

## **Appendix H**

### **Draft Agricultural Impact Mitigation Plan**

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# Agricultural Impact Mitigation Plan

Solway Solar Project

Prepared for Otter Tail Power Company

*Beltrami County, Minnesota*

September 6, 2024

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## Definitions

Unless otherwise provided to the contrary in this section, capitalized terms used in this Agricultural Impact Mitigation Plan (Plan or AIMP) shall have the meanings provided below. In the event of a conflict between these definitions and the AIMP text, the definitions provided here will prevail but only to the extent such conflicting terms are used in this list. The definitions provided for the defined words used herein shall apply to all forms of the words.

|                                            |                                                                                                                                                                                                                                                                                          |
|--------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| AC                                         | Alternating current                                                                                                                                                                                                                                                                      |
| Agricultural Land                          | Land that is actively managed for cropland, hay land, or pasture, and land in government set-aside programs.                                                                                                                                                                             |
| AIMP or Plan                               | Agricultural Impact Mitigation Plan                                                                                                                                                                                                                                                      |
| Applicant or OTP                           | Otter Tail Power Company                                                                                                                                                                                                                                                                 |
| AWC                                        | Available water capacity                                                                                                                                                                                                                                                                 |
| BMPs                                       | Best management practices                                                                                                                                                                                                                                                                |
| Certifying Agent                           | As defined by the National Organic Program Standards, Federal Regulations 7 CFR Part 205.2.                                                                                                                                                                                              |
| Contractor                                 | Construction contractor hired to building the Project facilities.                                                                                                                                                                                                                        |
| Cropland                                   | Land actively managed for growing row crops, small grains, or hay.                                                                                                                                                                                                                       |
| Decertified or Decertification             | Loss of Organic Certification.                                                                                                                                                                                                                                                           |
| Final Clean-up                             | Activity that occurs after the Project has been constructed. Final Clean-up activities may include: removal of construction debris, de-compaction of soil as required, removal of temporary erosion control structures, final grading, and restoration of fences and required reseeding. |
| MDA                                        | Minnesota Department of Agriculture                                                                                                                                                                                                                                                      |
| Monitor                                    | Agricultural Monitor retained by the Applicant responsible for overall project compliance with permit conditions and commitments made in this document.                                                                                                                                  |
| MW                                         | Megawatt                                                                                                                                                                                                                                                                                 |
| Non-Agricultural Land                      | Any land that is not "Agricultural Land" as defined above.                                                                                                                                                                                                                               |
| NRCS                                       | Natural Resources Conservation Service                                                                                                                                                                                                                                                   |
| Organic Agricultural Land                  | Farms or portions thereof described in 7 CFR Parts 205.100, 205.202, and 205.101.                                                                                                                                                                                                        |
| Organic Buffer Zone                        | As defined by the National Organic Program Standards, Federal Regulations 7 CFR Part 205.2.                                                                                                                                                                                              |
| Organic Certification or Organic Certified | As defined by the National Organic Program Standards, Federal Regulations 7 CFR Part 205.100 and 7 CFR Part 205.101.                                                                                                                                                                     |
| Organic System Plan                        | As defined by the National Organic Program Standards, Federal Regulations 7 CFR Part 205.2.                                                                                                                                                                                              |
| Prohibited Substance                       | As defined by the National Organic Program Standards, Federal Regulations 7 CFR Part 205.600 through 7 CFR 205.605 using the criteria provided in 7 USC 6517 and 7 USC 6518.                                                                                                             |
| Project                                    | The Solway Solar Project, an up to 66 megawatt alternating current solar energy generating system in Lammers Township, Beltrami County, Minnesota.                                                                                                                                       |
| Project Area                               | The Project Area is the approximately 487-acre property owned and controlled by the Applicant, within which the Project would be constructed and operated. (See Project Footprint definition for comparison)                                                                             |

|                   |                                                                                                                                                               |
|-------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Project Footprint | The 267-acre area within the Project Area where the components of the Project would be constructed and operated. (See Project Area definition for comparison) |
| PV                | Photovoltaic                                                                                                                                                  |
| SPA               | Site Permit Application                                                                                                                                       |
| SSURGO            | Soil Survey Geographic Database                                                                                                                               |
| Subsoil           | Soil that is not Topsoil and located immediately below Topsoil.                                                                                               |
| Tile              | Artificial subsurface drainage system.                                                                                                                        |
| Topsoil           | The uppermost horizon (layer) of the soil, typically with the darkest color and highest content of organic matter.                                            |
| VMP               | Vegetation Management Plan                                                                                                                                    |

# 1 Background

## 1.1 Project Overview

This Agricultural Impact Mitigation Plan and the associated Vegetation Management Plan (VMP) identify measures that Otter Tail Power (Applicant or OTP) and its contractors will take to avoid, minimize, mitigate, and/or repair potential negative agricultural impacts that may result from the construction, operation, and eventual decommissioning of the proposed Solway Solar Project (Project). The Project is an up to 66-megawatt alternating current (MWac) solar photovoltaic (PV) energy generation facility to be located in Lammers Township in Beltrami County, MN. The Project is planned to be sited on approximately 487 acres of land (Project Area) located in Sections 16, Township 147N, Range 35W in Beltrami County, MN (Exhibit 1). The entire Project Area is owned by the Applicant. A portion of the Project Area contains the existing Solway Combustion Turbine facility. The existing interconnection switchyard/substation will be expanded to interconnect the Project. This Plan was also prepared in support of the Site Permit Application (SPA) that will be submitted to the Minnesota Public Utilities Commission) for approval of the Project.

## 1.2 Purpose and Applicability of the AIMP

As a result of the Project, agricultural use/production of the areas occupied by the Project will temporarily cease during the anticipated 35-year life of the Project. It is important to note that there is currently little or no traditional row-crop agricultural use of the Project Area, and the Project's construction and operation would not result in a significant change in the current minor agricultural use of the Project Area. Nevertheless, this Plan outlines measures to ensure the Project Area may be returned to future agricultural use following the closure and decommissioning of the Project, including descriptions of best management practices (BMPs) that will be used during construction to minimize long-term impacts to soil. The Project Area is not part of a certified organic farm.

It is also important to note that while the Applicant and the construction contractor (Contractor) hired to build the proposed facility fully intend to adhere to the specifics of this Plan, certain practices may vary as the Contractor identifies methods that work more efficiently in this specific location and provide the highest degree of safety while constructing the facility. The Applicant will consult with the Minnesota Department of Agriculture (MDA) to discuss any significant deviations from practices and/or methods as outlined in this Plan prior to any such alternative practices and/or methods being implemented.

The associated VMP includes establishing beneficial perennial vegetation within and directly adjacent to the Project perimeter fence which will be installed around the planned Project PV solar arrays. Native and non-invasive plant species will be selected to thrive in shade conditions and not interfere with the operation of the solar panels yet provide benefits to the soil, wildlife and insects. The seed mixes are formulated to be native and regionally established plants to the extent practical and are developed with recommendations from plant specialists in coordination with the MDA, Minnesota

Department of Natural Resources, and Minnesota Board of Water & Soil Resources, as applicable, as described in the VMP concurrently being implemented with this Plan for the Project.

## 2 Site Overview and Existing Conditions

The Project is located in Lammers Township located just north of the City of Solway. **Table 2-1** provides the Township, Range, and Sections of areas included within the Project Area.

**Table 2-1. Townships, Ranges, and Sections areas included within the Project Area**

| Township Name    | Township | Range | Sections                    |
|------------------|----------|-------|-----------------------------|
| Lammers Township | 147 N    | 35 W  | 04, 07–11, 14–23, and 27–29 |

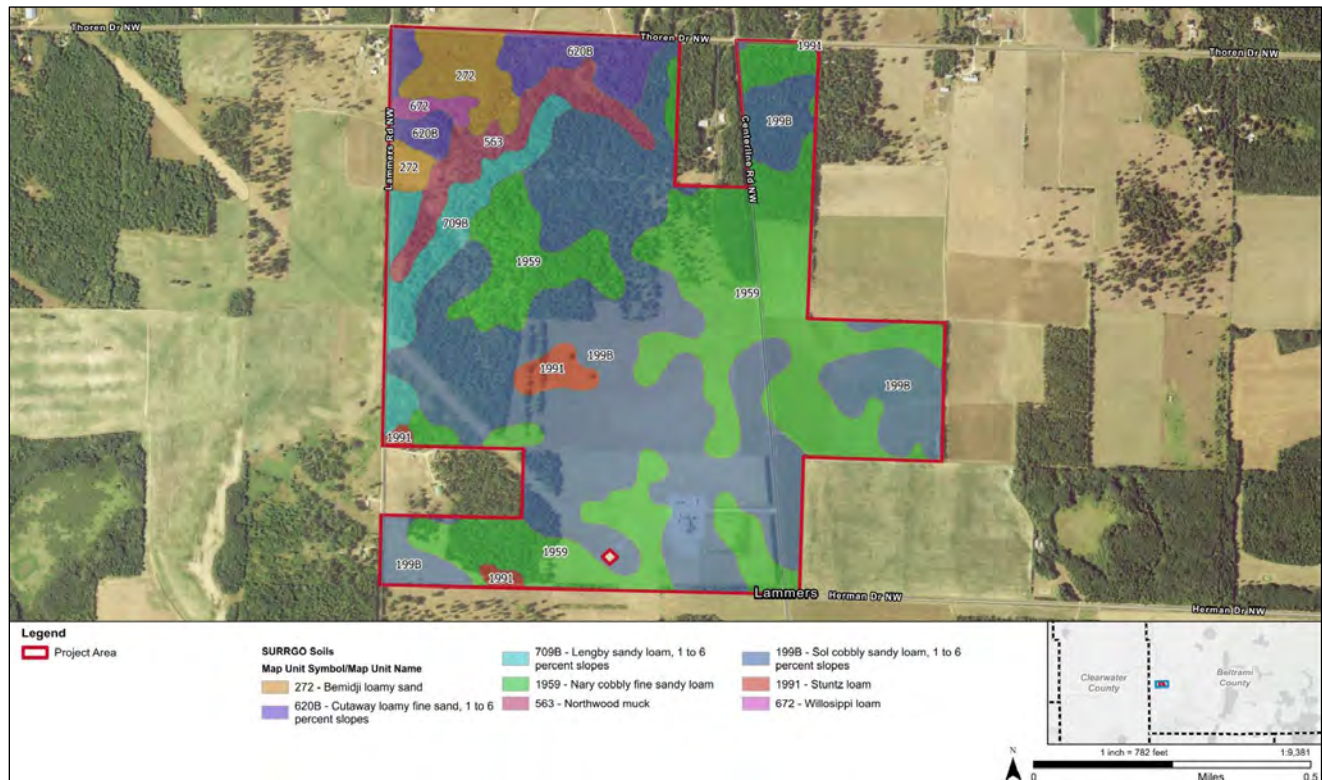
## 3 Limitations and Suitability of Site Soils

In general, soil types can vary considerably in its physical and chemical characteristics that strongly influence the suitability and limitations that soil has for construction, reclamation, and restoration/. Soil types on the Project Area are shown on **Figure 3-1** and listed in **Table 3-1**. (Natural Resources Conservation Service/ Soil Survey Geographic Database [NRCS/SSURGO] 2024a)<sup>1</sup>

**Table 3-1. Soils present within Project Area**

| Soil Name                         | SSURGO Map Unit Symbol | Acreage on Project Area | Percent Cover on Project Area |
|-----------------------------------|------------------------|-------------------------|-------------------------------|
| Sol cobbly sandy loam, 1-6% slope | 199B                   | 221.8                   | 45.5%                         |
| Nary cobbly fine sandy loam       | 1959                   | 165.9                   | 34%                           |
| Lengby sandy loam                 | 709B                   | 24.5                    | 5%                            |
| Cutaway fine sandy loam           | 620B                   | 23.3                    | 4.8%                          |
| Bemidji sandy loam                | 272                    | 20.4                    | 4.2%                          |
| Northwood muck                    | 563                    | 19.9                    | 4.1%                          |
| Stuntz loam                       | 1991                   | 8.7                     | 1.8%                          |
| Willosipi loam                    | 672                    | 3.5                     | 0.7%                          |
| Total                             | na                     |                         |                               |

Figure 3-1. SSURGO Soils



Source: NAIP 2023

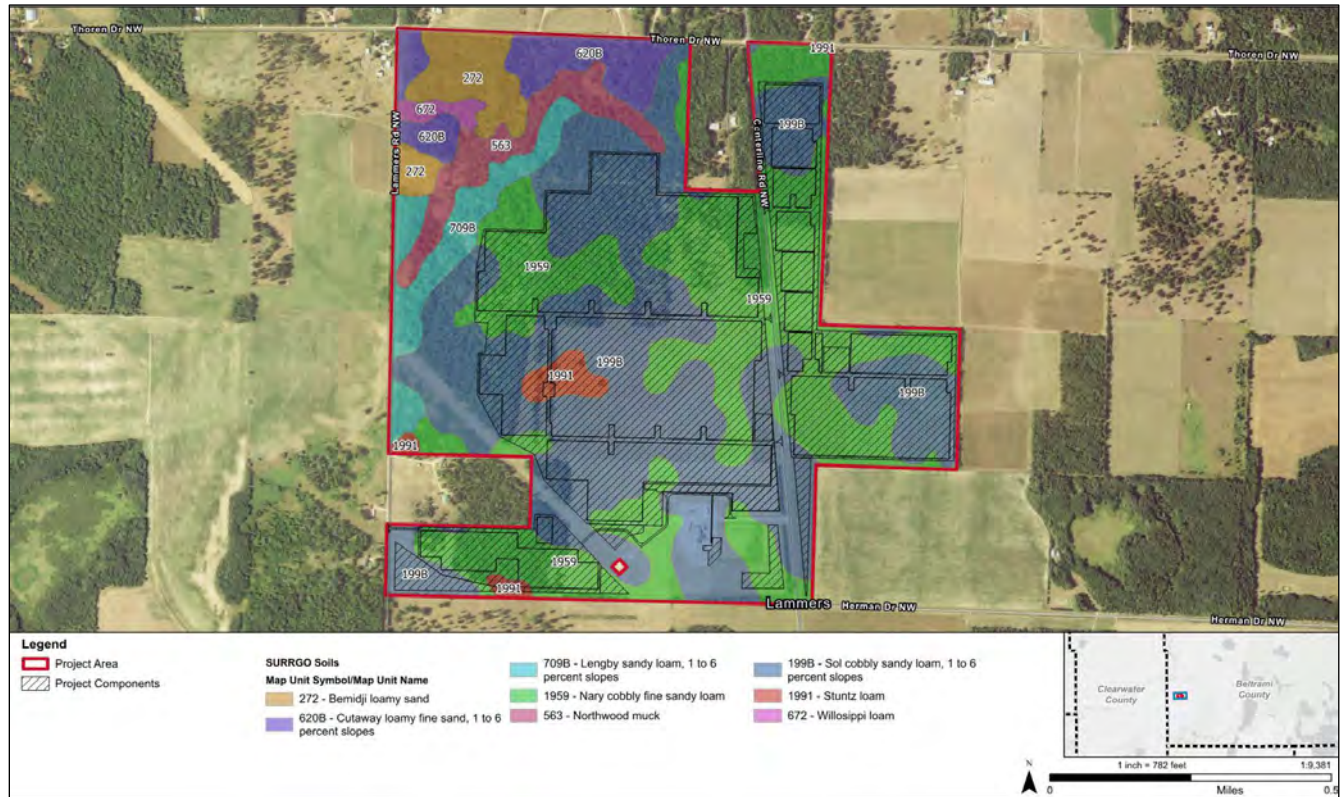
### 3.1 Land Use Considerations

Based on historical aerial imagery, nearly all of the Project Area and surrounding land has been divided roughly evenly between forest/timber production and pastureland since at least 1985, and likely longer. Similarly, most of the land in the watershed area that the Project Area is located is forested, as is the majority of southern Beltrami County.

Additionally, there is no history of the Project Area being utilized for Organic Agricultural Land or being part of an Organic Buffer Zone. No part of the Project Area has been Organic Certified or been part of an Organic System Plan. As a result, the AIMP for the Project does not address potential impacts to organic agriculture.

The majority of the Project Area itself is made up of soils that are not rated as “prime farmland” or “prime farmland if drained.” (**Table 3-2**) The most common soil type in the Project Area, Sol cobbly sandy loam, accounts for 221.8 acres (45.5%) of the Project Area and is rated “not prime farmland.” The second most prevalent soil type, Nary cobbly fine sandy loam, accounts for 165.9 acres (34%) of the Project Area and is rated “farmland of statewide importance.” This designation, according to NRCS SSURGO, means, “does not meet the standard of prime farmland.” Overall, only one soil type on the Project Area, Lengby sandy loam, is rated “prime farmland.” Two other soil types on the Project Area are rated “prime farmland if drained.” Together, these three soil types comprise 36.7 acres, or 7.5% of the Project Area.

Figure 3-2. SSURGO Soils &amp; Project Components



Source: NAIP 2023

Table 3-2. Selected Agricultural Productivity Ratings for Soil Units Present in the Project Area

| Soil Name                         | SSURGO Map Unit Symbol | Acreage on site | Percent cover on site | Prime Farmland Rating <sup>a</sup> | Land Capability Classification <sup>b</sup> | Hydric Rating <sup>c</sup> | MN Crop Productivity Index <sup>d</sup> |
|-----------------------------------|------------------------|-----------------|-----------------------|------------------------------------|---------------------------------------------|----------------------------|-----------------------------------------|
| Sol cobbly sandy loam, 1-6% slope | 199B                   | 221.8           | 45.5%                 | Not Prime Farmland                 | 4s                                          | 2                          | 50                                      |
| Nary cobbly fine sandy loam       | 1959                   | 165.9           | 34%                   | Farmland of Statewide Importance   | 3s                                          | 2                          | 58                                      |
| Lengby sandy loam                 | 709B                   | 24.5            | 5%                    | Prime farmland                     | 2e                                          | 2                          | 72                                      |
| Cutaway fine sandy loam           | 620B                   | 23.3            | 4.8%                  | Farmland of Statewide Importance   | 3s                                          | 2                          | 56                                      |
| Bemidji sandy loam                | 272                    | 20.4            | 4.2%                  | Farmland of Statewide Importance   | 3s                                          | 2,3                        | 64                                      |
| Northwood muck                    | 563                    | 19.9            | 4.1%                  | Not Prime Farmland                 | 6w                                          | 2,3                        | 15                                      |

**Table 3-2. Selected Agricultural Productivity Ratings for Soil Units Present in the Project Area**

| Soil Name      | SSURGO Map Unit Symbol | Acreage on site | Percent cover on site | Prime Farmland Rating <sup>a</sup> | Land Capability Classification <sup>b</sup> | Hydric Rating <sup>c</sup> | MN Crop Productivity Index <sup>d</sup> |
|----------------|------------------------|-----------------|-----------------------|------------------------------------|---------------------------------------------|----------------------------|-----------------------------------------|
| Stuntz loam    | 1991                   | 8.7             | 1.8%                  | Prime if drained                   | 2w                                          | 2,3                        | 92                                      |
| Willosipi loam | 672                    | 3.5             | 0.7%                  | Prime if drained                   | 2w                                          | 2                          | 58                                      |

**<sup>a</sup> Prime Farmland Rating:**

Prime Farmland – “land that has the best combination of physical and chemical characteristics for producing food, feed, forage, fiber, and oilseed crops and is available for these uses.”

Prime if drained – Land that would meet the production standards of prime farmland with proper drainage

Farmland of Statewide Importance – Land that has agricultural value but is “land that does not meet the criteria for prime or unique farmland.” (NRCS SSURGO)

**<sup>b</sup> Land Capability Classification (NRCS/SSURGO 2024b)<sup>2</sup>:**

There are eight classes within the Land capability Classifications. Soils on the Solway site fall under four of those classifications, which are defined as:

- Class 2 soils have moderate limitations that restrict the choice of plants or that require moderate conservation practices. (Lengby sandy loam, Stuntz loam, Willosipi loam)
- Class 3 soils have severe limitations that restrict the choice of plants or that require special conservation practices, or both. (Nary cobbly fine sandy loam, Cutaway fine sandy loam, Bemidji sandy loam)
- Class 4 soils have very severe limitations that restrict the choice of plants or that require very careful management, or both. (Sol cobbly sandy loam)

Class 6 soils have severe limitations that make them generally unsuitable for cultivation and that restrict their use mainly to pasture, rangeland, forestland, or wildlife habitat. (Northwood muck)

**<sup>c</sup> Hydric Rating (NRCS/SSURGO 2024c)<sup>3</sup>:**

There are five levels of Hydric Ratings. Soils on the Solway site fall under only two of those ratings, which are defined as:

- Hydric Code 2 - Soils in Aquic suborders, great groups, or subgroups, Albolls suborder, Historthels great group, Histoturbels great group, Pachic subgroups, or Cumulic subgroups that:
  - o Based on the range of characteristics for the soil series, will at least in part meet one or more Field Indicators of Hydric Soils in the United States, or
  - o Show evidence that the soil meets the definition of a hydric soil.
- Hydric Code 3 – Soils that are frequently ponded for long or very long duration during the growing season:
  - o Based on the range of characteristics for the soil series, will at least in part meet one or more Field Indicators of Hydric Soils in the United States, or
  - o Show evidence that the soil meets the definition of a hydric soil.
- Hydric Code 3 – Soils that are frequently ponded for long or very long duration during the growing season:
  - o Based on the range of characteristics for the soil series, will at least in part meet one or more Field Indicators of Hydric Soils in the United States, or
  - o Show evidence that the soil meets the definition of a hydric soil.

**<sup>d</sup> MN Crop Productivity Index (NRCS/SSURGO 2024d)<sup>4</sup>:**

The Minnesota Crop Productivity Index ratings provide a relative ranking of soils based on their potential for intensive row crop production. An index can be used to rate the potential yield of one soil against that of another over a period of time. Ratings range from 0 to 100. The higher numbers indicate higher production potential.

The impacts from the Project will be limited to the Project Footprint, which totals 266.7 acres. Of the three soil types rated “prime” or “prime if drained” present within the Project Area, only one type, Stuntz loam, would be impacted by the Project Footprint.. These

impacts would total 6.7 acres. Project impacts to the soil units by prime farmland rating within the Project Footprint are summarized in **Table 4-3**.

**Table 4-3. Project Component Impacts to Soil Units by Prime Farmland Rating**

| Prime Farmland Rating            | Soil Name(s)                                                   | Total Project Impact Acreage | Project Component |           |                      |                   |
|----------------------------------|----------------------------------------------------------------|------------------------------|-------------------|-----------|----------------------|-------------------|
|                                  |                                                                |                              | Solar Array       | Fenceline | Substation Expansion | Substation Access |
| Not Prime Farmland               | Sol cobbly sandy loam, 1-6% slope (199B), Northwood muck (533) | 140.5                        | 113.7             | 25.6      | 0.6                  | 0.63              |
| Farmland of Statewide Importance | Nary cobbly fine sandy loam (1959)                             | 119.5                        | 93.5              | 25.5      | 0                    | 0.5               |
| Prime if drained                 | Stuntz loam (1991)                                             | 6.7                          | 5.4               | 1.3       | 0                    | 0                 |
| <b>TOTAL (acres)</b>             |                                                                | 266.7                        | 212.6             | 52.4      | 0.6                  | 1.13              |

## 3.2 Additional Site Soil Characteristics

Soils within the Project Area are dominated by two types, Sol cobbly sandy loam and Nary cobbly fine sandy loam. Both soil types have high sand content, moderate silt content and low clay content. Both are relatively stony soils, with 14-20% coarse fragments (stones and cobbles between 2.5" and 10") in the upper soil horizons (0-14"). Other soil types present in the Project Area are less stony, with 0-9% coarse fragments in the upper horizons. All soil types present have favorable physical, chemical or thermal properties for movement of water and air through the soil. Depth to a restrictive layer for water and/or air is rated as "greater than 200 cm" for all soil types present. This in effect means there is no restrictive layer present. Depth to bedrock is also rated as "greater than 200 cm" for all soil types present.

Available water capacity (AWC) refers to the quantity of water that the soil is capable of storing for use by plants. AWC is influenced by properties including organic matter content, soil texture, bulk density and soil structure. The AWC is given in centimeters per centimeter. Soils within the Project Area have AWCs ranging from 0.10 to 0.18. This means that, in the upper 25 inches of the soil column, soils within the Project Area have an available water supply of 2.5 (0.10 x 25) to 4.5 (0.18 x 25) centimeters of water available to plants at any given time.

# 4 Construction

A detailed description of the construction methods proposed for the Project is provided in the SPA. The following summarizes the SPA text and adds context relevant to

agricultural practices. This AIMP will be implemented in conjunction with the VMP and other Site Permit requirements.

## 4.1 Site Clearing and Vegetation Removal

Construction will begin with the initial site preparation work, including utility locates within the Project Area. Depending on timing of the start of construction, the Project may require the clearing of existing vegetation within portions of the Project Footprint. Alternatively, and depending on construction timing, the Applicant may plant a cover crop that is compatible with the Project's VMP. This cover crop will stabilize soils until construction begins.

### 4.1.1 Earthwork

Areas of the site to be graded will have topsoil and organic matter stripped and segregated from the subsoil (depending on the depth of grading cut). Some grading will be required to provide a more level workspace and maintain soil stability in areas with a slope greater than five percent. However, slopes within the Project Area are predominantly less than five percent. Topsoil will have temporary and permanent erosion control and soil stabilization measures established in accordance with the Project's Construction Stormwater Pollution Prevention Plan that will be prepared and implemented during construction of the Project. As a component of earthwork, permanent access roads and permanent turnouts will be developed. This work will start with the stripping and segregating of topsoil materials from the anticipated 20-foot-wide road width. The subgrade materials will be compacted 20-feet wide to the specified compaction requirements as laid out by the civil and geotechnical engineer. After compaction is reached and verified, the road will be installed as designed, typically done with or without geo-fabric depending on the soil type, and then, with a surface of four to 12 inches of gravel. The gravel will be placed level with the existing grade to facilitate drainage and minimize ponding.

After gravel is installed and compacted to engineers' requirements, the Project drainage ditches will be shaped as identified on the final grading plan. Finally, the previously stripped and windrowed topsoil material will be re-spread throughout the Project Area.

Topsoil removed from permanent access roads will be moved to suitable locations near the site of removal and spread across existing topsoil for storage. Storage locations will be identified (Global Positioning System boundary and depth) and recorded on site maps to facilitate final reclamation after decommissioning.

### 4.1.2 Solar Array Construction

Once grading activities are complete, the racking system supports will be constructed using steel piles driven into the ground. The solar facilities will be constructed in blocks, and multiple blocks may be constructed simultaneously.

During array and racking assembly, multiple crews and various types of vehicles will be working within the Project Area. To the extent practicable, vehicular traffic will be limited to permanent and temporary access roads to minimize soil disturbance, mixing and compaction; however vehicular traffic will occur off of roads throughout the Project Area

during construction. Panels will be staged in advance throughout the Project Area and brought to specific work areas for installation by wagon-type trailers pulled by small tractors or by all-terrain tracked equipment. The solar panels will be installed by multiple crews using hand tools. Installation crews will proceed in serpentine fashion along staked temporary access roads in a pre-established route to minimize off-road traffic.

#### 4.1.3 Electrical Collection

Potential impacts on soils, related to electrical collection, would result from below-ground AC collection systems. These would be installed in trenches at a depth of at least 36 inches below grade. During trench excavation the topsoil and subsoil will be removed and stockpiled separately in accordance with the AIMP. Once the cables are laid in the trench, the area will be backfilled with subsoil followed by topsoil. Electrical collection technology is rapidly evolving and will be site-specific depending on geotechnical analysis, constructability, and availability of materials. Final engineering and procurement will help determine the construction method for the electrical collection system.

#### 4.1.4 Stormwater Drainage Basins

Similar to Project Substation construction described below, drainage basins would have topsoil removed and temporarily stored in a pre-established suitable location. Subsoil would then be excavated to a depth of four to seven feet and the sides of the drainage basin sloped to design requirements (including inlet/outlet areas). Excavated subsoil would be distributed throughout the site as fill material in areas where grading is required. Topsoil would be replaced, and the basins vegetated with a wet seed mix.

#### 4.1.5 Project Fencing Installation

Project fencing is described in detail in the SPA. Potential impacts to soils in the Project Footprint could result from holes created by fence poles. These holes will be filled in with either stockpiled soil or with supplemented soil to pre-construction conditions.

### 4.2 Project Substation Expansion

Details of the construction of the substation expansion are provided in the SPA. Potential impacts to soils, related to substation expansion will include site preparation and installation of substructures and electrical equipment. Installation of concrete foundations and embedments for equipment may require the use of trenching machines, concrete trucks and pumpers, vibrators, forklifts, boom trucks, and large cranes. In addition, crushed rock will cover the area of the substation.

One of two methods will be used to install substation foundations. Option 1 would use a small rubber tire backhoe to dig out major foundations prior to pouring the concrete slabs. Option 2 would use an auger/drill type machine for minor foundations. In both scenarios, the limits of disturbance will be within the footprint of the substation for both the foundation equipment and the concrete delivery trucks.

## 5 BMPs During Construction and Operation

### 5.1 Agricultural Monitor

The Applicant will hire an Agricultural Monitor (Monitor) if required to act as an independent third party to monitor compliance with this AIMP. The Applicant will work with the MDA to select the Monitor. The Applicants will coordinate with the MDA in identifying potential contractors to conduct agricultural monitoring. The Applicants will direct the selected Monitor to communicate independently with the MDA and set up a reporting relationship as the MDA instructs.

### 5.2 Roles and Responsibilities of the Monitor

The Monitor, if required, will be retained and funded by the Applicant but will report directly to the MDA. The primary function of the Monitor will be to audit the Applicant's compliance with this AIMP. While the Monitor will not have the authority to direct construction activities and will not have authority to stop construction, the Monitor will be required to immediately report to OTP observation of a significant non-compliant activity. The MDA may also instruct the Monitor to report non-compliant activities to the MDA. If after reviewing the non-compliant activity, and if judgement is made that continuing the activity will cause damage to the environment or Cultivated Agricultural Land, the Applicant would issue a stop work order. The Monitor will have full access to Agricultural Land crossed by the Project and will have the option of attending meetings where construction on Agricultural Land is discussed.

Specific duties of the Monitor will include, but are not limited to the following:

1. Participate in preconstruction training activities sponsored by the Applicant and provide construction personnel with training on provisions of this AIMP before construction begins.
2. Monitor construction and restoration activities on Agricultural Land for compliance with provisions of this AIMP. The Monitor will be allowed full access to the Agricultural Land where construction occurs.
3. Work with construction crews to assure all practices are in compliance with the provisions of this AIMP.
4. Document instances of noncompliance and work with construction personnel to identify and implement appropriate corrective actions as needed.
5. Report instances of noncompliance with the AIMP to OTP and the MDA.
6. Coordinate with the MDA to develop a reporting structure and report directly to the MDA on events or schedule as agreed upon with the MDA.
7. Be responsible for determining whether weather conditions have caused the soil to become so wet that mitigation measures designed to alleviate soil compaction would be ineffective and would actually reduce the future production capacity of the land. The Monitor would advise OTP of these conditions. OTP will be solely responsible in making the decision on whether it will proceed with construction under these conditions.

The selected Monitor will:

- Have a bachelor's degree in agronomy, soil science or equivalent work experience.
- Have demonstrated practical experience with solar electric conversion facility construction, restoration, and compliance monitoring on Agricultural Land.
- Have demonstrated practical experience with soils and hydrology in agricultural settings.

OTP will make the final selection of the Monitor in coordination with the MDA.

## 5.3 Additional BMPs During Construction and Operation

### 5.3.1 Excavation/Grading

Topsoil and Subsoil layers that are removed during construction for facility structures or temporary road impacts will be stored separately and replaced in the proper sequence after the transmission line is installed. The Applicant will not use this soil for other purposes, including creating access ramps at road crossings.

### 5.3.2 Soil Compaction/Rutting

Compaction will be alleviated as needed on Cropland traversed by construction equipment. Cropland that has been compacted will be plowed using appropriate deep-tillage and draft equipment. Alleviation of compaction of the topsoil will be performed during suitable weather conditions and must not be performed when weather conditions have caused the soil to become so wet that activity to alleviate compaction would damage the future production capacity of the land as determined by the Monitor.

The Applicant will restore rutted land to as near as practical to its pre-construction condition.

### 5.3.3 Excess Soil and Rocks

Excess soil and rock will be removed from the site.

### 5.3.4 Construction Debris

Construction-related debris and material which are not an integral part of the Project, will be removed from the property. Such material to be removed would include excess construction materials or litter generated by the construction crews.

### 5.3.5 Damaged Soil Conservation Practices

Soil conservation practices such as terraces and grassed waterways which are damaged by the Project's construction, will be restored to their pre-construction condition.

### 5.3.6 Access Routes/Temporary Roads

The location of temporary roads to be used for construction purposes will proceed as follows:

1. The temporary roads will be designed to not impede proper drainage and will be built to mitigate soil erosion on or near the temporary roads.
2. If grading is required to create a temporary road, temporary roads may be left intact unless otherwise restricted by federal, state or local regulations.

If a temporary road is to be removed, the Agricultural Land upon which the temporary road is constructed will be returned to its previous use and restored to equivalent condition as existed prior to their construction.

#### 5.3.7 Construction in Wet Conditions

If it is necessary to construct during wet conditions, and if the Monitor believes conditions are too wet for continued construction, damages which may result from such construction will be restored by the Applicant.

### 5.4 Additional BMPs During Decommissioning

At the end of commercial operations, the Applicant will be responsible for removal and disposal of the solar arrays and associated Project components. A detailed Decommissioning Plan is provided in the SPA for the Project.

#### 5.4.1 Disassembly of Facility

The components of the Project will be disassembled and removed from the Project Area. If soils are excavated during disassembly of the Project components, topsoil will be segregated and stockpiled and subsurface soils will be staged next to the excavation. Once Project components are removed, the subsurface soils will be compacted, and the topsoil will be redistributed across the disturbed area and/or be available for restoring final contours and disturbed areas of the decommissioned site. Excess soil and rock will be removed from the site.

#### 5.4.2 Soil Compaction/Rutting

Compaction will be alleviated as needed on Cropland traversed by construction equipment. Cropland that has been compacted will be plowed using appropriate deep-tillage and draft equipment. Alleviation of compaction of the topsoil will be performed during suitable weather conditions and must not be performed when weather conditions have caused the soil to become so wet that activity to alleviate compaction would damage the future production capacity of the land as determined by the Monitor. The Applicant will restore rutted land to as near as practical to its pre-construction condition.

#### 5.4.3 Debris

Debris and material generated during decommissioning of the Project will be removed from the property. Material to be removed would include debris from Project component disassembly or litter generated during decommissioning.

#### 5.4.4 Access Roads/Temporary Roads

Facility access roads will be used during decommissioning, after which the roads will be removed. Aggregate to be removed from the roads will be reused, sold, or disposed of properly, at the Applicant's discretion, consistent with applicable regulations and standards. The subgrade of access roads will be de-compacted to a depth of approximately 18 inches using a chisel plow or similar appropriate equipment. Topsoil that was stockpiled during original construction, as well as any additional topsoil generated during disassembly of the Project components, will be distributed across the open area.

#### 5.4.5 Decommissioning During Wet Conditions

The Applicant will attempt to avoid decommissioning during wet conditions. If it is necessary to conduct decommissioning activities during wet conditions, and if the Monitor believes conditions are too wet for continued construction, damages which may result from such decommissioning will be restored by the Applicant.

## 6 Conclusion

OTP proposes to construct an up to 66 MWac solar PV energy generation facility on approximately 267 acres of a 487-acre property owned by the Applicant near the town of Solway in Beltrami County, MN. The Project Area has no past history of traditional row-crop use, and there is no current use of the site for row-crop agriculture or organic agricultural practices. The majority of the Project Area is in timber and pastureland. This AIMP outlines current soil conditions and classifications, as well as BMPs to ensure that the construction, operation and decommissioning of the Project will not impede any future use of the property for agricultural purposes.

## 7 References

<sup>1</sup>Natural Resources Conservation Service/SSURGO. 2024a. Farmland Classification-Beltrami County, Minnesota (OTP Solway Solar Project). Report created 8/8/24 via NRCS Web Soil Survey site ([Web Soil Survey \(usda.gov\)](https://websoilsurvey.sc.egov.usda.gov/)) Accessed 8/8/24

<sup>2</sup>NRCS/SSURGO 2024b. Land Capability Classification - Beltrami County, MN. Report created 8/8/24 via NRCS Web Soil Survey. [Web Soil Survey \(usda.gov\)](https://websoilsurvey.sc.egov.usda.gov/) Accessed 8/8/2024.

<sup>3</sup>NRCS/SSURGO 2024c. Hydric Soils Ratings - Beltrami County, MN. Report created 8/8/24 via NRCS Web Soil Survey. [Web Soil Survey \(usda.gov\)](https://websoilsurvey.sc.egov.usda.gov/) Accessed 8/8/2024.

<sup>4</sup>NRCS/SSURGO 2024d. MN Crop Productivity Index- Beltrami County, MN (Solway\_TaxParcel\_20240730). Report created 8/8/24 via NRCS Web Soil Survey. [Web Soil Survey \(usda.gov\)](https://websoilsurvey.sc.egov.usda.gov/) Accessed 7/30/2024.