Operation & Maintenance Plan
ASD Shutesbury MA Solar LLC, PV Array
Amherst, MA

The following is an Operation and Maintenance Plan for the Solar PV Array located off of Shutesbury Road between 187 and 201 Shutesbury Road in Amherst, Massachusetts.

The PV Array use consists of gravel access drives, perimeter fencing, 3 infiltration basins and an infiltration trench for stormwater management, PV Array racking, and grass pollinator meadow areas. Structural and non- structural BMP's have been incorporated into this site design and are outlines below.

Responsible Parties

The array owner, ASD Shutesbury MA Solar LLC, is responsible for the long term operation and maintenance of the BMP's described in this Plan.

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During Construction

Sediment & Erosion Control Plans have been prepared and included within the permit drawing set to outline measures designed to address all facets of sediment, erosion control and site work phasing during construction. Some of the measures included in these plans are as follows:

- Silt fence Erosion Control Barriers
- Rock Fillers
- Level Spreaders
- Rip Rap Outlet Protection
- Erosion Control Matting
- Water Quality Swales
- Construction entrance
- Dust control
- Temporary seeding for stabilization of exposed soils
- Temporary excavated sediment traps

During construction, the access road shall be inspected twice monthly and after a 2-year storm event. No less than weekly or after significant daily build up, the driveway apron and roadway along Shutesbury Road shall be cleared of mud caused by construction operations.

During Construction, construction debris and litter removal over the entire property shall take place no less than weekly and, in any circumstance, promptly upon request by a local authority.

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Long Term Maintenance

The following is a list of long-term BMP's to ensure the array's continued stormwater compliance and overall effectiveness.

- Infiltration Basins
- Infiltration Trenches

Litter Control

Routinely walk or drive the site to pick up and remove construction debris and litter from the area, perimeter greenspace areas and around the perimeter fencing. This maintenance requirement is in addition to the seasonal grass mowing operations.

Stormwater Installation Inspection

Inspect all sediment containment structures that capture sediment and reduce runoff velocities from potential overland flow (4) four times per year and after all major storm events as outlined in the MassDEP Stormwater Management Handbook. Repair eroded ground and plant vegetation as necessary. Realign rocks to reduce channelization. Remove sediment if greater the 6" deep and redistribute on property.

Outlet Control Structures, Rip Rap Flared End Sections and Emergency Overflow Weirs

Inspect all outlet control structures and rip rap flared end structures (4) four times per year at a minimum to ensure orifices and grates are clean of debris. Remove accumulated sand, sediment, and leaves from the structures at least four times per year. Dispose of sediments at an approved off-site location. Maintain records of inspections and cleaning. As part of routine maintenance, visual inspections should be conducted after heavy precipitation events.

Access Road Maintenance and Inspection

No less than twice annually, and after every major storm event, the entire length of the access road and internal roads shall be inspected for erosion and sufficient gravel covering. The inspections shall initially take place in the fall and spring to ensure that the access road is in the appropriate condition before and after snow season. The array owner will promptly repair the access road to maintain proper emergency vehicle access.

After every significant snowfall, the access road shall be plowed to maintain proper access. Specific attention shall be paid to ensure that no significant amount of gravel is pushed into the bordering vegetated wetlands during plowing on the section of road that encroaches a wetland, and the twice annual inspections shall properly remove any gravel deposits in and around the wetland setback.

Panel, Racking, Foundation, Fence Inspection

Twice annually visually inspect all racking equipment damage and panel to panel connections. Annually inspect panels for hotspots, weather damage, and module degradation. Replace panels as necessary.

Inspect all foundation points for signs of erosion and apply erosion control materials as necessary.

Annually, inspect the perimeter fence for damage. Ensure the fence maintains an approximate 6-inch gap for wildlife passage.

Meadow Areas and Vegetation control

The wildflower pollinator meadows that comprises the majority of the array area shall be mowed multiple times in the initial years of project as the pollinator meadow is being established.

In later years, mowing is only expected to take place once a year as the pollinator species do not reach the height and bulk of traditional grasses. No Massachusetts Prohibited Plant List species will be used. No pesticides or other chemicals will be used for vegetation management or module cleaning.

Areas of the array with a higher volume of grass will be mowed regularly to limit the amount of combustible material potentially available.