



TRUDELL CONSULTING ENGINEERS
478 BLAIR PARK ROAD | WILLISTON, VERMONT 05495
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Revisions	No.	Description	Date	By
	1	Update Wetland & Site Layout	07/23/14	KED

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Project Title

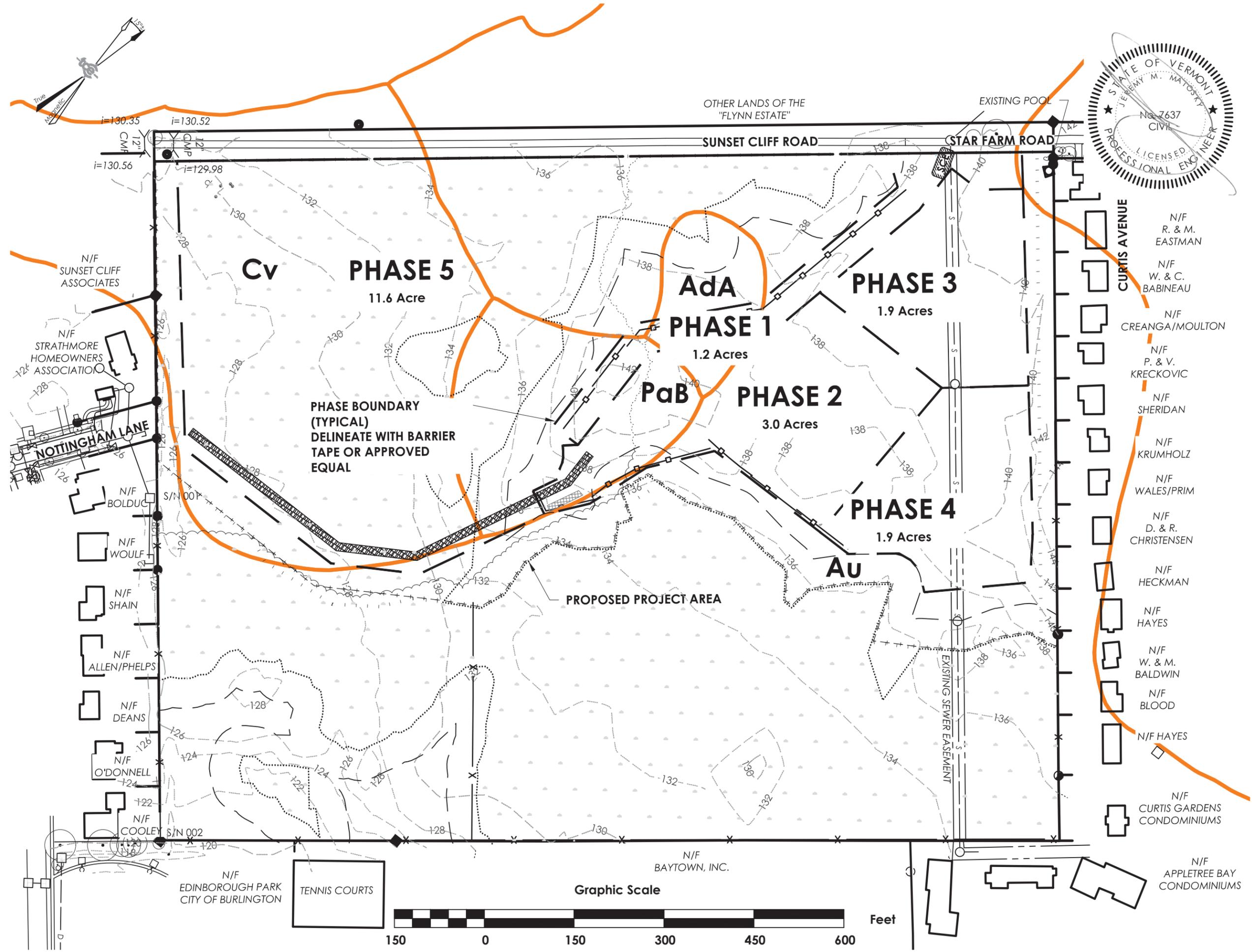
**South Forty Solar Farm
Sunset Cliff Road
Burlington, Vermont**

Sheet Title

Pre-Construction Plan

Date:	03/25/2014
Scale:	1" = 150'
Project Number:	13-113
Drawn By:	RMP
Project Engineer:	JMM
Approved By:	

C5-01



EROSION PREVENTION AND SEDIMENT CONTROL NARRATIVE

GENERAL DESCRIPTION OF PROJECT

THE FOLLOWING NARRATIVE WAS PREPARED FOR THE CONTRACTOR'S EROSION PREVENTION AND SEDIMENT CONTROL (EPSC) PLAN. THIS PROJECT CONSISTS OF THE INSTALLATION OF A SOLAR FARM AND SUPPORTING INFRASTRUCTURE ON SUNSET CLIFF ROAD IN BURLINGTON, VERMONT. EARTHWORK FOR THIS PROJECT CONSISTS OF THE CONSTRUCTION OF A GRAVEL ACCESS ROAD, STORMWATER DETENTION BASIN, DRIVING PILES FOR THE SOLAR ARRAY, AND TRENCHING OF ELECTRICAL CONDUIT. WHILE A PORTION OF THE SOLAR ARRAY WILL BE LOCATED IN A CLASS II WETLAND, THE PROJECT HAS BEEN DESIGNED TO LIMIT THE DISTURBED EARTH IN THIS AREA. THE ONLY EARTH DISTURBANCE IN THIS AREA WILL BE FROM THE DRIVING OF SUPPORT PILES FOR THE SOLAR PANELS.

SITE DRAINAGE CHARACTERISTICS

THE SITE GENERALLY SLOPES FROM EAST TO WEST, WITH PITCH NOT EXCEEDING 5% ANYWHERE IN THE PROJECT AREA. THERE ARE TWO DISCHARGE POINTS FROM THE SITE, S/N 001 IS A CATCH BASIN ON THE WESTERN SIDE OF THE PROPERTY, AND S/N 002 IS A DRAINAGE SWALE IN THE SOUTHWEST CORNER OF THE PROPERTY.

DRAINAGE, WATERWAYS AND BODIES OF WATER

LAKE CHAMPLAIN IS THE ULTIMATE RECEIVING WATER FOR THE PROJECT, THOUGH RUNOFF WILL BE CONVEYED TO THE LAKE VIA THE CITY OF BURLINGTON STORMWATER SYSTEM.

LOCATION, EXISTING FEATURES, BUILDINGS & UTILITIES

THE PROPERTY IS LOCATED TO THE SOUTH OF SUNSET CLIFF ROAD. A CITY-OWNED SANITARY SEWER EXISTS ON THE EASTERN PORTION OF THE PROPERTY. NO BUILDINGS OR ROADS CURRENTLY EXIST ONSITE. THE SITE HISTORICALLY WAS PASTURE, WITH GRAZING LIVESTOCK. REMNANTS OF FENCE STILL EXIST ONSITE.

VEGETATION

THE SITE IS CURRENTLY A MIXTURE OF MEADOW (IN THE WETLAND AREA) AND FOREST.

SOILS

SOILS IN THE PRIMARY AREA OF EARTHWORK CONSIST OF ADAMS AND WINDSOR LOAMY SANDS (K = 0.17), AU GRES FINE SANDY LOAM (K = 0.15), AND PALATINE SILT LOAM (K = 0.32). THE WETLAND AREA CONSISTS OF COVINGTON SILTY CLAY (K = 0.49), BUT IMPACTS TO THIS AREA WILL BE LIMITED TO 84 SQUARE FEET (SUPPORT PILE DRIVING ONLY).

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PROXIMITY TO NATURAL AND MAN-MADE WATER FEATURES

LAKE CHAMPLAIN IS APPROXIMATELY 750 FEET SOUTH OF THE PROJECT AREA.

REQUIREMENTS FOR WINTER CONSTRUCTION

THE FOLLOWING MEASURES MUST BE ADHERED FOR CONSTRUCTION BETWEEN OCTOBER 15 AND APRIL 15.

TO ENSURE COVER OF DISTURBED SOIL IN ADVANCE OF A MELT EVENT, AREAS OF DISTURBED SOIL MUST BE STABILIZED AT THE END OF EACH WORK DAY, WITH THE FOLLOWING EXCEPTIONS:

1. IF NO PRECIPITATION WITHIN 24 HOURS IS FORECAST AND WORK WILL RESUME IN THE SAME DISTURBED AREA WITHIN 24 HOURS, DAILY STABILIZATION IS NOT NECESSARY.
 2. DISTURBED AREAS THAT COLLECT AND RETAIN RUNOFF, SUCH AS HOUSE FOUNDATIONS OR OPEN UTILITY TRENCHES.
- PRIOR TO STABILIZATION, SNOW OR ICE MUST BE REMOVED TO A THICKNESS OF NO MORE THAN 1 INCH.
 - MULCH USED FOR TEMPORARY STABILIZATION MUST BE APPLIED AT DOUBLE THE STANDARD RATE, OR A MINIMUM OF 3 INCHES WITH AN 80-90% COVER.
 - SILT FENCE AND OTHER PRACTICES REQUIRING EARTH DISTURBANCE MUST BE INSTALLED PRIOR TO GROUND FREEZE.
 - DRAINAGE STRUCTURES MUST BE KEPT OPEN AND FREE OF SNOW AND ICE DAMS.
 - A MINIMUM 25 FOOT BUFFER SHALL BE MAINTAINED FROM PERIMETER CONTROLS SUCH AS SILT FENCES.
 - IN AREAS OF DISTURBANCE THAT DRAIN TO A WATER BODY WITHIN 100 FEET, SILT FENCE SHALL BE REINFORCED.
 - ALL AREAS THAT ARE DISTURBED DURING WINTER CONSTRUCTION SHALL BE STABILIZED BY APPLYING SEED AND MULCH AT TWICE THE NORMAL RATE AND THEN COVERED WITH STRAW MATTING.

GRADING PLAN, TIMETABLE & CONSTRUCTION SEQUENCE

THIS PROJECT IS ANTICIPATED TO BEGIN IN THE WINTER OF 2014/2015, WITH THE BULK OF THE GRADING ACTIVITIES TO BEGIN IN THE SPRING OF 2015. ALL WORK IS ANTICIPATED TO BE COMPLETED BY SUMMER 2015.

FIRST, THE DISTURBANCE AND PHASING LIMITS ARE TO BE MARKED WITH BARRIER TAPE AS INDICATED ON THE PLANS. PERIMETER SEDIMENT CONTROL FEATURES (E.G. SILT FENCE) WILL BE INSTALLED ALONG THE WETLAND BUFFER BOUNDARIES NEXT TO ESTABLISH PROTECTION TO THESE NATURAL FEATURES. ONCE THESE ITEMS ARE INSTALLED, EARTHWORK MAY PROCEED ACCORDING TO THE EPSC PLAN. NO MORE THAN FIVE (5) ACRES OF DISTURBED EARTH MAY BE OPEN AT ONE TIME. THE SITE SHALL REMAIN COMPLIANT WITH THE SITE STABILIZATION REQUIREMENTS NOTED ON THE EPSC PLAN SET.

EPSC PLAN & TIMETABLE

BY PHASING THE PROJECT AND PROVIDING PERIMETER SEDIMENT CONTROL MEASURES, THE RECEIVING WATERS ARE PROTECTED FROM EROSION FROM THE SITE. FIBER ROLLS ARE PROVIDED IN THE WETLAND AREA AS THEY DO NOT REQUIRE AS EXTENSIVE TRENCHING AS SILT FENCE. IT IS NOT ANTICIPATED THAT MUCH, IF ANY, EROSION OCCURS IN THE WETLAND AREA, AS EARTH DISTURBANCE IS LIMITED TO THE DRIVING OF THE PILES FOR THE ARRAY. ALL MEASURES WILL BE REMOVED ONCE THE SITE HAS ACHIEVED FINAL STABILIZATION (GRAVEL AND VEGETATIVE COVER).

REPORTING FREQUENCY

SITE OBSERVATION WILL OCCUR AT A MINIMUM OF ONCE EVERY SEVEN (7) CALENDAR DAYS AND WITHIN 24 HOURS OF A PRECIPITATION EVENT THAT RESULTS IN A DISCHARGE FROM THE SITE.

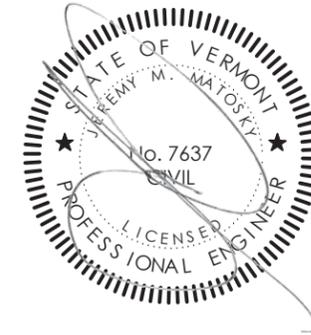
ONSITE PLAN COORDINATOR (OSPC) INFORMATION TO BE DETERMINED

STABILIZATION REQUIREMENTS

ALL AREAS OF DISTURBANCE MUST HAVE TEMPORARY OR FINAL STABILIZATION WITHIN FOURTEEN (14) CALENDAR DAYS OF THE INITIAL DISTURBANCE. AFTER THIS TIME, ANY DISTURBANCE IN THE AREA MUST BE STABILIZED AT THE END OF EACH WORK DAY; HOWEVER, THE FOLLOWING EXCEPTIONS APPLY:

1. IF WORK IS TO CONTINUE IN THE AREA WITHIN THE NEXT 24 HOURS AND THERE IS NO PRECIPITATION FORECASTED IN THAT TIME PERIOD, WORK MAY CONTINUE WITHOUT STABILIZATION, AND,
2. IF THE WORK IS OCCURRING IN A SELF-CONTAINED EXCAVATION WITH A DEPTH OF TWO (2) FEET OR GREATER (E.G. FOUNDATION EXCAVATION, UTILITY TRENCH), STABILIZATION IS NOT REQUIRED.

STABILIZATION IS TO BE ACCOMPLISHED IN ACCORDANCE WITH THE DETAILS PROVIDED IN THE EPSC PLAN SET.



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**South Forty Solar Farm
Sunset Cliff Road
Burlington, Vermont**

Sheet Title

**Pre-Construction
Notes**

Date:	08/07/15
Scale:	N/A
Project Number:	13-113
Drawn By:	NPC
Project Engineer:	JMM
Approved By:	

EPSC Legend

PROJECT AREA

SILT FENCE

PHASE BOUNDARY

SOIL BOUNDARY LINE



STABILIZED CONSTRUCTION ENTRANCE



SOIL STOCK PILE



FIBER ROLL

SOIL KEY

ID	DESCRIPTION
AdA	ADAMS AND WINDSOR LOAMY SANDS
Au	AU GRES FINE SANDY LOAM
Cv	COVINGTON SILTY CLAY
PaB	PALATINE SILT LOAM

C5-01.2