MLG | MICHAUD
RENEWABLE ENERGY LAW IS OUR BUSINESS LAWGROUP

PAUL R. MICHAUD
Managing Attorney / Principal
515 Centerpoint Drive, Suite 503
Middletown, CT 06457
Direct Telephone: (860) 338-3728
Email: pmichaud@michaud.law
Web: www.michaud.law

May 13, 2024

VIA ELECTRONIC MAIL AND HAND DELIVERY

Melanie Bachman
Executive Director
Connecticut Siting Council
10 Franklin Square
New Britain, CT 06051

Re: **PETITION NO. 1612 –** TRITEC Americas, LLC notice of election to waive exclusion from Connecticut Siting Council jurisdiction, pursuant to Connecticut General Statutes §16-50k(e), and petition for a declaratory ruling, pursuant to Connecticut General Statutes §4-176 and §16-50k, for the proposed construction, maintenance and operation of a 0.999-megawatt AC solar photovoltaic electric generating facility located at 37 Hunters Lane, Southington, Connecticut, and associated electrical interconnection. **Petitioner Response to Council Interrogatories.**

Dear Attorney Bachman:

On behalf of TRITEC Americas, LLC ("Petitioner"), please accept the enclosed responses to the interrogatories provided by the Connecticut Siting Council ("Council") on April 22, 2024.

Consistent with Council requirements, Petitioner submits an original and fifteen hard copies of all necessary documents.

Please feel free to contact me if you have any questions.

Very truly yours,

Paul R. Michaud

Paul R. Michaud

cc: Service List, 02/09/24

Petition No. 1612
TRITEC Americas, LLC
37 Hunters Lane, Southington, Connecticut

Interrogatories
April 22, 2024

Notice

1. Has TRITEC received any comments since the petition was submitted to the Council? If yes, summarize the comments and state how these comments were addressed.

   Response:

   Petitioner has not received any comments since the Petition was submitted to Council.

2. Referencing Petition p. 3, which Town officials and abutters were present at the November 3, 2023, and November 16, 2023 video conferences? How were the comments related to visibility and noise from the Town officials and abutters addressed?

   Response:

   The Town Manager, Mark Sciota, and Director of Public Works, Annette Turnquist, attended the November 3, 2023 video conference. The property owners of 83 Hunters Ln., 85 Roxbury Rd., 115 Roxbury Rd., and 8 Metals Dr., Southington attended the November 16, 2023 video conference. Petitioner explained how the pre-existing trees and vegetation and proposed vegetation buffer will keep visibility to a minimum and how Petitioner selected the proposed equipment and equipment locations to minimize noise.

Project Development

3. Referencing Petition p. 4,

   a. by what mechanism would the energy from the proposed facility provide electricity only to the Town of Southington?

   Response:

   Page 4 of the Petition does not state that the proposed Project would provide electricity only to the Town of Southington. The Petition states that the proposed Project would benefit the Town of Southington by producing "clean, carbon-free energy for the electric grid, thus reducing the Town's reliance on fossil fuels and helping to decrease greenhouse gas emissions and combat climate change," and the proposed Project, "would allow the Town to help meet Connecticut's law to achieve 100% carbon-free generation by 2040." See Petition No. 1612, Petition Narrative, 4 (02/09/24).

   The proposed Project would help the State and Town reduce fossil fuel reliance and achieve 100% carbon-free generation by replacing electricity from fossil fuels with solar energy. Petitioner sells the solar energy to Eversource, which distributes it to Connecticut residents, including those in Southington.

   b. would the proposed facility produce energy 24/7? If not, how would the proposed facility provide a stable electricity supply for the electric grid?

Response:

No. The proposed Project would not produce energy 24/7. It would provide a stable electricity supply for the electric grid during the daytime.

c. what substantial grid improvements would occur in the vicinity of the proposed facility?

Response:

The proposed Project improves the electrical grid by reducing stress on the distribution system. The proposed Project is a distributed generation facility that helps spread generation across the grid, thereby reducing the amount of electricity needed to move across the distribution lines. For example, the Canal St 15Q-2X substation will receive electricity from the proposed Project (about 1.2 miles away). In contrast, the next closest generation facility in the electric utility sector is the UI RCP New Haven Fuel Cell (about 20 miles away). See U.S. Energy Information Administration, "Electricity Data Browser" (last visited May 6, 2024). This reduction in electricity movement reduces energy losses, delays infrastructure upgrades, and extends distribution lines and overall electric grid lifespans, saving money on maintenance, operating, and electricity costs.

4. Referencing Petition Exhibit A, the second to last slide entitled, "Solar Project Benefits" states that the "project will provide substantial property tax income to the **Town of Suffield**." Explain.

Response:

This was an administrative error. The Slide was supposed to state that the proposed Project would provide, "substantial property tax income to the Town of Southington."

5. Referencing Petition p. 6, identify which entity will hold each permit?

Response:

Petitioner will hold each permit.

6. Referring to Petition p. 11, when will the Project be bid into the NRES Program? Would the total capacity of the facility be supplied to the NRES Program? If the project was bid into the program and was selected, what distressed municipalities would benefit from the project?

Response:

Petitioner bid the proposed Project into the NRES Auction held in February 2024. Eversource has not announced the winners yet. If awarded, the proposed Project's total capacity would supply the NRES Program and would benefit the distressed municipality of Meriden.

7. If the facility is not selected in the NRES Program, would TRITEC withdraw this Petition?

Response:

No, Petitioner would resubmit the proposed Project in the next NRES Auction, sell electricity wholesale under Eversource Rate 980, or pursue another revenue mechanism.

8. If the facility operates beyond the terms of the NRES Agreement, will TRITEC decommission the facility or seek other revenue mechanisms for the power produced by the facility?

   Response:

   This will depend on the market conditions.

9. If TRITEC transfers the facility to another entity, would TRITEC provide the Council with a written agreement as to the entity responsible for any outstanding conditions of the Declaratory Ruling and quarterly assessment charges under CGS §16-50v(b)(2) that may be associated with this facility, including contact information for the individual acting on behalf of the transferee?

   Response:

   Yes, Petitioner would provide the Council with a written agreement.

Proposed Site

10. Submit a map clearly depicting the boundaries of the solar facility site and the boundaries of the host parcel(s). Under Regulations of Connecticut State Agencies (RCSA) §16-50j-2a(29), **"Site"** means a contiguous parcel of property with specified boundaries, including, but not limited to, the leased area, right-of-way, access and easements on which a facility and associated equipment is located, shall be located or is proposed to be located.

    Response:

    Please refer to the "Overall Site Plan" (Sheet 2.10) in Appendix B for the map clearly depicting the boundaries of the proposed Project Site and the boundaries of the Host Parcel.

11. What is the length of the lease agreement with the property owner? Describe options for a lease extension, if any.

    Petitioner:

    The lease agreement is 21 years long, with options to extend for two one-year periods and two five-year periods.

12. In the lease agreement with the property owner, are there any provisions related to decommissioning or site restoration at the end of the project's useful life? If so, please describe and/or provide any such provisions.

    Response:

    Yes. The lease includes the following provisions:

    > **Decommissioning. At the termination or expiration of the Lease, whether as to the entire Property or only as to part, the Lessee shall cease commercial operation of the Solar Energy Project on the Property or the part as to which the Lease has terminated or expired. Lessee shall, as soon as practicable after that and at its sole cost and expense, remove all above-ground and below-ground Solar Energy Projects, excluding the portion of foundations that are below a depth of two feet below grade from the natural surface of the Property or of the portion as to which this Lease was terminated, infrastructure and underground conduit that cannot be removed without**

damage to the Property, and dispose of such removed components per applicable law the "Decommissioning Obligations"). Lessee shall leave the Property in substantially the same condition as before the Effective Date (except for removing trees and foliage permitted hereunder) and shall restore the soil surface to a condition reasonably similar to its original condition, reasonable wear and tear, and casualty excepted. The lessee shall post a decommissioning performance bond to secure the performance of its obligations under Section 13.13. The provisions of this section shall not affect any continuing rights or obligations that under the terms of this Lease survive the Term or any termination or expiration of this Lease. The provisions of this section shall survive any termination or expiration of this Lease

13. Does the lease agreement with the property owner contain provisions for agricultural co-uses at the site? If yes, describe the co-uses.

    Response:

    Yes, Petitioner's lease agreement with the property owner allows Petitioner to conduct agricultural co-uses. The co-uses were not specified in the lease agreement because the co-uses were not determined until after the parties executed the agreement.

14. Referring to Petition p.12, what entity currently manages the apiaries and where are they located on the host parcel? What other agricultural activities are contemplated for the site, who would manage them and where would they be located?

    Response:

    Necker's Farm manages the apiaries. They are located along the curved portion of the road entering the Host Parcel near the north of the proposed Project Site. Petitioner is considering blueberries, blackberries, raspberries, and other fruits along the proposed fence line that would also be managed by local farms.

15. If agricultural co-uses are implemented at the site, who would be responsible for responding to concerns and/or complaints related to these agricultural co-uses? How would contact information be provided for complaints?

    Response:

    Any concerns and/or complaints related to these agricultural co-uses can be directed to Petitioner's legal counsel, Michaud Law Group.

16. Referring to Petition p. 12, are the proposed agricultural co-use areas all located within the facility "site?" If yes, provide the following information for these agricultural co-use areas.

    Response:

    Petitioner is still determining the final, post-construction location for the proposed agricultural co-uses, but they would remain within the leased area.

    a. What entity would manage these areas?

       Response:

       Necker's Farm would continue to manage the apiaries.

b. If the project is sold and/or transferred to another entity, would the sale and/or transfer include management and maintenance of these agricultural co-use areas?

Response:

Yes.

c. Would parking and access for emergency vehicles be available?

Response:

Yes.

d. Would the hours of accessibility be limited or unlimited? Explain.

Response:

Access within the fence line would be limited to Petitioner receiving adequate notice to unlock the gate and grant access.

e. Will signs be posted related to the hours of accessibility, permitted and prohibited uses, etc.?

Response:

Yes.

f. Who would be liable for any personal injury?

Response:

Petitioner's insurance policies will likely cover any occurrence with a nexus to the Project. Regarding bees, the bee company will be required to carry a liability insurance policy as a beekeeper serving the Project.

g. Who would be responsible for maintenance of the agricultural co-uses described above? What type of maintenance is necessary and how frequently would maintenance activities occur?

Response:

Necker's Farm will continue to maintain the apiaries. Apiary management occurs year-round. Maintenance involves feeding and inspecting the honeybees, swarm, mite, and disease prevention measures, and inspecting honey spurs and colonies. These activities will generally require thirty site visits per year.

h. Identify the water source for these agricultural co-use areas.

Response:

Apiaries do not require a water source.

i. Could the lease agreement with the host property owner be amended to remove these agricultural co-use areas from the solar facility "site," as defined under RCSA §16-50j-2a(29)?

Response:

Petitioner is open to different agricultural co-uses at the proposed Project Site, but agricultural activities must occur at the Project Site throughout the proposed Project's lifespan.

17. Referring to Petition, Appendix B, Existing Conditions Plan, a "Limit of Environmental Land Use Restriction" (ELUR) is identified in the site development area with a note, "Per Map Reference C." Provide Map Reference C.

Response:

Map Reference C is enclosed. Please see "Exhibit A: Environmental Land Use Restriction Survey," prepared by Meehan & Goodin, dated September 17, 2010.

18. Define the origin and purpose of the ELUR.

Response:

The property owner and Town of Southington agreed to the ELUR during the approval process of the 55 and older community located on the Host Parcel.

19. Does the presence of the ELUR preclude development of the site? Explain.

Response:

No, the ELUR does not preclude development of solar facilities like the proposed Project. It precludes building additional condominiums to the 55 and older community within the ELUR.

20. Is the site and/or host parcel within a Town of Southington-designated conservation easement?

Response:

Other than the above-referenced ELUR, there is no evidence of the proposed Site and/or Host Parcel being located within a Town of Southington-designated conservation easement.

Energy Output

21. Was a shade study conducted? Would shading from adjacent woodland areas interfere with energy production at the site?

Response:

No shade study was conducted; however, the adjacent forested areas will not interfere with energy production at the site due to the proposed Project's location and the heights of the adjacent trees.

Proposed Facility and Associated Equipment

22. Referencing Petition Exhibit F, p. 2,

    a. to what approximate depth would the tracker support posts be driven into the ground?

       Response:

       The approximate depth of the embedment will be 9' to 12'.

    b. how many tracker unit motors would be installed?

       Response:

       Petitioner would install approximately 25-30 tracker unit motors.

    c. what is the lifespan of the tracker motors?

       Response:

       The expected lifespan is thirty years.

    d. how are the tracker motors powered?

       Response:

       Tracker motors are powered by a low-voltage auxiliary panel located at the equipment pad.

    e. at what height above grade are the tracker motors located?

       Response:

       Tracker motors are the same height as the slew beams (approximately 5' above grade).

23. What are the approximate dimensions of the transformer and switchgear that would be installed on the concrete pad located in the eastern corner of the facility compound?

    Response:

    The transformer vault will be 6' x 7,' and the switchgear would be 4' x 16.'

24. Referencing Petition Site Plan 2.11, are the inverters mounted on concrete pads or on posts?

    Response:

    The proposed inverters would be mounted on posts.

25. Petition Appendix F contains specification sheets for two different solar panels. Which solar panels passed the TCLP test and would be installed at the site? What solar panel output was used to calculate the generation capacity of the proposed facility?

Response:

The panels to be installed at the proposed Project Site will be the Trina-Solar Vertex TSM-DEG19C.20 models.

Electrical Interconnection

26. Provide the distance of the interconnection point from the facility equipment pad.

Response:

The proposed distance is 450 linear feet, but this is subject to Eversource review.

27. Will the interconnection provide energy to a substation? If yes, which one?

Response:

Yes, the Canal St 15Q-2X substation.

28. Petition Exhibit F, p. 2 refers to proposed utility interconnection service poles by Eversource in the northeast corner of the site adjacent to Metals Drive. How many utility interconnection poles are proposed?

Response:

Eversource requires three Eversource-owned service poles and two customer-owned service poles. Eversource is still reviewing the interconnection requirements for the proposed Project and will ultimately dictate the location, quantity, and type of equipment needed.

Petitioner is pursuing a potential alternate route for the interconnection to bypass the wetlands. This would require an easement from an abutting property. The revised Site Plan shows this alternate interconnection route with the result being no direct impacts to wetlands.

Additionally, Petitioner is working with Eversource to replace the poles with pads to remove the need for poles altogether.

29. Referencing Petition Appendix B, Site Plan 2.11 and Petition Appendix F, p. 2, is the rest of the interconnection underground? Would any utility poles be required for the interconnection? If so, provide the number of utility poles required, their proposed location and the equipment to be installed?

Response:

The interconnection is currently expected to be underground to Metals Drive, where it would transition to be above-ground. The number of potential poles is outlined above in Petitioner's response to Interrogatory 28.

30. Referencing Petition p. 7, what is the status of the Eversource System Impact Study?

Response:

Eversource is still conducting the System Impact Study. Petitioner expects results within the next thirty business days.

31. Does the interconnection require a review from ISO-NE?

Response:

No, the interconnection does not require review from ISO-NE.

32. Referencing Petition Appendix B, Site Plan 2.11, the underground electrical connection traverses a wetland area on the host parcel. Was an alternative electrical connection considered to avoid disturbance to the wetland? Explain.

Response:

Eversource is reviewing the interconnection requirements for the proposed Project and will ultimately dictate the location, quantity, and type of equipment needed. Petitioner is working with Eversource a potential alternate route for the interconnection to bypass the wetlands. This would require an easement from an abutting property. The revised Site Plan shows this alternate interconnection route with the result being no direct impacts to wetlands.

33. Referencing Petition Appendix B, Site Plan 2.31 a culvert is shown at the edge of the limit of disturbance associated with the underground electrical line in the northeast corner of the host parcel. Is a culvert inlet or outlet structure shown at the demarcation of the limit of disturbance? How will the installation of the underground electric line with a trench affect above ground, and underground, water flow in the culvert area?

Response:

The above-referenced culvert is an existing pipe located at the property edge which collects surface runoff from the wetland areas and ultimately discharges that surface water into the existing stormwater basin located off-site, adjacent to Interstate 84. It is not expected that the installation of underground electric conduit in this area would have any impact on water flow into that culvert area as the work will be completed in one day and immediately restored to its previous condition.

Public Safety

34. Referencing Petition p. 11, how does the project comply with industry Best Management Practices for Electric and Magnetic Fields at solar facilities?

Response:

Petitioner is unaware of any best management practices for electric and magnetic fields at solar facilities like those in the proposed project. The Council's "Best Management Practices for Electric and Magnetic Fields" addresses "engineering practices for proposed electric transmission lines with a design capacity of 69kV or more," the proposed Project will interconnect to a distribution line with a design capacity of 23kV. See Connecticut Siting Council, "Best Management Practices for Electric and Magnetic Fields" (Feb. 20, 2014) 2.

35. Provide the distance of the proposed gravel road entrance to the nearest residential structure.

Response:

The Overall Site Layout Plan (Sheet 2.10) has been revised to show the distance to the nearest residential structure. Please see "Exhibit B: Revised Civil Plan Drawing Set."

36. Provide the distance of the nearest residential structure from the perimeter fence and the inverters at their closest points.

Response:

The Overall Site Layout Plan (Sheet 2.10) has been revised to show the distance to the nearest residential structure. Please see "Exhibit B: Revised Civil Plan Drawing Set."

37. Referencing Petition p. 9, would training be provided for local emergency responders regarding site operation and safety in the event of a fire or other emergency at the site?

Response:

Training can be provided to local emergency responders in the facility's operation.

38. Are there manual facility shut-off switches that can be operated by emergency personnel? If yes, in what location(s)?

Response:

Yes. There are multiple means of isolating and shutting off the facility's power. The first is the manual disconnect switch located on the Utility pole. The second is the automatic means on the second utility pole, and the third is the main breaker at the equipment pad.

39. In the event of a brush or electrical fire, how are potential electric hazards that could be encountered by emergency response personnel mitigated? What type of media and/or specialized equipment would be necessary to extinguish a solar panel/electrical component fire?

Response:

In the event of a fire or emergency, the proposed Project will be able to be shut down by emergency responders via a physical disconnect switch that will be appropriately labeled under the requirements of the National Electric Code. Petitioner is unaware of any specific media and/or specialized equipment needed to extinguish a fire within the proposed Project. Generally speaking, electrical fires are allowed to burn out, with water being used only in the surrounding areas to prevent the spread of any fire beyond the affected area.

40. Provide an Emergency Response Plan for the proposed facility.

Response:

Petitioner respectfully requests that the Council submit an Emergency Response Plan, a condition in the Council's Final Decision because the final design of the proposed Project depends on several factors, including any potential changes made by the Council or DEEP through their respective permitting processes.

41. Referencing Petition p. 9, does the transformer have a containment system in the event of an insulating mineral oil leak? Can the SCADA system detect an insulating mineral oil leak? Is the mineral oil biodegradable?

Response:

Transformers manufactured today use mineral oil. Mineral oil presents no danger to the environment and is biodegradable. SCADA cannot sense a leak of fluid. However, Petitioner is actively searching for transformer containment systems or a similar mechanism to detect potential transformer oil leaks.

42. Would the installation of racking posts affect well water quality from construction impacts, such as from vibrations and well water sedimentation?

Response:

Based on correspondence with the Town of Southington Water Department, there are no neighboring residences currently serviced by a private water well therefore it is not anticipated that the installation of racking posts will affect well water quality.

43. Referencing Petition p. 12, submit the noise study that determined the noise level complies with Department of Energy and Environmental Protection (DEEP) Noise Standards at the nearest property line. Was operation of the tracker motors considered in the noise analysis?

Response:

Sound level calculations have been submitted in conjunction with these responses to interrogatories to confirm that the anticipated noise associated with the proposed project comply with the Department of Energy and Environmental Protection (DEEP) Noise Standards at the nearest property line. Tracker motors were not considered as part of this analysis as there is no available data regarding the noise that they emit.

44. What is the noise profile of the selected transformer?

Response:

The specific transformer model for the proposed Project will be based on availability during construction. Per NEMA TR-1, the average decibel rating for a self-cooled, two- 13 winding 1,500-2,000 kVA transformer, which is anticipated for the proposed Project, will produce a noise level of 61 dB at a distance of 1 meter. This data has been used in the sound-level calculations submitted in conjunction with these responses to interrogatories. See "Exhibit C: Revised Sections of Environmental Assessment."

45. Referencing Petition Exhibit F, p. 19, submit a detailed sound level calculation work sheet or a sound study that accounts for noise levels from the proposed inverters and transformer at the nearest abutting property line.

Response:

Sound level calculations have been submitted in conjunction with these responses to interrogatories to confirm that the anticipated noise associated with the proposed project comply with the Department of Energy and Environmental Protection (DEEP) Noise

Standards at the nearest property line. Tracker motors were not considered as part of this analysis as there is no available data regarding the noise that they emit.

Environmental Effects and Mitigation Measures

46. Could the Petitioner extend the southern portion of the evergreen plantings/landscaping to the north and up to the access road to provide additional screening to the housing development that is located west of the proposed facility?

    Response:

    Yes.

47. Provide the length of conduit to be installed within the wetland.

    Response:

    The revised interconnection route results in no impacts to the wetlands on-site. Please see "Exhibit B: Revised Civil Plan Drawing Set."

48. Referencing Petition Site Plan 2.31, Note 1, is the preliminary design of the Project at least 50 percent complete? If not, would construction comply with the Connecticut Soil Erosion and Sediment Control Guidelines and Connecticut Stormwater Quality Manual, effective March 30, 2024?

    Response:

    The design complies with the Connecticut Soil Erosion and Sediment Control Guidelines and Connecticut Stormwater Quality Manual, effective March 30, 2024. Petition Site Plan 2.31, Note 1 has been revised accordingly. Please see "Exhibit B: Revised Civil Plan Drawing Set."

49. Referencing Petition Site Plan 3.01- Fence Detail, can the bottom of the perimeter fence fabric be raised to a height of six-inches above grade to allow for small wildlife movement?

    Response:

    Petitioner revised the detail accordingly to provide a six-inch gap to allow for small wildlife movement. Please see "Exhibit B: Revised Civil Plan Drawing Set."

50. Referencing Petition Exhibit F, p. 18, it states there is no prime farmland soil on the site. Referencing the Prime Farmland Map behind Appendix A, the eastern portion of the proposed site contains 3.6 acres of prime farmland. Clarify.

    Response:

    Exhibit F has been revised accordingly to address the effects on prime farmland soils. The project contains approximately 1.7 acres of prime farmland along its eastern edge.

51. Referencing Petition p. 13 and Appendix E, has the Phase IA Cultural Resources Assessment Survey been submitted to the State Historic Preservation Office? If yes, provide a copy of their response, if available.

    Response:

A copy of the SHPO response letter is included herein. No additional survey work is required. Please see "Exhibit D: State Historic Preservation Office Letter."

52. Referencing Petition Appendix B Site Plan 2.10 provide the distance of the proposed gravel access road from the wetland area to the west.

Response:

The Overall Site Layout Plan (Sheet 2.10) has been revised to show the distance to the wetlands. Please see "Exhibit B: Revised Civil Plan Drawing Set."

53. Has TRITEC submitted an application for a General Permit for the Discharge of Stormwater and Dewatering Wastewaters from Construction Activities to DEEP? If yes, what is the status of such permit?

Response:

The CTDEEP Stormwater General Permit application is intended to include "construction ready" site plans, but the Petitioner has not yet submitted it. The Petitioner intends to apply for this permit soon and will submit proof of approval to the Council as a precondition to beginning construction of the proposed Project.

54. Referencing Petition Exhibit G, identify the addresses of the properties with visible residential structures in Photos 2 north, 4 north and 4 southwest, 5 north, 5 south and 5 southwest, 6 south and 6 west, 11 south, 12 west, 13 south and 13 west, 14 southwest, 18 south, 22 south, 23 south and 24 north.

Response:

The addresses of the properties with visible residential structures in Petition Exhibit G are as follows:

- **Photo 2 north: 33 Hunters Lane.**
- **Photo 4 north: 53, 61, 69, and 77 Hunters Lane**
- **Photo 4 southwest: 37 Hunters Lane (Project site)**
- **Photo 5 north: 37 Hunters Lane (Project site)**
- **Photo 5 south: 37 Hunters Lane (Project site)**
- **Photo 5 southwest: 37 Hunters Lane (Project site)**
- **Photo 6 south: 37 Hunters Lane (Project site)**
- **Photo 6 west: 37 Hunters Lane (Project site)**
- **Photo 11 south: 37 Hunters Lane (Project site)**
- **Photo 12 west: 37 Hunters Lane (Project site)**
- **Photo 13 south: 37 Hunters Lane (Project site)**
- **Photo 13 west: 37 Hunters Lane (Project site**
- **Photo 14 southwest: 37 Hunters Lane (Project site)**
- **Photo 18 south: 37 Hunters Lane (Project site)**
- **Photo 22 south: 37 Hunters Lane (Project site)**
- **Photo 23 south: 6 Metals Drive**
- **Photo 24 north: 6 Metals Drive**

55. Referencing Petition Appendix C, the U.S. Fish and Wildlife Service's Information, Planning, and Conservation System (IPaC) review documentation appears incomplete. For example, the Project Questionnaire portion of the review has no information. Explain.

Response:

The U.S Fish and Wildlife Service's IPaC review documentation has been correctly filed and is complete. While filing the IPaC, the only federally listed species noted as having the potential to occur in the project area was the Northern Long Eared Bat (NLEB). Following protocol of the IPaC review, we utilized the NLEB Rangewide Determination Key (DKey). As no additional federally listed species were potentially present, use of the Consultation Package Builder (CPB) was not necessary. All prompted questions while filing the DKey were answered accurately based on the proposed project's impact and the complete returned determination was submitted in full with the application. Please see, "Exhibit E: US Fish & Wildlife Services Correspondence."

56. Referencing Petition Exhibit B, Site Plan 2.10, would box turtles use upland forested areas for habitat? If yes, how much upland forested habitat would remain post-development?

Response:

As outlined within Exhibit F and Appendix D, Eastern Box Turtles use upland, open, deciduous forests as well as open fields and early successional habitats. The proposed project will preserve 70% of the onsite red maple woodland, approximately 5.7 acres, while also preserving 1.4 acres of an existing successional old field and creating 4 acres of grassland early successional habitat. All proposed disturbance areas are outlined in Exhibit F, Table 3.

Facility Construction

57. Will blasting be required to construct the site? If not, how will bedrock be removed if encountered?

Response:

No blasting is proposed as part of this project. Based on geotechnical investigation, ledge exists at depths varying from 4.5 to 10 feet below existing grade. In areas where ledge will interfere with solar racking post installation, the post will be able to be driven into the ledge by drilling into the rock.

58. Referencing Petition Exhibit F, p. 18, what is the 1,250 cubic yards of material composed of and where would it be disposed? What is the total estimate of cut and fill. Where Would the stockpile of stripped topsoil be located.

Response:

The existing material is largely comprised of topsoil, fine to coarse sand, and sandy loam. The grading of the project, particularly the stormwater basin, has been revised per the data found during the geotechnical investigation. This revised design results in approximately 1,650 CY of cut and 1,500 CY of fill, resulting in a net export of 150 CY. Any excess material will be placed throughout the Site, where appropriate to maintain positive drainage patterns. An area for material stockpile has been identified on Sheets 2.31 and 2.32.

59. What type of construction vehicles would be expected to enter the site during construction and where would they park? How would construction activities impact traffic and the surrounding area?

Response:

Vehicles will include dump trucks, delivery trucks, and personal vehicles. There would be minimal impact to traffic during the delivery of materials which takes place within a four-to-five-day period at the beginning of construction.

60. Referencing Petition p. 9, identify the location of the construction staging area within the proposed site.

Response:

A construction staging area has been identified on Sheets 2.31 and 2.32. Please see "Exhibit B: Revised Civil Plan Drawing Set."

Facility Maintenance/Decommissioning

61. Revise the Petition Operations and Maintenance Plan (Exhibit C) to include procedures for panel washing, and inspection and replacement of landscaping if die off occurs.

Response:

The updated Operations & Maintenance Plan is included herein. Please see, "Exhibit F: Revised Operations & Maintenance Plan."

62. Under what circumstances would pesticide and/or herbicides be used at the site? What specific precautions are taken for use of these products to prevent effects on water quality and human health?

Petitioner does not use pesticides or herbicides on any of their solar arrays in Connecticut. The Operations and Maintenace Plan has been updated accordingly. Please see "Exhibit F: Revised Operations & Maintenance Plan."

63. Referring to Petition page 10, at what depth would snow be on the panels before it is shed by the trackers?

Response:

The panels will shed the snow at about a 3-5" depth, but the trackers are adjustable to meet the area's annual snow fall.

EXHIBIT A

Environmental Land Use Restriction Survey

42

ZONING DATA

ZONE: C2	REQUIRED	PROVIDED
LOT AREA	40,000 SF	1,436,608.6 SQ. FT.
MIN. WIDTH	200 FT	222.44 FT
MIN. FRONT YARD	40 FT	NONE
MIN. SIDE YARD	20 FT(E)	NONE
MIN. REAR YARD	30 FT (E)	NONE
MAX. LOT COVERAGE	35%	NONE
MAX. HEIGHT	3 STORIES/55 FT	NONE

SOURCE OF DATA SOUTHINGTON PLANNING AND ZONING OFFICE.

* DENOTES NON-CONFORMING TO CURRENT ZONING REGULATIONS

** (E) IF BOTH PUBLIC WATER AND SEWER ARE AVAILABLE SEE SECTION 5-00.13

SECTION 5-00.13: IF BOTH WATER AND SEWER UTILITIES ARE AVAILABLE TO AN I-1 ZONED PARCEL, AND WILL BE INCORPORATED INTO DEVELOPMENT OF THE PROPERTY, THE APPLICABLE SCHEDULE OF AREA, HEIGHT AND BULK IS AS FOLLOWS:

MINIMUM LOT AREA:(S.F.) = 20, 000
MINIMUM LOT WIDTH:(FEET). = 100
MINIMUM SIDE YARD:(FEET). = 15
MINIMUM REAR YARD:(FEET). = 20

NOTES CORRESPONDING TO SCHEDULE B

(7) THE WAIVER OR DENIAL OF ACCESS RIGHTS DIRECTLY TO AND FROM SAID PREMISES FROM AND TO INTERSTATE ROUTE 84 APPEARING IN A QUIT-CLAIM DEED FROM STANLEY P. WICHROSKI AND JOSEPHINE F. WICHROSKI TO STATE OF CONNECTICUT DATE AUGUST 3, 1960 AND RECORDED AUGUST 31, 1960 IN VOLUME 164 AT PAGE 574 OF THE SOUTHINGTON LAND RECORDS; IN A CERTIFICATE OF TAKING BY THE STATE OF CONNECTICUT FROM ALLIED CONTROL COMPANY, INC., DATED OCTOBER 21, 1960 AND RECORDED ON OCTOBER 25, 1960 IN VOLUME 165 AT PAGE 455; IN A QUIT-CLAIM DEED FROM ALLIED CONTROL COMPANY, INC., TO THE STATE OF CONNECTICUT DATE MAY 8, 1961 AND RECORDED ON MAY 24, 1961 IN VOLUME 168 AT PAGE 467 OF THE SOUTHINGTON LAND RECORDS. AFFECTS THE PROPERTY AND IS DEPICTED HEREON.

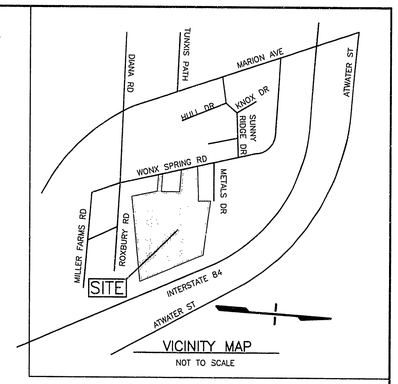
(8) "EXISTING DRIVE USED BY MALS" AS SHOWN ON A MAP REFERRED TO A SCHEDULE A (DRAWER 15 MAP 109) AS LIMITED BY A NOTICE DATED MAY 15, 1968 AND RECORDED MAY 23, 1968 IN VOLUME 221 AT PAGE 148 OF THE SOUTHINGTON LAND RECORDS. AFFECTS THE PROPERTY AND IS DEPICTED HEREON.

(9) LAWNS, GARDENS, SHEDS, ETC. UTILIZED BY ADJOINING OWNERS AS NOTED ON SAID MAP. MAY AFFECT THE PROPERTY AND SAID ENCROACHMENTS ARE DEPICTED HEREON.

(10) 40' BUILDING LINE, 20 FOOT SIDE YARD LINES AND A 30 FOOT REAR YARD LINE, AS NOTED ON SAID MAP, WHICH LINES AFFECT THE PROPERTY AND ARE DEPICTED HEREON.

ACCESS NOTE

WONX SPRING ROAD IS MAINTAINED BY THE TOWN OF SOUTHINGTON AS PUBLIC HIGHWAY.



VICINITY MAP
NOT TO SCALE

EXHIBIT A
LEGAL DESCRIPTION

A CERTAIN PIECE OR PARCEL OF LAND SITUATED IN THE TOWN OF SOUTHINGTON, COUNTY OF HARTFORD AND STATE OF CONNECTICUT BOUNDED AND DESCRIBED AS FOLLOWS:

BEGINNING AT A CONCRETE MONUMENT SET IN THE SOUTHERLY LINE OF WONX SPRINGS STREET AT THE NORTHWESTERLY CORNER OF PROPERTY NOW OR FORMERLY OF JULIA N. LaFOREST; THENCE RUNNING S 03°-45'-20" E 214.02 FEET ALONG THE WESTERLY LINE OF SAID LaFOREST PROPERTY TO A CONCRETE MONUMENT; THENCE RUNNING S 85°-36'-40" E 214.94 FEET ALONG THE SOUTHERLY LINE OF SAID LaFOREST PROPERTY, PROPERTY NOW OR FORMERLY OF MICHAEL J. AND SUSAN T. DICORPO, AND PROPERTY OF NOW OR FORMERLY OF GIBBS WIRE AND STEEL COMPANY, INC., BOUNDED IN PART BY EACH, TO A CONCRETE MONUMENT; THENCE RUNNING THE FOUR FOLLOWING COURSES ALONG GIBBS WIRE AND STEEL COMPANY PROPERTY: S 4°-25'-40" E 394.73 FEET TO A CONCRETE MONUMENT; S 4°-25'-40" E 434.58 FEET TO A CONCRETE MONUMENT; S 0°-40'-50" E 135.56 FEET TO A CONCRETE MONUMENT; S 6°-15'-40" E 124.48 FEET TO A CONCRETE MONUMENT; THENCE RUNNING S 30°-15'-25" W 649.70 FEET ALONG THE NORTHWESTERLY HIGHWAY LINE OF INTERSTATE ROUTE 84 TO A CONCRETE MONUMENT; THENCE RUNNING S 82°-39'-45" W 468.57 FEET ALONG PROPERTY NOW OR FORMERLY OF STEFANIA ZAKRZEWSKI TO A CONCRETE MONUMENT; THENCE RUNNING N 4°-07'-35" W 1122.04 FEET ALONG SAID ZAKRZEWSKI PROPERTY AND ALONG PROPERTY NOW OR FORMERLY OF JOHN G. DANIEL ET AL TO A CONCRETE MONUMENT; THENCE RUNNING S 80°-34'-00" W 148.48 FEET ALONG SAID DANIEL PROPERTY OF TO A CONCRETE MONUMENT; THENCE RUNNING N 4°-06'-30" W 617.69 FEET ALONG SAID DANIEL PROPERTY TO A CONCRETE MONUMENT; THENCE RUNNING N 86°-35'-30" E 148.00 FEET ALONG PROPERTY NOW OR FORMERLY OF LEWIS E. AND EDITH C. RIED TO A CONCRETE MONUMENT; THENCE RUNNING N 3°-33'-30" W 109.98 FEET ALONG SAID REID PROPERTY TO A CONCRETE MONUMENT; THENCE RUNNING N 79°-41'-00" E 72.52 FEET ALONG THE SOUTHERLY LINE OF WONX SPRINGS STREET TO A CONCRETE MONUMENT; THENCE RUNNING SOUTHWESTERLY 36.33 FEET ON A CURVE TO THE LEFT, RADIUS OF 25 FEET ALONG PROPERTY NOW OR FORMERLY OF VIRGINIA MALS TO A CONCRETE MONUMENT; THENCE RUNNING S 4°-08'-10" E 115.30 FEET ALONG SAID MALS PROPERTY TO A CONCRETE MONUMENT; THENCE RUNNING N 85°-46'-15" E 110.18 FEET ALONG SAID MALS PROPERTY TO AN IRON PIPE; THENCE RUNNING N 83°-39'-40" E 80.17 FEET ALONG PROPERTY NOW OR FORMERLY OF MIRELLA C.CASTELLANO TO A CONCRETE MONUMENT; THENCE RUNNING N 79°-51'-30" E 79.87 FEET ALONG PROPERTY NOW OR FORMERLY OF MELCHIOR AND ANITA LEVESQUE TO A IRON PIPE; THENCE RUNNING N 79°-28'-30" E 80.08 FEET ALONG PROPERTY NOW OR FORMERLY OF STEPHEN W. AND KAREN E. HAMMONS TO A CONCRETE MONUMENT; THENCE RUNNING N 04°-11'-50" W 155.00 FEET ALONG SAID HAMMONS PROPERTY TO A CONCRETE MONUMENT; THENCE RUNNING N 83°-20'-50" E 222.44 FEET ALONG THE SOUTHERLY LINE OF WONX SPRINGS STREET TO THE POINT OR PLACE OF BEGINNING;

SAID PROPERTY CONTAINS 32.98 ACRES, BE IT THE SAME MORE OR LESS, AND FULLY SHOWN ON A MAP ENTITLED, " LAND TITLE SURVEY OF PROPERTY OF GOULD, INC. WONX SPRINGS STREET SOUTHINGTON, CONN. SCALE: 1" = 40' MARCH 24, 1981 REVISED FEBRUARY 9, 1985

TOGETHER WITH THE BENEFIT OF A SANITARY SEWER EASEMENT FROM STEFANIA ZAFRZEWSKI TO ALLIED CONTROL COMPANY, INC. DATED SEPTEMBER 4, 1957, RECORDED SEPTEMBER 4, 1957 IN VOLUME 148. PAGE 474 OF THE SOUTHINGTON LAND RECORDS.

EXHIBIT C
DESCRIPTION OF THE ELUR SUBJECT AREA

ALL THAT CERTAIN PARCEL OF LAND WITH BUILDINGS AND IMPROVEMENTS LOCATED THEREON SITUATED SOUTHERLY OF WONX SPRING ROAD AND ALONG THE WESTERLY SIDE OF CONNECTICUT I-84 IN THE TOWN OF SOUTHINGTON, COUNTY OF HARTFORD AND STATE OF CONNECTICUT, BEING SHOWN AS ELUR PARCEL AREA ON A MAP ENTITLED "PLAN PREPARED FOR THE SQUARE D COMPANY WONX SPRING ROAD SOUTHINGTON, CONN. ENVIRONMENTAL LAND USE RESTRICTION SURVEY SCALE: 1" = 80' DATE: JULY 7, 2009 PROJECT: 09-088 SHEET 1 OF 2 BY MEEHAN AND GOODIN, ENGINEERS – SURVEYORS, P.C." REFERENCE TO WHICH MAP IS HEREBY MADE. SAID PARCEL IS MORE PARTICULARLY BOUNDED AND DESCRIBED AS FOLLOWS:

BEGINNING AT A CONCRETE MONUMENT SITUATED ON THE WESTERLY LINE OF CONNECTICUT I-84 WHICH POINT MARKS THE SOUTHWESTERLY CORNER OF LAND NOW OR FORMERLY OF LEWIS D. AND PAUL H. CARRINGTON, THE SOUTHEASTERLY CORNER OF LAND NOW OR FORMERLY OF TELEMECANIQUE, INC. AND WHICH POINT MARKS THE SOUTHEASTERLY CORNER OF THE HEREIN DESCRIBED PARCEL, THE LINES RUN;

THENCE S-30°-14'-25"-W ALONG I-84, A DISTANCE OF 649.70 FEET TO A MONUMENT;

THENCE N-35°-59'-22"-W THROUGH LAND NOW OR FORMERLY OF SAID TELEMECANIQUE, INC., A DISTANCE OF 886.23 FEET TO A POINT AND LAND NOW OR FORMERLY OF CHARLES A. AND KATHY MOSS;

THENCE N-04°-07'-35"-W ALONG LAND OF SAID MOSS, AND LAND NOW OR FORMERLY OF ROBERT F. & MARY B. PRYBYLO, BERNARD M. & LOIS A. EDDINS, JOHN L. & CAROLYN A. BEAN, PARTLY BY EACH, A DISTANCE OF 343.10 FEET TO A POINT;

THENCE N-49°-25'-28"-E THROUGH LAND NOW OR FORMERLY OF SAID TELEMECANIQUE, INC., A DISTANCE OF 635.92' TO A POINT;

THENCE N-85°-34'-20"-E THROUGH LAND NOW OR FORMERLY OF SAID TELEMECANIQUE, INC., A DISTANCE OF 323.00 FEET TO A POINT AND LAND NOW OR FORMERLY OF SAID LEWIS D. AND PAUL H. CARRINGTON;

THENCE S-04°-25'-40"-E ALONG LAND OF SAID CARRINGTON, A DISTANCE OF 679.31 FEET TO A POINT;

THENCE S-00°-40'-50"-E ALONG LAND OF SAID CARRINGTON, A DISTANCE OF 135.56 FEET TO A POINT;

THENCE S-06°-15'-40"-E ALONG LAND OF SAID CARRINGTON, A DISTANCE OF 124.48' TO THE POINT OR PLACE OF BEGINNING.

SAID PARCEL OF LAND CONTAINS 19.74 ACRES OF LAND BY COMPUTATION.

RECEIVED and FILED
MAP 42 DRAWER 31
TOWN OF SOUTHINGTON
FEB 10 2011 11:30 AM
By Frederick A. Cotton
TOWN CLERK

Doc ID: 001273250001 Type: MAP
BK 31 PG 42

Received for Record at Southington, CT
On 02/10/2011 At 11:30:07 am
Frederick A. Cotton

THIS PLAN DOES NOT CONSTITUTE A SUBDIVISION

FOR RECORDING PURPOSES ONLY

OK MFSD
2-10-11

LEGEND

	PROPERTY LINE
S	SANITARY SEWER
OHW	OVERHEAD WIRES
D	STORM DRAINAGE
W	WATER SERVICE
G	GAS SERVICE
//	WOODED FENCE
X	CHAIN LINK FENCE
● IP	IRON PIN
■ CMS	CONCRETE MERESTONE
UP	UTILITY POLE
SMH	SANITARY MANHOLE
WG	WATER GATE
FY	FRONT YARD
SY	SIDE YARD
RY	REAR YARD
MW	MONITORING WELL
	PROPERTY CORNER
WL#1	WETLANDS FLAG
	STONE WALL
	EXISTING TREELINE(WOODLINE)

GRAPHIC SCALE 1" = 80'

REVISION	DATE
ADDRESS CT DEP COMMENTS	07-12-2010
ADDRESS CT DEP COMMENTS	09-17-2010

SEAL & SIGNATURE

STATE OF CONNECTICUT
RICHARD MEEHAN
12330
REGISTERED
LAND SURVEYOR

NOTE:
THIS DRAWING IS AN INSTRUMENT OF SERVICE OF AND REMAINS THE PROPERTY OF MEEHAN & GOODIN. IT IS TO BE USED ONLY FOR THIS SPECIFIC PROJECT AND SHALL NOT BE LOANED, COPIED, MODIFIED OR REPRODUCED WITHOUT THE WRITTEN CONSENT OF MEEHAN & GOODIN. ANY UNAUTHORIZED MODIFICATIONS WILL INVALIDATE ALL SIGNATURES, CERTIFICATIONS AND DECLARATIONS CONTAINED HEREON.

RICHARD MEEHAN, L.L.S. 12330

Meehan & Goodin
Engineers – Surveyors, P.C.
387 North Main Street, Manchester, CT 06042
(860) 643-2520 FAX (860) 649-8806

EXHIBIT C: DECLARATION OF ENVIRONMENTAL LAND RESTRICTION AND GRANT OF EASEMENT: "SCHNEIDER ELECTRIC, USA, INC. (FORMERLY KNOWN AS SQUARE D COMPANY), A DELAWARE CORPORATION, WHICH IS SUCCESSOR BY WAY OF MERGER TO TELEMECANIQUE, INC".
WONX SPRING ROAD (WITH A FORMER ADDRESS OF 100 RELAY ROAD) SOUTHINGTON, CONN.

ENVIRONMENTAL LAND USE RESTRICTION SURVEY

SCALE: 1" = 80'	DESIGN: RM	PROJECT: 09-088	ACAD: UPDATE2010.DWG
DATE: 03-09-2010	DRAFT: FS	Q/SC13/WORK/2009	SHEET NO. 1 OF 1

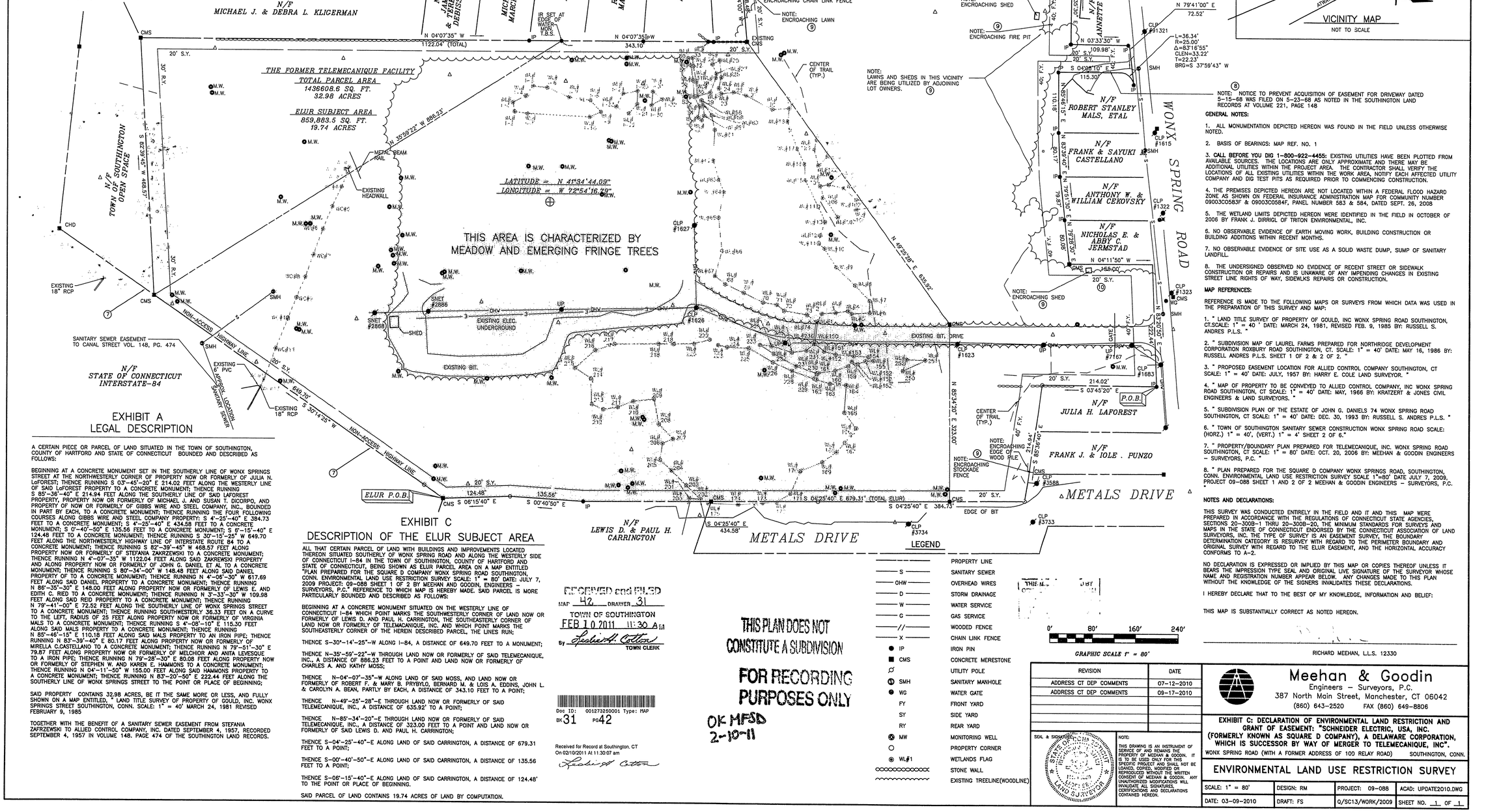
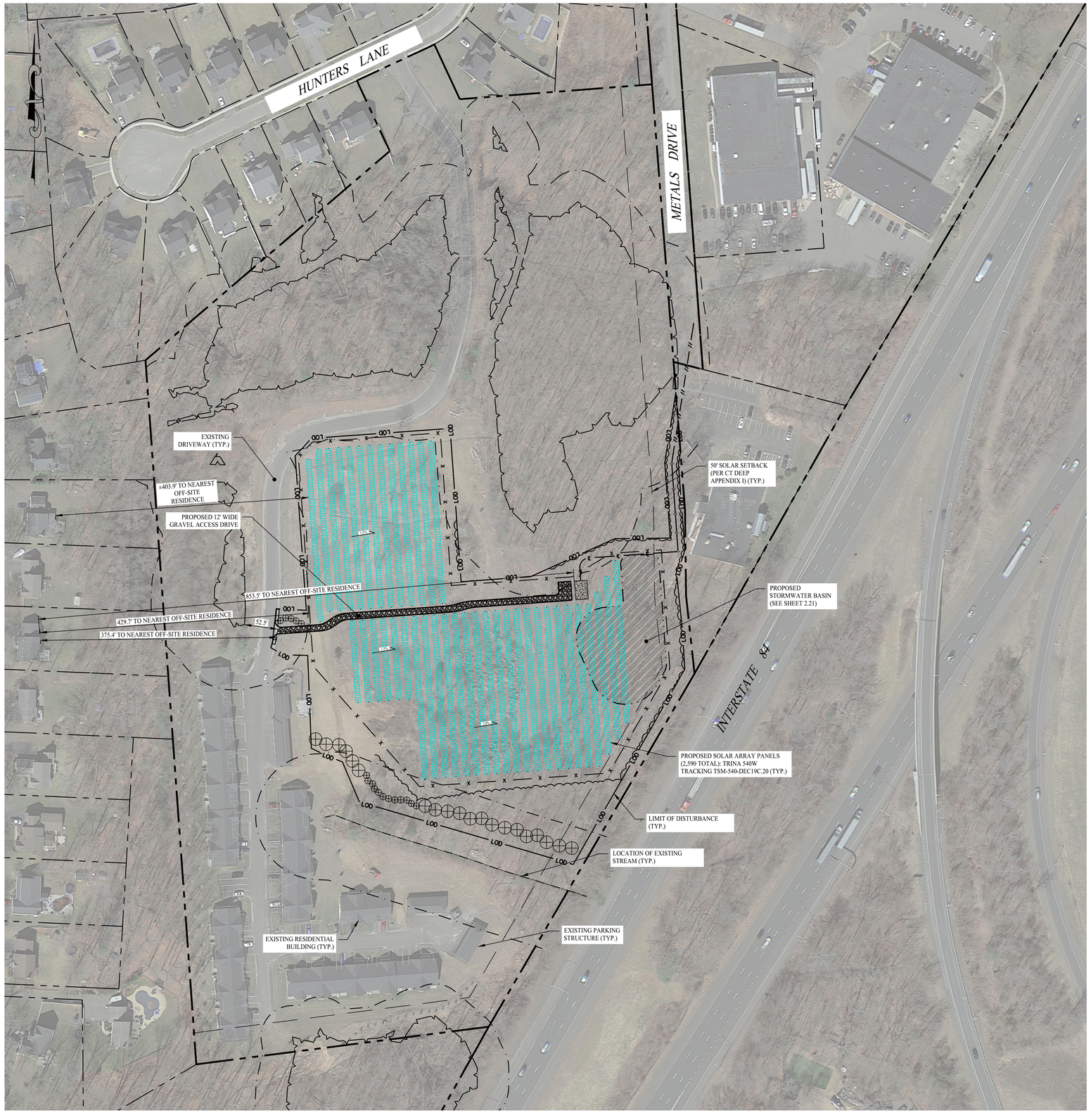


EXHIBIT B

Revised Civil Plan Drawing Set



LEGEND

- PROPERTY LINE
- RIGHT-OF-WAY LINE
- ADJOINING LOT LINE
- SOLAR SETBACK
- LIMIT OF WETLANDS
- UPLAND REVIEW AREA - 100 FT BUFFER
- STORMWATER BASIN AREA
- ELECTRIC CONDUIT (BY OTHERS)
- EXISTING INTERMITTENT STREAM
- TRINA 540W TRACKING MODULES
- CHAIN LINK FENCE
- LIMITS OF TREE CLEARING
- LIMIT OF DISTURBANCE
- EVERGREEN TREE

BOX TURTLE PROTECTION NOTES

THE FOLLOWING IS A SUMMARY OF MEASURES REQUIRED BY THE THE CT DEEP AND TO BE USED BEFORE, DURING AND FOLLOWING CONSTRUCTION TO PROTECT EASTERN BOX TURTLES THAT MAY POTENTIALLY BE ENCOUNTERED AT THE PROJECT SITE. ALL GROUND DISTURBANCE WORK ASSOCIATED WITH THE PROJECT MUST BE CONDUCTED BETWEEN APRIL 1 AND NOVEMBER 1, THE EASTERN BOX TURTLES' ACTIVE SEASON. IT IS RECOMMENDED MOWING NOT OCCUR DURING MAY 15 TO SEPTEMBER 15. IF MOWING IS TO OCCUR DURING THIS TIME FRAME, WHETHER PRE- OR POST-CONSTRUCTION, THE CT DEEP RECOMMENDS THE FOLLOWING.

PRE-CONSTRUCTION:

- IN PREPARING THE SITE FOR DEVELOPMENT, EXCLUSIONARY FENCING THAT IS AT LEAST 20 INCHES TALL AND THAT IS SECURED AND KEYED INTO THE GROUND, MUST BE INSTALLED AROUND THE PERIMETER OF THE WORK AREA TO PREVENT TURTLE ACCESS TO THE SITE. THE WORK AREA INCLUDES ALL AREAS USED FOR SITE ACCESS, EQUIPMENT PARKING, MATERIAL STAGING, MATERIAL STORAGE, AND CONSTRUCTION PURPOSES. THE ENTRANCE TO THE SITE ALSO MUST BE CORDONED OFF WITH AN EXCLUSIONARY METHOD WHEN THE SITE IS NOT IN USE. THIS CAN BE ACCOMPLISHED WITH A ROW OF HAY BALES THAT CAN BE MOVED WHEN ACCESS TO THE SITE IS NEEDED.
- IF MOWING NEEDS TO OCCUR BEFORE EXCLUSIONARY FENCE INSTALLATION WITHIN THE ACTIVE TURTLE TIMEFRAME, THE MOWING STYLE, MOWING HEIGHT, MOWING DIRECTIONALITY, MOWING SPEED AND THE LOCATION OF NON-MOWING AREAS SHOULD BE AS FOLLOWS:
  - MOWING STYLE: AVOID FLAIL MOWER HEADS WITH GUIDE BARS THAT RIDE ALONG THE GROUND. SICKLE BAR MOWERS WILL HAVE THE LEAST IMPACT IF MOWING EVERY ONE TO FIVE YEARS. IN AREAS WITH MORE WOODY VEGETATION, A LESS THAN ONE TO TWO-INCH DIAMETER BRONTOSAURUS-STYLE MOWER WILL HAVE THE LEAST IMPACT ON TURTLES.
  - MOWING HEIGHT: THE RETENTION OF MOWING STUBBLE SEVEN TO TWELVE INCHES IN HEIGHT WILL REDUCE MORTALITY, REDUCE BLADE WEAR AND WILL LEAVE IMPORTANT COVER FOR ANIMALS.
  - MOWING DIRECTIONALITY: START MOWING FROM THE CENTER OF THE FIELD AND USE A BACK-AND-FORTH APPROACH, OR LARGE CIRCULAR PATTERN TO AVOID CONCENTRATING FLEEING ANIMALS WHERE THEY MAY BE KILLED OR STRANDED. IN ADDITION, LEAVE AN UNMOWED 30-FOOT STRIP AROUND THE PERIMETER OF THE FIELD AND MOW THIS AREA LAST. MOST TURTLES ARE FOUND WITHIN THESE AREAS AND THIS PROVIDES TIME FOR THEM TO REACT TO THE MOWING ACTIVITY AND MOVE OUT OF THE AREA. IF FIELD IS NEAR A STREAM, START MOWING THE SIDE FURTHEST FROM THE STREAM AND WORK TOWARDS THE STREAM. IF FIELD IS BORDERED BY WOODLAND, START MOWING SIDE FURTHEST FROM WOODLAND AND WORK TOWARDS WOODLAND. IF FIELD IS BORDERED BY ROAD, START MOWING NEXT TO THE ROAD AND WORK YOUR WAY ACROSS THE FIELD.
  - MOWING SPEED: MOWING IN LOW GEAR OR AT SLOW SPEEDS WILL ALLOW TURTLES TO REACT AND MOVE OUT OF THE FIELD.
  - NON-MOWING AREAS: LEAVE AN UNMOWED FIELD EDGE IN HIGH TURTLE-USE AREAS UNTIL AFTER SEPTEMBER 15.
- ONCE EXCLUSIONARY FENCING HAS BEEN INSTALLED SURROUNDING THE WORK AREA, A QUALIFIED INDIVIDUAL MUST SURVEY THE AREA TO DETERMINE IF THERE ARE ANY TURTLES WITHIN THE WORK AREA. IF TURTLES ARE IDENTIFIED, THEY ARE TO BE CAREFULLY MOVED TO AN AREA OUTSIDE OF THE WORK AREA IN A SAFE MANNER THAT WILL NOT HARM THEM. IF LISTED SPECIES OF TURTLES ARE IDENTIFIED, THE QUALIFIED INDIVIDUAL WILL DOCUMENT AND REPORT THESE FINDINGS TO THE CT DEEP IN THE MANNER IDENTIFIED WITHIN THE NDDB DETERMINATION LETTER. ONLY WHEN THE QUALIFIED INDIVIDUAL DETERMINES THAT NO TURTLES ARE WITHIN THE WORK AREA AND THAT THE SITE IS SECURE FROM TURTLES RE-ENTERING CAN CONSTRUCTION BEGIN.
- PRIOR TO COMMENCING ACTIVITY, A MEETING IS TO BE HELD WITH ALL CONSTRUCTION PERSONNEL WORKING WITHIN THE EXCLUSION AREA BY THE QUALIFIED INDIVIDUAL TO APPRAISE THEM OF THE SPECIES DESCRIPTION AND THEIR DUTIES IN REGARD TO MAINTAINING THE SECURITY OF THE SITE. SHOULD CONSTRUCTION PERSONNEL ENCOUNTER A TURTLE, THE QUALIFIED INDIVIDUAL WILL INSTRUCT PERSONNEL DURING THIS MEETING ON HOW TO CAREFULLY REMOVE THE TURTLE FROM THE SITE, HOW TO DOCUMENT THEIR FINDINGS AND TO REPORT IT TO THE QUALIFIED INDIVIDUAL FOR REPORTING TO THE CT DEEP.

MID-CONSTRUCTION:

- PRIOR TO THE START OF WORK ACTIVITY EACH DAY, THE EXCLUSIONARY FENCING IS TO BE INSPECTED BY CONSTRUCTION PERSONNEL AND ALL GAPS OR OPENINGS AT THE GROUND LEVEL IDENTIFIED SHOULD BE FIXED OR REPAIRED IMMEDIATELY TO PREVENT TURTLES ACCESS TO THE SITE. IF A BREACH IS IDENTIFIED, WORK SHALL HALT UNTIL THE QUALIFIED INDIVIDUAL SURVEYS THE SITE AND DETERMINES NO TURTLES ARE WITHIN THE WORK AREA.
- ALL HEAVY MACHINERY (ACTIVE OR PARKED) MUST BE WITHIN THE LIMITS OF THE EXCLUSIONARY ZONE OR ON PAVED SURFACES. NO MACHINERY IS TO BE PARKED IN ANY TURTLE HABITAT (I.E., THE AREA OUTSIDE OF THE EXCLUSIONARY ZONE).
- AT THE END OF EACH WORK DAY, THE EXCLUSIONARY MEASURES AT THE ENTRANCE TO THE WORK SITE MUST BE REIMPLEMENTED TO PREVENT TURTLES FROM ACCESSING THE SITE. IF THIS IS NOT DONE, THE EXCLUSIONARY ZONE IS CONSIDERED VOID AND A QUALIFIED INDIVIDUAL MUST RE-SURVEY THE SITE AND CONCLUDE THAT NO TURTLES ARE PRESENT WITHIN THE WORK AREA BEFORE CONSTRUCTION ACTIVITY CAN BEGIN AGAIN.

POST-CONSTRUCTION:

- AFTER COMPLETION OF THE PROJECT, EXCLUSIONARY FENCING SHALL BE REMOVED ONCE THE AREA IS STABILIZED TO ALLOW FOR REPTILE AND AMPHIBIAN PASSAGE TO RESUME. IF CORDONING OFF SEGMENTS OF THE WORKSITE TO BE COMPLETED IN SEPARATE PHASES, ONCE THESE AREAS ARE STABLE, ONLY THEN MAY EXCLUSIONARY FENCING BE REMOVED. ALL ACTIVE AREAS MUST REMAIN EXCLUSIONARY TO TURTLES.

Rev. #:	Date	Description
2	05/09/24	Response to Interrogatories
1	03/27/24	CT DEEP Submission

Graphic Scale: 80 0 80 160

SOLLI ENGINEERING
501 Main Street, Monroe, CT 06468 T: (203) 880-5455 F: (203) 880-9695
11 Vanderbilt Ave, Norwood, MA 02062 T: (781) 352-8491 F: (203) 880-9695

Drawn By:	AWC
Checked By:	RPP
Approved By:	KMS
Project #:	22108701
Plan Date:	12/13/23
Scale:	1" = 80'

STATE OF CONNECTICUT · KEVIN M. SOLLI · 25759 · LICENSED PROFESSIONAL ENGINEER

Kevin Solli, P.E.
CT 25759

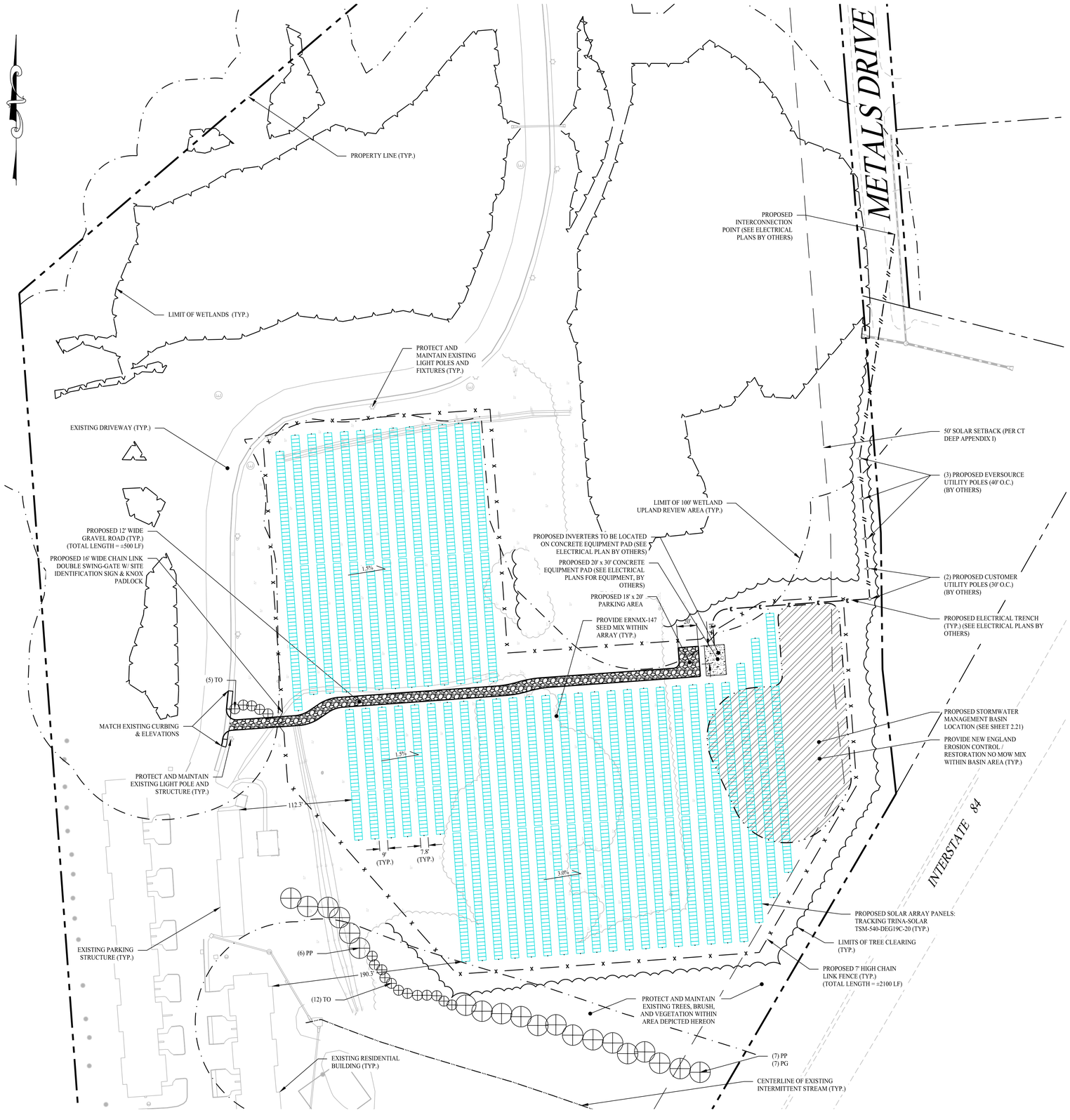
Project:

PROPOSED SOLAR PHOTOVOLTAIC ARRAY

37 HUNTERS LANE
SOUTHINGTON, CONNECTICUT

Sheet Title: OVERALL SITE LAYOUT PLAN

Sheet #: 2.10



LEGEND

- PROPERTY LINE
- RIGHT-OF-WAY LINE
- ADJOINING LOT LINE
- 50' SOLAR SETBACK (PER CT DEEP APPENDIX 1)
- LIMIT OF WETLANDS
- UPLAND REVIEW AREA - 100 FT BUFFER
- STORMWATER BASIN AREA
- ELECTRIC CONDUIT (BY OTHERS)
- TRINA 540W TRACKING MODULES
- CHAIN LINK FENCE
- NEW ENGLAND EROSION CONTROL / RESTORATION NO MOW MIX
- EVERGREEN TREE
- INVERTER
- EXISTING STREAM
- GRAVEL ROAD
- LIMITS OF TREE CLEARING
- CONCRETE PAD

GENERAL NOTES

1. THESE PLANS ARE FOR PERMITTING PURPOSES ONLY AND ARE NOT FOR CONSTRUCTION. NO CONSTRUCTION OR DEMOLITION SHALL BEGIN UNTIL FINAL APPROVAL OF THIS PLAN IS GRANTED.
2. ALL PROPOSED SITE WORK TO BE COMPLETED IN ACCORDANCE WITH ALL PERMITS, APPROVALS AND CONDITIONS OF APPROVALS ISSUED BY LOCAL, STATE AND/OR FEDERAL REVIEWING AGENCIES.
3. EXISTING BOUNDARY, TOPOGRAPHY AND SITE CONDITIONS INFORMATION TAKEN FROM A PLAN ENTITLED "EXISTING CONDITIONS PLAN, PREPARED FOR SOLLI ENGINEERING, LLC, 37 HUNTERS LANE, SOUTHINGTON, CONNECTICUT" DATED MAY 23, 2023, SCALE: 1"=60', BY HARRY E. COLE & SON.
4. REFER TO THE EXISTING CONDITIONS MAP FOR THE ENTIRE PROPERTY BOUNDARY AND EXISTING CONDITIONS INFORMATION. THE PLAN HEREON DEPICTS A PORTION OF THE PROPERTY IN WHICH THE SITE WORK IS BEING PROPOSED.
5. THE SUBJECT PARCEL CONSISTS OF A TOTAL AREA OF APPROXIMATELY 24.25± ACRES, LOCATED IN THE RESIDENTIAL 12 (R12) DISTRICT IN THE TOWN OF SOUTHINGTON, CONNECTICUT.
6. WETLAND BOUNDARY DETERMINED AND LOCATED BY PIETRAS ENVIRONMENTAL GROUP, LLC & HARRY E. COLE & SON AND VERIFIED BY WILLIAM KENNY ASSOCIATES.
7. PRIOR TO DEMOLITION OR CONSTRUCTION, THE CONTRACTOR SHALL CONTACT "CALL BEFORE YOU DIG" 72 HOURS BEFORE THE COMMENCEMENT OF WORK AT "(800) 922-4455" AND VERIFY ALL UTILITY AND STORM DRAINAGE SYSTEM LOCATIONS. INFORMATION ON EXISTING UTILITIES AND STORM DRAINAGE SYSTEMS HAS BEEN COMPILED FROM AVAILABLE INFORMATION INCLUDING UTILITY PROVIDER AND MUNICIPAL RECORD MAPS AND/OR FIELD SURVEY AND IS NOT GUARANTEED CORRECT OR COMPLETE. UTILITIES AND STORM DRAINAGE SYSTEMS ARE SHOWN TO ALERT THE CONTRACTOR TO THEIR PRESENCE AND THE CONTRACTOR IS SOLELY RESPONSIBLE FOR DETERMINING ACTUAL LOCATIONS AND ELEVATIONS OF ALL UTILITIES AND STORM DRAINAGE SYSTEMS INCLUDING SERVICES.
8. SHOULD ANY UNCHARTED OR INCORRECTLY CHARTED, EXISTING PIPING OR OTHER UTILITY BE UNCOVERED DURING EXCAVATION, CONSULT THE ENGINEER OF RECORD IMMEDIATELY FOR DIRECTIONS BEFORE PROCEEDING FURTHER WITH WORK IN THIS AREA.
9. THE OWNER IS RESPONSIBLE FOR OBTAINING ALL NECESSARY ZONING PERMITS REQUIRED BY GOVERNMENT AGENCIES PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL OBTAIN ALL LOCAL AND STATE PERMITS. THE CONTRACTOR SHALL POST ALL BONDS, PAY ALL FEES, PROVIDE PROOF OF INSURANCE, AND PROVIDE TRAFFIC CONTROLS NECESSARY FOR THIS PROJECT.
10. THE CONTRACTOR SHALL RESTORE ANY DRAINAGE STRUCTURE, PIPE, UTILITY, PAVEMENT, CURBS, SIDEWALKS, LANDSCAPED AREAS OR SIGNAGE DISTURBED DURING CONSTRUCTION TO THEIR ORIGINAL CONDITION OR BETTER, AS APPROVED BY THE ENGINEER OF RECORD. DURING CONSTRUCTION CONTRACTOR IS TO HAVE THE SITE MAINTAINED FREE OF ALL TRASH, LITTER, DEBRIS AND OVERGROWN VEGETATION.
11. THE OWNER SHALL BE RESPONSIBLE FOR MAINTAINING THE SITE FREE OF ALL TRASH, LITTER, DEBRIS, AND OVERGROWN VEGETATION THROUGHOUT CONSTRUCTION.
12. ALTERNATIVE METHODS AND PRODUCTS OTHER THAN THOSE SPECIFIED MAY BE USED IF REVIEWED AND APPROVED BY THE OWNER, ENGINEER OF RECORD, AND REGULATORY AGENCY PRIOR TO INSTALLATION DURING THE BIDDING PROCESS.

PLANTING SCHEDULE

KEY	QTY	BOTANICAL NAME	COMMON NAME	ROOT	SIZE	COMMENTS
TREES						
PP	13	PICEA PUNGENS	COLORADO BLUE SPRUCE	B&B		FULL, EXTRA HEAVY
PG	7	PICEA GLAUCA	WHITE SPRUCE	B&B		FULL, EXTRA HEAVY
TO	17	THUJA OCCIDENTALIS 'ELEGANTISSIMA'	AMERICAN ARBORVITAE	B&B	7'-8' HT	FULL, EXTRA HEAVY
SEED MIXES						
NEW ENGLAND EROSION CONTROL/RESTORATION MIX (NEW ENGLAND WETLAND PLANTS, INC.) APPLICATION RATE: 1 LB/2,500 S.F.						
ERNMX-147 APPLICATION RATE: 42 LBS/ACRE WITH A COVER CROP OF ANNUAL RYEGRASS AT 12 LBS/ACRE						
ERNMX-610 APPLICATION RATE: 30 LBS/ACRE OF A COVER CROP. FOR A COVER CROP USE EITHER GRAIN OATS (JAN 1TO JUL 31) OR GRAIN RYE (AUG 1 TO DEC 31)						

NOTE: ERNMX-147 TO BE USED WITHIN ARRAY. ERNMX-610 TO BE USED OUTSIDE FENCELINE AND IN NON-ARRAY AREAS (ROAD SHOULDERS, PERIMETER ALLEYS, ELECTRIC TRENCHES, ETC.)

SOLAR ARRAY SYSTEM INFORMATION

	TOTAL OUTPUT
SIZE DC	1.399 MW
SIZE AC	0.999 MW
INVERTER LOAD RATIO	1.40
MODULE TYPE	TRACKING TRINASOLAR TSM-540-DEG19C.20 (540W)
MODULE QUANTITY	2,590
INVERTER	SUNGROW SG125HV 125KW
INVERTER QUANTITY	8
UTILITY	EVERSOURCE

Rev. #:	Date	Description
2	05/09/24	Response to Interrogatories
1	03/27/24	CT DEEP Submission

Graphic Scale: 50 0 50 100

SOLLI ENGINEERING
501 Main Street, Monroe, CT 06468 T: (203) 880-5455 F: (203) 880-9695
11 Vanderbilt Ave, Norwood, MA 02062 T: (781) 352-8491 F: (203) 880-9695

Drawn By:	AWC
Checked By:	RPP
Approved By:	KMS
Project #:	22108701
Plan Date:	12/13/23
Scale:	1" = 50'

STATE OF CONNECTICUT · KEVIN M. SOLLI · 25759 · LICENSED PROFESSIONAL ENGINEER

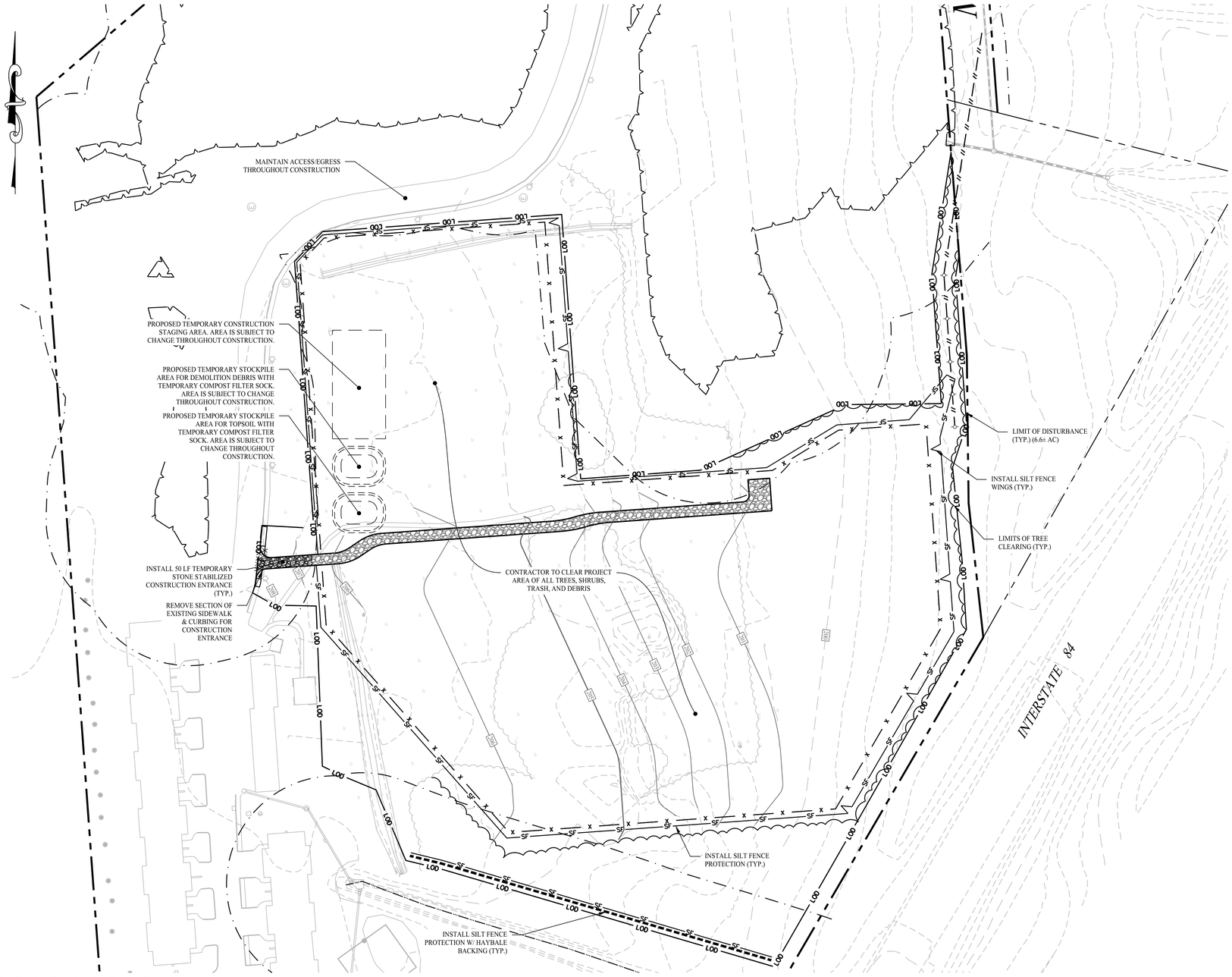
Kevin Solli, P.E.
CT 25759

Project:

PROPOSED SOLAR PHOTOVOLTAIC ARRAY

37 HUNTERS LANE
SOUTHINGTON, CONNECTICUT

Sheet Title:	Sheet #:
SITE LAYOUT PLAN	2.11



CONSTRUCTION SEQUENCE (PHASE I)

SEQUENCE THE FOLLOWING SUGGESTED SEQUENCE OF CONSTRUCTION ACTIVITIES IS PROJECTED BASED UPON ENGINEERING JUDGEMENT AND BEST MANAGEMENT PRACTICES. THE CONTRACTOR MAY ELECT TO ALTER THE SEQUENCING TO BEST MEET THE CONSTRUCTION SCHEDULE, THE EXISTING SITE ACTIVITIES AND WEATHER CONDITIONS. SHOULD THE CONTRACTOR ALTER THE CONSTRUCTION SEQUENCE OR ANY EROSION AND SEDIMENTATION CONTROL MEASURES THEY SHALL MODIFY THE STORMWATER POLLUTION CONTROL PLAN ("SWPCP") AS REQUIRED BY THE GENERAL PERMIT. MAJOR CHANGES IN SEQUENCING AND/OR METHODS MAY REQUIRE REGULATORY APPROVAL PRIOR TO IMPLEMENTATION.

PHASE I:

1. THE CONTRACTOR SHALL SCHEDULE A PRE-CONSTRUCTION MEETING. PHYSICALLY FLAG THE LIMITS OF DISTURBANCE IN THE FIELD AS NECESSARY TO FACILITATE THE PRE-CONSTRUCTION MEETING.
2. CONDUCT A PRE-CONSTRUCTION MEETING TO DISCUSS THE PROPOSED WORK AND EROSION AND SEDIMENTATION CONTROL MEASURES. THE MEETING SHOULD BE ATTENDED BY THE OWNER, THE OWNER'S REPRESENTATIVE(S), THE GENERAL CONTRACTOR, DESIGNATED SUB-CONTRACTORS AND THE PERSON, OR PERSONS, RESPONSIBLE FOR THE IMPLEMENTATION, OPERATION, MONITORING AND MAINTENANCE OF THE EROSION AND SEDIMENTATION MEASURES. THE CONSTRUCTION PROCEDURES FOR THE ENTIRE PROJECT SHALL BE REVIEWED AT THIS MEETING.
3. NOTIFY CALL BEFORE YOU DIG AT "CALL BEFORE YOU DIG" AT 1-800-922-4455, AS REQUIRED, PRIOR TO THE START OF CONSTRUCTION.
4. REMOVE EXISTING IMPEDIMENTS AS NECESSARY AND PROVIDE MINIMAL DISTURBANCE TO INSTALL THE REQUIRED CONSTRUCTION ENTRANCE.
5. INSTALL PERIMETER EROSION CONTROLS.
6. PERFORM TREE CLEARING WITHIN PROJECT AREA.
7. INSTALL GRAVEL ACCESS DRIVE.
8. PERFORM GRADING WITHIN PROJECT AREA AS DEPICTED HEREON.
9. TEMPORARILY SEED DISTURBED AREAS NOT UNDER CONSTRUCTION FOR THIRTY (30) DAYS OR MORE.

SEDIMENT & EROSION CONTROL NOTES

1. THE CONTRACTOR SHALL CONSTRUCT ALL SEDIMENT AND EROSION CONTROLS IN ACCORDANCE WITH THE 2024 CONNECTICUT GUIDELINES FOR SOIL EROSION AND SEDIMENT CONTROL, LATEST EDITION, IN ACCORDANCE WITH THE CONTRACT DOCUMENTS, AND AS DIRECTED BY THE TOWN OF SOUTHINGTON, PERMITTEE, AND/OR SWPCP MONITOR. ALL PERIMETER SEDIMENTATION AND EROSION CONTROL MEASURES SHALL BE INSTALLED PRIOR TO THE START OF CLEARING AND GRUBBING AND DEMOLITION OPERATIONS.
2. THESE DRAWINGS ARE ONLY INTENDED TO DESCRIBE THE SEDIMENT AND EROSION CONTROL MEASURES FOR THIS SITE. SEE CONSTRUCTION SEQUENCE FOR ADDITIONAL INFORMATION. ALL TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES SHOWN ON THE EROSION & SEDIMENT CONTROL PLAN ARE SHOWN AS REQUIRED BY THE ENGINEER OF RECORD. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ENSURING THAT ALL EROSION CONTROL MEASURES ARE CONFIGURED AND CONSTRUCTED IN A MANNER THAT WILL MINIMIZE EROSION OF SOILS AND PREVENT THE TRANSPORT OF SEDIMENTS AND OTHER POLLUTANTS TO STORM DRAINAGE SYSTEMS AND/OR WATERCOURSES. ACTUAL SITE CONDITIONS OR SEASONAL AND CLIMATIC CONDITIONS MAY WARRANT ADDITIONAL CONTROLS OR CONFIGURATIONS, AS REQUIRED, AND AS DIRECTED BY THE PERMITTEE AND/OR SWPCP MONITOR. REFER TO SITE PLAN FOR GENERAL INFORMATION AND OTHER CONTRACT PLANS FOR APPROPRIATE INFORMATION.
3. A BOND OR LETTER OF CREDIT MAY BE REQUIRED TO BE POSTED WITH THE GOVERNING AUTHORITY FOR THE EROSION CONTROL INSTALLATION AND MAINTENANCE.
4. THE CONTRACTOR SHALL APPLY THE MINIMUM EROSION & SEDIMENT CONTROL MEASURES SHOWN ON THE PLAN IN CONJUNCTION WITH CONSTRUCTION SEQUENCING, SUCH THAT ALL ACTIVE WORK ZONES ARE PROTECTED. ADDITIONAL AND/OR ALTERNATIVE SEDIMENT AND EROSION CONTROL MEASURES MAY BE INSTALLED DURING THE CONSTRUCTION PERIOD IF FOUND NECESSARY BY THE CONTRACTOR, OWNER, ENGINEER OF RECORD, MUNICIPAL OFFICIALS, OR ANY GOVERNING AGENCY. THE CONTRACTOR SHALL CONTACT THE OWNER AND APPROPRIATE GOVERNING AGENCIES FOR APPROVAL IF ALTERNATIVE CONTROLS OTHER THAN THOSE SHOWN ON THE PLANS ARE PROPOSED BY THE CONTRACTOR.
5. THE CONTRACTOR SHALL TAKE EXTREME CARE DURING CONSTRUCTION SO AS NOT TO DISTURB UNPROTECTED WETLAND AREAS OR INSTALLED SEDIMENTATION AND EROSION CONTROL MEASURES. THE CONTRACTOR SHALL INSPECT ALL SEDIMENT AND EROSION CONTROLS WEEKLY AND WITHIN 24 HOURS OF A STORM WITH A RAINFALL AMOUNT OF 0.25 INCHES OR GREATER TO VERIFY THAT THE CONTROLS ARE OPERATING PROPERLY AND MAKE REPAIRS AS NECESSARY IN A TIMELY MANNER.
6. THE CONTRACTOR SHALL KEEP A SUPPLY OF EROSION CONTROL MATERIAL (SILT FENCE, COMPOSITE FILTER SOCK, EROSION CONTROL BLANKET, ETC.) ON-SITE FOR PERIODIC MAINTENANCE AND EMERGENCY REPAIRS.
7. ALL FILL MATERIAL PLACED ADJACENT TO ANY WETLAND AREA SHALL BE GOOD QUALITY, WITH LESS THAN 5% FINES PASSING THROUGH A #200 SIEVE (BANK RUN), SHALL BE PLACED IN MAXIMUM ONE FOOT LIFTS, AND SHALL BE COMPACTED TO 95% MAX. DRY DENSITY MODIFIED PROCTOR OR AS SPECIFIED IN THE CONTRACT SPECIFICATIONS.
8. PROTECT EXISTING TREES THAT ARE TO BE SAVED BY FENCING, ORANGE SAFETY FENCE, CONSTRUCTION TAPE, OR EQUIVALENT FENCING/TAPE. ANY LIMB TRIMMING SHOULD BE DONE AFTER CONSULTATION WITH AN ARBORIST AND BEFORE CONSTRUCTION BEGINS IN THAT AREA. FENCING SHALL BE MAINTAINED AND REPAIRED DURING CONSTRUCTION.
9. CONSTRUCTION ENTRANCES (ANTI-TRACKING PADS) SHALL BE INSTALLED PRIOR TO ANY SITE EXCAVATION OR CONSTRUCTION ACTIVITY AND SHALL BE MAINTAINED THROUGHOUT THE DURATION OF ALL CONSTRUCTION IF REQUIRED. THE LOCATION OF THE TRACKING PADS MAY CHANGE AS VARIOUS PHASES OF CONSTRUCTION ARE COMPLETED. CONTRACTOR SHALL ENSURE THAT ALL VEHICLES EXITING THE SITE ARE PASSING OVER THE ANTI-TRACKING PADS PRIOR TO EXITING.
10. ALL CONSTRUCTION SHALL BE CONTAINED WITHIN THE LIMIT OF DISTURBANCE, WHICH SHALL BE MARKED WITH SILT FENCE, SAFETY FENCE, HAY BALES, RIBBONS, OR OTHER MEANS PRIOR TO CLEARING. CONSTRUCTION ACTIVITY SHALL REMAIN ON THE UPHILL SIDE OF THE SEDIMENT BARRIER UNLESS WORK IS SPECIFICALLY CALLED FOR ON THE DOWNHILL SIDE OF THE BARRIER.
11. NO CUT OR FILL SLOPES SHALL EXCEED 2:1 EXCEPT WHERE STABILIZED BY ROCK FACED EMBANKMENTS OR EROSION CONTROL BLANKETS. ALL SLOPES SHALL BE SEEDED AND BANKS WILL BE STABILIZED IMMEDIATELY UPON COMPLETION OF FINAL GRADING UNTIL TURF IS ESTABLISHED.
12. DIRECT ANY DEWATERING PUMP DISCHARGE TO A SEDIMENT CONTROL DEVICE CONFORMING TO THE GUIDELINES WITHIN THE APPROVED LIMIT OF DISTURBANCE IF REQUIRED. DISCHARGE TO STORM DRAINS OR SURFACE WATERS FROM SEDIMENT CONTROLS SHALL BE CLEAR AND APPROVED BY THE PERMITTEE OR MUNICIPALITY.
13. THE CONTRACTOR SHALL MAINTAIN A CLEAN CONSTRUCTION SITE AND SHALL NOT ALLOW THE ACCUMULATION OF RUBBISH OR CONSTRUCTION DEBRIS ON THE SITE. PROPER SANITARY DEVICES SHALL BE MAINTAINED ON-SITE AT ALL TIMES AND SECURED APPROPRIATELY. THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO AVOID THE SPILLAGE OF FUEL OR OTHER POLLUTANTS ON THE CONSTRUCTION SITE AND SHALL ADHERE TO ALL APPLICABLE POLICIES AND REGULATIONS RELATED TO SPILL PREVENTION AND RESPONSE/CONTAINMENT.
14. MINIMIZE LAND DISTURBANCES. SEED AND MULCH DISTURBED AREAS WITH TEMPORARY MIX AS SOON AS PRACTICABLE (2 WEEK MAXIMUM UNSTABILIZED PERIOD) USING PERENNIAL RYEGRASS AT 40 LBS PER ACRE. MULCH ALL CUT AND FILL SLOPES AND SWALES WITH LOOSE HAY AT A RATE OF 2 TONS PER ACRE. IF NECESSARY, REPLACE LOOSE HAY ON SLOPES WITH EROSION CONTROL BLANKETS OR JUTE CLOTH. MODERATELY GRADED AREAS, ISLANDS, AND TEMPORARY CONSTRUCTION STAGING AREAS MAY BE HYDROSEEDED WITH TACKIFIER.
15. SWEEP AFFECTED PORTIONS OF OFF SITE ROADS ONE OR MORE TIMES A DAY (OR LESS FREQUENTLY IF TRACKING IS NOT A PROBLEM) DURING CONSTRUCTION. FOR DUST CONTROL, PERIODICALLY MOISTEN EXPOSED SOIL SURFACES WITH WATER ON UNPAVED TRAVELWAYS TO KEEP THE TRAVELWAYS DAMP. CALCIUM CHLORIDE MAY ALSO BE APPLIED TO ACCESS ROADS. DUMP TRUCK LOADS EXITING THE SITE SHALL BE COVERED.
16. VEGETATIVE ESTABLISHMENT SHALL OCCUR ON ALL DISTURBED SOIL, UNLESS THE AREA IS UNDER ACTIVE CONSTRUCTION, IT IS COVERED IN STONE OR SCHEDULED FOR PAVING WITHIN 30 DAYS. TEMPORARY SEEDING OR NON-LIVING SOIL PROTECTION OF ALL EXPOSED SOILS AND SLOPES SHALL BE INITIATED WITHIN THE FIRST 7 DAYS OF SUSPENDING WORK IN AREAS TO BE LEFT LONGER THAN 30 DAYS.
17. MAINTAIN ALL PERMANENT AND TEMPORARY SEDIMENT CONTROL DEVICES IN EFFECTIVE CONDITION THROUGHOUT THE CONSTRUCTION PERIOD. UPON COMPLETION OF WORK SWEEP CONCRETE PADS, CLEAN THE STORMWATER MANAGEMENT SYSTEMS AND REMOVE ALL TEMPORARY SEDIMENT CONTROLS ONCE THE SITE IS FULLY STABILIZED AND APPROVAL HAS BEEN RECEIVED FROM PERMITTEE OR THE MUNICIPALITY.
18. SEEDING MIXTURES SHALL BE FUZZ & BUZZ MIX - PREMIUM - ERNMX-147, OR APPROVED EQUAL. NEW ENGLAND EROSION CONTROL/ RESTORATION MIX FOR STORMWATER BASINS & MOIST SITES, OR APPROVED EQUAL, SHALL BE UTILIZED ON THE BOTTOM OF THE BASIN & FUZZ & BUZZ MIX - PREMIUM - ERNMX-147, OR APPROVED EQUAL, ON THE SIDE SLOPES OF THE BASIN. SEE SHEET DN-2 FOR ALL SEED MIXTURES.
19. REFER TO SHEET 2.32 & 2.41 FOR SEDIMENT & EROSION CONTROL NARRATIVE & DETAILS.

LEGEND

- PROPERTY LINE
- SF — SF — SILT FENCE PROTECTION
- HAYBALE PROTECTION
- LOD — LIMIT OF DISTURBANCE
- MATERIAL STOCKPILE AREA
- CONSTRUCTION ENTRANCE
- LIMITS OF TREE CLEARING

CONSTRUCTION OPERATION & MAINTENANCE PLAN

T&S MEASURE	INSPECTION SCHEDULE	MAINTENANCE REQUIRED
CONSTRUCTION ENTRANCE	DAILY	PLACE ADDITIONAL STONE, EXTEND THE LENGTH OR REMOVE AND REPLACE THE STONE. CLEAN PAVED SURFACES OF TRACKED SEDIMENT.
COMPOST FILTER SOCK	WEEKLY & WITHIN 24 HOURS OF RAINFALL > 0.25"	REPAIR/REPLACE WHEN FAILURE OR DETERIORATION IS OBSERVED.
SILT FENCE	WEEKLY & WITHIN 24 HOURS OF RAINFALL > 0.25"	REPAIR/REPLACE WHEN FAILURE OR DETERIORATION IS OBSERVED. REMOVE SILT WHEN IT REACHES 1/2 THE HEIGHT OF THE FENCE.
TOPSOIL/BORROW STOCKPILES	DAILY	REPAIR/REPLACE SEDIMENT BARRIERS AS NECESSARY.
TEMPORARY SOIL PROTECTION	WEEKLY & WITHIN 24 HOURS OF RAINFALL > 0.25"	REPAIR ERODED OR BARE AREAS IMMEDIATELY. RESEED AND MULCH.

Rev. #:	Date	Description
2	05/09/24	Response to Interrogatories
1	03/27/24	CT DEEP Submission

Graphic Scale: 50 0 50 100

SOLLI ENGINEERING
501 Main Street, Monroe, CT 06468 T: (203) 880-5455 F: (203) 880-9695
11 Vanderbilt Ave, Norwood, MA 02062 T: (781) 352-8491 F: (203) 880-9695

Drawn By:	AWC
Checked By:	CJB
Approved By:	KMS
Project #:	22108701
Plan Date:	12/13/23
Scale:	1" = 50'

STATE OF CONNECTICUT · KEVIN M. SOLLI · 25759 · REGISTERED PROFESSIONAL ENGINEER

Kevin Solli, P.E.
CT 25759

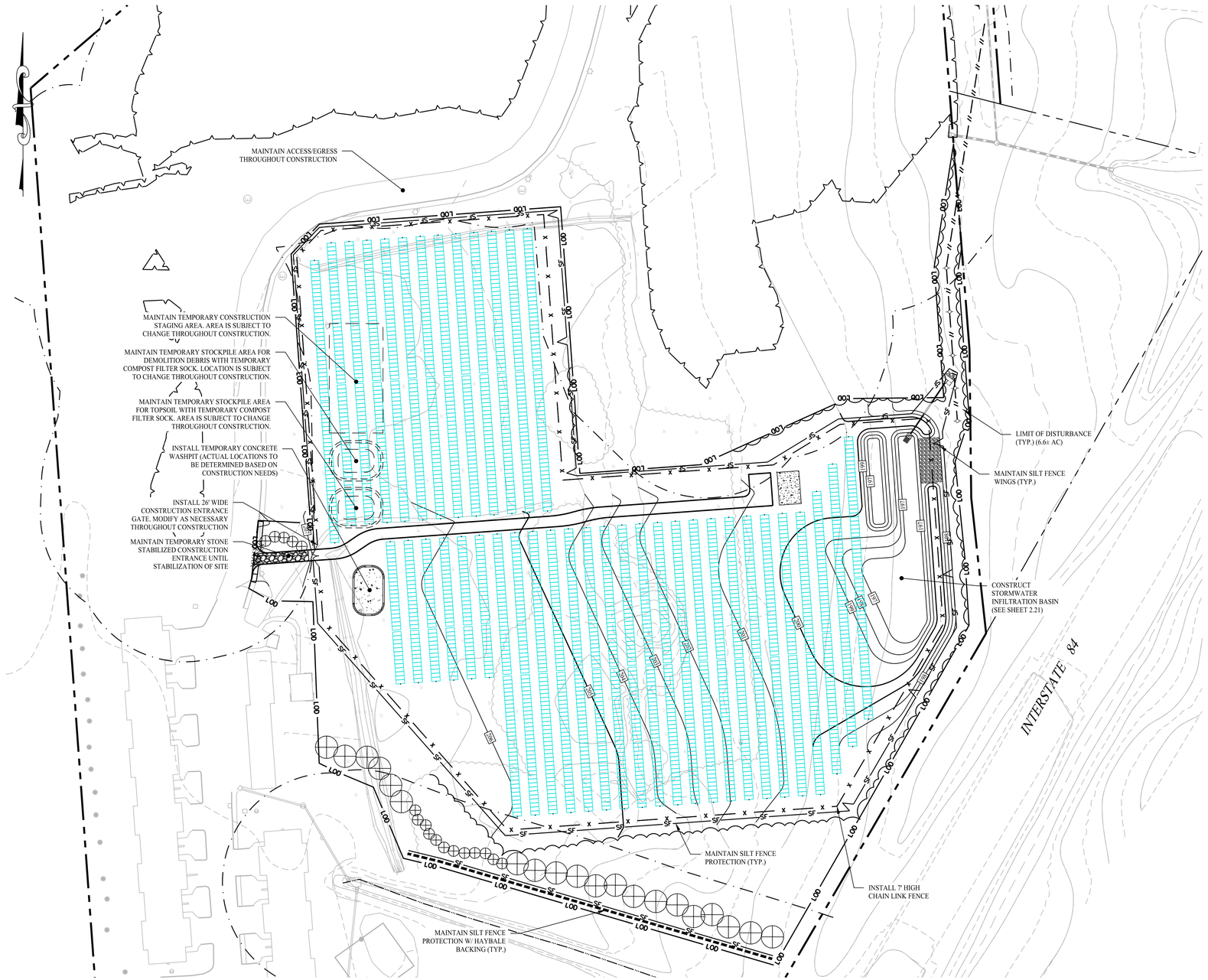
Project:

PROPOSED SOLAR PHOTOVOLTAIC ARRAY

37 HUNTERS LANE
SOUTHINGTON, CONNECTICUT

Sheet Title: SOIL EROSION & SEDIMENT CONTROL PLAN PHASE I

Sheet #: 2.31



LEGEND

- PROPERTY LINE
- SILT FENCE PROTECTION
- HAYBALE PROTECTION
- 7' TALL CHAIN LINK FENCE
- LIMIT OF DISTURBANCE
- MATERIAL STOCKPILE AREA
- CONSTRUCTION ENTRANCE
- CONCRETE WASHPIT
- LIMITS OF TREE CLEARING

RESOURCE PROTECTION NOTES

1. FLAG OR FENCE PROJECT LIMITS OF DISTURBANCE WITHIN ALL WETLAND AREAS AND AREAS WITHIN 100 FEET OF WETLANDS PRIOR TO ANY WORK IN WETLAND AREAS.
2. LOCATE STAGING AREAS AND ACCESS POINTS. STAGING AREAS SHOULD BE LOCATED AT LEAST 50 FEET FROM THE EDGE OF THE WETLAND. INSTALL SEDIMENT BARRIERS DOWN SLOPE OF ANY STAGING AREAS OR ACCESS POINTS.
3. SWAMP MATS, TIMBER MATS, TRUCK MATS OR SIMILAR DEVICES SHALL BE USED DURING THE CROSSINGS OF WETLANDS. SUCH DEVICES SHALL BE INSTALLED PRIOR TO CLEARING, GRUBBING OR EXCAVATION ACTIVITIES.
4. CLEARING, GRUBBING AND UTILITY TRENCHING ACTIVITIES MAY NOT COMMENCE IN ANY STAGE OR PHASE OF THE PROJECT UNTIL THE EROSION AND SEDIMENTATION CONTROLS SPECIFIED BY THIS PROTECTION PLAN AND AS DETAILED ON THE PROJECT SITE PLANS HAVE BEEN INSTALLED AND HAVE BEEN REVIEWED AND APPROVED BY THE ENVIRONMENTAL MONITOR TO ENSURE EROSION CONTROLS ARE PROPERLY INSTALLED.
5. SOIL EXCAVATED FROM WETLAND AREAS SHALL BE CAREFULLY REMOVED WITH THE ROOTS INTACT. THIS SOIL SHOULD BE PLACED IN A SEPARATE STOCKPILE TO BE REUSED DURING THE WETLAND RESTORATION WORK. BOTH WETLAND TOPSOIL AND SUBSOIL SHALL BE SEGREGATED INTO SEPARATE STOCKPILES.
6. SOIL EXCAVATED FROM THE UTILITIES TRENCH LOCATED WITHIN OR ADJACENT TO WETLANDS SHALL BE TEMPORARILY PLACED ON GEOTEXTILE FABRIC.
7. DEWATERING OF THE UTILITY TRENCH EXCAVATION SHALL BE PUMPED TO A SEDIMENT FILTER BAG.
8. INSTALL PIPE AND TRENCH PLUGS IN WETLAND AREAS, AS NECESSARY, TO PREVENT THE TRENCH FROM DRAINING THE WETLAND OR CHANGING ITS HYDROLOGY, AS DETERMINED BY THE ENGINEER OF RECORD OR SOILS SCIENTIST.
9. BACKFILL PIPE TRENCH. BACKFILL FIRST WITH STOCKPILED WETLAND SUBSOIL, WITH THE TOP 12-INCHES OF THE EXCAVATED TRENCH FILLED WITH THE STOCKPILED WETLAND TOPSOIL TO MATCH ORIGINAL SURFACE GRADES.
10. NO SOIL AMENDMENTS SUCH AS AGRICULTURAL LIME, FERTILIZER, ETC. WILL BE USED WITHIN WETLAND AREAS.
11. COMPACT BACKFILL AND GRADE THE SURFACE OF THE TRENCH AREA TO ALLOW FOR POSITIVE DRAINAGE TO SOIL EROSION AND SEDIMENT CONTROLS AND TO PREPARE DISTURBED AREAS FOR PERMANENT TRENCH RESTORATION.
12. ORIGINAL GRADES THROUGH WETLANDS MUST BE RESTORED AFTER TRENCHING AND BACKFILLING. ANY EXCESS FILL MATERIALS MUST BE REMOVED FROM THE WETLAND AND NOT SPREAD ON-SITE.
13. SEED DISTURBED WETLAND AREAS WITH A NEW ENGLAND WET SEED MIX (NEW ENGLAND WETLAND PLANTS, INC., OR APPROVED EQUIVALENT) AT THE MANUFACTURERS RECOMMENDED SEED RATE. MULCH DISTURBED WETLAND AREAS WITH NON-WOVEN NATURAL FIBER EROSION CONTROL BLANKET OR 1 TO 2 INCHES OF CLEAN STRAW MULCH.
14. SEED DISTURBED UPLAND AREAS WITH ERNMX-610, SEE SEED LIST ON SHEET 2.11, AT THE MANUFACTURERS RECOMMENDED SEED RATE. MULCH DISTURBED AREAS WITH NON-WOVEN NATURAL FIBER EROSION CONTROL BLANKET OR 1 TO 2 INCHES OF CLEAN STRAW MULCH.
15. MAINTAIN ALL EROSION AND SEDIMENTATION CONTROL DEVICES UNTIL SITE WORK IS COMPLETE AND A UNIFORM 70% PERENNIAL VEGETATIVE COVER IS ESTABLISHED AS CONFIRMED BY THE ENGINEER OF RECORD OR SOILS SCIENTIST.
16. REMOVE ALL SOIL AND EROSION SEDIMENT CONTROL MEASURES WITHIN 30 DAYS UPON ESTABLISHMENT OF A UNIFORM 70% VEGETATIVE COVER OVER THE DISTURBED AREA. RE-GRADE AND REVEGETATE AREAS DISTURBED DURING THE REMOVAL OF THE SOIL EROSION AND SEDIMENT CONTROLS

SEDIMENT & EROSION CONTROL NARRATIVE

1. THE PROJECT INVOLVES THE CONSTRUCTION OF A GROUND MOUNTED SOLAR PANEL FACILITY WITH ASSOCIATED EQUIPMENT, INCLUDING GRADING OF APPROXIMATELY 6.6± ACRES OF EXISTING LOT.

   THE PROPOSED PROJECT INVOLVES THE FOLLOWING CONSTRUCTION:

   A. CLEARING, GRUBBING, AND GRADING OF EXISTING LOT.
   B. CONSTRUCTION OF 2,590 GROUND MOUNTED SOLAR PANELS AND ASSOCIATED EQUIPMENT.
   C. THE STABILIZATION OF DISTURBED AREAS WITH PERMANENT VEGETATIVE TREATMENTS.

2. FOR THIS PROJECT, THERE ARE APPROXIMATELY 6.6± ACRES OF THE SITE BEING DISTURBED WITH NEGLIGIBLE INCREASE IN THE IMPERVIOUS AREA OF THE SITE. IMPERVIOUS AREAS ARE LIMITED TO THE CONCRETE PADS FOR ELECTRICAL EQUIPMENT & GRAVEL ACCESS DRIVE.
3. THE PROJECT AREA, AS MAPPED IN THE SOIL SURVEY OF STATE OF CONNECTICUT (NRCS, VERSION 18, DEC 6, 2018), CONTAINS TYPE 40A (HYDROLOGIC SOIL GROUP C) AND 307 (HYDROLOGIC SOIL GROUP D). A GEOTECHNICAL ENGINEERING REPORT IS SCHEDULED AND WILL BE PROVIDED UNDER SEPARATE COVER.
4. IT IS ANTICIPATED THAT CONSTRUCTION WILL BE COMPLETED IN APPROXIMATELY 4-6 MONTHS.
5. REFER TO THE CONSTRUCTION SEQUENCING AND EROSION AND SEDIMENTATION NOTES FOR INFORMATION REGARDING SEQUENCING OF MAJOR OPERATIONS IN THE ON-SITE CONSTRUCTION PHASES.
6. STORMWATER MANAGEMENT DESIGN CRITERIA UTILIZES THE APPLICABLE SECTIONS OF THE 2024 CONNECTICUT STORMWATER QUALITY MANUAL AND THE TOWN OF SOUTHINGTON STANDARDS, TO THE EXTENT POSSIBLE AND PRACTICABLE FOR THIS PROJECT ON THIS SITE. EROSION AND SEDIMENTATION MEASURES ARE BASED UPON ENGINEERING PRACTICE, JUDGEMENT AND THE APPLICABLE SECTIONS OF THE CONNECTICUT EROSION AND SEDIMENT CONTROL GUIDELINES FOR URBAN AND SUBURBAN AREAS, LATEST EDITION.
7. DETAILS FOR THE TYPICAL STORMWATER MANAGEMENT AND EROSION AND SEDIMENTATION MEASURES ARE SHOWN ON THE PLAN SHEETS OR PROVIDED AS SEPARATE SUPPORT DOCUMENTATION FOR REVIEW IN THIS PLAN.
8. CONSERVATION PRACTICES TO BE USED DURING CONSTRUCTION:

   A. STAGED CONSTRUCTION;
   B. MINIMIZE THE DISTURBED AREAS TO THE EXTENT PRACTICABLE DURING CONSTRUCTION;
   C. STABILIZE DISTURBED AREAS WITH TEMPORARY OR PERMANENT MEASURES AS SOON AS POSSIBLE, BUT NO LATER THAN 7-DAYS FOLLOWING DISTURBANCE;
   D. MINIMIZE IMPERVIOUS AREAS;
   E. UTILIZE APPROPRIATE CONSTRUCTION EROSION AND SEDIMENTATION MEASURES.

9. THE FOLLOWING SEPARATE DOCUMENTS ARE TO BE CONSIDERED A PART OF THE EROSION AND SEDIMENTATION PLAN:

   A. STORMWATER MANAGEMENT REPORT
   B. SWPCP, TO BE ISSUED AT A LATER DATE.

CONSTRUCTION SEQUENCE (PHASE II)

PHASE II:

1. INSTALL ELECTRICAL CONDUIT, RACKING POSTS FOR GROUND MOUNTED SOLAR PANELS & GROUND MOUNTED SOLAR PANELS AND COMPLETE ELECTRICAL INSTALLATION.
2. AFTER SUBSTANTIAL COMPLETION OF THE INSTALLATION OF THE SOLAR PANELS, COMPLETE REMAINING SITE WORK, INCLUDING ANY REQUIRED LANDSCAPE SCREENING, STORMWATER BASIN, CHAIN LINK FENCE, AND STABILIZE ALL DISTURBED AREAS.
3. FOR SLOPES GREATER THAN OR EQUAL TO 8%, EROSION CONTROL BLANKETS OR STUMP GRINDINGS OR EROSION CONTROL MIX MULCH OR HYDROSEED WITH TACKIFIER SHALL BE APPLIED WITHIN 72 HOURS OF FINAL GRADING, OR WHEN A RAINFALL OF 0.5 INCHES OR GREATER IS PREDICTED WITHIN 24 HOURS OF FINAL GRADING, WHICHEVER TIME PERIOD IS LESS.
4. FINE GRADE, RAKE, SEED, AND MULCH ALL REMAINING DISTURBED AREAS.
5. AFTER THE SITE IS STABILIZED AND WITH THE APPROVAL OF THE PERMITTEE AND IF NECESSARY THE CONSERVATION AGENT, REMOVE PERIMETER EROSION AND SEDIMENTATION CONTROLS.

Rev. #:	Date	Description
2	05/09/24	Response to Interrogatories
1	03/27/24	CT DEEP Submission

Graphic Scale: 50 0 50 100

SOLLI ENGINEERING
501 Main Street, Monroe, CT 06468 T: (203) 880-5455 F: (203) 880-9695
11 Vanderbilt Ave, Norwood, MA 02062 T: (781) 352-8491 F: (203) 880-9695

Drawn By:	AWC
Checked By:	CJB
Approved By:	KMS
Project #:	22108701
Plan Date:	12/13/23
Scale:	1" = 50'

STATE OF CONNECTICUT KEVIN M. SOLLI 25759 LICENSED PROFESSIONAL ENGINEER

Kevin Solli, P.E.
CT 25759

Project:

PROPOSED SOLAR PHOTOVOLTAIC ARRAY

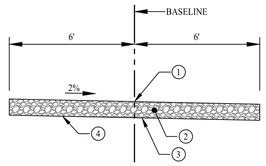
37 HUNTERS LANE
SOUTHINGTON, CONNECTICUT

Sheet Title: SOIL EROSION & SEDIMENT CONTROL PLAN PHASE II

Sheet #: 2.32

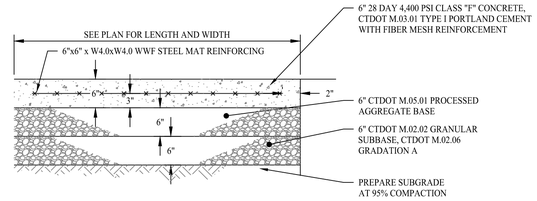
1. POINT OF APPLICATION OF GRADE OR MATCH EXISTING GROUND
2. 8" LAYER CRUSHER RUN GRAVEL
3. NONWOVEN GEOTEXTILE (MIRAFI 140N OR EQUAL)
4. LIMIT OF EXCAVATION OR LIMIT OF COMPACTION

NOTES:
1. THE CONTRACTOR SHALL CONTACT CT CALL BEFORE YOU DIG (CBYD) A MINIMUM OF 72 HOURS PRIOR TO BEGINNING CONSTRUCTION.
2. TRANSITIONS BETWEEN TYPICAL ACCESS ROAD SECTIONS SHALL OCCUR OVER 50 FEET. (TYPICAL)



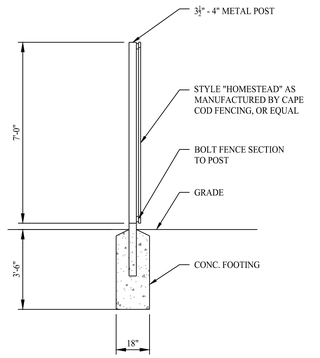
TYPICAL GRAVEL ROADWAY SECTION

SCALE: NTS



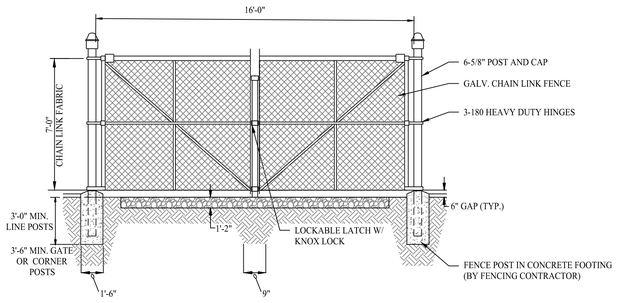
CONCRETE UTILITY PAD

SCALE: NTS



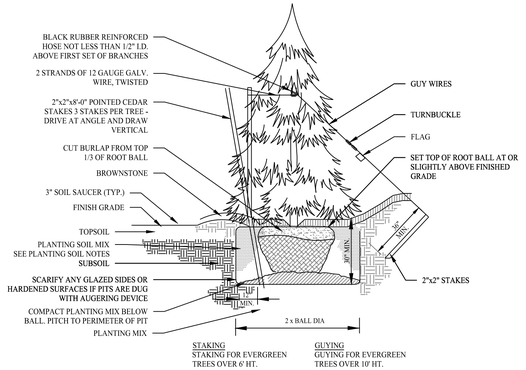
FENCE POST INSTALLATION

SCALE: NTS



DOUBLE SWING GATE DETAIL

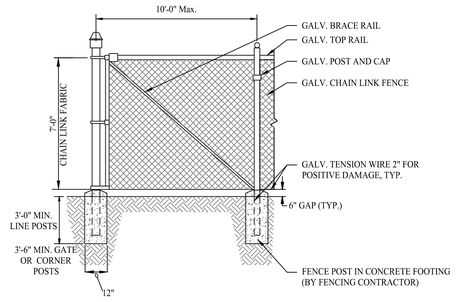
SCALE: NTS



EVERGREEN TREE PLANTING

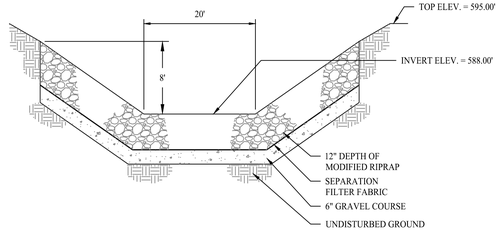
SCALE: NTS

SEE THE SITEWORK SPECIFICATIONS FOR THE SIZE, TYPE, AND GAUGE OF MATERIALS THAT WILL BE USED FOR CONSTRUCTION OF A CHAIN LINK FENCE.



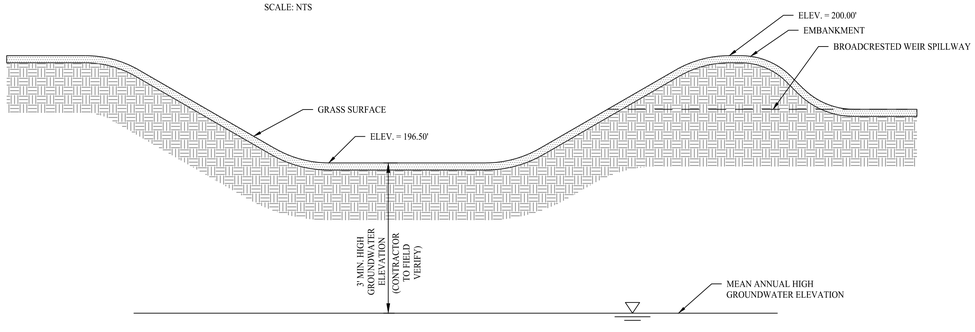
7' HIGH CHAIN LINK FENCE DETAIL

SCALE: NTS



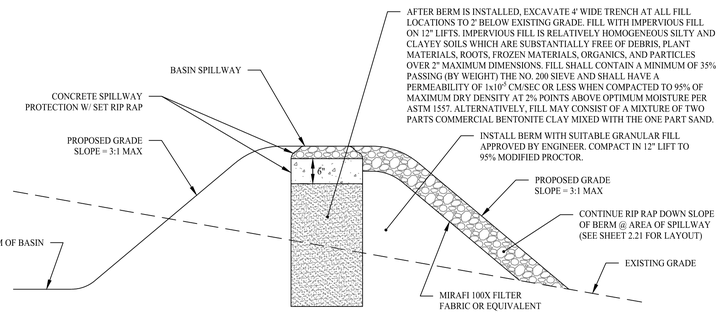
BROADCRESTED WEIR SPILLWAY

SCALE: NTS



INFILTRATION BASIN CROSS-SECTION

SCALE: NTS



TYPICAL SPILLWAY IN FILL SECTION DETAIL

SCALE: NTS

Rev. #:	Date	Description
2	05/09/24	Response to Interrogatories
1	03/27/24	CT DEEP Submission

Graphic Scale:

SOLLI ENGINEERING
501 Main Street, Monroe, CT 06468 T: (203) 880-5455 F: (203) 880-9695
11 Vanderbilt Ave, Norwood, MA 02062 T: (781) 352-8491 F: (203) 880-9695

Drawn By:	SFU
Checked By:	CJB
Approved By:	KMS
Project #:	22108701
Plan Date:	12/13/23
Scale:	NTS

STATE OF CONNECTICUT KEVIN M. SOLLI 25759 REGISTERED PROFESSIONAL ENGINEER

Kevin Solli, P.E.
CT 25759

Project:

PROPOSED SOLAR PHOTOVOLTAIC ARRAY

37 HUNTERS LANE
SOUTHINGTON, CONNECTICUT

Sheet Title: CONSTRUCTION DETAILS

Sheet #: 3.01

EXHIBIT C

Revised Sections of Environmental Assessment

The monarch butterfly is a candidate species for protection under the ESA. Candidate species are "species which the USFWS has sufficient information to propose as endangered or threatened under the ESA, but for which their development of a proposed listing regulation is precluded by other higher priority listing activities". As such, until they are proposed for listing, these species are not officially entitled to legal protection under the ESA, and they are not considered when making a determination as to "take".

3.6 SOILS & GEOLOGY

The project grading is expected to generate a net export of approximately 150 cubic yards of material. Before any fill material is removed or used, the topsoil will be stripped and stockpiled for later seeding of disturbed areas. Any soil exposed due to construction will be treated according to the *2024 Connecticut Guidelines for Soil Erosion and Sediment Control*.

The following soils exist on-site and in surrounding areas:

1. Urban land.
2. Ludlow silt loam, 0 to 3 percent slopes.

For more information, refer to the map Figure 8, Prime Farmland Map, included in Appendix A of this environmental assessment.

3.6.1 PRIME FARMLAND SOILS

Solli Engineering has reviewed the listed soils in accordance with the Code of Federal Regulations ("CFR") Title 7, part 657. Prime Farmland Soils are distinguishable based on soil type. These soils are to be identified under CFR Title 7, part 657 in order to know the extent and location of the best land for producing food, feed, fiber forage and oilseed crops. Upon review, the Project will impact approximately 1.7 acres of prime farmland. For more information, refer to the map Figure 8, Prime Farmland Map, included in Appendix A of this environmental assessment.

Because the expected use of the Project will have a finite lifespan, the Petitioner proposes to use minimally intrusive methods during construction when possible. Grading will be limited by the use of solar panel tracker systems and construction of solar panels in existing areas where grades are similar to proposed conditions. There will be some excavation and regrading that takes place on prime farmland to properly develop the Site as a whole. In areas where Prime Farmland Soils are disturbed, the developer will remove the topsoil, segregate it from underlying horizons, and stockpile and spread it throughout the Project as necessary to re-establish vegetation growth.

When the solar panel facility reaches the end of its finite lifespan, the facility will be decommissioned. Upon this development, all areas disturbed by the facility will be top dressed with native soils and reseeded with the same (or approved equivalent) pollinator blend that exists within the area of the solar panel facility. These proposed design strategies will not materially affect the prime farmland.

3.7 HISTORIC & ARCHAEOLOGICAL RESOURCES

Archaeological Consulting Services LLC performed a Phase 1A Archaeological Assessment Survey on behalf of Solli Engineering and the Petitioner. Their report discloses that a property National Register of Historic Places does not exist within the Site. Background research indicates a low sensitivity for potential prehistoric cultural resources. The low score can be attributed to fine particle fraction of the original soil context and associated moderate drainage qualities, as well as distance to nearest major bodies of water. ACS therefore recommends no further archaeological conservation efforts for the Site. For more information refer to the Phase 1A report in Appendix D, Cultural Resources included in this environmental assessment.

3.8 SCENIC AND RECREATIONAL AREAS

Interstate 84 is a state highway adjacent to the proposed solar array. Existing tree cover will shield the state highway from the Site. The Farmington Canal Heritage Trail is a protected hiking trail located approximately one-third mile east of the property on the opposite side of I-84. The closest open space is located at Panthorn Park, approximately one-third mile southwest of the property. For more information regarding resources located within one mile of the site refer to Figure 9, Scenic & Recreation Map.

3.9 LIGHTING

Permanent exterior lighting is not planned for the Project. During routine maintenance of the Facility there may be times when on-site equipment flashes small lights, which will only be activated during maintenance.

3.10 FAA DETERMINATION

The closest federally obligated airport is Waterbury-Oxford located approximately 14 miles southwest of the Site.

Solli Engineering has submitted the required information to the Federal Aviation Administration (FAA) for review. The FAA reviewed multiple sample points to determine whether a potential hazard exists for air navigation. Upon review, the FAA issued a Determination of No Hazard to Air Navigation for all points, therefore a glare analysis is not required. For more information see Appendix G, FAA Determinations.

3.11 VISIBILITY

There will be solar trackers a maximum of 6-ft off finished grade within the solar panel facility. All disturbed areas will be contained within a 7-ft chain link fence. Trees constituting the existing tree line will be preserved and maintained to the best of the developer's ability. Most neighbors in the vicinity of the subject property will not be able to view the solar panel facility due to tree coverage; however, the facility will be visible to two (2) of the existing five (5) residential buildings on the site year-round and may be visible to one commercially used building seasonally. For more information refer to Figure 10, Proposed Conditions Viewshed Map.

The solar panel products are designed in such a way that they are not highly reflective. Because solar panels have tracking features, the panels will not reflect in one direction for an extended period of time.

3.12 NOISE

Noise from the construction of the solar panel facility is exempted under Connecticut regulations for the control of noise. For more information refer to RCSA 22a-69-1.8(h). During construction, the increase in noise will likely lead to a subsequent elevation in ambient sound levels in the immediate vicinity of the Project. Standard construction equipment will be used for the Project, and the highest level of noise generated from this equipment - such as backhoes, bulldozers, cranes and trucks – is expected to be approximately 88 dBA from the origin.

The primary sources of noise generation associated with the Facility will be the (2) 2,000 kVA transformers and (8) inverters. The tracker motors for the solar panels themselves also emit noise, but the level of noise for these motors is minimal. A summary of the equipment and manufacturer's listed sound data is provided below in Table 1.

Table 1: Equipment Sound Summary

Equipment	Number of Sources	Listed Sound Pressure (dBA)	Distance of Observed Sound Level (meters)
Sungrow SG125HV 125kW Inverters	8	61.6	1
2,000 kVA Transformers	2	61	1

The logarithmic decibel scale is utilized to combine sound levels and adjust for distance based on the Inverse Square Law. Total sound levels from the proposed equipment was calculated as shown below:

Calculate Anticipated Sound Level at Nearest Property Boundary

Multiple analysis points were studied along the property boundary to determine at which point the highest level of sound will be produced by the equipment on-site. Once the point was determined, following equation was used to determine the sound level of each piece of noise-producing equipment:

$$L_b = L_a - 20 \times log_{10}(\frac{D_b}{D_a})$$

Where:
L_b = Noise level at new distance (dBA)
L_a = Noise level at original distance (dBA)
D_b = New distance from source of noise (meters)
D_a = Original distance from source of noise (meters)

Using the data from Table 1, as well as the distances from each inverter (156') and the transformers (156') to the property line, the total anticipated sound level for each piece equipment was calculated.

Combining Sound Levels

To add multiple sound levels of different strength, the following equation was used:

$$L_t = 10log_{10}(\sum 10^{\frac{L_b}{10}})$$

After combining all sound levels from each piece of equipment, it was determined that the highest collective operational noise at the property boundary would be 37.9 decibels. This noise level meets applicable CT DEEP Noise Standards, and noise levels will effectively be reduced to zero during nighttime hours when the array is not generating electricity.

SOLLI ENGINEERING
501 Main Street, Monroe, CT 06468
T: (203) 880-5455 F: (203) 880-9695

NOISE CALCULATIONS
37 HUNTERS LANE
SOUTHINGTON, CONNECTICUT

Project #:	22108701
Plan Date:	05/06/24
Scale:	1" = 150'
Figure:	

4.0 CONCLUSION

As demonstrated by the information outlined herein, the Project will have no air emissions, no significant adverse environmental impacts and will comply with the CT DEEP air and water quality standards. The Petitioner, therefore, respectfully requests that the Council issue a declaratory ruling that the proposed Project will comply with CT DEEP air and water quality standards, will not have a substantial adverse environmental impact, and does not require the issuance of a Certificate.

EXHIBIT D

State Historic Preservation Office Letter

State Historic Preservation Office
Department of Economic and Community Development

CONNECTICUT

March 22, 2024

Dr. Gregory F. Walwer
Archaeological Consulting Services
118 Whitfield Street
Guilford, CT 06437
(sent only via email to acsinfo@yahoo.com)

Subject: Phase Ia Archaeological Assessment Survey
37 Hunters Lane
Southington, Connecticut

Dear Dr. Walwer:

The State Historic Preservation Office (SHPO) has reviewed the Phase IA Archaeological Assessment survey prepared by Archaeological Consulting Services (ACS) for a proposed solar facility and related improvements situated northwest of Interstate 84 and south of Wonx Spring Road. The project parcel encompasses approximately 24.25 acres. The property currently contains a housing complex accessed by Hunters Lane. The proposed solar arrays will be accessed along this same roadway. The project will require approval from the Connecticut Siting Council and has a proposed stormwater basin. Therefore, it is subject to review by our office pursuant to state and federal legislation.

The preliminary context and background research demonstrates knowledge of the project region and is consistent with the standards set forth in the *Environmental Review Primer for Connecticut's Archaeological Resources*. The ACS report describes pervasive prior disturbances of the proposed project related to the construction, use and, demolition of a twentieth century industrial structure. As a result, SHPO concurs with ACS that the proposed actions are unlikely to impact significant archeological deposits. Based on the information provided to our office, SHPO concurs that no historic properties will be affected by this undertaking.

SHPO appreciates the opportunity to review and comment upon this project. Do not hesitate to contact Catherine Labadia, Staff Archaeologist and Deputy State Historic Preservation Officer, for additional information at (860) 500-2329 or catherine.labadia@ct.gov.

Sincerely,

Jonathan Kinney
State Historic Preservation Officer

450 Columbus Boulevard, Suite 5
Hartford, CT 06103
Phone: 860-500-2300

EXHIBIT E

US Fish & Wildlife Services Correspondence

United States Department of the Interior

FISH AND WILDLIFE SERVICE
New England Ecological Services Field Office
70 Commercial Street, Suite 300
Concord, NH 03301-5094
Phone: (603) 223-2541 Fax: (603) 223-0104

In Reply Refer To: 05/03/2024 13:21:12 UTC
Project code: 2023-0045969
Project Name: Southington CT Solar Photovoltaic Array

Federal Action Agency (if applicable):

Subject: Record of project representative's no effect determination for 'Southington CT Solar Photovoltaic Array'

Dear Alexander Wojtkowiak:

This letter records your determination using the Information for Planning and Consultation (IPaC) system provided to the U.S. Fish and Wildlife Service (Service) on May 03, 2024, for 'Southington CT Solar Photovoltaic Array' (here forward, Project). This project has been assigned Project Code 2023-0045969 and all future correspondence should clearly reference this number. **Please carefully review this letter.**

Ensuring Accurate Determinations When Using IPaC

The Service developed the IPaC system and associated species' determination keys in accordance with the Endangered Species Act of 1973 (ESA; 87 Stat. 884, as amended; 16 U.S.C. 1531 et seq.) and based on a standing analysis. All information submitted by the Project proponent into IPaC must accurately represent the full scope and details of the Project.

Failure to accurately represent or implement the Project as detailed in IPaC or the Northern Long-eared Bat Rangewide Determination Key (Dkey), invalidates this letter. ***Answers to certain questions in the DKey commit the project proponent to implementation of conservation measures that must be followed for the ESA determination to remain valid.***

Determination for the Northern Long-Eared Bat

Based upon your IPaC submission and a standing analysis, your project has reached the determination of "No Effect" on the northern long-eared bat. To make a no effect determination, the full scope of the proposed project implementation (action) should not have any effects (either positive or negative), to a federally listed species or designated critical habitat. Effects of the action are all consequences to listed species or critical habitat that are caused by the proposed

action, including the consequences of other activities that are caused by the proposed action. A consequence is caused by the proposed action if it would not occur but for the proposed action and it is reasonably certain to occur. Effects of the action may occur later in time and may include consequences occurring outside the immediate area involved in the action. (See § 402.17).

Under Section 7 of the ESA, if a federal action agency makes a no effect determination, no consultation with the Service is required (ESA §7). If a proposed Federal action may affect a listed species or designated critical habitat, formal consultation is required except when the Service concurs, in writing, that a proposed action "is not likely to adversely affect" listed species or designated critical habitat [50 CFR §402.02, 50 CFR§402.13].

Other Species and Critical Habitat that May be Present in the Action Area

The IPaC-assisted determination for the northern long-eared bat does not apply to the following ESA-protected species and/or critical habitat that also may occur in your Action area:

- Monarch Butterfly *Danaus plexippus* Candidate
- Tricolored Bat *Perimyotis subflavus* Proposed Endangered

You may coordinate with our Office to determine whether the Action may affect the animal species listed above and, if so, how they may be affected.

Next Steps

Based upon your IPaC submission, your project has reached the determination of “No Effect” on the northern long-eared bat. If there are no updates on listed species, no further consultation/ coordination for this project is required with respect to the northern long-eared bat. However, the Service recommends that project proponents re-evaluate the Project in IPaC if: 1) the scope, timing, duration, or location of the Project changes (includes any project changes or amendments); 2) new information reveals the Project may impact (positively or negatively) federally listed species or designated critical habitat; or 3) a new species is listed, or critical habitat designated. If any of the above conditions occurs, additional coordination with the Service should take place to ensure compliance with the Act.

If you have any questions regarding this letter or need further assistance, please contact the New England Ecological Services Field Office and reference Project Code 2023-0045969 associated with this Project.

Action Description
You provided to IPaC the following name and description for the subject Action.

1. Name

Southington CT Solar Photovoltaic Array

2. Description

The following description was provided for the project 'Southington CT Solar Photovoltaic Array':

> The proposed project is a solar photovoltaic array that will produce 0.999 MW AC within 6.60 acres of the eastern-central portion of the approximate 24.25 acre property at 37 Hunters Lane, Southington, Connecticut. The entirety of the property was investigated for existing environmental conditions (i.e. wetlands and watercourses surveys, wildlife and vegetation surveys, etc.). Existing improvements at the property include a multi-family residential development, ashpalt drives and parking areas and other associated improvements. Soils throughout the investigation area are formed from logement glacial till deposits and human-altered deposits. The deposits are from red arkosic sandstones native to the Connecticut Rift Valley. The vegetative cover throughout the investigation area is primarily maintained as a meadow with forested land along the eastern boundary.
>
> The project proposal is to develop the project site with a solar photovoltaic array and associated improvements including access drive, fencing, landscape improvements, utility pads and interconnection systems. The development will require vegetation clearing and minor earthwork within the project area that will utilize standard construction practices. No wetlands and watercourses are proposed to be impacted by the project. The project proposes to implement a variety of soil erosion and sedimentation control measures to protect wetlands and watercourses and neighboring properties from sedimentation. The stormwater management practices proposed to mitigate for the proposed increase in impervious surfaces and to provide treatment to the runoff prior to leaving the project area are still in development at this time. The timing of the project is unknown at this time.

The approximate location of the project can be viewed in Google Maps: https://www.google.com/maps/@41.57925505,-72.90440761710337,14z

DETERMINATION KEY RESULT

Based on the information you provided, you have determined that the Proposed Action will have no effect on the Endangered northern long-eared bat (Myotis septentrionalis). Therefore, no consultation with the U.S. Fish and Wildlife Service pursuant to Section 7(a)(2) of the Endangered Species Act of 1973 (87 Stat. 884, as amended 16 U.S.C. 1531 *et seq.*) is required for those species.

QUALIFICATION INTERVIEW

1. Does the proposed project include, or is it reasonably certain to cause, intentional take of the northern long-eared bat or any other listed species?

   Note: Intentional take is defined as take that is the intended result of a project. Intentional take could refer to research, direct species management, surveys, and/or studies that include intentional handling/encountering, harassment, collection, or capturing of any individual of a federally listed threatened, endangered or proposed species?

   No

2. The proposed action does not intersect an area where the northern long-eared bat is likely to occur, based on the information available to U.S. Fish and Wildlife Service as of the most recent update of this key. If you have data that indicates that northern long-eared bats are likely to be present in the action area, answer "NO" and continue through the key.

   Do you want to make a no effect determination?

   Yes

PROJECT QUESTIONNAIRE

IPAC USER CONTACT INFORMATION

Agency: Private Entity
Name: Alexander Wojtkowiak
Address: 1899 Bronson Road
City: Fairfield
State: CT
Zip: 06824
Email awojtkowiak@wkassociates.net
Phone: 4019355101

United States Department of the Interior

FISH AND WILDLIFE SERVICE
New England Ecological Services Field Office
70 Commercial Street, Suite 300
Concord, NH 03301-5094
Phone: (603) 223-2541 Fax: (603) 223-0104

In Reply Refer To: 05/03/2024 13:18:02 UTC
Project Code: 2023-0045969
Project Name: Southington CT Solar Photovoltaic Array

Subject: List of threatened and endangered species that may occur in your proposed project location or may be affected by your proposed project

To Whom It May Concern:

Updated 4/12/2023 - Please review this letter each time you request an Official Species List, we will continue to update it with additional information and links to websites may change.

About Official Species Lists

The purpose of the Act is to provide a means whereby threatened and endangered species and the ecosystems upon which they depend may be conserved. Federal and non-Federal project proponents have responsibilities under the Act to consider effects on listed species.

The enclosed species list identifies threatened, endangered, proposed, and candidate species, as well as proposed and final designated critical habitat, that may occur within the boundary of your proposed project and/or may be affected by your proposed project. The species list fulfills the requirements of the U.S. Fish and Wildlife Service (Service) under section 7(c) of the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 et seq.).

New information based on updated surveys, changes in the abundance and distribution of species, changed habitat conditions, or other factors could change this list. Please note that under 50 CFR 402.12(e) of the regulations implementing section 7 of the Act, the accuracy of this species list should be verified after 90 days. The Service recommends that verification be completed by visiting the IPaC website at regular intervals during project planning and implementation for updates to species lists and information. An updated list may be requested by returning to an existing project's page in IPaC.

Endangered Species Act Project Review

Please visit the "**New England Field Office Endangered Species Project Review and Consultation**" website for step-by-step instructions on how to consider effects on listed

species and prepare and submit a project review package if necessary:

https://www.fws.gov/office/new-england-ecological-services/endangered-species-project-review

NOTE Please do not use the **Consultation Package Builder** tool in IPaC except in specific situations following coordination with our office. Please follow the project review guidance on our website instead and reference your **Project Code** in all correspondence.

Northern Long-eared Bat - (**Updated 4/12/2023**) The Service published a final rule to reclassify the northern long-eared bat (NLEB) as endangered on November 30, 2022. The final rule went into effect on March 31, 2023. You may utilize the **Northern Long-eared Bat Rangewide Determination Key** available in IPaC. More information about this Determination Key and the Interim Consultation Framework are available on the northern long-eared bat species page:

https://www.fws.gov/species/northern-long-eared-bat-myotis-septentrionalis

For projects that previously utilized the 4(d) Determination Key, the change in the species' status may trigger the need to re-initiate consultation for any actions that are not completed and for which the Federal action agency retains discretion once the new listing determination becomes effective. If your project was not completed by March 31, 2023, and may result in incidental take of NLEB, please reach out to our office at newengland@fws.gov to see if reinitiation is necessary.

Additional Info About Section 7 of the Act
Under section 7(a)(2) of the Act and its implementing regulations (50 CFR 402 et seq.), Federal agencies are required to determine whether projects may affect threatened and endangered species and/or designated critical habitat. If a Federal agency, or its non-Federal representative, determines that listed species and/or designated critical habitat may be affected by the proposed project, the agency is required to consult with the Service pursuant to 50 CFR 402. In addition, the Federal agency also may need to consider proposed species and proposed critical habitat in the consultation. 50 CFR 402.14(c)(1) specifies the information required for consultation under the Act regardless of the format of the evaluation. More information on the regulations and procedures for section 7 consultation, including the role of permit or license applicants, can be found in the "Endangered Species Consultation Handbook" at:

https://www.fws.gov/service/section-7-consultations

In addition to consultation requirements under Section 7(a)(2) of the ESA, please note that under sections 7(a)(1) of the Act and its implementing regulations (50 CFR 402 et seq.), Federal agencies are required to utilize their authorities to carry out programs for the conservation of threatened and endangered species. Please contact NEFO if you would like more information.

Candidate species that appear on the enclosed species list have no current protections under the ESA. The species' occurrence on an official species list does not convey a requirement to

consider impacts to this species as you would a proposed, threatened, or endangered species. The ESA does not provide for interagency consultations on candidate species under section 7, however, the Service recommends that all project proponents incorporate measures into projects to benefit candidate species and their habitats wherever possible.

Migratory Birds

In addition to responsibilities to protect threatened and endangered species under the Endangered Species Act (ESA), there are additional responsibilities under the Migratory Bird Treaty Act (MBTA) and the Bald and Golden Eagle Protection Act (BGEPA) to protect native birds from project-related impacts. Any activity, intentional or unintentional, resulting in take of migratory birds, including eagles, is prohibited unless otherwise permitted by the U.S. Fish and Wildlife Service (50 C.F.R. Sec. 10.12 and 16 U.S.C. Sec. 668(a)). For more information regarding these Acts see:

https://www.fws.gov/program/migratory-bird-permit

https://www.fws.gov/library/collections/bald-and-golden-eagle-management

Please feel free to contact us at **newengland@fws.gov** with your **Project Code** in the subject line if you need more information or assistance regarding the potential impacts to federally proposed, listed, and candidate species and federally designated and proposed critical habitat.

Attachment(s): Official Species List

Attachment(s):

- Official Species List

OFFICIAL SPECIES LIST

This list is provided pursuant to Section 7 of the Endangered Species Act, and fulfills the requirement for Federal agencies to "request of the Secretary of the Interior information whether any species which is listed or proposed to be listed may be present in the area of a proposed action".

This species list is provided by:

New England Ecological Services Field Office
70 Commercial Street, Suite 300
Concord, NH 03301-5094
(603) 223-2541

PROJECT SUMMARY

Project Code: 2023-0045969
Project Name: Southington CT Solar Photovoltaic Array
Project Type: Power Gen - Solar
Project Description: The proposed project is a solar photovoltaic array that will produce 0.999 MW AC within 6.60 acres of the eastern-central portion of the approximate 24.25 acre property at 37 Hunters Lane, Southington, Connecticut. The entirety of the property was investigated for existing environmental conditions (i.e. wetlands and watercourses surveys, wildlife and vegetation surveys, etc.). Existing improvements at the property include a multi-family residential development, ashpalt drives and parking areas and other associated improvements. Soils throughout the investigation area are formed from logement glacial till deposits and human-altered deposits. The deposits are from red arkosic sandstones native to the Connecticut Rift Valley. The vegetative cover throughout the investigation area is primarily maintained as a meadow with forested land along the eastern boundary.

The project proposal is to develop the project site with a solar photovoltaic array and associated improvements including access drive, fencing, landscape improvements, utility pads and interconnection systems. The development will require vegetation clearing and minor earthwork within the project area that will utilize standard construction practices. No wetlands and watercourses are proposed to be impacted by the project. The project proposes to implement a variety of soil erosion and sedimentation control measures to protect wetlands and watercourses and neighboring properties from sedimentation. The stormwater management practices proposed to mitigate for the proposed increase in impervious surfaces and to provide treatment to the runoff prior to leaving the project area are still in development at this time. The timing of the project is unknown at this time.

Project Location:

The approximate location of the project can be viewed in Google Maps: https://www.google.com/maps/@41.57925505,-72.90440761710337,14z

Counties: Hartford County, Connecticut

ENDANGERED SPECIES ACT SPECIES

There is a total of 3 threatened, endangered, or candidate species on this species list.

Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species. Note that 1 of these species should be considered only under certain conditions.

IPaC does not display listed species or critical habitats under the sole jurisdiction of NOAA Fisheries[1], as USFWS does not have the authority to speak on behalf of NOAA and the Department of Commerce.

See the "Critical habitats" section below for those critical habitats that lie wholly or partially within your project area under this office's jurisdiction. Please contact the designated FWS office if you have questions.

---

1. NOAA Fisheries, also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

MAMMALS

NAME	STATUS
Northern Long-eared Bat *Myotis septentrionalis*	Endangered
No critical habitat has been designated for this species.	
This species only needs to be considered under the following conditions:	
▪ This species only needs to be considered if the project includes wind turbine operations.	
Species profile: https://ecos.fws.gov/ecp/species/9045	
Tricolored Bat *Perimyotis subflavus*	Proposed Endangered
No critical habitat has been designated for this species.	
Species profile: https://ecos.fws.gov/ecp/species/10515	

INSECTS

NAME	STATUS
Monarch Butterfly *Danaus plexippus*	Candidate
No critical habitat has been designated for this species.	
Species profile: https://ecos.fws.gov/ecp/species/9743	

CRITICAL HABITATS

THERE ARE NO CRITICAL HABITATS WITHIN YOUR PROJECT AREA UNDER THIS OFFICE'S JURISDICTION.

YOU ARE STILL REQUIRED TO DETERMINE IF YOUR PROJECT(S) MAY HAVE EFFECTS ON ALL ABOVE LISTED SPECIES.

IPAC USER CONTACT INFORMATION

Agency: Private Entity
Name: Alexander Wojtkowiak
Address: 1899 Bronson Road
City: Fairfield
State: CT
Zip: 06824
Email awojtkowiak@wkassociates.net
Phone: 4019355101

EXHIBIT F

Revised Operations & Maintenance Plan

	O&M Scope	Frequency per Year	Description
1.	General Site Inspection	Varies	- Verify safety and Identification labeling is present and legible (1x per year). - Inspect site access/egress locations are free of obstructions and hazards (1x per year). - Equipment access lanes are free of obstructions and hazards (1x per year). - Inspect for changes of environmental conditions such as nearby construction activity, agricultural activities, bird migrations, water table changes, acts of vandalism, and shading (1x per year). - Panel washing (as needed)
2.	Mechanical System Inspection	1x per year	- Racking structures visual and mechanical inspection. - Mechanical inspection 2% of Module-to-racking attachments for torque specification. - Module visual inspection. - DC Optimizer operation verification via monitoring equipment (when applicable). - Ballast block, foundations, driven piers, mechanical attachments, and earth screw visual inspection. - Roof protection installation methods and materials. - Equipment Grounding Conductor electrical continuity inspection. - Equipment bonding to ground electrical continuity inspection.

3.	DC & AC Electrical System Inspection	1x per year	- Verify safety and Identification labeling is present and legible. - Enclosure mounting, gaskets, interior, and exterior visual inspection. - Grounding and bonding inspection. - Terminations (conductors) thermography scanning. - Visual inspection of conductor termination torque markings. - Fuse and breaker thermography scanning. - Vacuum clean interiors. - Visual inspection of conduits, fittings, junctions/splice boxes, and enclosures. - Exercise operation of all protective devices. - Switchgear inspection. - Use infrared camera to inspect for hot spots, bypass.
4.	Inverter Inspection	1x per year	- Verify safety and Identification labeling is present and legible. - Enclosure mounting, gaskets, Interior, and exterior visual inspection. - Grounding and bonding inspection. - Inverter operation verification. - Use an infrared camera to check connections. - Vacuum clean interior. - Clean air intake/exhaust screens, fans, and filters. - Complete all other manufacturer specific maintenance procedures not listed above.
5.	Data Acquisition System Inspection	1x per year	- Verify safety and Identification labeling is present and legible. - Meteorological data sensor cleaning, positioning, and operation. - Inverter communication (when applicable).
6.	Reporting	1x per year	- Provide digital commissioning report including results from all steps with responses noting Pass, Values, or Failure with explanation. - Photo report of deficiencies.
7.	Inverter Replacement	As Needed	- Additional site visits related to inverter failure will be billed to Asset Manager on a time and materials basis. - Site visits will be followed with a report on site conditions and findings within three (3) business days.

8.	Testing	1x per year	- Perform performance test: measure incident sunlight and simultaneously observe temperature and calculate the balance of system efficiency. Compare readings with diagnostic benchmark (original efficiency of system).
9.	Vegetation Maintenance	Varies	- Inspect site for vegetation growth or accumulation which could shade arrays and impact PV production (4x per year) - Mow and/or clear to manage site vegetation (4x per year). - Inspect arrays for soiling, evidence of pest infestation, water pooling, vegetation growth, shading or damage (2x per year). - Photo-document general condition of each array, noting any corrective actions and location of any issues requiring remediation beyond project manager visit time allocation (2x per year). - Inspect landscaping for die off and replacement, if necessary (4x per year).
10.	Stormwater Control Management	As Needed	- Perform the steps to be outlined in the Stormwater Pollution Control Plan, approved by the Connecticut Department of Energy and Environmental Protection, and in compliance with the 2004 Connecticut Stormwater Quality Manual and 2002 Connecticut Guidelines for Soil Erosion and Sediment Control.