

Drain Tile Remediation Plan

South Ripley Solar Project

Town of Ripley, Chautauqua County, New York

Matter No. 21-00750

Prepared for:



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1.0 INTRODUCTION

1.1 Project Description

ConnectGen Chautauqua County LLC (the Applicant) proposes to construct and operate the South Ripley Solar Project (the Facility), a utility-scale solar electric generating facility of up to 270 megawatts (MW) in the Town of Ripley, Chautauqua County, New York. The Facility will be located on private land that is primarily rural in nature and will encompass approximately 3,382 acres, 1,046 acres of which occurs within Facility security fencing.

Proposed Facility components will include:

- Photovoltaic (PV) arrays
- Electrical collection system
- Inverters
- Transformers
- Access roads
- Collection substation
- POI switchyard
- Temporary laydown areas
- Battery energy storage system

1.2 Plan Purpose and Goals

On behalf of the Applicant, Environmental Design & Research, Landscape Architecture, Engineering, & Environmental Services, D.P.C. (EDR) has prepared this Drain Tile Remediation Plan (the Plan) for the Facility. This Plan was prepared to describe the steps taken to identify drain tile locations and establish procedures that the Applicant and its contractors will implement to avoid, minimize, and remediate potential impacts to drain tile and related subsurface drainage features that could result from construction of the Facility. Updates to this plan will be provided as the Applicant continues to secure information related to the location of drain tile systems within the site.

2.0 IDENTIFICATION OF DRAIN TILES

Identifying existing subsurface drainage systems early in the design process can help mitigate and reduce the incidence of interference and/or potential damage to drain tiles. The Applicant has completed multiple steps to survey and identify the location and extent of the existing drainage tile system within the Facility Site.

The Applicant sent a survey to host landowners within the Facility Site to identify active agricultural uses, presence of surface or subsurface drainage, and determine how the Facility would impact the agricultural use of their land. Included with the survey was a questionnaire that asked landowners to identify the location of any known drainage tiles located on the property. The Applicant also reached out to the Chautauqua County Department of Public Facilities (DPF), Chautauqua County Soil and Water Conservation District (SWCD), and the Chautauqua County GIS Department to determine if there was any available information on surface or subsurface drainage. The Chautauqua County DPF, SWCD, and GIS Department all responded that they did not have any data on surface or subsurface drainage. Additionally, the Applicant utilized a dataset from the National Center for Atmospheric Research (NCAR) which uses multiple USDA and USGS datasets to show a 30-meter resolution layer of suspected drain tile areas within the 5-mile study area, outside the Facility Site (Valayamkunnath et. al., 2020).

Four of the 28 returned landowner surveys indicated the presence of drainage tiles and provided a graphic approximating the locations of drainage tiles. In addition, review of the NCAR dataset indicated drainage tiles are suspected on four additional parcels within the Facility Site.

3.0 DRAIN TILE AVOIDANCE

Based on the survey results, the Applicant will implement the following drain tile avoidance measures prior to construction and decommissioning activities:

- Drain tile lines will be considered in the Facility design and the Applicant will make commercially reasonable efforts to avoid impacting the drainage tile system throughout Facility development, construction, and operations, wherever practicable.
- Prior to construction, known drain tile mains will be field located and flagged to facilitate avoidance during construction and operation activities.

4.0 IMPACTS TO DRAIN TILES

While identification and location of existing drain tile systems can aid in minimizing impacts, impacts cannot be categorically ruled out. Even under ideal circumstances, some drain tile damage during construction may be unavoidable. If broken drain tiles are visible during excavation and backfill activities, drain tile components that are damaged will be identified with flags or stakes until evaluation of damage and permanent repairs (if needed for drainage to support operation of the Facility) are completed. In addition, the location of damaged drain tile systems will be recorded using Global Positioning System (GPS) technology. Damage to drain tiles during certain aspects of Facility construction (e.g., installation of PV array racking) may not be apparent immediately following damage but may become

more apparent over time. Unexpected surface water flow or ponding during dry conditions, formation of localized voids or sinkholes above drain tiles during low flow periods and upwelling of water during high flow periods are indicators of potential drain tile damage. Should such areas be identified outside of where components are located, the Applicant will take steps to repair these systems, as further described in Section 5.1, below.

5.0 RESTORATION/REPAIRS TO IMPACTED DRAIN TILES

Agricultural land utilized for the siting of the PV arrays will be largely removed from production for the duration of the project. As such, the Applicant plans to repair drain tiles as described below.

5.1 Drain Tile Systems Servicing Properties Owned by Participating Landowners

The Applicant will keep record of any damages to drain tile systems that are identified during construction of the Facility. Drain tile systems that service agricultural lands that will remain in production during the operation of the Facility will be repaired as described below:

- If water is flowing through the damaged tile line to be repaired, the Applicant will immediately and temporarily repair the tile line until such time that the Applicant can make permanent repairs. If the damaged tile line to be repaired is dry and temporary repairs are not necessary, permanent repairs can be completed by the Applicant within 14 business days (weather and soil conditions permitting) of the time said damage occurred. However, the exposed tile line will be screened or otherwise protected to prevent the entry of foreign materials or animals into the tile line.
- All subsurface drains subject to repair shall be repaired or replaced with materials of equal or higher quality and of equal or larger inside diameter as those which were damaged or removed.
- Commercially reasonable efforts shall be made to maintain the tile line to its original alignment/gradient.
- Following completion of the work, the Applicant will be responsible for correcting or paying for the correction of the performed tile repairs that fail post-construction for a period of 24 months post construction. The Applicant will not be responsible for tile line repairs performed independently by the landowner unless previously agreed to under a separate agreement between the Applicant and landowner.

Drain tile systems that service lands where Facility components will be located and are not being returned to agricultural use during Facility operation may not be replaced or repaired until the Facility is decommissioned. Once the Facility is decommissioned, any drain tile system that was damaged during construction and not repaired, will be restored to its pre-construction condition to support future agricultural production. The Applicant will be

responsible for correcting or paying for the correction of the tile repairs. The Applicant will not be responsible for any drain tile repairs performed independently by the landowner unless previously agreed to under a separate agreement between the Applicant and landowner.

5.2 Drain Tile Systems Servicing Properties Owned by Non-participating Landowners

The Applicant is not aware of any drain tile systems that will be impacted by the Facility that extend outside the Facility Site into non-participating parcels. If any drain tile systems with connections to non-participating parcels are impacted by the construction of the Facility, the Applicant will repair any damages as soon as reasonably practicable. The Applicant will perform repairs to these damaged drain tile systems as described above.

6.0 COMPLAINT RESOLUTION

The Applicant is committed to addressing landowner concerns regarding drain tile repair and maintenance during construction, operation, and decommissioning of the Facility. In accordance with §900-10.2(e)(7) of the 94-c regulations, the Applicant will prepare a Complaint Management Plan for the Facility that will include guidance on registering a complaint, contact information, public notification procedures, complaint resolution procedures, and guidelines for tracking complaints. Landowners may express their concerns via email, phone call, or the contact form on the project website (<https://www.southripleysolar.com/contact/>) and the Applicant will work to address landowner concerns related to drainage in timely manner, in accordance with the Complaint Management Plan.