November 9th, 2020

Chris Stone
Connecticut Department of Energy and Environmental Protection
79 Elm Street
Hartford, CT 06106

Re: North Stonington Solar DEEP Updates

Dear Chris:

Per the meeting on Thursday, November 5th, Regarding the North Stonington solar project. CT DEEP has requested a letter describing the changes that are to be made to the civil design at the request of CT DEEP.

A summary of those changes;

- Phasing Plan updates
    - Boundaries on P-202 will be updated to coincide with boundaries on P-201
    - A description of the phasing sequence will be added to the SWPPP and P-202. Showing specific tasks performed to initiate a phase, clear a phase, and close-out a phase with stabilization prior to moving to next phase.
    - Phasing Plan dates on drawing will be updated to reflect the anticipated new start dates.

- ESC Plan updates
    - The seed mix table on ESC-100 will be updated to only include the seed mixes for the following areas. Also stating the time of year for seeding/ that a Certified Horticulturalist will determine appropriate permanent seeds in location and season.
        - Lawns and high maintenance area
        - Roadsides, pond banks, and other slopes and banks
        - Drainage ditch and channel banks
    - Silt fence baffles within the sediment basins will be shortened to create flow around the baffles for a longer flow path.
    - The perforated pipe shown in sediment basin details will be removed. The perforated pipe layer was accidentally left on in that viewport. The perforated pipe is for permanent stormwater control.
    - We are reviewing pipe outfalls to level spreaders and will add additional controls where possible.
        - The addition of more level spreaders is the intent

- All items labeled as Energy Dissipation Device will be relabeled to Velocity Dissipation Device.

- Grading & Drainage updates
  - A note will be added to protect pretreatment berms from construction traffic
  - Forebays will be added to permanent stormwater controls (Detail sheets will be provided separately) where applicable.

The outstanding items not listed that will be or have been shared with CT-DEEP are as follows;

- Test pit logs in the Terracon Report for the infiltration testing locations should be provided (Send to Mr. Stone Thursday November 5th at 3:24 PM).
- Updated G&D Sheets from the civil Design (Linked in the email body).

Please let the team know if there are any outstanding items you will need to see in order to move forward with your approval process.

Very truly yours,

Alec Droussiotis
CS Energy, LLC

Cc: CS Energy – Jacob Weiser

Attachments: none

STONINGTON SOLAR PROJECT

15 MW AC SINGLE AXIS TRACKER SYSTEM

SITE ADDRESS: ELLA WHEELER ROAD, NORTH STONINGTON, CT 06359

SITE COORDINATES: 41.42°N, 71.84°W

SCOPE OF WORK

DEVELOP A 15 MW AC SOLAR PHOTOVOLTAIC ELECTRICAL GENERATING FACILITY ON APPROXIMATELY 162 ACRES OF LAND. THE SOLAR POWER PLANT WILL BE INSTALLED ON NEXTRACKER HORIZONTAL SINGLE AXIS TRACKER SYSTEM.

BUILDING CODES AND DESIGN REFERENCES

AUTHORITIES HAVING JURISDICTION:

NORTH STONINGTON SITING COUNCIL

CONNECTICUT DEPARTMENT OF ENERGY AND ENVIRONMENTAL PROTECTION

APPLICABLE CODES:

BUILDING CODE:

- NORTH STONINGTON ORDINANCE
- CONNECTICUT STATE BUILDING CODE
- INTERNATIONAL BUILDING CODE (IBC) 2018

GEOTECH REPORT BY:

TERRACON CONSULTANTS INC.
201 HAMMER MILL ROAD
ROCKY HILL, CT 06067
TERRACON PROJECT NO.
J21751412

OWNER INFORMATION, PROJECT TEAM

PROJECT OWNER:

ENERPARC, INC
1999 HARRISON ST., SUITE 830
OAKLAND, CA 94612

GENERAL CONTRACTOR:

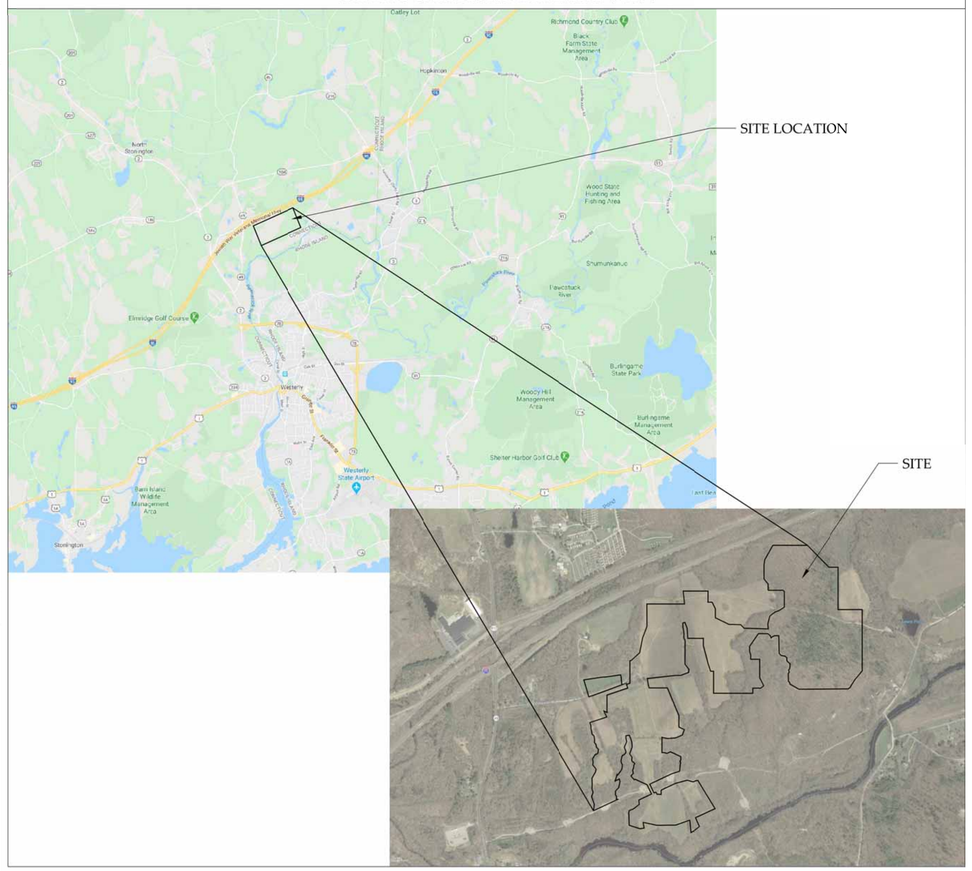
CS ENERGY
2405 LINCOLN HIGHWAY
EDISON, NJ 08817

CIVIL ENGINEER:

SIERRA OVERHEAD ANALYTICS
PO BOX 1716
TWAIN HARTE, CA 95383

CONTACT: DARIN GALLOWAY, PE
DGALLOWAY@SIERRAOVERHEAD.COM
(775) 848-5540

SITE LOCATION AND AERIAL VIEW



soa
SIERRA OVERHEAD ANALYTICS
18359 MICROTRONICS WAY
SONORA, CALIFORNIA 95370
CONNECTICUT PROFESSIONAL ENGINEERING CORPORATION #PEC.0001969

REV	DESCRIPTION	DATE
6	ISSUED FOR CONSTRUCTION - DRAFT	9/4/2020
7	ISSUED FOR CONSTRUCTION - DRAFT	9/18/2020
8	ISSUED FOR CONSTRUCTION - DRAFT	10/22/2020
9	ISSUED FOR CONSTRUCTION - DRAFT	11/06/2020
10	ISSUED FOR CONSTRUCTION	1/20/2021
-	-	-
-	-	-
-	-	-
-	-	-
-	-	-

CONFIDENTIAL:
THE INFORMATION DEPICTED ON THIS DOCUMENT IS PROPRIETARY AND THE SOLE PROPERTY OF SIERRA OVERHEAD ANALYTICS, INC (SOA). ANY USE OR DISCLOSURE OF THIS INFORMATION IS EXPRESSLY PROHIBITED WITHOUT THE PRIOR WRITTEN CONSENT OF SOA.

CS Energy
Building a Cleaner Future
2045 LINCOLN HIGHWAY
EDISON, NEW JERSEY 08817

PROJECT NAME:
STONINGTON SOLAR PROJECT

PROJECT ADDRESS:
ELLA WHEELER RD.
NORTH STONINGTON, CT 06359
41° 25' 9.71"N, 71° 50' 4.83"W

SEAL: STATE OF CONNECTICUT · DARIN RAY GALLOWAY · No. 34152 · LICENSED PROFESSIONAL ENGINEER

DATE: 21-JAN-20
PROJECT #: 20200309_CT
DRAWN BY: MMM
CHECKED BY: DRG

TITLE: COVER SHEET

SHEET: C-001

811 Know what's below. Call before you dig.

PLOT DATE: Tuesday, January 19, 2021

LOCATION: E:\DROPBOX (SOA)\ENGINEERING\CS ENERGY\2020-03-09_STONINGTON\CAD\NOTES.DWG PLOTTED BY: DARIN GALLOWAY

TABLE OF CONTENTS	
Sheet Number	Sheet Title
CIVIL DISCIPLINE	
C-001	COVER SHEET
C-002	TABLE OF CONTENTS
C-100	CIVIL NOTES
C-200	CIVIL SITE OVERVIEW
C-201	CIVIL SITE PLAN
C-202	CIVIL SITE PLAN
C-203	CIVIL SITE PLAN
C-204	CIVIL SITE PLAN
C-205	CIVIL SITE PLAN
C-206	CIVIL SITE PLANS
C-207	CIVIL SITE PLANS
C-208	CIVIL SITE PLANS
C-209	CIVIL SITE PLANS
C-210	CIVIL SITE PLANS
C-211	CIVIL SITE PLANS
C-212	CIVIL SITE PLANS
C-213	CIVIL SITE PLANS
C-214	CIVIL SITE PLANS
C-215	CIVIL SITE PLANS
C-216	CIVIL SITE PLANS
C-300	ROAD SECTIONS
C-301	ROAD SECTIONS
C-302	ROAD SECTIONS
C-303	ROAD SECTIONS
C-304	ROAD SECTIONS
C-305	ROAD SECTIONS
C-306	ROAD SECTIONS
C-307	ROAD SECTIONS
C-308	UTILITY ACCESS PLAN
C-400	CIVIL DETAILS
C-401	CULVERT DETAILS
C-402	FENCE DETAILS
C-403	FENCE DETAILS
EROSION & SEDIMENT CONTROL DISCIPLINE	
ESC-100	EROSION & SEDIMENT CONTROL NOTES
ESC-101	EROSION & SEDIMENT CONTROL NOTES
ESC-102	EROSION & SEDIMENT CONTROL NOTES
ESC-200	EROSION & SEDIMENT CONTROL SITE OVERVIEW
ESC-201	EROSION & SEDIMENT CONTROL SITE PLAN
ESC-202	EROSION & SEDIMENT CONTROL SITE PLAN
ESC-203	EROSION & SEDIMENT CONTROL SITE PLAN
ESC-204	EROSION & SEDIMENT CONTROL SITE PLAN
ESC-205	EROSION & SEDIMENT CONTROL SITE PLAN
ESC-206	EROSION & SEDIMENT CONTROL SITE PLAN
ESC-207	EROSION & SEDIMENT CONTROL SITE PLAN
ESC-208	EROSION & SEDIMENT CONTROL SITE PLAN
ESC-209	EROSION & SEDIMENT CONTROL SITE PLAN
ESC-210	EROSION & SEDIMENT CONTROL SITE PLAN
ESC-211	EROSION & SEDIMENT CONTROL SITE PLAN
ESC-212	EROSION & SEDIMENT CONTROL SITE PLAN
ESC-213	EROSION & SEDIMENT CONTROL SITE PLAN
ESC-214	EROSION & SEDIMENT CONTROL SITE PLAN
ESC-215	EROSION & SEDIMENT CONTROL SITE PLAN
ESC-216	EROSION & SEDIMENT CONTROL SITE PLAN
ESC-300	EROSION & SEDIMENT CONTROL DETAILS
ESC-301	EROSION & SEDIMENT CONTROL DETAILS

TABLE OF CONTINUED	
Sheet Number	Sheet Title
ESC-302	EROSION & SEDIMENT CONTROL DETAILS
ESC-303	EROSION & SEDIMENT CONTROL DETAILS
ESC-304	EROSION & SEDIMENT CONTROL DETAILS
ESC-305	EROSION & SEDIMENT CONTROL DETAILS
ESC-306	EROSION & SEDIMENT CONTROL DETAILS
ESC-307	EROSION & SEDIMENT CONTROL DETAILS
ESC-308	EROSION & SEDIMENT CONTROL DETAILS
ESC-309	EROSION & SEDIMENT CONTROL DETAILS
ESC-310	EROSION & SEDIMENT CONTROL DETAILS
ESC-311	EROSION & SEDIMENT CONTROL DETAILS
ESC-312	EROSION & SEDIMENT CONTROL DETAILS
ESC-313	EROSION & SEDIMENT CONTROL DETAILS
ESC-314	EROSION & SEDIMENT CONTROL DETAILS
ESC-315	EROSION & SEDIMENT CONTROL DETAILS
STRUCTURAL DISCIPLINE	
S-100	STRUCTURAL NOTES
S-200	EQUIPMENT PAD DETAILS
S-201	STRUCTURAL DETAILS
GRADING & DRAINAGE DISCIPLINE	
G&D-200	GRADING & DRAINAGE SITE OVERVIEW
G&D-201	GRADING & DRAINAGE PLAN
G&D-202	GRADING & DRAINAGE PLAN
G&D-203	GRADING & DRAINAGE PLAN
G&D-204	GRADING & DRAINAGE PLAN
G&D-205	GRADING & DRAINAGE PLAN
G&D-206	GRADING & DRAINAGE PLAN
G&D-207	GRADING & DRAINAGE PLAN
G&D-208	GRADING & DRAINAGE PLAN
G&D-209	GRADING & DRAINAGE PLAN
G&D-210	GRADING & DRAINAGE PLAN
G&D-211	GRADING & DRAINAGE PLAN
G&D-212	GRADING & DRAINAGE PLAN
G&D-213	GRADING & DRAINAGE PLAN
G&D-214	GRADING & DRAINAGE PLAN
G&D-215	GRADING & DRAINAGE PLAN
G&D-216	GRADING & DRAINAGE PLAN
G&D-300	GRADING & DRAINAGE DETAILS
G&D-301	GRADING & DRAINAGE DETAILS
G&D-302	GRADING & DRAINAGE DETAILS
G&D-303	GRADING & DRAINAGE DETAILS
G&D-304	GRADING & DRAINAGE DETAILS
G&D-305	GRADING & DRAINAGE DETAILS
G&D-306	GRADING & DRAINAGE DETAILS
G&D-307	GRADING & DRAINAGE DETAILS
G&D-308	GRADING & DRAINAGE DETAILS
G&D-309	GRADING & DRAINAGE DETAILS
G&D-310	GRADING & DRAINAGE DETAILS
G&D-311	GRADING & DRAINAGE DETAILS
G&D-312	GRADING & DRAINAGE DETAILS
G&D-313	GRADING & DRAINAGE DETAILS
G&D-314	GRADING & DRAINAGE DETAILS
G&D-315	GRADING & DRAINAGE DETAILS
G&D-316	GRADING & DRAINAGE DETAILS
G&D-317	GRADING & DRAINAGE DETAILS
G&D-318	GRADING & DRAINAGE DETAILS
STORMWATER MANAGEMENT DISCIPLINE	
SWMP-100	STORMWATER MANAGEMENT NOTES

TABLE OF CONTINUED	
Sheet Number	Sheet Title
SWMP-201	STORMWATER MANAGEMENT PLAN
SWMP-202	STORMWATER MANAGEMENT PLAN
SWMP-203	STORMWATER MANAGEMENT PLAN
SWMP-204	STORMWATER MANAGEMENT PLAN
SWMP-205	STORMWATER MANAGEMENT PLAN
CLEARING DISCIPLINE	
CL-200	CLEARING PLAN SITE OVERVIEW
CL-201	CLEARING PLAN
CL-202	CLEARING PLAN
CL-203	CLEARING PLAN
CL-204	CLEARING PLAN
CL-205	CLEARING PLAN
LOGISTICS AND PHASING DISCIPLINE	
P-200	PHASING PLAN
P-201	PHASING PLAN
P-202	PHASING PLAN
P-203	PHASING PLAN
P-204	PHASING PLAN
P-205	PHASING PLAN
P-206	PHASING PLAN

PLOT DATE: Tuesday, January 19, 2021

SIERRA OVERHEAD ANALYTICS
18359 MICROTRONICS WAY
SONORA, CALIFORNIA 95370
CONNECTICUT PROFESSIONAL
ENGINEERING CORPORATION #PEC.0001969

REV	DESCRIPTION	DATE
6	ISSUED FOR CONSTRUCTION - DRAFT	9/4/2020
7	ISSUED FOR CONSTRUCTION - DRAFT	9/18/2020
8	ISSUED FOR CONSTRUCTION - DRAFT	10/22/2020
9	ISSUED FOR CONSTRUCTION - DRAFT	11/06/2020
10	ISSUED FOR CONSTRUCTION	1/20/2021
-	-	-
-	-	-
-	-	-
-	-	-
-	-	-

CONFIDENTIAL:
THE INFORMATION DEPICTED ON THIS DOCUMENT IS PROPRIETARY AND THE SOLE PROPERTY OF SIERRA OVERHEAD ANALYTICS, INC (SOA). ANY USE OR DISCLOSURE OF THIS INFORMATION IS EXPRESSLY PROHIBITED WITHOUT THE PRIOR WRITTEN CONSENT OF SOA.

CS Energy
Building a Cleaner Future
2045 LINCOLN HIGHWAY
EDISON, NEW JERSEY 08817

PROJECT NAME:
STONINGTON SOLAR PROJECT

PROJECT ADDRESS:
ELLA WHEELER RD.
NORTH STONINGTON, CT 06359
41° 25' 9.71"N, 71° 50' 4.83"W

SEAL: STATE OF CONNECTICUT · DARIN RAY GALLOWAY · No. 34152 · LICENSED PROFESSIONAL ENGINEER

DATE: 21-JAN-20
PROJECT #: 20200309_CT
DRAWN BY: MMM
CHECKED BY: DRG

TITLE: TABLE OF CONTENTS

SHEET: C-002

Know what's below. Call before you dig.

GENERAL CIVIL NOTES:

1. CONSTRUCTION SHALL BE IN ACCORDANCE WITH THESE SPECIFICATIONS, TOWN OF NORTH STONINGTON ORDINANCES, AND CONNECTICUT STATE BUILDING CODES, CONNECTICUT GENERAL STATUTES, AND THE INTERNATIONAL BUILDING CODE.
2. CONNECTICUT STATE BUILDING CODES, CONNECTICUT GENERAL STATUTES AND NORTH STONINGTON TOWN ORDINANCES SHALL HAVE PRECEDENCE OVER SUBMITTED DRAWINGS AND SPECIFICATIONS.
3. ALL EARTHWORK AND TESTING SHALL ADHERE TO THE RECOMMENDATIONS OF THE GEOTECHNICAL ENGINEERING REPORT (GEOTECH REPORT), PROVIDED BY TERRACON CONSULTANTS, INC. PROJECT NO J2175142.
4. EARTHWORK ON THE SITE SHALL BE OBSERVED AND EVALUATED BY THE GEOTECHNICAL ENGINEER OF RECORD (G-EOR).
5. THE EVALUATION OF EARTHWORK SHALL INCLUDE OBSERVATION AND TESTING OF ON-SITE BACKFILL MATERIAL AND OTHER GEOTECHNICAL CONDITIONS EXPOSED DURING EQUIPMENT PAD EXCAVATIONS AND ROAD IMPROVEMENT CONSTRUCTION AT THE DIRECTION OF THE G-EOR.
6. WHERE DEVIATIONS EXIST BETWEEN THESE SPECIFICATIONS/DESIGN AND THE GEOTECH REPORT, THIS DESIGN SHALL TAKE PRECEDENCE.
7. NOTES AND DETAILS NOTED AS "TYPICAL," SHALL BE USED WHENEVER APPLICABLE. SPECIFIC DETAILS AND NOTES TAKE PRECEDENCE OVER TYPICAL DETAILS AND NOTES.
8. DRAWINGS, SPECIFICATIONS, DETAILS, AND NOTES DEPICTED IN THIS DESIGN REPRESENT THE FINISHED PRODUCT AND DO NOT INDICATE THE MEANS, METHODS, PROCEDURES, OR SEQUENCE OF CONSTRUCTION UNLESS SPECIFICALLY NOTED.
9. CHANGES OR DEVIATIONS FROM THE DRAWINGS, SPECIFICATIONS, DETAILS, AND NOTES DEPICTED IN THIS DESIGN ARE NOT ALLOWED WITHOUT WRITTEN AUTHORIZATION FROM THE CIVIL ENGINEER OF RECORD (C-EOR).
10. CONTRACTOR IS RESPONSIBLE FOR PROTECTING ALL CONSTRUCTION SURVEYING STAKES SET BY THE OWNER. ANY DEVIATIONS FROM EXISTING GRADES AS SHOWN ON THE PLANS SHALL BE IMMEDIATELY REPORTED TO THE OWNER AND C-EOR.
11. REQUESTS FOR INFORMATION (RFIs) FOR CLARIFICATION OF THE INTENT OF THE DESIGN SHALL BE SUBMITTED TO THE C-EOR. RFIs SHALL INCLUDE A DETAILED WRITTEN STATEMENT THAT INDICATES THE SPECIFIC DRAWINGS OR SPECIFICATIONS IN NEED OF CLARIFICATION AND THE NATURE OF THE CLARIFICATION REQUIRED. THE C-EOR SHALL RESPOND IN WRITING AND ISSUE CLARIFICATIONS AS NECESSARY. RESPONSES TO RFIs DO NOT CONSTITUTE APPROVED DESIGN CHANGES.
12. CONSTRUCTION PHASING TIMING IS CRITICAL BETWEEN EROSION & SEDIMENT CONTROL STRUCTURAL CONTROLS AND STORMWATER MANAGEMENT CONTROLS. SEE PHASING PLAN, EROSION & SEDIMENT CONTROL, GRADING PLAN, AND STORMWATER MANAGEMENT PLAN SHEETS.

EARTHWORK:

13. COMPACTION STANDARD FOR NATIVE, SCARIFIED, AND RE-COMPACTED SUBGRADES SHALL BE 95% MAXIM,UM DRY DENSITY (MDD) BY MODIFIED PROCTOR DRY DENSITY (ASTM D1557), METHOD C.
14. COMPACTION STANDARD FOR STRUCTURAL FILL BENEATH CONCRETE PADS SHALL BE 95% MDD BY ASTM D1557.
15. MOISTURE CONTENT OF SOILS SHALL BE IN ACCORDANCE WITH THE GEOTECH REPORT AT THE TIME OF PLACEMENT AND COMPACTION.
16. PLACE FILL MATERIAL IN MAXIMUM LIFTS OF 12" LOOSE THICKNESS WHEN USING SELF PROPELLED HEAVY COMPACTORS.
17. FILL MATERIAL TYPES SHALL BE IN ACCORDANCE WITH STRUCTURAL FILL TYPES LISTED IN THE GEOTECH REPORT.
18. PLACE FILL MATERIAL IN MAXIMUM LIFTS OF 6" LOOSE THICKNESS WHEN USING HAND GUIDED COMPACTING EQUIPMENT.
19. PRIOR TO PLACING FILL OR COMPACTING SCARIFIED SOIL IN FOUNDATION AREAS, ALL UNSUITABLE MATERIAL SHALL BE REMOVED FROM THE CONSTRUCTION AREAS. THIS SHALL INCLUDE THE REMOVAL OF ALL VEGETATION AND TOPSOIL, DEBRIS, LOOSE AND DISTURBED SOIL, CONTAMINATED SOIL AND OTHER DELETERIOUS MATERIALS THAT MAY EXIST WITHIN THE AREA OF THE PROPOSED CONSTRUCTION.
20. IF UNDERGROUND FACILITIES ARE ENCOUNTERED DURING SITE CLEARING, CONTRACTOR SHALL IMMEDIATELY NOTIFY C-EOR SO THAT A SOLUTION CAN BE CREATED TO PROTECT AND/OR RELOCATE (E) UTIL.
21. DRY AND LOW-DENSITY SOIL SHALL BE REMOVED OR WETTED AND COMPACTED IN-PLACE PRIOR TO PLACING ADDITIONAL FILL OVER THE MATERIAL.
22. CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND VOLUMES PRIOR TO CONSTRUCTION.
23. MATERIAL QUANTITIES SHOWN IN THESE PLANS ARE APPROXIMATE. CONTRACTOR SHALL VERIFY ALL MATERIAL QUANTITIES PRIOR TO CONSTRUCTION.
24. ORGANIC SOILS SHALL BE LEFT IN PLACE IN NON-STRUCTURAL AREAS SUCH AS WITHIN THE ARRAY AREAS.
25. VEGETATION REMOVAL SHALL ONLY TAKE PLACE IN AREAS TO BE DISTURBED, CONTRACTOR SHALL MINIMIZE DISTURBANCE OF VEGETATION DUE TO CONSTRUCTION ACTIVITIES.
26. IN ROAD AND EQUIPMENT PAD CONSTRUCTION LOCATIONS, NATIVE TOPSOIL WILL BE REMOVED AND SPREAD ON SITE.
27. IN GRADING AREAS, NATIVE TOPSOIL SHALL BE REMOVED AND STOCKPILED NEAR THE GRADING AREAS. WHEN FINAL GRADES ARE ACHIEVED, NATIVE TOPSOIL SHALL BE SPREAD OVER THE GRADED AREA FOR RE-VEGETATION AND STABILIZATION ACTIVITIES.

SITE ACCESS ROADS (INTERNAL ROADS):

29. SITE ACCESS ROAD CONSTRUCTION SHALL CONSIST OF 12" OF SCARIFIED, MOISTURE CONDITIONED, AND COMPACTED NATIVE SUBBASE MATERIAL (SUBBASE); GEOTEXTILE FABRIC; AND 12" OF COMPACTED AGGREGATE BASE MATERIAL (SURFACE COARSE).
40. PRIOR TO PLACING SURFACE COARSE OR COMPACTING SUBBASE IN PROPOSED ROADWAY LOCATIONS, ALL UNSUITABLE MATERIAL SHALL BE REMOVED. THIS SHALL INCLUDE THE REMOVAL OF ALL VEGETATION AND TOPSOIL, DEBRIS, LOOSE AND DISTURBED SOIL, CONTAMINATED SOIL AND OTHER DELETERIOUS MATERIALS THAT MAY EXIST WITHIN THE AREA OF THE PROPOSED ROADWAY CONSTRUCTION.
41. SURFACE COARSE SHALL HAVE A MINIMUM COMPACTED THICKNESS OF 12" OF CRUSHED ANGULAR AGGREGATE RANGING IN SIZE FROM $\frac{1}{2}$" TO 1 $\frac{3}{4}$".
42. SURFACE COARSE THICKNESS SHALL BE MEASURED AFTER FULL COMPACTION.
43. A MIRAFI 500X, OR EQUIVALENT GEOTEXTILE FABRIC SHALL BE PLACED ABOVE SCARIFIED AND COMPACTED NATIVE SUBBASE PRIOR TO PLACEMENT OF SURFACE COARSE MATERIAL.
44. SCARIFY (OR TILL), WET AND COMPACT NATIVE SUBBASE MATERIAL TO 12" DEPTH MINIMUM BEFORE ADDING GEOTEXTILE FABRIC OR AGGREGATE SURFACE COARSE.
45. NATIVE SUBBASE MATERIAL SHALL BE COMPACTED TO 95% MAXIMUM DRY DENSITY (MDD) PER ASTM D1557, OPTIMUM MOISTURE CONTENT SHALL BE IN ACCORDANCE WITH THE GEOTECH REPORT.
46. AGGREGATE SURFACE COARSE SHALL BE COMPACTED TO 95% MDD PER ASTM D1557, 0 TO 2% OPTIMUM MOISTURE CONTENT AND CROWNED 2%.
47. SITE ACCESS ROADWAYS SHALL BE CONSTRUCTED AT OR NEAR EXISTING GRADE, U.N.O. WITH A VERTICAL TOLERANCE OF +/- 2".
48. POSITIVE DRAINAGE SHALL BE MAINTAINED ACROSS ROADS.
49. ON-SITE ROADWAY SLOPES SHALL NOT EXCEED 5%.

CULVERTS:

50. BACKFILLING SHALL BE PERFORMED IN ACCORDANCE WITH CT DOT STANDARDS AND SPECIFICATIONS.
51. BACKFILLING ADJACENT TO PIPES OR STRUCTURES SHALL BE OF THE TYPE AND QUALITY CONFORMING TO THAT SPECIFIED FOR ADJOINING FILL MATERIAL.
52. PLACE FILL AROUND CMP IN HORIZONTAL LAYERS NOT TO EXCEED FOUR INCHES THICK AND COMPACT TO 95% MDD STANDARD PROCTOR (ASTM D698).
53. FILL MATERIAL SHALL COMPLETELY FILL ALL SPACES UNDER AND ADJACENT TO CMP(S)
54. ALL CMP SHALL BE ALUMINUM COATED STEEL PIPE CONFORMING TO AASHTO SPECIFICATION M-274 WITH WATERTIGHT COUPLING BANDS OR FLANGES.
55. COUPLING BANDS, ANTI-SEEP COLLARS, END SECTIONS, ETC., SHALL BE COMPOSED OF THE SAME MATERIAL AND COATINGS AS THE CMP.
56. PIPE CONNECTIONS SHALL BE WATERTIGHT.
57. DIMPLE BANDS ARE NOT CONSIDERED TO BE WATERTIGHT.
58. ALL CONNECTIONS SHALL USE RUBBER OR NEOPRENE GASKETS WHEN JOINING PIPE SECTIONS. THE END OF EACH PIPE SHALL BE RE-ROLLED AN ADEQUATE NUMBER OF CORRUGATIONS TO ACCOMMODATE THE BANDWIDTH.
59. THE CMP SHALL BE FIRMLY AND UNIFORMLY BEDDED THE ENTIRE LENGTH OF THE PIPE.
60. ROCK, SOFT SOIL, SPONGY MATERIAL, OR OTHER UNSTABLE DELETERIOUS SOIL SHALL BE REMOVED AND REPLACED WITH STRUCTURAL FILL.

CONSTRUCTION LAYDOWN AREA:

61. TEMPORARY LAYDOWN AREAS WILL BE CLEARED AND GRUBBED.
62. SCARIFY (OR TILL) NATIVE MATERIAL TO A DEPTH OF 12" AND RECOMPACT, IF NECESSARY.
63. PROOF ROLL COMPACTED SUB BASE NATIVE MATERIAL USING A LOADED TRUCK.
64. COMPACTION SHALL DEEMED ADEQUATE WHEN PROOF ROLL INDICATES 1" OR LESS DEFLECTION.
65. COVER TEMPORARY LAYDOWN AREA WITH 4" MIN. DEPTH OF CRUSHED ROCK.
66. TEMPORARY LAYDOWN AREAS SHALL BE REMOVED AND MITIGATED TO PRE-CONSTRUCTION GRADE BY SCARIFYING OR TILLING.
67. FINAL STABILIZATION OF TEMPORARY LAYDOWN AREAS SHALL BE IN ACCORDANCE WITH ESC SHEETS.

CLEARING AND GRUBBING:

68. CLEARING SHALL BE DEFINED AS THE REMOVAL OF PLANTS AT OR ABOVE THE GROUND SURFACE.
69. GRUBBING SHALL BE DEFINED AS THE REMOVAL OF ROOTS BENEATH THE GROUND SURFACE.

TEMPORARY SOIL STOCKPILING:

70. EXCAVATED SOILS SHALL ONLY BE STOCKPILED IN TEMPORARY LAYDOWN AREAS, WITH THE EXCEPTION OF TOPSOIL.
71. TOPSOIL FROM SITE ACCESS ROAD AND EQUIPMENT PAD CONSTRUCTION SHALL BE SPREAD ONSITE.
72. TOPSOIL IN GRADING AREAS SHALL BE STOCKPILED NEAR THE GRADING AREA AND SPREAD OVER THE GRADING AREA ONCE FINAL GRADE HAS BEEN ESTABLISHED.
73. EXCAVATED SOILS SHALL BE REUSED ON-SITE PLACE SO THAT SITE HYDROLOGY IS NOT ALTERED.
74. EXCAVATED SOIL REUSE LOCATIONS SHALL BE PROVIDED TO THE C-EOR FOR APPROVAL.
75. EROSION AND SEDIMENT CONTROLS FOR TEMPORARY STOCKPILES SHALL BE IN ACCORDANCE WITH ESC SHEETS AND THE STROMWATER POLLUTION CONTROL PLAN (SWPCP).

GRADING:

76. MASS GRADING ACROSS THE ENTIRE SITE SHALL NOT BE PERFORMED.
77. GRADING IN SELECT AREAS DEPICTED ON GRADING & DRAINAGE SHEETS IS REQUIRED TO MAINTAIN PIER HEIGHT TOLERANCES.
78. GRADING SHALL NOT BE PERFORMED IN WETLANDS, WETLAND SETBACKS, CULTURAL RESOURCE AREAS, OR ENDANGERED/THREATENED SPECIES AREAS.
79. ADDITIONAL GRADING AREAS THAT WERE NOT ANTICIPATED IN THIS DESIGN BUT WERE DISCOVERED DURING CONSTRUCTION SHALL BE EVALUATED ON A CASE BY CASE BASIS AS NEEDED.

STORMWATER MANAGEMENT CONTROLS:

80. STORMWATER MANAGEMENT CONTROLS SHALL BE INSTALLED AS DEPICTED ON GRADING & DRAINAGE DESIGN SHEETS.
81. STORMWATER MANAGEMENT BASINS AND BERMS ARE LOCATED IN THE SAME FOOTPRINT AS THE EROSION & SEDIMENT CONTROL SEDIMENT BASINS.
82. SEQUENCE OF CONSTRUCTION DEPICTED ON EROSION & SEDIMENT CONTROL SHEETS AND GRADING & DRAINAGE SHEETS SHALL BE STRICTLY FOLLOWED.
83. FOLLOWING FINAL STABILIZATION OF THE SITE, CLEANING OF SEDIMENT BASINS SHALL BE FOLLOWED AS DESCRIBED IN EROSION & SEDIMENT CONTROL NOTES ON ESC-100.

UTILITY LOCATE:

84. PRIOR TO CONSTRUCTION CONTRACTOR SHALL CONTACT CONNECTICUT ONE CALL FOR UTILITY LOCATION SERVICES TO LOCATE ALL PUBLIC AND PRIVATE UTILITIES.
85. CONNECTICUT ONE CALL CAN BE REACHED BY CALLING 811 OR 1-800-922-4455.

SURVEY CONTROL (CIVIL SHEETS ONLY):

86. HORIZONTAL COORDINATE SYSTEM: NAD 83, CONNECTICUT STATE PLANE SOUTH ZONE, SURVEY FEET.
87. VERTICAL DATUM: NAD 83, FEET.
88. ANY COORDINATES SHOWN ON CIVIL SHEETS ARE GROUND COORDINATES.

SPECIAL INSPECTIONS:

89. SPECIAL INSPECTION AND TESTING FIRM SHALL SUBMIT THE FOLLOWING TO THE OWNER AND C-EOR:
    - 89.1. SPECIAL INSPECTION AND TESTING REPORTS FOR THE FOLLOWING AT A MINIMUM:
        - 89.1.1. PERIODIC VERIFICATION THAT MATERIALS BELOW SHALLOW FOUNDATIONS AND EQUIPMENT PADS ARE ADEQUATE TO ACHIEVE THE DESIGN BEARING CAPACITY.
        - 89.1.2. PERIODIC VERIFICATION THAT EXCAVATIONS ARE EXTENDED TO PROPER DEPTH AND WIDTH AND HAVE REACHED SUITABLE MATERIAL.
        - 89.1.3. PERIODIC CLASSIFICATION AND TESTING OF COMPACTED FILL MATERIALS.
        - 89.1.4. CONTINUOUS VERIFICATION OF THE USE OF PROPER MATERIALS, DENSITIES, AND LIFT THICKNESS DURING PLACEMENT AND COMPACTION OF COMPACTED STRUCTURAL FILL.
        - 89.1.5. PERIODIC INSPECTION OF SUBGRADE, PRIOR TO PLACEMENT OF COMPACTED FILL, TO VERIFY THAT EXCAVATION SITE HAS BEEN PREPARED PROPERLY.

SUBMITTALS:

90. CONTRACTOR SHALL SUBMIT CUT SHEETS AND DETAILS FOR THE FOLLOWING TO THE OWNER AND C-EOR FOR REVIEW PRIOR TO PLACEMENT:
    - 90.1. PERIMETER FENCE
    - 90.2. FILL AND/OR STRUCTURAL FILL MATERIALS AND EQUIPMENT PAD EXCAVATION FILL MATERIALS

ALTERNATIVES:

91. THE C-EOR WILL CONSIDER ALTERNATIVES FOR MATERIALS AND PROCEDURES. HOWEVER, IT IS THE CONTRACTOR'S RESPONSIBILITY TO DEMONSTRATE THAT ALL ALTERNATIVES ARE EQUAL IN STRENGTH, PERFORMANCE, AND DURABILITY TO THE MATERIALS OR PROCEDURES SPECIFIED IN THE DESIGN.
92. WRITTEN APPROVAL BY THE C-EOR SHALL BE REQUIRED PRIOR TO USING ANY ALTERNATIVE. CONSIDERATION OF ANY ALTERNATIVE SHALL NOT BE DEEMED TO IMPLY ADVANCE ACCEPTANCE BY THE C-EOR. THE C-EOR RESERVES THE RIGHT TO REJECT ANY ALTERNATIVE.

Know what's below. Call before you dig.

PLOT DATE: Tuesday, January 19, 2021

SIERRA OVERHEAD ANALYTICS
18859 MICROTRONICS WAY
SONORA, CALIFORNIA 95370
CONNECTICUT PROFESSIONAL ENGINEERING CORPORATION #PEC.0001969

REV	DESCRIPTION	DATE
6	ISSUED FOR CONSTRUCTION - DRAFT	9/4/2020
7	ISSUED FOR CONSTRUCTION - DRAFT	9/18/2020
8	ISSUED FOR CONSTRUCTION - DRAFT	10/22/2020
9	ISSUED FOR CONSTRUCTION - DRAFT	11/06/2020
10	ISSUED FOR CONSTRUCTION	1/20/2021
-	-	-
-	-	-
-	-	-
-	-	-
-	-	-

CONFIDENTIAL:
THE INFORMATION DEPICTED ON THIS DOCUMENT IS PROPRIETARY AND THE SOLE PROPERTY OF SIERRA OVERHEAD ANALYTICS, INC (SOA). ANY USE OR DISCLOSURE OF THIS INFORMATION IS EXPRESSLY PROHIBITED WITHOUT THE PRIOR WRITTEN CONSENT OF SOA.

CS Energy
Building a Cleaner Future
2045 LINCOLN HIGHWAY
EDISON, NEW JERSEY 08817

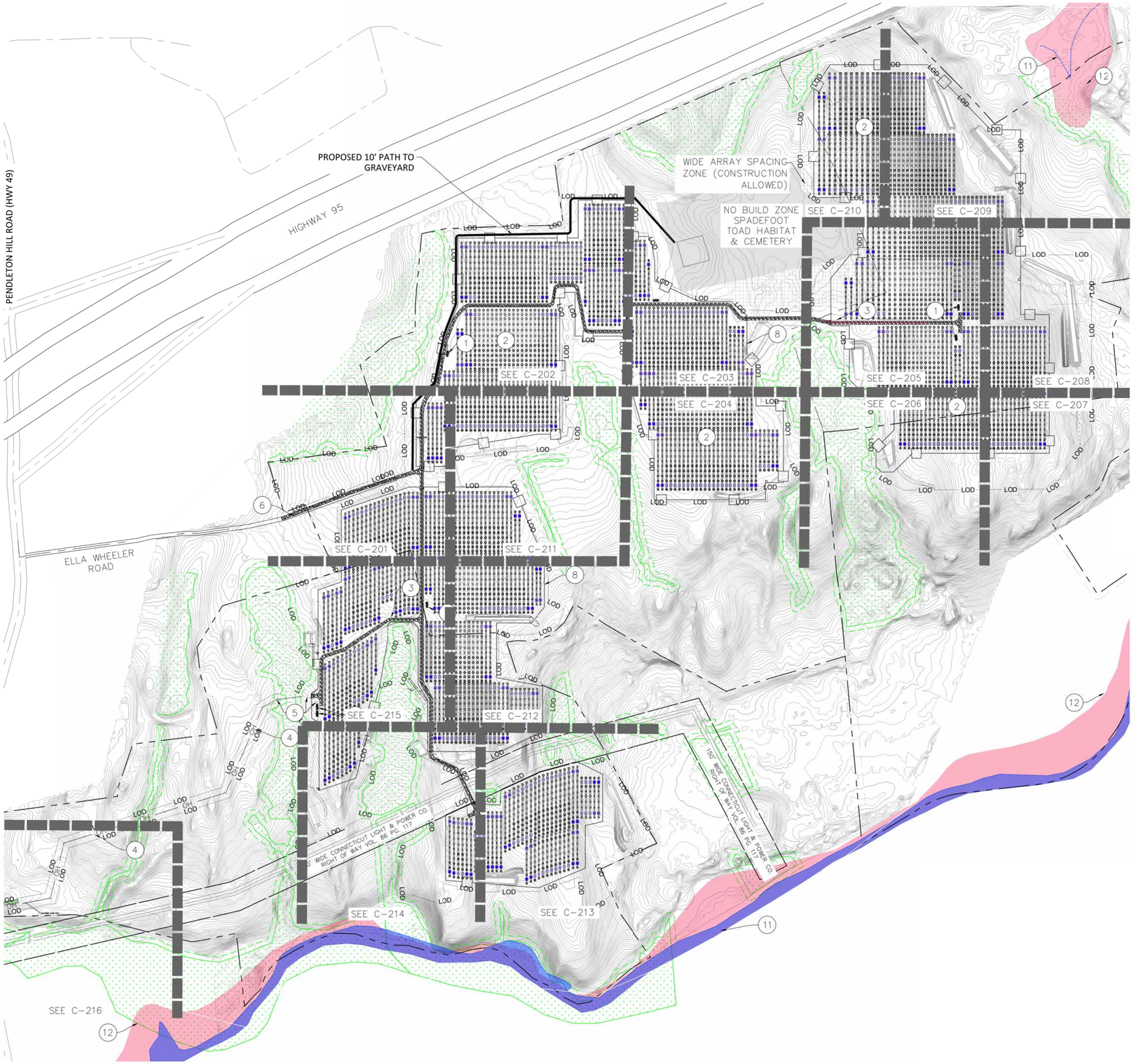
PROJECT NAME:
STONINGTON SOLAR PROJECT

PROJECT ADDRESS:
ELLA WHEELER RD.
NORTH STONINGTON, CT 06359
41° 25' 9.71"N, 71° 50' 4.83"W

SEAL: STATE OF CONNECTICUT · DARIN RAY GALLOWAY · No. 34152 · LICENSED PROFESSIONAL ENGINEER

DATE: 21-JAN-20
PROJECT #: 20200309_CT
DRAWN BY: MMM
CHECKED BY: DRG

TITLE: CIVIL NOTES
SHEET: C-100



1 C-200 CIVIL SITE OVERVIEW
Scale: 1" = 250'

N 0 250 500 FEET

LEGEND

1	EQUIPMENT PAD
2	ARRAY AREA
3	(N) UG AC WIRE
4	OVERHEAD POWER
5	OVERHEAD POWER POLE
6	PROPOSED SITE ACCESS ROAD (SEE C-400)
7	WETLAND W/BUFFER
8	SITE FENCE LINE (SEE C-402)
9	SITE LIMIT OF DISTURBANCE
10	SITE BOUNDARY
11	RIVER OR CREEK
12	100 YEAR FLOOD ZONE
	WIDE ARRAY SPACING AREA

GENERAL NOTES

1. LIMIT OF DISTURBANCE AREA = ±146.33 ACRES
2. DISTURBED AREAS INCLUDE: GRADING, EXCAVATION, PILE, ROADWORK, AND EQUIPMENT PADS.
3. SITE PREPARATION INCLUDES CLEARING/GRUBBING, GRADING, COMPACTION, MOWING OF VEGETATION, AND RE-STABILIZATION OF DISTURBED AREAS.
4. TOPSOIL SHALL NOT BE REMOVED FROM THE PROJECT SITE OR SOLD UNLESS REMOVAL OF EXCESS SOIL IS APPROVED BY THE AHJ.
5. EXCESS TOPSOIL SHALL BE SPREAD ON-SITE SO AS TO PROVIDE SIX INCHES OF COVER ORIGINALLY EXISTING ON THE SITE OR A MINIMUM OF FOUR INCHES OF COVER IF THE ORIGINAL COVER WAS LESS.
6. PROJECT SITE SHALL BE STABILIZED BY SEEDING AND/OR SODDING.
7. ADDITIONAL VEGETATION MAY NEED TO BE REMOVED PRIOR TO CONSTRUCTION. AREAS THAT ARE NOT CLEARED/GRUBBED SHALL BE MOWED TO A MINIMUM OF THREE INCHES.
8. CONTRACTOR RESPONSIBLE FOR PRESERVATION OF EXISTING VEGETATION, NOT CLEARED/GRUBBED OR MOWED, TO THE EXTENT PRACTICABLE.
9. VEGETATION REMOVAL SHALL ONLY OCCUR WITHIN THE PROJECT BOUNDARY.
10. CONTRACTOR TO REMOVE ONLY VEGETATION WHICH SHALL BE DESIGNATED BY THE OWNERS REPRESENTATIVE FOR REMOVAL AND SHALL EXERCISE CARE AROUND EXISTING VEGETATION TO BE SAVED. CONSTRUCTION FENCING MAY BE INSTALLED TO PROTECT AREAS THAT ARE NOT TO BE DISTURBED.
11. BURNING OF DEBRIS SHALL NOT OCCUR WITHOUT APPROPRIATE PERMITS AND/OR AHJ AND OWNER APPROVAL
12. FINAL STABILIZATION SHALL BE ACHIEVED WHEN A UNIFORM VEGETATIVE COVER WITH AN INDIVIDUAL PLANT DENSITY OF AT LEAST 80% OF PRE- DISTURBANCE LEVELS, OR EQUIVALENT PERMANENT PHYSICAL EROSION REDUCTION METHODS HAVE BEEN EMPLOYED IN ALL AREAS OF DISTURBED GROUND.

SETBACK SCHEDULE

ITEM	REQUIRED	DESIGNED
FRONT	50' FROM PROPERTY LINE	50'
SIDE	50' FROM PROPERTY LINE	50'
REAR	50' FROM PROPERTY LINE	50'

PIER LEGEND

SYMBOL	PIER TYPE
	HEAVY ARRAY PIER
	STANDARD ARRAY PIER
	HEAVY ARRAY PIER, EDGE
	STANDARD ARRAY PIER, EDGE
	HEAVY MOTOR PIER
	STANDARD MOTOR PIER
	HIGH SLOPE TRACKER

Know what's below. Call before you dig.

soa
SIERRA OVERHEAD ANALYTICS
18859 MICROTRONICS WAY
SONORA, CALIFORNIA 95370
CONNECTICUT PROFESSIONAL ENGINEERING CORPORATION #PEC.0001969

REV	DESCRIPTION	DATE
6	ISSUED FOR CONSTRUCTION - DRAFT	9/4/2020
7	ISSUED FOR CONSTRUCTION - DRAFT	9/18/2020
8	ISSUED FOR CONSTRUCTION - DRAFT	10/22/2020
9	ISSUED FOR CONSTRUCTION - DRAFT	11/06/2020
10	ISSUED FOR CONSTRUCTION	1/20/2021
-	-	-
-	-	-
-	-	-
-	-	-
-	-	-

CONFIDENTIAL:
THE INFORMATION DEPICTED ON THIS DOCUMENT IS PROPRIETARY AND THE SOLE PROPERTY OF SIERRA OVERHEAD ANALYTICS, INC (SOA). ANY USE OR DISCLOSURE OF THIS INFORMATION IS EXPRESSLY PROHIBITED WITHOUT THE PRIOR WRITTEN CONSENT OF SOA.

CS Energy
Building a Cleaner Future
2045 LINCOLN HIGHWAY
EDISON, NEW JERSEY 08817

PROJECT NAME:
STONINGTON SOLAR PROJECT

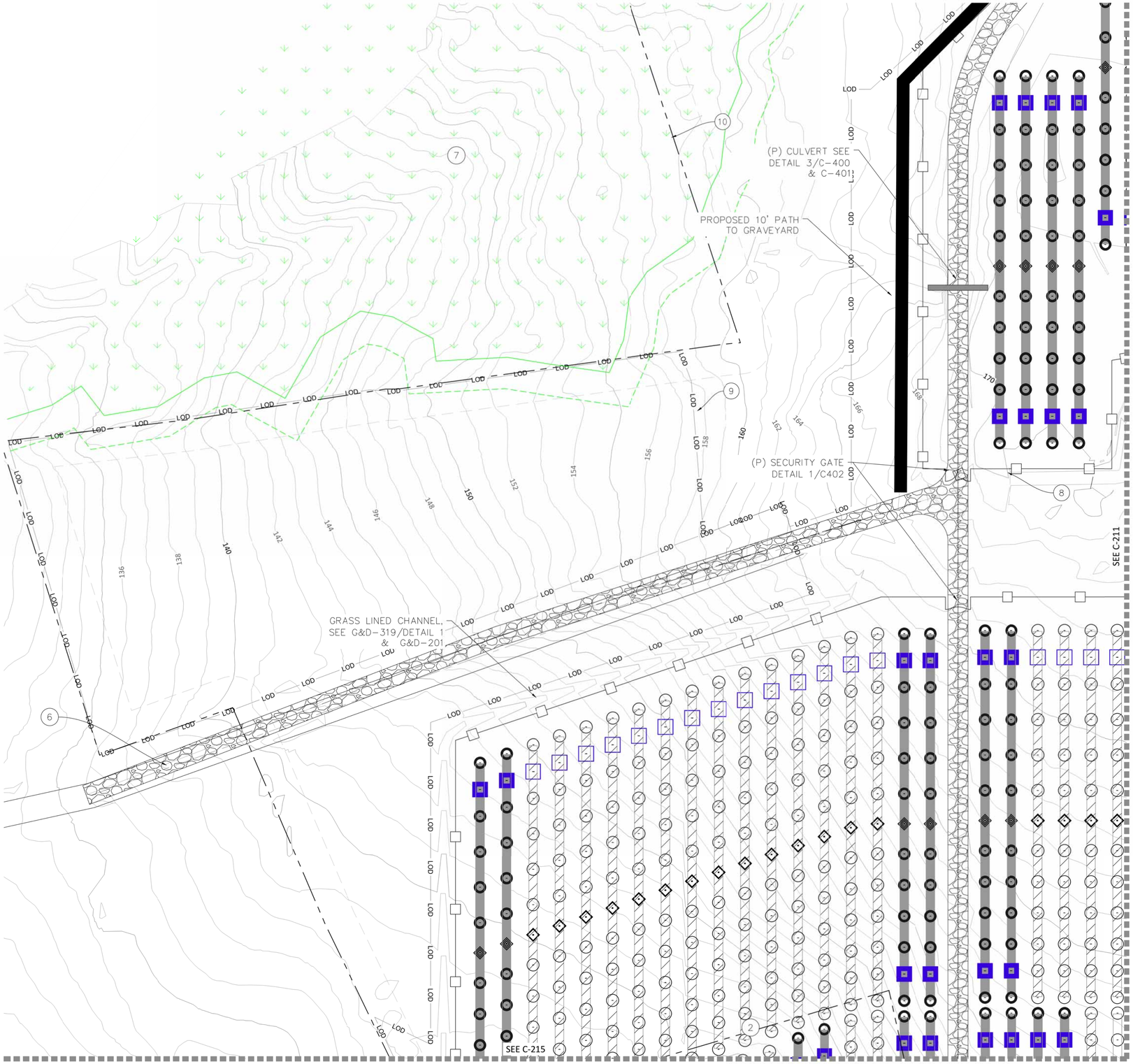
PROJECT ADDRESS:
ELLA WHEELER RD.
NORTH STONINGTON, CT 06359
41° 25' 9.71"N, 71° 50' 4.83"W

SEAL: STATE OF CONNECTICUT · DARIN RAY GALLOWAY · No. 34152 · LICENSED PROFESSIONAL ENGINEER

DATE: 21-JAN-20
PROJECT #: 20200309_CT
DRAWN BY: MMM
CHECKED BY: DRG

TITLE: CIVIL SITE OVERVIEW
SHEET: C-200

PLOT DATE: Tuesday, January 19, 2021



1 C-201 CIVIL SITE PLAN
Scale: 1" = 40'

N 0 40 80

MAP LEGEND (1"=1000')



LEGEND

1		EQUIPMENT PAD
2		ARRAY AREA
3	AC	(N) UG AC WIRE
4	OH	OVERHEAD POWER
5		OVERHEAD POWER POLE
6		PROPOSED SITE ACCESS ROAD (SEE C-400)
7		WETLAND W/BUFFER
8		SITE FENCE LINE (SEE C-402)
9	LOD	SITE LIMIT OF DISTURBANCE
10		SITE BOUNDARY
11		RIVER OR CREEK
12		100 YEAR FLOOD ZONE
	75	MAJOR CONTOUR
	76	MINOR CONTOUR

PIER LEGEND

SYMBOL	PIER TYPE
	HEAVY ARRAY PIER
	STANDARD ARRAY PIER
	HEAVY ARRAY PIER, EDGE
	STANDARD ARRAY PIER, EDGE
	HEAVY MOTOR PIER
	STANDARD MOTOR PIER
	HIGH SLOPE TRACKER

811 Know what's below. Call before you dig.

SIERRA OVERHEAD ANALYTICS
18859 MICROTRONICS WAY
SONORA, CALIFORNIA 95370
CONNECTICUT PROFESSIONAL
ENGINEERING CORPORATION #PEC.0001969

REV	DESCRIPTION	DATE
6	ISSUED FOR CONSTRUCTION - DRAFT	9/4/2020
7	ISSUED FOR CONSTRUCTION - DRAFT	9/18/2020
8	ISSUED FOR CONSTRUCTION - DRAFT	10/22/2020
9	ISSUED FOR CONSTRUCTION - DRAFT	11/06/2020
10	ISSUED FOR CONSTRUCTION	1/20/2021
-	-	-
-	-	-
-	-	-
-	-	-
-	-	-

CONFIDENTIAL:
THE INFORMATION DEPICTED ON THIS DOCUMENT IS PROPRIETARY AND THE SOLE PROPERTY OF SIERRA OVERHEAD ANALYTICS, INC (SOA). ANY USE OR DISCLOSURE OF THIS INFORMATION IS EXPRESSLY PROHIBITED WITHOUT THE PRIOR WRITTEN CONSENT OF SOA.

CS Energy
Building a Cleaner Future
2045 LINCOLN HIGHWAY
EDISON, NEW JERSEY 08817

PROJECT NAME:
STONINGTON SOLAR PROJECT

PROJECT ADDRESS:
ELLA WHEELER RD.
NORTH STONINGTON, CT 06359
41° 25' 9.71"N, 71° 50' 4.83"W

SEAL: STATE OF CONNECTICUT DARIN RAY GALLOWAY No. 34152 LICENSED PROFESSIONAL ENGINEER

DATE: 21-JAN-20
PROJECT #: 20200309_CT
DRAWN BY: MMM
CHECKED BY: DRG

TITLE: CIVIL SITE PLAN

SHEET: C-201

PLOT DATE: Tuesday, January 19, 2021

LOCATION: E:\DROPBOX (SOA)\ENGINEERING\CS ENERGY\2020-03-09_STONINGTON\CAD\SITE PLANS.DWG PLOTTED BY: DARIN GALLOWAY

PROPOSED 10' PATH TO GRAVEYARD

LOW WATER CROSSING
SEE C-303

SWALE 1

SEE C-211

SEE C-203

LOW WATER CROSSING
SEE C-303

1 C-202 CIVIL SITE PLAN
Scale: 1" = 40'

N

0 40 80

MAP LEGEND (1"=1000')



LEGEND

1		EQUIPMENT PAD
2		ARRAY AREA
3	AC	(N) UG AC WIRE
4	OH	OVERHEAD POWER
5		OVERHEAD POWER POLE
6		PROPOSED SITE ACCESS ROAD (SEE C-400)
7		WETLAND W/BUFFER
8		SITE FENCE LINE (SEE C-402)
9	LOD	SITE LIMIT OF DISTURBANCE
10		SITE BOUNDARY
11		RIVER OR CREEK
12		100 YEAR FLOOD ZONE
	75	MAJOR CONTOUR
	76	MINOR CONTOUR

PIER LEGEND

SYMBOL	PIER TYPE
	HEAVY ARRAY PIER
	STANDARD ARRAY PIER
	HEAVY ARRAY PIER, EDGE
	STANDARD ARRAY PIER, EDGE
	HEAVY MOTOR PIER
	STANDARD MOTOR PIER
	HIGH SLOPE TRACKER

Know what's below. Call before you dig.

SIERRA OVERHEAD ANALYTICS
18859 MICROTRONICS WAY
SONORA, CALIFORNIA 95370
CONNECTICUT PROFESSIONAL
ENGINEERING CORPORATION #PEC.0001969

REV	DESCRIPTION	DATE
6	ISSUED FOR CONSTRUCTION - DRAFT	9/4/2020
7	ISSUED FOR CONSTRUCTION - DRAFT	9/18/2020
8	ISSUED FOR CONSTRUCTION - DRAFT	10/22/2020
9	ISSUED FOR CONSTRUCTION - DRAFT	11/06/2020
10	ISSUED FOR CONSTRUCTION	1/20/2021
-	-	-
-	-	-
-	-	-
-	-	-
-	-	-

CONFIDENTIAL:
THE INFORMATION DEPICTED ON THIS DOCUMENT IS PROPRIETARY AND THE SOLE PROPERTY OF SIERRA OVERHEAD ANALYTICS, INC (SOA). ANY USE OR DISCLOSURE OF THIS INFORMATION IS EXPRESSLY PROHIBITED WITHOUT THE PRIOR WRITTEN CONSENT OF SOA.

CS Energy
Building a Cleaner Future
2045 LINCOLN HIGHWAY
EDISON, NEW JERSEY 08817

PROJECT NAME:
STONINGTON SOLAR PROJECT

PROJECT ADDRESS:
ELLA WHEELER RD.
NORTH STONINGTON, CT 06359
41° 25' 9.71"N, 71° 50' 4.83"W

SEAL: STATE OF CONNECTICUT · DARIN RAY GALLOWAY · No. 34152 · LICENSED PROFESSIONAL ENGINEER

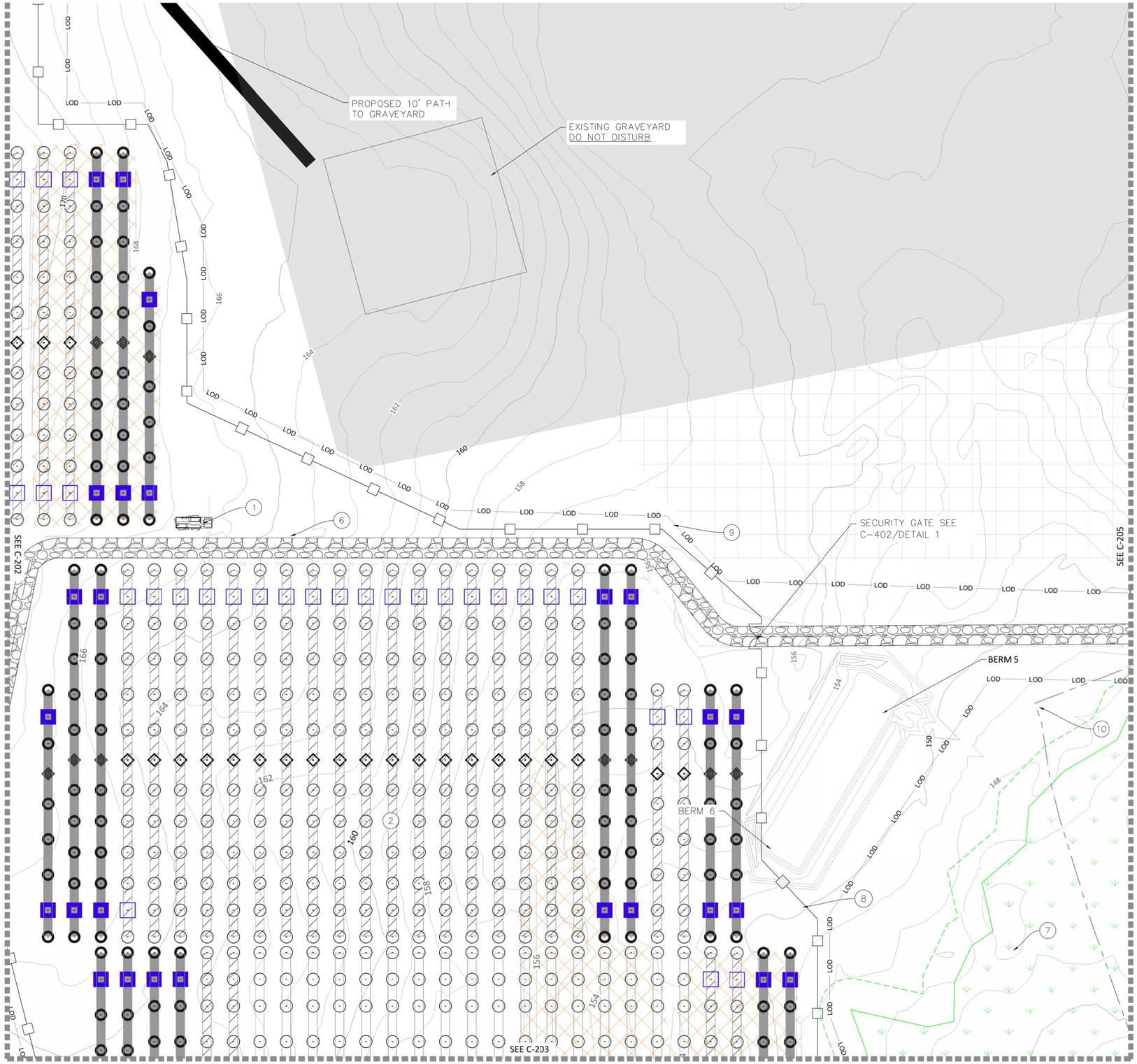
DATE: 21-JAN-20
PROJECT #: 20200309_CT
DRAWN BY: MMM
CHECKED BY: DRG

TITLE: CIVIL SITE PLAN

SHEET: C-202

PLOT DATE: Tuesday, January 19, 2021

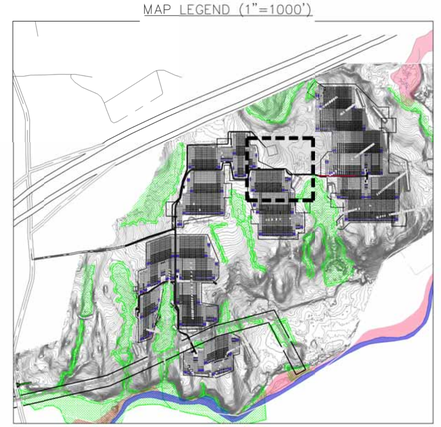
LOCATION: E:\DROPBOX (SOA)\ENGINEERING\CS ENERGY\2020-03-09_STONINGTON\CAD\SITE PLANS.DWG PLOTTED BY: DARIN GALLOWAY



1 C-203 CIVIL SITE PLAN
Scale: 1" = 40'

N 0 40 80

MAP LEGEND (1"=1000')



LEGEND

1		EQUIPMENT PAD
2		ARRAY AREA
3	AC	(N) UG AC WIRE
4	OH	OVERHEAD POWER
5		OVERHEAD POWER POLE
6		PROPOSED SITE ACCESS ROAD (SEE C-400)
7		WETLAND W/BUFFER
8		SITE FENCE LINE (SEE C-402)
9	LOD	SITE LIMIT OF DISTURBANCE
10		SITE BOUNDARY
11		RIVER OR CREEK
12		100 YEAR FLOOD ZONE
	75	MAJOR CONTOUR
	76	MINOR CONTOUR

PIER LEGEND

SYMBOL	PIER TYPE
	HEAVY ARRAY PIER
	STANDARD ARRAY PIER
	HEAVY ARRAY PIER, EDGE
	STANDARD ARRAY PIER, EDGE
	HEAVY MOTOR PIER
	STANDARD MOTOR PIER
	HIGH SLOPE TRACKER

Know what's below. Call before you dig.

soa
SIERRA OVERHEAD ANALYTICS
18859 MICROTRONICS WAY
SONORA, CALIFORNIA 95370
CONNECTICUT PROFESSIONAL
ENGINEERING CORPORATION #PEC.0001969

REV	DESCRIPTION	DATE
6	ISSUED FOR CONSTRUCTION - DRAFT	9/4/2020
7	ISSUED FOR CONSTRUCTION - DRAFT	9/18/2020
8	ISSUED FOR CONSTRUCTION - DRAFT	10/22/2020
9	ISSUED FOR CONSTRUCTION - DRAFT	11/06/2020
10	ISSUED FOR CONSTRUCTION	1/20/2021
-	-	-
-	-	-
-	-	-
-	-	-
-	-	-

CONFIDENTIAL:
THE INFORMATION DEPICTED ON THIS DOCUMENT IS PROPRIETARY AND THE SOLE PROPERTY OF SIERRA OVERHEAD ANALYTICS, INC (SOA). ANY USE OR DISCLOSURE OF THIS INFORMATION IS EXPRESSLY PROHIBITED WITHOUT THE PRIOR WRITTEN CONSENT OF SOA.

CS Energy
Building a Cleaner Future
2045 LINCOLN HIGHWAY
EDISON, NEW JERSEY 08817

PROJECT NAME:
STONINGTON SOLAR PROJECT

PROJECT ADDRESS:
ELLA WHEELER RD.
NORTH STONINGTON, CT 06359
41° 25' 9.71"N, 71° 50' 4.83"W

SEAL: STATE OF CONNECTICUT · DARIN RAY GALLOWAY · No. 34152 · LICENSED PROFESSIONAL ENGINEER

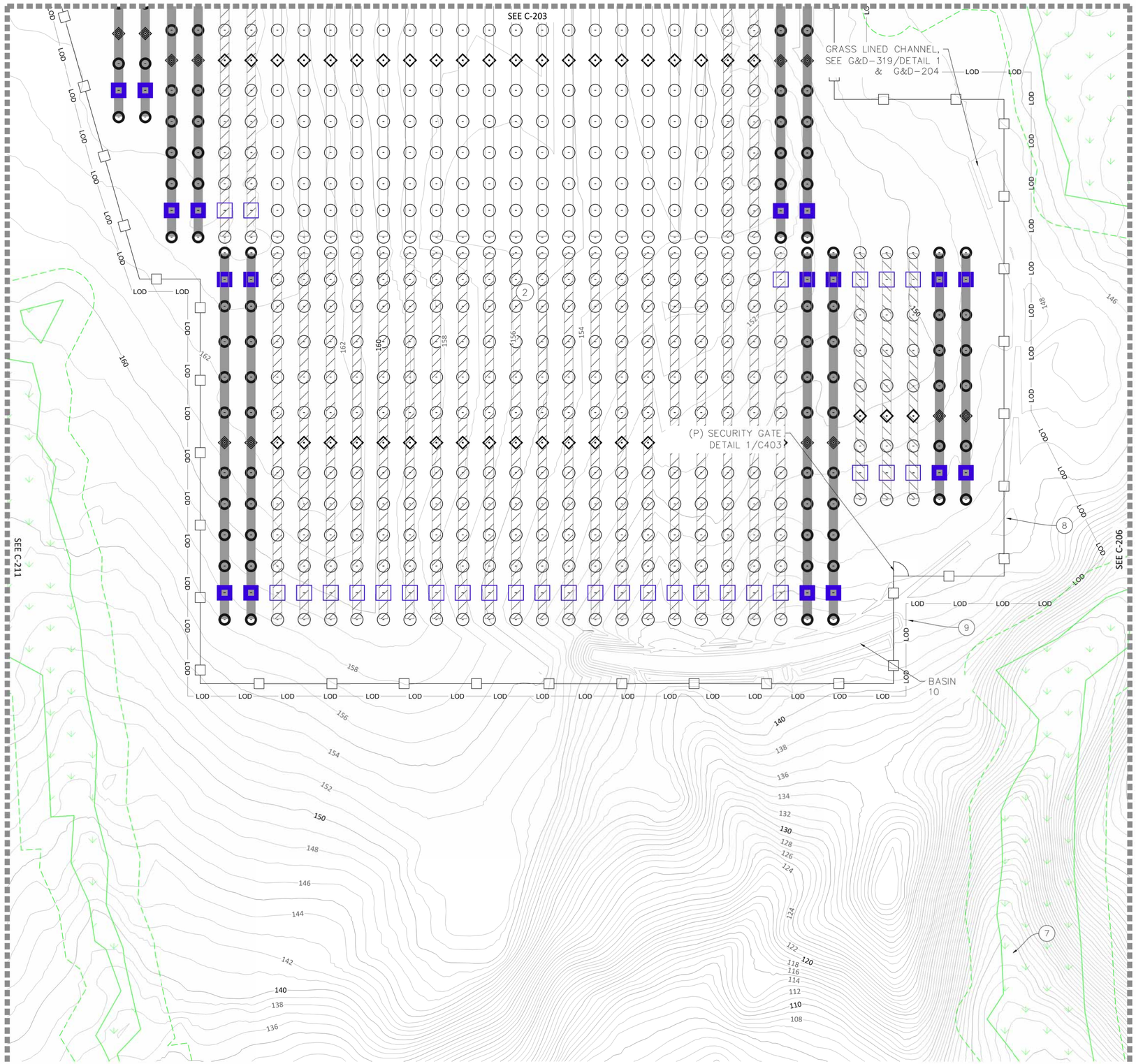
DATE: 21-JAN-20
PROJECT #: 20200309_CT
DRAWN BY: MMM
CHECKED BY: DRG

TITLE: CIVIL SITE PLAN

SHEET: C-203

PLOT DATE: Tuesday, January 19, 2021

LOCATION: E:\DROPBOX (SOA)\ENGINEERING\CS ENERGY\2020-03-09_STONINGTON\CAD\SITE PLANS.DWG PLOTTED BY: DARIN GALLOWAY



1 C-204 CIVIL SITE PLAN
Scale: 1" = 40'

N

0 40 80

MAP LEGEND (1"=1000')



LEGEND

1	EQUIPMENT PAD
2	ARRAY AREA
3	(N) UG AC WIRE
4	OVERHEAD POWER
5	OVERHEAD POWER POLE
6	PROPOSED SITE ACCESS ROAD (SEE C-400)
7	WETLAND W/BUFFER
8	SITE FENCE LINE (SEE C-402)
9	SITE LIMIT OF DISTURBANCE
10	SITE BOUNDARY
11	RIVER OR CREEK
12	100 YEAR FLOOD ZONE
	MAJOR CONTOUR
	MINOR CONTOUR

PIER LEGEND

SYMBOL	PIER TYPE
	HEAVY ARRAY PIER
	STANDARD ARRAY PIER
	HEAVY ARRAY PIER, EDGE
	STANDARD ARRAY PIER, EDGE
	HEAVY MOTOR PIER
	STANDARD MOTOR PIER
	HIGH SLOPE TRACKER

Know what's below. Call before you dig.

PLOT DATE: Tuesday, January 19, 2021

soa
SIERRA OVERHEAD ANALYTICS
18859 MICROTRONICS WAY
SONORA, CALIFORNIA 95370
CONNECTICUT PROFESSIONAL ENGINEERING CORPORATION #PEC.0001969

REV	DESCRIPTION	DATE
6	ISSUED FOR CONSTRUCTION - DRAFT	9/4/2020
7	ISSUED FOR CONSTRUCTION - DRAFT	9/18/2020
8	ISSUED FOR CONSTRUCTION - DRAFT	10/22/2020
9	ISSUED FOR CONSTRUCTION - DRAFT	11/06/2020
10	ISSUED FOR CONSTRUCTION	1/20/2021
-	-	-
-	-	-
-	-	-
-	-	-
-	-	-

CONFIDENTIAL:
THE INFORMATION DEPICTED ON THIS DOCUMENT IS PROPRIETARY AND THE SOLE PROPERTY OF SIERRA OVERHEAD ANALYTICS, INC (SOA). ANY USE OR DISCLOSURE OF THIS INFORMATION IS EXPRESSLY PROHIBITED WITHOUT THE PRIOR WRITTEN CONSENT OF SOA.

CS Energy
Building a Cleaner Future
2045 LINCOLN HIGHWAY
EDISON, NEW JERSEY 08817

PROJECT NAME:
STONINGTON SOLAR PROJECT

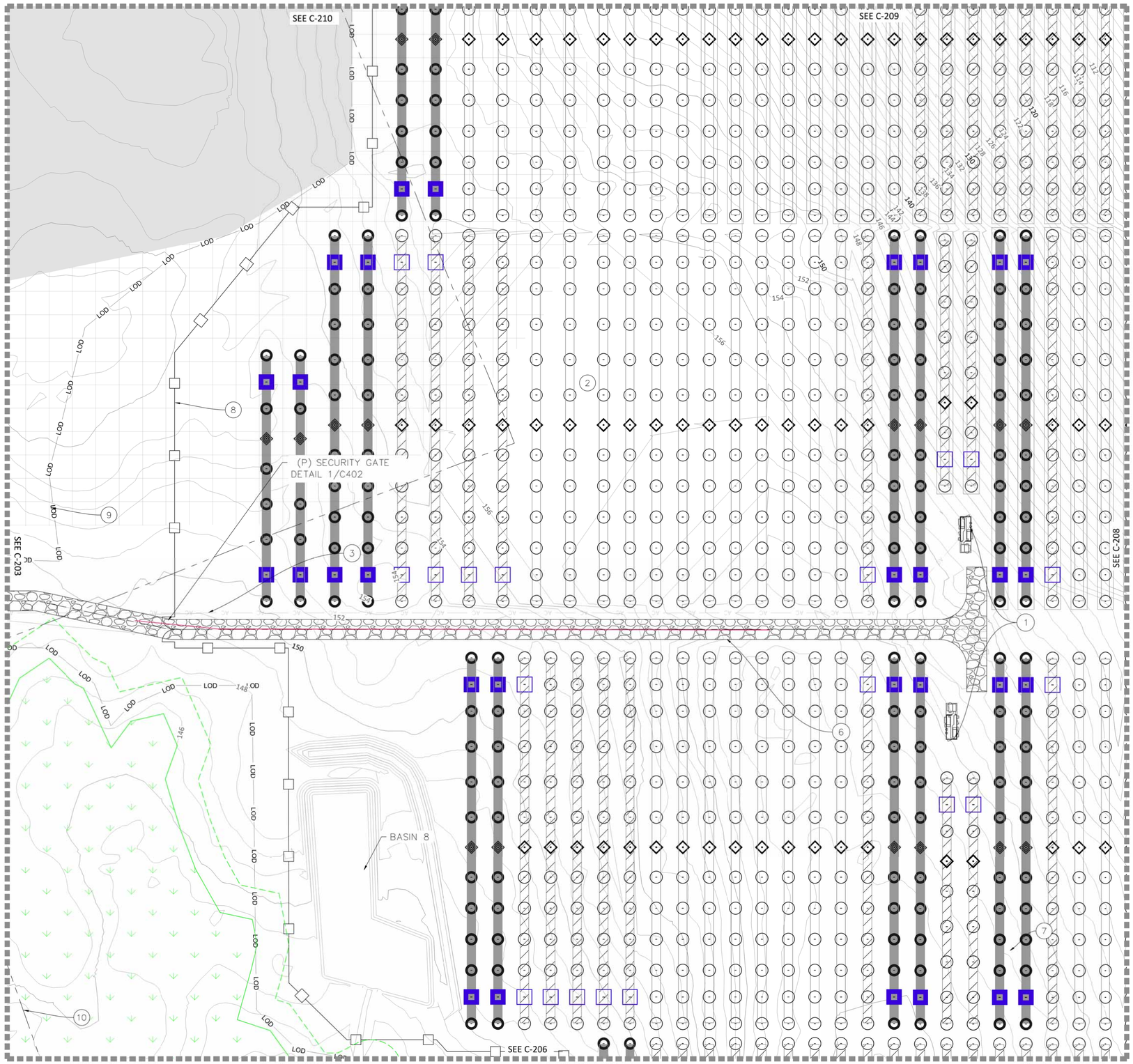
PROJECT ADDRESS:
ELLA WHEELER RD.
NORTH STONINGTON, CT 06359
41° 25' 9.71"N, 71° 50' 4.83"W

SEAL: STATE OF CONNECTICUT · DARIN RAY GALLOWAY · No. 34152 · LICENSED PROFESSIONAL ENGINEER

DATE: 21-JAN-20
PROJECT #: 20200309_CT
DRAWN BY: MMM
CHECKED BY: DRG

TITLE: CIVIL SITE PLAN
SHEET: C-204

LOCATION: E:\DROPBOX (SOA)\ENGINEERING\CS ENERGY\2020-03-09_STONINGTON\CAD\SITE PLANS.DWG PLOTTED BY: DARIN GALLOWAY



1 C-205 CIVIL SITE PLAN
Scale: 1" = 40'

N 0 40 80

MAP LEGEND (1"=1000')



LEGEND

1		EQUIPMENT PAD
2		ARRAY AREA
3	AC	(N) UG AC WIRE
4	OH	OVERHEAD POWER
5		OVERHEAD POWER POLE
6		PROPOSED SITE ACCESS ROAD (SEE C-400)
7		WETLAND W/BUFFER
8		SITE FENCE LINE (SEE C-402)
9	LOD	SITE LIMIT OF DISTURBANCE
10		SITE BOUNDARY
11		RIVER OR CREEK
12		100 YEAR FLOOD ZONE
	75	MAJOR CONTOUR
	76	MINOR CONTOUR

PIER LEGEND

SYMBOL	PIER TYPE
	HEAVY ARRAY PIER
	STANDARD ARRAY PIER
	HEAVY ARRAY PIER, EDGE
	STANDARD ARRAY PIER, EDGE
	HEAVY MOTOR PIER
	STANDARD MOTOR PIER
	HIGH SLOPE TRACKER

811 Know what's below. Call before you dig.

soa
SIERRA OVERHEAD ANALYTICS
18859 MICROTRONICS WAY
SONORA, CALIFORNIA 95370
CONNECTICUT PROFESSIONAL
ENGINEERING CORPORATION #PEC.0001969

REV	DESCRIPTION	DATE
6	ISSUED FOR CONSTRUCTION - DRAFT	9/4/2020
7	ISSUED FOR CONSTRUCTION - DRAFT	9/18/2020
8	ISSUED FOR CONSTRUCTION - DRAFT	10/22/2020
9	ISSUED FOR CONSTRUCTION - DRAFT	11/06/2020
10	ISSUED FOR CONSTRUCTION	1/20/2021
-	-	-
-	-	-
-	-	-
-	-	-
-	-	-

CONFIDENTIAL:
THE INFORMATION DEPICTED ON THIS DOCUMENT IS PROPRIETARY AND THE SOLE PROPERTY OF SIERRA OVERHEAD ANALYTICS, INC (SOA). ANY USE OR DISCLOSURE OF THIS INFORMATION IS EXPRESSLY PROHIBITED WITHOUT THE PRIOR WRITTEN CONSENT OF SOA.

CS Energy
Building a Cleaner Future
2045 LINCOLN HIGHWAY
EDISON, NEW JERSEY 08817

PROJECT NAME:
STONINGTON SOLAR PROJECT

PROJECT ADDRESS:
ELLA WHEELER RD.
NORTH STONINGTON, CT 06359
41° 25' 9.71"N, 71° 50' 4.83"W

SEAL: STATE OF CONNECTICUT DARIN RAY GALLOWAY No. 34152 LICENSED PROFESSIONAL ENGINEER

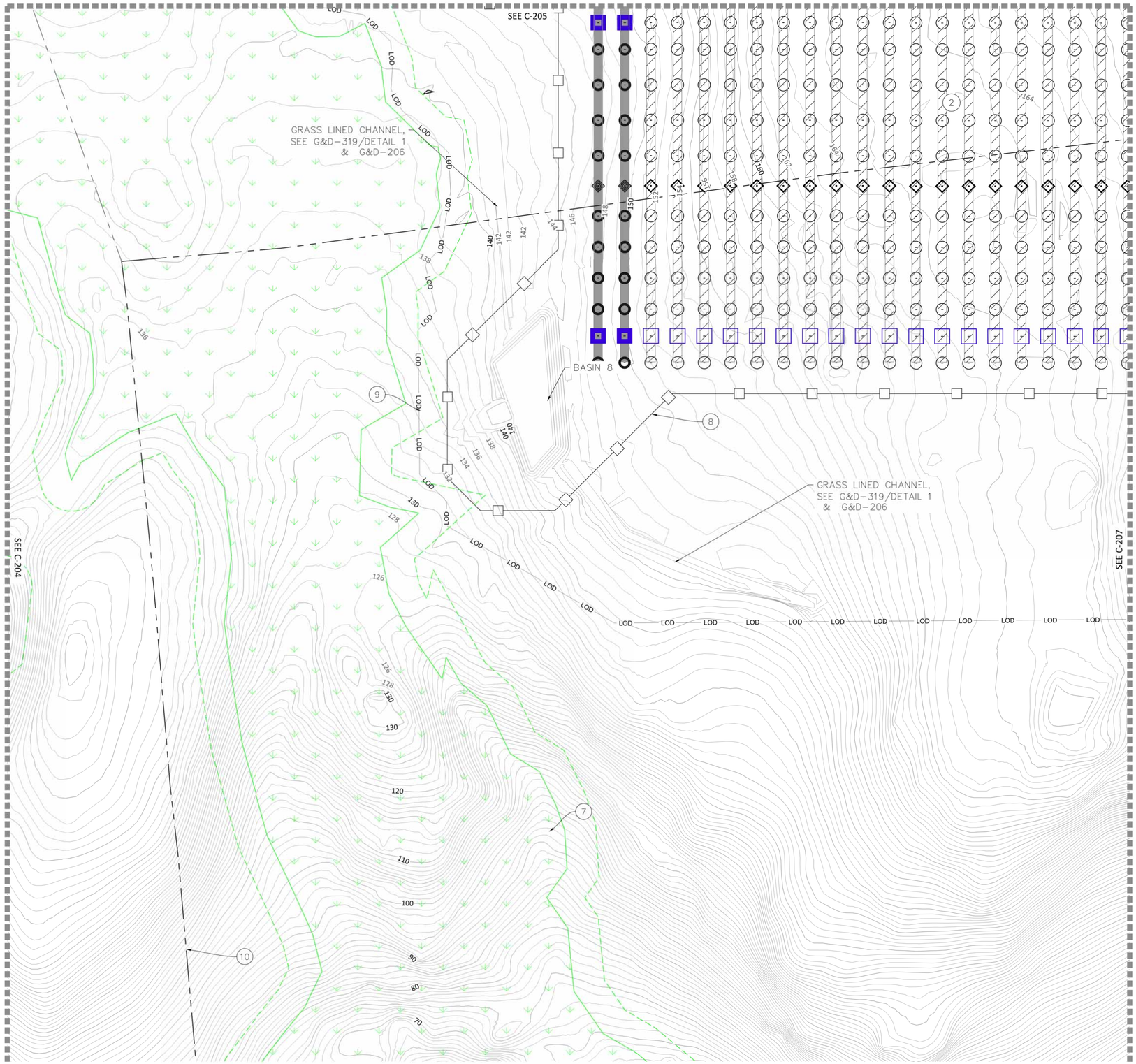
DATE: 21-JAN-20
PROJECT #: 20200309_CT
DRAWN BY: MMM
CHECKED BY: DRG

TITLE: CIVIL SITE PLAN

SHEET: C-205

PLOT DATE: Tuesday, January 19, 2021

LOCATION: E:\DROPBOX (SOA)\ENGINEERING\CS ENERGY\2020-03-09_STONINGTON\CAD\SITE PLANS.DWG PLOTTED BY: DARIN GALLOWAY



1 C-206 CIVIL SITE PLAN
Scale: 1" = 40'

N

0 40 80

MAP LEGEND (1"=1000')



LEGEND

1		EQUIPMENT PAD
2		ARRAY AREA
3	AC	(N) UG AC WIRE
4	OH	OVERHEAD POWER
5		OVERHEAD POWER POLE
6		PROPOSED SITE ACCESS ROAD (SEE C-400)
7		WETLAND W/BUFFER
8		SITE FENCE LINE (SEE C-402)
9	LOD	SITE LIMIT OF DISTURBANCE
10		SITE BOUNDARY
11		RIVER OR CREEK
12		100 YEAR FLOOD ZONE
	75	MAJOR CONTOUR
	76	MINOR CONTOUR

PIER LEGEND

SYMBOL	PIER TYPE
	HEAVY ARRAY PIER
-	STANDARD ARRAY PIER
	HEAVY ARRAY PIER, EDGE
-	STANDARD ARRAY PIER, EDGE
	HEAVY MOTOR PIER
	STANDARD MOTOR PIER
	HIGH SLOPE TRACKER

Know what's below. Call before you dig.

soa
SIERRA OVERHEAD ANALYTICS
18859 MICROTRONICS WAY
SONORA, CALIFORNIA 95370
CONNECTICUT PROFESSIONAL ENGINEERING CORPORATION #PEC.0001969

REV	DESCRIPTION	DATE
6	ISSUED FOR CONSTRUCTION - DRAFT	9/4/2020
7	ISSUED FOR CONSTRUCTION - DRAFT	9/18/2020
8	ISSUED FOR CONSTRUCTION - DRAFT	10/22/2020
9	ISSUED FOR CONSTRUCTION - DRAFT	11/06/2020
10	ISSUED FOR CONSTRUCTION	1/20/2021
-	-	-
-	-	-
-	-	-
-	-	-
-	-	-

CONFIDENTIAL:
THE INFORMATION DEPICTED ON THIS DOCUMENT IS PROPRIETARY AND THE SOLE PROPERTY OF SIERRA OVERHEAD ANALYTICS, INC (SOA). ANY USE OR DISCLOSURE OF THIS INFORMATION IS EXPRESSLY PROHIBITED WITHOUT THE PRIOR WRITTEN CONSENT OF SOA.

CS Energy
Building a Cleaner Future
2045 LINCOLN HIGHWAY
EDISON, NEW JERSEY 08817

PROJECT NAME:
STONINGTON SOLAR PROJECT

PROJECT ADDRESS:
ELLA WHEELER RD.
NORTH STONINGTON, CT 06359
41° 25' 9.71"N, 71° 50' 4.83"W

SEAL: STATE OF CONNECTICUT · DARIN RAY GALLOWAY · No. 34152 · LICENSED PROFESSIONAL ENGINEER

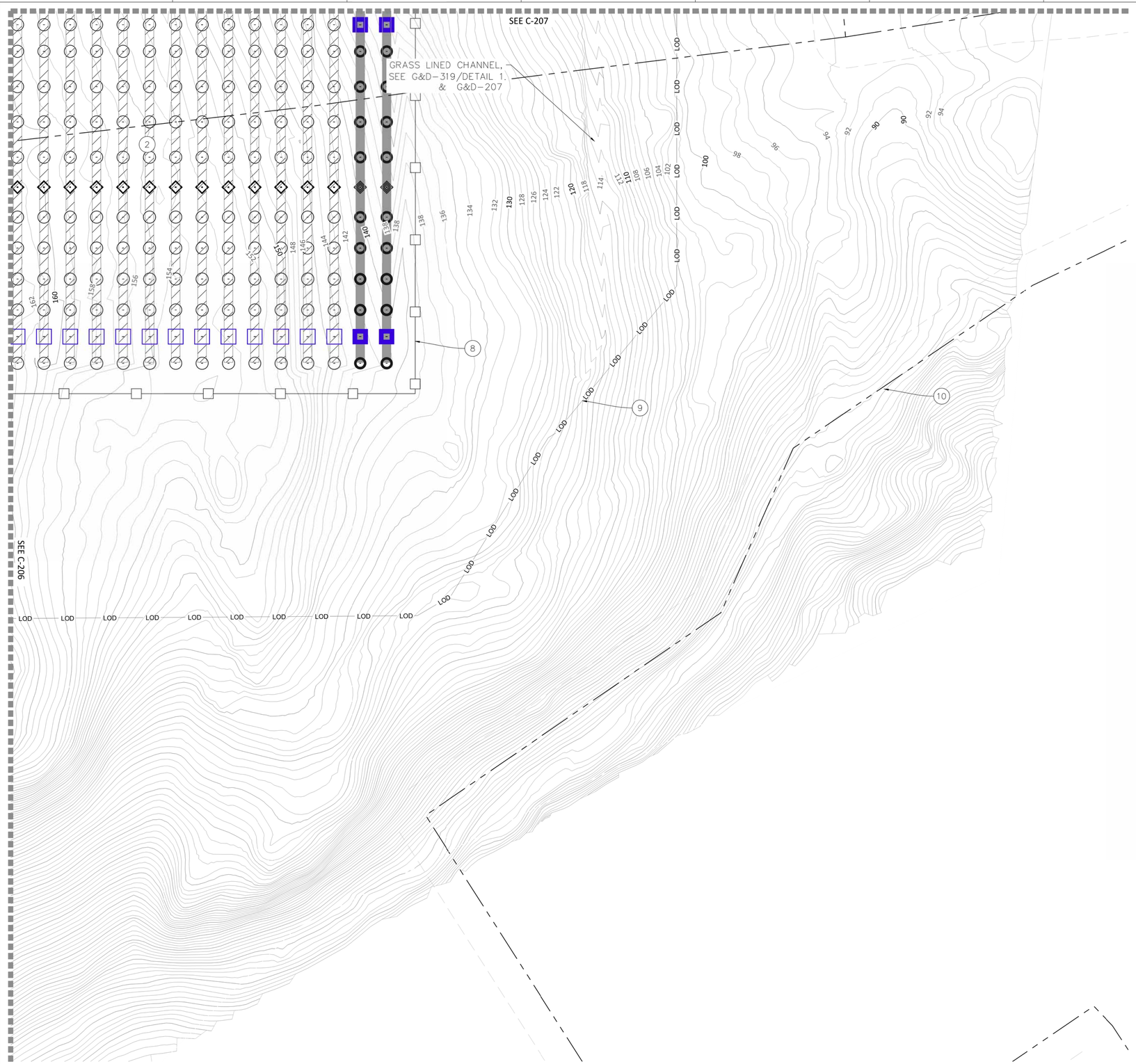
DATE: 21-JAN-20
PROJECT #: 20200309_CT
DRAWN BY: MMM
CHECKED BY: DRG

TITLE: CIVIL SITE PLANS

SHEET: C-206

PLOT DATE: Tuesday, January 19, 2021

LOCATION: E:\DROPBOX (SOA)\ENGINEERING\CS ENERGY\2020-03-09_STONINGTON\CAD\SITE PLANS.DWG PLOTTED BY: DARIN GALLOWAY



1 C-207 CIVIL SITE PLAN
Scale: 1" = 40'

N

0 40 80

MAP LEGEND (1"=1000')



LEGEND

1		EQUIPMENT PAD
2		ARRAY AREA
3	AC	(N) UG AC WIRE
4	OH	OVERHEAD POWER
5		OVERHEAD POWER POLE
6		PROPOSED SITE ACCESS ROAD (SEE C-400)
7		WETLAND W/BUFFER
8		SITE FENCE LINE (SEE C-402)
9	LOD	SITE LIMIT OF DISTURBANCE
10		SITE BOUNDARY
11		RIVER OR CREEK
12		100 YEAR FLOOD ZONE
	75	MAJOR CONTOUR
	76	MINOR CONTOUR

PIER LEGEND

SYMBOL	PIER TYPE
	HEAVY ARRAY PIER
-	STANDARD ARRAY PIER
	HEAVY ARRAY PIER, EDGE
-	STANDARD ARRAY PIER, EDGE
	HEAVY MOTOR PIER
-	STANDARD MOTOR PIER
	HIGH SLOPE TRACKER

811 Know what's below. Call before you dig.

soa
SIERRA OVERHEAD ANALYTICS
18859 MICROTRONICS WAY
SONORA, CALIFORNIA 95370
CONNECTICUT PROFESSIONAL
ENGINEERING CORPORATION #PEC.0001969

REV	DESCRIPTION	DATE
6	ISSUED FOR CONSTRUCTION - DRAFT	9/4/2020
7	ISSUED FOR CONSTRUCTION - DRAFT	9/18/2020
8	ISSUED FOR CONSTRUCTION - DRAFT	10/22/2020
9	ISSUED FOR CONSTRUCTION - DRAFT	11/06/2020
10	ISSUED FOR CONSTRUCTION	1/20/2021
-	-	-
-	-	-
-	-	-
-	-	-
-	-	-

CONFIDENTIAL:
THE INFORMATION DEPICTED ON THIS DOCUMENT IS PROPRIETARY AND THE SOLE PROPERTY OF SIERRA OVERHEAD ANALYTICS, INC (SOA). ANY USE OR DISCLOSURE OF THIS INFORMATION IS EXPRESSLY PROHIBITED WITHOUT THE PRIOR WRITTEN CONSENT OF SOA.

CS Energy
Building a Cleaner Future
2045 LINCOLN HIGHWAY
EDISON, NEW JERSEY 08817

PROJECT NAME:
STONINGTON SOLAR PROJECT

PROJECT ADDRESS:
ELLA WHEELER RD.
NORTH STONINGTON, CT 06359
41° 25' 9.71"N, 71° 50' 4.83"W

SEAL: STATE OF CONNECTICUT · DARIN RAY GALLOWAY · No. 34152 · LICENSED PROFESSIONAL ENGINEER

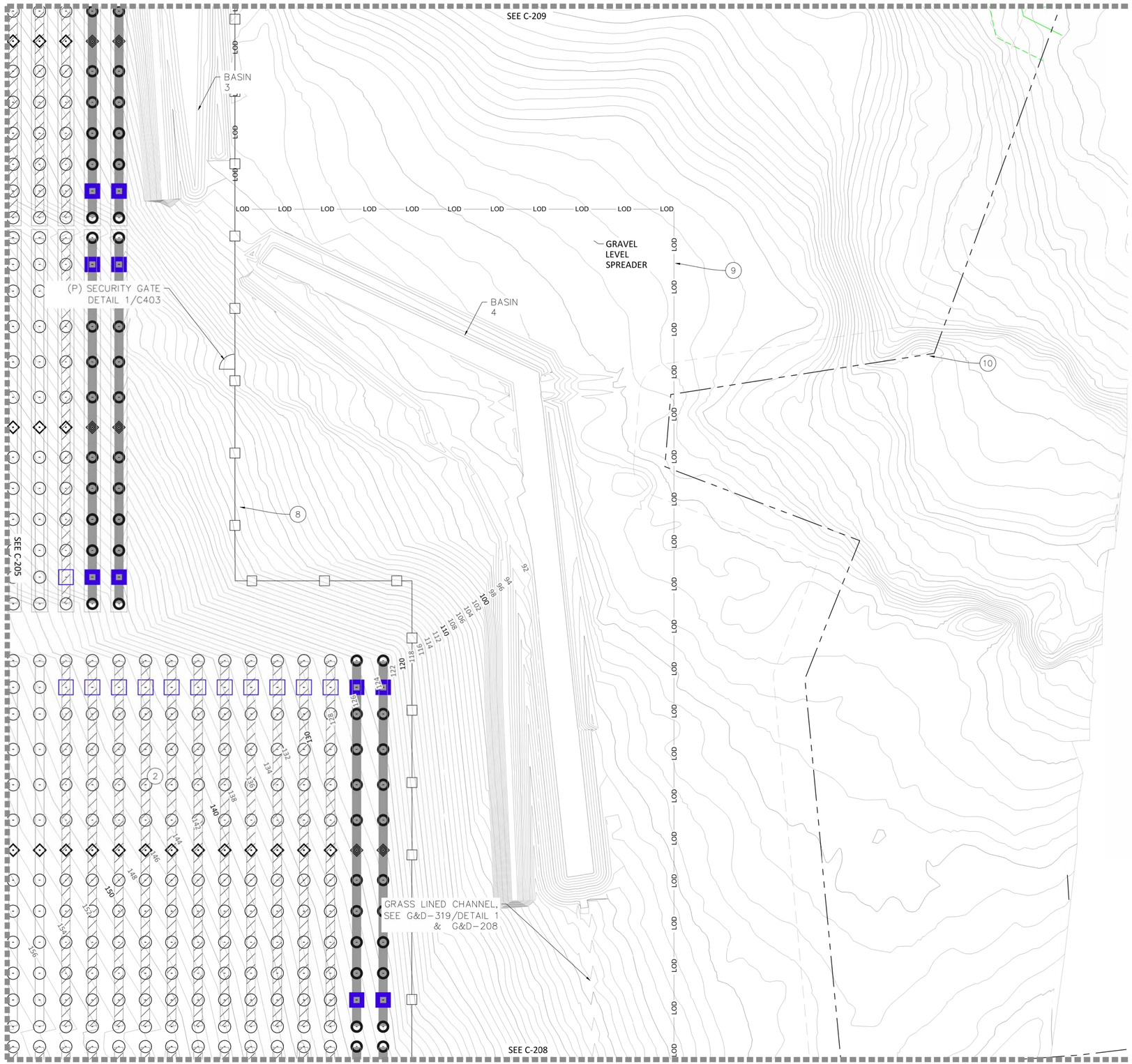
DATE: 21-JAN-20
PROJECT #: 20200309_CT
DRAWN BY: MMM
CHECKED BY: DRG

TITLE: CIVIL SITE PLANS

SHEET: C-207

PLOT DATE: Tuesday, January 19, 2021

LOCATION: E:\DROPBOX (SOA)\ENGINEERING\CS ENERGY\2020-03-09_STONINGTON\CAD\SITE PLANS.DWG PLOTTED BY: DARIN GALLOWAY

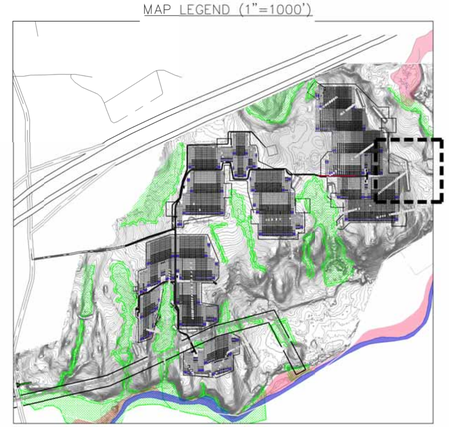


1 C-208 CIVIL SITE PLAN
Scale: 1" = 40'

N

0 40 80

MAP LEGEND (1"=1000')



LEGEND

1	EQUIPMENT PAD
2	ARRAY AREA
3	(N) UG AC WIRE
4	OVERHEAD POWER
5	OVERHEAD POWER POLE
6	PROPOSED SITE ACCESS ROAD (SEE C-400)
7	WETLAND W/BUFFER
8	SITE FENCE LINE (SEE C-402)
9	SITE LIMIT OF DISTURBANCE
10	SITE BOUNDARY
11	RIVER OR CREEK
12	100 YEAR FLOOD ZONE
	MAJOR CONTOUR
	MINOR CONTOUR

PIER LEGEND

SYMBOL	PIER TYPE
	HEAVY ARRAY PIER
	STANDARD ARRAY PIER
	HEAVY ARRAY PIER, EDGE
	STANDARD ARRAY PIER, EDGE
	HEAVY MOTOR PIER
	STANDARD MOTOR PIER
	HIGH SLOPE TRACKER

811 Know what's below. Call before you dig.

SIERRA OVERHEAD ANALYTICS
18859 MICROTRONICS WAY
SONORA, CALIFORNIA 95370
CONNECTICUT PROFESSIONAL ENGINEERING CORPORATION #PEC.0001969

REV	DESCRIPTION	DATE
6	ISSUED FOR CONSTRUCTION - DRAFT	9/4/2020
7	ISSUED FOR CONSTRUCTION - DRAFT	9/18/2020
8	ISSUED FOR CONSTRUCTION - DRAFT	10/22/2020
9	ISSUED FOR CONSTRUCTION - DRAFT	11/06/2020
10	ISSUED FOR CONSTRUCTION	1/20/2021
-	-	-
-	-	-
-	-	-
-	-	-
-	-	-

CONFIDENTIAL:
THE INFORMATION DEPICTED ON THIS DOCUMENT IS PROPRIETARY AND THE SOLE PROPERTY OF SIERRA OVERHEAD ANALYTICS, INC (SOA). ANY USE OR DISCLOSURE OF THIS INFORMATION IS EXPRESSLY PROHIBITED WITHOUT THE PRIOR WRITTEN CONSENT OF SOA.

CS Energy
Building a Cleaner Future
2045 LINCOLN HIGHWAY
EDISON, NEW JERSEY 08817

PROJECT NAME:
STONINGTON SOLAR PROJECT

PROJECT ADDRESS:
ELLA WHEELER RD.
NORTH STONINGTON, CT 06359
41° 25' 9.71"N, 71° 50' 4.83"W

SEAL: STATE OF CONNECTICUT · DARIN RAY GALLOWAY · No. 34152 · LICENSED PROFESSIONAL ENGINEER

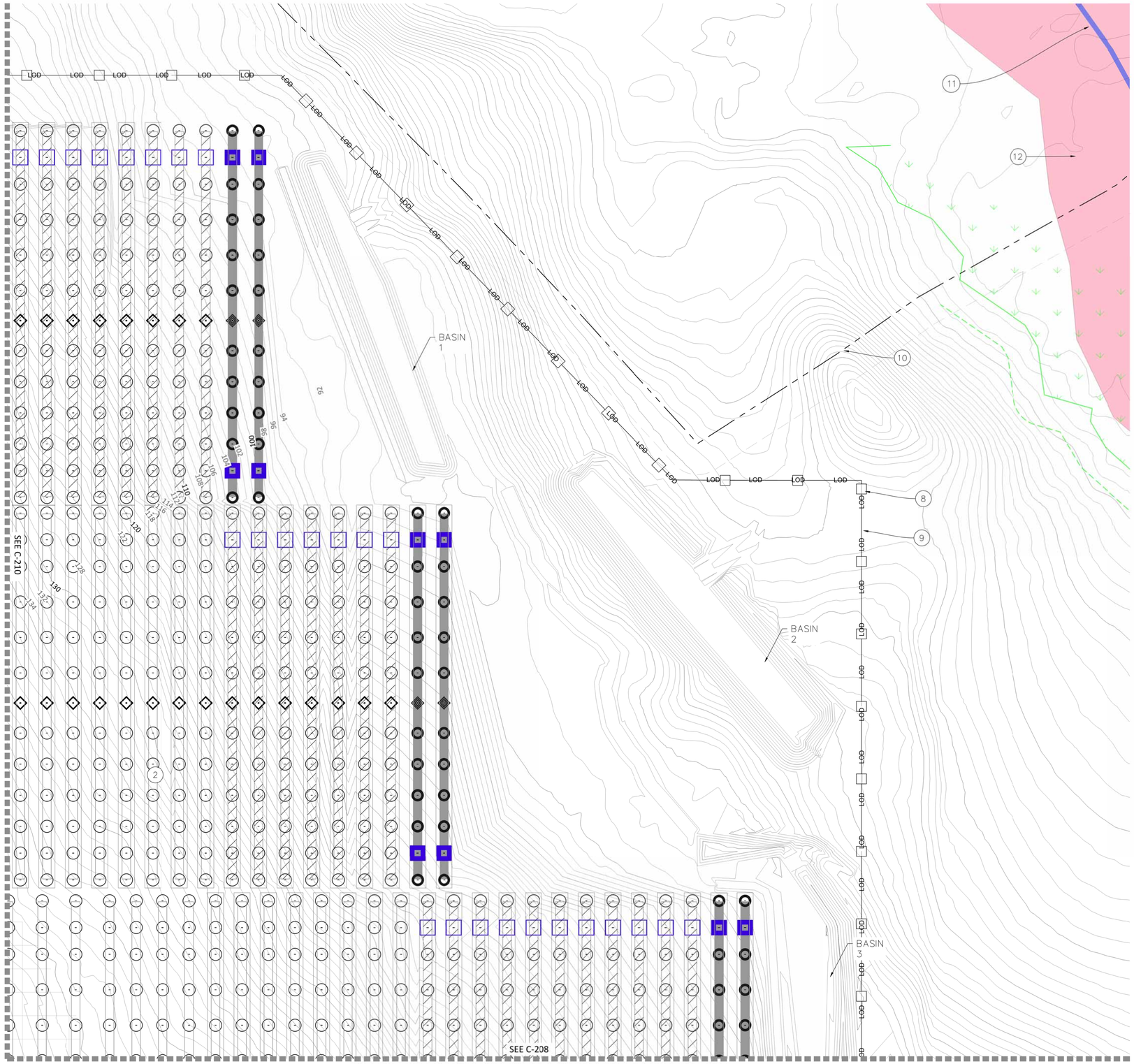
DATE: 21-JAN-20
PROJECT #: 20200309_CT
DRAWN BY: MMM
CHECKED BY: DRG

TITLE: CIVIL SITE PLANS

SHEET: C-208

PLOT DATE: Tuesday, January 19, 2021

LOCATION: E:\DROPBOX (SOA)\ENGINEERING\CS ENERGY\2020-03-09_STONINGTON\CAD\SITE PLANS.DWG PLOTTED BY: DARIN GALLOWAY



1 C-209 CIVIL SITE PLAN
Scale: 1" = 40'

N

0 40 80

MAP LEGEND (1"=1000')



LEGEND

1		EQUIPMENT PAD
2		ARRAY AREA
3	AC	(N) UG AC WIRE
4	OH	OVERHEAD POWER
5		OVERHEAD POWER POLE
6		PROPOSED SITE ACCESS ROAD (SEE C-400)
7		WETLAND W/BUFFER
8		SITE FENCE LINE (SEE C-402)
9	LOD	SITE LIMIT OF DISTURBANCE
10		SITE BOUNDARY
11		RIVER OR CREEK
12		100 YEAR FLOOD ZONE
	75	MAJOR CONTOUR
	76	MINOR CONTOUR

PIER LEGEND

SYMBOL	PIER TYPE
	HEAVY ARRAY PIER
	STANDARD ARRAY PIER
	HEAVY ARRAY PIER, EDGE
	STANDARD ARRAY PIER, EDGE
	HEAVY MOTOR PIER
	STANDARD MOTOR PIER
	HIGH SLOPE TRACKER

Know what's below. Call before you dig.

SIERRA OVERHEAD ANALYTICS
18859 MICROTRONICS WAY
SONORA, CALIFORNIA 95370
CONNECTICUT PROFESSIONAL
ENGINEERING CORPORATION #PEC.0001969

REV	DESCRIPTION	DATE
6	ISSUED FOR CONSTRUCTION - DRAFT	9/4/2020
7	ISSUED FOR CONSTRUCTION - DRAFT	9/18/2020
8	ISSUED FOR CONSTRUCTION - DRAFT	10/22/2020
9	ISSUED FOR CONSTRUCTION - DRAFT	11/06/2020
10	ISSUED FOR CONSTRUCTION	1/20/2021
-	-	-
-	-	-
-	-	-
-	-	-
-	-	-

CONFIDENTIAL:
THE INFORMATION DEPICTED ON THIS DOCUMENT IS PROPRIETARY AND THE SOLE PROPERTY OF SIERRA OVERHEAD ANALYTICS, INC (SOA). ANY USE OR DISCLOSURE OF THIS INFORMATION IS EXPRESSLY PROHIBITED WITHOUT THE PRIOR WRITTEN CONSENT OF SOA.

CS Energy
Building a Cleaner Future
2045 LINCOLN HIGHWAY
EDISON, NEW JERSEY 08817

PROJECT NAME:
STONINGTON SOLAR PROJECT

PROJECT ADDRESS:
ELLA WHEELER RD.
NORTH STONINGTON, CT 06359
41° 25' 9.71"N, 71° 50' 4.83"W

SEAL: STATE OF CONNECTICUT · DARIN RAY GALLOWAY · No. 34152 · LICENSED PROFESSIONAL ENGINEER

DATE:	21-JAN-20
PROJECT #:	20200309_CT
DRAWN BY:	MMM
CHECKED BY:	DRG

TITLE: CIVIL SITE PLANS

SHEET: C-209

PLOT DATE: Tuesday, January 19, 2021

LOCATION: E:\DROPBOX (SOA)\ENGINEERING\CS ENERGY\2020-03-09_STONINGTON\CAD\SITE PLANS.DWG PLOTTED BY: DARIN GALLOWAY

PLOT DATE: Tuesday, January 19, 2021

WIDE ARRAY SPACING ZONE (CONSTRUCTION ALLOWED)

NO BUILD ZONE SPADEFOOT TOAD HABITAT & CEMETERY

SEE C-205

SEE C-209

1 / C-210 CIVIL SITE PLAN
Scale: 1" = 40'

N

0 40 80

MAP LEGEND (1"=1000')



LEGEND

1		EQUIPMENT PAD
2		ARRAY AREA
3	AC	(N) UG AC WIRE
4	OH	OVERHEAD POWER
5		OVERHEAD POWER POLE
6		PROPOSED SITE ACCESS ROAD (SEE C-400)
7		WETLAND W/BUFFER
8		SITE FENCE LINE (SEE C-402)
9	LOD	SITE LIMIT OF DISTURBANCE
10		SITE BOUNDARY
11		RIVER OR CREEK
12		100 YEAR FLOOD ZONE
	75	MAJOR CONTOUR
	76	MINOR CONTOUR

PIER LEGEND

SYMBOL	PIER TYPE
	HEAVY ARRAY PIER
	STANDARD ARRAY PIER
	HEAVY ARRAY PIER, EDGE
	STANDARD ARRAY PIER, EDGE
	HEAVY MOTOR PIER
	STANDARD MOTOR PIER
	HIGH SLOPE TRACKER

Know what's below. Call before you dig.

SIERRA OVERHEAD ANALYTICS
18859 MICROTRONICS WAY
SONORA, CALIFORNIA 95370
CONNECTICUT PROFESSIONAL
ENGINEERING CORPORATION #PEC.0001969

REV	DESCRIPTION	DATE
6	ISSUED FOR CONSTRUCTION - DRAFT	9/4/2020
7	ISSUED FOR CONSTRUCTION - DRAFT	9/18/2020
8	ISSUED FOR CONSTRUCTION - DRAFT	10/22/2020
9	ISSUED FOR CONSTRUCTION - DRAFT	11/06/2020
10	ISSUED FOR CONSTRUCTION	1/20/2021
-	-	-
-	-	-
-	-	-
-	-	-
-	-	-

CONFIDENTIAL:
THE INFORMATION DEPICTED ON THIS DOCUMENT IS PROPRIETARY AND THE SOLE PROPERTY OF SIERRA OVERHEAD ANALYTICS, INC (SOA). ANY USE OR DISCLOSURE OF THIS INFORMATION IS EXPRESSLY PROHIBITED WITHOUT THE PRIOR WRITTEN CONSENT OF SOA.

CS Energy
Building a Cleaner Future
2045 LINCOLN HIGHWAY
EDISON, NEW JERSEY 08817

PROJECT NAME:
STONINGTON SOLAR PROJECT

PROJECT ADDRESS:
ELLA WHEELER RD.
NORTH STONINGTON, CT 06359
41° 25' 9.71"N, 71° 50' 4.83"W

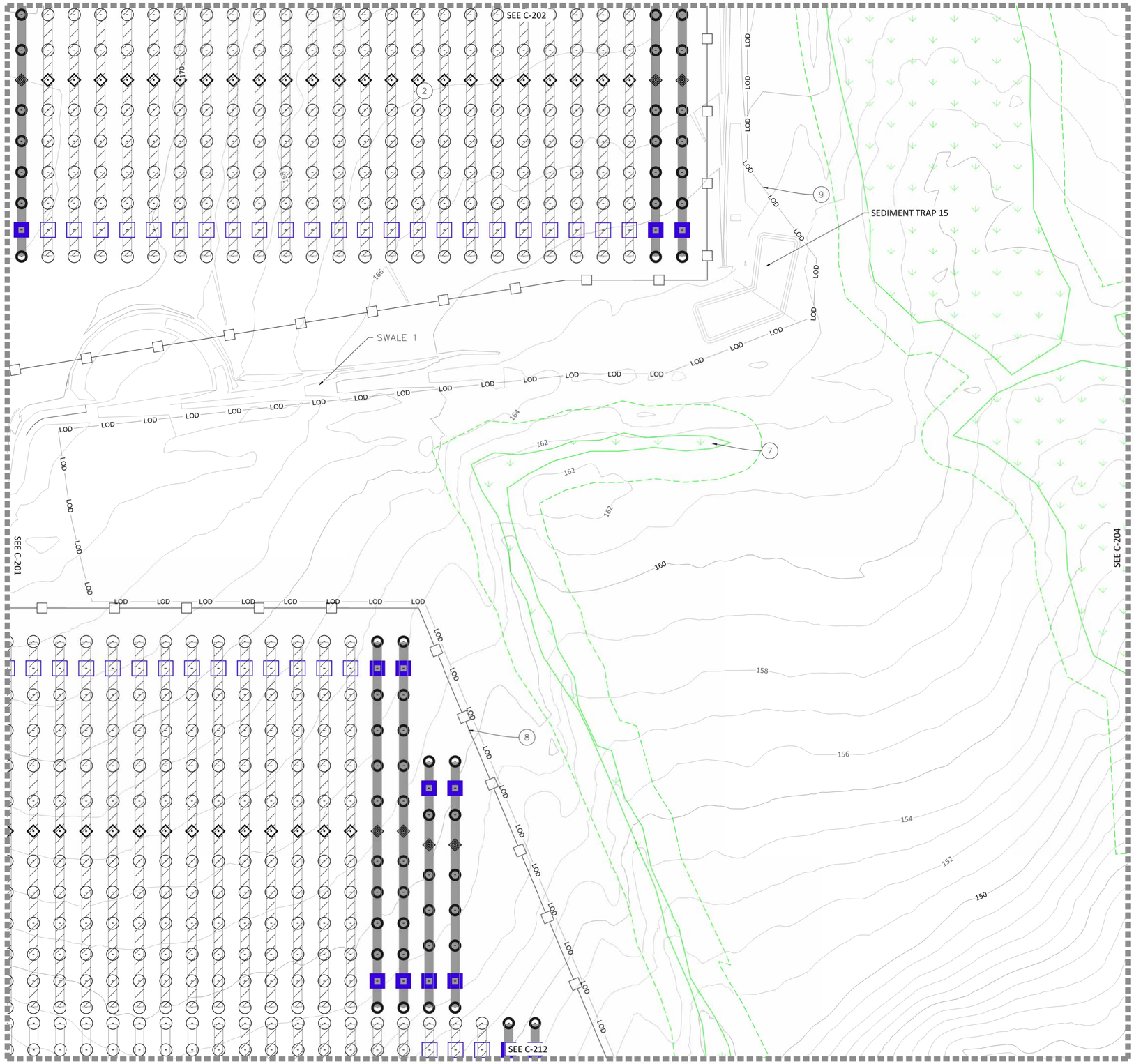
SEAL: STATE OF CONNECTICUT · DARIN RAY GALLOWAY · No. 34152 · LICENSED PROFESSIONAL ENGINEER

DATE: 21-JAN-20
PROJECT #: 20200309_CT
DRAWN BY: MMM
CHECKED BY: DRG

TITLE: CIVIL SITE PLANS

SHEET: C-210

LOCATION: E:\DROPBOX (SOA)\ENGINEERING\CS ENERGY\2020-03-09_STONINGTON\CAD\SITE PLANS.DWG PLOTTED BY: DARIN GALLOWAY



1 C-211 CIVIL SITE PLAN
Scale: 1" = 40'

N 0 40 80

MAP LEGEND (1"=1000')



LEGEND		
1		EQUIPMENT PAD
2		ARRAY AREA
3	AC	(N) UG AC WIRE
4	OH	OVERHEAD POWER
5		OVERHEAD POWER POLE
6		PROPOSED SITE ACCESS ROAD (SEE C-400)
7		WETLAND W/BUFFER
8		SITE FENCE LINE (SEE C-402)
9	LOD	SITE LIMIT OF DISTURBANCE
10		SITE BOUNDARY
11		RIVER OR CREEK
12		100 YEAR FLOOD ZONE
	75	MAJOR CONTOUR
	76	MINOR CONTOUR

PIER LEGEND	
SYMBOL	PIER TYPE
	HEAVY ARRAY PIER
	STANDARD ARRAY PIER
	HEAVY ARRAY PIER, EDGE
	STANDARD ARRAY PIER, EDGE
	HEAVY MOTOR PIER
	STANDARD MOTOR PIER
	HIGH SLOPE TRACKER

Know what's below. Call before you dig.

soa
SIERRA OVERHEAD ANALYTICS
18859 MICROTRONICS WAY
SONORA, CALIFORNIA 95370
CONNECTICUT PROFESSIONAL
ENGINEERING CORPORATION #PEC.0001969

REV	DESCRIPTION	DATE
6	ISSUED FOR CONSTRUCTION - DRAFT	9/4/2020
7	ISSUED FOR CONSTRUCTION - DRAFT	9/18/2020
8	ISSUED FOR CONSTRUCTION - DRAFT	10/22/2020
9	ISSUED FOR CONSTRUCTION - DRAFT	11/06/2020
10	ISSUED FOR CONSTRUCTION	1/20/2021
-	-	-
-	-	-
-	-	-
-	-	-
-	-	-

CONFIDENTIAL:
THE INFORMATION DEPICTED ON THIS DOCUMENT IS PROPRIETARY AND THE SOLE PROPERTY OF SIERRA OVERHEAD ANALYTICS, INC (SOA). ANY USE OR DISCLOSURE OF THIS INFORMATION IS EXPRESSLY PROHIBITED WITHOUT THE PRIOR WRITTEN CONSENT OF SOA.

CS Energy
Building a Cleaner Future
2045 LINCOLN HIGHWAY
EDISON, NEW JERSEY 08817

PROJECT NAME:
STONINGTON SOLAR PROJECT

PROJECT ADDRESS:
ELLA WHEELER RD.
NORTH STONINGTON, CT 06359
41° 25' 9.71"N, 71° 50' 4.83"W

SEAL: STATE OF CONNECTICUT · DARIN RAY GALLOWAY · No. 34152 · LICENSED PROFESSIONAL ENGINEER

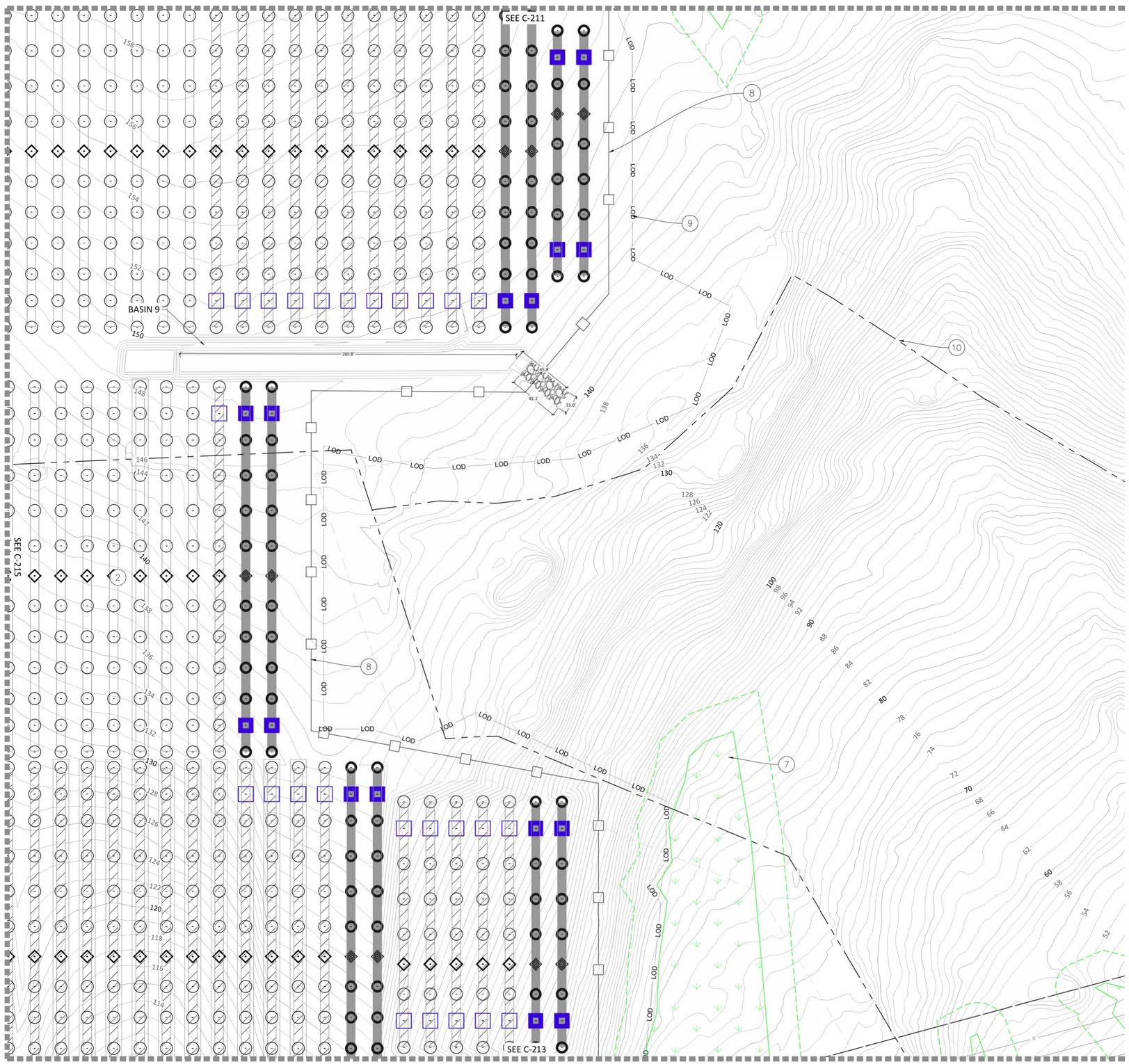
DATE:	21-JAN-20
PROJECT #:	20200309_CT
DRAWN BY:	MMM
CHECKED BY:	DRG

TITLE: CIVIL SITE PLANS

SHEET: C-211

PLOT DATE: Tuesday, January 19, 2021

LOCATION: E:\DROPBOX (SOA)\ENGINEERING\CS ENERGY\2020-03-09_STONINGTON\CAD\SITE PLANS.DWG PLOTTED BY: DARIN GALLOWAY



MAP LEGEND (1"=1000')



LEGEND

1		EQUIPMENT PAD
2		ARRAY AREA
3	AC	(N) UG AC WIRE
4	OH	OVERHEAD POWER
5		OVERHEAD POWER POLE
6		PROPOSED SITE ACCESS ROAD (SEE C-400)
7		WETLAND W/BUFFER
8		SITE FENCE LINE (SEE C-402)
9	LOD	SITE LIMIT OF DISTURBANCE
10		SITE BOUNDARY
11		RIVER OR CREEK
12		100 YEAR FLOOD ZONE
	75	MAJOR CONTOUR
	76	MINOR CONTOUR

PIER LEGEND

SYMBOL	PIER TYPE
	HEAVY ARRAY PIER
	STANDARD ARRAY PIER
	HEAVY ARRAY PIER, EDGE
	STANDARD ARRAY PIER, EDGE
	HEAVY MOTOR PIER
	STANDARD MOTOR PIER
	HIGH SLOPE TRACKER

Know what's below. Call before you dig.

SIERRA OVERHEAD ANALYTICS
18859 MICROTRONICS WAY
SONORA, CALIFORNIA 95370
CONNECTICUT PROFESSIONAL
ENGINEERING CORPORATION #PEC.0001969

REV	DESCRIPTION	DATE
6	ISSUED FOR CONSTRUCTION - DRAFT	9/4/2020
7	ISSUED FOR CONSTRUCTION - DRAFT	9/18/2020
8	ISSUED FOR CONSTRUCTION - DRAFT	10/22/2020
9	ISSUED FOR CONSTRUCTION - DRAFT	11/06/2020
10	ISSUED FOR CONSTRUCTION	1/20/2021
-	-	-
-	-	-
-	-	-
-	-	-
-	-	-

CONFIDENTIAL:
THE INFORMATION DEPICTED ON THIS DOCUMENT IS PROPRIETARY AND THE SOLE PROPERTY OF SIERRA OVERHEAD ANALYTICS, INC (SOA). ANY USE OR DISCLOSURE OF THIS INFORMATION IS EXPRESSLY PROHIBITED WITHOUT THE PRIOR WRITTEN CONSENT OF SOA.

CS Energy
Building a Cleaner Future
2045 LINCOLN HIGHWAY
EDISON, NEW JERSEY 08817

PROJECT NAME:
STONINGTON SOLAR PROJECT

PROJECT ADDRESS:
ELLA WHEELER RD.
NORTH STONINGTON, CT 06359
41° 25' 9.71"N, 71° 50' 4.83"W

SEAL: STATE OF CONNECTICUT · DARIN RAY GALLOWAY · No. 34152 · LICENSED PROFESSIONAL ENGINEER

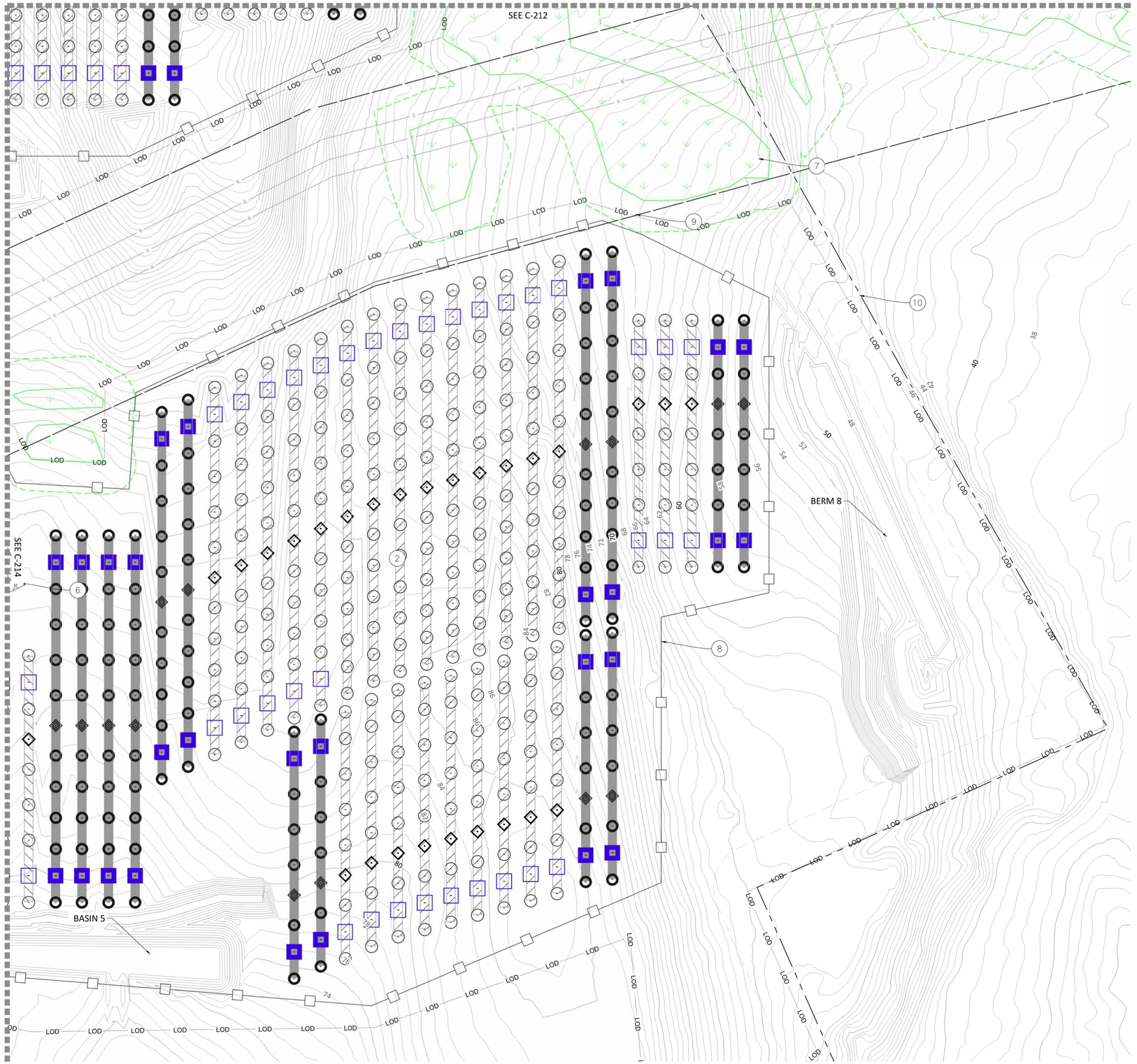
DATE:	21-JAN-20
PROJECT #:	20200309_CT
DRAWN BY:	MMM
CHECKED BY:	DRG

TITLE: CIVIL SITE PLANS

SHEET: C-212

PLOT DATE: Tuesday, January 19, 2021

LOCATION: E:\DROPBOX (SOA)\ENGINEERING\CS ENERGY\2020-03-09_STONINGTON\CAD\SITE PLANS.DWG PLOTTED BY: DARIN GALLOWAY



1 C-213 CIVIL SITE PLAN
Scale: 1" = 40'

N 0 40 80

MAP LEGEND (1"=1000')



LEGEND		
1		EQUIPMENT PAD
2		ARRAY AREA
3	AC	(N) UG AC WIRE
4	OH	OVERHEAD POWER
5		OVERHEAD POWER POLE
6		PROPOSED SITE ACCESS ROAD (SEE C-400)
7		WETLAND W/BUFFER
8		SITE FENCE LINE (SEE C-402)
9	LOD	SITE LIMIT OF DISTURBANCE
10		SITE BOUNDARY
11		RIVER OR CREEK
12		100 YEAR FLOOD ZONE
	75	MAJOR CONTOUR
	76	MINOR CONTOUR

PIER LEGEND	
SYMBOL	PIER TYPE
	HEAVY ARRAY PIER
	STANDARD ARRAY PIER
	HEAVY ARRAY PIER, EDGE
	STANDARD ARRAY PIER, EDGE
	HEAVY MOTOR PIER
	STANDARD MOTOR PIER
	HIGH SLOPE TRACKER

811 Know what's below. Call before you dig.

soa
SIERRA OVERHEAD ANALYTICS
18859 MICROTRONICS WAY
SONORA, CALIFORNIA 95370
CONNECTICUT PROFESSIONAL
ENGINEERING CORPORATION #PEC.0001969

REV	DESCRIPTION	DATE
6	ISSUED FOR CONSTRUCTION - DRAFT	9/4/2020
7	ISSUED FOR CONSTRUCTION - DRAFT	9/18/2020
8	ISSUED FOR CONSTRUCTION - DRAFT	10/22/2020
9	ISSUED FOR CONSTRUCTION - DRAFT	11/06/2020
10	ISSUED FOR CONSTRUCTION	1/20/2021
-	-	-
-	-	-
-	-	-
-	-	-
-	-	-

CONFIDENTIAL:
THE INFORMATION DEPICTED ON THIS DOCUMENT IS PROPRIETARY AND THE SOLE PROPERTY OF SIERRA OVERHEAD ANALYTICS, INC (SOA). ANY USE OR DISCLOSURE OF THIS INFORMATION IS EXPRESSLY PROHIBITED WITHOUT THE PRIOR WRITTEN CONSENT OF SOA.

CS Energy
Building a Cleaner Future
2045 LINCOLN HIGHWAY
EDISON, NEW JERSEY 08817

PROJECT NAME:
STONINGTON SOLAR PROJECT

PROJECT ADDRESS:
ELLA WHEELER RD.
NORTH STONINGTON, CT 06359
41° 25' 9.71"N, 71° 50' 4.83"W

SEAL: STATE OF CONNECTICUT · DARIN RAY GALLOWAY · No. 34152 · LICENSED PROFESSIONAL ENGINEER

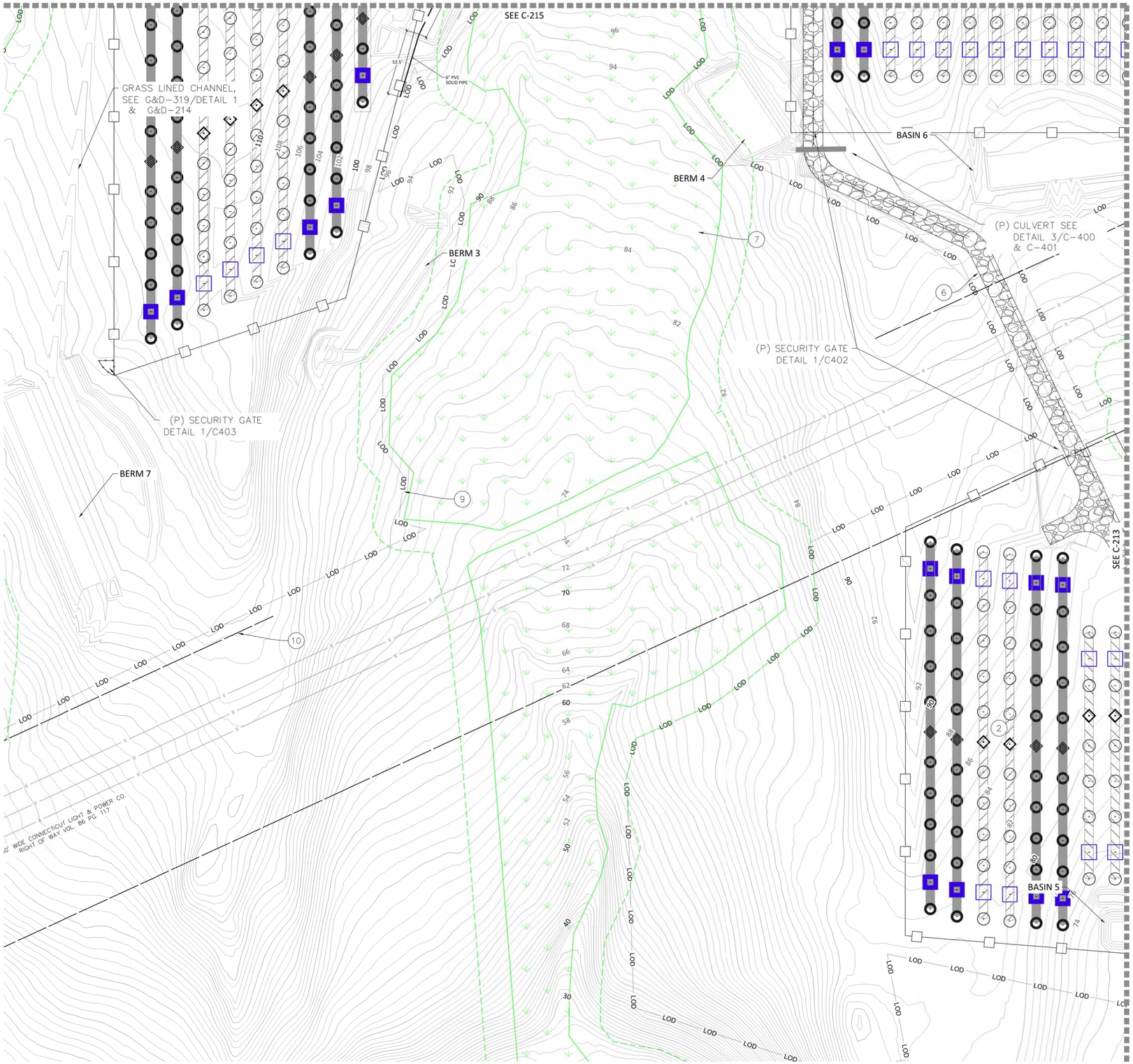
DATE: 21-JAN-20
PROJECT #: 20200309_CT
DRAWN BY: MMM
CHECKED BY: DRG

TITLE: CIVIL SITE PLANS

SHEET: C-213

PLOT DATE: Tuesday, January 19, 2021

LOCATION: E:\DROPBOX (SOA)\ENGINEERING\CS ENERGY\2020-03-09_STONINGTON\CAD\SITE PLANS.DWG PLOTTED BY: DARIN GALLOWAY



1 C-214 CIVIL SITE PLAN
Scale: 1" = 40'

N

0 40 80

MAP LEGEND (1"=1000')



LEGEND

1		EQUIPMENT PAD
2		ARRAY AREA
3	AC	(N) UG AC WIRE
4	OH	OVERHEAD POWER
5		OVERHEAD POWER POLE
6		PROPOSED SITE ACCESS ROAD (SEE C-400)
7		WETLAND W/BUFFER
8		SITE FENCE LINE (SEE C-402)
9	LOD	SITE LIMIT OF DISTURBANCE
10		SITE BOUNDARY
11		RIVER OR CREEK
12		100 YEAR FLOOD ZONE
	75	MAJOR CONTOUR
	76	MINOR CONTOUR

PIER LEGEND

SYMBOL	PIER TYPE
	HEAVY ARRAY PIER
	STANDARD ARRAY PIER
	HEAVY ARRAY PIER, EDGE
	STANDARD ARRAY PIER, EDGE
	HEAVY MOTOR PIER
	STANDARD MOTOR PIER
	HIGH SLOPE TRACKER

Know what's below. Call before you dig.

SIERRA OVERHEAD ANALYTICS
18859 MICROTRONICS WAY
SONORA, CALIFORNIA 95370
CONNECTICUT PROFESSIONAL
ENGINEERING CORPORATION #PEC.0001969

REV	DESCRIPTION	DATE
6	ISSUED FOR CONSTRUCTION - DRAFT	9/4/2020
7	ISSUED FOR CONSTRUCTION - DRAFT	9/18/2020
8	ISSUED FOR CONSTRUCTION - DRAFT	10/22/2020
9	ISSUED FOR CONSTRUCTION - DRAFT	11/06/2020
10	ISSUED FOR CONSTRUCTION	1/20/2021
-	-	-
-	-	-
-	-	-
-	-	-
-	-	-

CONFIDENTIAL:
THE INFORMATION DEPICTED ON THIS DOCUMENT IS PROPRIETARY AND THE SOLE PROPERTY OF SIERRA OVERHEAD ANALYTICS, INC (SOA). ANY USE OR DISCLOSURE OF THIS INFORMATION IS EXPRESSLY PROHIBITED WITHOUT THE PRIOR WRITTEN CONSENT OF SOA.

CS Energy
Building a Cleaner Future
2045 LINCOLN HIGHWAY
EDISON, NEW JERSEY 08817

PROJECT NAME:
STONINGTON SOLAR PROJECT

PROJECT ADDRESS:
ELLA WHEELER RD.
NORTH STONINGTON, CT 06359
41° 25' 9.71"N, 71° 50' 4.83"W

SEAL: STATE OF CONNECTICUT · DARIN RAY GALLOWAY · No. 34152 · LICENSED PROFESSIONAL ENGINEER

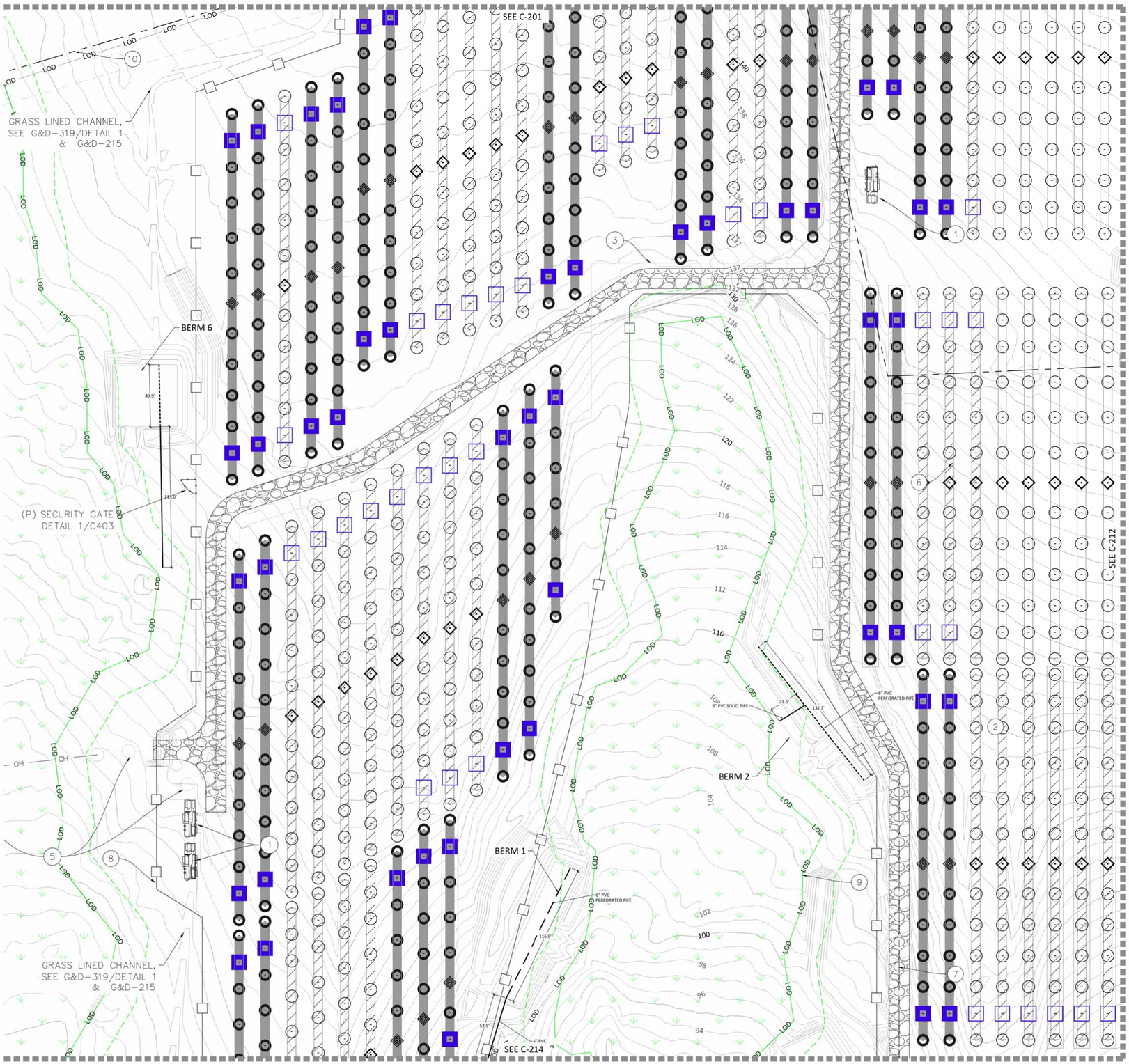
DATE:	21-JAN-20
PROJECT #:	20200309_CT
DRAWN BY:	MMM
CHECKED BY:	DRG

TITLE: CIVIL SITE PLANS

SHEET: C-214

PLOT DATE: Tuesday, January 19, 2021

LOCATION: E:\DROPBOX (SOA)\ENGINEERING\CS ENERGY\2020-03-09_STONINGTON\CAD\SITE PLANS.DWG PLOTTED BY: DARIN GALLOWAY



1 C-215 CIVIL SITE PLAN
Scale: 1" = 40'

N 0 40 80

MAP LEGEND (1"=1000')



LEGEND		
1		EQUIPMENT PAD
2		ARRAY AREA
3	AC	(N) UG AC WIRE
4	OH	OVERHEAD POWER
5		OVERHEAD POWER POLE
6		PROPOSED SITE ACCESS ROAD (SEE C-400)
7		WETLAND W/BUFFER
8		SITE FENCE LINE (SEE C-402)
9	LOD	SITE LIMIT OF DISTURBANCE
10		SITE BOUNDARY
11		RIVER OR CREEK
12		100 YEAR FLOOD ZONE
	75	MAJOR CONTOUR
	76	MINOR CONTOUR

PIER LEGEND	
SYMBOL	PIER TYPE
	HEAVY ARRAY PIER
	STANDARD ARRAY PIER
	HEAVY ARRAY PIER, EDGE
	STANDARD ARRAY PIER, EDGE
	HEAVY MOTOR PIER
	STANDARD MOTOR PIER
	HIGH SLOPE TRACKER

811 Know what's below. Call before you dig.

soa
SIERRA OVERHEAD ANALYTICS
18859 MICROTRONICS WAY
SONORA, CALIFORNIA 95370
CONNECTICUT PROFESSIONAL ENGINEERING CORPORATION #PEC.0001969

REV	DESCRIPTION	DATE
6	ISSUED FOR CONSTRUCTION - DRAFT	9/4/2020
7	ISSUED FOR CONSTRUCTION - DRAFT	9/18/2020
8	ISSUED FOR CONSTRUCTION - DRAFT	10/22/2020
9	ISSUED FOR CONSTRUCTION - DRAFT	11/06/2020
10	ISSUED FOR CONSTRUCTION	1/20/2021
-	-	-
-	-	-
-	-	-
-	-	-
-	-	-

CONFIDENTIAL:
THE INFORMATION DEPICTED ON THIS DOCUMENT IS PROPRIETARY AND THE SOLE PROPERTY OF SIERRA OVERHEAD ANALYTICS, INC (SOA). ANY USE OR DISCLOSURE OF THIS INFORMATION IS EXPRESSLY PROHIBITED WITHOUT THE PRIOR WRITTEN CONSENT OF SOA.

CS Energy
Building a Cleaner Future
2045 LINCOLN HIGHWAY
EDISON, NEW JERSEY 08817

PROJECT NAME:
STONINGTON SOLAR PROJECT

PROJECT ADDRESS:
ELLA WHEELER RD.
NORTH STONINGTON, CT 06359
41° 25' 9.71"N, 71° 50' 4.83"W

SEAL: STATE OF CONNECTICUT · DARIN RAY GALLOWAY · No. 34152 · LICENSED PROFESSIONAL ENGINEER

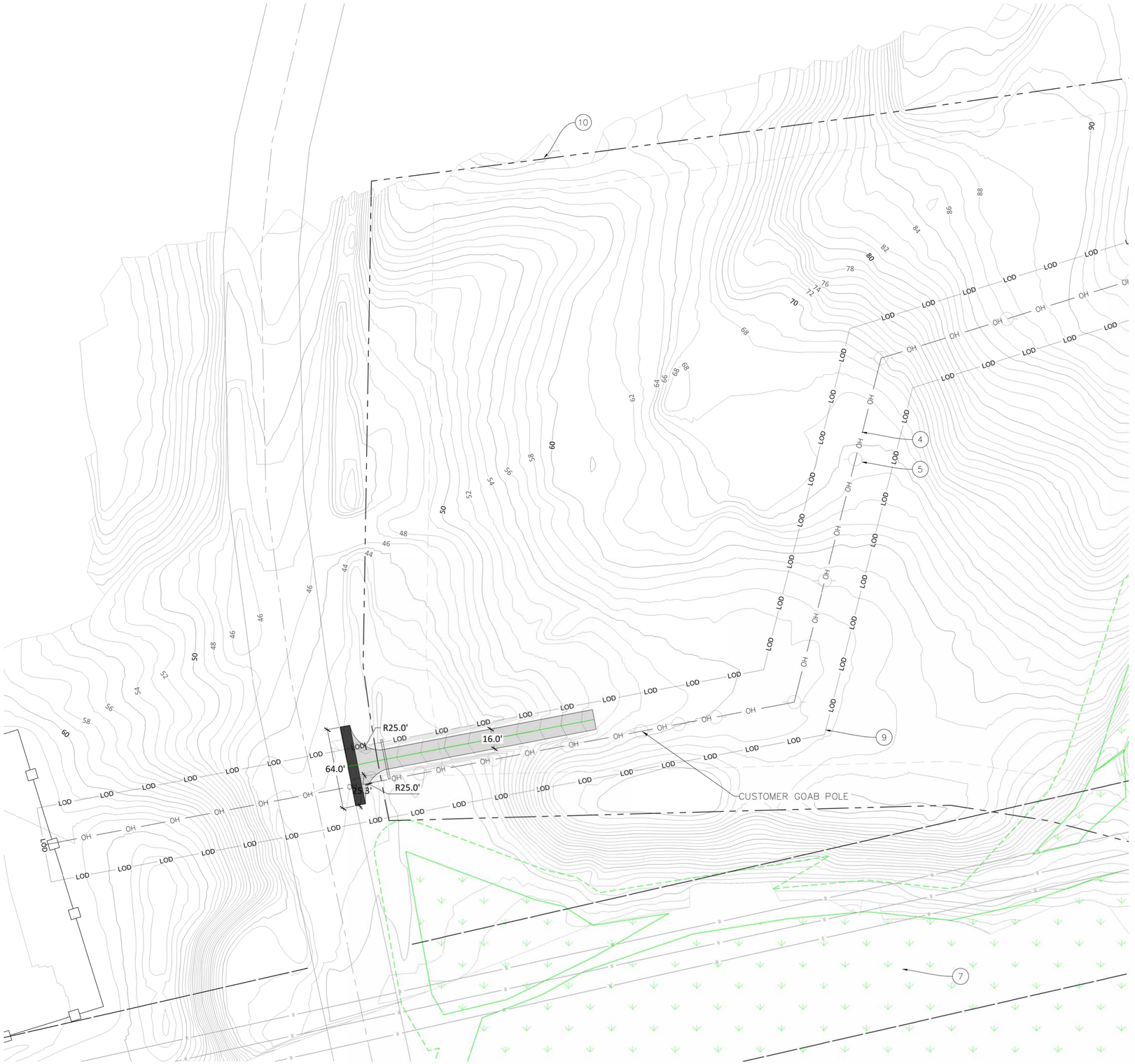
DATE: 21-JAN-20
PROJECT #: 20200309_CT
DRAWN BY: MMM
CHECKED BY: DRG

TITLE: CIVIL SITE PLANS

SHEET: C-215

PLOT DATE: Tuesday, January 19, 2021

LOCATION: E:\DROPBOX (SOA)\ENGINEERING\CS ENERGY\2020-03-09_STONINGTON\CAD\SITE PLANS.DWG PLOTTED BY: DARIN GALLOWAY

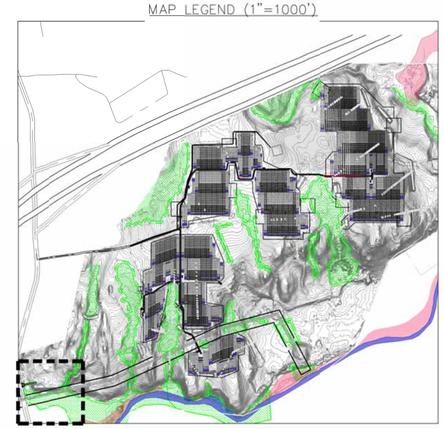


1 C-216 CIVIL SITE PLAN
Scale: 1" = 40'

N

0 40 80

MAP LEGEND (1"=1000')



LEGEND

1		EQUIPMENT PAD
2		ARRAY AREA
3	AC	(N) UG AC WIRE
4	OH	OVERHEAD POWER
5		OVERHEAD POWER POLE
6		PROPOSED SITE ACCESS ROAD (SEE C-400)
7		WETLAND W/BUFFER
8		SITE FENCE LINE (SEE C-402)
9	LOD	SITE LIMIT OF DISTURBANCE
10		SITE BOUNDARY
11		RIVER OR CREEK
12		100 YEAR FLOOD ZONE
	75	MAJOR CONTOUR
	76	MINOR CONTOUR

Know what's below. Call before you dig.

soa
SIERRA OVERHEAD ANALYTICS
18859 MICROTRONICS WAY
SONORA, CALIFORNIA 95370
CONNECTICUT PROFESSIONAL
ENGINEERING CORPORATION #PEC.0001969

REV	DESCRIPTION	DATE
6	ISSUED FOR CONSTRUCTION - DRAFT	9/4/2020
7	ISSUED FOR CONSTRUCTION - DRAFT	9/18/2020
8	ISSUED FOR CONSTRUCTION - DRAFT	10/22/2020
9	ISSUED FOR CONSTRUCTION - DRAFT	11/06/2020
10	ISSUED FOR CONSTRUCTION	1/20/2021
-	-	-
-	-	-
-	-	-
-	-	-
-	-	-

CONFIDENTIAL:
THE INFORMATION DEPICTED ON THIS DOCUMENT IS PROPRIETARY AND THE SOLE PROPERTY OF SIERRA OVERHEAD ANALYTICS, INC (SOA). ANY USE OR DISCLOSURE OF THIS INFORMATION IS EXPRESSLY PROHIBITED WITHOUT THE PRIOR WRITTEN CONSENT OF SOA.

CS Energy
Building a Cleaner Future
2045 LINCOLN HIGHWAY
EDISON, NEW JERSEY 08817

PROJECT NAME:
STONINGTON SOLAR PROJECT

PROJECT ADDRESS:
ELLA WHEELER RD.
NORTH STONINGTON, CT 06359
41° 25' 9.71"N, 71° 50' 4.83"W

SEAL:
STATE OF CONNECTICUT
DARIN RAY GALLOWAY
No. 34152
LICENSED PROFESSIONAL ENGINEER

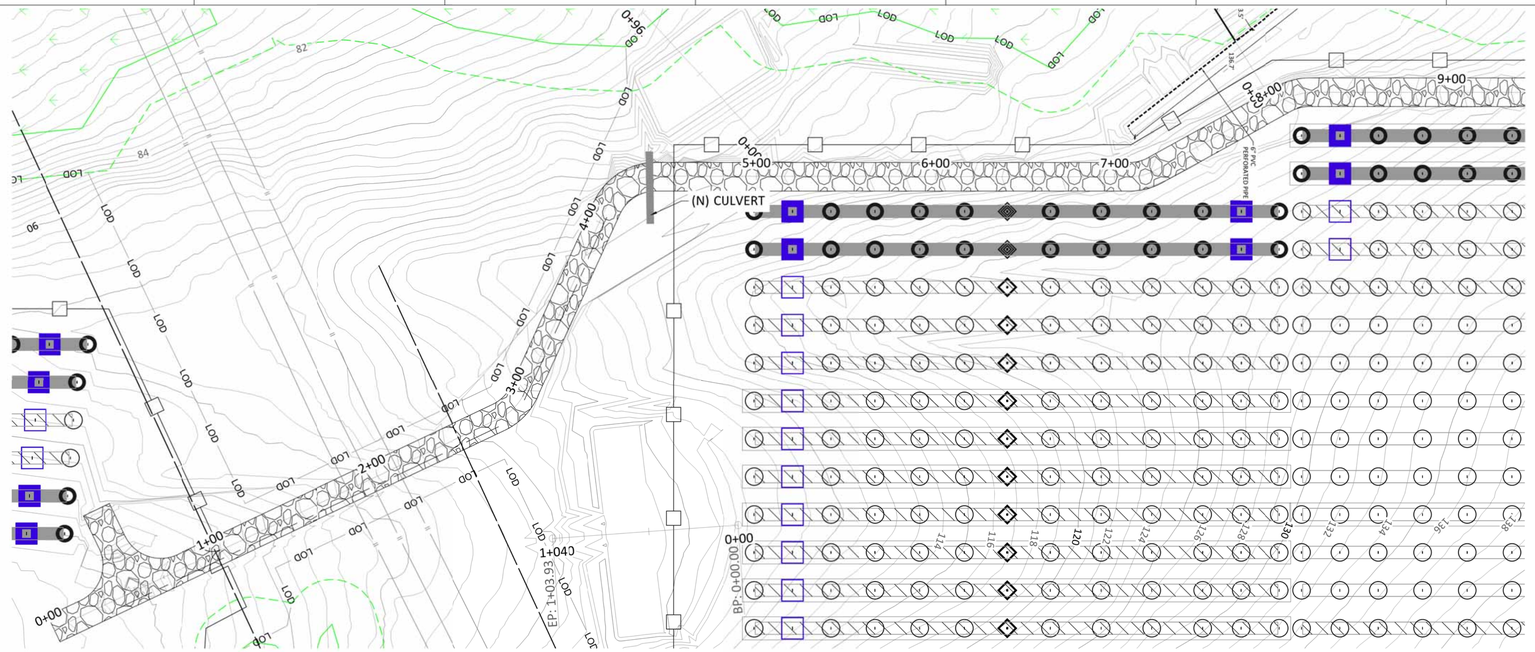
DATE: 21-JAN-20
PROJECT #: 20200309_CT
DRAWN BY: MMM
CHECKED BY: DRG

TITLE: CIVIL SITE PLANS

SHEET: C-216

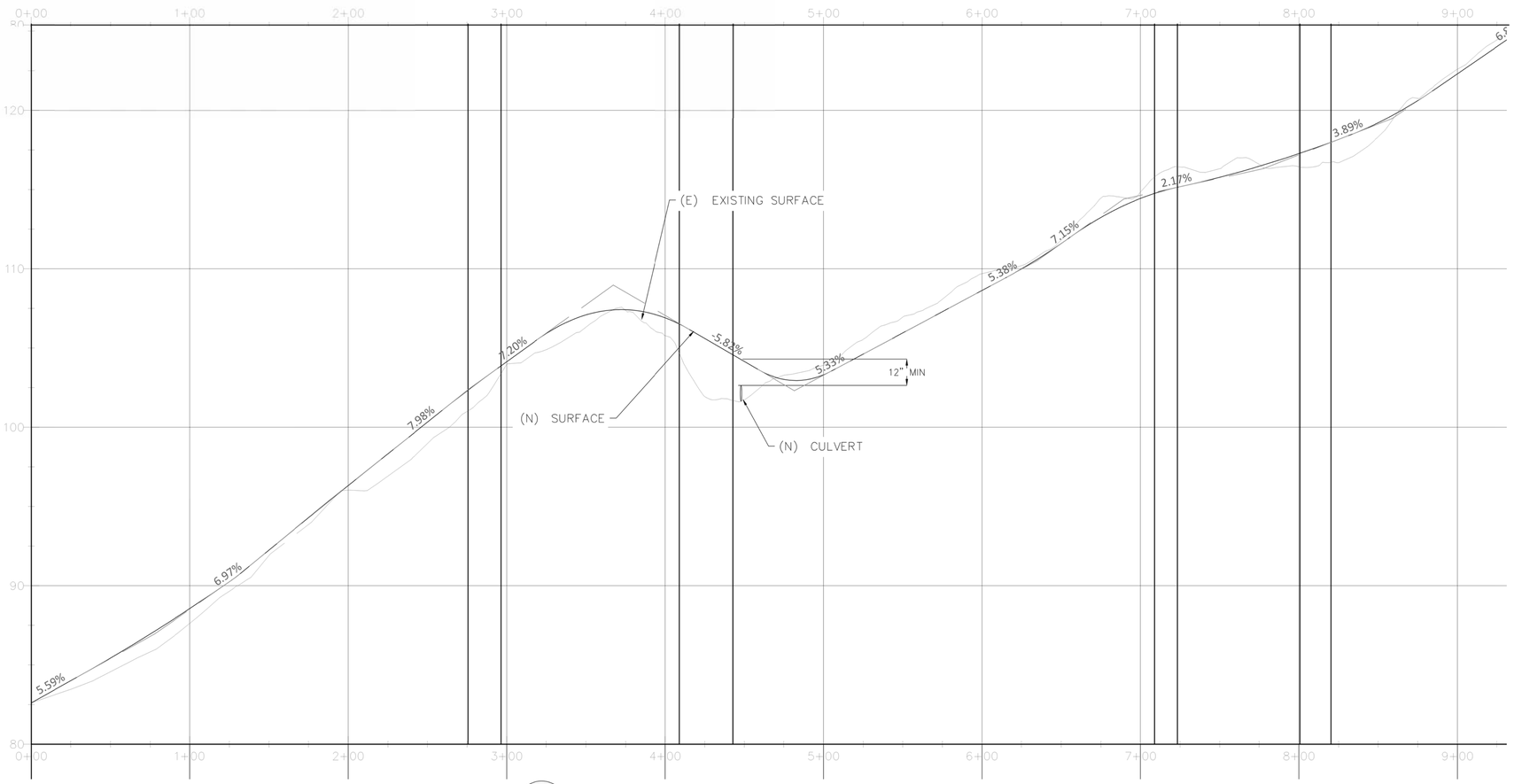
PLOT DATE: Tuesday, January 19, 2021

LOCATION: E:\DROPBOX (SOA)\ENGINEERING\CS ENERGY\2020-03-09_STONINGTON\CAD\SITE PLANS.DWG PLOTTED BY: DARIN GALLOWAY



1 C-300 ROAD SECTION 1 (STA 0+00 TO STA 9+25)

Scale: 1" = 40'



2 C-300 ROAD SECTION 1 PROFILE (STA 0+00 TO STA 9+25)

Scale: H-1" = 40' V-1"=4'

PLOT DATE: Tuesday, January 19, 2021

SIERRA OVERHEAD ANALYTICS
18859 MICROTRONICS WAY
SONORA, CALIFORNIA 95370
CONNECTICUT PROFESSIONAL
ENGINEERING CORPORATION #PEC.0001969

REV	DESCRIPTION	DATE
6	ISSUED FOR CONSTRUCTION - DRAFT	9/4/2020
7	ISSUED FOR CONSTRUCTION - DRAFT	9/18/2020
8	ISSUED FOR CONSTRUCTION - DRAFT	10/22/2020
9	ISSUED FOR CONSTRUCTION - DRAFT	11/06/2020
10	ISSUED FOR CONSTRUCTION	1/20/2021
-	-	-
-	-	-
-	-	-
-	-	-
-	-	-

CONFIDENTIAL:
THE INFORMATION DEPICTED ON THIS DOCUMENT IS PROPRIETARY AND THE SOLE PROPERTY OF SIERRA OVERHEAD ANALYTICS, INC (SOA). ANY USE OR DISCLOSURE OF THIS INFORMATION IS EXPRESSLY PROHIBITED WITHOUT THE PRIOR WRITTEN CONSENT OF SOA.

CS Energy
Building a Cleaner Future
2045 LINCOLN HIGHWAY
EDISON, NEW JERSEY 08817

PROJECT NAME:
STONINGTON SOLAR PROJECT

PROJECT ADDRESS:
ELLA WHEELER RD.
NORTH STONINGTON, CT 06359
41° 25' 9.71"N, 71° 50' 4.83"W

SEAL:
STATE OF CONNECTICUT
DARIN RAY GALLOWAY
No. 34152
LICENSED PROFESSIONAL ENGINEER

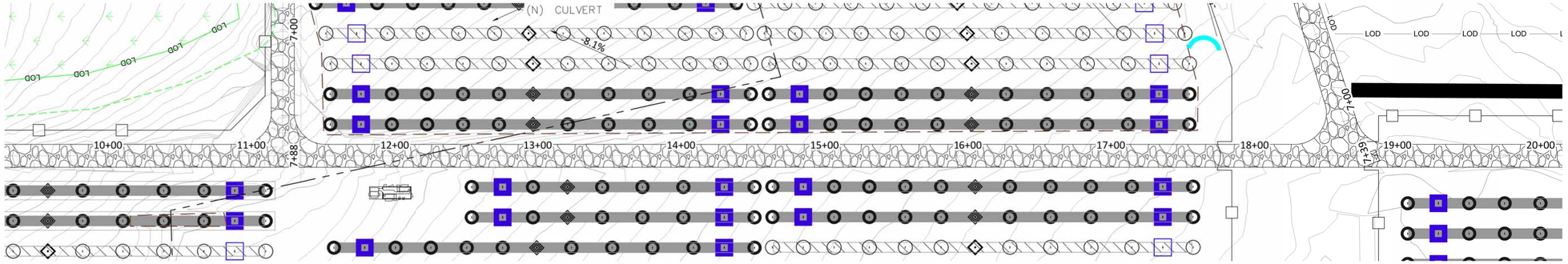
DATE: 21-JAN-20
PROJECT #: 20200309_CT
DRAWN BY: MMM
CHECKED BY: DRG

TITLE: ROAD SECTIONS

SHEET: C-300

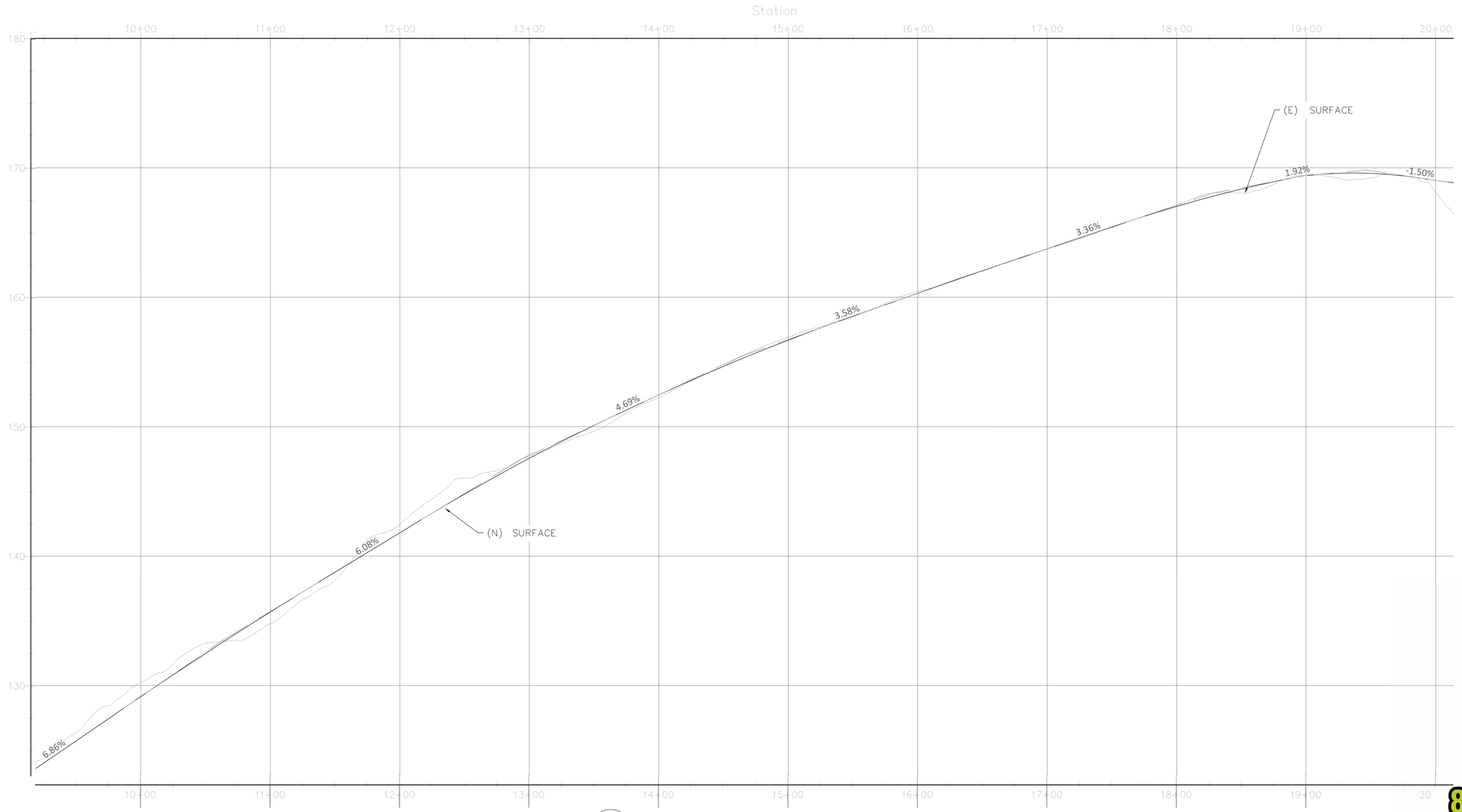
811 Know what's below. Call before you dig.

LOCATION: E:\DROPBOX (SOA)\ENGINEERING\CS ENERGY\2020-03-09_STONINGTON\CAD\SITE PLANS.DWG PLOTTED BY: DARIN GALLOWAY



1 C-301 ROAD SECTION 1 (STA 9+25 TO STA 20+00)

Scale: 1" = 40'



2 C-301 ROAD SECTION 1 PROFILE (STA 9+25 TO STA 20+00)

Scale: H-1" = 40' V-1"=4'

Know what's below. Call before you dig.

soa
SIERRA OVERHEAD ANALYTICS
18859 MICROTRONICS WAY
SONORA, CALIFORNIA 95370
CONNECTICUT PROFESSIONAL
ENGINEERING CORPORATION #PEC.0001969

REV	DESCRIPTION	DATE
6	ISSUED FOR CONSTRUCTION - DRAFT	9/4/2020
7	ISSUED FOR CONSTRUCTION - DRAFT	9/18/2020
8	ISSUED FOR CONSTRUCTION - DRAFT	10/22/2020
9	ISSUED FOR CONSTRUCTION - DRAFT	11/06/2020
10	ISSUED FOR CONSTRUCTION	1/20/2021
-	-	-
-	-	-
-	-	-
-	-	-
-	-	-

CONFIDENTIAL:
THE INFORMATION DEPICTED ON THIS DOCUMENT IS PROPRIETARY AND THE SOLE PROPERTY OF SIERRA OVERHEAD ANALYTICS, INC (SOA). ANY USE OR DISCLOSURE OF THIS INFORMATION IS EXPRESSLY PROHIBITED WITHOUT THE PRIOR WRITTEN CONSENT OF SOA.

CS Energy
Building a Cleaner Future
2045 LINCOLN HIGHWAY
EDISON, NEW JERSEY 08817

PROJECT NAME:
STONINGTON SOLAR PROJECT

PROJECT ADDRESS:
ELLA WHEELER RD.
NORTH STONINGTON, CT 06359
41° 25' 9.71"N, 71° 50' 4.83"W

SEAL: STATE OF CONNECTICUT · DARIN RAY GALLOWAY · No. 34152 · LICENSED PROFESSIONAL ENGINEER

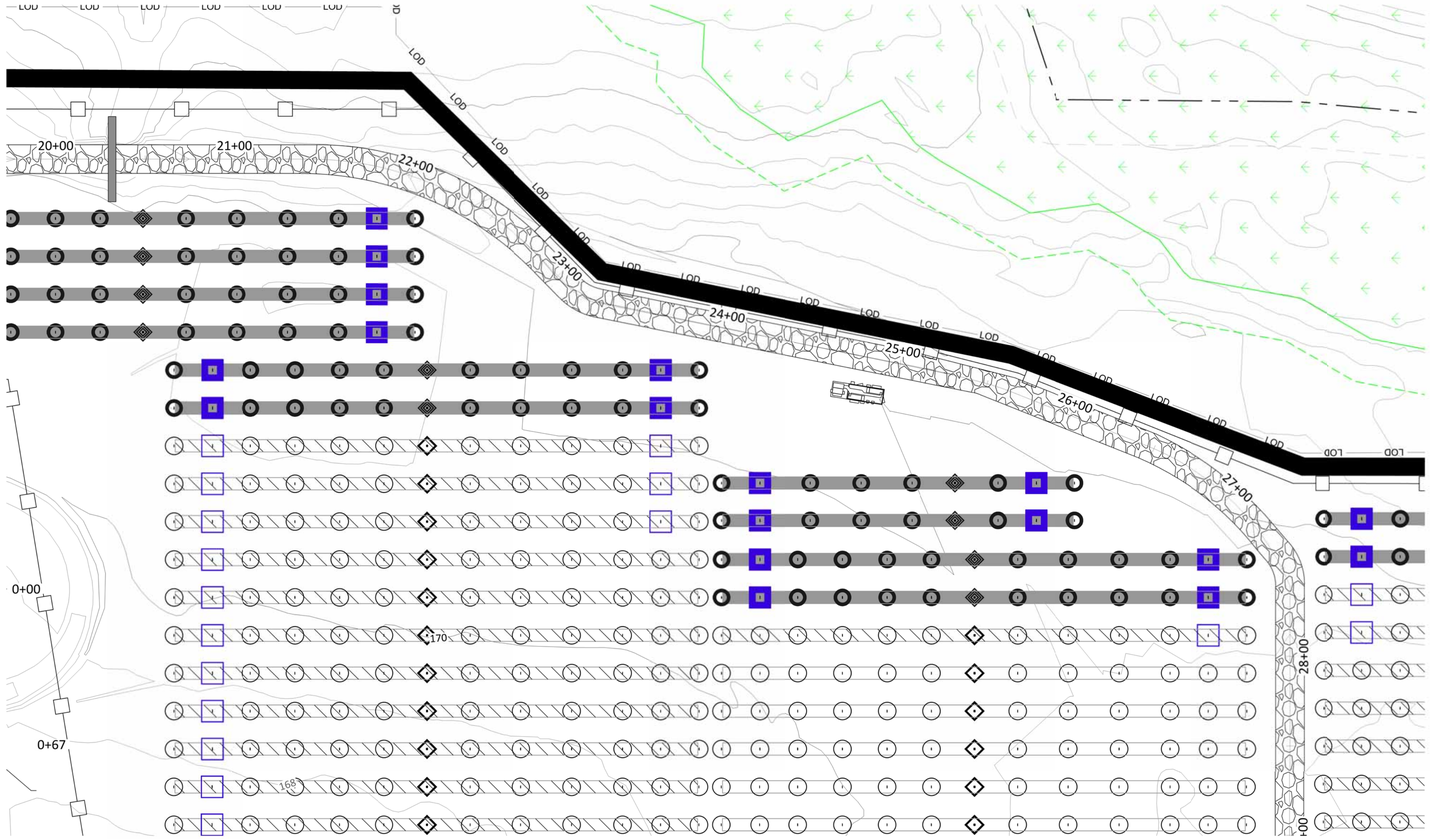
DATE:	21-JAN-20
PROJECT #:	20200309_CT
DRAWN BY:	MMM
CHECKED BY:	DRG

TITLE: ROAD SECTIONS

SHEET: C-301

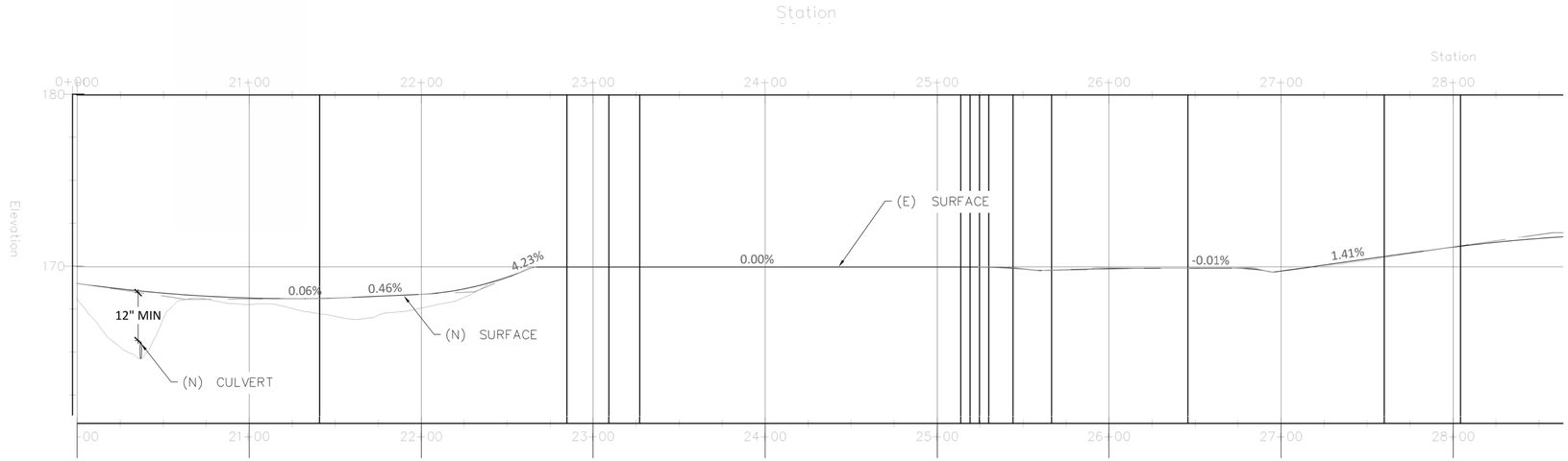
PLOT DATE: Tuesday, January 19, 2021

LOCATION: E:\DROPBOX (SOA)\ENGINEERING\CS ENERGY\2020-03-09_STONINGTON\CAD\SITE PLANS.DWG PLOTTED BY: DARIN GALLOWAY



1 C-302 ROAD SECTION 1 (STA 20+00 TO 29+00)

Scale: 1" = 40'



2 C-302 ROAD SECTION 1 PROFILE (STA 20+00 TO 29+00)

Scale: H-1" = 40' V-1"=4'

Know what's below. Call before you dig.

LOCATION: E:\DROPBOX (SOA)\ENGINEERING\CS ENERGY\2020-03-09_STONINGTON\CAD\SITE PLANS.DWG PLOTTED BY: DARIN GALLOWAY

PLOT DATE: Tuesday, January 19, 2021

SIERRA OVERHEAD ANALYTICS
18859 MICROTRONICS WAY
SONORA, CALIFORNIA 95370
CONNECTICUT PROFESSIONAL
ENGINEERING CORPORATION #PEC.0001969

REV	DESCRIPTION	DATE
6	ISSUED FOR CONSTRUCTION - DRAFT	9/4/2020
7	ISSUED FOR CONSTRUCTION - DRAFT	9/18/2020
8	ISSUED FOR CONSTRUCTION - DRAFT	10/22/2020
9	ISSUED FOR CONSTRUCTION - DRAFT	11/06/2020
10	ISSUED FOR CONSTRUCTION	1/20/2021
-	-	-
-	-	-
-	-	-
-	-	-
-	-	-

CONFIDENTIAL:
THE INFORMATION DEPICTED ON THIS DOCUMENT IS PROPRIETARY AND THE SOLE PROPERTY OF SIERRA OVERHEAD ANALYTICS, INC (SOA). ANY USE OR DISCLOSURE OF THIS INFORMATION IS EXPRESSLY PROHIBITED WITHOUT THE PRIOR WRITTEN CONSENT OF SOA.

CS Energy
Building a Cleaner Future
2045 LINCOLN HIGHWAY
EDISON, NEW JERSEY 08817

PROJECT NAME:
STONINGTON SOLAR PROJECT

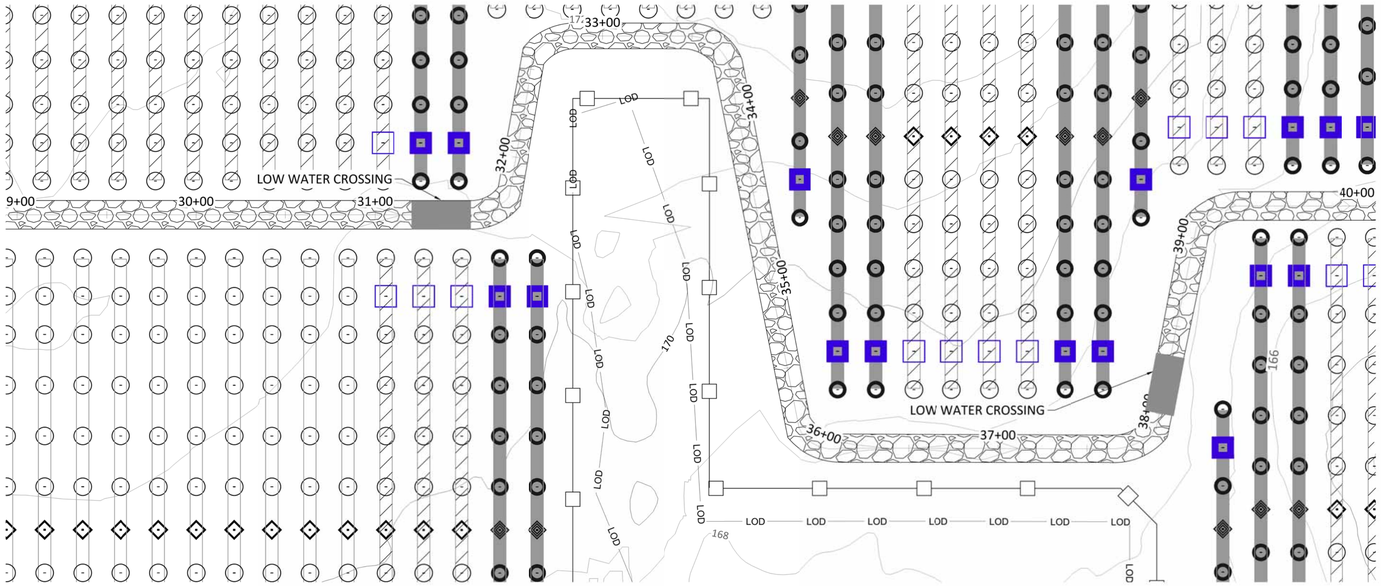
PROJECT ADDRESS:
ELLA WHEELER RD.
NORTH STONINGTON, CT 06359
41° 25' 9.71"N, 71° 50' 4.83"W

SEAL: STATE OF CONNECTICUT · DARIN RAY GALLOWAY · No. 34152 · LICENSED PROFESSIONAL ENGINEER

DATE: 21-JAN-20
PROJECT #: 20200309_CT
DRAWN BY: MMM
CHECKED BY: DRG

TITLE: ROAD SECTIONS

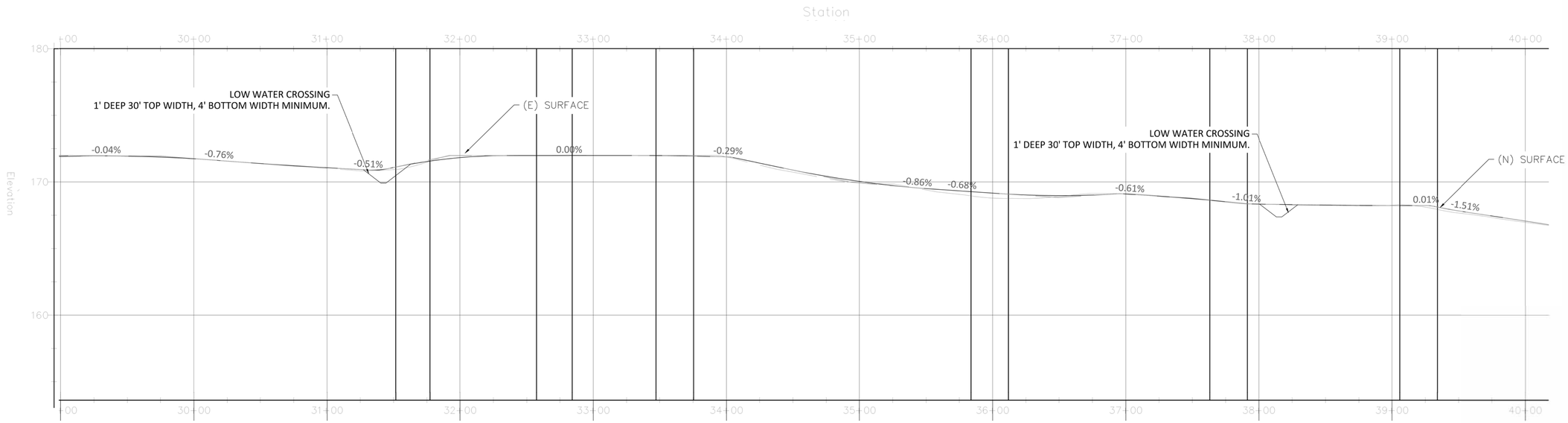
SHEET: C-302



1 / C-303 ROAD SECTION 1 (STA 29+00 TO STA 40+00)

Scale: 1" = 40'

N



2 / C-303 ROAD SECTION 1 PROFILE (STA 29+00 TO STA 40+00)

Scale: H-1" = 40' V-1"=4'

Know what's below. Call before you dig.

PLOT DATE: Tuesday, January 19, 2021

SIERRA OVERHEAD ANALYTICS
18859 MICROTRONICS WAY
SONORA, CALIFORNIA 95370
CONNECTICUT PROFESSIONAL
ENGINEERING CORPORATION #PEC.0001969

REV	DESCRIPTION	DATE
6	ISSUED FOR CONSTRUCTION - DRAFT	9/4/2020
7	ISSUED FOR CONSTRUCTION - DRAFT	9/18/2020
8	ISSUED FOR CONSTRUCTION - DRAFT	10/22/2020
9	ISSUED FOR CONSTRUCTION - DRAFT	11/06/2020
10	ISSUED FOR CONSTRUCTION	1/20/2021
-	-	-
-	-	-
-	-	-
-	-	-
-	-	-

CONFIDENTIAL:
THE INFORMATION DEPICTED ON THIS DOCUMENT IS PROPRIETARY AND THE SOLE PROPERTY OF SIERRA OVERHEAD ANALYTICS, INC (SOA). ANY USE OR DISCLOSURE OF THIS INFORMATION IS EXPRESSLY PROHIBITED WITHOUT THE PRIOR WRITTEN CONSENT OF SOA.

CS Energy
Building a Cleaner Future
2045 LINCOLN HIGHWAY
EDISON, NEW JERSEY 08817

PROJECT NAME:
STONINGTON SOLAR PROJECT

PROJECT ADDRESS:
ELLA WHEELER RD.
NORTH STONINGTON, CT 06359
41° 25' 9.71"N, 71° 50' 4.83"W

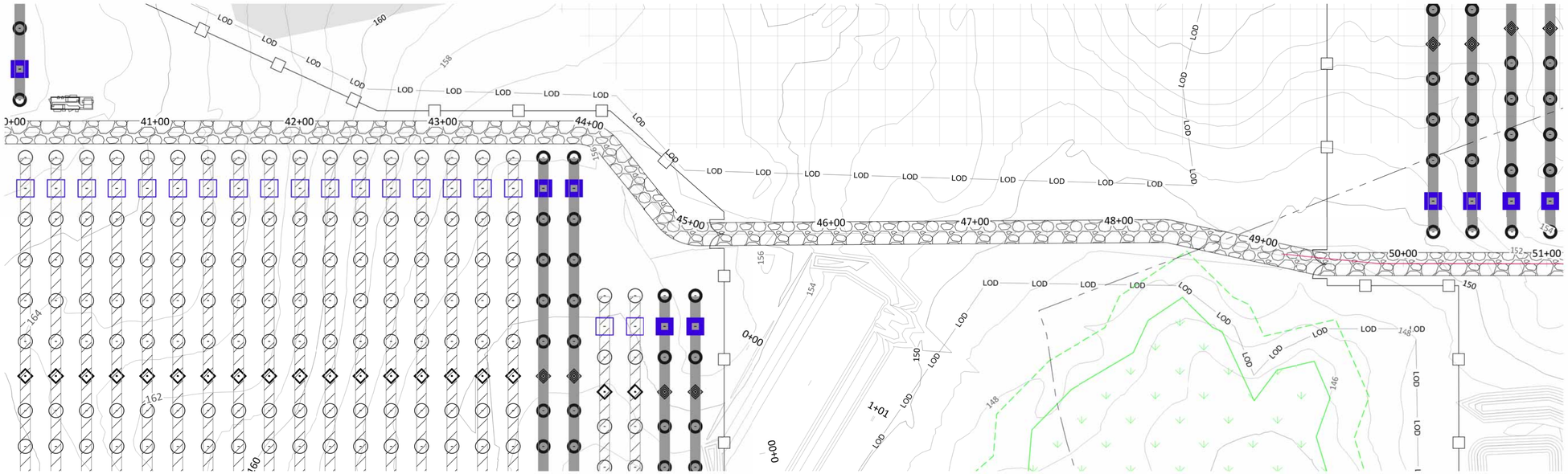
SEAL: STATE OF CONNECTICUT · DARIN RAY GALLOWAY · No. 34152 · LICENSED PROFESSIONAL ENGINEER

DATE: 21-JAN-20
PROJECT #: 20200309_CT
DRAWN BY: MMM
CHECKED BY: DRG

TITLE: ROAD SECTIONS

SHEET: C-303

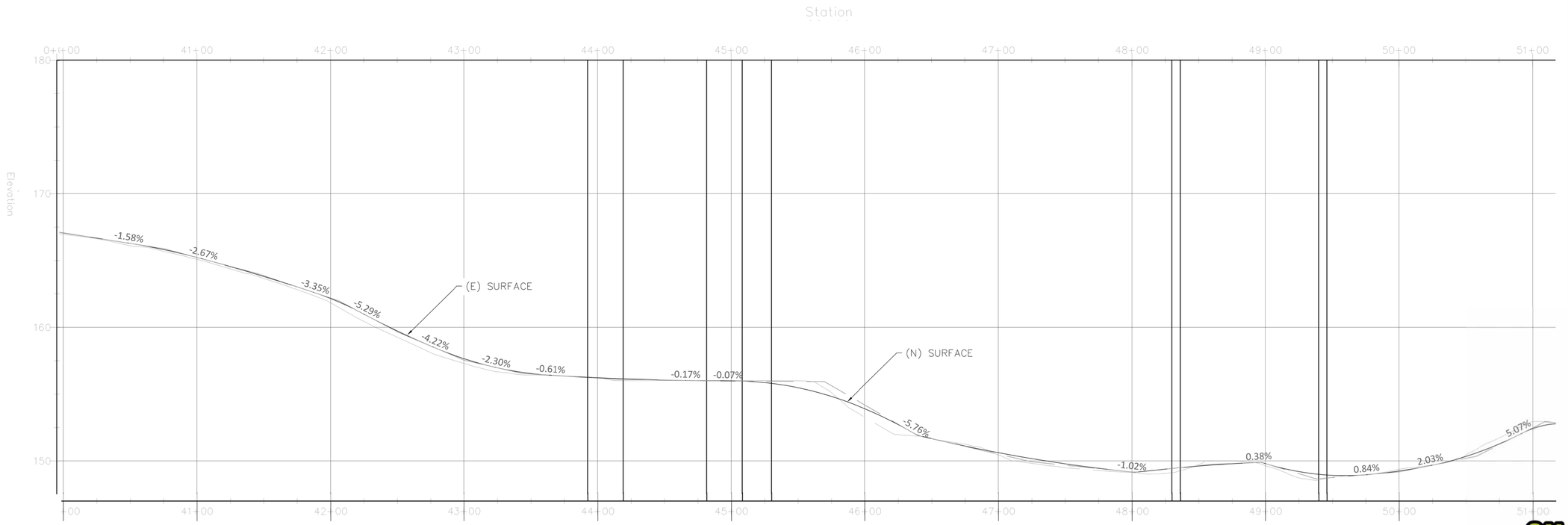
LOCATION: E:\DROPBOX (SOA)\ENGINEERING\CS ENERGY\2020-03-09_STONINGTON\CAD\SITE PLANS.DWG PLOTTED BY: DARIN GALLOWAY



1 / C-304 ROAD SECTION 1 (STA 40+00 TO STA 51+00)

Scale: 1" = 40'

N



2 / C-304 ROAD SECTION 1 PROFILE (STA 40+00 TO STA 51+00)

Scale: H-1" = 40' V-1"=4'

Know what's below. Call before you dig.

PLOT DATE: Tuesday, January 19, 2021

SIERRA OVERHEAD ANALYTICS

18859 MICROTRONICS WAY
SONORA, CALIFORNIA 95370
CONNECTICUT PROFESSIONAL
ENGINEERING CORPORATION #PEC.0001969

REV	DESCRIPTION	DATE
6	ISSUED FOR CONSTRUCTION - DRAFT	9/4/2020
7	ISSUED FOR CONSTRUCTION - DRAFT	9/18/2020
8	ISSUED FOR CONSTRUCTION - DRAFT	10/22/2020
9	ISSUED FOR CONSTRUCTION - DRAFT	11/06/2020
10	ISSUED FOR CONSTRUCTION	1/20/2021
-	-	-
-	-	-
-	-	-
-	-	-
-	-	-

CONFIDENTIAL:

THE INFORMATION DEPICTED ON THIS DOCUMENT IS PROPRIETARY AND THE SOLE PROPERTY OF SIERRA OVERHEAD ANALYTICS, INC (SOA). ANY USE OR DISCLOSURE OF THIS INFORMATION IS EXPRESSLY PROHIBITED WITHOUT THE PRIOR WRITTEN CONSENT OF SOA.

CS Energy
Building a Cleaner Future

2045 LINCOLN HIGHWAY
EDISON, NEW JERSEY 08817

PROJECT NAME:

STONINGTON SOLAR PROJECT

PROJECT ADDRESS:

ELLA WHEELER RD.
NORTH STONINGTON, CT 06359
41° 25' 9.71"N, 71° 50' 4.83"W

SEAL: STATE OF CONNECTICUT · DARIN RAY GALLOWAY · No. 34152 · LICENSED PROFESSIONAL ENGINEER

DATE: 21-JAN-20

PROJECT #: 20200309_CT

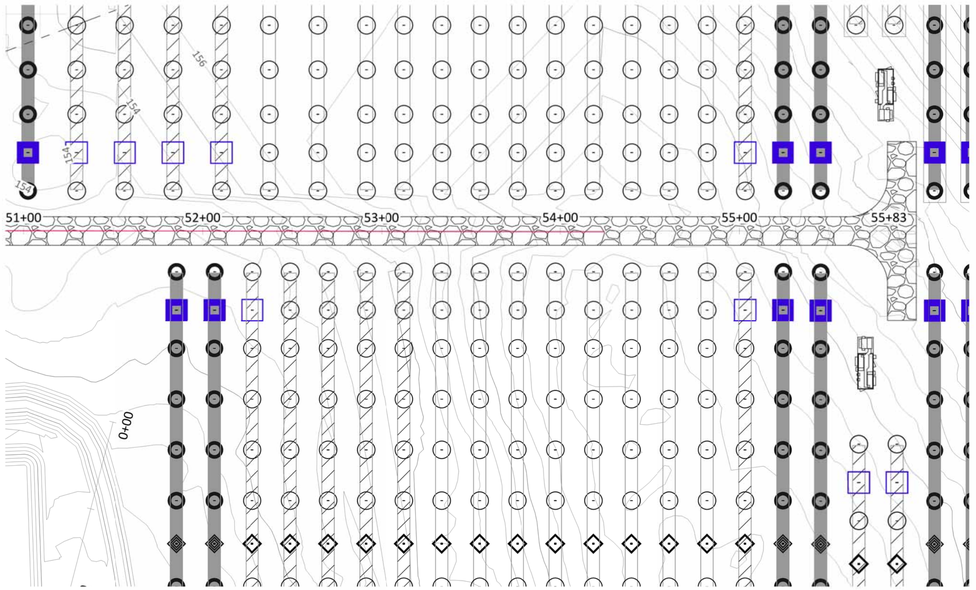
DRAWN BY: MMM

CHECKED BY: DRG

TITLE: ROAD SECTIONS

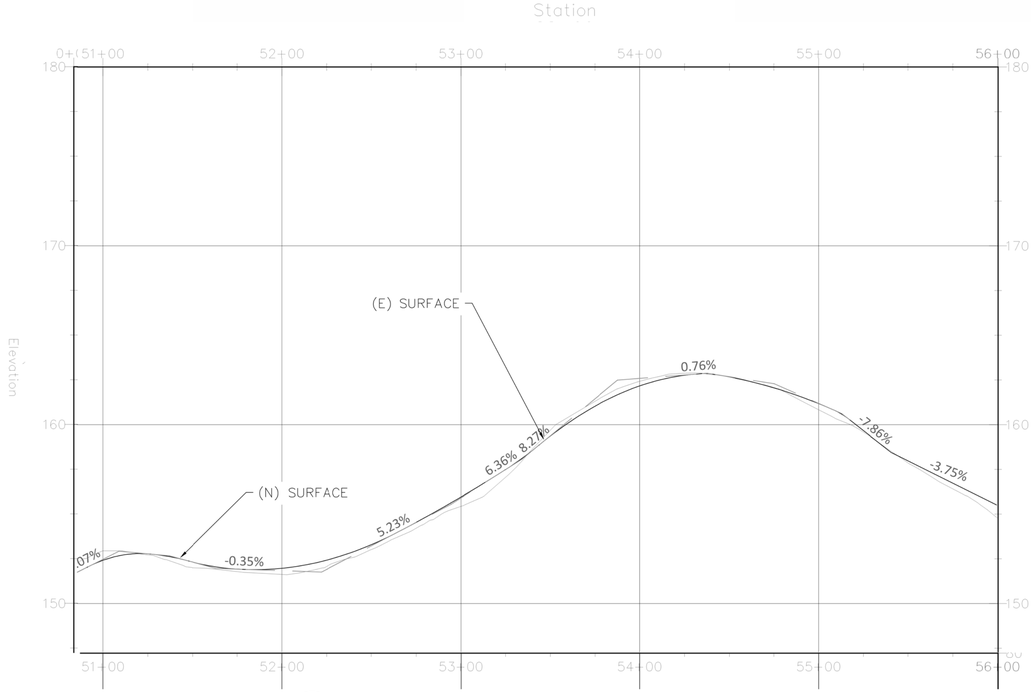
SHEET: C-304

LOCATION: E:\DROPBOX (SOA)\ENGINEERING\CS ENERGY\2020-03-09_STONINGTON\CAD\SITE PLANS.DWG PLOTTED BY: DARIN GALLOWAY



1 C-305 ROAD SECTION 1 (STA 40+00 TO STA 51+00)

Scale: 1" = 40'



2 C-305 ROAD SECTION 1 PROFILE (STA 40+00 TO STA 51+00)

Scale: H-1" = 40' V-1"=4'

Know what's below. Call before you dig.

PLOT DATE: Tuesday, January 19, 2021

SIERRA OVERHEAD ANALYTICS
18859 MICROTRONICS WAY
SONORA, CALIFORNIA 95370
CONNECTICUT PROFESSIONAL
ENGINEERING CORPORATION #PEC.0001969

REV	DESCRIPTION	DATE
6	ISSUED FOR CONSTRUCTION - DRAFT	9/4/2020
7	ISSUED FOR CONSTRUCTION - DRAFT	9/18/2020
8	ISSUED FOR CONSTRUCTION - DRAFT	10/22/2020
9	ISSUED FOR CONSTRUCTION - DRAFT	11/06/2020
10	ISSUED FOR CONSTRUCTION	1/20/2021
-	-	-
-	-	-
-	-	-
-	-	-
-	-	-

CONFIDENTIAL:
THE INFORMATION DEPICTED ON THIS DOCUMENT IS PROPRIETARY AND THE SOLE PROPERTY OF SIERRA OVERHEAD ANALYTICS, INC (SOA). ANY USE OR DISCLOSURE OF THIS INFORMATION IS EXPRESSLY PROHIBITED WITHOUT THE PRIOR WRITTEN CONSENT OF SOA.

CS Energy
Building a Cleaner Future
2045 LINCOLN HIGHWAY
EDISON, NEW JERSEY 08817

PROJECT NAME:
STONINGTON SOLAR PROJECT

PROJECT ADDRESS:
ELLA WHEELER RD.
NORTH STONINGTON, CT 06359
41° 25' 9.71"N, 71° 50' 4.83"W

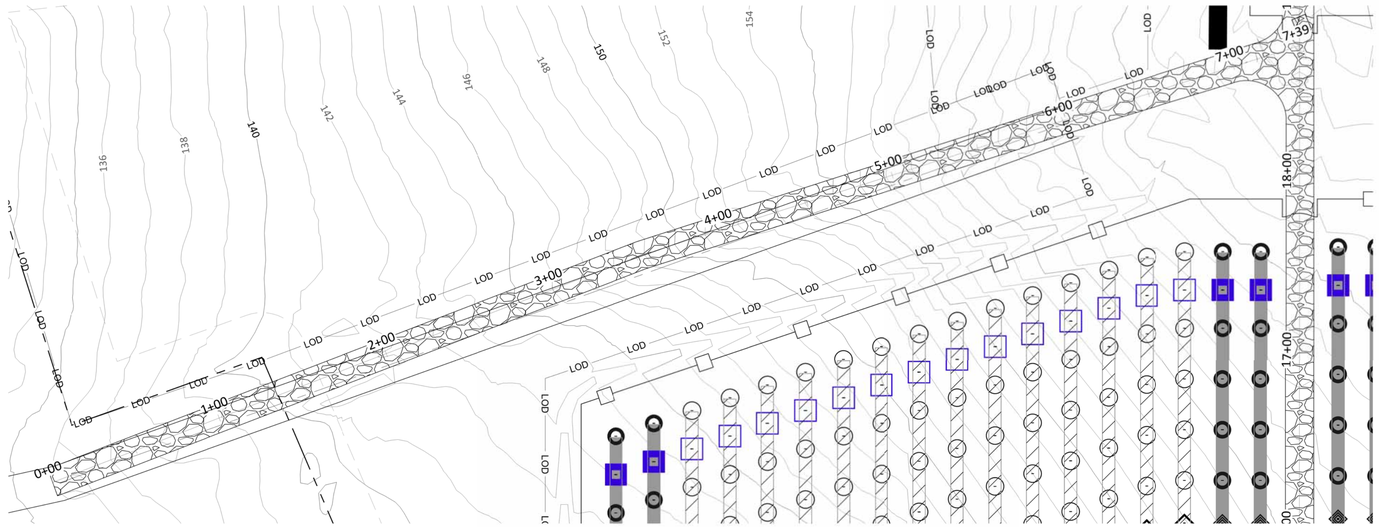
SEAL: STATE OF CONNECTICUT · DARIN RAY GALLOWAY · No. 34152 · LICENSED PROFESSIONAL ENGINEER

DATE: 21-JAN-20
PROJECT #: 20200309_CT
DRAWN BY: MMM
CHECKED BY: DRG

TITLE: ROAD SECTIONS

SHEET: C-305

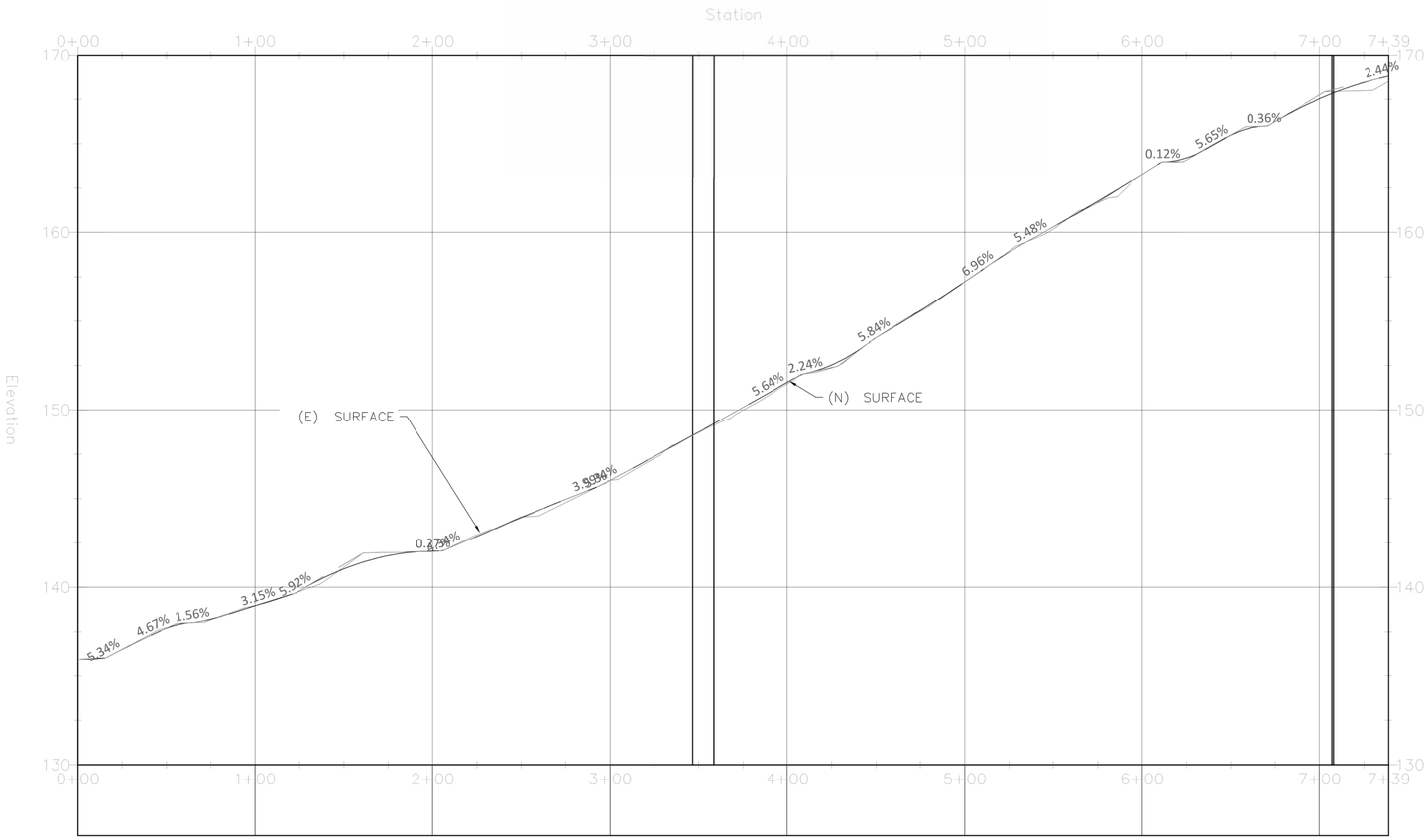
LOCATION: E:\DROPBOX (SOA)\ENGINEERING\CS ENERGY\2020-03-09_STONINGTON\CAD\SITE PLANS.DWG PLOTTED BY: DARIN GALLOWAY



1 C-306 ROAD SECTION 2

Scale: 1" = 40'

N



2 C-306 ROAD SECTION 2 PROFILE

Scale: H-1" = 40' V-1"=4'

PLOT DATE: Tuesday, January 19, 2021

SIERRA OVERHEAD ANALYTICS

18859 MICROTRONICS WAY
SONORA, CALIFORNIA 95370
CONNECTICUT PROFESSIONAL
ENGINEERING CORPORATION #PEC.0001969

REV	DESCRIPTION	DATE
6	ISSUED FOR CONSTRUCTION - DRAFT	9/4/2020
7	ISSUED FOR CONSTRUCTION - DRAFT	9/18/2020
8	ISSUED FOR CONSTRUCTION - DRAFT	10/22/2020
9	ISSUED FOR CONSTRUCTION - DRAFT	11/06/2020
10	ISSUED FOR CONSTRUCTION	1/20/2021
-	-	-
-	-	-
-	-	-
-	-	-
-	-	-

CONFIDENTIAL:

THE INFORMATION DEPICTED ON THIS DOCUMENT IS PROPRIETARY AND THE SOLE PROPERTY OF SIERRA OVERHEAD ANALYTICS, INC (SOA). ANY USE OR DISCLOSURE OF THIS INFORMATION IS EXPRESSLY PROHIBITED WITHOUT THE PRIOR WRITTEN CONSENT OF SOA.

CS Energy
Building a Cleaner Future

2045 LINCOLN HIGHWAY
EDISON, NEW JERSEY 08817

PROJECT NAME:

STONINGTON SOLAR PROJECT

PROJECT ADDRESS:

ELLA WHEELER RD.
NORTH STONINGTON, CT 06359
41° 25' 9.71"N, 71° 50' 4.83"W

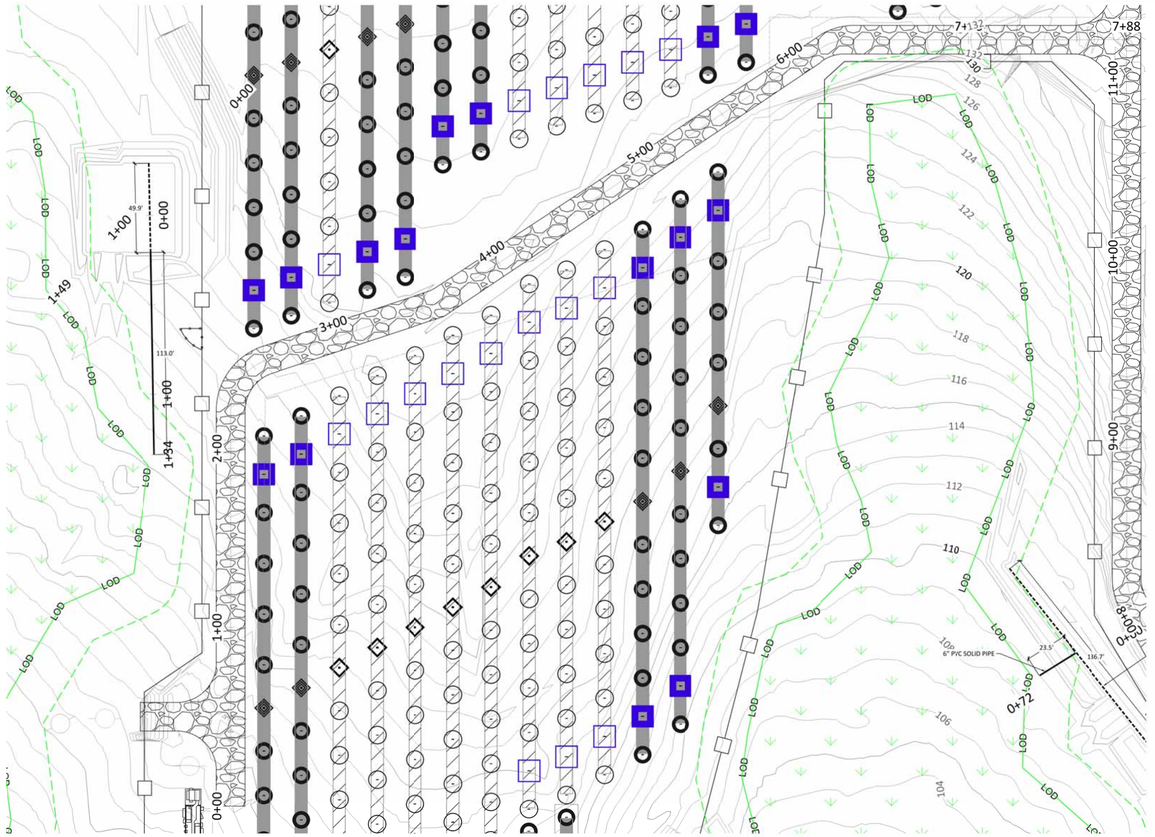
SEAL: STATE OF CONNECTICUT · DARIN RAY GALLOWAY · No. 34152 · LICENSED PROFESSIONAL ENGINEER

DATE:	21-JAN-20
PROJECT #:	20200309_CT
DRAWN BY:	MMM
CHECKED BY:	DRG

TITLE: ROAD SECTIONS

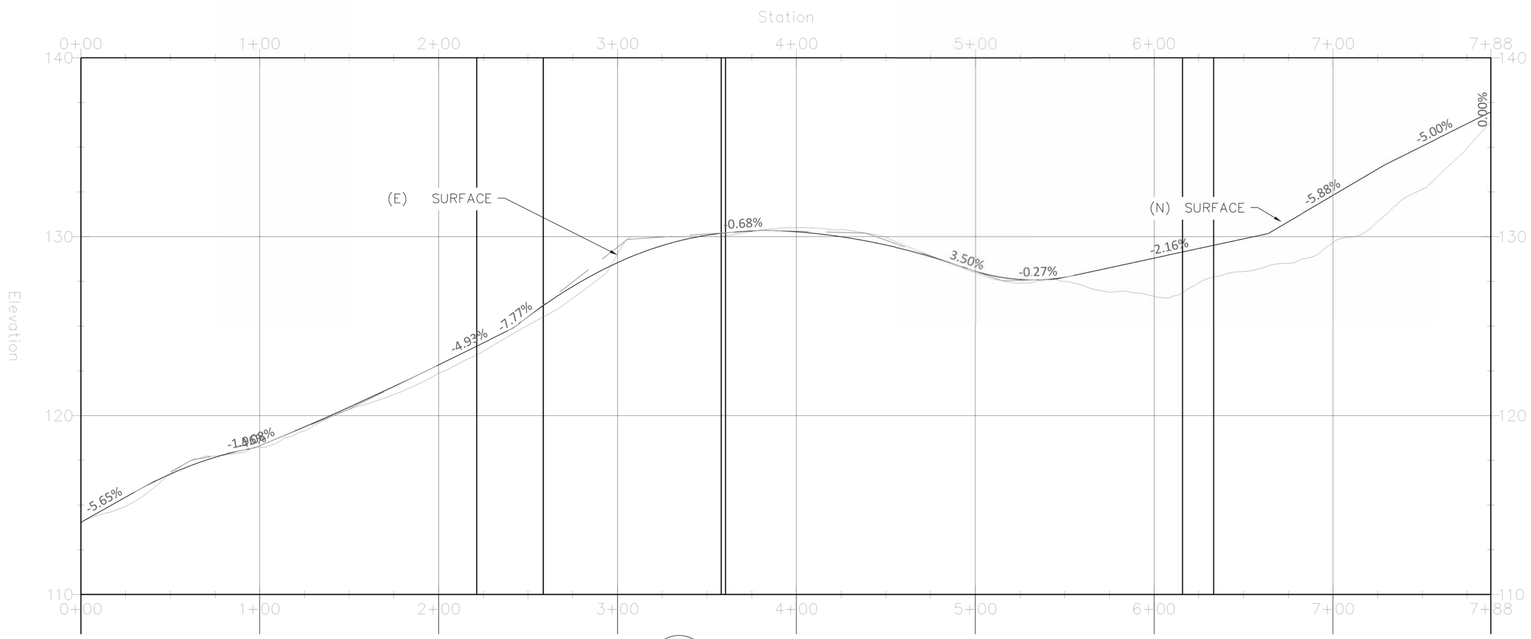
SHEET: C–306

811 Know what's below. Call before you dig.



1 C-307 ROAD SECTION 3

Scale: 1" = 40'



2 C-307 ROAD SECTION 3 PROFILE

Scale: H-1" = 40' V-1"=4'

REV	DESCRIPTION	DATE
6	ISSUED FOR CONSTRUCTION - DRAFT	9/4/2020
7	ISSUED FOR CONSTRUCTION - DRAFT	9/18/2020
8	ISSUED FOR CONSTRUCTION - DRAFT	10/22/2020
9	ISSUED FOR CONSTRUCTION - DRAFT	11/06/2020
10	ISSUED FOR CONSTRUCTION	1/20/2021
-	-	-
-	-	-
-	-	-
-	-	-
-	-	-
-	-	-

CONFIDENTIAL:
THE INFORMATION DEPICTED ON THIS DOCUMENT IS PROPRIETARY AND THE SOLE PROPERTY OF SIERRA OVERHEAD ANALYTICS, INC (SOA). ANY USE OR DISCLOSURE OF THIS INFORMATION IS EXPRESSLY PROHIBITED WITHOUT THE PRIOR WRITTEN CONSENT OF SOA.

SIERRA OVERHEAD ANALYTICS
18859 MICROTRONICS WAY
SONORA, CALIFORNIA 95370
CONNECTICUT PROFESSIONAL
ENGINEERING CORPORATION #PEC.0001969

CS Energy
Building a Cleaner Future
2045 LINCOLN HIGHWAY
EDISON, NEW JERSEY 08817

PROJECT NAME:
STONINGTON SOLAR PROJECT

PROJECT ADDRESS:
ELLA WHEELER RD.
NORTH STONINGTON, CT 06359
41° 25' 9.71"N, 71° 50' 4.83"W

SEAL: STATE OF CONNECTICUT · DARIN RAY GALLOWAY · No. 34182 · LICENSED PROFESSIONAL ENGINEER

DATE: 21-JAN-20
PROJECT #: 20200309_CT
DRAWN BY: MMM
CHECKED BY: DRG

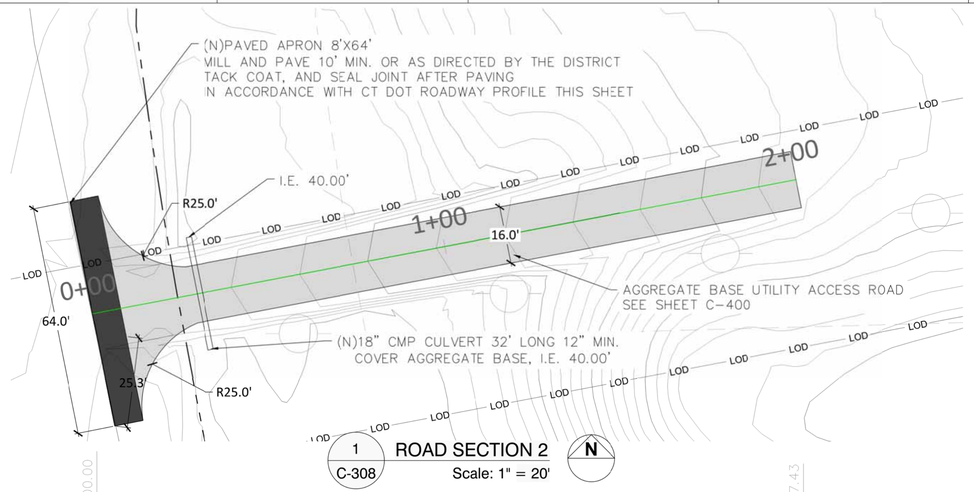
TITLE: ROAD SECTIONS

SHEET: C-307

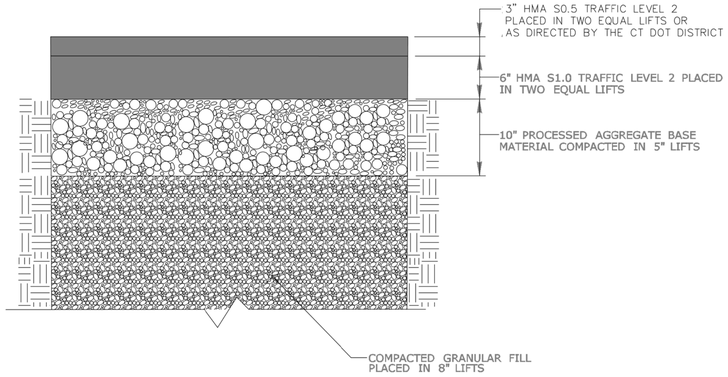
811 Know what's below. Call before you dig.

PLOT DATE: Tuesday, January 19, 2021

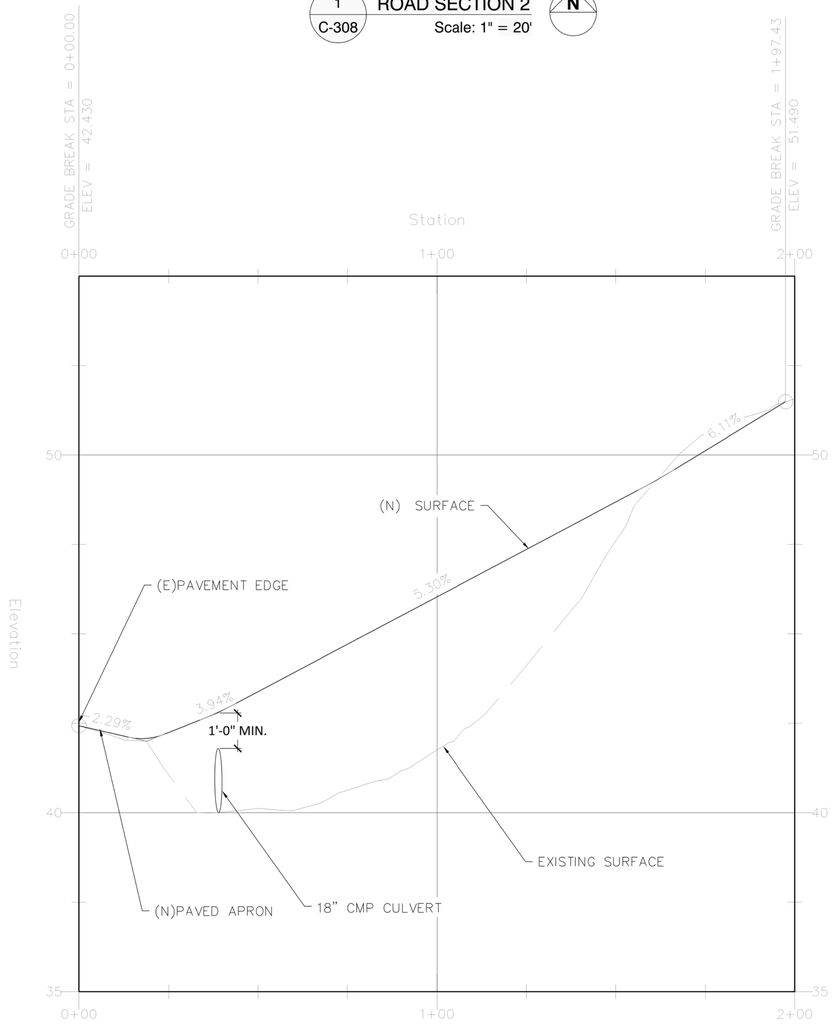
LOCATION: E:\DROPBOX (SOA)\ENGINEERING\CS ENERGY\2020-03-09_STONINGTON\CAD\SITE PLANS.DWG PLOTTED BY: DARIN GALLOWAY



1 C-308 ROAD SECTION 2 Scale: 1" = 20'



ROADWAY PROFILE



2 C-308 ROAD SECTION 2 PROFILE Scale: H-1" = 20' V-1"=2'

UTILITY ACCESS ROAD CONNECTION TO HIGHWAY GENERAL NOTES:

THE ConnDOT ROADWAY PROFILE FOR ENCROACHMENT PERMITS WILL CONSIST OF THE FOLLOWING:

1. 3" OF HMA SUPERPAVE 0.5 TRAFFIC LEVEL 2 PLACED IN TWO EQUAL LIFTS.
2. 6" OF HMA SUPERPAVE 1.0 TRAFFIC LEVEL 2 PLACED IN TWO EQUAL LIFTS.
3. 10" OF PROCESSED AGGREGATE BASE MATERIAL COMPACTED IN 5" LIFTS.
4. COMPACTED GRANULAR FILL BASE COMPACTED IN 8" LIFTS.

PERMANENT PAVEMENT REPAIR WITH MILLING:
DEPENDING ON THE LOCATION OF THE PROPOSED EXCAVATIONS, MILLING AND HMA RESURFACING SHALL BE REQUIRED FOR THE AFFECTED AREA. THE LIMITS OF RESURFACING WILL BE DETERMINED BY CONNDOT AND WILL GENERALLY EXTEND FROM THE NEAREST LONGITUDINAL PAVEMENT JOINT TO THE GUTTER LINE OR NEAREST ADJACENT JOINT WHICH PARALLELS THE EXCAVATION. THE MILLED AREA AND ALL SAW CUT EDGES SHALL BE MECHANICALLY SWEPT AND TACK COATED WITH AN APPROVED TACK MATERIAL. THE MATERIAL MUST BE APPLIED BY A NON-GRAVITY PRESSURIZED SPRAY SYSTEM THAT RESULTS IN UNIFORM OVERLAPPING COVERAGE WITH AN APPLICATION RATE THAT IS IN ACCORDANCE WITH THE STANDARD AND SPECIFICATIONS. THE MILLED AREA WILL BE PAVED WITH S0.5 OR S0.375 LEVEL 2 HMA COMPACTED TO A 2" DEPTH IN ACCORDANCE WITH THE STANDARD AND SPECIFICATIONS SECTIONS 4.06 & M.04. ALL MILLED MATERIAL MUST BE DISPOSED OF AT THE PERMITTEE'S EXPENSE.

BACKFILL:
THE EXCAVATION SHALL BE FILLED WITH THE APPROPRIATED SUITABLE SUB-BASE AND BASE MATERIAL. THE SUB-BASE AND BASE SHALL BE COMPACTED IN LIFTS IN ACCORDANCE WITH THE STANDARD AND SPECIFICATIONS.

COMPACTION:
THE PERMITTEE SHALL BE REQUIRED TO HAVE A CONSULTANT INSPECTOR ON SITE AT ALL TIMES DURING ANY AND ALL CONSTRUCTION WITHIN THE STATE RIGHT OF WAY TO PERFORM INSPECTIONS AND TO VERIFY REQUIRED MATERIALS TESTING IN ACCORDANCE WITH STANDARD SPECIFICATIONS SECTION 2.14. ALL COMPACTION AND DENSITY TESTING SHALL BE PERFORMED BY CERTIFIED NORTHEAST TRANSPORTATION TRAINING AND CERTIFICATION PROGRAM TESTING PERSONNEL USING A NUCLEAR DENSITY GAUGE THAT HAS BEEN RECEIVED ITS ANNUAL CERTIFICATION FROM CTDOT. COMPACTION TESTS ON SOILS AND DENSITY TESTS ON ASPHALT SHALL BE PERFORMED ONCE PER LIFT OF MATERIAL INSTALLED ONCE EVERY 25 L.F. OF THE EXCAVATION OR AS DIRECTED BY THE PERMIT INSPECTOR TO ASSURE THAT A RATE OF 95% IS ACHIEVED ON GRANULAR FILL, PROCESS, AND A MINIMAL OF 92% ON ASPHALT. DAILY INSPECTION REPORTS WHICH HAVE BEEN REVIEWED AND STAMPED BY A LICENSED CONNECTICUT PROFESSIONAL ENGINEER SHALL BE SUBMITTED TO THE DISTRICT PERMIT OFFICE ON A WEEKLY BASIS.

SAW CUTTING:
THE CONTRACTOR SHALL BE REQUIRED TO SAW CUT THE PAVEMENT EDGES IN A VERTICAL, NEAT, STRAIGHT LINE TO A DEPTH NECESSARY TO REMOVE THE PAVEMENT AND PCC TO THE SUBBASE. THE SAW CUTTING SLURRY MUST NOT BE ALLOWED TO ENTER THE STATE'S DRAINAGE SYSTEM. ALL EDGES MUST BE TACK COATED AND THE SURFACE JOINTS SEALED BY AN APPROVED ASPHALTIC MATERIAL APPLIED IN ACCORDANCE WITH STANDARD AND SPECIFICATIONS SECTION 4.06.03.

FINE MILLING:
ALL WORK PERFORMED UNDER MILLING OF BITUMINOUS CONCRETE, REMOVAL OF EXISTING WEARING SERVICE SHALL BE IN ACCORDANCE WITH STANDARDS AND SPECIFICATIONS SECTION 4.09. THE EQUIPMENT USED TO MILL MUST COME EQUIPPED WITH AUTOMATIC GRADE OR SLOPE CONTROLS IN ORDER TO PROVIDE A UNIFORM TEXTURED APPEARANCE. THE MILLED SURFACE SHALL BE FREE FROM GOUGES, LONGITUDINAL GROOVES AND RIDGES, OIL FILM, AND OTHER IMPERFECTIONS THAT ARE A RESULT OF DEFECTIVE EQUIPMENT, IMPROPER USE OF EQUIPMENT, OR POOR WORKMANSHIP. ANY MILLED AREA THAT WILL NOT BE EXPOSED TO LIVE TRAFFIC FOR A MINIMUM OF 48 HOURS PRIOR TO PAVING SHALL REQUIRE A VACUUM SWEEPER TRUCK IN ADDITION TO, OR IN LIEU OF MECHANICAL SWEEPING. THE VACUUM SWEEPER TRUCK SHALL HAVE SUFFICIENT POWER AND CAPACITY TO COMPLETELY REMOVE ALL MILLINGS FROM THE ROADWAY SURFACE INCLUDING ANY FINE PARTICLES WITHIN THE TEXTURE OF THE MILLED SURFACE. VACUUM SWEEPER TRUCK HOSE ATTACHMENTS MUST BE USED TO CLEAN AROUND PAVEMENT STRUCTURES OR AREAS THAT CANNOT BE REACHED EFFECTIVELY BY THE MAIN VACUUM. COMPRESSED AIR MAY BE USED IN LIEU OF VACUUM ATTACHMENTS UPON PRIOR APPROVAL FROM THE INSPECTOR. THE PAVEMENT SURROUNDING AND INCLUDING THE EXCAVATION SHALL BE MILLED TO A DEPTH OF 2 INCHES FROM SHOULDER TO CENTER LINE OR SHOULDER TO SHOULDER, DEPENDING ON THE LENGTH OF THE EXCAVATION. THE MILLED AREA SHALL EXTEND A MINIMUM OF 10 FEET BEYOND THE OUTERMOST EDGE OF THE ORIGINAL TRENCH LINE. WHEN DETERMINING THE OVERALL WIDTH AND THE STARTING AND ENDING POINTS FOR THE MILLING, CONSIDERATION MUST BE GIVEN TO EXISTING PAVEMENT JOINTS, AT-GRADE RAIL CROSSINGS AND INTERSECTING STREETS. THE MILLED EDGES SHALL BE VERTICALLY FACED AND NOT TAPERED. THE ENTIRE MILLED AREA INCLUDING THE VERTICAL EDGES SHALL BE SWEPT AND TACK COATED WITH APPROVED MATERIAL AT THE APPROPRIATE RATE.

OVERLAY:
THE AREA SHALL BE OVERLAID WITH S0.50 OR S0.375 LEVEL 2 HMA, COMPACTED BY A ROLLER WITH A VIBRATORY SYSTEM THAT ACHIEVES COMPACTION THROUGH VERTICAL AMPLITUDE FORCES THAT WILL MEET A MINIMAL COMPACTION OF 92% TO A DEPTH OF 2 INCHES. A 10-FOOT STRAIGHTEDGE SHALL BE USED TO ENSURE THAT THE FINAL GRADE OF THE PAVEMENT REPLACEMENT CONSISTENTLY MATCHES THE EXISTING SURFACE GRADE.

Know what's below. Call before you dig.

SIERRA OVERHEAD ANALYTICS
18859 MICROTRONICS WAY
SONORA, CALIFORNIA 95370
CONNECTICUT PROFESSIONAL
ENGINEERING CORPORATION #PEC.0001969

REV	DESCRIPTION	DATE
6	ISSUED FOR CONSTRUCTION - DRAFT	9/4/2020
7	ISSUED FOR CONSTRUCTION - DRAFT	9/18/2020
8	ISSUED FOR CONSTRUCTION - DRAFT	10/22/2020
9	ISSUED FOR CONSTRUCTION - DRAFT	11/06/2020
10	ISSUED FOR CONSTRUCTION	1/20/2021
-	-	-
-	-	-
-	-	-
-	-	-
-	-	-

CONFIDENTIAL:
THE INFORMATION DEPICTED ON THIS DOCUMENT IS PROPRIETARY AND THE SOLE PROPERTY OF SIERRA OVERHEAD ANALYTICS, INC (SOA). ANY USE OR DISCLOSURE OF THIS INFORMATION IS EXPRESSLY PROHIBITED WITHOUT THE PRIOR WRITTEN CONSENT OF SOA.

CS Energy
Building a Cleaner Future
2045 LINCOLN HIGHWAY
EDISON, NEW JERSEY 08817

PROJECT NAME:
STONINGTON SOLAR PROJECT

PROJECT ADDRESS:
ELLA WHEELER RD.
NORTH STONINGTON, CT 06359
41° 25' 9.71"N, 71° 50' 4.83"W

SEAL: STATE OF CONNECTICUT · DARIN RAY GALLOWAY · No. 34152 · LICENSED PROFESSIONAL ENGINEER

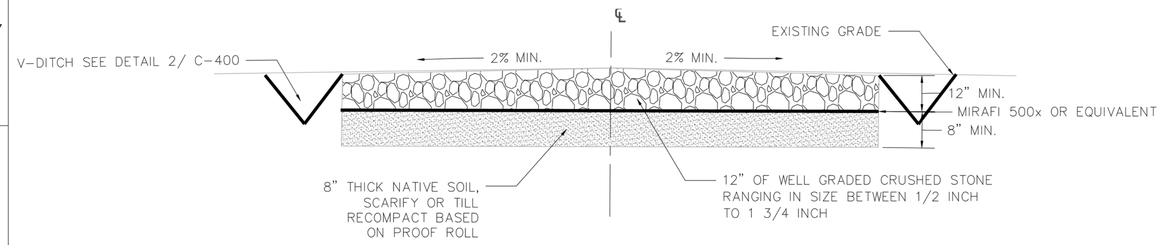
DATE: 21-JAN-20
PROJECT #: 20200309_CT
DRAWN BY: MMM
CHECKED BY: DRG

TITLE: UTILITY ACCESS PLAN

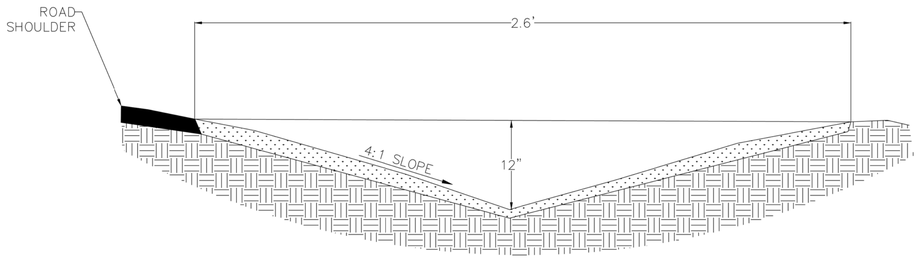
SHEET: C-308

PLOT DATE: Tuesday, January 19, 2021

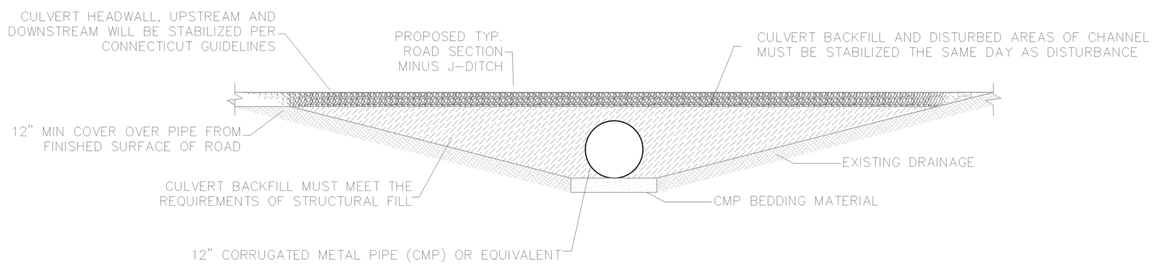
LOCATION: E:\DROPBOX (SOA)\ENGINEERING\CS ENERGY\2020-03-09_STONINGTON\CAD\SITE PLANS.DWG PLOTTED BY: DARIN GALLOWAY



1 C-400 **SITE ROAD CROSS SECTION, TYP.**
SCALE: NTS



2 C-400 **V-DITCH, TYP.**
SCALE: NTS



3 C-400 **CULVERT CROSSING, TYP.**
SCALE: NTS

ON-SITE ACCESS ROAD CONSTRUCTION NOTES:

1. AGGREGATE BASE COARSE (0" TO 12" DEPTH):
   1.1. ROADWAY TO CONSIST OF 12-INCH THICKNESS OF WELL GRADED CRUSHED STONE RANGING IN SIZE FROM 1/2" TO 1 3/4", PLACED OVER A PREPARED SUBGRADE.
2. PRIOR TO PLACING FILL OR COMPACTING SCARIFIED SOILS IN ROAD EXCAVATIONS, REMOVAL OF ALL VEGETATION AND OTHER DELETERIOUS MATERIALS SHALL BE CONDUCTED.
3. NATIVE SUBBASE COARSE (12" TO 20" DEPTH):
   3.1. FOLLOWING REMOVAL OF MATERIAL WITHIN ROAD EXCAVATION, SCARIFY (OR TILL), WET AND COMPACT NATIVE SUBBASE MATERIAL TO 8" DEPTH MINIMUM BEFORE ADDING AGGREGATE BASE COARSE.
   3.2. LAY MIRAFI 500x OR EQUIVALENT GEOTEXTILE FABRIC ON TOP OF PREPARED SUBGRADE.
   3.3. NATIVE SUBBASE MATERIAL SHALL BE COMPACTED TO 95% MDD VIA STANDARD PROCTOR (ASTM D698).
4. ON-SITE AGGREGATE ROADWAYS SHALL BE CONSTRUCTED AT GRADE WITH A VERTICAL TOLERANCE OF +/- 2".
5. POSITIVE DRAINAGE SHALL BE MAINTAINED ACROSS THE SITE.
6. ON-SITE AGGREGATE ROADWAY SLOPES SHALL NOT EXCEED 5%.
7. PRIOR TO PLACING FILL OR COMPACTING SCARIFIED SOIL ON PROPOSED ROADWAY LOCATIONS, ALL UNSUITABLE MATERIAL SHALL BE REMOVED. THIS SHALL INCLUDE THE REMOVAL OF ALL VEGETATION AND TOPSOIL, DEBRIS, LOOSE AND DISTURBED SOIL, CONTAMINATED SOIL AND OTHER DELETERIOUS MATERIALS THAT MAY EXIST WITHIN THE AREA OF THE PROPOSED ROADWAY CONSTRUCTION.
8. 16' ACCESS ROADS SHALL ACCOMMODATE ALL CONSTRUCTION, OPERATIONS, MAINTENANCE, AND UTILITY TRAFFIC THROUGHOUT THE SITE.
9. A CROWN OF 2% WILL BE PREPARED SLOPING AWAY FROM THE ROAD ALONG ITS CENTERLINE.
10. A J OR V DITCH DESIGN WILL BE UTILIZED AS EDGE DRAINAGE FOR THE ROADWAYS.
11. J OR V DITCH WILL BE AGGREGATE LINED TO PROTECT AGAINST EROSION.

CONNECTICUT DEPARTMENT OF TRANSPORTATION AGGREGATE REQUIREMENTS

1. GRADTION: COURSE AND FINE AGGREGATES SHALL BE COMBINED AND MIXED BY APPROVED METHODS SO THAT THEY MEET THE FOLLOWING GRADATION REQUIREMENT:

SQUARE MESH SIEVE	PERCENT PASSING BY MASS
PASS 2 ½ INCHES (63 MM)	100
PASS 2 INCHES (50 MM)	95-100
PASS ¾ INCH (19 MM)	50-75
PASS ¼ INCH (6.3 MM)	25-45
PASS #40	5-20
PASS #100	2-12

2. COARSE AGGREGATE: COARSE AGGREGATE SHALL BE EITHER GRAVEL, BROKEN STONE OR RECLAIMED MISCELLANEOUS AGGREGATE CONTAINING NO MORE THAN 2% BY WEIGHT (MASS) OF ASPHALT CEMENT, AT THE OPTION OF THE CONTRACTOR. WHEN TESTED BY MEANS OF THE LOS ANGELES MACHINE, USING AASHTO METHOD T 96, THE COARSE AGGREGATE SHALL NOT HAVE A LOSS OF MORE THAN 50%.

A)A) IF GRAVEL IS USED FOR THE COARSE AGGREGATE, IT SHALL CONSIST OF SOUND, TOUGH, DURABLE PARTICLES OF CRUSHED OR UNCRUSHED GRAVEL OR A MIXTURE THEREOF, FREE FROM SOFT, THIN, ELONGATED OR LAMINATED PIECES, LUMPS OF CLAY, LOAM AND VEGETABLE OR OTHER DELETERIOUS SUBSTANCES.

A)B) IF BROKEN STONE IS USED FOR THE COARSE AGGREGATE, IT SHALL CONSIST OF SOUND, TOUGH, DURABLE FRAGMENTS OF ROCK OF UNIFORM QUALITY THROUGHOUT. IT SHALL BE FREE FROM SOFT DISINTEGRATED PIECES, MUD, DIRT, ORGANIC OR OTHER INJURIOUS MATERIAL.

A)C) IF THE RECLAIMED MISCELLANEOUS AGGREGATE IS USED FOR THE COARSE AGGREGATE, IT SHALL CONSIST OF SOUND, TOUGH, DURABLE FRAGMENTS OF UNIFORM QUALITY THROUGHOUT. IT SHALL BE FREE FROM SOFT DISINTEGRATED PIECES, MUD, DIRT, GLASS, ORGANIC OR OTHER INJURIOUS MATERIAL.

A)D) SOUNDNESS FOR GRAVEL, BROKEN STONE AND RECLAIMED MISCELLANEOUS AGGREGATE: WHEN TESTED BY MAGNESIUM SULFATE SOLUTION FOR SOUNDNESS USING AASHTO METHOD T 104, THE COARSE AGGREGATE SHALL SHOW A LOSS OF NOT MORE THAN 15% AT THE END OF 5 CYCLES.

3. FINE AGGREGATE: THE FINE AGGREGATE SHALL BE NATURAL SAND, STONE SAND, SCREENINGS OR ANY COMBINATION THEREOF. THE FINE AGGREGATE SHALL BE LIMITED TO MATERIAL 95% OF WHICH PASSES A NO. 4 (4.75-MM) SIEVE HAVING SQUARE OPENINGS AND NOT MORE THAN 8% OF WHICH PASSES A NO. 200 (75-MM) SIEVE. THE MATERIAL SHALL BE FREE FROM CLAY, LOAM AND DELETERIOUS MATERIALS.

A)A) PLASTICITY: WHEN NATURAL SAND IS USED, THE FINE AGGREGATE SHALL CONFORM TO THE REQUIREMENTS OF ARTICLE M.02.06-2.

A)B) PLASTICITY: WHEN SCREENINGS OR ANY COMBINATION OF SCREENINGS AND NATURAL SAND OR ANY COMBINATION OF STONE SAND AND NATURAL SAND ARE USED, THE FOLLOWING REQUIREMENTS SHALL APPLY:

3.1)1) WHEN THE FRACTION OF THE DRY SAMPLE PASSING THE NO. 100 (150-MM) MESH SIEVE IS 6% OR LESS BY WEIGHT (MASS), NO PLASTIC LIMIT TEST WILL BE MADE.

3.1)2) WHEN THE FRACTION OF THE DRY SAMPLE PASSING THE NO. 100 (150-MM) MESH SIEVE IS GREATER THAN 6% AND NOT GREATER THAN 10% BY MASS, THAT FRACTION SHALL NOT HAVE SUFFICIENT PLASTICITY TO PERMIT THE PERFORMING OF THE PLASTIC LIMIT TEST, USING AASHTO METHOD T 90.

3.3)3) WHEN THE FRACTION OF THE DRY SAMPLE PASSING THE NO. 100 (150-MM) MESH SIEVE IS GREATER THAN 10% BY WEIGHT (MASS), THE SAMPLE SHALL BE WASHED; AND ADDITIONAL MATERIAL PASSING THE NO. 100 (150-MM) MESH SIEVE SHALL BE DETERMINED BY AASHTO METHOD T 146, EXCEPT THAT THE NO. 100 (150-MM) MESH SIEVE SHALL BE SUBSTITUTED FOR THE NO. 40 (425-MM) MESH SIEVE WHERE THE LATTER IS SPECIFIED IN AASHTO METHOD T 146. THE COMBINED MATERIALS THAT HAVE PASSED THE NO. 100 (150-MM) MESH SIEVE SHALL NOT HAVE SUFFICIENT PLASTICITY TO PERMIT THE PERFORMING OF THE PLASTIC LIMIT TEST USING AASHTO METHOD T 90.

Know what's below. Call before you dig.

SIERRA OVERHEAD ANALYTICS
18859 MICROTRONICS WAY
SONORA, CALIFORNIA 95370
CONNECTICUT PROFESSIONAL ENGINEERING CORPORATION #PEC.0001969

REV	DESCRIPTION	DATE
6	ISSUED FOR CONSTRUCTION - DRAFT	9/4/2020
7	ISSUED FOR CONSTRUCTION - DRAFT	9/18/2020
8	ISSUED FOR CONSTRUCTION - DRAFT	10/22/2020
9	ISSUED FOR CONSTRUCTION - DRAFT	11/06/2020
10	ISSUED FOR CONSTRUCTION	1/20/2021
-	-	-
-	-	-
-	-	-
-	-	-
-	-	-

CONFIDENTIAL:
THE INFORMATION DEPICTED ON THIS DOCUMENT IS PROPRIETARY AND THE SOLE PROPERTY OF SIERRA OVERHEAD ANALYTICS, INC (SOA). ANY USE OR DISCLOSURE OF THIS INFORMATION IS EXPRESSLY PROHIBITED WITHOUT THE PRIOR WRITTEN CONSENT OF SOA.

CS Energy
Building a Cleaner Future
2045 LINCOLN HIGHWAY
EDISON, NEW JERSEY 08817

PROJECT NAME:
STONINGTON SOLAR PROJECT

PROJECT ADDRESS:
ELLA WHEELER RD.
NORTH STONINGTON, CT 06359
41° 25' 9.71"N, 71° 50' 4.83"W

SEAL: STATE OF CONNECTICUT · DARIN RAY GALLOWAY · No. 34152 · LICENSED PROFESSIONAL ENGINEER

DATE: 21-JAN-20
PROJECT #: 20200309_CT
DRAWN BY: MMM
CHECKED BY: DRG

TITLE: CIVIL DETAILS
SHEET: C-400

PLOT DATE: Tuesday, January 19, 2021

8.4 Design Features

8.4.1 Culvert Sizes and Shape

The culvert size and shape selected shall be based on engineering and economic criteria related to site conditions.

The following minimum sizes shall be used to avoid maintenance problems and clogging:
- 600 mm (24 in) for Interstate Systems, or equivalent for non-circular shapes
- 450 mm (18 in) for other systems, or equivalent for non-circular shapes
- Use arch or oval shapes only if required by hydraulic limitations, site characteristics, structural criteria, or environmental criteria
- Where practical, the minimum height of box culverts should be 1.52 m (5 ft) for inspectability

8.4.2 Multiple Barrels

Multiple barrel culverts shall fit within the natural dominant channel with minor widening of the channel so as to avoid conveyance loss through sediment deposition in some of the barrels. They are to be avoided where:

- the approach flow is high velocity, particularly if supercritical, (These sites require either a single barrel or special inlet treatment to avoid adverse hydraulic jump effects.)
- fish passage is required unless special treatment is provided to insure adequate low flows (commonly one barrel is lowered) See Section 8.5.5.
- a high potential exists for debris problems (clogging of culvert inlet)
- a meander bend is present immediately upstream

8.4.3 Material Selection

The material selection shall consider replacement cost and difficulty of construction as well as traffic delay.

- The material selected shall be based on a comparison of the total cost of alternate materials over the design life of the structure which is dependent upon the following:
  - durability (service life)
  - structural strength
  - hydraulic roughness
  - bedding conditions
  - abrasion and corrosion resistance
  - water tightness requirements
- The selection shall not be made using first cost as the only criteria.
- See Chapter 4, Culvert Repair, Materials, and Structural Design, for discussion of various pipe types and service life.

8.4.4 Culvert Skew

The culvert skew shall not exceed 45° as measured from a line perpendicular to the roadway centerline without the approval of the Hydraulics and Drainage Section. Consider structural impacts of skew. Flexible culverts may need balanced fill.

8.4.5 End Treatment (Inlet or Outlet)

The culvert inlet type shall be selected from the following list based on the considerations given and the inlet coefficient, K_E. (A table of recommended values of K_E is included in Appendix B.) Consideration shall also be given to safety since some end treatments can be hazardous to errant vehicles.

Projecting Inlets or Outlets

- extend beyond the roadway embankment and are susceptible to damage during roadway maintenance and from errant vehicles
- have low construction cost
- have poor hydraulic efficiency for thin materials
- shall include anchoring the inlet to concrete slope paving and toe wall to strengthen the weak leading edge
- are used predominantly with metal pipe

Concrete Headwalls with Bevels

- increase the efficiency of metal pipe
- provide embankment stability and embankment erosion protection
- provide protection from buoyancy
- shorten the required structure length

Improved Inlets

- shall be considered for culverts which will operate in inlet control
- can increase the hydraulic performance of the culvert, but may also add to the total culvert cost, therefore, they should only be used if practicable
- slope-taper shall not be considered where fish passage is required
- could increase downstream flows and velocities

Commercial End Sections

- are available for corrugated metal, high density polyethylene pipe and concrete pipe
- retard embankment erosion and incur less damage from maintenance
- may improve projecting metal pipe entrances by increasing hydraulic efficiency and improving their appearance
- are hydraulically equal to a headwall

Wingwalls

- are used to retain the roadway embankment to avoid a projecting culvert barrel
- are used where the side slopes of the channel are unstable
- are used where the culvert is skewed to the normal channel flow
- provide the best hydraulic efficiency if the flare angle is between 30° and 60°

Aprons

- are used to reduce scour from high headwater depths or from approach velocity in the channel
- shall extend at least two pipe diameters upstream
- shall not protrude above the normal streambed elevation

Mitered Inlets

- are hydraulically more efficient than thin edge projecting
- shall be mitered to match the fill slope
- shall include anchoring the inlet to strengthen the weak leading edge for culverts 1200 mm (48 in) in diameter and larger

Cut-off-Walls

- are generally used as primary protection against piping at culvert inlets and as secondary protection against erosion at culvert outlets (primary outlet protection is designed by the hydraulic engineer)
- shall be used at endwalls and slope paved inlets and outlets as detailed on the Standard Drawings
- shall have embedment depths which comply with the following:
  1) for culverts included on Standard Drawings, use dimension shown
  2) for culverts not included on Standard Drawings, embed cutoff walls a minimum of 1.2m (4 ft) below the streambed and 0.6m (2 ft) below the bottom of the culvert
  3) where riprap is required, the embedment depth should not be less than the thickness of riprap/bedding material

Weep Holes

- may be required to relieve uplift pressure and reduce hydrostatic pressure behind headwalls

4.4.3 Corrugated Steel

Corrugated steel culverts are made with factory-produced corrugated sheet steel. Corrugated pipe culverts are made with factory-produced corrugated pipe sections. Large corrugated culverts are normally field-assembled using structural plate products. Structural plate steel products are available as structural plate pipes, box culverts, or long span structures. Standard shapes for corrugated steel culverts are shown on Table 4-2.

• Material – Corrugated steel pipe is fabricated from sheets coated with zinc or aluminum. It is reasonably lightweight for shipping and comes in a large range of thicknesses and corrugations to provide the appropriate strength. However, it requires controlled backfill for proper soil support. Other options include various coatings and/or pavings for added protection.

• Shapes – Corrugated steel may be used for a wide variety of shapes, sizes, and lengths of culverts. The culverts may be made from prefabricated sections that are factory produced or assembled in the field from specially fabricated plates. The shapes may be made from various thicknesses of plate stock.

Pipe – Corrugated steel pipe is factory made in two basic shapes: round and pipe arch. Both round and arch shapes are available in a wide range of standard sizes. Round pipe is available in standard sizes up to 3600 mm (144 inches) in diameter. Standard sizes for pipe arch are available in sizes up to the equivalent of 3000 mm (120 inch) diameter round pipe. Both shapes are produced in several wall thicknesses, several corrugation sizes, as shown in Figure 4-10 and with annular (circumferential) or helical (spiral) corrugations.

Pipes with annular corrugations have riveted, spot welded, or bolted seams. Pipes with helical corrugations have continuously welded seams or lock seams. Corrugated steel pipe and pipe arch are usually coated with zinc (galvanized) or aluminum. Additional protective coatings are used with the metallic coating when there are potential corrosion or abrasion problems.

Structural plate – Structural plate steel pipes are field assembled from standard corrugated galvanized steel plates. Standard plates have corrugations with a 150mm (6-inch) pitch and a depth of 50 mm (2 inches). Plates are manufactured in a variety of thicknesses and are pre-curved for the size and shape of the structure to be erected. Standard plates have a nominal length of either 3 m or 3.7m (10 or 12 feet) and are produced in standard widths of 3N, 5N, 6N, 7N, and 8N, where N equals 3 pi or 244 mm (9.6 inches). Widths are measured along the circumference of the structure. Since the circumference of a circle equals pi times the diameter, the use of dimensions expressed in N or pi permits easy conversion from pipe circumference of 60 pi or 20N and would normally be assembled from four 5N plates. Structural plate pipes are available in six basic shapes: round, pipe arch, arch, vertical ellipse, horizontal ellipse, and underpass. The standard sizes available range in span from 1.5 m 6 to 7.9m (5 feet to 26 feet).

Box – Steel box sections use standard 150 by 50 mm (6 by 2 inch) corrugated galvanized steel plates with special reinforcing elements applied to the areas of maximum moment or 375 by 140 mm (15 by 5 1/2 inches) corrugated plate without ribs. Steel box culverts are available with spans that range from 3m (9 feet 8 inches) to 6.3m (20 feet 9 inches).

Long span – Long span steel structures are assembled using conventional 150 by 50 mm (6 by 2 inch) corrugated galvanized steel plates with longitudinal or circumferential stiffening members or 375 by 140 mm (15 by 5 ½ inch) corrugated plate without ribs. There are five standard shapes for long span structures: horizontal elliptical, pipe arch, low profile arch, high profile arch, and pear shape. The long span pipe arch is not commonly used. The span lengths of typical sections range from 5.9m (19 feet 4 inches) to 12.2 m (40 feet). Longer spans are available for some shapes as special designs.

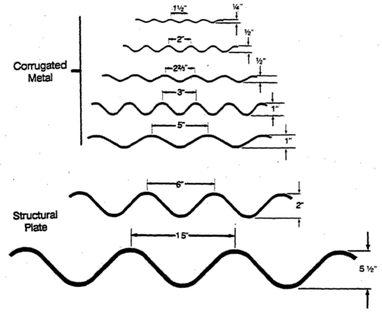


Figure 4-10 Common corrugated patterns (not to scale) (English only)

Table 4-2 Standard corrugated steel culvert shapes (English only)

Shape	Range of Sizes	Common Uses
Round	6 in.–26 ft.	Culverts, subdrains, sewers, service tunnels, etc. All pipes same radius. For medium and high fills (or trenches).
Vertically-elongated (ellipse) 5% is common	4–21 ft. nominal before elongating	Culverts, sewers, service tunnels, recovery tunnels. Plates of varying radii; shop fabrication. For appearance and where backfill compaction is only moderate.
Pipe-arch	Span x Rise 17 in. x 13 in. to 20 ft. 7 in. x 13 ft. 2 in.	Where headroom is limited. Has hydraulic advantages at low flows. Corner plate radius. 16 inches or 31 inches for structural plate.
Underpass*	Span x Rise 5 ft. 9 in. x 5 ft. 9 in. to 20 ft. 4 in. x 17 ft. 9 in.	For pedestrians, livestock or vehicles (structural plate).
Arch	Span x Rise 6 ft. x 1 ft. 9 1/2 in. to 25 ft. x 12 ft. 6 in.	For low clearance large waterway opening, and aesthetics (structural plate).
Horizontal Ellipse	Span 7–40 ft.	Culverts, grade separations, storm sewers, tunnels.
Pear	Span 25–30 ft.	Grade separtsions, culverts, storm sewers, tunnels.
High Profile Arch	Span 20–45 ft.	Grade separtsions, culverts, storm sewers, tunnels, ammo ammunition magazines, earth covered storage.
Low Profile Arch	Span 20–50 ft.	Low-Wide waterway enclosures, culverts, storm sewers.
Box Culverts	Span 10–26 ft.	Low-Wide waterway enclosures, culverts, storm sewers.
Specials	Various	For lining old structures or other special purposes. Special fabrication.

*For equal area or clearance, the round shape is generally more economical and simpler to assemble.

4.4.4 Corrugated Aluminum

Corrugated aluminum culverts are constructed from factory assembled corrugated aluminum pipe or field assembled from structural plates. Structural plate aluminum culverts are available as conventional structural plate structures, box culverts, or long span structures.

• Material – Corrugated aluminum pipe is fabricated from aluminum-alloy sheets. It is very lightweight for shipping and handling. It has good resistance to corrosion, especially in brackish waters but is subject to abrasion in fast-flowing streams with a significant load of sand or rock. It is generally more flexible than steel, requires greater care in installation, and is less tolerant of less-than-normal cover.

• Shapes – Corrugated aluminum may be used for a wide variety of shapes, sizes, and lengths of culverts. The culverts may be made from prefabricated sections that are factory produced or assembled in the field from specially fabricated plates. The shapes may be made from various thickness of plate stock.

Pipe - Factory assembled aluminum pipe is available in two basic shapes: round and pipe arch. Both shapes are produced with several different wall thicknesses, several corrugation patterns, and with annular (circumferential) or helical (spiral) corrugations. Round aluminum pipe is available in standard sizes up to 3000 mm (120 inches) in nominal diameter. Aluminum arch pipe is available in sizes up to the equivalent of a 2400 mm (96-inch) diameter round pipe.

Structural plate - Structural plate aluminum pipes are field assembled with 228 mm (9-inch)-pitch by 64 mm (2.5-inch)-depth corrugations. Plates are manufactured in a variety of plate thicknesses and are pre-curved for the specific size and shape of the structure to be erected. Plates are manufactured in lengths of SN through 18N, where N equals 3 pi or 244 mm (9.625 inches). Plate length is measured along the circumference of the structure. Standard plates have a net width of 1.4 m (4.5 ft.). Structural plate aluminum pipes are produced in five basic shapes: round, pipe arch', arch, pedestrian/animal underpass, and vehicle underpass. A wide range of standard sizes is available for each shape. Spans as large as 7.9 m (26 feet) can be obtained for the arch shape.

Box - The aluminum box culvert utilizes standard aluminum structural plates with aluminum rib reinforcing added in the areas of maximum moments. Ribs are bolted to the exterior of the aluminum shell during installation. Aluminum box culverts are suitable for shallow depths of fill and are available with spans ranging from 2.7 m (8 feet 9 inches) to 7.7m (25 feet 5 inches).

Long Span - Long span aluminum structures are assembled using conventional 225 by 64 mm (9- by 2.5-inch) corrugated aluminum plates and aluminum rib stiffeners. Long span aluminum structures are available in the same five basic shapes as steel long spans: including horizontal ellipse, pipe arch, low profile arch, high profile arch, and pear shape. The typical sizes for aluminum spans are essentially the same as the typical sizes available for steel long span structures. Spans range from 5.9 m (19 feet 4 inches) to 12.2 m (40 feet).

811 Know what's below. Call before you dig.

soa
SIERRA OVERHEAD ANALYTICS
18359 MICROTRONICS WAY
SONORA, CALIFORNIA 95370
CONNECTICUT PROFESSIONAL ENGINEERING CORPORATION #PEC.0001969

REV	DESCRIPTION	DATE
6	ISSUED FOR CONSTRUCTION - DRAFT	9/4/2020
7	ISSUED FOR CONSTRUCTION - DRAFT	9/18/2020
8	ISSUED FOR CONSTRUCTION - DRAFT	10/22/2020
9	ISSUED FOR CONSTRUCTION - DRAFT	11/06/2020
10	ISSUED FOR CONSTRUCTION	1/20/2021
-	-	-
-	-	-
-	-	-
-	-	-
-	-	-

CONFIDENTIALITY:
THE INFORMATION DEPICTED ON THIS DOCUMENT IS PROPRIETARY AND THE SOLE PROPERTY OF SIERRA OVERHEAD ANALYTICS, INC (SOA). ANY USE OR DISCLOSURE OF THIS INFORMATION IS EXPRESSLY PROHIBITED WITHOUT THE PRIOR WRITTEN CONSENT OF SOA.

CS Energy Building a Cleaner Future
2045 LINCOLN HIGHWAY
EDISON, NEW JERSEY 08817

PROJECT NAME:
STONINGTON SOLAR PROJECT

PROJECT ADDRESS:
ELLA WHEELER RD.
NORTH STONINGTON, CT 06359
41° 25' 9.71"N, 71° 50' 4.83"W

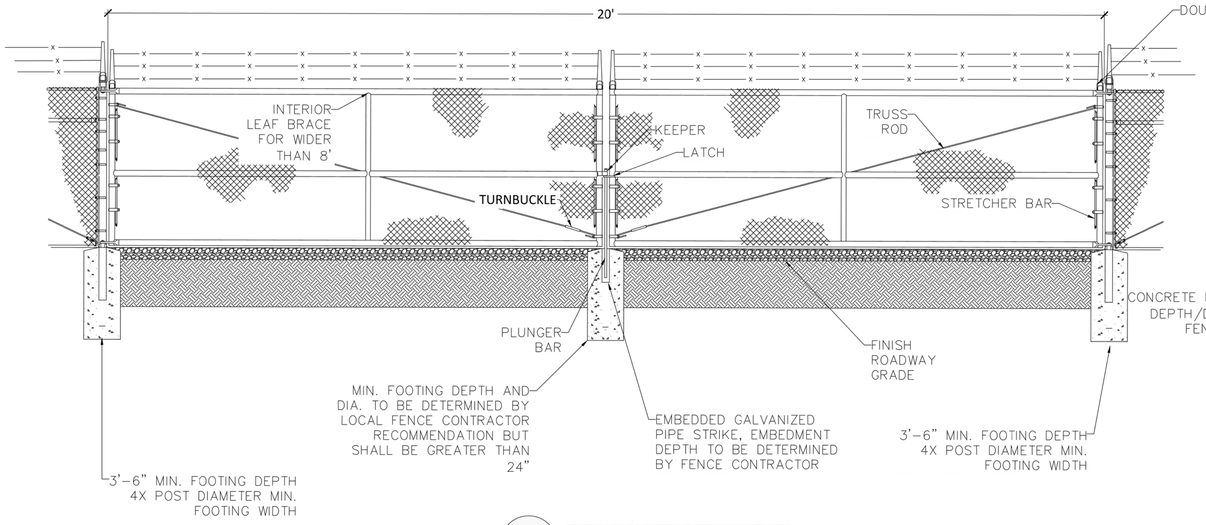
SEAL: STATE OF CONNECTICUT · DARIN RAY GALLOWAY · No. 34152 · LICENSED PROFESSIONAL ENGINEER

DATE: 21-JAN-20
PROJECT #: 20200309_CT
DRAWN BY: MMM
CHECKED BY: DRG

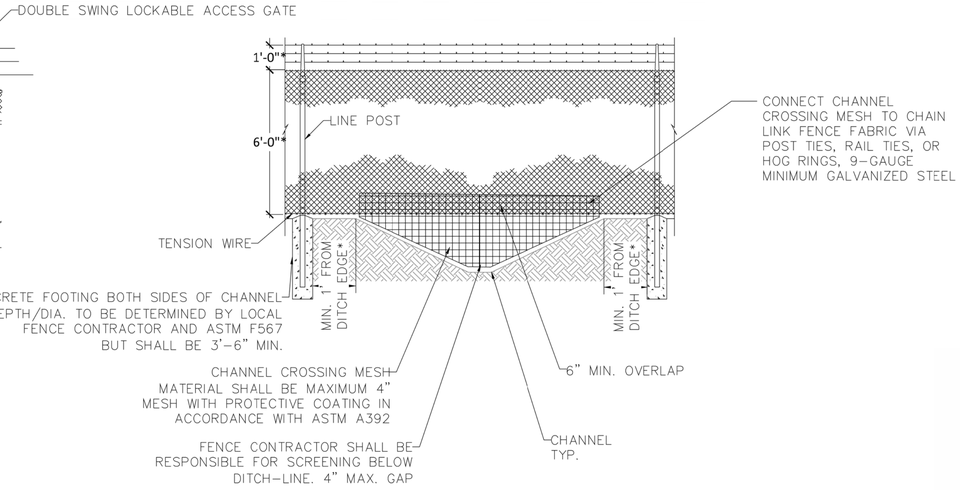
TITLE: CULVERT DETAILS
SHEET: C–401

PLOT DATE: Tuesday, January 19, 2021

LOCATION: E:\DROPBOX (SOA)\ENGINEERING\CS ENERGY\2020-03-09_STONINGTON\CAD\CIVIL DETAILS.DWG PLOTTED BY: DARIN GALLOWAY



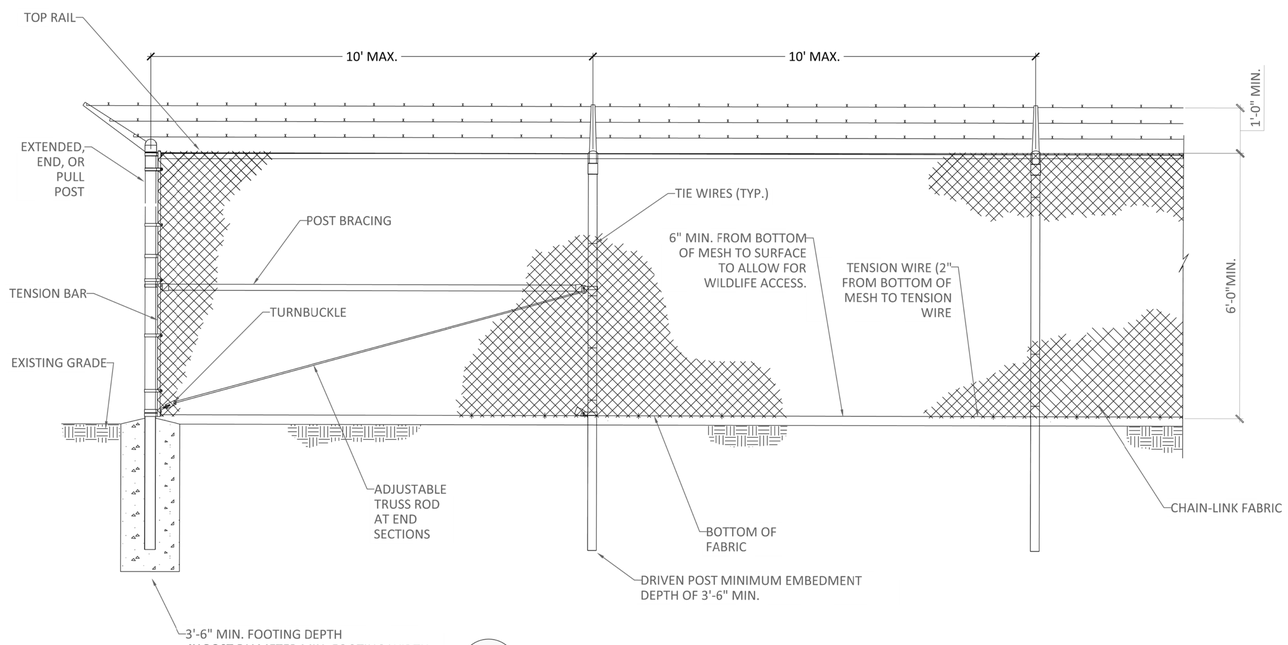
1 C-402 **DRIVE GATE DETAIL, TYP.**
Scale: NTS



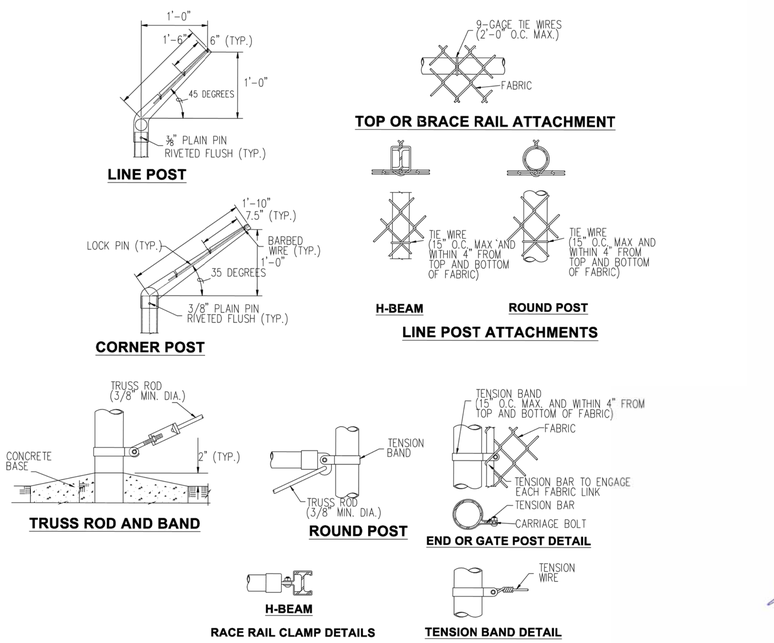
2 C-402 **FENCE CROSSING GRASS LINE CHANNELS DETAIL, TYP.**
Scale: NTS

FENCE INSTALLATION NOTES:

1. FENCE TO BE INSTALLED IN GENERAL ACCORDANCE WITH ASTM F567. LOCAL FENCE CONTRACTOR TO ALTER ASTM F567 REQUIREMENTS TO MEET SITE SPECIFIC CONDITIONS.
2. FENCE FABRIC SHALL BE GALVANIZED IN ACCORDANCE WITH ASTM A392, CLASS 2.
3. STRENGTH AND PROTECTIVE COATINGS OF ALL FENCE FRAMEWORK SHALL CONFORM TO ASTM F1083.
4. CORNER, END, OR PULL POST FOOTING MINIMUM CONCRETE COMPRESSIVE STRENGTH SHALL BE 2,500 PSI MIN.
5. CORNER, END, OR PULL POST FOOTING DEPTH SHALL BE A MINIMUM OF 36".
6. SWING GATE POST FOOTING DEPTHS AND DIAMETERS SHALL BE DETERMINED BASED ON ASTM F567, TABLE 2 AND ALTERED AS NEEDED BY FENCE CONTRACTOR.
7. IN AREAS WHERE EXISTING FENCES CONFLICT WITH SITE SECURITY FENCE, CONTRACTOR SHALL REMOVE AND DISPOSE OF EXISTING FENCE.
8. POSTS SHALL BE STEEL PIPE, ASTM F1083 STANDARD WEIGHT SCHEDULE 40
   8.1. LINE POSTS – 2" SCHEDULE 40
   8.2. TERMINAL POSTS (EXTENDED, END, AND PULL) 2½" SCHEDULE 40.
9. ALL STEEL OR MALLEABLE IRON PARTS AND ACCESSORIES SHALL BE HOT-DIP GALVANIZED IN ACCORDANCE WITH ASTM A123 AFTER FABRICATION.
10. POST TIES, RAIL TIES AND HOG RINGS—LINE POST, RAIL TIES, AND HOG RINGS SHALL BE IN ACCORDANCE WITH ASTM SPECIFICATION F626,9 GAUGE, 0.148 IN (376 MM) DIAMETER GALVANIZED STEEL.
11. 9 GAUGE MINIMUM FENCE FABRIC.



3 C-402 **SECURIY FENCE DETAIL, TYP.**
Scale: NTS



4 C-402 **FENCE ATTACHEMENT DETAILS, TYP.**
Scale: NTS

Know what's below. Call before you dig.

SIERRA OVERHEAD ANALYTICS
18359 MICROTRONICS WAY
SONORA, CALIFORNIA 95370
CONNECTICUT PROFESSIONAL ENGINEERING CORPORATION #PEC.0001969

REV	DESCRIPTION	DATE
6	ISSUED FOR CONSTRUCTION - DRAFT	9/4/2020
7	ISSUED FOR CONSTRUCTION - DRAFT	9/18/2020
8	ISSUED FOR CONSTRUCTION - DRAFT	10/22/2020
9	ISSUED FOR CONSTRUCTION - DRAFT	11/06/2020
10	ISSUED FOR CONSTRUCTION	1/20/2021
-	-	-
-	-	-
-	-	-
-	-	-
-	-	-

CONFIDENTIAL:
THE INFORMATION DEPICTED ON THIS DOCUMENT IS PROPRIETARY AND THE SOLE PROPERTY OF SIERRA OVERHEAD ANALYTICS, INC (SOA). ANY USE OR DISCLOSURE OF THIS INFORMATION IS EXPRESSLY PROHIBITED WITHOUT THE PRIOR WRITTEN CONSENT OF SOA.

CS Energy
Building a Cleaner Future
2045 LINCOLN HIGHWAY
EDISON, NEW JERSEY 08817

PROJECT NAME:
STONINGTON SOLAR PROJECT

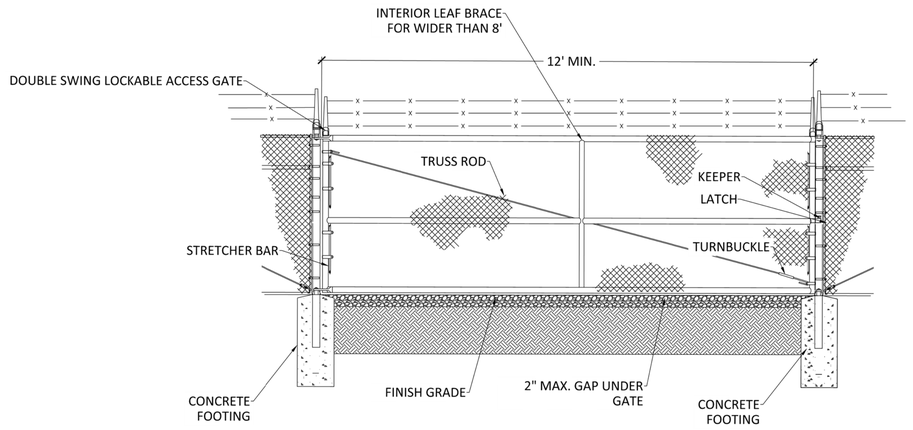
PROJECT ADDRESS:
ELLA WHEELER RD.
NORTH STONINGTON, CT 06359
41° 25' 9.71"N, 71° 50' 4.83"W

SEAL: STATE OF CONNECTICUT · DARIN RAY GALLOWAY · No. 34152 · LICENSED PROFESSIONAL ENGINEER

DATE: 21-JAN-20
PROJECT #: 20200309_CT
DRAWN BY: MMM
CHECKED BY: DRG

TITLE: FENCE DETAILS
SHEET: C-402

PLOT DATE: Tuesday, January 19, 2021



1 C-403 12' MAINTENANCE ACCESS GATE, TYP.

Scale: NTS

FENCE INSTALLATION NOTES:

1. 12' MAINTENANCE GATES TO BE UTILIZED AT LOCATIONS FOR ACCESS TO MAINTAIN SEDIMENT TRAPS OR BASINS.
2. FOR LOCATIONS SEE G&D DETAIL SHEETS.
3. EMBEDMENT DEPTHS AND INSTALLATION TO MIRROR 20' DRIVE GATES.

PLOT DATE: Tuesday, January 19, 2021

SIERRA OVERHEAD ANALYTICS
18359 MICROTRONICS WAY
SONORA, CALIFORNIA 95370
CONNECTICUT PROFESSIONAL
ENGINEERING CORPORATION #PEC.0001969

REV	DESCRIPTION	DATE
6	ISSUED FOR CONSTRUCTION - DRAFT	9/4/2020
7	ISSUED FOR CONSTRUCTION - DRAFT	9/18/2020
8	ISSUED FOR CONSTRUCTION - DRAFT	10/22/2020
9	ISSUED FOR CONSTRUCTION - DRAFT	11/06/2020
10	ISSUED FOR CONSTRUCTION	1/20/2021
-	-	-
-	-	-
-	-	-
-	-	-
-	-	-

CONFIDENTIAL:
THE INFORMATION DEPICTED ON THIS DOCUMENT IS PROPRIETARY AND THE SOLE PROPERTY OF SIERRA OVERHEAD ANALYTICS, INC (SOA). ANY USE OR DISCLOSURE OF THIS INFORMATION IS EXPRESSLY PROHIBITED WITHOUT THE PRIOR WRITTEN CONSENT OF SOA.

CS Energy
Building a Cleaner Future
2045 LINCOLN HIGHWAY
EDISON, NEW JERSEY 08817

PROJECT NAME:
STONINGTON SOLAR PROJECT

PROJECT ADDRESS:
ELLA WHEELER RD.
NORTH STONINGTON, CT 06359
41° 25' 9.71"N, 71° 50' 4.83"W

SEAL: STATE OF CONNECTICUT · DARIN RAY GALLOWAY · No. 34152 · LICENSED PROFESSIONAL ENGINEER

DATE: 21-JAN-20
PROJECT #: 20200309_CT
DRAWN BY: MMM
CHECKED BY: DRG

TITLE: FENCE DETAILS

SHEET: C-403

811 Know what's below. Call before you dig.

LOCATION: E:\DROPBOX (SOA)\ENGINEERING\CS ENERGY\2020-03-09_STONINGTON\CAD\CIVIL DETAILS.DWG PLOTTED BY: DARIN GALLOWAY

EROSION AND SEDIMENT CONTROL NOTES:

ALL EROSION AND SEDIMENT CONTROL WORK AND BMPs SHALL ADHERE TO THE FOLLOWING DOCUMENTS:

1. CONNECTICUT DEPARTMENT OF ENERGY AND ENVIRONMENTAL PROTECTION (CT-DEEP) GENERAL PERMIT FOR THE DISCHARGE OF STORMWATER AND DEWATERING WASTEWATERS FROM CONSTRUCTION ACTIVITIES (CGP) DEEP-WPED-GP-015.
2. NORTH STONINGTON ORDINANCE.
3. CONNECTICUT STATE BUILDING CODE.
4. 2002 CONNECTICUT GUIDELINES FOR SOIL EROSION AND SEDIMENT CONTROL BY THE CONNECTICUT COUNCIL ON SOIL AND WATER CONSERVATION IN COOPERATION WITH THE CONNECTICUT DEPARTMENT OF ENVIRONMENTAL PROTECTION.
5. ALL WORK SHALL COMPLY WITH THE CONDITIONS OF THE PERMITS OBTAINED FOR THE PROJECT AND ALL FEDERAL, STATE, AND LOCAL REGULATIONS.
6. ADDITIONAL BMP REQUIREMENTS ARE IN THE WETLAND AND VERNAL POOL PROTECTION PLAN INCLUDED ON ESC-102.

STANDARD STABILIZATION NOTES:

7. FOLLOWING INITIAL SOIL DISTURBANCE OR RE-DISTURBANCE, PERMANENT OR TEMPORARY STABILIZATION MUST BE COMPLETED IN ACCORDANCE WITH THE SWPCP.
8. ALL STABILIZED AREAS SHALL BE INSPECTED BY A CERTIFIED SWPCP INSPECTOR.

TYPICAL CONSTRUCTION SEQUENCE:

9. INSTALL SITE ENTRANCE.
10. INSTALL STABILIZED CONSTRUCTION ENTRANCE.
11. CLEAR (GRUB IF NECESSARY) SITE FOR PERIMETER EROSION AND SEDIMENT CONTROLS (BMP'S) ONLY.
12. INSTALL TEMPORARY PERIMETER BMPs.
13. INSTALL TEMPORARY SEDIMENT TRAPS AND TEMPORARY SEDIMENT BASINS.
14. ROUGH GRADE ROAD(S) AND LAYDOWN/MATERIAL STORAGE AREA IMPORTING MATERIAL AS NECESSARY FROM ON-SITE OR OFF-SITE SOURCE PER PROPOSED GRADES PROVIDED TO CREATE OR MAINTAIN POSITIVE DRAINAGE, UNLESS NOTED OTHERWISE.
15. CONSTRUCT THE SOLAR PLANT.
16. FINAL GRADE THE ENTRANCE.
17. PERFORM TEMPORARY STABILIZATION SEEDING OF DISTURBED AREAS IF REQUIRED.
18. CONSTRUCT PERMANENT STORMWATER CONTROLS.
19. STABILIZE ALL REMAINING DISTURBED AREAS WITH PERMANENT VEGETATION OR SITE SPECIFIC VEGETATION AS NOTED INCLUDING TOP SOILING, FERTILIZING, AND MULCHING, IF REQUIRED.
20. STABILIZATION OF ALL AREAS DISTURBED BY REMOVAL OF BMP'S WILL BE PERFORMED PRIOR TO FINAL INSPECTION.
21. ALL MAINTENANCE OF THE FINAL SITE AND PERMANENT BMP'S SHALL BE CONTROLLED BY SITE OWNER.
22. IF THE SEQUENCE OF CONSTRUCTION AND BMP INSTALLATION IS MODIFIED BY THE CONTRACTOR. THE CONTRACTOR SHALL SUBMIT TO THE ENGINEER THESE CORRECTIONS TO UPDATE THE EROSION AND SEDIMENT CONTROL PLAN. THE CERTIFIED SWPCP DESIGNER SHALL UPDATE THE SWPCP. THESE CHANGES SHALL BE APPROVED BY THE AHJ PRIOR TO IMPLEMENTATION.

INSPECTIONS AND MAINTENANCE OF BMP'S:

23. ADDITIONAL INSPECTION REQUIREMENTS ARE IN THE WETLAND AND VERNAL POOL PROTECTION PLAN INCLUDED ON ESC-102.
24. THE CERTIFIED SWPCP INSPECTOR SHALL INSPECT ALL DISCHARGE POINTS, DISTURBED AREAS, MATERIAL STORAGE AREAS, STRUCTURAL CONTROLS AND CONSTRUCTION ENTRANCES/EXITS IN ACCORDANCE WITH THE APPROVED SWPCP. ALL OBSERVATIONS AND INCIDENTS OF NON-COMPLIANCE, CORRECTIVE ACTIONS, AND MAINTENANCE SHALL BE RECORDED IN THE SWPCP INSPECTION REPORT.
25. INSPECTIONS OF BMP'S SHALL BE DOCUMENTED AND SIGNED BY THE CERTIFIED SWPCP INSPECTOR AND PROVIDED TO PROJECT MANAGEMENT AND CONTRACTOR.
26. IF BMP INSPECTION REPORTS DO NOT IDENTIFY INCIDENCES OF NON-COMPLIANCE, THE BMP INSPECTION REPORT SHALL CONTAIN A CERTIFICATION THAT THE FACILITY IS IN COMPLIANCE WITH THE SWPCP AND THE CGP.
27. IF REQUIRED, MAINTENANCE OF BMP'S SHALL BE CONDUCTED BY A CERTIFIED SWPCP INSTALLER AND SHALL OCCUR WITHIN 24 HOURS OF THE INSPECTION.
28. BMP'S DETAILED IN THE EROSION AND SEDIMENT CONTROL PLAN ARE ONLY AN ESTIMATE OF WHAT NEEDS TO BE IMPLEMENTED PRIOR TO AND DURING CONSTRUCTION. IF BMP INSPECTIONS IDENTIFY AREAS OF THE PROJECT SITE WHERE PROPERLY INSTALLED BMP'S ARE NOT CONTROLLING FLOW OF SEDIMENT OFF-SITE, IT IS THE CONTRACTORS OBLIGATION TO IMPLEMENT COST EFFECTIVE/PRACTICAL BMP'S WHILE GRADING AND CONSTRUCTION ACTIVITIES ARE OCCURRING.
29. EROSION AND SEDIMENT CONTROL DRAWINGS ARE SUBJECT TO ADDITIONAL, NEW AND ALTERNATIVE BMP'S WHEN REQUESTED OR APPROVED BY THE ENGINEER, CERTIFIED SWPCP INSPECTOR, CERTIFIED SWPCP DESIGNER, OR AHJ.
30. IT IS THE RESPONSIBILITY OF THE CERTIFIED SWPCP INSPECTOR TO IDENTIFY ALL INCIDENTS OF NON-COMPLIANCE, CORRECTIVE ACTIONS, AND MAINTENANCE AND ENSURE THAT PROJECT MANAGEMENT IS ALERTED TO ALL ISSUES.
31. SEDIMENT SHALL BE REMOVED WITHIN 24 HOURS OF SEDIMENT REACHING 1/3 HEIGHT OF PERIMETER BMPs.
32. SEDIMENT TRACKED OFF-SITE FROM CONSTRUCTION TRAFFIC SHALL BE REMOVED FROM PAVED SURFACES WITHIN 24 HOURS OF DISCOVERY.

PERIMETER CONTROL BMPs:

33. PERIMETER CONTROL BMPs SHALL BE CONSTRUCTED BEFORE UP-SLOPE GROUND COVER IS REMOVED.
34. CLEARING, GRUBBING, AND STUMPING CAN OCCUR BEFORE SILT FENCE INSTALLATION IF GROUND COVER IS REMOVED.
35. ALL PERIMETER CONTROL BMPs SHALL BE PLACED AS CLOSE TO THE CONTOUR AS POSSIBLE SO THAT WATER WILL NOT CONCENTRATE AT LOW POINTS AND SO THAT SMALL SWALES OR DEPRESSIONS THAT MAY CARRY SMALL CONCENTRATED FLOWS TO THE PERIMETER CONTROL BMP ARE DISSIPATED ALONG ITS LENGTH.
36. ENDS OF PERIMETER CONTROL BMPs SHALL BE BROUGHT UP-SLOPE SLIGHTLY SO THAT WATER PONDING WILL BE PREVENTED FROM FLOWING AROUND THE BMPs.
37. IF USED BENEATH A SLOPE, SILT FENCE SHOULD BE A MINIMUM OF 10 FEET FROM THE TOE OF THE SLOPE.
38. SILT FENCE SHALL BE TRENCHED IN. THE TRENCH SHALL BE MADE WITH A TRENCHER, CABLE LAYING MACHINE, SLICING MACHINE, OR OTHER SUITABLE DEVICE THAT WILL ENSURE AN ADEQUATELY UNIFORM TRENCH DEPTH.
39. WHERE 2 SECTIONS OF PREFABRICATED SILT FENCE ARE COMBINED INTO ONE RUN, THE END POSTS SHALL BE CONNECTED TOGETHER, NOT SIMPLY OVERLAPPED.
32. SILT FENCE SHALL ALLOW RUNOFF TO PASS ONLY AS DIFFUSE FLOW THROUGH THE GEOTEXTILE. IN RUNOFF FLOW, ONE OF THE FOLLOWING SHALL BE PERFORMED, AS APPROPRIATE:
    - 32.1. AN ADDITIONAL RUN OF SILT FENCE SHALL BE PLACED UPSTREAM
    - 32.2. THE LAYOUT OF THE SILT FENCE SHALL BE CHANGED
    - 32.3. ACCUMULATED SEDIMENT SHALL BE REMOVED
    - 32.4. OTHER PRACTICES SHALL BE IMPLEMENTED.
33. SEDIMENT DEPOSITS SHALL BE REMOVED WHEN THE DEPOSIT REACHES APPROXIMATELY ONE HALF OF THE HEIGHT OF THE SILT FENCE.
34. ALL STOCKPILES SHALL BE ENCIRCLED WITH AN APPROPRIATE BMP SUCH AS SILT FENCE, FIBER ROLL, OR SEDIMENT LOGS.
35. SILT FENCE FABRIC SHALL MEET THE FOLLOWING SPECIFICATIONS:
    - 35.1. MINIMUM TENSILE STENGTH = 120 LBS (ASTM D4632)
    - 35.2. MAXIMUM ELONGATION AT 60 LBS. = 15% (ASTM D 4632)
    - 35.3. MINIMUM PUNCTURE STRENGTH = 50 LBS. (ASTM D 4833)
    - 35.4. MINIMUM TEAR STRENGTH = 40 LBS. (ASTM D4533)
    - 35.5. APPARENT OPENING SIZE <= 0.84MM (ASTM D 4751)
    - 35.6. MINIMUM PERMITTIVITY = 1X10-2SEC.-1 (ASTM D 4491)
    - 35.7. WATER FLOW RATE = 15 GAL./MIN/SQ. FT.
    - 35.8. UV EXPOSURE STRENGTH RETENTION = 70% (ASTM G4355)

TEMPORARY SEDIMENT BASINS:

36. TEMPORARY SEDIMENT BASINS WERE SIZED BASED ON THE CONNECTICUT GUIDLINES FOR SOIL EROSION & SEDIMENT CONTROL, CONNECTICUT SEDIMENT STORAGE VOLUME CALCULATION (2002). SEDIMENT BASINS WERE PLACED DOWN SLOPE OF GRADED OR OTHERWISE HIGHLY DISTURBED AREAS.
37. SEDIMENT BASINS SHALL BE CONSTRUCTED AS DEPICTED ON ESC-303 THROUGH ESC-315.
38. SEDIMENT BASINS ARE LOCATED IN THE SAME FOOTPRINT AS PERMANENT STORMWATER BASINS AND BERMS. SEDIMENT BASIN NUMBERING CORROSPONDS TO STORMWATER BASIN/BERM NUMBERING (E.G. SEDIMENT BASIN 1 IS IN THE SAME FOOTPRINT AS STORMWATER BASIN 1).
    - 38.1. AFTER FINAL STABILIZATION OF THE SITE, THE FOLLOWING SEQUENCE SHALL BE PERFORMED PRIOR TO CONSTRUCTION OF THE PERMANENT STORMWATER CONTROLS:
        - 38.1.1. SEDIMENT BASINS LOCATED WHERE BIOFILTRATION BASINS OR BERMS ARE LOCATED SHALL BE EXCAVATED TO THE FULL DEPTH OF THE FILTER MEDIA AND RECONSTRUCTED AS DEPICTED ON GRADING & DRAINAGE DESIGN SHEETS.
        - 38.1.2. SEDIMENT BASINS LOCATED WHERE INFILTRATION BASINS OR BERMS ARE LOCATED SHALL HAVE ANY SEDIMENT ACCUMULATION REMOVED AND SCARIFIED TO 12" BELOW BASIN BOTTOM ELEVATION. FOLLOWING CLEANING AND SCARIFICATION, THE STORMWATER CONTROLS SHALL BE RECONSTRUCTED AS DEPICTED ON GRADING & DRAINAGE DESIGN SHEETS.
39. SEDIMENT BASINS SHALL BE INSPECTED IN ACCORDANCE WITH THE REQUIREMENTS IN SECTION 7 OF THE STORMWATER POLLUTION CONTROL PLAN.
40. SEDIMENT BASINS SHALL BE CLEANED WHEN SEDIMENT ACCUMULATION EXCEEDS ONE HALF THE WET STORAGE CAPACITY OF THE BASIN OR WHEN THE DEPTH OF AVAILABLE POOL IS REDUCED TO 18-INCHES, WHICHEVER IS ACHIEVED FIRST.

EROSION CONTROL:

41. SLOPE MATTING SHALL BE PLACED AND SECURED ON CUT/FILL SLOPES IMMEDIATELY FOLLOWING FINAL GRADE IN ACCORDANCE WITH THE STANDARD DETAIL SHEETS ON ESC-101.
42. IF SLOPE MATTING DOES NOT ADEQUATELY CONTROL EROSION, A HAY BALE BARRIER SHALL BE PLACED AT THE TOP OF THE SLOPE WITH TEMPORARY PIPE SLOE DRAINS AND STABILIZED OUTFALLS TO CONVEY RUNOFF TO THE BOTTOM OF THE SLOPE.
43. NO GREATER THAN 5-ACRES (CONTIGUOUS) SHALL BE DISTURBED AT ONE TIME.
44. IMMEDIATELY FOLLOWING FINAL GRADING, DISTURBED AREAS SHALL BE STABILIZED WITH WOOD CHIP MULCH OR DISC ANCHORED STRAW.
    - 44.1. IF WOOD CHIP MULCH IS USED FOR STABILIZATION, PRIOR TO FINAL SEEDING, THE WOOD CHIPS SHALL EITHER BE REMOVED FROM THE SITE OR SHALL BE TILLED INTO THE SOIL WITH NITROGEN FERTILIZER.
    - 44.2. IF DISC ANCHORED STRAW IS USED FOR STABILIZATION, NO ADDITIONAL ACTION IS REQUIRED PRIOR TO FINAL SEEDING.

TOPSOIL:

45. IN GRADING AREAS, TOPSOIL SHALL BE STOCKPILED NEAR THE GRADING. FOLLOWING FINAL GRADE, TOPSOIL SHALL BE SPREAD EVENLY ONVER GRADED AREA AND IMMEDIATELY SEEDED WITH A TEMPORARY SEED MIX.
46. IN AREAS THAT ARE TO REMAIN IMPERVIOUS POST-CONSTRUCITON (ROADS, EQUIPMENT PADS) TOPSOIL FROM EXCAVATIONS SHALL BE SPREAD EVENLY THROUGHOUT ARRAY AREA.

SEED MIX (PERMANENT):

47. SEEDING WILL BE DONE POST CONSTRUCTION AND ENCOMPASS ALL DISTURBED AREAS (SWALES, RETENTION/DETENTION STRUCTURES, GRADING AREAS), WITH THE EXCEPTION OF ROADS AND EQUIPMENT PADS.
48. PERMANENT SEED MIX SHALL INCORPORATE POLLINATOR FRIENDLY PLANTS THAT DO NOT EXCEED 12" IN HEIGHT AT FULL GROWTH.
49. SEEDING AREA MIX WILL BE ACCORDANCE WITH THE FOLLOWING TABLE AND AS DIRECTED BY A HORTICULTURIST WITH KNOWLEDGE OF PLANT SPECIES NATIVE TO THE AREA:

Figure PS-2 Selecting Seed Mix to Match Need

Area To Be Seeded	Mixture Number[1]	
	Mowing Desired	Mowing Not Required
BORROW AREAS, ROADSIDES, DIKES, LEVEES, POND BANKS AND OTHER SLOPES AND BANKS		
A) Well or excessively drained soil[2]	1,2,3,4,5 or 8	5, 6, 7, 8, 9, 10, 11, 12, 16, ***22***
B) Somewhat poorly drained soils[2]	2	5, 6
C) Variable drainage soils[2]	2	5, 6, 11
DRAINAGE DITCH AND CHANNEL BANKS		
A) Well or excessively drained soils[2]	1, 2, 3, or 4	9, 10, 11, 12
B) Somewhat poorly drained soils[2]	2	
C) Variable drainage soils[2]	2	
LAWNS AND HIGH MAINTENANCE AREAS	1, 19, ***21*** or ***29***	

[1] The numbers following in these columns refer to seed mixtures in **Figure PS-3**. Mixes for shady areas are in ***bold-italics*** print (including mixes 20 through 24).
[2] See county soil survey for drainage class. Soil surveys are available from the County Soil and Water Conservation District Office.
[3] Use mix 26 when soil passing a 200 mesh sieve is less than 15% of total weight. Use mix 26 & 27 when soil passing a 200 mesh sieve is between 15 and 20% of total weight. Use mix 26, 27 & 28 when soil passing a 200 mesh sieve is above 20% of total weight.

Figure PS-3 Seed Mixtures for Permanent Seeding (con't)

No.	Seed Mixture (Variety)[4]	Lbs/1,000 Lbs/Acre	No. Sq. Ft.
12[6]	Switchgrass (Blackwell, Shelter, Cave-in-rock)	101	.25
	Perennial Ryegrass (Norlea, Manhatten)	5	.10
	Crown Vetch (Chemung, Penngift) with inoculant[1]	15	.35
		Total 45	1.05
13[6]	Crown Vetch (Chemung, Penngift) with inoculant[1]	10	.25
	(or Flatpea (Lathco) with inoculant[1])	(30)	(.75)
	Switchgrass (Blackwell, Shelter, Cave-in-rock)	51	.10
	Perennial Ryegrass (Norlea, Manhatten)	5	.10
		Total 20 (or 40)	.45 (or .95)
14[5]	Crown Vetch (Chemung, Penngift) with inoculant[1]	15	.35
	(or Flatpea (Lathco) with inoculant[1])	(30)	(.75)
	Perennial Ryegrass (Norlea, Manhatten)	10	.25
		Total 25 (or 40)	.60 (or 1.00)
15[6]	Switchgrass (Blackwell, Shelter, Cave-in-rock)	51	.10
	Big Bluestem (Niagra, Kaw) or Little Bluestem (Blaze, Aldous, Camper)	51	.10
	Perennial Ryegrass (Norlea, Manhatten)	5	.10
	Bird's-foot Trefoil (Empire, Viking) with inoculant[1]	5	.10
		Total 20	.40
16[5]	Tall Fescue (Kentucky 31)	20	.45
	Flatpea (Lathco) with inoculant[1]	30	.75
		Total 50	1.20
17[6]	Deer Tongue (Tioga) with inoculant[1]	10[1]	.25
	Bird's-foot Trefoil (Empire, Viking) with inoculant[1]	8	.20
	Perennial Ryegrass (Norlea, Manhatten)	3	.07
		Total 21	.52
18[6]	Deer Tongue (Tioga) with inoculant[1]	10[1]	.25
	Crown Vetch (Chemung, Penngift) with inoculant[1]	15	.35
	Perennial Ryegrass (Norlea, Manhatten)	3	.07
		Total 28	.67
19[3]	Chewings Fescue	35	.80
	Hard Fescue	30	.70
	Colonial Bentgrass	5	.10
	Bird's-foot Trefoil (Empire, Viking) with inoculant[1]	10	.20
	Perennial Ryegrass	20	.50
		Total 100	2.30
20[5]	Deleted due to invasive species		
21[5]	Creeping Red Fescue (Pennlawn, Wintergreen)	Total 60	1.35
22[5]	Creeping Red Fescue (Pennlawn, Wintergreen)	40	.90
	Tall Fescue (Kentucky 31)	20	.45
		Total 60	1.35
23[5]	Creeping Red Fescue (Pennlawn, Wintergreen)	15	.35
	Flatpea (Lathco) with inoculant[1]	30	.75
		Total 45	3.60
24[5]	Tall Fescue (Kentucky 31)	Total 150	3.60

Figure PS-3 Seed Mixtures for Permanent Seeding

No.	Seed Mixture (Variety)[4]	Lbs/Acre	Lbs/1,000 Sq. Ft.
1[5]	Kentucky Bluegrass	20	.45
	Creeping Red Fescue (Pennlawn, Wintergreen)	20	.45
	Perennial Ryegrass (Norlea, Manhatten)	5	.10
		Total 45	1.00
2[5]	Creeping Red Fescue (Pennlawn, Wintergreen)	20	.45
	Redtop (Streeker, Common)	2	.05
	Tall Fescue (Kentucky 31) or Smooth Bromegrass (Saratoga, Lincoln)	20	.45
		Total 42	.95
3[5]	Creeping Red Fescue (Pennlawn, Wintergreen)	20	.45
	Bird's-foot Trefoil (Empire, Viking) with inoculant[1]	8	.20
	Tall Fescue (Kentucky 31) or Smooth Bromegrass (Saratoga, Lincoln)	20	.45
		Total 48	1.10
4[5]	Creeping Red Fescue (Pennlawn, Wintergreen) or Tall Fescue (Kentucky 31)	20	.45
	Redtop (Streeker, Common)	2	.05
	Bird's-foot Trefoil (Empire, Viking) with inoculant[1]	8	.20
		Total 30	.70
5[5]	White Clover	10	.25
	Perennial Rye Grass	2	.05
		Total 12	.30
6[5]	Creeping Red Fescue	20	.50
	Redtop (Streeker, Common)	2	.05
	Perennial Rye Grass	20	.50
		Total 42	1.05
7[5]	Smooth Bromegrass (Saratoga, Lincoln)	15	.35
	Perennial Ryegrass (Norlea, Manhatten)	5	.10
	Bird's-foot Trefoil (Empire, Viking) with inoculant[1]	10	.25
		Total 30	.79
8[6]	Switchgrass (Blackwell, Shelter, Cave-in-rock)	10[1]	.25
	Weeping lovegrass	3	.07
	Little Bluestem (Blaze, Aldous, Camper)	10[1]	.25
		Total 23	.57
9[5]	Creeping Red Fescue (Pennlawn, Wintergreen)	10	.25
	Crown Vetch (Chemung, Penngift) with inoculant[1]	15	.35
	(or Flatpea (Lathco) with inoculant[1])	(30)	(.75)
	Tall Fescue (Kentucky 31) or Smooth Bromegrass (Saratoga, Lincoln)	15	.35
	Redtop (Streeker, Common)	2	.05
		Total 42 (or 57)	1.00 (or 1.40)
10[5]	Creeping Red Fescue (Pennlawn, Wintergreen)	20	.45
	Redtop (Streeker, Common)	2	.05
	Crown Vetch (Chemung, Penngift) with inoculant[1]	15	.35
	(or Flatpea (Lathco) with inoculant[1])	(30)	(.75)
		Total 37 (or 52)	.85 (or 1.25)
11[5]	Bird's-foot Trefoil (Empire, Viking) with inoculant[1]	8	.20
	Crown Vetch (Chemung, Penngift) with inoculant[1]	15	.35
	Creeping Red Fescue (Pennlawn, Wintergreen) or Tall Fescue (Kentucky 31)		
	or Smooth Bromegrass (Saratoga, Lincoln)	20	.45
		Total 43	1.00

Figure PS-3 Seed Mixtures for Permanent Seeding (con't)

No.	Seed Mixture (Variety)[4]	Lbs/Acre	Lbs/1,000 Sq. Ft.
25[5]	American Beachgrass (Cape)	58,500 culms/acre	1,345 culms/ 100 sq. ft
26[6]	Switchgrass (Blackwell, Shelter, Cave-in-rock)	4.0	.10
	Bg Bluestem (Niagra, Kaw)	4.0	.10
	Little Bluestem (Blaze, Aldous, Camper)	2.0	.05
	Sand Lovegrass (NE-27, Bend)	1.5	.03
	Bird's-foot Trefoil (Empire Viking)	2.0	.05
		Total 13.5	.33
27[5]	Flatpea (Lathco)	10	.20
	Perennial Pea (Lancer)	2	.05
	Crown Vetch (Chemung, Penngift)	10	.20
	Tall Fescue (Kentucky 31)	2	.20
		Total 24	.65
28[5]	Orchardgrass (Pennlate, Kay, Potomac)	5	.10
	Tall Fescue (Kentucky 31)	10	.20
	Redtop (Streeker, Common)	2	.05
	Brds-foot Trefoil (Empire Viking)	5	.10
		Total 22	.45
29	Turf Type Tall Fescue (Bonanza, Mustang, Rebel II, Spartan, Jaguar) or Perennial Rye ("Future 2000" mix; Fiesta II, Blazer II, and Dasher II)	175 to 250	6 to 8

[1] Use proper inoculant for legume seeds, use four times recommended rate when hydroseeding.
[2] Use Pure Live Seed (PLS) = $\frac{\%\ \text{Germination} \times \%\ \text{Purity}}{100}$
EXAMPLE: Common Bermuda seed with 70% germination and 80% purity= $\frac{70 \times 80}{100}$ or $\frac{56}{100}$ or 56%
$\frac{10\ \text{lbs PLS/acre}}{56\%}$ = 17.9 lbs/acre of bagged seed
[3] DOT AE purpose mix
[4] Wild flower mix containing New England Aster, Baby's Breath, Black Eye Susan, Catchfly, Dwarf Columbine, Purple Coneflower, Lance-leaved Coreopsis, Cornflowyr, Ox-eye Daisy, Scarlet Flax, Fougbwe, Gayfeather, Rocky Larkspur, Spanish Larkspur, Corn Poppy, Spurred Snapdragon, Wallflower and/or Yarrow may be added to any seed mix given. Most seed suppliers carr\ a wild flower mixture that is suitable for the Northeast and contains a variety of both annual and perennial flowers. Seeding rates for the specific mixtures should be followed.
[5] Considered to be a cool season mix.
[6] Considered to be a warm season mix.

811 Know what's below. Call before you dig.

soa
SIERRA OVERHEAD ANALYTICS
18859 MICROTRONICS WAY
SCNORA, CALIFORNIA 95370
CONNECTICUT PROFESSIONAL ENGINEERING CORPORATION #PEC.0001969

REV	DESCRIPTION	DATE
6	ISSUED FOR CONSTRUCTION - DRAFT	9/4/2020
7	ISSUED FOR CONSTRUCTION - DRAFT	9/18/2020
8	ISSUED FOR CONSTRUCTION - DRAFT	10/22/2020
9	ISSUED FOR CONSTRUCTION - DRAFT	11/06/2020
10	ISSUED FOR CONSTRUCTION	1/20/2021
-	-	-
-	-	-
-	-	-
-	-	-
-	-	-

CONFIDENTIAL:
THE INFORMATION DEPICTED ON THIS DOCUMENT IS PROPRIETARY AND THE SOLE PROPERTY OF SIERRA OVERHEAD ANALYTICS, INC (SOA). ANY USE OR DISCLOSURE OF THIS INFORMATION IS EXPRESSLY PROHIBITED WITHOUT THE PRIOR WRITTEN CONSENT OF SOA.

CS Energy
Building a Cleaner Future
2045 LINCOLN HIGHWAY
EDISON, NEW JERSEY 08817

PROJECT NAME:
STONINGTON SOLAR PROJECT

PROJECT ADDRESS:
ELLA WHEELER RD.
NORTH STONINGTON, CT 06359
41° 25' 9.71"N, 71° 50' 4.83"W

SEAL: STATE OF CONNECTICUT · DARRIN RAY GALLOWAY · No. 34152 · LICENSED PROFESSIONAL ENGINEER

DATE: 21-JAN-20
PROJECT #: 20200309_CT
DRAWN BY: MMM
CHECKED BY: DRG

TITLE: EROSION & SEDIMENT CONTROL NOTES
SHEET: ESC-100

SEED MIX (TEMPORARY):

1. TEMPORARY SEEDING WILL BE DONE POST GRADING AND ENCOMPASS ALL DISTURBED AREAS (SWALES, RETENTION/DETENTION STRUCTURES, GRADING AREAS), WITH THE EXCEPTION OF ROADS AND EQUIPMENT PADS.

2. TEMPORARY SEEDING AREA MIX AND APPLICATION SHALL BE ACCORDANCE WITH THE VEGETATIVE SOIL COVER/TEMPORARY SEEDING (TS) BMP INCLUDED ON THIS SHEET.

MULCH:

3. IF TEMPORARY SEEDING DATES CANNOT BE MET, DISC ANCHORED STRAW MULCH OR WOOD CHIPS SHALL BE APPLIED IN ACCORDANCE WITH THE SHORT TERM NON-LIVING SOIL PROTECTION/TEMPORARY SOIL PROTECTION (TSP) BMP INCLUDED ON THIS SHEET.

4. STRAW MULCH OR WOOD CHIPS SHALL BE APPLIED TO PROVIDE 100% SOIL COVERAGE AND DISC ANCHORED.

4-Short Term Non-living Soil Protection

Temporary Soil Protection (TSP)

Definition
Application of a degradable material that will protect the soil surface on a temporary basis without the intention of promoting plant growth.

Purpose
To prevent erosion by dissipating the erosive energy of raindrops and encouraging sheet flow over the soil surface.

Applicability
- When grading of the disturbed area will be suspended for a period of 30 or more consecutive days, but less than 5 months, stabilize the site within 7 days of the suspension of grading through the use of mulch or other materials appropriate for use as a temporary soil protector.
- For surfaces that are not to be reworked within 5 months but will be reworked within 1 year, use **Temporary Seeding**, **Mulch for Seed** or when slopes are less than 3:1, wood chips, bark chips or shredded bark.
- For surfaces that are to be reworked after 1 year, use **Permanent Seeding** and **Mulch for Seed**

Planning Considerations

See Mulching Selection Chart found in the Group Planning Considerations.

Specifications

Materials

Temporary soil protection materials include but are not limited to mulches, tackifiers, and nettings and shall be:

- ❍ *biodegradable or photo-degradable within 2 years but without substantial degradation for 5 months;*
- ❍ *free of contaminants that pollute the air or waters of the State when properly applied;*
- ❍ *free of foreign material, coarse stems and any substance toxic to plant growth or which interferes with seed germination; and*
- ❍ *capable of being applied evenly such that it provides 100% initial soil coverage and still adheres to the soil surface, does not slip on slopes when it rains or is watered, does not blow off site, and dissipates raindrop splash.*

Mulches within this specification include, but are not limited to:

Hay: The dried stems and leafy parts of plants cut and harvested, such as alfalfa, clovers, other forage legumes and the finer stemmed, leafy grasses. The average stem length should not be less than 4 inches. Hay that can be windblown should be anchored to hold it in place.

Straw: Cut and dried stems of herbaceous plants, such as wheat, barley, cereal rye, or brome. The average stem length should not be less than 4 inches. Straw that can be windblown should be anchored to hold it in place.

Wood Chips: Chipped wood material from logs, stumps, brush or trimmings including bark, stems and leaves having a general maximum size of 0.5 inch by 2 inches and free of excessively fine or long stringy particles as well as stones, soil and other debris. No anchoring is required. If seeding is performed where wood chips have been previously applied, prior to the seeding the wood chips should be removed or tilled into the ground and additional nitrogen applied. Nitrogen application rate is determined by soil test at time of seeding (anticipate 12 lbs. nitrogen per ton of wood chips).

Bark Chips, Shredded Bark: Tree bark shredded as a by product of timber processing having a general maximum size of 4 inches and free of excessively fine or long stringy particles as well as stone and other debris. Material use is the same as wood chips.

May also include corn stalks, leaves and other similar materials provided they meet the requirements of the materials section within this specification.

Note: *Wood and bark by-products may generate contaminated runoff if improperly stored for extended periods. These materials should only be stored on free draining, gently sloping soils, and only for short periods of time.*

If subsequent seeding is performed where cellulose dense mulches (e.g. leaves, excelsior, woodchips, barkchips) have been applied, then prior to seeding either remove the mulch or till it into the ground with the application of nitrogen.

Cellulose fiber is not recommended for use, except as a tackifier for other mulch materials.

Tackifiers within this specification include, but are not limited to:

Water soluble materials that cause mulch particles to adhere to one another, generally consisting of either a natural vegetable gum blended with gelling and hardening agents or a blend of hydrophilic polymers, resins, viscosifiers, sticking aids and gums. **Emulsified asphalts are specifically prohibited for use as tackifiers due to their potential for causing water pollution following its application.**

Nettings within this specification include but are not limited to:

Prefabricated openwork fabrics made of cellulose cords, ropes, threads, or biodegradable synthetic material that is woven, knotted or molded in such a manner that it holds mulch in place until temporary soil protection is no longer needed. Examples of netting are tobacco netting (used where flows are not concentrated) and jute netting (typically used in drainageways).

Substitute Measures

Where tackifiers or nettings are needed to anchor mulch, a **Temporary Erosion Control Blanket** or **Stone Slope Protection** may be substituted, providing 100% of the disturbed soil is covered.

Site Preparation

Prior to mulching, complete the required grading and install and/or repair other sediment control measures needed to control water movement within the area to be mulched.

Application

Spreading: Spread mulch material uniformly by hand or machine resulting in 100% coverage of the disturbed soil.

When spreading hay mulch by hand, divide the area to be mulched into approximately 1,000 square feet and place 2 to 3 bales of hay in each section to facilitate uniform distribution.

When spreading woodchips on slopes, it is particularly important not to spread the chips too thick. Excessive applications tend to slip or slump when saturated.

See **Figure TSP-1** for suggested application rates of specific mulches when used as temporary soil protection.

Figure TSP–1 Suggested Temporary Soil Protection Application Rates for 100% Cover

Mulch	Rate
Hay/Straw	2 – 3 Tons/acre
Wood Chips/ Shredded Bark	6 cu. yds./1000 sq. ft.

Anchoring: Apply tackifiers and/or netting either with the mulch or immediately following mulch application. Expect the need for tackifiers or netting along the shoulders of actively traveled roads, hill tops and long open slopes not protected by wind breaks.

When using netting the most critical aspect is to ensure that the netting maintains substantial contact with the mulch and the mulch, in turn, maintains continuous contact with the soil surface. Without such contact, the material is useless and erosion can be expected to occur. Install in accordance with manufacturer's recommendations.

Maintenance

Inspect temporary soil protection area at least once a week and within 24 hours of the end of a storm with a rainfall amount of 0.5 inch or greater for mulch movement and rill erosion.

Where soil protection falls below 100%, reapply soil protection within 48 hours. Determine the cause of the failure. If mulch failure was the result of wind, consider applying a tackifier or netting. If mulch failure was caused by concentrating water, install additional measures to control water and sediment movement, repair erosion damage, re-apply mulch with anchoring or use Temporary Erosion Control Blankets.

Inspections should take place until work resumes.

3-Vegetative Soil Cover

Temporary Seeding (TS)

Definition
Establishment of temporary stand of grass and/or legumes by seeding and mulching soils that will be exposed for a period greater than 1 month but less than 12 months.

Purpose
To temporarily stabilize the soil and reduce damage from wind and/or water erosion and sedimentation until permanent stabilization is accomplished.

Applicability
- Within the first 7 days of suspending work on a grading operation that exposes erodible soils where such suspension is expected to last for 1 to 12 months. Such areas include soil stockpiles, borrow pits, road banks and other disturbed or unstable areas.
- Not for use on areas that are to be left dormant for more than 1 year. Use permanent vegetative measures in those situations.

Specifications

Seed Selection

Select grass species appropriate for the season and site conditions from **Figure TS-2**.

Timing Considerations

Seed with a temporary seed mixture within 7 days after the suspension of grading work in disturbed areas where the suspension of work is expected to be more than 30 days but less than 1 year. Seeding outside the optimum seeding dates given in **Figure TS-2** may result in either inadequate germination or low plant survival rates, reducing erosion control effectiveness.

Site Preparation

Install needed erosion control measures such as diversions, grade stabilization structures, sediment basins and grassed waterways in accordance with the approved plan.

Grade according to plans and allow for the use of appropriate equipment for seedbed preparation, seeding, mulch application, and mulch anchoring. All grading should be done in accordance with the **Land Grading** measure.

Seedbed Preparation

Loosen the soil to a depth of 3-4 inches with a slightly roughened surface. If the area has been recently loosened or disturbed, no further roughening is required. Soil preparation can be accomplished by tracking with a bulldozer, discing, harrowing, raking or dragging with a section of chain link fence. Avoid excessive compaction of the surface by equipment traveling back and forth over the surface. If the slope is tracked, the cleat marks shall be perpendicular to the anticipated direction of the flow of surface water (see **Surface Roughening** measure).

Apply ground limestone and fertilizer according to soil test recommendations (such as those offered by the University of Connecticut Soil Testing Laboratory or other reliable source). Soil sample mailers are available from the local Cooperative Extension System office. Appendix E contains a listing of the Cooperative Extension System offices.

If soil testing is not feasible on small or variable sites, or where timing is critical, fertilizer may be applied at the rate of 300 pounds per acre or 7.5 pounds per 1,000 square feet of 10-10-10 or equivalent. Additionally, lime may be applied using rates given in **Figure TS-1**.

Figure TS-1 Soil Texture vs. Liming Rates

Soil Texture	Tons / Acre of Lime	Lbs / 1000 ft² of Lime
Clay, clay loam and high organic soil	3	135
Sandy loam, loam, silt loam	2	90
Loamy sand, sand	1	45

Seeding

Apply seed uniformly by hand, cyclone seeder, drill, cultipacker type seeder or hydroseeder at a minimum rate for the selected seed identified in **Figure TS-2**. Increase

Figure TS-2 Temporary Seeding Rates and Dates

Species[4]	Seeding Rates (pounds) /Acre	/1000 sq. ft.	Optimum Seed Depth[2] (inches)	Optimum Seeding Dates[1] 3/15 4/15 5/15 6/15 7/15 8/15 9/15 10/15 / 3/1 4/1 5/1 6/1 7/1 8/1 9/1 10/1	Plant Characteristics
Annual ryegrass Lolium multiflorum	40	1.0	0.5		May be added in mixes. Will mow out of most stands
Perennial ryegrass Lolium perenne	40	1.0	0.5		Use for winter cover. Tolerates cold and low moisture.
Winter Rye Secale cereale	120	3.0	1.0		Quick germination and heavy spring growth. Dies back in June with little regrowth.
Oats Avena sativa	86	2.0	1.0		In northern CT. will winter kill with the first killing frost and may throughout the state in severe winters.
Winter Wheat Triticum aestivum	120	3.0	1.0		Quick germination with moderate growth. Dies back in June with no regrowth.
Mille: Echinochloa crusgalli	20	0.5	1.0		Warm season small grain. Dies with frost in September.
Sudangrass Sorghum sudanense	30	0.7	1.0		Tolerates warm temperatures and droughty conditions.
Buckwheat Fagopyrum esculentum	15	0.4	1.0		Hardy plant that will reseed itself and is good as a green manure crop.
Weeping lovegrass Eragostis curbula	5	0.2	0.25		Warm-season perennial. May branch. Tolerates hot, dry slopes, acid infertile soils. Excellent nurse crop. Usually winter kills.
DOT All Purpose Mix[3]	150	3.4	0.5		Suitable for all conditions.

[1] May be planted throughout summer if soil moisture is adequate or can be irrigated. Fall seeding may be extended 15 days in the coastal towns.
[2] Seed at twice the indicated depth for sandy soils.
[3] See Permanent Seeding **Figure PS-3** for seeding mixture requirements.
[4] Listed species may be used in combinations to obtain a broader time spectrum. If used in combinations, reduce each species planting rate by 20% of that listed.

Source: USDA–NRCS

seeding rates by 10% when hydroseeding.

Mulching

Temporary seedings made during optimum seeding dates shall be mulched according to the **Mulch for Seed** measure. Note when seeding outside of the optimum seeding dates, increase the application of mulch to provide 95%-100% coverage.

Maintenance

Inspect seeded area at least once a week and within 24 hours of the end of a storm with a rainfall amount of 0.5 inch or greater for seed and mulch movement and rill erosion.

Where seed has moved or where soil erosion has occurred, determine the cause of the failure. Bird feeding may be a problem if mulch was applied too thinly to protect seed. Re-seed and re- mulch. If movement was the result of wind, then repair erosion damage (if any), reapply seed and mulch and apply mulch anchoring. If failure was caused by concentrated runoff, install additional measures to control water and sediment movement, repair erosion damage, re-seed and re-apply mulch with anchoring or use **Temporary Erosion Control Blanket** measure.

Continue inspections until the grasses are firmly established. Grasses shall not be considered established until a ground cover is achieved which is mature enough to control soil erosion and to survive severe weather conditions (approximately 80% vegetative surface cover).

soa
SIERRA OVERHEAD ANALYTICS
18859 MICROTRONICS WAY
SCNORA, CALIFORNIA 95370
CONNECTICUT PROFESSIONAL
ENGINEERING CORPORATION #PEC.0001969

REV	DESCRIPTION	DATE
6	ISSUED FOR CONSTRUCTION - DRAFT	9/4/2020
7	ISSUED FOR CONSTRUCTION - DRAFT	9/18/2020
8	ISSUED FOR CONSTRUCTION - DRAFT	10/22/2020
9	ISSUED FOR CONSTRUCTION - DRAFT	11/06/2020
10	ISSUED FOR CONSTRUCTION	1/20/2021
-	-	-
-	-	-
-	-	-
-	-	-
-	-	-

CONFIDENTIAL:
THE INFORMATION DEPICTED ON THIS DOCUMENT IS PROPRIETARY AND THE SOLE PROPERTY OF SIERRA OVERHEAD ANALYTICS, INC (SOA). ANY USE OR DISCLOSURE OF THIS INFORMATION IS EXPRESSLY PROHIBITED WITHOUT THE PRIOR WRITTEN CONSENT OF SOA.

CS Energy
Building a Cleaner Future
2045 LINCOLN HIGHWAY
EDISON, NEW JERSEY 08817

PROJECT NAME:
STONINGTON SOLAR PROJECT

PROJECT ADDRESS:
ELLA WHEELER RD.
NORTH STONINGTON, CT 06359
41° 25' 9.71"N, 71° 50' 4.83"W

SEAL:
STATE OF CONNECTICUT DARIN RAY GALLOWAY No. 34152 LICENSED PROFESSIONAL ENGINEER

DATE: 21-JAN-20
PROJECT #: 20200309_CT
DRAWN BY: MMM
CHECKED BY: DRG

TITLE: EROSION & SEDIMENT CONTROL NOTES

SHEET: ESC-101

811 Know what's below. Call before you dig.

PLOT DATE: Tuesday, January 19, 2021

LOCATION: E:\DROPBOX (SOA)\ENGINEERING\CS ENERGY\2020-03-09_STONINGTON\CAD\NOTES.DWG PLOTTED BY: DARIN GALLOWAY

WETLAND AND VERNAL POOL PROTECTION PLAN

As a result of the proposed development's location in the vicinity of wetlands and vernal pool habitat, the following Best Management Practices ("BMPs") are recommended to avoid unintentional impact to wetland habitats or mortality to vernal pool herpetofauna (i.e., spotted salamander, wood frog, turtles, etc.) during construction activities. This plan includes elements that will protect herpetofauna should construction activities occur during peak amphibian movement periods (early spring breeding [March 1st to May 15th] and late summer dispersal [July 15th to September 15th]) as well as wetlands regardless of the time of year. Complete details of the recommended BMPs are provided below, which will be incorporated into the construction drawings to ensure the Contractor is fully aware of the project's environmentally sensitive setting.

A wetland scientist from All Points Technology Corp. ("APT") experienced in compliance monitoring of construction activities will serve as the Environmental Monitor for this project to ensure that the following BMPs are implemented properly. The proposed wetland and vernal pool protection program consists of several components including: isolation of the development perimeter; periodic inspection and maintenance of erosion controls and isolation structures; herpetofauna sweeps; education of all contractors and sub contractors prior to initiation of work on the site; protective measures; and, reporting.

1. Erosion and Sedimentation Controls

a. Plastic netting with large mesh openings (> ¼") used in a variety of erosion control products (i.e., erosion control blankets, fiber rolls [wattles], reinforced silt fence) has been found to entangle wildlife, including reptiles, amphibians, birds and small mammals. No permanent erosion control products or reinforced silt fence will be used on the project. Temporary erosion control products that will be exposed at the ground surface represent a potential for wildlife entanglement will use either erosion control blankets and fiber rolls composed of processed fibers mechanically bound together to form a continuous matrix (netless) or netting with a mesh size <¼" such as that typically used in compost filter socks to avoid/minimize wildlife entanglement.

b. Installation of erosion and sedimentation controls, required for erosion control compliance and creation of a barrier to possible migrating/dispersing herpetofauna, shall be performed by the Contractor following clearing activities and prior to any earthwork. The Environmental Monitor will inspect the work zone area prior to and following erosion control barrier installation to ensure the area is free of herpetofauna and satisfactorily installed. The intent of the barrier is to segregate the majority of the work zone from migrating/dispersing herpetofauna. Oftentimes complete isolation of a work zone is not feasible due to accessibility needs and locations of staging/material storage areas, etc. In those circumstances, the barriers will be positioned to deflect migrating/dispersal routes away from the work zone to minimize potential encounters with herpetofauna.

c. If a staging area for equipment, vehicles or construction materials is required for this project, such area(s) shall be located outside of any wetland resource upland review area and surrounded by silt fence to isolate the area from possible migrating herpetofauna.

d. All erosion control measures shall be removed within 30 days of completion of work and permanent stabilization of site soils so that herpetofauna movements between uplands and wetlands are not restricted.

2. Contractor Education:

a. Prior to work on site and initial deployment/mobilization of equipment and materials, the Contractor shall attend an educational session at the pre construction meeting with the Environmental Monitor. This orientation and educational session will consist of information such as, but not limited to: representative photographs of typical herpetofauna that may be encountered, rare that could be encountered (if possible), typical species behavior, and proper procedures to protect such species if they are encountered. The meeting will further emphasize the non aggressive nature of these species, the absence of need to destroy such animals and the need to follow Protective Measures as described in Section 4 below. The Contractor will designate one of its workers as the "Project Monitor", who will receive more intense training on the identification and proper handling of herpetofauna.

b. The Contractor will designate a member of its crew as the Project Monitor to be responsible for the daily "sweeps" for herpetofauna within the work zone each morning, during any and all transportation of vehicles along the access drive, and for any ground disturbance work. This individual will receive more intense training from the Environmental Monitor on the identification and protection of herpetofauna in order to perform sweeps. Any herpetofauna discovered will be reported to the Environmental Monitor, photographed if possible, and relocated outside the work zone in the general direction the animal was oriented.

c. The Environmental Monitor will also post caution signs throughout the project site and maintain them for the duration of construction to provide notice of the environmentally sensitive nature of the work area, the potential for encountering various amphibians and reptiles and precautions to be taken to avoid injury to or mortality of these animals.

d. The Contractor will be provided with the Environmental Monitor's cell phone and email contact information to immediately report any encounters with herpetofauna.

3. Petroleum Materials Storage and Spill Prevention

a. Certain precautions are necessary to store petroleum materials, refuel and contain and properly clean up any inadvertent fuel or petroleum (i.e., oil, hydraulic fluid, etc.) spill due to the project's location in proximity to sensitive wetland resources.

b. A spill containment kit consisting of a sufficient supply of absorbent pads and absorbent material will be maintained by the Contractor at the construction site throughout the duration of the project. In addition, a waste drum will be kept on site to contain any used absorbent pads/material for proper and timely disposal off site in accordance with applicable local, state and federal laws.

c. The following petroleum and hazardous materials storage and refueling restrictions and spill response procedures will be adhered to by the Contractor.

i. Petroleum and Hazardous Materials Storage and Refueling

1. Refueling of vehicles or machinery shall take place on an impervious pad with secondary containment designed to contain fuels.
2. Any refueling drums/tanks or hazardous materials that must be kept on site shall be stored on an impervious surface utilizing secondary containment a minimum of 100 feet from wetlands or watercourses.

ii. Initial Spill Response Procedures

1. Stop operations and shut off equipment.
2. Remove any sources of spark or flame.
3. Contain the source of the spill.
4. Determine the approximate volume of the spill.
5. Identify the location of natural flow paths to prevent the release of the spill to sensitive nearby waterways or wetlands.
6. Ensure that fellow workers are notified of the spill.

iii. Spill Clean Up & Containment

1. Obtain spill response materials from the on site spill response kit. Place absorbent materials directly on the release area.
2. Limit the spread of the spill by placing absorbent materials around the perimeter of the spill.
3. Isolate and eliminate the spill source.
4. Contact the appropriate local, state and/or federal agencies, as necessary.
5. Contact a disposal company to properly dispose of contaminated materials.

iv. Reporting

1. Complete an incident report.
2. Submit a completed incident report to the Connecticut Siting Council.

4. Protective Measures

a. A thorough cover search of the construction area will be performed by the Environmental Monitor for herpetofauna prior to and following installation of erosion control measures/silt fencing barriers to remove any species from the work zone prior to the initiation of construction activities. Any herpetofauna discovered would be relocated outside the work zone in the general direction the animal was oriented. Periodic inspections will be performed by the Environmental Monitor throughout the duration of construction.

b. The Contractor's Project Monitor will inspect the work area each morning and escort initial vehicle access into the site each morning along the access drive to visually inspect for any herpetofauna. Any herpetofauna discovered would be relocated outside the work zone in the general direction the animal was oriented.

c. Any herpetofauna requiring relocation out of the work zone will be captured with the use of a net or clean plastic bag that has been moistened with clean water for careful handling and placement out of the work zone in the general direction it was observed heading.

d. Any stormwater management features, ruts or artificial depressions that could hold water created intentionally or unintentionally by site clearing/construction activities will be properly filled in and permanently stabilized with vegetation to avoid the creation of vernal pool "decoy pools" that could intercept amphibians moving toward the vernal pools. Stormwater management features such as level spreaders will be carefully reviewed in the field to ensure that standing water does not endure for more than a 24 hour period to avoid creation of decoy pools and may be subject to field design changes. Any such proposed design changes will be reviewed by the design engineer to ensure stormwater management functions are maintained.

5. Herbicide and Pesticide Restrictions

a. The use of herbicides and pesticides at the proposed solar facility shall be avoided when possible. In the event herbicides and/or pesticides are required at the proposed facility, their use will be used in accordance with Integrated Pest Management ("IPM") principles with particular attention to minimize applications within 100 feet of wetland or watercourse resources. No applications of herbicides or pesticides are allowed within actual wetland or watercourse resources.

6. Reporting

a. Daily inspection reports (brief narrative and applicable photos) will be prepared by the Environmental Monitor documenting each inspection and submitted to Pawcatuck Solar Center for compliance verification. Any non compliance observations of erosion control measures or evidence of erosion or sediment release will be immediately reported to the Contractor and Pawcatuck Solar Center's Construction Manager and included in the reports.

b. Any incidents of sediment release into the wetland resource areas shall will be reported within 24 hours to the Town of North Stonington Inland Wetlands Director.

c. Any observations of rare species will be reported to the Connecticut Department of Energy & Environmental Protection Natural Diversity Data Base.

d. Following completion of the project, a summary report will be prepared by the Environmental Monitor documenting compliance with the Wetland and Vernal Pool Protection Plan and submitted to Pawcatuck Solar Center.

Watershed Basin ID	LOD within Basin (acres)	Catchment Area ID	Catchment Area (Acres)	Catchment Area (mi^2)	Average Annual Erosion (tons/ac/year)	Delivery Ratio	Trap Efficiency	Sediment Density	Volume of Sediment Trapped (ac-feet)
2	39.5	1	6.6	0.0104	50	0.6	0.8	85	0.09
		2	8.2	0.0128	50	0.6	0.8	85	0.11
		3	7.2	0.0113	50	0.6	0.8	85	0.09
		4	17.4	0.0272	50	0.52	0.8	85	0.20
3		Drains to Watershed 2 Sub-Basin 4	--						
4		Drains to Watershed 2 Sub-Basin 4	--						
5	61.9	1	5.3	0.0083	50	0.6	0.8	85	0.07
		2	7.5	0.0117	50	0.6	0.8	85	0.10
		3	10.0	0.0156	50	0.6	0.8	85	0.13
		4	14.0	0.0219	50	0.52	0.8	85	0.16
		5	9.1	0.0142	50	0.6	0.8	85	0.12
		6	10.0	0.0156	50	0.6	0.8	85	0.13
		7	6.0	0.0094	50	0.6	0.8	85	0.08
6	9.5	1	9.5	0.0149	50	0.6	0.8	85	0.12
7	13.5	1	8.4	0.0131	50	0.6	0.8	85	0.11
		2	5.1	0.0079	50	0.6	0.8	85	0.07
8	11.5	1	2.4	0.0038	50	0.6	0.8	85	0.03
		2	0.5	0.0009	50	0.6	0.8	85	0.01
		3	2.6	0.0040	50	0.6	0.8	85	0.03
		4	6.0	0.0094	50	0.6	0.8	85	0.08
9	9.1	1	5.1	0.0080	50	0.6	0.8	85	0.07
		2	4.0	0.0063	50	0.6	0.8	85	0.05
TOTALS:	**145**		**145.0**						**2**

1 ESC-102 — WATERSHED BASIN - SEDIMENT STORAGE VOLUME

Scale: NTS

SIERRA OVERHEAD ANALYTICS
18859 MICROTRONICS WAY
SCNORA, CALIFORNIA 95370
CONNECTICUT PROFESSIONAL
ENGINEERING CORPORATION #PEC.0001969

REV	DESCRIPTION	DATE
6	ISSUED FOR CONSTRUCTION - DRAFT	9/4/2020
7	ISSUED FOR CONSTRUCTION - DRAFT	9/18/2020
8	ISSUED FOR CONSTRUCTION - DRAFT	10/22/2020
9	ISSUED FOR CONSTRUCTION - DRAFT	11/06/2020
10	ISSUED FOR CONSTRUCTION	1/20/2021
-	-	-
-	-	-
-	-	-
-	-	-
-	-	-
-	-	-

CONFIDENTIAL:
THE INFORMATION DEPICTED ON THIS DOCUMENT IS PROPRIETARY AND THE SOLE PROPERTY OF SIERRA OVERHEAD ANALYTICS, INC (SOA). ANY USE OR DISCLOSURE OF THIS INFORMATION IS EXPRESSLY PROHIBITED WITHOUT THE PRIOR WRITTEN CONSENT OF SOA.

CS Energy
Building a Cleaner Future
2045 LINCOLN HIGHWAY
EDISON, NEW JERSEY 08817

PROJECT NAME:
STONINGTON SOLAR PROJECT

PROJECT ADDRESS:
ELLA WHEELER RD.
NORTH STONINGTON, CT 06359
41° 25' 9.71"N, 71° 50' 4.83"W

SEAL: STATE OF CONNECTICUT · DARIN RAY GALLOWAY · No. 34152 · LICENSED PROFESSIONAL ENGINEER

DATE: 21-JAN-20
PROJECT #: 20200309_CT
DRAWN BY: MMM
CHECKED BY: DRG

TITLE: EROSION & SEDIMENT CONTROL NOTES

SHEET: ESC-102

811 Know what's below. Call before you dig.

PLOT DATE: Tuesday, January 19, 2021

LOCATION: E:\DROPBOX (SOA)\ENGINEERING\CS ENERGY\2020-03-09_STONINGTON\CAD\NOTES.DWG PLOTTED BY: DARIN GALLOWAY

1 ESC-200 EROSION & SEDIMENT CONTROL SITE PLAN
Scale: 1" = 250'

N

0 250 500 Feet

LEGEND

6	PROPOSED SITE ACCESS ROAD (SEE C-400)
7	WETLAND W/BUFFER
8	SITE FENCE LINE (SEE C-402)
9	LOD — SITE LIMIT OF DISTURBANCE
10	SITE BOUNDARY
11	RIVER OR CREEK
12	100 YEAR FLOOD ZONE
13	SITE ENTRANCE ROAD (SEE ESC 300/ DETAIL 1 & ESC 301)
14	TREE CLEARING (GRUBBING, STABILIZE AFTER CLEARING)
15	TREE CLEARING (NO GRUBBING)
16	TREE CLEARING (SELECTIVE)
17	SILT FENCE (SEE ESC-302)
18	CONSTRUCTION ENTRANCE/EXIT (SEE ESC-300)
19	SLOPE MATTING (SEE ESC-301)
20	CONCRETE WASHOUT (SEE ESC-300)
21	MULCH FOR SEED/LANDSCAPE MULCH
22	SILT FENCE OUTLET (SEE ESC-302)
23	SEDIMENT BASIN, OR SEDIMENT BERM
24	TEMPORARY LAYDOWN YARD
	75 — MAJOR CONTOUR
	76 — MINOR CONTOUR
28	VELOCITY DISSIPATION DEVICE (ROCK CHECK DAM, GRAVEL LEVEL SPREADER)

EROSION AND SEDIMENT CONTROL GENERAL NOTES

1. ARRAY NOT SHOWN FOR CLARITY.
2. IN INSTANCES OF DISCREPANCY BETWEEN THE ESC DRAWINGS, SWPCP, AND CONSTRUCTION GENERAL PERMIT (CGP), THE CGP SHALL TAKE PRECEDENCE.
3. BMPs DEPICTED ON THESE DRAWINGS REPRESENT THE MINIMUM REQUIRED. IF BMPs ARE INEFFECTIVE AT CONTROLLING SEDIMENT FLOW OFFSITE, ADDITIONAL BMPs SHALL BE IMPLEMENTED TO STAY IN COMPLIANCE WITH THE CONSTRUCTION GENERAL PERMIT.
4. IF ADDITIONAL CONTROLS ARE NEEDED, A PERMIT VIOLATION OCCURS, AND/OR THE SWPCP AND ESC DRAWINGS NEED TO BE UPDATED, CT DEEP AND THE CIVIL ENGINEER OF RECORD SHALL BE NOTIFIED.
5. PRIOR TO CONSTRUCTION THE FOLLOWING SEQUENCE SHALL BE PERFOMED:
   - 5.1. FLAG THE LIMITS OF CONSTRUCTION, ROADWAY BASE-LINE, RIGHT-OF-WAY AND TREE PROTECTION ZONES.
   - 5.2. HOLD PRE-CONSTRUCTION MEETING.
   - 5.3. CALL 1-800-922-4455 BEFORE YOU DIG.
   - 5.4. HOLD TREE CUTTING MEETING.
   - 5.5. INSTALL THE CONSTRUCTION ENTRANCE.
   - 5.6. INSTALL PERIMETER EROSION AND SEDIMENT CONTROLS AND TREE PROTECTION DEVICES IN ACCORDANCE WITH THE ESC PLAN.
   - 5.7. CUT TREES WITHIN THE DEFINED CLEARING LIMITS AND REMOVE CUT WOOD. CHIP BRUSH AND SLASH, STOCKPILE CHIPS FOR FUTURE USE OR REMOVE OFF SITE.
   - 5.8. GRADING AREAS SHALL BE SEEDED WITH A TEMPORARY SEEDING MIX IMMEDIATELY FOLLOWING GRADING AND REPLACEMENT OF TOPSOIL. TEMPORARY SEEDING MAY BE PERFORMED VIA NO-TILL DRILL, HYDROSEEDING, OR HAND SPREADING, SEE SHEET ESC-101.
   - 5.9. IF TEMPORARY SEEDING CANNOT BE PERFORMED WITHIN THE REQUIRED SEEDING DATES, WOOD CHIPS OR DISC ANCHORED STRAW MULCH SHALL BE PLACED OVER ALL DISTURBED AREAS.
   - 5.10. ALL DISTURBED AREAS, EXCEPT ROADS AND EQUIPMENT PADS, SHALL BE SEEDED WITH A PERMANENT SEED MIX. PERMANENT SEEDING SHALL BE PERFORMED VIA NO-TILL DRILL. IN AREAS WHERE A NO-TILL DRILL CANNOT BE USED, HYDROSEEDING OR HAND SPREADING MAY BE USED.
   - 5.11. IF PONDING OCCURS BEHIND SILT FENCE, HAY BALE BARRIERS OR SEDIMENT TRAPS MAY BE SUBSTITUTED.
   - 5.12. IF HAY BALE BARRIERS OR SEDIMENT TRAPS ARE INEFFECTIVE AT CONTROLLING SEDIMENT FLOW OFFSITE, A TEMPRORARY SEDIMENT BASIN SHALL BE INSTALLED.
   - 5.13. IF SLOPE MATTING IS INEFFECTIVE AT CONTROLLING SLOPE EROSION, A HAY BALE BARRIER SHALL BE INSTALLED AT THE TOP OF THE SLOPE AND TEMPORARY PIPE SLOPE DRAINS WITH ARMORED OUTFALLS SHALL BE UTILIZED TO TRANSFER WATER FROM THE TOP OF THE SLOPE TO THE BOTTOM.

SIERRA OVERHEAD ANALYTICS
18859 MICROTRONICS WAY
SONORA, CALIFORNIA 95370
CONNECTICUT PROFESSIONAL ENGINEERING CORPORATION #PEC.0001969

REV	DESCRIPTION	DATE
6	ISSUED FOR CONSTRUCTION - DRAFT	9/4/2020
7	ISSUED FOR CONSTRUCTION - DRAFT	9/18/2020
8	ISSUED FOR CONSTRUCTION - DRAFT	10/22/2020
9	ISSUED FOR CONSTRUCTION - DRAFT	11/06/2020
10	ISSUED FOR CONSTRUCTION	1/20/2021
-	-	-
-	-	-
-	-	-
-	-	-
-	-	-

CONFIDENTIAL:
THE INFORMATION DEPICTED ON THIS DOCUMENT IS PROPRIETARY AND THE SOLE PROPERTY OF SIERRA OVERHEAD ANALYTICS, INC (SOA). ANY USE OR DISCLOSURE OF THIS INFORMATION IS EXPRESSLY PROHIBITED WITHOUT THE PRIOR WRITTEN CONSENT OF SOA.

CS Energy
Building a Cleaner Future
2045 LINCOLN HIGHWAY
EDISON, NEW JERSEY 08817

PROJECT NAME:
STONINGTON SOLAR PROJECT

PROJECT ADDRESS:
ELLA WHEELER RD.
NORTH STONINGTON, CT 06359
41° 25' 9.71"N, 71° 50' 4.83"W

SEAL: STATE OF CONNECTICUT · DARIN RAY GALLOWAY · No. 34152 · LICENSED PROFESSIONAL ENGINEER

DATE:	21-JAN-20
PROJECT #:	20200309_CT
DRAWN BY:	MMM
CHECKED BY:	DRG

TITLE: EROSION & SEDIMENT CONTROL SITE OVERVIEW
SHEET: ESC-200

811 Know what's below. Call before you dig.

PLOT DATE: Tuesday, January 19, 2021

LOCATION: E:\DROPBOX (SOA)\ENGINEERING\CS ENERGY\2020-03-09_STONINGTON\CAD\SITE PLANS.DWG PLOTTED BY: DARIN GALLOWAY

PROPOSED 10' PATH TO GRAVEYARD

2 LAYERS OF SILT FENCE BETWEEN THE SITE AND ANY WATER FEATURE

47.1'

59.5'

GRASS LINED CHANNEL, SEE G&D-319/DETAIL 1 & G&D-201

SEE ESC-211

SEE ESC-215

1 ESC-201 EROSION & SEDIMENT CONTROL SITE PLAN

Scale: 1" = 40'

N 0 40 80

MAP LEGEND (1"=1000')



LEGEND

6	PROPOSED SITE ACCESS ROAD (SEE C-400)
7	WETLAND W/BUFFER
8	SITE FENCE LINE (SEE C-402)
9	LOD SITE LIMIT OF DISTURBANCE
10	SITE BOUNDARY
11	RIVER OR CREEK
12	100 YEAR FLOOD ZONE
13	SITE ENTRANCE ROAD (SEE ESC 300/ DETAIL 1 & ESC 301)
14	TREE CLEARING (GRUBBING, STABILIZE AFTER CLEARING)
15	TREE CLEARING (NO GRUBBING)
16	TREE CLEARING (SELECTIVE)
17	SILT FENCE (SEE ESC-302)
18	CONSTRUCTION ENTRANCE/EXIT (SEE ESC-300)
19	SLOPE MATTING (SEE ESC-301)
20	CONCRETE WASHOUT (SEE ESC-300)
21	MULCH FOR SEED/LANDSCAPE MULCH
22	SILT FENCE OUTLET (SEE ESC-302)
23	SEDIMENT BASIN, OR SEDIMENT BERM
24	TEMPORARY LAYDOWN YARD
	75 MAJOR CONTOUR
	76 MINOR CONTOUR

Know what's below. Call before you dig.

SIERRA OVERHEAD ANALYTICS
18859 MICROTRONICS WAY
SONORA, CALIFORNIA 95370
CONNECTICUT PROFESSIONAL ENGINEERING CORPORATION #PEC.0001969

REV	DESCRIPTION	DATE
6	ISSUED FOR CONSTRUCTION - DRAFT	9/4/2020
7	ISSUED FOR CONSTRUCTION - DRAFT	9/18/2020
8	ISSUED FOR CONSTRUCTION - DRAFT	10/22/2020
9	ISSUED FOR CONSTRUCTION - DRAFT	11/06/2020
10	ISSUED FOR CONSTRUCTION	1/20/2021
-	-	-
-	-	-
-	-	-
-	-	-
-	-	-
-	-	-

CONFIDENTIAL:
THE INFORMATION DEPICTED ON THIS DOCUMENT IS PROPRIETARY AND THE SOLE PROPERTY OF SIERRA OVERHEAD ANALYTICS, INC (SOA). ANY USE OR DISCLOSURE OF THIS INFORMATION IS EXPRESSLY PROHIBITED WITHOUT THE PRIOR WRITTEN CONSENT OF SOA.

CS Energy
Building a Cleaner Future
2045 LINCOLN HIGHWAY
EDISON, NEW JERSEY 08817

PROJECT NAME:
STONINGTON SOLAR PROJECT

PROJECT ADDRESS:
ELLA WHEELER RD.
NORTH STONINGTON, CT 06359
41° 25' 9.71"N, 71° 50' 4.83"W

SEAL: STATE OF CONNECTICUT · DARIN RAY GALLOWAY · No. 34152 · LICENSED PROFESSIONAL ENGINEER

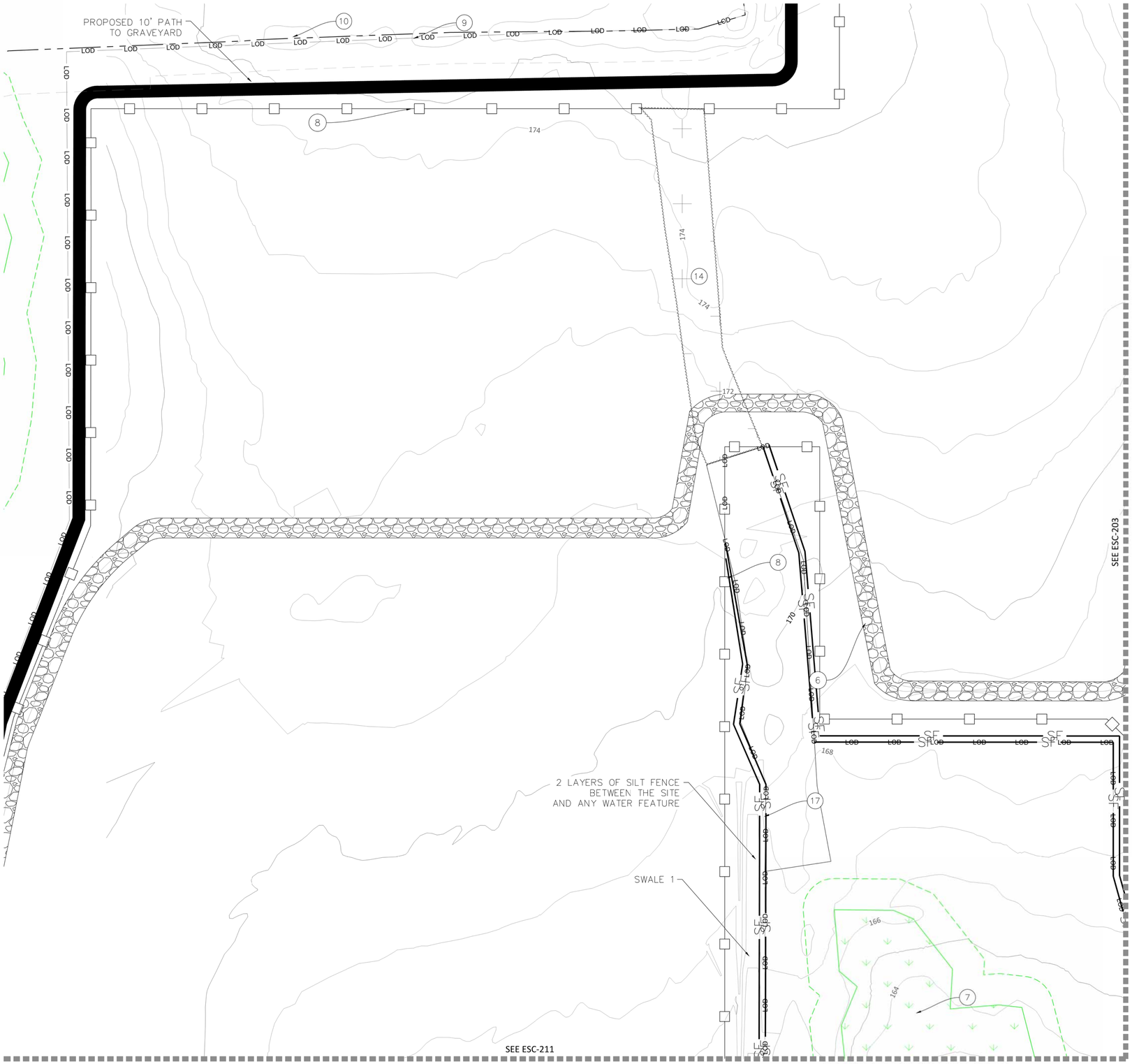
DATE:	21-JAN-20
PROJECT #:	20200309_CT
DRAWN BY:	MMM
CHECKED BY:	DRG

TITLE: EROSION & SEDIMENT CONTROL SITE PLAN

SHEET: ESC-201

PLOT DATE: Tuesday, January 19, 2021

LOCATION: E:\DROPBOX (SOA)\ENGINEERING\CS ENERGY\2020-03-09_STONINGTON\CAD\SITE PLANS.DWG PLOTTED BY: DARIN GALLOWAY



1 ESC-202 EROSION & SEDIMENT CONTROL SITE PLAN

Scale: 1" = 40'

N 0 40 80

MAP LEGEND (1"=1000')



LEGEND

6		PROPOSED SITE ACCESS ROAD (SEE C-400)
7		WETLAND W/BUFFER
8		SITE FENCE LINE (SEE C-402)
9	LOD	SITE LIMIT OF DISTURBANCE
10		SITE BOUNDARY
11		RIVER OR CREEK
12		100 YEAR FLOOD ZONE
13		SITE ENTRANCE ROAD (SEE ESC 300/ DETAIL 1 & ESC 301)
14		TREE CLEARING (GRUBBING, STABILIZE AFTER CLEARING)
15		TREE CLEARING (NO GRUBBING)
16		TREE CLEARING (SELECTIVE)
17		SILT FENCE (SEE ESC-302)
18		CONSTRUCTION ENTRANCE/EXIT (SEE ESC-300)
19		SLOPE MATTING (SEE ESC-301)
20		CONCRETE WASHOUT (SEE ESC-300)
21		MULCH FOR SEED/LANDSCAPE MULCH
22		SILT FENCE OUTLET (SEE ESC-302)
23		SEDIMENT BASIN, OR SEDIMENT BERM
24		TEMPORARY LAYDOWN YARD
	75	MAJOR CONTOUR
	76	MINOR CONTOUR

Know what's below. Call before you dig. 811

PLOT DATE: Tuesday, January 19, 2021

soa
SIERRA OVERHEAD ANALYTICS
18859 MICROTRONICS WAY
SONORA, CALIFORNIA 95370
CONNECTICUT PROFESSIONAL ENGINEERING CORPORATION #PEC.0001969

REV	DESCRIPTION	DATE
6	ISSUED FOR CONSTRUCTION - DRAFT	9/4/2020
7	ISSUED FOR CONSTRUCTION - DRAFT	9/18/2020
8	ISSUED FOR CONSTRUCTION - DRAFT	10/22/2020
9	ISSUED FOR CONSTRUCTION - DRAFT	11/06/2020
10	ISSUED FOR CONSTRUCTION	1/20/2021
-	-	-
-	-	-
-	-	-
-	-	-
-	-	-

CONFIDENTIAL:
THE INFORMATION DEPICTED ON THIS DOCUMENT IS PROPRIETARY AND THE SOLE PROPERTY OF SIERRA OVERHEAD ANALYTICS, INC (SOA). ANY USE OR DISCLOSURE OF THIS INFORMATION IS EXPRESSLY PROHIBITED WITHOUT THE PRIOR WRITTEN CONSENT OF SOA.

CS Energy
Building a Cleaner Future
2045 LINCOLN HIGHWAY
EDISON, NEW JERSEY 08817

PROJECT NAME:
STONINGTON SOLAR PROJECT

PROJECT ADDRESS:
ELLA WHEELER RD.
NORTH STONINGTON, CT 06359
41° 25' 9.71"N, 71° 50' 4.83"W

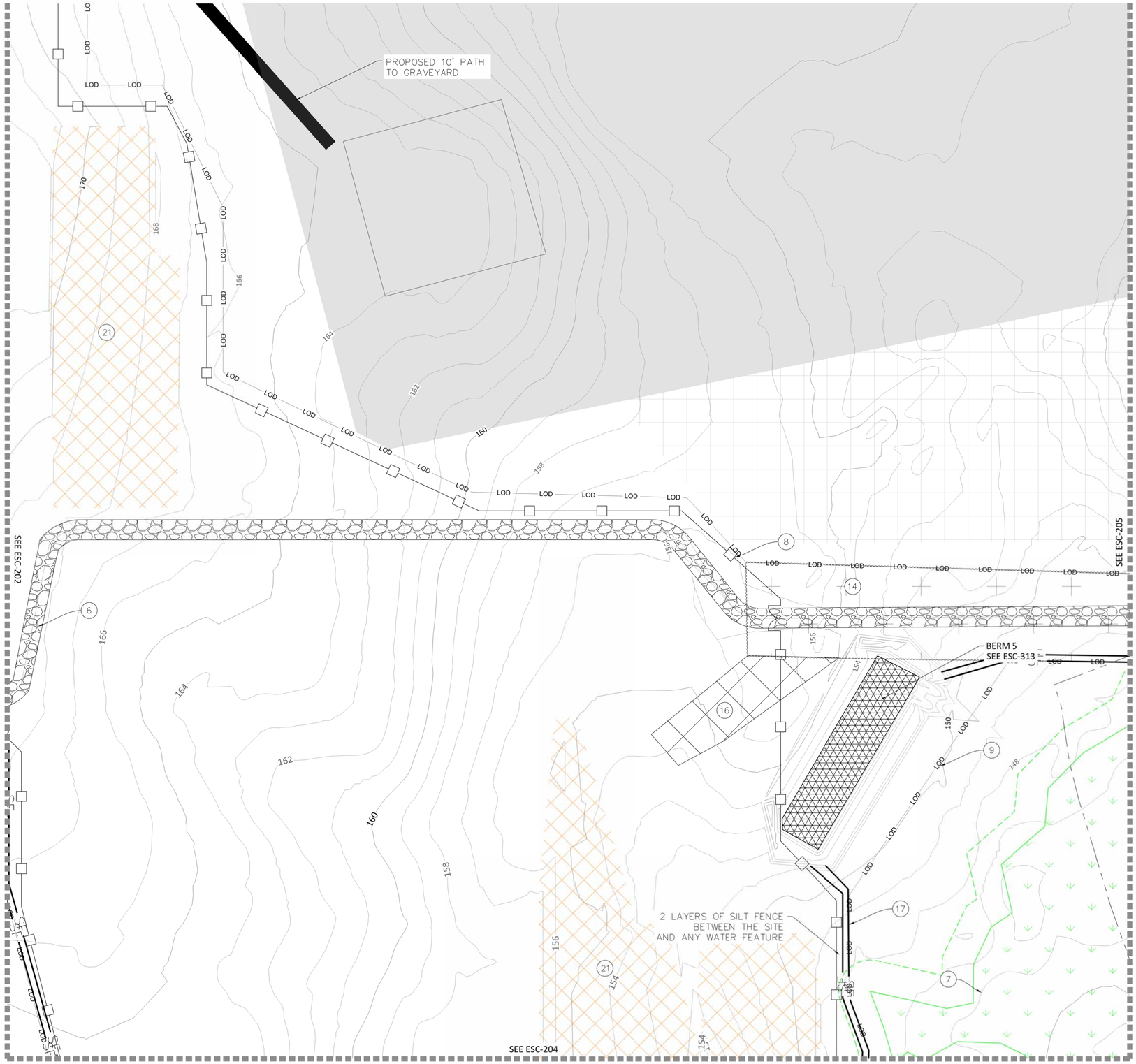
SEAL: STATE OF CONNECTICUT · DARIN RAY GALLOWAY · No. 34152 · LICENSED PROFESSIONAL ENGINEER

DATE: 21-JAN-20
PROJECT #: 20200309_CT
DRAWN BY: MMM
CHECKED BY: DRG

TITLE: EROSION & SEDIMENT CONTROL SITE PLAN

SHEET: ESC-202

LOCATION: E:\DROPBOX (SOA)\ENGINEERING\CS ENERGY\2020-03-09_STONINGTON\CAD\SITE PLANS.DWG PLOTTED BY: DARIN GALLOWAY



1 ESC-203 EROSION & SEDIMENT CONTROL SITE PLAN
Scale: 1" = 40'

N 0 40 80

MAP LEGEND (1"=1000')



LEGEND

6		PROPOSED SITE ACCESS ROAD (SEE C-400)
7		WETLAND W/BUFFER
8		SITE FENCE LINE (SEE C-402)
9	LOD	SITE LIMIT OF DISTURBANCE
10		SITE BOUNDARY
11		RIVER OR CREEK
12		100 YEAR FLOOD ZONE
13		SITE ENTRANCE ROAD (SEE ESC 300/ DETAIL 1 & ESC 301)
14		TREE CLEARING (GRUBBING, STABILIZE AFTER CLEARING)
15		TREE CLEARING (NO GRUBBING)
16		TREE CLEARING (SELECTIVE)
17		SILT FENCE (SEE ESC-302)
18		CONSTRUCTION ENTRANCE/EXIT (SEE ESC-300)
19		SLOPE MATTING (SEE ESC-301)
20		CONCRETE WASHOUT (SEE ESC-300)
21		MULCH FOR SEED/LANDSCAPE MULCH
22		SILT FENCE OUTLET (SEE ESC-302)
23		SEDIMENT BASIN, OR SEDIMENT BERM
24		TEMPORARY LAYDOWN YARD
	75	MAJOR CONTOUR
	76	MINOR CONTOUR

Know what's below. Call before you dig.

PLOT DATE: Tuesday, January 19, 2021

soa
SIERRA OVERHEAD ANALYTICS
18859 MICROTRONICS WAY
SONORA, CALIFORNIA 95370
CONNECTICUT PROFESSIONAL
ENGINEERING CORPORATION #PEC.0001969

REV	DESCRIPTION	DATE
6	ISSUED FOR CONSTRUCTION - DRAFT	9/4/2020
7	ISSUED FOR CONSTRUCTION - DRAFT	9/18/2020
8	ISSUED FOR CONSTRUCTION - DRAFT	10/22/2020
9	ISSUED FOR CONSTRUCTION - DRAFT	11/06/2020
10	ISSUED FOR CONSTRUCTION	1/20/2021
-	-	-
-	-	-
-	-	-
-	-	-
-	-	-

CONFIDENTIAL:
THE INFORMATION DEPICTED ON THIS DOCUMENT IS PROPRIETARY AND THE SOLE PROPERTY OF SIERRA OVERHEAD ANALYTICS, INC (SOA). ANY USE OR DISCLOSURE OF THIS INFORMATION IS EXPRESSLY PROHIBITED WITHOUT THE PRIOR WRITTEN CONSENT OF SOA.

CS Energy
Building a Cleaner Future
2045 LINCOLN HIGHWAY
EDISON, NEW JERSEY 08817

PROJECT NAME:
STONINGTON SOLAR PROJECT

PROJECT ADDRESS:
ELLA WHEELER RD.
NORTH STONINGTON, CT 06359
41° 25' 9.71"N, 71° 50' 4.83"W

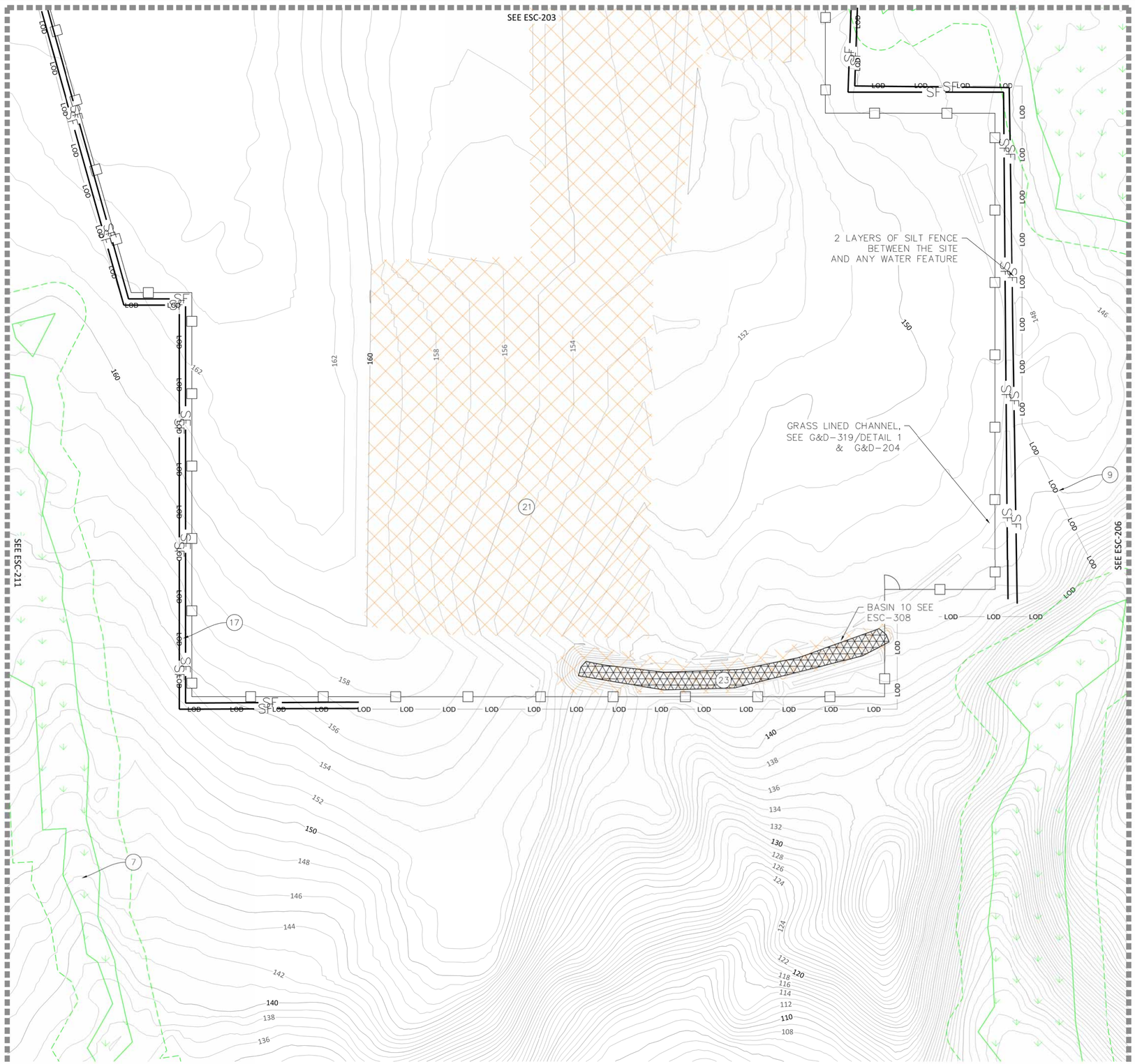
SEAL: STATE OF CONNECTICUT · DARIN RAY GALLOWAY · No. 34152 · LICENSED PROFESSIONAL ENGINEER

DATE:	21-JAN-20
PROJECT #:	20200309_CT
DRAWN BY:	MMM
CHECKED BY:	DRG

TITLE: EROSION & SEDIMENT CONTROL SITE PLAN

SHEET: ESC-203

LOCATION: E:\DROPBOX (SOA)\ENGINEERING\CS ENERGY\2020-03-09_STONINGTON\CAD\SITE PLANS.DWG PLOTTED BY: DARIN GALLOWAY



1 ESC-204 EROSION & SEDIMENT CONTROL SITE PLAN

Scale: 1" = 40'

N 0 40 80

MAP LEGEND (1"=1000')



LEGEND

6		PROPOSED SITE ACCESS ROAD (SEE C-400)
7		WETLAND W/BUFFER
8		SITE FENCE LINE (SEE C-402)
9	LOD	SITE LIMIT OF DISTURBANCE
10		SITE BOUNDARY
11		RIVER OR CREEK
12		100 YEAR FLOOD ZONE
13		SITE ENTRANCE ROAD (SEE ESC 300/ DETAIL 1 & ESC 301)
14		TREE CLEARING (GRUBBING, STABILIZE AFTER CLEARING)
15		TREE CLEARING (NO GRUBBING)
16		TREE CLEARING (SELECTIVE)
17	SF	SILT FENCE (SEE ESC-302)
18		CONSTRUCTION ENTRANCE/EXIT (SEE ESC-300)
19		SLOPE MATTING (SEE ESC-301)
20		CONCRETE WASHOUT (SEE ESC-300)
21		MULCH FOR SEED/LANDSCAPE MULCH
22		SILT FENCE OUTLET (SEE ESC-302)
23		SEDIMENT BASIN, OR SEDIMENT BERM
24		TEMPORARY LAYDOWN YARD
	75	MAJOR CONTOUR
	76	MINOR CONTOUR

SIERRA OVERHEAD ANALYTICS
18859 MICROTRONICS WAY
SONORA, CALIFORNIA 95370
CONNECTICUT PROFESSIONAL ENGINEERING CORPORATION #PEC.0001969

REV	DESCRIPTION	DATE
6	ISSUED FOR CONSTRUCTION - DRAFT	9/4/2020
7	ISSUED FOR CONSTRUCTION - DRAFT	9/18/2020
8	ISSUED FOR CONSTRUCTION - DRAFT	10/22/2020
9	ISSUED FOR CONSTRUCTION - DRAFT	11/06/2020
10	ISSUED FOR CONSTRUCTION	1/20/2021
-	-	-
-	-	-
-	-	-
-	-	-
-	-	-

CONFIDENTIAL:
THE INFORMATION DEPICTED ON THIS DOCUMENT IS PROPRIETARY AND THE SOLE PROPERTY OF SIERRA OVERHEAD ANALYTICS, INC (SOA). ANY USE OR DISCLOSURE OF THIS INFORMATION IS EXPRESSLY PROHIBITED WITHOUT THE PRIOR WRITTEN CONSENT OF SOA.

CS Energy
Building a Cleaner Future
2045 LINCOLN HIGHWAY
EDISON, NEW JERSEY 08817

PROJECT NAME:
STONINGTON SOLAR PROJECT

PROJECT ADDRESS:
ELLA WHEELER RD.
NORTH STONINGTON, CT 06359
41° 25' 9.71"N, 71° 50' 4.83"W

SEAL: STATE OF CONNECTICUT · DARIN RAY GALLOWAY · No. 34152 · LICENSED PROFESSIONAL ENGINEER

DATE:	21-JAN-20
PROJECT #:	20200309_CT
DRAWN BY:	MMM
CHECKED BY:	DRG

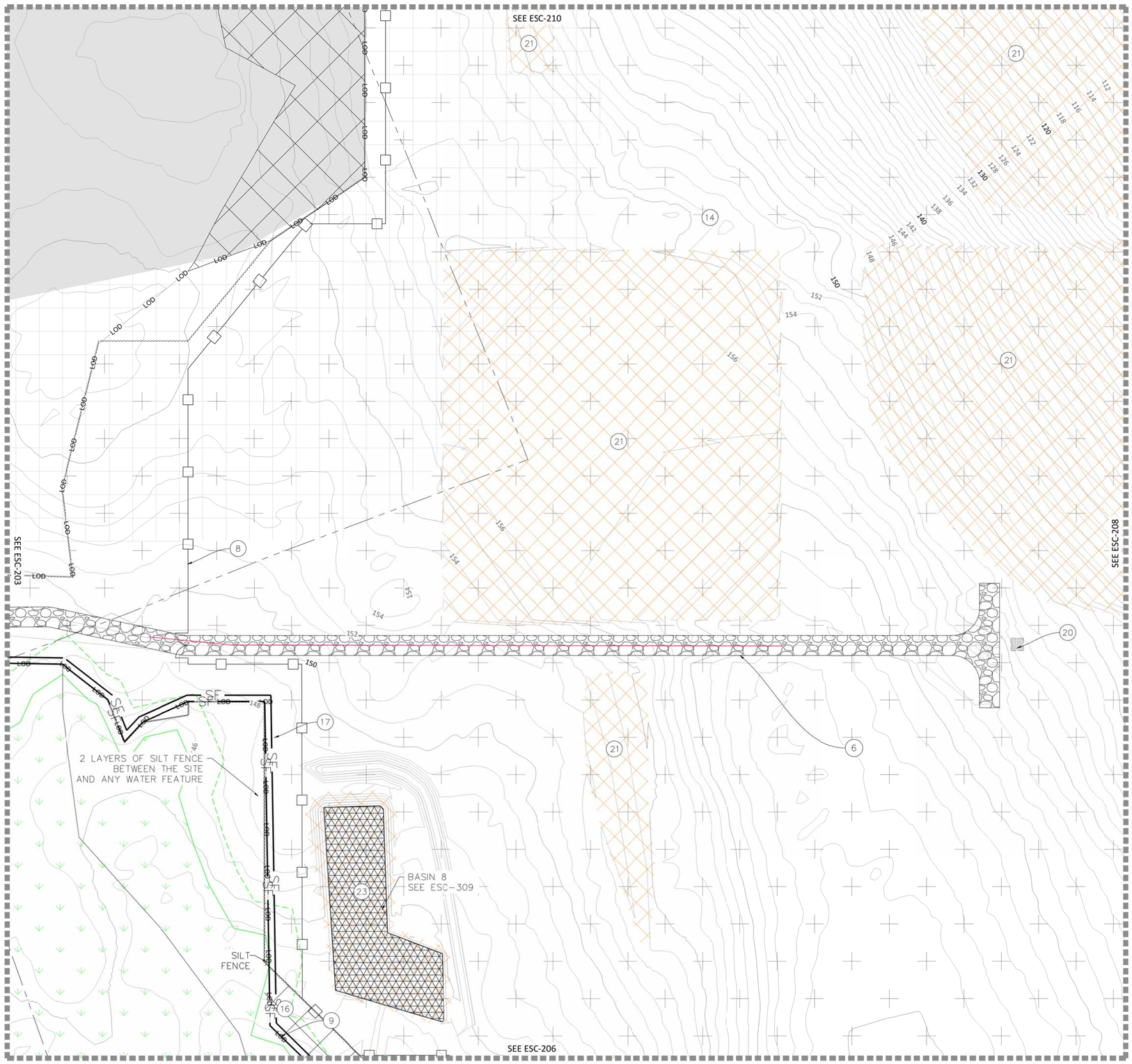
TITLE: EROSION & SEDIMENT CONTROL SITE PLAN

SHEET: ESC-204

811 Know what's below. Call before you dig.

PLOT DATE: Tuesday, January 19, 2021

LOCATION: E:\DROPBOX (SOA)\ENGINEERING\CS ENERGY\2020-03-09_STONINGTON\CAD\SITE PLANS.DWG PLOTTED BY: DARIN GALLOWAY



1 ESC-205 EROSION & SEDIMENT CONTROL SITE PLAN
Scale: 1" = 40'

N

0 40 80

MAP LEGEND (1"=1000')



LEGEND

6		PROPOSED SITE ACCESS ROAD (SEE C-400)
7		WETLAND W/BUFFER
8		SITE FENCE LINE (SEE C-402)
9	LOD	SITE LIMIT OF DISTURBANCE
10		SITE BOUNDARY
11		RIVER OR CREEK
12		100 YEAR FLOOD ZONE
13		SITE ENTRANCE ROAD (SEE ESC 300/ DETAIL 1 & ESC 301)
14		TREE CLEARING (GRUBBING, STABILIZE AFTER CLEARING)
15		TREE CLEARING (NO GRUBBING)
16		TREE CLEARING (SELECTIVE)
17		SILT FENCE (SEE ESC-302)
18		CONSTRUCTION ENTRANCE/EXIT (SEE ESC-300)
19		SLOPE MATTING (SEE ESC-301)
20		CONCRETE WASHOUT (SEE ESC-300)
21		MULCH FOR SEED/LANDSCAPE MULCH
22		SILT FENCE OUTLET (SEE ESC-302)
23		SEDIMENT BASIN, OR SEDIMENT BERM
24		TEMPORARY LAYDOWN YARD
	75	MAJOR CONTOUR
	76	MINOR CONTOUR

Know what's below. Call before you dig.

PLOT DATE: Tuesday, January 19, 2021

SIERRA OVERHEAD ANALYTICS
18859 MICROTRONICS WAY
SONORA, CALIFORNIA 95370
CONNECTICUT PROFESSIONAL
ENGINEERING CORPORATION #PEC.0001969

REV	DESCRIPTION	DATE
6	ISSUED FOR CONSTRUCTION - DRAFT	9/4/2020
7	ISSUED FOR CONSTRUCTION - DRAFT	9/18/2020
8	ISSUED FOR CONSTRUCTION - DRAFT	10/22/2020
9	ISSUED FOR CONSTRUCTION - DRAFT	11/06/2020
10	ISSUED FOR CONSTRUCTION	1/20/2021
-	-	-
-	-	-
-	-	-
-	-	-
-	-	-

CONFIDENTIAL:
THE INFORMATION DEPICTED ON THIS DOCUMENT IS PROPRIETARY AND THE SOLE PROPERTY OF SIERRA OVERHEAD ANALYTICS, INC (SOA). ANY USE OR DISCLOSURE OF THIS INFORMATION IS EXPRESSLY PROHIBITED WITHOUT THE PRIOR WRITTEN CONSENT OF SOA.

CS Energy
Building a Cleaner Future
2045 LINCOLN HIGHWAY
EDISON, NEW JERSEY 08817

PROJECT NAME:
STONINGTON SOLAR PROJECT

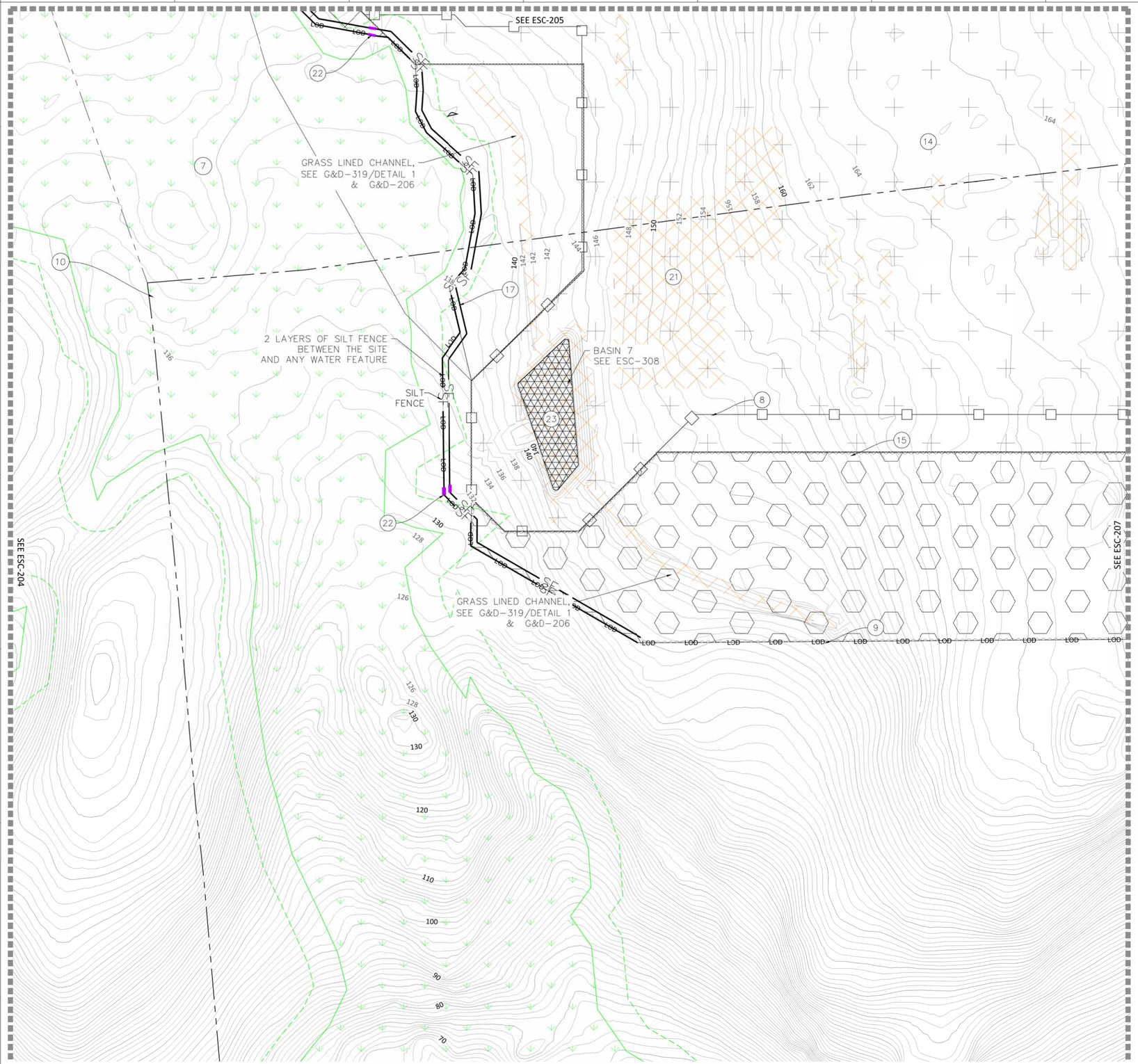
PROJECT ADDRESS:
ELLA WHEELER RD.
NORTH STONINGTON, CT 06359
41° 25' 9.71"N, 71° 50' 4.83"W

SEAL: STATE OF CONNECTICUT · DARIN RAY GALLOWAY · No. 34152 · LICENSED PROFESSIONAL ENGINEER

DATE: 21-JAN-20
PROJECT #: 20200309_CT
DRAWN BY: MMM
CHECKED BY: DRG

TITLE: EROSION & SEDIMENT CONTROL SITE PLAN
SHEET: ESC-205

LOCATION: E:\DROPBOX (SOA)\ENGINEERING\CS ENERGY\2020-03-09_STONINGTON\CAD\SITE PLANS.DWG PLOTTED BY: DARIN GALLOWAY



1 ESC-206 EROSION & SEDIMENT CONTROL SITE PLAN

Scale: 1" = 40'

N

0 40 80

MAP LEGEND (1"=1000')



LEGEND

6	PROPOSED SITE ACCESS ROAD (SEE C-400)
7	WETLAND W/BUFFER
8	SITE FENCE LINE (SEE C-402)
9	LOD SITE LIMIT OF DISTURBANCE
10	SITE BOUNDARY
11	RIVER OR CREEK
12	100 YEAR FLOOD ZONE
13	SITE ENTRANCE ROAD (SEE ESC 300/ DETAIL 1 & ESC 301)
14	TREE CLEARING (GRUBBING, STABILIZE AFTER CLEARING)
15	TREE CLEARING (NO GRUBBING)
16	TREE CLEARING (SELECTIVE)
17	SILT FENCE (SEE ESC-302)
18	CONSTRUCTION ENTRANCE/EXIT (SEE ESC-300)
19	SLOPE MATTING (SEE ESC-301)
20	CONCRETE WASHOUT (SEE ESC-300)
21	MULCH FOR SEED/LANDSCAPE MULCH
22	SILT FENCE OUTLET (SEE ESC-302)
23	SEDIMENT BASIN, OR SEDIMENT BERM
24	TEMPORARY LAYDOWN YARD
	75 MAJOR CONTOUR
	76 MINOR CONTOUR

Know what's below. Call before you dig.

PLOT DATE: Tuesday, January 19, 2021

soa
SIERRA OVERHEAD ANALYTICS
18859 MICROTRONICS WAY
SONORA, CALIFORNIA 95370
CONNECTICUT PROFESSIONAL ENGINEERING CORPORATION #PEC.0001969

REV	DESCRIPTION	DATE
6	ISSUED FOR CONSTRUCTION - DRAFT	9/4/2020
7	ISSUED FOR CONSTRUCTION - DRAFT	9/18/2020
8	ISSUED FOR CONSTRUCTION - DRAFT	10/22/2020
9	ISSUED FOR CONSTRUCTION - DRAFT	11/06/2020
10	ISSUED FOR CONSTRUCTION	1/20/2021
-	-	-
-	-	-
-	-	-
-	-	-
-	-	-

CONFIDENTIAL:
THE INFORMATION DEPICTED ON THIS DOCUMENT IS PROPRIETARY AND THE SOLE PROPERTY OF SIERRA OVERHEAD ANALYTICS, INC (SOA). ANY USE OR DISCLOSURE OF THIS INFORMATION IS EXPRESSLY PROHIBITED WITHOUT THE PRIOR WRITTEN CONSENT OF SOA.

CS Energy
Building a Cleaner Future
2045 LINCOLN HIGHWAY
EDISON, NEW JERSEY 08817

PROJECT NAME:
STONINGTON SOLAR PROJECT

PROJECT ADDRESS:
ELLA WHEELER RD.
NORTH STONINGTON, CT 06359
41° 25' 9.71"N, 71° 50' 4.83"W

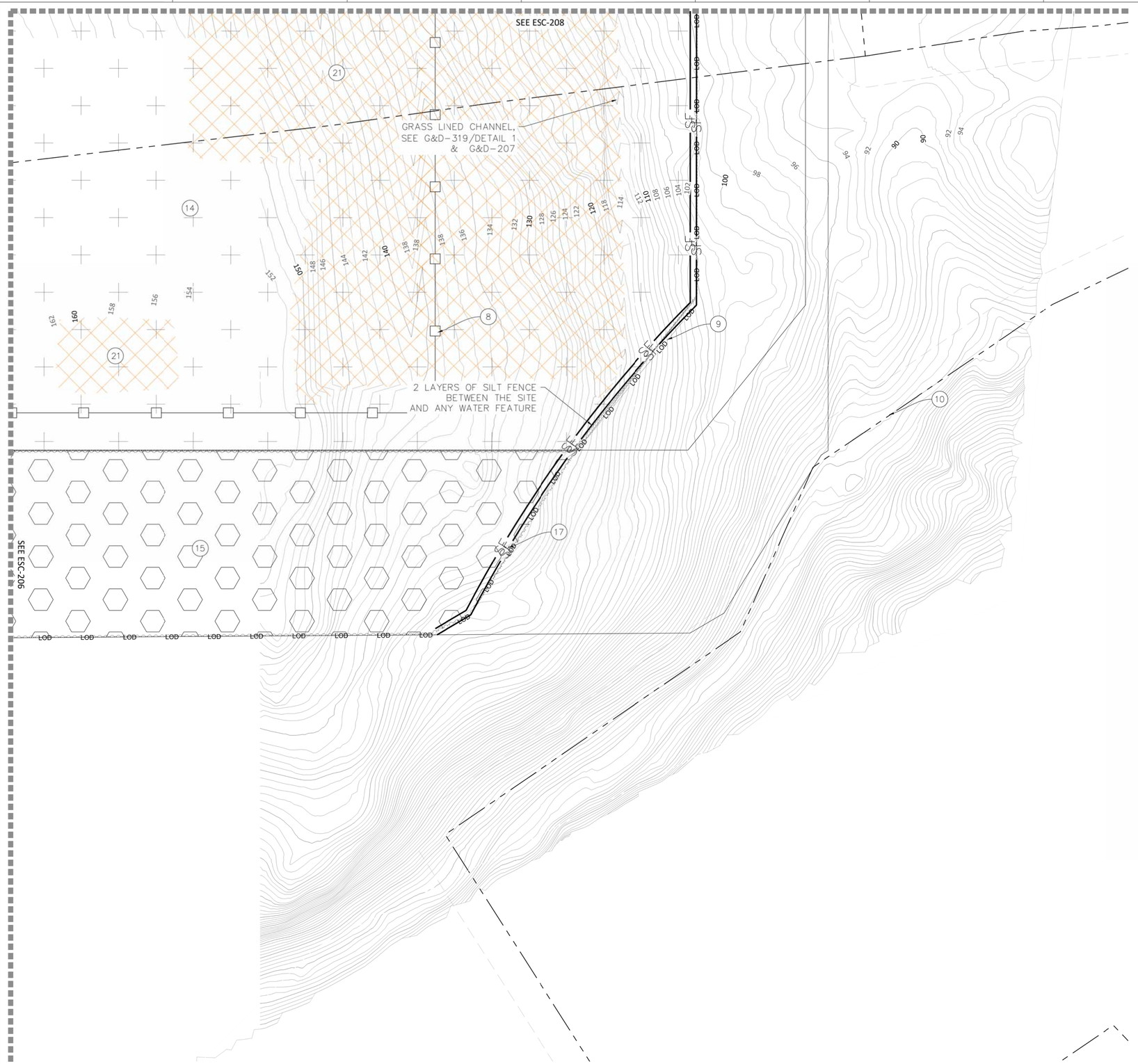
SEAL: STATE OF CONNECTICUT · DARIN RAY GALLOWAY · No. 34152 · LICENSED PROFESSIONAL ENGINEER

DATE:	21-JAN-20
PROJECT #:	20200309_CT
DRAWN BY:	MMM
CHECKED BY:	DRG

TITLE: EROSION & SEDIMENT CONTROL SITE PLAN

SHEET: ESC-206

LOCATION: E:\DROPBOX (SOA)\ENGINEERING\CS ENERGY\2020-03-09_STONINGTON\CAD\SITE PLANS.DWG PLOTTED BY: DARIN GALLOWAY



1 EROSION & SEDIMENT CONTROL SITE PLAN
ESC-207 Scale: 1" = 40'

N

MAP LEGEND (1"=1000')



LEGEND

6	PROPOSED SITE ACCESS ROAD (SEE C-400)
7	WETLAND W/BUFFER
8	SITE FENCE LINE (SEE C-402)
9	LOD — SITE LIMIT OF DISTURBANCE
10	SITE BOUNDARY
11	RIVER OR CREEK
12	100 YEAR FLOOD ZONE
13	SITE ENTRANCE ROAD (SEE ESC 300/ DETAIL 1 & ESC 301)
14	TREE CLEARING (GRUBBING, STABILIZE AFTER CLEARING)
15	TREE CLEARING (NO GRUBBING)
16	TREE CLEARING (SELECTIVE)
17	SILT FENCE (SEE ESC-302)
18	CONSTRUCTION ENTRANCE/EXIT (SEE ESC-300)
19	SLOPE MATTING (SEE ESC-301)
20	CONCRETE WASHOUT (SEE ESC-300)
21	MULCH FOR SEED/LANDSCAPE MULCH
22	SILT FENCE OUTLET (SEE ESC-302)
23	SEDIMENT BASIN, OR SEDIMENT BERM
24	TEMPORARY LAYDOWN YARD
75	MAJOR CONTOUR
76	MINOR CONTOUR

Know what's below. Call before you dig.

PLOT DATE: Tuesday, January 19, 2021

SIERRA OVERHEAD ANALYTICS
18859 MICROTRONICS WAY
SONORA, CALIFORNIA 95370
CONNECTICUT PROFESSIONAL ENGINEERING CORPORATION #PEC.0001969

REV	DESCRIPTION	DATE
6	ISSUED FOR CONSTRUCTION - DRAFT	9/4/2020
7	ISSUED FOR CONSTRUCTION - DRAFT	9/18/2020
8	ISSUED FOR CONSTRUCTION - DRAFT	10/22/2020
9	ISSUED FOR CONSTRUCTION - DRAFT	11/06/2020
10	ISSUED FOR CONSTRUCTION	1/20/2021
-	-	-
-	-	-
-	-	-
-	-	-
-	-	-

CONFIDENTIAL:
THE INFORMATION DEPICTED ON THIS DOCUMENT IS PROPRIETARY AND THE SOLE PROPERTY OF SIERRA OVERHEAD ANALYTICS, INC (SOA). ANY USE OR DISCLOSURE OF THIS INFORMATION IS EXPRESSLY PROHIBITED WITHOUT THE PRIOR WRITTEN CONSENT OF SOA.

CS Energy
Building a Cleaner Future
2045 LINCOLN HIGHWAY
EDISON, NEW JERSEY 08817

PROJECT NAME:
STONINGTON SOLAR PROJECT

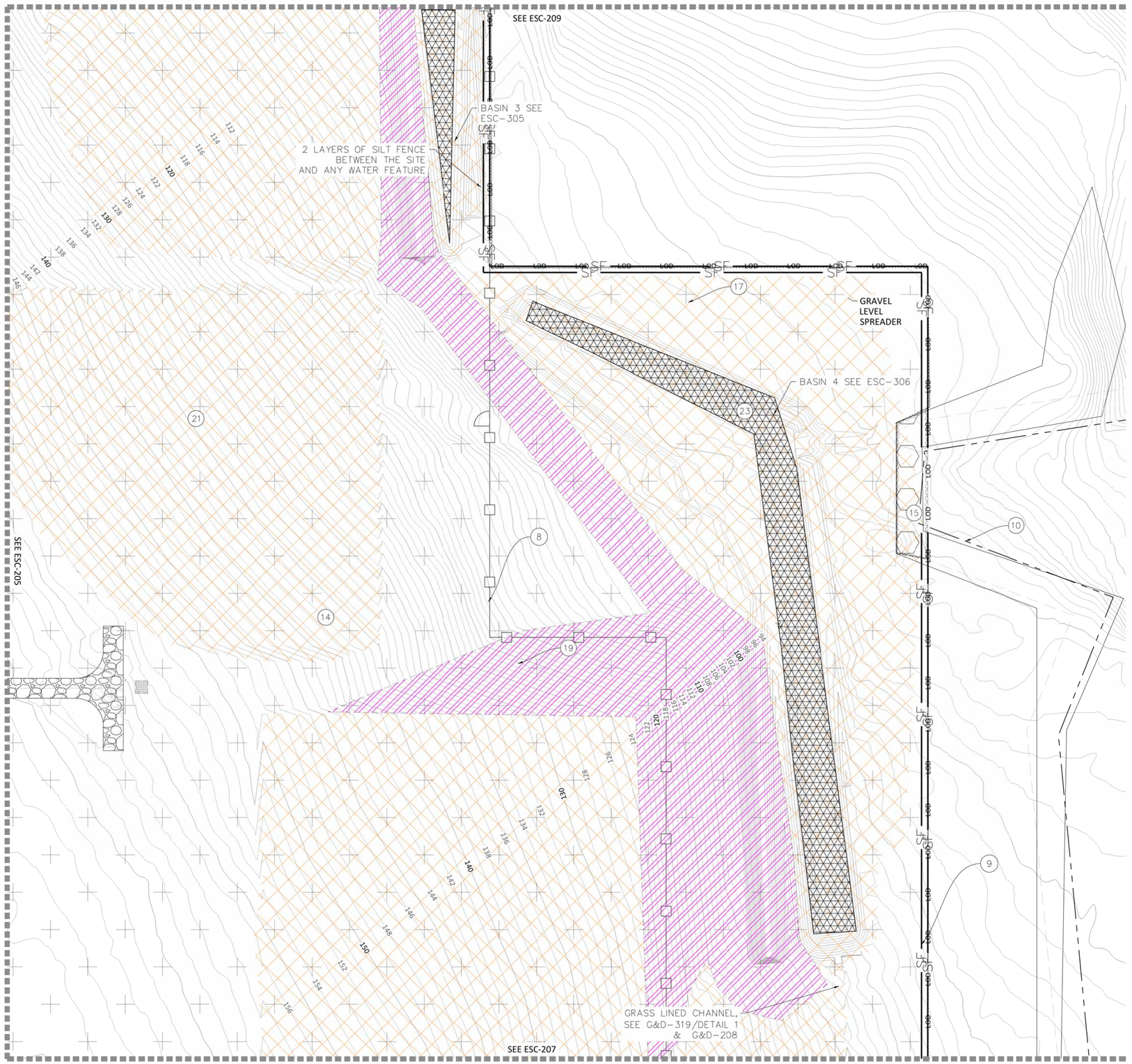
PROJECT ADDRESS:
ELLA WHEELER RD.
NORTH STONINGTON, CT 06359
41° 25' 9.71"N, 71° 50' 4.83"W

SEAL: STATE OF CONNECTICUT · DARIN RAY GALLOWAY · No. 34152 · LICENSED PROFESSIONAL ENGINEER

DATE: 21-JAN-20
PROJECT #: 20200309_CT
DRAWN BY: MMM
CHECKED BY: DRG

TITLE: EROSION & SEDIMENT CONTROL SITE PLAN
SHEET: ESC-207

LOCATION: E:\DROPBOX (SOA)\ENGINEERING\CS ENERGY\2020-03-09_STONINGTON\CAD\SITE PLANS.DWG PLOTTED BY: DARIN GALLOWAY



1 ESC-208 EROSION & SEDIMENT CONTROL SITE PLAN

Scale: 1" = 40'

N

0 40 80

MAP LEGEND (1"=1000')



LEGEND

6		PROPOSED SITE ACCESS ROAD (SEE C-400)
7		WETLAND W/BUFFER
8		SITE FENCE LINE (SEE C-402)
9	LOD	SITE LIMIT OF DISTURBANCE
10		SITE BOUNDARY
11		RIVER OR CREEK
12		100 YEAR FLOOD ZONE
13		SITE ENTRANCE ROAD (SEE ESC 300/ DETAIL 1 & ESC 301)
14		TREE CLEARING (GRUBBING, STABILIZE AFTER CLEARING)
15		TREE CLEARING (NO GRUBBING)
16		TREE CLEARING (SELECTIVE)
17		SILT FENCE (SEE ESC-302)
18		CONSTRUCTION ENTRANCE/EXIT (SEE ESC-300)
19		SLOPE MATTING (SEE ESC-301)
20		CONCRETE WASHOUT (SEE ESC-300)
21		MULCH FOR SEED/LANDSCAPE MULCH
22		SILT FENCE OUTLET (SEE ESC-302)
23		SEDIMENT BASIN, OR SEDIMENT BERM
24		TEMPORARY LAYDOWN YARD
	75	MAJOR CONTOUR
	76	MINOR CONTOUR

Know what's below. Call before you dig.

soa
SIERRA OVERHEAD ANALYTICS
18859 MICROTRONICS WAY
SONORA, CALIFORNIA 95370
CONNECTICUT PROFESSIONAL
ENGINEERING CORPORATION #PEC.0001969

REV	DESCRIPTION	DATE
6	ISSUED FOR CONSTRUCTION - DRAFT	9/4/2020
7	ISSUED FOR CONSTRUCTION - DRAFT	9/18/2020
8	ISSUED FOR CONSTRUCTION - DRAFT	10/22/2020
9	ISSUED FOR CONSTRUCTION - DRAFT	11/06/2020
10	ISSUED FOR CONSTRUCTION	1/20/2021
-	-	-
-	-	-
-	-	-
-	-	-
-	-	-

CONFIDENTIAL:
THE INFORMATION DEPICTED ON THIS DOCUMENT IS PROPRIETARY AND THE SOLE PROPERTY OF SIERRA OVERHEAD ANALYTICS, INC (SOA). ANY USE OR DISCLOSURE OF THIS INFORMATION IS EXPRESSLY PROHIBITED WITHOUT THE PRIOR WRITTEN CONSENT OF SOA.

CS Energy
Building a Cleaner Future
2045 LINCOLN HIGHWAY
EDISON, NEW JERSEY 08817

PROJECT NAME:
STONINGTON SOLAR PROJECT

PROJECT ADDRESS:
ELLA WHEELER RD.
NORTH STONINGTON, CT 06359
41° 25' 9.71"N, 71° 50' 4.83"W

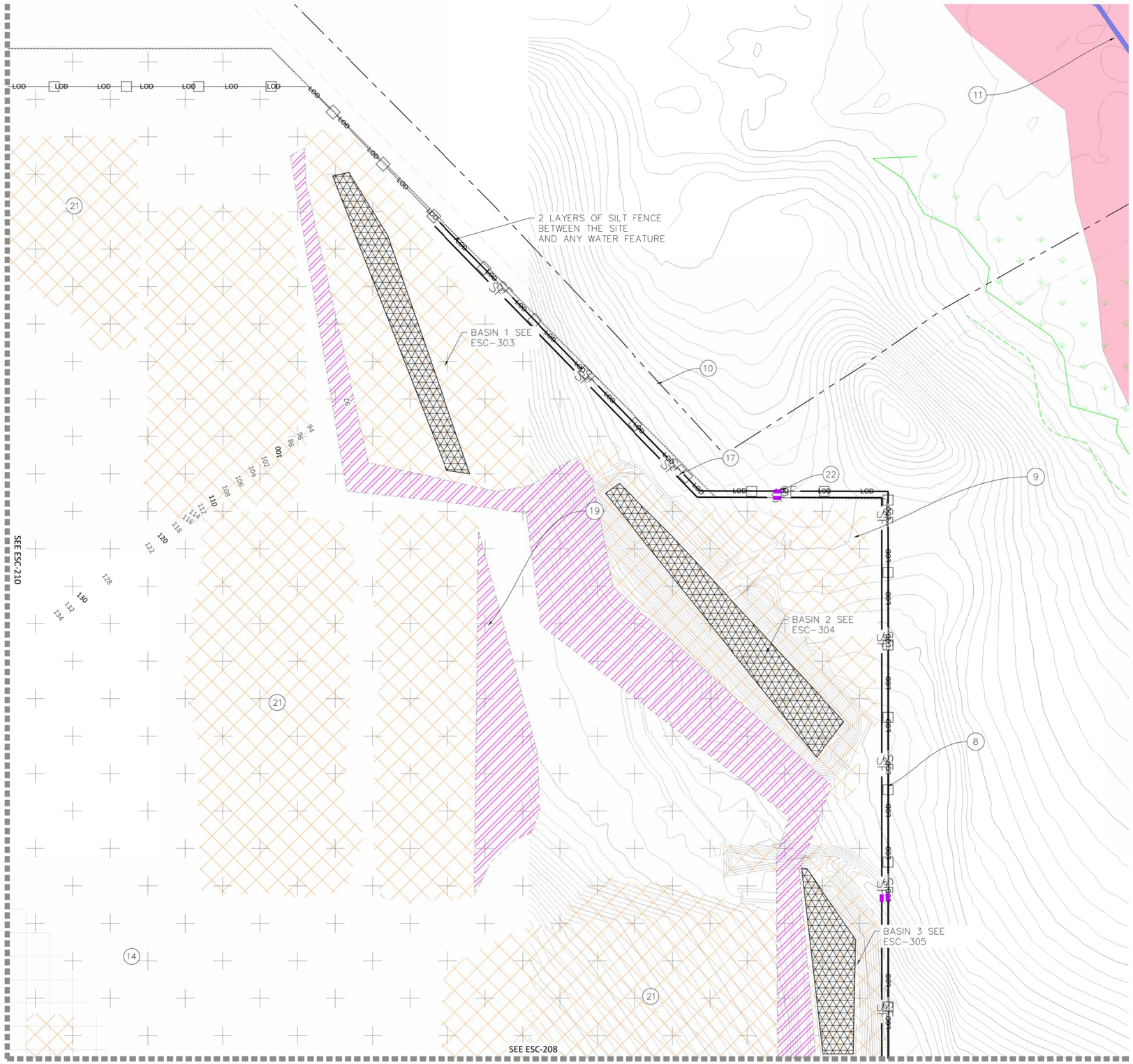
SEAL: STATE OF CONNECTICUT · DARIN RAY GALLOWAY · No. 34152 · LICENSED PROFESSIONAL ENGINEER

DATE: 21-JAN-20
PROJECT #: 20200309_CT
DRAWN BY: MMM
CHECKED BY: DRG

TITLE: EROSION & SEDIMENT CONTROL SITE PLAN
SHEET: ESC-208

PLOT DATE: Tuesday, January 19, 2021

LOCATION: E:\DROPBOX (SOA)\ENGINEERING\CS ENERGY\2020-03-09_STONINGTON\CAD\SITE PLANS.DWG PLOTTED BY: DARIN GALLOWAY



1 ESC-209 EROSION & SEDIMENT CONTROL SITE PLAN

Scale: 1" = 40'

N

0 40 80

MAP LEGEND (1"=1000')



LEGEND

6		PROPOSED SITE ACCESS ROAD (SEE C-400)
7		WETLAND W/BUFFER
8		SITE FENCE LINE (SEE C-402)
9	LOD	SITE LIMIT OF DISTURBANCE
10		SITE BOUNDARY
11		RIVER OR CREEK
12		100 YEAR FLOOD ZONE
13		SITE ENTRANCE ROAD (SEE ESC 300/ DETAIL 1 & ESC 301)
14		TREE CLEARING (GRUBBING, STABILIZE AFTER CLEARING)
15		TREE CLEARING (NO GRUBBING)
16		TREE CLEARING (SELECTIVE)
17	SF	SILT FENCE (SEE ESC-302)
18		CONSTRUCTION ENTRANCE/EXIT (SEE ESC-300)
19		SLOPE MATTING (SEE ESC-301)
20		CONCRETE WASHOUT (SEE ESC-300)
21		MULCH FOR SEED/LANDSCAPE MULCH
22	SF	SILT FENCE OUTLET (SEE ESC-302)
23		SEDIMENT BASIN, OR SEDIMENT BERM
24		TEMPORARY LAYDOWN YARD
	75	MAJOR CONTOUR
	76	MINOR CONTOUR

Know what's below. Call before you dig.

PLOT DATE: Tuesday, January 19, 2021

soa
SIERRA OVERHEAD ANALYTICS
18859 MICROTRONICS WAY
SONORA, CALIFORNIA 95370
CONNECTICUT PROFESSIONAL ENGINEERING CORPORATION #PEC.0001969

REV	DESCRIPTION	DATE
6	ISSUED FOR CONSTRUCTION - DRAFT	9/4/2020
7	ISSUED FOR CONSTRUCTION - DRAFT	9/18/2020
8	ISSUED FOR CONSTRUCTION - DRAFT	10/22/2020
9	ISSUED FOR CONSTRUCTION - DRAFT	11/06/2020
10	ISSUED FOR CONSTRUCTION	1/20/2021
-	-	-
-	-	-
-	-	-
-	-	-
-	-	-

CONFIDENTIAL:
THE INFORMATION DEPICTED ON THIS DOCUMENT IS PROPRIETARY AND THE SOLE PROPERTY OF SIERRA OVERHEAD ANALYTICS, INC (SOA). ANY USE OR DISCLOSURE OF THIS INFORMATION IS EXPRESSLY PROHIBITED WITHOUT THE PRIOR WRITTEN CONSENT OF SOA.

CS Energy
Building a Cleaner Future
2045 LINCOLN HIGHWAY
EDISON, NEW JERSEY 08817

PROJECT NAME:
STONINGTON SOLAR PROJECT

PROJECT ADDRESS:
ELLA WHEELER RD.
NORTH STONINGTON, CT 06359
41° 25' 9.71"N, 71° 50' 4.83"W

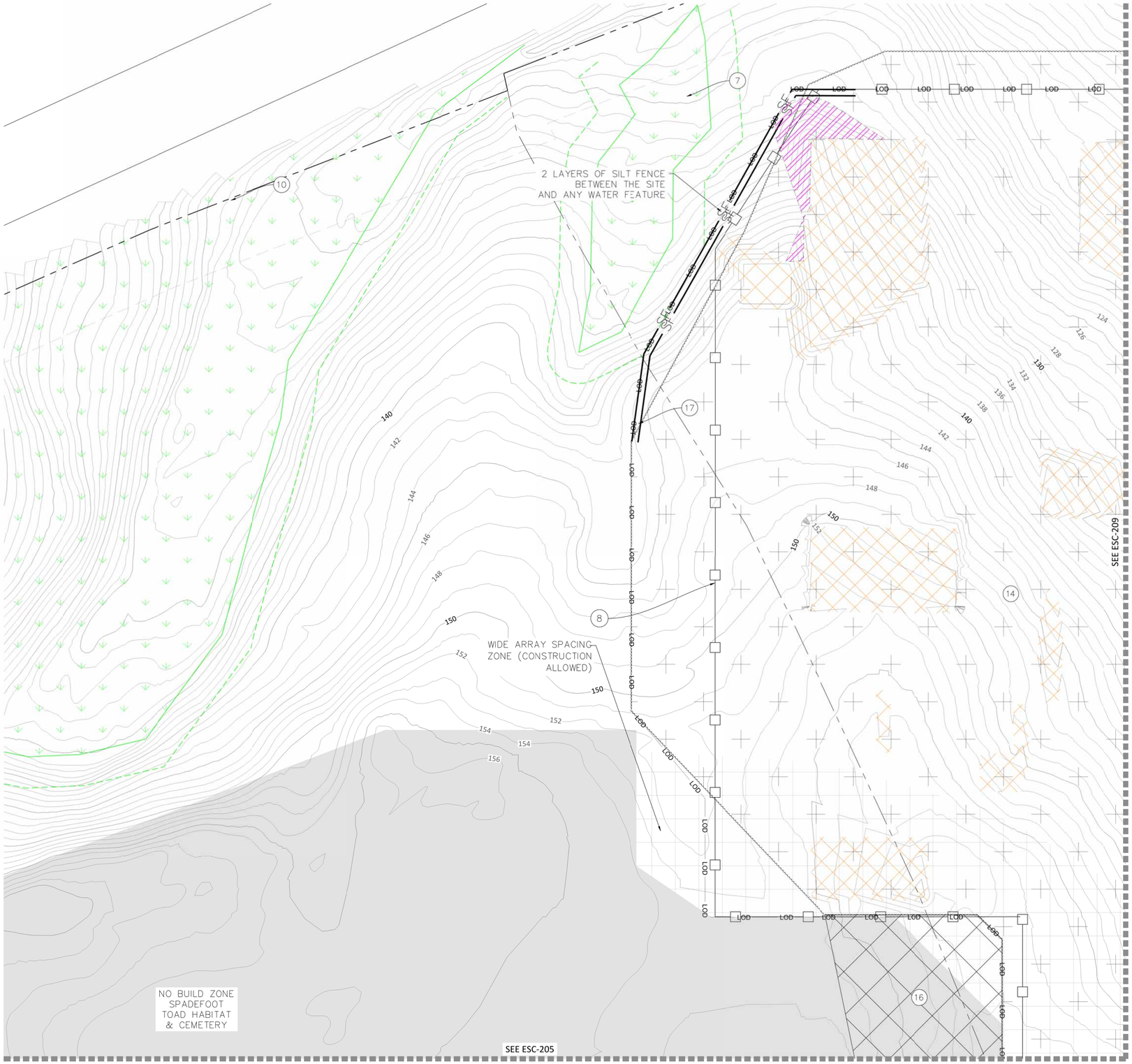
SEAL: STATE OF CONNECTICUT · DARIN RAY GALLOWAY · No. 34152 · LICENSED PROFESSIONAL ENGINEER

DATE:	21-JAN-20
PROJECT #:	20200309_CT
DRAWN BY:	MMM
CHECKED BY:	DRG

TITLE: EROSION & SEDIMENT CONTROL SITE PLAN

SHEET: ESC-209

LOCATION: E:\DROPBOX (SOA)\ENGINEERING\CS ENERGY\2020-03-09_STONINGTON\CAD\SITE PLANS.DWG PLOTTED BY: DARIN GALLOWAY



1 ESC-210 EROSION & SEDIMENT CONTROL SITE PLAN

Scale: 1" = 40'

N

0 40 80 Feet

MAP LEGEND (1"=1000')



LEGEND

6	PROPOSED SITE ACCESS ROAD (SEE C-400)
7	WETLAND W/BUFFER
8	SITE FENCE LINE (SEE C-402)
9	LOD — SITE LIMIT OF DISTURBANCE
10	SITE BOUNDARY
11	RIVER OR CREEK
12	100 YEAR FLOOD ZONE
13	SITE ENTRANCE ROAD (SEE ESC 300/ DETAIL 1 & ESC 301)
14	TREE CLEARING (GRUBBING, STABILIZE AFTER CLEARING)
15	TREE CLEARING (NO GRUBBING)
16	TREE CLEARING (SELECTIVE)
17	SILT FENCE (SEE ESC-302)
18	CONSTRUCTION ENTRANCE/EXIT (SEE ESC-300)
19	SLOPE MATTING (SEE ESC-301)
20	CONCRETE WASHOUT (SEE ESC-300)
21	MULCH FOR SEED/LANDSCAPE MULCH
22	SILT FENCE OUTLET (SEE ESC-302)
23	SEDIMENT BASIN, OR SEDIMENT BERM
24	TEMPORARY LAYDOWN YARD
75	MAJOR CONTOUR
76	MINOR CONTOUR

soa
SIERRA OVERHEAD ANALYTICS
18859 MICROTRONICS WAY
SONORA, CALIFORNIA 95370
CONNECTICUT PROFESSIONAL
ENGINEERING CORPORATION #PEC.0001969

REV	DESCRIPTION	DATE
6	ISSUED FOR CONSTRUCTION - DRAFT	9/4/2020
7	ISSUED FOR CONSTRUCTION - DRAFT	9/18/2020
8	ISSUED FOR CONSTRUCTION - DRAFT	10/22/2020
9	ISSUED FOR CONSTRUCTION - DRAFT	11/06/2020
10	ISSUED FOR CONSTRUCTION	1/20/2021
-	-	-
-	-	-
-	-	-
-	-	-
-	-	-
-	-	-

CONFIDENTIAL:
THE INFORMATION DEPICTED ON THIS DOCUMENT IS PROPRIETARY AND THE SOLE PROPERTY OF SIERRA OVERHEAD ANALYTICS, INC (SOA). ANY USE OR DISCLOSURE OF THIS INFORMATION IS EXPRESSLY PROHIBITED WITHOUT THE PRIOR WRITTEN CONSENT OF SOA.

CS Energy
Building a Cleaner Future
2045 LINCOLN HIGHWAY
EDISON, NEW JERSEY 08817

PROJECT NAME:
STONINGTON SOLAR PROJECT

PROJECT ADDRESS:
ELLA WHEELER RD.
NORTH STONINGTON, CT 06359
41° 25' 9.71"N, 71° 50' 4.83"W

SEAL: STATE OF CONNECTICUT · DARIN RAY GALLOWAY · No. 34152 · LICENSED PROFESSIONAL ENGINEER

DATE:	21-JAN-20
PROJECT #:	20200309_CT
DRAWN BY:	MMM
CHECKED BY:	DRG

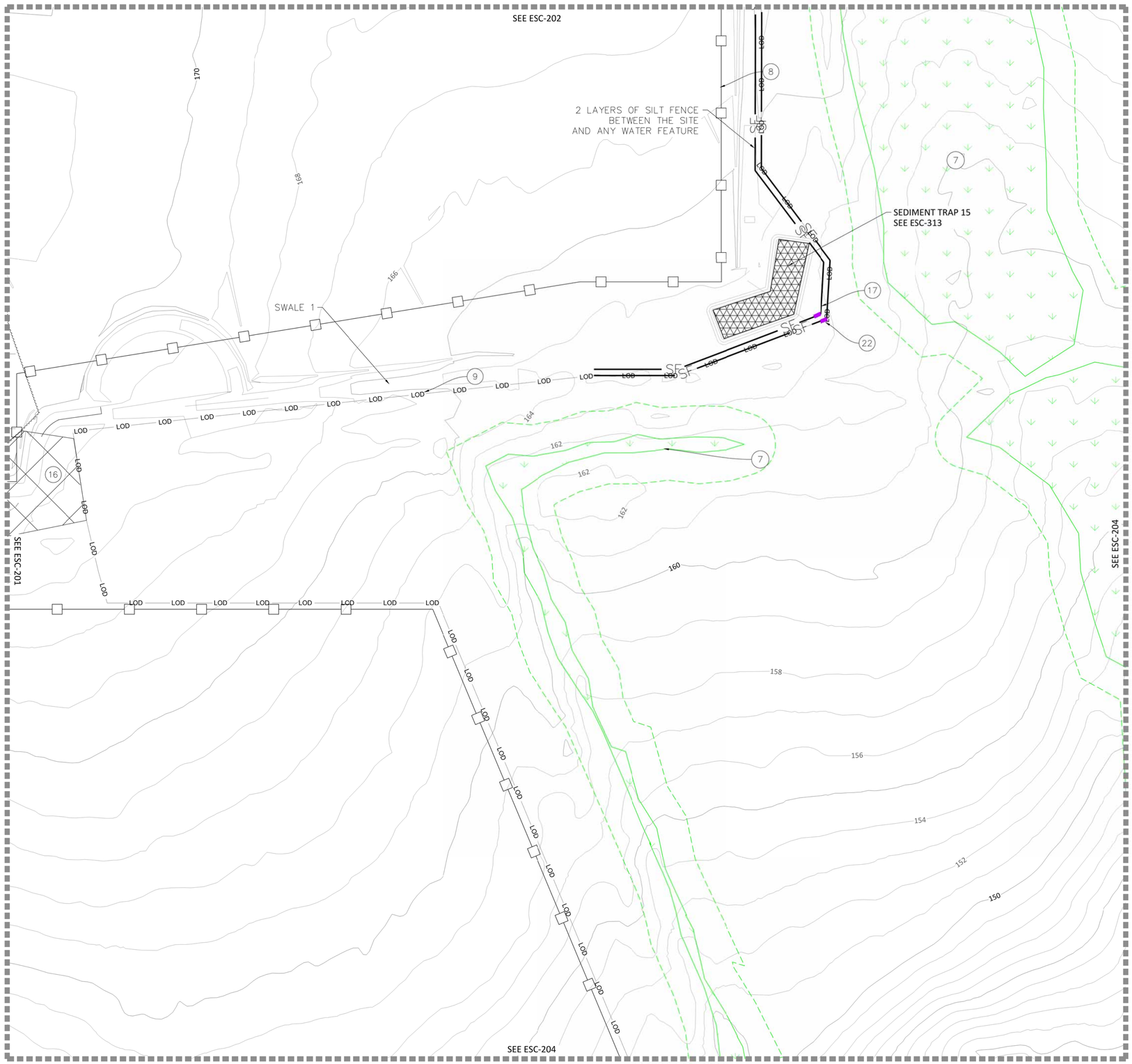
TITLE: EROSION & SEDIMENT CONTROL SITE PLAN

SHEET: ESC-210

811 Know what's below. Call before you dig.

PLOT DATE: Tuesday, January 19, 2021

LOCATION: E:\DROPBOX (SOA)\ENGINEERING\CS ENERGY\2020-03-09_STONINGTON\CAD\SITE PLANS.DWG PLOTTED BY: DARIN GALLOWAY



1 ESC-211 EROSION & SEDIMENT CONTROL SITE PLAN

Scale: 1" = 40'

N

0 40 80

MAP LEGEND (1"=1000')



LEGEND

6	PROPOSED SITE ACCESS ROAD (SEE C-400)
7	WETLAND W/BUFFER
8	SITE FENCE LINE (SEE C-402)
9	LOD — SITE LIMIT OF DISTURBANCE
10	SITE BOUNDARY
11	RIVER OR CREEK
12	100 YEAR FLOOD ZONE
13	SITE ENTRANCE ROAD (SEE ESC 300/ DETAIL 1 & ESC 301)
14	TREE CLEARING (GRUBBING, STABILIZE AFTER CLEARING)
15	TREE CLEARING (NO GRUBBING)
16	TREE CLEARING (SELECTIVE)
17	SILT FENCE (SEE ESC-302)
18	CONSTRUCTION ENTRANCE/EXIT (SEE ESC-300)
19	SLOPE MATTING (SEE ESC-301)
20	CONCRETE WASHOUT (SEE ESC-300)
21	MULCH FOR SEED/LANDSCAPE MULCH
22	SILT FENCE OUTLET (SEE ESC-302)
23	SEDIMENT BASIN, OR SEDIMENT BERM
24	TEMPORARY LAYDOWN YARD
75	MAJOR CONTOUR
76	MINOR CONTOUR

Know what's below. Call before you dig.

PLOT DATE: Tuesday, January 19, 2021

SIERRA OVERHEAD ANALYTICS
18859 MICROTRONICS WAY
SONORA, CALIFORNIA 95370
CONNECTICUT PROFESSIONAL ENGINEERING CORPORATION #PEC.0001969

REV	DESCRIPTION	DATE
6	ISSUED FOR CONSTRUCTION - DRAFT	9/4/2020
7	ISSUED FOR CONSTRUCTION - DRAFT	9/18/2020
8	ISSUED FOR CONSTRUCTION - DRAFT	10/22/2020
9	ISSUED FOR CONSTRUCTION - DRAFT	11/06/2020
10	ISSUED FOR CONSTRUCTION	1/20/2021
-	-	-
-	-	-
-	-	-
-	-	-
-	-	-

CONFIDENTIAL:
THE INFORMATION DEPICTED ON THIS DOCUMENT IS PROPRIETARY AND THE SOLE PROPERTY OF SIERRA OVERHEAD ANALYTICS, INC (SOA). ANY USE OR DISCLOSURE OF THIS INFORMATION IS EXPRESSLY PROHIBITED WITHOUT THE PRIOR WRITTEN CONSENT OF SOA.

CS Energy
Building a Cleaner Future
2045 LINCOLN HIGHWAY
EDISON, NEW JERSEY 08817

PROJECT NAME:
STONINGTON SOLAR PROJECT

PROJECT ADDRESS:
ELLA WHEELER RD.
NORTH STONINGTON, CT 06359
41° 25' 9.71"N, 71° 50' 4.83"W

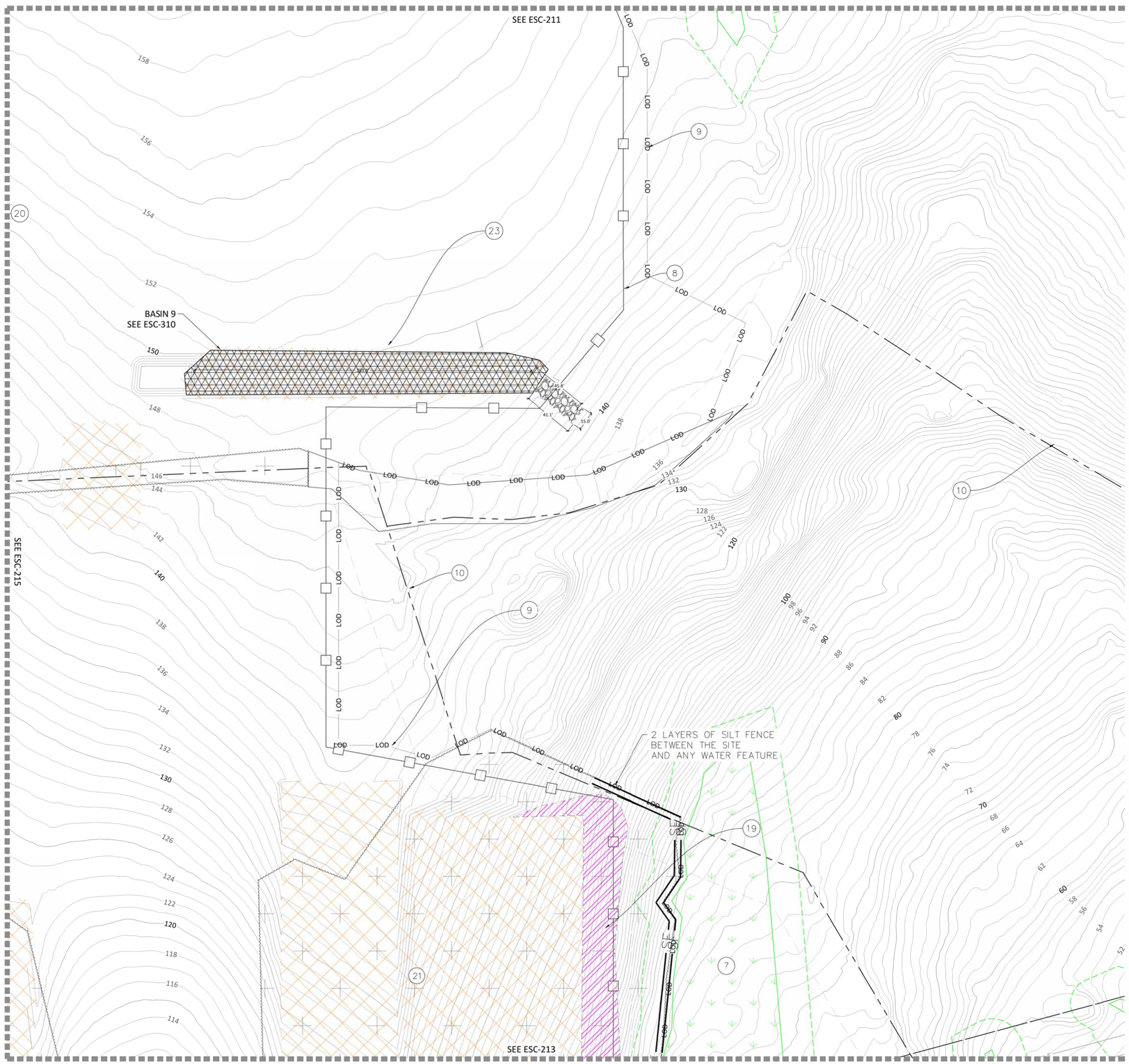
SEAL: STATE OF CONNECTICUT · DARIN RAY GALLOWAY · No. 34152 · LICENSED PROFESSIONAL ENGINEER

DATE:	21-JAN-20
PROJECT #:	20200309_CT
DRAWN BY:	MMM
CHECKED BY:	DRG

TITLE: EROSION & SEDIMENT CONTROL SITE PLAN

SHEET: ESC-211

LOCATION: E:\DROPBOX (SOA)\ENGINEERING\CS ENERGY\2020-03-09_STONINGTON\CAD\SITE PLANS.DWG PLOTTED BY: DARIN GALLOWAY



1 EROSION & SEDIMENT CONTROL SITE PLAN
ESC-212
Scale: 1" = 40'

N

0 40 80

MAP LEGEND (1"=1000')



LEGEND

6		PROPOSED SITE ACCESS ROAD (SEE C-400)
7		WETLAND W/BUFFER
8		SITE FENCE LINE (SEE C-402)
9	LOD	SITE LIMIT OF DISTURBANCE
10		SITE BOUNDARY
11		RIVER OR CREEK
12		100 YEAR FLOOD ZONE
13		SITE ENTRANCE ROAD (SEE ESC 300/ DETAIL 1 & ESC 301)
14		TREE CLEARING (GRUBBING, STABILIZE AFTER CLEARING)
15		TREE CLEARING (NO GRUBBING)
16		TREE CLEARING (SELECTIVE)
17		SILT FENCE (SEE ESC-302)
18		CONSTRUCTION ENTRANCE/EXIT (SEE ESC-300)
19		SLOPE MATTING (SEE ESC-301)
20		CONCRETE WASHOUT (SEE ESC-300)
21		MULCH FOR SEED/LANDSCAPE MULCH
22		SILT FENCE OUTLET (SEE ESC-302)
23		SEDIMENT BASIN, OR SEDIMENT BERM
24		TEMPORARY LAYDOWN YARD
	75	MAJOR CONTOUR
	76	MINOR CONTOUR

Know what's below. Call before you dig.

PLOT DATE: Tuesday, January 19, 2021

SIERRA OVERHEAD ANALYTICS
18859 MICROTRONICS WAY
SONORA, CALIFORNIA 95370
CONNECTICUT PROFESSIONAL
ENGINEERING CORPORATION #PEC.0001969

REV	DESCRIPTION	DATE
6	ISSUED FOR CONSTRUCTION - DRAFT	9/4/2020
7	ISSUED FOR CONSTRUCTION - DRAFT	9/18/2020
8	ISSUED FOR CONSTRUCTION - DRAFT	10/22/2020
9	ISSUED FOR CONSTRUCTION - DRAFT	11/06/2020
10	ISSUED FOR CONSTRUCTION	1/20/2021
-	-	-
-	-	-
-	-	-
-	-	-
-	-	-

CONFIDENTIAL:
THE INFORMATION DEPICTED ON THIS DOCUMENT IS PROPRIETARY AND THE SOLE PROPERTY OF SIERRA OVERHEAD ANALYTICS, INC (SOA). ANY USE OR DISCLOSURE OF THIS INFORMATION IS EXPRESSLY PROHIBITED WITHOUT THE PRIOR WRITTEN CONSENT OF SOA.

CS Energy
Building a Cleaner Future
2045 LINCOLN HIGHWAY
EDISON, NEW JERSEY 08817

PROJECT NAME:
STONINGTON SOLAR PROJECT

PROJECT ADDRESS:
ELLA WHEELER RD.
NORTH STONINGTON, CT 06359
41° 25' 9.71"N, 71° 50' 4.83"W

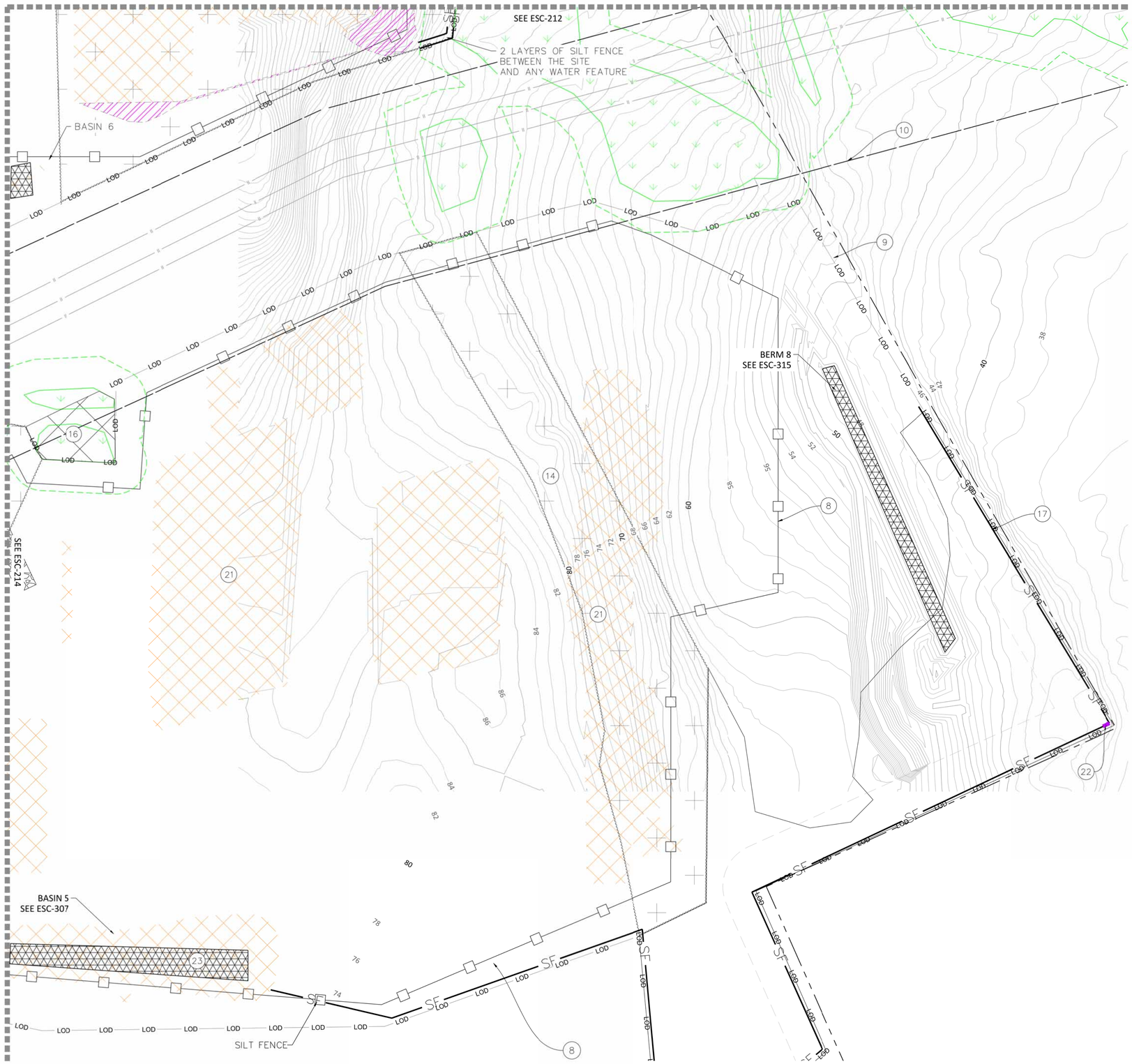
SEAL:
STATE OF CONNECTICUT
DARIN RAY GALLOWAY
No. 34152
LICENSED PROFESSIONAL ENGINEER

DATE:	21-JAN-20
PROJECT #:	20200309_CT
DRAWN BY:	MMM
CHECKED BY:	DRG

TITLE: EROSION & SEDIMENT CONTROL SITE PLAN

SHEET: ESC-212

LOCATION: E:\DROPBOX (SOA)\ENGINEERING\CS ENERGY\2020-03-09_STONINGTON\CAD\SITE PLANS.DWG PLOTTED BY: DARIN GALLOWAY



1 ESC-213 EROSION & SEDIMENT CONTROL SITE PLAN
Scale: 1" = 40'

N 0 40 80

MAP LEGEND (1"=1000')



LEGEND

6	PROPOSED SITE ACCESS ROAD (SEE C-400)
7	WETLAND W/BUFFER
8	SITE FENCE LINE (SEE C-402)
9	LOD — SITE LIMIT OF DISTURBANCE
10	SITE BOUNDARY
11	RIVER OR CREEK
12	100 YEAR FLOOD ZONE
13	SITE ENTRANCE ROAD (SEE ESC 300/ DETAIL 1 & ESC 301)
14	TREE CLEARING (GRUBBING, STABILIZE AFTER CLEARING)
15	TREE CLEARING (NO GRUBBING)
16	TREE CLEARING (SELECTIVE)
17	SILT FENCE (SEE ESC-302)
18	CONSTRUCTION ENTRANCE/EXIT (SEE ESC-300)
19	SLOPE MATTING (SEE ESC-301)
20	CONCRETE WASHOUT (SEE ESC-300)
21	MULCH FOR SEED/LANDSCAPE MULCH
22	SILT FENCE OUTLET (SEE ESC-302)
23	SEDIMENT BASIN, OR SEDIMENT BERM
24	TEMPORARY LAYDOWN YARD
75	MAJOR CONTOUR
76	MINOR CONTOUR

PLOT DATE: Tuesday, January 19, 2021

SIERRA OVERHEAD ANALYTICS
18859 MICROTRONICS WAY
SONORA, CALIFORNIA 95370
CONNECTICUT PROFESSIONAL
ENGINEERING CORPORATION #PEC.0001969

REV	DESCRIPTION	DATE
6	ISSUED FOR CONSTRUCTION - DRAFT	9/4/2020
7	ISSUED FOR CONSTRUCTION - DRAFT	9/18/2020
8	ISSUED FOR CONSTRUCTION - DRAFT	10/22/2020
9	ISSUED FOR CONSTRUCTION - DRAFT	11/06/2020
10	ISSUED FOR CONSTRUCTION	1/20/2021
-	-	-
-	-	-
-	-	-
-	-	-
-	-	-

CONFIDENTIAL:
THE INFORMATION DEPICTED ON THIS DOCUMENT IS PROPRIETARY AND THE SOLE PROPERTY OF SIERRA OVERHEAD ANALYTICS, INC (SOA). ANY USE OR DISCLOSURE OF THIS INFORMATION IS EXPRESSLY PROHIBITED WITHOUT THE PRIOR WRITTEN CONSENT OF SOA.

CS Energy
Building a Cleaner Future
2045 LINCOLN HIGHWAY
EDISON, NEW JERSEY 08817

PROJECT NAME:
STONINGTON SOLAR PROJECT

PROJECT ADDRESS:
ELLA WHEELER RD.
NORTH STONINGTON, CT 06359
41° 25' 9.71"N, 71° 50' 4.83"W

SEAL: STATE OF CONNECTICUT DARIN RAY GALLOWAY No. 34152 LICENSED PROFESSIONAL ENGINEER

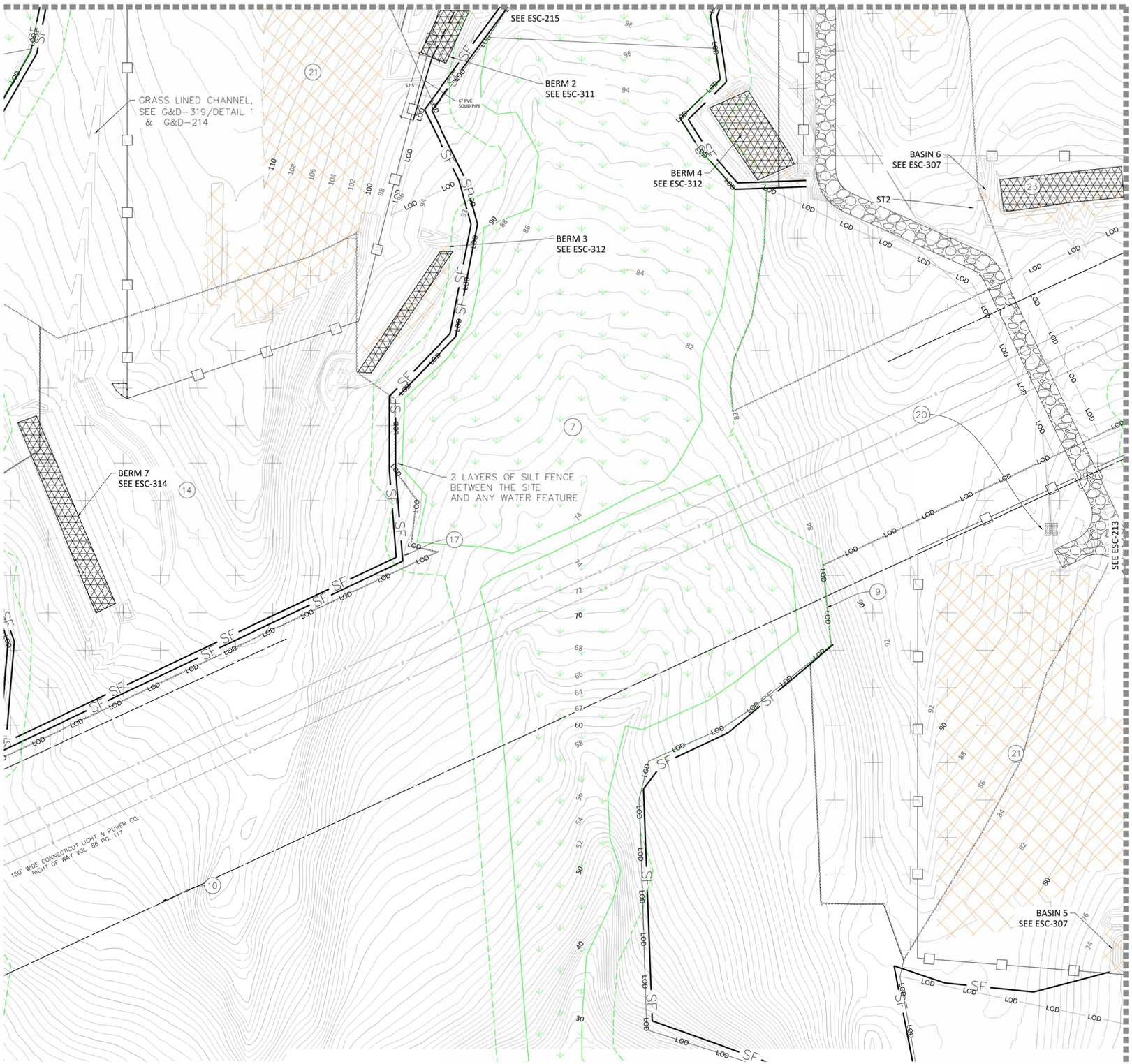
DATE: 21-JAN-20
PROJECT #: 20200309_CT
DRAWN BY: MMM
CHECKED BY: DRG

TITLE: EROSION & SEDIMENT CONTROL SITE PLAN

SHEET: ESC-213

811 Know what's below. Call before you dig.

LOCATION: E:\DROPBOX (SOA)\ENGINEERING\CS ENERGY\2020-03-09_STONINGTON\CAD\SITE PLANS.DWG PLOTTED BY: DARIN GALLOWAY



1 EROSION & SEDIMENT CONTROL SITE PLAN
ESC-214
Scale: 1" = 40'

N 0 40 80

MAP LEGEND (1"=1000')



LEGEND

6		PROPOSED SITE ACCESS ROAD (SEE C-400)
7		WETLAND W/BUFFER
8		SITE FENCE LINE (SEE C-402)
9	LOD	SITE LIMIT OF DISTURBANCE
10		SITE BOUNDARY
11		RIVER OR CREEK
12		100 YEAR FLOOD ZONE
13		SITE ENTRANCE ROAD (SEE ESC 300/ DETAIL 1 & ESC 301)
14		TREE CLEARING (GRUBBING, STABILIZE AFTER CLEARING)
15		TREE CLEARING (NO GRUBBING)
16		TREE CLEARING (SELECTIVE)
17		SILT FENCE (SEE ESC-302)
18		CONSTRUCTION ENTRANCE/EXIT (SEE ESC-300)
19		SLOPE MATTING (SEE ESC-301)
20		CONCRETE WASHOUT (SEE ESC-300)
21		MULCH FOR SEED/LANDSCAPE MULCH
22		SILT FENCE OUTLET (SEE ESC-302)
23		SEDIMENT BASIN, OR SEDIMENT BERM
24		TEMPORARY LAYDOWN YARD
	75	MAJOR CONTOUR
	76	MINOR CONTOUR

Know what's below. Call before you dig.

PLOT DATE: Tuesday, January 19, 2021

soa
SIERRA OVERHEAD ANALYTICS
18859 MICROTRONICS WAY
SONORA, CALIFORNIA 95370
CONNECTICUT PROFESSIONAL
ENGINEERING CORPORATION #PEC.0001969

REV	DESCRIPTION	DATE
6	ISSUED FOR CONSTRUCTION - DRAFT	9/4/2020
7	ISSUED FOR CONSTRUCTION - DRAFT	9/18/2020
8	ISSUED FOR CONSTRUCTION - DRAFT	10/22/2020
9	ISSUED FOR CONSTRUCTION - DRAFT	11/06/2020
10	ISSUED FOR CONSTRUCTION	1/20/2021
-	-	-
-	-	-
-	-	-
-	-	-
-	-	-

CONFIDENTIAL:
THE INFORMATION DEPICTED ON THIS DOCUMENT IS PROPRIETARY AND THE SOLE PROPERTY OF SIERRA OVERHEAD ANALYTICS, INC (SOA). ANY USE OR DISCLOSURE OF THIS INFORMATION IS EXPRESSLY PROHIBITED WITHOUT THE PRIOR WRITTEN CONSENT OF SOA.

CS Energy
Building a Cleaner Future
2045 LINCOLN HIGHWAY
EDISON, NEW JERSEY 08817

PROJECT NAME:
STONINGTON SOLAR PROJECT

PROJECT ADDRESS:
ELLA WHEELER RD.
NORTH STONINGTON, CT 06359
41° 25' 9.71"N, 71° 50' 4.83"W

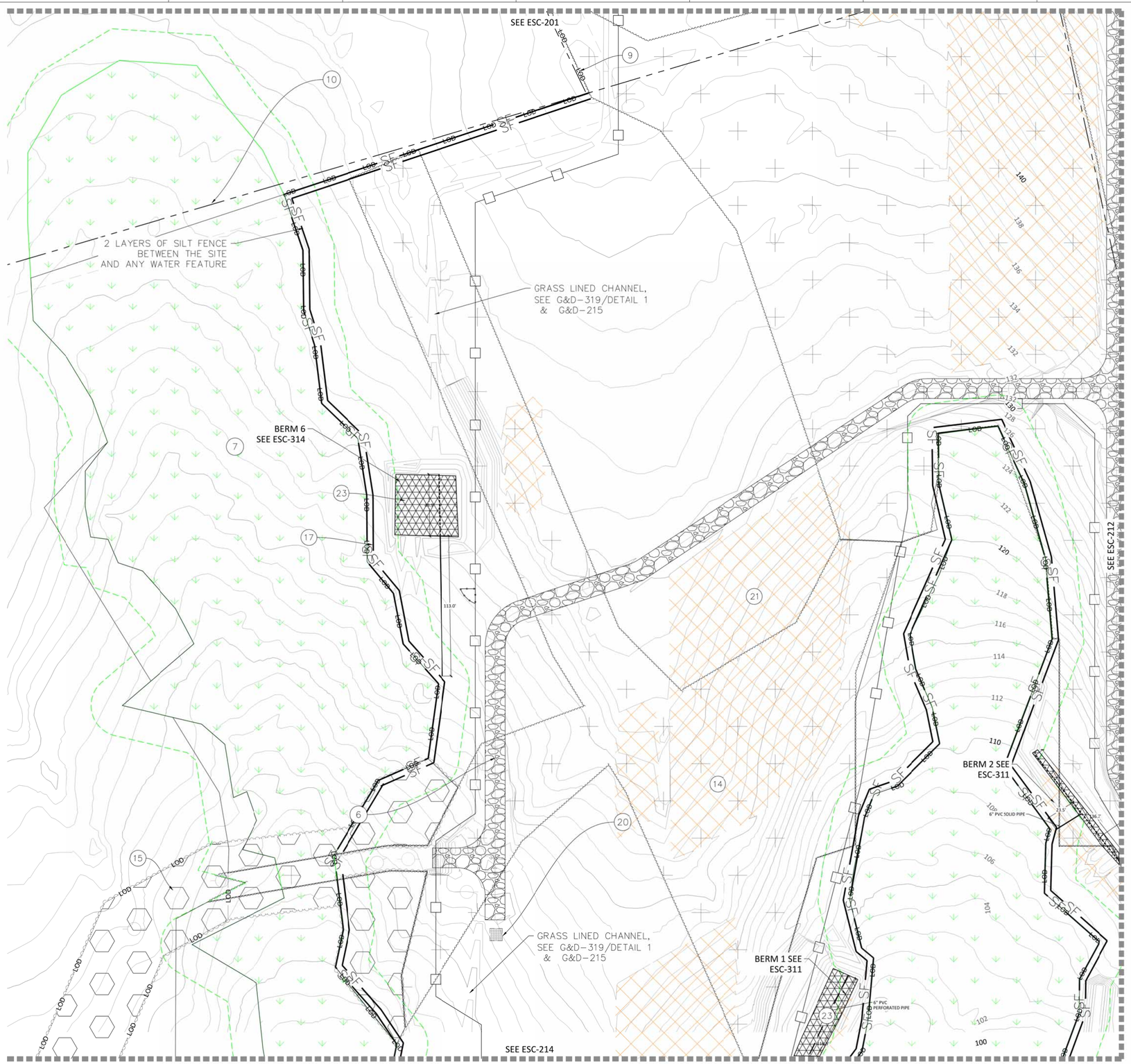
SEAL: STATE OF CONNECTICUT · DARIN RAY GALLOWAY · No. 34152 · LICENSED PROFESSIONAL ENGINEER

DATE:	21-JAN-20
PROJECT #:	20200309_CT
DRAWN BY:	MMM
CHECKED BY:	DRG

TITLE: EROSION & SEDIMENT CONTROL SITE PLAN

SHEET: ESC-214

LOCATION: E:\DROPBOX (SOA)\ENGINEERING\CS ENERGY\2020-03-09_STONINGTON\CAD\SITE PLANS.DWG PLOTTED BY: DARIN GALLOWAY



1 ESC-215 EROSION & SEDIMENT CONTROL SITE PLAN

Scale: 1" = 40'

N 0 40 80

MAP LEGEND (1"=1000')



LEGEND

6		PROPOSED SITE ACCESS ROAD (SEE C-400)
7		WETLAND W/BUFFER
8		SITE FENCE LINE (SEE C-402)
9	LOD	SITE LIMIT OF DISTURBANCE
10		SITE BOUNDARY
11		RIVER OR CREEK
12		100 YEAR FLOOD ZONE
13		SITE ENTRANCE ROAD (SEE ESC 300/ DETAIL 1 & ESC 301)
14		TREE CLEARING (GRUBBING, STABILIZE AFTER CLEARING)
15		TREE CLEARING (NO GRUBBING)
16		TREE CLEARING (SELECTIVE)
17		SILT FENCE (SEE ESC-302)
18		CONSTRUCTION ENTRANCE/EXIT (SEE ESC-300)
19		SLOPE MATTING (SEE ESC-301)
20		CONCRETE WASHOUT (SEE ESC-300)
21		MULCH FOR SEED/LANDSCAPE MULCH
22		SILT FENCE OUTLET (SEE ESC-302)
23		SEDIMENT BASIN, OR SEDIMENT BERM
24		TEMPORARY LAYDOWN YARD
	75	MAJOR CONTOUR
	76	MINOR CONTOUR

SIERRA OVERHEAD ANALYTICS

18859 MICROTRONICS WAY
SONORA, CALIFORNIA 95370
CONNECTICUT PROFESSIONAL
ENGINEERING CORPORATION #PEC.0001969

REV	DESCRIPTION	DATE
6	ISSUED FOR CONSTRUCTION - DRAFT	9/4/2020
7	ISSUED FOR CONSTRUCTION - DRAFT	9/18/2020
8	ISSUED FOR CONSTRUCTION - DRAFT	10/22/2020
9	ISSUED FOR CONSTRUCTION - DRAFT	11/06/2020
10	ISSUED FOR CONSTRUCTION	1/20/2021
-	-	-
-	-	-
-	-	-
-	-	-
-	-	-

CONFIDENTIAL:
THE INFORMATION DEPICTED ON THIS DOCUMENT IS PROPRIETARY AND THE SOLE PROPERTY OF SIERRA OVERHEAD ANALYTICS, INC (SOA). ANY USE OR DISCLOSURE OF THIS INFORMATION IS EXPRESSLY PROHIBITED WITHOUT THE PRIOR WRITTEN CONSENT OF SOA.

CS Energy
Building a Cleaner Future
2045 LINCOLN HIGHWAY
EDISON, NEW JERSEY 08817

PROJECT NAME:
STONINGTON SOLAR PROJECT

PROJECT ADDRESS:
ELLA WHEELER RD.
NORTH STONINGTON, CT 06359
41° 25' 9.71"N, 71° 50' 4.83"W

SEAL: STATE OF CONNECTICUT DARIN RAY GALLOWAY No. 34152 LICENSED PROFESSIONAL ENGINEER

DATE: 21-JAN-20
PROJECT #: 20200309_CT
DRAWN BY: MMM
CHECKED BY: DRG

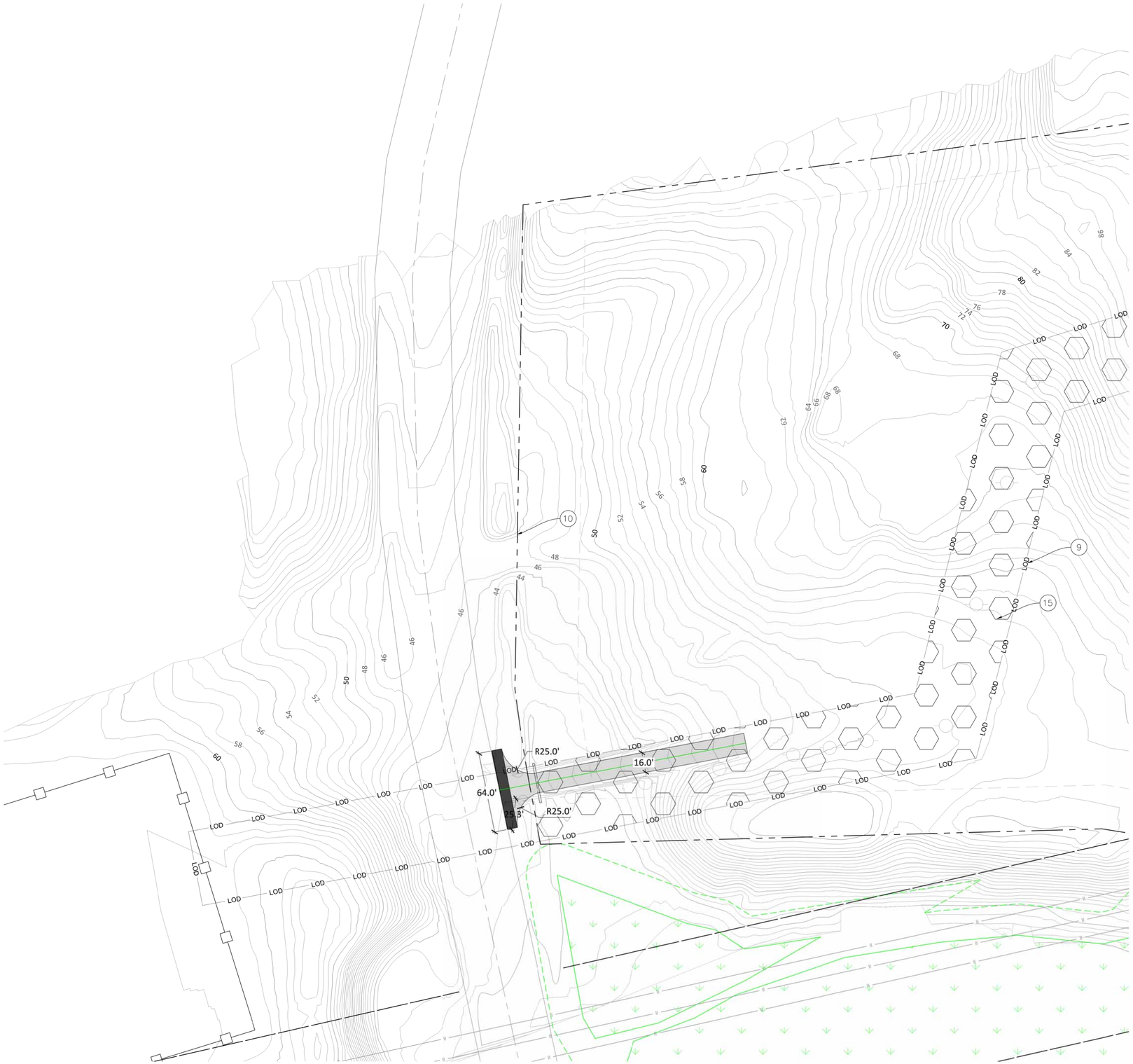
TITLE: EROSION & SEDIMENT CONTROL SITE PLAN

SHEET: ESC-215

811 Know what's below. Call before you dig.

PLOT DATE: Tuesday, January 19, 2021

LOCATION: E:\DROPBOX (SOA)\ENGINEERING\CS ENERGY\2020-03-09_STONINGTON\CAD\SITE PLANS.DWG PLOTTED BY: DARIN GALLOWAY



1 ESC-216 EROSION & SEDIMENT CONTROL SITE PLAN
Scale: 1" = 40'

N 0 40 80 Feet

MAP LEGEND (1"=1000')



LEGEND

6	PROPOSED SITE ACCESS ROAD (SEE C-400)
7	WETLAND W/BUFFER
8	SITE FENCE LINE (SEE C-402)
9	LOD SITE LIMIT OF DISTURBANCE
10	SITE BOUNDARY
11	RIVER OR CREEK
12	100 YEAR FLOOD ZONE
13	SITE ENTRANCE ROAD (SEE ESC 300/ DETAIL 1 & ESC 301)
14	TREE CLEARING (GRUBBING, STABILIZE AFTER CLEARING)
15	TREE CLEARING (NO GRUBBING)
16	TREE CLEARING (SELECTIVE)
17	SILT FENCE (SEE ESC-302)
18	CONSTRUCTION ENTRANCE/EXIT (SEE ESC-300)
19	SLOPE MATTING (SEE ESC-301)
20	CONCRETE WASHOUT (SEE ESC-300)
21	MULCH FOR SEED/LANDSCAPE MULCH
22	SILT FENCE OUTLET (SEE ESC-302)
23	SEDIMENT BASIN, OR SEDIMENT BERM
24	TEMPORARY LAYDOWN YARD
75	MAJOR CONTOUR
76	MINOR CONTOUR

Know what's below. Call before you dig.

PLOT DATE: Tuesday, January 19, 2021

SIERRA OVERHEAD ANALYTICS
18859 MICROTRONICS WAY
SONORA, CALIFORNIA 95370
CONNECTICUT PROFESSIONAL
ENGINEERING CORPORATION #PEC.0001969

REV	DESCRIPTION	DATE
6	ISSUED FOR CONSTRUCTION - DRAFT	9/4/2020
7	ISSUED FOR CONSTRUCTION - DRAFT	9/18/2020
8	ISSUED FOR CONSTRUCTION - DRAFT	10/22/2020
9	ISSUED FOR CONSTRUCTION - DRAFT	11/06/2020
10	ISSUED FOR CONSTRUCTION	1/20/2021
-	-	-
-	-	-
-	-	-
-	-	-
-	-	-
-	-	-

CONFIDENTIAL:
THE INFORMATION DEPICTED ON THIS DOCUMENT IS PROPRIETARY AND THE SOLE PROPERTY OF SIERRA OVERHEAD ANALYTICS, INC (SOA). ANY USE OR DISCLOSURE OF THIS INFORMATION IS EXPRESSLY PROHIBITED WITHOUT THE PRIOR WRITTEN CONSENT OF SOA.

CS Energy
Building a Cleaner Future
2045 LINCOLN HIGHWAY
EDISON, NEW JERSEY 08817

PROJECT NAME:
STONINGTON SOLAR PROJECT

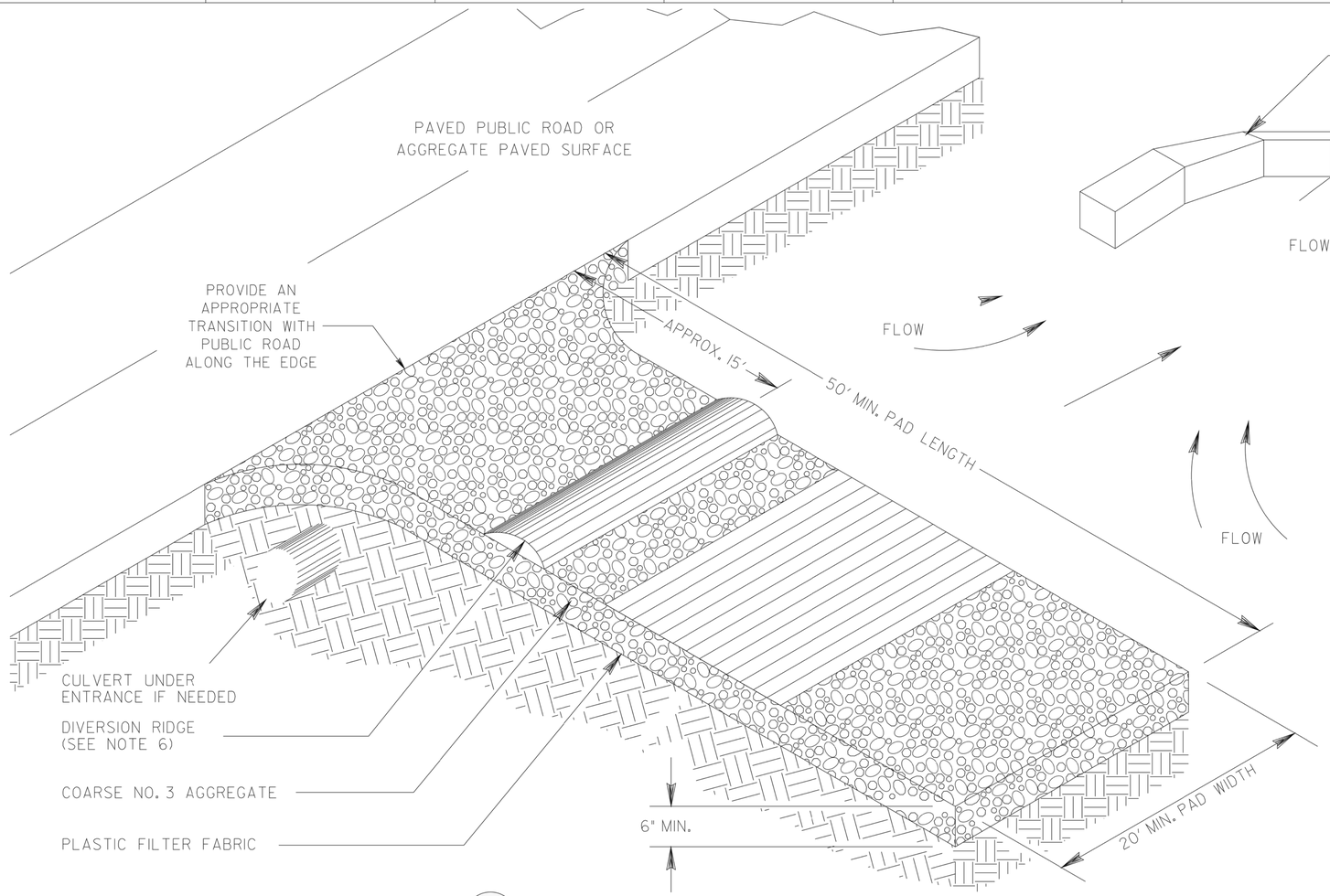
PROJECT ADDRESS:
ELLA WHEELER RD.
NORTH STONINGTON, CT 06359
41° 25' 9.71"N, 71° 50' 4.83"W

SEAL: STATE OF CONNECTICUT · DARIN RAY GALLOWAY · No. 34152 · LICENSED PROFESSIONAL ENGINEER

DATE: 21-JAN-20
PROJECT #: 20200309_CT
DRAWN BY: MMM
CHECKED BY: DRG

TITLE: EROSION & SEDIMENT CONTROL SITE PLAN
SHEET: ESC-216

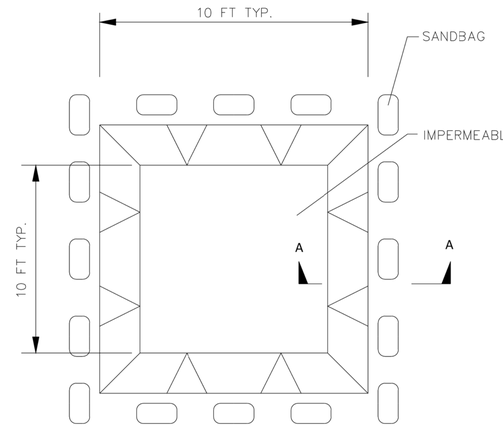
LOCATION: E:\DROPBOX (SOA)\ENGINEERING\CS ENERGY\2020-03-09_STONINGTON\CAD\SITE PLANS.DWG PLOTTED BY: DARIN GALLOWAY



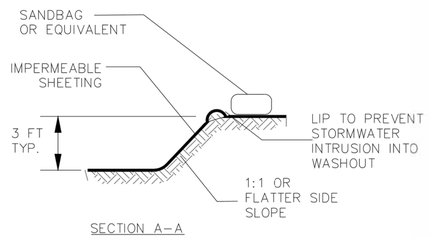
1 CONSTRUCTION ENTRANCE, TYP.
ESC-300 Scale: NTS

GENERAL NOTES:

1. AVOID LOCATING CONSTRUCTION EXITS ON STEEP SLOPES OR AT SHARP CURVES ON PUBLIC ROADS. CONSTRUCTION EXITS ARE NOT REQUIRED FOR AGGREGATE SURFACED PUBLIC ROADS.
2. REMOVE ALL VEGETATION AND OTHER UNSUITABLE MATERIAL FROM THE FOUNDATION AREA AND GRADE FOR POSITIVE DRAINAGE.
3. AGGREGATE SIZE SHALL BE COARSER THAN NO. 3 AGGREGATE WITH 0.0% PASSING THE 1.06" U.S. STANDARD SIEVE.
4. GRAVEL PAD SHALL HAVE A MINIMUM THICKNESS OF 6" AND PLACED ON APPROVED PLASTIC FILTER FABRIC.
5. GRAVEL PAD WIDTH SHALL BE EQUAL TO FULL WIDTH AT ALL POINTS OF VEHICULAR EGRESS.
6. PROVIDE A TRAVERSABLE DIVERSION RIDGE CONSTRUCTED OF AGGREGATE 6" TO 8" HIGH WHEN GRADE TOWARD THE PAVED AREA IS GREATER THAN 2%.
7. INSTALL CULVERT UNDER THE ENTRANCE IF NEEDED TO MAINTAIN DRAINAGE DITCHES.
8. IF THE ACTION OF THE VEHICLE TRAVELING OVER THE GRAVEL PAD DOES NOT SUFFICIENTLY REMOVE THE MUD PRIOR TO ENTERING PUBLIC ROADS, THE CONTRACTOR SHALL ADD A CONSTRUCTION EXIST TIRE WASH ASSEMBLY TO AN EXISTING CONSTRUCTION EXIT. THE CONSTRUCTION EXIT TIRE WASH ASSEMBLY INCLUDES: TIRE WASH AREA, WATER SOURCE, AND SEDIMENT TRAP OR OTHER ACCEPTABLE SEDIMENT STORAGE DEVICE.
9. TIRE WASHING SHALL BE PERFORMED ON AN AREA STABILIZED WITH AGGREGATE THAT DRAINS INTO A SEDIMENT TRAP OR OTHER ACCEPTIBLE SEDIMENT STORAGE DEVICE. DIVERT ALL SURFACE RUNOFF AND DRAINAGE FROM THE CONSTRUCTION EXIT TO THE SEDIMENT CONTROL DEVICE. ACCEPTABLE SEDIMENT STORAGE DEVICE EXAMPLES INCLUDE TEMPORARY SEDIMENT TRAPS, HAY BALES OR STONE FILTER RING WITH THE SEDIMENT STORAGE SIZED FOR 67 CUBIC YARDS PER ACRE OF DRAINAGE. TIRE WASHING SHALL BE DONE MANUALLY OR BY EQUIPMENT SUITABLE FOR TRUCK TRAFFIC THAT REMOVES MUD AND DIRT.
10. AGGREGATE SHALL BE KEPT LOOSE OR SCARIFIED WHEN AGGREGATE BECOMES CONSOLIDATED.
11. CONSTRUCTION EXIT SHALL BE MAINTAINED IN A CONDITION THAT PREVENTS TRACKING AND/OR FLOW OF MUD ONTO PUBLIC RIGHTS-OF-WAY. THIS MAY REQUIRE TOP DRESSING, REPAIR, AND OR CLEAN OUT OF ANY MEASURES USED TO TRAP SEDIMENT. ALL MUS AND DEBRIS SPILLED, DROPPED, WASHED, OR TRACKED FROM VEHICLES OR SITE ONTO ROADWAYS OR INTO DRAINS MUST BE REMOVED IMMEDIATELY.



PLAN



SECTION A-A

2 CONCRETE WASHOUT, TYP.
ESC-300 Scale: NTS

Know what's below. Call before you dig.

PLOT DATE: Tuesday, January 19, 2021

SIERRA OVERHEAD ANALYTICS
18359 MICROTRONICS WAY
SONORA, CALIFORNIA 95370
CONNECTICUT PROFESSIONAL
ENGINEERING CORPORATION #PEC.0001969

REV	DESCRIPTION	DATE
6	ISSUED FOR CONSTRUCTION - DRAFT	9/4/2020
7	ISSUED FOR CONSTRUCTION - DRAFT	9/18/2020
8	ISSUED FOR CONSTRUCTION - DRAFT	10/22/2020
9	ISSUED FOR CONSTRUCTION - DRAFT	11/06/2020
10	ISSUED FOR CONSTRUCTION	1/20/2021
-	-	-
-	-	-
-	-	-
-	-	-
-	-	-
-	-	-

CONFIDENTIAL:
THE INFORMATION DEPICTED ON THIS DOCUMENT IS PROPRIETARY AND THE SOLE PROPERTY OF SIERRA OVERHEAD ANALYTICS, INC (SOA). ANY USE OR DISCLOSURE OF THIS INFORMATION IS EXPRESSLY PROHIBITED WITHOUT THE PRIOR WRITTEN CONSENT OF SOA.

CS Energy
Building a Cleaner Future
2045 LINCOLN HIGHWAY
EDISON, NEW JERSEY 08817

PROJECT NAME:
STONINGTON SOLAR PROJECT

PROJECT ADDRESS:
ELLA WHEELER RD.
NORTH STONINGTON, CT 06359
41° 25' 9.71"N, 71° 50' 4.83"W

SEAL: STATE OF CONNECTICUT · DARRIN RAY GALLOWAY · No. 34152 · LICENSED PROFESSIONAL ENGINEER

DATE:	21-JAN-20
PROJECT #:	20200309_CT
DRAWN BY:	MMM
CHECKED BY:	DRG

TITLE: EROSION & SEDIMENT CONTROL DETAILS

SHEET: ESC-300

12-Tire Tracked Soils

Construction Entrance (CE)

Definition
A stone stabilized pad sometimes associated with a mud rack, automotive spray, or other measures located at points of vehicular ingress and egress on a construction site.

Purpose
To reduce the tracking of sediment off site onto paved surfaces.

Applicability
At points of construction vehicle ingress and egress where sediment may be tracked onto adjoining paved surfaces by vehicles.

Planning Considerations

The construction entrance is intended to cause sediment to drop off of vehicle tires and prevent it from being tracked onto adjoining paved areas. Its design and maintenance requirements are dependent upon how intensely the entrance is used and the nature of the sediments that can be tracked. Consider the texture of the sediments to be retained by the construction entrance. The minimum construction entrance is 50 feet, but where the soils subject to tracking contain less than 80% sand, then the minimum length of the construction entrance is 100 feet (see textural triangle in Appendix H). For sites containing clay or silty soils consider developing a construction access road with a gravel base. (See Chapter 4, Special Treatments, Construction Access Roads). The length of the construction entrance may be reduced by the establishment of an access road with a stable surface that is not subject to soil tracking.

If the construction entrance drains to a paved surface and its grade exceeds 2%, then plan on installing a water bar within the construction entrance to divert water away from the paved surface. For access roads that slope down to the construction entrance, consider installing a water bar and associated sediment barrier to protect the construction entrance from unnecessary siltation during storm events.

Placing a geotextile beneath the stone pad of the construction entrance can reduce the pumping of subsoil into the stone by construction traffic and reduce maintenance costs.

Select the site of the construction entrance to avoid poorly drained soils where possible. Where lateral flows of water must be maintained through the construction entrance, consider having an engineer design subsurface drainage or other drainage facilities to eliminate the obstruction to flow.

Consider requiring the installation of construction access fencing to restrict construction traffic to the construction entrance.

When the construction entrance is installed to the minimum standards and is properly maintained, but is still unable to prevent the majority of sediments from being tracked off site, the entrance must either be extended or a washing rack installed. If a washing rack or similar device is to be used to wash sediment from tires, make provisions to intercept the wash water and trap the sediment before it is carried off-site. Determine the sizing requirements for the sediment trapping facility so that it will hold the maximum volume of water that would be used over a 2-hour period. (See **Pumping Settling Basin** measure for formula on pumping rate and storage requirements).

The use of a construction entrance may not eliminate the need for periodic street sweeping, but if properly maintain it should significantly reduce the need.

Specifications

Materials

Stone: Use angular stone sized according to the standards set by ASTM C-33, size No. 2 or 3, or DOT Standard Specifications section M.01.01, size #3. See **Figure SP-1 on page 5-4-14** for stone sizing requirements.

Geotextile: Fibers used in the geotextile shall consist of synthetic polymers composed of at least 85% by weight polypropylenes, polyesters, polyamides, polyethylene, polyolefins or polyvinylidene-chlorides. The fibers shall be formed into a stable network of filaments or yarns retaining dimensional stability relative to each other. The geotextile used shall be specifically intended for "road stabilization" applications and shall be consistent with the manufacturer's recommendations for the intended use.

Location

Locate the entrance to provide maximum utilization by construction vehicles. Avoid poorly drained soils, where possible.

Construction Entrance Dimensions (see **Figure CE-2**)

Stone Thickness: not less than 6 inches.

Width: A 12-foot minimum with points of ingress or egress flared sufficiently to accommodate the turning radius of the construction vehicles used.

Length: A 50-foot minimum except where the tracked sediments contain less than 80% sand, a 100-foot minimum is required. If the traveled length is less than the minimum, then the construction entrance shall be the traveled length. On a site specific basis increase lengths as needed to prevent the tracking of sediment onto paved surfaces.

Construction

Clear the area of the entrance of all vegetation, roots, and other objectionable material. At poorly drained locations install subsurface drainage insuring the outlet to the drains are free flowing.

If using a geotextile in place of free draining material, unroll the geotexile in a direction parallel to the roadway centerline in a loose manner permitting it to conform to the surface irregularities when the stone is placed. Unless otherwise specified by the manufacturer, the minimum overlap of geotextile panels joined without sewing according to the manufacturer's recommendations. The geotextile may be temporarily secured with pins recommended or provided by the manufacturer but they shall be removed prior to placement of the stone.

Place the stone to the specified dimensions. Keep additional stone available or stockpile for future use. If the grade of the construction entrance drains to the paved surface and it exceeds 2%, construct a water bar within the construction entrance at least 15 feet from its entrance on the paved surface diverting runoff water to a settling or filtering area.

Construct any drainage and settling facilities needed for washing operations. If wash racks are used, install according to the manufacturer's specifications.

Washing

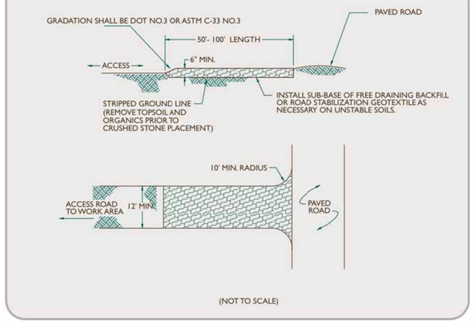
If most of the sediment is not removed by travel over the stone, wash tires before vehicles enter a public road. Divert wash water away from the entrance to a settling area to remove sediment. Size settling area to hold the volume of water used during any 2-hour period. Using a wash rack may make washing more convenient and effective.

Maintenance

Maintain the entrance in a condition which will prevent tracking and washing of sediment onto paved surfaces. Provide periodic top dressing with additional stone or additional length as conditions demand. Repair any measures used to trap sediment as needed. Immediately remove all sediment spilled, dropped, washed or tracked onto paved surfaces. Roads adjacent to a construction site shall be left clean at the end of each day.

If the construction entrance is being properly maintained and the action of a vehicle traveling over the stone pad is not sufficient to remove the majority of the sediment, then either (1) increase the length of the construction entrance, (2) modify the construction access road surface, or (3) install washing racks and associated settling area or similar devices before the vehicle enters a paved surface.

Figure CE-2 Diagram of Typical Construction Entrance



Source: USDA-NRCS

4-Short Term Non-living Soil Protection

Temporary Erosion Control Blanket (ECB)

Definition
A manufactured blanket composed of biodegradable / photodegradable natural or polymer fibers and/or filaments that have been mechanically, structurally or chemically bound together to form a continuous matrix.

Purpose
To provide temporary surface protection to newly seeded and/or disturbed soils to absorb raindrop impact and to reduce sheet and rill erosion and to enhance the establishment of vegetation.

Applicability
- On disturbed soils where slopes are 2:1 or flatter.
- Where wind and traffic generated air flow may dislodge standard, unarmored mulches.
- May be used as a substitute for **Temporary Soil Protection**.
- May be used as a substitute for **Mulch for Seed**.

Planning Considerations

When considering the use of ECB keep in mind the blanket's capability to conform to ground surface irregularities. If the blanket is not capable of developing a continuous contact with the soil then it must be applied to a fine graded surface. Some blankets will soften and when wetted reconform to the ground. Also, when the ground is frozen, proper anchoring can be difficult, if not impossible.

Care must be taken to choose the type of blanket which is most appropriate for the specific need of the project. With the abundance of erosion control blankets available, it is impossible to cover all of the advantages, disadvantages and specifications of all manufactured blankets. There is no substitute for a thorough understanding of the manufacturer's instructions and recommendations in conjunction with a site visit by the erosion and sedimentation plan designer prior to and during installation to verify a product's appropriateness.

The success of temporary erosion control blankets is dependent upon strict adherence to the manufacturer's installation recommendations. As such, a final inspection should be planned to ensure that the lap joints are secure, all edges are properly anchored and all staking/stapling patterns follow the manufacturer's recommendations.

Specifications

Materials

Temporary erosion control blankets shall be composed of fibers and/or filaments that:

- ❍ *are biodegradable or photodegradable within two years but without substantial degradation over the period of intended usage (five months maximum);*
- ❍ *are mechanically, structurally or chemically bound together to form a continuous matrix of even thickness and distribution that resist raindrop splash and when used with seedings allows vegetation to penetrate the blanket;*
- ❍ *are of sufficient structural strength to withstand stretching or movement by wind or water when installed in accordance with the manufacturer's recommendations;*
- ❍ *are free of any substance toxic to plant growth and unprotected human skin or which interferes with seed germination;*
- ❍ *contain no contaminants that pollute the air or waters of the State when properly applied; and*

- ❍ *provide either 80%-95% soil coverage when used as a substitute for **Mulch for Seed** or 100% initial soil coverage when used as a substitute for **Temporary Soil Protection** measure.*

Materials shall be selected as appropriate for the specific site conditions in accordance with manufacturer's recommendations. Use of any particular temporary erosion control blanket should be supported by manufacturer's test data that confirms the blanket meets these material specifications and will provide the short term erosion control capabilities necessary for the specific project.

Site Preparation and Installation

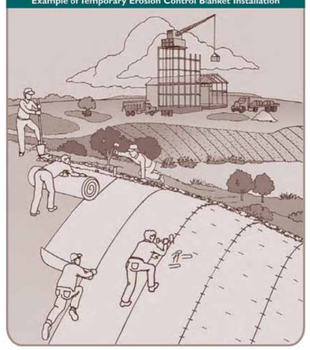
(see **Figure ECB-1**)

Prepare the surface, remove protruding objects and install temporary erosion control blankets in accordance with the manufacturer's recommendations. Ensure that the orientation and anchoring of the blanket is appropriate for the site.

The blanket can be laid over areas where sprigged grass seedlings have been inserted into the soil. Where landscape plantings are planned, lay the blanket first and then plant through the blanket in accordance with Landscape Planting measure.

Inspect the installation to insure that all lap joints are secure, all edges are properly anchored and all staking or stapling patterns follow manufacturer's recommendations.

Figure ECB-1
Example of Temporary Erosion Control Blanket Installation



Maintenance

Inspect temporary erosion control blankets at least once a week and within 24 hours of the end of a storm with a rainfall amount of 0.5 inch or greater for failures. Blanket failure has occurred when (1) soils and/or seed have washed away from beneath the blanket and the soil surface can be expected to continue to erode at an accelerated rate, and/or (2) the blanket has become dislodged from the soil surface or is torn.

If washouts or breakouts occur, re-install the blanket after regrading and re-seeding, ensuring that blanket installation still meets design specifications. When repetitive failures occur at the same location, review conditions and limitations for use and determine if diversions, stone check dams or other measures are needed to reduce failure rate.

Repair any dislodged or failed blankets immediately.

When used as a substitute for **Mulch for Seed**, continue to inspect as required by the seeding measure. When used as a substitute for **Temporary Soil Protection**, continue to inspect until it is replaced by other erosion control measures or until work resumes.

PLOT DATE: Tuesday, January 19, 2021

soa
SIERRA OVERHEAD ANALYTICS
18359 MICROTRONICS WAY
SONORA, CALIFORNIA 95370
CONNECTICUT PROFESSIONAL
ENGINEERING CORPORATION #PEC.0001969

REV	DESCRIPTION	DATE
6	ISSUED FOR CONSTRUCTION - DRAFT	9/4/2020
7	ISSUED FOR CONSTRUCTION - DRAFT	9/18/2020
8	ISSUED FOR CONSTRUCTION - DRAFT	10/22/2020
9	ISSUED FOR CONSTRUCTION - DRAFT	11/06/2021
10	ISSUED FOR CONSTRUCTION	1/20/2021
-	-	-
-	-	-
-	-	-
-	-	-
-	-	-

CONFIDENTIAL:
THE INFORMATION DEPICTED ON THIS DOCUMENT IS PROPRIETARY AND THE SOLE PROPERTY OF SIERRA OVERHEAD ANALYTICS, INC (SOA). ANY USE OR DISCLOSURE OF THIS INFORMATION IS EXPRESSLY PROHIBITED WITHOUT THE PRIOR WRITTEN CONSENT OF SOA.

CS Energy
Building a Cleaner Future
2045 LINCOLN HIGHWAY
EDISON, NEW JERSEY 08817

PROJECT NAME:
STONINGTON SOLAR PROJECT

PROJECT ADDRESS:
ELLA WHEELER RD.
NORTH STONINGTON, CT 06359
41° 25' 9.71"N, 71° 50' 4.83"W

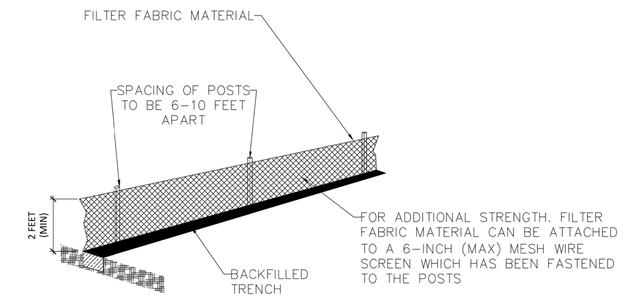
SEAL: STATE OF CONNECTICUT · DARIN RAY GALLOWAY · No. 34152 · LICENSED PROFESSIONAL ENGINEER

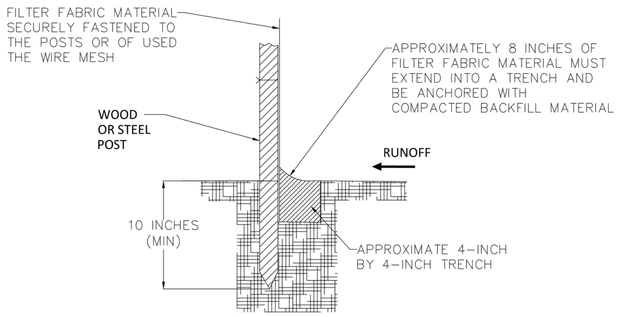
DATE: 21-JAN-20
PROJECT #: 20200309_CT
DRAWN BY: MMM
CHECKED BY: DRG

TITLE: EROSION & SEDIMENT CONTROL DETAILS
SHEET: ESC–301

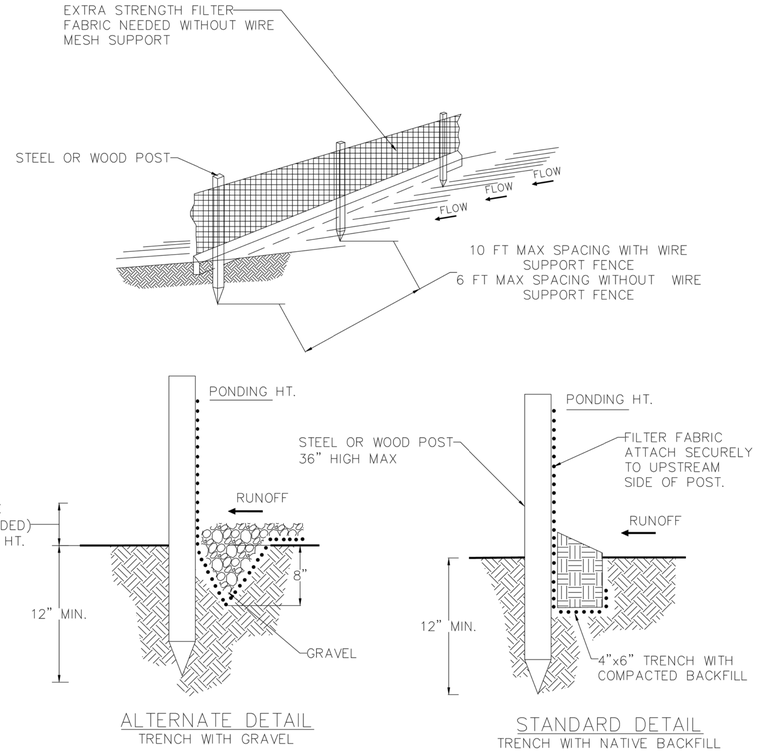
811 Know what's below. Call before you dig.

LOCATION: E:\DROPBOX (SOA)\ENGINEERING\CS ENERGY\2020-03-09_STONINGTON\CAD\SITE PLANS.DWG PLOTTED BY: DARIN GALLOWAY

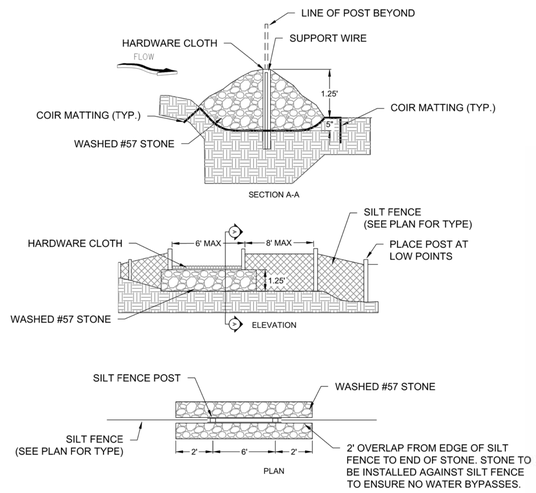




1 SILT FENCE, TYP.
ESC-302 Scale: NTS



2 SILT FENCE ALTERNATE, TYP.
ESC-302 Scale: NTS



3 SILT FENCE OUTLET, TYP.
ESC-302 Scale: NTS

SIERRA OVERHEAD ANALYTICS
18359 MICROTRONICS WAY
SONORA, CALIFORNIA 95370
CONNECTICUT PROFESSIONAL ENGINEERING CORPORATION #PEC.0001969

REV	DESCRIPTION	DATE
6	ISSUED FOR CONSTRUCTION - DRAFT	9/4/2020
7	ISSUED FOR CONSTRUCTION - DRAFT	9/18/2020
8	ISSUED FOR CONSTRUCTION - DRAFT	10/22/2020
9	ISSUED FOR CONSTRUCTION - DRAFT	11/06/2020
10	ISSUED FOR CONSTRUCTION	1/20/2021
-	-	-
-	-	-
-	-	-
-	-	-
-	-	-

CONFIDENTIAL:
THE INFORMATION DEPICTED ON THIS DOCUMENT IS PROPRIETARY AND THE SOLE PROPERTY OF SIERRA OVERHEAD ANALYTICS, INC (SOA). ANY USE OR DISCLOSURE OF THIS INFORMATION IS EXPRESSLY PROHIBITED WITHOUT THE PRIOR WRITTEN CONSENT OF SOA.

CS Energy
Building a Cleaner Future
2045 LINCOLN HIGHWAY
EDISON, NEW JERSEY 08817

PROJECT NAME:
STONINGTON SOLAR PROJECT

PROJECT ADDRESS:
ELLA WHEELER RD.
NORTH STONINGTON, CT 06359
41° 25' 9.71"N, 71° 50' 4.83"W

SEAL: STATE OF CONNECTICUT · DARIN RAY GALLOWAY · No. 34152 · LICENSED PROFESSIONAL ENGINEER

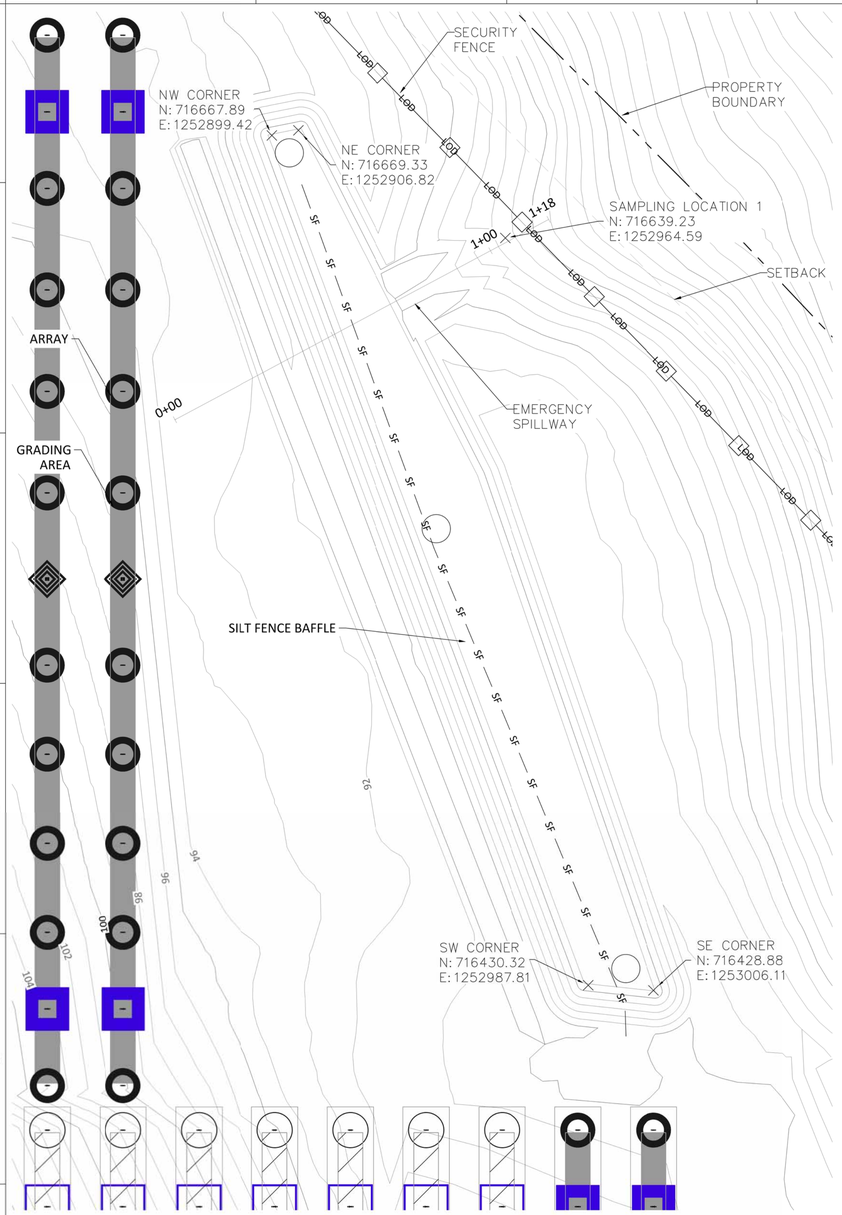
DATE: 21-JAN-20
PROJECT #: 20200309_CT
DRAWN BY: MMM
CHECKED BY: DRG

TITLE: EROSION & SEDIMENT CONTROL DETAILS
SHEET: ESC–302

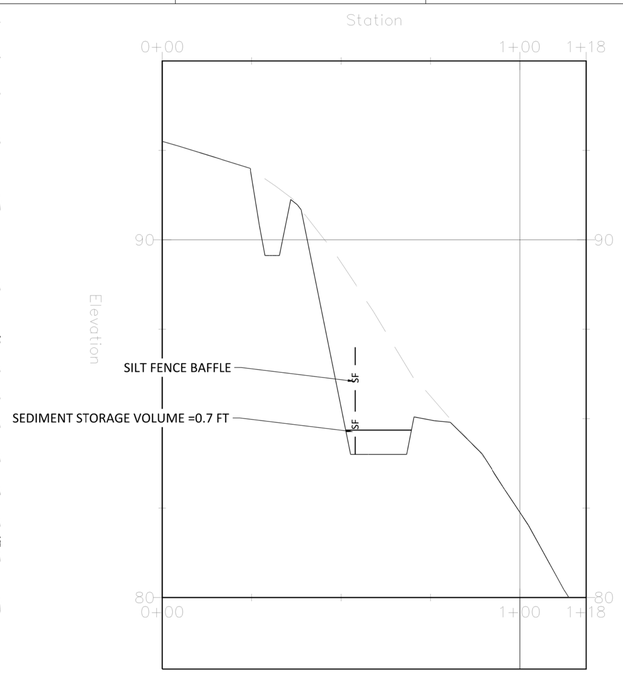
811 Know what's below. Call before you dig.

PLOT DATE: Tuesday, January 19, 2021

LOCATION: E:\DROPBOX (SOA)\ENGINEERING\CS ENERGY\2020-03-09_STONINGTON\CAD\SITE PLANS.DWG PLOTTED BY: DARIN GALLOWAY



1 SEDIMENT BASIN - 1
ESC-303 Scale: 1"=20'



2 PROFILE - SEDIMENT BASIN 1
ESC-303 Scale: H:1"=20' V:1"=2'

SEDIMENT BASIN NOTES:

36. TEMPORARY SEDIMENT BASINS WERE SIZED BASED ON THE CONNECTICUT GUIDLINES FOR SOIL EROSION & SEDIMENT CONTROL, CONNECTICUT SEDIMENT STORAGE VOLUME CALCULATION (2002). SEDIMENT BASINS WERE PLACED DOWN SLOPE OF GRADED OR OTHERWISE HIGHLY DISTURBED AREAS.

37. SEDIMENT BASINS SHALL BE CONSTRUCTED AS DEPICTED ON ESC-303 THROUGH ESC-315.
38. SEDIMENT BASINS ARE LOCATED IN THE SAME FOOTPRINT AS PERMANENT STORMWATER BASINS AND BERMS. SEDIMENT BASIN NUMBERING CORROSPONDS TO STORMWATER BASIN/BERM NUMBERING (E.G. SEDIMENT BASIN 1 IS IN THE SAME FOOTPRINT AS STORMWATER BASIN 1).

38.1. AFTER FINAL STABILIZATION OF THE SITE, THE FOLLOWING SEQUENCE SHALL BE PERFORMED PRIOR TO CONSTRUCTION OF THE PERMANENT STORMWATER CONTROLS:

38.1.1. SEDIMENT BASINS LOCATED WHERE BIOFILTRATION BASINS OR BERMS ARE LOCATED SHALL BE EXCAVATED TO THE FULL DEPTH OF THE FILTER MEDIA AND RECONSTRUCTED AS DEPICTED ON GRADING & DRAINAGE DESIGN SHEETS.

38.1.2. SEDIMENT BASINS LOCATED WHERE INFILTRATION BASINS OR BERMS ARE LOCATED SHALL HAVE ANY SEDIMENT ACCUMULATION REMOVED AND SCARIFIED TO 12" BELOW BASIN BOTTOM ELEVATION. FOLLOWING CLEANING AND SCARIFICATION, THE STORMWATER CONTROLS SHALL BE RECONSTRUCTED AS DEPICTED ON GRADING & DRAINAGE DESIGN SHEETS.

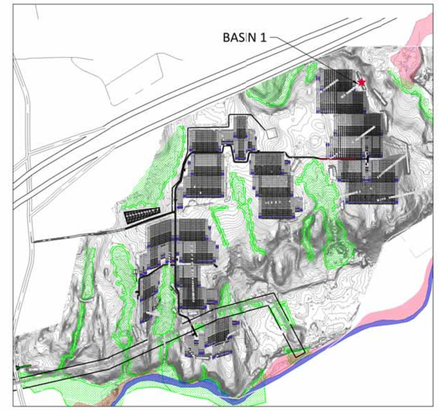
39. SEDIMENT BASINS SHALL BE INSPECTED IN ACCORDANCE WITH THE REQUIREMENTS IN SECTION 7 OF THE STORMWATER POLLUTION CONTROL PLAN.

40. SEDIMENT BASINS SHALL BE CLEANED WHEN SEDIMENT ACCUMULATION EXCEEDS ONE HALF THE WET STORAGE CAPACITY OF THE BASIN OR WHEN THE DEPTH OF AVAILABLE POOL IS REDUCED TO 18-INCHES, WHICHEVER IS ACHIEVED FIRST.

SEDIMENT BASIN 1 NOTES:

41. SEDIMENT BASIN 1 CORRESPONDS TO WATERSHED 2, CATCHMENT 1

MAP LEGEND (1"=1000')



soa
SIERRA OVERHEAD ANALYTICS
18859 MICROTRONICS WAY
SONORA, CALIFORNIA 95370
CONNECTICUT PROFESSIONAL
ENGINEERING CORPORATION #PEC.0001969

REV	DESCRIPTION	DATE
6	ISSUED FOR CONSTRUCTION - DRAFT	9/4/2020
7	ISSUED FOR CONSTRUCTION - DRAFT	9/18/2020
8	ISSUED FOR CONSTRUCTION - DRAFT	10/22/2020
9	ISSUED FOR CONSTRUCTION - DRAFT	11/06/2020
10	ISSUED FOR CONSTRUCTION	1/20/2021
-	-	-
-	-	-
-	-	-
-	-	-
-	-	-

CONFIDENTIAL:
THE INFORMATION DEPICTED ON THIS DOCUMENT IS PROPRIETARY AND THE SOLE PROPERTY OF SIERRA OVERHEAD ANALYTICS, INC (SOA). ANY USE OR DISCLOSURE OF THIS INFORMATION IS EXPRESSLY PROHIBITED WITHOUT THE PRIOR WRITTEN CONSENT OF SOA.

CS Energy
Building a Cleaner Future
2045 LINCOLN HIGHWAY
EDISON, NEW JERSEY 08817

PROJECT NAME:
STONINGTON SOLAR PROJECT

PROJECT ADDRESS:
ELLA WHEELER RD.
NORTH STONINGTON, CT 06359
41° 25' 9.71"N, 71° 50' 4.83"W

SEAL: STATE OF CONNECTICUT · DARIN RAY GALLOWAY · No. 34152 · LICENSED PROFESSIONAL ENGINEER

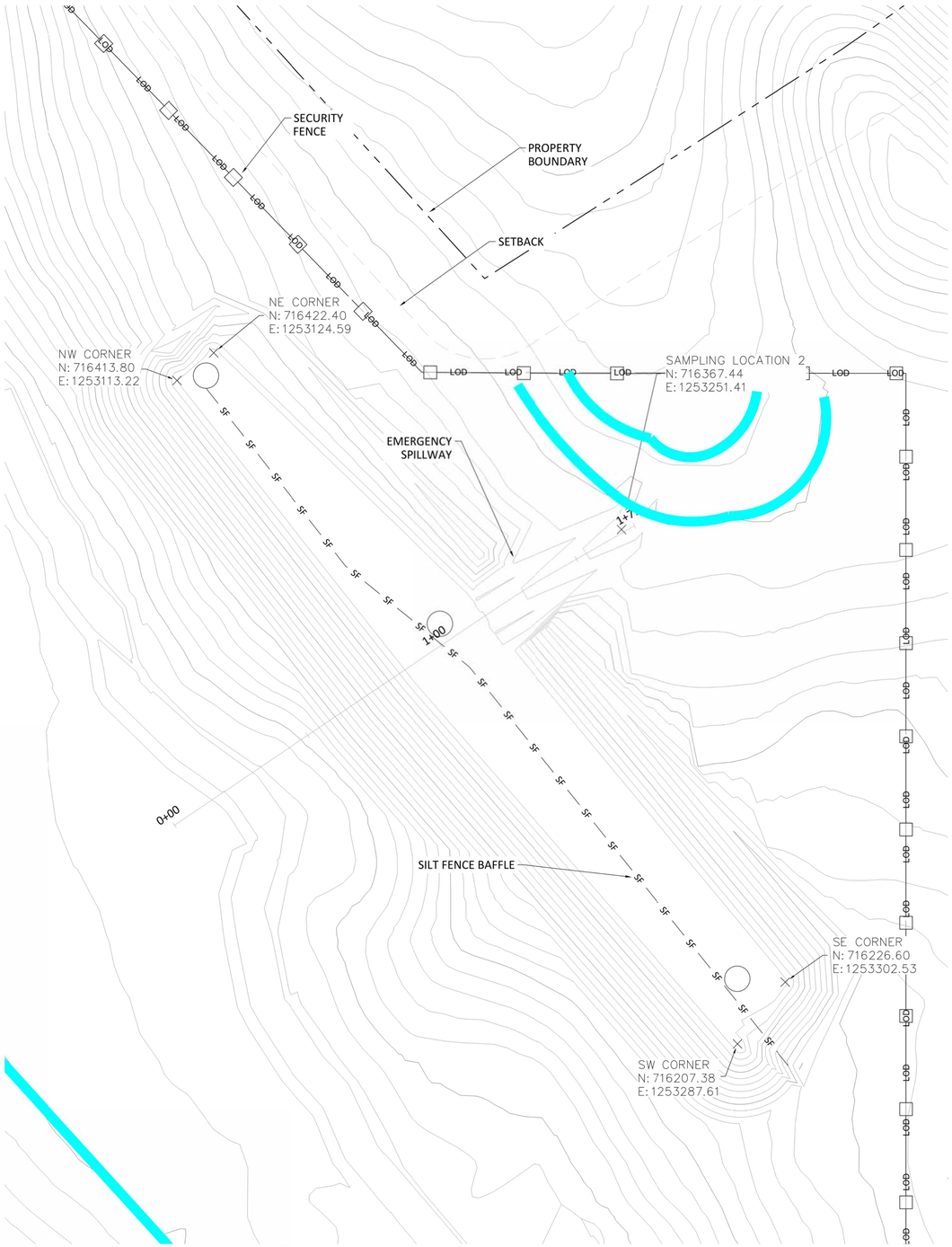
DATE: 21-JAN-20
PROJECT #: 20200309_CT
DRAWN BY: MMM
CHECKED BY: DRG

TITLE: EROSION & SEDIMENT CONTROL DETAILS
SHEET: ESC-303

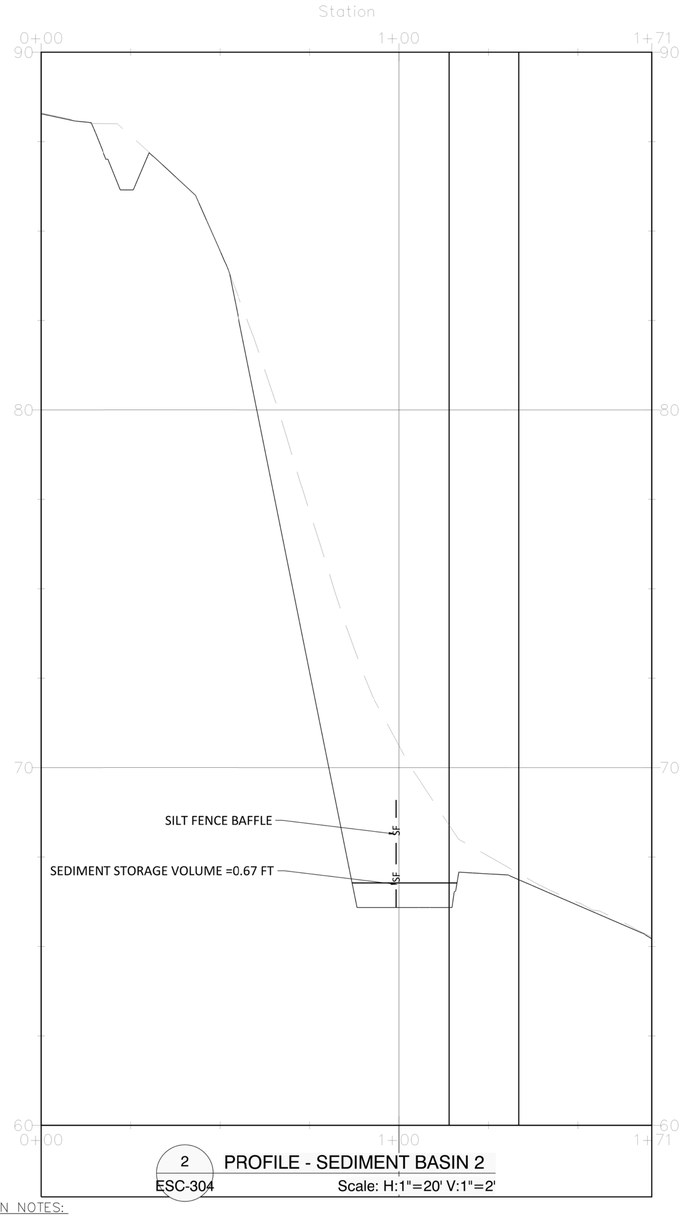
811 Know what's below. Call before you dig.

PLOT DATE: Tuesday, January 19, 2021

LOCATION: E:\DROPBOX (SOA)\ENGINEERING\CS ENERGY\2020-03-09_STONINGTON\CAD\SITE PLANS.DWG PLOTTED BY: DARIN GALLOWAY



1 SEDIMENT BASIN 2
ESC-304 Scale: 1"=20'



2 PROFILE - SEDIMENT BASIN 2
ESC-304 Scale: H:1"=20' V:1"=2'

SEDIMENT BASIN NOTES:

36. TEMPORARY SEDIMENT BASINS WERE SIZED BASED ON THE CONNECTICUT GUIDLINES FOR SOIL EROSION & SEDIMENT CONTROL, CONNECTICUT SEDIMENT STORAGE VOLUME CALCULATION (2002). SEDIMENT BASINS WERE PLACED DOWN SLOPE OF GRADED OR OTHERWISE HIGHLY DISTURBED AREAS.

37. SEDIMENT BASINS SHALL BE CONSTRUCTED AS DEPICTED ON ESC-303 THROUGH ESC-315.
38. SEDIMENT BASINS ARE LOCATED IN THE SAME FOOTPRINT AS PERMANENT STORMWATER BASINS AND BERMS. SEDIMENT BASIN NUMBERING CORROSPONDS TO STORMWATER BASIN/BERM NUMBERING (E.G. SEDIMENT BASIN 1 IS IN THE SAME FOOTPRINT AS STORMWATER BASIN 1).

38.1. AFTER FINAL STABILIZATION OF THE SITE, THE FOLLOWING SEQUENCE SHALL BE PERFORMED PRIOR TO CONSTRUCTION OF THE PERMANENT STORMWATER CONTROLS:

38.1.1. SEDIMENT BASINS LOCATED WHERE BIOFILTRATION BASINS OR BERMS ARE LOCATED SHALL BE EXCAVATED TO THE FULL DEPTH OF THE FILTER MEDIA AND RECONSTRUCTED AS DEPICTED ON GRADING & DRAINAGE DESIGN SHEETS.

38.1.2. SEDIMENT BASINS LOCATED WHERE INFILTRATION BASINS OR BERMS ARE LOCATED SHALL HAVE ANY SEDIMENT ACCUMULATION REMOVED AND SCARIFIED TO 12" BELOW BASIN BOTTOM ELEVATION. FOLLOWING CLEANING AND SCARIFICATION, THE STORMWATER CONTROLS SHALL BE RECONSTRUCTED AS DEPICTED ON GRADING & DRAINAGE DESIGN SHEETS.

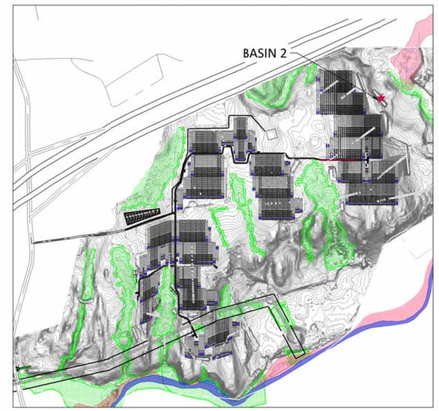
39. SEDIMENT BASINS SHALL BE INSPECTED IN ACCORDANCE WITH THE REQUIREMENTS IN SECTION 7 OF THE STORMWATER POLLUTION CONTROL PLAN.

40. SEDIMENT BASINS SHALL BE CLEANED WHEN SEDIMENT ACCUMULATION EXCEEDS ONE HALF THE WET STORAGE CAPACITY OF THE BASIN OR WHEN THE DEPTH OF AVAILABLE POOL IS REDUCED TO 18-INCHES, WHICHEVER IS ACHIEVED FIRST.

SEDIMENT BASIN 2 NOTES:

41. SEDIMENT BASIN 2 CORRESPONDS TO WATERSHED 2, CATCHMENT 2

MAP LEGEND (1"=1000')



soa
SIERRA OVERHEAD ANALYTICS
18859 MICROTRONICS WAY
SONORA, CALIFORNIA 95370
CONNECTICUT PROFESSIONAL
ENGINEERING CORPORATION #PEC.0001969

REV	DESCRIPTION	DATE
6	ISSUED FOR CONSTRUCTION - DRAFT	9/4/2020
7	ISSUED FOR CONSTRUCTION - DRAFT	9/18/2020
8	ISSUED FOR CONSTRUCTION - DRAFT	10/22/2020
9	ISSUED FOR CONSTRUCTION - DRAFT	11/06/2020
10	ISSUED FOR CONSTRUCTION	1/20/2021
-	-	-
-	-	-
-	-	-
-	-	-
-	-	-
-	-	-

CONFIDENTIAL:
THE INFORMATION DEPICTED ON THIS DOCUMENT IS PROPRIETARY AND THE SOLE PROPERTY OF SIERRA OVERHEAD ANALYTICS, INC (SOA). ANY USE OR DISCLOSURE OF THIS INFORMATION IS EXPRESSLY PROHIBITED WITHOUT THE PRIOR WRITTEN CONSENT OF SOA.

CS Energy
Building a Cleaner Future
2045 LINCOLN HIGHWAY
EDISON, NEW JERSEY 08817

PROJECT NAME:
STONINGTON SOLAR PROJECT

PROJECT ADDRESS:
ELLA WHEELER RD.
NORTH STONINGTON, CT 06359
41° 25' 9.71"N, 71° 50' 4.83"W

SEAL: STATE OF CONNECTICUT · DARRIN RAY GALLOWAY · No. 34152 · LICENSED PROFESSIONAL ENGINEER

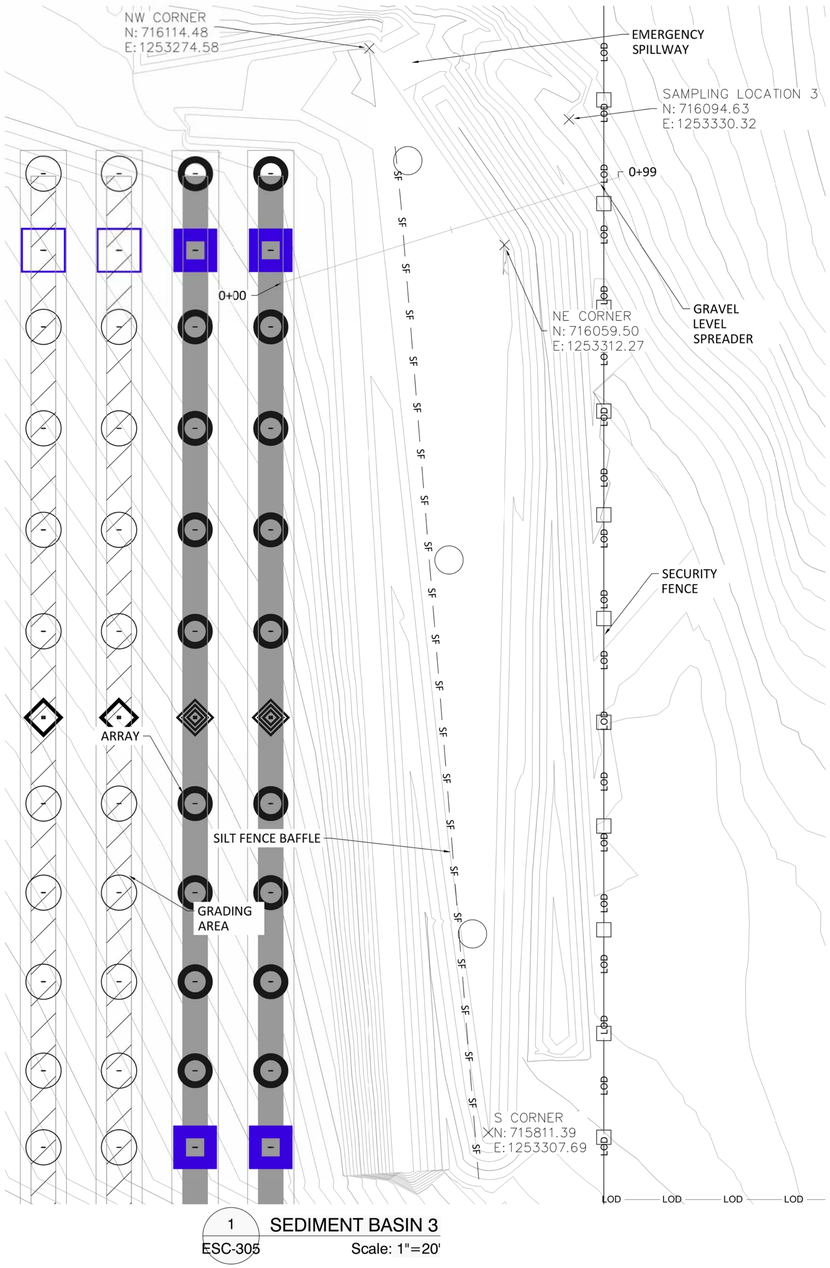
DATE: 21-JAN-20
PROJECT #: 20200309_CT
DRAWN BY: MMM
CHECKED BY: DRG

TITLE: EROSION & SEDIMENT CONTROL DETAILS
SHEET: ESC-304

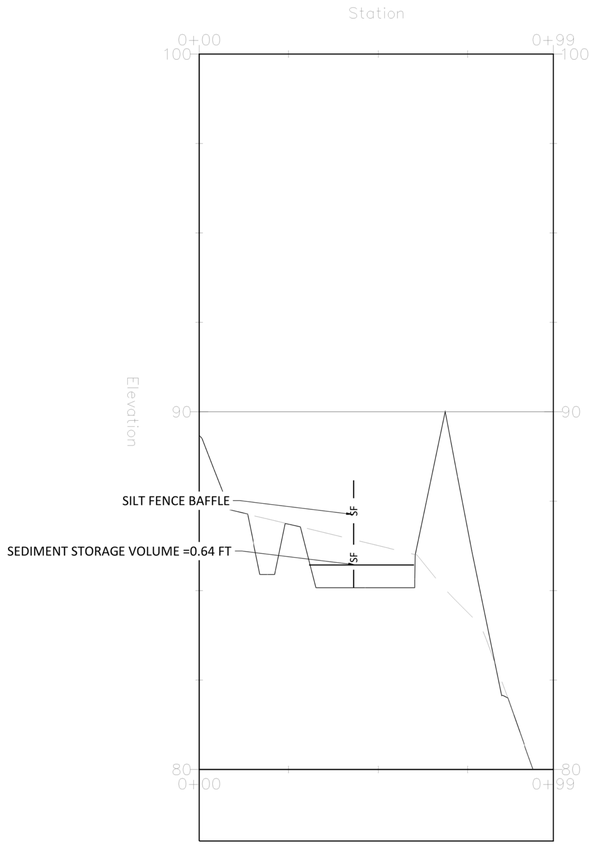
811 Know what's below. Call before you dig.

PLOT DATE: Tuesday, January 19, 2021

LOCATION: E:\DROPBOX (SOA)\ENGINEERING\CS ENERGY\2020-03-09_STONINGTON\CAD\SITE PLANS.DWG PLOTTED BY: DARIN GALLOWAY



1 SEDIMENT BASIN 3
ESC-305 Scale: 1"=20'



2 PROFILE - SEDIMENT BASIN 3
ESC-305 Scale: H:1"=20' V:1"=2'

SEDIMENT BASIN NOTES:

36. TEMPORARY SEDIMENT BASINS WERE SIZED BASED ON THE CONNECTICUT GUIDLINES FOR SOIL EROSION & SEDIMENT CONTROL, CONNECTICUT SEDIMENT STORAGE VOLUME CALCULATION (2002). SEDIMENT BASINS WERE PLACED DOWN SLOPE OF GRADED OR OTHERWISE HIGHLY DISTURBED AREAS.

37. SEDIMENT BASINS SHALL BE CONSTRUCTED AS DEPICTED ON ESC-303 THROUGH ESC-315.
38. SEDIMENT BASINS ARE LOCATED IN THE SAME FOOTPRINT AS PERMANENT STORMWATER BASINS AND BERMS. SEDIMENT BASIN NUMBERING CORROSPONDS TO STORMWATER BASIN/BERM NUMBERING (E.G. SEDIMENT BASIN 1 IS IN THE SAME FOOTPRINT AS STORMWATER BASIN 1).

38.1. AFTER FINAL STABILIZATION OF THE SITE, THE FOLLOWING SEQUENCE SHALL BE PERFORMED PRIOR TO CONSTRUCTION OF THE PERMANENT STORMWATER CONTROLS:

38.1.1. SEDIMENT BASINS LOCATED WHERE BIOFILTRATION BASINS OR BERMS ARE LOCATED SHALL BE EXCAVATED TO THE FULL DEPTH OF THE FILTER MEDIA AND RECONSTRUCTED AS DEPICTED ON GRADING & DRAINAGE DESIGN SHEETS.

38.1.2. SEDIMENT BASINS LOCATED WHERE INFILTRATION BASINS OR BERMS ARE LOCATED SHALL HAVE ANY SEDIMENT ACCUMULATION REMOVED AND SCARIFIED TO 12" BELOW BASIN BOTTOM ELEVATION. FOLLOWING CLEANING AND SCARIFICATION, THE STORMWATER CONTROLS SHALL BE RECONSTRUCTED AS DEPICTED ON GRADING & DRAINAGE DESIGN SHEETS.

39. SEDIMENT BASINS SHALL BE INSPECTED IN ACCORDANCE WITH THE REQUIREMENTS IN SECTION 7 OF THE STORMWATER POLLUTION CONTROL PLAN.

40. SEDIMENT BASINS SHALL BE CLEANED WHEN SEDIMENT ACCUMULATION EXCEEDS ONE HALF THE WET STORAGE CAPACITY OF THE BASIN OR WHEN THE DEPTH OF AVAILABLE POOL IS REDUCED TO 18-INCHES, WHICHEVER IS ACHIEVED FIRST.

SEDIMENT BASIN 3 NOTES:

41. SEDIMENT BASIN 3 CORRESPONDS TO WATERSHED 2, CATCHMENT 3

MAP LEGEND (1"=1000')



soa
SIERRA OVERHEAD ANALYTICS
18859 MICROTRONICS WAY
SONORA, CALIFORNIA 95370
CONNECTICUT PROFESSIONAL
ENGINEERING CORPORATION #PEC.0001969

REV	DESCRIPTION	DATE
6	ISSUED FOR CONSTRUCTION - DRAFT	9/4/2020
7	ISSUED FOR CONSTRUCTION - DRAFT	9/18/2020
8	ISSUED FOR CONSTRUCTION - DRAFT	10/22/2020
9	ISSUED FOR CONSTRUCTION - DRAFT	11/06/2020
10	ISSUED FOR CONSTRUCTION	1/20/2021
-	-	-
-	-	-
-	-	-
-	-	-
-	-	-

CONFIDENTIAL:
THE INFORMATION DEPICTED ON THIS DOCUMENT IS PROPRIETARY AND THE SOLE PROPERTY OF SIERRA OVERHEAD ANALYTICS, INC (SOA). ANY USE OR DISCLOSURE OF THIS INFORMATION IS EXPRESSLY PROHIBITED WITHOUT THE PRIOR WRITTEN CONSENT OF SOA.

CS Energy
Building a Cleaner Future
2045 LINCOLN HIGHWAY
EDISON, NEW JERSEY 08817

PROJECT NAME:
STONINGTON SOLAR PROJECT

PROJECT ADDRESS:
ELLA WHEELER RD.
NORTH STONINGTON, CT 06359
41° 25' 9.71"N, 71° 50' 4.83"W

SEAL: STATE OF CONNECTICUT · DARIN RAY GALLOWAY · No. 34152 · LICENSED PROFESSIONAL ENGINEER

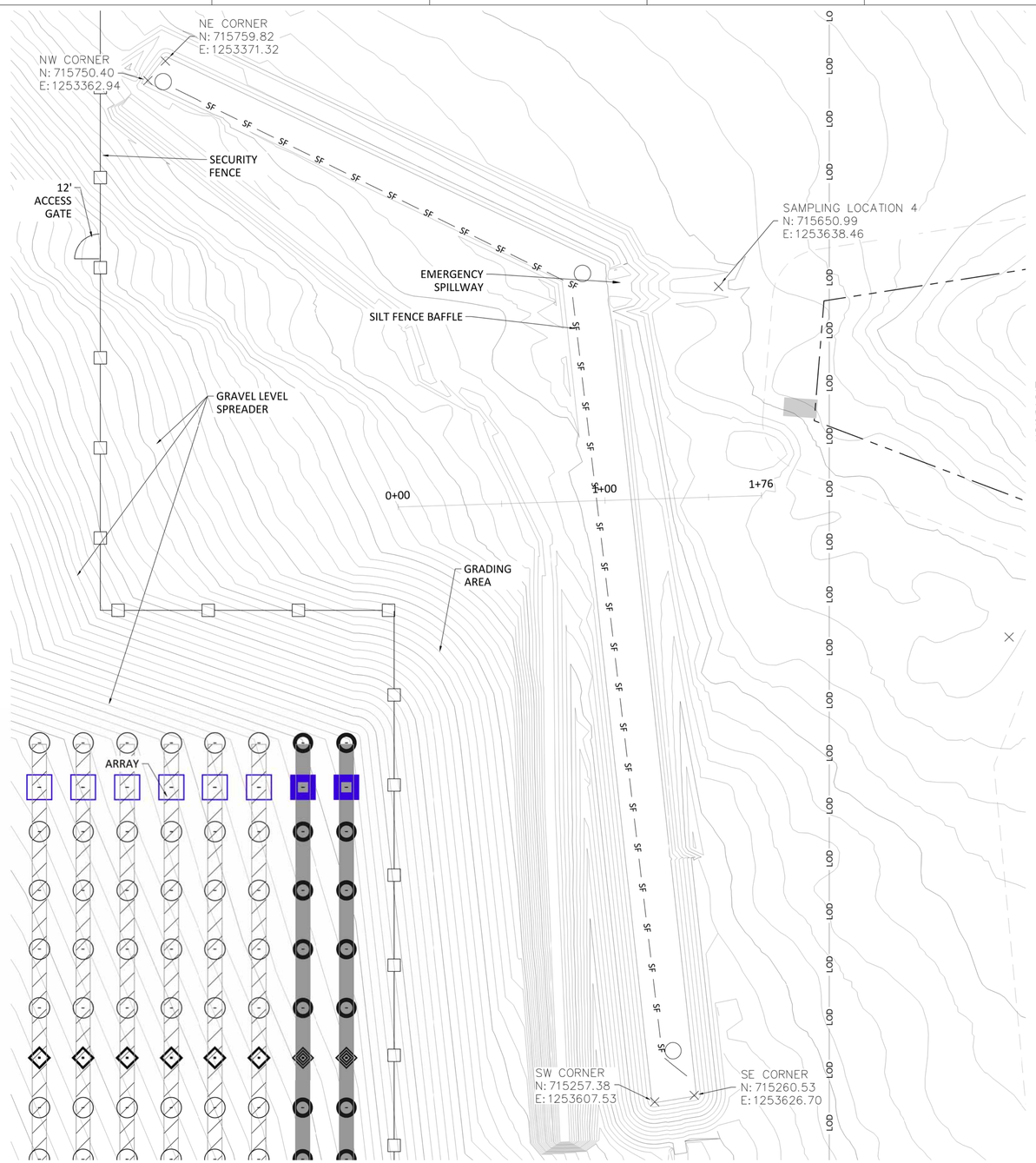
DATE: 21-JAN-20
PROJECT #: 20200309_CT
DRAWN BY: MMM
CHECKED BY: DRG

TITLE: EROSION & SEDIMENT CONTROL DETAILS
SHEET: ESC-305

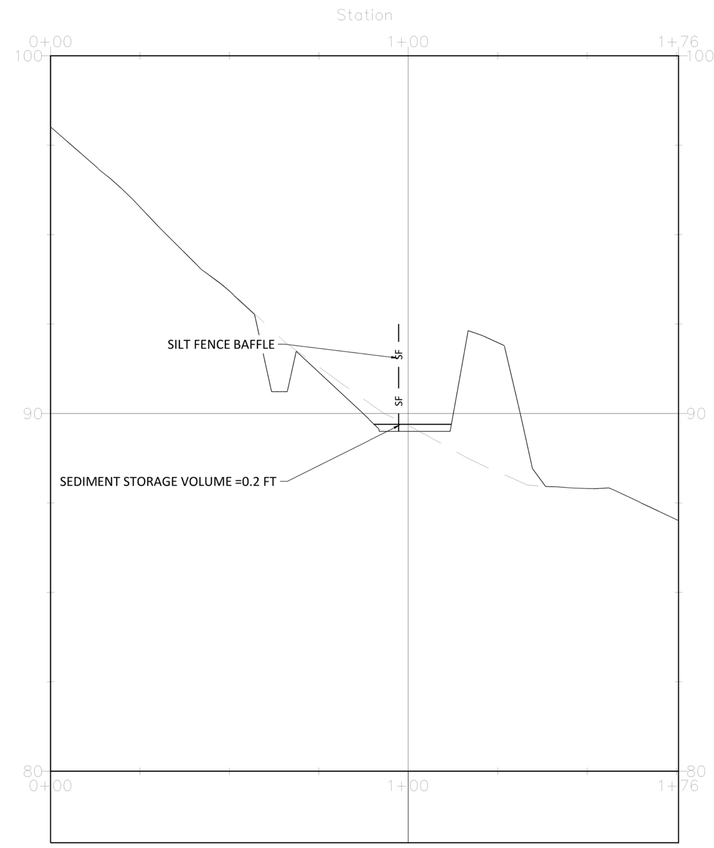
811 Know what's below. Call before you dig.

PLOT DATE: Tuesday, January 19, 2021

LOCATION: E:\DROPBOX (SOA)\ENGINEERING\CS ENERGY\2020-03-09_STONINGTON\CAD\SITE PLANS.DWG PLOTTED BY: DARIN GALLOWAY



1 SEDIMENT BASIN 4
ESC-306 Scale: 1"=20'



2 PROFILE - SEDIMENT BASIN 4
ESC-306 Scale: H:1"=20' V:1"=2'

SEDIMENT BASIN NOTES:

36. TEMPORARY SEDIMENT BASINS WERE SIZED BASED ON THE CONNECTICUT GUIDLINES FOR SOIL EROSION & SEDIMENT CONTROL, CONNECTICUT SEDIMENT STORAGE VOLUME CALCULATION (2002). SEDIMENT BASINS WERE PLACED DOWN SLOPE OF GRADED OR OTHERWISE HIGHLY DISTURBED AREAS.

37. SEDIMENT BASINS SHALL BE CONSTRUCTED AS DEPICTED ON ESC-303 THROUGH ESC-315.
38. SEDIMENT BASINS ARE LOCATED IN THE SAME FOOTPRINT AS PERMANENT STORMWATER BASINS AND BERMS. SEDIMENT BASIN NUMBERING CORROSPONDS TO STORMWATER BASIN/BERM NUMBERING (E.G. SEDIMENT BASIN 1 IS IN THE SAME FOOTPRINT AS STORMWATER BASIN 1).

38.1. AFTER FINAL STABILIZATION OF THE SITE, THE FOLLOWING SEQUENCE SHALL BE PERFORMED PRIOR TO CONSTRUCTION OF THE PERMANENT STORMWATER CONTROLS:

38.1.1. SEDIMENT BASINS LOCATED WHERE BIOFILTRATION BASINS OR BERMS ARE LOCATED SHALL BE EXCAVATED TO THE FULL DEPTH OF THE FILTER MEDIA AND RECONSTRUCTED AS DEPICTED ON GRADING & DRAINAGE DESIGN SHEETS.

38.1.2. SEDIMENT BASINS LOCATED WHERE INFILTRATION BASINS OR BERMS ARE LOCATED SHALL HAVE ANY SEDIMENT ACCUMULATION REMOVED AND SCARIFIED TO 12" BELOW BASIN BOTTOM ELEVATION. FOLLOWING CLEANING AND SCARIFICATION, THE STORMWATER CONTROLS SHALL BE RECONSTRUCTED AS DEPICTED ON GRADING & DRAINAGE DESIGN SHEETS.

39. SEDIMENT BASINS SHALL BE INSPECTED IN ACCORDANCE WITH THE REQUIREMENTS IN SECTION 7 OF THE STORMWATER POLLUTION CONTROL PLAN.

40. SEDIMENT BASINS SHALL BE CLEANED WHEN SEDIMENT ACCUMULATION EXCEEDS ONE HALF THE WET STORAGE CAPACITY OF THE BASIN OR WHEN THE DEPTH OF AVAILABLE POOL IS REDUCED TO 18-INCHES, WHICHEVER IS ACHIEVED FIRST.

SEDIMENT BASIN 4 NOTES:

41. SEDIMENT BASIN 4 CORRESPONDS TO WATERSHED 2, CATCHMENT 4

MAP LEGEND (1"=1000')



soa
SIERRA OVERHEAD ANALYTICS
18859 MICROTRONICS WAY
SONORA, CALIFORNIA 95370
CONNECTICUT PROFESSIONAL
ENGINEERING CORPORATION #PEC.0001969

REV	DESCRIPTION	DATE
6	ISSUED FOR CONSTRUCTION - DRAFT	9/4/2020
7	ISSUED FOR CONSTRUCTION - DRAFT	9/18/2020
8	ISSUED FOR CONSTRUCTION - DRAFT	10/22/2020
9	ISSUED FOR CONSTRUCTION - DRAFT	11/06/2020
10	ISSUED FOR CONSTRUCTION	1/20/2021
-	-	-
-	-	-
-	-	-
-	-	-
-	-	-

CONFIDENTIAL:
THE INFORMATION DEPICTED ON THIS DOCUMENT IS PROPRIETARY AND THE SOLE PROPERTY OF SIERRA OVERHEAD ANALYTICS, INC (SOA). ANY USE OR DISCLOSURE OF THIS INFORMATION IS EXPRESSLY PROHIBITED WITHOUT THE PRIOR WRITTEN CONSENT OF SOA.

CS Energy
Building a Cleaner Future
2045 LINCOLN HIGHWAY
EDISON, NEW JERSEY 08817

PROJECT NAME:
STONINGTON SOLAR PROJECT

PROJECT ADDRESS:
ELLA WHEELER RD.
NORTH STONINGTON, CT 06359
41° 25' 9.71"N, 71° 50' 4.83"W

SEAL: STATE OF CONNECTICUT · DARRIN RAY GALLOWAY · No. 34152 · LICENSED PROFESSIONAL ENGINEER

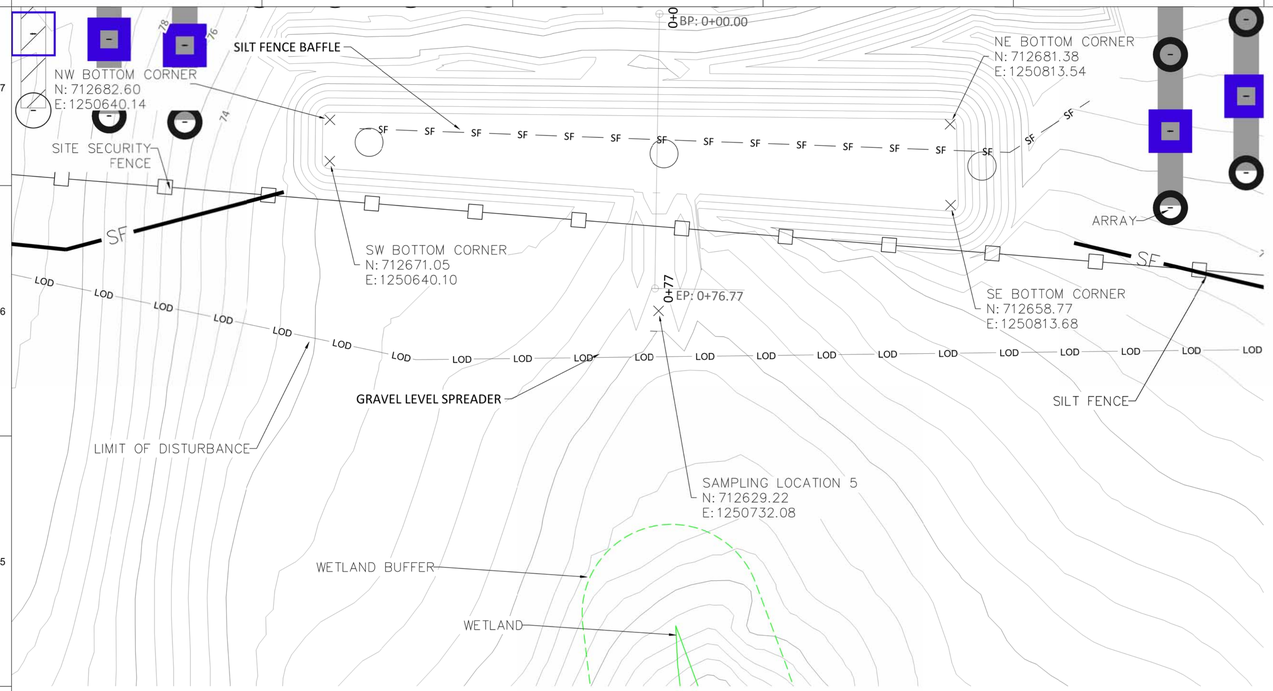
DATE: 21-JAN-20
PROJECT #: 20200309_CT
DRAWN BY: MMM
CHECKED BY: DRG

TITLE: EROSION & SEDIMENT CONTROL DETAILS
SHEET: ESC-306

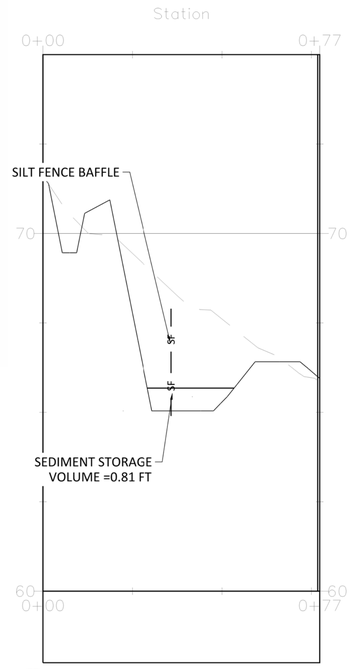
811 Know what's below. Call before you dig.

PLOT DATE: Tuesday, January 19, 2021

LOCATION: E:\DROPBOX (SOA)\ENGINEERING\CS ENERGY\2020-03-09_STONINGTON\CAD\SITE PLANS.DWG PLOTTED BY: DARIN GALLOWAY

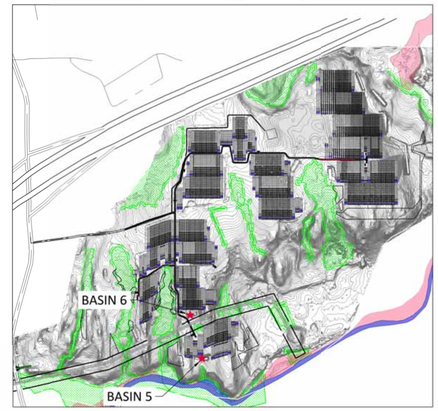


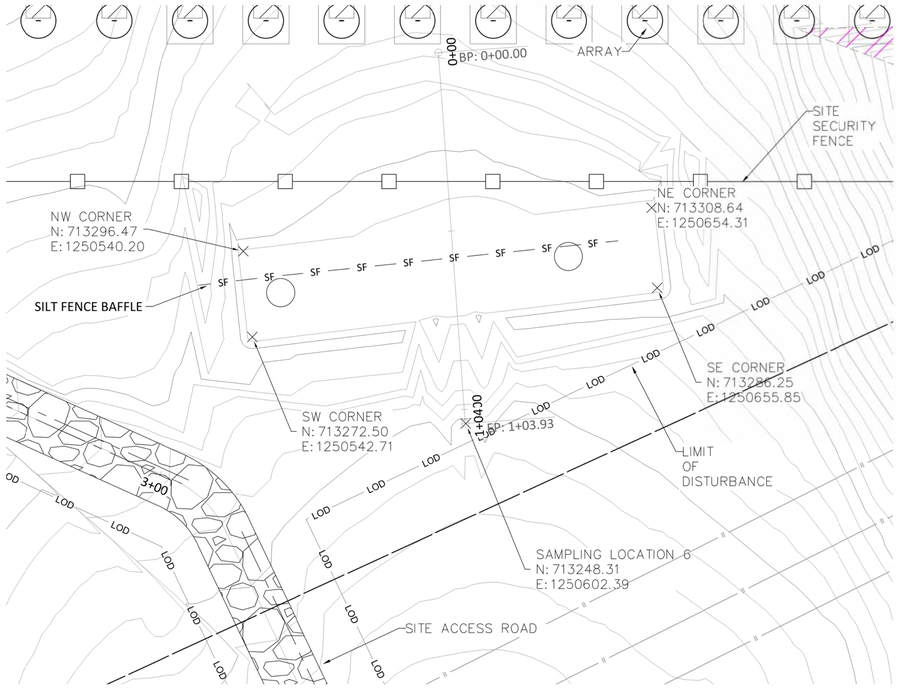
1 SEDIMENT BASIN 5
ESC-307 Scale: 1"=20'



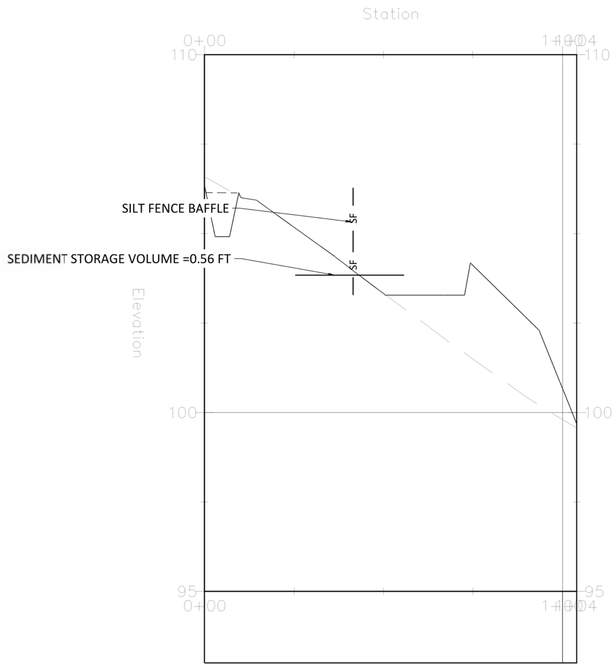
2 PROFILE - SEDIMENT BASIN 5
ESC-307 Scale: H:1"=20' V:1"=2'

MAP LEGEND (1"=1000')





3 SEDIMENT BASIN 6
ESC-307 Scale: 1"=20'



4 PROFILE - SEDIMENT BASIN 6
ESC-307 Scale: H:1"=20' V:1"=2'

SEDIMENT BASIN NOTES:

36. TEMPORARY SEDIMENT BASINS WERE SIZED BASED ON THE CONNECTICUT GUIDLINES FOR SOIL EROSION & SEDIMENT CONTROL, CONNECTICUT SEDIMENT STORAGE VOLUME CALCULATION (2002). SEDIMENT BASINS WERE PLACED DOWN SLOPE OF GRADED OR OTHERWISE HIGHLY DISTURBED AREAS.
37. SEDIMENT BASINS SHALL BE CONSTRUCTED AS DEPICTED ON ESC-303 THROUGH ESC-315.
38. SEDIMENT BASINS ARE LOCATED IN THE SAME FOOTPRINT AS PERMANENT STORMWATER BASINS AND BERMS. SEDIMENT BASIN NUMBERING CORROSPONDS TO STORMWATER BASIN/BERM NUMBERING (E.G. SEDIMENT BASIN 1 IS IN THE SAME FOOTPRINT AS STORMWATER BASIN 1).

38.1. AFTER FINAL STABILIZATION OF THE SITE, THE FOLLOWING SEQUENCE SHALL BE PERFORMED PRIOR TO CONSTRUCTION OF THE PERMANENT STORMWATER CONTROLS:

38.1.1. SEDIMENT BASINS LOCATED WHERE BIOFILTRATION BASINS OR BERMS ARE LOCATED SHALL BE EXCAVATED TO THE FULL DEPTH OF THE FILTER MEDIA AND RECONSTRUCTED AS DEPICTED ON GRADING & DRAINAGE DESIGN SHEETS.

38.1.2. SEDIMENT BASINS LOCATED WHERE INFILTRATION BASINS OR BERMS ARE LOCATED SHALL HAVE ANY SEDIMENT ACCUMULATION REMOVED AND SCARIFIED TO 12" BELOW BASIN BOTTOM ELEVATION. FOLLOWING CLEANING AND SCARIFICATION, THE STORMWATER CONTROLS SHALL BE RECONSTRUCTED AS DEPICTED ON GRADING & DRAINAGE DESIGN SHEETS.

39. SEDIMENT BASINS SHALL BE INSPECTED IN ACCORDANCE WITH THE REQUIREMENTS IN SECTION 7 OF THE STORMWATER POLLUTION CONTROL PLAN.
40. SEDIMENT BASINS SHALL BE CLEANED WHEN SEDIMENT ACCUMULATION EXCEEDS ONE HALF THE WET STORAGE CAPACITY OF THE BASIN OR WHEN THE DEPTH OF AVAILABLE POOL IS REDUCED TO 18-INCHES, WHICHEVER IS ACHIEVED FIRST.

Know what's below. Call before you dig.

soa
SIERRA OVERHEAD ANALYTICS
18859 MICROTRONICS WAY
SONORA, CALIFORNIA 95370
CONNECTICUT PROFESSIONAL
ENGINEERING CORPORATION #PEC.0001969

REV	DESCRIPTION	DATE
6	ISSUED FOR CONSTRUCTION - DRAFT	9/4/2020
7	ISSUED FOR CONSTRUCTION - DRAFT	9/18/2020
8	ISSUED FOR CONSTRUCTION - DRAFT	10/22/2020
9	ISSUED FOR CONSTRUCTION - DRAFT	11/06/2020
10	ISSUED FOR CONSTRUCTION	1/20/2021
-	-	-
-	-	-
-	-	-
-	-	-
-	-	-

CONFIDENTIAL:
THE INFORMATION DEPICTED ON THIS DOCUMENT IS PROPRIETARY AND THE SOLE PROPERTY OF SIERRA OVERHEAD ANALYTICS, INC (SOA). ANY USE OR DISCLOSURE OF THIS INFORMATION IS EXPRESSLY PROHIBITED WITHOUT THE PRIOR WRITTEN CONSENT OF SOA.

CS Energy
Building a Cleaner Future
2045 LINCOLN HIGHWAY
EDISON, NEW JERSEY 08817

PROJECT NAME:
STONINGTON SOLAR PROJECT

PROJECT ADDRESS:
ELLA WHEELER RD.
NORTH STONINGTON, CT 06359
41° 25' 9.71"N, 71° 50' 4.83"W

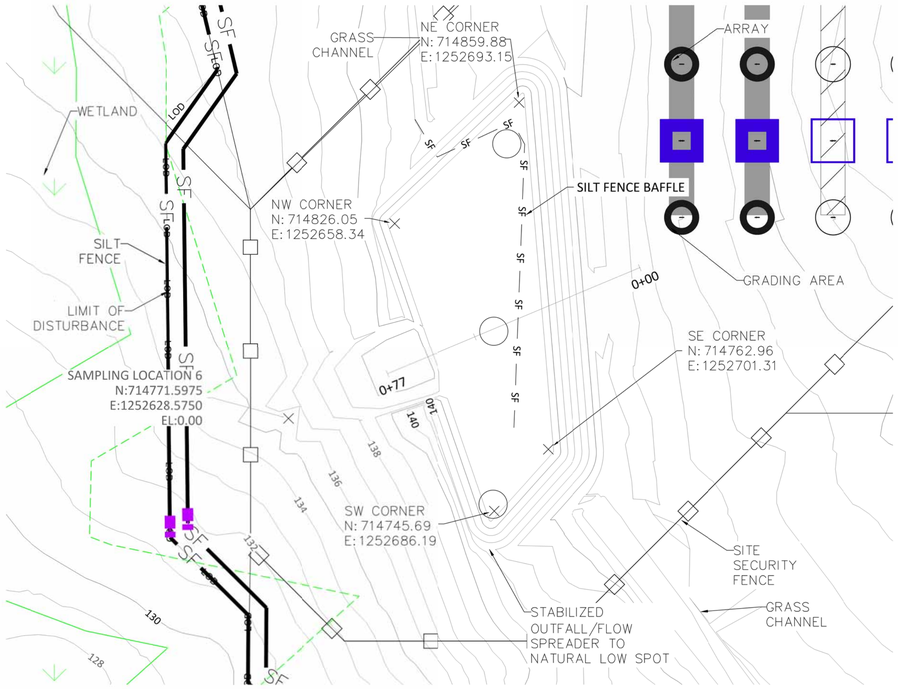
SEAL: STATE OF CONNECTICUT · DARIN RAY GALLOWAY · No. 34152 · LICENSED PROFESSIONAL ENGINEER

DATE: 21-JAN-20
PROJECT #: 20200309_CT
DRAWN BY: MMM
CHECKED BY: DRG

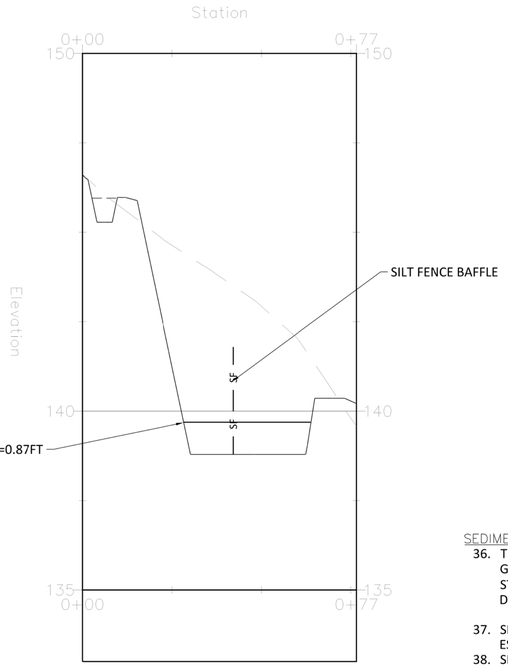
TITLE: EROSION & SEDIMENT CONTROL DETAILS
SHEET: ESC-307

PLOT DATE: Tuesday, January 19, 2021

LOCATION: E:\DROPBOX (SOA)\ENGINEERING\CS ENERGY\2020-03-09_STONINGTON\CAD\SITE PLANS.DWG PLOTTED BY: DARIN GALLOWAY

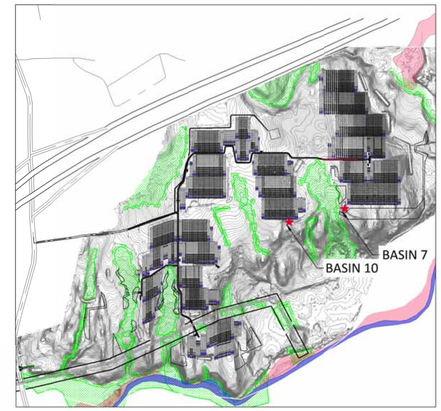


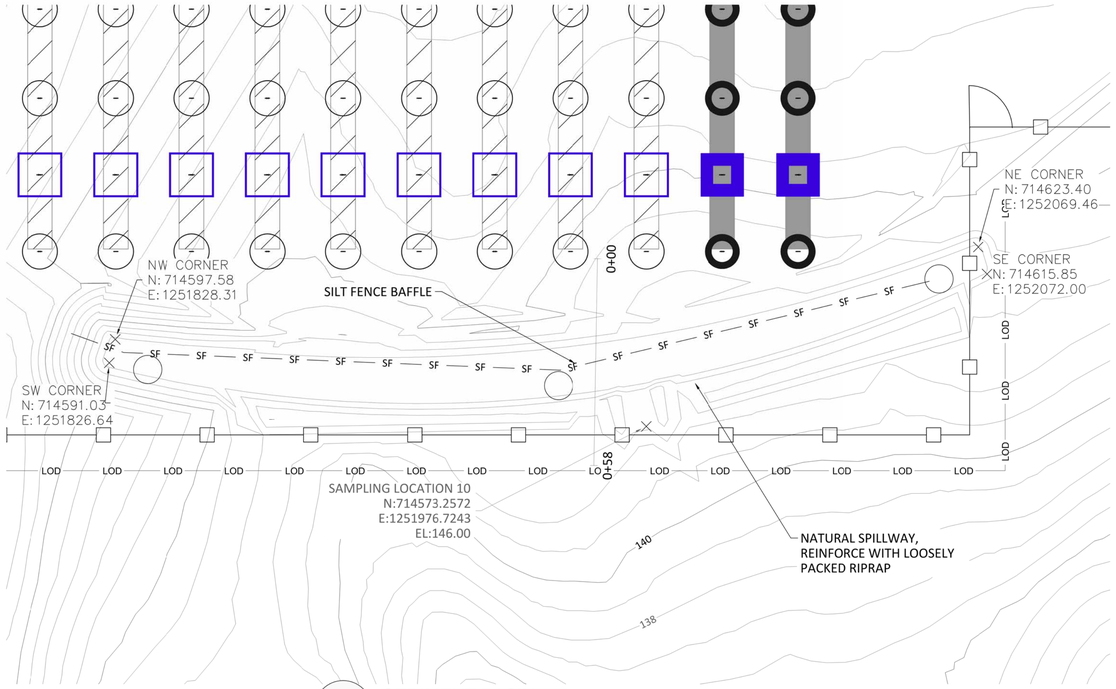
1 SEDIMENT BASIN 7
ESC-308 Scale: 1"=20'



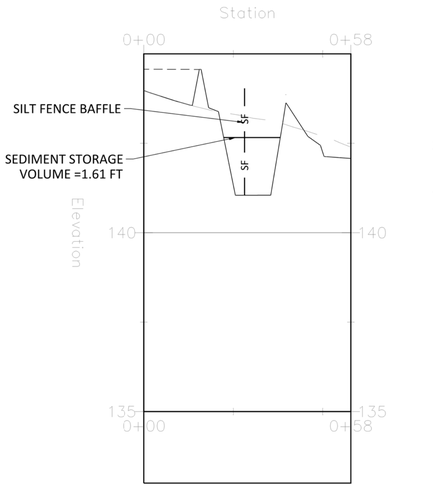
2 PROFILE - SEDIMENT BASIN 7
ESC-308 Scale: H:1"=20' V:1"=2'

MAP LEGEND (1"=1000')





3 SEDIMENT BASIN 10
ESC-308 Scale: 1"=20'



4 PROFILE - SEDIMENT BASIN 10
ESC-308 Scale: H:1"=20' V:1"=2'

SEDIMENT BASIN NOTES:

36. TEMPORARY SEDIMENT BASINS WERE SIZED BASED ON THE CONNECTICUT GUIDLINES FOR SOIL EROSION & SEDIMENT CONTROL, CONNECTICUT SEDIMENT STORAGE VOLUME CALCULATION (2002). SEDIMENT BASINS WERE PLACED DOWN SLOPE OF GRADED OR OTHERWISE HIGHLY DISTURBED AREAS.

37. SEDIMENT BASINS SHALL BE CONSTRUCTED AS DEPICTED ON ESC-303 THROUGH ESC-315.

38. SEDIMENT BASINS ARE LOCATED IN THE SAME FOOTPRINT AS PERMANENT STORMWATER BASINS AND BERMS. SEDIMENT BASIN NUMBERING CORROSPONDS TO STORMWATER BASIN/BERM NUMBERING (E.G. SEDIMENT BASIN 1 IS IN THE SAME FOOTPRINT AS STORMWATER BASIN 1).

38.1. AFTER FINAL STABILIZATION OF THE SITE, THE FOLLOWING SEQUENCE SHALL BE PERFORMED PRIOR TO CONSTRUCTION OF THE PERMANENT STORMWATER CONTROLS:

38.1.1. SEDIMENT BASINS LOCATED WHERE BIOFILTRATION BASINS OR BERMS ARE LOCATED SHALL BE EXCAVATED TO THE FULL DEPTH OF THE FILTER MEDIA AND RECONSTRUCTED AS DEPICTED ON GRADING & DRAINAGE DESIGN SHEETS.

38.1.2. SEDIMENT BASINS LOCATED WHERE INFILTRATION BASINS OR BERMS ARE LOCATED SHALL HAVE ANY SEDIMENT ACCUMULATION REMOVED AND SCARIFIED TO 12" BELOW BASIN BOTTOM ELEVATION. FOLLOWING CLEANING AND SCARIFICATION, THE STORMWATER CONTROLS SHALL BE RECONSTRUCTED AS DEPICTED ON GRADING & DRAINAGE DESIGN SHEETS.

39. SEDIMENT BASINS SHALL BE INSPECTED IN ACCORDANCE WITH THE REQUIREMENTS IN SECTION 7 OF THE STORMWATER POLLUTION CONTROL PLAN.

40. SEDIMENT BASINS SHALL BE CLEANED WHEN SEDIMENT ACCUMULATION EXCEEDS ONE HALF THE WET STORAGE CAPACITY OF THE BASIN OR WHEN THE DEPTH OF AVAILABLE POOL IS REDUCED TO 18-INCHES, WHICHEVER IS ACHIEVED FIRST.

Know what's below. Call before you dig.

SIERRA OVERHEAD ANALYTICS
18859 MICROTRONICS WAY
SONORA, CALIFORNIA 95370
CONNECTICUT PROFESSIONAL ENGINEERING CORPORATION #PEC.0001969

REV	DESCRIPTION	DATE
6	ISSUED FOR CONSTRUCTION - DRAFT	9/4/2020
7	ISSUED FOR CONSTRUCTION - DRAFT	9/18/2020
8	ISSUED FOR CONSTRUCTION - DRAFT	10/22/2020
9	ISSUED FOR CONSTRUCTION - DRAFT	11/06/2020
10	ISSUED FOR CONSTRUCTION	1/20/2021
-	-	-
-	-	-
-	-	-
-	-	-
-	-	-

CONFIDENTIAL:
THE INFORMATION DEPICTED ON THIS DOCUMENT IS PROPRIETARY AND THE SOLE PROPERTY OF SIERRA OVERHEAD ANALYTICS, INC (SOA). ANY USE OR DISCLOSURE OF THIS INFORMATION IS EXPRESSLY PROHIBITED WITHOUT THE PRIOR WRITTEN CONSENT OF SOA.

CS Energy
Building a Cleaner Future
2045 LINCOLN HIGHWAY
EDISON, NEW JERSEY 08817

PROJECT NAME:
STONINGTON SOLAR PROJECT

PROJECT ADDRESS:
ELLA WHEELER RD.
NORTH STONINGTON, CT 06359
41° 25' 9.71"N, 71° 50' 4.83"W

SEAL: STATE OF CONNECTICUT · DARIN RAY GALLOWAY · No. 34152 · LICENSED PROFESSIONAL ENGINEER

DATE:	21-JAN-20
PROJECT #:	20200309_CT
DRAWN BY:	MMM
CHECKED BY:	DRG

TITLE: EROSION & SEDIMENT CONTROL DETAILS

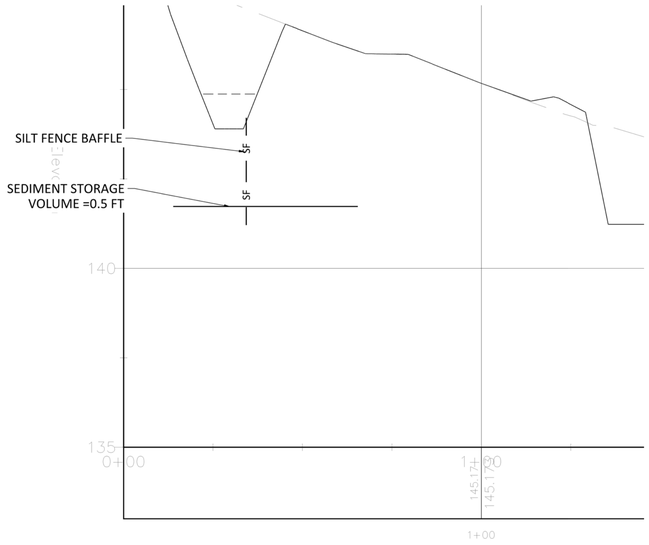
SHEET: ESC-308

PLOT DATE: Tuesday, January 19, 2021

LOCATION: E:\DROPBOX (SOA)\ENGINEERING\CS ENERGY\2020-03-09_STONINGTON\CAD\SITE PLANS.DWG PLOTTED BY: DARIN GALLOWAY



1 SEDIMENT BASIN 8
ESC-309 Scale: 1"=20'



2 PROFILE - SEDIMENT BASIN 8
ESC-309 Scale: H:1"=20' V:1"=2'

SEDIMENT BASIN NOTES:

36. TEMPORARY SEDIMENT BASINS WERE SIZED BASED ON THE CONNECTICUT GUIDLINES FOR SOIL EROSION & SEDIMENT CONTROL, CONNECTICUT SEDIMENT STORAGE VOLUME CALCULATION (2002). SEDIMENT BASINS WERE PLACED DOWN SLOPE OF GRADED OR OTHERWISE HIGHLY DISTURBED AREAS.

37. SEDIMENT BASINS SHALL BE CONSTRUCTED AS DEPICTED ON ESC-303 THROUGH ESC-315.
38. SEDIMENT BASINS ARE LOCATED IN THE SAME FOOTPRINT AS PERMANENT STORMWATER BASINS AND BERMS. SEDIMENT BASIN NUMBERING CORROSPONDS TO STORMWATER BASIN/BERM NUMBERING (E.G. SEDIMENT BASIN 1 IS IN THE SAME FOOTPRINT AS STORMWATER BASIN 1).

38.1. AFTER FINAL STABILIZATION OF THE SITE, THE FOLLOWING SEQUENCE SHALL BE PERFORMED PRIOR TO CONSTRUCTION OF THE PERMANENT STORMWATER CONTROLS:

38.1.1. SEDIMENT BASINS LOCATED WHERE BIOFILTRATION BASINS OR BERMS ARE LOCATED SHALL BE EXCAVATED TO THE FULL DEPTH OF THE FILTER MEDIA AND RECONSTRUCTED AS DEPICTED ON GRADING & DRAINAGE DESIGN SHEETS.

38.1.2. SEDIMENT BASINS LOCATED WHERE INFILTRATION BASINS OR BERMS ARE LOCATED SHALL HAVE ANY SEDIMENT ACCUMULATION REMOVED AND SCARIFIED TO 12" BELOW BASIN BOTTOM ELEVATION. FOLLOWING CLEANING AND SCARIFICATION, THE STORMWATER CONTROLS SHALL BE RECONSTRUCTED AS DEPICTED ON GRADING & DRAINAGE DESIGN SHEETS.

39. SEDIMENT BASINS SHALL BE INSPECTED IN ACCORDANCE WITH THE REQUIREMENTS IN SECTION 7 OF THE STORMWATER POLLUTION CONTROL PLAN.

40. SEDIMENT BASINS SHALL BE CLEANED WHEN SEDIMENT ACCUMULATION EXCEEDS ONE HALF THE WET STORAGE CAPACITY OF THE BASIN OR WHEN THE DEPTH OF AVAILABLE POOL IS REDUCED TO 18-INCHES, WHICHEVER IS ACHIEVED FIRST.

MAP LEGEND (1"=1000')



soa
SIERRA OVERHEAD ANALYTICS
18859 MICROTRONICS WAY
SONORA, CALIFORNIA 95370
CONNECTICUT PROFESSIONAL
ENGINEERING CORPORATION #PEC.0001969

REV	DESCRIPTION	DATE
6	ISSUED FOR CONSTRUCTION - DRAFT	9/4/2020
7	ISSUED FOR CONSTRUCTION - DRAFT	9/18/2020
8	ISSUED FOR CONSTRUCTION - DRAFT	10/22/2020
9	ISSUED FOR CONSTRUCTION - DRAFT	11/06/2020
10	ISSUED FOR CONSTRUCTION	1/20/2021
-	-	-
-	-	-
-	-	-
-	-	-
-	-	-
-	-	-

CONFIDENTIAL:
THE INFORMATION DEPICTED ON THIS DOCUMENT IS PROPRIETARY AND THE SOLE PROPERTY OF SIERRA OVERHEAD ANALYTICS, INC (SOA). ANY USE OR DISCLOSURE OF THIS INFORMATION IS EXPRESSLY PROHIBITED WITHOUT THE PRIOR WRITTEN CONSENT OF SOA.

CS Energy
Building a Cleaner Future
2045 LINCOLN HIGHWAY
EDISON, NEW JERSEY 08817

PROJECT NAME:
STONINGTON SOLAR PROJECT

PROJECT ADDRESS:
ELLA WHEELER RD.
NORTH STONINGTON, CT 06359
41° 25' 9.71"N, 71° 50' 4.83"W

SEAL: STATE OF CONNECTICUT · DARWIN RAY GALLOWAY · No. 34152 · LICENSED PROFESSIONAL ENGINEER

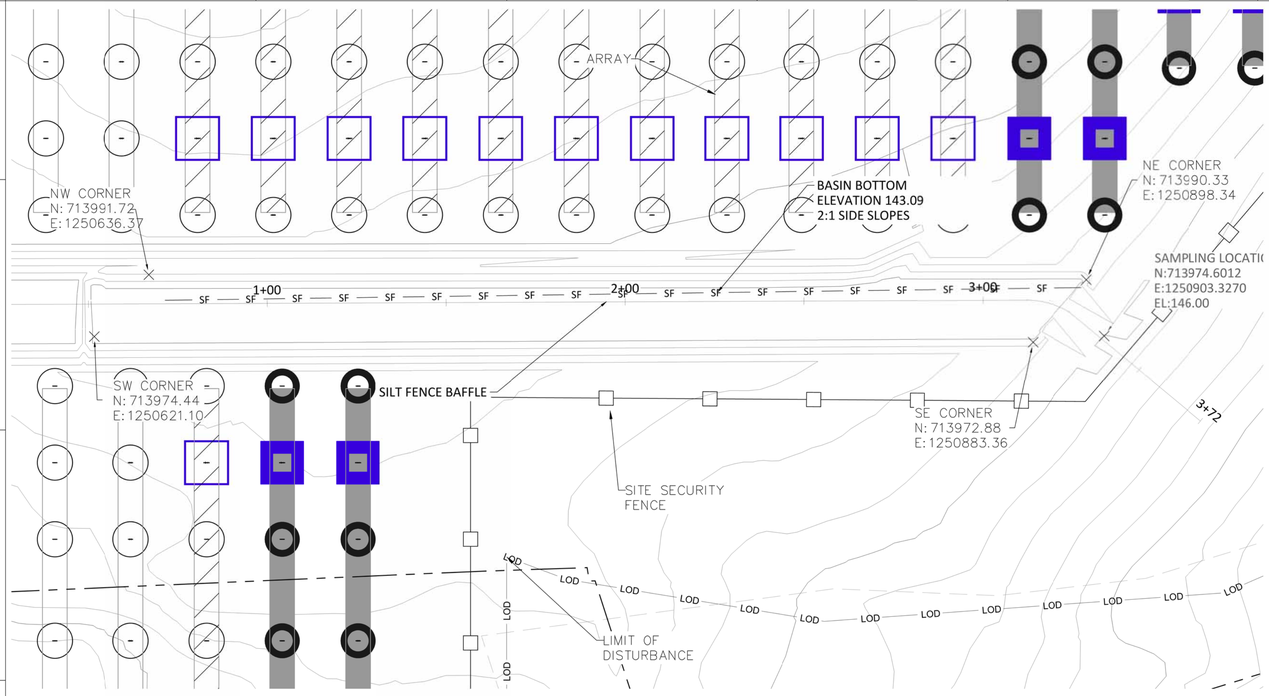
DATE: 21-JAN-20
PROJECT #: 20200309_CT
DRAWN BY: MMM
CHECKED BY: DRG

TITLE: EROSION & SEDIMENT CONTROL DETAILS
SHEET: ESC-309

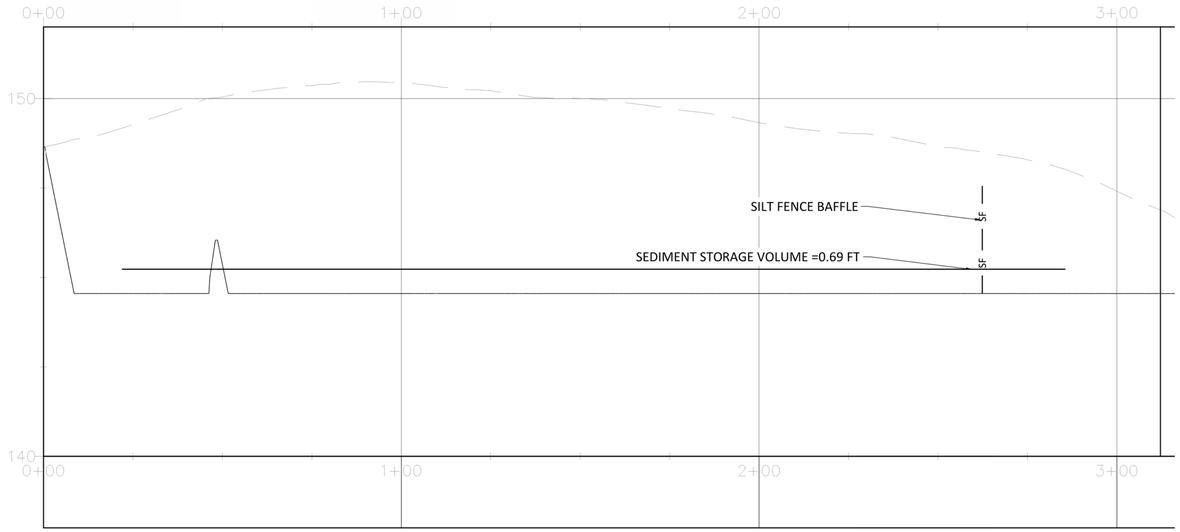
811 Know what's below. Call before you dig.

PLOT DATE: Tuesday, January 19, 2021

LOCATION: E:\DROPBOX (SOA)\ENGINEERING\CS ENERGY\2020-03-09_STONINGTON\CAD\SITE PLANS.DWG PLOTTED BY: DARIN GALLOWAY

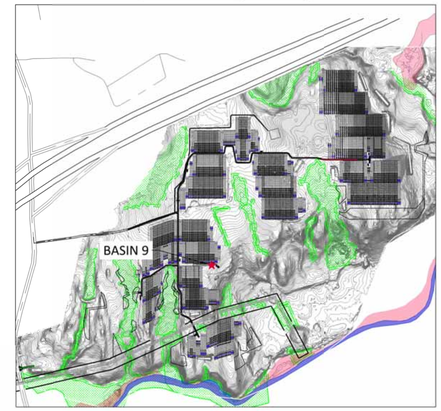


1 SEDIMENT BASIN 9
ESC-310 Scale: 1"=20'



2 PROFILE - SEDIMENT BASIN 9
ESC-310 Scale: H:1"=20' V:1"=2'

MAP LEGEND (1"=1000')



SEDIMENT BASIN NOTES:

36. TEMPORARY SEDIMENT BASINS WERE SIZED BASED ON THE CONNECTICUT GUIDLINES FOR SOIL EROSION & SEDIMENT CONTROL, CONNECTICUT SEDIMENT STORAGE VOLUME CALCULATION (2002). SEDIMENT BASINS WERE PLACED DOWN SLOPE OF GRADED OR OTHERWISE HIGHLY DISTURBED AREAS.

37. SEDIMENT BASINS SHALL BE CONSTRUCTED AS DEPICTED ON ESC-303 THROUGH ESC-315.

38. SEDIMENT BASINS ARE LOCATED IN THE SAME FOOTPRINT AS PERMANENT STORMWATER BASINS AND BERMS. SEDIMENT BASIN NUMBERING CORROSPONDS TO STORMWATER BASIN/BERM NUMBERING (E.G. SEDIMENT BASIN 1 IS IN THE SAME FOOTPRINT AS STORMWATER BASIN 1).

38.1. AFTER FINAL STABILIZATION OF THE SITE, THE FOLLOWING SEQUENCE SHALL BE PERFORMED PRIOR TO CONSTRUCTION OF THE PERMANENT STORMWATER CONTROLS:

38.1.1. SEDIMENT BASINS LOCATED WHERE BIOFILTRATION BASINS OR BERMS ARE LOCATED SHALL BE EXCAVATED TO THE FULL DEPTH OF THE FILTER MEDIA AND RECONSTRUCTED AS DEPICTED ON GRADING & DRAINAGE DESIGN SHEETS.

38.1.2. SEDIMENT BASINS LOCATED WHERE INFILTRATION BASINS OR BERMS ARE LOCATED SHALL HAVE ANY SEDIMENT ACCUMULATION REMOVED AND SCARIFIED TO 12" BELOW BASIN BOTTOM ELEVATION. FOLLOWING CLEANING AND SCARIFICATION, THE STORMWATER CONTROLS SHALL BE RECONSTRUCTED AS DEPICTED ON GRADING & DRAINAGE DESIGN SHEETS.

39. SEDIMENT BASINS SHALL BE INSPECTED IN ACCORDANCE WITH THE REQUIREMENTS IN SECTION 7 OF THE STORMWATER POLLUTION CONTROL PLAN.

40. SEDIMENT BASINS SHALL BE CLEANED WHEN SEDIMENT ACCUMULATION EXCEEDS ONE HALF THE WET STORAGE CAPACITY OF THE BASIN OR WHEN THE DEPTH OF AVAILABLE POOL IS REDUCED TO 18-INCHES, WHICHEVER IS ACHIEVED FIRST.

Know what's below. Call before you dig.

soa
SIERRA OVERHEAD ANALYTICS
18859 MICROTRONICS WAY
SONORA, CALIFORNIA 95370
CONNECTICUT PROFESSIONAL
ENGINEERING CORPORATION #PEC.0001969

REV	DESCRIPTION	DATE
6	ISSUED FOR CONSTRUCTION - DRAFT	9/4/2020
7	ISSUED FOR CONSTRUCTION - DRAFT	9/18/2020
8	ISSUED FOR CONSTRUCTION - DRAFT	10/22/2020
9	ISSUED FOR CONSTRUCTION - DRAFT	11/06/2020
10	ISSUED FOR CONSTRUCTION	1/20/2021
-	-	-
-	-	-
-	-	-
-	-	-
-	-	-

CONFIDENTIAL:
THE INFORMATION DEPICTED ON THIS DOCUMENT IS PROPRIETARY AND THE SOLE PROPERTY OF SIERRA OVERHEAD ANALYTICS, INC (SOA). ANY USE OR DISCLOSURE OF THIS INFORMATION IS EXPRESSLY PROHIBITED WITHOUT THE PRIOR WRITTEN CONSENT OF SOA.

CS Energy
Building a Cleaner Future
2045 LINCOLN HIGHWAY
EDISON, NEW JERSEY 08817

PROJECT NAME:
STONINGTON SOLAR PROJECT

PROJECT ADDRESS:
ELLA WHEELER RD.
NORTH STONINGTON, CT 06359
41° 25' 9.71"N, 71° 50' 4.83"W

SEAL: STATE OF CONNECTICUT · DARRIN RAY GALLOWAY · No. 34152 · LICENSED PROFESSIONAL ENGINEER

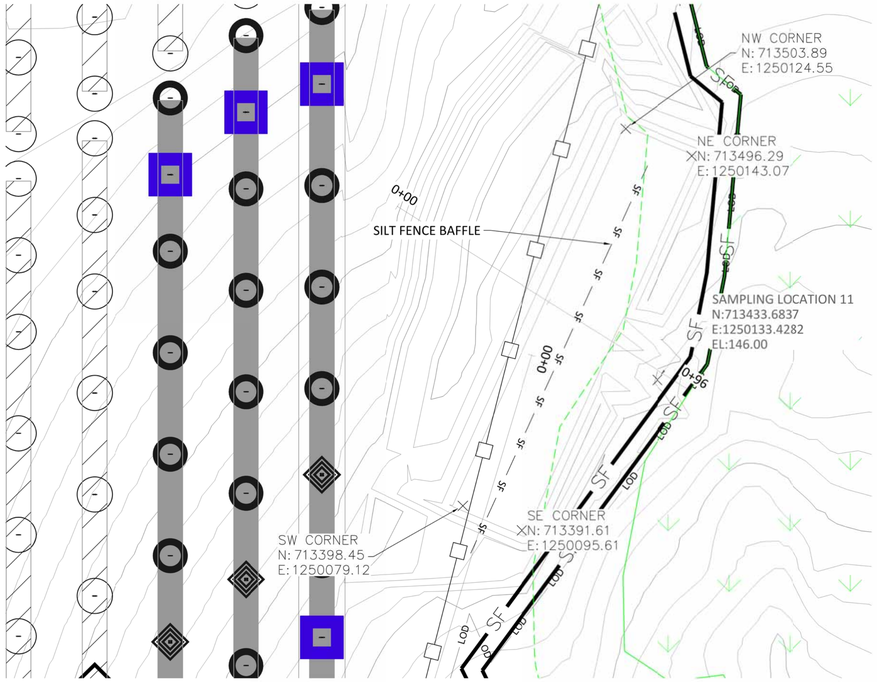
DATE: 21-JAN-20
PROJECT #: 20200309_CT
DRAWN BY: MMM
CHECKED BY: DRG

TITLE: EROSION & SEDIMENT CONTROL DETAILS

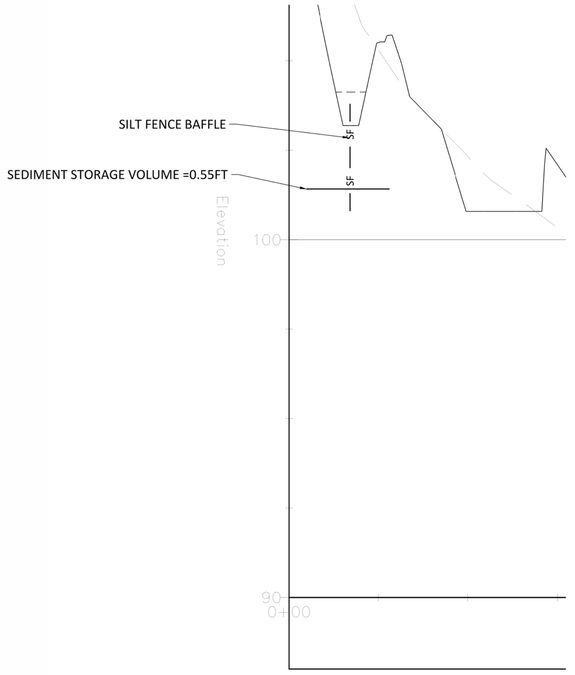
SHEET: ESC-310

PLOT DATE: Tuesday, January 19, 2021

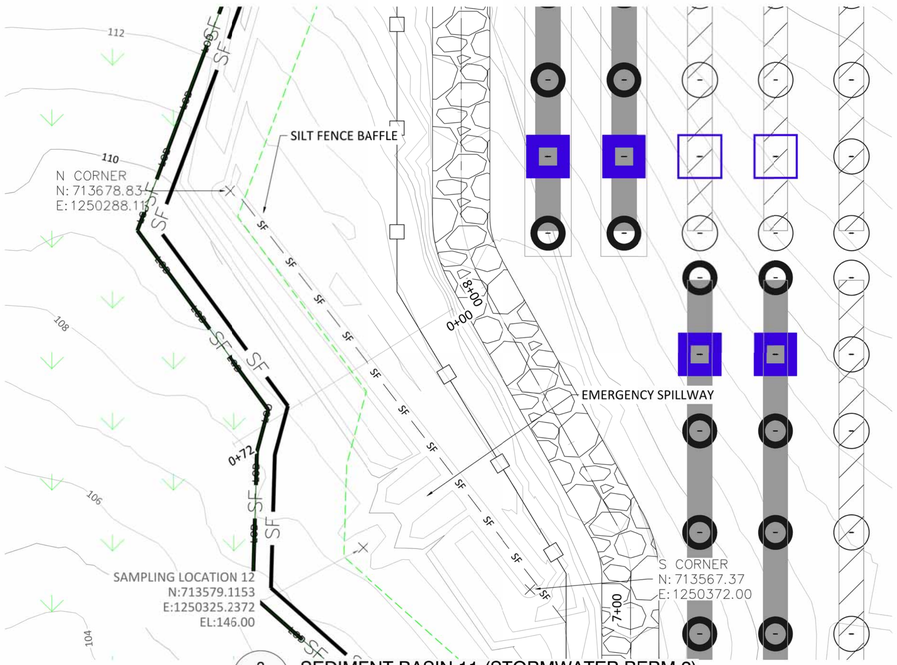
LOCATION: E:\DROPBOX (SOA)\ENGINEERING\CS ENERGY\2020-03-09_STONINGTON\CAD\SITE PLANS.DWG PLOTTED BY: DARIN GALLOWAY



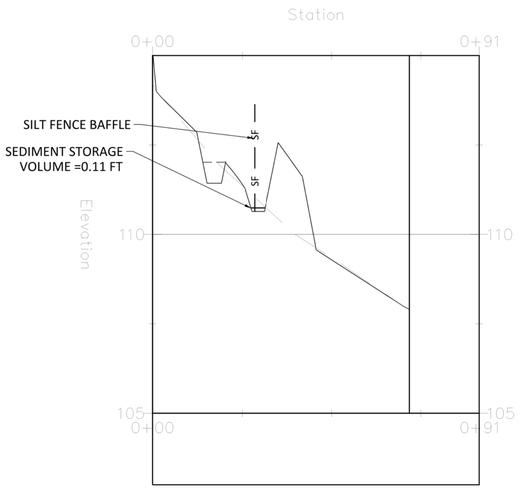
1 SEDIMENT BASIN 10 (STORMWATER BERM - 1)
ESC-311 Scale: 1"=20'



2 PROFILE - SEDIMENT BASIN 10 (BERM 1)
ESC-311 Scale: H:1"=20' V:1"=2'

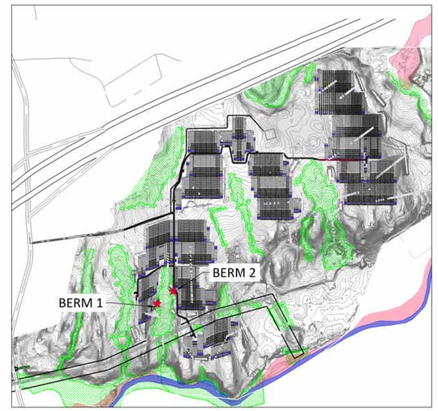


3 SEDIMENT BASIN 11 (STORMWATER BERM 2)
ESC-311 Scale: 1"=20'



4 PROFILE - SEDIMENT BASIN 11 (BERM 2)
ESC-311 Scale: H:1"=20' V:1"=2'

MAP LEGEND (1"=1000')



SEDIMENT BASIN NOTES:

36. TEMPORARY SEDIMENT BASINS WERE SIZED BASED ON THE CONNECTICUT GUIDLINES FOR SOIL EROSION & SEDIMENT CONTROL, CONNECTICUT SEDIMENT STORAGE VOLUME CALCULATION (2002). SEDIMENT BASINS WERE PLACED DOWN SLOPE OF GRADED OR OTHERWISE HIGHLY DISTURBED AREAS.

37. SEDIMENT BASINS SHALL BE CONSTRUCTED AS DEPICTED ON ESC-303 THROUGH ESC-315.

38. SEDIMENT BASINS ARE LOCATED IN THE SAME FOOTPRINT AS PERMANENT STORMWATER BASINS AND BERMS. SEDIMENT BASIN NUMBERING CORROSPONDS TO STORMWATER BASIN/BERM NUMBERING (E.G. SEDIMENT BASIN 1 IS IN THE SAME FOOTPRINT AS STORMWATER BASIN 1).

38.1. AFTER FINAL STABILIZATION OF THE SITE, THE FOLLOWING SEQUENCE SHALL BE PERFORMED PRIOR TO CONSTRUCTION OF THE PERMANENT STORMWATER CONTROLS:

38.1.1. SEDIMENT BASINS LOCATED WHERE BIOFILTRATION BASINS OR BERMS ARE LOCATED SHALL BE EXCAVATED TO THE FULL DEPTH OF THE FILTER MEDIA AND RECONSTRUCTED AS DEPICTED ON GRADING & DRAINAGE DESIGN SHEETS.

38.1.2. SEDIMENT BASINS LOCATED WHERE INFILTRATION BASINS OR BERMS ARE LOCATED SHALL HAVE ANY SEDIMENT ACCUMULATION REMOVED AND SCARIFIED TO 12" BELOW BASIN BOTTOM ELEVATION. FOLLOWING CLEANING AND SCARIFICATION, THE STORMWATER CONTROLS SHALL BE RECONSTRUCTED AS DEPICTED ON GRADING & DRAINAGE DESIGN SHEETS.

39. SEDIMENT BASINS SHALL BE INSPECTED IN ACCORDANCE WITH THE REQUIREMENTS IN SECTION 7 OF THE STORMWATER POLLUTION CONTROL PLAN.

40. SEDIMENT BASINS SHALL BE CLEANED WHEN SEDIMENT ACCUMULATION EXCEEDS ONE HALF THE WET STORAGE CAPACITY OF THE BASIN OR WHEN THE DEPTH OF AVAILABLE POOL IS REDUCED TO 18-INCHES, WHICHEVER IS ACHIEVED FIRST.

soa
SIERRA OVERHEAD ANALYTICS
18859 MICROTRONICS WAY
SONORA, CALIFORNIA 95370
CONNECTICUT PROFESSIONAL
ENGINEERING CORPORATION #PEC.0001969

REV	DESCRIPTION	DATE
6	ISSUED FOR CONSTRUCTION - DRAFT	9/4/2020
7	ISSUED FOR CONSTRUCTION - DRAFT	9/18/2020
8	ISSUED FOR CONSTRUCTION - DRAFT	10/22/2020
9	ISSUED FOR CONSTRUCTION - DRAFT	11/06/2020
10	ISSUED FOR CONSTRUCTION	1/20/2021
-	-	-
-	-	-
-	-	-
-	-	-
-	-	-

CONFIDENTIAL:
THE INFORMATION DEPICTED ON THIS DOCUMENT IS PROPRIETARY AND THE SOLE PROPERTY OF SIERRA OVERHEAD ANALYTICS, INC (SOA). ANY USE OR DISCLOSURE OF THIS INFORMATION IS EXPRESSLY PROHIBITED WITHOUT THE PRIOR WRITTEN CONSENT OF SOA.

CS Energy
Building a Cleaner Future
2045 LINCOLN HIGHWAY
EDISON, NEW JERSEY 08817

PROJECT NAME:
STONINGTON SOLAR PROJECT

PROJECT ADDRESS:
ELLA WHEELER RD.
NORTH STONINGTON, CT 06359
41° 25' 9.71"N, 71° 50' 4.83"W

SEAL: STATE OF CONNECTICUT · DARIN RAY GALLOWAY · No. 34152 · LICENSED PROFESSIONAL ENGINEER

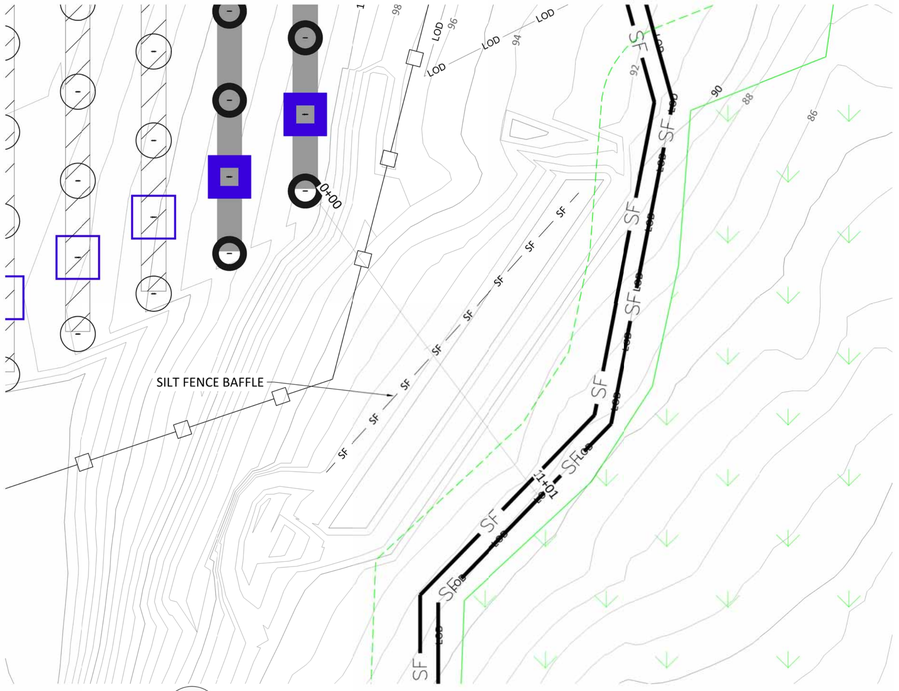
DATE: 21-JAN-20
PROJECT #: 20200309_CT
DRAWN BY: MMM
CHECKED BY: DRG

TITLE: EROSION & SEDIMENT CONTROL DETAILS
SHEET: ESC–311

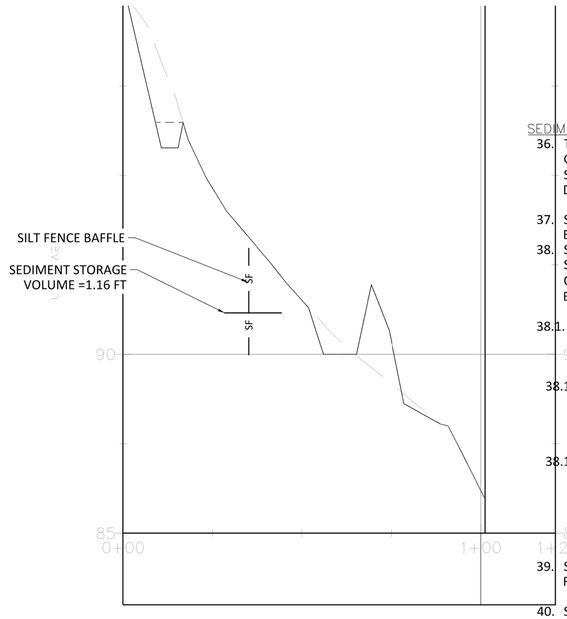
811 Know what's below. Call before you dig.

PLOT DATE: Tuesday, January 19, 2021

LOCATION: E:\DROPBOX (SOA)\ENGINEERING\CS ENERGY\2020-03-09_STONINGTON\CAD\SITE PLANS.DWG PLOTTED BY: DARIN GALLOWAY



1 SEDIMENT BASIN 12 (STORMWATER BERM 3)
ESC-312 Scale: 1"=20'



2 PROFILE - SEDIMENT BASIN 12 (BERM 3)
ESC-312 Scale: H:1"=20' V:1"=2'

SEDIMENT BASIN NOTES:

36. TEMPORARY SEDIMENT BASINS WERE SIZED BASED ON THE CONNECTICUT GUIDLINES FOR SOIL EROSION & SEDIMENT CONTROL, CONNECTICUT SEDIMENT STORAGE VOLUME CALCULATION (2002). SEDIMENT BASINS WERE PLACED DOWN SLOPE OF GRADED OR OTHERWISE HIGHLY DISTURBED AREAS.

37. SEDIMENT BASINS SHALL BE CONSTRUCTED AS DEPICTED ON ESC-303 THROUGH ESC-315.

38. SEDIMENT BASINS ARE LOCATED IN THE SAME FOOTPRINT AS PERMANENT STORMWATER BASINS AND BERMS. SEDIMENT BASIN NUMBERING CORROSPONDS TO STORMWATER BASIN/BERM NUMBERING (E.G. SEDIMENT BASIN 1 IS IN THE SAME FOOTPRINT AS STORMWATER BASIN 1).

38.1. AFTER FINAL STABILIZATION OF THE SITE, THE FOLLOWING SEQUENCE SHALL BE PERFORMED PRIOR TO CONSTRUCTION OF THE PERMANENT STORMWATER CONTROLS:

38.1.1. SEDIMENT BASINS LOCATED WHERE BIOFILTRATION BASINS OR BERMS ARE LOCATED SHALL BE EXCAVATED TO THE FULL DEPTH OF THE FILTER MEDIA AND RECONSTRUCTED AS DEPICTED ON GRADING & DRAINAGE DESIGN SHEETS.

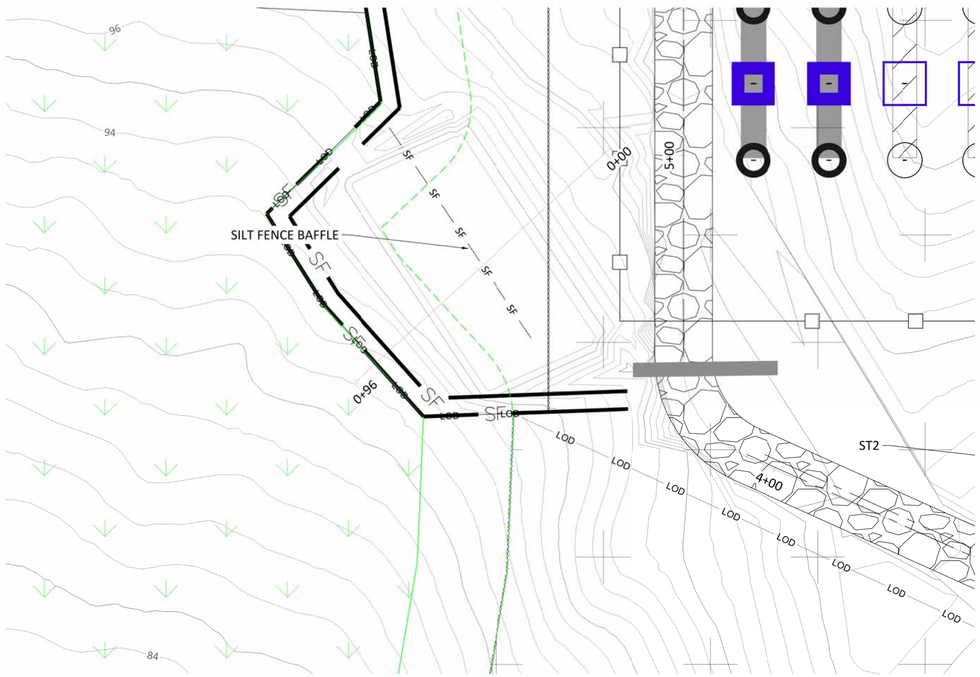
38.1.2. SEDIMENT BASINS LOCATED WHERE INFILTRATION BASINS OR BERMS ARE LOCATED SHALL HAVE ANY SEDIMENT ACCUMULATION REMOVED AND SCARIFIED TO 12" BELOW BASIN BOTTOM ELEVATION. FOLLOWING CLEANING AND SCARIFICATION, THE STORMWATER CONTROLS SHALL BE RECONSTRUCTED AS DEPICTED ON GRADING & DRAINAGE DESIGN SHEETS.

39. SEDIMENT BASINS SHALL BE INSPECTED IN ACCORDANCE WITH THE REQUIREMENTS IN SECTION 7 OF THE STORMWATER POLLUTION CONTROL PLAN.

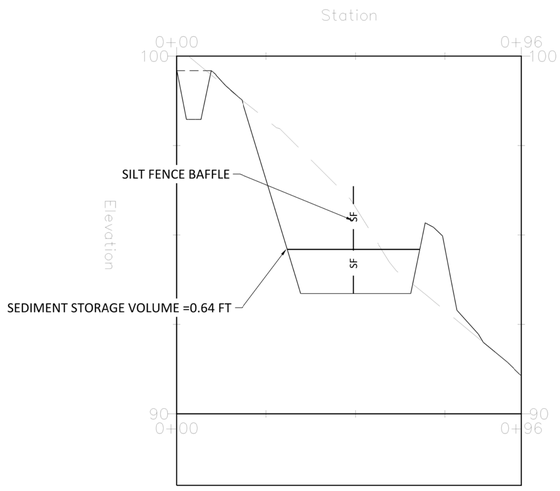
40. SEDIMENT BASINS SHALL BE CLEANED WHEN SEDIMENT ACCUMULATION EXCEEDS ONE HALF THE WET STORAGE CAPACITY OF THE BASIN OR WHEN THE DEPTH OF AVAILABLE POOL IS REDUCED TO 18-INCHES, WHICHEVER IS ACHIEVED FIRST.

MAP LEGEND (1"=1000')





3 SEDIMENT BASIN 13 (STORMWATER BERM 4)
ESC-312 Scale: 1"=20'



4 PROFILE - SEDIMENT BASIN 13 (BERM 4)
ESC-312 Scale: H:1"=20' V:1"=2'

soa
SIERRA OVERHEAD ANALYTICS
18859 MICROTRONICS WAY
SONORA, CALIFORNIA 95370
CONNECTICUT PROFESSIONAL
ENGINEERING CORPORATION #PEC.0001969

REV	DESCRIPTION	DATE
6	ISSUED FOR CONSTRUCTION - DRAFT	9/4/2020
7	ISSUED FOR CONSTRUCTION - DRAFT	9/18/2020
8	ISSUED FOR CONSTRUCTION - DRAFT	10/22/2020
9	ISSUED FOR CONSTRUCTION - DRAFT	11/06/2020
10	ISSUED FOR CONSTRUCTION	1/20/2021
-	-	-
-	-	-
-	-	-
-	-	-
-	-	-

CONFIDENTIAL:
THE INFORMATION DEPICTED ON THIS DOCUMENT IS PROPRIETARY AND THE SOLE PROPERTY OF SIERRA OVERHEAD ANALYTICS, INC (SOA). ANY USE OR DISCLOSURE OF THIS INFORMATION IS EXPRESSLY PROHIBITED WITHOUT THE PRIOR WRITTEN CONSENT OF SOA.

CS Energy
Building a Cleaner Future
2045 LINCOLN HIGHWAY
EDISON, NEW JERSEY 08817

PROJECT NAME:
STONINGTON SOLAR PROJECT

PROJECT ADDRESS:
ELLA WHEELER RD.
NORTH STONINGTON, CT 06359
41° 25' 9.71"N, 71° 50' 4.83"W

SEAL: STATE OF CONNECTICUT · DARIN RAY GALLOWAY · NO. 34152 · LICENSED PROFESSIONAL ENGINEER

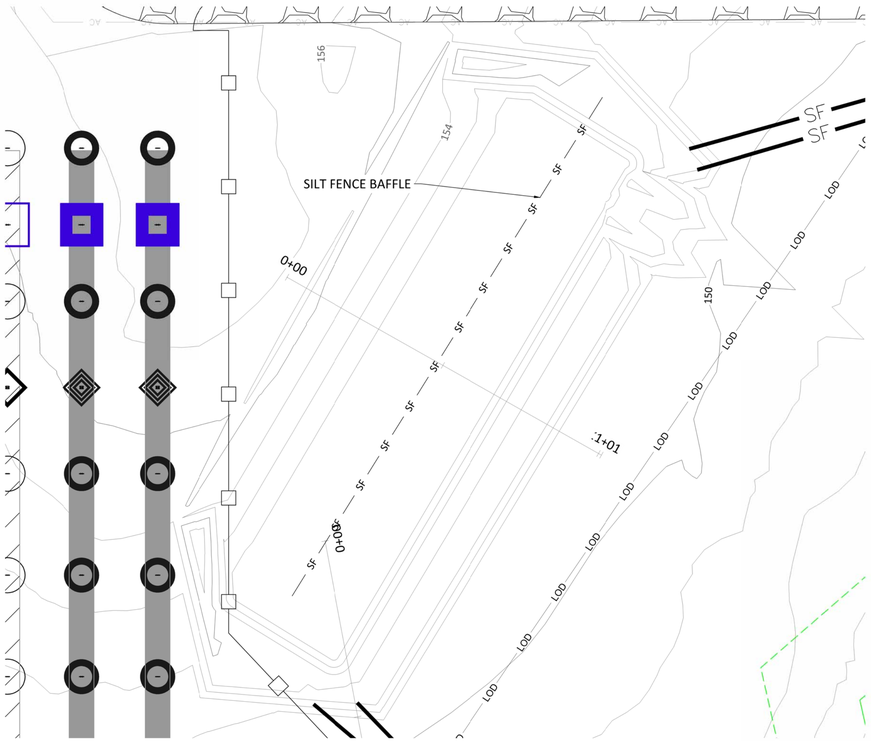
DATE: 21-JAN-20
PROJECT #: 20200309_CT
DRAWN BY: MMM
CHECKED BY: DRG

TITLE: EROSION & SEDIMENT CONTROL DETAILS
SHEET: ESC-312

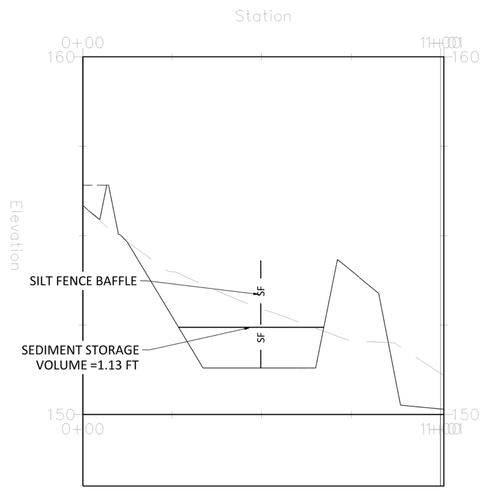
811 Know what's below. Call before you dig.

PLOT DATE: Tuesday, January 19, 2021

LOCATION: E:\DROPBOX (SOA)\ENGINEERING\CS ENERGY\2020-03-09_STONINGTON\CAD\SITE PLANS.DWG PLOTTED BY: DARIN GALLOWAY



1 SEDIMENT BASIN 14 (STORMWATER BERM 5)
ESC-313 Scale: 1"=20'



2 PROFILE - SEDIMENT BASIN 14 (BERM 5)
ESC-313 Scale: H:1"=20' V:1"=2'

SEDIMENT BASIN NOTES:

36. TEMPORARY SEDIMENT BASINS WERE SIZED BASED ON THE CONNECTICUT GUIDLINES FOR SOIL EROSION & SEDIMENT CONTROL, CONNECTICUT SEDIMENT STORAGE VOLUME CALCULATION (2002). SEDIMENT BASINS WERE PLACED DOWN SLOPE OF GRADED OR OTHERWISE HIGHLY DISTURBED AREAS.

37. SEDIMENT BASINS SHALL BE CONSTRUCTED AS DEPICTED ON ESC-303 THROUGH ESC-315.

38. SEDIMENT BASINS ARE LOCATED IN THE SAME FOOTPRINT AS PERMANENT STORMWATER BASINS AND BERMS. SEDIMENT BASIN NUMBERING CORROSPONDS TO STORMWATER BASIN/BERM NUMBERING (E.G. SEDIMENT BASIN 1 IS IN THE SAME FOOTPRINT AS STORMWATER BASIN 1).

38.1. AFTER FINAL STABILIZATION OF THE SITE, THE FOLLOWING SEQUENCE SHALL BE PERFORMED PRIOR TO CONSTRUCTION OF THE PERMANENT STORMWATER CONTROLS:

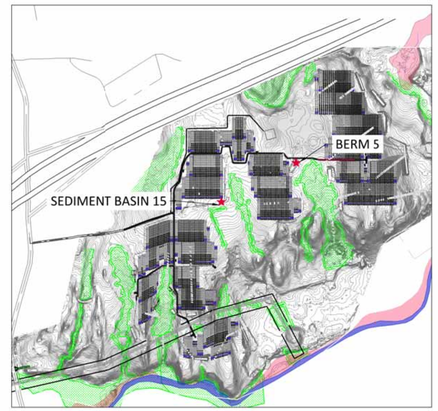
38.1.1. SEDIMENT BASINS LOCATED WHERE BIOFILTRATION BASINS OR BERMS ARE LOCATED SHALL BE EXCAVATED TO THE FULL DEPTH OF THE FILTER MEDIA AND RECONSTRUCTED AS DEPICTED ON GRADING & DRAINAGE DESIGN SHEETS.

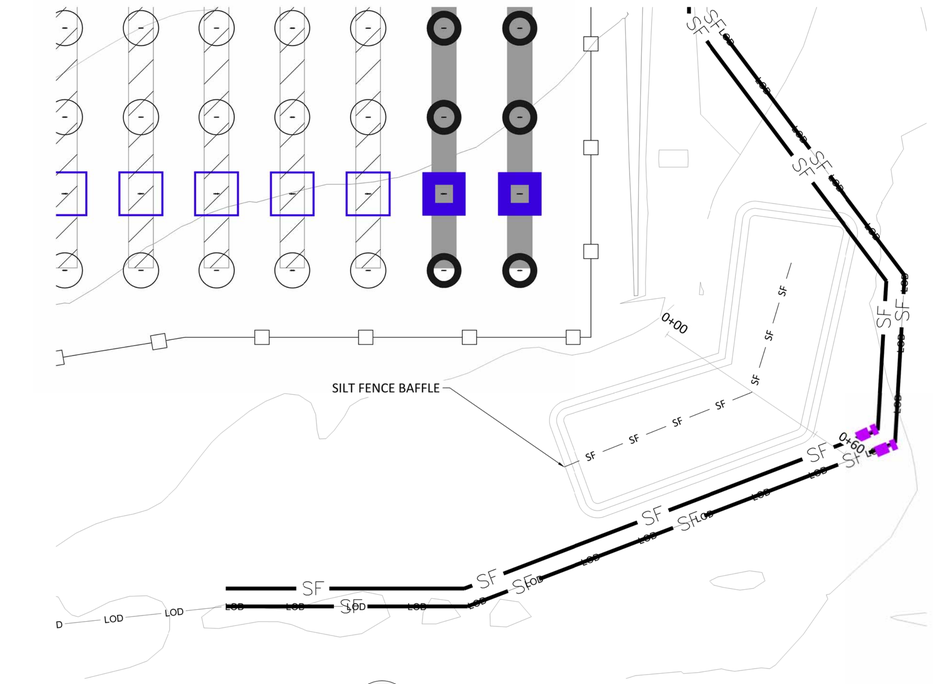
38.1.2. SEDIMENT BASINS LOCATED WHERE INFILTRATION BASINS OR BERMS ARE LOCATED SHALL HAVE ANY SEDIMENT ACCUMULATION REMOVED AND SCARIFIED TO 12" BELOW BASIN BOTTOM ELEVATION. FOLLOWING CLEANING AND SCARIFICATION, THE STORMWATER CONTROLS SHALL BE RECONSTRUCTED AS DEPICTED ON GRADING & DRAINAGE DESIGN SHEETS.

39. SEDIMENT BASINS SHALL BE INSPECTED IN ACCORDANCE WITH THE REQUIREMENTS IN SECTION 7 OF THE STORMWATER POLLUTION CONTROL PLAN.

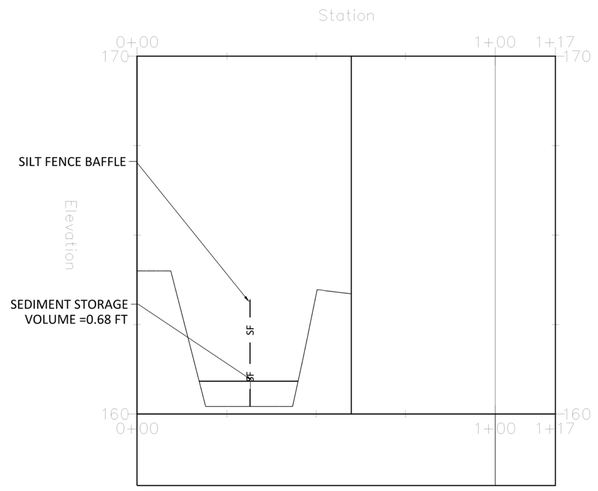
40. SEDIMENT BASINS SHALL BE CLEANED WHEN SEDIMENT ACCUMULATION EXCEEDS ONE HALF THE WET STORAGE CAPACITY OF THE BASIN OR WHEN THE DEPTH OF AVAILABLE POOL IS REDUCED TO 18-INCHES, WHICHEVER IS ACHIEVED FIRST.

MAP LEGEND (1"=1000')





3 SEDIMENT BASIN 15
ESC-313 Scale: 1"=20'



4 PROFILE - SEDIMENT BASIN 15
ESC-313 Scale: H:1"=20' V:1"=2'

soa
SIERRA OVERHEAD ANALYTICS
18859 MICROTRONICS WAY
SONORA, CALIFORNIA 95370
CONNECTICUT PROFESSIONAL
ENGINEERING CORPORATION #PEC.0001969

REV	DESCRIPTION	DATE
6	ISSUED FOR CONSTRUCTION - DRAFT	9/4/2020
7	ISSUED FOR CONSTRUCTION - DRAFT	9/18/2020
8	ISSUED FOR CONSTRUCTION - DRAFT	10/22/2020
9	ISSUED FOR CONSTRUCTION - DRAFT	11/06/2020
10	ISSUED FOR CONSTRUCTION	1/20/2021
-	-	-
-	-	-
-	-	-
-	-	-
-	-	-
-	-	-

CONFIDENTIAL:
THE INFORMATION DEPICTED ON THIS DOCUMENT IS PROPRIETARY AND THE SOLE PROPERTY OF SIERRA OVERHEAD ANALYTICS, INC (SOA). ANY USE OR DISCLOSURE OF THIS INFORMATION IS EXPRESSLY PROHIBITED WITHOUT THE PRIOR WRITTEN CONSENT OF SOA.

CS Energy
Building a Cleaner Future
2045 LINCOLN HIGHWAY
EDISON, NEW JERSEY 08817

PROJECT NAME:
STONINGTON SOLAR PROJECT

PROJECT ADDRESS:
ELLA WHEELER RD.
NORTH STONINGTON, CT 06359
41° 25' 9.71"N, 71° 50' 4.83"W

SEAL: STATE OF CONNECTICUT · DARRIN RAY GALLOWAY · No. 34152 · LICENSED PROFESSIONAL ENGINEER

DATE:	21-JAN-20
PROJECT #:	20200309_CT
DRAWN BY:	MMM
CHECKED BY:	DRG

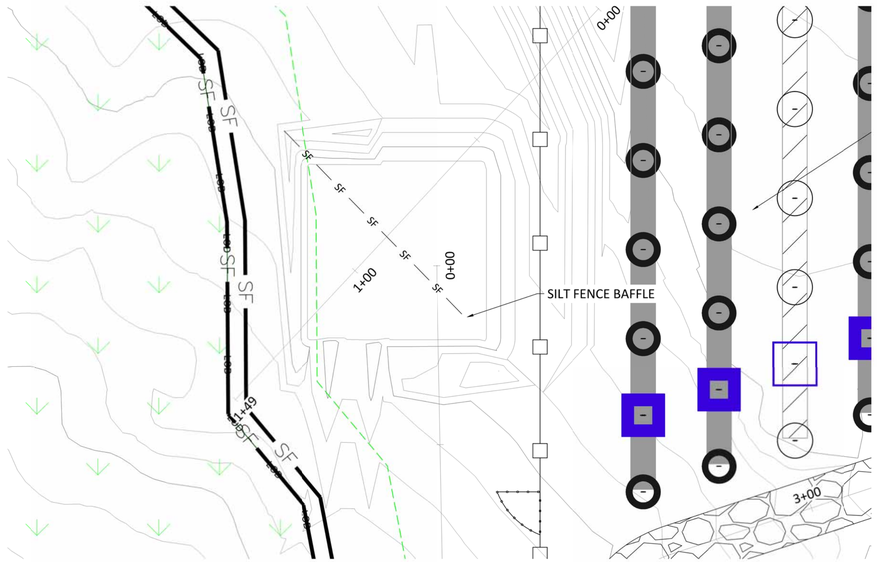
TITLE: EROSION & SEDIMENT CONTROL DETAILS

SHEET: ESC-313

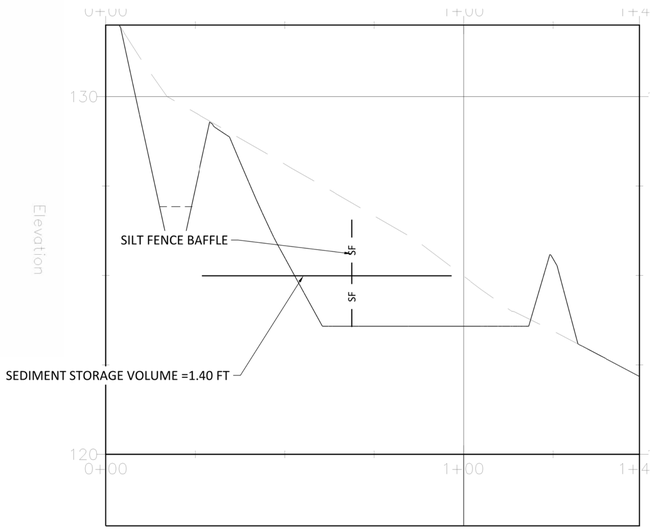
811 Know what's below. Call before you dig.

PLOT DATE: Tuesday, January 19, 2021

LOCATION: E:\DROPBOX (SOA)\ENGINEERING\CS ENERGY\2020-03-09_STONINGTON\CAD\SITE PLANS.DWG PLOTTED BY: DARIN GALLOWAY

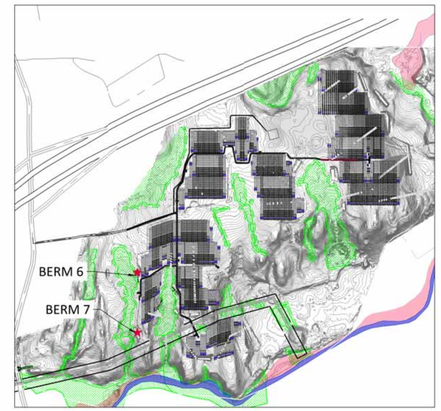


1 SEDIMENT BASIN 16 (STORMWATER BERM 6)
ESC-314 Scale: 1"=20'



2 PROFILE - SEDIMENT BASIN 16 (BERM 7)
ESC-314 Scale: H:1"=20' V:1"=2'

MAP LEGEND (1"=1000')



SEDIMENT BASIN NOTES:

36. TEMPORARY SEDIMENT BASINS WERE SIZED BASED ON THE CONNECTICUT GUIDLINES FOR SOIL EROSION & SEDIMENT CONTROL, CONNECTICUT SEDIMENT STORAGE VOLUME CALCULATION (2002). SEDIMENT BASINS WERE PLACED DOWN SLOPE OF GRADED OR OTHERWISE HIGHLY DISTURBED AREAS.

37. SEDIMENT BASINS SHALL BE CONSTRUCTED AS DEPICTED ON ESC-303 THROUGH ESC-315.

38. SEDIMENT BASINS ARE LOCATED IN THE SAME FOOTPRINT AS PERMANENT STORMWATER BASINS AND BERMS. SEDIMENT BASIN NUMBERING CORROSPONDS TO STORMWATER BASIN/BERM NUMBERING (E.G. SEDIMENT BASIN 1 IS IN THE SAME FOOTPRINT AS STORMWATER BASIN 1).

38.1. AFTER FINAL STABILIZATION OF THE SITE, THE FOLLOWING SEQUENCE SHALL BE PERFORMED PRIOR TO CONSTRUCTION OF THE PERMANENT STORMWATER CONTROLS:

38.1.1. SEDIMENT BASINS LOCATED WHERE BIOFILTRATION BASINS OR BERMS ARE LOCATED SHALL BE EXCAVATED TO THE FULL DEPTH OF THE FILTER MEDIA AND RECONSTRUCTED AS DEPICTED ON GRADING & DRAINAGE DESIGN SHEETS.

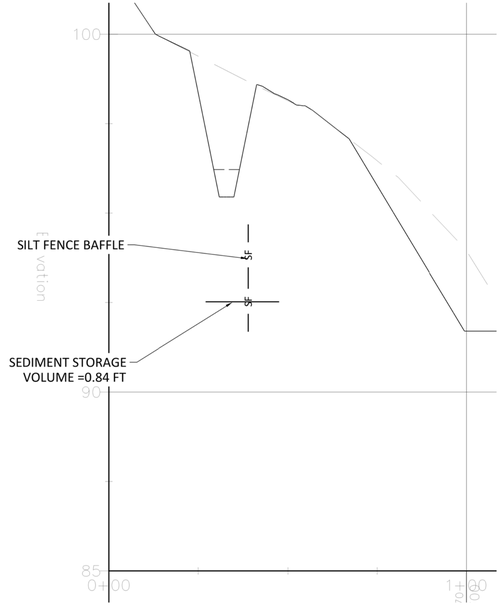
38.1.2. SEDIMENT BASINS LOCATED WHERE INFILTRATION BASINS OR BERMS ARE LOCATED SHALL HAVE ANY SEDIMENT ACCUMULATION REMOVED AND SCARIFIED TO 12" BELOW BASIN BOTTOM ELEVATION. FOLLOWING CLEANING AND SCARIFICATION, THE STORMWATER CONTROLS SHALL BE RECONSTRUCTED AS DEPICTED ON GRADING & DRAINAGE DESIGN SHEETS.

39. SEDIMENT BASINS SHALL BE INSPECTED IN ACCORDANCE WITH THE REQUIREMENTS IN SECTION 7 OF THE STORMWATER POLLUTION CONTROL PLAN.

40. SEDIMENT BASINS SHALL BE CLEANED WHEN SEDIMENT ACCUMULATION EXCEEDS ONE HALF THE WET STORAGE CAPACITY OF THE BASIN OR WHEN THE DEPTH OF AVAILABLE POOL IS REDUCED TO 18-INCHES, WHICHEVER IS ACHIEVED FIRST.



3 SEDIMENT BASIN 17 (STORMWATER BERM 7)
ESC-314 Scale: 1"=20'



4 PROFILE - SEDIMENT BASIN 17 (BERM 8)
ESC-314 Scale: H:1"=20' V:1"=2'

soa
SIERRA OVERHEAD ANALYTICS
18859 MICROTRONICS WAY
SONORA, CALIFORNIA 95370
CONNECTICUT PROFESSIONAL
ENGINEERING CORPORATION #PEC.0001969

REV	DESCRIPTION	DATE
6	ISSUED FOR CONSTRUCTION - DRAFT	9/4/2020
7	ISSUED FOR CONSTRUCTION - DRAFT	9/18/2020
8	ISSUED FOR CONSTRUCTION - DRAFT	10/22/2020
9	ISSUED FOR CONSTRUCTION - DRAFT	11/06/2020
10	ISSUED FOR CONSTRUCTION	1/20/2021
-	-	-
-	-	-
-	-	-
-	-	-
-	-	-

CONFIDENTIAL:
THE INFORMATION DEPICTED ON THIS DOCUMENT IS PROPRIETARY AND THE SOLE PROPERTY OF SIERRA OVERHEAD ANALYTICS, INC (SOA). ANY USE OR DISCLOSURE OF THIS INFORMATION IS EXPRESSLY PROHIBITED WITHOUT THE PRIOR WRITTEN CONSENT OF SOA.

CS Energy
Building a Cleaner Future
2045 LINCOLN HIGHWAY
EDISON, NEW JERSEY 08817

PROJECT NAME:
STONINGTON SOLAR PROJECT

PROJECT ADDRESS:
ELLA WHEELER RD.
NORTH STONINGTON, CT 06359
41° 25' 9.71"N, 71° 50' 4.83"W

SEAL: STATE OF CONNECTICUT · DARWIN RAY GALLOWAY · No. 34152 · LICENSED PROFESSIONAL ENGINEER

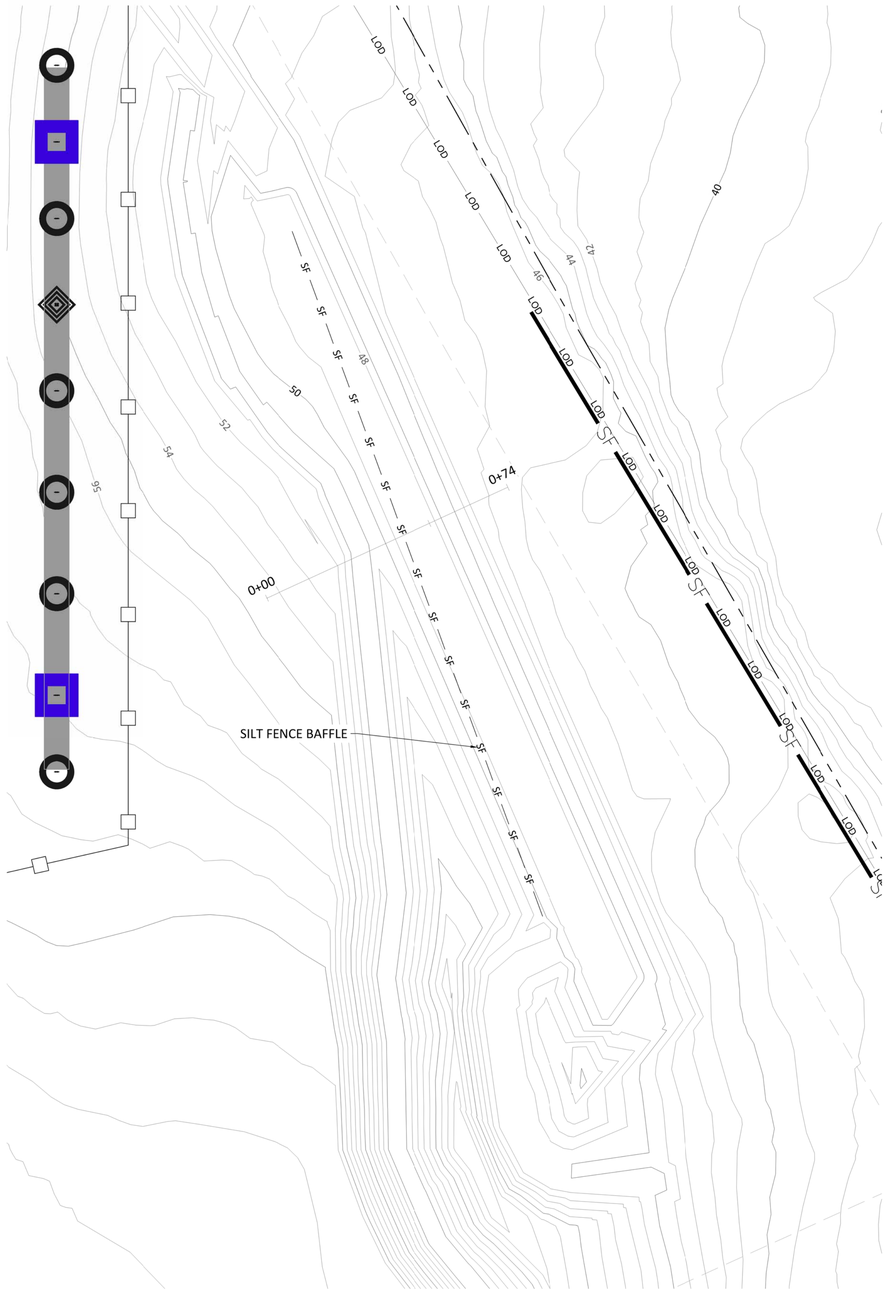
DATE: 21-JAN-20
PROJECT #: 20200309_CT
DRAWN BY: MMM
CHECKED BY: DRG

TITLE: EROSION & SEDIMENT CONTROL DETAILS
SHEET: ESC-314

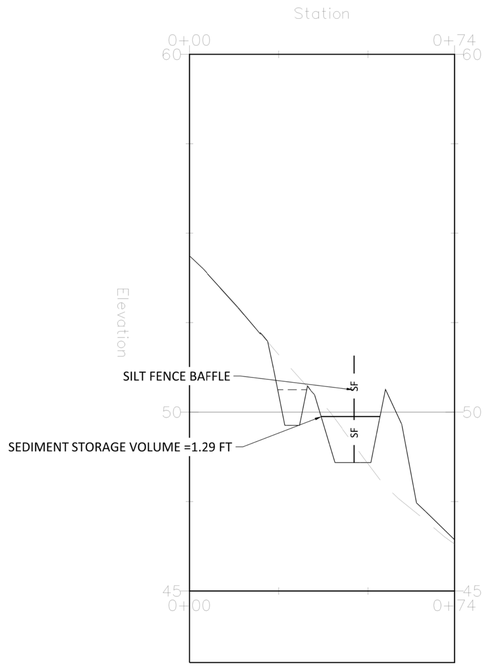
811 Know what's below. Call before you dig.

PLOT DATE: Tuesday, January 19, 2021

LOCATION: E:\DROPBOX (SOA)\ENGINEERING\CS ENERGY\2020-03-09_STONINGTON\CAD\SITE PLANS.DWG PLOTTED BY: DARIN GALLOWAY



1 SEDIMENT BASIN 18 (STORMWATER BERM 8)
ESC-315 Scale: 1"=20'



2 PROFILE -SEDIMENT BASIN 18 (BERM 8)
ESC-315 Scale: H:1"=20' V:1"=2'

SEDIMENT BASIN NOTES:

36. TEMPORARY SEDIMENT BASINS WERE SIZED BASED ON THE CONNECTICUT GUIDLINES FOR SOIL EROSION & SEDIMENT CONTROL, CONNECTICUT SEDIMENT STORAGE VOLUME CALCULATION (2002). SEDIMENT BASINS WERE PLACED DOWN SLOPE OF GRADED OR OTHERWISE HIGHLY DISTURBED AREAS.

37. SEDIMENT BASINS SHALL BE CONSTRUCTED AS DEPICTED ON ESC-303 THROUGH ESC-315.
38. SEDIMENT BASINS ARE LOCATED IN THE SAME FOOTPRINT AS PERMANENT STORMWATER BASINS AND BERMS. SEDIMENT BASIN NUMBERING CORROSPONDS TO STORMWATER BASIN/BERM NUMBERING (E.G. SEDIMENT BASIN 1 IS IN THE SAME FOOTPRINT AS STORMWATER BASIN 1).

38.1. AFTER FINAL STABILIZATION OF THE SITE, THE FOLLOWING SEQUENCE SHALL BE PERFORMED PRIOR TO CONSTRUCTION OF THE PERMANENT STORMWATER CONTROLS:

38.1.1. SEDIMENT BASINS LOCATED WHERE BIOFILTRATION BASINS OR BERMS ARE LOCATED SHALL BE EXCAVATED TO THE FULL DEPTH OF THE FILTER MEDIA AND RECONSTRUCTED AS DEPICTED ON GRADING & DRAINAGE DESIGN SHEETS.

38.1.2. SEDIMENT BASINS LOCATED WHERE INFILTRATION BASINS OR BERMS ARE LOCATED SHALL HAVE ANY SEDIMENT ACCUMULATION REMOVED AND SCARIFIED TO 12" BELOW BASIN BOTTOM ELEVATION. FOLLOWING CLEANING AND SCARIFICATION, THE STORMWATER CONTROLS SHALL BE RECONSTRUCTED AS DEPICTED ON GRADING & DRAINAGE DESIGN SHEETS.

39. SEDIMENT BASINS SHALL BE INSPECTED IN ACCORDANCE WITH THE REQUIREMENTS IN SECTION 7 OF THE STORMWATER POLLUTION CONTROL PLAN.

40. SEDIMENT BASINS SHALL BE CLEANED WHEN SEDIMENT ACCUMULATION EXCEEDS ONE HALF THE WET STORAGE CAPACITY OF THE BASIN OR WHEN THE DEPTH OF AVAILABLE POOL IS REDUCED TO 18-INCHES, WHICHEVER IS ACHIEVED FIRST.

MAP LEGEND (1"=1000')



PLOT DATE: Tuesday, January 19, 2021

SIERRA OVERHEAD ANALYTICS
18859 MICROTRONICS WAY
SONORA, CALIFORNIA 95370
CONNECTICUT PROFESSIONAL
ENGINEERING CORPORATION #PEC.0001969

REV	DESCRIPTION	DATE
6	ISSUED FOR CONSTRUCTION - DRAFT	9/4/2020
7	ISSUED FOR CONSTRUCTION - DRAFT	9/18/2020
8	ISSUED FOR CONSTRUCTION - DRAFT	10/22/2020
9	ISSUED FOR CONSTRUCTION - DRAFT	11/06/2020
10	ISSUED FOR CONSTRUCTION	1/20/2021
-	-	-
-	-	-
-	-	-
-	-	-
-	-	-

CONFIDENTIAL:
THE INFORMATION DEPICTED ON THIS DOCUMENT IS PROPRIETARY AND THE SOLE PROPERTY OF SIERRA OVERHEAD ANALYTICS, INC (SOA). ANY USE OR DISCLOSURE OF THIS INFORMATION IS EXPRESSLY PROHIBITED WITHOUT THE PRIOR WRITTEN CONSENT OF SOA.

CS Energy
Building a Cleaner Future
2045 LINCOLN HIGHWAY
EDISON, NEW JERSEY 08817

PROJECT NAME:
STONINGTON SOLAR PROJECT

PROJECT ADDRESS:
ELLA WHEELER RD.
NORTH STONINGTON, CT 06359
41° 25' 9.71"N, 71° 50' 4.83"W

SEAL: STATE OF CONNECTICUT · DARRIN RAY GALLOWAY · No. 34152 · LICENSED PROFESSIONAL ENGINEER

DATE: 21-JAN-20
PROJECT #: 20200309_CT
DRAWN BY: MMM
CHECKED BY: DRG

TITLE: EROSION & SEDIMENT CONTROL DETAILS
SHEET: ESC-315

811 Know what's below. Call before you dig.

LOCATION: E:\DROPBOX (SOA)\ENGINEERING\CS ENERGY\2020-03-09_STONINGTON\CAD\SITE PLANS.DWG PLOTTED BY: DARIN GALLOWAY

GENERAL STRUCTURAL NOTES:

1. THE WORDS "THE ENGINEER" AND "CEOR" AS USED IN THESE NOTES REFER TO THE CIVIL ENGINEER OF RECORD AND SIERRA OVERHEAD ANALYTICS, INC.
2. GENERAL CONTRACTORS SHALL BE FAMILIAR WITH ALL EXISTING SITE CONDITIONS AND DESIGN DOCUMENTS PROVIDED BY THE VARIOUS DESIGN PROFESSIONALS INVOLVED WITH THIS PROJECT.
3. GENERAL CONTRACTOR SHALL VERIFY ALL DIMENSIONS, DETAILS AND SPATIAL RELATIONSHIPS SHOWN ON THESE DRAWINGS. ANY DISCREPANCIES, CONFLICTS, OR OMISSIONS FOUND SHALL BE REPORTED TO THE ENGINEER AND OTHER DESIGN PROFESSIONALS AS APPROPRIATE FOR RESOLUTION PRIOR TO PROCEEDING WITH ANY WORK ON THE PROJECT.
4. ALL WORK SHALL COMPLY WITH THE CONNECTICUT STATE BUILDING CODE AND THE INTERNATIONAL BUILDING CODE, 2018 EDITION AND ALL FEDERAL, STATE, AND LOCAL CODES.
5. ANY TESTING OR INSPECTIONS REQUIRED BY BUILDING OFFICIALS, PROJECT DRAWINGS, OR SPECIFICATIONS SHALL BE PERFORMED BY AN APPROVED INDEPENDENT TESTING LABORATORY.
6. SITE VISITS AND OBSERVATIONS CONDUCTED BY THE ENGINEER SHALL NEITHER BE CONSTRUED AS INSPECTIONS NOR APPROVAL OF CONSTRUCTION.
7. GENERAL CONTRACTOR IS SOLELY RESPONSIBLE FOR COMPLIANCE WITH O.S.H.A. STANDARDS.
8. GENERAL CONTRACTOR IS SOLELY RESPONSIBLE FOR BRACING AND SHORING ALL EXCAVATIONS, DEWATERING OF EXCAVATIONS FROM EITHER SURFACE WATER, GROUNDWATER, OR SEEPAGE, TEMPORARY AND EXISTING STRUCTURES, AND PARTIALLY COMPLETED PORTIONS OF THE WORK TO ASSURE THE SAFETY OF ANY PERSONS COMING IN CONTACT WITH THE WORK.
9. ALL CT BUILDING CODES AND ASTM INTERNATIONAL (ASTM) SPECIFICATIONS NOTED ON THE DRAWINGS SHALL BE AMENDED TO DATE.
10. UNLESS AS CALLED OUT AS "EXISTING" OR "NOT-IN-CONTRACT", EVERYTHING SHOWN ON THESE DRAWINGS SHALL BE PROVIDED AND INSTALLED AS PART OF THE WORK OF THE PROJECT.
11. GENERAL CONTRACTOR SHALL REVIEW ALL SUBMITTALS, INCLUDING SHOP DRAWINGS, AND VERIFY CORRECTNESS PRIOR TO SUBMISSION TO THE ENGINEER.

STRUCTURAL STEEL NOTES:

12. ALL STRUCTURAL STEEL SHALL CONFORM TO ASTM A36 UNLESS NOTED OTHERWISE.
13. ALL STRUCTURAL WIDE FLANGE BEAMS, GIRDERS, AND COLUMNS SHALL CONFORM TO ASTM A992 (Fy = 50 KSI).
14. STEEL PIPE COLUMNS SHALL CONFORM TO ASTM A501 (Fy = 36 KSI) OR ASTM A53, TYPE E OR S, GRADE B (Fy = 35 KSI).
15. STRUCTURAL STEEL TUBE SHALL CONFORM TO ASTM A501, GRADE B (Fy = 46 KSI).
16. BOLTS SHALL CONFORM TO ASTM A325, UNLESS OTHERWISE NOTED.
17. DIAMETER OF BOLT HOLES IN STEEL SHALL BE 1/16" LARGER THAN THE BOLT SIZE, UNLESS OTHERWISE NOTED.
18. ALL WELDS SHALL BE IN CONFORMANCE WITH THE STRUCTURAL WELDING CODE OF THE AMERICAN WELDING SOCIETY. ALL STRUCTURAL WELDING SHALL USE THE SHIELDED METAL ARC WELDING PROCESS WITH E70XXX ELECTRODES. USE LOW HYDROGEN ELECTRODES FOR BOLTS AND REINFORCING BARS.
19. SHOP WELDING SHALL BE PERFORMED IN APPROVED FABRICATORS SHOP PER IBC SECTION 1704.1.
20. ANCHOR BOTS AND THREADED RODS SHALL CONFORM TO EITHER ASTM A307 OR A36 UNLESS OTHERWISE NOTED.
21. FABRICATION AND ERECTION SHALL COMPLY WITH AISC SPECIFICATIONS, AS REVISED TO DATE.
22. SUBMIT SHOP DRAWINGS TO THE ENGINEER PRIOR TO FABRICATION.
23. CONTRACTOR SHALL VERIFY ALL DIMENSIONS WITH CIVIL, ARCHITECTURAL, MECHANICAL, AND ELECTRICAL DRAWINGS AND COORDINATE ANY CONFLICTS BEFORE PROCEEDING.
24. TORQUE TUBES, IF USED, SHALL BE PLACED WITH MILL CAMBER UPWARD.

FOUNDATION NOTES:

25. FOUNDATION DESIGN IS BASED ON SOIL BEARING PRESSURE OF 2,500 PSF FOR "DEAD" PLUS "LONG TERM LIVE" LOADS. SEE GEOTECHNICAL REPORT.
26. FOOTING SHALL BEAR ON APPROPRIATE SOIL AS DESCRIBER IN THE GEOTECH REPORT.
27. ALL EXCAVATION AND FILL BENEATH FOUNDATIONS SHALL BE OBSERVED BY THE GEOTECHNICAL ENGINEER OF RECORD (GEOR) OR THEIR AUTHORIZED REPRESENTATIVE.
28. SHOULD ANY SUBSURFACE CONDITION NOT BE IN ACCORDANCE WITH THE GEOTECH REPORT, THE GEOR SHALL BE NOTIFIED IMMEDIATELY FOR RESOLUTION PRIOR TO CONTINUING WORK.

DESIGN CRITERIA NOTES:

29. DESIGN CODES:
    - 29.1. NORTH STONINGTON ORDINANCE
    - 29.2. CONNECTICUT STATE BUILDING CODE
    - 29.3. CONNECTICUT GENERAL STATUTES
    - 29.4. INTERNATIONAL BUILDING CODE (IBC), 2018 EDITION.
    - 29.5. ASCE 7-16 MINIMUM DESIGN LOADS FOR BUILDINGS AND OTHER STRUCTURES
    - 29.6. AMERICAN CONCRETE INSTITUTE (ACI) 318-14

RISK CATEGORY: I
SEISMIC DESIGN CATEGORY: B
SITE CLASS: C - PER GEOTECH
Ss: 0.16
S1: 0.052
Sds: 0.12
Sd1: 0.11

GROUND SNOW LOAD: 30 PSF
SNOW LOAD IMPORTANCE FACTOR: 1.0
ULTIMATE DESIGN WIND SPEED (Vult): 135 MPH
NOMINAL DESIGN WIND SPEED (Vasd): 105 MPH

WIND EXPOSURE CATAGORY: C
WIND IMPORTANCE FACTOR (Iw): 1.0
FROST DEPTH: 42" BELOW EXISTING GROUND SURFACE

CONCRETE NOTES:

30. CONCRETE SHALL BE REGULAR WEIGHT WITH HARDROCK AGGREGATES, U.N.O.
31. CEMENT SHALL CONFORM TO ASTM C-150 TYPE II.
32. AGGREGATES SHALL CONFORM TO ASTM C-33 WITH PROVEN SHRINKAGE CHARACTERISTICS OF LESS THAN -0.04%.
33. CONCRETE SHALL BE READY MIXED PER ASTM C-94.
34. GENERAL CONTRACTOR IS RESPONSIBLE FOR OBTAINING CONCRETE MIX DESIGNS WHICH CONFORM TO THE CLASS AND STRENGTH REQUIREMENTS.
35. GENERAL CONTRACTOR SHALL SUBMIT A COPY OF THE MIX DESIGN TO THE ENGINEER FOR APPROVAL PRIOR TO CONCRETE PLACEMENT.
36. CONCRETE CLASS AND STRENGTH SHALL BE NOTED AS FOLLOWS:

CONCRETE CLASS	SLAB ON GRADE
MAXIMUM AGGREGATE SIZE	1"
AIR ENTRAINMENT	6% +/-1.5%
MINIMUM SACKS PER YARD	5.0
MAXIMUM WATER/CEMENT RATIO	0.45
SLUMP	4" =/-0.5"
28 DAY COMPRESSIVE STRENGTH	4,000 PSI

37. ONLY ONE CLASS AND STRENGTH OF CONCRETE SHALL BE POURED ON THE PROJECT AT ONE TIME.
38. CONCRETE SHALL BE TESTED IN ACCORDANCE WITH IBC SECTION 1704.
39. ALL REINFORCING STEEL, ANCHOR BOLTS AND SLEEVES SHALL BE PLACED AND SECURED IN POSITION PRIOR TO POURING CONCRETE.
40. CURE ALL EXPOSED CONCRETE SURFACES WITH LIQUID MEMBRANE-FORMING CURING COMPOUND CONFORMING TO ASTM C309, TYPE 1, CLASS A OR OTHER APPROVED CURING METHOD.
41. APPLY CURING COMPOUND IMMEDIATELY AFTER PLACING CONCRETE.
42. WHERE CONCRETE PLACEMENT OCCURS IN TEMPERATURES OVER 90 DEGREES OR IN WINDY CONDITIONS, GENERAL CONTRACTOR SHALL TAKE ADDITIONAL MEASURES TO ENSURE PROPER CONCRETE CURING.
43. RE-APPLY CURING COMPOUND TO CONTROL JOINTS WHEN CONTROL JOINT SAW-CUTTING OCCURS AFTER APPLICATION OF CURING COMPOUND.
44. FOR COLD WEATHER CONCRETE PLACEMENT, PERFORM IN ACCORDANCE WITH ACI 318-14, SECTION 26.5.4
45. FOR HOT WEATHER CONCRETE PLACEMENT, PERFORM IN ACCORDANCE WITH ACI 318-14, SECTION 26.5.5.
46. IF PLACEMENT OF CONCRETE OCCURS DURING HOT WEATHER CONDITIONS, REINFORCING STEEL SHALL BE KEPT COOL DURING CONCRETE PLACEMENT.
47. GENERAL CONTRACTOR IS RESPONSIBLE FOR FILLING AND REPAIRING CRACKS AS DETERMINED BY THE ENGINEER OR THEIR REPRESENTATIVE.

SPECIAL INSPECTIONS:

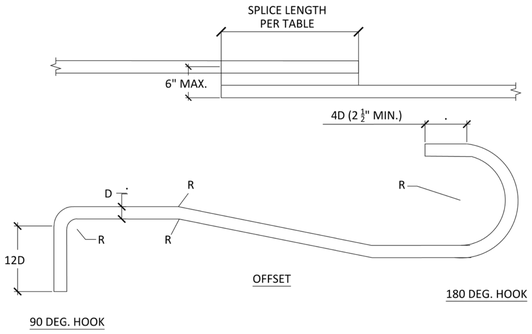
48. PROVIDE SPECIAL INSPECTION OF THE ITEMS LISTED IN THE TABLE BELOW IN ACCORDANCE WITH IBC CHAPTER 17.
49. SPECIAL INSPECTIONS SHALL BE OBJECTIVE, COMPETENT AND INDEPENDENT FROM THE CONTRACTOR RESPONSIBLE FOR THE WORK BEING INSPECTED.
50. SPECIAL INSPECTORS SHALL KEEP RECORDS OF INSPECTIONS. THESE RECORDS SHALL BE PROVIDED TO THE ENGINEER.

LIST OF SPECIAL INSPECTIONS FOR EACH STRUCTURAL PAD		
1. CONCRETE CONSTRUCTION	PERIODIC	CONTINUOUS
A. INSPECTION OF RE-INFORCING STEEL AND PLACEMENT	X	
B. INSPECTION OF ANCHORS POST INSTALLED IN HARDENED CONCRETE MEMBERS	X	
C. VERIFY USE OF REQUIRED MIX DESIGN	X	
D. AT THE TIME FRESH CONCRETE IS SAMPLED TO FABRICATE SPECIMENS FOR STRENGTH TESTS, PERFORM SLUMP AND AIR CONTENT TESTS, AND DETERMINE TEMPERATURE FOR CONCRETE	X	
2. INSPECTION OF SOILS	PERIODIC	CONTINUOUS
A. VERIFY MATERIALS BELOW CONCRETE PAD FOUNDATION ARE ADEQUATE TO ACHEIVE THE DESIGN BEARING CAPACITY	X	
B. VERIFY USE OF PROPER MATERIALS, DENSITIES AND LIFT THICKNESS DURING PLACEMENT AND COMPACTION OF COMPACTED FILL BELOW ALL CONCRETE PADS	X	
C. PRIOR TO PLACEMENT OF COMPACTED FILL OBSERVE SUBGRADE AND VERIFY EXISTING CONDITION IS AS DESCRIBED IN THE SOILS REPORT	X	

REINFORCING STEEL NOTES:

51. ALL REINFORCING STEEL SHALL BE AS FOLLOWS:
    - 51.1. NO.3 BARS AND SMALLER - ASTM A615, GRADE 60
    - 51.2. NO. 4 BARS AND LARGER - ASTM A615, GRADE 60
    - 51.3. REINFORCING STEEL TO BE WELDED - ASTM A706, GRADE 60
    - 51.4. WELDED WIRE FABRIC - ASTM A185
52. ALL BARS SHALL BE CLEAN OF RUST, GREASE, OR OTHER MATERIALS LIKELY TO IMPAIR BOND.
53. ALL BENDS SHALL BE MADE COLD.
54. SPLICING OF BARS SHALL HAVE MINIMUM LAP PER DETAIL BELOW IN ALL CASES UNLESS DIMENSIONED OTHERWISE ON DETAILS.

REINFORCEMENT BEND AND SPLICE DETAILS



BAR SIZE	LAP LENGTH
#3	18"
#4	23"
#5	29"
#6	35"
#7	50"
#8	57"
#9	55"

D = DIAMETER OF BAR
R = RADIUS OF BEND MEASURED ON THE INSIDE OF BAR
= 2 1/2 D FOR #2 ONLY
= 3D FOR #3 THROUGH #8
= 4D FOR #9 THROUGH #11
= 5D FOR #14 & #18

55. ALL REINFORCEMENT BARS SHALL BE ACCURATELY AND SECURELY PLACED BEFORE POURING CONCRETE OR APPLYING GROUT.
56. MINIMUM LAP FOR WELDED WIRE FABRIC SHALL BE 1.5 MESH.
57. WELDING OF REINFORCING STEEL SHALL COMPLY WITH AWS D1.4-79, USING HYDROGEN ELECTRODES.
58. SPACING OF BARS SHALL BE CONSIDEREED AS MAXIMUM SPACING.

811 Know what's below. Call before you dig.

PLOT DATE: Tuesday, January 19, 2021

soa
SIERRA OVERHEAD ANALYTICS
18859 MICROTRONICS WAY
SONORA, CALIFORNIA 95370
CONNECTICUT PROFESSIONAL ENGINEERING CORPORATION #PEC.0001969

REV	DESCRIPTION	DATE
6	ISSUED FOR CONSTRUCTION - DRAFT	9/4/2020
7	ISSUED FOR CONSTRUCTION - DRAFT	9/18/2020
8	ISSUED FOR CONSTRUCTION - DRAFT	10/22/2020
9	ISSUED FOR CONSTRUCTION - DRAFT	11/06/2020
10	ISSUED FOR CONSTRUCTION	1/20/2021
-	-	-
-	-	-
-	-	-
-	-	-
-	-	-

CONFIDENTIAL:
THE INFORMATION DEPICTED ON THIS DOCUMENT IS PROPRIETARY AND THE SOLE PROPERTY OF SIERRA OVERHEAD ANALYTICS, INC (SOA). ANY USE OR DISCLOSURE OF THIS INFORMATION IS EXPRESSLY PROHIBITED WITHOUT THE PRIOR WRITTEN CONSENT OF SOA.

CS Energy
Building a Cleaner Future
2045 LINCOLN HIGHWAY
EDISON, NEW JERSEY 08817

PROJECT NAME:
STONINGTON SOLAR PROJECT

PROJECT ADDRESS:
ELLA WHEELER RD.
NORTH STONINGTON, CT 06359
41° 25' 9.71"N, 71° 50' 4.83"W

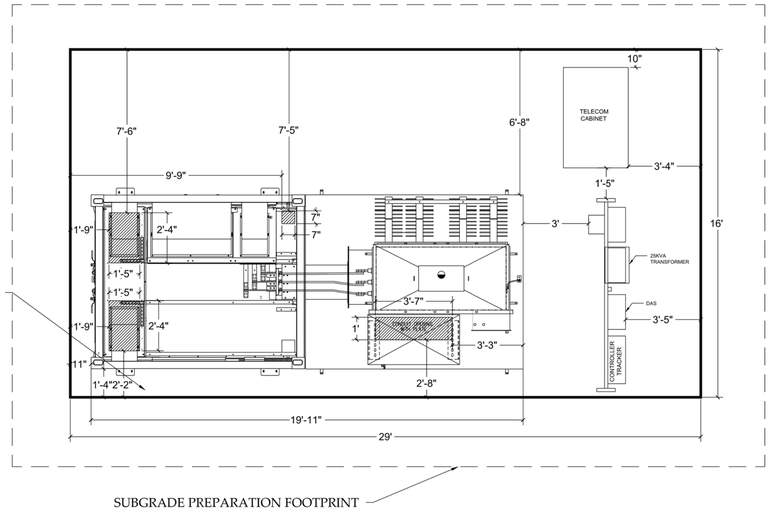
SEAL: STATE OF CONNECTICUT · DARIN RAY GALLOWAY · No. 34152 · LICENSED PROFESSIONAL ENGINEER

DATE: 21-JAN-20
PROJECT #: 20200309_CT
DRAWN BY: MMM
CHECKED BY: DRG

TITLE: STRUCTURAL NOTES
SHEET: S-100

EQUIPMENT NOTES:
1. EQUIPMENT LOCATIONS DEPICTED ON THIS DETAIL ARE APPROXIMATE. REFER TO ELECTRICAL SHEETS FOR EXACT LOCATIONS.
2. FRONT OF EQUIPMENT SHALL FACE ROAD.
3. SEE ELECTRICAL PLANS FOR SLAB PENETRATION LOCATIONS.
4. PROVIDE 6" MIN. SLACK IN ALL CONDUCTORS AND WIRES TO ACCOUNT FOR SLAB MOVEMENT.
5. EXTERIOR CONCRETE SLAB DIMENSIONS ARE INCLUDED ON ELECTRICAL SHEETS.

8" THICK CONCRETE SLAB W/ #4 AT 12" O.C. EACH WAY CENTERED ON SLAB. FOR SECTION DETAILS AND SUBGRADE PREPARATION SEE DETAIL 2/201

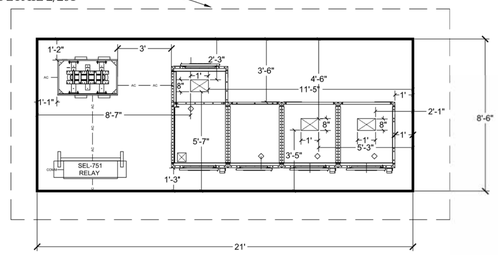


SUBGRADE PREPARATION FOOTPRINT

1 S-200 EQUIPMENT PAD #1 DETAIL, TYP.
Scale: NTS

EQUIPMENT NOTES:
1. EQUIPMENT LOCATIONS DEPICTED ON THIS DETAIL ARE APPROXIMATE. REFER TO ELECTRICAL SHEETS FOR EXACT LOCATIONS.
2. FRONT OF EQUIPMENT SHALL FACE ROAD.
3. SEE ELECTRICAL PLANS FOR SLAB PENETRATION LOCATIONS.
4. PROVIDE 6" MIN. SLACK IN ALL CONDUCTORS AND WIRES TO ACCOUNT FOR SLAB MOVEMENT.
5. EXTERIOR CONCRETE SLAB DIMENSIONS ARE INCLUDED ON ELECTRICAL SHEETS.

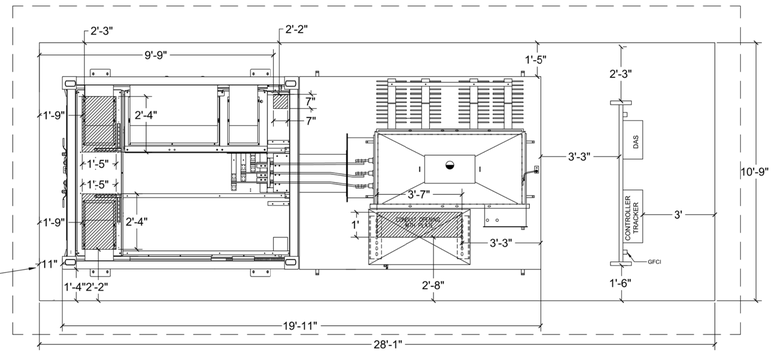
8" THICK CONCRETE SLAB W/ #4 AT 12" O.C. EACH WAY CENTERED ON SLAB. FOR SECTION DETAILS AND SUBGRADE PREPARATION SEE DETAIL 2/201



2 S-200 CABINET EQUIPMENT PAD, TYP.
Scale: NTS

EQUIPMENT NOTES:
1. EQUIPMENT LOCATIONS DEPICTED ON THIS DETAIL ARE APPROXIMATE. REFER TO ELECTRICAL SHEETS FOR EXACT LOCATIONS.
2. FRONT OF EQUIPMENT SHALL FACE ROAD.
3. SEE ELECTRICAL PLANS FOR SLAB PENETRATION LOCATIONS.
4. PROVIDE 6" MIN. SLACK IN ALL CONDUCTORS AND WIRES TO ACCOUNT FOR SLAB MOVEMENT.
5. EXTERIOR CONCRETE SLAB DIMENSIONS ARE INCLUDED ON ELECTRICAL SHEETS.

8" THICK CONCRETE SLAB W/ #4 AT 12" O.C. EACH WAY CENTERED ON SLAB. FOR SECTION DETAILS AND SUBGRADE PREPARATION SEE DETAIL 2/201



3 S-200 EQUIPMENT PAD #2 DETAIL, TYP.
Scale: NTS

soa
SIERRA OVERHEAD ANALYTICS
18359 MICROTRONICS WAY
SONORA, CALIFORNIA 95370
CONNECTICUT PROFESSIONAL ENGINEERING CORPORATION #PEC.0001969

REV	DESCRIPTION	DATE
6	ISSUED FOR CONSTRUCTION - DRAFT	9/4/2020
7	ISSUED FOR CONSTRUCTION - DRAFT	9/18/2020
8	ISSUED FOR CONSTRUCTION - DRAFT	10/22/2020
9	ISSUED FOR CONSTRUCTION - DRAFT	11/06/2020
10	ISSUED FOR CONSTRUCTION	1/20/2021
-	-	-
-	-	-
-	-	-
-	-	-
-	-	-

CONFIDENTIAL:
THE INFORMATION DEPICTED ON THIS DOCUMENT IS PROPRIETARY AND THE SOLE PROPERTY OF SIERRA OVERHEAD ANALYTICS, INC (SOA). ANY USE OR DISCLOSURE OF THIS INFORMATION IS EXPRESSLY PROHIBITED WITHOUT THE PRIOR WRITTEN CONSENT OF SOA.

CS Energy
Building a Cleaner Future
2045 LINCOLN HIGHWAY
EDISON, NEW JERSEY 08817

PROJECT NAME:
STONINGTON SOLAR PROJECT

PROJECT ADDRESS:
ELLA WHEELER RD.
NORTH STONINGTON, CT 06359
41° 25' 9.71"N, 71° 50' 4.83"W

SEAL: STATE OF CONNECTICUT · DARIN RAY GALLOWAY · No. 34152 · LICENSED PROFESSIONAL ENGINEER

DATE: 21-JAN-20
PROJECT #: 20200309_CT
DRAWN BY: MMM
CHECKED BY: DRG

TITLE: EQUIPMENT PAD DETAILS
SHEET: S-200

811 Know what's below. Call before you dig.

PLOT DATE: Tuesday, January 19, 2021

LOCATION: E:\DROPBOX (SOA)\ENGINEERING\CS ENERGY\2020-03-09_STONINGTON\CAD\STRUCTURAL DETAILS.DWG PLOTTED BY: DARIN GALLOWAY

EQUIPMENT PAD CONSTRUCTION NOTES:

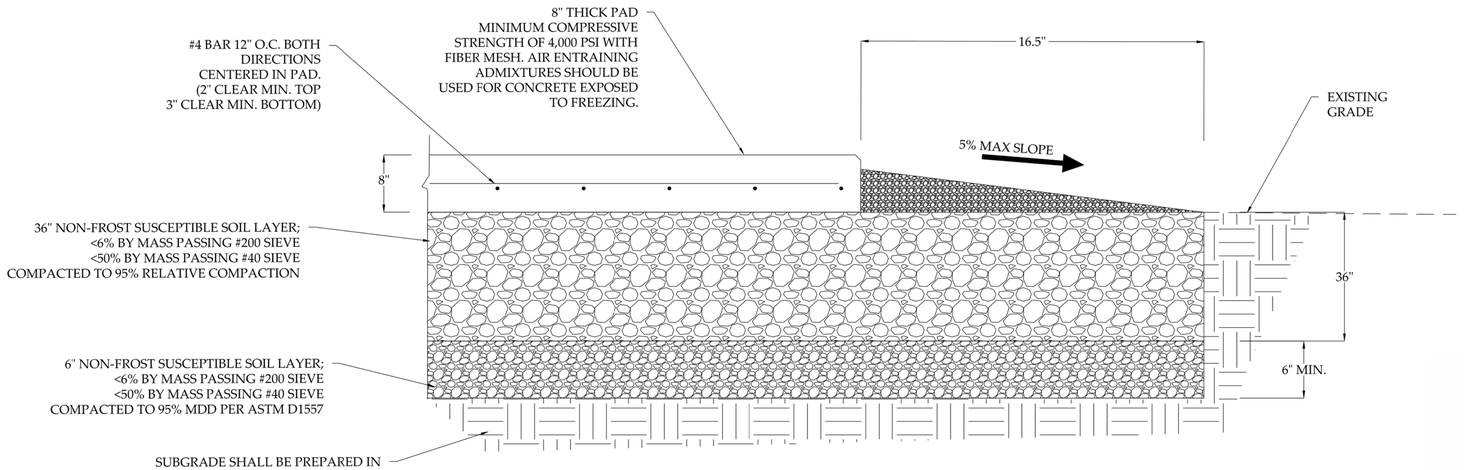
1. PRIOR TO FORMING AND POURING ANY AND ALL CONCRETE PADS AND FOUNDATIONS, THE CONTRACTOR SHALL SUBMIT SHOP DRAWINGS OF PAD DIMENSIONS AND PROVIDE FINAL EQUIPMENT DETAILS TO THE ENGINEER FOR APPROVAL.

2. CONTRACTOR SHALL SEAL ALL CONDUITS AFTER CONDUCTORS ARE IN PLACE. FILL VOIDS AROUND STUB UPS WITH CONCRETE FLUSH WITH SURROUNDING GRADE.

EQUIPMENT ANCHORAGE SCHEDULE			
ITEM	BOLT	EMBED (IN)	QUANTITY
MV TRANSFORMER	HDA-P M10X100 / 20	4	8 ea.
SWITCH GEAR	HDA-P M10X100 / 20	4	12 ea.
EQUIPMENT CABINET	HDA-P M10X100 / 20	4	4 ea.
GROUNDING TRANSFORMER	HDA-P M10X100 / 20	4	4 ea.

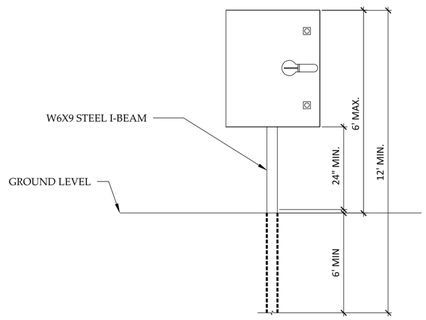
NOTE:
1. PROVIDE 8" MINIMUM EDGE DISTANCE FROM ANCHORS TO ALL SLAB EDGES
2. ANCHORS SHALL BE UTILIZED IN MANUFACTURED PROVIDE MOUNTING LOCATIONS.
3. EMBED ESTIMATED THROUGH COMPARISON TO SIMILAR PADS AND LOCATIONS

1 / S-201 EQUIPMENT ANCHORAGE
Scale: NTS



2 / S-201 EQUIPMENT PAD SECTION, TYP.
NTS

SUBGRADE PREPARATION NOTES:
1. ALL WORK SHALL ADHERE TO THE FOLLOWING DOCUMENTS:
   1.1. SEI/ASCE 32-01 (OR CURRENT) DESIGN AND CONSTRUCTION OF FROST-PROTECTED SHALLOW FOUNDATIONS.
2. NON-FROST SUSCEPTIBLE SOIL IS DEFINED AS A SOIL THAT DOES NOT DISPLAY SIGNIFICANT DETRIMENTAL ICE SEGREGATION (I.E. ICE LENS DEVELOPMENT) DURING FREEZING. GENERALLY, GRANULAR SOILS WITH LESS THAN 6% BY MASS PASSING A #200 SIEVE (0.074 MM) HAVE LOW FROST SUSCEPTIBILITY, WHEREAS SILTS AND CLAYS OR SANDS AND GRAVELS (I.E. GRANULAR SOILS) WITH HIGH FINES CONTENT GENERALLY HAVE A MEDIUM TO HIGH FROST SUSCEPTIBILITY.
3. CONTRACTOR SHALL SUBMIT NON-FROST SUSCEPTIBLE SOIL REPORT TO ENGINEER PRIOR TO INSTALLATION.
4. SITE SHALL BE GRADED TO DRAIN SURFACE WATER AWAY FROM EQUIPMENT PADS.
5. HORIZONTAL INSULATION PLACED LESS THAN 12" BELOW GROUND SURFACE, OR ANY PORTION EXTENDING OUTWARD MORE THAN 24" FROM THE FOUNDATION EDGE, SHALL BE PROTECTED AGAINST DAMAGE FROM CONCRETE OR ASPHALT PAVEMENT ON THE GROUND SURFACE DIRECTLY ABOVE THE INSULATION BY CEMENTITIOUS BOARD OR PLYWOOD RATED FOR BELOW-GROUND USE, OR BY OTHER APPROVED MATERIALS PLACED DIRECTLY ON THE TOP SURFACE OF THE INSULATION.
6. POLYSTYRENE INSULATION SHALL NOT BE EXPOSED TO PETROLEUM- BASED PRODUCTS.



COMBINER BOX GENERAL NOTES

1. MAXIMUM REVEAL HEIGHT OF THE COMBINER BOX PILE IS 6'.
2. MINIMUM EMBEDMENT DEPTH OF THE W6X9 PILE IS 6'.
3. FOR A PROFILE VIEW AND EQUIPMENT SPEC OF THE COMBINER BOX SEE ELECTRICAL SHEETS.

3 / S-200 COMBINER BOX ELEVATION DETAIL
Scale: NTS

SIERRA OVERHEAD ANALYTICS
18359 MICROTRONICS WAY
SONORA, CALIFORNIA 95370
CONNECTICUT PROFESSIONAL ENGINEERING CORPORATION #PEC.0001969

REV	DESCRIPTION	DATE
6	ISSUED FOR CONSTRUCTION - DRAFT	9/4/2020
7	ISSUED FOR CONSTRUCTION - DRAFT	9/18/2020
8	ISSUED FOR CONSTRUCTION - DRAFT	10/22/2020
9	ISSUED FOR CONSTRUCTION - DRAFT	11/06/2020
10	ISSUED FOR CONSTRUCTION	1/20/2021
-	-	-
-	-	-
-	-	-
-	-	-
-	-	-

CONFIDENTIAL:
THE INFORMATION DEPICTED ON THIS DOCUMENT IS PROPRIETARY AND THE SOLE PROPERTY OF SIERRA OVERHEAD ANALYTICS, INC (SOA). ANY USE OR DISCLOSURE OF THIS INFORMATION IS EXPRESSLY PROHIBITED WITHOUT THE PRIOR WRITTEN CONSENT OF SOA.

CS Energy
Building a Cleaner Future
2045 LINCOLN HIGHWAY
EDISON, NEW JERSEY 08817

PROJECT NAME:
STONINGTON SOLAR PROJECT

PROJECT ADDRESS:
ELLA WHEELER RD.
NORTH STONINGTON, CT 06359
41° 25' 9.71"N, 71° 50' 4.83"W

SEAL: STATE OF CONNECTICUT · DARRIN RAY GALLOWAY · No. 34152 · LICENSED PROFESSIONAL ENGINEER

DATE: 21-JAN-20
PROJECT #: 20200309_CT
DRAWN BY: MMM
CHECKED BY: DRG

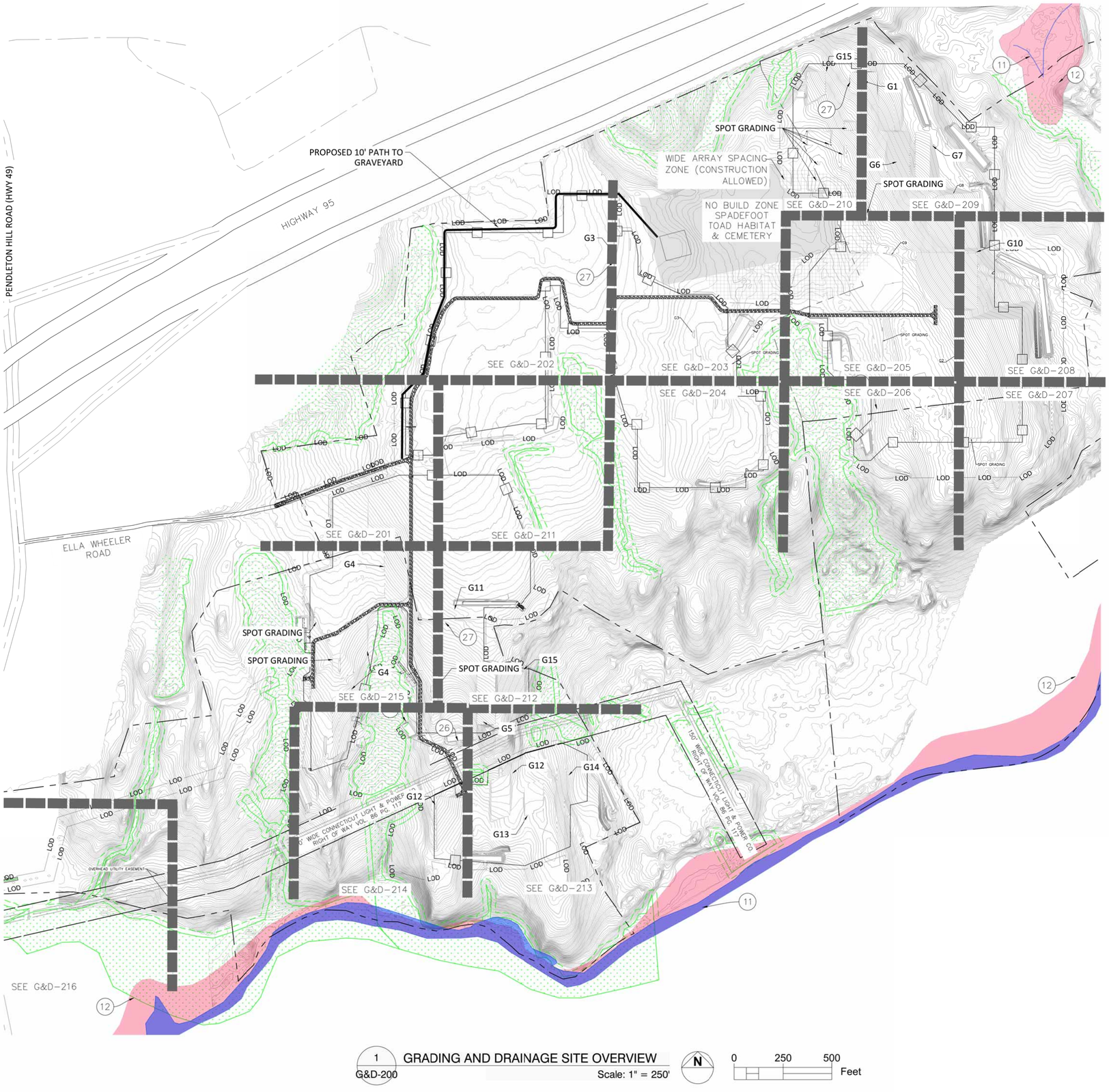
TITLE: STRUCTURAL DETAILS

SHEET: S-201

811 Know what's below. Call before you dig.

PLOT DATE: Tuesday, January 19, 2021

LOCATION: E:\DROPBOX (SOA)\ENGINEERING\CS ENERGY\2020-03-09_STONINGTON\CAD\STRUCTURAL DETAILS.DWG PLOTTED BY: DARIN GALLOWAY



1 GRADING AND DRAINAGE SITE OVERVIEW
G&D-200
Scale: 1" = 250'

N

0 250 500 Feet

LEGEND

6	PROPOSED SITE ACCESS ROAD (SEE C-400)
7	WETLAND W/BUFFER
8	SITE FENCE LINE (SEE C-402)
9	LOD — SITE LIMIT OF DISTURBANCE
10	SITE BOUNDARY
11	RIVER OR CREEK
12	100 YEAR FLOOD ZONE
26	PERMANENT STORMWATER CONTROL
27	GRADING AREA
28	VELOCITY DISSIPATION DEVICE (ROCK CHECK DAM, GRAVEL LEVEL SPREADER)
	75 — MAJOR CONTOUR
	76 — MINOR CONTOUR

GRADING AND DRAINAGE GENERAL NOTES:

1. ARRAY NOT SHOWN FOR CLARITY.
2. GRADING AREAS ARE BASED ON NEXT TRACKER RACKING WITH 5.5' MAXIMUM REVEAL POSTS.
3. CUT & FILL FACTOR = 1
4. ACCURACY OF FINAL GRADE VOLUMES, PILE REVEAL HEIGHTS, AND BILL OF MATERIAL TABLES IS BASED SOLELY ON ACCURACY OF TOPOGRAPHY PROVIDED BY OTHERS.
5. CONTRACTOR SHALL FIELD VERIFY ALL DIMENSIONS, VOLUMES, AND AREAS PRIOR TO CONSTRUCTION.

CUT & FILL ANALYSIS

GRADING	CUT (YD³)	FILL (YD³)	BALANCE (YD³)
G1	393.69	481.76	88.07 FILL
G2	2,922	18,316.60	15,394.40 FILL
G3	4,622.30	1,924.70	2,697.60 CUT
G4	4,906.05	1,111.90	3,794.15 CUT
G5	2,630.54	85.98	2,544.56 CUT
G6	1,639.11	285.90	1,353.21 CUT
G7	1.81	4,607.49	4,605.68 FILL
G8	808.45	6,178.7	5,370.25 FILL
G9	333.34	6,229.86	5,896.52 FILL
G10	7,695.78	112.22	7,583.56 CUT
G11	136.88	1.15	135.73 CUT
G12	1,531.01	1,875.79	344.78 FILL
G13	845.11	2.54	842.57 CUT
G14	214.59	284.71	70.12 FILL
G15	2,782.45	664.96	2,117.49 CUT
BASINS	15,511.29	4,587.75	10,923.54 CUT
SPOT GRADING	1,307.98	2530.30	1,222.32 FILL
ROADS	3,950.55	2,406.79	1,543.76 CUT
TOTAL	54,599.75	52,772.7	2,982.5 CUT

Know what's below. Call before you dig.

SIERRA OVERHEAD ANALYTICS
18859 MICROTRONICS WAY
SONORA, CALIFORNIA 95370
CONNECTICUT PROFESSIONAL ENGINEERING CORPORATION #PEC.0001969

REV	DESCRIPTION	DATE
6	ISSUED FOR CONSTRUCTION - DRAFT	9/4/2020
7	ISSUED FOR CONSTRUCTION - DRAFT	9/18/2020
8	ISSUED FOR CONSTRUCTION - DRAFT	10/22/2020
9	ISSUED FOR CONSTRUCTION - DRAFT	11/06/2020
10	ISSUED FOR CONSTRUCTION	1/20/2021
-	-	-
-	-	-
-	-	-
-	-	-
-	-	-
-	-	-

CONFIDENTIAL:
THE INFORMATION DEPICTED ON THIS DOCUMENT IS PROPRIETARY AND THE SOLE PROPERTY OF SIERRA OVERHEAD ANALYTICS, INC (SOA). ANY USE OR DISCLOSURE OF THIS INFORMATION IS EXPRESSLY PROHIBITED WITHOUT THE PRIOR WRITTEN CONSENT OF SOA.

CS Energy
Building a Cleaner Future
2045 LINCOLN HIGHWAY
EDISON, NEW JERSEY 08817

PROJECT NAME:
STONINGTON SOLAR PROJECT

PROJECT ADDRESS:
ELLA WHEELER RD.
NORTH STONINGTON, CT 06359
41° 25' 9.71"N, 71° 50' 4.83"W

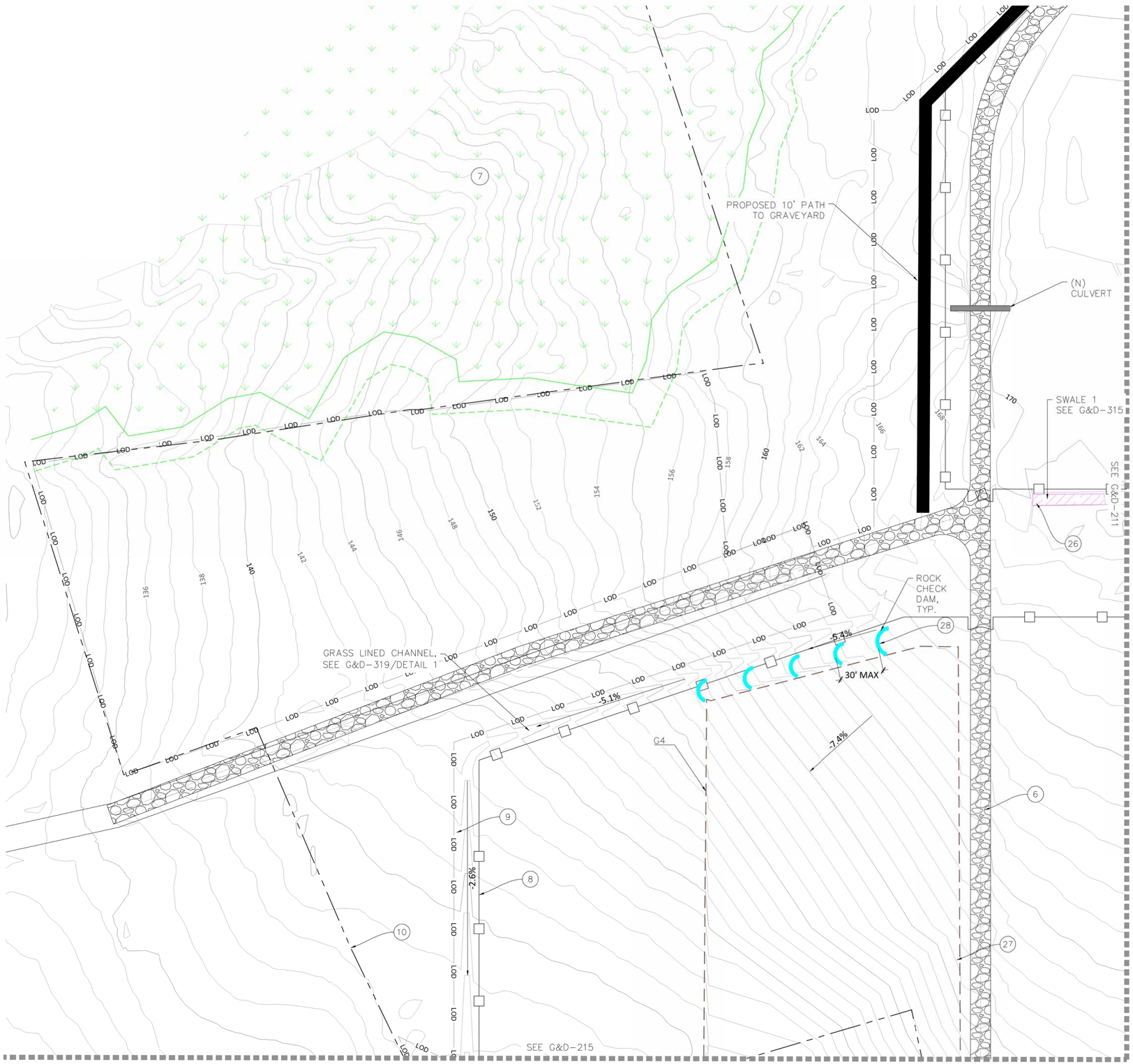
SEAL: STATE OF CONNECTICUT · DARIN RAY GALLOWAY · No. 34152 · LICENSED PROFESSIONAL ENGINEER

DATE: 21-JAN-20
PROJECT #: 20200309_CT
DRAWN BY: MMM
CHECKED BY: DRG

TITLE: GRADING & DRAINAGE SITE OVERVIEW
SHEET: G&D-200

PLOT DATE: Tuesday, January 19, 2021

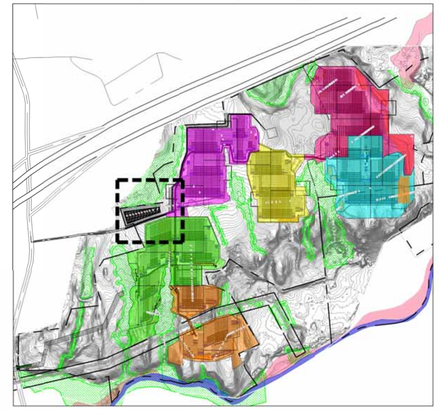
LOCATION: E:\DROPBOX (SOA)\ENGINEERING\CS ENERGY\2020-03-09_STONINGTON\CAD\SITE PLANS.DWG PLOTTED BY: DARIN GALLOWAY



1 GRADING AND DRAINAGE SITE PLAN
G&D-201
Scale: 1" = 40'

N 0 40 80

MAP LEGEND (1"=1000')



LEGEND

6	PROPOSED SITE ACCESS ROAD (SEE C-400)
7	WETLAND W/BUFFER
8	SITE FENCE LINE (SEE C-402)
9	LOD SITE LIMIT OF DISTURBANCE
10	SITE BOUNDARY
11	RIVER OR CREEK
12	100 YEAR FLOOD ZONE
26	PERMANENT STORMWATER CONTROL
27	GRADING AREA
28	VELOCITY DISSIPATION DEVICE (ROCK CHECK DAM, GRAVEL LEVEL SPREADER)
75	MAJOR CONTOUR
76	MINOR CONTOUR

GRADING AND DRAINAGE GENERAL NOTES:

1. ARRAY NOT SHOWN FOR CLARITY
2. GRADING AREAS ARE BASED ON NEXT TRACKER RACKING WITH 5.5' MAXIMUM REVEAL POSTS.
4. ACCURACY OF FINAL GRADE VOLUMES, PILE REVEAL HEIGHTS, AND BILL OF MATERIAL TABLES IS BASED SOLELY ON ACCURACY OF TOPOGRAPHY PROVIDED BY OTHERS.
5. CONTRACTOR SHALL FIELD VERIFY ALL DIMENSIONS, VOLUMES, AND AREAS PRIOR TO CONSTRUCTION.

SIERRA OVERHEAD ANALYTICS
18859 MICROTRONICS WAY
SONORA, CALIFORNIA 95370
CONNECTICUT PROFESSIONAL
ENGINEERING CORPORATION #PEC.0001969

REV	DESCRIPTION	DATE
6	ISSUED FOR CONSTRUCTION - DRAFT	9/4/2020
7	ISSUED FOR CONSTRUCTION - DRAFT	9/18/2020
8	ISSUED FOR CONSTRUCTION - DRAFT	10/22/2020
9	ISSUED FOR CONSTRUCTION - DRAFT	11/06/2020
10	ISSUED FOR CONSTRUCTION	1/20/2021
-	-	-
-	-	-
-	-	-
-	-	-
-	-	-

CONFIDENTIAL:
THE INFORMATION DEPICTED ON THIS DOCUMENT IS PROPRIETARY AND THE SOLE PROPERTY OF SIERRA OVERHEAD ANALYTICS, INC (SOA). ANY USE OR DISCLOSURE OF THIS INFORMATION IS EXPRESSLY PROHIBITED WITHOUT THE PRIOR WRITTEN CONSENT OF SOA.

CS Energy
Building a Cleaner Future
2045 LINCOLN HIGHWAY
EDISON, NEW JERSEY 08817

PROJECT NAME:
STONINGTON SOLAR PROJECT

PROJECT ADDRESS:
ELLA WHEELER RD.
NORTH STONINGTON, CT 06359
41° 25' 9.71"N, 71° 50' 4.83"W

SEAL: STATE OF CONNECTICUT DARIN RAY GALLOWAY No. 34152 LICENSED PROFESSIONAL ENGINEER

DATE: 21-JAN-20
PROJECT #: 20200309_CT
DRAWN BY: MMM
CHECKED BY: DRG

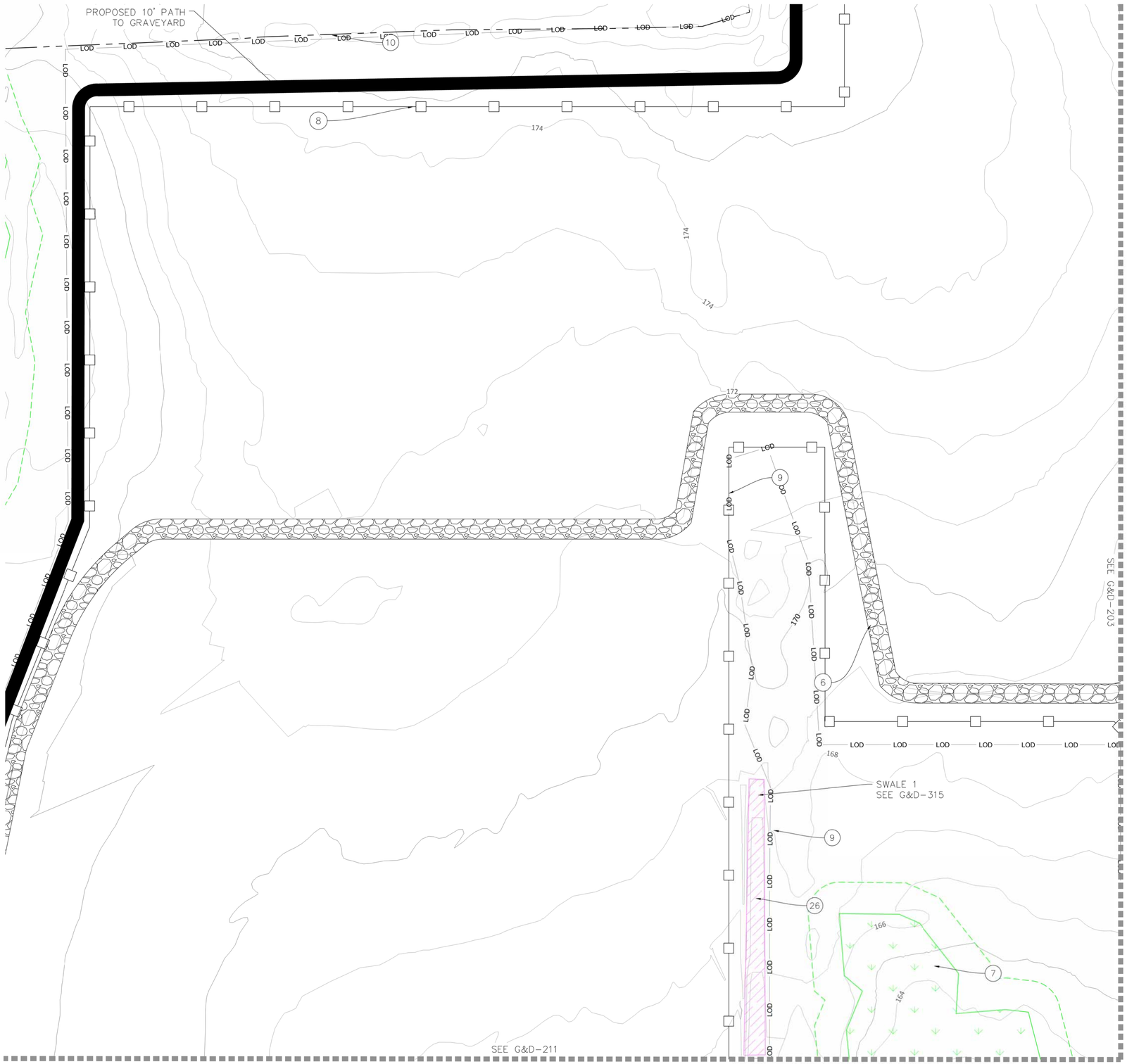
TITLE: GRADING & DRAINAGE PLAN

SHEET: G&D-201

811 Know what's below. Call before you dig.

PLOT DATE: Tuesday, January 19, 2021

LOCATION: E:\DROPBOX (SOA)\ENGINEERING\CS ENERGY\2020-03-09_STONINGTON\CAD\SITE PLANS.DWG PLOTTED BY: DARIN GALLOWAY



1 GRADING AND DRAINAGE SITE PLAN
G&D-202
Scale: 1" = 40'

N

0 40 80

MAP LEGEND (1"=1000')



LEGEND

6		PROPOSED SITE ACCESS ROAD (SEE C-400)
7		WETLAND W/BUFFER
8		SITE FENCE LINE (SEE C-402)
9	LOD	SITE LIMIT OF DISTURBANCE
10		SITE BOUNDARY
11		RIVER OR CREEK
12		100 YEAR FLOOD ZONE
26		PERMANENT STORMWATER CONTROL
27		GRADING AREA
	75	MAJOR CONTOUR
	76	MINOR CONTOUR

GRADING AND DRAINAGE GENERAL NOTES:

1. ARRAY NOT SHOWN FOR CLARITY
2. GRADING AREAS ARE BASED ON NEXT TRACKER RACKING WITH 5.5' MAXIMUM REVEAL POSTS.
4. ACCURACY OF FINAL GRADE VOLUMES, PILE REVEAL HEIGHTS, AND BILL OF MATERIAL TABLES IS BASED SOLELY ON ACCURACY OF TOPOGRAPHY PROVIDED BY OTHERS.
5. CONTRACTOR SHALL FIELD VERIFY ALL DIMENSIONS, VOLUMES, AND AREAS PRIOR TO CONSTRUCTION.

Know what's below. Call before you dig.

PLOT DATE: Tuesday, January 19, 2021

SIERRA OVERHEAD ANALYTICS
18859 MICROTRONICS WAY
SONORA, CALIFORNIA 95370
CONNECTICUT PROFESSIONAL
ENGINEERING CORPORATION #PEC.0001969

REV	DESCRIPTION	DATE
6	ISSUED FOR CONSTRUCTION - DRAFT	9/4/2020
7	ISSUED FOR CONSTRUCTION - DRAFT	9/18/2020
8	ISSUED FOR CONSTRUCTION - DRAFT	10/22/2020
9	ISSUED FOR CONSTRUCTION - DRAFT	11/06/2020
10	ISSUED FOR CONSTRUCTION	1/20/2021
-	-	-
-	-	-
-	-	-
-	-	-
-	-	-

CONFIDENTIAL:
THE INFORMATION DEPICTED ON THIS DOCUMENT IS PROPRIETARY AND THE SOLE PROPERTY OF SIERRA OVERHEAD ANALYTICS, INC (SOA). ANY USE OR DISCLOSURE OF THIS INFORMATION IS EXPRESSLY PROHIBITED WITHOUT THE PRIOR WRITTEN CONSENT OF SOA.

CS Energy
Building a Cleaner Future
2045 LINCOLN HIGHWAY
EDISON, NEW JERSEY 08817

PROJECT NAME:
STONINGTON SOLAR PROJECT

PROJECT ADDRESS:
ELLA WHEELER RD.
NORTH STONINGTON, CT 06359
41° 25' 9.71"N, 71° 50' 4.83"W

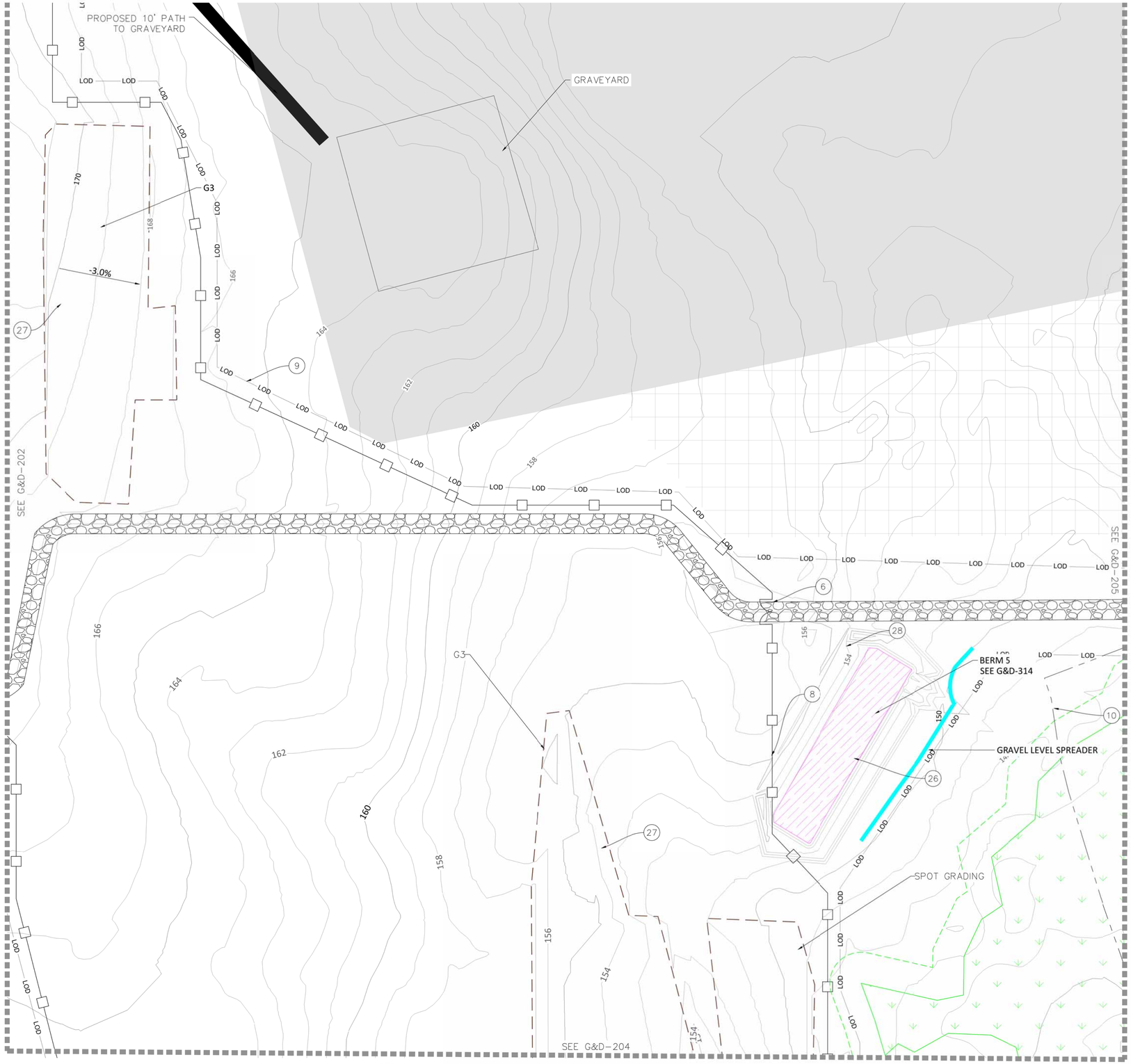
SEAL:
STATE OF CONNECTICUT
DARIN RAY GALLOWAY
No. 34152
LICENSED PROFESSIONAL ENGINEER

DATE: 21-JAN-20
PROJECT #: 20200309_CT
DRAWN BY: MMM
CHECKED BY: DRG

TITLE: GRADING & DRAINAGE PLAN

SHEET: G&D-202

LOCATION: E:\DROPBOX (SOA)\ENGINEERING\CS ENERGY\2020-03-09_STONINGTON\CAD\SITE PLANS.DWG PLOTTED BY: DARIN GALLOWAY

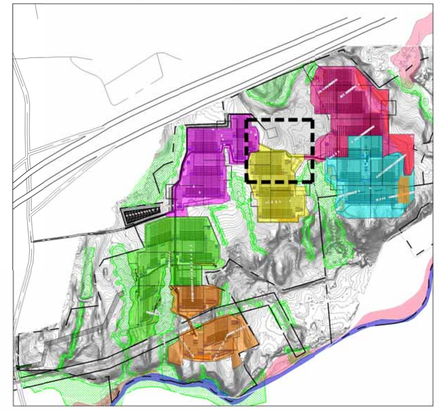


1 G&D-203 GRADING AND DRAINAGE SITE PLAN

Scale: 1" = 40'

N 0 40 80

MAP LEGEND (1"=1000')



LEGEND

6		PROPOSED SITE ACCESS ROAD (SEE C-400)
7		WETLAND W/BUFFER
8		SITE FENCE LINE (SEE C-402)
9	LOD	SITE LIMIT OF DISTURBANCE
10		SITE BOUNDARY
11		RIVER OR CREEK
12		100 YEAR FLOOD ZONE
26		PERMANENT STORMWATER CONTROL
27		GRADING AREA
28		VELOCITY DISSIPATION DEVICE (ROCK CHECK DAM, GRAVEL LEVEL SPREADER)
	75	MAJOR CONTOUR
	76	MINOR CONTOUR

GRADING AND DRAINAGE GENERAL NOTES:

1. ARRAY NOT SHOWN FOR CLARITY
2. GRADING AREAS ARE BASED ON NEXT TRACKER RACKING WITH 5.5' MAXIMUM REVEAL POSTS.
4. ACCURACY OF FINAL GRADE VOLUMES, PILE REVEAL HEIGHTS, AND BILL OF MATERIAL TABLES IS BASED SOLELY ON ACCURACY OF TOPOGRAPHY PROVIDED BY OTHERS.
5. CONTRACTOR SHALL FIELD VERIFY ALL DIMENSIONS, VOLUMES, AND AREAS PRIOR TO CONSTRUCTION.

Know what's below. Call before you dig.

PLOT DATE: Tuesday, January 19, 2021

soa
SIERRA OVERHEAD ANALYTICS
18859 MICROTRONICS WAY
SONORA, CALIFORNIA 95370
CONNECTICUT PROFESSIONAL ENGINEERING CORPORATION #PEC.0001969

REV	DESCRIPTION	DATE
6	ISSUED FOR CONSTRUCTION - DRAFT	9/4/2020
7	ISSUED FOR CONSTRUCTION - DRAFT	9/18/2020
8	ISSUED FOR CONSTRUCTION - DRAFT	10/22/2020
9	ISSUED FOR CONSTRUCTION - DRAFT	11/06/2020
10	ISSUED FOR CONSTRUCTION	1/20/2021
-	-	-
-	-	-
-	-	-
-	-	-
-	-	-

CONFIDENTIAL:
THE INFORMATION DEPICTED ON THIS DOCUMENT IS PROPRIETARY AND THE SOLE PROPERTY OF SIERRA OVERHEAD ANALYTICS, INC (SOA). ANY USE OR DISCLOSURE OF THIS INFORMATION IS EXPRESSLY PROHIBITED WITHOUT THE PRIOR WRITTEN CONSENT OF SOA.

CS Energy
Building a Cleaner Future
2045 LINCOLN HIGHWAY
EDISON, NEW JERSEY 08817

PROJECT NAME:
STONINGTON SOLAR PROJECT

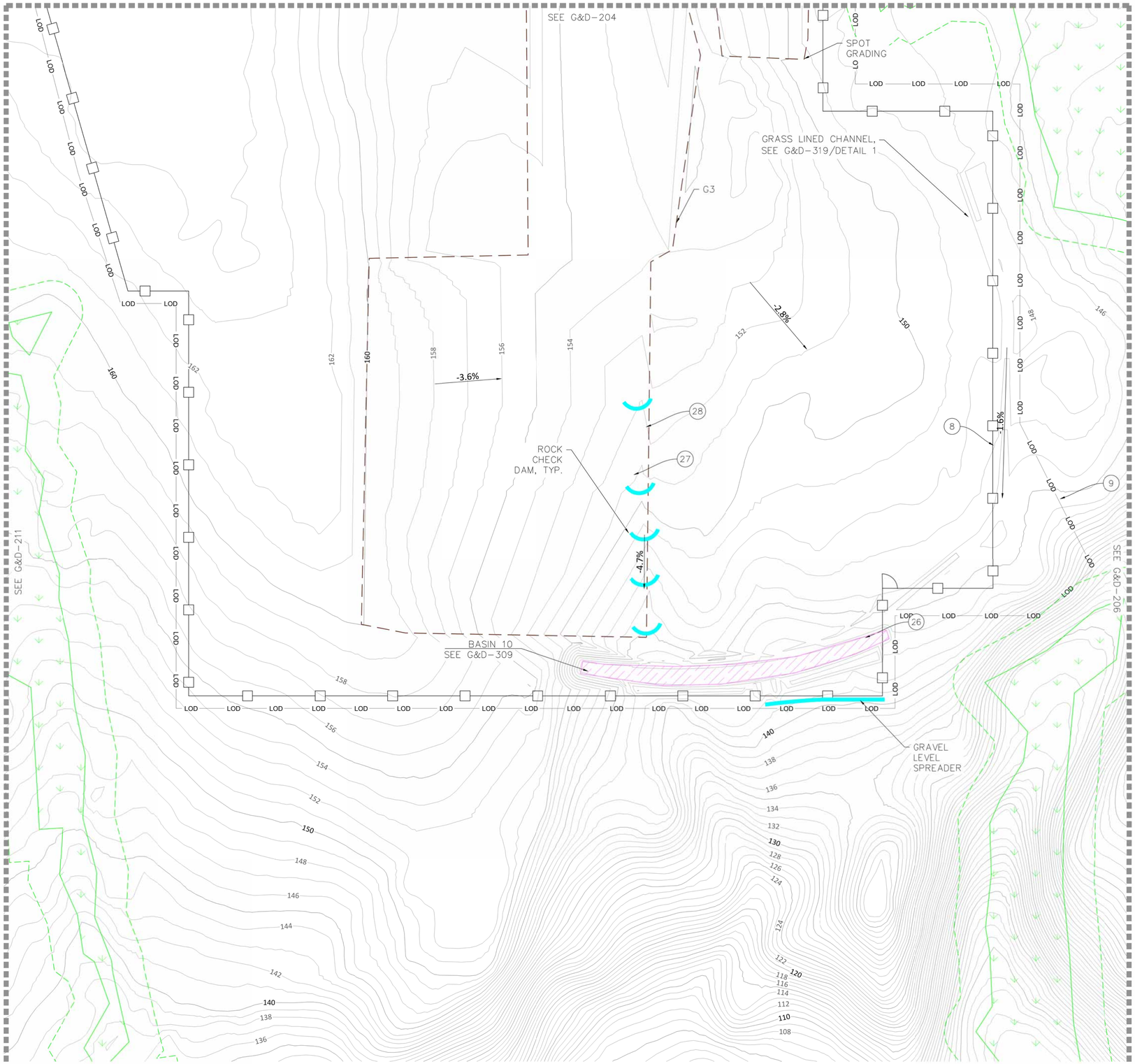
PROJECT ADDRESS:
ELLA WHEELER RD.
NORTH STONINGTON, CT 06359
41° 25' 9.71"N, 71° 50' 4.83"W

SEAL: STATE OF CONNECTICUT · DARIN RAY GALLOWAY · No. 34152 · LICENSED PROFESSIONAL ENGINEER

DATE:	21-JAN-20
PROJECT #:	20200309_CT
DRAWN BY:	MMM
CHECKED BY:	DRG

TITLE: GRADING & DRAINAGE PLAN

SHEET: G&D-203



1 GRADING AND DRAINAGE SITE PLAN
G&D-204
Scale: 1" = 40'

N

0 40 80

MAP LEGEND (1"=1000')



LEGEND

6		PROPOSED SITE ACCESS ROAD (SEE C-400)
7		WETLAND W/BUFFER
8		SITE FENCE LINE (SEE C-402)
9	LOD	SITE LIMIT OF DISTURBANCE
10		SITE BOUNDARY
11		RIVER OR CREEK
12		100 YEAR FLOOD ZONE
26		PERMANENT STORMWATER CONTROL
27		GRADING AREA
28		VELOCITY DISSIPATION DEVICE (ROCK CHECK DAM, GRAVEL LEVEL SPREADER)
	75	MAJOR CONTOUR
	76	MINOR CONTOUR

GRADING AND DRAINAGE GENERAL NOTES:

1. ARRAY NOT SHOWN FOR CLARITY
2. GRADING AREAS ARE BASED ON NEXT TRACKER RACKING WITH 5.5' MAXIMUM REVEAL POSTS.
4. ACCURACY OF FINAL GRADE VOLUMES, PILE REVEAL HEIGHTS, AND BILL OF MATERIAL TABLES IS BASED SOLELY ON ACCURACY OF TOPOGRAPHY PROVIDED BY OTHERS.
5. CONTRACTOR SHALL FIELD VERIFY ALL DIMENSIONS, VOLUMES, AND AREAS PRIOR TO CONSTRUCTION.

Know what's below. Call before you dig.

PLOT DATE: Tuesday, January 19, 2021

SIERRA OVERHEAD ANALYTICS
18859 MICROTRONICS WAY
SONORA, CALIFORNIA 95370
CONNECTICUT PROFESSIONAL
ENGINEERING CORPORATION #PEC.0001969

REV	DESCRIPTION	DATE
6	ISSUED FOR CONSTRUCTION - DRAFT	9/4/2020
7	ISSUED FOR CONSTRUCTION - DRAFT	9/18/2020
8	ISSUED FOR CONSTRUCTION - DRAFT	10/22/2020
9	ISSUED FOR CONSTRUCTION - DRAFT	11/06/2020
10	ISSUED FOR CONSTRUCTION	1/20/2021
-	-	-
-	-	-
-	-	-
-	-	-
-	-	-

CONFIDENTIAL:
THE INFORMATION DEPICTED ON THIS DOCUMENT IS PROPRIETARY AND THE SOLE PROPERTY OF SIERRA OVERHEAD ANALYTICS, INC (SOA). ANY USE OR DISCLOSURE OF THIS INFORMATION IS EXPRESSLY PROHIBITED WITHOUT THE PRIOR WRITTEN CONSENT OF SOA.

CS Energy
Building a Cleaner Future
2045 LINCOLN HIGHWAY
EDISON, NEW JERSEY 08817

PROJECT NAME:
STONINGTON SOLAR PROJECT

PROJECT ADDRESS:
ELLA WHEELER RD.
NORTH STONINGTON, CT 06359
41° 25' 9.71"N, 71° 50' 4.83"W

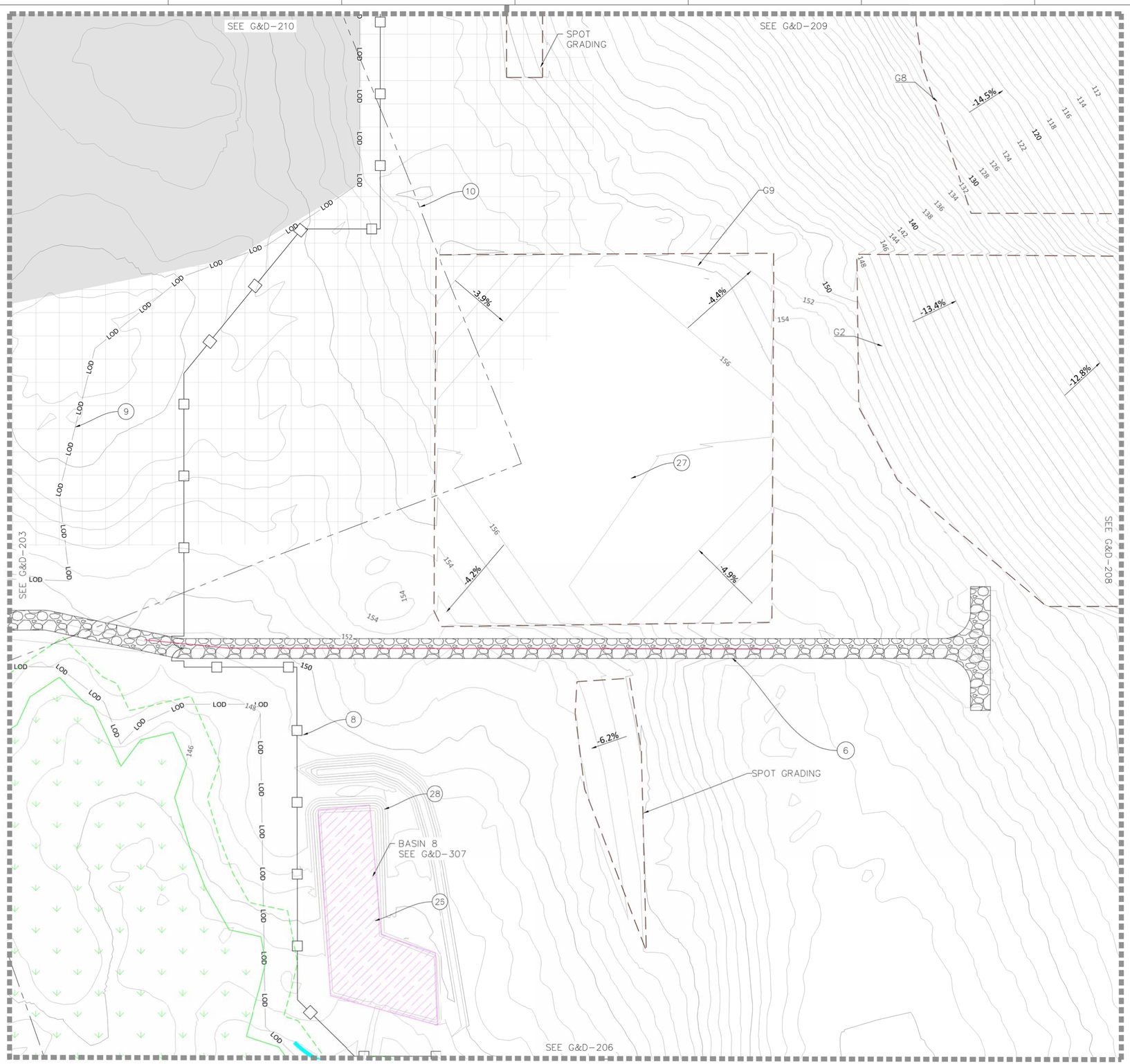
SEAL: STATE OF CONNECTICUT · DARIN RAY GALLOWAY · No. 34152 · LICENSED PROFESSIONAL ENGINEER

DATE:	21-JAN-20
PROJECT #:	20200309_CT
DRAWN BY:	MMM
CHECKED BY:	DRG

TITLE: GRADING & DRAINAGE PLAN

SHEET: G&D-204

LOCATION: E:\DROPBOX (SOA)\ENGINEERING\CS ENERGY\2020-03-09_STONINGTON\CAD\SITE PLANS.DWG PLOTTED BY: DARIN GALLOWAY



1 GRADING AND DRAINAGE SITE PLAN
G&D-205
Scale: 1" = 40'

N 0 40 80

MAP LEGEND (1"=1000')



LEGEND

6		PROPOSED SITE ACCESS ROAD (SEE C-400)
7		WETLAND W/BUFFER
8		SITE FENCE LINE (SEE C-402)
9	LOD	SITE LIMIT OF DISTURBANCE
10		SITE BOUNDARY
11		RIVER OR CREEK
12		100 YEAR FLOOD ZONE
26		PERMANENT STORMWATER CONTROL
27		GRADING AREA
28		VELOCITY DISSIPATION DEVICE (ROCK CHECK DAM, GRAVEL LEVEL SPREADER)
	75	MAJOR CONTOUR
	76	MINOR CONTOUR

GRADING AND DRAINAGE GENERAL NOTES:

1. ARRAY NOT SHOWN FOR CLARITY
2. GRADING AREAS ARE BASED ON NEXT TRACKER RACKING WITH 5.5' MAXIMUM REVEAL POSTS.
4. ACCURACY OF FINAL GRADE VOLUMES, PILE REVEAL HEIGHTS, AND BILL OF MATERIAL TABLES IS BASED SOLELY ON ACCURACY OF TOPOGRAPHY PROVIDED BY OTHERS.
5. CONTRACTOR SHALL FIELD VERIFY ALL DIMENSIONS, VOLUMES, AND AREAS PRIOR TO CONSTRUCTION.

SIERRA OVERHEAD ANALYTICS
18859 MICROTRONICS WAY
SONORA, CALIFORNIA 95370
CONNECTICUT PROFESSIONAL
ENGINEERING CORPORATION #PEC.0001969

REV	DESCRIPTION	DATE
6	ISSUED FOR CONSTRUCTION - DRAFT	9/4/2020
7	ISSUED FOR CONSTRUCTION - DRAFT	9/18/2020
8	ISSUED FOR CONSTRUCTION - DRAFT	10/22/2020
9	ISSUED FOR CONSTRUCTION - DRAFT	11/06/2020
10	ISSUED FOR CONSTRUCTION	1/20/2021
-	-	-
-	-	-
-	-	-
-	-	-
-	-	-

CONFIDENTIAL:
THE INFORMATION DEPICTED ON THIS DOCUMENT IS PROPRIETARY AND THE SOLE PROPERTY OF SIERRA OVERHEAD ANALYTICS, INC (SOA). ANY USE OR DISCLOSURE OF THIS INFORMATION IS EXPRESSLY PROHIBITED WITHOUT THE PRIOR WRITTEN CONSENT OF SOA.

CS Energy
Building a Cleaner Future
2045 LINCOLN HIGHWAY
EDISON, NEW JERSEY 08817

PROJECT NAME:
STONINGTON SOLAR PROJECT

PROJECT ADDRESS:
ELLA WHEELER RD.
NORTH STONINGTON, CT 06359
41° 25' 9.71"N, 71° 50' 4.83"W

SEAL: STATE OF CONNECTICUT · DARIN RAY GALLOWAY · No. 34152 · LICENSED PROFESSIONAL ENGINEER

DATE: 21-JAN-20
PROJECT #: 20200309_CT
DRAWN BY: MMM
CHECKED BY: DRG

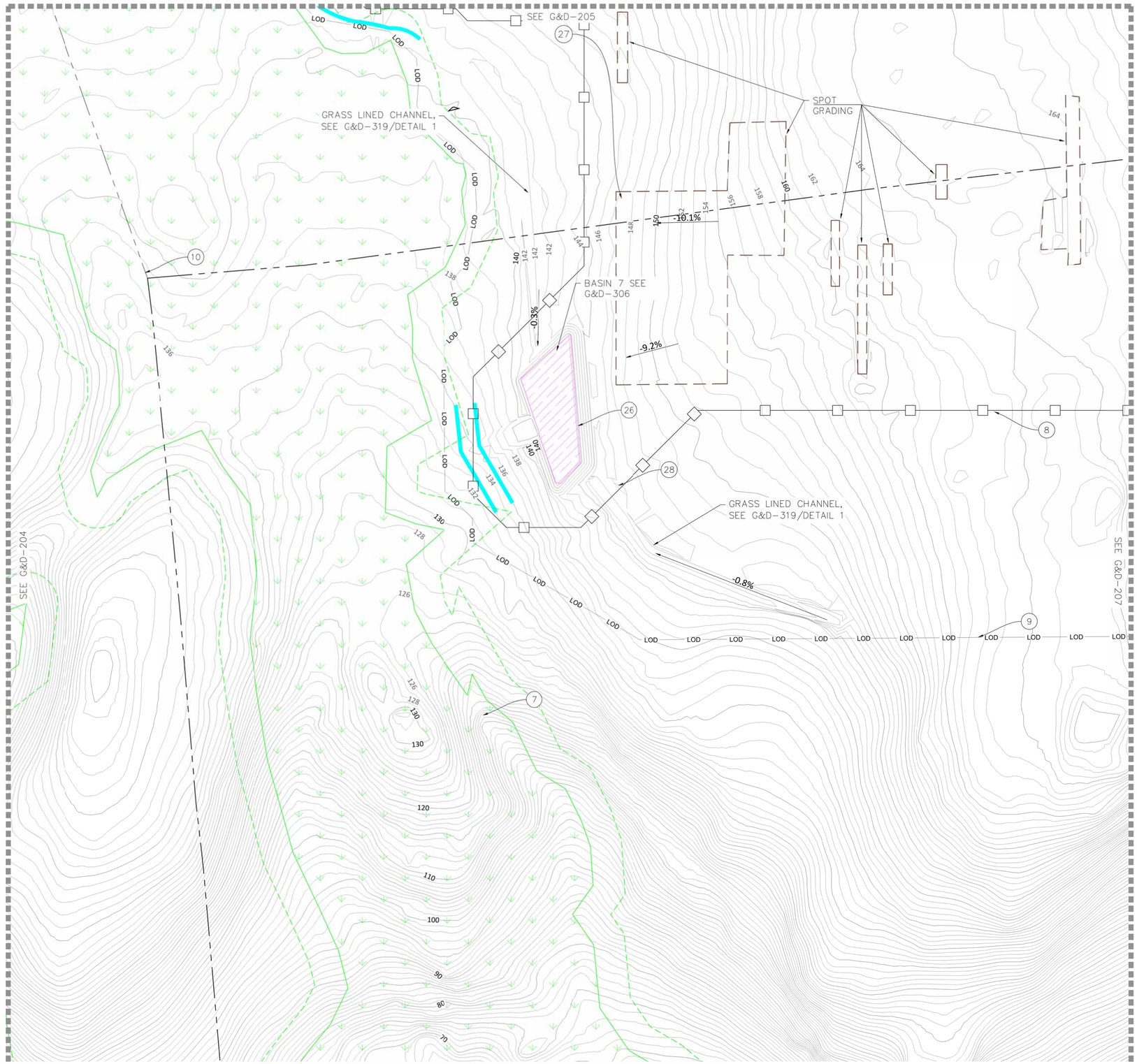
TITLE: GRADING & DRAINAGE PLAN

SHEET: G&D-205

811 Know what's below. Call before you dig.

PLOT DATE: Tuesday, January 19, 2021

LOCATION: E:\DROPBOX (SOA)\ENGINEERING\CS ENERGY\2020-03-09_STONINGTON\CAD\SITE PLANS.DWG PLOTTED BY: DARIN GALLOWAY



1 GRADING AND DRAINAGE SITE PLAN
G&D-206
Scale: 1" = 40'

N 0 40 80

MAP LEGEND (1"=1000')



LEGEND

6		PROPOSED SITE ACCESS ROAD (SEE C-400)
7		WETLAND W/BUFFER
8		SITE FENCE LINE (SEE C-402)
9	LOD	SITE LIMIT OF DISTURBANCE
10		SITE BOUNDARY
11		RIVER OR CREEK
12		100 YEAR FLOOD ZONE
26		PERMANENT STORMWATER CONTROL
27		GRADING AREA
28		VELOCITY DISSIPATION DEVICE (ROCK CHECK DAM, GRAVEL LEVEL SPREADER)
	75	MAJOR CONTOUR
	76	MINOR CONTOUR

GRADING AND DRAINAGE GENERAL NOTES:

1. ARRAY NOT SHOWN FOR CLARITY
2. GRADING AREAS ARE BASED ON NEXT TRACKER RACKING WITH 5.5' MAXIMUM REVEAL POSTS.
4. ACCURACY OF FINAL GRADE VOLUMES, PILE REVEAL HEIGHTS, AND BILL OF MATERIAL TABLES IS BASED SOLELY ON ACCURACY OF TOPOGRAPHY PROVIDED BY OTHERS.
5. CONTRACTOR SHALL FIELD VERIFY ALL DIMENSIONS, VOLUMES, AND AREAS PRIOR TO CONSTRUCTION.

Know what's below. Call before you dig.

PLOT DATE: Tuesday, January 19, 2021

SIERRA OVERHEAD ANALYTICS
18859 MICROTRONICS WAY
SONORA, CALIFORNIA 95370
CONNECTICUT PROFESSIONAL
ENGINEERING CORPORATION #PEC.0001969

REV	DESCRIPTION	DATE
6	ISSUED FOR CONSTRUCTION - DRAFT	9/4/2020
7	ISSUED FOR CONSTRUCTION - DRAFT	9/18/2020
8	ISSUED FOR CONSTRUCTION - DRAFT	10/22/2020
9	ISSUED FOR CONSTRUCTION - DRAFT	11/06/2020
10	ISSUED FOR CONSTRUCTION	1/20/2021
-	-	-
-	-	-
-	-	-
-	-	-
-	-	-
-	-	-

CONFIDENTIAL:
THE INFORMATION DEPICTED ON THIS DOCUMENT IS PROPRIETARY AND THE SOLE PROPERTY OF SIERRA OVERHEAD ANALYTICS, INC (SOA). ANY USE OR DISCLOSURE OF THIS INFORMATION IS EXPRESSLY PROHIBITED WITHOUT THE PRIOR WRITTEN CONSENT OF SOA.

CS Energy
Building a Cleaner Future
2045 LINCOLN HIGHWAY
EDISON, NEW JERSEY 08817

PROJECT NAME:
STONINGTON SOLAR PROJECT

PROJECT ADDRESS:
ELLA WHEELER RD.
NORTH STONINGTON, CT 06359
41° 25' 9.71"N, 71° 50' 4.83"W

SEAL: STATE OF CONNECTICUT · DARIN RAY GALLOWAY · No. 34152 · LICENSED PROFESSIONAL ENGINEER

DATE:	21-JAN-20
PROJECT #:	20200309_CT
DRAWN BY:	MMM
CHECKED BY:	DRG

TITLE: GRADING & DRAINAGE PLAN

SHEET: G&D-206

LOCATION: E:\DROPBOX (SOA)\ENGINEERING\CS ENERGY\2020-03-09_STONINGTON\CAD\SITE PLANS.DWG PLOTTED BY: DARIN GALLOWAY

1 GRADING AND DRAINAGE SITE PLAN
G&D-207
Scale: 1" = 40'

N 0 40 80

MAP LEGEND (1"=1000')



LEGEND

6		PROPOSED SITE ACCESS ROAD (SEE C-400)
7		WETLAND W/BUFFER
8		SITE FENCE LINE (SEE C-402)
9	LOD	SITE LIMIT OF DISTURBANCE
10		SITE BOUNDARY
11		RIVER OR CREEK
12		100 YEAR FLOOD ZONE
26		PERMANENT STORMWATER CONTROL
27		GRADING AREA
28		VELOCITY DISSIPATION DEVICE (ROCK CHECK DAM, GRAVEL LEVEL SPREADER)
	75	MAJOR CONTOUR
	76	MINOR CONTOUR

GRADING AND DRAINAGE GENERAL NOTES:

1. ARRAY NOT SHOWN FOR CLARITY
2. GRADING AREAS ARE BASED ON NEXT TRACKER RACKING WITH 5.5' MAXIMUM REVEAL POSTS.
4. ACCURACY OF FINAL GRADE VOLUMES, PILE REVEAL HEIGHTS, AND BILL OF MATERIAL TABLES IS BASED SOLELY ON ACCURACY OF TOPOGRAPHY PROVIDED BY OTHERS.
5. CONTRACTOR SHALL FIELD VERIFY ALL DIMENSIONS, VOLUMES, AND AREAS PRIOR TO CONSTRUCTION.

Know what's below. Call before you dig.

PLOT DATE: Tuesday, January 19, 2021

soa
SIERRA OVERHEAD ANALYTICS
18859 MICROTRONICS WAY
SONORA, CALIFORNIA 95370
CONNECTICUT PROFESSIONAL
ENGINEERING CORPORATION #PEC.0001969

REV	DESCRIPTION	DATE
6	ISSUED FOR CONSTRUCTION - DRAFT	9/4/2020
7	ISSUED FOR CONSTRUCTION - DRAFT	9/18/2020
8	ISSUED FOR CONSTRUCTION - DRAFT	10/22/2020
9	ISSUED FOR CONSTRUCTION - DRAFT	11/06/2020
10	ISSUED FOR CONSTRUCTION	1/20/2021
-	-	-
-	-	-
-	-	-
-	-	-
-	-	-

CONFIDENTIAL:
THE INFORMATION DEPICTED ON THIS DOCUMENT IS PROPRIETARY AND THE SOLE PROPERTY OF SIERRA OVERHEAD ANALYTICS, INC (SOA). ANY USE OR DISCLOSURE OF THIS INFORMATION IS EXPRESSLY PROHIBITED WITHOUT THE PRIOR WRITTEN CONSENT OF SOA.

CS Energy
Building a Cleaner Future
2045 LINCOLN HIGHWAY
EDISON, NEW JERSEY 08817

PROJECT NAME:
STONINGTON SOLAR PROJECT

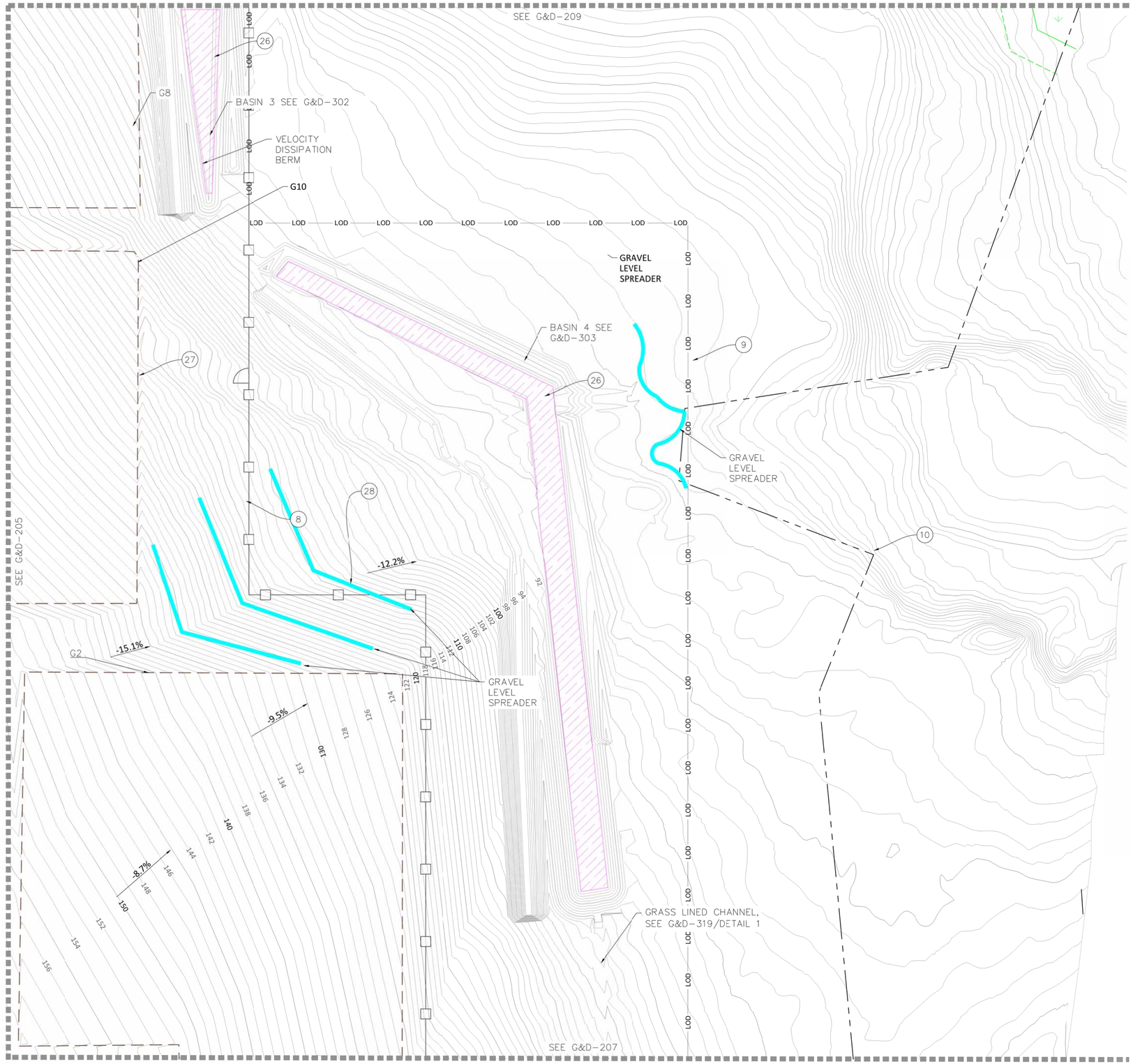
PROJECT ADDRESS:
ELLA WHEELER RD.
NORTH STONINGTON, CT 06359
41° 25' 9.71"N, 71° 50' 4.83"W

SEAL: STATE OF CONNECTICUT · DARIN RAY GALLOWAY · No. 34152 · LICENSED PROFESSIONAL ENGINEER

DATE: 21-JAN-20
PROJECT #: 20200309_CT
DRAWN BY: MMM
CHECKED BY: DRG

TITLE: GRADING & DRAINAGE PLAN
SHEET: G&D-207

LOCATION: E:\DROPBOX (SOA)\ENGINEERING\CS ENERGY\2020-03-09_STONINGTON\CAD\SITE PLANS.DWG PLOTTED BY: DARIN GALLOWAY



1 GRADING AND DRAINAGE SITE PLAN
G&D-208
Scale: 1" = 40'

N 0 40 80

MAP LEGEND (1"=1000')



LEGEND

6		PROPOSED SITE ACCESS ROAD (SEE C-400)
7		WETLAND W/BUFFER
8		SITE FENCE LINE (SEE C-402)
9	LOD	SITE LIMIT OF DISTURBANCE
10		SITE BOUNDARY
11		RIVER OR CREEK
12		100 YEAR FLOOD ZONE
26		PERMANENT STORMWATER CONTROL
27		GRADING AREA
28		VELOCITY DISSIPATION DEVICE (ROCK CHECK DAM, GRAVEL LEVEL SPREADER)
	75	MAJOR CONTOUR
	76	MINOR CONTOUR

GRADING AND DRAINAGE GENERAL NOTES:

1. ARRAY NOT SHOWN FOR CLARITY
2. GRADING AREAS ARE BASED ON NEXT TRACKER RACKING WITH 5.5' MAXIMUM REVEAL POSTS.
4. ACCURACY OF FINAL GRADE VOLUMES, PILE REVEAL HEIGHTS, AND BILL OF MATERIAL TABLES IS BASED SOLELY ON ACCURACY OF TOPOGRAPHY PROVIDED BY OTHERS.
5. CONTRACTOR SHALL FIELD VERIFY ALL DIMENSIONS, VOLUMES, AND AREAS PRIOR TO CONSTRUCTION.

Know what's below. Call before you dig.

SIERRA OVERHEAD ANALYTICS
18859 MICROTRONICS WAY
SONORA, CALIFORNIA 95370
CONNECTICUT PROFESSIONAL ENGINEERING CORPORATION #PEC.0001969

REV	DESCRIPTION	DATE
6	ISSUED FOR CONSTRUCTION - DRAFT	9/4/2020
7	ISSUED FOR CONSTRUCTION - DRAFT	9/18/2020
8	ISSUED FOR CONSTRUCTION - DRAFT	10/22/2020
9	ISSUED FOR CONSTRUCTION - DRAFT	11/06/2020
10	ISSUED FOR CONSTRUCTION	1/20/2021
-	-	-
-	-	-
-	-	-
-	-	-
-	-	-

CONFIDENTIAL:
THE INFORMATION DEPICTED ON THIS DOCUMENT IS PROPRIETARY AND THE SOLE PROPERTY OF SIERRA OVERHEAD ANALYTICS, INC (SOA). ANY USE OR DISCLOSURE OF THIS INFORMATION IS EXPRESSLY PROHIBITED WITHOUT THE PRIOR WRITTEN CONSENT OF SOA.

CS Energy
Building a Cleaner Future
2045 LINCOLN HIGHWAY
EDISON, NEW JERSEY 08817

PROJECT NAME:
STONINGTON SOLAR PROJECT

PROJECT ADDRESS:
ELLA WHEELER RD.
NORTH STONINGTON, CT 06359
41° 25' 9.71"N, 71° 50' 4.83"W

SEAL: STATE OF CONNECTICUT · DARIN RAY GALLOWAY · No. 34152 · LICENSED PROFESSIONAL ENGINEER

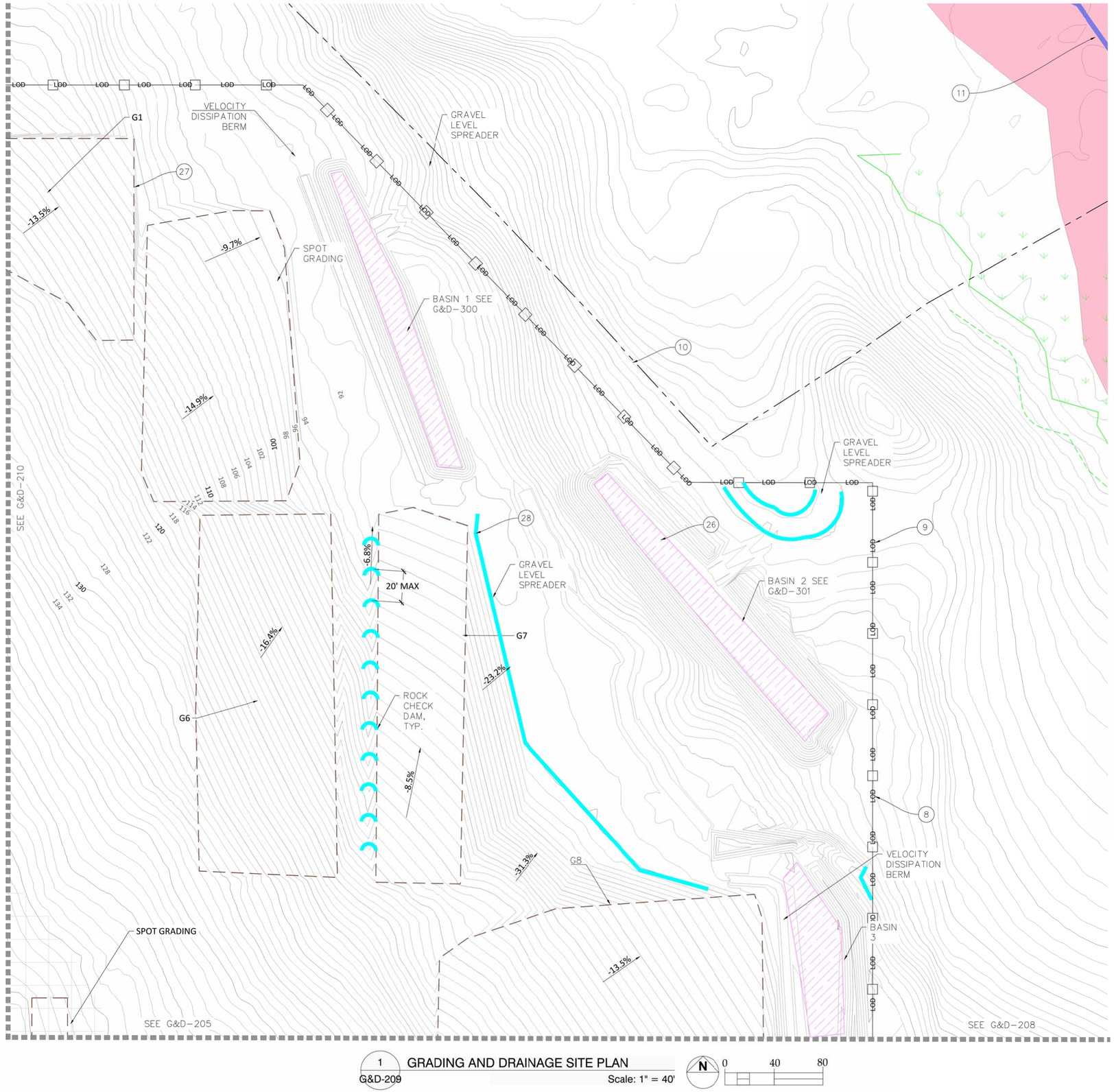
DATE:	21-JAN-20
PROJECT #:	20200309_CT
DRAWN BY:	MMM
CHECKED BY:	DRG

TITLE: GRADING & DRAINAGE PLAN

SHEET: G&D-208

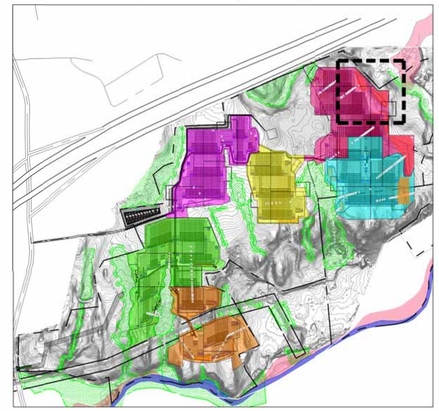
PLOT DATE: Tuesday, January 19, 2021

LOCATION: E:\DROPBOX (SOA)\ENGINEERING\CS ENERGY\2020-03-09_STONINGTON\CAD\SITE PLANS.DWG PLOTTED BY: DARIN GALLOWAY



1 GRADING AND DRAINAGE SITE PLAN
G&D-209
Scale: 1" = 40'

MAP LEGEND (1"=1000')



LEGEND

6		PROPOSED SITE ACCESS ROAD (SEE C-400)
7		WETLAND W/BUFFER
8		SITE FENCE LINE (SEE C-402)
9	LOD	SITE LIMIT OF DISTURBANCE
10		SITE BOUNDARY
11		RIVER OR CREEK
12		100 YEAR FLOOD ZONE
26		PERMANENT STORMWATER CONTROL
27		GRADING AREA
28		VELOCITY DISSIPATION DEVICE (ROCK CHECK DAM, GRAVEL LEVEL SPREADER)
	75	MAJOR CONTOUR
	76	MINOR CONTOUR

GRADING AND DRAINAGE GENERAL NOTES:

1. ARRAY NOT SHOWN FOR CLARITY
2. GRADING AREAS ARE BASED ON NEXT TRACKER RACKING WITH 5.5° MAXIMUM REVEAL POSTS.
4. ACCURACY OF FINAL GRADE VOLUMES, PILE REVEAL HEIGHTS, AND BILL OF MATERIAL TABLES IS BASED SOLELY ON ACCURACY OF TOPOGRAPHY PROVIDED BY OTHERS.
5. CONTRACTOR SHALL FIELD VERIFY ALL DIMENSIONS, VOLUMES, AND AREAS PRIOR TO CONSTRUCTION.

SIERRA OVERHEAD ANALYTICS
18859 MICROTRONICS WAY
SONORA, CALIFORNIA 95370
CONNECTICUT PROFESSIONAL
ENGINEERING CORPORATION #PEC.0001969

REV	DESCRIPTION	DATE
6	ISSUED FOR CONSTRUCTION - DRAFT	9/4/2020
7	ISSUED FOR CONSTRUCTION - DRAFT	9/18/2020
8	ISSUED FOR CONSTRUCTION - DRAFT	10/22/2020
9	ISSUED FOR CONSTRUCTION - DRAFT	11/06/2020
10	ISSUED FOR CONSTRUCTION	1/20/2021
-	-	-
-	-	-
-	-	-
-	-	-
-	-	-

CONFIDENTIAL:
THE INFORMATION DEPICTED ON THIS DOCUMENT IS PROPRIETARY AND THE SOLE PROPERTY OF SIERRA OVERHEAD ANALYTICS, INC (SOA). ANY USE OR DISCLOSURE OF THIS INFORMATION IS EXPRESSLY PROHIBITED WITHOUT THE PRIOR WRITTEN CONSENT OF SOA.

CS Energy
Building a Cleaner Future
2045 LINCOLN HIGHWAY
EDISON, NEW JERSEY 08817

PROJECT NAME:
STONINGTON SOLAR PROJECT

PROJECT ADDRESS:
ELLA WHEELER RD.
NORTH STONINGTON, CT 06359
41° 25' 9.71"N, 71° 50' 4.83"W

SEAL: STATE OF CONNECTICUT · DARIN RAY GALLOWAY · No. 34152 · LICENSED PROFESSIONAL ENGINEER

DATE:	21-JAN-20
PROJECT #:	20200309_CT
DRAWN BY:	MMM
CHECKED BY:	DRG

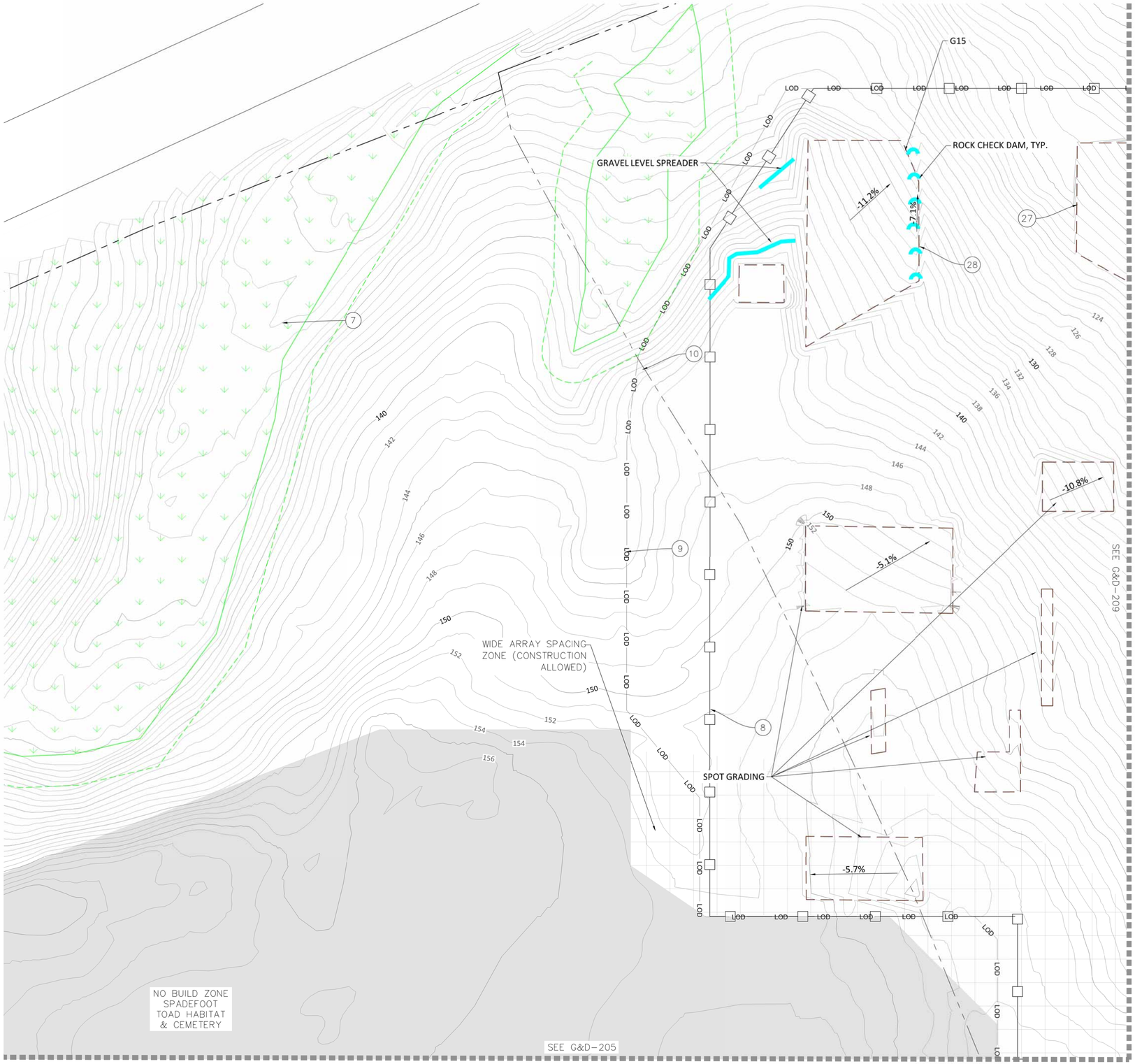
TITLE: GRADING & DRAINAGE PLAN

SHEET: G&D-209

811 Know what's below. Call before you dig.

PLOT DATE: Tuesday, January 19, 2021

LOCATION: E:\DROPBOX (SOA)\ENGINEERING\CS ENERGY\2020-03-09_STONINGTON\CAD\SITE PLANS.DWG PLOTTED BY: DARIN GALLOWAY



1 GRADING AND DRAINAGE SITE PLAN
G&D-210
Scale: 1" = 40'

N 0 40 80

MAP LEGEND (1"=1000')



LEGEND

6		PROPOSED SITE ACCESS ROAD (SEE C-400)
7		WETLAND W/BUFFER
8	LOD	SITE FENCE LINE (SEE C-402)
9		SITE LIMIT OF DISTURBANCE
10		SITE BOUNDARY
11		RIVER OR CREEK
12		100 YEAR FLOOD ZONE
26		PERMANENT STORMWATER CONTROL
27		GRADING AREA
28		VELOCITY DISSIPATION DEVICE (ROCK CHECK DAM, GRAVEL LEVEL SPREADER)
	75	MAJOR CONTOUR
	76	MINOR CONTOUR

GRADING AND DRAINAGE GENERAL NOTES:

1. ARRAY NOT SHOWN FOR CLARITY
2. GRADING AREAS ARE BASED ON NEXT TRACKER RACKING WITH 5.5' MAXIMUM REVEAL POSTS.
4. ACCURACY OF FINAL GRADE VOLUMES, PILE REVEAL HEIGHTS, AND BILL OF MATERIAL TABLES IS BASED SOLELY ON ACCURACY OF TOPOGRAPHY PROVIDED BY OTHERS.
5. CONTRACTOR SHALL FIELD VERIFY ALL DIMENSIONS, VOLUMES, AND AREAS PRIOR TO CONSTRUCTION.

soa
SIERRA OVERHEAD ANALYTICS
18859 MICROTRONICS WAY
SONORA, CALIFORNIA 95370
CONNECTICUT PROFESSIONAL
ENGINEERING CORPORATION #PEC.0001969

REV	DESCRIPTION	DATE
6	ISSUED FOR CONSTRUCTION - DRAFT	9/4/2020
7	ISSUED FOR CONSTRUCTION - DRAFT	9/18/2020
8	ISSUED FOR CONSTRUCTION - DRAFT	10/22/2020
9	ISSUED FOR CONSTRUCTION - DRAFT	11/06/2020
10	ISSUED FOR CONSTRUCTION	1/20/2021
-	-	-
-	-	-
-	-	-
-	-	-
-	-	-

CONFIDENTIAL:
THE INFORMATION DEPICTED ON THIS DOCUMENT IS PROPRIETARY AND THE SOLE PROPERTY OF SIERRA OVERHEAD ANALYTICS, INC (SOA). ANY USE OR DISCLOSURE OF THIS INFORMATION IS EXPRESSLY PROHIBITED WITHOUT THE PRIOR WRITTEN CONSENT OF SOA.

CS Energy
Building a Cleaner Future
2045 LINCOLN HIGHWAY
EDISON, NEW JERSEY 08817

PROJECT NAME:
STONINGTON SOLAR PROJECT

PROJECT ADDRESS:
ELLA WHEELER RD.
NORTH STONINGTON, CT 06359
41° 25' 9.71"N, 71° 50' 4.83"W

SEAL: STATE OF CONNECTICUT · DARIN RAY GALLOWAY · No. 34152 · LICENSED PROFESSIONAL ENGINEER

DATE: 21-JAN-20
PROJECT #: 20200309_CT
DRAWN BY: MMM
CHECKED BY: DRG

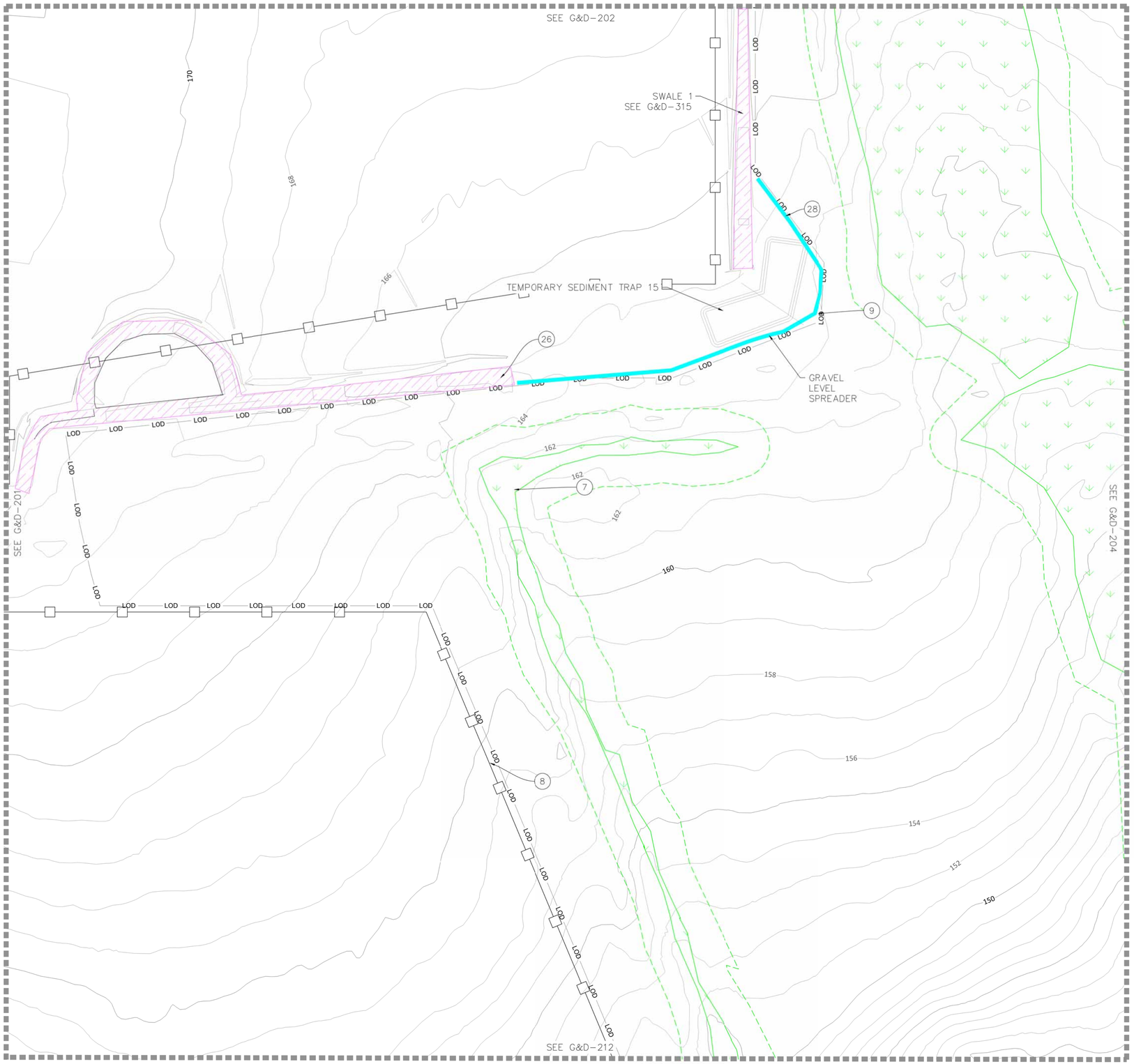
TITLE: GRADING & DRAINAGE PLAN

SHEET: G&D-210

811 Know what's below. Call before you dig.

PLOT DATE: Tuesday, January 19, 2021

LOCATION: E:\DROPBOX (SOA)\ENGINEERING\CS ENERGY\2020-03-09_STONINGTON\CAD\SITE PLANS.DWG PLOTTED BY: DARIN GALLOWAY



1 G&D-211 GRADING AND DRAINAGE SITE PLAN

Scale: 1" = 40'

N 0 40 80

MAP LEGEND (1"=1000')



LEGEND

6		PROPOSED SITE ACCESS ROAD (SEE C-400)
7		WETLAND W/BUFFER
8		SITE FENCE LINE (SEE C-402)
9	LOD	SITE LIMIT OF DISTURBANCE
10		SITE BOUNDARY
11		RIVER OR CREEK
12		100 YEAR FLOOD ZONE
26		PERMANENT STORMWATER CONTROL
27		GRADING AREA
28		VELOCITY DISSIPATION DEVICE (ROCK CHECK DAM, GRAVEL LEVEL SPREADER)
	75	MAJOR CONTOUR
	76	MINOR CONTOUR

GRADING AND DRAINAGE GENERAL NOTES:

1. ARRAY NOT SHOWN FOR CLARITY
2. GRADING AREAS ARE BASED ON NEXT TRACKER RACKING WITH 5.5' MAXIMUM REVEAL POSTS.
4. ACCURACY OF FINAL GRADE VOLUMES, PILE REVEAL HEIGHTS, AND BILL OF MATERIAL TABLES IS BASED SOLELY ON ACCURACY OF TOPOGRAPHY PROVIDED BY OTHERS.
5. CONTRACTOR SHALL FIELD VERIFY ALL DIMENSIONS, VOLUMES, AND AREAS PRIOR TO CONSTRUCTION.

Know what's below. Call before you dig.

soa
SIERRA OVERHEAD ANALYTICS
18859 MICROTRONICS WAY
SONORA, CALIFORNIA 95370
CONNECTICUT PROFESSIONAL
ENGINEERING CORPORATION #PEC.0001969

REV	DESCRIPTION	DATE
6	ISSUED FOR CONSTRUCTION - DRAFT	9/4/2020
7	ISSUED FOR CONSTRUCTION - DRAFT	9/18/2020
8	ISSUED FOR CONSTRUCTION - DRAFT	10/22/2020
9	ISSUED FOR CONSTRUCTION - DRAFT	11/06/2020
10	ISSUED FOR CONSTRUCTION	1/20/2021
-	-	-
-	-	-
-	-	-
-	-	-
-	-	-

CONFIDENTIAL:
THE INFORMATION DEPICTED ON THIS DOCUMENT IS PROPRIETARY AND THE SOLE PROPERTY OF SIERRA OVERHEAD ANALYTICS, INC (SOA). ANY USE OR DISCLOSURE OF THIS INFORMATION IS EXPRESSLY PROHIBITED WITHOUT THE PRIOR WRITTEN CONSENT OF SOA.

CS Energy
Building a Cleaner Future
2045 LINCOLN HIGHWAY
EDISON, NEW JERSEY 08817

PROJECT NAME:
STONINGTON SOLAR PROJECT

PROJECT ADDRESS:
ELLA WHEELER RD.
NORTH STONINGTON, CT 06359
41° 25' 9.71"N, 71° 50' 4.83"W

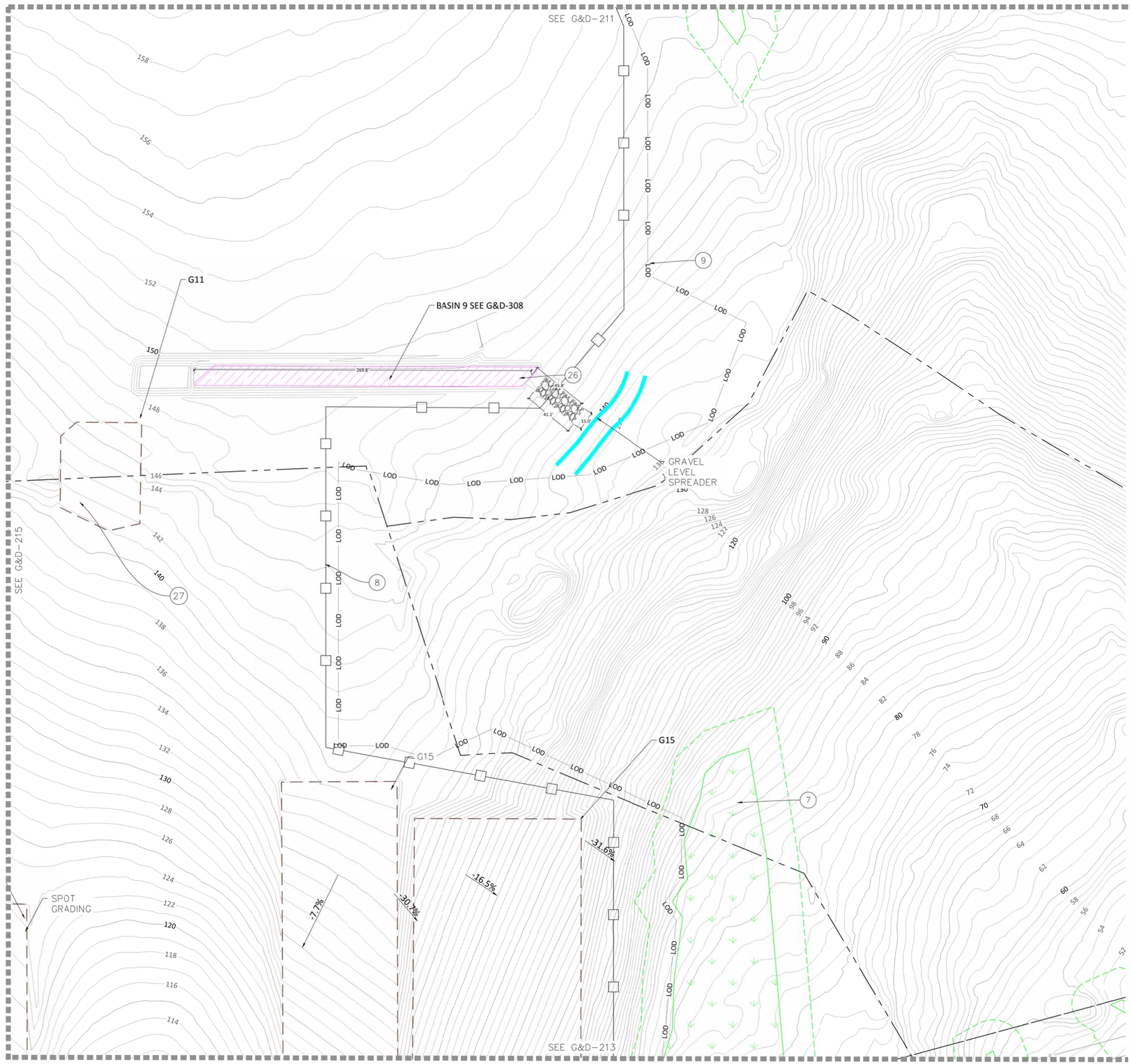
SEAL: STATE OF CONNECTICUT · DARIN RAY GALLOWAY · No. 34152 · LICENSED PROFESSIONAL ENGINEER

DATE: 21-JAN-20
PROJECT #: 20200309_CT
DRAWN BY: MMM
CHECKED BY: DRG

TITLE: GRADING & DRAINAGE PLAN
SHEET: G&D-211

PLOT DATE: Tuesday, January 19, 2021

LOCATION: E:\DROPBOX (SOA)\ENGINEERING\CS ENERGY\2020-03-09_STONINGTON\CAD\SITE PLANS.DWG PLOTTED BY: DARIN GALLOWAY



1 G&D-212 GRADING AND DRAINAGE SITE PLAN

Scale: 1" = 40'

N 0 40 80

MAP LEGEND (1"=1000')



LEGEND

6		PROPOSED SITE ACCESS ROAD (SEE C-400)
7		WETLAND W/BUFFER
8		SITE FENCE LINE (SEE C-402)
9	LOD	SITE LIMIT OF DISTURBANCE
10		SITE BOUNDARY
11		RIVER OR CREEK
12		100 YEAR FLOOD ZONE
26		PERMANENT STORMWATER CONTROL
27		GRADING AREA
28		VELOCITY DISSIPATION DEVICE (ROCK CHECK DAM, GRAVEL LEVEL SPREADER)
	75	MAJOR CONTOUR
	76	MINOR CONTOUR

GRADING AND DRAINAGE GENERAL NOTES:

1. ARRAY NOT SHOWN FOR CLARITY
2. GRADING AREAS ARE BASED ON NEXT TRACKER RACKING WITH 5.5' MAXIMUM REVEAL POSTS.
4. ACCURACY OF FINAL GRADE VOLUMES, PILE REVEAL HEIGHTS, AND BILL OF MATERIAL TABLES IS BASED SOLELY ON ACCURACY OF TOPOGRAPHY PROVIDED BY OTHERS.
5. CONTRACTOR SHALL FIELD VERIFY ALL DIMENSIONS, VOLUMES, AND AREAS PRIOR TO CONSTRUCTION.

Know what's below. Call before you dig.

PLOT DATE: Tuesday, January 19, 2021

SIERRA OVERHEAD ANALYTICS
18859 MICROTRONICS WAY
SONORA, CALIFORNIA 95370
CONNECTICUT PROFESSIONAL
ENGINEERING CORPORATION #PEC.0001969

REV	DESCRIPTION	DATE
6	ISSUED FOR CONSTRUCTION - DRAFT	9/4/2020
7	ISSUED FOR CONSTRUCTION - DRAFT	9/18/2020
8	ISSUED FOR CONSTRUCTION - DRAFT	10/22/2020
9	ISSUED FOR CONSTRUCTION - DRAFT	11/06/2020
10	ISSUED FOR CONSTRUCTION	1/20/2021
-	-	-
-	-	-
-	-	-
-	-	-
-	-	-

CONFIDENTIAL:
THE INFORMATION DEPICTED ON THIS DOCUMENT IS PROPRIETARY AND THE SOLE PROPERTY OF SIERRA OVERHEAD ANALYTICS, INC (SOA). ANY USE OR DISCLOSURE OF THIS INFORMATION IS EXPRESSLY PROHIBITED WITHOUT THE PRIOR WRITTEN CONSENT OF SOA.

CS Energy
Building a Cleaner Future
2045 LINCOLN HIGHWAY
EDISON, NEW JERSEY 08817

PROJECT NAME:
STONINGTON SOLAR PROJECT

PROJECT ADDRESS:
ELLA WHEELER RD.
NORTH STONINGTON, CT 06359
41° 25' 9.71"N, 71° 50' 4.83"W

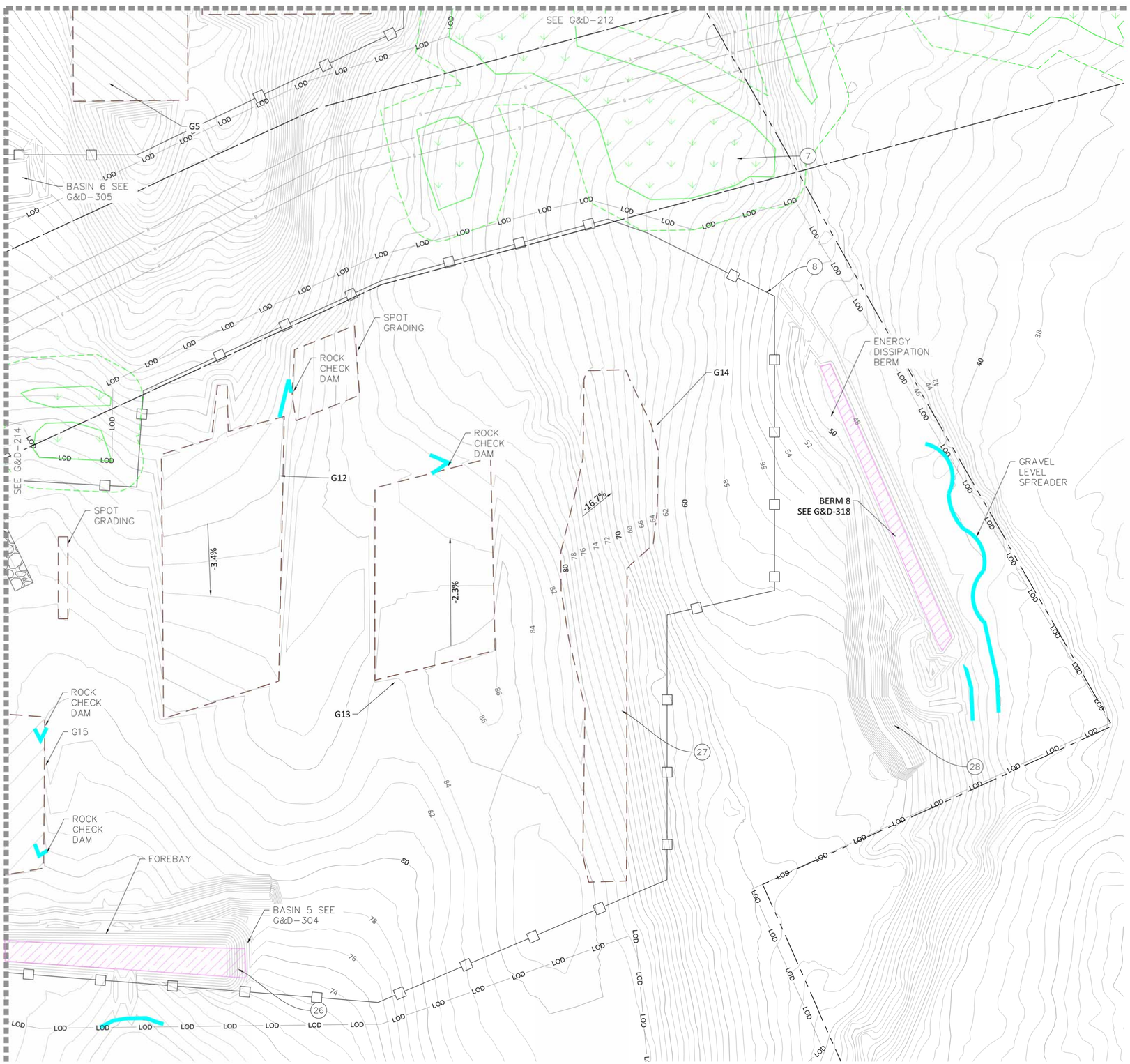
SEAL: STATE OF CONNECTICUT · DARIN RAY GALLOWAY · No. 34152 · LICENSED PROFESSIONAL ENGINEER

DATE: 21-JAN-20
PROJECT #: 20200309_CT
DRAWN BY: MMM
CHECKED BY: DRG

TITLE: GRADING & DRAINAGE PLAN

SHEET: G&D-212

LOCATION: E:\DROPBOX (SOA)\ENGINEERING\CS ENERGY\2020-03-09_STONINGTON\CAD\SITE PLANS.DWG PLOTTED BY: DARIN GALLOWAY



1 GRADING AND DRAINAGE SITE PLAN
G&D-213
Scale: 1" = 40'

N 0 40 80

MAP LEGEND (1"=1000')



LEGEND

6		PROPOSED SITE ACCESS ROAD (SEE C-400)
7		WETLAND W/BUFFER
8		SITE FENCE LINE (SEE C-402)
9	LOD	SITE LIMIT OF DISTURBANCE
10		SITE BOUNDARY
11		RIVER OR CREEK
12		100 YEAR FLOOD ZONE
26		PERMANENT STORMWATER CONTROL
27		GRADING AREA
28		VELOCITY DISSIPATION DEVICE (ROCK CHECK DAM, GRAVEL LEVEL SPREADER)
	75	MAJOR CONTOUR
	76	MINOR CONTOUR

GRADING AND DRAINAGE GENERAL NOTES:

1. ARRAY NOT SHOWN FOR CLARITY
2. GRADING AREAS ARE BASED ON NEXT TRACKER RACKING WITH 5.5' MAXIMUM REVEAL POSTS.
4. ACCURACY OF FINAL GRADE VOLUMES, PILE REVEAL HEIGHTS, AND BILL OF MATERIAL TABLES IS BASED SOLELY ON ACCURACY OF TOPOGRAPHY PROVIDED BY OTHERS.
5. CONTRACTOR SHALL FIELD VERIFY ALL DIMENSIONS, VOLUMES, AND AREAS PRIOR TO CONSTRUCTION.

Know what's below. Call before you dig.

PLOT DATE: Tuesday, January 19, 2021

soa
SIERRA OVERHEAD ANALYTICS
18859 MICROTRONICS WAY
SONORA, CALIFORNIA 95370
CONNECTICUT PROFESSIONAL
ENGINEERING CORPORATION #PEC.0001969

REV	DESCRIPTION	DATE
6	ISSUED FOR CONSTRUCTION - DRAFT	9/4/2020
7	ISSUED FOR CONSTRUCTION - DRAFT	9/18/2020
8	ISSUED FOR CONSTRUCTION - DRAFT	10/22/2020
9	ISSUED FOR CONSTRUCTION - DRAFT	11/06/2020
10	ISSUED FOR CONSTRUCTION	1/20/2021
-	-	-
-	-	-
-	-	-
-	-	-
-	-	-

CONFIDENTIAL:
THE INFORMATION DEPICTED ON THIS DOCUMENT IS PROPRIETARY AND THE SOLE PROPERTY OF SIERRA OVERHEAD ANALYTICS, INC (SOA). ANY USE OR DISCLOSURE OF THIS INFORMATION IS EXPRESSLY PROHIBITED WITHOUT THE PRIOR WRITTEN CONSENT OF SOA.

CS Energy
Building a Cleaner Future
2045 LINCOLN HIGHWAY
EDISON, NEW JERSEY 08817

PROJECT NAME:
STONINGTON SOLAR PROJECT

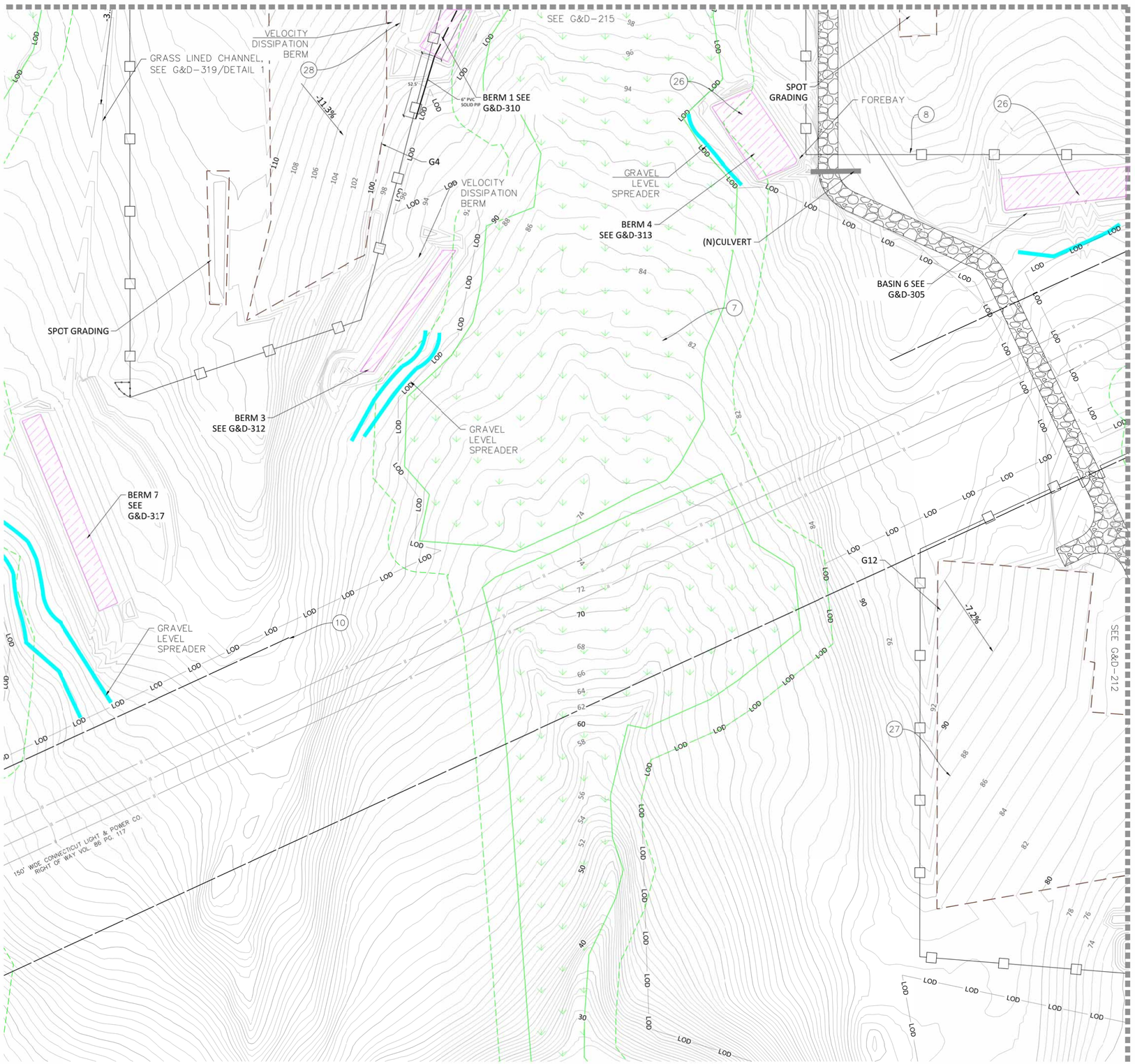
PROJECT ADDRESS:
ELLA WHEELER RD.
NORTH STONINGTON, CT 06359
41° 25' 9.71"N, 71° 50' 4.83"W

SEAL: STATE OF CONNECTICUT · DARIN RAY GALLOWAY · No. 34152 · LICENSED PROFESSIONAL ENGINEER

DATE: 21-JAN-20
PROJECT #: 20200309_CT
DRAWN BY: MMM
CHECKED BY: DRG

TITLE: GRADING & DRAINAGE PLAN
SHEET: G&D-213

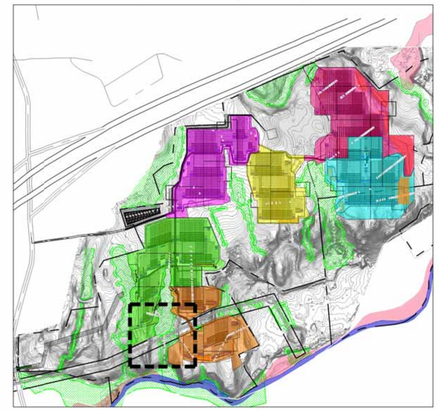
LOCATION: E:\DROPBOX (SOA)\ENGINEERING\CS ENERGY\2020-03-09_STONINGTON\CAD\SITE PLANS.DWG PLOTTED BY: DARIN GALLOWAY



1 GRADING AND DRAINAGE SITE PLAN
G&D-214
Scale: 1" = 40'

N 0 40 80

MAP LEGEND (1"=1000')



LEGEND

6		PROPOSED SITE ACCESS ROAD (SEE C-400)
7		WETLAND W/BUFFER
8		SITE FENCE LINE (SEE C-402)
9	LOD	SITE LIMIT OF DISTURBANCE
10		SITE BOUNDARY
11		RIVER OR CREEK
12		100 YEAR FLOOD ZONE
26		PERMANENT STORMWATER CONTROL
27		GRADING AREA
28		VELOCITY DISSIPATION DEVICE (ROCK CHECK DAM, GRAVEL LEVEL SPREADER)
	75	MAJOR CONTOUR
	76	MINOR CONTOUR

GRADING AND DRAINAGE GENERAL NOTES:

1. ARRAY NOT SHOWN FOR CLARITY
2. GRADING AREAS ARE BASED ON NEXT TRACKER RACKING WITH 5.5' MAXIMUM REVEAL POSTS.
4. ACCURACY OF FINAL GRADE VOLUMES, PILE REVEAL HEIGHTS, AND BILL OF MATERIAL TABLES IS BASED SOLELY ON ACCURACY OF TOPOGRAPHY PROVIDED BY OTHERS.
5. CONTRACTOR SHALL FIELD VERIFY ALL DIMENSIONS, VOLUMES, AND AREAS PRIOR TO CONSTRUCTION.

Know what's below. Call before you dig.

PLOT DATE: Tuesday, January 19, 2021

soa
SIERRA OVERHEAD ANALYTICS
18859 MICROTRONICS WAY
SONORA, CALIFORNIA 95370
CONNECTICUT PROFESSIONAL ENGINEERING CORPORATION #PEC.0001969

REV	DESCRIPTION	DATE
6	ISSUED FOR CONSTRUCTION - DRAFT	9/4/2020
7	ISSUED FOR CONSTRUCTION - DRAFT	9/18/2020
8	ISSUED FOR CONSTRUCTION - DRAFT	10/22/2020
9	ISSUED FOR CONSTRUCTION - DRAFT	11/06/2020
10	ISSUED FOR CONSTRUCTION	1/20/2021
-	-	-
-	-	-
-	-	-
-	-	-
-	-	-
-	-	-

CONFIDENTIAL:
THE INFORMATION DEPICTED ON THIS DOCUMENT IS PROPRIETARY AND THE SOLE PROPERTY OF SIERRA OVERHEAD ANALYTICS, INC (SOA). ANY USE OR DISCLOSURE OF THIS INFORMATION IS EXPRESSLY PROHIBITED WITHOUT THE PRIOR WRITTEN CONSENT OF SOA.

CS Energy
Building a Cleaner Future
2045 LINCOLN HIGHWAY
EDISON, NEW JERSEY 08817

PROJECT NAME:
STONINGTON SOLAR PROJECT

PROJECT ADDRESS:
ELLA WHEELER RD.
NORTH STONINGTON, CT 06359
41° 25' 9.71"N, 71° 50' 4.83"W

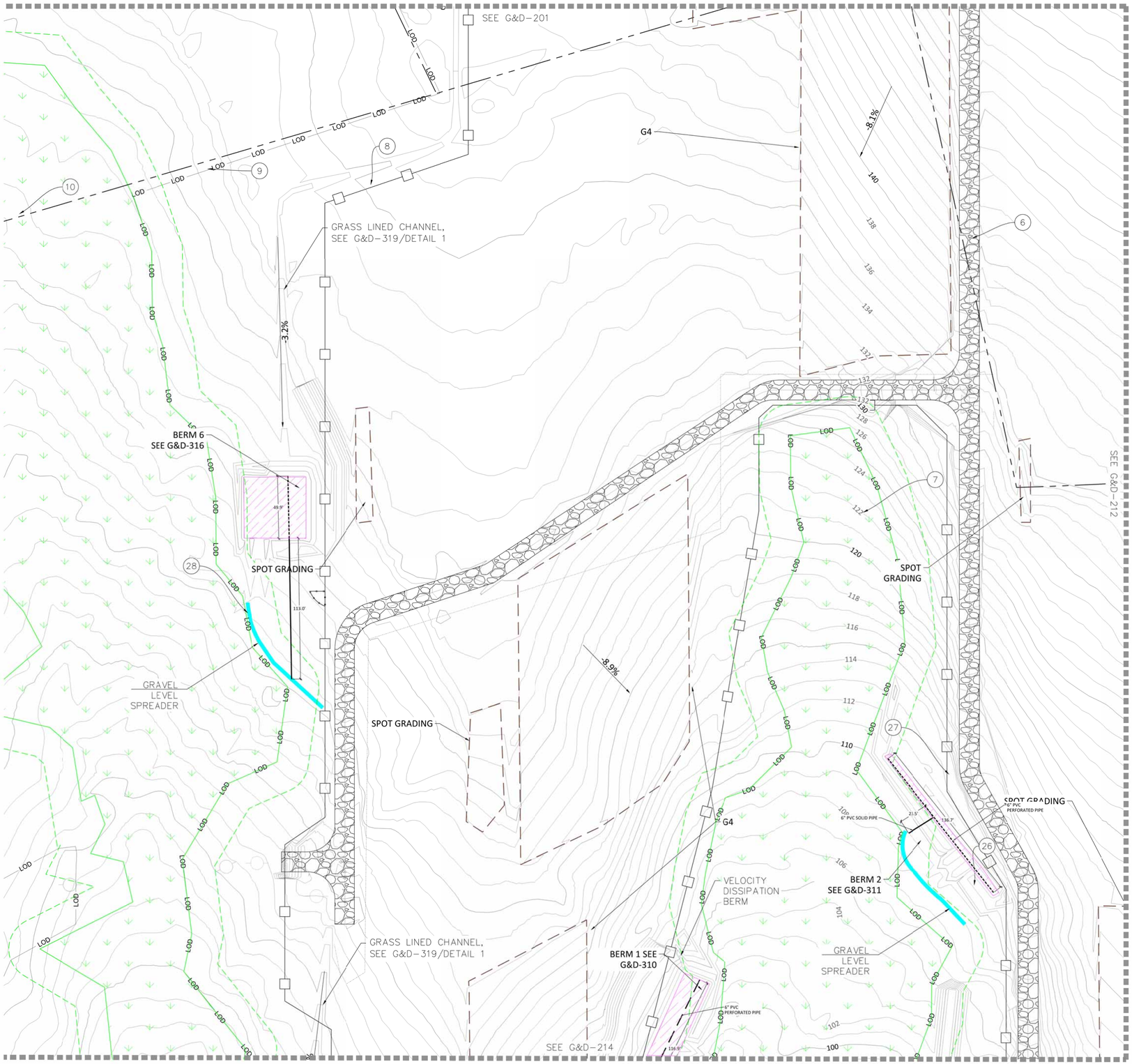
SEAL: STATE OF CONNECTICUT · DARIN RAY GALLOWAY · No. 34152 · LICENSED PROFESSIONAL ENGINEER

DATE:	21-JAN-20
PROJECT #:	20200309_CT
DRAWN BY:	MMM
CHECKED BY:	DRG

TITLE: GRADING & DRAINAGE PLAN

SHEET: G&D-214

LOCATION: E:\DROPBOX (SOA)\ENGINEERING\CS ENERGY\2020-03-09_STONINGTON\CAD\SITE PLANS.DWG PLOTTED BY: DARIN GALLOWAY



1 G&D-215 GRADING AND DRAINAGE SITE PLAN

Scale: 1" = 40'

N 0 40 80

MAP LEGEND (1"=1000')



LEGEND

6	PROPOSED SITE ACCESS ROAD (SEE C-400)
7	WETLAND W/BUFFER
8	SITE FENCE LINE (SEE C-402)
9	LOD — SITE LIMIT OF DISTURBANCE
10	SITE BOUNDARY
11	RIVER OR CREEK
12	100 YEAR FLOOD ZONE
26	PERMANENT STORMWATER CONTROL
27	GRADING AREA
28	VELOCITY DISSIPATION DEVICE (ROCK CHECK DAM, GRAVEL LEVEL SPREADER)
75	MAJOR CONTOUR
76	MINOR CONTOUR

GRADING AND DRAINAGE GENERAL NOTES:

1. ARRAY NOT SHOWN FOR CLARITY
2. GRADING AREAS ARE BASED ON NEXT TRACKER RACKING WITH 5.5' MAXIMUM REVEAL POSTS.
4. ACCURACY OF FINAL GRADE VOLUMES, PILE REVEAL HEIGHTS, AND BILL OF MATERIAL TABLES IS BASED SOLELY ON ACCURACY OF TOPOGRAPHY PROVIDED BY OTHERS.
5. CONTRACTOR SHALL FIELD VERIFY ALL DIMENSIONS, VOLUMES, AND AREAS PRIOR TO CONSTRUCTION.

Know what's below. Call before you dig.

PLOT DATE: Tuesday, January 19, 2021

soa
SIERRA OVERHEAD ANALYTICS
18859 MICROTRONICS WAY
SONORA, CALIFORNIA 95370
CONNECTICUT PROFESSIONAL ENGINEERING CORPORATION #PEC.0001969

REV	DESCRIPTION	DATE
6	ISSUED FOR CONSTRUCTION - DRAFT	9/4/2020
7	ISSUED FOR CONSTRUCTION - DRAFT	9/18/2020
8	ISSUED FOR CONSTRUCTION - DRAFT	10/22/2020
9	ISSUED FOR CONSTRUCTION - DRAFT	11/06/2020
10	ISSUED FOR CONSTRUCTION	1/20/2021
-	-	-
-	-	-
-	-	-
-	-	-
-	-	-

CONFIDENTIAL:
THE INFORMATION DEPICTED ON THIS DOCUMENT IS PROPRIETARY AND THE SOLE PROPERTY OF SIERRA OVERHEAD ANALYTICS, INC (SOA). ANY USE OR DISCLOSURE OF THIS INFORMATION IS EXPRESSLY PROHIBITED WITHOUT THE PRIOR WRITTEN CONSENT OF SOA.

CS Energy
Building a Cleaner Future
2045 LINCOLN HIGHWAY
EDISON, NEW JERSEY 08817

PROJECT NAME:
STONINGTON SOLAR PROJECT

PROJECT ADDRESS:
ELLA WHEELER RD.
NORTH STONINGTON, CT 06359
41° 25' 9.71"N, 71° 50' 4.83"W

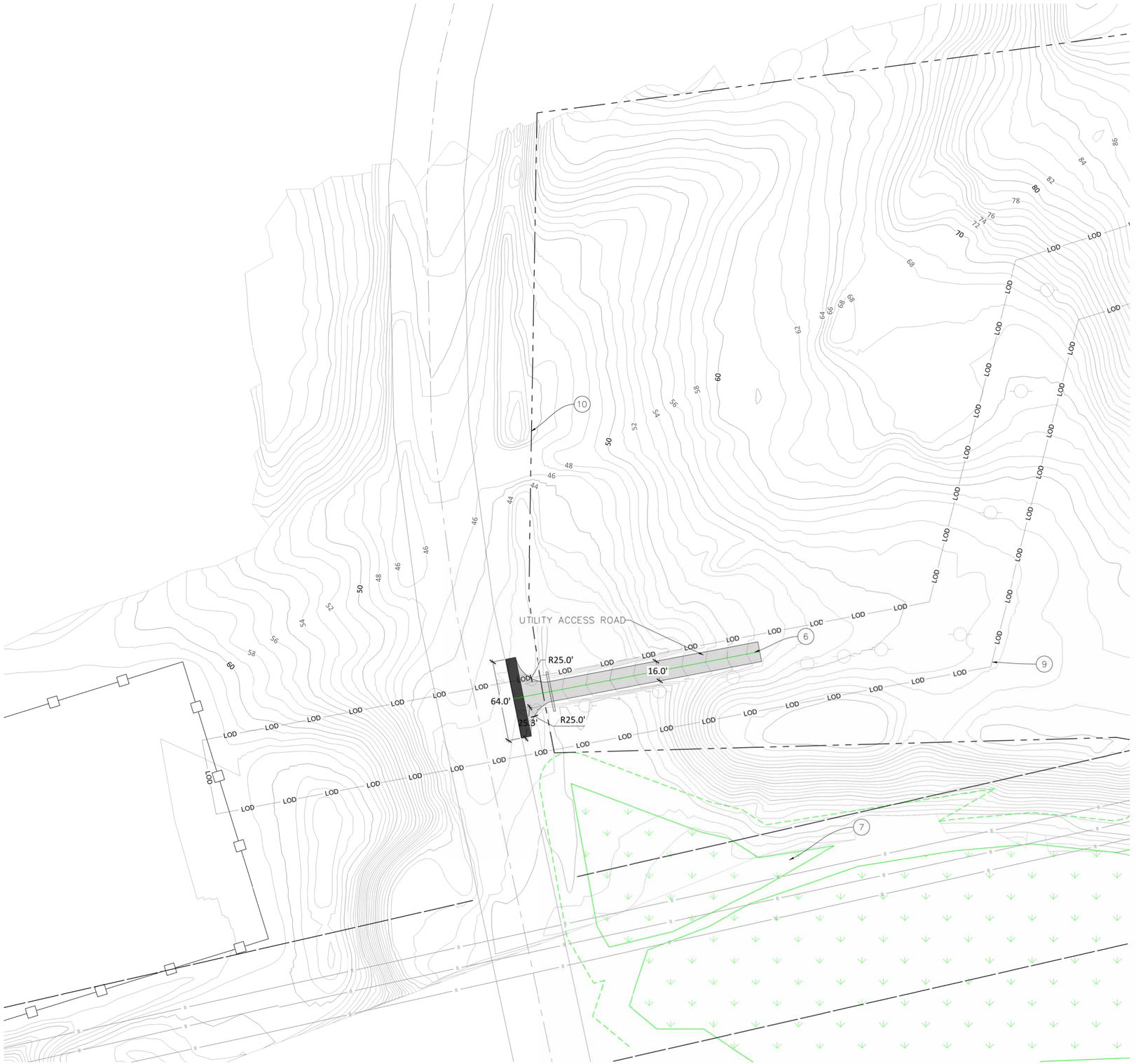
SEAL: STATE OF CONNECTICUT · DARIN RAY GALLOWAY · No. 34152 · LICENSED PROFESSIONAL ENGINEER

DATE: 21-JAN-20
PROJECT #: 20200309_CT
DRAWN BY: MMM
CHECKED BY: DRG

TITLE: GRADING & DRAINAGE PLAN

SHEET: G&D-215

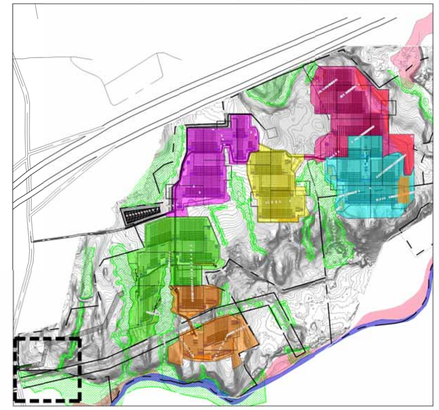
LOCATION: E:\DROPBOX (SOA)\ENGINEERING\CS ENERGY\2020-03-09_STONINGTON\CAD\SITE PLANS.DWG PLOTTED BY: DARIN GALLOWAY



1 GRADING AND DRAINAGE SITE PLAN
G&D-216
Scale: 1" = 40'

N 0 40 80

MAP LEGEND (1"=1000')



LEGEND

6		PROPOSED SITE ACCESS ROAD (SEE C-400)
7		WETLAND W/BUFFER
8		SITE FENCE LINE (SEE C-402)
9	LOD	SITE LIMIT OF DISTURBANCE
10		SITE BOUNDARY
11		RIVER OR CREEK
12		100 YEAR FLOOD ZONE
26		PERMANENT STORMWATER CONTROL
27		GRADING AREA
	75	MAJOR CONTOUR
	76	MINOR CONTOUR

GRADING AND DRAINAGE GENERAL NOTES:

1. ARRAY NOT SHOWN FOR CLARITY
2. GRADING AREAS ARE BASED ON NEXT TRACKER RACKING WITH 5.5' MAXIMUM REVEAL POSTS.
4. ACCURACY OF FINAL GRADE VOLUMES, PILE REVEAL HEIGHTS, AND BILL OF MATERIAL TABLES IS BASED SOLELY ON ACCURACY OF TOPOGRAPHY PROVIDED BY OTHERS.
5. CONTRACTOR SHALL FIELD VERIFY ALL DIMENSIONS, VOLUMES, AND AREAS PRIOR TO CONSTRUCTION.

Know what's below. Call before you dig.

SIERRA OVERHEAD ANALYTICS
18859 MICROTRONICS WAY
SONORA, CALIFORNIA 95370
CONNECTICUT PROFESSIONAL
ENGINEERING CORPORATION #PEC.0001969

REV	DESCRIPTION	DATE
6	ISSUED FOR CONSTRUCTION - DRAFT	9/4/2020
7	ISSUED FOR CONSTRUCTION - DRAFT	9/18/2020
8	ISSUED FOR CONSTRUCTION - DRAFT	10/22/2020
9	ISSUED FOR CONSTRUCTION - DRAFT	11/06/2020
10	ISSUED FOR CONSTRUCTION	1/20/2021
-	-	-
-	-	-
-	-	-
-	-	-
-	-	-

CONFIDENTIAL:
THE INFORMATION DEPICTED ON THIS DOCUMENT IS PROPRIETARY AND THE SOLE PROPERTY OF SIERRA OVERHEAD ANALYTICS, INC (SOA). ANY USE OR DISCLOSURE OF THIS INFORMATION IS EXPRESSLY PROHIBITED WITHOUT THE PRIOR WRITTEN CONSENT OF SOA.

CS Energy
Building a Cleaner Future
2045 LINCOLN HIGHWAY
EDISON, NEW JERSEY 08817

PROJECT NAME:
STONINGTON SOLAR PROJECT

PROJECT ADDRESS:
ELLA WHEELER RD.
NORTH STONINGTON, CT 06359
41° 25' 9.71"N, 71° 50' 4.83"W

SEAL: STATE OF CONNECTICUT · DARIN RAY GALLOWAY · No. 34152 · LICENSED PROFESSIONAL ENGINEER

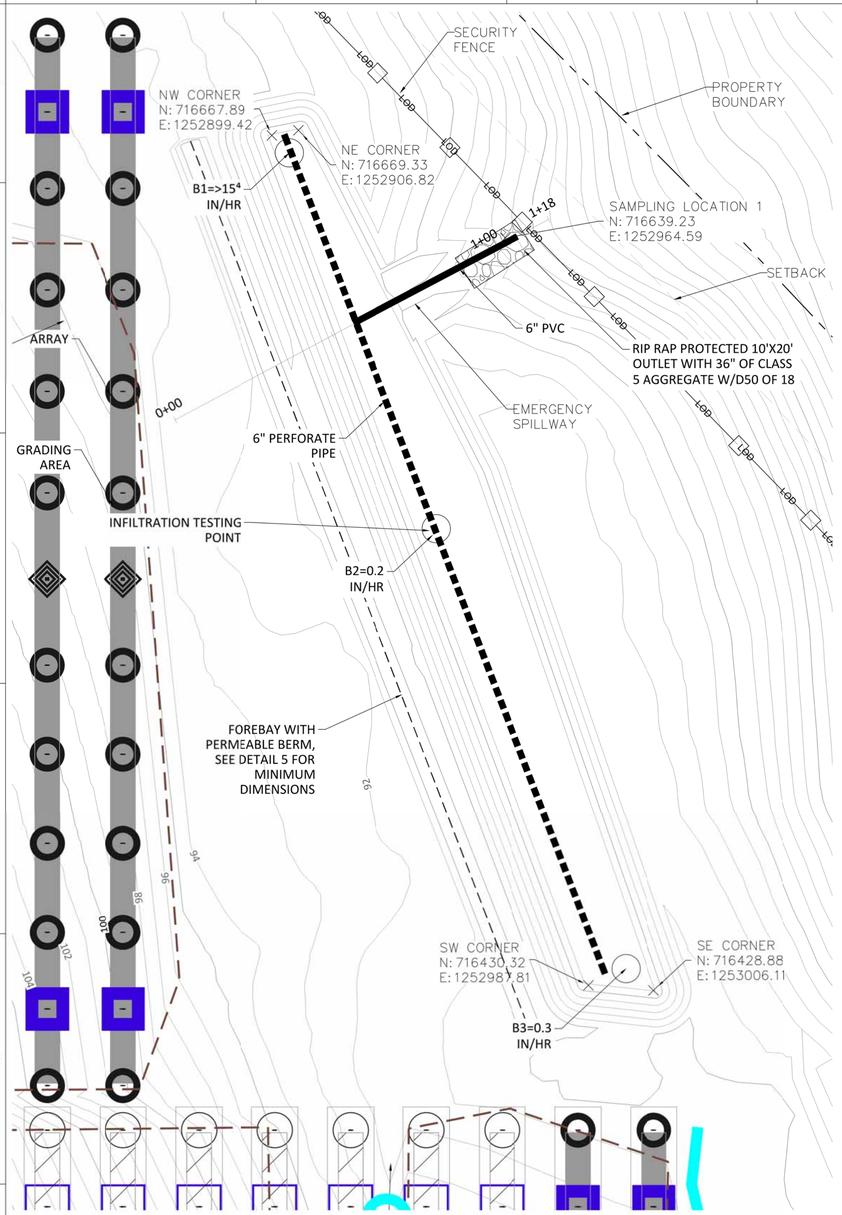
DATE:	21-JAN-20
PROJECT #:	20200309_CT
DRAWN BY:	MMM
CHECKED BY:	DRG

TITLE: GRADING & DRAINAGE PLAN

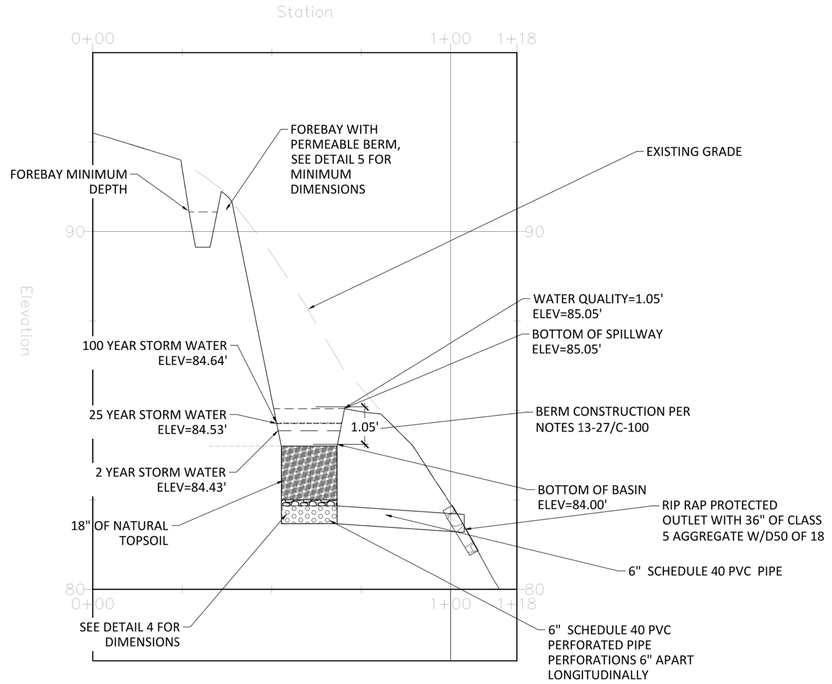
SHEET: G&D-216

PLOT DATE: Tuesday, January 19, 2021

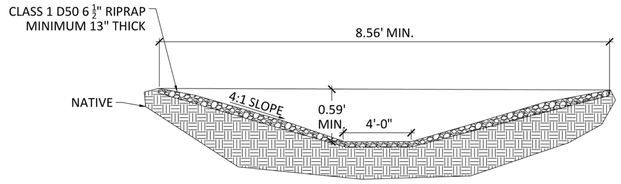
LOCATION: E:\DROPBOX (SOA)\ENGINEERING\CS ENERGY\2020-03-09_STONINGTON\CAD\SITE PLANS.DWG PLOTTED BY: DARIN GALLOWAY



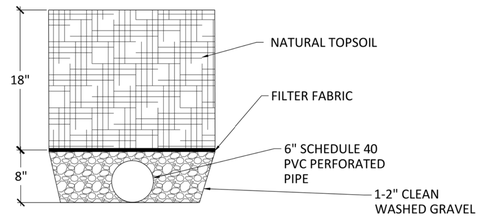
1 STORMWATER BASIN WITH BIORETENTION - BASIN 1
G&D-300 Scale: 1"=20'



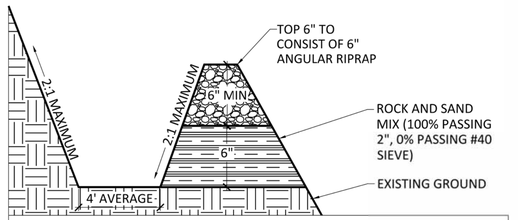
2 STORMWATER BASIN WITH BIORETENTION PROFILE - BASIN 1
G&D-300 Scale: H:1"=20' V:1"=2'



3 EMERGENCY SPILLWAY - BASIN 1
G&D-300 Scale: NTS



4 BIORETENTION BASIN UNDERDRAIN, TYP.
G&D-300 Scale: NTS



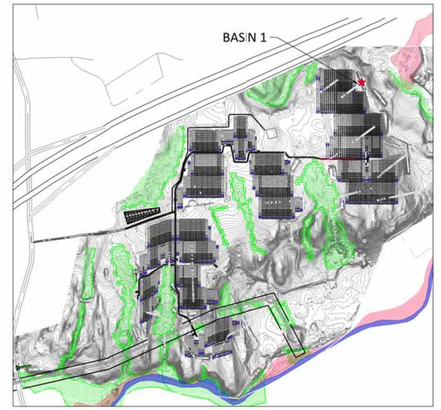
BASIN 1 FOREBAY		
MINIMUM DEPTH (FT)	MINIMUM LENGTH (FT)	STORAGE (FT^3)
1	237	1,422

5 BASIN PRETREATMENT-FOREBAY, TYP
G&D-300 Scale: NTS

STORMWATER BASIN NOTES:

36. STORMWATER BASINS WERE SIZED BASED ON GUIDANCE FROM THE CONNECTICUT STORMWATER QUALITY MANUAL (2004).
37. BASIN DESIGN INPUTS ARE INCLUDED ON SHEET SWMP-100.
38. STORMWATER BASINS/BERMS ARE LOCATED IN THE SAME FOOTPRINT AS SEDIMENT BASINS. SEDIMENT BASIN NUMBERING CORRESPONDS TO STORMWATER BASIN/BERM NUMBERING (E.G. SEDIMENT BASIN 1 IS IN THE SAME FOOTPRINT AS STORMWATER BASIN 1).
39. AFTER FINAL STABILIZATION OF THE SITE, THE FOLLOWING SEQUENCE SHALL BE PERFORMED PRIOR TO CONSTRUCTION OF THE PERMANENT STORMWATER CONTROLS:
    - 39.1. SEDIMENT BASINS LOCATED WHERE BIOFILTRATION BASINS OR BERMS ARE LOCATED SHALL BE EXCAVATED TO THE FULL DEPTH OF THE FILTER MEDIA AND RECONSTRUCTED AS DEPICTED ON GRADING & DRAINAGE DESIGN SHEETS.
    - 39.2. SEDIMENT BASINS LOCATED WHERE INFILTRATION BASINS OR BERMS ARE LOCATED SHALL HAVE ANY SEDIMENT ACCUMULATION REMOVED AND SCARIFIED TO 12" BELOW BASIN BOTTOM ELEVATION. FOLLOWING CLEANING AND SCARIFICATION, THE STORMWATER CONTROLS SHALL BE RECONSTRUCTED AS DEPICTED ON GRADING & DRAINAGE DESIGN SHEETS.
40. BERM CONSTRUCTION SHALL BE IN ACCORDANCE WITH NOTES 13-27/C-100

MAP LEGEND (1"=1000')



soa
SIERRA OVERHEAD ANALYTICS
18859 MICROTRONICS WAY
SONORA, CALIFORNIA 95370
CONNECTICUT PROFESSIONAL ENGINEERING CORPORATION #PEC.0001969

REV	DESCRIPTION	DATE
6	ISSUED FOR CONSTRUCTION - DRAFT	9/4/2020
7	ISSUED FOR CONSTRUCTION - DRAFT	9/18/2020
8	ISSUED FOR CONSTRUCTION - DRAFT	10/22/2020
9	ISSUED FOR CONSTRUCTION - DRAFT	11/06/2020
10	ISSUED FOR CONSTRUCTION	1/20/2021
-	-	-
-	-	-
-	-	-
-	-	-
-	-	-

CONFIDENTIAL:
THE INFORMATION DEPICTED ON THIS DOCUMENT IS PROPRIETARY AND THE SOLE PROPERTY OF SIERRA OVERHEAD ANALYTICS, INC (SOA). ANY USE OR DISCLOSURE OF THIS INFORMATION IS EXPRESSLY PROHIBITED WITHOUT THE PRIOR WRITTEN CONSENT OF SOA.

CS Energy
Building a Cleaner Future
2045 LINCOLN HIGHWAY
EDISON, NEW JERSEY 08817

PROJECT NAME:
STONINGTON SOLAR PROJECT

PROJECT ADDRESS:
ELLA WHEELER RD.
NORTH STONINGTON, CT 06359
41° 25' 9.71"N, 71° 50' 4.83"W

SEAL: STATE OF CONNECTICUT · DARRIN RAY GALLOWAY · No. 34152 · LICENSED PROFESSIONAL ENGINEER

DATE:	21-JAN-20
PROJECT #:	20200309_CT
DRAWN BY:	MMM
CHECKED BY:	DRG

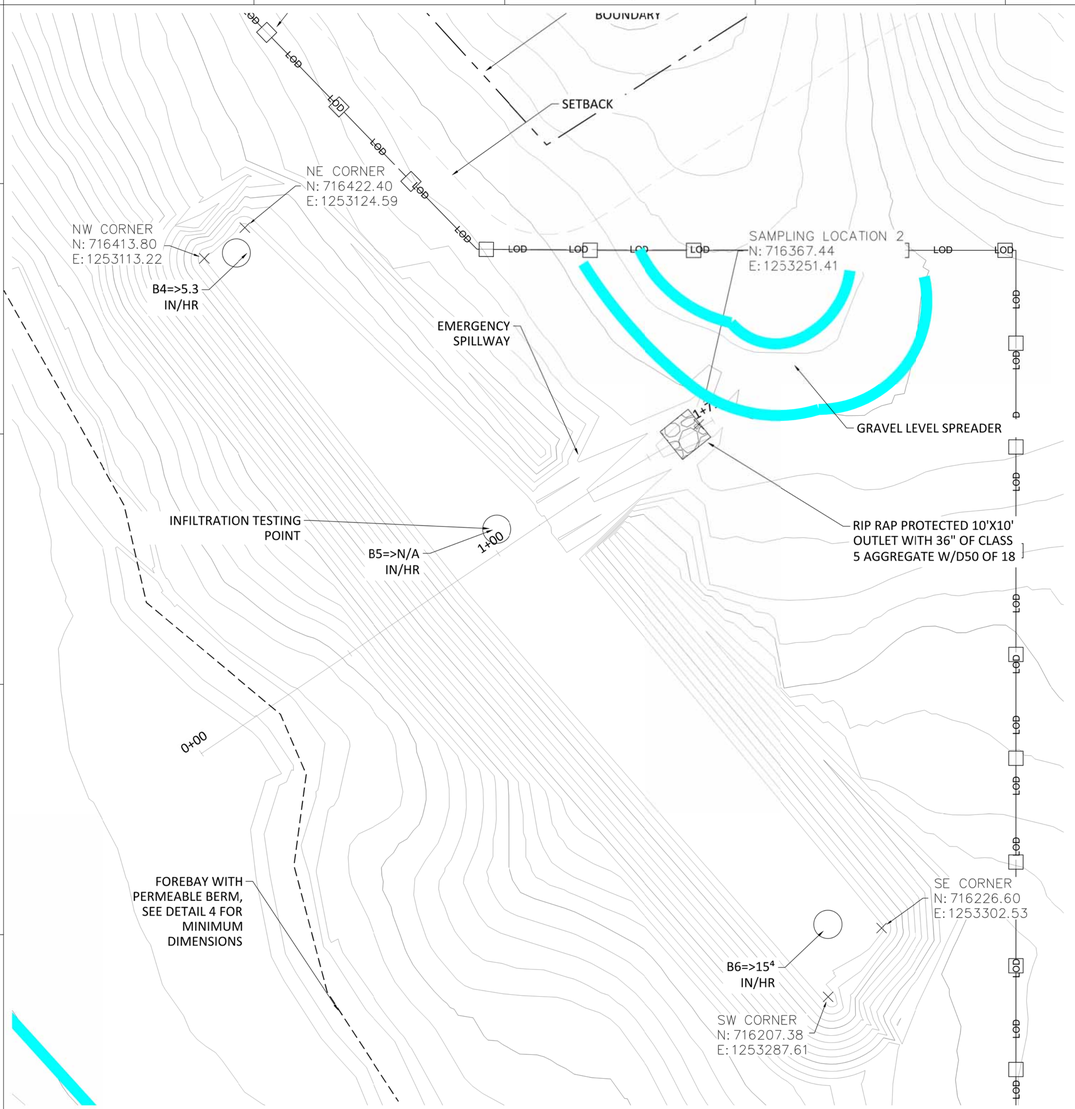
TITLE: GRADING & DRAINAGE DETAILS

SHEET: G&D-300

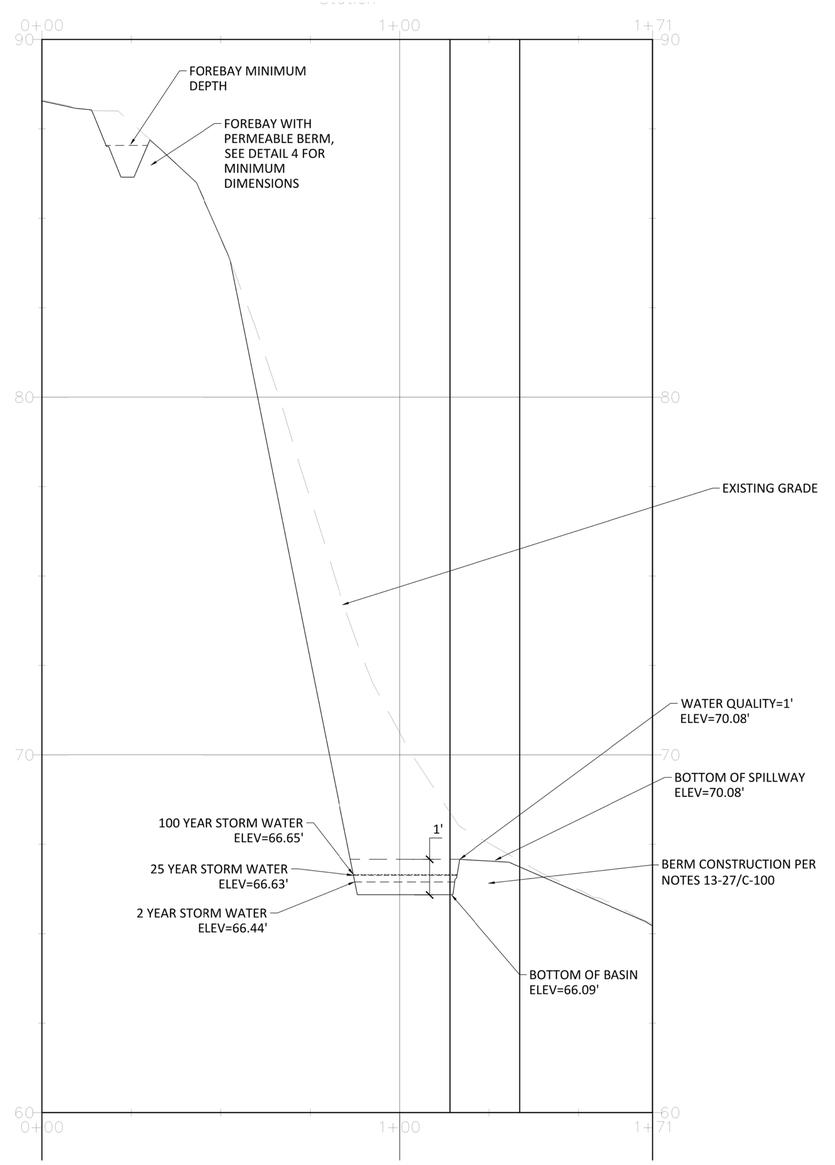
811 Know what's below. Call before you dig.

PLOT DATE: Tuesday, January 19, 2021

LOCATION: E:\DROPBOX (SOA)\ENGINEERING\CS ENERGY\2020-03-09_STONINGTON\CAD\SITE PLANS.DWG PLOTTED BY: DARIN GALLOWAY

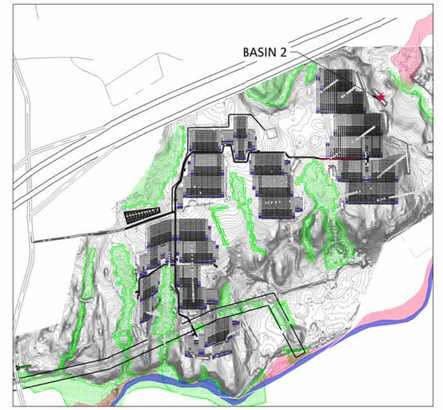


1 STORMWATER BASIN WITH INFILTRATION - BASIN 2
G&D-301 Scale: 1"=20'



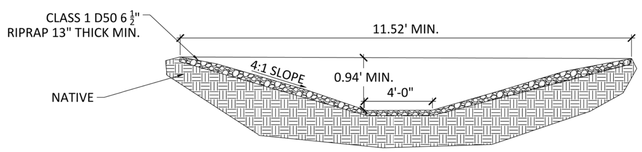
2 STORMWATER BASIN WITH INFILTRATION PROFILE - BASIN 2
G&D-301 Scale: H:1"=20' V:1"=2'

MAP LEGEND (1"=1000')

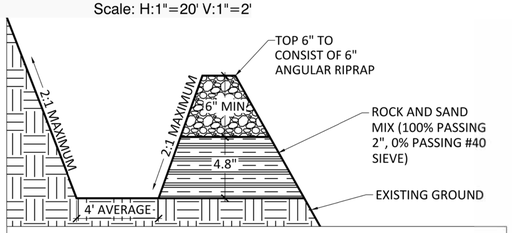


STORMWATER BASIN NOTES:

36. STORMWATER BASINS WERE SIZED BASED ON GUIDANCE FROM THE CONNECTICUT STORMWATER QUALITY MANUAL (2004).
37. BASIN DESIGN INPUTS ARE INCLUDED ON SHEET SWMP-100.
38. STORMWATER BASINS/BERMS ARE LOCATED IN THE SAME FOOTPRINT AS SEDIMENT BASINS. SEDIMENT BASIN NUMBERING CORRESPONDS TO STORMWATER BASIN/BERM NUMBERING (E.G. SEDIMENT BASIN 1 IS IN THE SAME FOOTPRINT AS STORMWATER BASIN 1).
39. AFTER FINAL STABILIZATION OF THE SITE, THE FOLLOWING SEQUENCE SHALL BE PERFORMED PRIOR TO CONSTRUCTION OF THE PERMANENT STORMWATER CONTROLS:
    - 39.1. SEDIMENT BASINS LOCATED WHERE BIOFILTRATION BASINS OR BERMS ARE LOCATED SHALL BE EXCAVATED TO THE FULL DEPTH OF THE FILTER MEDIA AND RECONSTRUCTED AS DEPICTED ON GRADING & DRAINAGE DESIGN SHEETS.
    - 39.2. SEDIMENT BASINS LOCATED WHERE INFILTRATION BASINS OR BERMS ARE LOCATED SHALL HAVE ANY SEDIMENT ACCUMULATION REMOVED AND SCARIFIED TO 12" BELOW BASIN BOTTOM ELEVATION. FOLLOWING CLEANING AND SCARIFICATION, THE STORMWATER CONTROLS SHALL BE RECONSTRUCTED AS DEPICTED ON GRADING & DRAINAGE DESIGN SHEETS.
40. BERM CONSTRUCTION SHALL BE IN ACCORDANCE WITH NOTES 13-27/C-100



3 EMERGENCY SPILLWAY - BASIN 2
G&D-301 Scale: NTS



BASIN 2 FOREBAY		
MINIMUM DEPTH (FT)	MINIMUM LENGTH (FT)	STORAGE (FT³)
0.9	329	1,717

4 BASIN PRETREATMENT-FOREBAY, TYP
G&D-301 Scale: NTS

soa
SIERRA OVERHEAD ANALYTICS
18859 MICROTRONICS WAY
SONORA, CALIFORNIA 95370
CONNECTICUT PROFESSIONAL
ENGINEERING CORPORATION #PEC.0001969

REV	DESCRIPTION	DATE
6	ISSUED FOR CONSTRUCTION - DRAFT	9/4/2020
7	ISSUED FOR CONSTRUCTION - DRAFT	9/18/2020
8	ISSUED FOR CONSTRUCTION - DRAFT	10/22/2020
9	ISSUED FOR CONSTRUCTION - DRAFT	11/06/2020
10	ISSUED FOR CONSTRUCTION	1/20/2021
-	-	-
-	-	-
-	-	-
-	-	-
-	-	-

CONFIDENTIAL:
THE INFORMATION DEPICTED ON THIS DOCUMENT IS PROPRIETARY AND THE SOLE PROPERTY OF SIERRA OVERHEAD ANALYTICS, INC (SOA). ANY USE OR DISCLOSURE OF THIS INFORMATION IS EXPRESSLY PROHIBITED WITHOUT THE PRIOR WRITTEN CONSENT OF SOA.

CS Energy
Building a Cleaner Future
2045 LINCOLN HIGHWAY
EDISON, NEW JERSEY 08817

PROJECT NAME:
STONINGTON SOLAR PROJECT

PROJECT ADDRESS:
ELLA WHEELER RD.
NORTH STONINGTON, CT 06359
41° 25' 9.71"N, 71° 50' 4.83"W

SEAL: STATE OF CONNECTICUT · DARRIN RAY GALLOWAY · No. 34152 · LICENSED PROFESSIONAL ENGINEER

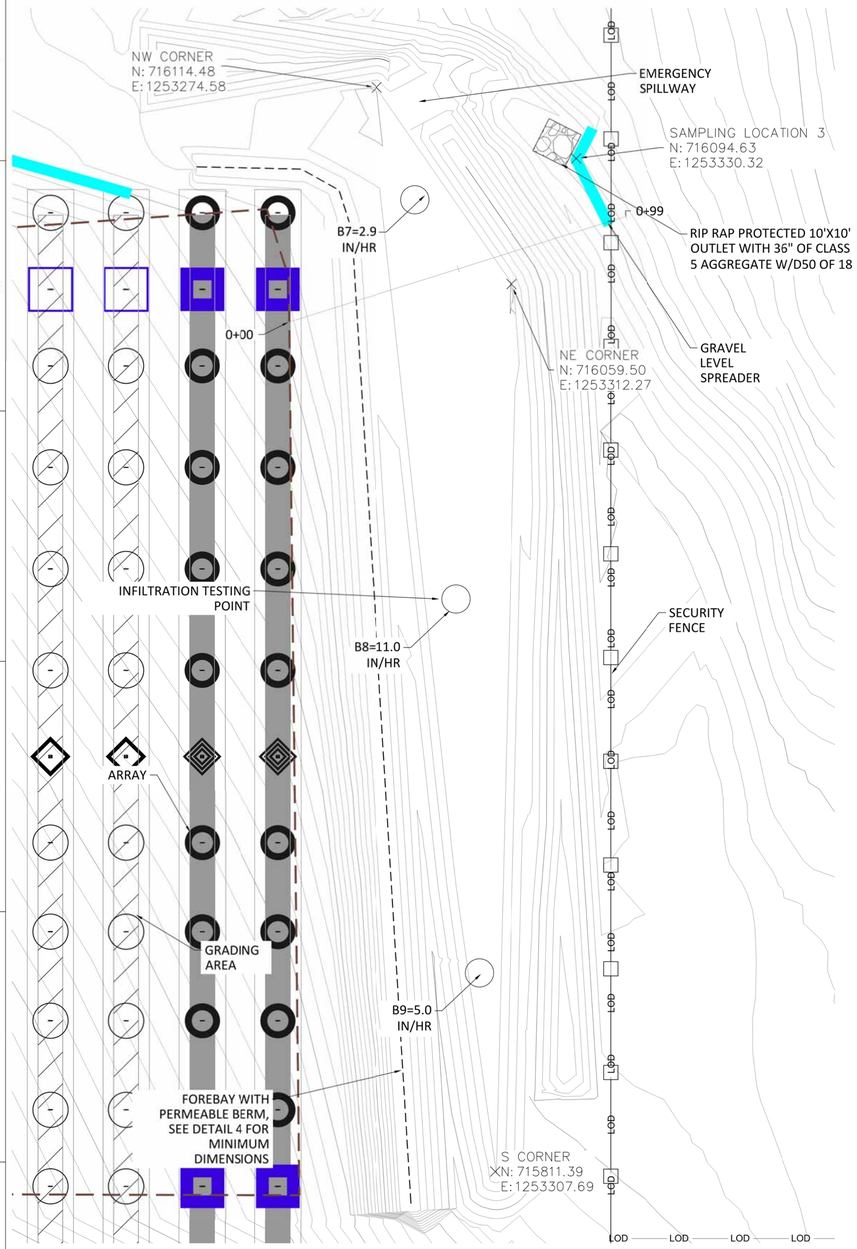
DATE: 21-JAN-20
PROJECT #: 20200309_CT
DRAWN BY: MMM
CHECKED BY: DRG

TITLE: GRADING & DRAINAGE DETAILS
SHEET: G&D-301

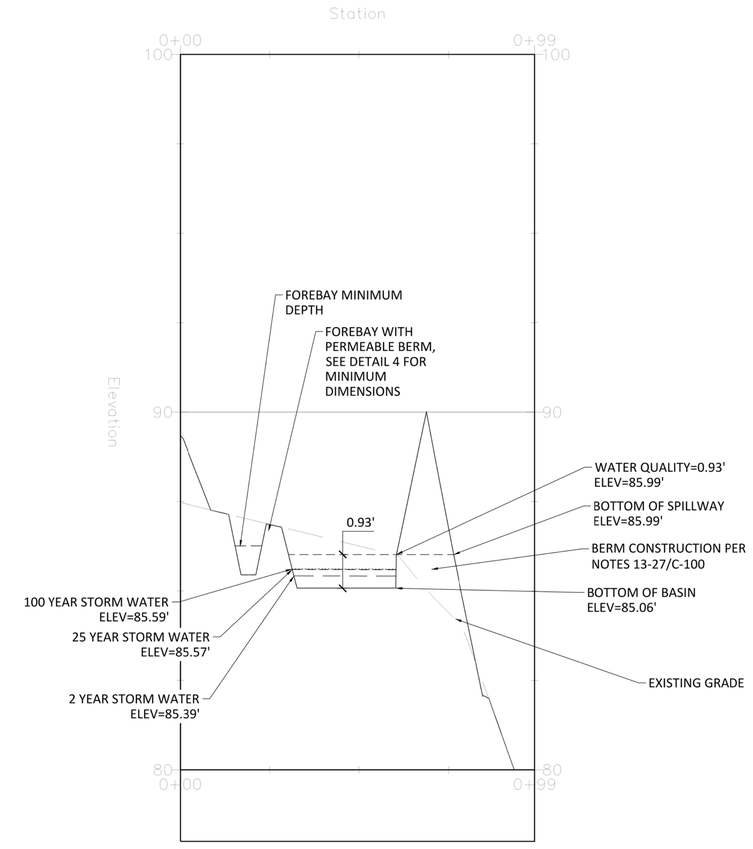
811 Know what's below. Call before you dig.

PLOT DATE: Tuesday, January 19, 2021

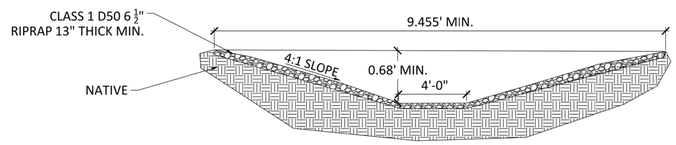
LOCATION: E:\DROPBOX (SOA)\ENGINEERING\CS ENERGY\2020-03-09_STONINGTON\CAD\SITE PLANS.DWG PLOTTED BY: DARIN GALLOWAY



1 STORMWATER BASIN WITH INFILTRATION - BASIN 3
G&D-302 Scale: 1"=20'



2 STORMWATER BASIN WITH INFILTRATION PROFILE - BASIN 3
G&D-302 Scale: H:1"=20' V:1"=2'



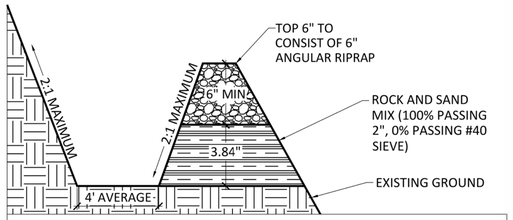
3 EMERGENCY SPILLWAY - BASIN 3
G&D-302 Scale: NTS

MAP LEGEND (1"=1000')



STORMWATER BASIN NOTES:

36. STORMWATER BASINS WERE SIZED BASED ON GUIDANCE FROM THE CONNECTICUT STORMWATER QUALITY MANUAL (2004).
37. BASIN DESIGN INPUTS ARE INCLUDED ON SHEET SWMP-100.
38. STORMWATER BASINS/BERMS ARE LOCATED IN THE SAME FOOTPRINT AS SEDIMENT BASINS. SEDIMENT BASIN NUMBERING CORRESPONDS TO STORMWATER BASIN/BERM NUMBERING (E.G. SEDIMENT BASIN 1 IS IN THE SAME FOOTPRINT AS STORMWATER BASIN 1).
39. AFTER FINAL STABILIZATION OF THE SITE, THE FOLLOWING SEQUENCE SHALL BE PERFORMED PRIOR TO CONSTRUCTION OF THE PERMANENT STORMWATER CONTROLS:
    - 39.1. SEDIMENT BASINS LOCATED WHERE BIOFILTRATION BASINS OR BERMS ARE LOCATED SHALL BE EXCAVATED TO THE FULL DEPTH OF THE FILTER MEDIA AND RECONSTRUCTED AS DEPICTED ON GRADING & DRAINAGE DESIGN SHEETS.
    - 39.2. SEDIMENT BASINS LOCATED WHERE INFILTRATION BASINS OR BERMS ARE LOCATED SHALL HAVE ANY SEDIMENT ACCUMULATION REMOVED AND SCARIFIED TO 12" BELOW BASIN BOTTOM ELEVATION. FOLLOWING CLEANING AND SCARIFICATION, THE STORMWATER CONTROLS SHALL BE RECONSTRUCTED AS DEPICTED ON GRADING & DRAINAGE DESIGN SHEETS.
40. BERM CONSTRUCTION SHALL BE IN ACCORDANCE WITH NOTES 13-27/C-100



BASIN 3 FOREBAY		
MINIMUM DEPTH (FT)	MINIMUM LENGTH (FT)	STORAGE (FT³)
0.82	327	1,512

4 BASIN PRETREATMENT-FOREBAY, TYP
G&D-302 Scale: NTS

Know what's below. Call before you dig.

soa
SIERRA OVERHEAD ANALYTICS
18859 MICROTRONICS WAY
SONORA, CALIFORNIA 95370
CONNECTICUT PROFESSIONAL ENGINEERING CORPORATION #PEC.0001969

REV	DESCRIPTION	DATE
6	ISSUED FOR CONSTRUCTION - DRAFT	9/4/2020
7	ISSUED FOR CONSTRUCTION - DRAFT	9/18/2020
8	ISSUED FOR CONSTRUCTION - DRAFT	10/22/2020
9	ISSUED FOR CONSTRUCTION - DRAFT	11/06/2020
10	ISSUED FOR CONSTRUCTION	1/20/2021
-	-	-
-	-	-
-	-	-
-	-	-
-	-	-

CONFIDENTIAL:
THE INFORMATION DEPICTED ON THIS DOCUMENT IS PROPRIETARY AND THE SOLE PROPERTY OF SIERRA OVERHEAD ANALYTICS, INC (SOA). ANY USE OR DISCLOSURE OF THIS INFORMATION IS EXPRESSLY PROHIBITED WITHOUT THE PRIOR WRITTEN CONSENT OF SOA.

CS Energy
Building a Cleaner Future
2045 LINCOLN HIGHWAY
EDISON, NEW JERSEY 08817

PROJECT NAME:
STONINGTON SOLAR PROJECT

PROJECT ADDRESS:
ELLA WHEELER RD.
NORTH STONINGTON, CT 06359
41° 25' 9.71"N, 71° 50' 4.83"W

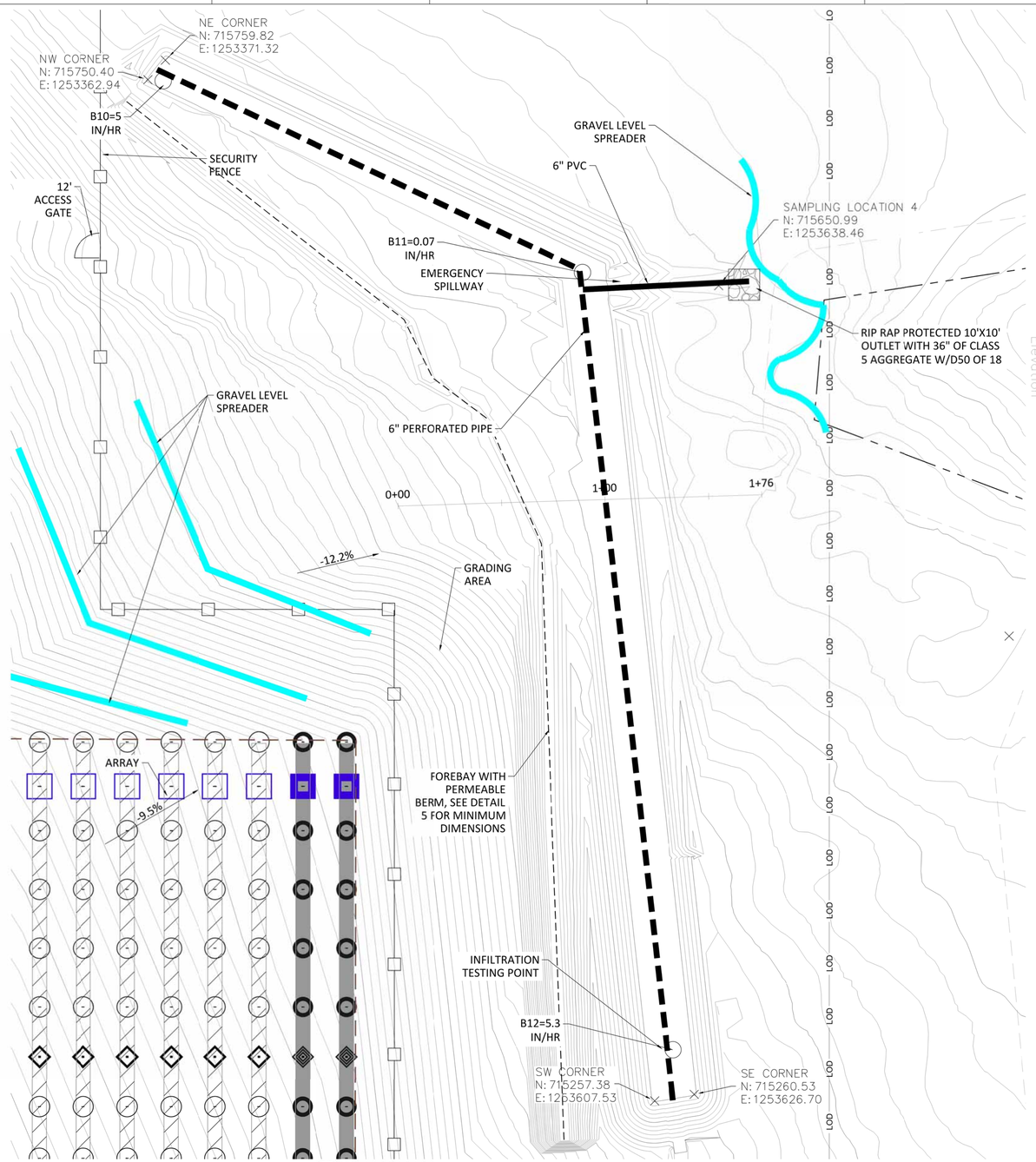
SEAL: STATE OF CONNECTICUT · DARRIN RAY GALLOWAY · No. 34152 · LICENSED PROFESSIONAL ENGINEER

DATE: 21-JAN-20
PROJECT #: 20200309_CT
DRAWN BY: MMM
CHECKED BY: DRG

TITLE: GRADING & DRAINAGE DETAILS
SHEET: G&D-302

PLOT DATE: Tuesday, January 19, 2021

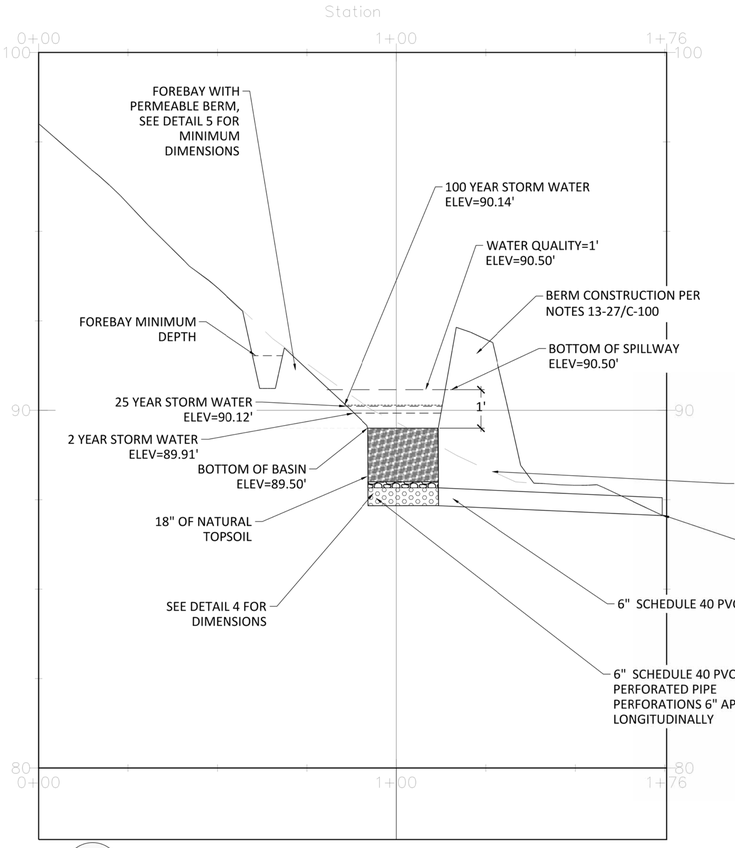
LOCATION: E:\DROPBOX (SOA)\ENGINEERING\CS ENERGY\2020-03-09_STONINGTON\CAD\SITE PLANS.DWG PLOTTED BY: DARIN GALLOWAY



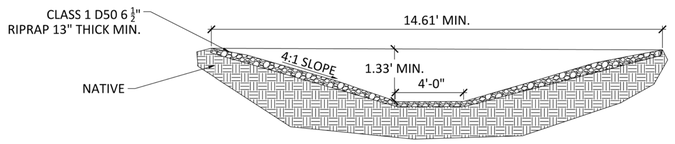
1 STORMWATER BASIN WITH BIORETENTION - BASIN 4
G&D-303 Scale: 1"=20'

STORMWATER BASIN NOTES:

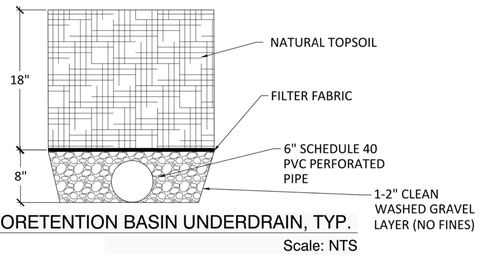
1. STORMWATER BASINS WERE SIZED BASED ON GUIDANCE FROM THE CONNECTICUT STORMWATER QUALITY MANUAL (2004).
2. BASIN DESIGN INPUTS ARE INCLUDED ON SHEET SWMP-100.
3. STORMWATER BASINS/BERMS ARE LOCATED IN THE SAME FOOTPRINT AS SEDIMENT BASINS. SEDIMENT BASIN NUMBERING CORRESPONDS TO STORMWATER BASIN/BERM NUMBERING (E.G. SEDIMENT BASIN 1 IS IN THE SAME FOOTPRINT AS STORMWATER BASIN 1).
4. AFTER FINAL STABILIZATION OF THE SITE, THE FOLLOWING SEQUENCE SHALL BE PERFORMED PRIOR TO CONSTRUCTION OF THE PERMANENT STORMWATER CONTROLS:
   - 4.1. SEDIMENT BASINS LOCATED WHERE BIOFILTRATION BASINS OR BERMS ARE LOCATED SHALL BE EXCAVATED TO THE FULL DEPTH OF THE FILTER MEDIA AND RECONSTRUCTED AS DEPICTED ON GRADING & DRAINAGE DESIGN SHEETS.
   - 4.2. SEDIMENT BASINS LOCATED WHERE INFILTRATION BASINS OR BERMS ARE LOCATED SHALL HAVE ANY SEDIMENT ACCUMULATION REMOVED AND SCARIFIED TO 12" BELOW BASIN BOTTOM ELEVATION. FOLLOWING CLEANING AND SCARIFICATION, THE STORMWATER CONTROLS SHALL BE RECONSTRUCTED AS DEPICTED ON GRADING & DRAINAGE DESIGN SHEETS.
5. BERM CONSTRUCTION SHALL BE IN ACCORDANCE WITH NOTES 13-27/C-100



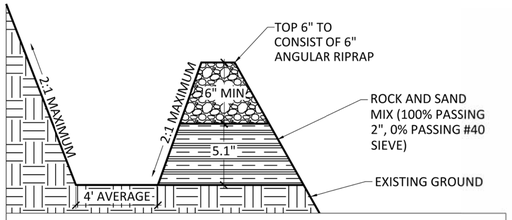
2 STORMWATER BASIN WITH BIORETENTION PROFILE - BASIN 4
G&D-303 Scale: H:1"=20' V:1"=2'



3 EMERGENCY SPILLWAY - BASIN 4
G&D-303 Scale: NTS



4 BIORETENTION BASIN UNDERDRAIN, TYP.
G&D-303 Scale: NTS



BASIN 4 FOREBAY		
MINIMUM DEPTH (FT)	MINIMUM LENGTH (FT)	STORAGE (FT³)
0.925	594	3,191

5 BASIN PRETREATMENT-FOREBAY, TYP
G&D-303 Scale: NTS

MAP LEGEND (1"=1000')



soa
SIERRA OVERHEAD ANALYTICS
18859 MICROTRONICS WAY
SONORA, CALIFORNIA 95370
CONNECTICUT PROFESSIONAL
ENGINEERING CORPORATION #PEC.0001969

REV	DESCRIPTION	DATE
6	ISSUED FOR CONSTRUCTION - DRAFT	9/4/2020
7	ISSUED FOR CONSTRUCTION - DRAFT	9/18/2020
8	ISSUED FOR CONSTRUCTION - DRAFT	10/22/2020
9	ISSUED FOR CONSTRUCTION - DRAFT	11/06/2020
10	ISSUED FOR CONSTRUCTION	1/20/2021
-	-	-
-	-	-
-	-	-
-	-	-
-	-	-
-	-	-

CONFIDENTIAL:
THE INFORMATION DEPICTED ON THIS DOCUMENT IS PROPRIETARY AND THE SOLE PROPERTY OF SIERRA OVERHEAD ANALYTICS, INC (SOA). ANY USE OR DISCLOSURE OF THIS INFORMATION IS EXPRESSLY PROHIBITED WITHOUT THE PRIOR WRITTEN CONSENT OF SOA.

CS Energy
Building a Cleaner Future
2045 LINCOLN HIGHWAY
EDISON, NEW JERSEY 08817

PROJECT NAME:
STONINGTON SOLAR PROJECT

PROJECT ADDRESS:
ELLA WHEELER RD.
NORTH STONINGTON, CT 06359
41° 25' 9.71"N, 71° 50' 4.83"W

SEAL: STATE OF CONNECTICUT · DARIN RAY GALLOWAY · No. 34152 · LICENSED PROFESSIONAL ENGINEER

DATE:	21-JAN-20
PROJECT #:	20200309_CT
DRAWN BY:	MMM
CHECKED BY:	DRG

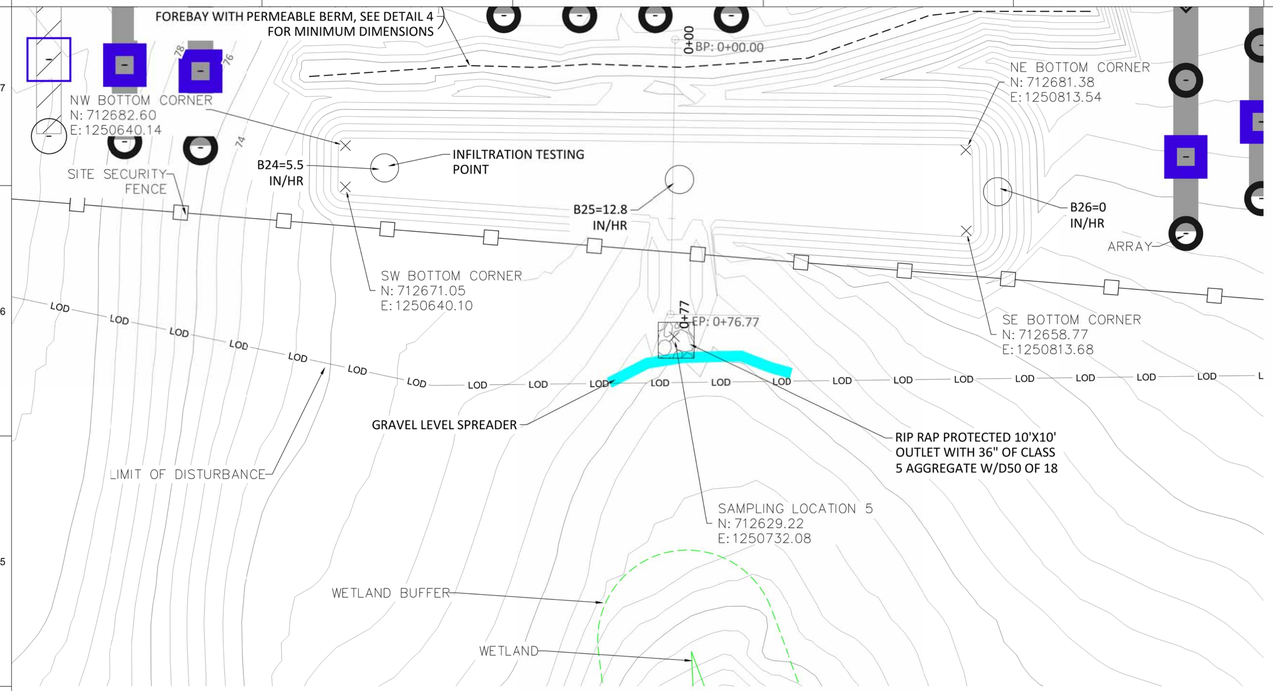
TITLE: GRADING & DRAINAGE DETAILS

SHEET: G&D–303

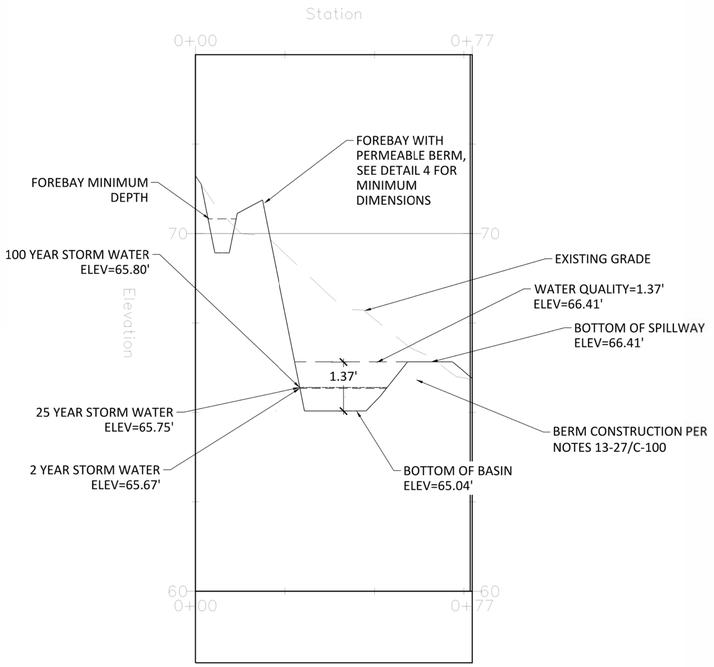
811 Know what's below. Call before you dig.

PLOT DATE: Tuesday, January 19, 2021

LOCATION: E:\DROPBOX (SOA)\ENGINEERING\CS ENERGY\2020-03-09_STONINGTON\CAD\SITE PLANS.DWG PLOTTED BY: DARIN GALLOWAY



1 STORMWATER BASIN WITH INFILTRATION - BASIN 5
G&D-304 Scale: 1"=20'

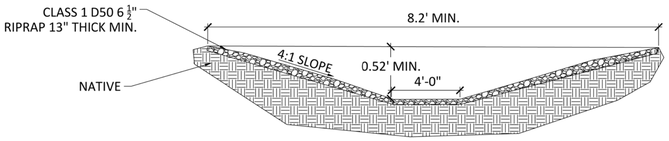


2 STORMWATER BASIN WITH INFILTRATION PROFILE - BASIN 5
G&D-304 Scale: H:1"=20' V:1"=2'

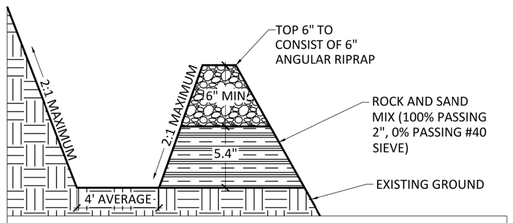
MAP LEGEND (1"=1000')



PLOT DATE: Tuesday, January 19, 2021



3 EMERGENCY SPILLWAY - BASIN 5
G&D-304 Scale: NTS



BASIN 5 FOREBAY		
MINIMUM DEPTH (FT)	MINIMUM LENGTH (FT)	STORAGE (FT³)
0.95	594	3,191

4 BASIN PRETREATMENT-FOREBAY, TYP
G&D-304 Scale: NTS

STORMWATER BASIN NOTES:

36. STORMWATER BASINS WERE SIZED BASED ON GUIDANCE FROM THE CONNECTICUT STORMWATER QUALITY MANUAL (2004).
37. BASIN DESIGN INPUTS ARE INCLUDED ON SHEET SWMP-100.
38. STORMWATER BASINS/BERMS ARE LOCATED IN THE SAME FOOTPRINT AS SEDIMENT BASINS. SEDIMENT BASIN NUMBERING CORRESPONDS TO STORMWATER BASIN/BERM NUMBERING (E.G. SEDIMENT BASIN 1 IS IN THE SAME FOOTPRINT AS STORMWATER BASIN 1).
39. AFTER FINAL STABILIZATION OF THE SITE, THE FOLLOWING SEQUENCE SHALL BE PERFORMED PRIOR TO CONSTRUCTION OF THE PERMANENT STORMWATER CONTROLS:
    39.1. SEDIMENT BASINS LOCATED WHERE BIOFILTRATION BASINS OR BERMS ARE LOCATED SHALL BE EXCAVATED TO THE FULL DEPTH OF THE FILTER MEDIA AND RECONSTRUCTED AS DEPICTED ON GRADING & DRAINAGE DESIGN SHEETS.
    39.2. SEDIMENT BASINS LOCATED WHERE INFILTRATION BASINS OR BERMS ARE LOCATED SHALL HAVE ANY SEDIMENT ACCUMULATION REMOVED AND SCARIFIED TO 12" BELOW BASIN BOTTOM ELEVATION. FOLLOWING CLEANING AND SCARIFICATION, THE STORMWATER CONTROLS SHALL BE RECONSTRUCTED AS DEPICTED ON GRADING & DRAINAGE DESIGN SHEETS.
40. BERM CONSTRUCTION SHALL BE IN ACCORDANCE WITH NOTES 13-27/C-100

Know what's below. Call before you dig.

REV	DESCRIPTION	DATE
6	ISSUED FOR CONSTRUCTION - DRAFT	9/4/2020
7	ISSUED FOR CONSTRUCTION - DRAFT	9/18/2020
8	ISSUED FOR CONSTRUCTION - DRAFT	10/22/2020
9	ISSUED FOR CONSTRUCTION - DRAFT	11/06/2020
10	ISSUED FOR CONSTRUCTION	1/20/2021
-	-	-
-	-	-
-	-	-
-	-	-
-	-	-

CONFIDENTIAL:
THE INFORMATION DEPICTED ON THIS DOCUMENT IS PROPRIETARY AND THE SOLE PROPERTY OF SIERRA OVERHEAD ANALYTICS, INC (SOA). ANY USE OR DISCLOSURE OF THIS INFORMATION IS EXPRESSLY PROHIBITED WITHOUT THE PRIOR WRITTEN CONSENT OF SOA.

SIERRA OVERHEAD ANALYTICS
18859 MICROTRONICS WAY
SONORA, CALIFORNIA 95370
CONNECTICUT PROFESSIONAL ENGINEERING CORPORATION #PEC.0001969

CS Energy Building a Cleaner Future
2045 LINCOLN HIGHWAY
EDISON, NEW JERSEY 08817

PROJECT NAME:
STONINGTON SOLAR PROJECT

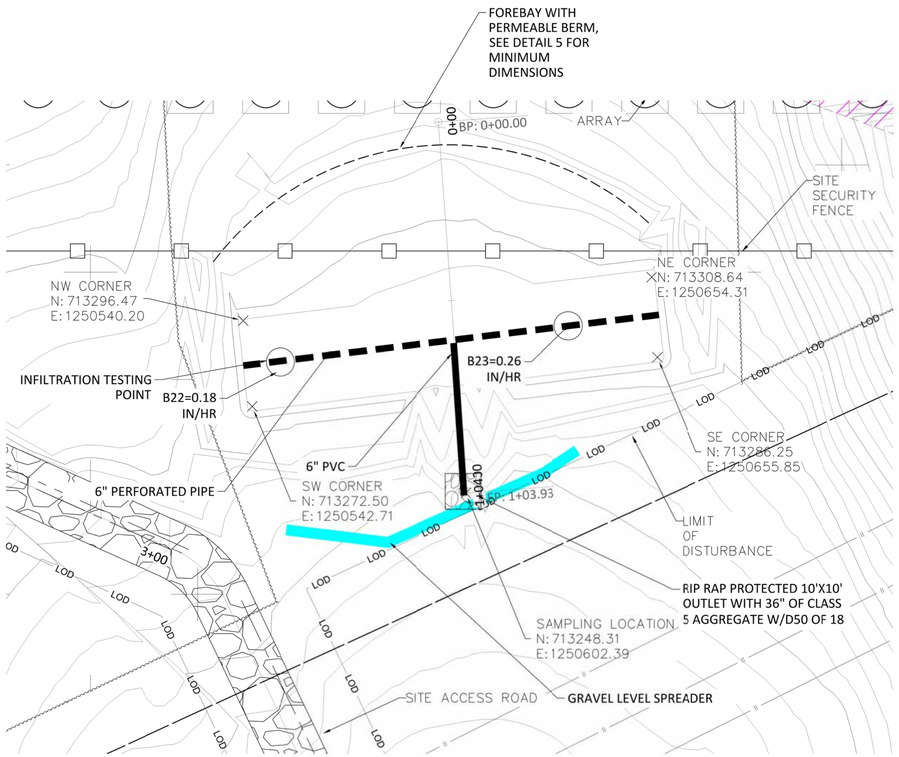
PROJECT ADDRESS:
ELLA WHEELER RD.
NORTH STONINGTON, CT 06359
41° 25' 9.71"N, 71° 50' 4.83"W

SEAL: STATE OF CONNECTICUT · DARIN RAY GALLOWAY · No. 34152 · LICENSED PROFESSIONAL ENGINEER

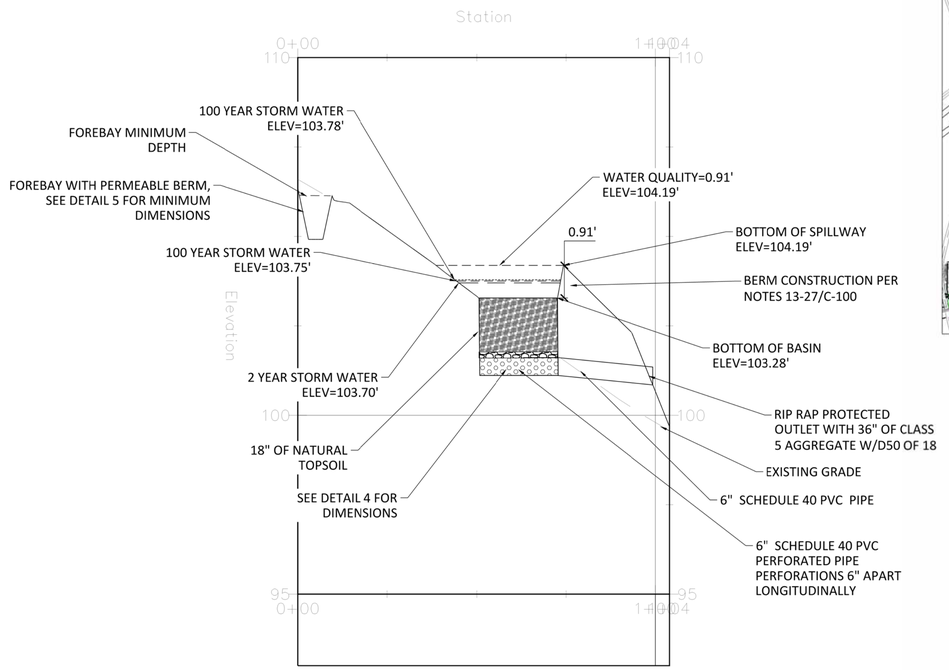
DATE: 21-JAN-20
PROJECT #: 20200309_CT
DRAWN BY: MMM
CHECKED BY: DRG

TITLE: GRADING & DRAINAGE DETAILS
SHEET: G&D–304

LOCATION: E:\DROPBOX (SOA)\ENGINEERING\CS ENERGY\2020-03-09_STONINGTON\CAD\SITE PLANS.DWG PLOTTED BY: DARIN GALLOWAY



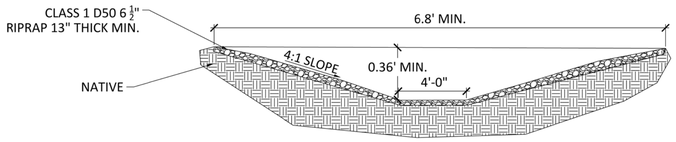
1 STORMWATER BASIN WITH BIORETENTION - BASIN 6
G&D-305 Scale: 1"=20'



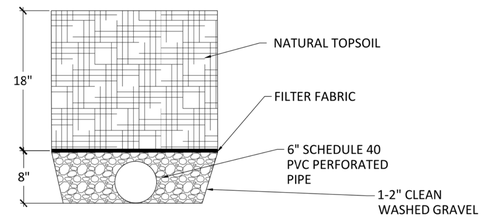
2 STORMWATER BASIN WITH BIORETENTION PROFILE - BASIN 6
G&D-305 Scale: H:1"=20' V:1"=2'

MAP LEGEND (1"=1000')





3 EMERGENCY SPILLWAY - BASIN 6
G&D-305 Scale: NTS



4 BIORETENTION BASIN UNDERDRAIN, TYP.
G&D-305 Scale: NTS

STORMWATER BASIN NOTES:

36. STORMWATER BASINS WERE SIZED BASED ON GUIDANCE FROM THE CONNECTICUT STORMWATER QUALITY MANUAL (2004).

37. BASIN DESIGN INPUTS ARE INCLUDED ON SHEET SWMP-100.

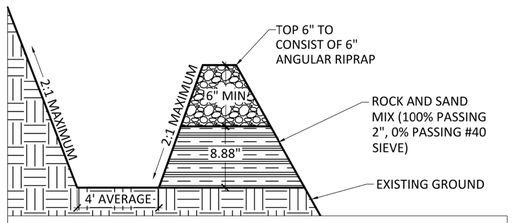
38. STORMWATER BASINS/BERMS ARE LOCATED IN THE SAME FOOTPRINT AS SEDIMENT BASINS. SEDIMENT BASIN NUMBERING CORRESPONDS TO STORMWATER BASIN/BERM NUMBERING (E.G. SEDIMENT BASIN 1 IS IN THE SAME FOOTPRINT AS STORMWATER BASIN 1).

39. AFTER FINAL STABILIZATION OF THE SITE, THE FOLLOWING SEQUENCE SHALL BE PERFORMED PRIOR TO CONSTRUCTION OF THE PERMANENT STORMWATER CONTROLS:

39.1. SEDIMENT BASINS LOCATED WHERE BIOFILTRATION BASINS OR BERMS ARE LOCATED SHALL BE EXCAVATED TO THE FULL DEPTH OF THE FILTER MEDIA AND RECONSTRUCTED AS DEPICTED ON GRADING & DRAINAGE DESIGN SHEETS.

39.2. SEDIMENT BASINS LOCATED WHERE INFILTRATION BASINS OR BERMS ARE LOCATED SHALL HAVE ANY SEDIMENT ACCUMULATION REMOVED AND SCARIFIED TO 12" BELOW BASIN BOTTOM ELEVATION. FOLLOWING CLEANING AND SCARIFICATION, THE STORMWATER CONTROLS SHALL BE RECONSTRUCTED AS DEPICTED ON GRADING & DRAINAGE DESIGN SHEETS.

40. BERM CONSTRUCTION SHALL BE IN ACCORDANCE WITH NOTES 13-27/C-100



BASIN 6 FOREBAY		
MINIMUM DEPTH (FT)	MINIMUM LENGTH (FT)	STORAGE (FT³)
1.24	135	920

4 BASIN PRETREATMENT-FOREBAY, TYP
G&D-305 Scale: NTS

Know what's below. Call before you dig.

soa
SIERRA OVERHEAD ANALYTICS
18859 MICROTRONICS WAY
SONORA, CALIFORNIA 95370
CONNECTICUT PROFESSIONAL ENGINEERING CORPORATION #PEC.0001969

REV	DESCRIPTION	DATE
6	ISSUED FOR CONSTRUCTION - DRAFT	9/4/2020
7	ISSUED FOR CONSTRUCTION - DRAFT	9/18/2020
8	ISSUED FOR CONSTRUCTION - DRAFT	10/22/2020
9	ISSUED FOR CONSTRUCTION - DRAFT	11/06/2020
10	ISSUED FOR CONSTRUCTION	1/20/2021
-	-	-
-	-	-
-	-	-
-	-	-
-	-	-

CONFIDENTIAL:
THE INFORMATION DEPICTED ON THIS DOCUMENT IS PROPRIETARY AND THE SOLE PROPERTY OF SIERRA OVERHEAD ANALYTICS, INC (SOA). ANY USE OR DISCLOSURE OF THIS INFORMATION IS EXPRESSLY PROHIBITED WITHOUT THE PRIOR WRITTEN CONSENT OF SOA.

CS Energy
Building a Cleaner Future
2045 LINCOLN HIGHWAY
EDISON, NEW JERSEY 08817

PROJECT NAME:
STONINGTON SOLAR PROJECT

PROJECT ADDRESS:
ELLA WHEELER RD.
NORTH STONINGTON, CT 06359
41° 25' 9.71"N, 71° 50' 4.83"W

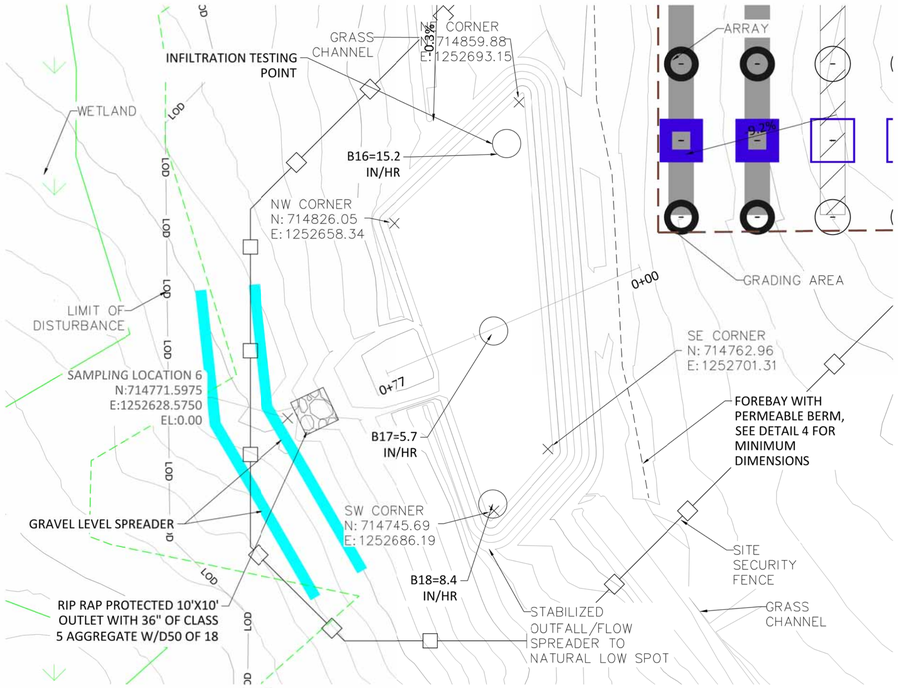
SEAL: STATE OF CONNECTICUT · DARRIN RAY GALLOWAY · No. 34152 · LICENSED PROFESSIONAL ENGINEER

DATE: 21-JAN-20
PROJECT #: 20200309_CT
DRAWN BY: MMM
CHECKED BY: DRG

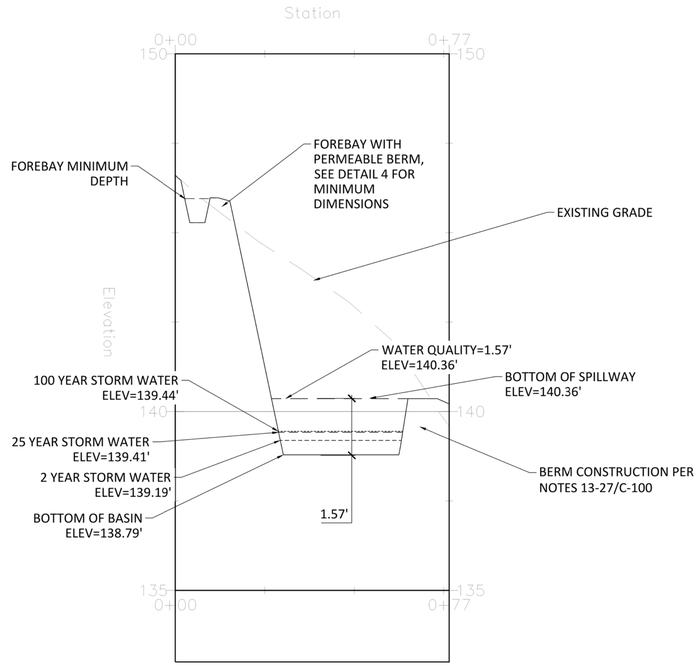
TITLE: GRADING & DRAINAGE DETAILS
SHEET: G&D-305

PLOT DATE: Tuesday, January 19, 2021

LOCATION: E:\DROPBOX (SOA)\ENGINEERING\CS ENERGY\2020-03-09_STONINGTON\CAD\SITE PLANS.DWG PLOTTED BY: DARIN GALLOWAY



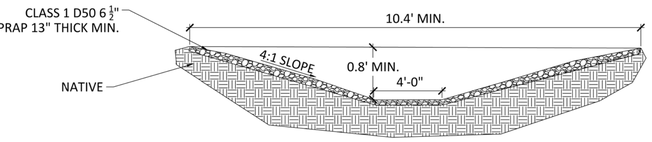
1 STORMWATER BASIN WITH INFILTRATION - BASIN 7
G&D-306 Scale: 1"=20'



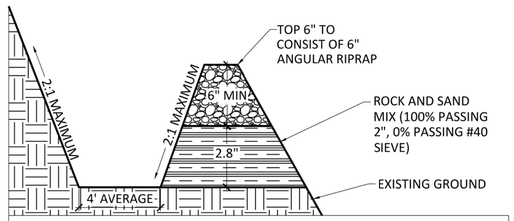
2 STORMWATER BASIN WITH INFILTRATION PROFILE - BASIN 7
G&D-306 Scale: H:1"=20' V:1"=2'

MAP LEGEND (1"=1000')





3 EMERGENCY SPILLWAY - BASIN 7
G&D-306 Scale: NTS



BASIN 7 FOREBAY		
MINIMUM DEPTH (FT)	MINIMUM LENGTH (FT)	STORAGE (FT³)
0.73	347	1,383

4 BASIN PRETREATMENT-FOREBAY, TYP
G&D-306 Scale: NTS

STORMWATER BASIN NOTES:

36. STORMWATER BASINS WERE SIZED BASED ON GUIDANCE FROM THE CONNECTICUT STORMWATER QUALITY MANUAL (2004).
37. BASIN DESIGN INPUTS ARE INCLUDED ON SHEET SWMP-100.
38. STORMWATER BASINS/BERMS ARE LOCATED IN THE SAME FOOTPRINT AS SEDIMENT BASINS. SEDIMENT BASIN NUMBERING CORRESPONDS TO STORMWATER BASIN/BERM NUMBERING (E.G. SEDIMENT BASIN 1 IS IN THE SAME FOOTPRINT AS STORMWATER BASIN 1).
39. AFTER FINAL STABILIZATION OF THE SITE, THE FOLLOWING SEQUENCE SHALL BE PERFORMED PRIOR TO CONSTRUCTION OF THE PERMANENT STORMWATER CONTROLS:
    39.1. SEDIMENT BASINS LOCATED WHERE BIOFILTRATION BASINS OR BERMS ARE LOCATED SHALL BE EXCAVATED TO THE FULL DEPTH OF THE FILTER MEDIA AND RECONSTRUCTED AS DEPICTED ON GRADING & DRAINAGE DESIGN SHEETS.
    39.2. SEDIMENT BASINS LOCATED WHERE INFILTRATION BASINS OR BERMS ARE LOCATED SHALL HAVE ANY SEDIMENT ACCUMULATION REMOVED AND SCARIFIED TO 12" BELOW BASIN BOTTOM ELEVATION. FOLLOWING CLEANING AND SCARIFICATION, THE STORMWATER CONTROLS SHALL BE RECONSTRUCTED AS DEPICTED ON GRADING & DRAINAGE DESIGN SHEETS.
40. BERM CONSTRUCTION SHALL BE IN ACCORDANCE WITH NOTES 13-27/C-100

Know what's below. Call before you dig.

soa
SIERRA OVERHEAD ANALYTICS
18859 MICROTRONICS WAY
SONORA, CALIFORNIA 95370
CONNECTICUT PROFESSIONAL ENGINEERING CORPORATION #PEC.0001969

REV	DESCRIPTION	DATE
6	ISSUED FOR CONSTRUCTION - DRAFT	9/4/2020
7	ISSUED FOR CONSTRUCTION - DRAFT	9/18/2020
8	ISSUED FOR CONSTRUCTION - DRAFT	10/22/2020
9	ISSUED FOR CONSTRUCTION - DRAFT	11/06/2020
10	ISSUED FOR CONSTRUCTION	1/20/2021
-	-	-
-	-	-
-	-	-
-	-	-
-	-	-

CONFIDENTIAL:
THE INFORMATION DEPICTED ON THIS DOCUMENT IS PROPRIETARY AND THE SOLE PROPERTY OF SIERRA OVERHEAD ANALYTICS, INC (SOA). ANY USE OR DISCLOSURE OF THIS INFORMATION IS EXPRESSLY PROHIBITED WITHOUT THE PRIOR WRITTEN CONSENT OF SOA.

CS Energy
Building a Cleaner Future
2045 LINCOLN HIGHWAY
EDISON, NEW JERSEY 08817

PROJECT NAME:
STONINGTON SOLAR PROJECT

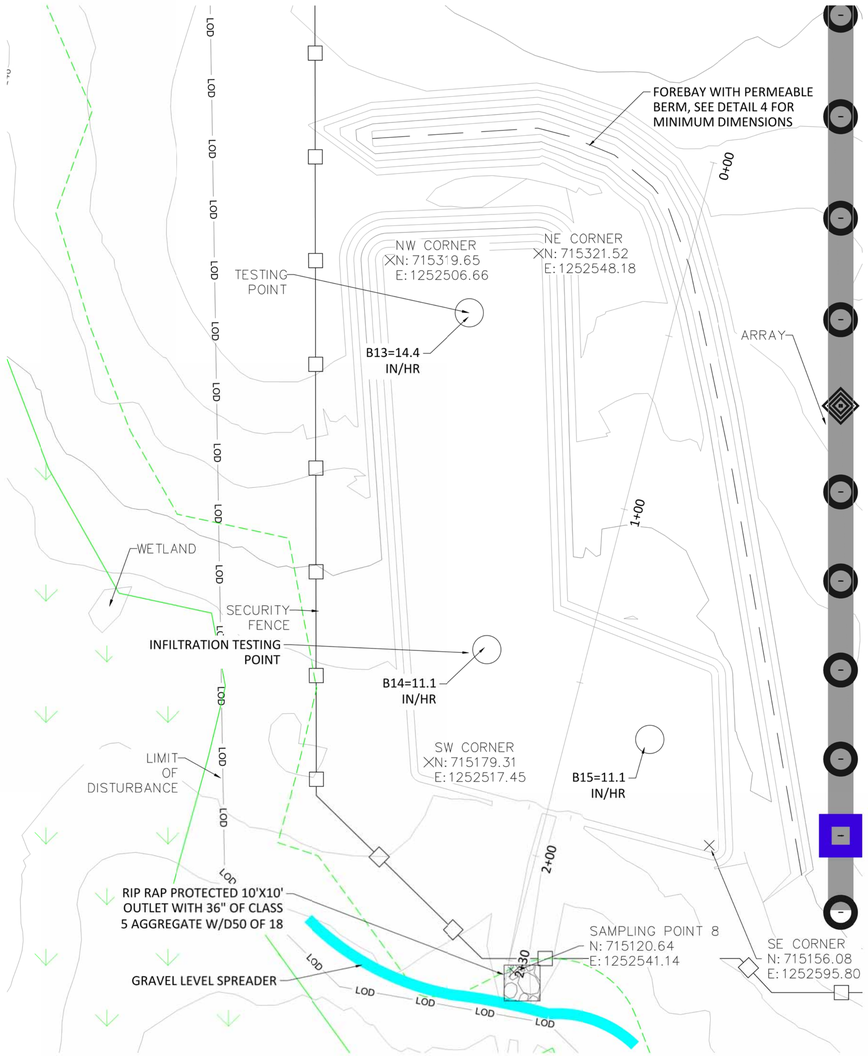
PROJECT ADDRESS:
ELLA WHEELER RD.
NORTH STONINGTON, CT 06359
41° 25' 9.71"N, 71° 50' 4.83"W

SEAL: STATE OF CONNECTICUT · DARIN RAY GALLOWAY · No. 34152 · LICENSED PROFESSIONAL ENGINEER

DATE: 21-JAN-20
PROJECT #: 20200309_CT
DRAWN BY: MMM
CHECKED BY: DRG

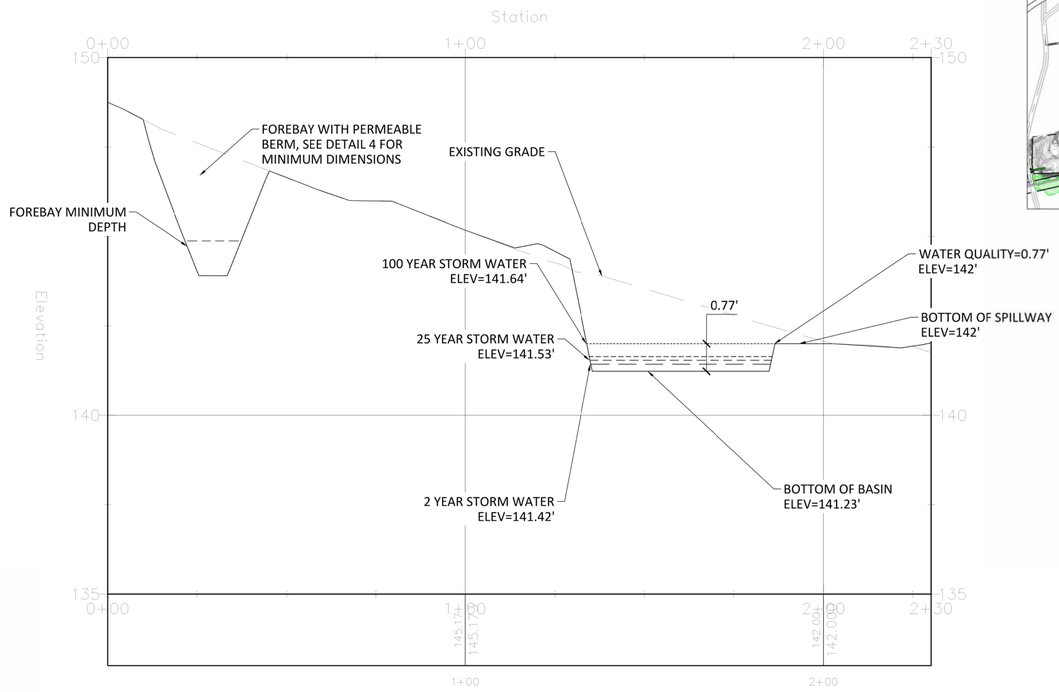
TITLE: GRADING & DRAINAGE DETAILS
SHEET: G&D–306

PLOT DATE: Tuesday, January 19, 2021



1 G&D-307 **STORMWATER BASIN WITH INFILTRATION - BASIN 8**

Scale: 1"=20'

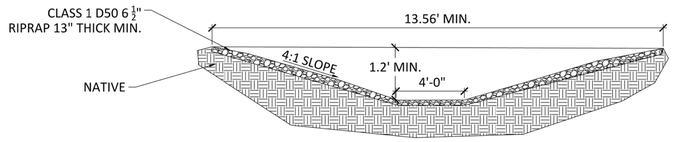


2 G&D-307 **STORMWATER BASIN WITH INFILTRATION PROFILE - BASIN 8**

Scale: H:1"=20' V:1"=2'

MAP LEGEND (1"=1000')





3 G&D-307 **EMERGENCY SPILLWAY - BASIN 8**

Scale: NTS

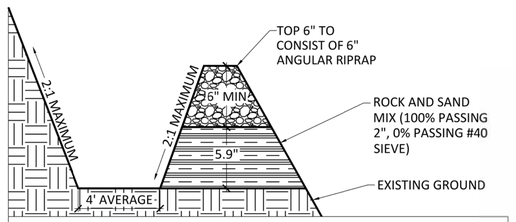
STORMWATER BASIN NOTES:

36. STORMWATER BASINS WERE SIZED BASED ON GUIDANCE FROM THE CONNECTICUT STORMWATER QUALITY MANUAL (2004).
37. BASIN DESIGN INPUTS ARE INCLUDED ON SHEET SWMP-100.
38. STORMWATER BASINS/BERMS ARE LOCATED IN THE SAME FOOTPRINT AS SEDIMENT BASINS. SEDIMENT BASIN NUMBERING CORRESPONDS TO STORMWATER BASIN/BERM NUMBERING (E.G. SEDIMENT BASIN 1 IS IN THE SAME FOOTPRINT AS STORMWATER BASIN 1).
39. AFTER FINAL STABILIZATION OF THE SITE, THE FOLLOWING SEQUENCE SHALL BE PERFORMED PRIOR TO CONSTRUCTION OF THE PERMANENT STORMWATER CONTROLS:

39.1. SEDIMENT BASINS LOCATED WHERE BIOFILTRATION BASINS OR BERMS ARE LOCATED SHALL BE EXCAVATED TO THE FULL DEPTH OF THE FILTER MEDIA AND RECONSTRUCTED AS DEPICTED ON GRADING & DRAINAGE DESIGN SHEETS.

39.2. SEDIMENT BASINS LOCATED WHERE INFILTRATION BASINS OR BERMS ARE LOCATED SHALL HAVE ANY SEDIMENT ACCUMULATION REMOVED AND SCARIFIED TO 12" BELOW BASIN BOTTOM ELEVATION. FOLLOWING CLEANING AND SCARIFICATION, THE STORMWATER CONTROLS SHALL BE RECONSTRUCTED AS DEPICTED ON GRADING & DRAINAGE DESIGN SHEETS.

40. BERM CONSTRUCTION SHALL BE IN ACCORDANCE WITH NOTES 13-27/C-100



BASIN 8 FOREBAY		
MINIMUM DEPTH (FT)	MINIMUM LENGTH (FT)	STORAGE (FT³)
0.99	280	1,657

4 G&D-307 **BASIN PRETREATMENT-FOREBAY, TYP**

Scale: NTS

811 Know what's below. Call before you dig.

soa
SIERRA OVERHEAD ANALYTICS
18859 MICROTRONICS WAY
SONORA, CALIFORNIA 95370
CONNECTICUT PROFESSIONAL ENGINEERING CORPORATION #PEC.0001969

REV	DESCRIPTION	DATE
6	ISSUED FOR CONSTRUCTION - DRAFT	9/4/2020
7	ISSUED FOR CONSTRUCTION - DRAFT	9/18/2020
8	ISSUED FOR CONSTRUCTION - DRAFT	10/22/2020
9	ISSUED FOR CONSTRUCTION - DRAFT	11/06/2020
10	ISSUED FOR CONSTRUCTION	1/20/2021
-	-	-
-	-	-
-	-	-
-	-	-
-	-	-

CONFIDENTIAL:
THE INFORMATION DEPICTED ON THIS DOCUMENT IS PROPRIETARY AND THE SOLE PROPERTY OF SIERRA OVERHEAD ANALYTICS, INC (SOA). ANY USE OR DISCLOSURE OF THIS INFORMATION IS EXPRESSLY PROHIBITED WITHOUT THE PRIOR WRITTEN CONSENT OF SOA.

CS Energy
Building a Cleaner Future
2045 LINCOLN HIGHWAY
EDISON, NEW JERSEY 08817

PROJECT NAME:
STONINGTON SOLAR PROJECT

PROJECT ADDRESS:
ELLA WHEELER RD.
NORTH STONINGTON, CT 06359
41° 25' 9.71"N, 71° 50' 4.83"W

SEAL: STATE OF CONNECTICUT · DARIN RAY GALLOWAY · No. 34152 · LICENSED PROFESSIONAL ENGINEER

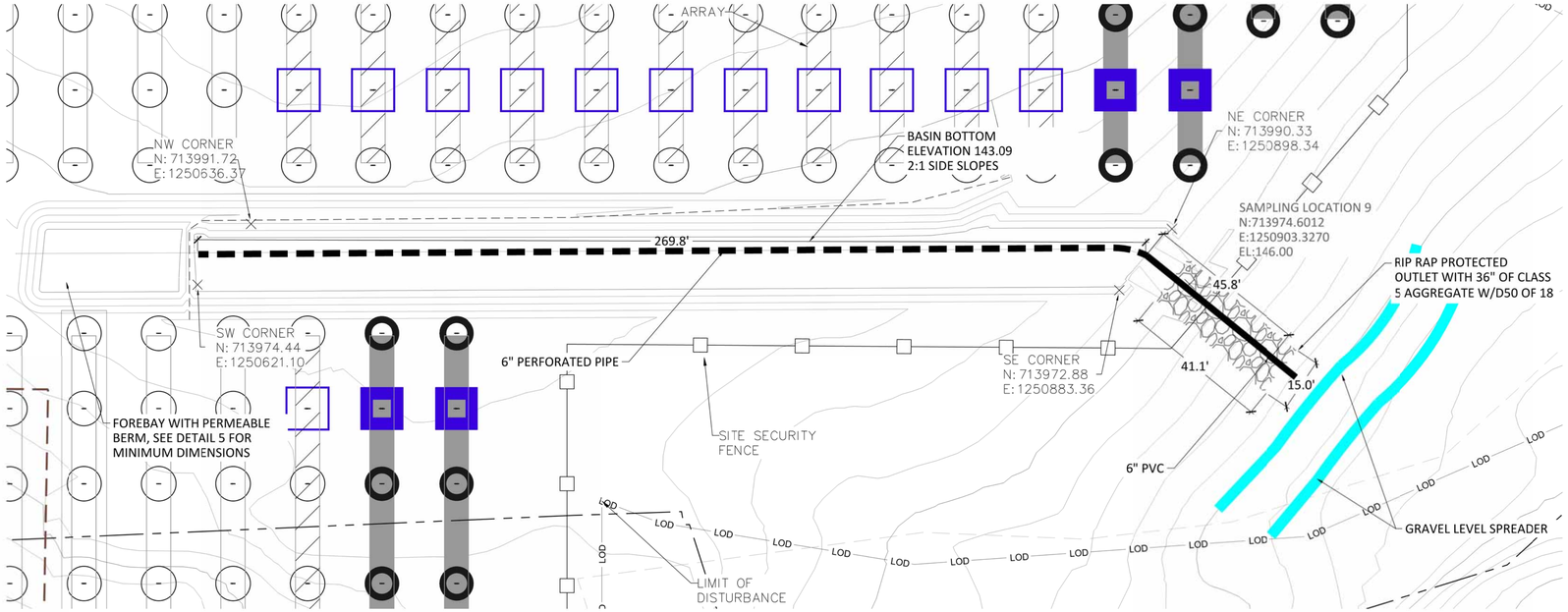
DATE: 21-JAN-20
PROJECT #: 20200309_CT
DRAWN BY: MMM
CHECKED BY: DRG

TITLE: GRADING & DRAINAGE DETAILS

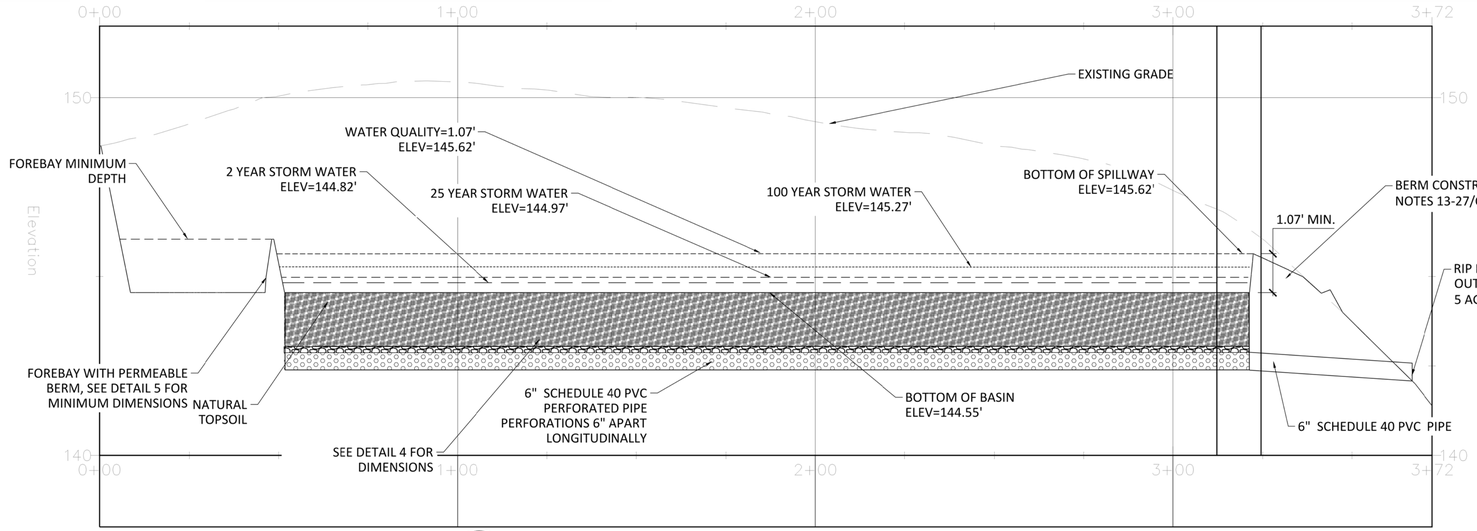
SHEET: G&D-307

PLOT DATE: Tuesday, January 19, 2021

LOCATION: E:\DROPBOX (SOA)\ENGINEERING\CS ENERGY\2020-03-09_STONINGTON\CAD\SITE PLANS.DWG PLOTTED BY: DARIN GALLOWAY



1 STORMWATER BASIN WITH BIORETENTION - BASIN 9
G&D-308 Scale: 1"=20'



2 STORMWATER BASIN WITH BIORETENTION PROFILE - BASIN 9
G&D-308 Scale: H:1"=20' V:1"=2'

STORMWATER BASIN NOTES:

36. STORMWATER BASINS WERE SIZED BASED ON GUIDANCE FROM THE CONNECTICUT STORMWATER QUALITY MANUAL (2004).
37. BASIN DESIGN INPUTS ARE INCLUDED ON SHEET SWMP-100.
38. STORMWATER BASINS/BERMS ARE LOCATED IN THE SAME FOOTPRINT AS SEDIMENT BASINS. SEDIMENT BASIN NUMBERING CORRESPONDS TO STORMWATER BASIN/BERM NUMBERING (E.G. SEDIMENT BASIN 1 IS IN THE SAME FOOTPRINT AS STORMWATER BASIN 1).
39. AFTER FINAL STABILIZATION OF THE SITE, THE FOLLOWING SEQUENCE SHALL BE PERFORMED PRIOR TO CONSTRUCTION OF THE PERMANENT STORMWATER CONTROLS:

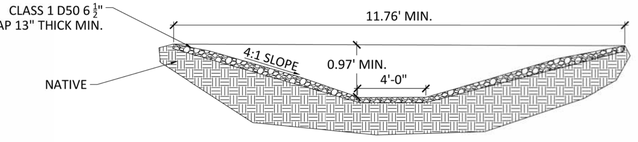
39.1. SEDIMENT BASINS LOCATED WHERE BIOFILTRATION BASINS OR BERMS ARE LOCATED SHALL BE EXCAVATED TO THE FULL DEPTH OF THE FILTER MEDIA AND RECONSTRUCTED AS DEPICTED ON GRADING & DRAINAGE DESIGN SHEETS.

39.2. SEDIMENT BASINS LOCATED WHERE INFILTRATION BASINS OR BERMS ARE LOCATED SHALL HAVE ANY SEDIMENT ACCUMULATION REMOVED AND SCARIFIED TO 12" BELOW BASIN BOTTOM ELEVATION. FOLLOWING CLEANING AND SCARIFICATION, THE STORMWATER CONTROLS SHALL BE RECONSTRUCTED AS DEPICTED ON GRADING & DRAINAGE DESIGN SHEETS.

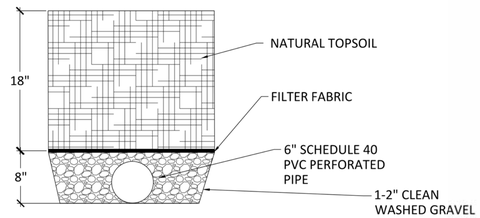
40. BERM CONSTRUCTION SHALL BE IN ACCORDANCE WITH NOTES 13-27/C-100

MAP LEGEND (1"=1000')

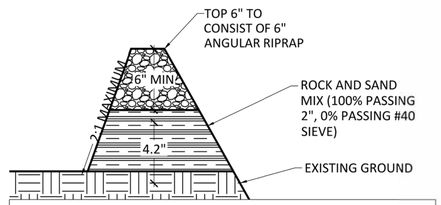




3 EMERGENCY SPILLWAY - BASIN 9
G&D-308 Scale: NTS



4 BIORETENTION BASIN UNDERDRAIN, TYP.
G&D-308 Scale: NTS



BASIN 9 FOREBAY	
MINIMUM DEPTH (FT)	STORAGE (FT³)
1.5	1,316

5 BASIN PRETREATMENT-FOREBAY, TYP
G&D-308 Scale: NTS

Know what's below. Call before you dig.

soa
SIERRA OVERHEAD ANALYTICS
18859 MICROTRONICS WAY
SONORA, CALIFORNIA 95370
CONNECTICUT PROFESSIONAL
ENGINEERING CORPORATION #PEC.0001969

REV	DESCRIPTION	DATE
6	ISSUED FOR CONSTRUCTION - DRAFT	9/4/2020
7	ISSUED FOR CONSTRUCTION - DRAFT	9/18/2020
8	ISSUED FOR CONSTRUCTION - DRAFT	10/22/2020
9	ISSUED FOR CONSTRUCTION - DRAFT	11/06/2020
10	ISSUED FOR CONSTRUCTION	1/20/2021
-	-	-
-	-	-
-	-	-
-	-	-
-	-	-

CONFIDENTIAL:
THE INFORMATION DEPICTED ON THIS DOCUMENT IS PROPRIETARY AND THE SOLE PROPERTY OF SIERRA OVERHEAD ANALYTICS, INC (SOA). ANY USE OR DISCLOSURE OF THIS INFORMATION IS EXPRESSLY PROHIBITED WITHOUT THE PRIOR WRITTEN CONSENT OF SOA.

CS Energy
Building a Cleaner Future
2045 LINCOLN HIGHWAY
EDISON, NEW JERSEY 08817

PROJECT NAME:
STONINGTON SOLAR PROJECT

PROJECT ADDRESS:
ELLA WHEELER RD.
NORTH STONINGTON, CT 06359
41° 25' 9.71"N, 71° 50' 4.83"W

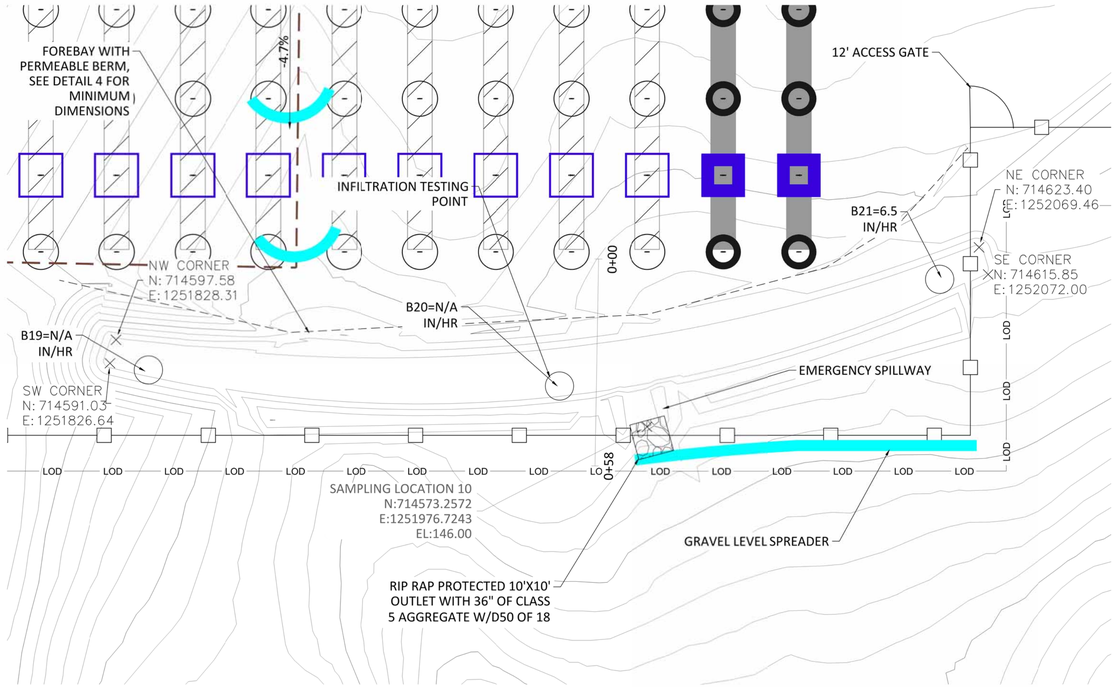
SEAL: STATE OF CONNECTICUT · DARIN RAY GALLOWAY · No. 34152 · LICENSED PROFESSIONAL ENGINEER

DATE: 21-JAN-20
PROJECT #: 20200309_CT
DRAWN BY: MMM
CHECKED BY: DRG

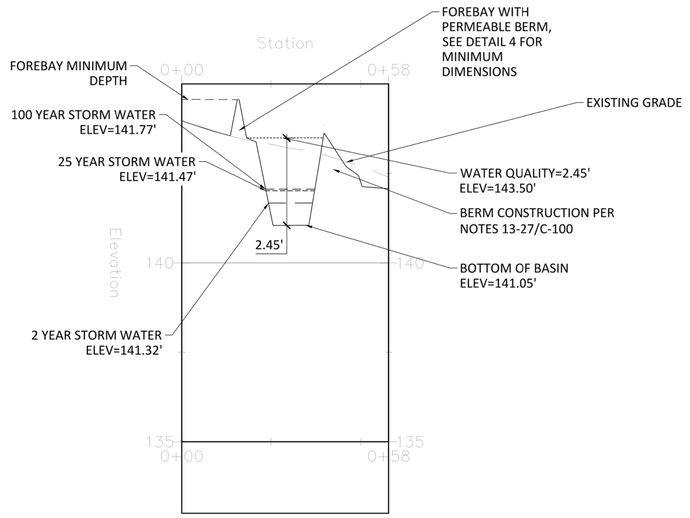
TITLE: GRADING & DRAINAGE DETAILS

SHEET: G&D–308

PLOT DATE: Tuesday, January 19, 2021

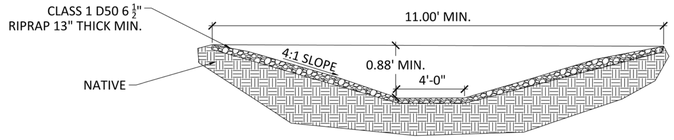


1 STORMWATER BASIN WITH INFILTRATION - BASIN 10
G&D-309 Scale: 1"=20'

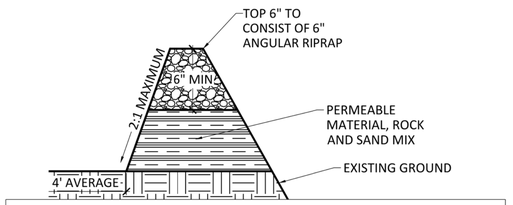


2 STORMWATER BASIN WITH INFILTRATION PROFILE - BASIN 10
G&D-309 Scale: H:1"=20' V:1"=2'





3 EMERGENCY SPILLWAY - BASIN 10
G&D-309 Scale: NTS



BASIN 10 FOREBAY		
MINIMUM DEPTH (FT)	MINIMUM LENGTH (FT)	STORAGE (FT³)
1	142	2,416

4 BASIN PRETREATMENT-FOREBAY, TYP
G&D-309 Scale: NTS

STORMWATER BASIN NOTES:

36. STORMWATER BASINS WERE SIZED BASED ON GUIDANCE FROM THE CONNECTICUT STORMWATER QUALITY MANUAL (2004).

37. BASIN DESIGN INPUTS ARE INCLUDED ON SHEET SWMP-100.

38. STORMWATER BASINS/BERMS ARE LOCATED IN THE SAME FOOTPRINT AS SEDIMENT BASINS. SEDIMENT BASIN NUMBERING CORRESPONDS TO STORMWATER BASIN/BERM NUMBERING (E.G. SEDIMENT BASIN 1 IS IN THE SAME FOOTPRINT AS STORMWATER BASIN 1).

39. AFTER FINAL STABILIZATION OF THE SITE, THE FOLLOWING SEQUENCE SHALL BE PERFORMED PRIOR TO CONSTRUCTION OF THE PERMANENT STORMWATER CONTROLS:

39.1. SEDIMENT BASINS LOCATED WHERE BIOFILTRATION BASINS OR BERMS ARE LOCATED SHALL BE EXCAVATED TO THE FULL DEPTH OF THE FILTER MEDIA AND RECONSTRUCTED AS DEPICTED ON GRADING & DRAINAGE DESIGN SHEETS.

39.2. SEDIMENT BASINS LOCATED WHERE INFILTRATION BASINS OR BERMS ARE LOCATED SHALL HAVE ANY SEDIMENT ACCUMULATION REMOVED AND SCARIFIED TO 12" BELOW BASIN BOTTOM ELEVATION. FOLLOWING CLEANING AND SCARIFICATION, THE STORMWATER CONTROLS SHALL BE RECONSTRUCTED AS DEPICTED ON GRADING & DRAINAGE DESIGN SHEETS.

40. BERM CONSTRUCTION SHALL BE IN ACCORDANCE WITH NOTES 13-27/C-100

soa
SIERRA OVERHEAD ANALYTICS
18359 MICROTRONICS WAY
SONORA, CALIFORNIA 95370
CONNECTICUT PROFESSIONAL ENGINEERING CORPORATION #PEC.0001969

REV	DESCRIPTION	DATE
6	ISSUED FOR CONSTRUCTION - DRAFT	9/4/2020
7	ISSUED FOR CONSTRUCTION - DRAFT	9/18/2020
8	ISSUED FOR CONSTRUCTION - DRAFT	10/22/2020
9	ISSUED FOR CONSTRUCTION - DRAFT	11/06/2020
10	ISSUED FOR CONSTRUCTION	1/20/2021
-	-	-
-	-	-
-	-	-
-	-	-
-	-	-

CONFIDENTIALITY:
THE INFORMATION DEPICTED ON THIS DOCUMENT IS PROPRIETARY AND THE SOLE PROPERTY OF SIERRA OVERHEAD ANALYTICS, INC (SOA). ANY USE OR DISCLOSURE OF THIS INFORMATION IS EXPRESSLY PROHIBITED WITHOUT THE PRIOR WRITTEN CONSENT OF SOA.

CS Energy
Building a Cleaner Future
2045 LINCOLN HIGHWAY
EDISON, NEW JERSEY 08817

PROJECT NAME:
STONINGTON SOLAR PROJECT

PROJECT ADDRESS:
ELLA WHEELER RD.
NORTH STONINGTON, CT 06359
41° 25' 9.71"N, 71° 50' 4.83"W

SEAL: STATE OF CONNECTICUT · DARIN RAY GALLOWAY · No. 34152 · LICENSED PROFESSIONAL ENGINEER

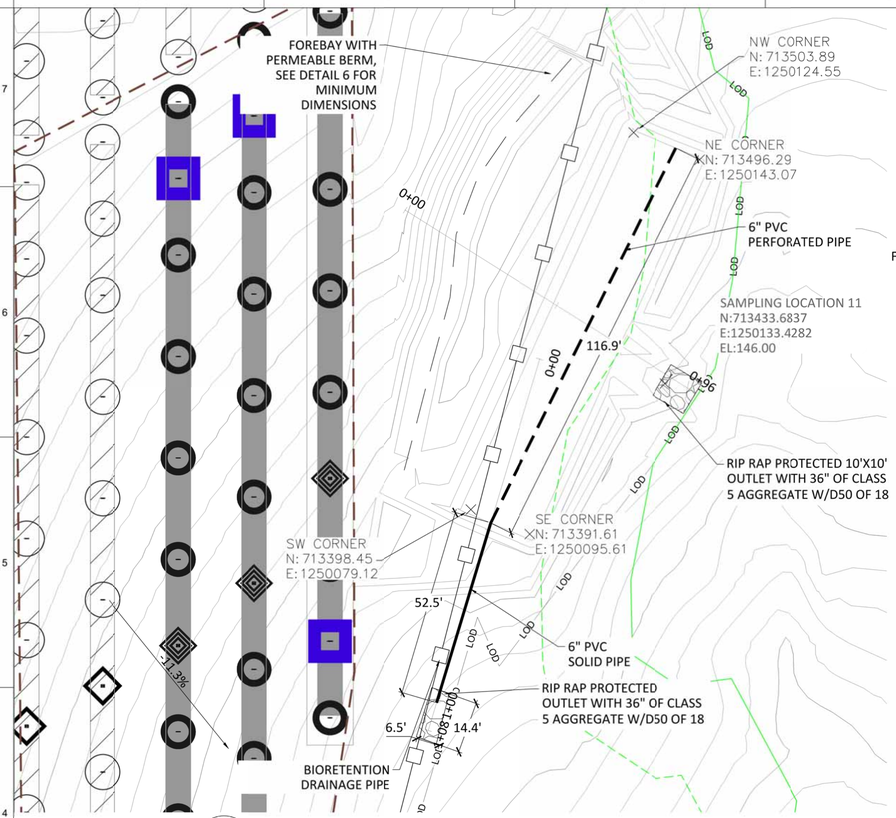
DATE: 21-JAN-20
PROJECT #: 20200309_CT
DRAWN BY: MMM
CHECKED BY: DRG

TITLE: GRADING & DRAINAGE DETAILS
SHEET: G&D–309

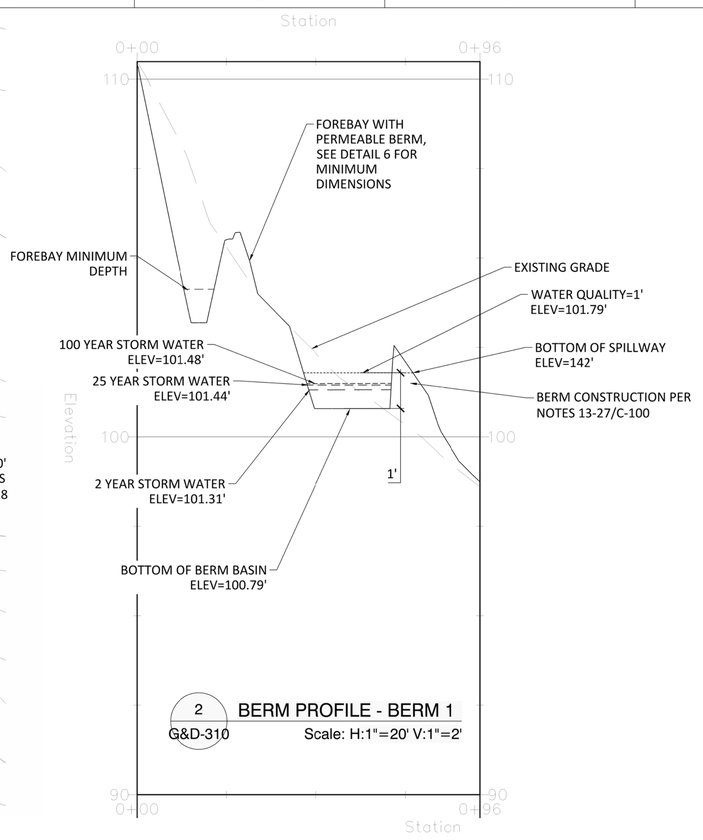
811 Know what's below. Call before you dig.

LOCATION: E:\DROPBOX (SOA)\ENGINEERING\CS ENERGY\2020-03-09_STONINGTON\CAD\SITE PLANS.DWG PLOTTED BY: DARIN GALLOWAY

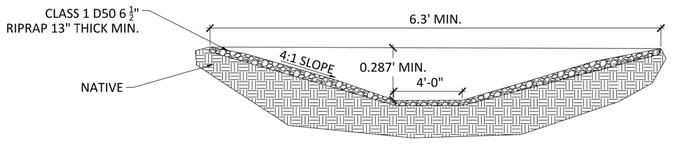
PLOT DATE: Tuesday, January 19, 2021



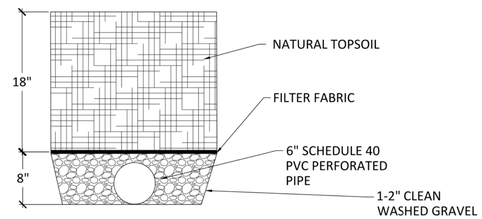
1 STORMWATER BERM WITH BIORETENTION BERM - 1
G&D-310 Scale: 1"=20'



2 BERM PROFILE - BERM 1
G&D-310 Scale: H:1"=20' V:1"=2'

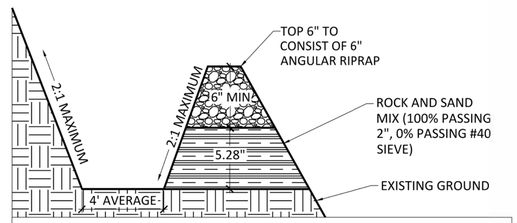


3 EMERGENCY SPILLWAY - BERM 1
G&D-310 Scale: NTS



4 BIORETENTION BASIN UNDERDRAIN,TYP.
G&D-310 Scale: NTS

5 PROFILE BIORETENTION DRAIN PIPE - BERM 1
G&D-310 Scale: H:1"=20' V:1"=2'



BERM 1 FOREBAY		
MINIMUM DEPTH (FT)	MINIMUM LENGTH (FT)	STORAGE (FT³)
0.94	103	570

6 BASIN PRETREATMENT-FOREBAY, TYP
G&D-310 Scale: NTS

STORMWATER BASIN NOTES:

36. STORMWATER BASINS WERE SIZED BASED ON GUIDANCE FROM THE CONNECTICUT STORMWATER QUALITY MANUAL (2004).

37. BASIN DESIGN INPUTS ARE INCLUDED ON SHEET SWMP-100.

38. STORMWATER BASINS/BERMS ARE LOCATED IN THE SAME FOOTPRINT AS SEDIMENT BASINS. SEDIMENT BASIN NUMBERING CORRESPONDS TO STORMWATER BASIN/BERM NUMBERING (E.G. SEDIMENT BASIN 1 IS IN THE SAME FOOTPRINT AS STORMWATER BASIN 1).

39. AFTER FINAL STABILIZATION OF THE SITE, THE FOLLOWING SEQUENCE SHALL BE PERFORMED PRIOR TO CONSTRUCTION OF THE PERMANENT STORMWATER CONTROLS:

39.1. SEDIMENT BASINS LOCATED WHERE BIOFILTRATION BASINS OR BERMS ARE LOCATED SHALL BE EXCAVATED TO THE FULL DEPTH OF THE FILTER MEDIA AND RECONSTRUCTED AS DEPICTED ON GRADING & DRAINAGE DESIGN SHEETS.

39.2. SEDIMENT BASINS LOCATED WHERE INFILTRATION BASINS OR BERMS ARE LOCATED SHALL HAVE ANY SEDIMENT ACCUMULATION REMOVED AND SCARIFIED TO 12" BELOW BASIN BOTTOM ELEVATION. FOLLOWING CLEANING AND SCARIFICATION, THE STORMWATER CONTROLS SHALL BE RECONSTRUCTED AS DEPICTED ON GRADING & DRAINAGE DESIGN SHEETS.

40. BERM CONSTRUCTION SHALL BE IN ACCORDANCE WITH NOTES 13-27/C-100

MAP LEGEND (1"=1000')



soa
SIERRA OVERHEAD ANALYTICS
18859 MICROTRONICS WAY
SONORA, CALIFORNIA 95370
CONNECTICUT PROFESSIONAL
ENGINEERING CORPORATION #PEC.0001969

REV	DESCRIPTION	DATE
6	ISSUED FOR CONSTRUCTION - DRAFT	9/4/2020
7	ISSUED FOR CONSTRUCTION - DRAFT	9/18/2020
8	ISSUED FOR CONSTRUCTION - DRAFT	10/22/2020
9	ISSUED FOR CONSTRUCTION - DRAFT	11/06/2020
10	ISSUED FOR CONSTRUCTION	1/20/2021
-	-	-
-	-	-
-	-	-
-	-	-
-	-	-
-	-	-

CONFIDENTIAL:
THE INFORMATION DEPICTED ON THIS DOCUMENT IS PROPRIETARY AND THE SOLE PROPERTY OF SIERRA OVERHEAD ANALYTICS, INC (SOA). ANY USE OR DISCLOSURE OF THIS INFORMATION IS EXPRESSLY PROHIBITED WITHOUT THE PRIOR WRITTEN CONSENT OF SOA.

CS Energy
Building a Cleaner Future
2045 LINCOLN HIGHWAY
EDISON, NEW JERSEY 08817

PROJECT NAME:
STONINGTON SOLAR PROJECT

PROJECT ADDRESS:
ELLA WHEELER RD.
NORTH STONINGTON, CT 06359
41° 25' 9.71"N, 71° 50' 4.83"W

SEAL: STATE OF CONNECTICUT DARIN RAY GALLOWAY No. 34152 LICENSED PROFESSIONAL ENGINEER

DATE:	21-JAN-20
PROJECT #:	20200309_CT
DRAWN BY:	MMM
CHECKED BY:	DRG

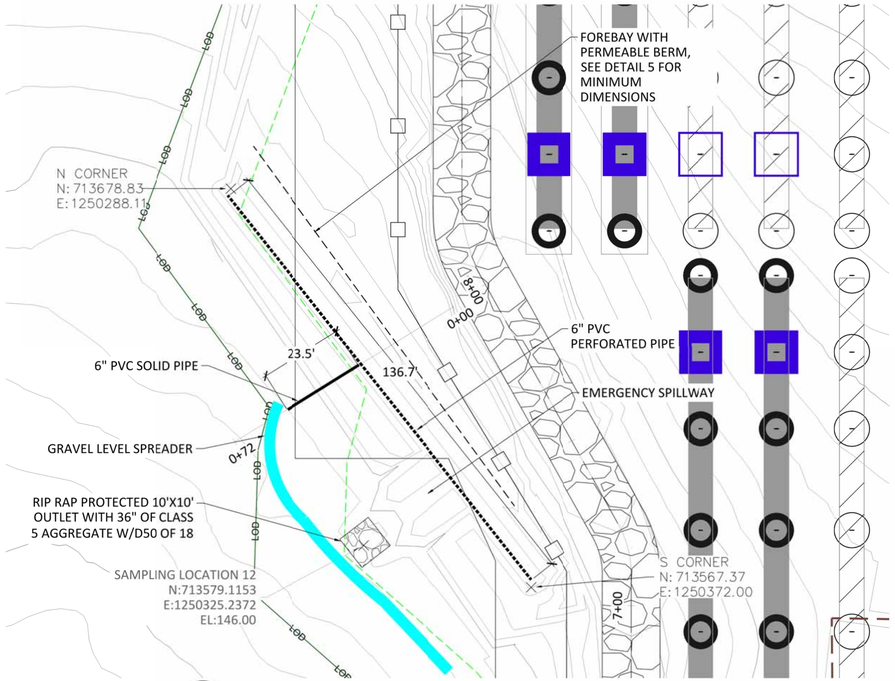
TITLE: GRADING & DRAINAGE DETAILS

SHEET: G&D-310

811 Know what's below. Call before you dig.

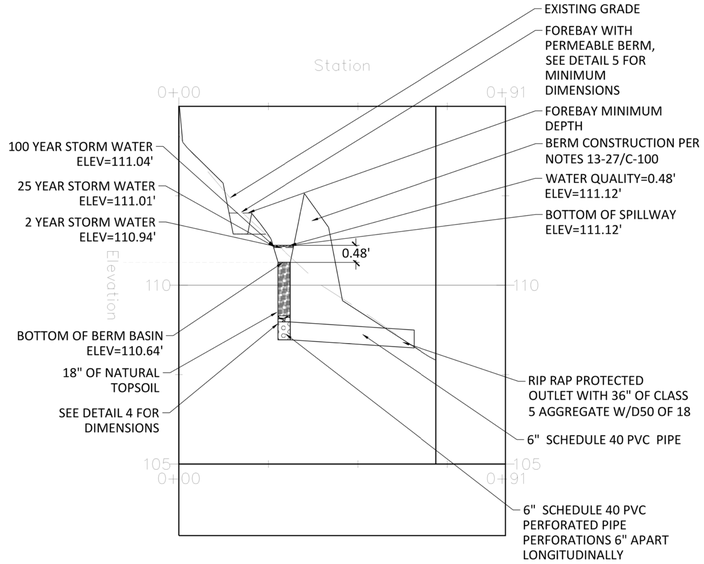
PLOT DATE: Tuesday, January 19, 2021

LOCATION: E:\DROPBOX (SOA)\ENGINEERING\CS ENERGY\2020-03-09_STONINGTON\CAD\SITE PLANS.DWG PLOTTED BY: DARIN GALLOWAY



1 G&D-311 STORMWATER BERM WITH BIORETENTION BASIN - BERM 2

Scale: 1"=20'

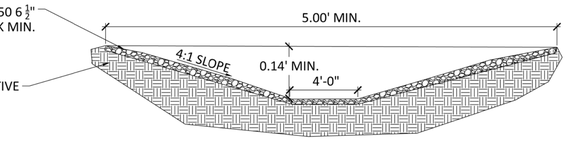


2 G&D-311 BERM PROFILE - BERM 2

Scale: H:1"=20' V:1"=2'

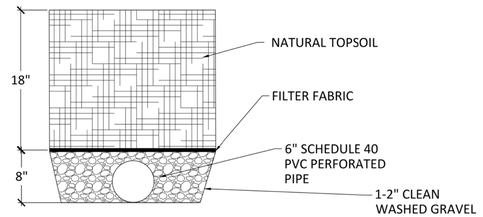
MAP LEGEND (1"=1000')





3 G&D-311 EMERGENCY SPILLWAY - BERM 2

Scale: NTS



4 G&D-311 BIORETENTION BASIN UNDERDRAIN, TYP.

Scale: NTS

STORMWATER BASIN NOTES:

36. STORMWATER BASINS WERE SIZED BASED ON GUIDANCE FROM THE CONNECTICUT STORMWATER QUALITY MANUAL (2004).

37. BASIN DESIGN INPUTS ARE INCLUDED ON SHEET SWMP-100.

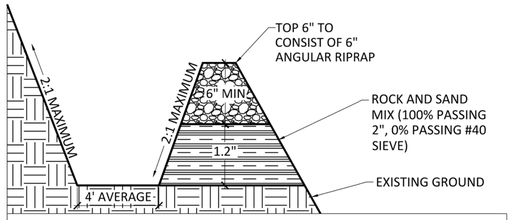
38. STORMWATER BASINS/BERMS ARE LOCATED IN THE SAME FOOTPRINT AS SEDIMENT BASINS. SEDIMENT BASIN NUMBERING CORRESPONDS TO STORMWATER BASIN/BERM NUMBERING (E.G. SEDIMENT BASIN 1 IS IN THE SAME FOOTPRINT AS STORMWATER BASIN 1).

39. AFTER FINAL STABILIZATION OF THE SITE, THE FOLLOWING SEQUENCE SHALL BE PERFORMED PRIOR TO CONSTRUCTION OF THE PERMANENT STORMWATER CONTROLS:

39.1. SEDIMENT BASINS LOCATED WHERE BIOFILTRATION BASINS OR BERMS ARE LOCATED SHALL BE EXCAVATED TO THE FULL DEPTH OF THE FILTER MEDIA AND RECONSTRUCTED AS DEPICTED ON GRADING & DRAINAGE DESIGN SHEETS.

39.2. SEDIMENT BASINS LOCATED WHERE INFILTRATION BASINS OR BERMS ARE LOCATED SHALL HAVE ANY SEDIMENT ACCUMULATION REMOVED AND SCARIFIED TO 12" BELOW BASIN BOTTOM ELEVATION. FOLLOWING CLEANING AND SCARIFICATION, THE STORMWATER CONTROLS SHALL BE RECONSTRUCTED AS DEPICTED ON GRADING & DRAINAGE DESIGN SHEETS.

40. BERM CONSTRUCTION SHALL BE IN ACCORDANCE WITH NOTES 13-27/C-100



BERM 2 FOREBAY		
MINIMUM DEPTH (FT)	MINIMUM LENGTH (FT)	STORAGE (FT³)
0.6	117	365

5 G&D-311 BASIN PRETREATMENT-FOREBAY, TYP

Scale: NTS

Know what's below. Call before you dig.

soa
SIERRA OVERHEAD ANALYTICS
18859 MICROTRONICS WAY
SONORA, CALIFORNIA 95370
CONNECTICUT PROFESSIONAL ENGINEERING CORPORATION #PEC.0001969

REV	DESCRIPTION	DATE
6	ISSUED FOR CONSTRUCTION - DRAFT	9/4/2020
7	ISSUED FOR CONSTRUCTION - DRAFT	9/18/2020
8	ISSUED FOR CONSTRUCTION - DRAFT	10/22/2020
9	ISSUED FOR CONSTRUCTION - DRAFT	11/06/2020
10	ISSUED FOR CONSTRUCTION	1/20/2021
-	-	-
-	-	-
-	-	-
-	-	-
-	-	-

CONFIDENTIAL:
THE INFORMATION DEPICTED ON THIS DOCUMENT IS PROPRIETARY AND THE SOLE PROPERTY OF SIERRA OVERHEAD ANALYTICS, INC (SOA). ANY USE OR DISCLOSURE OF THIS INFORMATION IS EXPRESSLY PROHIBITED WITHOUT THE PRIOR WRITTEN CONSENT OF SOA.

CS Energy
Building a Cleaner Future
2045 LINCOLN HIGHWAY
EDISON, NEW JERSEY 08817

PROJECT NAME:
STONINGTON SOLAR PROJECT

PROJECT ADDRESS:
ELLA WHEELER RD.
NORTH STONINGTON, CT 06359
41° 25' 9.71"N, 71° 50' 4.83"W

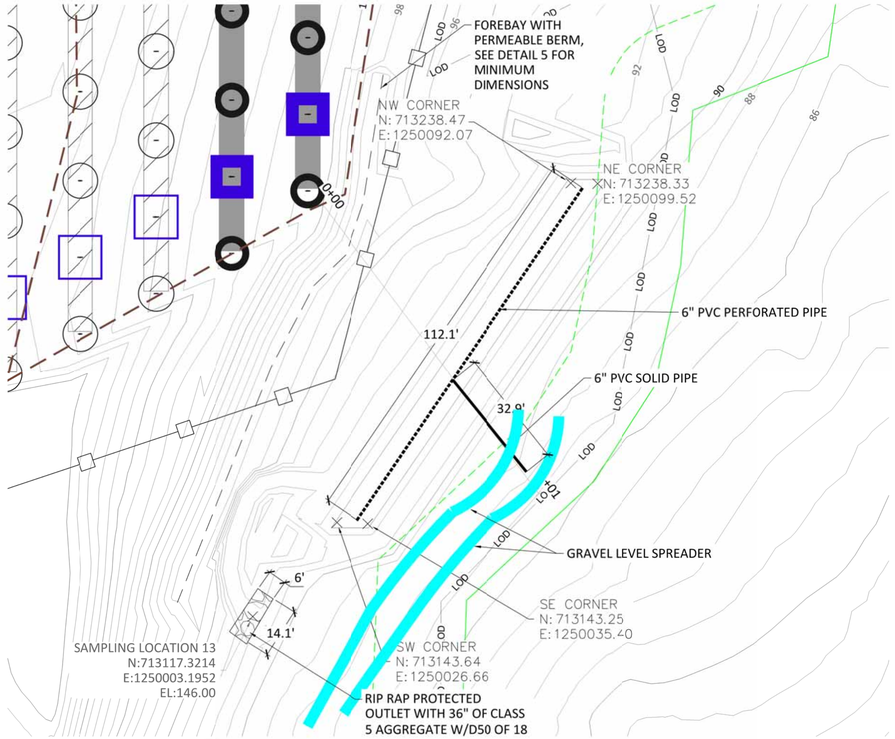
SEAL: STATE OF CONNECTICUT · DARIN RAY GALLOWAY · No. 34152 · LICENSED PROFESSIONAL ENGINEER

DATE: 21-JAN-20
PROJECT #: 20200309_CT
DRAWN BY: MMM
CHECKED BY: DRG

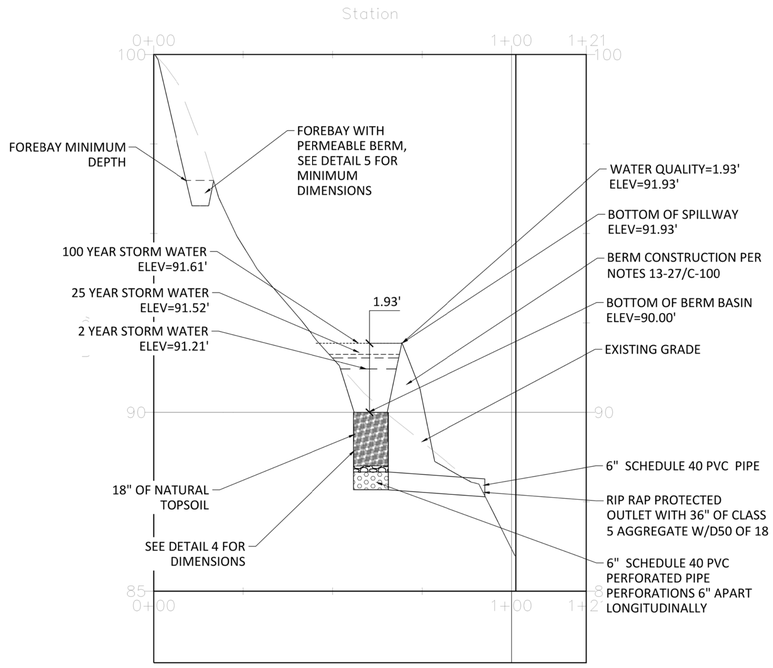
TITLE: GRADING & DRAINAGE DETAILS
SHEET: G&D–311

PLOT DATE: Tuesday, January 19, 2021

LOCATION: E:\DROPBOX (SOA)\ENGINEERING\CS ENERGY\2020-03-09_STONINGTON\CAD\SITE PLANS.DWG PLOTTED BY: DARIN GALLOWAY



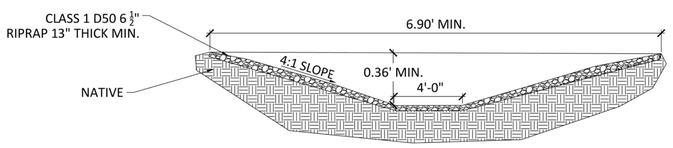
1 G&D-312 **STORMWATER BERM WITH BIORETENTION BASIN - BERM 3**
Scale: 1"=20'



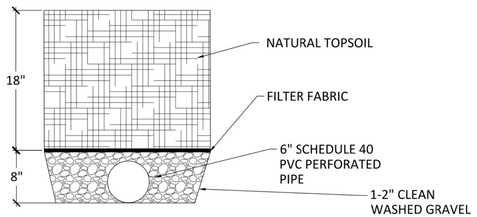
2 G&D-312 **BERM PROFILE - BERM 3**
Scale: H:1"=20' V:1"=2'

MAP LEGEND (1"=1000')





3 G&D-312 **EMERGENCY SPILLWAY - BERM 3**
Scale: NTS



4 G&D-312 **BIORETENTION BASIN UNDERDRAIN, TYP.**
Scale: NTS

STORMWATER BASIN NOTES:

36. STORMWATER BASINS WERE SIZED BASED ON GUIDANCE FROM THE CONNECTICUT STORMWATER QUALITY MANUAL (2004).

37. BASIN DESIGN INPUTS ARE INCLUDED ON SHEET SWMP-100.

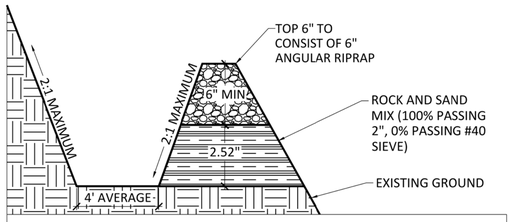
38. STORMWATER BASINS/BERMS ARE LOCATED IN THE SAME FOOTPRINT AS SEDIMENT BASINS. SEDIMENT BASIN NUMBERING CORRESPONDS TO STORMWATER BASIN/BERM NUMBERING (E.G. SEDIMENT BASIN 1 IS IN THE SAME FOOTPRINT AS STORMWATER BASIN 1).

39. AFTER FINAL STABILIZATION OF THE SITE, THE FOLLOWING SEQUENCE SHALL BE PERFORMED PRIOR TO CONSTRUCTION OF THE PERMANENT STORMWATER CONTROLS:

39.1. SEDIMENT BASINS LOCATED WHERE BIOFILTRATION BASINS OR BERMS ARE LOCATED SHALL BE EXCAVATED TO THE FULL DEPTH OF THE FILTER MEDIA AND RECONSTRUCTED AS DEPICTED ON GRADING & DRAINAGE DESIGN SHEETS.

39.2. SEDIMENT BASINS LOCATED WHERE INFILTRATION BASINS OR BERMS ARE LOCATED SHALL HAVE ANY SEDIMENT ACCUMULATION REMOVED AND SCARIFIED TO 12" BELOW BASIN BOTTOM ELEVATION. FOLLOWING CLEANING AND SCARIFICATION, THE STORMWATER CONTROLS SHALL BE RECONSTRUCTED AS DEPICTED ON GRADING & DRAINAGE DESIGN SHEETS.

40. BERM CONSTRUCTION SHALL BE IN ACCORDANCE WITH NOTES 13-27/C-100



BERM 3 FOREBAY		
MINIMUM DEPTH (FT)	MINIMUM LENGTH (FT)	STORAGE (FT³)
0.71	159	612

5 G&D-312 **BASIN PRETREATMENT-FOREBAY, TYP**
Scale: NTS

Know what's below. Call before you dig.

soa
SIERRA OVERHEAD ANALYTICS
18859 MICROTRONICS WAY
SONORA, CALIFORNIA 95370
CONNECTICUT PROFESSIONAL ENGINEERING CORPORATION #PEC.0001969

REV	DESCRIPTION	DATE
6	ISSUED FOR CONSTRUCTION - DRAFT	9/4/2020
7	ISSUED FOR CONSTRUCTION - DRAFT	9/18/2020
8	ISSUED FOR CONSTRUCTION - DRAFT	10/22/2020
9	ISSUED FOR CONSTRUCTION - DRAFT	11/06/2020
10	ISSUED FOR CONSTRUCTION	1/20/2021
-	-	-
-	-	-
-	-	-
-	-	-
-	-	-

CONFIDENTIAL:
THE INFORMATION DEPICTED ON THIS DOCUMENT IS PROPRIETARY AND THE SOLE PROPERTY OF SIERRA OVERHEAD ANALYTICS, INC (SOA). ANY USE OR DISCLOSURE OF THIS INFORMATION IS EXPRESSLY PROHIBITED WITHOUT THE PRIOR WRITTEN CONSENT OF SOA.

CS Energy
Building a Cleaner Future
2045 LINCOLN HIGHWAY
EDISON, NEW JERSEY 08817

PROJECT NAME:
STONINGTON SOLAR PROJECT

PROJECT ADDRESS:
ELLA WHEELER RD.
NORTH STONINGTON, CT 06359
41° 25' 9.71"N, 71° 50' 4.83"W

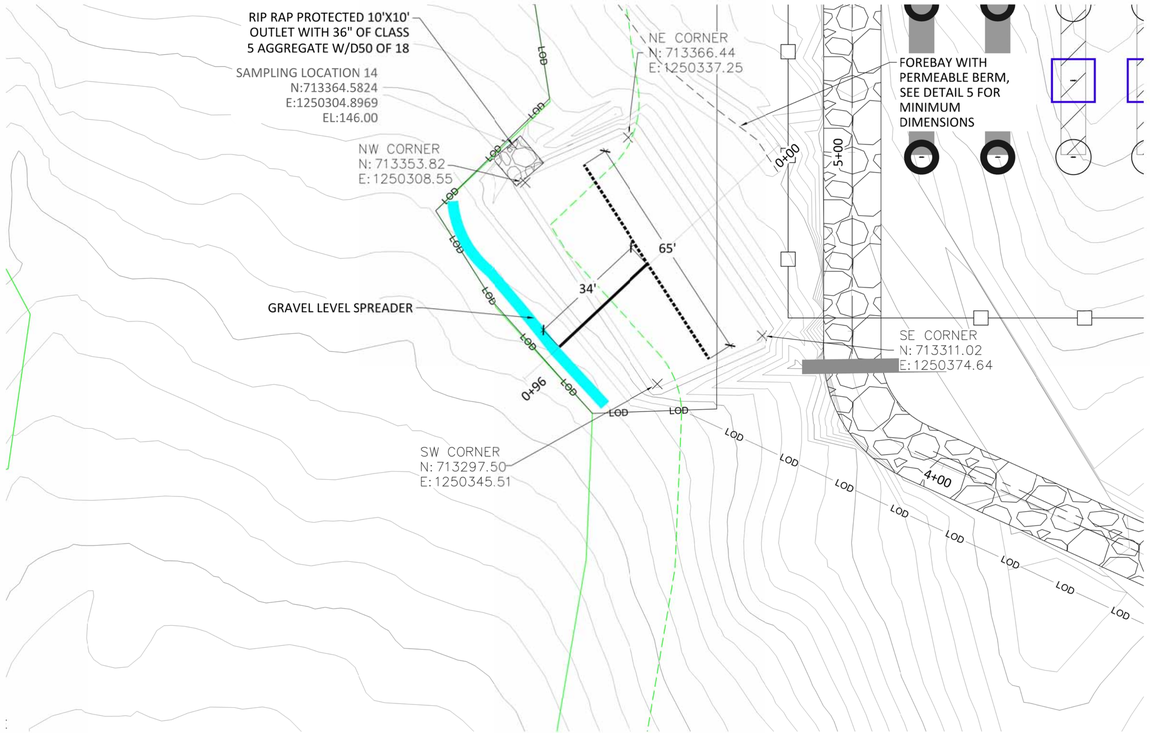
SEAL: STATE OF CONNECTICUT · DARIN RAY GALLOWAY · No. 34152 · LICENSED PROFESSIONAL ENGINEER

DATE: 21-JAN-20
PROJECT #: 20200309_CT
DRAWN BY: MMM
CHECKED BY: DRG

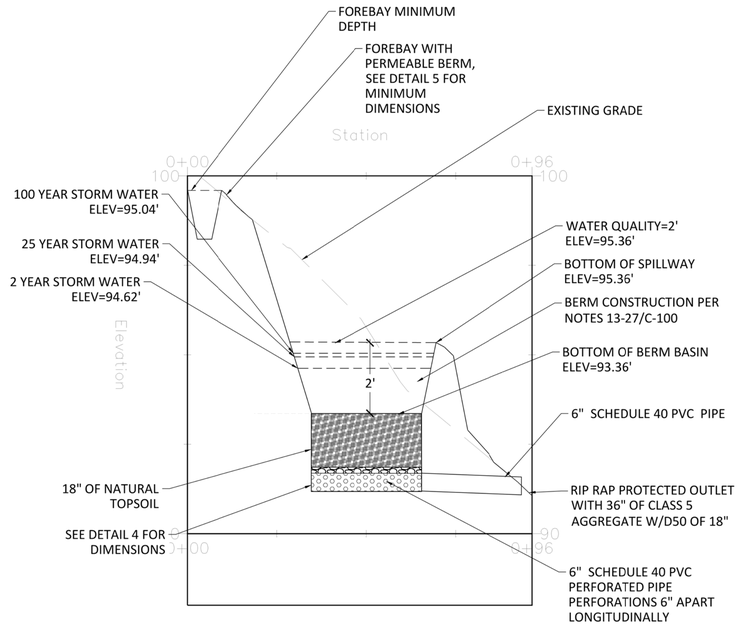
TITLE: GRADING & DRAINAGE DETAILS
SHEET: G&D–312

PLOT DATE: Tuesday, January 19, 2021

LOCATION: E:\DROPBOX (SOA)\ENGINEERING\CS ENERGY\2020-03-09_STONINGTON\CAD\SITE PLANS.DWG PLOTTED BY: DARIN GALLOWAY



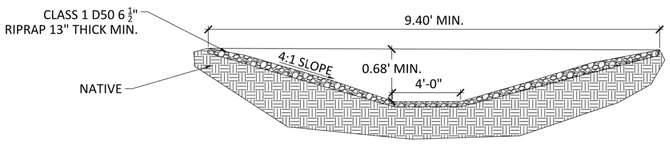
1 STORMWATER BERM WITH BIORETENTION BASIN - BERM 4
G&D-313 Scale: 1"=20'



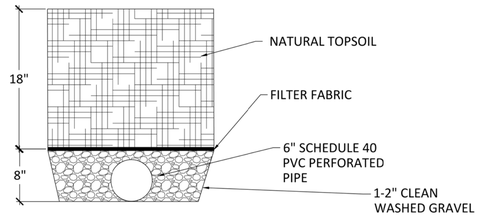
2 BERM PROFILE - BERM 4
G&D-313 Scale: H:1"=20' V:1"=2'

MAP LEGEND (1"=1000')





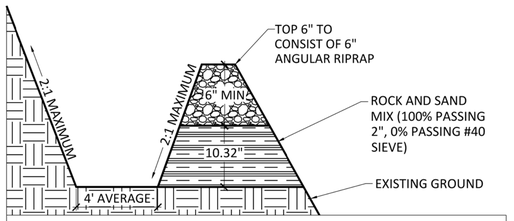
3 EMERGENCY SPILLWAY - BERM 4
G&D-313 Scale: NTS



4 BIORETENTION BASIN UNDERDRAIN, TYP.
G&D-313 Scale: NTS

STORMWATER BASIN NOTES:

36. STORMWATER BASINS WERE SIZED BASED ON GUIDANCE FROM THE CONNECTICUT STORMWATER QUALITY MANUAL (2004).
37. BASIN DESIGN INPUTS ARE INCLUDED ON SHEET SWMP-100.
38. STORMWATER BASINS/BERMS ARE LOCATED IN THE SAME FOOTPRINT AS SEDIMENT BASINS. SEDIMENT BASIN NUMBERING CORRESPONDS TO STORMWATER BASIN/BERM NUMBERING (E.G. SEDIMENT BASIN 1 IS IN THE SAME FOOTPRINT AS STORMWATER BASIN 1).
39. AFTER FINAL STABILIZATION OF THE SITE, THE FOLLOWING SEQUENCE SHALL BE PERFORMED PRIOR TO CONSTRUCTION OF THE PERMANENT STORMWATER CONTROLS:
39.1. SEDIMENT BASINS LOCATED WHERE BIOFILTRATION BASINS OR BERMS ARE LOCATED SHALL BE EXCAVATED TO THE FULL DEPTH OF THE FILTER MEDIA AND RECONSTRUCTED AS DEPICTED ON GRADING & DRAINAGE DESIGN SHEETS.
39.2. SEDIMENT BASINS LOCATED WHERE INFILTRATION BASINS OR BERMS ARE LOCATED SHALL HAVE ANY SEDIMENT ACCUMULATION REMOVED AND SCARIFIED TO 12" BELOW BASIN BOTTOM ELEVATION. FOLLOWING CLEANING AND SCARIFICATION, THE STORMWATER CONTROLS SHALL BE RECONSTRUCTED AS DEPICTED ON GRADING & DRAINAGE DESIGN SHEETS.
40. BERM CONSTRUCTION SHALL BE IN ACCORDANCE WITH NOTES 13-27/C-100



BERM 4 FOREBAY		
MINIMUM DEPTH (FT)	MINIMUM LENGTH (FT)	STORAGE (FT³)
1.36	153	1,399

5 BASIN PRETREATMENT-FOREBAY, TYP
G&D-313 Scale: NTS

soa
SIERRA OVERHEAD ANALYTICS
18859 MICROTRONICS WAY
SONORA, CALIFORNIA 95370
CONNECTICUT PROFESSIONAL ENGINEERING CORPORATION #PEC.0001969

REV	DESCRIPTION	DATE
6	ISSUED FOR CONSTRUCTION - DRAFT	9/4/2020
7	ISSUED FOR CONSTRUCTION - DRAFT	9/18/2020
8	ISSUED FOR CONSTRUCTION - DRAFT	10/22/2020
9	ISSUED FOR CONSTRUCTION - DRAFT	11/06/2020
10	ISSUED FOR CONSTRUCTION	1/20/2021
-	-	-
-	-	-
-	-	-
-	-	-
-	-	-

CONFIDENTIAL:
THE INFORMATION DEPICTED ON THIS DOCUMENT IS PROPRIETARY AND THE SOLE PROPERTY OF SIERRA OVERHEAD ANALYTICS, INC (SOA). ANY USE OR DISCLOSURE OF THIS INFORMATION IS EXPRESSLY PROHIBITED WITHOUT THE PRIOR WRITTEN CONSENT OF SOA.

CS Energy
Building a Cleaner Future
2045 LINCOLN HIGHWAY
EDISON, NEW JERSEY 08817

PROJECT NAME:
STONINGTON SOLAR PROJECT

PROJECT ADDRESS:
ELLA WHEELER RD.
NORTH STONINGTON, CT 06359
41° 25' 9.71"N, 71° 50' 4.83"W

SEAL: STATE OF CONNECTICUT · DARRIN RAY GALLOWAY · NO. 34152 · LICENSED PROFESSIONAL ENGINEER

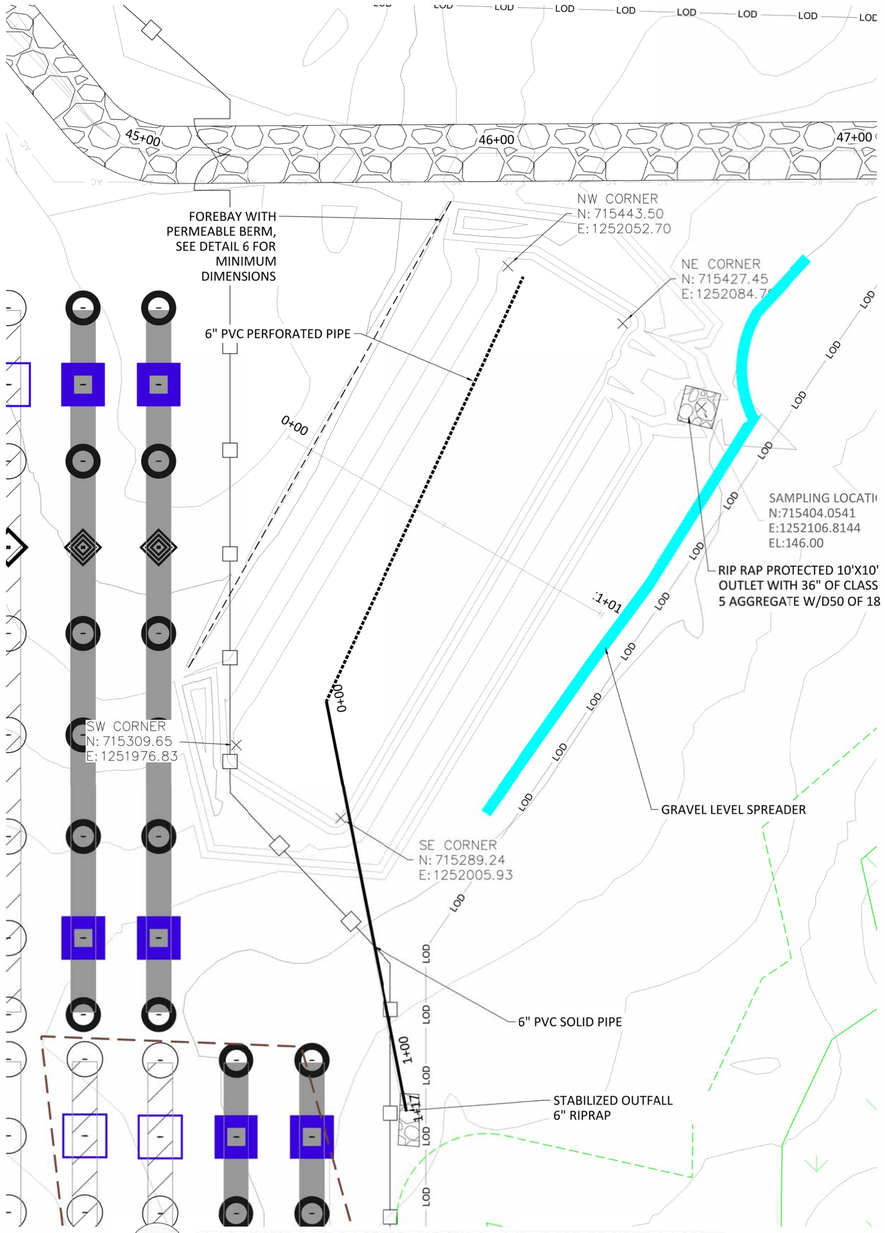
DATE: 21-JAN-20
PROJECT #: 20200309_CT
DRAWN BY: MMM
CHECKED BY: DRG

TITLE: GRADING & DRAINAGE DETAILS
SHEET: G&D–313

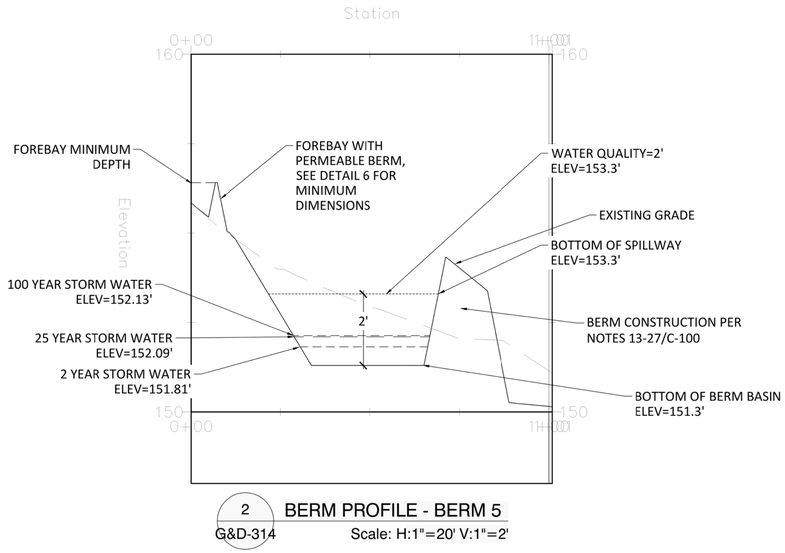
811 Know what's below. Call before you dig.

PLOT DATE: Tuesday, January 19, 2021

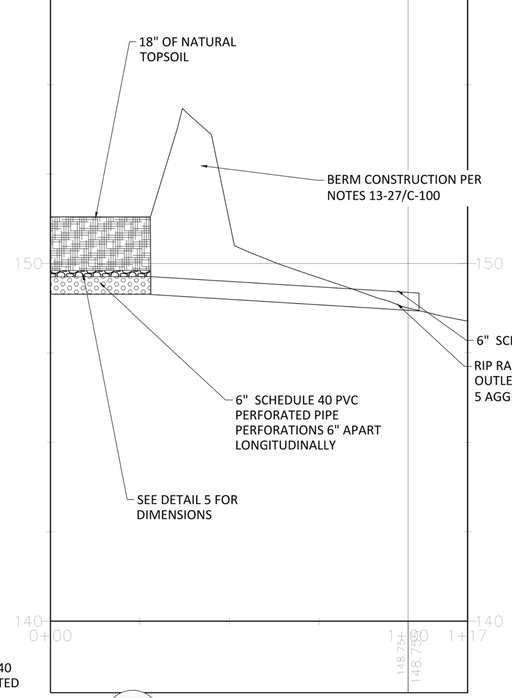
LOCATION: E:\DROPBOX (SOA)\ENGINEERING\CS ENERGY\2020-03-09_STONINGTON\CAD\SITE PLANS.DWG PLOTTED BY: DARIN GALLOWAY



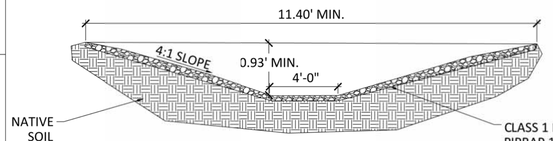
1 STORMWATER BERM WITH BIORETENTION BASIN - BERM 5
G&D-314 Scale: 1"=20'



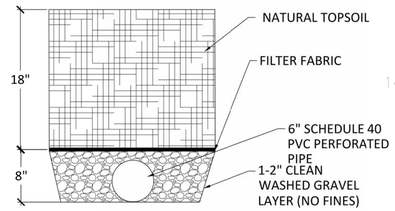
2 BERM PROFILE - BERM 5
G&D-314 Scale: H:1"=20' V:1"=2'



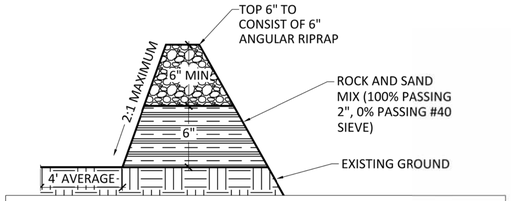
3 BIORETENTION PIPE - BERM 5
G&D-314 Scale: H:1"=20' V:1"=2'



4 EMERGENCY SPILLWAY - BERM 5
G&D-314 Scale: NTS



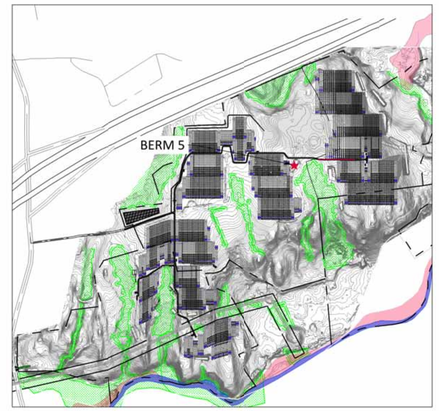
5 BIORETENTION BASIN UNDERDRAIN, TYP.
G&D-314 Scale: NTS



BERM 5 FOREBAY		
MINIMUM DEPTH (FT)	MINIMUM LENGTH (FT)	STORAGE (FT³)
1	108	3,023

6 BASIN PRETREATMENT-FOREBAY, TYP
G&D-314 Scale: NTS

MAP LEGEND (1"=1000')



STORMWATER BASIN NOTES:

36. STORMWATER BASINS WERE SIZED BASED ON GUIDANCE FROM THE CONNECTICUT STORMWATER QUALITY MANUAL (2004).

37. BASIN DESIGN INPUTS ARE INCLUDED ON SHEET SWMP-100.

38. STORMWATER BASINS/BERMS ARE LOCATED IN THE SAME FOOTPRINT AS SEDIMENT BASINS. SEDIMENT BASIN NUMBERING CORRESPONDS TO STORMWATER BASIN/BERM NUMBERING (E.G. SEDIMENT BASIN 1 IS IN THE SAME FOOTPRINT AS STORMWATER BASIN 1).

39. AFTER FINAL STABILIZATION OF THE SITE, THE FOLLOWING SEQUENCE SHALL BE PERFORMED PRIOR TO CONSTRUCTION OF THE PERMANENT STORMWATER CONTROLS:

39.1. SEDIMENT BASINS LOCATED WHERE BIOFILTRATION BASINS OR BERMS ARE LOCATED SHALL BE EXCAVATED TO THE FULL DEPTH OF THE FILTER MEDIA AND RECONSTRUCTED AS DEPICTED ON GRADING & DRAINAGE DESIGN SHEETS.

39.2. SEDIMENT BASINS LOCATED WHERE INFILTRATION BASINS OR BERMS ARE LOCATED SHALL HAVE ANY SEDIMENT ACCUMULATION REMOVED AND SCARIFIED TO 12" BELOW BASIN BOTTOM ELEVATION. FOLLOWING CLEANING AND SCARIFICATION, THE STORMWATER CONTROLS SHALL BE RECONSTRUCTED AS DEPICTED ON GRADING & DRAINAGE DESIGN SHEETS.

40. BERM CONSTRUCTION SHALL BE IN ACCORDANCE WITH NOTES 13-27/C-100

soa
SIERRA OVERHEAD ANALYTICS
18859 MICROTRONICS WAY
SONORA, CALIFORNIA 95370
CONNECTICUT PROFESSIONAL ENGINEERING CORPORATION #PEC.0001969

REV	DESCRIPTION	DATE
6	ISSUED FOR CONSTRUCTION - DRAFT	9/4/2020
7	ISSUED FOR CONSTRUCTION - DRAFT	9/18/2020
8	ISSUED FOR CONSTRUCTION - DRAFT	10/22/2020
9	ISSUED FOR CONSTRUCTION - DRAFT	11/06/2020
10	ISSUED FOR CONSTRUCTION	1/20/2021
-	-	-
-	-	-
-	-	-
-	-	-
-	-	-

CONFIDENTIAL:
THE INFORMATION DEPICTED ON THIS DOCUMENT IS PROPRIETARY AND THE SOLE PROPERTY OF SIERRA OVERHEAD ANALYTICS, INC (SOA). ANY USE OR DISCLOSURE OF THIS INFORMATION IS EXPRESSLY PROHIBITED WITHOUT THE PRIOR WRITTEN CONSENT OF SOA.

CS Energy
Building a Cleaner Future
2045 LINCOLN HIGHWAY
EDISON, NEW JERSEY 08817

PROJECT NAME:
STONINGTON SOLAR PROJECT

PROJECT ADDRESS:
ELLA WHEELER RD.
NORTH STONINGTON, CT 06359
41° 25' 9.71"N, 71° 50' 4.83"W

SEAL: STATE OF CONNECTICUT · DARIN RAY GALLOWAY · No. 34152 · LICENSED PROFESSIONAL ENGINEER

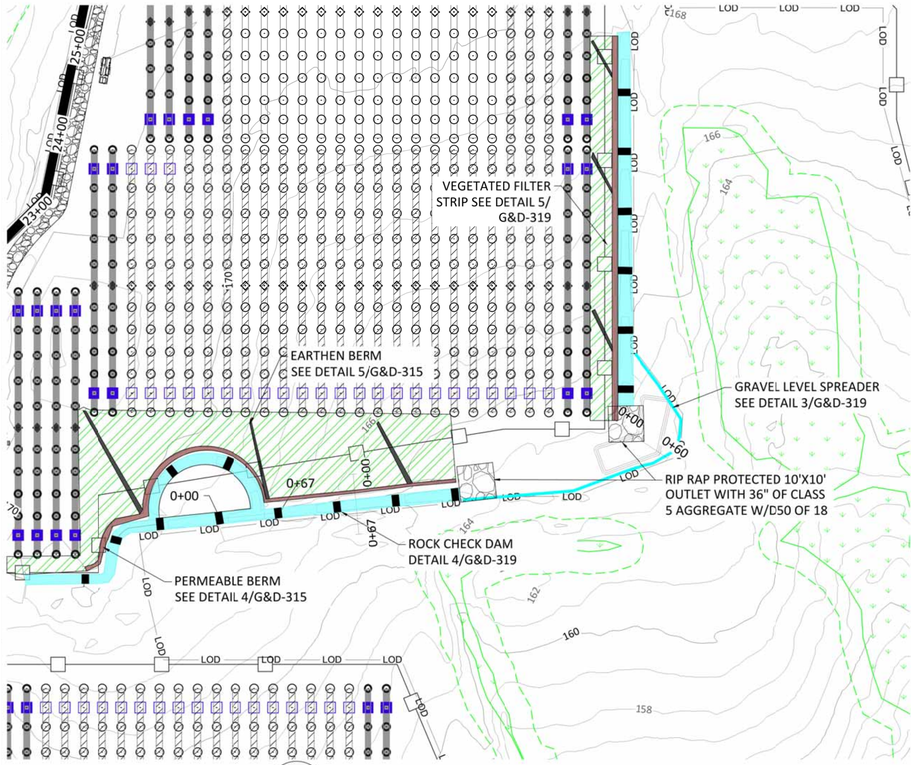
DATE: 21-JAN-20
PROJECT #: 20200309_CT
DRAWN BY: MMM
CHECKED BY: DRG

TITLE: GRADING & DRAINAGE DETAILS
SHEET: G&D–314

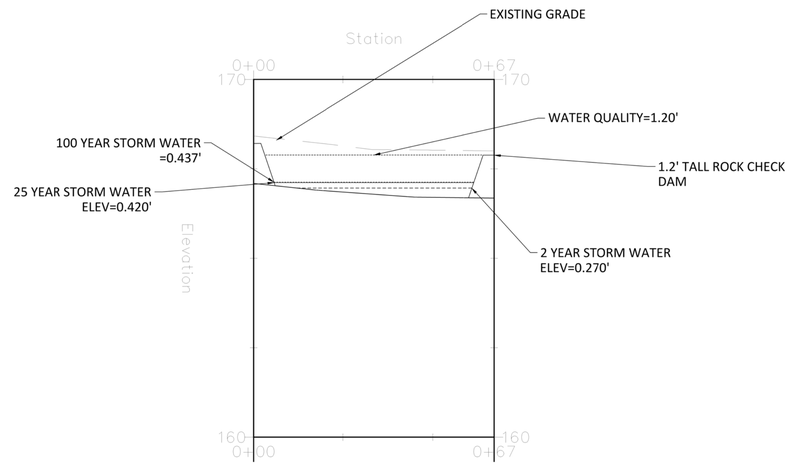
Know what's below. Call before you dig.

PLOT DATE: Tuesday, January 19, 2021

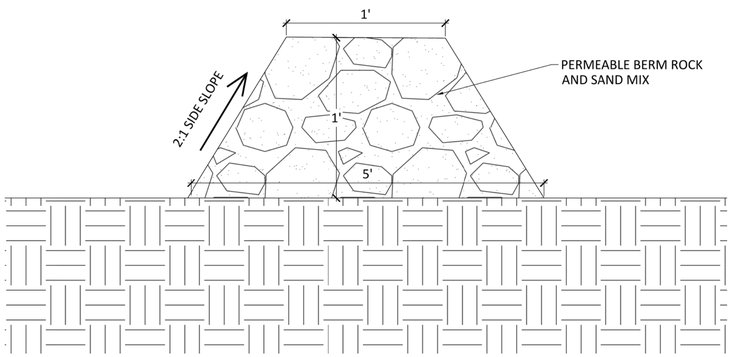
LOCATION: E:\DROPBOX (SOA)\ENGINEERING\CS ENERGY\2020-03-09_STONINGTON\CAD\SITE PLANS.DWG PLOTTED BY: DARIN GALLOWAY



1 G&D-315 — STORMWATER SWALE - 1
Scale: 1"=80'

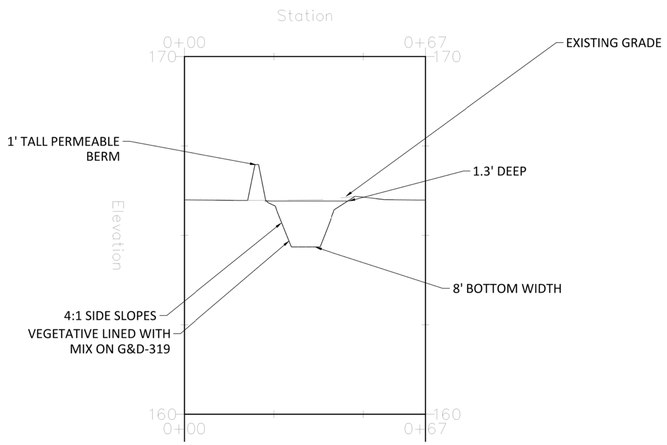


2 G&D-315 — SWALE PROFILE TYP. - SWALE 1
Scale: H:1"=20' V:1"=2'

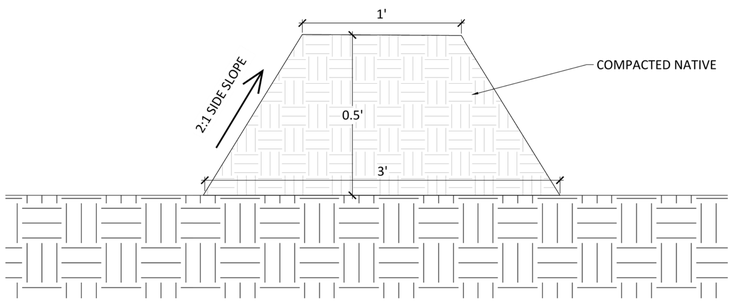


4 G&D-315 — PERMEABLE BERM TYP.
Scale: NTS

PERMEABLE BERM NOTES:
PROTECT PERMEABLE BERM FROM CONSTRUCTION TRAFFIC. DAMAGED BERMS SHALL BE REPAIRED PRIOR TO CONTRACTOR DEMOBILIZATION



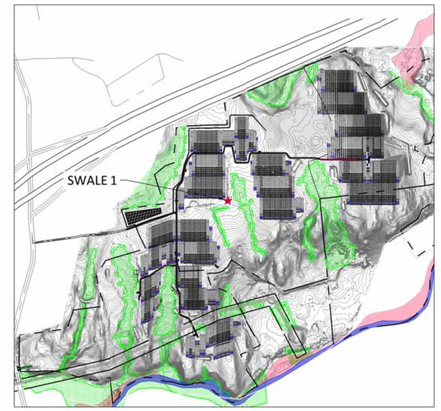
3 G&D-315 — SWALE 1 CROSS SECTION
Scale: H:1"=20' V:1"=2'



5 G&D-315 — EARTHEN BERM TYP.
Scale: NTS

EARTHEN BERM NOTES:
PROTECT EARTHEN BERM FROM CONSTRUCTION TRAFFIC. DAMAGED BERMS SHALL BE REPAIRED PRIOR TO CONTRACTOR DEMOBILIZATION

MAP LEGEND (1"=1000')



PLOT DATE: Tuesday, January 19, 2021

SIERRA OVERHEAD ANALYTICS
18859 MICROTRONICS WAY
SONORA, CALIFORNIA 95370
CONNECTICUT PROFESSIONAL ENGINEERING CORPORATION #PEC.0001969

REV	DESCRIPTION	DATE
6	ISSUED FOR CONSTRUCTION - DRAFT	9/4/2020
7	ISSUED FOR CONSTRUCTION - DRAFT	9/18/2020
8	ISSUED FOR CONSTRUCTION - DRAFT	10/22/2020
9	ISSUED FOR CONSTRUCTION - DRAFT	11/06/2020
10	ISSUED FOR CONSTRUCTION	1/20/2021
-	-	-
-	-	-
-	-	-
-	-	-
-	-	-
-	-	-

CONFIDENTIAL:
THE INFORMATION DEPICTED ON THIS DOCUMENT IS PROPRIETARY AND THE SOLE PROPERTY OF SIERRA OVERHEAD ANALYTICS, INC (SOA). ANY USE OR DISCLOSURE OF THIS INFORMATION IS EXPRESSLY PROHIBITED WITHOUT THE PRIOR WRITTEN CONSENT OF SOA.

CS Energy — Building a Cleaner Future
2045 LINCOLN HIGHWAY
EDISON, NEW JERSEY 08817

PROJECT NAME:
STONINGTON SOLAR PROJECT

PROJECT ADDRESS:
ELLA WHEELER RD.
NORTH STONINGTON, CT 06359
41° 25' 9.71"N, 71° 50' 4.83"W

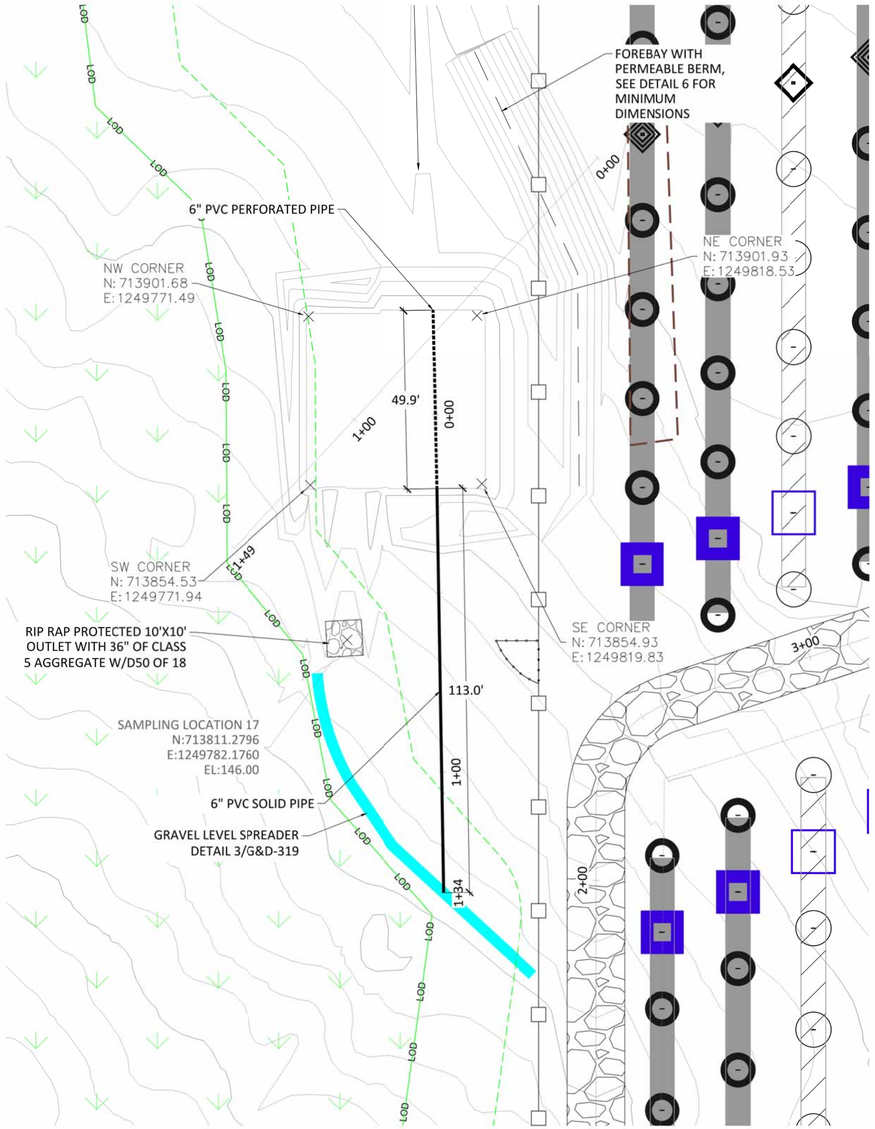
SEAL: STATE OF CONNECTICUT — DARIN RAY GALLOWAY — No. 34152 — LICENSED PROFESSIONAL ENGINEER

DATE: 21-JAN-20
PROJECT #: 20200309_CT
DRAWN BY: MMM
CHECKED BY: DRG

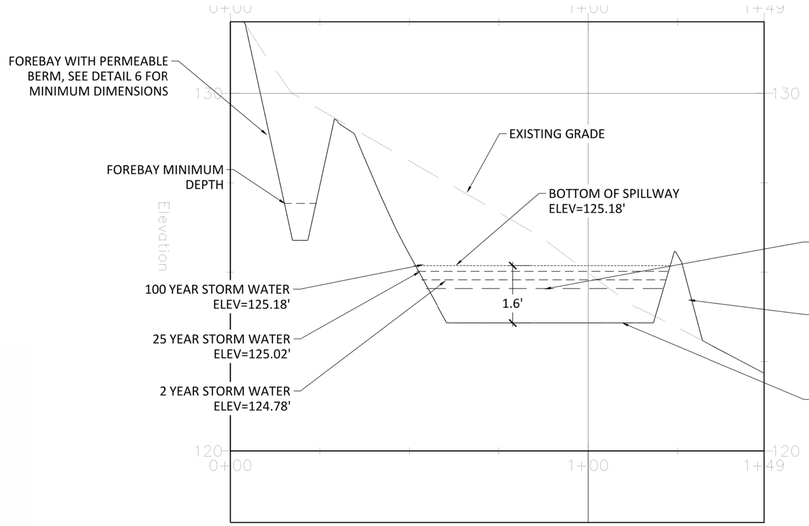
TITLE: GRADING & DRAINAGE DETAILS
SHEET: G&D–315

811 Know what's below. Call before you dig.

LOCATION: E:\DROPBOX (SOA)\ENGINEERING\CS ENERGY\2020-03-09_STONINGTON\CAD\SITE PLANS.DWG PLOTTED BY: DARIN GALLOWAY



1 G&D-316 **STORMWATER BERM WITH BIORETENTION BERM - 6**
Scale: 1"=20'



2 G&D-316 **BERM PROFILE - BERM 6**
Scale: H:1"=20' V:1"=2'

MAP LEGEND (1"=1000')



STORMWATER BASIN NOTES:

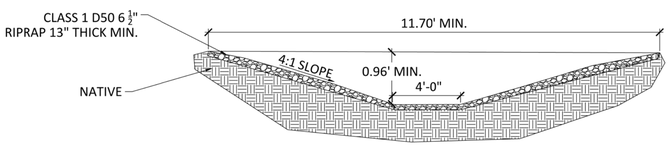
36. STORMWATER BASINS WERE SIZED BASED ON GUIDANCE FROM THE CONNECTICUT STORMWATER QUALITY MANUAL (2004).
37. BASIN DESIGN INPUTS ARE INCLUDED ON SHEET SWMP-100.
38. STORMWATER BASINS/BERMS ARE LOCATED IN THE SAME FOOTPRINT AS SEDIMENT BASINS. SEDIMENT BASIN NUMBERING CORRESPONDS TO STORMWATER BASIN/BERM NUMBERING (E.G. SEDIMENT BASIN 1 IS IN THE SAME FOOTPRINT AS STORMWATER BASIN 1).
39. AFTER FINAL STABILIZATION OF THE SITE, THE FOLLOWING SEQUENCE SHALL BE PERFORMED PRIOR TO CONSTRUCTION OF THE PERMANENT STORMWATER CONTROLS:

39.1. SEDIMENT BASINS LOCATED WHERE BIOFILTRATION BASINS OR BERMS ARE LOCATED SHALL BE EXCAVATED TO THE FULL DEPTH OF THE FILTER MEDIA AND RECONSTRUCTED AS DEPICTED ON GRADING & DRAINAGE DESIGN SHEETS.

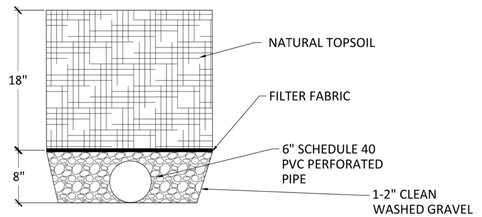
39.2. SEDIMENT BASINS LOCATED WHERE INFILTRATION BASINS OR BERMS ARE LOCATED SHALL HAVE ANY SEDIMENT ACCUMULATION REMOVED AND SCARIFIED TO 12" BELOW BASIN BOTTOM ELEVATION. FOLLOWING CLEANING AND SCARIFICATION, THE STORMWATER CONTROLS SHALL BE RECONSTRUCTED AS DEPICTED ON GRADING & DRAINAGE DESIGN SHEETS.

40. BERM CONSTRUCTION SHALL BE IN ACCORDANCE WITH NOTES 13-27/C-100

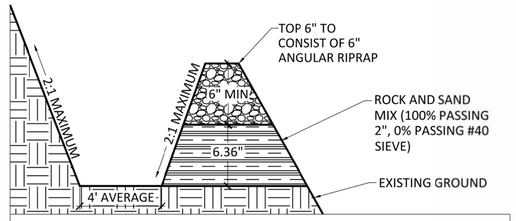
3 G&D-316 **BIORETENTION DRAIN PIPE - 6**
Scale: H:1"=20' V:1"=2'



4 G&D-316 **EMERGENCY SPILLWAY - BERM 6**
Scale: NTS



5 G&D-316 **BIORETENTION BASIN UNDERDRAIN**
Scale: NTS



BERM 6 FOREBAY		
MINIMUM DEPTH (FT)	MINIMUM LENGTH (FT)	STORAGE (FT³)
1.03	130	813

6 G&D-316 **BASIN PRETREATMENT-FOREBAY, TYP**
Scale: NTS

Know what's below. Call before you dig.

soa
SIERRA OVERHEAD ANALYTICS
18859 MICROTRONICS WAY
SONORA, CALIFORNIA 95370
CONNECTICUT PROFESSIONAL ENGINEERING CORPORATION #PEC.0001969

REV	DESCRIPTION	DATE
6	ISSUED FOR CONSTRUCTION - DRAFT	9/4/2020
7	ISSUED FOR CONSTRUCTION - DRAFT	9/18/2020
8	ISSUED FOR CONSTRUCTION - DRAFT	10/22/2020
9	ISSUED FOR CONSTRUCTION - DRAFT	11/06/2020
10	ISSUED FOR CONSTRUCTION	1/20/2021
-	-	-
-	-	-
-	-	-
-	-	-
-	-	-

CONFIDENTIAL:
THE INFORMATION DEPICTED ON THIS DOCUMENT IS PROPRIETARY AND THE SOLE PROPERTY OF SIERRA OVERHEAD ANALYTICS, INC (SOA). ANY USE OR DISCLOSURE OF THIS INFORMATION IS EXPRESSLY PROHIBITED WITHOUT THE PRIOR WRITTEN CONSENT OF SOA.

CS Energy
Building a Cleaner Future
2045 LINCOLN HIGHWAY
EDISON, NEW JERSEY 08817

PROJECT NAME:
STONINGTON SOLAR PROJECT

PROJECT ADDRESS:
ELLA WHEELER RD.
NORTH STONINGTON, CT 06359
41° 25' 9.71"N, 71° 50' 4.83"W

SEAL: STATE OF CONNECTICUT · DARIN RAY GALLOWAY · No. 34152 · LICENSED PROFESSIONAL ENGINEER

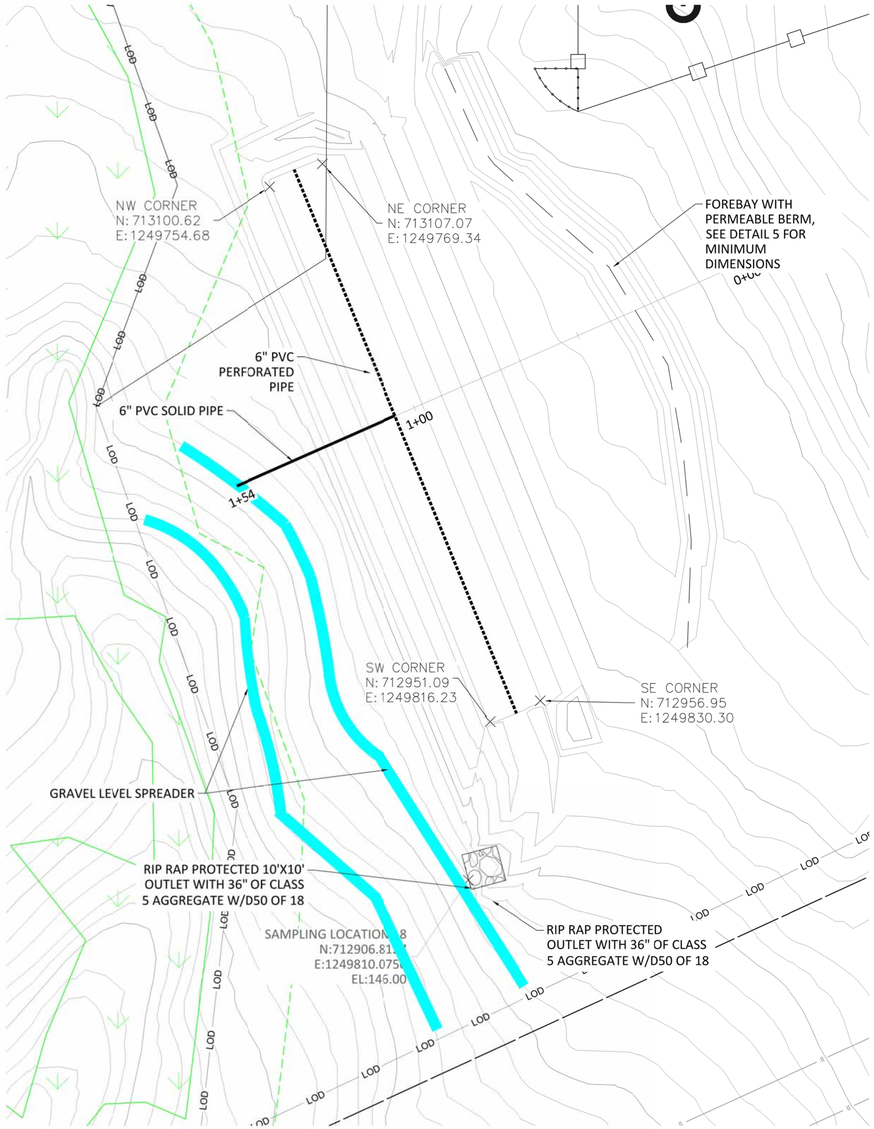
DATE: 21-JAN-20
PROJECT #: 20200309_CT
DRAWN BY: MMM
CHECKED BY: DRG

TITLE: GRADING & DRAINAGE DETAILS

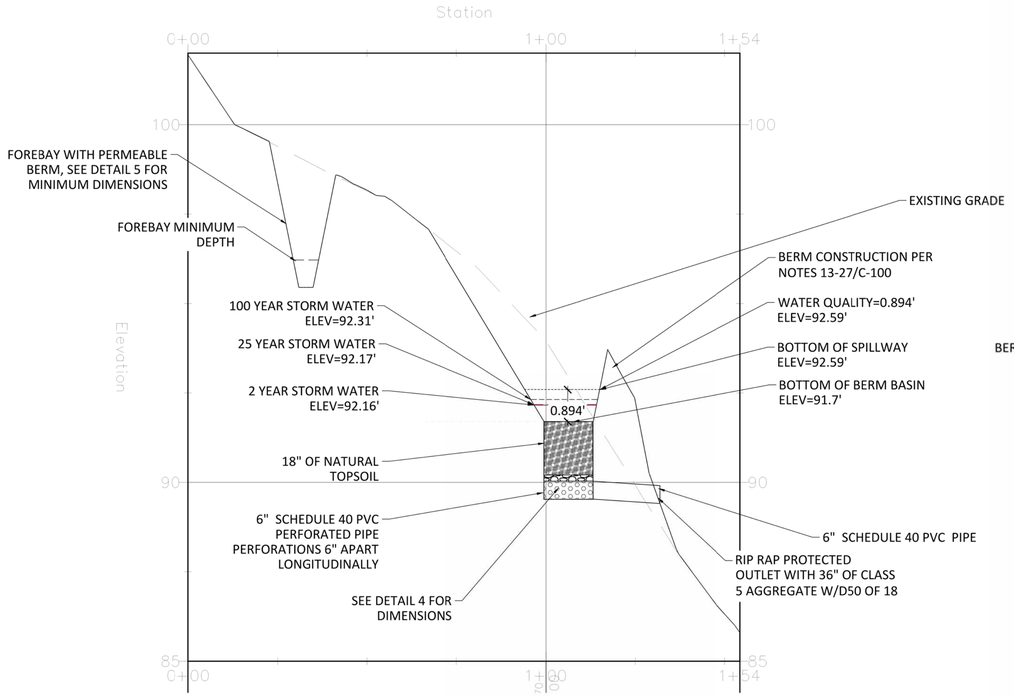
SHEET: G&D–316

PLOT DATE: Tuesday, January 19, 2021

LOCATION: E:\DROPBOX (SOA)\ENGINEERING\CS ENERGY\2020-03-09_STONINGTON\CAD\SITE PLANS.DWG PLOTTED BY: DARIN GALLOWAY



1 STORMWATER BERM WITH BIORETENTION BASIN - 7
G&D-317 Scale: 1"=20'



2 BERM PROFILE - BERM 7
G&D-317 Scale: H:1"=20' V:1"=2'

MAP LEGEND (1"=1000')



STORMWATER BASIN NOTES:

36. STORMWATER BASINS WERE SIZED BASED ON GUIDANCE FROM THE CONNECTICUT STORMWATER QUALITY MANUAL (2004).

37. BASIN DESIGN INPUTS ARE INCLUDED ON SHEET SWMP-100.

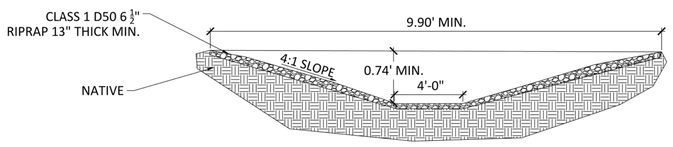
38. STORMWATER BASINS/BERMS ARE LOCATED IN THE SAME FOOTPRINT AS SEDIMENT BASINS. SEDIMENT BASIN NUMBERING CORRESPONDS TO STORMWATER BASIN/BERM NUMBERING (E.G. SEDIMENT BASIN 1 IS IN THE SAME FOOTPRINT AS STORMWATER BASIN 1).

39. AFTER FINAL STABILIZATION OF THE SITE, THE FOLLOWING SEQUENCE SHALL BE PERFORMED PRIOR TO CONSTRUCTION OF THE PERMANENT STORMWATER CONTROLS:

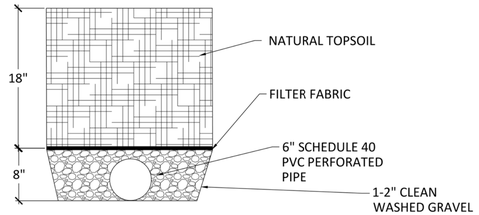
39.1. SEDIMENT BASINS LOCATED WHERE BIOFILTRATION BASINS OR BERMS ARE LOCATED SHALL BE EXCAVATED TO THE FULL DEPTH OF THE FILTER MEDIA AND RECONSTRUCTED AS DEPICTED ON GRADING & DRAINAGE DESIGN SHEETS.

39.2. SEDIMENT BASINS LOCATED WHERE INFILTRATION BASINS OR BERMS ARE LOCATED SHALL HAVE ANY SEDIMENT ACCUMULATION REMOVED AND SCARIFIED TO 12" BELOW BASIN BOTTOM ELEVATION. FOLLOWING CLEANING AND SCARIFICATION, THE STORMWATER CONTROLS SHALL BE RECONSTRUCTED AS DEPICTED ON GRADING & DRAINAGE DESIGN SHEETS.

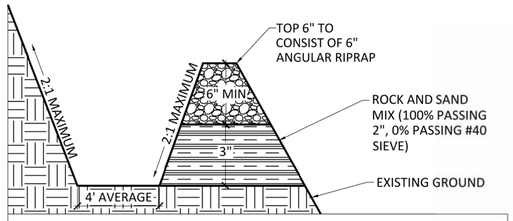
40. BERM CONSTRUCTION SHALL BE IN ACCORDANCE WITH NOTES 13-27/C-100



3 EMERGENCY SPILLWAY - BERM 7
G&D-317 Scale: NTS



4 BIORETENTION BASIN UNDERDRAIN
G&D-317 Scale: NTS



BERM 7 FOREBAY		
MINIMUM DEPTH (FT)	MINIMUM LENGTH (FT)	STORAGE (FT³)
0.75	183	754

5 BASIN PRETREATMENT-FOREBAY, TYP
G&D-317 Scale: NTS

Know what's below. Call before you dig.

soa
SIERRA OVERHEAD ANALYTICS
18859 MICROTRONICS WAY
SONORA, CALIFORNIA 95370
CONNECTICUT PROFESSIONAL ENGINEERING CORPORATION #PEC.0001969

REV	DESCRIPTION	DATE
6	ISSUED FOR CONSTRUCTION - DRAFT	9/4/2020
7	ISSUED FOR CONSTRUCTION - DRAFT	9/18/2020
8	ISSUED FOR CONSTRUCTION - DRAFT	10/22/2020
9	ISSUED FOR CONSTRUCTION - DRAFT	11/06/2020
10	ISSUED FOR CONSTRUCTION	1/20/2021
-	-	-
-	-	-
-	-	-
-	-	-
-	-	-

CONFIDENTIAL:
THE INFORMATION DEPICTED ON THIS DOCUMENT IS PROPRIETARY AND THE SOLE PROPERTY OF SIERRA OVERHEAD ANALYTICS, INC (SOA). ANY USE OR DISCLOSURE OF THIS INFORMATION IS EXPRESSLY PROHIBITED WITHOUT THE PRIOR WRITTEN CONSENT OF SOA.

CS Energy
Building a Cleaner Future
2045 LINCOLN HIGHWAY
EDISON, NEW JERSEY 08817

PROJECT NAME:
STONINGTON SOLAR PROJECT

PROJECT ADDRESS:
ELLA WHEELER RD.
NORTH STONINGTON, CT 06359
41° 25' 9.71"N, 71° 50' 4.83"W

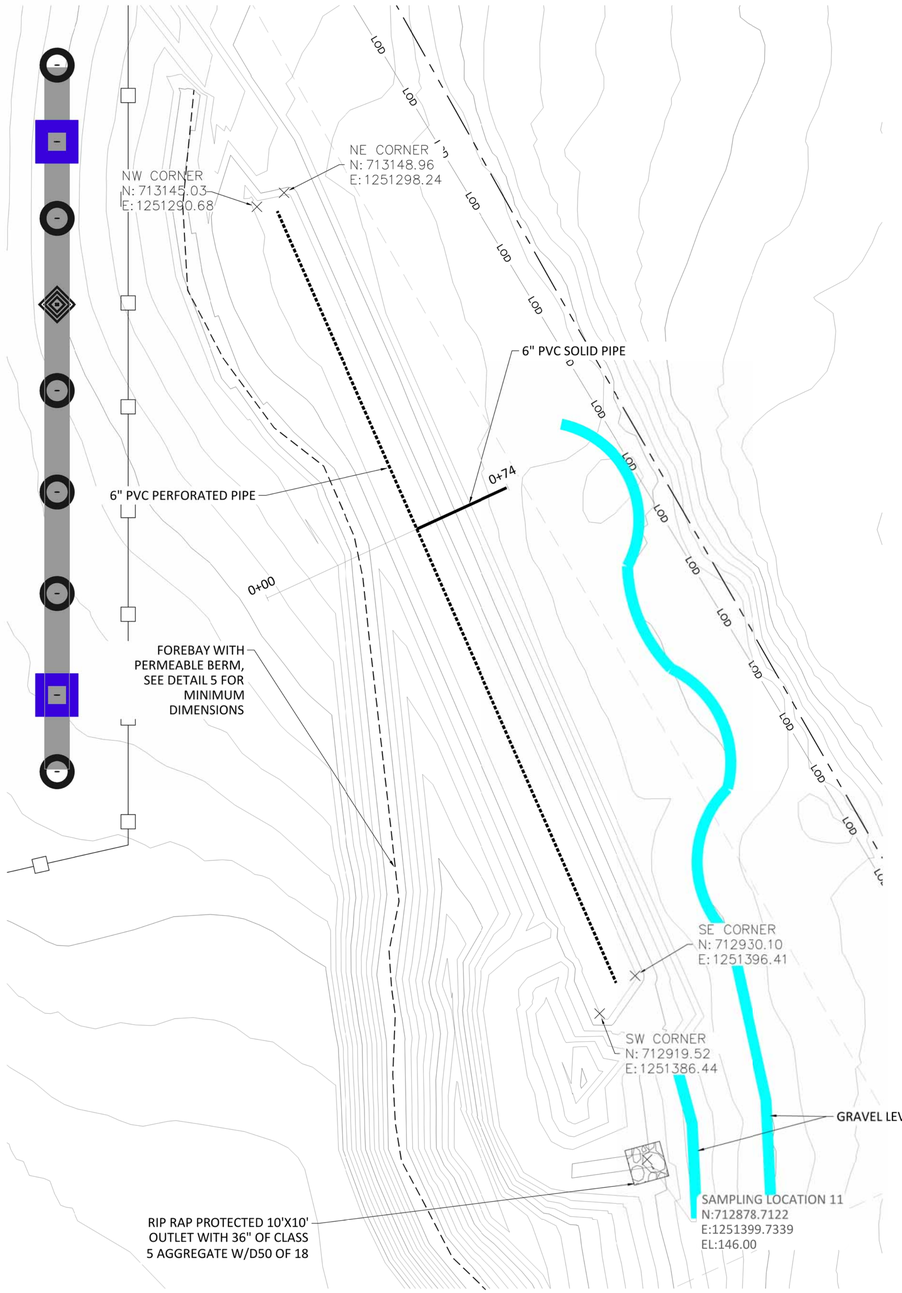
SEAL: STATE OF CONNECTICUT · DARRIN RAY GALLOWAY · No. 34152 · LICENSED PROFESSIONAL ENGINEER

DATE: 21-JAN-20
PROJECT #: 20200309_CT
DRAWN BY: MMM
CHECKED BY: DRG

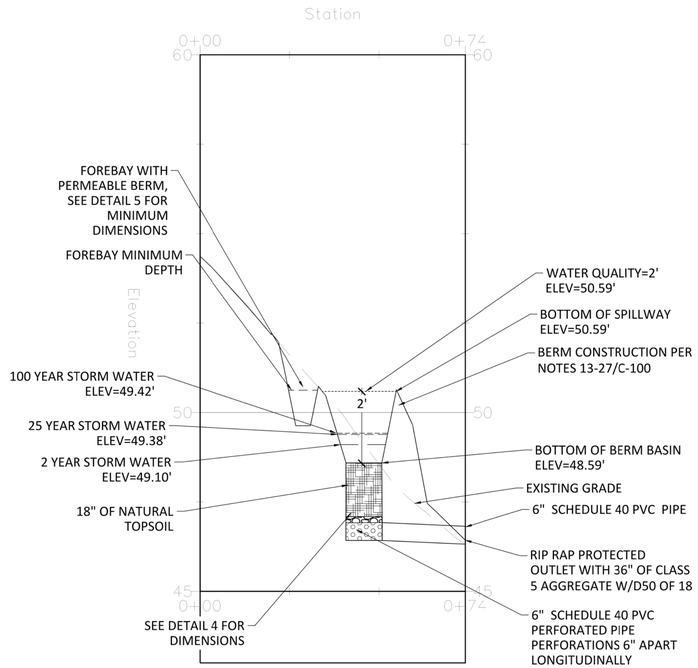
TITLE: GRADING & DRAINAGE DETAILS
SHEET: G&D-317

PLOT DATE: Tuesday, January 19, 2021

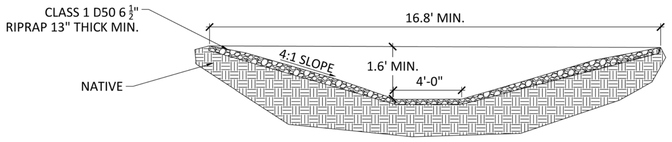
LOCATION: E:\DROPBOX (SOA)\ENGINEERING\CS ENERGY\2020-03-09_STONINGTON\CAD\SITE PLANS.DWG PLOTTED BY: DARIN GALLOWAY



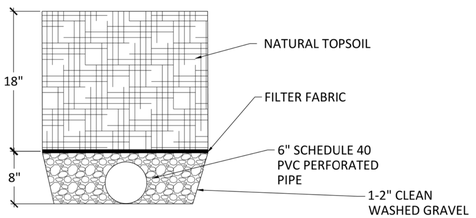
1 STORMWATER BERM WITH BIORETENTION BERM - 8
G&D-318 Scale: 1"=20'



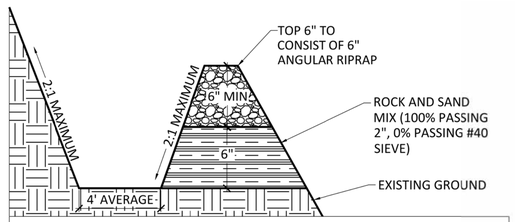
2 BERM PROFILE - BERM 8
G&D-318 Scale: H:1"=20' V:1"=2'



3 EMERGENCY SPILLWAY - BERM 8
G&D-318 Scale: NTS



4 BIORETENTION BASIN UNDERDRAIN
G&D-318 Scale: NTS



BERM 8 FOREBAY		
MINIMUM DEPTH (FT)	MINIMUM LENGTH (FT)	STORAGE (FT³)
1	375	2,250

5 BASIN PRETREATMENT-FOREBAY, TYP
G&D-318 Scale: NTS

MAP LEGEND (1"=1000')



STORMWATER BASIN NOTES:

36. STORMWATER BASINS WERE SIZED BASED ON GUIDANCE FROM THE CONNECTICUT STORMWATER QUALITY MANUAL (2004).
37. BASIN DESIGN INPUTS ARE INCLUDED ON SHEET SWMP-100.
38. STORMWATER BASINS/BERMS ARE LOCATED IN THE SAME FOOTPRINT AS SEDIMENT BASINS. SEDIMENT BASIN NUMBERING CORRESPONDS TO STORMWATER BASIN/BERM NUMBERING (E.G. SEDIMENT BASIN 1 IS IN THE SAME FOOTPRINT AS STORMWATER BASIN 1).
39. AFTER FINAL STABILIZATION OF THE SITE, THE FOLLOWING SEQUENCE SHALL BE PERFORMED PRIOR TO CONSTRUCTION OF THE PERMANENT STORMWATER CONTROLS:

39.1. SEDIMENT BASINS LOCATED WHERE BIOFILTRATION BASINS OR BERMS ARE LOCATED SHALL BE EXCAVATED TO THE FULL DEPTH OF THE FILTER MEDIA AND RECONSTRUCTED AS DEPICTED ON GRADING & DRAINAGE DESIGN SHEETS.

39.2. SEDIMENT BASINS LOCATED WHERE INFILTRATION BASINS OR BERMS ARE LOCATED SHALL HAVE ANY SEDIMENT ACCUMULATION REMOVED AND SCARIFIED TO 12" BELOW BASIN BOTTOM ELEVATION. FOLLOWING CLEANING AND SCARIFICATION, THE STORMWATER CONTROLS SHALL BE RECONSTRUCTED AS DEPICTED ON GRADING & DRAINAGE DESIGN SHEETS.

40. BERM CONSTRUCTION SHALL BE IN ACCORDANCE WITH NOTES 13-27/C-100

soa
SIERRA OVERHEAD ANALYTICS
18859 MICROTRONICS WAY
SONORA, CALIFORNIA 95370
CONNECTICUT PROFESSIONAL ENGINEERING CORPORATION #PEC.0001969

REV	DESCRIPTION	DATE
6	ISSUED FOR CONSTRUCTION - DRAFT	9/4/2020
7	ISSUED FOR CONSTRUCTION - DRAFT	9/18/2020
8	ISSUED FOR CONSTRUCTION - DRAFT	10/22/2020
9	ISSUED FOR CONSTRUCTION - DRAFT	11/06/2020
10	ISSUED FOR CONSTRUCTION	1/20/2021
-	-	-
-	-	-
-	-	-
-	-	-
-	-	-

CONFIDENTIAL:
THE INFORMATION DEPICTED ON THIS DOCUMENT IS PROPRIETARY AND THE SOLE PROPERTY OF SIERRA OVERHEAD ANALYTICS, INC (SOA). ANY USE OR DISCLOSURE OF THIS INFORMATION IS EXPRESSLY PROHIBITED WITHOUT THE PRIOR WRITTEN CONSENT OF SOA.

CS Energy
Building a Cleaner Future
2045 LINCOLN HIGHWAY
EDISON, NEW JERSEY 08817

PROJECT NAME:
STONINGTON SOLAR PROJECT

PROJECT ADDRESS:
ELLA WHEELER RD.
NORTH STONINGTON, CT 06359
41° 25' 9.71"N, 71° 50' 4.83"W

SEAL: STATE OF CONNECTICUT · DARIN RAY GALLOWAY · No. 34152 · LICENSED PROFESSIONAL ENGINEER

DATE: 21-JAN-20
PROJECT #: 20200309_CT
DRAWN BY: MMM
CHECKED BY: DRG

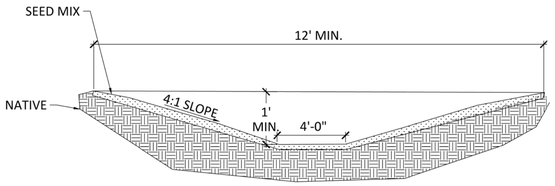
TITLE: GRADING & DRAINAGE DETAILS

SHEET: G&D–318

811 Know what's below. Call before you dig.

PLOT DATE: Tuesday, January 19, 2021

LOCATION: E:\DROPBOX (SOA)\ENGINEERING\CS ENERGY\2020-03-09_STONINGTON\CAD\SITE PLANS.DWG PLOTTED BY: DARIN GALLOWAY



1 GRASS LINE CHANNEL, TYP.
G&D-319 Scale: NTS

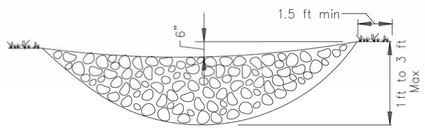
o **Warm Season Planting Mix**

		Lbs/1,000 Lbs/Acre	No. Sq. Ft.
9[5]	Creeping Red Fescue (Pennlawn, Wintergreen)	10	.25
	Crown Vetch (Chemung, Penngift) with inoculant[1]	15	.35
	(or Flatpea (Lathco) with inoculant[1])	(30)	(.75)
	Tall Fescue (Kentucky 31) or Smooth Bromegrass (Saratoga, Lincoln)	15	.35
	Redtop (Streeker, Common)	2	.05
		Total 42 (or 57)	1.00 (or 1.40)

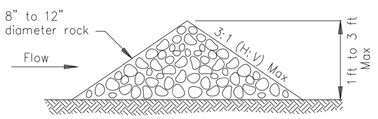
o **Cool Season Planting:**

		Lbs/1,000 Lbs/Acre	No. Sq. Ft.
12[6]	Switchgrass (Blackwell, Shelter, Cave-in-rock)	101	.25
	Perennial Ryegrass (Norlea, Manhatten)	5	.10
	Crown Vetch (Chemung, Penngift) with inoculant[1]	15	.35
		Total 45	1.05
13[6]	Crown Vetch (Chemung, Penngift) with inoculant[1]	10	.25
	(or (Flatpea (Lathco) with inoculant[1])	(30)	(.75)
	Switchgrass (Blackwell, Shelter, Cave-in-rock)	5[1]	.10
	Perennial Ryegrass (Norlea, Manhatten)	5	.10
		Total 20 (or 40)	.45 (or .95)

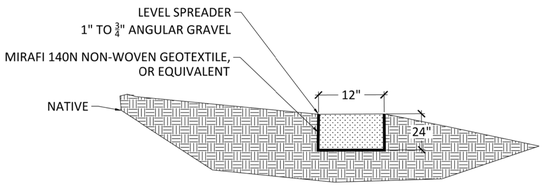
2 GRASS LINE CHANNEL SEED MIX
G&D-319 Scale: NTS



ELEVATION

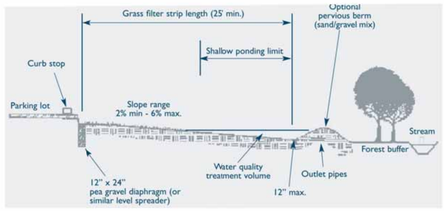


TYPICAL ROCK CHECK DAM SECTION



3 LEVEL SPREADER, TYP.
G&D-319 Scale: NTS

4 ROCK CHECK DAM, TYP.
G&D-319 Scale: NTS



5 VEGETATED FILTER STRIP, TYP.
G&D-319 Scale: NTS

Know what's below. Call before you dig.

SIERRA OVERHEAD ANALYTICS
18859 MICROTRONICS WAY
SONORA, CALIFORNIA 95370
CONNECTICUT PROFESSIONAL
ENGINEERING CORPORATION #PEC.0001969

REV	DESCRIPTION	DATE
6	ISSUED FOR CONSTRUCTION - DRAFT	9/4/2020
7	ISSUED FOR CONSTRUCTION - DRAFT	9/18/2020
8	ISSUED FOR CONSTRUCTION - DRAFT	10/22/2020
9	ISSUED FOR CONSTRUCTION - DRAFT	11/06/2020
10	ISSUED FOR CONSTRUCTION	1/20/2021
-	-	-
-	-	-
-	-	-
-	-	-
-	-	-
-	-	-

CONFIDENTIAL:
THE INFORMATION DEPICTED ON THIS DOCUMENT IS PROPRIETARY AND THE SOLE PROPERTY OF SIERRA OVERHEAD ANALYTICS, INC (SOA). ANY USE OR DISCLOSURE OF THIS INFORMATION IS EXPRESSLY PROHIBITED WITHOUT THE PRIOR WRITTEN CONSENT OF SOA.

CS Energy
Building a Cleaner Future
2045 LINCOLN HIGHWAY
EDISON, NEW JERSEY 08817

PROJECT NAME:
STONINGTON SOLAR PROJECT

PROJECT ADDRESS:
ELLA WHEELER RD.
NORTH STONINGTON, CT 06359
41° 25' 9.71"N, 71° 50' 4.83"W

SEAL: STATE OF CONNECTICUT · DARIN RAY GALLOWAY · No. 34152 · LICENSED PROFESSIONAL ENGINEER

DATE: 21-JAN-20
PROJECT #: 20200309_CT
DRAWN BY: MMM
CHECKED BY: DRG

TITLE: GRADING & DRAINAGE DETAILS

SHEET: G&D–319

PLOT DATE: Tuesday, January 19, 2021

LOCATION: E:\DROPBOX (SOA)\ENGINEERING\CS ENERGY\2020-03-09_STONINGTON\CAD\SITE PLANS.DWG PLOTTED BY: DARIN GALLOWAY

STORMWATER MANAGEMENT NOTES:

1. ALL STORMWATER CONTROLS SHALL BE INSTALLED AND MAINTAINED IN ACCORDANCE WITH THE CONNECTICUT STORMWATER MANUAL (2004).
2. FOLLOWING CONSTRUCTION, PERMANENT STORMWATER CONTROLS, INSPECTIONS AND MAINTENANCE SHALL BE THE RESPONSIBILITY OF THE OWNER.
3. STORMWATER CONTROL PRACTICES, INSPECTION, AND MAINTENANCE PROCEDURES ARE INCLUDED IN THE STORMWATER POLLUTION CONTROL PLAN.
4. ALL PERMANENT STORMWATER CONTROLS SHALL BE INSPECTED TWO TIMES A YEAR MINIMUM.
5. PERMANENT STORMWATER CONTROL INSPECTIONS SHALL BE PERFORMED TO OBSERVE FOR EXCESSIVE PONDING AND SEDIMENT BUILDUP.
6. IF EXCESSIVE PONDING AND SEDIMENT BUILD UP ARE OBSERVED IN BIORETENTION BASINS, THE FOLLOWING SHALL BE PERFORMED:
   - 6.1. SEDIMENT BUILDUP SHALL BE REMOVED AS NEEDED TO MAINTAIN THE DESIGN BOTTOM ELEVATION.
   - 6.2. IF EXCESSIVE PONDING OCCURS OR LASTS LONGER THAN MAXIMUM DESIGN REQUIREMENTS (5-DAYS), CLEAN OUT DRAIN SYSTEM. IF PONDING LASTS GREATER THAN 5-DAYS AFTER DRAIN SYSTEM CLEANING, REPLACE DRAIN ROCK, SOIL BED, AND RE-PLANT.
7. IF EXCESSIVE PONDING AND SEDIMENT BUILDUP ARE OBSERVED IN INFILTRATION BASINS, THE FOLLOWING SHALL BE PERFORMED:
   - 7.1. SEDIMENT BUILDUP SHALL BE REMOVED AS NEEDED TO MAINTAIN THE DESIGN BOTTOM ELEVATION.
   - 7.2. IF EXCESSIVE PONDING OCCURS:
     - 7.2.1. REMOVE THE TOP 12" OF SOIL
     - 7.2.2. SCARIFY 12"
     - 7.2.3. REPLACE SOIL WITH A PLANTING MEDIUM WITH GRAIN SIZE OF LESS THAN 50% PASSING THE #200 SIEVE.
     - 7.2.4. RE-PLANT WITH A NATIVE PLANT SPECIES SUITABLE FOR WET ENVIRONMENTS.

STORMWATER CONTROL DESIGN PARAMETERS

WATERSHED BASIN ID	SUB-BASIN ID	STORMWATER CONTROL I.D.	WATER QUALITY VOLUME (FT^3)	WATER QUALITY FLOW (CFS)	2-YEAR PEAK ATTENUATION VOLUME (FT^3)	25-YEAR PEAK ATTENUATION VOLUME (FT^3)	100-YEAR PEAK ATTENUATION VOLUME (FT^3)	2-YEAR MAX (CFS)	25-YEAR MAX (CFS)	100-YEAR MAX (CFS)
2	1	BASIN 1	5,578.51	0.39	2,033.10	3,089.981	3,181.18	9.64	29.08	41.92
	2	BASIN 2	6,701.03	0.47	2,442.20	3,711.75	3,821.301	6.5	34.93	50.35
	3	BASIN 3	5,920.83	0.42	2,157.85	3,279.59	3,376.386	2.28	30.86	44.49
	4	BASIN 4	12,754	0.9	3,742.03	5,687.27	5,855.13	33.14	96.37	137.77
3	DRAINS TO WATERSHED 2 SUB-BASIN 4	--	2,089.604	--	934.2	1,172.4	1,317.6	3.33	10.73	15.60
4	DRAINS TO WATERSHED 2 SUB-BASIN 4	--	396.587	--	633	923.4	971.4	11.656	32.108	45.00
5	1	BASIN 7	5,423.95	0.38	1,393.80	2,163.39	2,255.61	11.84	31.07	43.36
	2	BASIN 8	6,548.92	0.46	1,682.88	2,612.10	3,504.45	14.30	37.52	52.36
	3	BASIN 10	8505.20	0.61	2,185.59	3,392.38	3,219.17	18.57	48.75	63.00
	4	BERM 5	12,090.81	0.85	3,106.99	4,822.53	5409.71	26.40	69.28	69.67
	5	SWALE 1	7,940.75	0.56	2,040.54	3,167.24	3,302.25	17.34	45.50	63.48
	6	BERM 8	8,712	0.61	2,238.73	3,474.86	3,622.98	19.02	49.92	69.65
	7	BASIN 9	5,262.06	0.37	1352.20	2,098.82	3,618.787	11.49	30.15	42.07
6	1	--	4,900.26	0.34	622.60	848.10	934.80	38.29	100.88	140.21
7	1	BERM 6	3,249	0.26	4,070.229	4,865.78	5,409.71	11.411	32.85	46.89
	2	BERM 7	3,017	0.24	1,572.71	1,594.15	2,070.95	11.302	32.45	46.08
8	1	BERM 1	2268.8	0.18	1,419.35	1,778.58	1,891.98	2.00	5.80	8.35
	2	BERM 2	516.6	0.04	323.22	405.02	430.85	0.45	1.32	1.90
	3	BERM 3	2,423.63	0.19	1,516.21	1,899.96	2,021.10	2.14	6.20	8.92
	4	BERM 4	5,550	0.45	3,472.81	4,351.76	4,629.21	4.91	14.20	20.43
9	1	BASIN 5	4,881.91	0.44	2,261.72	2,539.68	2,732.18	4.99	12.68	17.44
	2	BASIN 6	3,654.06	0.33	1,692.87	1,900.92	2,045.01	3.73	9.49	13.05

STORMWATER CONTROL SPECIFICATIONS

WATERSHED BASIN ID	SUB-BASIN ID	STORMWATER CONTROL I.D.	TOP AREA (FT^2)	BOTTOM AREA (FT^2)	DEPTH (FT)	BASIN VOLUME (FT^3)	PRE-TREATMENT VOLUMES (FT^3)	LOWEST MEASURED INFILTRATION RATE (IN/HR)	DESIGNED INFILTRATION RATE (IN/HR)	DRAW DOWN TIME (HR)	NOTES
2	1	BASIN 1	6,026	4,600	1.05	5,579	1,395	0.2	--	--	
	2	BASIN 2	7,620	6,000	1	6,742	1,686	5.3	2.65	4.52	AMEND WITH MATERIAL >50% PASSING #40 SIEVE
	3	BASIN 3	8,004	4,709	0.93	5,920	1,480	2.5	1.25	8.92	AMEND WITH MATERIAL >50% PASSING #40 SIEVE
	4	BASIN 4	14,508	11,000	1	12,754	3,189	5	2.50	4.8	AMEND WITH MATERIAL >50% PASSING #40 SIEVE
5	1	BASIN 7	3,985	3,007	1.57	5,489	1,372	5.7	2.85	6.61	AMEND WITH MATERIAL >50% PASSING #40 SIEVE
	2	BASIN 8	9,122	7,957	0.77	6,575	1,644	11.1	5.05	1.80	AMEND WITH MATERIAL >50% PASSING #40 SIEVE
	3	BASIN 10	4,944	2,094	2.45	8,622	2,156	6.5	3.25	9.04	AMEND WITH MATERIAL >50% PASSING #40 SIEVE
	4	BERM 5	7,090	5,000	2	12,090	3,023	--	--	--	
	5	SWALE 1	--	--	1.3	8,426	2,107	0.03	--	--	16 CHECK DAMS WITH AN AVERAGE DETENTION VOLUME OF 526.63 FT^3
	6	BERM 8	6,212	2,500	2	8,712	2,178	--	--	--	
	7	BASIN 9	5,302	4,636	1.07	5,317	1,329	--	--	--	
7	1	BERM 6	4,500	2,250	0.96	3,250	813	--	--	--	
	2	BERM 7	4,500	2,250	0.89	3,017	754	--	--	--	
8	1	BERM 1	2,510	2,422	0.92	2,269	567	--	--	--	
	2	BERM 2	1,817	490.47	0.48	553	126	--	--	--	
	3	BERM 3	1,511	1,000	1.93	2,424	606	--	--	--	
	4	BERM 4	3,550	2,000	2	5,550	1,388	--	--	--	
9	1	BASIN 5	4,176	2,932	1.374	4,883	1,221	5.5	2.25	7.3	AMEND WITH MATERIAL >50% PASSING #40 SIEVE
	2	BASIN 6	5,500	2,532	0.91	3,655	914	0.18	--	--	

SOA
SIERRA OVERHEAD ANALYTICS
18859 MICROTRONICS WAY
SONORA, CALIFORNIA 95370
CONNECTICUT PROFESSIONAL ENGINEERING CORPORATION #PEC.0001969

REV	DESCRIPTION	DATE
6	ISSUED FOR CONSTRUCTION - DRAFT	9/4/2020
7	ISSUED FOR CONSTRUCTION - DRAFT	9/18/2020
8	ISSUED FOR CONSTRUCTION - DRAFT	10/22/2020
9	ISSUED FOR CONSTRUCTION - DRAFT	11/06/2020
10	ISSUED FOR CONSTRUCTION	1/20/2021
-	-	-
-	-	-
-	-	-
-	-	-
-	-	-

CONFIDENTIAL:
THE INFORMATION DEPICTED ON THIS DOCUMENT IS PROPRIETARY AND THE SOLE PROPERTY OF SIERRA OVERHEAD ANALYTICS, INC (SOA). ANY USE OR DISCLOSURE OF THIS INFORMATION IS EXPRESSLY PROHIBITED WITHOUT THE PRIOR WRITTEN CONSENT OF SOA.

CS Energy
Building a Cleaner Future
2045 LINCOLN HIGHWAY
EDISON, NEW JERSEY 08817

PROJECT NAME:
STONINGTON SOLAR PROJECT

PROJECT ADDRESS:
ELLA WHEELER RD.
NORTH STONINGTON, CT 06359
41° 25' 9.71"N, 71° 50' 4.83"W

SEAL: STATE OF CONNECTICUT · DARIN RAY GALLOWAY · No. 34152 · LICENSED PROFESSIONAL ENGINEER

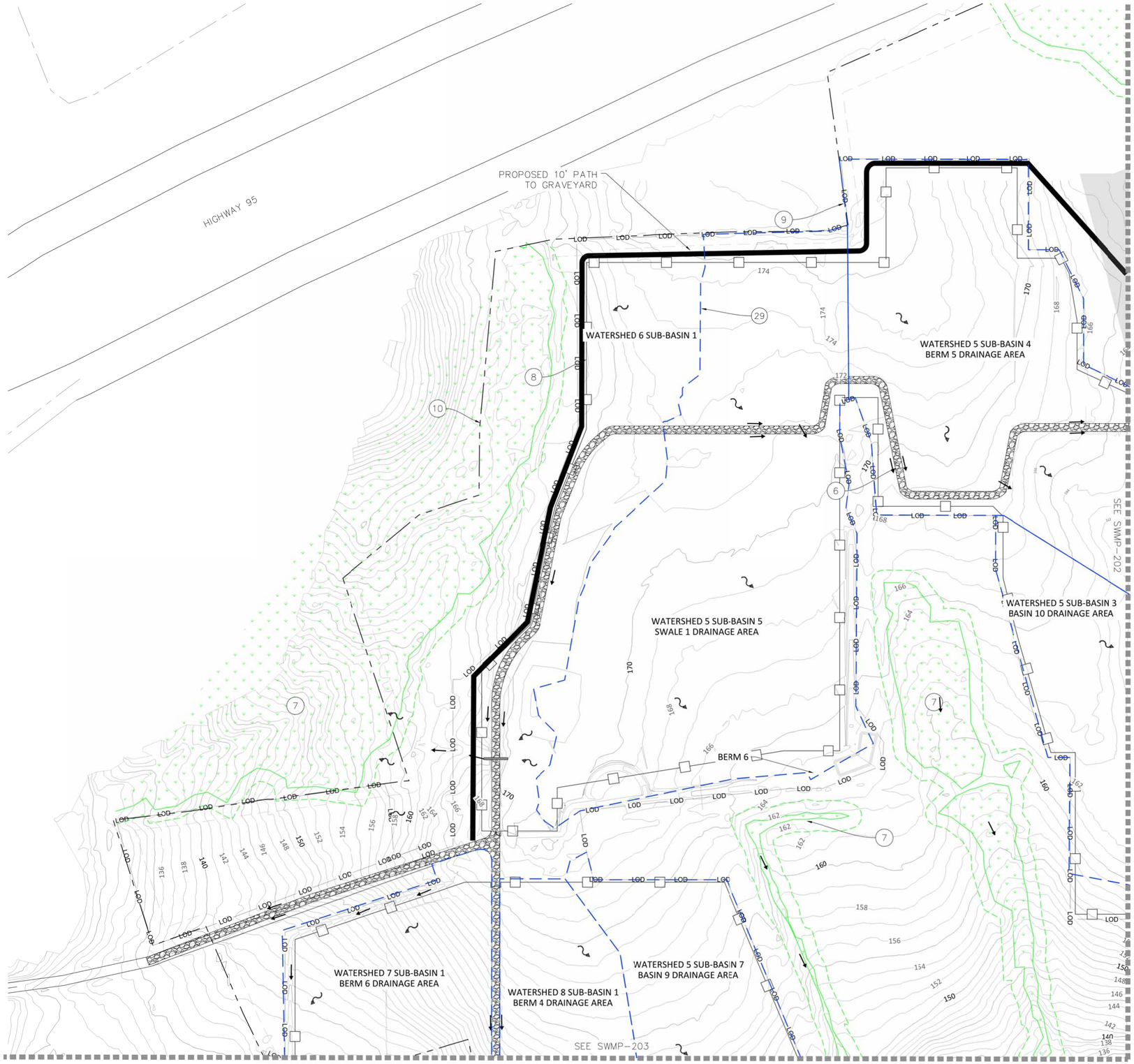
DATE: 21-JAN-20
PROJECT #: 20200309_CT
DRAWN BY: MMM
CHECKED BY: DRG

TITLE: STORMWATER MANAGEMENT NOTES
SHEET: SWMP-100

811 Know what's below. Call before you dig.

PLOT DATE: Tuesday, January 19, 2021

LOCATION: E:\DROPBOX (SOA)\ENGINEERING\CS ENERGY\2020-03-09_STONINGTON\CAD\NOTES.DWG PLOTTED BY: DARIN GALLOWAY

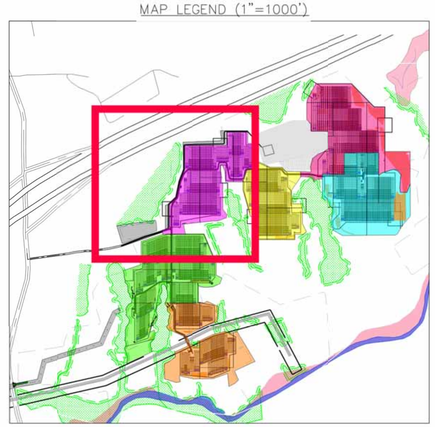


1 STORMWATER MANAGEMENT PLAN
SWMP-201
Scale: 1" = 100'

N

0 100 200 Feet

MAP LEGEND (1"=1000')



LEGEND

6	PROPOSED SITE ACCESS ROAD (SEE C-400)
7	WETLAND W/BUFFER
8	SITE FENCE LINE (SEE C-402)
9	LOD — SITE LIMIT OF DISTURBANCE
10	SITE BOUNDARY
29	SUB BASIN BOUNDARY
	CHANNELED FLOW
	SHEET FLOW

SIERRA OVERHEAD ANALYTICS
18859 MICROTRONICS WAY
SONORA, CALIFORNIA 95370
CONNECTICUT PROFESSIONAL
ENGINEERING CORPORATION #PEC.0001969

REV	DESCRIPTION	DATE
6	ISSUED FOR CONSTRUCTION - DRAFT	9/4/2020
7	ISSUED FOR CONSTRUCTION - DRAFT	9/18/2020
8	ISSUED FOR CONSTRUCTION - DRAFT	10/22/2020
9	ISSUED FOR CONSTRUCTION - DRAFT	11/06/2020
10	ISSUED FOR CONSTRUCTION	1/20/2021
-	-	-
-	-	-
-	-	-
-	-	-
-	-	-
-	-	-

CONFIDENTIAL:
THE INFORMATION DEPICTED ON THIS DOCUMENT IS PROPRIETARY AND THE SOLE PROPERTY OF SIERRA OVERHEAD ANALYTICS, INC (SOA). ANY USE OR DISCLOSURE OF THIS INFORMATION IS EXPRESSLY PROHIBITED WITHOUT THE PRIOR WRITTEN CONSENT OF SOA.

CS Energy
Building a Cleaner Future
2045 LINCOLN HIGHWAY
EDISON, NEW JERSEY 08817

PROJECT NAME:
STONINGTON SOLAR PROJECT

PROJECT ADDRESS:
ELLA WHEELER RD.
NORTH STONINGTON, CT 06359
41° 25' 9.71"N, 71° 50' 4.83"W

SEAL:
STATE OF CONNECTICUT
DARIN RAY GALLOWAY
No. 34152
LICENSED PROFESSIONAL ENGINEER

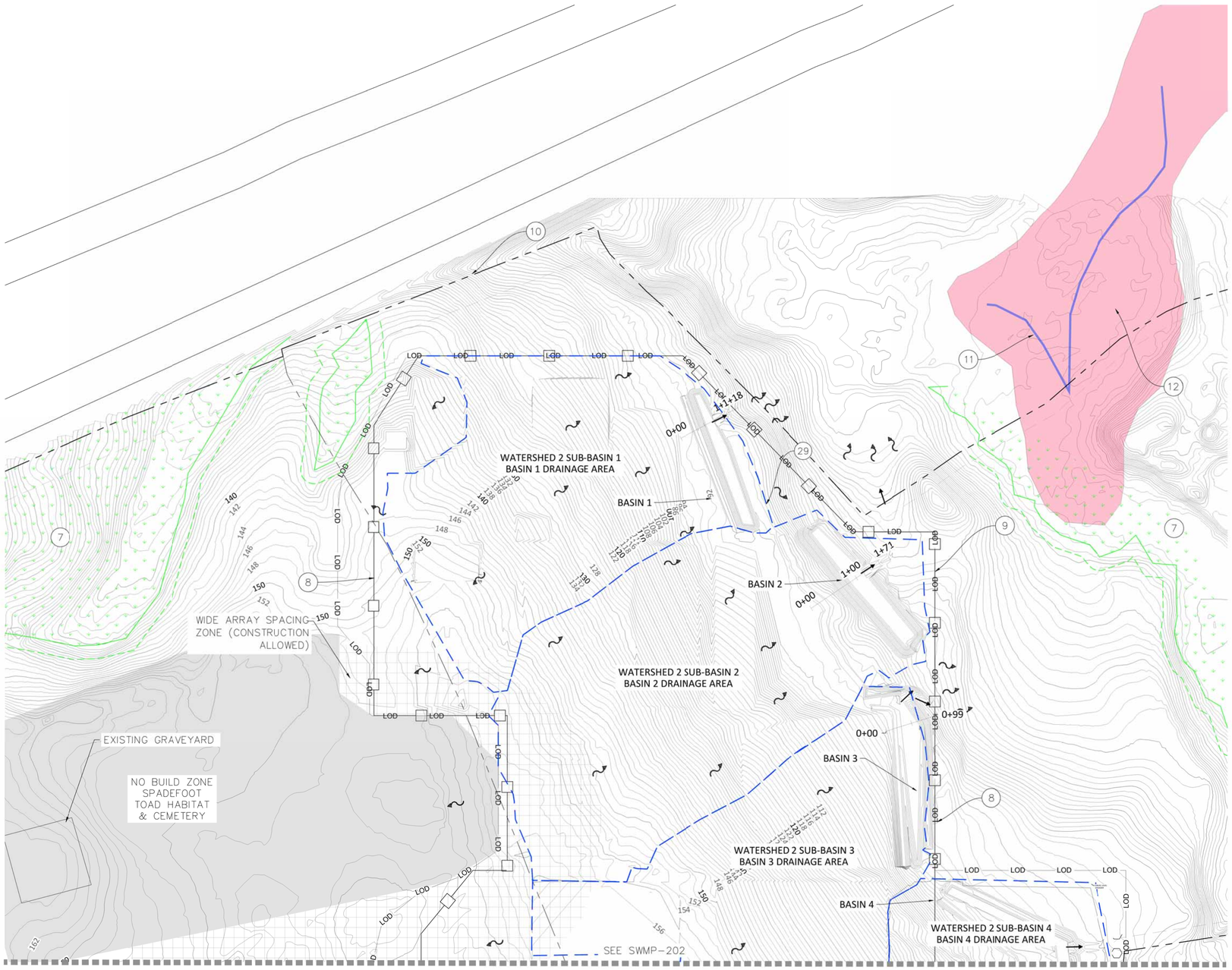
DATE: 21-JAN-20
PROJECT #: 20200309_CT
DRAWN BY: MMM
CHECKED BY: DRG

TITLE: STORMWATER MANAGEMENT PLAN
SHEET: SWMP-201

811 Know what's below. Call before you dig.

PLOT DATE: Tuesday, January 19, 2021

LOCATION: E:\DROPBOX (SOA)\ENGINEERING\CS ENERGY\2020-03-09_STONINGTON\CAD\SITE PLANS.DWG PLOTTED BY: DARIN GALLOWAY



1 SWMP-202 STORMWATER MANAGEMENT PLAN
Scale: 1" = 100'

N

0 100 200 Feet

MAP LEGEND (1"=1000')



LEGEND

6	PROPOSED SITE ACCESS ROAD (SEE C-400)
7	WETLAND W/BUFFER
8	SITE FENCE LINE (SEE C-402)
9	LOD — SITE LIMIT OF DISTURBANCE
10	SITE BOUNDARY
29	SUB BASIN BOUNDARY
	CHANNELED FLOW
	SHEET FLOW

SIERRA OVERHEAD ANALYTICS
18859 MICROTRONICS WAY
SONORA, CALIFORNIA 95370
CONNECTICUT PROFESSIONAL
ENGINEERING CORPORATION #PEC.0001969

REV	DESCRIPTION	DATE
6	ISSUED FOR CONSTRUCTION - DRAFT	9/4/2020
7	ISSUED FOR CONSTRUCTION - DRAFT	9/18/2020
8	ISSUED FOR CONSTRUCTION - DRAFT	10/22/2020
9	ISSUED FOR CONSTRUCTION - DRAFT	11/06/2020
10	ISSUED FOR CONSTRUCTION	1/20/2021
-	-	-
-	-	-
-	-	-
-	-	-
-	-	-

CONFIDENTIAL:
THE INFORMATION DEPICTED ON THIS DOCUMENT IS PROPRIETARY AND THE SOLE PROPERTY OF SIERRA OVERHEAD ANALYTICS, INC (SOA). ANY USE OR DISCLOSURE OF THIS INFORMATION IS EXPRESSLY PROHIBITED WITHOUT THE PRIOR WRITTEN CONSENT OF SOA.

CS Energy
Building a Cleaner Future
2045 LINCOLN HIGHWAY
EDISON, NEW JERSEY 08817

PROJECT NAME:
STONINGTON SOLAR PROJECT

PROJECT ADDRESS:
ELLA WHEELER RD.
NORTH STONINGTON, CT 06359
41° 25' 9.71"N, 71° 50' 4.83"W

SEAL: STATE OF CONNECTICUT · DARIN RAY GALLOWAY · No. 34152 · LICENSED PROFESSIONAL ENGINEER

DATE: 21-JAN-20
PROJECT #: 20200309_CT
DRAWN BY: MMM
CHECKED BY: DRG

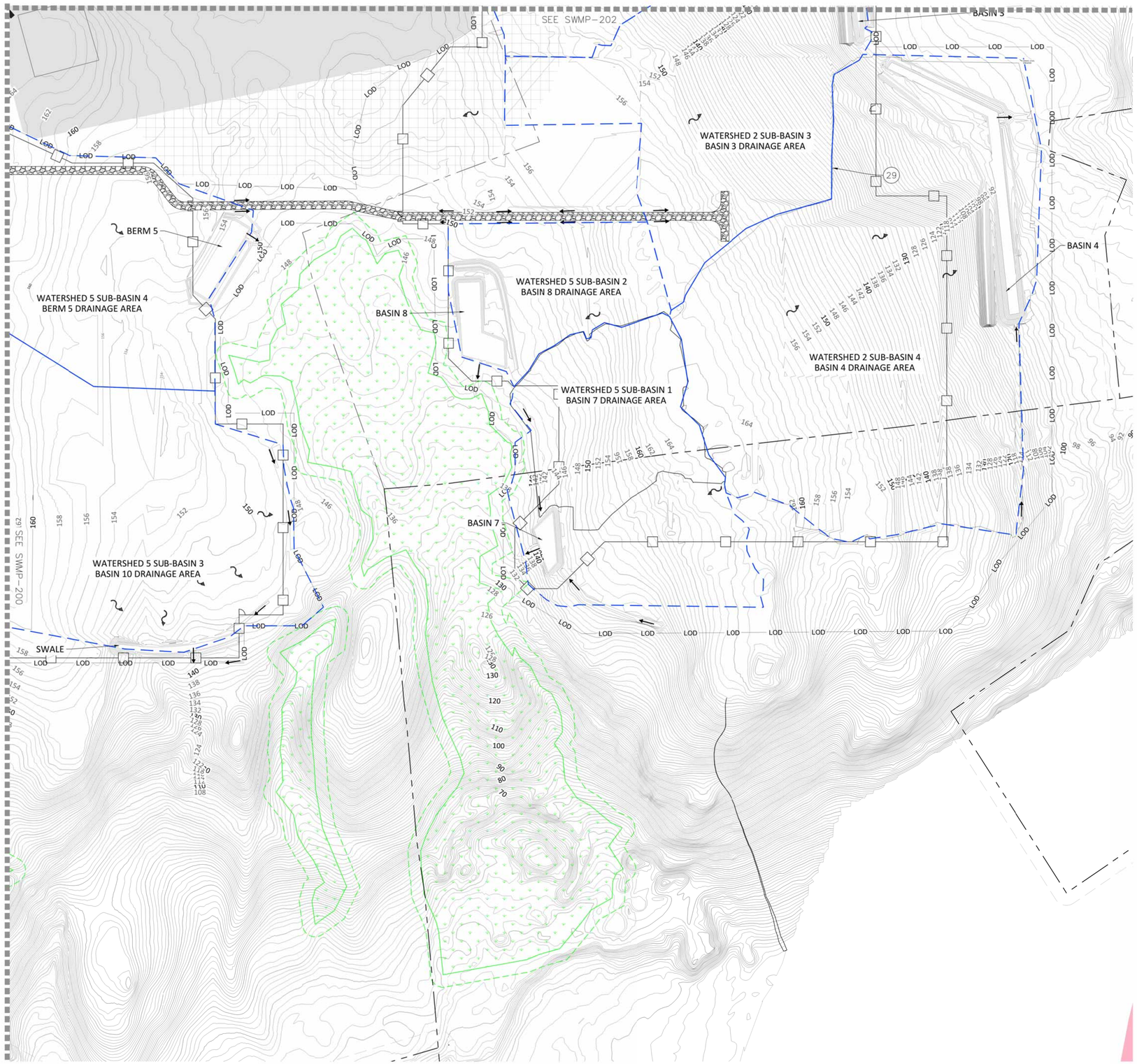
TITLE: STORMWATER MANAGEMENT PLAN

SHEET: SWMP-202

811 Know what's below. Call before you dig.

PLOT DATE: Tuesday, January 19, 2021

LOCATION: E:\DROPBOX (SOA)\ENGINEERING\CS ENERGY\2020-03-09_STONINGTON\CAD\SITE PLANS.DWG PLOTTED BY: DARIN GALLOWAY



MAP LEGEND (1"=1000')



LEGEND

6	PROPOSED SITE ACCESS ROAD (SEE C-400)
7	WETLAND W/BUFFER
8	SITE FENCE LINE (SEE C-402)
9	LOD — SITE LIMIT OF DISTURBANCE
10	SITE BOUNDARY
29	SUB BASIN BOUNDARY
	CHANNELED FLOW
	SHEET FLOW

1 STORMWATER MANAGEMENT PLAN
SWMP-203
Scale: 1" = 100'

N

0 100 200 Feet

Know what's below. Call before you dig.

LOCATION: E:\DROPBOX (SOA)\ENGINEERING\CS ENERGY\2020-03-09_STONINGTON\CAD\SITE PLANS.DWG PLOTTED BY: DARIN GALLOWAY

PLOT DATE: Tuesday, January 19, 2021

soa
SIERRA OVERHEAD ANALYTICS
18859 MICROTRONICS WAY
SONORA, CALIFORNIA 95370
CONNECTICUT PROFESSIONAL
ENGINEERING CORPORATION #PEC.0001969

REV	DESCRIPTION	DATE
6	ISSUED FOR CONSTRUCTION - DRAFT	9/4/2020
7	ISSUED FOR CONSTRUCTION - DRAFT	9/18/2020
8	ISSUED FOR CONSTRUCTION - DRAFT	10/22/2020
9	ISSUED FOR CONSTRUCTION - DRAFT	11/06/2020
10	ISSUED FOR CONSTRUCTION	1/20/2021
-	-	-
-	-	-
-	-	-
-	-	-
-	-	-

CONFIDENTIAL:
THE INFORMATION DEPICTED ON THIS DOCUMENT IS PROPRIETARY AND THE SOLE PROPERTY OF SIERRA OVERHEAD ANALYTICS, INC (SOA). ANY USE OR DISCLOSURE OF THIS INFORMATION IS EXPRESSLY PROHIBITED WITHOUT THE PRIOR WRITTEN CONSENT OF SOA.

CS Energy
Building a Cleaner Future
2045 LINCOLN HIGHWAY
EDISON, NEW JERSEY 08817

PROJECT NAME:
STONINGTON SOLAR PROJECT

PROJECT ADDRESS:
ELLA WHEELER RD.
NORTH STONINGTON, CT 06359
41° 25' 9.71"N, 71° 50' 4.83"W

SEAL: STATE OF CONNECTICUT · DARIN RAY GALLOWAY · No. 34182 · LICENSED PROFESSIONAL ENGINEER

DATE:	21-JAN-20
PROJECT #:	20200309_CT
DRAWN BY:	MMM
CHECKED BY:	DRG

TITLE: STORMWATER MANAGEMENT PLAN

SHEET: SWMP-203

SEE SWMP-200

SEE SWMP-204

WATERSHED 5 SUB-BASIN 7
BASIN 9 DRAINAGE AREA

WATERSHED 8 SUB-BASIN 3
BERM 2 DRAINAGE AREA

WATERSHED 7 SUB-BASIN 1
BERM 6 DRAINAGE AREA

BASIN 9

BERM 6

WATERSHED 8 SUB-BASIN 3
BERM 1 DRAINAGE AREA

BERM 2

BERM 1

WATERSHED 9 SUB-BASIN 2
BASIN 6 DRAINAGE AREA

WATERSHED 8 SUB-BASIN 3
BERM 4 DRAINAGE AREA

BERM 4

BASIN 6

WATERSHED 8 SUB-BASIN 3
BERM 3 RAINAGE AREA

BERM 3

WATERSHED 7 SUB-BASIN 2
BERM 7 DRAINAGE AREA

BERM 7

150' WIDE CONNECTICUT LIGHT & POWER CO.
RIGHT OF WAY VOL. 86 P.G. 117

WATERSHED 5 SUB-BASIN 6
BERM 8 DRAINAGE AREA

BERM 8

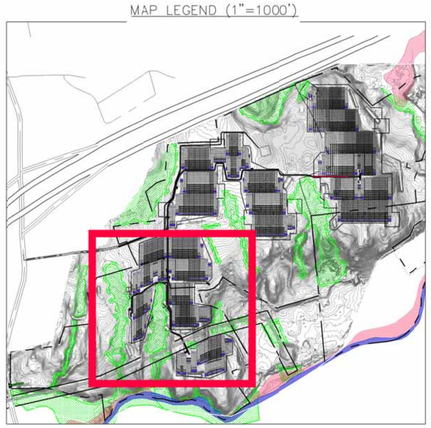
WATERSHED 9 SUB-BASIN 1
BASIN 5 DRAINAGE AREA

BASIN 5

1 SWMP-204 STORMWATER MANAGEMENT PLAN
Scale: 1" = 100'

N 0 100 200 Feet

MAP LEGEND (1"=1000')



LEGEND

6	PROPOSED SITE ACCESS ROAD (SEE C-400)
7	WETLAND W/BUFFER
8	SITE FENCE LINE (SEE C-402)
9	LOD SITE LIMIT OF DISTURBANCE
10	SITE BOUNDARY
29	SUB BASIN BOUNDARY
	CHANNELED FLOW
	SHEET FLOW

soa
SIERRA OVERHEAD ANALYTICS
18859 MICROTRONICS WAY
SONORA, CALIFORNIA 95370
CONNECTICUT PROFESSIONAL
ENGINEERING CORPORATION #PEC.0001969

REV	DESCRIPTION	DATE
6	ISSUED FOR CONSTRUCTION - DRAFT	9/4/2020
7	ISSUED FOR CONSTRUCTION - DRAFT	9/18/2020
8	ISSUED FOR CONSTRUCTION - DRAFT	10/22/2020
9	ISSUED FOR CONSTRUCTION - DRAFT	11/06/2020
10	ISSUED FOR CONSTRUCTION	1/20/2021
-	-	-
-	-	-
-	-	-
-	-	-
-	-	-

CONFIDENTIAL:
THE INFORMATION DEPICTED ON THIS DOCUMENT IS PROPRIETARY AND THE SOLE PROPERTY OF SIERRA OVERHEAD ANALYTICS, INC (SOA). ANY USE OR DISCLOSURE OF THIS INFORMATION IS EXPRESSLY PROHIBITED WITHOUT THE PRIOR WRITTEN CONSENT OF SOA.

CS Energy
Building a Cleaner Future
2045 LINCOLN HIGHWAY
EDISON, NEW JERSEY 08817

PROJECT NAME:
STONINGTON SOLAR PROJECT

PROJECT ADDRESS:
ELLA WHEELER RD.
NORTH STONINGTON, CT 06359
41° 25' 9.71"N, 71° 50' 4.83"W

SEAL: STATE OF CONNECTICUT · DARIN RAY GALLOWAY · No. 34152 · LICENSED PROFESSIONAL ENGINEER

DATE:	21-JAN-20
PROJECT #:	20200309_CT
DRAWN BY:	MMM
CHECKED BY:	DRG

TITLE: STORMWATER MANAGEMENT PLAN

SHEET: SWMP-204

811 Know what's below. Call before you dig.

PLOT DATE: Tuesday, January 19, 2021

LOCATION: E:\DROPBOX (SOA)\ENGINEERING\CS ENERGY\2020-03-09_STONINGTON\CAD\SITE PLANS.DWG PLOTTED BY: DARIN GALLOWAY



1 STORMWATER MANAGEMENT PLAN
SWMP-205
Scale: 1" = 100'

N

0 100 200 Feet

MAP LEGEND (1"=1000')



LEGEND

6		PROPOSED SITE ACCESS ROAD (SEE C-400)
7		WETLAND W/BUFFER
8		SITE FENCE LINE (SEE C-402)
9	LOD	SITE LIMIT OF DISTURBANCE
10		SITE BOUNDARY
		CHANNELED FLOW
		SHEET FLOW

Know what's **below.** **Call** before you dig.

PLOT DATE: Tuesday, January 19, 2021

SIERRA OVERHEAD ANALYTICS
18859 MICROTRONICS WAY
SONORA, CALIFORNIA 95370
CONNECTICUT PROFESSIONAL
ENGINEERING CORPORATION #PEC.0001969

REV	DESCRIPTION	DATE
6	ISSUED FOR CONSTRUCTION - DRAFT	9/4/2020
7	ISSUED FOR CONSTRUCTION - DRAFT	9/18/2020
8	ISSUED FOR CONSTRUCTION - DRAFT	10/22/2020
9	ISSUED FOR CONSTRUCTION - DRAFT	11/06/2020
10	ISSUED FOR CONSTRUCTION	1/20/2021
-	-	-
-	-	-
-	-	-
-	-	-
-	-	-

CONFIDENTIAL:
THE INFORMATION DEPICTED ON THIS DOCUMENT IS PROPRIETARY AND THE SOLE PROPERTY OF SIERRA OVERHEAD ANALYTICS, INC (SOA). ANY USE OR DISCLOSURE OF THIS INFORMATION IS EXPRESSLY PROHIBITED WITHOUT THE PRIOR WRITTEN CONSENT OF SOA.

CS Energy
Building a Cleaner Future
2045 LINCOLN HIGHWAY
EDISON, NEW JERSEY 08817

PROJECT NAME:
STONINGTON SOLAR PROJECT

PROJECT ADDRESS:
ELLA WHEELER RD.
NORTH STONINGTON, CT 06359
41° 25' 9.71"N, 71° 50' 4.83"W

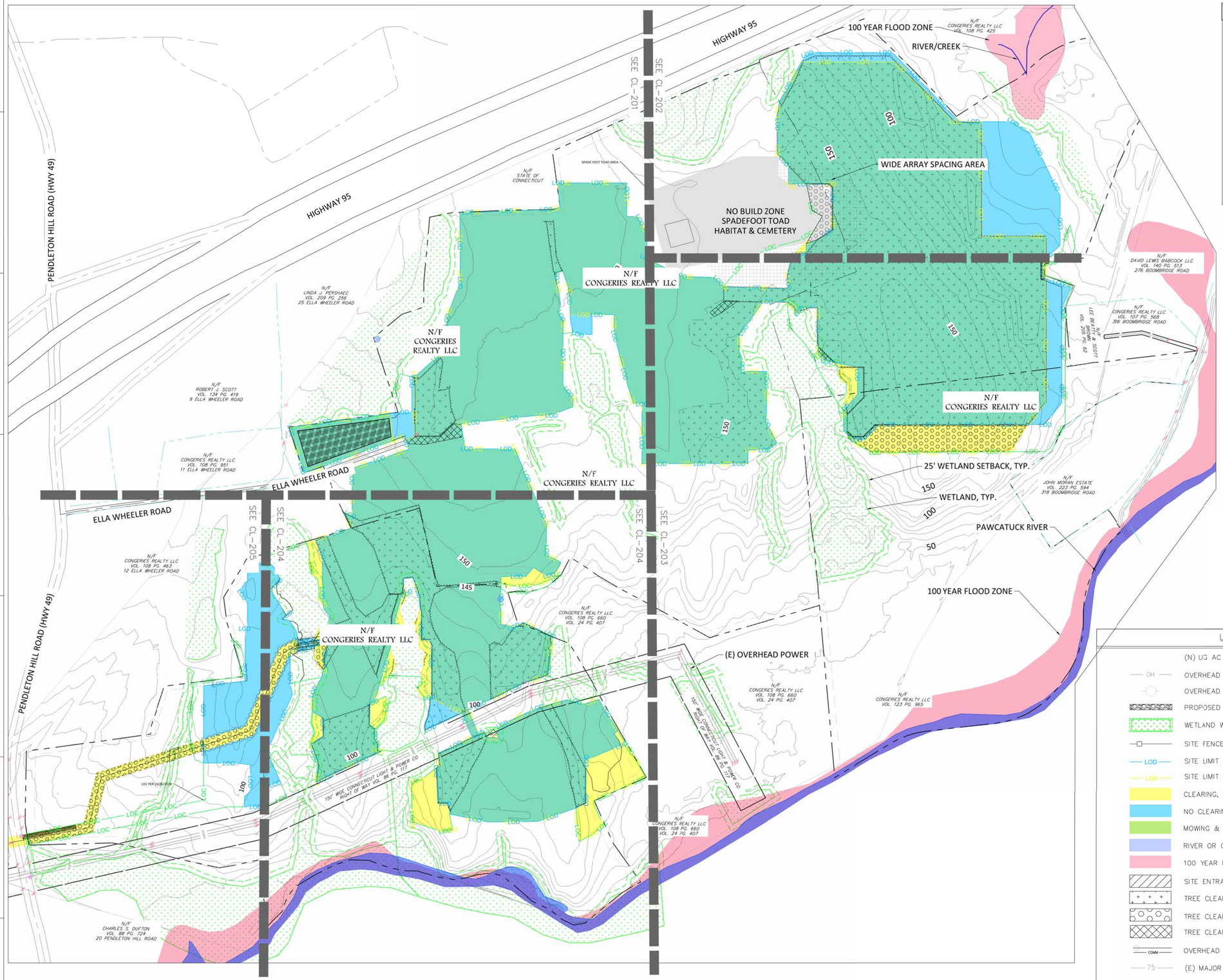
SEAL:
STATE OF CONNECTICUT · DARIN RAY GALLOWAY · No. 34152 · LICENSED PROFESSIONAL ENGINEER

DATE:	21-JAN-20
PROJECT #:	20200309_CT
DRAWN BY:	MMM
CHECKED BY:	DRG

TITLE:
STORMWATER MANAGEMENT PLAN

SHEET:
SWMP-205

LOCATION: E:\DROPBOX (SOA)\ENGINEERING\CS ENERGY\2020-03-09_STONINGTON\CAD\SITE PLANS.DWG PLOTTED BY: DARIN GALLOWAY



1 CL-200 CLEARING PLAN SITE OVERVIEW
Scale: 1" = 250'

N 0 250 500 Feet

CLEARING PLAN NOTES

1. ARRAY NOT SHOWN FOR CLARITY.
2. LIMIT OF DISTURBANCE (ALT 2) = ±146.33 ACRES
3. LIMIT OF CLEARING (SITING COUNCIL 10/26/2018) = ±173.28 ACRES
4. COMPLETE TREE CLEARING = ±59.70 ACRES
5. TREE CLEARING, NO GRUBBING = ±14.8 ACRES
6. SELECTIVE TREE CLEARING = ±9.5 ACRES
7. WETLAND TREE CLEARING (NO STUMPING NO GRUBBING) = ± 1,822 SQUARE FEET
8. TREE CLEARING AREA REMAINING = 0 ACRES
9. AREA TO BE GRUBBED OR MOWED (AREA INSIDE SECURITY FENCE) = ±110.0 ACRES
10. MOWING IS DEFINED AS REMOVING VEGETATION ABOVE THE GROUND SURFACE BUT LEAVING THE ROOT STRUCTURE INTACT.
11. GRUBBING IS THE REMOVAL OF THE ROOT STRUCTURE.

LEGEND

- (N) UG AC WIRE
- OH — OVERHEAD POWER
- OVERHEAD POWER POLE
- PROPOSED SITE ACCESS ROAD
- WETLAND W/BUFFER
- SITE FENCE LINE
- LOD — SITE LIMIT OF DISTURBANCE – ALT 1
- LOD — SITE LIMIT OF DISTURBANCE – ALT 2
- CLEARING, NO GRUBBING AREA
- NO CLEARING, NO GRUBBING AREA
- MOWING & GRUBBING AREA (SEE NOTE 9,10,&11 CL-200)
- RIVER OR CREEK
- 100 YEAR FLOOD ZONE
- SITE ENTRANCE ROAD
- TREE CLEARING (GRUBBING)
- TREE CLEARING (NO GRUBBING)
- TREE CLEARING (SELECTIVE)
- COMM — OVERHEAD POWER LINE
- 75 — (E) MAJOR CONTOUR
- 76 — (E) MINOR CONTOUR
- 75 — (N) MAJOR CONTOUR
- 76 — (N) MINOR CONTOUR

811 Know what's below. Call before you dig.

SIERRA OVERHEAD ANALYTICS
18859 MICROTRONICS WAY
SONORA, CALIFORNIA 95370
CONNECTICUT PROFESSIONAL
ENGINEERING CORPORATION #PEC.0001969

REV	DESCRIPTION	DATE
6	ISSUED FOR CONSTRUCTION - DRAFT	9/4/2020
7	ISSUED FOR CONSTRUCTION - DRAFT	9/18/2020
8	ISSUED FOR CONSTRUCTION - DRAFT	10/22/2020
9	ISSUED FOR CONSTRUCTION - DRAFT	11/06/2020
10	ISSUED FOR CONSTRUCTION	1/20/2021
-	-	-
-	-	-
-	-	-
-	-	-
-	-	-

CONFIDENTIAL:
THE INFORMATION DEPICTED ON THIS DOCUMENT IS PROPRIETARY AND THE SOLE PROPERTY OF SIERRA OVERHEAD ANALYTICS, INC (SOA). ANY USE OR DISCLOSURE OF THIS INFORMATION IS EXPRESSLY PROHIBITED WITHOUT THE PRIOR WRITTEN CONSENT OF SOA.

CS Energy
Building a Cleaner Future
2045 LINCOLN HIGHWAY
EDISON, NEW JERSEY 08817

PROJECT NAME:
STONINGTON SOLAR PROJECT

PROJECT ADDRESS:
ELLA WHEELER RD.
NORTH STONINGTON, CT 06359
41° 25' 9.71"N, 71° 50' 4.83"W

SEAL: STATE OF CONNECTICUT · DARIN RAY GALLOWAY · No. 34152 · LICENSED PROFESSIONAL ENGINEER

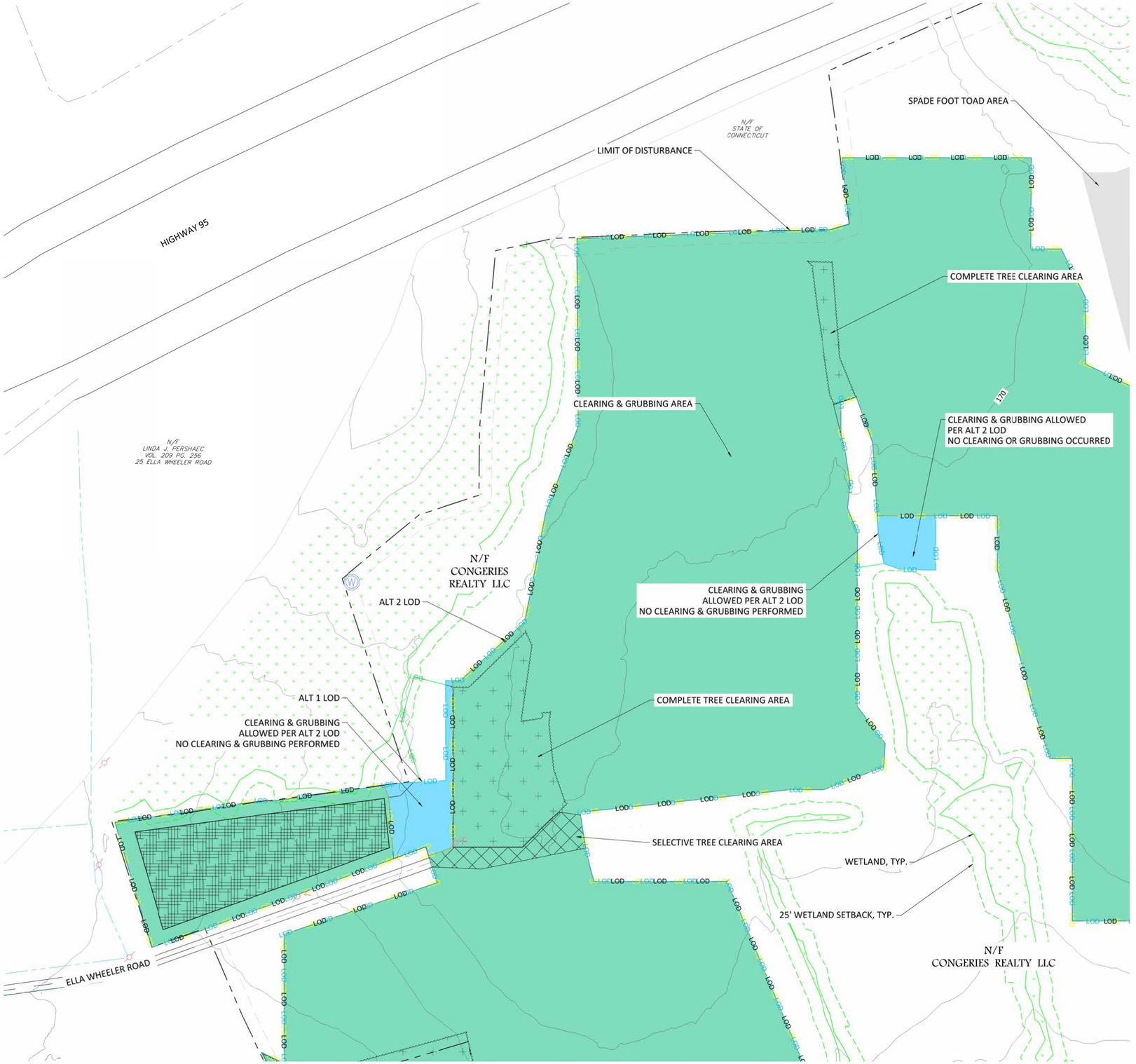
DATE:	21-JAN-20
PROJECT #:	20200309_CT
DRAWN BY:	MMM
CHECKED BY:	DRG

TITLE: CLEARING PLAN SITE OVERVIEW

SHEET: CL-200

PLOT DATE: Tuesday, January 19, 2021

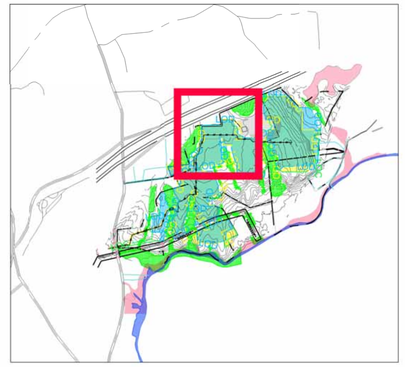
LOCATION: E:\DROPBOX (SOA)\ENGINEERING\CS ENERGY\2020-03-09_STONINGTON\CAD\CLEARING PLAN.DWG PLOTTED BY: DARIN GALLOWAY



1 CL-201 **CLEARING PLAN**
Scale: 1" = 100'

N 0 100 200 Feet

KEY MAP (1"=2000')



LEGEND

- (N) UG AC WIRE
- OH — OVERHEAD POWER
- OVERHEAD POWER POLE
- PROPOSED SITE ACCESS ROAD
- WETLAND W/BUFFER
- SITE FENCE LINE
- LOD — SITE LIMIT OF DISTURBANCE – ALT 1
- LOD — SITE LIMIT OF DISTURBANCE – ALT 2
- CLEARING, NO GRUBBING AREA
- NO CLEARING, NO GRUBBING AREA
- MOWING & GRUBBING AREA (SEE NOTE 9,10,&11 CL-200)
- RIVER OR CREEK
- 100 YEAR FLOOD ZONE
- SITE ENTRANCE ROAD
- TREE CLEARING (GRUBBING)
- TREE CLEARING (NO GRUBBING)
- TREE CLEARING (SELECTIVE)
- COMM — OVERHEAD POWER LINE
- 75 — (E) MAJOR CONTOUR
- 76 — (E) MINOR CONTOUR
- 75 — (N) MAJOR CONTOUR
- 76 — (N) MINOR CONTOUR

Know what's **below.** **Call** before you dig.

soa
SIERRA OVERHEAD ANALYTICS
18859 MICROTRONICS WAY
SONORA, CALIFORNIA 95370
CONNECTICUT PROFESSIONAL
ENGINEERING CORPORATION #PEC.0001969

REV	DESCRIPTION	DATE
6	ISSUED FOR CONSTRUCTION - DRAFT	9/4/2020
7	ISSUED FOR CONSTRUCTION - DRAFT	9/18/2020
8	ISSUED FOR CONSTRUCTION - DRAFT	10/22/2020
9	ISSUED FOR CONSTRUCTION - DRAFT	11/06/2020
10	ISSUED FOR CONSTRUCTION	1/20/2021
-	-	-
-	-	-
-	-	-
-	-	-
-	-	-

CONFIDENTIAL:
THE INFORMATION DEPICTED ON THIS DOCUMENT IS PROPRIETARY AND THE SOLE PROPERTY OF SIERRA OVERHEAD ANALYTICS, INC (SOA). ANY USE OR DISCLOSURE OF THIS INFORMATION IS EXPRESSLY PROHIBITED WITHOUT THE PRIOR WRITTEN CONSENT OF SOA.

CS Energy
Building a Cleaner Future
2045 LINCOLN HIGHWAY
EDISON, NEW JERSEY 08817

PROJECT NAME:
STONINGTON SOLAR PROJECT

PROJECT ADDRESS:
ELLA WHEELER RD.
NORTH STONINGTON, CT 06359
41° 25' 9.71"N, 71° 50' 4.83"W

SEAL: STATE OF CONNECTICUT — DARIN RAY GALLOWAY — No. 34152 — LICENSED PROFESSIONAL ENGINEER

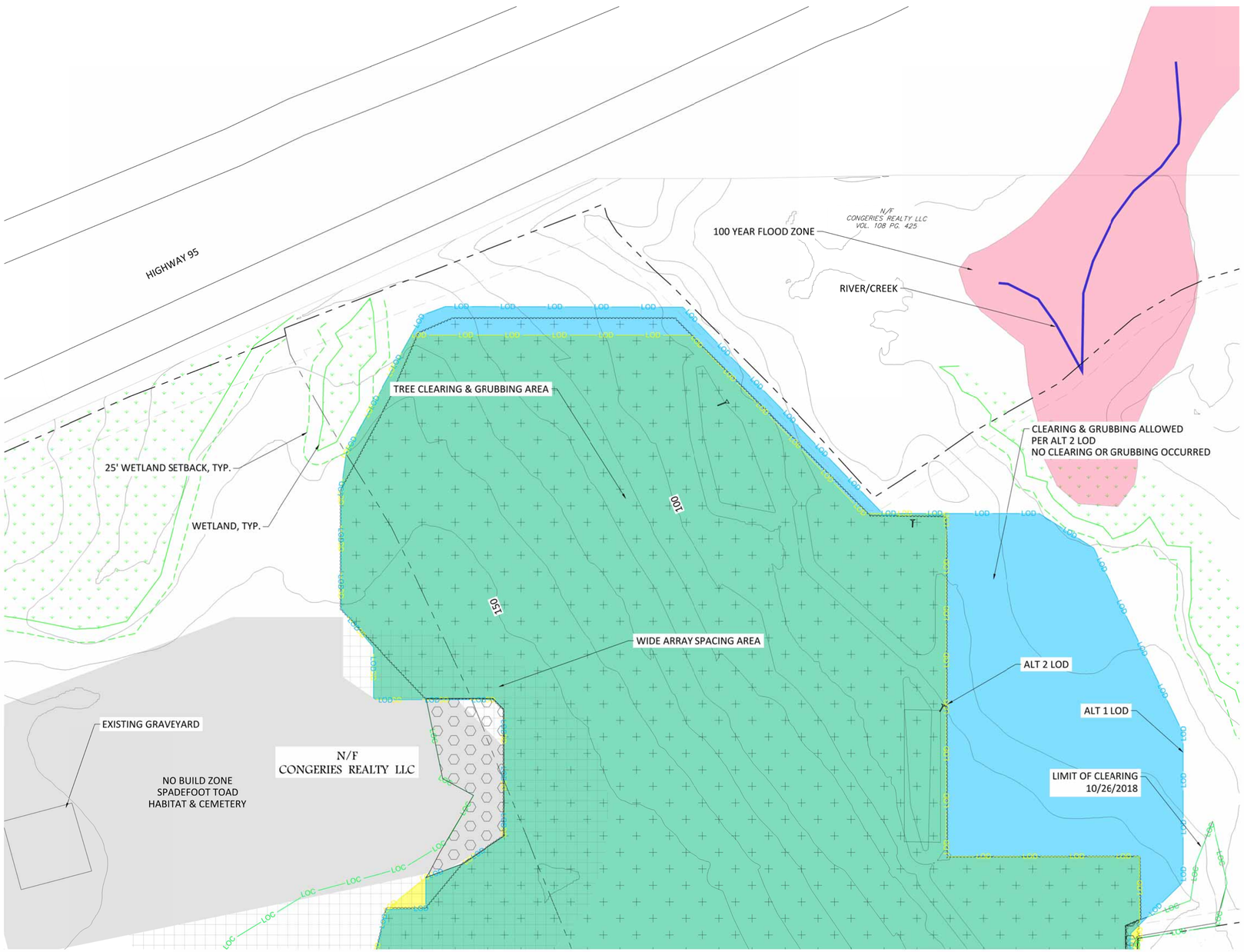
DATE:	21-JAN-20
PROJECT #:	20200309_CT
DRAWN BY:	MMM
CHECKED BY:	DRG

TITLE: CLEARING PLAN

SHEET: CL-201

PLOT DATE: Tuesday, January 19, 2021

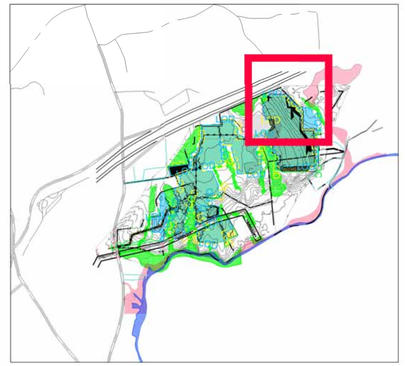
LOCATION: E:\DROPBOX (SOA)\ENGINEERING\CS ENERGY\2020-03-09_STONINGTON\CAD\CLEARING PLAN.DWG PLOTTED BY: DARIN GALLOWAY



1 CL-202 **CLEARING PLAN**
Scale: 1" = 100'

N 0 100 200 Feet

KEY MAP (1"=2000')



LEGEND

- (N) UG AC WIRE
- OH — OVERHEAD POWER
- OVERHEAD POWER POLE
- PROPOSED SITE ACCESS ROAD
- WETLAND W/BUFFER
- SITE FENCE LINE
- LOD — SITE LIMIT OF DISTURBANCE – ALT 1
- LOD — SITE LIMIT OF DISTURBANCE – ALT 2
- CLEARING, NO GRUBBING AREA
- NO CLEARING, NO GRUBBING AREA
- MOWING & GRUBBING AREA (SEE NOTE 9,10,&11 CL-200)
- RIVER OR CREEK
- 100 YEAR FLOOD ZONE
- SITE ENTRANCE ROAD
- TREE CLEARING (GRUBBING)
- TREE CLEARING (NO GRUBBING)
- TREE CLEARING (SELECTIVE)
- COMM — OVERHEAD POWER LINE
- 75 — (E) MAJOR CONTOUR
- 76 — (E) MINOR CONTOUR
- 75 — (N) MAJOR CONTOUR
- 76 — (N) MINOR CONTOUR

811 Know what's below. Call before you dig.

PLOT DATE: Tuesday, January 19, 2021

soa
SIERRA OVERHEAD ANALYTICS
18859 MICROTRONICS WAY
SONORA, CALIFORNIA 95370
CONNECTICUT PROFESSIONAL
ENGINEERING CORPORATION #PEC.0001969

REV	DESCRIPTION	DATE
6	ISSUED FOR CONSTRUCTION - DRAFT	9/4/2020
7	ISSUED FOR CONSTRUCTION - DRAFT	9/18/2020
8	ISSUED FOR CONSTRUCTION - DRAFT	10/22/2020
9	ISSUED FOR CONSTRUCTION - DRAFT	11/06/2020
10	ISSUED FOR CONSTRUCTION	1/20/2021
-	-	-
-	-	-
-	-	-
-	-	-
-	-	-

CONFIDENTIAL:
THE INFORMATION DEPICTED ON THIS DOCUMENT IS PROPRIETARY AND THE SOLE PROPERTY OF SIERRA OVERHEAD ANALYTICS, INC (SOA). ANY USE OR DISCLOSURE OF THIS INFORMATION IS EXPRESSLY PROHIBITED WITHOUT THE PRIOR WRITTEN CONSENT OF SOA.

CS Energy
Building a Cleaner Future
2045 LINCOLN HIGHWAY
EDISON, NEW JERSEY 08817

PROJECT NAME:
STONINGTON SOLAR PROJECT

PROJECT ADDRESS:
ELLA WHEELER RD.
NORTH STONINGTON, CT 06359
41° 25' 9.71"N, 71° 50' 4.83"W

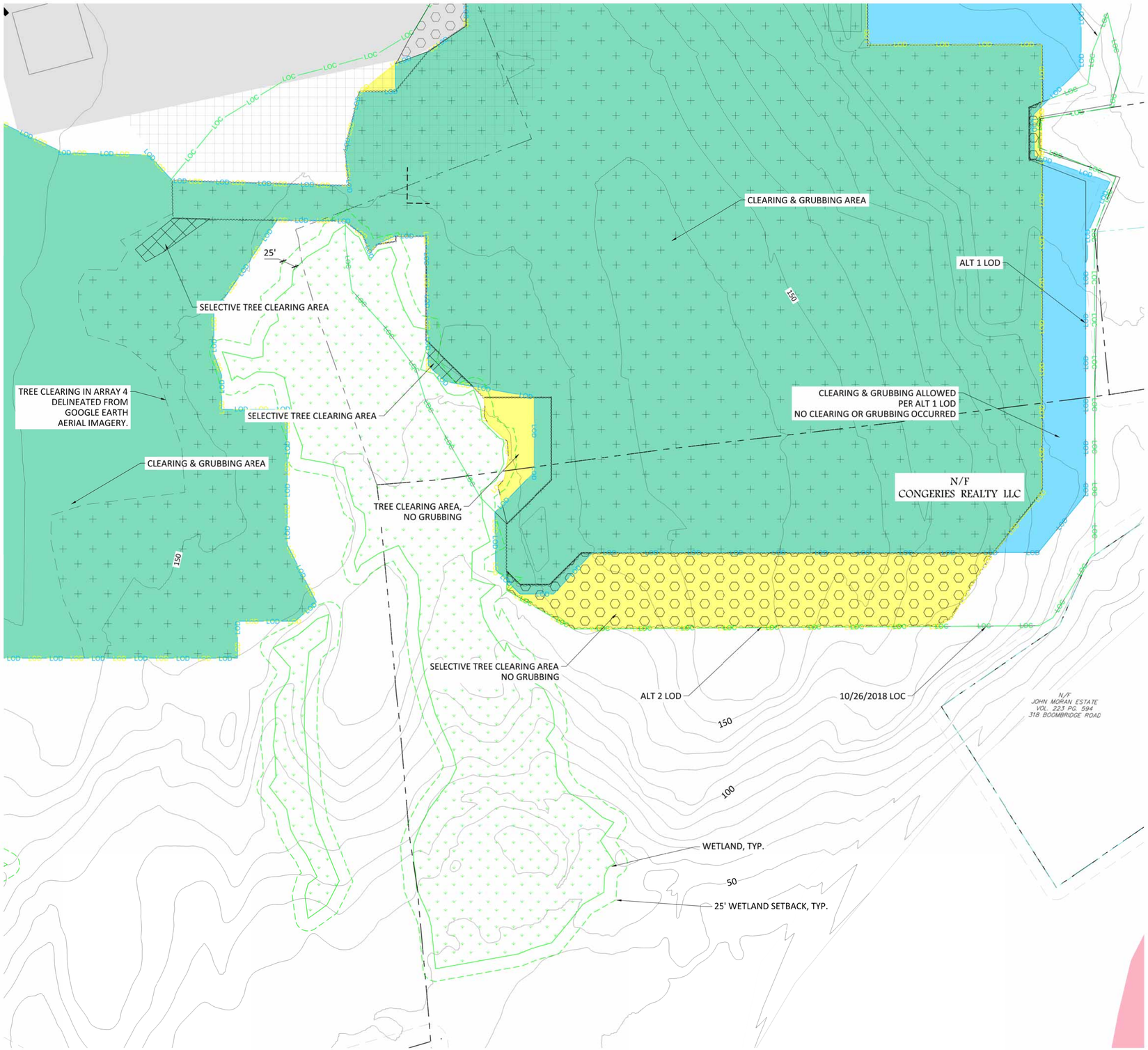
SEAL: STATE OF CONNECTICUT · DARIN RAY GALLOWAY · No. 34152 · LICENSED PROFESSIONAL ENGINEER

DATE:	21-JAN-20
PROJECT #:	20200309_CT
DRAWN BY:	MMM
CHECKED BY:	DRG

TITLE: CLEARING PLAN

SHEET: CL-202

LOCATION: E:\DROPBOX (SOA)\ENGINEERING\CS ENERGY\2020-03-09_STONINGTON\CAD\CLEARING PLAN.DWG PLOTTED BY: DARIN GALLOWAY

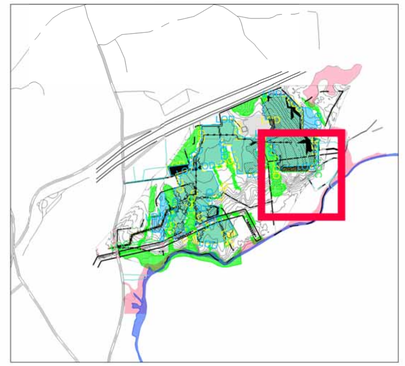


1 CL-203 CLEARING PLAN
Scale: 1" = 100'

N

0 100 200 Feet

KEY MAP (1"=2000')



LEGEND

- (N) UG AC WIRE
- OH — OVERHEAD POWER
- OVERHEAD POWER POLE
- PROPOSED SITE ACCESS ROAD
- WETLAND W/BUFFER
- SITE FENCE LINE
- LOD — SITE LIMIT OF DISTURBANCE – ALT 1
- LOD — SITE LIMIT OF DISTURBANCE – ALT 2
- CLEARING, NO GRUBBING AREA
- NO CLEARING, NO GRUBBING AREA
- MOWING & GRUBBING AREA (SEE NOTE 9,10,&11 CL-200)
- RIVER OR CREEK
- 100 YEAR FLOOD ZONE
- SITE ENTRANCE ROAD
- TREE CLEARING (GRUBBING)
- TREE CLEARING (NO GRUBBING)
- TREE CLEARING (SELECTIVE)
- COMM — OVERHEAD POWER LINE
- 75 — (E) MAJOR CONTOUR
- 76 — (E) MINOR CONTOUR
- 75 — (N) MAJOR CONTOUR
- 76 — (N) MINOR CONTOUR

Know what's below. Call before you dig.

soa
SIERRA OVERHEAD ANALYTICS
18859 MICROTRONICS WAY
SONORA, CALIFORNIA 95370
CONNECTICUT PROFESSIONAL
ENGINEERING CORPORATION #PEC.0001969

REV	DESCRIPTION	DATE
6	ISSUED FOR CONSTRUCTION - DRAFT	9/4/2020
7	ISSUED FOR CONSTRUCTION - DRAFT	9/18/2020
8	ISSUED FOR CONSTRUCTION - DRAFT	10/22/2020
9	ISSUED FOR CONSTRUCTION - DRAFT	11/06/2020
10	ISSUED FOR CONSTRUCTION	1/20/2021
-	-	-
-	-	-
-	-	-
-	-	-
-	-	-

CONFIDENTIAL:
THE INFORMATION DEPICTED ON THIS DOCUMENT IS PROPRIETARY AND THE SOLE PROPERTY OF SIERRA OVERHEAD ANALYTICS, INC (SOA). ANY USE OR DISCLOSURE OF THIS INFORMATION IS EXPRESSLY PROHIBITED WITHOUT THE PRIOR WRITTEN CONSENT OF SOA.

CS Energy
Building a Cleaner Future
2045 LINCOLN HIGHWAY
EDISON, NEW JERSEY 08817

PROJECT NAME:
STONINGTON SOLAR PROJECT

PROJECT ADDRESS:
ELLA WHEELER RD.
NORTH STONINGTON, CT 06359
41° 25' 9.71"N, 71° 50' 4.83"W

SEAL: STATE OF CONNECTICUT · DARIN RAY GALLOWAY · No. 34152 · LICENSED PROFESSIONAL ENGINEER

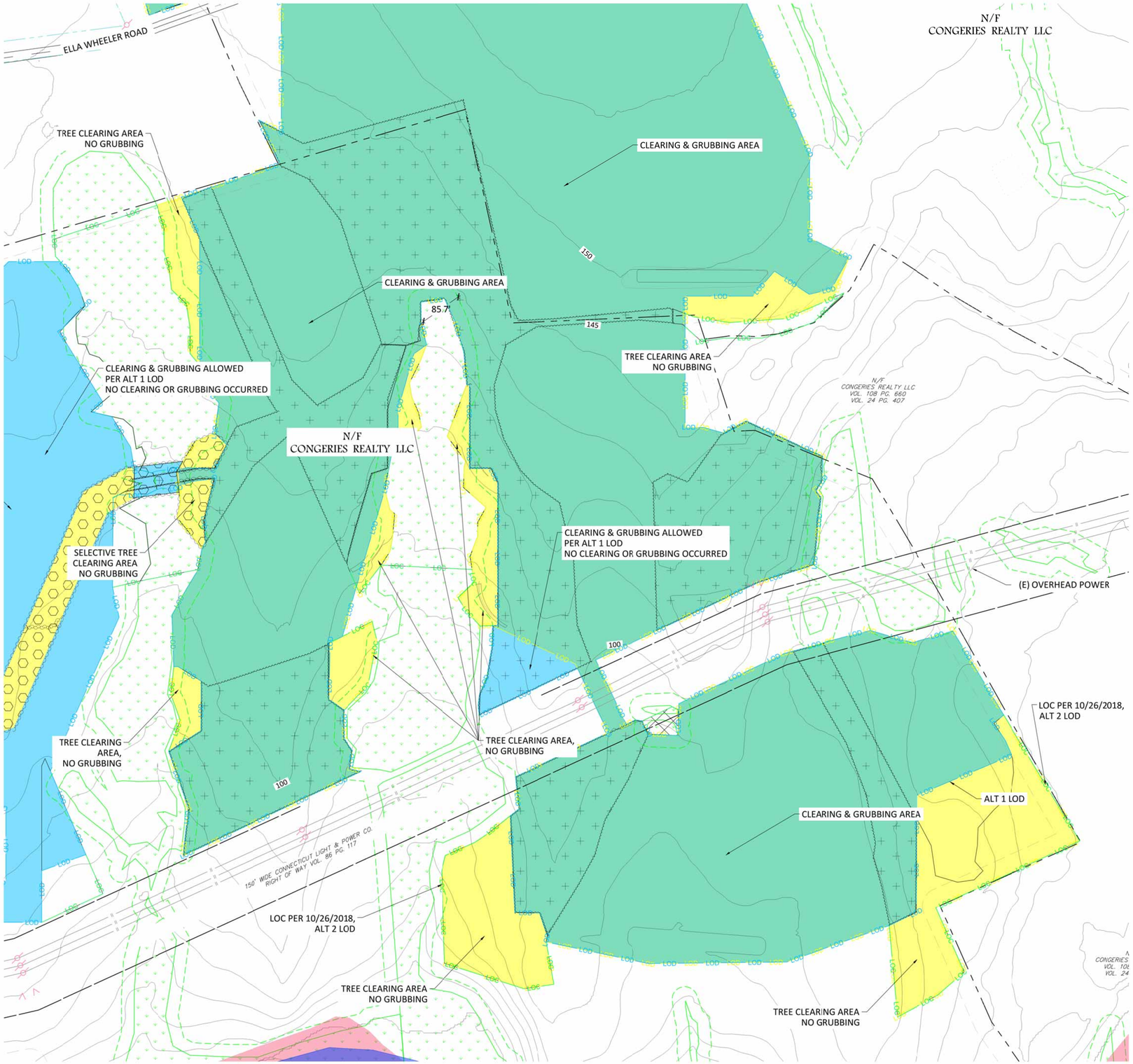
DATE: 21-JAN-20
PROJECT #: 20200309_CT
DRAWN BY: MMM
CHECKED BY: DRG

TITLE: CLEARING PLAN

SHEET: CL-203

PLOT DATE: Tuesday, January 19, 2021

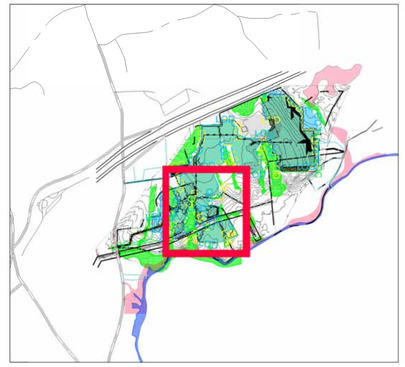
LOCATION: E:\DROPBOX (SOA)\ENGINEERING\CS ENERGY\2020-03-09_STONINGTON\CAD\CLEARING PLAN.DWG PLOTTED BY: DARIN GALLOWAY



1 CL-204 CLEARING PLAN
Scale: 1" = 100'

N 0 100 200 Feet

MAP LEGEND (1"=2000')



LEGEND

- (N) UG AC WIRE
- OH — OVERHEAD POWER
- OVERHEAD POWER POLE
- PROPOSED SITE ACCESS ROAD
- WETLAND W/BUFFER
- SITE FENCE LINE
- LOD — SITE LIMIT OF DISTURBANCE – ALT 1
- LOD — SITE LIMIT OF DISTURBANCE – ALT 2
- CLEARING, NO GRUBBING AREA
- NO CLEARING, NO GRUBBING AREA
- MOWING & GRUBBING AREA (SEE NOTE 9,10,&11 CL-200)
- RIVER OR CREEK
- 100 YEAR FLOOD ZONE
- SITE ENTRANCE ROAD
- TREE CLEARING (GRUBBING)
- TREE CLEARING (NO GRUBBING)
- TREE CLEARING (SELECTIVE)
- COMM — OVERHEAD POWER LINE
- 75 — (E) MAJOR CONTOUR
- 76 — (E) MINOR CONTOUR
- 75 — (N) MAJOR CONTOUR
- 76 — (N) MINOR CONTOUR

soa
SIERRA OVERHEAD ANALYTICS
18859 MICROTRONICS WAY
SONORA, CALIFORNIA 95370
CONNECTICUT PROFESSIONAL
ENGINEERING CORPORATION #PEC.0001969

REV	DESCRIPTION	DATE
6	ISSUED FOR CONSTRUCTION - DRAFT	9/4/2020
7	ISSUED FOR CONSTRUCTION - DRAFT	9/18/2020
8	ISSUED FOR CONSTRUCTION - DRAFT	10/22/2020
9	ISSUED FOR CONSTRUCTION - DRAFT	11/06/2020
10	ISSUED FOR CONSTRUCTION	1/20/2021
-	-	-
-	-	-
-	-	-
-	-	-
-	-	-

CONFIDENTIAL:
THE INFORMATION DEPICTED ON THIS DOCUMENT IS PROPRIETARY AND THE SOLE PROPERTY OF SIERRA OVERHEAD ANALYTICS, INC (SOA). ANY USE OR DISCLOSURE OF THIS INFORMATION IS EXPRESSLY PROHIBITED WITHOUT THE PRIOR WRITTEN CONSENT OF SOA.

CS Energy
Building a Cleaner Future
2045 LINCOLN HIGHWAY
EDISON, NEW JERSEY 08817

PROJECT NAME:
STONINGTON SOLAR PROJECT

PROJECT ADDRESS:
ELLA WHEELER RD.
NORTH STONINGTON, CT 06359
41° 25' 9.71"N, 71° 50' 4.83"W

SEAL: STATE OF CONNECTICUT · DARIN RAY GALLOWAY · No. 34152 · LICENSED PROFESSIONAL ENGINEER

DATE:	21-JAN-20
PROJECT #:	20200309_CT
DRAWN BY:	MMM
CHECKED BY:	DRG

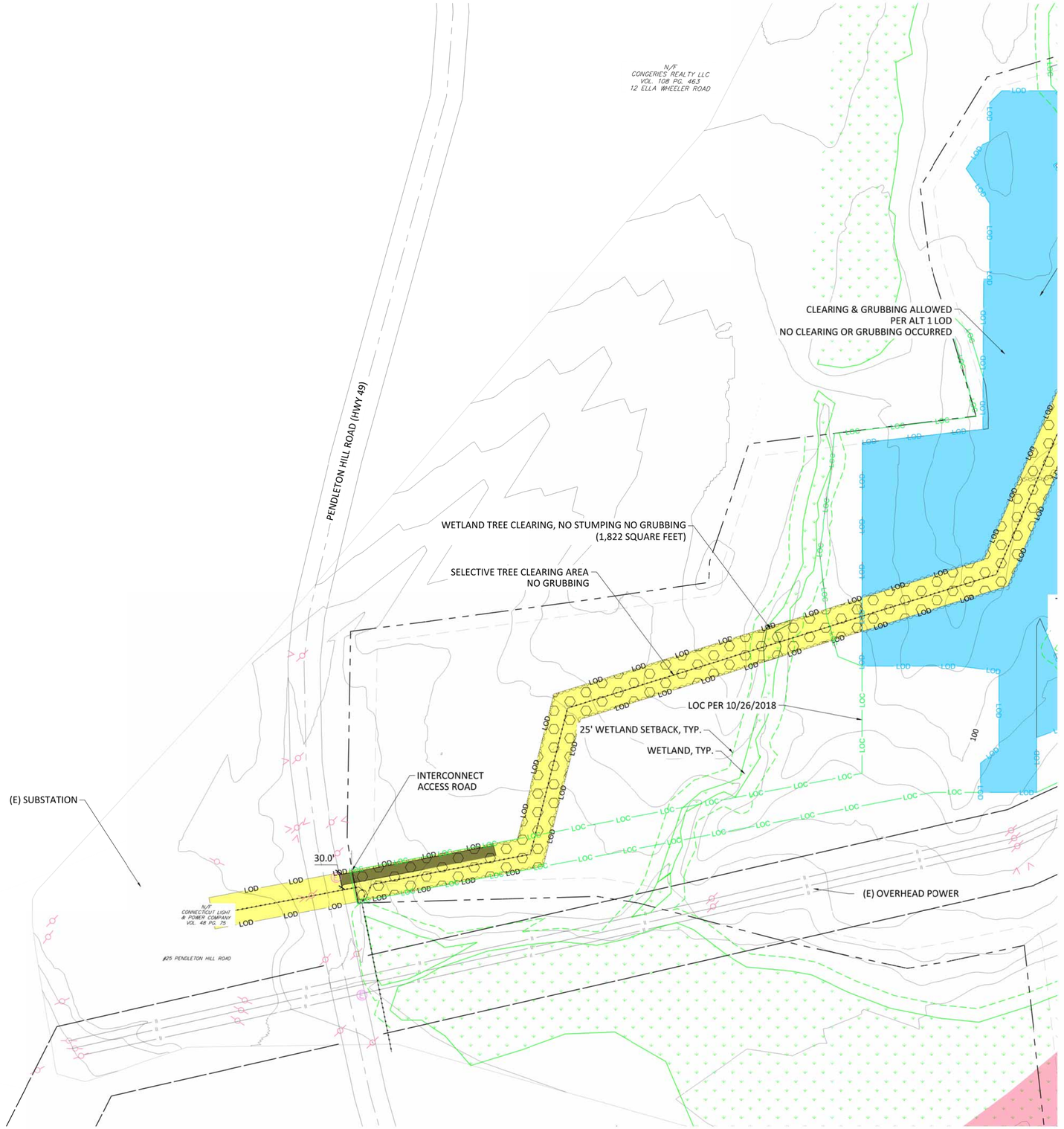
TITLE: CLEARING PLAN

SHEET: CL–204

811 Know what's below. Call before you dig.

LOCATION: E:\DROPBOX (SOA)\ENGINEERING\CS ENERGY\2020-03-09_STONINGTON\CAD\CLEARING PLAN.DWG PLOTTED BY: DARIN GALLOWAY

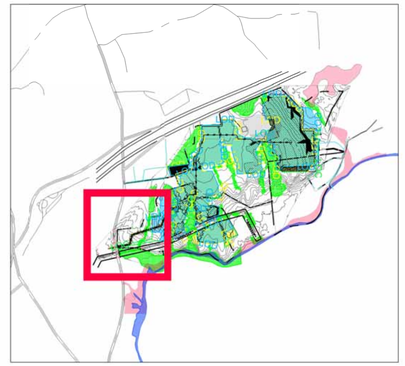
PLOT DATE: Tuesday, January 19, 2021



1 CL-205 CLEARING PLAN
Scale: 1" = 100'

N 0 100 200 Feet

KEY MAP (1"=2000')



LEGEND

- (N) UG AC WIRE
- OH — OVERHEAD POWER
- OVERHEAD POWER POLE
- PROPOSED SITE ACCESS ROAD
- WETLAND W/BUFFER
- SITE FENCE LINE
- LOD — SITE LIMIT OF DISTURBANCE – ALT 1
- LOD — SITE LIMIT OF DISTURBANCE – ALT 2
- CLEARING, NO GRUBBING AREA
- NO CLEARING, NO GRUBBING AREA
- MOWING & GRUBBING AREA (SEE NOTE 9,10,&11 CL-200)
- RIVER OR CREEK
- 100 YEAR FLOOD ZONE
- SITE ENTRANCE ROAD
- TREE CLEARING (GRUBBING)
- TREE CLEARING (NO GRUBBING)
- TREE CLEARING (SELECTIVE)
- COMM — OVERHEAD POWER LINE
- 75 — (E) MAJOR CONTOUR
- 76 — (E) MINOR CONTOUR
- 75 — (N) MAJOR CONTOUR
- 76 — (N) MINOR CONTOUR

Know what's below. Call before you dig.

SIERRA OVERHEAD ANALYTICS
18859 MICROTRONICS WAY
SONORA, CALIFORNIA 95370
CONNECTICUT PROFESSIONAL
ENGINEERING CORPORATION #PEC.0001969

REV	DESCRIPTION	DATE
6	ISSUED FOR CONSTRUCTION - DRAFT	9/4/2020
7	ISSUED FOR CONSTRUCTION - DRAFT	9/18/2020
8	ISSUED FOR CONSTRUCTION - DRAFT	10/22/2020
9	ISSUED FOR CONSTRUCTION - DRAFT	11/06/2020
10	ISSUED FOR CONSTRUCTION	1/20/2021
-	-	-
-	-	-
-	-	-
-	-	-
-	-	-

CONFIDENTIAL:
THE INFORMATION DEPICTED ON THIS DOCUMENT IS PROPRIETARY AND THE SOLE PROPERTY OF SIERRA OVERHEAD ANALYTICS, INC (SOA). ANY USE OR DISCLOSURE OF THIS INFORMATION IS EXPRESSLY PROHIBITED WITHOUT THE PRIOR WRITTEN CONSENT OF SOA.

CS Energy
Building a Cleaner Future
2045 LINCOLN HIGHWAY
EDISON, NEW JERSEY 08817

PROJECT NAME:
STONINGTON SOLAR PROJECT

PROJECT ADDRESS:
ELLA WHEELER RD.
NORTH STONINGTON, CT 06359
41° 25' 9.71"N, 71° 50' 4.83"W

SEAL: STATE OF CONNECTICUT · DARIN RAY GALLOWAY · No. 34152 · LICENSED PROFESSIONAL ENGINEER

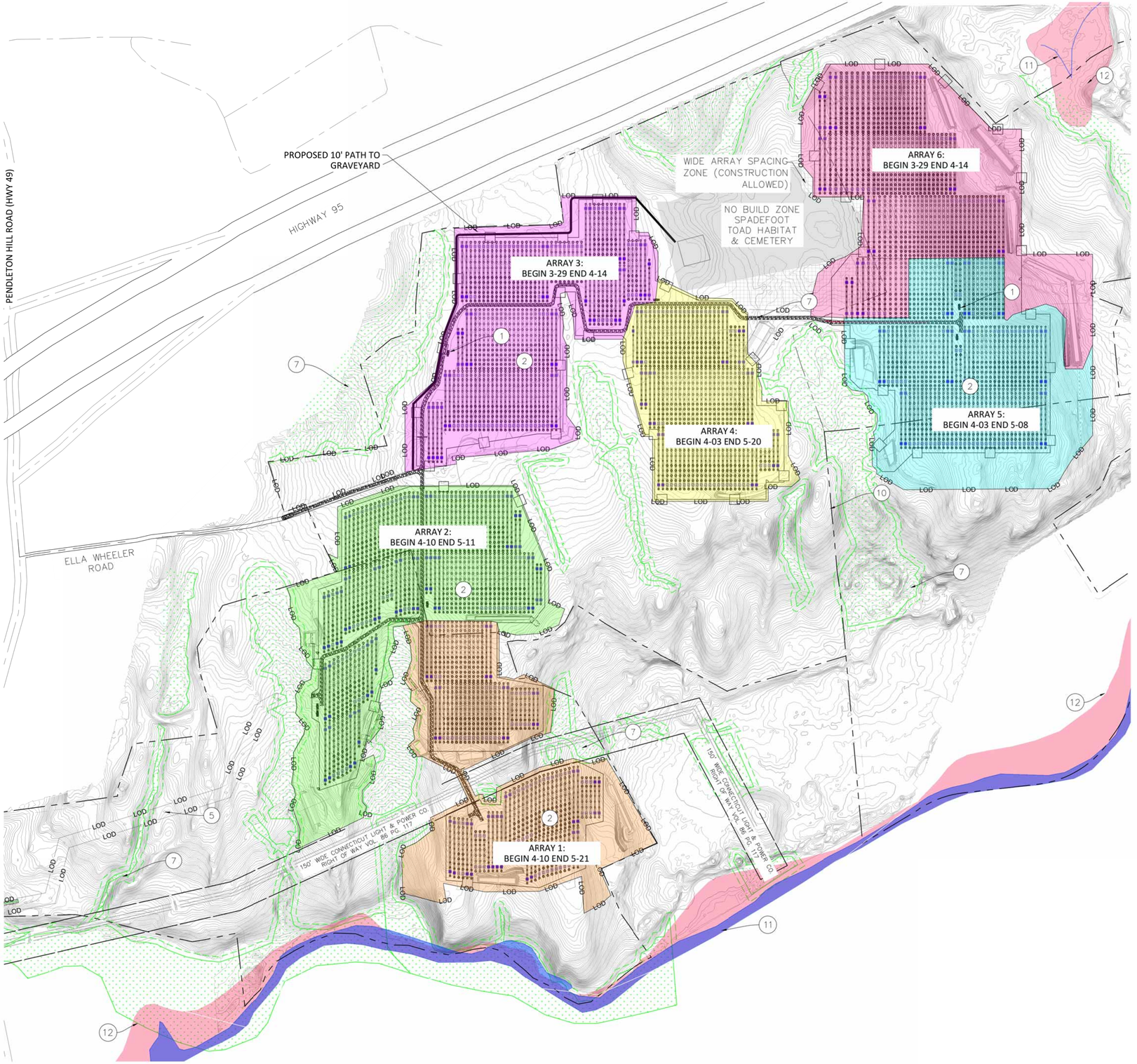
DATE: 21-JAN-20
PROJECT #: 20200309_CT
DRAWN BY: MMM
CHECKED BY: DRG

TITLE: CLEARING PLAN

SHEET: CL-205

PLOT DATE: Tuesday, January 19, 2021

LOCATION: E:\DROPBOX (SOA)\ENGINEERING\CS ENERGY\2020-03-09_STONINGTON\CAD\CLEARING PLAN.DWG PLOTTED BY: DARIN GALLOWAY



1 P-200 GRUBBING / MOWING / GRADING / SEEDING / PHASING SCHEDULE

Scale: 1" = 250'

N

0 250 500 FEET

LEGEND

1	EP	EQUIPMENT PAD
2		ARRAY AREA
3	AC	(N) UG AC WIRE
4	OH	OVERHEAD POWER
5		OVERHEAD POWER POLE
6		PROPOSED SITE ACCESS ROAD (SEE C-400)
7		WETLAND W/BUFFER
8		SITE FENCE LINE (SEE C-402)
9	LOD	SITE LIMIT OF DISTURBANCE
10		SITE BOUNDARY
11		RIVER OR CREEK
12		100 YEAR FLOOD ZONE
		WIDE ARRAY SPACING AREA

GENERAL NOTES

1. NO MORE THAN 5-ACRES (CONTIGUOUS) TO BE DISTURBED AT ANY ONE TIME.
2. PRIOR TO DISTURBING ADDITIONAL AREA THE PREVIOUS 5-ACRES NEED TO BE STABILIZED, COMPACTION, SEEDING, ETC.
3. THE PERMITTEE SHALL ENSURE THAT EXISTING VEGETATION IS PRESERVED TO THE MAXIMUM EXTENT PRACTICABLE AND THAT DISTURBED PORTIONS OF THE SITE ARE MINIMIZED AND STABILIZED.
4. WHERE CONSTRUCTION ACTIVITIES HAVE PERMANENTLY CEASED OR WHEN FINAL GRADES ARE REACHED IN ANY PORTION OF THE SITE, STABILIZATION AND PROTECTION PRACTICES ARE SPECIFIED IN CHAPTER 5 OF THE CONNECTICUT SOIL EROSION & SEDIMENT CONTROL GUIDELINES (GUIDELINES) OR AS APPROVED BY THE COMMISSIONER OR HIS/HER DESIGNATED AGENT SHALL BE IMPLEMENTED WITHIN SEVEN DAYS. AREAS THAT WILL REMAIN DISTURBED BUT INACTIVE FOR AT LEAST THIRTY DAYS SHALL RECEIVE TEMPORARY SEEDING OR SOIL PROTECTION WITHIN SEVEN DAYS IN ACCORDANCE WITH THE GUIDELINES.
5. ALL 5-ACRE AREAS SHALL BE STABILIZED IN ACCORDANCE WITH SHORT TERM NON-LIVING SOIL PROTECTION PRACTICE DETAILED ON ESC-301.
6. AREAS THAT WILL REMAIN DISTURBED BEYOND THE SEEDING SEASON AS IDENTIFIED IN THE GUIDELINES, SHALL RECEIVE LONG-TERM, NON-VEGETATIVE STABILIZATION AND PROTECTION SUFFICIENT TO PROTECT THE SITE THROUGH THE WINTER.
7. IN ALL CASES, STABILIZATION AND PROTECTION MEASURES SHALL BE IMPLEMENTED AS SOON AS POSSIBLE IN ACCORDANCE WITH THE GUIDELINES OR AS APPROVED BY THE COMMISSIONER OR HIS/HER DESIGNATED AGENT.
8. ALL DISTURBED AREAS, WITH THE EXCEPTION OF IMPERVIOUS SURFACES, WILL BE RECLAIMED BY SURFACE ROUGHENING AND APPLICATION OF LOW GROUND COVER, NATIVE SEED MIX, ONCE ALL SOIL DISTURBING ACTIVITIES AT THE SITE HAVE BEEN COMPLETED, ALL CONSTRUCTION MATERIALS, WASTE, AND EQUIPMENT WILL BE REMOVED AND PROPERLY DISPOSED OF, IF REQUIRED. TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES SHALL BE REMOVED. FINAL STABILIZATION SHALL BE ACHIEVED WHEN THE SITE HAS AN AVERAGE OF 100 PLANTS PER SQUARE FOOT, 6" TALL BEFORE THE FIRST MOWING. ONCE THE SITE HAS BEEN STABILIZED FOR AT LEAST THREE MONTHS, THE PERMITTEE SHALL HAVE THE SITE INSPECTED BY A QUALIFIED INSPECTOR TO CONFIRM FINAL STABILIZATION. THE PERMITTEE SHALL INDICATE COMPLIANCE WITH THIS REQUIREMENT ON THE NOTICE OF TERMINATION FORM.

Know what's below. Call before you dig.

soa
SIERRA OVERHEAD ANALYTICS
18859 MICROTRONICS WAY
SONORA, CALIFORNIA 95370
CONNECTICUT PROFESSIONAL ENGINEERING CORPORATION #PEC.0001969

REV	DESCRIPTION	DATE
6	ISSUED FOR CONSTRUCTION - DRAFT	9/4/2020
7	ISSUED FOR CONSTRUCTION - DRAFT	9/18/2020
8	ISSUED FOR CONSTRUCTION - DRAFT	10/22/2020
9	ISSUED FOR CONSTRUCTION - DRAFT	11/06/2020
10	ISSUED FOR CONSTRUCTION	1/20/2021
-	-	-
-	-	-
-	-	-
-	-	-
-	-	-

CONFIDENTIAL:
THE INFORMATION DEPICTED ON THIS DOCUMENT IS PROPRIETARY AND THE SOLE PROPERTY OF SIERRA OVERHEAD ANALYTICS, INC (SOA). ANY USE OR DISCLOSURE OF THIS INFORMATION IS EXPRESSLY PROHIBITED WITHOUT THE PRIOR WRITTEN CONSENT OF SOA.

CS Energy
Building a Cleaner Future
2045 LINCOLN HIGHWAY
EDISON, NEW JERSEY 08817

PROJECT NAME:
STONINGTON SOLAR PROJECT

PROJECT ADDRESS:
ELLA WHEELER RD.
NORTH STONINGTON, CT 06359
41° 25' 9.71"N, 71° 50' 4.83"W

SEAL:
STATE OF CONNECTICUT
DARIN RAY GALLOWAY
No. 34152
LICENSED PROFESSIONAL ENGINEER

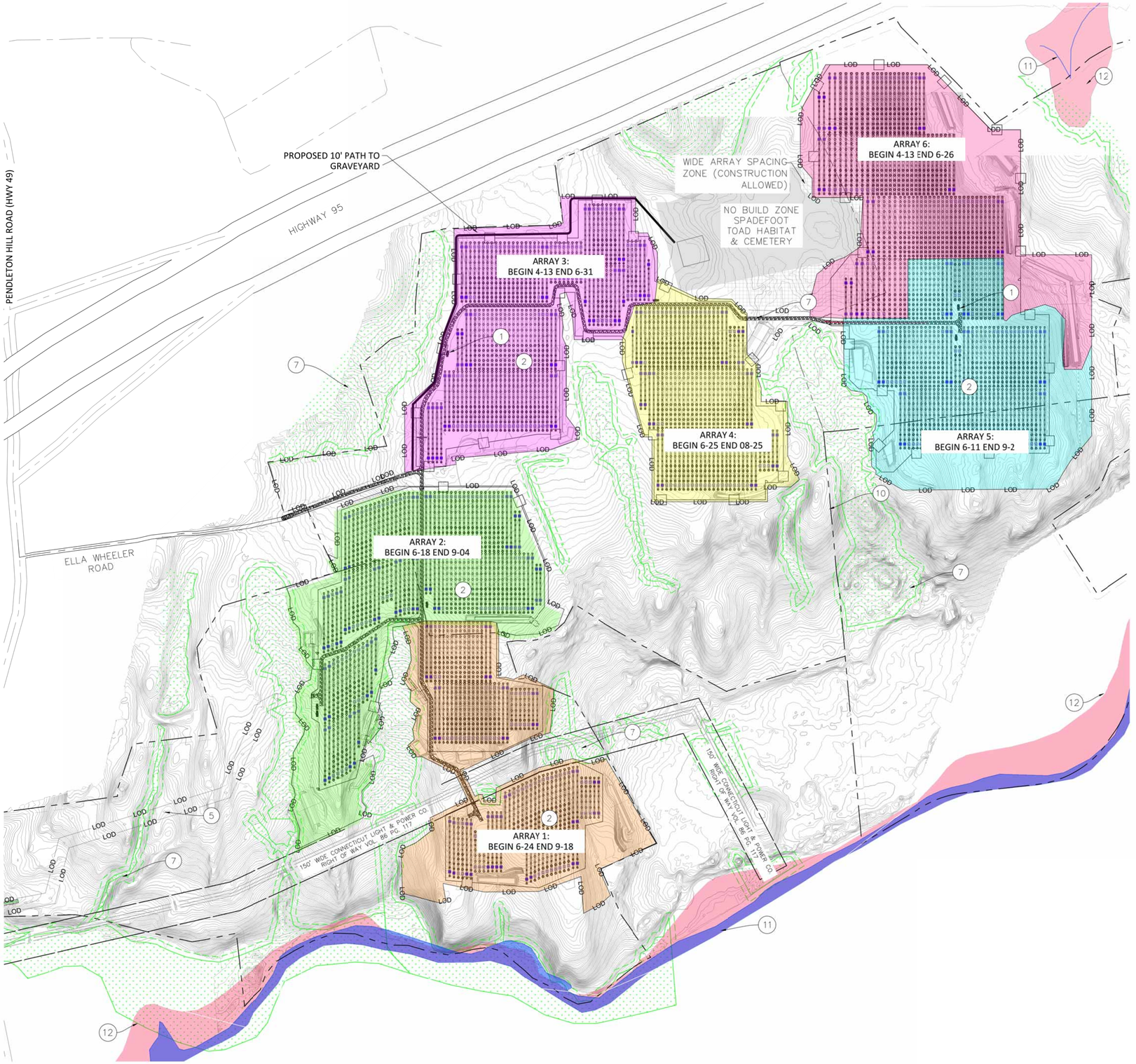
DATE: 21-JAN-20
PROJECT #: 20200309_CT
DRAWN BY: MMM
CHECKED BY: DRG

TITLE: PHASING PLAN

SHEET: P-200

PLOT DATE: Tuesday, January 19, 2021

LOCATION: E:\DROPBOX (SOA)\ENGINEERING\CS ENERGY\2020-03-09_STONINGTON\CAD\SITE PLANS.DWG PLOTTED BY: DARIN GALLOWAY



1 P-201 POST / RACKING / MODULE INSTALLATION PHASING SCHEDULE

Scale: 1" = 250'

N

0 250 500 FEET

LEGEND

1	EP	EQUIPMENT PAD
2		ARRAY AREA
3	AC	(N) UG AC WIRE
4	OH	OVERHEAD POWER
5		OVERHEAD POWER POLE
6		PROPOSED SITE ACCESS ROAD (SEE C-400)
7		WETLAND W/BUFFER
8		SITE FENCE LINE (SEE C-402)
9	LOD	SITE LIMIT OF DISTURBANCE
10		SITE BOUNDARY
11		RIVER OR CREEK
12		100 YEAR FLOOD ZONE
		WIDE ARRAY SPACING AREA

GENERAL NOTES

1. NO MORE THAN 5-ACRES (CONTIGUOUS) TO BE DISTURBED AT ANY ONE TIME.
2. PRIOR TO DISTURBING ADDITIONAL AREA THE PREVIOUS 5-ACRES NEED TO BE STABILIZED, COMPACTION, SEEDING, ETC.
3. THE PERMITTEE SHALL ENSURE THAT EXISTING VEGETATION IS PRESERVED TO THE MAXIMUM EXTENT PRACTICABLE AND THAT DISTURBED PORTIONS OF THE SITE ARE MINIMIZED AND STABILIZED.
4. WHERE CONSTRUCTION ACTIVITIES HAVE PERMANENTLY CEASED OR WHEN FINAL GRADES ARE REACHED IN ANY PORTION OF THE SITE, STABILIZATION AND PROTECTION PRACTICES ARE SPECIFIED IN CHAPTER 5 OF THE CONNECTICUT SOIL EROSION & SEDIMENT CONTROL GUIDELINES (GUIDELINES) OR AS APPROVED BY THE COMMISSIONER OR HIS/HER DESIGNATED AGENT SHALL BE IMPLEMENTED WITHIN SEVEN DAYS. AREAS THAT WILL REMAIN DISTURBED BUT INACTIVE FOR AT LEAST THIRTY DAYS SHALL RECEIVE TEMPORARY SEEDING OR SOIL PROTECTION WITHIN SEVEN DAYS IN ACCORDANCE WITH THE GUIDELINES.
5. ALL 5-ACRE AREAS SHALL BE STABILIZED IN ACCORDANCE WITH SHORT TERM NON-LIVING SOIL PROTECTION PRACTICE DETAILED ON ESC-301.
6. AREAS THAT WILL REMAIN DISTURBED BEYOND THE SEEDING SEASON AS IDENTIFIED IN THE GUIDELINES, SHALL RECEIVE LONG-TERM, NON-VEGETATIVE STABILIZATION AND PROTECTION SUFFICIENT TO PROTECT THE SITE THROUGH THE WINTER.
7. IN ALL CASES, STABILIZATION AND PROTECTION MEASURES SHALL BE IMPLEMENTED AS SOON AS POSSIBLE IN ACCORDANCE WITH THE GUIDELINES OR AS APPROVED BY THE COMMISSIONER OR HIS/HER DESIGNATED AGENT.
8. ALL DISTURBED AREAS, WITH THE EXCEPTION OF IMPERVIOUS SURFACES, WILL BE RECLAIMED BY SURFACE ROUGHENING AND APPLICATION OF LOW GROUND COVER, NATIVE SEED MIX, ONCE ALL SOIL DISTURBING ACTIVITIES AT THE SITE HAVE BEEN COMPLETED, ALL CONSTRUCTION MATERIALS, WASTE, AND EQUIPMENT WILL BE REMOVED AND PROPERLY DISPOSED OF, IF REQUIRED. TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES SHALL BE REMOVED. FINAL STABILIZATION SHALL BE ACHIEVED WHEN THE SITE HAS AN AVERAGE OF 100 PLANTS PER SQUARE FOOT, 6" TALL BEFORE THE FIRST MOWING. ONCE THE SITE HAS BEEN STABILIZED FOR AT LEAST THREE MONTHS, THE PERMITTEE SHALL HAVE THE SITE INSPECTED BY A QUALIFIED INSPECTOR TO CONFIRM FINAL STABILIZATION. THE PERMITTEE SHALL INDICATE COMPLIANCE WITH THIS REQUIREMENT ON THE NOTICE OF TERMINATION FORM.

Know what's below. Call before you dig.

SIERRA OVERHEAD ANALYTICS
18859 MICROTRONICS WAY
SONORA, CALIFORNIA 95370
CONNECTICUT PROFESSIONAL ENGINEERING CORPORATION #PEC.0001969

REV	DESCRIPTION	DATE
6	ISSUED FOR CONSTRUCTION - DRAFT	9/4/2020
7	ISSUED FOR CONSTRUCTION - DRAFT	9/18/2020
8	ISSUED FOR CONSTRUCTION - DRAFT	10/22/2020
9	ISSUED FOR CONSTRUCTION - DRAFT	11/06/2020
10	ISSUED FOR CONSTRUCTION	1/20/2021
-	-	-
-	-	-
-	-	-
-	-	-
-	-	-

CONFIDENTIAL:
THE INFORMATION DEPICTED ON THIS DOCUMENT IS PROPRIETARY AND THE SOLE PROPERTY OF SIERRA OVERHEAD ANALYTICS, INC (SOA). ANY USE OR DISCLOSURE OF THIS INFORMATION IS EXPRESSLY PROHIBITED WITHOUT THE PRIOR WRITTEN CONSENT OF SOA.

CS Energy
Building a Cleaner Future
2045 LINCOLN HIGHWAY
EDISON, NEW JERSEY 08817

PROJECT NAME:
STONINGTON SOLAR PROJECT

PROJECT ADDRESS:
ELLA WHEELER RD.
NORTH STONINGTON, CT 06359
41° 25' 9.71"N, 71° 50' 4.83"W

SEAL: STATE OF CONNECTICUT · DARIN RAY GALLOWAY · No. 34182 · LICENSED PROFESSIONAL ENGINEER

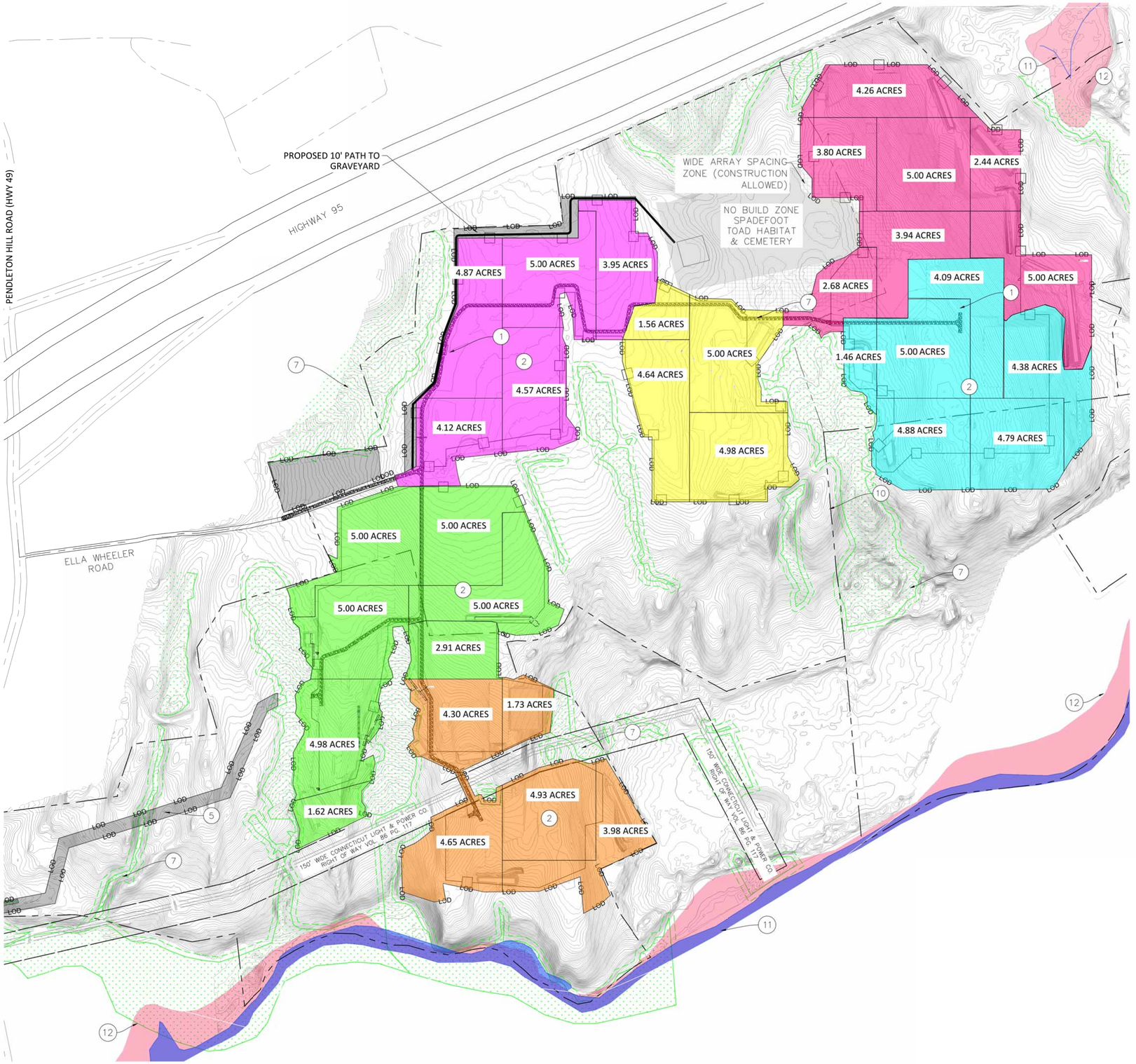
DATE:	21-JAN-20
PROJECT #:	20200309_CT
DRAWN BY:	MMM
CHECKED BY:	DRG

TITLE: PHASING PLAN

SHEET: P-201

PLOT DATE: Tuesday, January 19, 2021

LOCATION: E:\DROPBOX (SOA)\ENGINEERING\CS ENERGY\2020-03-09_STONINGTON\CAD\SITE PLANS.DWG PLOTTED BY: DARIN GALLOWAY



1 ACRES PHASING PLAN
P-202
Scale: 1" = 250'

N 0 250 500 FEET

LOCATION: E:\DROPBOX (SOA)\ENGINEERING\CS ENERGY\2020-03-09_STONINGTON\CAD\SITE PLANS.DWG PLOTTED BY: DARIN GALLOWAY

PLOT DATE: Tuesday, January 19, 2021

LEGEND

1	EP	EQUIPMENT PAD
2		ARRAY AREA
3	AC	(N) UG AC WIRE
4	OH	OVERHEAD POWER
5		OVERHEAD POWER POLE
6		PROPOSED SITE ACCESS ROAD (SEE C-400)
7		WETLAND W/BUFFER
8		SITE FENCE LINE (SEE C-402)
9	LOD	SITE LIMIT OF DISTURBANCE
10		SITE BOUNDARY
11		RIVER OR CREEK
12		100 YEAR FLOOD ZONE
		WIDE ARRAY SPACING AREA

GENERAL NOTES

1. NO MORE THAN 5-ACRES (CONTIGUOUS) TO BE DISTURBED AT ANY ONE TIME.
   - 1.1. PRIOR TO DISTURBING ADDITIONAL AREA THE PREVIOUS 5-ACRES NEED TO BE STABILIZED.
     - 1.1.1. IMMEDIATELY FOLLOWING CESSATION OF GRADING ACTIVITIES, SITE WILL BE HYDRO-SEEDED (BASED ON GROWING SEASON) OTHERWISE, STABILIZE WITH NON-VEGETATIVE STABILIZATION MEASURES PRIOR TO DISTURBING ADDITIONAL ACREAGE.
2. THE PERMITTEE SHALL ENSURE THAT EXISTING VEGETATION IS PRESERVED TO THE MAXIMUM EXTENT PRACTICABLE AND THAT DISTURBED PORTIONS OF THE SITE ARE MINIMIZED AND STABILIZED.
3. WHERE CONSTRUCTION ACTIVITIES HAVE PERMANENTLY CEASED OR WHEN FINAL GRADES ARE REACHED IN ANY PORTION OF THE SITE, STABILIZATION AND PROTECTION PRACTICES ARE SPECIFIED IN CHAPTER 5 OF THE CONNECTICUT SOIL EROSION & SEDIMENT CONTROL GUIDELINES (GUIDELINES) OR AS APPROVED BY THE COMMISSIONER OR HIS/HER DESIGNATED AGENT SHALL BE IMPLEMENTED WITHIN SEVEN DAYS. AREAS THAT WILL REMAIN DISTURBED BUT INACTIVE FOR AT LEAST THIRTY DAYS SHALL RECEIVE TEMPORARY SEEDING OR SOIL PROTECTION WITHIN SEVEN DAYS IN ACCORDANCE WITH THE GUIDELINES.
4. ALL 5-ACRE AREAS SHALL BE STABILIZED IN ACCORDANCE WITH SHORT TERM NON-LIVING SOIL PROTECTION PRACTICE DETAILED ON ESC-301.
5. AREAS THAT WILL REMAIN DISTURBED BEYOND THE SEEDING SEASON AS IDENTIFIED IN THE GUIDELINES, SHALL RECEIVE LONG-TERM, NON-VEGETATIVE STABILIZATION AND PROTECTION SUFFICIENT TO PROTECT THE SITE THROUGH THE WINTER.
6. IN ALL CASES, STABILIZATION AND PROTECTION MEASURES SHALL BE IMPLEMENTED AS SOON AS POSSIBLE IN ACCORDANCE WITH THE GUIDELINES OR AS APPROVED BY THE COMMISSIONER OR HIS/HER DESIGNATED AGENT.
7. ALL DISTURBED AREAS, WITH THE EXCEPTION OF IMPERVIOUS SURFACES, WILL BE RECLAIMED BY SURFACE ROUGHENING AND APPLICATION OF LOW GROUND COVER, NATIVE SEED MIX, ONCE ALL SOIL DISTURBING ACTIVITIES AT THE SITE HAVE BEEN COMPLETED, ALL CONSTRUCTION MATERIALS, WASTE, AND EQUIPMENT WILL BE REMOVED AND PROPERLY DISPOSED OF, IF REQUIRED. TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES SHALL BE REMOVED. FINAL STABILIZATION SHALL BE ACHIEVED WHEN THE SITE HAS AN AVERAGE OF 100 PLANTS PER SQUARE FOOT, 6" TALL BEFORE THE FIRST MOWING. ONCE THE SITE HAS BEEN STABILIZED FOR AT LEAST THREE MONTHS, THE PERMITTEE SHALL HAVE THE SITE INSPECTED BY A QUALIFIED INSPECTOR TO CONFIRM FINAL STABILIZATION. THE PERMITTEE SHALL INDICATE COMPLIANCE WITH THIS REQUIREMENT ON THE NOTICE OF TERMINATION FORM.

SIERRA OVERHEAD ANALYTICS
18859 MICROTRONICS WAY
SONORA, CALIFORNIA 95370
CONNECTICUT PROFESSIONAL ENGINEERING CORPORATION #PEC.0001969

REV	DESCRIPTION	DATE
6	ISSUED FOR CONSTRUCTION - DRAFT	9/4/2020
7	ISSUED FOR CONSTRUCTION - DRAFT	9/18/2020
8	ISSUED FOR CONSTRUCTION - DRAFT	10/22/2020
9	ISSUED FOR CONSTRUCTION - DRAFT	11/06/2020
10	ISSUED FOR CONSTRUCTION	1/20/2021
-	-	-
-	-	-
-	-	-
-	-	-
-	-	-
-	-	-

CONFIDENTIAL:
THE INFORMATION DEPICTED ON THIS DOCUMENT IS PROPRIETARY AND THE SOLE PROPERTY OF SIERRA OVERHEAD ANALYTICS, INC (SOA). ANY USE OR DISCLOSURE OF THIS INFORMATION IS EXPRESSLY PROHIBITED WITHOUT THE PRIOR WRITTEN CONSENT OF SOA.

CS Energy
Building a Cleaner Future
2045 LINCOLN HIGHWAY
EDISON, NEW JERSEY 08817

PROJECT NAME:
STONINGTON SOLAR PROJECT

PROJECT ADDRESS:
ELLA WHEELER RD.
NORTH STONINGTON, CT 06359
41° 25' 9.71"N, 71° 50' 4.83"W

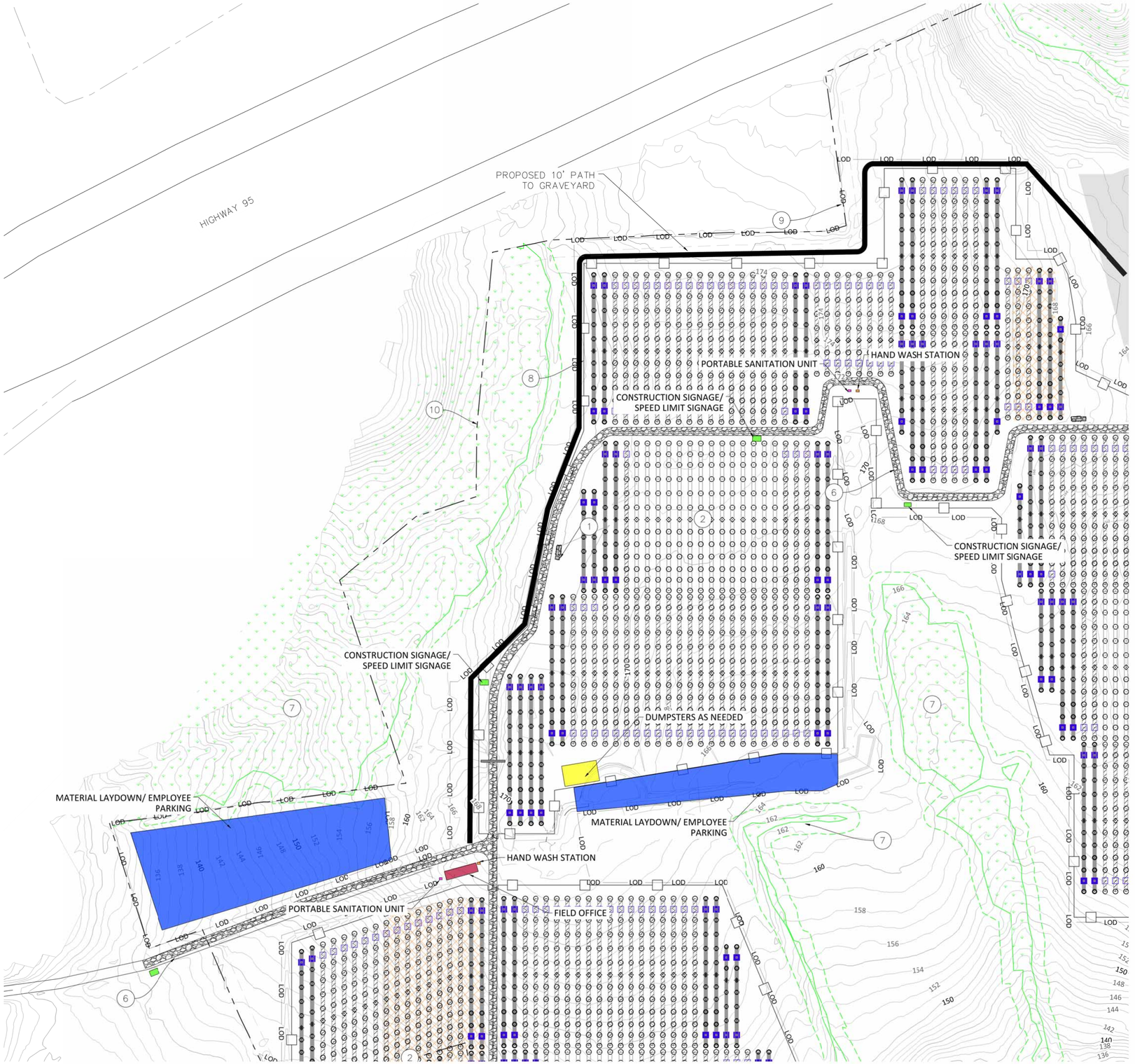
SEAL: STATE OF CONNECTICUT · DARIN RAY GALLOWAY · No. 34152 · LICENSED PROFESSIONAL ENGINEER

DATE: 21-JAN-20
PROJECT #: 20200309_CT
DRAWN BY: MMM
CHECKED BY: DRG

TITLE: PHASING PLAN

SHEET: P-202

811 Know what's below. Call before you dig.

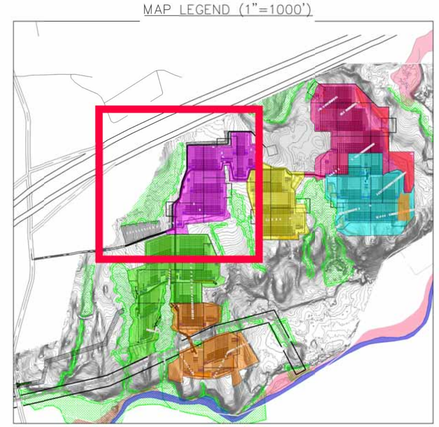


1 P-203 LOGISTICS OVERVIEW
Scale: 1" = 100'

N

0 100 200 FEET

MAP LEGEND (1"=1000')



LEGEND

1		EQUIPMENT PAD
2		ARRAY AREA
3	AC	(N) UG AC WIRE
4	OH	OVERHEAD POWER
5		OVERHEAD POWER POLE
6		PROPOSED SITE ACCESS ROAD (SEE C-400)
7		WETLAND W/BUFFER
8		SITE FENCE LINE (SEE C-402)
9	LOD	SITE LIMIT OF DISTURBANCE
10		SITE BOUNDARY
11		RIVER OR CREEK
12		100 YEAR FLOOD ZONE

PLOT DATE: Tuesday, January 19, 2021

SIERRA OVERHEAD ANALYTICS
18859 MICROTRONICS WAY
SONORA, CALIFORNIA 95370
CONNECTICUT PROFESSIONAL
ENGINEERING CORPORATION #PEC.0001969

REV	DESCRIPTION	DATE
6	ISSUED FOR CONSTRUCTION - DRAFT	9/4/2020
7	ISSUED FOR CONSTRUCTION - DRAFT	9/18/2020
8	ISSUED FOR CONSTRUCTION - DRAFT	10/22/2020
9	ISSUED FOR CONSTRUCTION - DRAFT	11/06/2020
10	ISSUED FOR CONSTRUCTION	1/20/2021
-	-	-
-	-	-
-	-	-
-	-	-
-	-	-

CONFIDENTIAL:
THE INFORMATION DEPICTED ON THIS DOCUMENT IS PROPRIETARY AND THE SOLE PROPERTY OF SIERRA OVERHEAD ANALYTICS, INC (SOA). ANY USE OR DISCLOSURE OF THIS INFORMATION IS EXPRESSLY PROHIBITED WITHOUT THE PRIOR WRITTEN CONSENT OF SOA.

CS Energy
Building a Cleaner Future
2045 LINCOLN HIGHWAY
EDISON, NEW JERSEY 08817

PROJECT NAME:
STONINGTON SOLAR PROJECT

PROJECT ADDRESS:
ELLA WHEELER RD.
NORTH STONINGTON, CT 06359
41° 25' 9.71"N, 71° 50' 4.83"W

SEAL: STATE OF CONNECTICUT · DARIN RAY GALLOWAY · No. 34182 · LICENSED PROFESSIONAL ENGINEER

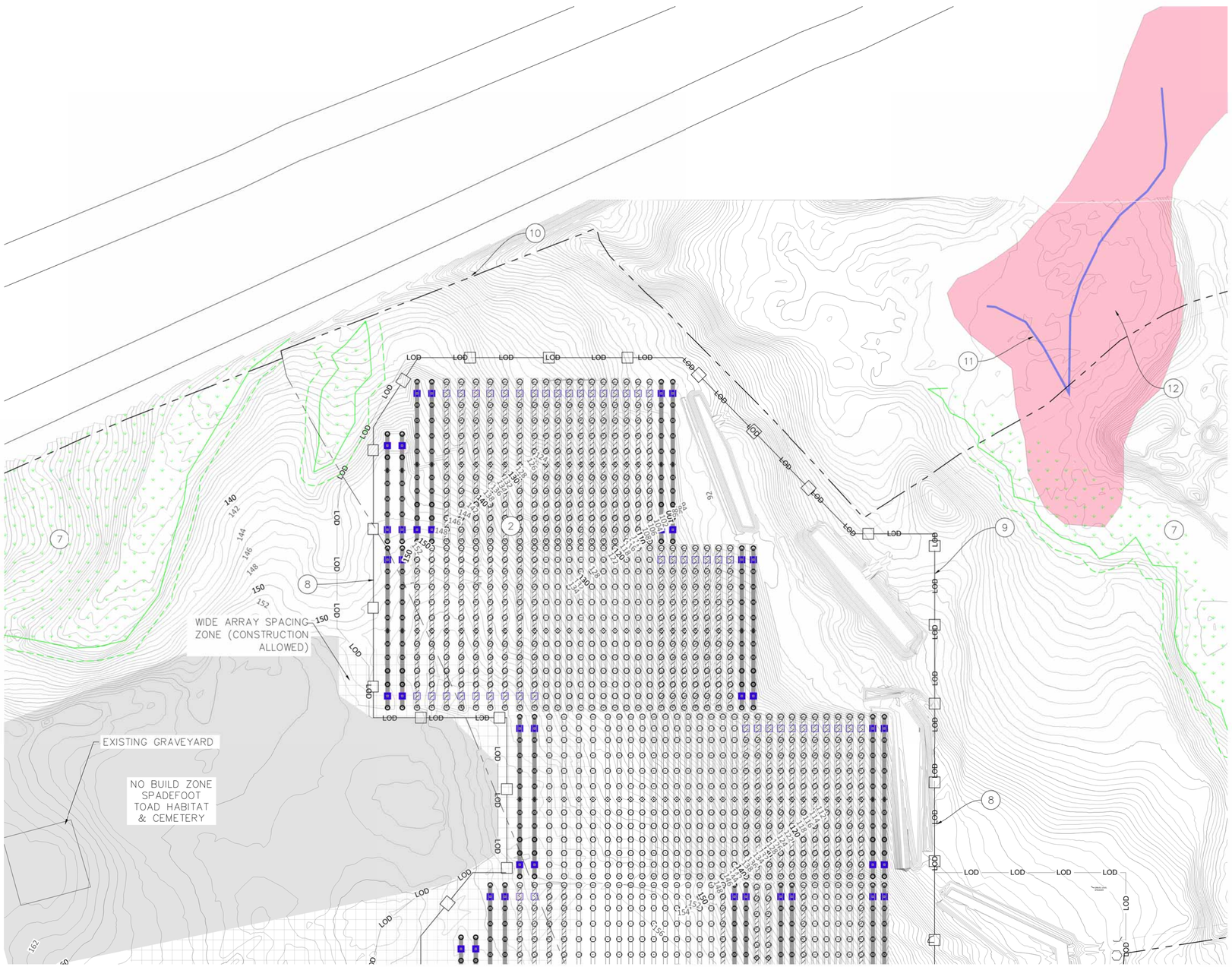
DATE: 21-JAN-20
PROJECT #: 20200309_CT
DRAWN BY: MMM
CHECKED BY: DRG

TITLE: PHASING PLAN

SHEET: P-203

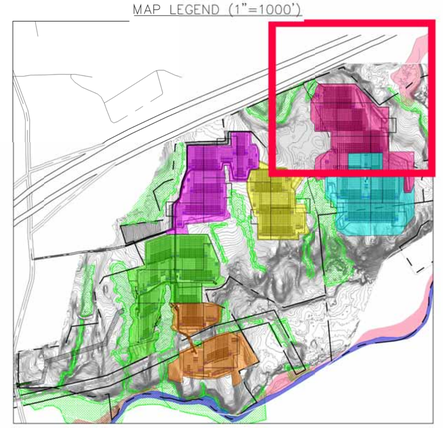
811 Know what's below. Call before you dig.

LOCATION: E:\DROPBOX (SOA)\ENGINEERING\CS ENERGY\2020-03-09_STONINGTON\CAD\SITE PLANS.DWG PLOTTED BY: DARIN GALLOWAY



1 P-204 LOGISTICS OVERVIEW
Scale: 1" = 100'

MAP LEGEND (1"=1000')



LEGEND

1		EQUIPMENT PAD
2		ARRAY AREA
3	AC	(N) UG AC WIRE
4	OH	OVERHEAD POWER
5		OVERHEAD POWER POLE
6		PROPOSED SITE ACCESS ROAD (SEE C-400)
7		WETLAND W/BUFFER
8		SITE FENCE LINE (SEE C-402)
9	LOD	SITE LIMIT OF DISTURBANCE
10		SITE BOUNDARY
11		RIVER OR CREEK
12		100 YEAR FLOOD ZONE
		WIDE ARRAY SPACING AREA

Know what's below. Call before you dig.

PLOT DATE: Tuesday, January 19, 2021

soa
SIERRA OVERHEAD ANALYTICS
18859 MICROTRONICS WAY
SONORA, CALIFORNIA 95370
CONNECTICUT PROFESSIONAL
ENGINEERING CORPORATION #PEC.0001969

REV	DESCRIPTION	DATE
6	ISSUED FOR CONSTRUCTION - DRAFT	9/4/2020
7	ISSUED FOR CONSTRUCTION - DRAFT	9/18/2020
8	ISSUED FOR CONSTRUCTION - DRAFT	10/22/2020
9	ISSUED FOR CONSTRUCTION - DRAFT	11/06/2020
10	ISSUED FOR CONSTRUCTION	1/20/2021
-	-	-
-	-	-
-	-	-
-	-	-
-	-	-

CONFIDENTIAL:
THE INFORMATION DEPICTED ON THIS DOCUMENT IS PROPRIETARY AND THE SOLE PROPERTY OF SIERRA OVERHEAD ANALYTICS, INC (SOA). ANY USE OR DISCLOSURE OF THIS INFORMATION IS EXPRESSLY PROHIBITED WITHOUT THE PRIOR WRITTEN CONSENT OF SOA.

CS Energy
Building a Cleaner Future
2045 LINCOLN HIGHWAY
EDISON, NEW JERSEY 08817

PROJECT NAME:
STONINGTON SOLAR PROJECT

PROJECT ADDRESS:
ELLA WHEELER RD.
NORTH STONINGTON, CT 06359
41° 25' 9.71"N, 71° 50' 4.83"W

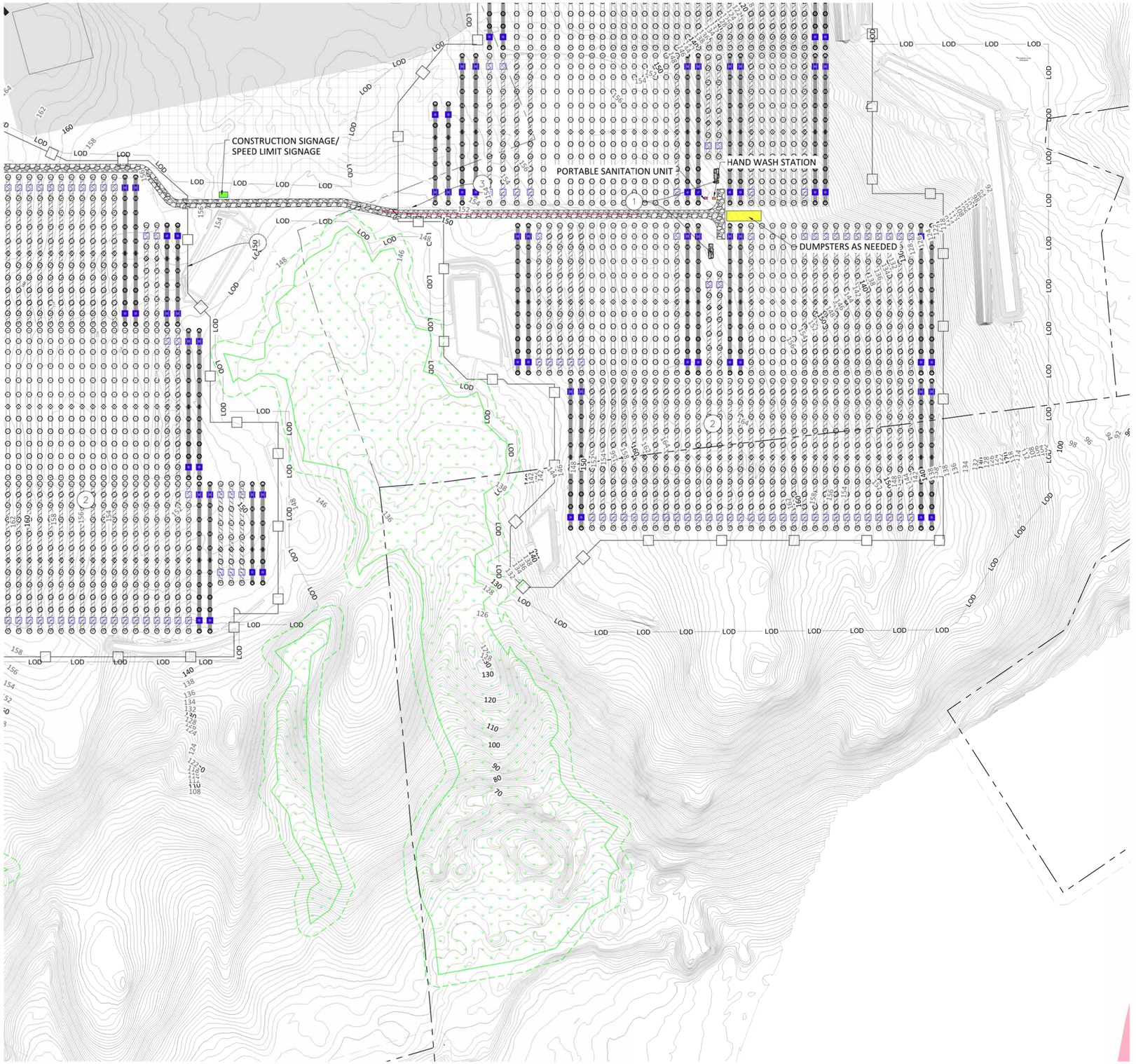
SEAL: STATE OF CONNECTICUT · DARIN RAY GALLOWAY · No. 34152 · LICENSED PROFESSIONAL ENGINEER

DATE:	21-JAN-20
PROJECT #:	20200309_CT
DRAWN BY:	MMM
CHECKED BY:	DRG

TITLE: PHASING PLAN

SHEET: P-204

LOCATION: E:\DROPBOX (SOA)\ENGINEERING\CS ENERGY\2020-03-09_STONINGTON\CAD\SITE PLANS.DWG PLOTTED BY: DARIN GALLOWAY

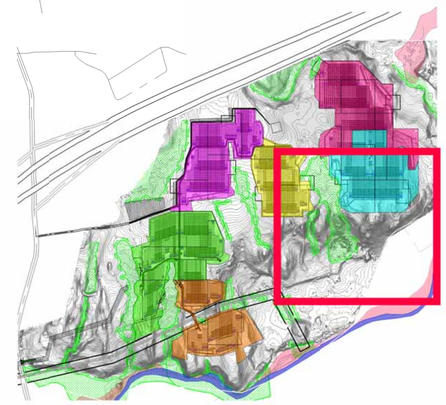


1 P-205 LOGISTICS OVERVIEW
Scale: 1" = 100'

N

0 100 200 FEET

MAP LEGEND (1"=1000')



LEGEND

1		EQUIPMENT PAD
2		ARRAY AREA
3	AC	(N) UG AC WIRE
4	OH	OVERHEAD POWER
5		OVERHEAD POWER POLE
6		PROPOSED SITE ACCESS ROAD (SEE C-400)
7		WETLAND W/BUFFER
8		SITE FENCE LINE (SEE C-402)
9	LOD	SITE LIMIT OF DISTURBANCE
10		SITE BOUNDARY

Know what's below. Call before you dig.

soa
SIERRA OVERHEAD ANALYTICS
18859 MICROTRONICS WAY
SONORA, CALIFORNIA 95370
CONNECTICUT PROFESSIONAL
ENGINEERING CORPORATION #PEC.0001969

REV	DESCRIPTION	DATE
6	ISSUED FOR CONSTRUCTION - DRAFT	9/4/2020
7	ISSUED FOR CONSTRUCTION - DRAFT	9/18/2020
8	ISSUED FOR CONSTRUCTION - DRAFT	10/22/2020
9	ISSUED FOR CONSTRUCTION - DRAFT	11/06/2020
10	ISSUED FOR CONSTRUCTION	1/20/2021
-	-	-
-	-	-
-	-	-
-	-	-
-	-	-

CONFIDENTIAL:
THE INFORMATION DEPICTED ON THIS DOCUMENT IS PROPRIETARY AND THE SOLE PROPERTY OF SIERRA OVERHEAD ANALYTICS, INC (SOA). ANY USE OR DISCLOSURE OF THIS INFORMATION IS EXPRESSLY PROHIBITED WITHOUT THE PRIOR WRITTEN CONSENT OF SOA.

CS Energy
Building a Cleaner Future
2045 LINCOLN HIGHWAY
EDISON, NEW JERSEY 08817

PROJECT NAME:
STONINGTON SOLAR PROJECT

PROJECT ADDRESS:
ELLA WHEELER RD.
NORTH STONINGTON, CT 06359
41° 25' 9.71"N, 71° 50' 4.83"W

SEAL:
STATE OF CONNECTICUT
DARIN RAY GALLOWAY
No. 34152
LICENSED PROFESSIONAL ENGINEER

DATE:	21-JAN-20
PROJECT #:	20200309_CT
DRAWN BY:	MMM
CHECKED BY:	DRG

TITLE:
PHASING PLAN

SHEET:
P-205

PLOT DATE: Tuesday, January 19, 2021

LOCATION: E:\DROPBOX (SOA)\ENGINEERING\CS ENERGY\2020-03-09_STONINGTON\CAD\SITE PLANS.DWG PLOTTED BY: DARIN GALLOWAY

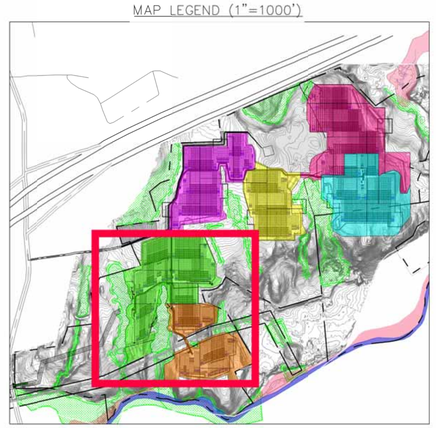


1 P-206 **LOGISTICS OVERVIEW**
Scale: 1" = 100'

N

0 100 200 FEET

MAP LEGEND (1"=1000')



LEGEND		
1		EQUIPMENT PAD
2		ARRAY AREA
3	AC	(N) UG AC WIRE
4	OH	OVERHEAD POWER
5		OVERHEAD POWER POLE
6		PROPOSED SITE ACCESS ROAD (SEE C-400)
7		WETLAND W/BUFFER
8		SITE FENCE LINE (SEE C-402)
9	LOD	SITE LIMIT OF DISTURBANCE
10		SITE BOUNDARY
	75	MAJOR CONTOUR
	76	MINOR CONTOUR

NOTES:

1. COORDINATE SYSTEM: NAD83 CONNECTICUT STATE PLANE ZONE, US FOOT

811 Know what's **below.** **Call** before you dig.

soa
SIERRA OVERHEAD ANALYTICS

18859 MICROTRONICS WAY
SONORA, CALIFORNIA 95370
CONNECTICUT PROFESSIONAL
ENGINEERING CORPORATION #PEC.0001969

REV	DESCRIPTION	DATE
6	ISSUED FOR CONSTRUCTION - DRAFT	9/4/2020
7	ISSUED FOR CONSTRUCTION - DRAFT	9/18/2020
8	ISSUED FOR CONSTRUCTION - DRAFT	10/22/2020
9	ISSUED FOR CONSTRUCTION - DRAFT	11/06/2020
10	ISSUED FOR CONSTRUCTION	1/20/2021
-	-	-
-	-	-
-	-	-
-	-	-
-	-	-

CONFIDENTIAL:
THE INFORMATION DEPICTED ON THIS DOCUMENT IS PROPRIETARY AND THE SOLE PROPERTY OF SIERRA OVERHEAD ANALYTICS, INC (SOA). ANY USE OR DISCLOSURE OF THIS INFORMATION IS EXPRESSLY PROHIBITED WITHOUT THE PRIOR WRITTEN CONSENT OF SOA.

CS Energy
Building a Cleaner Future

2045 LINCOLN HIGHWAY
EDISON, NEW JERSEY 08817

PROJECT NAME:
STONINGTON SOLAR PROJECT

PROJECT ADDRESS:
ELLA WHEELER RD.
NORTH STONINGTON, CT 06359
41° 25' 9.71"N, 71° 50' 4.83"W

SEAL: STATE OF CONNECTICUT · DARIN RAY GALLOWAY · No. 34152 · LICENSED PROFESSIONAL ENGINEER

DATE:	21-JAN-20
PROJECT #:	20200309_CT
DRAWN BY:	MMM
CHECKED BY:	DRG

TITLE: PHASING PLAN

SHEET: P-206

PLOT DATE: Tuesday, January 19, 2021

LOCATION: E:\DROPBOX (SOA)\ENGINEERING\CS ENERGY\2020-03-09_STONINGTON\CAD\SITE PLANS.DWG PLOTTED BY: DARIN GALLOWAY

Please refer to Note #8 on Sheet C-400 that confirms that the width of the solar facility access roads will be 16 ft.