TOWN OF FARMINGTON PLANNING BOARD
DELAWARE RIVER SOLAR PROJECT
FULL ENVIRONMENTAL ASSESSMENT FORM PART 2
SUPPLEMENTAL NARRATIVE TO APPLICANT

ZB #0902-18	Area Variance Application (SEQR Determination)
ZB #0903-18	Area Variance Application (SEQR Determination)
ZB #0904-18	Area Variance Application (SEQR Determination)
ZB #0905-18	Area Variance Application (SEQR Determination
PB #1003-18	Preliminary Subdivision Plat Application
PB #1004-18	Preliminary Site Plan Application
PB #1006-18	Special Use Permit Application

APPLICANT: **Delaware River Solar LLC, 33 Irving Place, New York, N.Y. 10003, on behalf of Roger and Carol Smith, owners of property at 466 Yellow Mills Road**

ACTIONS: **Preliminary Subdivision Plat, Preliminary Site Plan, Special Use Permit and Area Variance applications for the development of a 7-megawatt solar farm on approximately 35 acres of land at 466 Yellow Mills Road**

Extract from the minutes of the Farmington Planning Board meeting, May 15, 2019.

The following are the Planning Board's requests for additional (supplemental) information from the applicant regarding specific topics as identified on the Full Environmental Assessment Form Part 2—Identification of Potential Project Impacts for the Delaware River Solar applications. Additional comments by board members are also included to help clarify the specific concern to be addressed.

1. Impact on Land

1a. **SMALL IMPACT:** The proposed action may involve construction on land where depth to the water table is less than 3 feet.

Request: Provide a Geotechnical Report on the specific acreage upon which the solar panels would be located to substantiate this impact.

Delaware River Solar (DRS) Response:
Without regard to a geotechnical study, the Board may conclude that the potential impact here is small and no there is no potentially significant adverse impact, particularly given that there will be no excavation, mining or dredging involved in construction, there will be no bulk storage of petroleum or chemical products, the operation will not involve the

management or disposal of solid waste, and the operation does not involve the commercial generation, treatment storage or disposal of hazardous waste. This finding is further supported given that any land disturbance will be minor in nature and will remain close to the surface. There will be little to no disturbance to soils that may impact ground water if present above 3 feet. The most intensive construction will be from steel posts driven into the ground to construct the racking structure the solar arrays will be mounted to, and the access road construction that will be graded onto an existing farm access road that has been in use for decades.

Geotechnical study is normally done prior to seeking building permits, after final site plan approval, to avoid wasting resources that would be repetitive if modifications of the site plan were found to be necessary during Site Plan review, which occurs after a determination on SEQR is made. At the Planning Board's request, we have scheduled preliminary geotechnical work to be conducted beginning the week of June 3, 2019. Results of this study will take 6 to 8 weeks to complete. If high groundwater is found to be present, the impact of construction can be mitigated by decompaction of soils (as described in response to 8a), and preventing any hypothetical spills from construction materials from leaching into soils (as described in response to 4h). While there may be a small impact here, it is not outweighed by the benefits, and is similar to the current uses on the land, and therefore is insignificant.

1c. **SMALL IMPACT:** The proposed action may involve construction on land where bedrock is exposed, or generally within 5 feet of existing ground surface.
Request: Provide documentation whether or not the solar panels would be located on top of bedrock which is either exposed, or generally within five feet of existing ground surface.

DRS Response:
DRS can reasonably conclude that no area of the proposed development will be located on top of bedrock which is exposed, or generally within five feet of existing ground surface. The pile testing DRS conducted for posts found no exposed bedrock, or bedrock within 7 feet of surface, which was the limit depth of the pile test. Of the 18 pile test locations within the limits of the proposed system, all obtained a positive embedded depth of at least 7 feet, meaning the test bores did not encounter bedrock. Please see Appendix A for the Pull Test report conducted by RBI showing these results.

1h. **MODERATE TO LARGE IMPACT:**
It has been determined that viable agricultural soil is understood to be Class 1 through 4 Soils. In addition, it has been documented that there is no feasible

alternative on this parcel of land to locate the proposed solar arrays which would not involve placement upon Class 1 through 4 Soils.

DRS Response:
Initially, we would like to note that the full Site Plan and Special Permit application for this proposed action was submitted for review by the New York State Dept. of Agriculture and Markets (NYSDAM), which explicitly found that "the proposed action would not have an unreasonably adverse effect on the continuing viability of farm enterprises within the [Agricultural District 1] or State environmental plans, policies and objectives."

Moreover, we would note that the development area's current dominant use in not cropping – instead, it is primarily used as pasture. As such, and because the development will continue to accommodate pasture, the Ontario County Agricultural Enhancement Board concluded that "[a]s proposed, the landowner will be able to continue their agricultural operation at its current scale." The landowner and farmer of the parcel agree with these statements, and DRS has worked extensively with them to ensure their cattle farm will continue to operate in tandem with the solar energy system on the same land.

Additionally, any hypothetical impact on agriculture would be short term and minimal since the owner will be able to continue its operation at its present scale, and there will be no long term impact on agriculture since the impacted land will once again be available for farming operations when the solar array is decommissioned at the end of the lease term.

As such, the Planning Board may duly conclude that the proposal will not have a potentially significant adverse effect on the environment in relation to this topic.

Request: Provide a detailed written narrative identifying:

1. *A detailed description of how the site is to be prepared for the solar arrays and accessory uses;*

DRS Response:
DRS has previously provided detailed descriptions of how the site will be prepared for solar arrays and accessory uses in the Site Plan and Special Permit review applications submitted to the Town of Farmington, as well as in subsequent requests for additional information from the public and Planning Board. Please refer to the following locations of the Yellow Mills Road Solar Site Plan and Special Permit Review Application for this information:

a. **Preliminary Site Plan S-1 and S-1, submitted August 2018, revised November 2018, and February 2019** – construction notes are shown on site plan. These notes comprise adherence to the requirements of Town Code Chapter 165 and describe how the site will be prepared for solar arrays and other solar system component construction, as well as how this construction will be phased with realignment of the cattle pasture fences, to preserve the existing cattle farm operation.

b. **Project Memorandum– "Part 3 - CONSTRUCTION OF THE SOLAR FACILITY", submitted August 2018, updated November 2018 with Draft Full Decommissioning Plan.** Part 3 of this narrative includes a detailed description of the construction process, as well as the Operations and Maintenance and Decommissioning Plan of the solar energy system.

c. Decommissioning Package, submitted in November, 2018 – for more reference on how decommissioning will occur in accordance with Town Code Chapter 165, and the NYSDAM Siting Guidelines, please refer to the entire decommissioning plan, agreement, and sample decommissioning surety forms from several solar energy systems approved and built by DRS across New York State. This expanded decommissioning package was provided at the request of the Planning Board.

d. **The NYSDAM Notice of Intent (NOI) and Final Determination – submitted April 8, 2019**. The NOI Final Determination includes an agreement between DRS and New York State that describes how construction, operation, and decommissioning activity on the site will be in accordance with the 2019 "Guidelines for Agricultural Mitigation for Solar Energy Projects (Revision 4/19/2018)" (NYSDAM Siting Guidelines), to preserve the cattle farm operations onsite during construction, operation, and after decommissioning of the solar energy system.

2. *The role the Project's Environmental Manager will provide in site preparation, ongoing inspections and abandonment;*

DRS Response:

According to Town Code Chapter 165, an Environmental Monitor (EM) is defined as "[a]n individual possessing the skills and knowledge to effectively develop a site for use as a solar PV system and then reclaim the site restoring it, to the greatest extent practical, to its' original use."

The NYSDAM Notice of Intent (NOI) and Final Determination, submitted to the Planning Board on April 8, 2019, requires an Environmental Monitor (EM) during construction and at the time of Decommissioning of the solar energy system.

Please see Appendix B – Environmental Monitor Proposal, for details on qualifications of an EM who DRS may use (prepared by Bergmann Associates). This proposal describes the role of an EM, and work that would be done and monitored by the EM during construction and decommissioning of the solar energy system. The Town Code Enforcement Officer (CEO) can also act as an independent EM to make periodic inspections along with site inspections the CEO may also perform of the Stormwater Pollution Prevention Plan (SWPPP). A representative from NYSDAM may also periodically attend the construction site to act as an independent EM.

The Yellow Mills Road Solar Site Plan and Special Permit application was thoroughly reviewed by the NYSDAM, and found "the proposed action would not have an unreasonably adverse effect on the continuing viability of farm enterprises within the [Agricultural District 1] or State environmental plans, policies and objectives." Should any construction or decommissioning matters arise resulting from unavoidable site conditions that would conflict with Town Code Chapter 165, or the NYSDAM NOI Final Determination, any EM will report these conditions to DRS, the Town of Farmington and the NYSDAM, so that all necessary parties may seek appropriate mitigations and resolutions.

3. *The anticipated date of abandonment;*

DRS Response:

Decommissioning would occur 30 to 40 years from date of the system being placed in service, or at a time when the system has reached its useful life. The term "Abandonment" is not defined by Town Code Chapter 165, but is assumed to mean in this case a hypothetical condition in the event where there was no operator of the solar energy system. This is not possible to occur under the corporate organization of the solar energy system ownership structure. There will always be an entity that will maintain ownership, and the responsibility of system operation and maintenance, as well as the duty to decommission the solar energy system, should and when it needs to be, in accordance with the Decommissioning Agreement finalized under the Special Permit Review by the Planning Board. The act of providing surety to the Town of Farmington is therefore a final stop-gap measure to ensure that the system can be decommissioned in the event of an unforeseen hypothetical event where there was no system owner.

4. *How and when the reclamation of these soils is going to occur;*

DRS Response:

The New York State Division of Agriculture and Markets (NYSDAM) reviewed the impacts Yellow Mills Solar will have on the active farm uses of the property, and within Agricultural District 1 of the Town of Farmington. Through said review, DRS committed to ensure the system will be decommissioned in accordance with the NYSDAM "**Guidelines for Agricultural Mitigation for Solar Energy Projects (Revision 4/19/2018)**". These guidelines offer guidance on reclamation and decompaction of soils. According to the Final Determination of the NOI, Reclamation and decompaction of soils will occur to bring the soils back to the quality they are in today, as grazing pastureland.

Furthermore, in adherence to Town Code Chapter 165, and under the terms of a Decommissioning Agreement to be finalized in Special Permit Review by the Planning Board, soils will be decompacted to a depth of 18 inches with a deep ripper or heavy-duty chisel plow. Soil compaction results will be no more than 250 pounds per square inch (PSI) as measured with a soil penetrometer. In areas where the topsoil was stripped, soil decompaction will be conducted prior to topsoil replacement. Following decompaction, all rocks 4 inches in size or greater will be removed from the surface of the subsoil prior to replacement of topsoil. Topsoil will be replaced to original depth and original contours will be re-establish where possible. Subsoil decompaction and topsoil replacement shall be avoided after October 1st of each year if practical.

5. *How an adequate amount of surety is to be determined.*

DRS Response:

Surety for decommissioning of the solar energy system will be provided in a form acceptable to the Planning Board, in accordance with requirements of Town Code Chapter 165. A draft decommissioning Plan has been submitted to the Planning Board so that a formal Decommissioning Agreement can be discussed with the board and agreed to. The surety and decommissioning agreement will be determined as part of the Special Use Permit of the Planning Board's review. No Special Use Permit can be issued unless the Planning Board finds that the conditions have been or will be met.

2. Impact on Geological Features

No Supplemental Narrative is requested.

3. Impacts on Surface Water

DRS Response:
Generally as it relates to potential impacts on surface water, DRS's consultant performed a comprehensive wetland and waterbody study at the Project Site in order to ensure the protection of any identified wetlands. While wetlands have been identified at the Site, the Project has been designed to avoid disturbing any and all wetlands and to respect and comply with all buffers required as a result of such wetlands. A full SWPPP will be submitted with the Project, specifying construction and post-construction erosion control measures, further guarding against any potential surface water and erosion issues. No surface water flows are expected to be altered in connection with this Project. As a result of all of the above, the magnitude and/or importance of this hypothetical impact is so small, limited and remote that it will not result in a potentially significant adverse environmental impact.

3d. **SMALL IMPACT:** The proposed action may involve construction within or adjoining a freshwater or tidal wetland, or in the bed or banks of any other water body.
Request: Provide mitigation plans for possible leaching of chemicals into surface water from damaged solar panels.

DRS Response:
The project will maintain the 100-foot buffer from all NYSDEC delineated wetlands on the property, and no construction or development activity will take place within these setbacks. Disturbance to the isolated seasonal Federal wetland delineated as Wetland #3 on the site plan set will also be avoided.

See the response to 4h below regarding hypothetical leaching.

3e. **SMALL IMPACT:** The proposed action may create turbidity in a water body, either from upland erosion, runoff or by disturbing bottom sediments.
Request: Provide mitigation plans to control turbidity from being created in nearby surface water.

DRS Response:
A majority of the 35 acres within the proposed development area will not be physically disturbed. Any disturbance created during the installation of posts, access roads, temporary facilities, etc. will maintain a natural vegetative buffer surrounding the construction area, and/or Erosion and Sediment Controls (ESC) implemented to divert runoff, as required by the

SWPPP. Any stormwater runoff will be filtered by the natural vegetative buffer prior to entering any water body. A Stormwater Pollution and Prevention Plan (SWPPP) will be created, using guidance from the Town Engineer, during the Preliminary Site Plan review stage the Planning Board will conduct, after an action on SEQR has been determined. SWPPPs are required for any development in New York State over 1 acre in ground disturbance, to account for and mitigate any storm water runoff from construction activity on a parcel of land. Yellow Mills Solar will create approximately 1.1 acres of physical ground disturbance and is therefore required to conduct and be bound by a SWPPP, which will be monitored by DRS and independent SWPPP monitors during construction.

3h. **SMALL IMPACT:** The proposed action may cause soil erosion, or otherwise create a source of storm water discharge that may lead to siltation or other degradation of receiving water bodies.
Request: Provide mitigation details for compliance with the State's MS4 Program (Municipal Separate Storm Sewer System) requirements.

DRS Response:
In order to be in compliance with the NYSDEC SPDES General Permit the SWPPP is reviewed and approved by the local Small Municipal Stormwater Sewer Systems (MS4) Program. The MS4 must sign the acceptance form in order for the NOI to be submitted and project to receive coverage under the permit. As mentioned in the response to 3e, physical soil disturbance at the project site will be minimal. Soil erosion will be controlled with Erosion and Sediment Control (ESC) measures as depicted in the SWPPP. These measures will include silt fencing, a stabilized construction entrance and other measures as necessary to prevent soil erosion, or the creation of storm water discharge that may lead to siltation or other degradation of receiving waterbodies. While there may be a small impact from this action, it is relatively small, and not uncommon with the current actions on the land, therefore is insignificant.

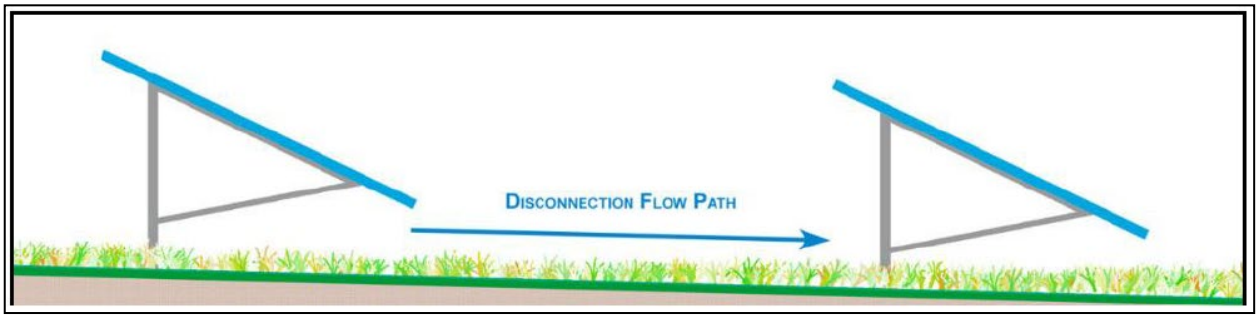
3i. **SMALL IMPACT:** The proposed action may affect the water quality of any water bodies within or downstream of the site of the proposed action.
Request: Provide mitigation details for maintaining water quality on this site.

DRS Response:
Water quality will be maintained through the Post Construction Stormwater Management function of the SWPPP. The NYSDEC has determined that solar energy systems are considered a pervious surface when calculating stormwater quality. This is due in part to being able to "disconnect" the solar panel surfaces from the vegetated surfaces located below the modules and in the rows of spacing between the modules. The solar arrays are elevated above the ground at a minimum height of 3 feet and rise at an angle to approximately 8 feet tall, and therefore are

"disconnected" and independent from vegetated surfaces, which sit below and are wider than the row of panel arrays. This means there is more area under the panel arrays, than is covered by them, and no area of ground surface is physically covered by panel arrays. See **Figure A** below for a cross section view of how solar panel arrays are constructed above the surface of land. Rainwater can fall underneath panel arrays, and flow similarly to how it would if there were no panel arrays present. Panel arrays also act to break the velocity of rain droplets as they fall from the sky. Slower rain droplets then roll off the panels onto the vegetated ground surface, where they are better absorbed at lower velocity.

Stormwater quality is therefore treated by capturing the runoff from impervious surfaces such as the access road, and the concrete pad where the inverter and transformer are located adjacent to the access road. For this solar energy system, the water quality requirements can be met by using Bioretention areas to treat the runoff from the access roads.

Figure A – Solar Panel Array Cross Section: Array Spacing is depicted to show disconnection of flow path between arrays. *Source: Maryland Department of the Environment*



4. Impact on Groundwater

DRS Response:
Generally, while the Project may be constructed in the vicinity of aquifer, the Project will not use or discharge water, limiting the risk that it would impact groundwater. As a result, and for the additional reasons set forth below, the Project is not expected to result in a potentially significant adverse environmental impact.

4h. SMALL IMPACT: Other impacts.
Request: Address public comments on the types of hazardous chemicals that are used in the solar panels, and measures to prevent leaching of these chemicals into the groundwater from damaged solar panels.

DRS Response:
There were several public comments made at Planning Board public hearings regarding concerns of panel composition, and risks of hazardous

chemicals that could leach into groundwater. While these concerns are common, they are not as drastic as one may assume. DRS takes this concern seriously and commits to using only solar panels that meet United States Environmental Protection Agency (EPA) guidelines for being safe to use, and dispose of, in the environment, without the risk of leaching hazardous chemicals into the environment or groundwater. DRS does this by using only solar panels that pass the Solar Panel Toxicity Characteristics Leaching Procedure Test (TCLP). The TCLP is an EPA approved test that is conducted by an independent laboratory, where panels are broken and water is run over them, and the water is then tested for chemicals that appear after this simulated process of "leaching" has occurred. Panels that pass the TCLP test show no signs of hazardous chemicals in the leached water above what the EPA considers normal and safe levels of these substances, that may naturally occur in the environment. DRS provided the TCLP test for a typical panel used to the Planning Board on January 15, 2018. Should any panels break, DRS will replace them, and remove and dispose of them in accordance with New York State Department of Environmental Conservation waste guidelines, which can include recycling. It is important to note that panel breakage will not result in hazardous chemicals being able to leach into the groundwater, as there are no hazardous chemicals in panels that pass a TCLP test that are able to leach from the panels above what the EPA considers safe ambient levels naturally occurring in our environment.

Please see **Appendix C – Solar Panel Toxicity Characteristics Leaching Procedure Test (TCLP),** which describes the rigorous and independently conducted tests that solar panels must pass to be considered by the United States Environmental Protection Agency safe to use and dispose of in the environment. Please note in Appendix C, the public information provided on solar panel safety issued by the State of Massachusetts Department of Environmental Conservation, which determines that solar panels passing a TCLP test are safe to use in the environment. This is referenced on page 7 of the attached report, in "End-of-Life/Decommissioning" section.

The SWPPP will include pollution prevention measures for construction chemicals and material management practices for spill prevention. As noted, the solar panels will pose no risk of leaching hazardous chemicals into the groundwater. Manufacturers recommended methods for breakage cleanup will be clearly posted and site personnel will be made aware of the procedures and the location of clean up supplies. The cleanup supplies shall be kept in the material storage area onsite. All breakages will be cleaned up immediately after discovery. In the event of a spill of a hazardous material it will be immediately reported to the appropriate state and/or local government agency for proper inspection and remediation.

5. Impact on Flooding

No Supplemental Narrative is requested.

6. Impact on Air

No Supplemental Narrative is requested.

7. Impact on Plants and Animals

No Supplemental Narrative is requested.

8. Impact on Agricultural Resources

Request: The applicant is requested to provide additional narrative describing how the soils group 1 through 4 are likely to be impacted:

DRS Response:

Generally, we would like to note that this proposal was submitted for review by the New York State Dept. of Agriculture and Markets, which explicitly found that "the proposed action would not have an unreasonably adverse effect on the continuing viability of farm enterprises within the [Agricultural District 1] or State environmental plans, policies and objectives."

Moreover, we would note that the development area's current dominant use is not cropping – instead, the land is primarily used as pasture. As such, and because the development will continue to accommodate pasture, the Ontario County Agricultural Enhancement Board concluded that "[a]s proposed, the landowner will be able to continue their agricultural operation at its current scale."

Additionally, any hypothetical impact on agriculture would be short term and minimal since the owner will be able to continue its operation at its present scale, and there will be no long term impact on agriculture since the impacted land will once again be available for farming operations when the solar array is decommissioned at the end of its useful life.

As such, the Planning Board may duly conclude that the proposal will not have a potentially significant adverse effect on the environment in relation to this topic.

1. *during site construction;*

DRS Response:

During site construction prime soils will be protected as outlined in the Construction Notes on Sheet S-2 of the plan set, to follow Town Code Chapter 165, and the NYSDAM "**Guidelines for Agricultural Mitigation for Solar Energy Projects (Revision 4/19/2018)**". All topsoil within areas to be used for vehicle and equipment traffic, parking and material laydown

will be stripped and stockpiled. No vehicles or equipment will be allowed outside the designated work area without approval from the Environmental Manager. The work area will be defined by the minimum area of disturbance possible within the proposed lease area. When open trench is required for cable installation all topsoil stripped from work areas will be stockpiled separately from excavated materials. All topsoil shall be stockpiled immediately adjacent to the area where it was stripped and shall be used for restoration of the area.

2. *during the life span of the solar operation;*

DRS Response:

Soils will be covered in native ground cover such as clover and typical grasses, which will be maintained by mowing and hand pruning. This action should act to recharge soil nutrients, and nutrient cycling over time, similar to land fallowing methods many farms employ. Land fallowing is a common practice where land is left undisturbed except to avoid overgrowth, so that is may be later reclaimed as cropland or pastureland with better soil quality. In New York State, on any given year, up to 40 percent of all agricultural land is fallowed, as soils are recharged.

3. *and upon the return of these soils to agricultural use.*

DRS Response:

During decommissioning of the solar energy system, soils will be restored in accordance with NYSDAM "**Guidelines for Agricultural Mitigation for Solar Energy Projects (Revision 4/19/2018)**", and Town Code Chapter 165, to mitigate impacts in soil quality during decommissioning. Soils will be decompacted to the state they are in today, as grazing land.

The process of Decommissioning is similar to Construction, but most steps are performed in reverse. All topsoil within areas to be used for vehicle and equipment traffic, parking and material laydown will be stripped and stockpiled. No vehicles or equipment will be allowed outside the designated work area without approval from the Environmental Manager. The work area will be defined by the minimum area of disturbance possible within the proposed lease area. When open trench is required for cable removal all topsoil stripped from work areas will be stockpiled separately from excavated materials. Some cables may be left underground, so as not to disturb soils, as recommended by the NYSDAM. All topsoil shall be stockpiled immediately adjacent to the area where it was stripped and shall be used for restoration of the area.

4. *In addition, the applicant is to delineate and identify the extent of acreage involved with the placement of the solar arrays.*

DRS Response:
The area comprised of Solar Energy System equipment (panels and inverter pads) will be 9.4 acres. The proposed fenced area is a total of 29.9 acres. Including the access road into the site and a generous assumption for perimeter landscaping area, the total area of disturbance will be approximately 35 acres.

5. *Also, the applicant is to identify how the pasture land underneath the solar panels are going to be maintained during the operation of the solar arrays.*

DRS Response:
DRS will use a local landscape company to mow and maintain ground cover vegetation, and trim any landscape screening periodically over the lifespan of the solar energy system. Ground maintenance site visits would occur approximately 3 to 4 times per year, by 1 vehicle carrying a riding lawn mower and two maintenance workers who would park inside the system access road. If after a period of time it is determined to be feasible to herd and raise sheep on the land, sheep can be brought onto the site to graze inside the project area fence to maintain ground cover, instead of mowing. The sheep farming would either be managed by DRS directly, or, through a local farmer DRS would contract with to provide vegetative maintenance.

6. *Finally, the applicant is to identify what guarantees there will be to have the proposed sheep maintain the pastureland underneath the solar arrays.*

DRS Response:
DRS has not specifically proposed to graze sheep at the Solar Energy System, but has referred to the use of sheep on other systems DRS operates to control ground cover, and make fuller use of the agricultural land. DRS has also mentioned that Yellow Mills Road Solar may be a suitable location for collocated sheep within the solar system. Currently, DRS is proposing to maintain vegetation by mowing approximately 3 to 4 times per year. After construction is complete, DRS will later study and explore introducing sheep to the operation of the solar energy system. Sheep grazing is a promising option DRS wishes to explore, which will require time for planning and coordination with local sheep farmers who DRS would contract with, as well as the potential construction of a small barn to house the sheep and farm equipment needed. Should sheep farming be possible, sheep would graze the land in weather appropriate months, and live and graze inside the system, helping to maintain ground cover.

It would be a natural choice to assume the cattle onsite could graze the land, however, cattle often like to rub against structures and trees to

scratch horns or foliate their hide, and their immense weight can damage panel arrays. Sheep are more docile, are much smaller, and unlike goats which like cows are also not suitable inside solar farms, sheep do not jump or eat cable wiring. Sheep find solar farms provide great shade and shelter from rain and wind, and plenty of grass and foliage to eat.

8a. **MODERATE TO LARGE IMPACT:** The proposed action may impact soil classified within soil group 1 through 4 of the NYS Land Classification System.
Request: The applicant is requested to describe the short-term and long-term impacts associated with the loss of Class 1 through 4 Soils from the farming operations. In addition, the applicant is requested to identify any cumulative efforts associated with the conversion of these farmland soils upon adjacent farming operations.

DRS Response:

Please refer to Appendix D - NYSDAM Notice of Intent review, which "**determined that the proposed action would not have an unreasonably adverse effect on the continuing viability of farm enterprises within the district or State environmental plans, policies and objectives.**"

The NYSDAM NOI Final Determination confirms that the operation of a solar energy system will not adversely impact the cattle farm onsite, or, any other farm activity in the area. Furthermore, cattle grazing does not actively make use of Class 1-4 Soils as crop land, as cattle grazing land is predominantly left as grass cover and is not cropped. The primary factor in why soils are classified into Class 1-4 is to determine where the most suitable crop soils are located, so they can be protected, planned for, and monitored over time. Since the soils on the subject parcel are not currently cropped, and are only grazed, and reclamation of these soils will still occur after decommissioning, these soils will be preserved in the long term for both pasture grazing and/or cropland use – two options the land also has today.

Please refer to the narrative questions in Part 8 asked by the Planning Board prior to this question, 8a, on short term impacts to Class 1 through 4 soils. Short- and long-term impacts will also include the financial strengthening of the landowner and their family farm over time, through greater lease payments than the land currently can obtain from farm activity. This will ensure the family farm stays in Farmington, and the risk of losing the land to subdividing or other development that may be permanent, like housing, will be reduced in both the short and long term.

In regards to "*cumulative efforts associated with the conversion of these farmland soils upon adjacent farming operations"* there will be no adverse impact onsite or other adjacent farm operations, as the development will

be contained within only the leased area of the subject parcel, and the farm operations on adjacent parcels can operate as they do today with no impact on the solar energy system. In addition, the inert nature of the proposal – it will generate little to no noise, odor, light or traffic - is particularly notable in terms of its limited impacts to adjacent farm and non-farm parcels.

Moreover, should the four (4) Area Variances be granted by the Zoning Board, the interior setbacks between the systems will be reduced, in large part to maintain more contiguous grazing area outside of the system that is not broken up by three separate solar systems. This action is considered a mitigating effect by the NYSDAM, which recommends that if the Zoning Board grants the Area Variances, NYSDAM will consider this a positive mitigation to preserve the cattle farm operations.

The cattle farm pasture fence will be realigned outside the perimeter of the system fence, and the cattle will have enough land to graze on outside of the leased area, which has been verified by the farmer. The realignment of cattle fences will involve the replacement of much of the fence, while improving it. Cattle will have ample space to traverse the parcel, much as they do today. A 30 foot wide path will be installed through the middle of the system, leading from the existing cattle barn to the western grazing pastures, so that cattle and farm equipment can traverse the parcel unimpeded. There will also be access around the east, north and south sides of the solar system perimeter. Along the north passage route, a 4-way positional cattle 'crash-fence' will be installed across the shared access road for the solar energy system and the cattle farm. When site access is required by DRS solar system workers, this gate can separate the cattle pasture from the access road, ensuring the safety of workers, and that cattle do not wander off the property or into the solar energy system. When site access is required by the cattle farmer, cattle can be diverted to pasture areas, and not the solar energy system. All site access by DRS will be coordinated with the farm owner, so that no impedance of cattle or farm operations occurs. This design was made with the landowner, to ensure the shared access road can be utilized appropriately and safely.

The NYSDAM NOI Final Determination confirms that the operation of a solar energy system will not adversely impact the cattle farm onsite, or, any other farm activity in the area. The subject parcel zoning designation will not change from Agricultural Residential, but it will obtain a Special Use Permit that allows the solar energy system to be a permissible use on this land use classification, and therefore, no adjacent parcels will be impacted by changes in use of zoning. While the development of a solar energy system will be noticeable and different from other uses on adjacent parcels, its impact will be minimal, unobtrusive, passive, and will not have an impact on farm operations of adjoining parcels. The impact will be in

harmony with the agricultural uses of the area and will therefore be insignificant.

8c. **SMALL IMPACT:** The proposed action may result in the excavation or compaction of the soil profile of active agricultural land.

Request: The applicant is requested to describe

1. *How excavation or compaction of the soils will be mitigated during construction, on-going during the life of the project, and then reclaimed for continued agricultural use.*

DRS Response:

Excavation and compaction of soils will be mitigated during each phase as follows:

a. **During construction:** Construction practices will conform to the NYSDAM guidelines for solar energy systems, as well as in accordance with Town Law Chapter 165.
b. **During operations:** Soil compaction will not be an issue to mitigate during operations, since there will be no construction activity, or, heavy equipment passing over the land. At most, a 4x4 passenger pickup truck will enter the site via the access road, and only in rare cases, will they leave the access road to travel across other parts of the system. In rare cases these pick-up trucks may make trips to areas of the solar farm to maintain parts of the system. Otherwise, a riding lawnmower, foot traffic by workers, or, sheep if they are implemented into the operations of the solar energy system, will be the only activity onsite that could cause unnatural soil compaction, which is similar to the type of compaction that currently occurs onsite as a result of the cattle who graze the land.
c. **During decommissioning:** Decommissioning practices will conform to the NYSDAM guidelines for solar energy systems, as well as in accordance with Town Law Chapter 165, to ensure proper restoration and decompaction of soils to preconstruction quality as a grazing pasture.

2. *Compare the descriptions to guidelines from the New York State Department of Agriculture and Markets and the requirements in Chapter 165 of the Farmington Town Code.*

DRS Response:

The Town of Farmington Solar Law, Chapter 165 of the Farmington Town Code codified the 2017 version of the NYSDAM "**Guidelines for Agricultural Mitigation for Solar Energy Projects**" (NYSDAM Guidelines). Since the adoption of Chapter 165, the NYSDAM has updated their guiltiness, and is currently in the process of updating them again. As guidelines, they are subject to change, and are not law,

however, the Town of Farmington codified them as law by adopting them into their Solar Law.

The two main differences between the NYSDAM Guidelines and Town Code Chapter 165 are:

a. The largest difference between the NYSDAM Guidelines and Town Code Chapter 165, are that the NYSDAM guidelines are guidelines, and are therefore inherently flexible and adaptable to site conditions, while the Town Code is a land use law, and is more inflexible.
b. Chapter 165 requires more specific seasonally appropriate construction and soil reclamation practices which are consistent with the unique climate of Agricultural District 1 of Ontario County. Some construction and soil reclamation practices are not permitted in certain months, "unless favorable soil moisture conditions exist." The NYSDAM Guidelines are more general, in part, due to the nature that they are guidelines for the entire State of New York, and its many different climates and agricultural districts.
c. The Town Code Chapter 165 was written at a time when Community Solar Energy systems could only be built to a maximum of 2 Mega Watts AC per parcel. Today, the maximum size is 5 Mega Watts AC per parcel. The NYSDAM Guidelines were updated since this increase in maximum size was implemented and will be further revised in 2019 to reflect comments on construction management best practices offered by the public. In order make Chapter 165 and the NYSDAM Guidelines copacetic over time, Chapter 165 will need to be amended, which by law requires at least one public hearing and a Town Board vote, while the NYSDAM Guidelines may simply be rewritten and approved by the Commissioner of NYSDAM, and uploaded to the NYSDAM website.

3. *The applicant is also requested to provide the anticipated length of trench and depth for the underground cables and if they will be direct bury, in conduits or encased in concrete in duct banks. This information will have an effect on the amount of disturbance to the Class 1–4 Soils.*

DRS Response:
Please see below for lengths and depths required by the National Electric Code for the two main types of wiring used – Low Voltage and Medium Voltage wiring.

- **Low Voltage cables** – used to connect solar panel arrays to each other in string, and then to the Inverter and Transformer station.

- LENGTH: 3,950 linear feet
- DEPTH: Underground trenching will be between 34.5 inches and 49.5 inches.
- COVER: In conduits (if underground) or in trays (if above ground, attached to racking structure). Combinations of each cable cover type can be used and are dependent on site characteristics at time of construction.

- **Medium Voltage cables** – used to make connections from the Inverter and Transformer station, to the Utility Overhead Electric Lines at Fox Road.
  - LENGHT: 2,400 linear feet
  - DEPTH: Underground trenching will be between 34.5 inches and 49.5 inches.
  - COVER: Cables will be laid underground in conduit where practical on site conditions and will connect to a riser pole to Utility Overhead Electric Lines at Fox Road, as required by the Rochester Gas and Electric (RG&E) Utility Interconnection Standards.

8e. **SMALLL IMPACT:** The proposed action may disrupt or prevent installation of an agricultural land management system.
Request: The applicant is to describe whether or not drainage improvements exist in the area of the proposed action. If they do, how are these improvements going to be protected?

DRS Response:
DRS has verified with the landowner that no drainage systems (tiles or other system) are implemented on the property or within the area of the proposed action.

9. Impact on Aesthetic Resources

DRS Response:
As per DEC Guidance, such as the SEQR EAF Workbook for example, this question deals with resources that are "officially designated and publicly accessible." In answering these questions, the first inquiry, the DEC advises that we should "first determine if an officially designated scenic or aesthetic resource is present." If not, then the question should be answered in the negative. We are unaware of any such resources and, as such, believe this question and its subparts should be answered in the negative, indicating that no potentially significant adverse impacts will be triggered on this topic.

9c. **SMALL IMPACT:** The proposed action may be visible from publicly accessible vantage points.
Request: The applicant is to identify if there are any publicly accessible vantage points, their location(s), and whether such visibility would be seasonal or year 'round.

DRS Response:
We are unaware of any officially designated vantage points that may be impacted by the proposed action.

(I). **MODERATE TO LARGE IMPACT:** Seasonally (e.g., screened by summer foliage, but visible during other seasons).
Request: The applicant is to describe what mitigation measures can be provided to create a year 'round screening of the solar arrays. Describe in detail the proposed plantings and what these plantings will provide both in the short term and long term.

DRS Response:
While we are unaware of any officially designated aesthetic resources in the area, the Preliminary Landscape plan has been amended to provide stronger screening. This updated proposal replaces all shrubs in the previous Preliminary Landscape Plan submitted in December 2018, with evergreen trees. The updated planting plan includes a mix evergreen trees consisting of:

- 330 Arborvitae lining the system in between the cattle fence and the system fence and will be planted at a minimum of 4 feet tall at planting and will be spaced 7.5 feet on center. The placement of trees inside the fences will protect them from deer, who are weary to enter a parcel full of cattle. These trees can grow to a height of 30 to 40 feet tall and will provide a thick year 'round screen. This variety of tree grows an average of 1 foot per year, and so in 5 years, the trees will be roughly the same height as, or taller than the solar arrays.

- 21 White Pine and Blue Spruce located in the Northwest corner of the parcel, to strengthen the 300 feet of existing deciduous vegetation and trees from properties and vehicular traffic on Fox Road. These trees will grow to a height of 40 to 85 feet tall and will provide a thick year 'round screen. This variety of tree grows an average of 1 foot per year, and so in 5 years, the trees will be roughly the same height as the solar arrays.

- 20 White Pine and Blue Spruce located in the Southeast corner of the parcel, to enhance the existing southern hedgerow and add screening from Yellow Mills Road that will overlap the arborvitae proposed along the fence line. These trees will grow to a height of 40 to 85 feet tall and will provide a thick year 'round screen. This variety of tree grows an average of 1 foot per year, and so in 5 years, the trees will be roughly the same height as the solar arrays.

The updated Preliminary Landscape Plan is still subject to change based on Planning Board comment in Site Plan and Special Permit review of the solar energy system, which occurs after a SEQR determination is made. DRS commits to working with the Planning Board to ensure to the greatest extent practical, that visual impacts are appropriately mitigated. Therefore, while this impact will be created, it will be mitigated a great extent in conformity with a Special Use Permit, and therefore, is an insignificant impact.

(ii). **MODERATE TO LARGE IMPACT:** Year 'round.
Request: The applicant is to describe what mitigation measures can be provided to create a year 'round screening of the solar arrays. Describe in detail the proposed plantings and what these plantings will provide both in the short term and long term.

DRS Response:
See response to 9c.(i). The revised landscape plan will provide better year 'round buffering of Solar Energy System.

9d. The situation or activity in which viewers are engaged while viewing the proposed action is:

(i). **SMALL IMPACT:** Routine travel by residents, including travel to and from work.
Request: The applicant is to describe what attractions to motorists will be created by the proposed solar arrays. For example, will there be glare from the panels that would distract the motorists' attention when traveling along the adjacent highways or when entering the intersection of Fox Road and Yellow Mills Road.

DRS Response:
In regard to views that drivers may have, please refer to the Visual Renderings of the proposed action submitted in December 2018, and revised in January 2019 with more vantage points. Since the system is located several hundred feet from any public road, the system will appear shorter than the cows that graze the land. In the visual renderings, the system is so far away from the road that it appears to blend in with the

contours and natural features of the landscape. This is largely due to the increased setbacks that will be possible should the four (4) Area Variances be granted to reduce the setbacks between the systems, in part so that setbacks can be increased from the public roads and reduce visual impacts. With the newly revised landscape plan as of May 30, 2019, these minimal and insignificant views will be even further screened.

Regarding glare, the solar panels are mounted in a fixed-tilt arrangement, facing south directly away from Fox Road, and in line with the orientation of Yellow Mills Road, which runs north and south. Since the solar panels are fixed tilt, they will not move, and are designed to absorb sunlight, not reflect it, and will not emit glare onto either road adjacent to the property.

Regarding what drivers may see as they pass by the solar energy system, cars can travel up to 55mph on both Yellow Mills Road and Fox Road. At this speed, the view of the solar farm location would be visible for a few seconds as cars pass by.

Here is a summation of views of the solar energy system from driver approaches that are possible on public roads:

a. Drivers on Fox Road approaching east towards the intersection with Yellow Mills would slow to the stop sign at the intersection, however, views of the solar energy system would already be behind the driver at these distances and would be largely unnoticeable. A thick natural hedge row of mature trees, topography and vegetation exists along most of this route, prior to reaching the Access Road for the solar energy system which is before the intersection of Yellow Mills. This thick natural buffer will be strengthened by the updated landscape plan with evergreen trees. Only after passing the access road would drivers have a view of the solar energy system, and at which point, it will be located mostly behind the drivers line of sight.

b. Drivers on Fox Road approaching west towards the intersection with Yellow Mills would slow to the stop sign at the intersection, however, views of the solar energy system would be at a minimum 590 feet from the driver, behind adequate vegetative screening. At this distance, as shown in the Visual Renderings of the proposed action, the solar energy system appears to blend in with the contours of the land, and is barely discernable. After the landscape screening has been in place for approximately 5 years, these views would be fully screened by mature trees at the same height as, or taller than the panels, and drivers would see a thick and full row of Arborvitae with cattle in front of these trees.

c. Drivers on Yellow Mills Road approaching south towards the intersection with Yellow Mills would slow to the stop sign at the intersection, however, views of the solar energy system would be at a minimum 590 feet from the driver, behind adequate vegetative screening. After the landscape screening has been in place for approximately 5 years, these views would be fully screened by mature trees at the same height as, or taller than the panels. Corn and other crops are often planted along the parcel that buffers the intersection view from the west, and would also act as a visual screen partly through the year.

d. Drivers on Yellow Mills Road approaching north towards the intersection with Yellow Mills would slow to the stop sign at the intersection, however, views of the solar energy system would be behind the driver at these distances, and largely unnoticeable behind adequate vegetative screening. After the landscape screening has been in place for approximately 5 years, these views would be fully screened by mature trees at the same height as, or taller than the panels. Corn and other crops are often planted along the road front of the subject parcel with Yellow Mills Road, which would also act as a visual screen partly through the year, as drivers move north along the road. This route would have the most direct views of the solar energy system, and would also be screened by 21 White Pine trees planted in the southeast corner of the parcel, and the 330 Arborvitae along the perimeter of the solar energy system. The cattle barn, another smaller barn, a silo, the home and its detached garage, and several mature trees located on the subject parcel would each also act as a permanent visual screen.

In the initial application DRS submitted in August 2018, it was noted that a Traffic Mitigation Plan can be created for the construction and decommissioning periods, so that driver awareness of the construction site can be managed and road safety can be paramount. DRS was not requested to create this plan, but can still commit to creating this plan, which would further mitigate visual impacts, and improve safety. This plan can include actions like hiring traffic flaggers to warn drivers of the construction site access road location and to stop and slow traffic when all construction related vehicles enter or leave the premise. This plan also includes regular traffic awareness practices, such as road signage, and access road construction entrance signage to clearly indicate where the construction site is located off road.

(ii). **SMALL IMPACT:** Recreational or tourism-based activities.
Request: The applicant is to identify what recreational or tourism-based activities have been documented in this area of the Town and how those activities would be affected by the proposed action.

DRS Response:

Northeast Farmington is home to a few recreational and tourism based activities that are unique to the character of the community. Yellow Mills Solar will have a minimal to no impact on these activities. Listed below are several activities:

- Various greenhouses, farm markets and farm stands in the area are open seasonally, and attract visitors from the region seeking fresh produce, plants, vegetables and farm products. These activities are located far enough away to not be impacted by the proposed action. The closest such uses are:
    - Fish's Farm Market and Greenhouse, which also operates Community Supported Agriculture subscription, and is located 2 miles south of the proposed action off Yellow Mills Road.
    - Morrisey Farms is a local farm and produce store, located approximately 2.5 miles northeast of the proposed action. Morrisey Farms won the "Best In Show" prize for corn at the New York State Fair.

- The Smith Family Farm Museum is located approximately 2.7 miles northeast of the proposed action. It is operated by the Church of Later Day Saints, and according to its website, "The Smith Family Farm, in Palmyra and Manchester, New York, is open to the public year-round. This historic site is located on the 100 acres of land cultivated by the Smith family in the 1820s." This activity is located far enough away to not be impacted by the proposed action.

- The Church of Latter Day Saints, Hill Cumorah Visitor Center is located 3.4 miles east of the proposed action, or, a 6 minute drive, in the Town of Manchester. Hill Cumorah itself is a drumlin hill, around which a religious center is built which attracts many people globally for events and worship. This activity is located far enough away to not be impacted by the proposed action.

Many solar farms in New York State are themselves tourist attractions, and Yellow Mills Solar will join them. People and families regularly take "Sunday Drives" through the country to pass by and see and count solar farms, and learn about how their communities are making strong, lasting efforts to provide a more sustainable world for future generations. While they do these activities, people are also more apt to exploring and experiencing other areas of the communities they visit.

10. Impact on Historic and Archaeological Resources

No Supplemental Narrative is requested.

11. Impact on Open Space and Recreation

11a. SMALL IMPACT: The proposed action may result in an impairment of natural functions, or "ecosystem services," provided by an undeveloped area, including but not limited to storm water storage, nutrient cycling, wildlife habitat.

Request: The applicant is requested to provide documentation as to how the proposed solar arrays will adversely impact existing wildlife habitats on the site and in the area. Describe how the arrays will be secured from wildlife movements and how the remaining lane ways will continue to allow wildlife habitats to co-exist.

DRS Response:

The proposed action will have minimal to no impact on existing wildlife habitats and movement on the site and in the area that is different than current habitat movements. A typical farm fence will be used to surround the solar system, outside of which will be sited a landscaped buffer, and the electrified cattle fence that currently exists on the parcel, to prevent the cattle from accessing the solar energy system. Both fences will have gaps large enough to allow small wildlife animals to pass across the parcel as they do now.

Cattle pathways run through the center, and over the north and south ends of the solar energy system will allow cattle and other wildlife to traverse across the system. The presence of cattle and bulls, and the electrified cattle fences will prevent and discourage deer and other large animals from entering and traversing the parcel, as they are today, and there should be no change in these types of movements or habitat use of the subject parcel or surrounding area.

Solar energy systems create unique habitats for birds and wildlife, as they are passive systems where animals can find shelter and shade under the panels. Many species of birds are often seen nesting under panels, and small grassland animals such as rabbits, squirrels, foxes and such are often seen finding habitat in the grassy meadow-like area that fills and surrounds solar energy systems. Moreover, the area is currently used as a pasture and home to livestock, and is thus not primarily used as a wildlife habitat.

12. Impact on Critical Environmental Areas

No Supplemental Narrative is requested.

13. Impact on Transportation

No Supplemental Narrative is requested.

14. Impact on Energy

No Supplemental Narrative is requested.

15. Impact on Noise, Odor and Light

Request: Provide lighting information.

15d. SMALL IMPACT: The proposed action may result in light shining onto adjoining properties.

Request: The applicant is to describe how site lighting will exist. What measures will be taken to ensure that light glare onto adjacent properties will not adversely affect the neighborhood's "dark sky" conditions.

DRS Response:

No lighting will be used for the proposed action, other than one single small light which will be used only in rare cases where the solar energy system must be accessed at night, in the rare event where the system must be serviced. A small switch activated light with a 60 watt bulb will be installed at the Inverter and Transformer pad, located 650 feet from the Fox Road parcel line, inside the system fence and behind rows of solar arrays. The light is necessary for safety of workers in case of any need to visit the system at night. The light will be "dark sky" compliant in accordance with Town Code Chapter 165, and lighting will not glare onto adjoining properties.

15e. SMALL IMPACT: The proposed action may result in lighting creating sky-glow brighter than existing area conditions.

Request: The applicant is to describe how site lighting will comply with the Town's Lighting Regulations contained in Town Code Chapter 165.

DRS Response:

No lighting will be used for the proposed action, other than one single small light which will be used only in rare cases where the solar energy system must be accessed at night, in the rare event where the system must be serviced. A small switch activated light with a 60 watt bulb will be installed at the Inverter and Transformer pad, located 650 feet from the Fox Road parcel line, inside the system fence and behind rows of solar arrays. The light is necessary for safety of workers in case of any need to visit the system at night. The light will be "dark sky" compliant in accordance with Town Code Chapter 165, and lighting will not glare onto adjoining properties.

16. Impact on Human Health

16d. **SMALL IMPACT:** The site of the action is subject to an institutional control limiting the use of the property (e.g., easement or deed restriction).
Request: The applicant is to provide a list of all proposed easements, their purposes and from whom they will be required. Also, provide information on whether or not any deed restrictions are in effect upon this property that would prevent the proposed solar operation.

DRS Response:
DRS is unaware of any easements, deed restrictions or other similar controls that would prevent the operation of the proposed action. DRS will obtain all necessary easements to operate the solar energy system. Easements will made be between the landowner and the solar systems, to allow cross-access and shared use of the lands for solar system and farm operations across the entire parcel, and all subdivisions of the property. As verified with the landowner, there are no deed restrictions on the property that may prevent appropriate cross access easements from being obtained.

16f. **SMALL IMPACT:** The proposed action has adequate control measures in place to ensure that future generation, treatment and/or disposal of hazardous wastes will be protective of the environment and human health.
Request: Provide details of the decommissioning plan, i.e., why is it necessary and who is responsible for providing sureties to the Town. Describe what matters are typically addressed in such a plan and what, if any, unique stipulations may exist for this site that would affect a standard decommissioning plan.

DRS Response:
A decommissioning plan and decommissioning surety are required by the Farmington Town Code Chapter 165 to ensure the solar energy system can be removed should it ever be abandoned and become non-operational. DRS is responsible for providing the decommissioning surety to the Town of Farmington, which will be held in a secure account the Town may draw from, in the event the Town must perform decommissioning. The decommissioning plan will be on file with the Town, in the event the Town becomes responsible for any reason to decommission the system. If this were to happen, it is likely they Town would seek and hire a qualified company that can perform the decommissioning, in adherence to the decommissioning plan. For more details, please refer to the Draft Decommissioning Plan that was submitted with the initial application.

No building permits may be issued until the Decommissioning Plan is agreed to by the Planning Board, and a Decommissioning Surety is in place and held by the Town Clerk. Unique stipulations that will be required for the proposed action will include compliance with NYSDAM Siting Guidelines, and Town Code Chapter 165 for soil restoration. Since

decommissioning will return the land to its current use as grazing pastureland, there will be no significant impact caused by the proposed action.

17. Consistence with Community Plans

DRS Response:

The premise of this question (thus leading to the sub-questions below) is that the "proposed action is not consistent with the adopted land use plans." However, to the contrary, the proposal is in fact, consistent with Town land use plans given that the Town Code itself expressly permits the proposal, subject to a special use permit. Given that the proposed action is a specially permitted use, it carries a legal presumption that it is in fact consistent with the character of the underlying zoning district in which it is permitted. The New York Court of Appeals has specifically held that "[t]he inclusion of the permitted use in the ordinance is tantamount to a legislative finding that the permitted use is in harmony with the general zoning plan and will not adversely affect the neighborhood." *N. Shore Steak House, Inc. v. Bd. of Appeals of Inc. Vil. of Thomaston*, 30 N.Y.2d 238, 243 (1972). As such, without the need to delve further into the sub-questions below (as the answer to the above parent question is "no"), the proposal is consistent with community plans and will not have a potentially significant adverse environmental impact in relation to this topic. However, to be as detailed and helpful as possible, we will answer the sub-questions below.

17a. MODERATE TO LARGE IMPACT: The proposed action's land use components may be different from, or in sharp contrast to, current surrounding land use pattern(s).

Request: The applicant is requested to provide a narrative of the existing conditions in the neighborhood and the character of this area of the community. In addition, the applicant is to provide information on how effective screening and landscaping of the solar arrays can be accomplished. Provide details why a particular solution may or may not work in the long term (e.g., both on continued agricultural operations and any adverse effects upon the operation of the solar arrays) during the life of the project.

DRS Response:

The subject parcel is located in the Ontario County Agricultural District 1, in the north east section of the Town of Farmington, approximately 5 miles south of the Town of Macedon and Wayne County border. The parcel is owned by the Smith Family, who raise approximately 160 head of cattle and grow feedstock (typically hay) on the subject parcel, along with 2 donkeys and 17 chickens. The Smith's have owned and farmed this parcel for over 30 years, and are a multigenerational farming family. The homestead on the parcel is occupied by the younger Smith son and his family, who have updated the original farmstead home and tend to the livestock and farm operations. The Smith parents, Roger and Carol Smith, are owners of the parcel and live on Fox Road, approximately a quarter mile to the west of the Project Site. Roger Smith, the landowner, drives a

local milk route for Upstate Dairy, and houses these vehicles on the Fox Road property. In 2018 Approximately 69.2 acres of 466 Yellow Mills Road was used for grazing pasture, and 26.8 acres are used for growing hay. An adjoining and connecting 21.1 acre parcel to the west along Fox Road is also owned by the Smith's, and is used for grazing and hay as well. Most of the grazing pastures can be rotated for hay production as needed, and approximately 50 acres of both parcels are not used for either pasture land or crop land due to wetland features.

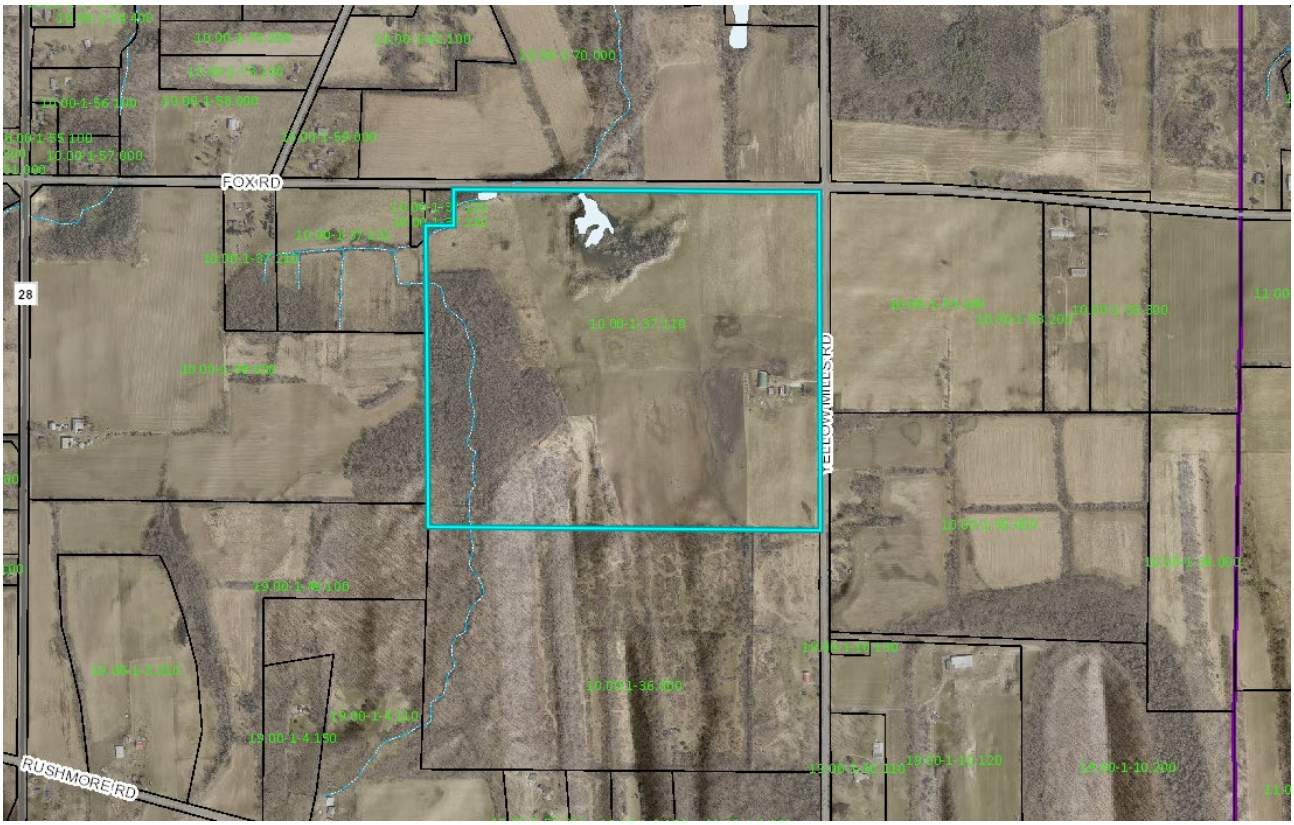
According to the Ontario County Soil and Water Conservation Worksheet, topography and wetland features on the subject parcel are common in this area of Agricultural District 1, and are unique to the area. These features have shaped the agricultural uses of the district, and the location of homesteads on each parcel. On the subject parcel, a large and tall drumlin with slopes greater than 5% rises from the south center of the parcel, extending approximately 1,070 feet into the center of the parcel, and stands 80 feet tall. These slopes are too steep to allow solar array development on them, and are avoided in the site plan design. This drumlin has been largely stripped of trees and is used as grazing pasture. Approximately 36.5 acres of wetlands and forest surround the south and west of the parcel. Similar topographical features can be found on other parcels in the area, giving the area a sense of rolling hills, interspersed with farms bounded by hedgerows, homesteads, and occasional residential uses.

The subject property is similar to many other farm homestead parcels in the area with active farming and residential uses onsite. Typical farming activities include crop fields, cattle farms, horse stables, and older orchards. There are some residential lots in the surrounding area, and there are exactly 3 residential properties within 1,000 feet of the subject parcel. All other nearby residential properties are located between 1,436 feet and 3,094 feet away, or further. These residential uses vary in architecture and construction period, and are each single family homes, some with accessory structures such as barns, cottages, gazeboes and detached garages. Immediately across the location of the proposed access road on the subject parcel is an unlisted structure that appears to be used as a residential use, and has ground mounted solar arrays in the front yard facing Fox Road, which presumably powers this structure. Notably, there is a prominent cobblestone home located at the corner of Fox Road and Ellsworth Road, which could be listed on the National Register of Historic Places, but has not been registered to date. This cobblestone home is one of roughly 13 in the Town of Farmington, and much study on the history of this home and other cobblestone structures has been done by the Town Historian.

To date, DRS has received a No Impact letter from the New York State Department of Recreation – State Historic Preservation Office (SHPO), which concludes that no significant historic resources, including all cobblestone homes in the area, will be adversely impacted by the proposed action, and no further study or mitigation is required by the Project Sponsor for the proposed action.

To further understand the context of the community in relation to the proposed action's location, please refer to the table below for a detailed description of all parcels and residential uses in the area of the subject parcel. This table shows the distances of each residential structure and unoccupied parcel away from the subject parcel, and the subject action (noted in the column labeled "Approximate Distance to Array from Structure"). It is evident by this table that the proposed action will be sited further away from any adjoining structure, than any existing structure is located away from other existing structures.

Tax Parcel	Structure on Parcel	Approximate Distance to Array From Edge of Property	Approximate Distance to Array From Structure	Relative Location		Tax Parcel	Structure on Parcel	Approximate Distance to Array From Edge of Property	Approximate Distance to Array From Structure	Relative Location
10.00-1-36.000	Yes	413ft	1,436ft	S		19.00-1-10.200	No	1,252ft	-	SE
10.00-1-70.000	Yes	416ft	701ft	N		19.00-1-10.130	No	1,319ft	-	SE
10.00-1-33.100	No	465ft	-	E		19.00-1-10.120	Yes	1,427ft	1,868ft	SE
10.00-1-35.000	Yes	594ft	685ft	SE		10.00-1-59.000	Yes	1,446ft	1,565ft	NW
10.00-1-32.000	Yes	625ft	1,495ft	NE		10.00-1-62.100	No	1,474ft	-	NW
10.00-1-37.120	Yes	643ft	720ft	NW		19.00-1-4.110	Yes	1,503ft	2,821ft	SW
10.00-1-37.131	No	716ft	-	W		19.00-1-10.110	Yes	1,747ft	2,148ft	SE
10.00-1-37.132	No	749ft	-	NW		10.00-1-33.200	Yes	1,914ft	1,940ft	E
10.00-1-38.000	Yes	1,048ft	3,094ft	W		10.00-1-62.200	Yes	1,976ft	2,136ft	NW
19.00-1-49.100	No	1,188ft	-	SW						



The map above shows where each parcel is located in the table above. The above table was provided to the Planning Board and general public in December 2018, in a report titled "Yellow Mills Road Solar Project - Property Value Impact Analysis, Prepared for Town of Farmington Planning Board Meeting December 5, 2018". This report was created to address concerns from some residents over property value impacts associated with the installation of the proposed solar energy system. The main conclusions of this report show there should be no adverse impacts to property values in the area, based on other similar types of developments across New York State. The main conclusions are:

- No Town Assessor contacted by DRS across New York State is considering lowering the assessed value of homes near any constructed and operational solar energy system, therefore implying that property values are at least stable or are rising in areas surrounding solar energy system development.
- While there are thousands of solar farms in operation across the country, DRS has seen no evidence of property values of surrounding properties being affected negatively by solar farm development, anywhere in New York State, or in the United States.
- DRS's research shows that while individual homes may experience a change in their views, appropriate landscaping

and vegetative screening can mitigate this effect and will result in no change to specific property values.

- The property values of all residents of the Town will see positive effects of the efforts to be more environmentally responsible.
- Neighboring residents can be assured that while the solar system is in operation, the land will not be used for other more intensive uses that are possible on the land, such as pig farming.

Please also refer to Appendix C attached to this Supplemental Narrative, provided by the Massachusetts Department of Environmental Conservation. Mass DEC specifically states no evidence has been found to implicate property value decreases resulting from ground-mounted solar installations, and recommends that municipalities require developers to install vegetative screening around solar energy systems, to mitigate impacts from views. Today, Massachusetts has twice as many ground mounted solar energy systems as New York does, having implemented Clean Energy Standard mandates several years prior to, and more aggressively than New York State has. Since 2009, ground mounted solar was possible to develop in Massachusetts – a climate very similar to New York State – and over 2,500 Megawatts of solar has been installed.

In regards to the considerations of designing the extensive vegetative screening, the Preliminary Landscape Plan was updated with the submittal of these responses. A thicker landscape buffer will border the perimeter of the solar energy system from all sides where a view may be possible from an adjoining parcel or structure. On sides where buffering will not be installed, extensive wetland forest already exists. This landscape plan will help to ensure that views are properly screened. During the NYSDAM review of the Notice of Intent for the proposed action, it was discovered that planting trees along the property line closer to public roads would not be preferred by NYSDAM, since the required setbacks of those trees would necessitate placement of trees diagonally across active crop and pastureland, resulting in the loss of active contiguous use of these soils. This diagonal, triangle shape would be created by maintaining a site-line distance setback of 350 feet from the intersection, to provide drivers visibility of seeing other drivers also approaching the intersection. The diagonal row of trees would begin approximately 350 feet from either end of the intersection, and extend in a straight line between these two points, breaking the pastureland and one crop field. In addition, the decommissioning of the solar energy system as required by the NYSDAM NOI and Town Code Chapter 165 would require the removal of these trees, to restore the active farm use as it exists today. The action of removing these trees would also remove Class 1-4 Soils collected by the tree root balls, which would be dug up with each

tree. In order to adequately screen the solar energy system, and ensure that decommissioning actions did not remove Class 1-4 Soils from the farm, Arborvitae are proposed to be planted inside the cattle fence, and outside of the solar energy system perimeter fence. When Arborvitae are removed, their root balls are also removed, but will hold less soil than more mature and robust evergreen trees such as White Pine and Blue Spruce. White Pine has been proposed as vegetative screening in areas of the subject parcel that could more naturally become, or already are, thick hedgerows of vegetative screening. These trees will not be removed at decommissioning, as they will act as natural hedgerows to complement the use of the property. The strength of this landscape plan is also aided by the Area Variances requested, which will pull the system further from all public roads, thus minimizing views, while maximizing the contiguous use of pastureland on the subject parcel.

Regarding similar uses in the area, immediately over the border of the Town Line between the Town of Manchester and Farmington, on Fox Road about .75 miles from Yellow Mills Road, is the Industrial District of Manchester. There are several active industrially zoned uses at the intersection of Fox Road and Stafford Road, as well active commercial uses, and active farm parcels which are primarily used for cattle grazing. Notably, two of the industrially zoned uses at Stafford Road have rooftop mounted solar energy systems installed, which are visible from the road, along with signs on the buildings stating the company is powered by solar energy. A 4 Megawatt AC solar farm recently approved by the Town Manchester is slated to begin construction in 2019, near Stafford Road approximately 4.5 miles east from the subject parcel, and another 20 Megawatt AC system has been proposed in the south of the Town of Manchester on County Road 13. Three solar energy systems have been approved in the Town of Macedon to the north, 2 have been built in the Town of Hopewell to the south, and 8 have been built in the Towns of Canandaigua and Geneva to the south. Thus, solar energy systems are not unique to the rural character of the larger area.

DRS herds sheep on several solar farms in New York State, and is considering this agricultural use for the Project Site to help maintain ground cover planted under the solar arrays. Sheep would herd inside the fence of the Solar System, and would be housed in a separate barn to be proposed for construction after the Solar System has been built. Sheep help maintain the ground cover inside the Solar System, minimizing the need for mowing, and add to the agricultural production of the land.

In closing, while the proposed action's land use components may be different from, or in sharp contrast to, current surrounding land use pattern(s), many suitable efforts and mitigations have been used in the site plan design, landscape plan, and decommissioning plan, to ensure that any

impacts the proposed action may have will be minimal, and unobtrusive to the greatest extent practical, and insignificant.

17c. SMALL IMPACT: The proposed action is inconsistent with any County plans, or other regional land use plans.
Request: The applicant is to identify what county or regional plans exist regarding land use in this portion of the community, what those documents may say, whether or not they have been officially adopted, and what impact the proposed action will have on those plans.

DRS Response:
DRS is unaware of any plans that the proposal may be inconsistent with. Importantly, the Town Code allows the proposal as a specially permitted use, and, presumably, in implementing the Town Code provisions permitting this use, the Town reviewed County and regional plans to ensure its Code was not in violation thereof. As such, the proposal will not have a potentially adverse environmental impact.

Listed here are regional and County plans and initiatives which the subject parcel and land use are impacted by, and are found to be in harmony with:

1. **Consolidated Agricultural District 1 Ontario County, New York Originally Established in 1979, Recertified in 2012.**
    a. The purpose of this report "is to determine if the District continues to achieve its original objective of retaining viable farmland and whether it should be continued." This report was certified by the New York State Department of Agriculture and Markets.
    b. Yellow Mills Solar is in harmony with this report, as the proposed action supports the landowners' farming operations by preserving the farm operations during the life of the solar energy system. At decommissioning, the land will be reclaimed and returned to its current state as grazing land, with no loss of agricultural land. Furthermore, the NYSDAM determined in their Notice of Intent process that no adverse impacts on the farm operations or Agricultural District 1 would be created by the proposed action, within the very Agricultural District which they certified in the 2012 Consolidated Agricultural District 1 of Ontario County.

2. **Genesee Fingerlakes Regional Planning Council (GFRPC)**. The GFRPC coordinates several regional initiatives which the Yellow Mills solar energy system is in harmony with, or is eligible to participate in. Here are some:

a. **Clean Energy Communities program** – GFRPC is the regional coordinator for the CEC program. "The NYSERDA Clean Energy Communities Program is a $16-million initiative to help local governments across the state reduce energy consumption and drive clean energy use in their communities. Local governments that complete four out of ten identified High Impact Actions will earn the Clean Energy Community designation.".
b. **Comprehensive Economic Development Strategy (CEDS), 2016-2020**. GFRPC updated the CEDS in 2016, which set out several goals and objectives for the region. Yellow Mills Solar is in harmony with meeting several of the Goals and Objectives of the CEDS:
    i. Objective 8D: To pursue opportunities for alternative energy to improve sustainability and to help lower high energy costs
    ii. 6.7.c.ii Alternative Energy - Alternative energy remains a priority within the Genesee-Finger Lakes Region. A multitude of projects are already underway utilizing various sources of energy..
    iii. The CEDSs are updated every four years. This CEDS was written in 2015, before Community Solar Systems were possible to build in New York State, and prior to New York State declaring a mandate in 2016 to reach 70 percent renewable energy by 2030, and 100 percent carbon neutral energy production by 2050. It is well within reason that in the 2021-2024 CEDS, solar energy and other forms of renewable energy will be a more prominent feature of the CEDS, over which time, the proposed action will accomplish many more goals and objectives.

18. Consistency with Community Character

DRS Response:

The premise of this question (thus leading to the sub-questions below) is that the "proposed action is inconsistent with the existing community character." However, the proposal is, in fact, consistent with Town land use plans given that the Town Code itself expressly permits the proposal, subject to a special use permit. Given that the proposed project is a specially permitted use, it carries a legal presumption that it is in fact consistent with the character of the underlying zoning district in which it is permitted. The New York Court of Appeals has specifically held that "[t]he inclusion of the permitted use in the ordinance is tantamount to a legislative finding that the permitted use is in harmony with the general zoning plan and will not adversely affect the neighborhood." *N. Shore Steak House, Inc. v. Bd. of Appeals of Inc. Vil. of Thomaston*, 30 N.Y.2d 238, 243 (1972). As such, without the need to delve further into the sub-questions

below (as the answer to the above parent question is "no"), the proposal is consistent with community character and will not have a potentially significant adverse environmental impact in relation to this topic. However, to be as detailed and helpful as possible, we will answer the sub-questions below.

18e. **MODERATE TO LARGE IMPACT:** The proposed action is inconsistent with the predominant architectural scale and character.
Request: The applicant is to provide supplemental narrative that defines how the applicant intends to mitigate the potentially large impact the proposed action is likely to have upon the existing natural landscape through the use of plantings along those portions of the project viewed along the public road.

DRS Response:
Please see response to Questions 8, 9, 17 (a) and 17 (c) that also address the character of the predominant architectural scale and character of the area. As per the above, since the proposal is consistent with the Town's zoning Code, it carries with it a legal presumption that it is consistent with the character of the neighborhood. Also, see the submitted Landscape Plans and our response to 9c.(i), which is directly responsive to this question as it details the extensive buffering/screening and landscaping that will be used. The proposal is in an area characterized as rural, agricultural and its inert nature – i.e., no material light, traffic, noise or odor are created by the proposed action – is consistent therewith. The scale of the project is limited and consistent with the area in that the height of the panels are 9 feet, its intensity is limited given its inert nature as described herein and the proposal includes substantial setbacks (ranging from 308 feet to over 540 feet from any public road), which are dramatically larger than those required by Town Code to further limit any potential impacts. Furthermore, unlike most land that is developed, this land is already cleared of trees and the proposed action will be adding extensive trees to act as a buffer. While the proposed action may have some qualities that are inconsistent with the predominant architectural scale and character of the area, unlike the predominant architecture of the area, the proposed action is semi-permanent in that it will be decommissioned and the land will be returned to its current use, and it will be extensively screened from view. Therefore the proposed action is appropriately mitigated and is not a significant adverse impact.

18f. **MODERATE TO LARGE IMPACT:** Proposed action is inconsistent with the character of the existing natural landscape.
Request: The applicant is to describe the existing natural landscape of the site, how the proposed action is either consistent or inconsistent with that character, and what mitigation measures can be provided, if any, to make the action consistent with the character of the existing natural landscape.

DRS Response:

Please see specific response to Questions 8, 9, 17 (a) and 17 (c) and 18(e), that also address the character of the natural landscape. Moreover, the proposal limits impacts to the existing natural vegetation on site. Contrary to what is expected of other typical and permissible developments on this parcel, there will be limited impacts to existing vegetation and, instead, additional vegetation (such as trees) will be added to the site (see 9(c)(i). The scale of the project is limited and consistent with the area in that the height of the panels are 9 feet, its intensity is limited given its inert nature as described herein and the proposal includes substantial setbacks (ranging from 308 feet to over 540 feet from any public road), which are dramatically larger than those required by Town Code to further limit any potential impacts. While the proposed action may have some qualities that are inconsistent with the character of the natural landscape, this action is semi-permanent and will be decommissioned to return the land to its current state, as an active pastureland, and therefore is appropriately mitigated and is not a significant adverse impact.

-----END OF COMMENTS-----