.9	7.2	Franklin
Beb	Brayton stony loam, 3 to 8-percent slopes	Farmland of statewide importance	8	319.6	21.8	2,782.7	4.0	Franklin
Bfb	Brayton very stony loam, 0 to 8-percent slopes	Not prime farmland	8	49.8	3.4	1,710.4	2.4	Franklin
Brb	Bice fine sandy loam, 3 to 8-percent slopes	All areas are prime farmland	3	0.0	0.0	19.9	0.0	Clinton

**Table 15-4. Mapped Soils within the Facility Site and Study Area**

Map Unit Symbol	Map Unit Name	Farmland Classification	MSG	Acres in Facility Site	Percent of Facility Site	Acres in Study Area	Percent of Study Area	County
Bx	Bucksport mucky peat	Not prime farmland	8	0.0	0.0	53.0	0.1	Clinton
Caa	Colton and Constable gravelly loamy sands, 0 to 3-percent slopes	Farmland of statewide importance	6	3.8	0.3	414.5	0.6	Franklin
Cab	Colton and Constable gravelly loamy sands, 3 to 8-percent slopes	Farmland of statewide importance	6	35.7	2.4	1,831.1	2.6	Franklin
Cbb	Colton and Constable cobbly loamy sands, 3 to 8-percent	Farmland of statewide importance	6	10.2	0.7	588.5	0.8	Franklin
Ccc	Colton and Constable gravelly and cobbly loamy sands, 8 to 15-percent slopes	Not prime farmland	8	9.9	0.7	643.5	0.9	Franklin
Ccd	Colton and Constable gravelly and cobbly loamy sands, 15 to 25-percent slopes	Not prime farmland	8	4.6	0.3	163.6	0.2	Franklin
Cda	Cook gravelly and cobbly loamy sands, 0 to 5-percent slopes	Farmland of statewide importance	7	0.0	0.0	522.2	0.7	Franklin
Cea	Cook stony and very stony loamy sands, 0 to 5-percent slopes	Not prime farmland	8	0.0	0.0	4,456.7	6.4	Franklin
Cga	Coveytown gravelly loamy sand, 0 to 3-percent slopes	Farmland of statewide importance	6	0.0	0.0	41.7	0.1	Franklin

**Table 15-4. Mapped Soils within the Facility Site and Study Area**

Map Unit Symbol	Map Unit Name	Farmland Classification	MSG	Acres in Facility Site	Percent of Facility Site	Acres in Study Area	Percent of Study Area	County
Cha	Coveytown stony and very stony loamy sands, 0 to 6-percent slopes	Not prime farmland	8	0.0	0.0	1,398.0	2.0	Franklin
Cfa	Coveytown cobbly loamy sand, 0 to 6-percent slopes	Farmland of statewide importance	6	0.0	0.0	836.3	1.2	Franklin
Can	Croghan loamy sand, 0 to 3-percent slopes	Farmland of statewide importance	4	0.0	0.0	3.7	0.0	Franklin
Coa	Colton gravelly loamy coarse sand, 0 to 3-percent slopes	Farmland of statewide importance	6	0.0	0.0	9.9	0.0	Clinton
Cob	Colton gravelly loamy coarse sand, 3 to 8-percent slopes	Farmland of statewide importance	6	0.0	0.0	10.0	0.0	Clinton
Cpc	Colton gravelly loamy coarse sand, strongly sloping, very stony	Not prime farmland	8	0.0	0.0	28.6	0.0	Clinton
Cqb	Croghan sandy loam over till, 0 to 6-percent slopes	Farmland of statewide importance	4	0.0	0.0	60.2	0.1	Franklin
Cxb	Croghan loamy fine sand, 3 to 8-percent slopes	Farmland of statewide importance	4	0.0	0.0	1.5	0.0	Clinton
Daa	Duane gravelly sandy loam, 0 to 3-percent slopes	Farmland of statewide importance	5	16.3	1.1	418.5	0.6	Franklin
Dab	Duane gravelly sandy loam, 3 to 8-percent slopes	Farmland of statewide importance	5	0.0	0.0	432.4	0.6	Franklin

**Table 15-4. Mapped Soils within the Facility Site and Study Area**

Map Unit Symbol	Map Unit Name	Farmland Classification	MSG	Acres in Facility Site	Percent of Facility Site	Acres in Study Area	Percent of Study Area	County
DbA	Duane cobbly sandy loam, 0 to 3-percent slopes	Farmland of statewide importance	5	0.0	0.0	2.2	0.0	Franklin
DbB	Duane cobbly sandy loam, 3 to 8-percent slopes	Farmland of statewide importance	5	0.0	0.0	1.3	0.0	Franklin
Df	Deinache fine sand	Farmland of statewide importance	8	0.0	0.0	21.1	0.0	Clinton
Eaa	Empeyville very fine sandy loam, 0 to 3-percent slopes, stony	Farmland of statewide importance	5	11.6	0.8	2,173.7	3.1	Franklin
Eab	Empeyville very fine sandy loam, 3 to 8-percent slopes, stony	Farmland of statewide importance	5	82.1	5.6	2,914.3	4.2	Franklin
Eac	Empeyville very fine sandy loam, 8 to 15-percent slopes, stony	Farmland of statewide importance	7	13.3	0.9	296.3	0.4	Franklin
Ebb	Empeyville very fine sandy loam, 0 to 8-percent slopes, very stony	Not prime farmland	5	0.0	0.0	1,319.1	1.9	Franklin
Ecd	Empeyville very fine sandy loam, 15 to 25-percent slopes, stony	Not prime farmland	8	5.5	0.4	241.3	0.3	Franklin
Edc	Empeyville very fine sandy loam, 8 to 25-percent slopes, very stony	Not prime farmland	5	3.1	0.2	806.9	1.2	Franklin
Faa	Fahey gravelly loamy sand, 0 to 3-percent slopes	Farmland of statewide importance	5	0.0	0.0	25.9	0.0	Franklin
Fab	Fahey gravelly loamy sand, 3 to 8-percent slopes	Farmland of statewide	5	0.0	0.0	15.8	0.0	Franklin



**Table 15-4. Mapped Soils within the Facility Site and Study Area**

Map Unit Symbol	Map Unit Name	Farmland Classification	MSG	Acres in Facility Site	Percent of Facility Site	Acres in Study Area	Percent of Study Area	County
		importance						
Fba	Fahey cobbly and stony loamy sands, 0 to 3-percent slopes	Farmland of statewide importance	5	0.0	0.0	297.9	0.4	Franklin
Fbb	Fahey cobbly and stony loamy sands, 3 to 8-percent slopes	Farmland of statewide importance	5	0.0	0.0	78.1	0.1	Franklin
Fcb	Fahey very stony loamy sand, 0 to 8-percent slopes	Not prime farmland	8	0.0	0.0	3.0	0.0	Franklin
Feb	Fahey gravelly fine sandy loam, 3 to 8-percent slopes, loamy substratum	Farmland of statewide importance	4	0.0	0.0	16.4	0.0	Clinton
Fn	Fluvaquents-Udifluvents complex, frequently flooded	Not prime farmland	9	0.0	0.0	6.1	0.0	Clinton
GP	Gravel and sand pits	Not prime farmland	-	0.0	0.0	57.7	0.1	Franklin
Inb	Irona-Conic complex, gently sloping, very rocky	Not prime farmland	8	0.0	0.0	13.6	0.0	Clinton
Laa	Livingston silty clay loam, 0 to 2-percent slopes	Not prime farmland	8	0.0	0.0	644.8	0.9	Franklin
Lba	Livingston stony clay loam, 0 to 2-percent slopes	Not prime farmland	8	0.0	0.0	558.0	0.8	Franklin
Lca	Livingston very stony clay loam, 0 to 2-percent slopes	Not prime farmland	8	0.0	0.0	355.3	0.5	Franklin
Ly	Lyonmounten loam, very stony	Not prime farmland	8	0.0	0.0	77.2	0.1	Clinton

**Table 15-4. Mapped Soils within the Facility Site and Study Area**

Map Unit Symbol	Map Unit Name	Farmland Classification	MSG	Acres in Facility Site	Percent of Facility Site	Acres in Study Area	Percent of Study Area	County
Maa	Madalin silt loam, 0 to 2-percent slopes	Farmland of statewide importance	5	0.0	0.0	1,158.0	1.7	Franklin
Mba	Madalin stony silt loam, 0 to 2-percent slopes	Farmland of statewide importance	6	0.0	0.0	273.5	0.4	Franklin
Mca	Malone loam, 0 to 3-percent slopes	Prime farmland if drained	6	0.0	0.0	31.2	0.0	Franklin
Mea	Moira stony loam, 0 to 3-percent slopes	Prime farmland if drained <sup>a</sup> ; Farmland of statewide importance <sup>b</sup>	5 <sup>a,b</sup>	11.8	0.8	71.3 <sup>a</sup> 1,747.6 <sup>b</sup>	0.1 <sup>a</sup> 2.6 <sup>b</sup>	Clinton and Franklin
Meb	Moira stony loam, 3 to 8-percent slopes	Prime farmland if drained <sup>a</sup> ; Farmland of statewide importance <sup>b</sup>	5 <sup>a,b</sup>	193.7	13.2	45.1 <sup>a</sup> 2,734.9 <sup>b</sup>	0.1 <sup>a</sup> 4.0 <sup>b</sup>	Clinton and Franklin
Mec	Moira stony loam, 8 to 15-percent slopes	Farmland of statewide importance	7	40.4	2.8	267.8	0.4	Franklin
Mfb	Malone loam, 0 to 8-percent slopes, very stony	Not prime farmland	8 <sup>a,b</sup>	0.0	0.0	4.6 <sup>a</sup> 567.9 <sup>b</sup>	0.0 <sup>a</sup> 0.8 <sup>b</sup>	Clinton and Franklin
Mga	Muck, deep	Not prime farmland	6	0.0	0.0	19.3	0.0	Franklin
Mha	Muck, shallow	Not prime farmland	10	3.6	0.2	423.6	0.6	Franklin
Mtb	Monadnock fine sandy loam, 3 to 8-percent slopes	All areas are prime farmland	8	0.0	0.0	4.6	0.0	Clinton
Muc	Monadnock fine sandy loam,	Not prime farmland	8	0.0	0.0	9.9	0.0	Clinton

**Table 15-4. Mapped Soils within the Facility Site and Study Area**

Map Unit Symbol	Map Unit Name	Farmland Classification	MSG	Acres in Facility Site	Percent of Facility Site	Acres in Study Area	Percent of Study Area	County
	strongly sloping, very bouldery							
Mvb	Mooers loamy sand, 3 to 8-percent slopes	All areas are prime farmland	5	0.0	0.0	7.8	0.0	Clinton
Naa	Nicholville fine sandy loam, 0 to 2-percent slopes	All areas are prime farmland	4	0.0	0.0	1.6	0.0	Franklin
Nab	Nicholville fine sandy loam, 2 to 6-percent slopes	All areas are prime farmland	5	0.0	0.0	1.9	0.0	Franklin
Oaa	Ondawa and Genesee fine sandy loams, 0 to 2-percent slopes	All areas are prime farmland	2	0.0	0.0	23.5	0.0	Franklin
Pbb	Parishville stony loam, 2 to 8-percent slopes	Farmland of statewide importance	4	0.0	0.0	20.3	0.0	Franklin
Pcb	Parishville very stony loam, 2 to 8-percent slopes	Not prime farmland	8	0.0	0.0	24.6	0.0	Franklin
Pda	Podunk and Eel fine sandy loams, 0 to 2-percent slopes	All areas are prime farmland	7	0.0	0.0	93.0	0.1	Franklin
Pea	Peasleeville loam, 0 to 3-percent slopes	Prime farmland if drained	7	0.0	0.0	83.1	0.1	Clinton
Peb	Peasleeville loam, 3 to 8-percent slopes	Prime farmland if drained	7	0.0	0.0	32.8	0.0	Clinton
Pfb	Peasleeville loam, gently sloping, very stony	Not prime farmland	8	0.0	0.0	317.5	0.5	Clinton
Pp	Pits, sand	Not prime farmland	9	0.0	0.0	15.8	0.0	Clinton
Qu	Quarries	Not prime farmland	-	0.4	0.0	20.9	0.0	Franklin
Rcb	Ridgebury very stony sandy	Not prime farmland	8	0.0	0.0	2.1	0.0	Franklin

**Table 15-4. Mapped Soils within the Facility Site and Study Area**

Map Unit Symbol	Map Unit Name	Farmland Classification	MSG	Acres in Facility Site	Percent of Facility Site	Acres in Study Area	Percent of Study Area	County
	loam, 0 to 10-percent slopes							
Rd	Rockland, sandstone and granite	Not prime farmland	8	0.0	0.0	51.3	0.0	Franklin
Rea	Rumney and Wayland fine sandy loams, 0 to 2-percent slopes	Farmland of statewide importance	7	0.0	0.0	176.5	0.3	Franklin
Ry	Runeberg soils, 0 to 3-percent slopes, frequently ponded	Not prime farmland	8	0.0	0.0	15.2	0.0	Clinton
Saa	Saco and Sloan soils, 0 to 2-percent slopes	Farmland of statewide importance	8	13.8	0.9	1,442.2	2.1	Franklin
Sb	Sabattis mucky fine sandy loam, very bouldery	Not prime farmland	8	0.0	0.0	25.0	0.0	Clinton
Sea	Scarboro fine sandy loam, 0 to 3-percent slopes	Not prime farmland	8	19.2	1.3	654.2	0.9	Franklin
Se	Saprists and Aquepts, ponded	Not prime farmland	10	0.0	0.0	5.4	0.0	Clinton
Sfa	Scarboro loam, neutral variant, 0 to 3-percent slopes	Not prime farmland	8	0.0	0.0	88.4	0.1	Franklin
Sga	Scarboro loam, neutral variant, over till or clay, 0 to 3-percent slopes	Not prime farmland	8	0.2	0.0	472.2	0.7	Franklin
Sh	Stony land, Hermon and Becket soils	Not prime farmland	8	0.0	0.0	135.5	0.2	Franklin
Shb	Schroon fine sandy loam, 3-to 8 percent slopes	All areas are prime farmland	3	0.0	0.0	520.0	0.7	Clinton

**Table 15-4. Mapped Soils within the Facility Site and Study Area**

Map Unit Symbol	Map Unit Name	Farmland Classification	MSG	Acres in Facility Site	Percent of Facility Site	Acres in Study Area	Percent of Study Area	County
Sk	Stony land, Worth and Parishville soils	Not prime farmland	8	0.0	0.0	211.4	0.3	Franklin
Skb	Schroon fine sandy loam, gently sloping, very stony	Not prime farmland	8	0.0	0.0	171.1	0.2	Clinton
Sma	Runeberg soils, 0 to 5-percent slopes	Not prime farmland	8	119.7	8.2	2,869.9	4.1	Franklin
Sn	Sciota fine sand	Prime farmland if drained	6	0.0	0.0	24.0	0.0	Clinton
Sna	Runeberg soils, 0 to 5-percent slopes, very stony	Not prime farmland	8	61.4	4.2	2,999.7	4.3	Franklin
Swb	Sunapee fine sandy loam, 3 to 8-percent slopes	All areas are prime farmland	5	0.0	0.0	70.9	0.1	Clinton
Sxb	Sunapee fine sandy loam, gently sloping, very bouldery	Not prime farmland	8	0.0	0.0	203.5	0.3	Clinton
Taa	Trout River gravelly loamy sand, 0 to 3-percent slopes	Farmland of statewide importance	5	0.0	0.0	333.2	0.5	Franklin
Tab	Trout River gravelly loamy sand, 3 to 8-percent slopes	Farmland of statewide importance	5	0.0	0.0	632.2	0.9	Franklin
Tba	Trout River cobbly loamy sand, 0 to 3-percent slopes	Farmland of statewide importance	5	0.0	0.0	677.9	1.0	Franklin
Tbb	Trout River cobbly loamy sand, 3 to 8-percent slopes	Farmland of statewide importance	5	0.0	0.0	683.9	1.0	Franklin
Tca	Tughill and Dannemora stony very fine sandy	Not prime farmland	8	2.2	0.2	752.5	1.1	Franklin

**Table 15-4. Mapped Soils within the Facility Site and Study Area**

Map Unit Symbol	Map Unit Name	Farmland Classification	MSG	Acres in Facility Site	Percent of Facility Site	Acres in Study Area	Percent of Study Area	County
	loams, 0 to 3-percent slopes							
Tcb	Topknot-Chazy complex, gently sloping, rocky	Not prime farmland	8	0.0	0.0	47.5	0.1	Clinton
Tda	Tughill and Dannemora very stony very fine sandy loams, 0 to 3-percent slopes	Not prime farmland	8	3.9	0.3	3,303.7	4.7	Franklin
W	Water	Not prime farmland	-	0.0	0.0	173.3	0.2	Franklin
Wca	Walpole sandy loam, 0 to 6-percent slopes	Farmland of statewide importance	6	17.8	1.2	718.7	1.0	Franklin
Wea	Walpole loam, neutral variant, 0 to 3-percent slopes	Farmland of statewide importance	6	0.0	0.0	25.2	0.0	Franklin
Wfa	Walpole sandy loam, neutral variant, over till 0 to 5-percent slopes	Farmland of statewide importance	6	0.0	0.0	268.1	0.4	Franklin
Wga	Walpole loamy sand, neutral variant, over clay, 0 to 3-percent slopes	Farmland of statewide importance	7	0.0	0.0	57.1	0.1	Franklin
Wha	Walpole and Au Gres loamy sands, 0 to 6-percent slopes	Farmland of statewide importance	6	0.0	0.0	80.6	0.1	Franklin
Wka	Walpole, neutral variant, and Au Gres loamy sands, 0 to 6-percent slopes	Farmland of statewide importance	6	0.0	0.0	91.2	0.1	Franklin
Wma	Westbury and Dannemora stony very fine sandy	Farmland of statewide importance	7	16.2	1.1	3,860.6	5.5	Franklin

**Table 15-4. Mapped Soils within the Facility Site and Study Area**

Map Unit Symbol	Map Unit Name	Farmland Classification	MSG	Acres in Facility Site	Percent of Facility Site	Acres in Study Area	Percent of Study Area	County
	loams, 0 to 3-percent slopes							
Wmb	Westbury and Dannemora stony very fine sandy loams, 3 to 8-percent slopes	Farmland of statewide importance	7	121.7	8.3	1,469.5	2.1	Franklin
Wna	Westbury and Dannemora very stony fine sandy loams, 0 to 8-percent slopes	Not prime farmland	8	0.0	0.0	3,103.5	0.0	Franklin
Wn	Wainola loamy fine sand	Prime farmland if drained	7	0.0	0.0	39.2	0.1	Clinton
Woc	Westbury and Brayton very stony very fine sandy loams, 8 to 15-percent slopes	Not prime farmland	8	0.0	0.0	165.2	0.2	Franklin
Wpa	Whitman very stony fine sandy loam, 0 to 8-percent slopes	Not prime farmland	8	0.0	0.0	7.8	0.0	Franklin
Wqa	Worth very fine sandy loam, 0 to 3-percent slopes, stony	All areas are prime farmland	7	0.0	0.0	251.5	0.4	Franklin
Wqb	Worth very fine sandy loam, 3 to 8-percent slopes, stony	All areas are prime farmland	4	4.5	0.3	433.7	0.6	Franklin
Wqc	Worth very fine sandy loam, 8 to 15-percent slopes, stony	Farmland of statewide importance	6	0.0	0.0	82.1	0.1	Franklin
Wsb	Worth very fine sandy loam, 0 to 8-percent slopes, very stony	Not prime farmland	4	0.0	0.0	782.3	1.1	Franklin
Wsd	Worth very fine sandy loam, 8 to	Not prime farmland	7	0.7	0.1	307.3	0.4	Franklin

**Table 15-4. Mapped Soils within the Facility Site and Study Area**

Map Unit Symbol	Map Unit Name	Farmland Classification	MSG	Acres in Facility Site	Percent of Facility Site	Acres in Study Area	Percent of Study Area	County
	25-percent slopes, very stony							
Wte	Worth very fine sandy loam, 25 to 60-percent slopes, very stony	Not prime farmland	9	9.9	0.7	1,342.5	1.9	Franklin
3100B	Westbury-Dannemora complex, 0 to 8-percent slopes	Farmland of statewide importance	8	0.0	0.0	26.8	0.0	Franklin
3111B	Empeyville-Westbury Complex, 3 to 8-percent slopes	Farmland of statewide importance	9	0.0	0.0	46.2	0.1	Franklin
3115D	Worth very fine sandy loam, 15 to 35-percent slopes	Not prime farmland	8	0.0	0.0	0.1	0.0	Franklin
<sup>a</sup> Clinton County, <sup>b</sup> Franklin County								

### **(6) NYS Agricultural Land Classification Mineral Soil Group Map**

The NYS Agricultural Land Classification System has identified 10 MSGs based on productivity and capability. Groups 1 through 4 are considered to represent the most productive farmland within the State and are primarily used for the production of food and fiber, whereas MSGs 5 through 10 are considered to have limitations for agricultural production (NYSAGM, 2020).

Within the Facility Site, only 4.5 acres (0.3 percent) of soil are classified as being within MSGs 1 through 4. This accounts for 0.3 percent of the 1,471-acre Facility Site. As previously mentioned in this exhibit, the 4.5 acres of soil within the Facility Site that are classified in MSGs 1 through 4 will not be impacted and the Facility has been sited to avoid these resources.

Within the Study Area, only 1,862.8 acres of soil are classified as being within MSGs 1 through 4. This accounts for 2.7 percent of the 69,963-acre Study Area. Of the 1,862.8 acres within the Study Area that are classified as MSGs 1 through 4, 1,303.3 acres are within Franklin County and 559.5 acres are within Clinton County. All soils with an MSG rating of 1 through 4 within the Study Area will not be impacted since the Facility has been sited to avoid these resources. This



is in line with NYSAGM goals to limit the conversion of agricultural areas by solar development (NYSAGM, 2020). Additionally, there will be no disturbance to areas classified as Prime Farmland by the USDA Natural Resources Conservation Service (NRCS) within the Facility's LOD.

Land within the Facility fence line will be taken out of agricultural production during the life of the Facility and will be used for solar production resulting in a conversion of land use within the Facility Site. This conversion area will be used for solar production purposes throughout the useful economic life of the Facility and therefore, will not be used for agricultural production during that time. Remaining land outside the Facility fenced area will remain under its existing uses, including agricultural production. As previously stated, upon decommissioning land previously used for the Facility will be restored to its original use and can be converted back to agricultural use.

Based on publicly available spatial data, MSGs 1 through 10 within the Facility Site can also be viewed on Figure 15-3. Additionally, information regarding MSGs 1 through 10 and associated acreage within the Facility Site has been provided in a tabular format in Table 15-4 above.

### **15(c) Agricultural Plan**

The Applicant will comply with the NYSAGM Guidelines, to the maximum extent practicable for requirements specific to restoration, monitoring, and decommissioning, which are further discussed in Agricultural Plan included as Appendix 15-3. As stated in the NYSAGM Guidelines, an Environmental Monitor (EM) will coordinate with the NYSAGM's Division of Land and Water Resources, to develop an inspection schedule and solution if any such goal included in the guidelines cannot be met. Additionally, in consultation with ORES, the EM will conduct regular site inspections of the construction site and issue regular reporting and compliance audits on these activities.

### **15(d) Drainage Remediation Plan**

A Drainage Remediation Plan has been developed to address inadvertent damages to surface and sub-surface drainage as a results of Facility construction. The Plan will also discuss the likelihood of impacts, as well as anticipated repair methods. The Plan is available in Appendix 15-4 of this Exhibit.

### **(1) Likelihood of Drainage Impacts Within and Adjacent to the Facility**

As previously discussed, the Applicant will work with landowners within and adjacent to the Facility Site to identify drainage infrastructure prior to construction. Drainage features within the Facility Site were identified through onsite wetland delineations and from publicly available information previously discussed in section 15(b)(4). There were two drainage features identified as a result of the Agricultural Viability Landowner Survey discussed in previous sections of this Exhibit. The Applicant is committed to working with landowners/farm operators in order to minimize impacts to agricultural operations and address unanticipated post-construction impacts. The Applicant does not anticipate any permanent impacts to surface or subsurface drainage as a result of construction through the use of proper siting of Facility components to avoid areas of landowner-imposed development restrictions and sensitive site resources. However, in the event that impacts to surface or subsurface drainage occur during construction of the facility, components that are damaged will be identified with flags or stakes until evaluation of damage and permanent repairs are completed.

The Applicant does not anticipate impacts to surface and sub-surface drainage features and therefore impacts to farmland are not anticipated as a result of interrupted drainage. During construction a Stormwater Pollution Prevention Plan (SWPPP) will be utilized which will outline best management practices (BMPs) for construction of the Facility in order to maintain existing drainage patterns throughout the Facility and surrounding areas. The SWPPP has been provided as Appendix 13-3 of Exhibit 13. The Facility has been sited in order to minimize disruption to existing drainage features and avoid downstream impacts. Additionally, as previously stated, the Facility will be constructed and operated in accordance with the NYSAGM Guidelines which specify practices in relation to the maintenance of drainage patterns and features, including the following:

Construction requirements set forth in the NYSAGM Guidelines specific the following:

- The surface of haul roads located outside of the generation facility's security fence and constructed through agricultural fields shall be level with the adjacent field surface. If a level road design is not feasible, all haul roads should be constructed to allow a farm crossing (for specific equipment and livestock) and to restore/ maintain original surface drainage patterns.

- Install culverts and/or waterbars to maintain or improve site specific natural drainage patterns.
- When buried utilities alter the natural stratification of soil horizons and natural soil drainage patterns, rectify the effects with measures such as subsurface intercept drain lines. Consult the local Soil and Water Conservation District concerning the type of intercept drain lines to install to prevent surface seeps and the seasonally prolonged saturation of the conductor installation zone and adjacent areas. Install and/or repair all drain lines according to Natural Resources Conservation Service conservation practice standards and specifications. Drain tile must meet or exceed the AASHTO M-252 specifications. Repair of subsurface drains tiles should be consistent with the NYSDAM's details for "Repair of Severed Tile Line" found in the pipeline drawing A-5 (<http://www.agriculture.ny.gov/ap/agservices/Pipeline-Drawings.pdf>)

Post-construction requirements set forth in the NYSAGM Guidelines specify the following:

- Regrade all haul roads outside of the security fencing (as determined necessary by the EM), to allow for farm equipment crossing and restore original surface drainage patterns, or other drainage pattern incorporated into the design.
- Repair all surface or subsurface drainage structures damaged during construction as close to preconstruction conditions as possible, unless said structures are to be removed as part of the Facility design. Correct any surface or subsurface drainage problems resulting from construction of the solar energy project with the appropriate mitigation as determined by the Environmental Monitor, Soil and Water Conservation District and the Landowner.

Prior to construction, the Applicant will hire an independent, third-party EM to oversee all construction and restoration activities to oversee compliance with all applicable environmental commitments and siting permit requirements. Prior to the commencement of Facility-related construction, an overall site survey will be performed to effectively locate and demarcate the exact location of Facility components and routes. Additionally, the EM, with the support of construction management personnel, will conduct specific site reviews at locations to be impacted, or potentially impacted, by associated construction activities. Pre-construction site reviews will direct attention to previously identified sensitive resources to avoid (e.g., select wetlands and waterbodies, archaeological, or agricultural resources), as well as the limits of clearing, location of drainage features (e.g., culverts, ditches), location of existing underground

pipelines and utilities, known locations of agricultural tile lines, and layout of erosion and sediment control measures. Work area limits will be defined prior to construction using flagging, staking, and/or fencing.

The Applicant is committed to working with landowners/farm operators to minimize impacts to agricultural operations and address unanticipated post-construction impacts. Additionally, the Applicant will use BMPs, those identified above, as well as utilizing trench breakers in areas of moderate to steep slopes on active agricultural land where drainage issues have been identified if deemed necessary to ensure that the deposition of impacted or stockpiled soils does not occur over agricultural lands.

## ***(2) Anticipated Repair Methods***

Existing drain tiles will be identified and located before construction as much as is reasonably possible based primarily on consultation between the Applicant and landowners, results from the previously discussed Agricultural Viability Landowner Survey, wetland delineations efforts, and publicly available information previously discussed in section 15(b)(4). During and after construction operations, any existing drain tiles within the LOD will be checked for damage. Any drain tiles damaged by the construction will be replaced or repaired consistent with the NYSAGM's details for "Repair of Severed Tile Line" to the maximum extent practicable. The Applicant will coordinate with the landowner to continue to monitor drain tiles post-construction to ensure that repairs are properly functioning.

## **15(e) Feasibility of Agricultural Co-utilization**

While there will be no agricultural activities within the Facility's fence line, agricultural activities outside the fence line and on adjacent parcels can continue as there will be no offsite staging and/or storage used for the construction of the Facility. The Applicant worked with its participating landowners to identify development restrictions and specific properties that should be preserved to allow for continued agricultural use and development. This allows the landowner to continue existing agricultural operations where necessary. The land outside the Facility LOD remains available to landowners for agricultural use and development. The Facility has also been sited and designed to prioritize the placement of Facility components of parcels with contiguous proximity to one another. This reduces the need to place components, such as collection lines and haul roads, offsite. This also limits the number of haul roads required for the

---

Facility, allowing multiple parcels to be accessed via one road instead of several. Designing the Facility in this manner helps to condense and reduce permanent impacts to land, as well as reduce interference with existing adjacent land uses, such as agricultural production.

As previously stated, agricultural land within the fence line will be restored in accordance with the NYSAGM Guidelines. Additional information regarding site restoration and decommissioning can be found in Exhibit 23.

## **Conclusions**

Roughly 81 percent of the Facility Site is agricultural land. Approximately 0.3 percent of the Facility Site is classified as MSGs 1 through 4. Portions of the Facility Site are located within Franklin County Agricultural District 1. The proposed solar panels will result in minimal ground disturbance, protecting the viable agricultural land for future use following decommissioning of the Facility. During operation, continued agricultural use is allowed for on parcels excluded from the Facility. There were 18 responses received for the Agricultural Viability Landowner Survey that indicated agriculture productions ranged from hay and crop production to pastureland and dairy farm production. The Facility will be constructed in accordance with the NYSAGM Guidelines as well as the Applicant's Drainage Remediation Plan and Agricultural Plan. The Facility has been designed to comply with 19 New York Codes, Rules and Regulations (NYCRR) Section 900-2.16 and the Uniform Standards and Conditions (USCs) and impacts related to agricultural resources have been avoided and minimized to the maximum extent practicable.

## References

- Cornell Geospatial Information Repository (CUGIR). (2021). Franklin County Agricultural Districts (2021). Available at: <https://cugir.library.cornell.edu/catalog/cugir-007963>. Accessed December 2021.
- CUGIR. (2017). Clinton County Agricultural Districts (2017). Available at: <https://cugir.library.cornell.edu/catalog/cugir-007956>. Accessed December 2021.
- New York State Department of Agriculture and Markets (NYSAGM). (2019). Guidelines for Solar Energy Projects – Construction Mitigation for Agricultural Lands. Available at: [https://agriculture.ny.gov/system/files/documents/2019/10/solar\\_energy\\_guidelines.pdf](https://agriculture.ny.gov/system/files/documents/2019/10/solar_energy_guidelines.pdf). Accessed December 2021.
- NYSAGM Direct Testimony. Taken on June 5, 2020, at pg. 7, lines 6-18. Available at: [http://documents.dps.ny.gov/public/MatterManagement/CaseMaster.aspx?MatterSeq=54553&\\_sm\\_au\\_=iVV46j6P3jMBn0Dj](http://documents.dps.ny.gov/public/MatterManagement/CaseMaster.aspx?MatterSeq=54553&_sm_au_=iVV46j6P3jMBn0Dj). Accessed December 2021.
- NYSAGM (2021a). Agricultural Districts Acreage Totals by County <https://data.ny.gov/Economic-Development/Agricultural-Districts-Acreage-Totalsby-County/h2id-x25a/data>. Accessed December 2021.
- NYSAGM (2021b). County Agricultural Districts Profiles <https://data.ny.gov/Economic-Development/County-Agricultural-Districts-Profile/9bc8-mx4a/data>. Accessed December 2021.
- NYSAGM (2021c). Tax Credits and Agricultural Assessments. <https://agriculture.ny.gov/land-and-water/tax-credits-and-agricultural-assessments#agricultural-assessment-information>. Accessed December 2021.
- Office of the New York State Comptroller (2019). A Profile of Agriculture in New York State. <https://www.osc.state.ny.us/files/reports/special-topics/pdf/agriculture-report-2019.pdf>. Accessed January 2022.
- Solar Energy Industries Association (2020). Major Solar Projects List. <https://www.seia.org/research-resources/major-solar-projects-list>. Accessed December 2021.

Town of Burke. (2019). Town of Burke Solar Energy Law. Available at: <https://burkeny.org/wp-content/uploads/2019/11/2019-Law-1-Burke-Town-Solar-Law.pdf>. Accessed December 2021.

Town of Burke. (1991). Town of Burke Zoning Law. Available at: <https://burkeny.org/wp-content/uploads/2019/11/1991-Law-1-Zoning-Law-1.pdf>. Accessed December 2021.

United States Department of Agriculture (USDA). (2018). Natural Resources Conservation Service: Web Soil Survey. Available at: <https://websoilsurvey.sc.egov.usda.gov/App/HomePage.htm>. Accessed December 2021.

USDA. (2020). National Agricultural Statistics Service (NASS) Cropland Data Layer (CDL). Available at: <https://nassgeodata.gmu.edu/CropScape/>. Accessed December 2021.

United States Geologic Survey (USGS) Wind Turbine Database. (ver. 3.3, January 2021). Available at: <https://eerscmap.usgs.gov/uswtodb/viewer/#6.15/45.137/-76.301>. Accessed December 2021.

Valayamkunnath, P., M. Barlage, F. Chen, D. J. Gochis and K. J. Franz. 2020. Mapping of 30-meter resolution tile-drained croplands using a geospatial modeling approach. *Sci Data* (7): 257. Available at: <https://doi.org/10.1038/s41597-020-00596-x>. Accessed December 2021.