

Exhibit I
Vegetation Management Plan

PREPARED FOR:

NOTTINGHAM SOLAR LLC

VEGETATION MANAGEMENT AND PROTECTION PLAN NOTTINGHAM SOLAR PROJECT

Ohio Power Siting Board
Case Number: 21-0270-EL-BGN



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OHIO POWER SITING BOARD
CASE NUMBER: 21-0270-EL-BGN
JULY 2021 - VERSION 1

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1 PROJECT INTRODUCTION

This Vegetation Management and Protection Plan (Plan) will be used during the construction and operational phases of the Nottingham Solar Project (Project), as required per Ohio Administrative Code 4906-4-08. The Plan identifies all areas proposed for vegetation clearing, describes the extent of the clearing, and discusses the proposed methods of clearing. Additionally, the Plan includes methods of disposal for all downed trees, brush, and other vegetation. Finally, the Plan describes measures to protect trees and other woody vegetation from damage and removal during the various phases of the Project.

The Project will be owned and operated by Nottingham Solar LLC, a wholly owned subsidiary of BQ Energy Development, LLC (BQ Energy). The Project is a proposed 100 megawatt (MW) solar project within Athens Township, Harrison County, Ohio. The Facility Site has an area of approximately 580 acres. The Project is located within the Flushing, Ohio U.S. Geological Survey (USGS) 7.5-minute topographic map quadrangle boundary.

A desktop analysis and field verification of the land use within the Project area indicates a high percentage of Project land (over 93%) is reclaimed mine land that is grasslands, with smaller land use categories for developed spaces, forests, and wetlands. During the field surveys, the forested areas were discovered to be of low to moderate quality, surrounded by younger second growth forest and saplings.

2 VEGETATION PROTECTION

The Project was sited to minimize impacts to the forested lands, shrublands, wetlands, and streams within the Project area, thereby minimizing impacts to trees and woody vegetation. Project infrastructure and the maintained buffers around them will be located primarily on reclaimed mine grasslands as shown in Table 2.1 below (summary of vegetative communities). To protect vegetation from unauthorized removal, Project drawings will clearly illustrate the limits of construction. Prior to any ground disturbing activities, the limits for clearing will be adequately flagged or staked in the field.

For the protection of vegetation in sensitive areas, such as wetlands and tree lots, the Project will utilize the Vegetation Protection Measures, as outlined in Appendix A.

Table 2.1 Wetland Delineation Report – Vegetative Communities within the Project Area*

VEGETATIVE COMMUNITY	DESCRIPTION	APPROXIMATE ACREAGE WITHIN THE PROJECT AREA	APPROXIMATE PERCENTAGE OF PROJECT AREA
Grassland	Herbaceous cover dominated by grasses with intermixed forbs and occasional woody shrubs.	906.15	75.8%
Scrub/Shrub	The successional stage between old field and second growth forest characterized by short, opportunistic woody species.	153.61	12.8%
Ponds and Wetlands	Ponds, and wetlands were observed within the ESA boundaries.	53.24	4.5%
Successional Hardwood Woodland	Mixed hardwood woodlands characterized by a canopy composed of woody deciduous trees.	57.30	4.8%
Developed, High Intensity	Developed roadways, access roads, and oil/gas well pads.	26.11	2.2%
	Total	1,196	100.0%

* Table pulled from Wetland Delineation Report (June 2021).

3 VEGETATION MANAGEMENT

3.1 CONSTRUCTION

Construction activities for large-scale solar infrastructure have the potential to impact vegetation through cutting and clearing, removal of stumps and roots, and increased ground disturbance and soil exposure from routine construction activities. To limit the impacts to vegetation, all clearing will be confined to the Project infrastructure footprint. Typical footprints include:

- 15 feet on either side of access road centerline (~42 acres)
- 15 feet on either side of buried collection line centerline (~48 acres)
- Approximately 7 acres for laydown yards

The operational Facility footprint will be 580 acres, however construction will require approximately of 661 acres of clearing or permanent disturbance of vegetation. The majority of disturbance activities will occur in reclaimed mine grasslands with the goal of retaining desirable vegetation growth to the maximum extent practicable. The Project will require the clearing approximately 36.8 acres of trees within Facility Site, and up to 26.2 acres of tree trimming around the perimeter to reduce shading impacts. No trees greater than three inches in diameter at breast height (DBH) will be cut outside of the approved cutting season of October 1 through March 31. Any trees and limbs removed, with approval, will be logged, and/or chipped, and either removed or left to remain on the land, per the landowner's request and as allowed under federal, state, and local regulations. Authorization to leave cleared vegetation on the land (either chipped or utilized by landowners) reduces the need to for further equipment mobilization, reducing further impacts to the site, but if removal is required, all equipment will utilize existing travel lanes to the extent practicable to reduce overland travel.

After construction, disturbed areas not used for Facility infrastructure will be returned to approximate pre-construction use and capability via reclamation and revegetation. This involves the treatment of soil as necessary to preserve approximate pre-construction capability and the stabilization of the work surface in a manner consistent with the initial land use. Disturbed soils within the Facility's fence line will be re-seeded with low-growth turf grasses to stabilize exposed soils and to control the potential for sedimentation and soil erosion.

Where suitable at the site, BQ Energy plans to plant some pollinator species that were provided in the December 11, 2020 coordination letter from U.S. Fish and Wildlife Service (USFWS). The USFWS is working closely with their partners at Ohio Pollinator Habitat Initiative (OPHI) to create and enhance pollinator habitat at solar power installations. USFWS provided BQ Energy with the Ohio Solar Site Pollinator Habitat Planning and Assessment Form. This form was developed by the OPHI Solar Pollinator Program Advisory Team. The OPHI Advisory Team recommend that the areas between the solar panels be planted with legumes and wildflowers (i.e. forbs) that are beneficial to pollinators and other wildlife instead of non-native grass. The recommended legumes and forbs are short (low growing) so as not to cast shadows on the solar panels and would only require one to two mowings per year for maintenance, which should allow the project proponent to minimize maintenance costs. For other areas of the installation where vegetation does not have to be low-growing, alternative pollinator mixes are available with a more diverse array of flowering plants. A copy of the OPHI Ohio Solar Site Pollinator Habitat Planning and Assessment Form is provided in Appendix B.

3.2 OPERATION

During Facility operation, it is anticipated that on-site vegetation within the fence line of the Project will be regularly maintained through mowing. All vegetation monitoring and maintenance will be conducted by an experienced and qualified contractor. BQ Energy will utilize herbicides, as necessary, within the substation yard, to maintain a gravel surface with no weeds (or any plant growth) for fire safety purposes.

APPENDIX A

VEGETATION PROTECTION MEASURES

VEGETATION PROTECTION MEASURES

A.1 General

A.1.1 PRE-CONSTRUCTION MEETING

Prior to the commencement of any construction activities, a Project kick-off meeting will be conducted to review the methods for vegetation protection outlined in this document. This includes:

- The establishment and importance of vegetation protection zones;
- Review of the applicable seasonal cutting dates for trees greater than three inches DBH;
- The establishment of construction pathways for movement near protection zones; and
- Oversight by qualified individuals to ensure proper adherence to established protection measures during construction activities, near protection zones.

A.1.2 DOCUMENT EXISTING CONDITIONS

Qualified personnel will document the existing trees and other plants that are to remain and require protection measures designed to prevent their removal. Such documentation will also be used to establish the pre-construction condition, in case it becomes necessary to replace any vegetation due to any damage during construction.

Documentation includes:

- Detailed site photographs or video recordings of trees within the protection zones; and
- Detailed notes and photographs documenting any pre-existing damage or injury to the vegetation within the protection zones.

A.1.3 QUALITY CONTROL PROGRAM

A written Quality Control Plan (QC Plan) will be developed that describes the purpose of the QC Plan, and provides for proper procedures, materials, handling, and equipment operation that are necessary to prevent damage to vegetation within the protection zones. The QC Plan will also provide detailed diagrams illustrating dimensions for the placement of fencing to ensure trees and root systems are protected, and defined equipment movement pathways. The QC Plan will include how these vegetation protection measures will be enforced.

A.1.4 PROHIBITED ACTIONS IN PROTECTION ZONES

The following activities are prohibited within the protection zones, as they can lead to damage or injury to vegetation, and degradation of habitat:

- Storage of construction materials, debris, and any excavated material;
- Construction of sheds or any temporary or permanent structure;
- Any ground disturbing activities, unless otherwise noted;
- Water impoundment;
- Attachment of signs or wraps around trees, unless otherwise noted;
- Movement of any equipment;

A.2 Materials

Plastic construction fencing will be installed to delineate the vegetation protection zones within the Project area. Typical orange, high visibility construction fencing will be used, constructed of high-density polyethylene fabric with 2-inch maximum opening, measuring approximately 48 inches in height. In situations where vegetation protection zones are located adjacent to the perimeter fence, only the permanent perimeter fence will be used, rather than adding the orange construction fencing.

A.3 Implementation

A.3.1 SEDIMENT AND EROSION CONTROL

Prior to installation of the construction fencing, qualified personnel will ensure all temporary sediment and erosion control measures such as silt fence, fiber rolls, or similar barriers, are in place and verify that any water flows are diverted away from the protection zones, unless they previously flowed to a protection zone prior to construction.

A.3.2 SITE PREPARATION

To assist with the delineation of protection zones to be cordoned off with construction fencing, all trees, shrubs, and other vegetation identified for preservation will be located and flagged with 1-inch vinyl tape, at a height of approximately five feet, or at the highest point, as to be visible to pedestrian traffic and equipment operators.

A.3.3 PROTECTION ZONES

The protection zone fencing will be installed in the pre-determined areas, prior to any materials or equipment are brought to the site, and prior to the commencement of any construction activities. All fencing will be kept in good condition for the duration of construction activities, repaired if damaged or fallen, and kept free of weeds that limit the visibility of the fence and trash. Protection zone fencing will not be removed during construction, for even temporary activities, including the delivery of materials or equipment. Vehicles will need to seek an alternate route.

A.3.4 REPAIR AND REPLACEMENT

Any trees, shrubs, or other vegetation that had been identified as requiring protection that may have been damaged during construction activities, or needed to be relocated, shall be repaired or replaced, as necessary. Any repairs or replacements will be submitted for approval to BQ Energy and to a certified arborist. Repair or replacement should include the following steps:

- Submit details of the damage and any proposed replacement or proposed pruning and repairs;
- Perform the repairs within 24 hours of arborist approval;
- Replace vegetation that cannot be repaired and restored to full-growth status as determined by BQ Energy.
 - For small trees, measured 4 inches or less diameter at breast height (DBH), provide a replacement of the damaged tree, the same size and species.
 - For larger trees, measured more than 4 inches DBH, provide two trees per damaged tree, of which the species and location will be determined by the landowner.

A.3.5 DISPOSAL

At the end of construction, all excess excavated material, displaced trees, vegetative debris, and trash will be removed from the landowner's property and legally disposed of, following municipal guidelines. The only exception to this may be for trees and other vegetation that may be chipped or placed into piles on the property.

APPENDIX B

OHIO SOLAR SITE POLLINATOR HABITAT PLANNING AND ASSESSMENT FORM

Ohio Solar Site Pollinator Habitat Planning and Assessment Form

1. Percent of total site planted with native or beneficial introduced flowering plants.

- 25-50% 10 points
- 51-75% 20 points
- 76-100% 30 points

2. Flowering plant diversity in site perimeter & buffer area (species with more than 1% cover).

- 9-12 species 5 points
- 13-16 species 10 points
- 17-20 species 15 points
- 20+ species 20 points
- Site specific Milkweed included @2,000 pls/ac minimum 10 points

* *If no boxes were selected in questions 1 or 2 then your site does not meet criteria to be considered as an OPHI Solar Pollinator Habitat. However, OPHI can work with you on ways to increase the pollinator score of your site.*

3. Flowering plant seed mixes and plantings to be used.

Native species local to the site are preferred; otherwise species native to Ohio are encouraged.

- Includes only native plant species 15 points
- Includes native and beneficial introduced plant species 10 points
- Includes only beneficial introduced plant species 5 points

4. Flowering plant diversity in rows & under solar array.

- 4-6 5 points
- 7+ 10 points
- Site specific Milkweed included @2,000 pls/ac minimum 10 points

5. Seasons with at least 3 blooming species. Check all that apply.

- Spring (April – May) 5 points
- Summer (June – August) 5 points
- Fall (September – October) 5 points

6. Available habitat components within ¼ mile of site.

Check all that apply.

- Native grasses 2 points
- Trees and shrubs 2 points
- Forest edge habitat 2 points
- Cavity nesting sites 2 points
- Clean perennial water sources 2 points

7. Planned vegetative buffers adjacent to the solar site. Check all that apply.

- Site has planned buffer adjacent to solar site 5 points
- Buffer is at least 30 feet wide as measured from array fencing or edge of flower plantings 5 points
- Buffer is at least 50 feet wide as measured from array fencing or edge of flower plantings 10 points
- Buffer includes flowering Shrubs/trees and other shrubs/trees that provide food for wildlife 5 points

8. Habitat site preparation prior to implementation.

- Measures taken to control weeds and invasive species prior to seeding/planting. 10 points
- Appropriate soil preparation done to reduce erosion And enhance germination/growth 5 points
- None -10 points

9. Planned management practices for areas designated as part of the pollinator habitat site. Check all that apply.

- Detailed establishment and management plan developed for site 10 points
- Mowing Follows OPHI mowing schedule for monarchs each year 5 points
- Mowing is staggered over a 2 week period 5 points
- Signage indicating site is wildlife & pollinator-friendly 5 points
- Creation of habitat features (e.g. boxes, pass-through tunnels, bee hotels) 5 points
- Long-term monitoring plan developed that includes re-certification as Solar Site Pollinator Habitat 10 points

10. Insecticide risk. Check if applicable.

Communication with adjacent landowners about the project and possible impacts of their insecticide use is critical

- Site is adjacent to land (within 120 ft.) where insecticides are used -20 points
- Planned on-site insecticide use (including pre-treated seeds/plants) -40 points

Total Points: 0

Provides High Quality Pollinator Habitat > 85
Meets OPHI Solar Pollinator Habitat Standards 70-84

Site Owner/Operator:

Project Location:

Project Size (acres):

Planned Source of Seeds:

Planned Seeding Date:

Habitat & Vegetation Consultant:

Refer to www.ophi.info for more information regarding solar pollinator habitat development.

Version 1 - March 2018
 Developed by the OPHI Solar Pollinator Program Advisory Team

