

Stormwater Narrative
Proposed Miller Road Solar & Miller Road Solar West
405 Miller Road, East Greenbush NY
August 09, 2023

The applicant, Miller Road Solar, LLC., and Miller Road Solar West, LLC., is proposing to develop a portion of a ±198 acre parcel in both the Town of Schodack and East Greenbush with a grid-tied community solar array. The proposed solar development will occur within the Town of East Greenbush, while two access roads are proposed within the Town of Schodack. One access road will tie into Autumn Way Road and the other is located on Miller Road.

The overall proposed project will cover ±51.1 acres (fenced in areas, solar arrays and access road). The solar fields have been divided into two separate projects, Miller Road Solar and Miller Road Solar West, each of which are proposed to be 4.975 MW-AC. A chain link fence surrounds the perimeter of the proposed solar areas on the lot.

A NYSDEC approved limited use pervious access road will be installed for construction and maintenance of the proposed facility. The proposed solar layouts and locations have been depicted on the Proposed Site Plan Documents prepared by Bohler Engineering, dated June 23, 2023, last revised August 9, 2023.

This narrative will briefly discuss the proposed site development and provide an analysis of the existing developed and proposed redeveloped site conditions and the proposed stormwater management system. A Stormwater Pollution Prevention Plan is currently being prepared.

It is the intent of the applicant to design the system in accordance with NYS Department of Environmental Conservation Technical Memorandum titled “Solar Panel Construction Stormwater Permitting/SWPPP Guidance dated April 5, 2018 (DEC Memorandum).

Existing Stormwater Conditions:

The existing ±198 acre parcel is currently undeveloped and consists primarily of wooded and grassed and agricultural areas. The majority of stormwater from the site sheet flows overland in either a southwesterly or southeasterly direction towards the existing on-site stream, which is an unnamed tributary to Moordener Kill. Moordener Kill eventually discharges into the Hudson River.

Proposed Stormwater Conditions:

The proposed project includes development of two separate four point nine-seven-five (4.975) megawatt solar fields with proposed solar panels, equipment pads, electric infrastructure, a pervious access drive, and other associated appurtenances. An electrical collection and conveyance system is proposed to connect the proposed solar field with the grid.

A new NYSDEC approved limited use pervious access drive to Miller Road and fencing with associated gates are also proposed. The proposed erosion controls are depicted on the accompanying plans prepared by Bohler Engineering, June 23, 2023, last revised August 9, 2023.

The majority of stormwater from the site will sheet flow overland in either a southeasterly or southwesterly direction to the on-site stream tributary to Moordener Kill, which eventually discharges to the Hudson River as it does today.

The layout of proposed solar panels have been designed in accordance with the DEC Memorandum. In accordance with the design guidelines, the panel design proposes to utilize non-rooftop disconnection to reduce runoff by promoting overland filtering.

Portions of the solar panel area will be regraded to be below 10%, and straw wattles are proposed at 100' spacing, as suggested in the Solar Panel Installation Guidelines. The disconnection of non-rooftop runoff from the proposed solar panel addresses stormwater management requirements for the proposed panels and no additional stormwater management techniques for the panels are required. The proposed pervious access drives also do not require mitigation as there is no increase in the impervious area over existing conditions.

The proposed development will create a negligible amount of new impervious areas in the form of equipment concrete pads (± 720 SF). Stormwater is proposed to discharge in a way that mimics the existing drainage patterns from the pre-developed conditions as required and set forth in the 2015 NYSDEC Stormwater Design Manual. All calculations, flow rates, and modeling will be included as a part of a complete SWPPP to be prepared for a future submission.

The proposed project as designed will serve to mitigate the effects of the development of the parcel, such that the proposed use will not adversely affect any downstream or adjacent properties.