

Memorandum

To: Posey County Area Plan Commission

From: Kyle Gerking – Tenaska

Date: July 13, 2022

Re: Clarification of the Drainage Plan Approval Letter issued by the Posey County Soil and Water Conservation District's District Technician on May 4th, 2022

In accordance with Section 153.124.03 of the Renewable Energy Generation Systems Ordinance for Unincorporated Posey County, Posey Solar, LLC (the "Project") submitted a Drainage Plan for review by the District Technician for the Posey County Soil and Water Conservation District. The Drainage Plan was submitted for review on April 21st, 2022, and an Approval Letter was issued jointly by Carrie Parmenter, District Technician – Posey County Soil and Water Conservation District and John Stofleth, Senior Hydrologist – cbec inc. eco engineering.

The Approval Letter confirmed certain required contents of the Drainage Plan were included in the Project's submittal. It also included a list of recommendations that should be addressed and/or confirmed prior to issuance of an Improvement Location Permit to the Project or the start of the construction. Those six recommendations are addressed individually, below.

- Grading should be kept to a minimum. When grading is necessary, topsoil will be stockpiled and evenly spread over the surface prior to seeding.

Response: *The topics of grading and topsoil segregation and re-application are discussed in multiple locations within the Drainage Plan. The subsection with the heading of "Micrograding" addresses this subject in detail. In addition to the requirements within the Drainage Plan, the Agricultural Soil Reclamation Plan (Attachment B to the Decommissioning Plan Agreement), which is also a component of the Project's Final Development Plan Application, discusses the obligations pertaining to grading and topsoil segregation and re-application prior to seeding and stabilization.*

- Solar arrays should be placed on slopes ideally 10% or less. If the slope exceeds 10%, additional stormwater management Best Management Practices (BMPs) should be utilized to promote sheet flow and dissipate energy at the drip edge of each row of panels. Acceptable stormwater management BMPs must meet the design specifications detailed in Chapter 7 of the IDEM Stormwater Manual.
https://www.in.gov/idem/stormwater/files/stormwater_manual_chap_07.pdf

Response: *The subsection with the heading of "Best Management Practices" within the Drainage Plan addresses the requirements for stormwater ponds, level spreaders or slope interrupters to address concerns where solar arrays are proposed on final slopes (after grading, if any) greater than 5%. Exhibit 8 was prepared to identify areas within the proposed Project area with existing slopes greater than 5% and to provide details of the various Best Management Practices that could be implemented to mitigate the potential runoff and concentrated flow concerns. Note this obligation materially exceeds the requirement noted above.*

- Solar arrays should be designed and installed to allow growth of vegetation under and between the solar arrays. Vegetation needs to be 90% density before temporary erosion control structures are removed. Ideally, the vegetation will be established prior to the installation of the solar panels to promote better establishment. The vegetation should be a shade-tolerant native mix of warm and cool season grasses and forbs.

Response: *A native meadow grass is proposed beneath the tracking solar arrays. The Approved Drainage Plan includes the requirement that prior to submittal of the Notice of Termination of the Project's General*

Construction Stormwater Permit, the site must achieve 80% native vegetative ground cover with a clear plan for achieving 90% establishment, or other provisions must be employed until the 90% threshold is achieved. Details will be included within the Project's Stormwater Pollution Prevention Plan. Pre-seeding for stabilization prior to initiating site grading and other preparation activities is a preferred practice; however, it may be limited based on the specific timing of construction.

- Solar panels should be installed with sufficient distance between rows to allow for rainfall to infiltrate.

Response: *The area beneath the solar trackers will be vegetated and in compliance with the minimum impervious area disconnection length, which will ensure that rainfall will be able to infiltrate.*

- Solar panels should not be installed so the dripline is higher than 10 feet to prevent scouring.

Response: *All solar panels installed will comply with the height restrictions defined in Section 153.126.03 D of the Renewable Energy Generation Systems Ordinance for Unincorporated Posey County and the Project's more onerous commitment that the height of any panel in the maximum tilt position shall not exceed 15 feet in height. It is not anticipated that the dripline will exceed 10 feet above the ground. The proposed tracking technology will further mitigate any potential scouring.*

- Existing drainage patterns should be maintained. If the drainage pattern is altered, the new drainage pattern must be detailed in the final drainage plans.

Response: *In accordance with the Drainage Plan, it is the Project's intent to maintain the existing drainage patterns to the extent feasible. In the event that drainage patterns are altered, the final plans submitted to the Building Inspector and other required parties prior to the issuance of the Improvement Location Permit will detail the altered drainage pattern and any Best Management Practices which may be necessary to maintain compliance with the local peak runoff rate or water quality requirements.*