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To: Dan O'Connor, PE

Village Engineer

From: Ralph G. Mastromonaco, PE

Re: Matrix / Hudson National Solar Project

Date: December 13, 2021

We have revised the application and plans to address the comments from Chazen and others as noted.

• 1. Please note that the tree count has been revised downward to a total of 555 trees to be removed.

The latest drawing set (revised: 12/9/21) includes the latest tree count on the Tree Plan.

2. We suggest adding the jute mats as a "permanent" stormwater device to be inspected annually and replaced as needed.

The Jute mat disintegrates over time – it is only useful before vegetation — takes effect.

- 3. Please provide a detail of the temporary diversion paths.
  - A Temporary Swale detail from NYSDEC has been included in the Detail Sheet.
- 4. It appears that a new 15" CMP culvert is proposed for the driveway to Lands N/F of Reilly. What is the intent with the existing drain inlet along this driveway?

The proposed gutter will integrate with the inlets.

- 5. It appears there is a typo in the label for the electrical distribution and inverter pad. It is assumed the height is 8" and not 8'. Please confirm. Detailed designs of the slabs shall be provided prior to issuance of a building permit
- The site plan now includes the corrected dimensions for the inverter pad.

- 6. The rain garden detail should be corrected to note that the 1,200 s.f. to be captured and treated is not all impervious. The plans indicate that roughly 400 s.f. of impervious drain to the rain garden, with the remainder presumed to be lawn or some other pervious surface. Per NYSDEC, the total allowable impervious inflow to rain gardens is 1,000 s.f. The detail should also be modified to comply with the soil mixture provided in the NYSDEC design manual. The average organic content should be 5%, not 20-30% as stated. Lastly, please indicate the daylight location of the overflow structure on the plan.
- The rain garden detail has been revised to include the amount of pervious and impervious areas captured by the rain garden. A note has been included that states the rain garden's captured area has both pervious and impervious areas, as requested. The rain garden detail has been modified to specify an average of 5% organic content. Overflow pipe is unnecessary as the flow is designed overtop the rain garden berm and drain to the existing natural drainage swale south of the rain garden.
- 7. Rain garden maintenance should include weeding, mulching, pruning/trimming of plants, and replacement of plants as needed.

A rain garden maintenance note has been added to the rain garden detail.

• 8. Soil tests to confirm feasibility of the rain garden design shall be performed and the results provided

Soil tests will be performed and results provided prior to installation.

- Your numbers are different in the legend on the Tree Plan and the Tree Replanting Plan. These need to be consistent.
- The chart on the Tree Plan has been updated and the chart on the Re- Planting Plan has been removed.
- Poor and dead are still lumped together. Poor trees are still "live" and are regulated and need to be part of the live trees to be removed count. We pointed this out previously and it was in Dan O'Connor's email of November 8.
- The tree chart has been revised to reference "poor" and "dead" separately
- Please also indicate that the numbers include only and all of those trees 4" and over.
- Note has been added to the Tree Plan to indicate "numbers include only and all of those trees 4" and over".

On the tree replanting plan please clarify the note on seed mix and provide detail.
 It is our understanding and set forth in the TMA responses that both grasses and wildflower mix will be planted.

Detailed information on the wildflower seed mix is on the latest Re-planting Plan/Landscape Plan.

 We have a concern that 10" – 14" seedlings as you propose to plant will just be consumed by the deer and likely none will survive. Can you address this.

The latest Seedling Planting Detail, on the Re-planting Plan/Landscape Plan, specifies use of a deer repellent, ("Fend Off"), to be utilized to discourage deer from eating the newly planted seedlings.

Submitted by:

Ralph G. Mastromonaco