

Exhibit B
Preliminary Decommissioning Plan

Stantec Consulting Services Inc.

February 8, 2021

**Preliminary Decommissioning Plan – Birch
Solar Project
Allen and Auglaize Counties, Ohio**



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Project No: 2028113238
February 8, 2021

**DECOMMISSIONING PLAN
BIRCH SOLAR PROJECT, ALLEN AND AUGLAIZE COUNTIES, OHIO**

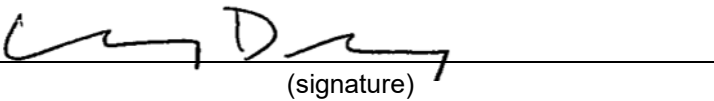
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Table of Contents

1.0	INTRODUCTION	1
1.1	SOLAR FARM COMPONENTS	1
1.2	TRIGGERING EVENTS AND EXPECTED LIFETIME OF PROJECT.....	1
1.3	DECOMMISSIONING SEQUENCE	2
2.0	PROJECT COMPONENTS AND DECOMMISSIONING ACTIVITIES.....	4
2.1	OVERVIEW OF SOLAR FACILITY SYSTEM.....	4
2.2	SOLAR MODULES	5
2.3	TRACKING SYSTEM AND SUPPORT	5
2.4	INVERTER STATIONS.....	6
2.5	ELECTRICAL CABLING AND CONDUITS	6
2.6	PROJECT SUBSTATION.....	6
2.7	OVERHEAD GENERATION TIE-IN TRANSMISSION LINE	6
2.8	OPERATIONS AND MAINTENANCE BUILDING.....	6
2.9	PERIMETER FENCING AND ACCESS ROADS	7
3.0	LAND USE AND ENVIRONMENT.....	8
3.1	SOILS AND AGRICULTURAL LAND	8
3.2	RESTORATION AND REVEGETATION.....	8
3.3	SURFACE WATER DRAINAGE AND CONTROL	8
3.4	MAJOR EQUIPMENT REQUIRED FOR DECOMMISSIONING	9
4.0	DECOMMISSIONING COST ESTIMATE SUMMARY	10
4.1	DECOMMISSIONING EXPENSES.....	10
4.2	DECOMMISSIONING REVENUES.....	11
4.3	DECOMMISSIONING COST SUMMARY AND FINANCIAL ASSURANCE.....	11

LIST OF TABLES

Table 1	Primary Components of Solar Farm to be Decommissioned.....	5
Table 2	Typical Access Road Construction Materials.....	7
Table 3	Estimated Decommissioning Expenses – 300 MW _{AC} Solar Array	10
Table 4	Estimated Decommissioning Revenues.....	11
Table 5	Net Decommissioning Summary	12

LIST OF FIGURES

Figure 1	Proposed Project Layout
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1.0 INTRODUCTION

Birch Solar 1, LLC, (Birch Solar) is proposing to construct the Birch Solar Project (the Project) in Allen and Auglaize Counties, Ohio.

The proposed Project is located in Shawnee Township in Allen County and Logan Township in Auglaize County, Ohio. The Project footprint encompasses approximately 1,410 acres. The maximum nameplate generating capacity of the Project will be up to 300 megawatts, alternating current (MW)_[AC]. Major components of the Project include solar modules, tracking systems and inverters/transformers (inverter stations). Birch Solar is currently considering bifacial mono-crystalline solar panels for the Project.

This Decommissioning Plan (Plan) provides a description of the decommissioning and restoration phase of the Project. Start-of-construction is planned for the first quarter of 2022, with a projected Commercial Operation Date of June 30, 2023. The Project will consist of the installation of the perimeter fencing; solar arrays and associated trackers, foundations, and steel piles; inverter stations; access and internal roads; electrical collection system and substation (Figure 1).

This Plan is applicable to the decommissioning/deconstruction and restoration phases of the Project. A summary of the components to be removed is provided in Section 1.1. A summary of estimated costs associated with decommissioning the Project is provided in Section 4.0.

1.1 SOLAR FARM COMPONENTS

The main components of the Project include:

- Solar panels and tracking system
- Foundations and steel piles
- Inverter stations
- Electrical cabling and conduits
- Site access roads
- Perimeter fencing
- Project substation

1.2 TRIGGERING EVENTS AND EXPECTED LIFETIME OF PROJECT

Project decommissioning may be triggered by an event such as the end of the power purchase agreement, abandonment, or when the Project reaches the end of its operational life. The Project will be considered to be abandoned if facilities are non-operational for a period of twelve (12) consecutive months. Project facilities will be removed from the site in accordance with a timeframe agreed upon by Birch Solar, the Ohio Power Siting Board Staff (OPSB), and the respective county administrators.

DECOMMISSIONING PLAN

BIRCH SOLAR PROJECT, ALLEN AND AUGLAIZE COUNTIES, OHIO

If properly maintained, the expected lifetime of the Project is 35 years. In the event that the modules are not retrofitted, or at the end of the Project's useful life, the panels and associated components will be decommissioned and removed from the Project site.

The value of the individual components of the solar facility will vary with time. In general, the highest component value would be expected at the time of construction with declining value over the life of the Project. Over most of the life of the Project, components such as the solar panels could be sold in the wholesale market for reuse or refurbishment. As efficiency and power production of the panels decrease due to aging and/or weathering, the resale value will decline accordingly. Secondary markets for used solar components include other utility scale solar facilities with similar designs that may require replacement equipment due to damage or normal wear over time; or other buyers (e.g., developers, consumers) that are willing to accept a slightly lower power output in return for a significantly lower price point when compared to new equipment.

Components of the solar facility that have resale value may be sold in the wholesale market. Components with no wholesale value will be salvaged and sold as scrap for recycling or disposed of at an approved offsite licensed solid waste disposal facility (landfill). Decommissioning activities will include removal of the arrays and associated components as listed in Section 1.1 and described in Section 2.

Birch Solar is committed to recycling all solar panels. This commitment includes panels damaged during construction and operation, as well as panels at the end of Project life/decommissioning.

1.3 DECOMMISSIONING SEQUENCE

Decommissioning activities will begin within twelve months of the Project ceasing operation and are anticipated to be completed in 12 to 18 months. Birch Solar will be the responsible party. Monitoring and site restoration may extend beyond this period to ensure successful revegetation and rehabilitation. The anticipated sequence of decommissioning and removal is described below; however, overlap of activities is expected.

- Reinforce access roads, if needed, and prepare site for component removal
- Install erosion control fencing and other best management practices (BMPs) to protect sensitive resources and control erosion during decommissioning activities
- De-energize solar arrays
- Dismantle panels and above ground wiring
- Remove tracking and piles
- Remove inverter/transformer stations along with support system and foundation pads
- Remove electrical cables and conduits
- Remove access and internal roads and grade site (if required)

DECOMMISSIONING PLAN

BIRCH SOLAR PROJECT, ALLEN AND AUGLAIZE COUNTIES, OHIO

- Remove substation
- De-compact subsoils as needed, restore and revegetate disturbed land to pre-construction conditions to the extent practicable

2.0 PROJECT COMPONENTS AND DECOMMISSIONING ACTIVITIES

The solar facility components and decommissioning activities necessary to restore the Project area, as near as practicable, to pre-construction conditions are described within this section.

2.1 OVERVIEW OF SOLAR FACILITY SYSTEM

Birch Solar anticipates utilizing approximately 635,584 solar modules, with a total nameplate generating capacity of approximately 345 MW, direct current (DC) (300 MW_[AC]). The Project footprint encompasses approximately 1,410 acres and will be bounded by perimeter fencing as shown on Figure 1 (preliminary design; subject to modification). The land within the perimeter fencing is predominantly agricultural land. Statistics and estimates provided in this Plan are based on TrinaSolar Vertex 590-watt bifacial module.

Foundations, steel piles, and electric cabling and conduit installed below the soil surface will be removed. Access roads may be left in place if requested and/or agreed to by the landowner; however, for purposes of this assessment, all access roads are assumed to be removed. Public roads damaged or modified during the decommissioning and reclamation process will be repaired upon completion of the decommissioning phase and in compliance with the Road Use Agreement that is expected to be implemented between Birch Solar and the Allen and Auglaize County Engineers. An estimated cost of public road repair is included in Project decommissioning costs as shown in Table 3.

Estimated quantities of materials to be removed and salvaged or disposed of are included in this section. Many of the materials described have salvage value; although, there are some components that will likely have none at the time of decommissioning. Removed materials will be salvaged or recycled to the extent possible. Other waste materials will be disposed of in accordance with state and federal law in an approved licensed solid waste facility. Solar panels may have value in a resale market, depending on their condition at the end of the Project life. If the Project is decommissioned prior to the anticipated 25 to 30-year timeframe, the resale value of components may be substantially higher than at the end of the projected Project.

Table 1 presents a summary of the primary components of the Project included in this decommissioning plan.

Table 1 Primary Components of Solar Farm to be Decommissioned

Component	Quantity	Unit of Measure
Solar Modules (approximate)	635,584	Each
Tracking System (combined 2 and 3-string trackers)	9,931	Tracker
Steel Piles	141,590	Each
Inverter Stations with Foundations	95	Each
Electrical Cables and Conduits	1,015,630	Linear Foot (estimated)
Perimeter Fencing	220,900	Linear Foot
Access Roads (approximate)	118,600	Linear Foot
Project Substation	1	Each

2.2 SOLAR MODULES

Birch Solar intends to use a bifacial mono-crystalline panel (590 watt) from TrinaSolar for the Project. Each module assembly (with frame) has a total weight of approximately 77.8 pounds (35.3 kg). The modules will be approximately 86 inches by 51 inches in size and are mainly comprised of non-metallic materials such as silicon, glass, composite film, plastic, and epoxies, with an anodized aluminum frame.

At the time of decommissioning, module components in working condition may be refurbished and sold in a secondary market yielding greater revenue than selling as salvage material. The estimates in this report have been calculated using a conservative approach, considering revenue from salvage only, rather than resale of Project components.

Birch Solar is committed to recycling all solar panels. This commitment includes panels damaged during construction and operation, as well as panels at the end of Project life/ decommissioning.

2.3 TRACKING SYSTEM AND SUPPORT

The solar modules will be mounted on a single-axis, one-in-portrait tracking system. Birch Solar has selected the DuraTrack HZ manufactured by Array Technologies for the tracking system. Each full, two-string tracker will be approximately 85 meters (279 feet) in length and will support 64 solar modules. Smaller single-string trackers, supporting 32 panels each, will be employed at the edges of the layout to efficiently utilize available space. The tracking system is mainly comprised of high-strength galvanized steel and anodized aluminum; steel piles that support the system are assumed to be comprised of galvanized steel.

DECOMMISSIONING PLAN

BIRCH SOLAR PROJECT, ALLEN AND AUGLAIZE COUNTIES, OHIO

The solar arrays will be deactivated from the surrounding electrical system and made safe for disassembly. Liquid wastes, including oils and hydraulic fluids will be removed and properly disposed of or recycled according to regulations current at the time of decommissioning. Electronic components, and internal electrical wiring will be removed and salvaged. The steel piles will be completely removed from the ground.

The supports, tracking system, and posts contain salvageable materials which can be sold to provide revenue to offset the decommissioning costs.

2.4 INVERTER STATIONS

The combined inverters/transformers (inverter stations) generally sit on small concrete footings or piers on steel piles within the array. The inverters will be deactivated, disassembled and removed. For purposes of this report, it is assumed that inverters will be constructed on concrete pads which will be completely removed during decommissioning. Depending on condition, the equipment may be sold for refurbishment and re-use. If not re-used, they will be salvaged or disposed of at an approved solid waste management facility.

2.5 ELECTRICAL CABLING AND CONDUITS

The Project's underground electrical collection system will be placed at a depth of approximately three feet (36 inches) below the ground surface. All cabling will be removed and salvaged. Recovery cost has been conservatively based on aluminum wiring; however, the salvage value of copper, if used, would be far greater.

2.6 PROJECT SUBSTATION

A Project substation will be part of the Project within an approximately 300-foot by 300-foot footprint. The substation will contain within its perimeter, a gravel pad, power transformers and footings, electrical control house and concrete foundations, as needed. The substation transformers may be sold for re-use or salvage. Components of the substation that cannot be salvaged will be transported off-site for disposal at an approved waste management facility. Although there is some potential that the Project substation may remain at the end of the Project life, an estimated decommissioning cost has been included in this Plan.

2.7 OVERHEAD GENERATION TIE-IN TRANSMISSION LINE

There is an approximate 250-foot-long overhead transmission line to be constructed between the Project substation and the Southwest Lima substation (the point of interconnection). Removal of the overhead generation tie-in transmission line is included in this Plan.

2.8 OPERATIONS AND MAINTENANCE BUILDING

There is no onsite Operations and Maintenance (O&M) building planned; therefore, no O&M building removal is included in this Plan.

2.9 PERIMETER FENCING AND ACCESS ROADS

The Project will include a security fence around the perimeter of the site and exclusionary area. The fence will total approximately 220,900 feet in length. Access drives will provide direct access to the solar facility from local roads and along the inner perimeter of the arrays. Internal roads will be located within the array to allow access to the equipment. The site access drives will be approximately 20 feet in width and total approximately 118,600 feet (22.46 miles) in length. The access road lengths may change with final Project design. To be conservative, the decommissioning estimate assumes that all access roads will be completely removed.

During installation of the Project access roads, the existing topsoil will be excavated to a depth of six inches, the subgrade will be compacted, and then six inches of granular fill will be placed. The estimated quantity of these materials and the required topsoil to replace them is provided in Table 2.

Table 2 Typical Access Road Construction Materials

Item	Quantity	Unit
Topsoil replacement	15,330	Cubic Yards
Compacted granular fill, 6-inch thick – to be removed	15,330	Cubic Yards

Decommissioning activities include the removal and stockpiling of aggregate materials onsite for salvage preparation. It is conservatively assumed that all aggregate materials will be removed from the Project site and hauled up to five miles from the Project area. Following removal of aggregate, the access road areas will be graded, de-compacted with deep ripper or chisel plow (ripped to 18 inches), backfilled with native subsoil and topsoil, as needed, and graded as necessary.

3.0 LAND USE AND ENVIRONMENT

3.1 SOILS AND AGRICULTURAL LAND

Areas of the Project that were previously utilized for agricultural purposes will be restored to their pre-construction condition and land use as dictated by landowner lease agreements. Restored areas will be revegetated in consultation with the current landowner and in compliance with regulations in place at the time of decommissioning. Land disturbed by Project facilities will be restored in such a way to be used in a reasonably similar manner to its original intended use as it existed prior to Project construction.

3.2 RESTORATION AND REVEGETATION

Areas of the Project that have been excavated and backfilled will be graded as previously described. Soils compacted during de-construction activities will be de-compacted, as necessary, to restore the land to pre-construction land use. If present, drain tiles that have been damaged will be restored to pre-construction condition. Topsoil will be placed on disturbed areas and seeded with appropriate vegetation or in coordination with landowners within agricultural land. Work will be completed to comply with the conditions agreed upon by Birch Solar and the OPSB or as directed by regulations in affect at the time of decommissioning.

3.3 SURFACE WATER DRAINAGE AND CONTROL

The proposed Project is predominantly located in actively drained agricultural land. The terrain is relatively flat with several ditches protected by vegetated buffers. The Project facilities are being sited to avoid all impacts to wetlands, waterways, and drainage ditches. The existing Project site conditions and proposed BMPs to protect surface water features will be detailed in a Project Stormwater Pollution Prevention Plan (SWPPP) for the Project prior to the commencement of construction activities.

Surface water conditions at the Project site will be reassessed prior to the decommissioning phase. Birch Solar will obtain the required water quality permits from the Ohio Environmental Protection Agency (OEPA) and the U.S. Army Corp of Engineers (USACE), if needed, before decommissioning of the Project. Construction storm water permits will also be obtained and a SWPPP prepared describing the protection needed to reflect conditions present at the time of decommissioning. BMPs may include construction entrances, temporary seeding, permanent seeding, mulching (in non-agricultural areas), erosion control matting, silt fence, filter berms, and filter socks.

3.4 MAJOR EQUIPMENT REQUIRED FOR DECOMMISSIONING

The activities involved in decommissioning the Project include removal of the above and below-ground ground components of the Project, and restoration as described in Sections 2 and 3.2.

Equipment required for the decommissioning activities is similar to what is needed to construct the solar facility and may include, but is not limited to: small cranes, low ground pressure (LGP) track mounted excavators, backhoes, LGP track bulldozers, LGP off-road end-dump trucks, front-end loaders, deep rippers, water trucks, disc plows and tractors to restore subgrade conditions, and ancillary equipment. Standard dump trucks will be used to transport material removed from the site to disposal facilities.

4.0 DECOMMISSIONING COST ESTIMATE SUMMARY

Expenses associated with decommissioning the Project will be dependent on labor costs at the time of decommissioning. For the purposes of this report approximate 2020 average market values were used to estimate labor expenses. Fluctuation and inflation of the labor costs were not factored into the estimates.

4.1 DECOMMISSIONING EXPENSES

Project decommissioning will incur costs associated with disposal of components not sold for salvage, including materials which will be disposed of at a licensed facility, as required. Decommissioning costs also include backfilling, grading and restoration of the Project site as described in Section 2. Table 3 summarizes the estimates for activities associated with the major components of the Project.

Table 3 Estimated Decommissioning Expenses – 300 MW_{AC} Solar Array

Activity	Unit	Quantity	Cost per Unit	Total
Overhead and management (includes estimated permitting required)	Lump Sum	1	\$1,380,000	\$1,380,000
Public road repair	Lump Sum	1	\$391,000	\$391,000
Solar modules; disassembly and removal	Each	635,584	\$3.75	\$2,383,440
Tracking System disassembly and removal (equivalent 3-string trackers)	Each	9,931	\$620.00	\$6,157,220
Steel pile/post removal	Each	141,590	\$9.50	\$1,345,105
Remove buried DC cable	Linear Feet	832,200	\$0.40	\$332,880
Removed above and below ground AC cable	Linear Feet	183,432	\$0.40	\$73,372
Transformers and inverter removal	Each	95	\$1,100	\$104,500
Concrete pad at inverter removal	Each	95	\$1,250	\$118,750
Access road excavation and removal	Lump Sum	1	\$351,407	\$351,407
Perimeter fence removal	Linear Feet	220,900	\$2.80	\$618,520
Topsoil replacement for roads and rehabilitation of site	Lump Sum	1	\$1,561,100	\$1,561,100
Removed above ground transmission line and poles	Linear Mile	0.05	\$250,000	\$12,500
Project substation (two transformers)	Each	1	\$450,000	\$450,000
Total estimated decommissioning cost				\$15,279,794

4.2 DECOMMISSIONING REVENUES

Project revenue will be realized through the sale of the solar facility components and construction materials. Modules and other components may be sold within a secondary market or as salvage. The market value of steel and other materials fluctuates daily and has varied widely over the past five years. Salvage value estimates were based on an approximate five-year-average price of steel and copper derived from sources including on-line recycling companies and United States Geological Survey (USGS) commodity summaries. The price used to value the steel used in this report is \$253 per metric ton; aluminum at \$0.40 per pound; silicon at \$0.40 per pound and glass at \$0.05 per pound. The main component of the tracking system and piles is assumed to be salvageable steel. Solar panels are estimated to contain approximately 75 percent glass, 8 percent aluminum and 5 percent silicon. A 50 percent recovery rate was assumed for aluminum and all panel components, due to the processing required to separate the panel components. Alternative and more efficient methods of recycling solar panels are anticipated before this Project is decommissioned, given the large number of solar facilities that are currently being developed. Table 4 summarizes the potential salvage value for the solar array components and construction materials.

Table 4 Estimated Decommissioning Revenues

Item	Unit of Measurement	Quantity per Unit	Salvage Price per Unit	Total Salvage Price per Item	Number of Items	Total
Panels - Silicon	Pounds per Panel	1.9	\$0.40/lb	\$0.760	635,584	\$483,044
Panels - Aluminum	Pounds per Panel	3.1	\$0.40/lb	\$1.240	635,584	\$788,124
Panels - Glass	Pounds per Panel	29.2	\$0.05/lb	\$1.460	635,584	\$927,953
Collection Cabling - Aluminum	Pounds per 1,000 feet	833	\$0.19/lb	\$158.27	1,015.63	\$160,744
Tracking System and Posts	Metric tons per MW _[AC]	40	\$253/MT	\$10,120	300	\$3,036,000
Substation	Each	1	\$50,000	\$50,000	1	\$50,000
						\$5,445,865

4.3 DECOMMISSIONING COST SUMMARY AND FINANCIAL ASSURANCE

The following is a summary of the net estimated cost to decommission the Project, using the information detailed in Sections 4.1 and 4.2. Estimates are based on 2020 prices, with no market fluctuations or inflation considered.

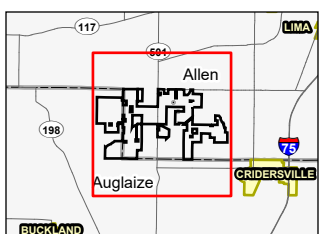
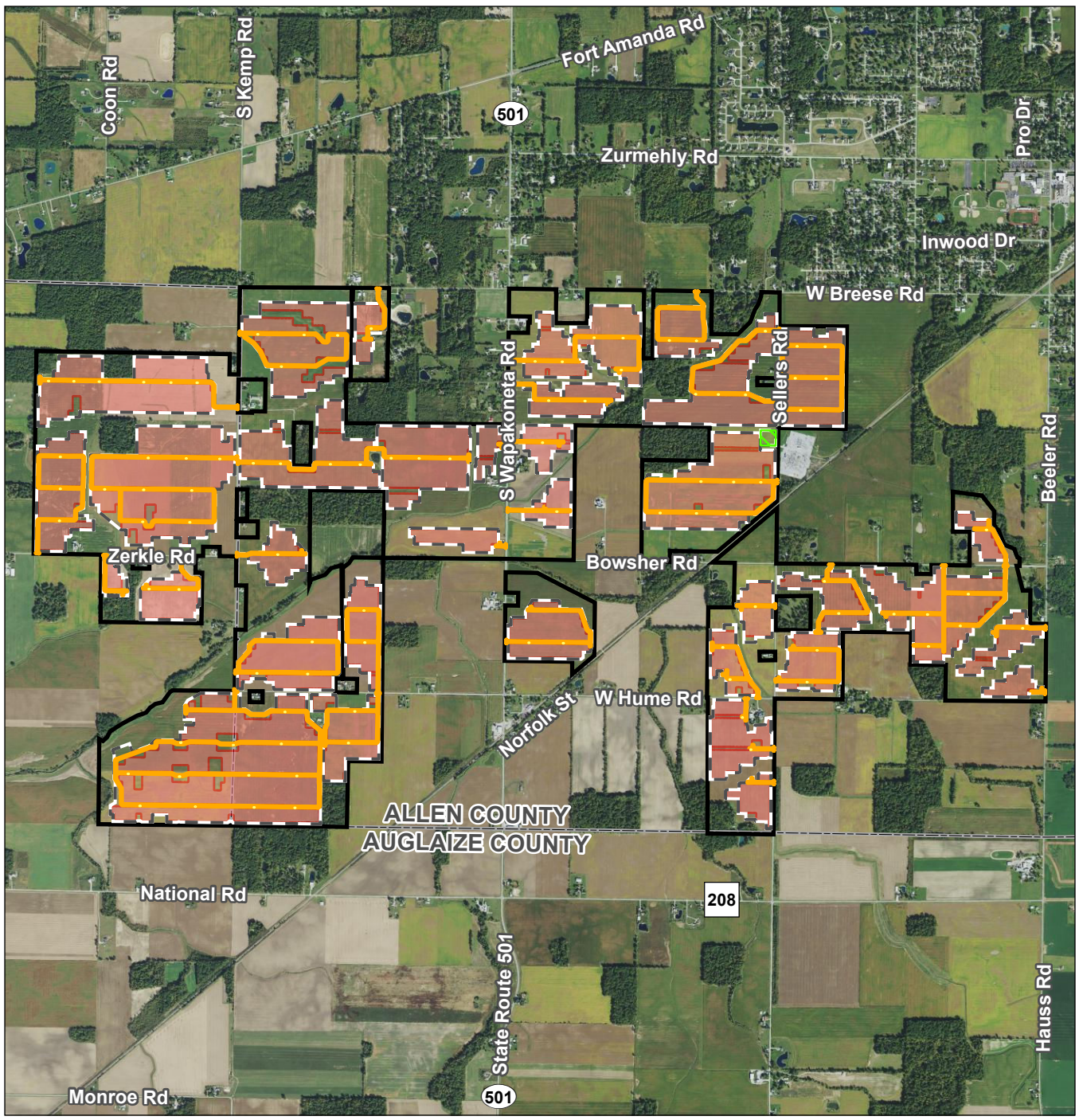
DECOMMISSIONING PLAN
BIRCH SOLAR PROJECT, ALLEN AND AUGLAIZE COUNTIES, OHIO

Table 5 Net Decommissioning Summary

Item	Cost/Revenue
Decommissioning Expenses	\$15,279,794
Potential Revenue – salvage value of panel components and recoverable materials	\$5,445,865
Net Decommissioning Cost	\$9,833,929

FIGURES

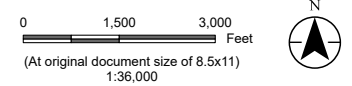
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Notes

- Coordinate System:
NAD 1983 StatePlane Ohio North FIPS 3401 Feet
- Data Sources: Stantec, Lightsource, USGS, NADS
- Orthophotography: 2019 NAIP

- Legend**
- Project Area
 - Solar Array
 - Inverter
 - Substation
 - Fence
 - Access Road



Project Location
 Allen and Auglaize Counties, Ohio

Prepared by JLH on 2021-01-21
 TR by CA on 2021-01-23
 IR by CMD on 2021-01-23

Client/Project
 Lightsource bp
 Birch Solar Project

2028113238

Figure No.
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Title
 Project Area Location Map

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Summary: Application - 7 of 31 (Exhibit B – Preliminary Decommissioning Plan) electronically filed by Christine M.T. Pirik on behalf of Birch Solar 1, LLC