

12.0 STORMWATER MANAGEMENT

Acheron Engineering Services (Acheron) has developed a comprehensive stormwater management and control plan for the Three Rivers Solar Power Project.

The Stormwater Management Plan addresses each approval criterion set forth in Section 12, Stormwater Management of the State of Maine, Department of Environmental Protection, Site Location of Development (38 MRSA §§481-490) Permit Application. The stormwater control plan focuses on minimizing permanent impacting areas within the project area and incorporates appropriate Best Management Practices (BMPs) into the project design to minimize concentration of stormwater flows at the project site. See Exhibit 12-1 for the full stormwater management plan and erosion and sedimentation control plan.

Exhibit 12-1
Three Rivers Solar Stormwater Management Plan



STORMWATER MANAGEMENT PLAN

Submitted by:

**THREE RIVERS SOLAR POWER
TOWNSHIP 16 MD BPP
HANCOCK COUNTY, MAINE**

Prepared by:

Acheron Engineering Services
147 Main Street 24466 Powell Road
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DATE:

OCTOBER, 2019

This Stormwater Management Plan addresses each approval criterion set forth in Section 12, Stormwater Management of the State of Maine, Department of Environmental Protection, Site Location of Development (38 MRSA §§481-490) Permit Application.

1.0 Development Description

Location: Three Rivers Solar Power, LLC proposes to develop a 100 megawatt utility scale solar facility located in Township 16MD, BPP, Hancock County, Maine (Project). The project parcel is approximately 1,115 acres in size. 696 acres within the parcel has recently been rezoned allowing utility scale solar projects and is considered the Project Area. Please refer to the Appendix E for site plans for parcel and project area configurations and Appendix A for site location map.

Land Cover & General Topography: The Project Area is considered undeveloped land containing a mixture of forestland and agricultural field with several intersecting gravel agricultural and forestry access roads. Most of the forestland appears to have been harvested within the past 10 years, however, some harvests appear older than that. The area contains several topographic “hills” that are dominated by well and moderately well drained glacial till and glacial outwash sediments. Within the Project area are six individual areas have been selected for the installation of solar panels, associated equipment and substation. The six solar fields total approximately 465 acres.

Surface Waters: Surface waters within the Project Area includes; scrub-shrub, isolated forested and emergent wetlands along with three unnamed streams. Surface water abutting the site include West Branch Narraguagus River and Colson Branch. Please see the Protected Natural Resource report prepared by Atlantic Resources for specific details.

Downstream Ponds or Lakes and Flooding: There are no downstream ponds or lakes from the Project. In addition, there are no known areas, buildings or facilities that historically flood or will be affected by stormwater runoff from the Project. Natural drainage ways will not be altered by the Project.

Alterations to Land Cover: Proposed areas that will be stripped, regraded and not revegetated included; approximately 7.1 acres of existing gravel roads and approximately, 1.8 acres to support the construction of the substation, 0.3 acres for inverters and 0.1 acres of support posts. Roads within the project area will remain gravel or be revegetated. Up to the time of filing the application, the six areas to house the project have been cleared of trees and approximately 100 acres have been destumped and boulders removed for the cultivation of wild blueberries. Once all approvals from regulatory agencies have been obtained, preparing the land cover for the cultivation of blueberries for the remaining 365 acres will restart. Land cover will be converted to allow the wild blueberries

to take hold prior to the installation of solar panels or equipment in the remaining 365 acres. Based on this information, the Basic, General and Flooding standards apply to the project.

Assumptions: To evaluate the Project impact to peak runoff rates from the parcel, the following assumptions were made:

- All forestry and agricultural activities within the parcel occurred after October 1, 1975 and the preexisting land cover in the project area is considered wooded, with a hydraulic condition of good.
- Once developed, the land cover within the solar field is considered brush with a hydraulic condition of good.
- Roads that exist within the project area are gravel with a CN value of 96 soil conditions.
- Concrete pads for inverters and substation equipment are considered impervious with a CN value of 98 for all HSG soils.
- Cross sectional area for panel support posts is considered impervious with a CN value of 98 for all HSG soils.
- The crushed stone surface within the substation area is considered to have a CN value of 55 for HSG soils A, B & C and 60 for HSG D soils.
- Runoff curve number based on; Table 2-2c found in Urban Hydrology for Small Watersheds, TR-55 and Department approved cure values for substations and switchyards.

Water Quantity Control (Flooding Standard): To evaluate the potential change in peak stormwater runoff and the need for control methods, the pre and post combined runoff curves for each of the six solar fields were calculated. Results can be found in the following table:

Table 1		
Solar Field Combined Curve Number Values		
	CN	
Solar Field	Preexisting Condition	Post Development Condition
1	65	60
2	69	64
3	69	65
4	73	68
5	76	72
6	72	64

Results show that the post development condition CN value for each of the development areas is less than the preexisting condition. Based on these results and the fact that the project only

includes minimal topography change, the peak runoff from the parcel will be less in the post development condition, meeting the flooding standard. Please see Section 4.0 Flooding Standard Submission and plan sheet C-2 for detailed calculations.

Water Quality Treatment (General Standards): Per Chapter 500, the project stormwater management plan must provide treatment of no less than 95% of the impervious area and 80% of the developed area. For the linear portion of the project, this plan applies exemption 5(c) Linear portion of the project, where 75% of the impervious area must be treated. How this standard is met is described below.

Linear Portion of the Project: Approximately 43,900 feet (16.1 acres) of gravel roads were constructed within the project boundary to support past timber and agricultural activities. One road within the project boundary is used by the general public for timber harvesting, wind farm access and a thoroughfare between the towns of Eastbrook and DeBlois and is identified as Road “A” on attached plans. Due to its current and past use, Road “A” has been excluded from stormwater treatment calculations. Road “A” is approximately 7,100 ft (2.6 acres). In addition, 17,400 feet (6.4 acres) of existing road are not needed to support the project and will be revegetated. The remaining 19,400 feet (7.1 acres) will be regraded to obtain a treatment level of 76%. Meadows or forested buffers adjacent to the side of a road are utilized to meet the treatment requirement. Please refer to the General Standards Submission Section and attached plans for specific details.

Nonlinear Portion of the Project: Nonlinear portion of the project includes, solar panel support post (0.10 acres), inverter pads (0.31 acres) and the substation (3.9 acres). Developed and impervious area associated with solar panel support posts and inverters pads are considered self-buffering meeting the general standards. Developed and impervious area associated with the substation has been designed to meet a treatment level of 100% of the impervious and 87% of the developed. The developed area includes the crushed stone area, concrete equipment foundations, access drive, buildings, ditch and swale. The crushed stone area soil profile includes 6-inches of crushed stone (50:50 mix of 1.5” and ¾”) overlaying 18” of MDOT Type A gravel. This profile will detain and provide treatment meeting the General standards. Treatment for the remaining developed, including impervious is provided by a meadow buffer with stone bermed level lip spreader.

2.0 Basic Standard Submission

Erosion and sedimentation control plan details and notes can be found on the design plans located in Appendix E. See Appendix B for the Erosion & Sedimentation Control Inspection and Maintenance Plan. A site location Plan is included in Appendix B.

3.0 General Standards Submission

Narrative: Please refer to Section 1.0 Project Description for a description of site layout and hydrology. The flowing table details of disturbed, developed and impervious area associated with the project.

Table 2								
Project Area Summary								
Description	Disturbed Area (acres)	Surface area of Panels (acres)	Area of Posts (acres)	Area of Roads (acres)	Area of Inverter pads (acres)	Substation Impervious (acres)	Substation area (acres)	Notes
Field 1	329.3	68.90	0.06	4.5	0.21	N/A	N/A	Roads: L ,J ,I, H
Field 2	38.9	7.57	0.01	0.7	0.03	N/A	N/A	Roads: F & G
Field 3	32.6	6.73	0.01	1.7	0.03	N/A	N/A	Roads: B
Field 4	10.7	2.17	0.00	0.0	0.01	N/A	N/A	
Field 5	14.1	2.89	0.00	0.1	0.02	N/A	N/A	Roads: D
Field 6	39.5	7.28	0.01	0.0	0.02	0.16	3.92	
Totals	465.10	95.53	0.09	7.13	0.31	0.16	3.92	
	Total Disturbed	465.10	acres					
	Total Developed	11.61	acres					
	Total Impervious	7.69	acres					

Nonlinear Portion of the Project: The nonlinear portion of the project is design to meet treatment level of at least 95% of the impervious and 80% of the developed area. These areas are specifically the area associated with the solar panel support posts, concrete inverter locations and the substation. Support post and inverters are located with in the solar fields and are considered self-buffering and achieve treatment levels of 100% of the developed area and 100% of the impervious area. Treatment for the impervious and developed area for the substation is provided by a meadow buffer with stoned bermed level spreader and the soil profile of the substation foot print. An 81-foot level spreader that discharged to a 150-foot-long meadow buffer provides treatment for the impervious area within the substation and the landscaped area associated with regrading the area. The soil profile of 6" of crushed stone, 50:50 mix of 1.5" & ¾" stone over 18" of MDOT Type A gravel. Provides treatment for the non-impervious area within the footprint of the substation. Seasonal high groundwater table has been determined to

	Proposed Area (SF)		Amount of Area Treated (SF)			
Description	Developed	Impervious	Developed	BMP	Impervious	BMP
Substaion Foot Print (480' x 250')	120,000	6,932	113,068	Stone & Gravel Base	6,932	Meadow Buffer
Regraded Area	50,645	0	35,928	Meadow Buffer	0	Meadow Buffer
Totals	170,645	6,932	148,996		6,932	
Percent of Developed Area Treated	87%					
Percent of Impervious Area Treated	100%					
Note: Regraded Gravel Access Part of Linear Portion of Project						

be greater than 2-feet below finish grade within the footprint of the substation. Table 3 provide a summary of the treatment calculations for the substation development.

Refer to Appendix C for soil test pit logs for all buffers and soils survey report for test pit logs within the footprint of the substation. Calculations for level length can be found on plan sheet C-7. Below is a photo of the proposed substation buffer.



Photo: Substation Buffer Location

Linear Portion of the Project: Roads identified that required treatment include; Roads B, D, F, G, H, I, J and L. Please refer to plan sheet C-1 for the specific location of each road. Each of the roads will be regraded so the road surface is super elevated promoting stormwater to flow from the full width of road surface directly to meadows or forested buffers adjacent to the side of a road. Attached plan sheets C-6, C-7, & C-8, provide road stationing, direction of super elevation, and location of each buffer. Table 3 is a summary of treatment level calculations for each road and demonstrates that as designed, the linear portion of the project achieves a treatment level of 76%. Proposed deed restriction language is provided in Appendix D. Test pitting was performed by Atlantic Resources Co, to confirm that buffers are not within wetland soils. Please see Appendix C for test pit logs.

The following photograph was taken of Buffer H2 in Field #1 where stumps and boulders have been removed and blueberry growth has been established. The land cover shown will be typical of all meadow buffers proposed.



Photo: Meadow Buffer H2

The following photo is of forested buffer D1 and is typical of all forested buffers.



Photo: Forested Buffer D1

Table 4					
Linear Portion of the Project					
Stormwater Treatment					
Decription	Impervious Area (acres)	Area Treated (acres)	Percent of Area Treated	Stormwater BMP	Description
Road-B	1.75	1.20	69	Meadow Buffers, B3 through B8 Forested Buffer, B1, B2, B9 and B10	Road connects, Solar Fields 1,3, 4 & 6
Road-D	0.14	0.04	29	Forested Buffer, D1	Road to Solar Field 5
Road-F	0.54	0.37	69	Meadow Buffers, F1 through F4	Road for Solar Field 2
Road-G	0.17	0.11	65	Meadow Buffers, G1 and G2	Road for Solar Field 2
Road-H	1.44	1.13	78	Meadow Buffers, H1 through H10	Road for Solar Field 1
Road-I	1.26	1.14	90	Meadow Buffers, I1 through I5	Road for Solar Field 1
Road-J	1.38	1.09	79	Meadow Buffers, J1 through J8	Road for Solar Field 1
Road-L	0.44	0.33	75	Forested Buffer, L1 through L3	Road for Solar Field 1
Total	7.12	5.41	76%		

4.0 Flooding Standards Submission:

The following calculation tables support the conclusion that the peak runoff from the project will be less in the post condition by change of landcover associated with the project:

Area Description	Solar Field #1			
	Pre Site Law		Proposed	
	Area (acres)	CN	Area (acres)	CN
Woods, Hyd Condition - Good, HSG-A	16.05	34		
Woods, Hyd Condition - Good, HSG-B	79.54	55		
Woods, Hyd Condition - Good, HSG-C	200.85	70		
Woods, Hyd Condition - Good, HSG-D	32.86	77		
Brush, Hyd Condition - Good, HSG-A			16.05	30
Brush, Hyd Condition - Good, HSG-B			79.54	48
Brush, Hyd Condition - Good, HSG-C			196.04	65
Brush, Hyd Condition - Good, HSG-D			32.86	73
Gravel Roads, Hyd Condition - Good, HSG - A, B, C, & D			4.53	96
Concrete, Hyd Condition - Good, HSG - A, B, C, & D			0.21	98
Support Posts, Hyd Condition - Good, HSG - A, B, C, & D			0.06	98
Substation, Hyd Condition - Good, HSG - A, B, & C			0.00	55
Total	329.30		329.30	
Weighted Average		65		60

	Solar Field #2			
	Pre Site Law		Proposed	
Area Description	Area (acres)	CN	Area (acres)	CN
Woods, Hyd Condition - Good, HSG-A				
Woods, Hyd Condition - Good, HSG-B	3.69	55		
Woods, Hyd Condition - Good, HSG-C	34.92	70		
Woods, Hyd Condition - Good, HSG-D	0.29	77		
Brush, Hyd Condition - Good, HSG-A				
Brush, Hyd Condition - Good, HSG-B			3.69	48
Brush, Hyd Condition - Good, HSG-C			34.18	65
Brush, Hyd Condition - Good, HSG-D			0.29	73
Gravel Roads, Hyd Condition - Good, HSG - A, B, C, & D			0.71	96
Concrete, Hyd Condition - Good, HSG - A, B, C, & D			0.03	98
Support Posts, Hyd Condition - Good, HSG - A, B, C, & D			0.01	98
Substation, Hyd Condition - Good, HSG - A, B, & C			0.00	55
Total	38.90		38.90	
Weighted Average		69		64

	Solar Field #3			
	Pre Site Law		Proposed	
Area Description	Area (acres)	CN	Area (acres)	CN
Woods, Hyd Condition - Good, HSG-A	2.82	34		
Woods, Hyd Condition - Good, HSG-B	0.00	55		
Woods, Hyd Condition - Good, HSG-C	18.04	70		
Woods, Hyd Condition - Good, HSG-D	11.74	77		
Brush, Hyd Condition - Good, HSG-A			2.82	30
Brush, Hyd Condition - Good, HSG-B			0.00	48
Brush, Hyd Condition - Good, HSG-C			18.04	65
Brush, Hyd Condition - Good, HSG-D			11.74	73
Gravel Roads, Hyd Condition - Good, HSG - A, B, C, & D			0.00	96
Concrete, Hyd Condition - Good, HSG - A, B, C, & D			0.00	98
Support Posts, Hyd Condition - Good, HSG - A, B, C, & D			0.00	98
Substation, Hyd Condition - Good, HSG - A, B, & C			0.00	55
Total	32.60		32.60	
Weighted Average		69		65

	Solar Field #4			
	Pre Site Law		Proposed	
Area Description	Area (acres)	CN	Area (acres)	CN
Woods, Hyd Condition - Good, HSG-A				
Woods, Hyd Condition - Good, HSG-B	2.12	55		
Woods, Hyd Condition - Good, HSG-C	-0.01	70		
Woods, Hyd Condition - Good, HSG-D	8.59	77		
Brush, Hyd Condition - Good, HSG-A				
Brush, Hyd Condition - Good, HSG-B			2.12	48
Brush, Hyd Condition - Good, HSG-C			-0.02	65
Brush, Hyd Condition - Good, HSG-D			8.59	73
Gravel Roads, Hyd Condition - Good, HSG - A, B, C, & D			0.00	96
Concrete, Hyd Condition - Good, HSG - A, B, C, & D			0.01	98
Support Posts, Hyd Condition - Good, HSG - A, B, C, & D			0.00	98
Substation, Hyd Condition - Good, HSG - A, B, & C			0.00	55
Total	10.70		10.70	
Weighted Average		73		68

	Solar Field #5			
	Pre Site Law		Proposed	
Area Description	Area (acres)	CN	Area (acres)	CN
Woods, Hyd Condition - Good, HSG-A				
Woods, Hyd Condition - Good, HSG-B	0.00	55		
Woods, Hyd Condition - Good, HSG-C	2.95	70		
Woods, Hyd Condition - Good, HSG-D	11.15	77		
Brush, Hyd Condition - Good, HSG-A				
Brush, Hyd Condition - Good, HSG-B			0.00	48
Brush, Hyd Condition - Good, HSG-C			2.79	65
Brush, Hyd Condition - Good, HSG-D			11.15	73
Gravel Roads, Hyd Condition - Good, HSG - A, B, C, & D			0.14	96
Concrete, Hyd Condition - Good, HSG - A, B, C, & D			0.02	98
Support Posts, Hyd Condition - Good, HSG - A, B, C, & D			0.00	98
Substation, Hyd Condition - Good, HSG - A, B, & C			0.00	55
Total	14.10		14.10	
Weighted Average		76		72

Area Description	Solar Field #6			
	Pre Site Law		Proposed	
	Area (acres)	CN	Area (acres)	CN
Woods, Hyd Condition - Good, HSG-A				
Woods, Hyd Condition - Good, HSG-B	2.98	55		
Woods, Hyd Condition - Good, HSG-C	21.52	70		
Woods, Hyd Condition - Good, HSG-D	15.00	77		
Brush, Hyd Condition - Good, HSG-A				
Brush, Hyd Condition - Good, HSG-B			2.98	48
Brush, Hyd Condition - Good, HSG-C			17.58	65
Brush, Hyd Condition - Good, HSG-D			15.00	73
Gravel Roads, Hyd Condition - Good, HSG - A, B, C, & D			0.00	96
Concrete, Hyd Condition - Good, HSG - A, B, C, & D			0.01	98
Support Posts, Hyd Condition - Good, HSG - A, B, C, & D			0.02	98
Substation, Hyd Condition - Good, HSG - A, B, & C			3.92	55
Total	39.50		39.50	
Weighted Average		72		60

5.0 Plan Summary:

Below is a summary of how the project meets the State stormwater standards as designed:

Basic Standard: As submitted, construction activity associated with the project, will not impede or otherwise alter drainageways so as to have an unreasonable adverse impact on a wetland or waterbody, or an adjacent downslope parcel. Project plans includes details and specifications for erosion control measures. Including temporary stabilization, mulch, buffers, stormwater channels and winter construction. The attached, Erosion and Sedimentation Control, Inspection and Maintenance Plan, provides detail inspection, maintenance and housekeeping procedures.

General Standards: As design the project provides stormwater treatment for 100% of the substation impervious area and 87% of the developed. BMPs designed to achieve the treatment level includes; A 150-foot long meadow buffer, with level spreader and the substation gravel/crushed stone subbase profile. In addition, the project will meet a treatment level of 76% of the linear portion of the project, by revegetating existing gravel roads and regrading project roads to sheet flow to downgradient meadow buffers.

Flooding Standard: The change of land cover within the development area, from forested that predated the Site Location of Development Act to brush dominated by wild blueberries, effectively reduces the peak stormwater runoff rates form the project site. Meeting the flooding standard.

Appendix A
Site Location Plan

Appendix B
Erosion & Sedimentation Control Inspection & Maintenance Plan



**EROSION AND SEDIMENTATION CONTROL
INSPECTION AND MAINTENANCE PLAN**

Submitted by:

THREE RIVERS SOLAR POWER

TOWNSHIP 16 MD BPP

HANCOCK COUNTY, MAINE

Prepared by:

Acheron Engineering Services

147 Main Street	24466 Powell Road
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(207) 368-5700	(352) 796-6236

DATE:

OCTOBER, 2019

1.0 Introduction

The purpose of this plan is to establish an inspection and maintenance process to employ during construction of the project and is intended to meet the requirements set forth in Chapter 500, Section 4(B) of the Stormwater Management Rules. The following section includes:

- A description of the project.
- Responsible parties for implementing the plan.
- Inspection and maintenance procedures during construction.
- Inspection and maintenance procedures after construction.

This plan was prepared by or under the supervision of, Kirk Ball, P.E., Acheron Engineering Services, 147 Main Street Newport, Maine 04953.

2.0 Project Description

Three Rivers Solar proposes to develop a 100 megawatt utility scale solar facility located in Township 16MD, BPP, Hancock County, Maine (Project). The project parcel is approximately 1,115 acres in size.

The scope of work includes, but is not limited to:

- Stump and boulder removal.
- Stump grinding and or burning.
- Road regrading.
- Revegetation of gravel roads.
- Installation of solar panels with up to 100 megawatt capacity and associated support structures.
- Installation of 35 inverters.
- Installation of buried collector lines.
- Construction of a 115kV substation.

The stormwater management BMPs include forested and meadow buffers. Please see that attached plan for specific locations of the BMPs.

3.0 Responsible Parties

During construction Elliott Jordan & Son will be responsible to ensure that the inspections are performed as described in the following sections. Following construction, the Three Rivers Solar's Environmental Manager will be responsible for overseeing or conducting the inspections and record keeping as described in Section 5. Recertification requirement, within three months of the expiration of each five-year interval from the date of issuance of the permit, the permittee shall certify the following to the Department:

1. All areas of the project site have been inspected for areas of erosion, and appropriate steps have been taken to permanently stabilize these areas.
2. All aspects of the stormwater control system are operating as approved, have been inspected for damage, wear, and malfunction, and appropriate steps have been taken to repair or replace the system, or portions of the system, as necessary.
3. The stormwater maintenance plan for the site is being implemented as approved by the Department, and the maintenance log is being maintained.

Contact Information:

Three Rivers Solar Power, LLC
89 Main Street
Yarmouth, ME 04096
Tel. 857-315-5292

General Contractor:

Elliott Jordan & Son
456 Cave Hill Rd,
Waltham, ME 04605
Tel. 207-584-5403

4.0 Inspection and Maintenance During Construction

This plan applies to all temporary and permanent erosion control features/structures. During construction, all stormwater features and erosion control structures that remain in place shall be inspected weekly, or after each rainstorm producing 1" or greater rainfall, whichever is more frequent. All inspections shall be conducted/performed by an individual with knowledge of erosion and stormwater control practices and the conditions of the stormwater management permit issued by the Maine Department of Environmental Protection. All erosion and sedimentation controls structures shall be inspected and maintained for, but not limited to, the following:

A. Sediment Barriers

1. Inspect weekly, before and after a storm.
2. Verify that barriers are installed prior to any soil disturbance.
3. Verify if silt fence is keyed properly and tight.
4. Repair and/or replace barriers as needed.
5. Verify barriers are removed when the site is stabilized. Silt fence should be cut at the ground surface.
6. Water that is flowing under the silt-fence without treatment requires resetting the silt fence so the bottom of the fabric is buried into or covered with soil or stone.
7. Sediments that have built up behind silt fence should be removed and the section of the silt fence reset (with new fabric and posts if signs of damage are evident).

8. Rips or holes in fabric require replacement of the section of silt fence with new fabric from post to post. Examine area for cause of problem and remove the threat.

B. Temporary Stabilization

1. Inspect disturbed areas weekly, before and after a storm.
2. Verify that areas that are idle for more than 14 days have been stabilized.
3. Verify that disturbed areas within 100 feet of a natural resource are stabilized each day.

C. Mulch

1. Inspect disturbed areas weekly, before and after a storm.
2. Verify that areas are seeded and mulched within 7 days of obtaining final grade.
3. Verify that erosion control mix is 4-6 inches thick.
4. Verify that erosion control blankets or hay mulch are anchored.

D. Stormwater Channels

1. Inspect disturbed areas weekly, before and after a storm.
2. Verify that ditches and swales are clear of obstruction, accumulated sediments or debris.
3. Verify that ditch lining/bottoms are free of erosion.

E. Buffers

1. Inspect before and after a storm.
2. Verify that areas that buffer are free of erosion and concentrated flows.
3. Verify that area downgradient of level spreaders is stable.
4. Inspect and remove any sediment accumulation within the level spreaders.

F. Winter Construction (Nov 1st to April 15th)

1. Inspect erosion control measures daily.
 - i. Ensure final graded areas are mulched twice the normal rate and anchored.
 - ii. Ensure that newly constructed ditches are lined with riprap.

If any corrective correction actions are needed based on inspections, they shall be started by the end of the following work day and completed within seven days or prior to the next rain event. Document the corrective actions and maintain with inspection forms. Inspection forms and corrective action documents shall be maintained for three years after permanent stabilization is achieved.

(See Appendix B for Inspection and Maintenance Log)

5.0 Inspection and Maintenance After Construction

After construction is finished, inspections must take place once per quarter, or after each rainstorm producing at least 1 inch of rainfall, whichever is more frequent (Appendix A). Such inspections are necessary to ensure the structures are functioning properly and are necessary as part of the 5-year recertification process for long-term maintenance of stormwater systems. If any structures are not functioning properly, they shall be repaired or replaced. All inspections shall be conducted/performed by an individual with knowledge of erosion and stormwater control practices and the conditions of the stormwater management permit issued by the Maine Department of Environmental Protection. All control structures shall be inspected and maintained for, but not limited to, the following:

A. Ditches and Swales

- a. Inspect annually, in spring and late fall and after heavy rains.
- b. Sediment deposits shall be removed if the depth is greater than 3”.
- c. If erosion has scoured the ditch inverts, they shall be repaired with new loam, seed, fertilizer, and protective mulch or mesh until a new catch of grass is established.
- d. Slumping of the banks which should be repaired, seeded, and protected with mulch until a new catch of grass is established.
- e. Water is flowing by or around check dams which shall be rebuilt or repaired with more stone.
- f. Remove any woody vegetation growing through riprap.
- g. Repair riprap where underlying filter fabric or gravel is showing or stone has been dislodged.

B. Level Spreaders:

- a. Inspect annually in fall and after heavy rains for sand accumulation and debris that may reduce level spreader capacity.
- b. Sediment build up within the level spreader should be removed when it has accumulated to approximately 25% of design volume or channel capacity. Dispose of sediments appropriately.
- c. Remove debris, such as leaf litter, branches, and tree growth, as needed from the spreader.
- d. Vegetated spreaders may require mowing.

Document the corrective actions and maintain with inspection forms. Inspection forms and corrective action documents shall be maintained for five years after permanent stabilization is achieved.

(See Appendix B for Inspection and Maintenance Log)

6.0 Housekeeping

A. Spill Prevention & Response

Controls must be used to prevent pollutants from construction and waste materials stored on site to enter stormwater, which includes storage practices to minimize exposure of the materials to stormwater. The site contractor or operator must develop, and implement as necessary, appropriate spill prevention, containment, and response planning measures.

NOTE: Any spill or release of toxic or hazardous substances must be reported to the Maine Department of Environmental Protection. For oil spills, call 1-800-482-0777 which is available 24 hours a day. For spills of toxic or hazardous material, call 1-800-452-4664 which is available 24 hours a day. For more information, visit the Department's website at: <http://www.maine.gov/dep/spills/emergspillresp/>

Clean-up assistance:

Clean Harbors Environmental: 207-772-2201

B. Groundwater protection

During construction, liquid petroleum products and other hazardous materials with the potential to contaminate groundwater may not be stored or handled in areas of the site draining to an infiltration area. An "infiltration area" is any area of the site that by design or as a result of soils, topography and other relevant factors accumulates runoff that infiltrates into the soil. Dikes, berms, sumps, and other forms of secondary containment that prevent discharge to groundwater may be used to isolate portions of the site for the purposes of storage and handling of these materials. Any project proposing infiltration of stormwater must provide adequate pre-treatment of stormwater prior to discharge of stormwater to the infiltration area, or provide for treatment within the infiltration area, in order to prevent the accumulation of fines, reduction in infiltration rate, and consequent flooding and destabilization. During dry months, all access roads should be wet down weekly or as needed.

C. Fugitive Sediment and Dust

Actions must be taken to ensure that activities do not result in noticeable erosion of soils or fugitive dust emissions during or after construction. Oil may not be used for dust control, but other water additives may be considered as needed. A stabilized construction entrance (SCE) should be included to minimize tracking of mud and sediment. If off-site tracking occurs, public roads should be swept immediately and no less than once a week and prior to significant storm events. Operations during dry months, that experience fugitive dust problems, should wet down unpaved access roads once a week or more frequently as needed with a water additive to suppress fugitive sediment and dust.

D. Debris and Other Materials

Minimize the exposure of construction debris, building and landscaping materials, trash, fertilizers, pesticides, herbicides, detergents, sanitary waste and other materials to precipitation and stormwater runoff. These materials must be prevented from becoming a pollutant source.

E. Excavation Dewatering

Excavation de-watering is the removal of water from trenches, foundations, coffer dams, ponds, and other areas within the construction area that retain water after excavation. In most cases the collected water is heavily silted and hinders correct and safe construction practices. The collected water removed from the ponded area, either through gravity or pumping, must be spread through natural wooded buffers or removed to areas that are specifically designed to collect the maximum amount of sediment possible, like a cofferdam sedimentation basin. Avoid allowing the water to flow over disturbed areas of the site. Equivalent measures may be taken if approved by the Maine Department of Environmental Protection.

F. Authorized Non-stormwater Discharges

Identify and prevent contamination by non-stormwater discharges. Where allowed non-stormwater discharges exist, they must be identified and steps should be taken to ensure the implementation of appropriate pollution prevention measures for the non-stormwater component(s) of the discharge. Authorized non-stormwater discharges are:

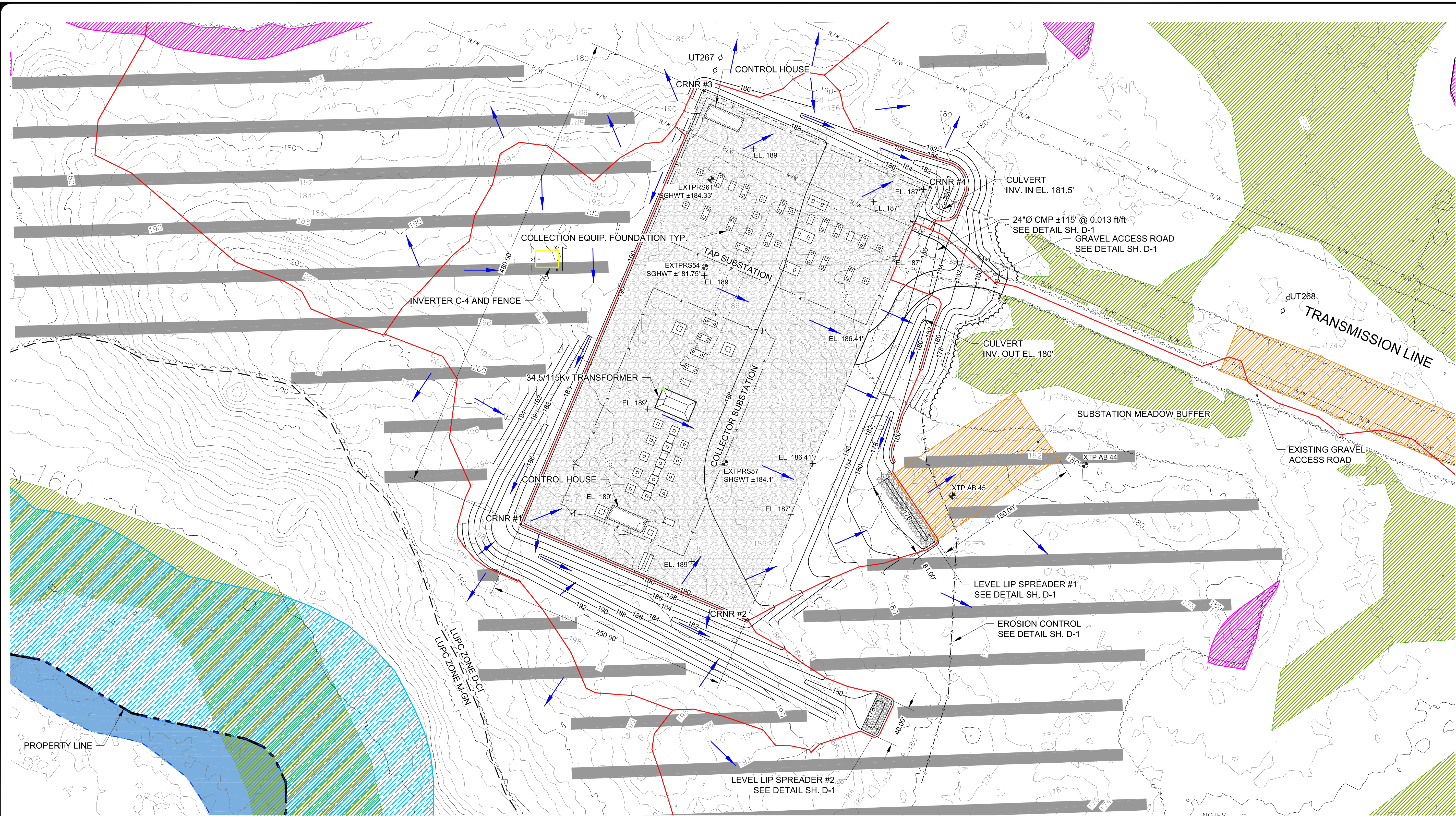
1. Discharges from firefighting activity;
2. Fire hydrant flushings;
3. Vehicle wash water if detergents are not used and washing is limited to the exterior of vehicles (engine, undercarriage and transmission washing is prohibited);
4. Dust control runoff in accordance with permit conditions;
5. Routine external building wash down, not including surface paint removal, that does not involve detergents;
6. Pavement wash water (where spills/leaks of toxic or hazardous materials have not occurred, unless all spilled material had been removed) if detergents are not used;
7. Uncontaminated air conditioning or compressor condensate;
8. Uncontaminated groundwater or spring water;
9. Foundation or footer drain-water where flows are not contaminated;
10. Uncontaminated excavation dewatering;
11. Potable water sources including waterline flushings; and
12. Landscape irrigation.

G. Unauthorized Non-stormwater Discharges

The Maine Department of Environmental Protections' approval does not authorize a discharge that is mixed with a source of non-stormwater, other than those discharges in compliance with Department regulations. Specifically, the Department's approval does not authorize discharges of the following:

1. Wastewater from the washout or cleanout of concrete, stucco, paint, form release oils, curing compounds or other construction materials;
2. Fuels, oils or other pollutants used in vehicle and equipment operation and maintenance;
3. Soaps, solvents, or detergents used in vehicle and equipment washing; and
4. Toxic or hazardous substances from a spill or other release.

APPENDIX A: PLAN



EXISTING

- PROPERTY LINE
- PROJECT BOUNDARY LINE
- EXISTING ROAD
- TREE LINE
- TRANSMISSION R.O.W. LINE
- STREAM
- CONTOURS
- UTILITY POLE
- WETLAND
- 75' WETLAND OF SPECIAL SIGNIFICANCE SETBACK
- 150' RIVER SETBACK

LEGEND

PROPOSED

- BUFFER LOCATION
- CONTOURS
- 8' CHAIN LINK PERIMETER FENCE
- NEW SUBSTATION YARD
- DRAINAGE BOUNDARY
- FLOW DIRECTION
- TEST PITS
- TREE LINE
- CULVERT
- EROSION CONTROL BERM
- LOCATION POINT
- SPOT ELEVATIONS
- SOLAR PANELS

Description	Substation Stormwater Treatment Table					
	Proposed Area (SF)			Amount of Area Treated (SF)		
	Developed	Impervious	Regraded Area	BMP	Impervious	BMP
Substation Foot Print (480' x 250')	120,000	6,932		Stone & Gravel Base	6,932	Meadow Buffer
	50,645	0	35,928	Meadow Buffer	0	Meadow Buffer
Totals	170,645	6,932	148,996		6,932	
Percent of Developed Area Treated: 87%						
Percent of Impervious Area Treated: 100%						
Note: Regraded Gravel Substation Access Part of Linear Portion of Project.						

Substation Level Lip Spreader Length Calculation Table					
BMP	Acres of Impervious Area (Acres)	Acres of Landscaped Area (Acres)	Berm Length per Acre of Impervious Area (Ft/Acre)	Berm Length per Acre of Landscaped Area (Ft/Acre)	Length of Level Lip Spreader (Ft)
Meadow Buffer with Stone Bermed Level Lip Spreader	0.16	0.82	200	60	81

LOCATION POINT TABLE			
LABEL	NORTHING	EASTING	DESCRIPTION
CRNR #1	16244383.2022	1871359.6579	SOUTHWEST CORNER OF SUBSTATION
CRNR #2	16244285.6145	1871589.8245	SOUTHEAST CORNER OF SUBSTATION
CRNR #3	16244825.1220	1871547.0265	NORTHWEST CORNER OF SUBSTATION
CRNR #4	16244727.5342	1871777.1930	NORTHEAST CORNER OF SUBSTATION

- NOTES:
- PARCEL BOUNDARY DEPICTED IS BASED ON SURVEY PERFORMED BY KEITH BLANCHARD, PLS. OF PLISGA & DAY LAND SURVEYORS, PLAN TITLED, BOUNDARY SURVEY 1,115 ACRES +/-, ELLIOT JORDAN & SON, INC.
 - LIDAR TOPOGRAPHIC INFORMATION PROVIDED BY AMERICAN FOREST MANAGEMENT.
 - SITE PLAN BASED ON NAD83 UTM ZONE 19, US FEET.
 - VERTICAL CONTROL VERIFIED BY PLISGA & DAY LAND SURVEYORS AND SET TO NAVD88 DATUM.
 - SOLAR PANEL LAYOUT PROVIDED BY RBI SOLAR, CINCINNATI, OH.
 - PARCEL IS IDENTIFIED AS MAP HA007, PLAN 01, LOTS 1.3,4.1 AND 14.1, BY MAINE LAND USE PLANNING COMMISSION.
 - PARCEL DEED: BOOK 6020, PAGE 38.
 - PROTECTED NATURAL RESOURCES SHOWN PROVIDED BY ATLANTIC RESOURCE CO, LLC. REFER TO PROTECTED NATURAL RESOURCES REPORT, THREE RIVERS SOLAR PROJECT, DATED AUGUST 26, 2019 FOR SPECIFIC DETAILS.
 - SOILS SURVEY PERFORMED BY ATLANTIC RESOURCES CO, LLC.
 - SUBSTATION LAYOUT BASED ON DESIGN PROVIDED BY SGC ENGINEERING, AUGUSTA, MAINE.
 - SEE INDEX SHEET FOR DETAILS REGARDING EROSION CONTROL.

Do Not Use for Construction
For Regulatory Review Only



Drwn By: BFG
Desg By: BFG / KJB / SGC
Chkd By: KJB
Aprvd By:
Date:
Revision Description
No.
Chkd
Drwn
Date

ACHERON ENGINEERING SERVICES
Engineering, Environmental & Geologic Consultants
www.AcheronEngineering.com
147 Main St
Newport, ME 04953
(207)-568-5700
24466 Powell Rd
Brooksville, FL 34602
(352)-796-6236
Acheron International, Inc.

Stormwater Management Plan
Substation Location
Proposed Conditions Site Plan

Job Number:
80900
Drawing No:
C-7
Sheet 8 of 12

Three Rivers Solar
Township 16 MD
Hancock County, ME.

APPENDIX B: INSPECTION CHECK LISTS

THREE RIVERS SOLAR CONSTRUCTION INSPECTION FORM FOR EROSION AND SEDIMENT CONTROL

General Information:

Site Name:	Date:	Inspected by:			
Owner:					
Retained 3PI:	Last Rain Date:			Amount:	
Reason for Inspection:	Weekly	Winter	Final	Rain Event	Complaint
Description of disturbed area:					
Photos:					

	YES/NO/NA	COMMENTS
--	------------------	-----------------

1. Is an Erosion and Sediment Control Plan available?

ESC plan on-site and followed		
Other:		

2. Are all erosion control practices installed properly, maintained and functioning?

Disturbed areas stable		
Concentrated flow inlet/outlet protection		
All areas at final grade		
Disturbed dormant areas stabilized		
Access roads and parking		
Hillsides and stockpiles		
Other:		

3. Are all sedimentation control practices installed properly, maintained and functioning?

Construction entrance		
Sedimentation basins/traps/diversions		
Perimeter controls		
Check dams		
Other:		

4. Is maintenance of ESC measures, construction activities and housekeeping kept-up?

Sedimentation/erosion in ditches		
Tracked Sediment or dust at exits		
Hazardous material storage and spill control practices		
Waste management (concrete, hazardous material, etc.)		
Other:		

5. Violation, Corrective Actions, Recommendations

Sediment discharged from site?		
Corrective action required?		
Site compliant with all permits?		
Notice of violation or stop work order issued?		

Comments/Corrective Actions (complete corrective actions before the next rain event and within 7 day)

--

THREE RIVERS SOLAR
POST CONSTRUCTION INSPECTION FORM FOR BUFFERS

General Information:

Site Name:	Date:	Inspected by:		
Owner:				
Retained 3PI:	Last Rain Date:		Amount:	
Reason for Inspection:	Rain Event	Monthly	Quarterly	

Description of Basin Condition:

Photos:

Inspection Details	Yes/No	Comments
Is buffer free from trash, debris or waste?		
Has any vegetation been removed within the buffer?		
Is there any evidence of mowing within the buffer?		
Any temporary structure within the buffer?		
Any evidence of motorized vehicles operation within buffer?		
Level spreader functioning properly or filled with sediment?		
Buffer signs visible and readable?		

Additional Comments:

Appendix C
Test Pit Logs for Stormwater Buffers



www.arc-env.com

ARC #B18-006
October 04, 2019

Three Rivers Solar Power, LLC
Attention: Dave Fowler, Director
89 Main Street
Yarmouth, ME 04096

Subject: Soil Documentation Report for Stormwater Management Plan
Three Rivers Solar Project
T16MD, Maine

Dear Dave,

We are pleased to present this Soil Documentation Report for a stormwater management plan at the proposed Three Rivers Solar Power, LLC project in T16MD, Maine. The purpose of our services was to document and classify soils in test pits in proposed stormwater management areas near to the substation and gravel roads, to be designed by Acheron Engineering Services.

Exploration and Methodology

The proposed substation location and nearby test pit locations were shown on a plan e-mailed to us by Acheron Engineering Services, Inc. on January 18, 2019. Test pit locations along gravel roads were laid out in the field and shown on plans by Acheron Engineering Services dated May 09, 2019.

A Maine Certified Soil Scientist from Atlantic Resource Co, LLC visited the site on November 21, 2018, and January 18, June 05, and September 17, 2019 to document and classify soils in test pits in proposed stormwater management areas. The twenty-three test pits, labeled EXTP-RS-30, EXTP-RS-55, EXTP-RS-56, EXTP-RS-60, and EXTP-AB-1 through 17, 44 and 45, are located as shown on the Stormwater Test Pit Map attached in Appendix B. The test pits were dug with an excavator by Elliott Jordan & Son, Inc. of Deblois, Maine.

At each test pit, soil horizon depths, soil texture, color, consistence, structure, depth of observed fill, depth to seasonal water table, depth to observed seeping, and depth to ledge were documented (if observed). Test pit logs are attached in Appendix C.

Using the collected soil data, we then classified the soils to the closest Maine soil series based on data published by the Natural Resources Conservation Service (NRCS). We used published NRCS data on the soil series to report the soil's hydrologic soil group. Soil classification and hydrologic soil group are included below. The hydrologic soil groups presented are based on NRCS published soils data and do not represent laboratory or in-situ testing results.

Findings

Table 1, below, presents a summary of our findings.

Table 1 – Test Pit Documentation Summary						
Test Pit	Depth of Test Pit	Depth to Seasonal Water Table	Depth to Restrictive Layer	Depth to Bedrock	Soil Series	Hydrologic Soil Group (NRCS)
EXTP-RS-30	60"	33"	33"	N.O.	Buxton silt loam, variant	C
EXTP-RS-55	60"	N.O.	N.O.	N.O.	Hermon sandy loam	A
EXTP-RS-56	60"	13"	13"	N.O.	Lamoine silt loam	D
EXTP-RS-60	66"	15"	15"	N.O.	Lamoine silt loam, variant	D
EXTP-AB-1	72"	14"	14"	N.O.	Swanton very fine sandy loam, variant	D
EXTP-AB-2	72"	45"	N.O.	N.O.	Monadnock very fine sandy loam	B
EXTP-AB-3	72"	37"	37"	N.O.	Peru fine sandy loam	C
EXTP-AB-4	72"	39"	39"	N.O.	Skerry fine sandy loam	C
EXTP-AB-5	72"	44"	44"	N.O.	Monadnock fine sandy loam	B
EXTP-AB-6	72"	N.O.	N.O.	N.O.	Monadnock gravelly loamy sand	B
EXTP-AB-7	72"	34"	34"	N.O.	Peru fine sandy loam	C
EXTP-AB-8	72"	24"	24"	N.O.	Peru fine sandy loam	C
EXTP-AB-9	72"	16"	32"	N.O.	Skerry fine sandy loam	C
EXTP-AB-10	72"	24"	24"	N.O.	Skerry fine sandy loam	C
EXTP-AB-11	36"	36"	N.O.	36"	Skerry cobbly fine sandy loam	C

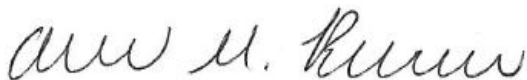
Table 1 – Test Pit Documentation Summary (continued)						
Test Pit	Depth of Test Pit	Depth to Seasonal Water Table	Depth to Restrictive Layer	Depth to Bedrock	Soil Series	Hydrologic Soil Group (NRCS)
EXTP-AB-12	60"	16"	16"	N.O.	Croghan fine sandy loam	B
EXTP-AB-13	65"	48"	48"	N.O.	Roundabout silt loam, buried	C
EXTP-AB-14	66"	21"	21"	N.O.	Croghan fine sandy loam	B
EXTP-AB-15	72"	16"	27"	N.O.	Roundabout silt loam	C
EXTP-AB-16	66"	9"	18"	N.O.	Lamoine silt loam	D
EXTP-AB-17	60"	18"	18"	N.O.	Buxton silt loam	D
EXTP-AB-44	72"	21"	21"	N.O.	Peru gravelly fine sandy loam	C
EXTP-AB-45	48"	8"	8"	N.O.	Lamoine silt loam	D

Closure

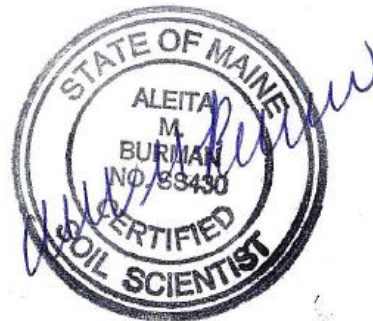
We appreciate the opportunity to assist you during this phase of your project. If you have any questions, please contact us.

Sincerely,

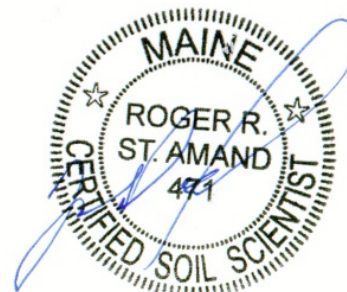
Atlantic Resource Co, LLC



Aleita M. Burman, C.W.S., C.S.S., L.S.E.
Senior Soil and Wetland Scientist




Roger St.Amand, CSS, LSE, LPF, CPESC, PWS
PRINCIPAL | ATLANTIC RESOURCE CO, LLC



cc: Kirk Ball, Acheron Engineering Services

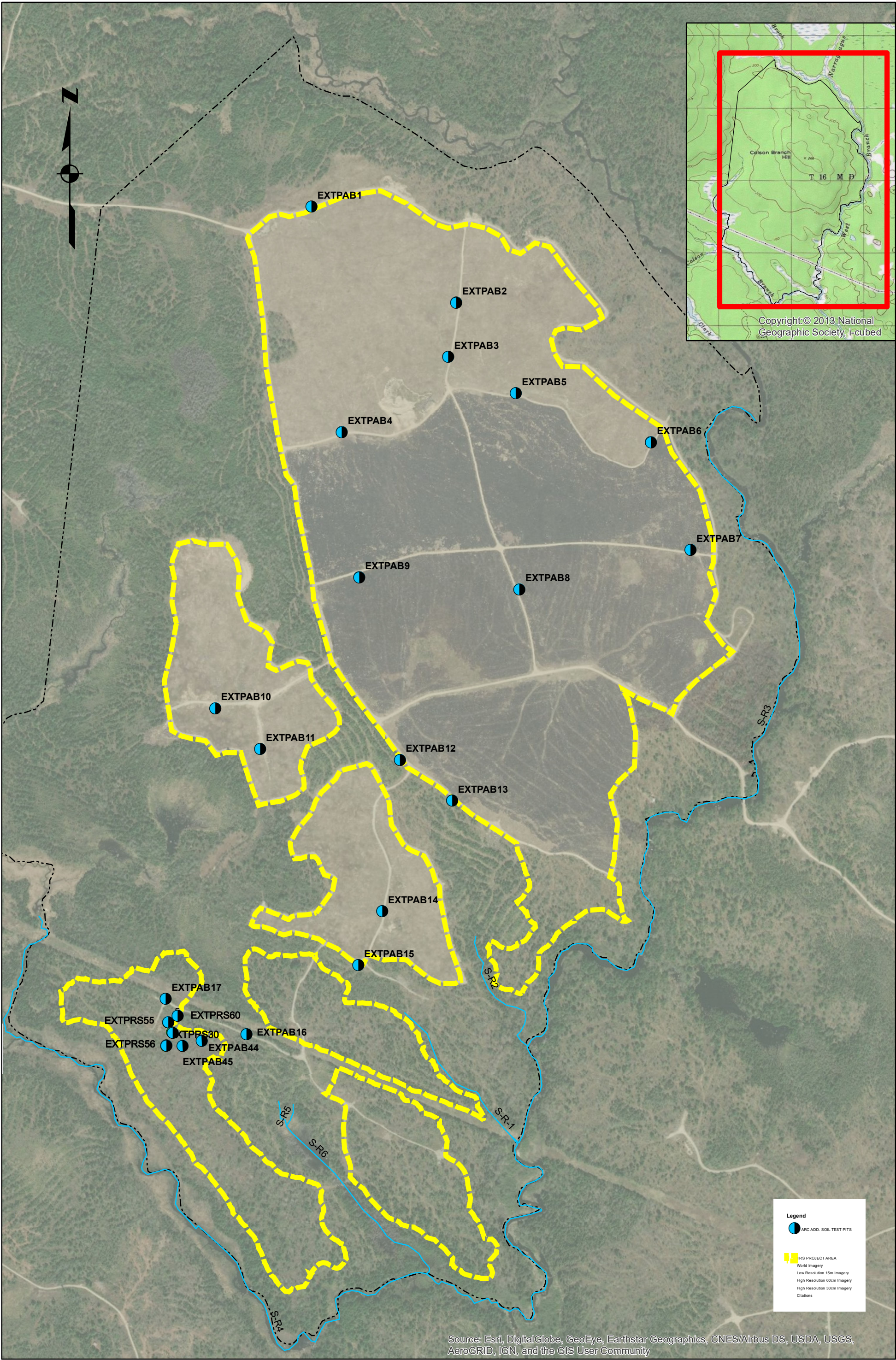
APPENDIX A

Limitations

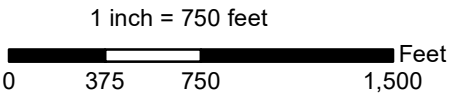
Appendix A – Limitations

The scope of Atlantic Resource Co, LLC services has been limited to soil documentation services for a stormwater management plan at the Three Rivers Solar Power, LLC project in T16MD, Maine. This Report has been prepared for the exclusive use of Three Rivers Solar Power, LLC. No warranty, expressed or implied, is made. The conclusions made in this report are based on the data obtained from the areas explored at the time of services.

APPENDIX B
Stormwater Test Pit Map



NOTES:
Test Pits completed by Atlantic Resource Co, LLC
CSS#471 & CSS#430 in 2018 & 2019
See Report Entitled "Soil Documentation Report
For Stormwater Management" dated 10/04/19.



THREE RIVERS SOLAR- TWP 16 MD
STORMWATER TEST PIT MAP
10/04/2019

APPENDIX C
Test Pit Logs

Atlantic Resources Co, LLC

Soil Description and Classification Form

Project Name:	Three Rivers Solar	Applicant Name:	Three Rivers Solar Power, LLC
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Symbol:		O Horizon Thickness:	2"	Symbol:		O Horizon Thickness:	2
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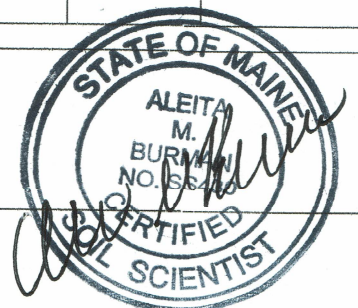
Test Pit	EXTP AB-1	Hydric (y/n)	No
Soil Name:	Swanton very fine sandy loam, variant		

Test Pit	EXTP AB-2	Hydric (y/n)	No
Soil Name:	Monadnock very fine sandy loam		

Horiz	0	Texture	Consistency	Color	Mottling
E	1			10YR 5/2	
Bs	2				
	3			10YR 4/6	
	4	very fine			
	5	fine	friable		none
Bs	6	sandy loam			observed
	7				
	8			10YR 4/4	
	9				
	10				
	12				
	14				
2BC	16				
	18				
	20				
	25	silt loam	firm	2.5Y 4/3	cmd
	30				5Y 5/2
	35				
	40				
	45				
2C	50				
	55	silty clay loam	very firm	2.5Y 4/3	cmd
	60				
	65				
	70				
	75				
	80				
		LLI = 72"			rotten rock - varying size throughout

Horiz	0	Texture	Consistency	Color	Mottling
Bs	1			7.5YR 4/6	
	2				
	3				
	4	very fine			
B	5	fine			
	6	sandy loam		10YR 4/6	
	7				
	8				
	9				
	10		friable	10YR 6/3	none observed
	12				
	14				
BC	16				
	18				
	20	loamy		2.5Y 5/4	
	25	very fine			
	30	fine sand			
	35				24"-48" rotten rock one side of TP
	40				
	45				
C	50				
	55	fine sandy loam			cmd
	60		friable	2.5Y 4/4	2.5Y 5/2
	65				10YR 4/6
	70				
	75				
	80				
		LLI = 72"			

C.S.S.	Name:	Aleita M. Burman	Date:	06/05/19
			License #:	#SS430



Atlantic Resources Co, LLC

Soil Description and Classification Form

Project Name:	Three Rivers Solar	Applicant Name:	Three Rivers Solar Power, LLC
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Symbol:		O Horizon Thickness:	2"	Symbol:		O Horizon Thickness:	2"
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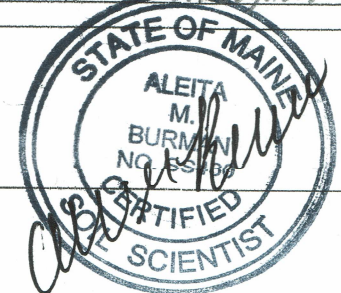
Test Pit	EXTPAB-3	Hydric (y/n)	No
Soil Name:	Perv fine sandy loam		

Test Pit	EXTPAB-4	Hydric (y/n)	No
Soil Name:	SKerry fine sandy loam		

Horiz	0	Texture	Consistency	Color	Mottling
A/E	1			10YR 3/2	
	2	Fine		?	
	3	sandy loam		10YR 5/2	
Bhs	4			7.5YR 3+4	
	5				
Bs	6				
	7				
	8		friable		none observed
	9				
	10	very fine			
	12	sandy loam		2.5Y 5/4	
	14				
	16				
	18				
	20				
	25				
	30				
Cd	35				
	40				
	45				
	50	very fine			
	55	sandy loam	firm	2.5Y 4/4	ccf
	60				2.5Y 4/4
	65				fccl
	70				5Y 5/2
	75				
	80				

Horiz	0	Texture	Consistency	Color	Mottling
A	1				
	2				
	3			10YR 3/2	
	4				
	5				
Bs	6				
	7	fine			
	8	sandy loam	friable	7.5Y 4/6	none observed
	9				
	10				
	12				
	14				
B	16				
	18			2.5Y 5/6	
	20				
	25				
BC	30			2.5Y 5/4	
	35				
	40				
	45	gravelly loamy			
	50	fine sand	firm	2.5Y 4/4	cmf
C	55				2.5Y 5/2
	60				cmd
	65				10YR 4/6
	70				
	75				
	80				

C.S.S.	Name:	Aleita M. Burman	Date:	06/05/19
			License #:	#SS430



Atlantic Resources Co, LLC

Soil Description and Classification Form

Project Name:	Three Rivers Solar	Applicant Name:	Three Rivers Solar Power, LLC
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Symbol:		O Horizon Thickness:	2"	Symbol:		O Horizon Thickness:	2"
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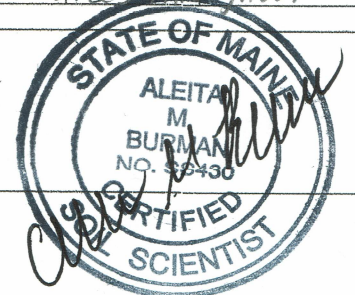
Test Pit	EXTP AB-5	Hydric (y/n)	No
Soil Name:	Monadnock fine sandy loam		

Test Pit	EXTP AB-6	Hydric (y/n)	No
Soil Name:	Monadnock gravelly loamy sand		

Horiz	0	Texture	Consistency	Color	Mottling
E	1				
	2			10YR 5/2	
	3	fine			
Bs	4	sandy			
	5	loam		7.5YR 4/6	
	6				
B	7				
	8				
	9	gravelly	friable	10YR 5/6	none
	10	fine			observed
	12	sandy			
	14	loam			
BC	16				
	18				
	20	loamy			
	25	very		2.5Y 5/4	
	30	fine			
	35	sand			
C	40				
	45				
	50				
	55	gravelly			cmf
	60	loamy	firm	2.5Y 4/4	2.5Y 5/2
	65	fine			cmd
	70	sand			10YR 4/6
	75				
	80				

Horiz	0	Texture	Consistency	Color	Mottling
Bs	1	fine		10YR 4/6	
	2	sandy loam			
E	3				
	4			10YR 5/2	
	5				
	6	gravelly	friable		
	7	loamy			
	8	fine			
Bs	9	sand		7.5YR 4/6	
	10				none
	12				observed
	14				
BC	16				
	18			2.5Y 4/4	
	20				
	25				
	30	gravelly	loose		
	35	coarse			
C	40	sand			
	45			2.5Y 4/3	
	50				
	55				
	60				
	65				
	70				
	75				
	80				

C.S.S.	Name:	Aleita M. Burman	Date:	06/05/19
			License #:	#GG430



Atlantic Resources Co, LLC

Soil Description and Classification Form

Project Name:	Three Rivers Solar	Applicant Name:	Three Rivers Solar Power, LLC
---------------	--------------------	-----------------	-------------------------------

Symbol:		O Horizon Thickness:	2	Symbol:		O Horizon Thickness:	3"
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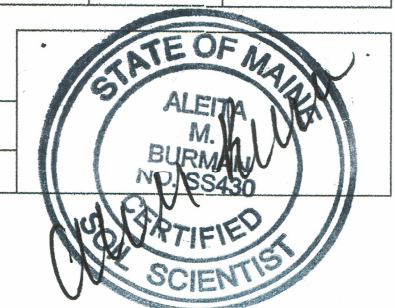
Test Pit	EXTPAB-7	Hydric (y/n)	No
Soil Name:	Peru fine sandy loam		

Test Pit	EXTPAB-8	Hydric (y/n)	No
Soil Name:	Peru fine sandy loam		

Horiz	0	Texture	Consistency	Color	Mottling
A/E	1			10YR 3/2	
	2			:	
	3	Fine		10YR 5/2	
Bs	4	sandy			
	5	loam		7.5YR 3/4	
	6				
	7				
B	8				none observed
	9		friable		
	10				
	12	very fine			
	14	fine		2.5Y 5/4	
	16	sandy			
	18	loam		7"-60" one side of TP	
	20				
	25				
	30				
C	35				
	40				
	45				ccf
	50	very fine		2.5Y 4/4	
	55	fine	firm	2.5Y 4/4	fecl
	60	sandy		5Y 5/2	
	65	loam			
	70				
	75				
	80	LLI = 72"			

Horiz	0	Texture	Consistency	Color	Mottling
E	1			10YR 5/2	
	2	Fine			
Bs ₁	3	sandy			
	4	loam		7.5YR 4/6	
Bs ₂	5				
	6				
	7		friable	7.5YR 3/4	none observed
	8	gravelly			
	9	fine			
	10	sandy			
B	12	loam			
	14				
	16			2.5Y 5/6	
	18				
	20				
	25				
BC	30				cmd
	35				10YR 4/6
	40				
	45	Cobbly	firm	2.5Y 4/4	
C	50	fine			
	55	sandy			none observed
	60	loam			
	65				
	70				
	75				
	80	LLI = 72"			

C.S.S.	Name:	Aleita M. Burman	Date:	06/05/19
			License #:	#SS430



Atlantic Resources Co, LLC

Soil Description and Classification Form

Project Name:	Three Rivers Solar	Applicant Name:	Three Rivers Solar Power, LLC
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Symbol:		O Horizon Thickness:	3"
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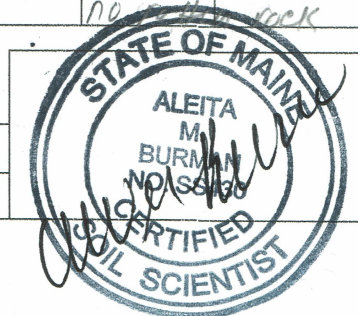
Test Pit	EX TP AB-9	Hydric (y/n)	No
Soil Name:	SKerry fine sandy loam		

Test Pit	EX TP AB-10	Hydric (y/n)	No
Soil Name:	SKerry fine sandy loam		

Horiz	0	Texture	Consistency	Color	Mottling
A/E	1			10YR 3/2	
	2				
	3			10YR 5/2	
Bs ₁	4				
	5				
	6	fine		7.5YR 4/6	none
	7	sandy			observed
	8	loam			
	9				
	10				
Bs ₂	12		friable		
	14			10YR 4/6	
	16				
BC	18	cobbly			
	20	fine			cmd
	25	sandy		2.5Y 5/4	10YR 4/6
	30	loam			
C	35				
	40				
	45	cobbly			cmd
	50	loamy	Firm	2.5Y 4/4	10YR 4/6
	55	fine			
	60	sand			
	65				
	70				
	75				
	80	LLI = 72"		no rotten rock	

Horiz	0	Texture	Consistency	Color	Mottling
E	1				
	2			10YR 5/2	
	3				
Bs ₁	4				
	5			7.5YR 4/6	
	6				
	7	fine			none
	8	sandy	friable		observed
	9	loam			
	10			10YR 4/6	
Bs ₂	12				
	14				
	16				
BC	18				
	20			10YR 4/4	
	25				
	30				
C	35				
	40	cobbly			
	45	loamy	firm	2.5Y 4/4	cmd
	50	fine			10YR 4/6
	55	sand			
	60				
	65				
	70				
	75				
	80	LLI = 72"		no rotten rock	

C.S.S.	Name:	Aleita M. Burman	Date:	06/05/19
			License #:	#SS430



Atlantic Resources Co, LLC

Soil Description and Classification Form

Project Name:	Three Rivers Solar	Applicant Name:	Three Rivers Solar Power, LLC
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Symbol:		O Horizon Thickness:	2"	Symbol:		O Horizon Thickness:	3"
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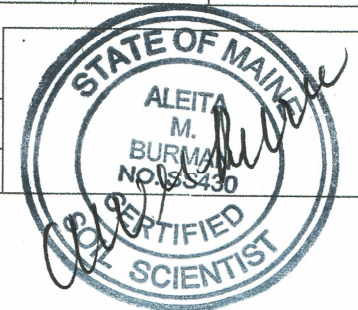
Test Pit	EX TP AB-11	Hydric (y/n)	No
Soil Name:	SKerry cobbly fine sandy loam		

Test Pit	EX TP AB-12	Hydric (y/n)	No
Soil Name:	Croghan fine sandy loam		

Horiz	0	Texture	Consistency	Color	Mottling
Ap	1				
	2			10YR 3/2	
	3				
Bs	4			7.5YR 3/4	
	5	cobbly			
B	6	fine			
	7	sandy			
	8	loam	friable		none
	9			10YR 4/6	observed
	10				
	12				
	14				
	16				
BC	18				
	20	cobbly		10YR 3/6	
	25	loamy			
	30	fine			
	35	sand			
	40				
	45				
	50	refusal @ 36" - very large boulders			
	55				
	60	(excavator operator did not think it was ledge, large boulders nearby)			
	65				
	70				
	75				
	80	LLI = 36"			

Horiz	0	Texture	Consistency	Color	Mottling
E	1				
	2			2.5Y 6/2	
Bs	3				
	4			10YR 4/6	
B	5	fine			none
	6	sandy	friable		observed
	7	loam			
	8			10YR 5/6	
	9				
	10				
	12				
	14				
BC	18	very fine			
	20	sandy			
	25	loam	firm	2.5Y 4/4	cmcl 5Y 5/2
	30				
	35				
ZC	40	layered			
	45	very fine			
	50	sand	firm	2.5Y 4/4	multi-colored
	55	fine	in place		
	60	sand		2.5Y 5/3	
	65				
	70				
	75				
	80	LLI = 60"			

C.S.S.	Name:	Aleita M. Burman	Date:	06/05/19
			License #:	#SS430



Atlantic Resources Co, LLC

Soil Description and Classification Form

Project Name:	Three Rivers Solar	Applicant Name:	Three Rivers Solar Power, LLC
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Symbol:		O Horizon Thickness:	4"	Symbol:		O Horizon Thickness:	4"
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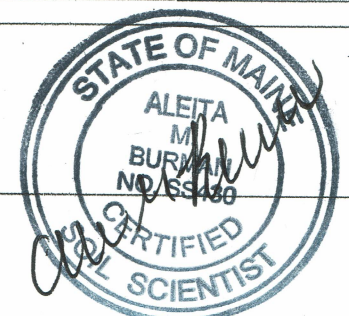
Test Pit	EXT PAB-13	Hydric (y/n)	No
Soil Name:	Roundabout silt loam, buried		

Test Pit	EXT PAB-14	Hydric (y/n)	No
Soil Name:	Craghan fine sandy loam		

Horiz	0	Texture	Consistency	Color	Mottling
	1				
	2				
	3				
	4				
	5				
	6				
	7	silt	friable	10YR 4/4	none
	8	loam			observed
	9				
	10				
	12				
	14				
	16				
	18				
	20				
	25	organic matter - former surface			
Ob	30	silt		7.5YR 3/4	
B _s	35	loam		10YR 4/6	none
B _{s2}	40		friable		observed
	45	silt		10YR 4/6	
B	50	loam			
	55	cobbly			cmd
	60	gravelly		10YR 4/4	10YR 4/6
BC	65	silt loam	Firm		
	70				
	75				
	80	LLI = 65"			

Horiz	0	Texture	Consistency	Color	Mottling
	1				
	2			7.5YR 3/4	
	3				
	4				
B _s	5				
	6				
	7	fine	friable		none
	8	sandy			observed
	9	loam			
B	10			10YR 4/6	
	12				
	14				
	16				
	18				
	20				
	25				cmd
BC	30		Firm	2.5Y 4/4	5Y 5/2
	35				
	40				
	45	layered			
	50	very fine	friable	2.5Y 4/4	multi-colored
	55	sand			
	60	and		2.5Y 5/3	
	65	fine sand			
2C	70				
	75				
	80	LLI = 66"			

C.S.S.	Name:	Aleita M. Burman	Date:	06/05/19
			License #:	#SS430



Atlantic Resources Co, LLC

Soil Description and Classification Form

Project Name:	Three Rivers Solar	Applicant Name:	Three Rivers Solar Power, LLC
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Symbol:		O Horizon Thickness:	3"	Symbol:		O Horizon Thickness:	4"
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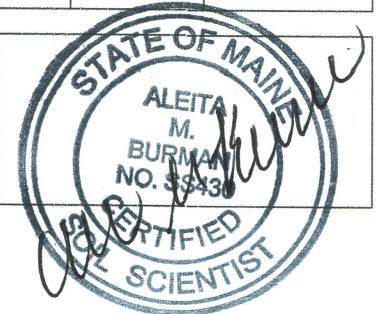
Test Pit	EXTPAB-15	Hydric (y/n)	No
Soil Name:	Roundabout silt loam		

Test Pit	EXTPAB-16	Hydric (y/n)	No
Soil Name:	Lamoine silt loam		

Horiz	0	Texture	Consistency	Color	Mottling
Bs	1				
	2				
	3				
	4			10YR 4/6	
	5				
	6	silt loam			none observed
B ₁	7				observed
	8				
	9		friable		
	10			2.5Y 4/4	
	12				
	14				
B ₂	18				cfcl
	20			2.5Y 4/4	2.5Y 5/2
	25				cfp
					10YR 4/6
BC	30	gravelly			
	35	silt			
	40	loam	very firm	5Y 5/3	mcp
	45		firm		10YR 4/6
	50				
	55				
	60				
C	65	very gravelly			cmf
	70	silt loam	firm	5Y 5/3	5Y 5/2
	75				
	80	LLI = 6"			seep @ 60"

Horiz	0	Texture	Consistency	Color	Mottling
B ₁	1				
	2				
	3				
	4				
	5			10YR 4/4	none observed
	6				
B ₂	7		friable		
	8				
	9	silt loam			
	10				mmd
B ₂	12				5Y 5/2
	14			2.5Y 4/3	cmf
	16				2.5Y 4/4
	18				
BC	20				seep @ 18"
	25				mmd
	30				5Y 5/2
	35		firm	2.5Y 4/3	cmf
	40				2.5Y 4/4
	45				
	50				
C	55	silt clay	very firm		mmd
	60	loam		5Y 4/3	5Y 5/2
	65				cmf
	70				2.5Y 4/4
	75				
	80	LLI = 66"			

C.S.S.	Name:	Aleita M. Burman	Date:	06/05/19
			License #:	#SS430



Atlantic Resources Co, LLC

Soil Description and Classification Form

Project Name:	Three Rivers Solar	Applicant Name:	Three Rivers Solar Power, LLC
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Symbol:	O Horizon Thickness:	2"	Symbol:	O Horizon Thickness:
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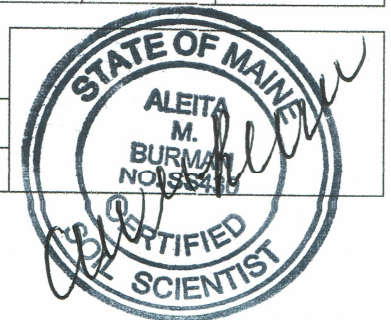
Test Pit	EX TPAB-17	Hydric (y/n)	NO
Soil Name:	Buxton silt loam		

Test Pit		Hydric (y/n)	
Soil Name:			

Horiz	0	Texture	Consistency	Color	Mottling
Bs	1				
	2				
	3			10YR 4/6	
	4				
	5				
B	6				none
	7		friable		observed
	8				
	9			2.5Y 5/4	
	10	silt			
	12	loam			
	14				
	16				
BC	18				
	20				
	25				cmp
	30			10YR 4/6	
	35		firm	2.5Y 4/3	cmf
	40			2.5Y 4/2	
	45				
C	50				
	55	stiff clay	very	5Y 4/3	mmf
	60	loam	firm		cmf
	65			seep @	50"
	70				
	75				
	80				

Horiz	0	Texture	Consistency	Color	Mottling
	1				
	2				
	3				
	4				
	5				
	6				
	7				
	8				
	9				
	10				
	12				
	14				
	16				
	18				
	20				
	25				
	30				
	35				
	40				
	45				
	50				
	55				
	60				
	65				
	70				
	75				
	80				

C.S.S.	Name:	Aleita M. Burman	Date:	06/05/19
			License #:	#SS430



Atlantic Resource Co, LLC

Soil Description and Classification Form

Project Name:	Three Rivers Solar	Applicant Name:	Three Rivers Solar Power, LLC
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Symbol:	Pec	O Horizon Thickness:	3	Symbol:	LaB	O Horizon Thickness:	3
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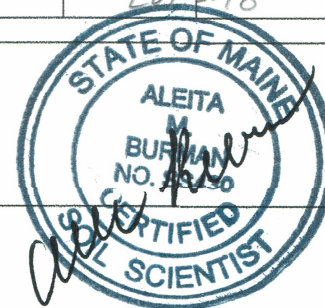
Test Pit	XTP-AB-44	Hydric (y/n)	No
Soil Name:	Perv gravelly fine sandy loam		

Test Pit	XTP-AB-45	Hydric (y/n)	No
Soil Name:	Lamoine silt loam		

Horiz	0	Texture	Consistency	Color	Mottling
B _n	1				
	2				
	3			7.5YR3/4	
	4				
	5	gravelly fine			
B _s	6	sandy loam	friable	10YR3/4	none observed
	7				
	8				
	9				
B _{sz}	10				
	12				
	14			10YR3/6	
	16				
	18				
	20				
C ₁	25				
	30	rotten rock			
	35	rock	firm	variable	n/o
	40		in place		
	45				
	50				
C ₂	55	very gravelly fine sandy loam	firm	2.5Y4/3	cmp 10YR4/6
	60				
	65				
	70				
	75				
	80				LOI = 72"

Horiz	0	Texture	Consistency	Color	Mottling
B _s	1				
	2				
	3			10YR4/3	
	4		friable		none observed
	5				
B	6				
	7	silt loam		2.5Y4/3	
	8				
	9				
B _g	10				cmp
	12			2.5Y5/2	10YR4/6
	14		firm		
	16				
B _c	18			2.5Y4/3	cmp 5Y5/2
	20				
	25				
	30				
C	35	silty clay loam	very firm	2.5Y4/3	cmp 10YR4/4
	40				
	45				cmp 5Y5/1
	50				
	55				
	60				
	65				
	70				
	75				
	80				LOI = 48"

C.S.S.	Name:	Aleita M. Burman	Date:	9/17/19
			License #:	#SS430



Atlantic Resources Co, LLC

Soil Description and Classification Form

Project Name:	Three Rivers Solar	Applicant Name:	Three Rivers Solar Power, LLC
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Symbol:		O Horizon Thickness:	3"	Symbol:		O Horizon Thickness:	6"
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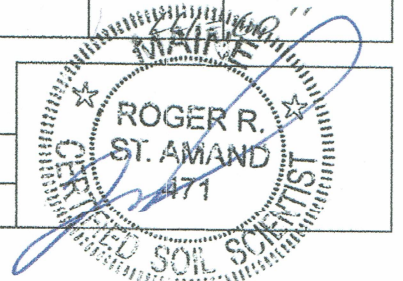
Test Pit	EXTP-RS-29	Hydric (y/n)	N
Soil Name:	Buxton gravelly fine sandy loam, variant		

Test Pit	EXTP-RS-30	Hydric (y/n)	N
Soil Name:	Buxton silt loam, variant		

Horiz	0	Texture	Consistency	Color	Mottling
A	1	gravelly			
	2	loam	friable		
	3				
B _s	4				
	5				
	6	gravelly	friable	7.5YR 4/4	
	7	fine			
	8	sandy			
B _w	9	loam			
	10				
	12				
	14				
C ₁	16	silt	friable	2.5Y 5/4	
	18	loam			
	20				
	25				
C ₂	30	silt	firm	5Y 5/3	mmp 10YR 10YR 4/6
	35	loam			cmd 5Y 6/2
	40				
	45				
	50				
	55				
	60	silty	very	5Y 4/3	
	65	clay	firm		
	70	loam			
	75				
	80				

Horiz	0	Texture	Consistency	Color	Mottling
A	1				
	2				
	3	silt	friable	10YR 3/3	
	4	loam			
	5				
B _w	6				
	7				
	8				
	9	silt	friable	10YR 4/6	none observed
	10	loam			
B _{w2}	12				
	14				
	16				
	18				
	20				
C	25	gravelly silt	friable	2.5Y 3/4	
	30	loam			
	35				
	40				
	45	rotten	firm		
	50	rock			
	55				
	60				
	65				
	70				
	75				
	80				

C.S.S.	Name:	Roger St.Amand	Date:	11/21/18
			License #:	#SS471



Atlantic Resources Co, LLC

Soil Description and Classification Form

Project Name:	Three Rivers Solar	Applicant Name:	Three Rivers Solar
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Symbol:		O Horizon Thickness:	0"
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Test Pit	EXTP-RS-54	Hydric (y/n)	N
Soil Name:	Peru fine sandy loam		

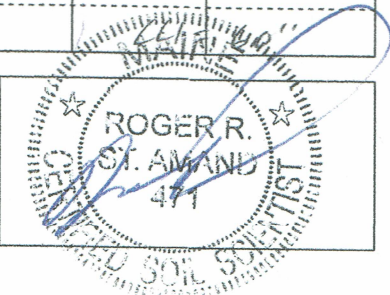
Horiz	0	Texture	Consistency	Color	Mottling
A	1				
	2				
	3				
	4	fine			
	5	sandy	friable	10YR 3/4	
	6	loam			
	7				
	8				none observed
	9				
	10				
Bs	12				
	14	fine			
	16	sandy loam	friable	10YR 4/6	
B	18				
	20	fine sandy loam	friable	10YR 3/4	
BC	25				
	30	fine sandy loam	friable	2.5Y 5/4	
Cd	35				
	40	sandy loam	firm	2.5Y 5/3	cmd
	45				
	50	(some rotten rock)			
	55				
60					
65					
70					
75					
80					

LLI = 50"

Test Pit	EXTP-RS-55	Hydric (y/n)	N
Soil Name:	Herman gravelly sandy loam		

Horiz	0	Texture	Consistency	Color	Mottling
Ap	1				
	2				
	3				
	4	sandy	friable	10YR 3/3	
	5	loam			
	6				
	7				
	8				
Bs ₁	9	gravelly			
	10	sandy loam	friable	7.5YR 4/6	none observed
	12				
Bs ₂	14				
	16	gravelly loamy sand	friable	10YR 5/4	
	18				
	20				
	25				
C	30				
	35	gravelly loamy			
	40	coarse sand	loose	2.5Y 5/3	
	45				
	50		(firm in place)		
	55				
	60				
	65				
70					
75					
80					

C.S.S.	Name:	Roger St.Amand	Date:	01/18/19
			License #:	#SS471



Atlantic Resource Co, LLC

Soil Description and Classification Form

Project Name: Three Rivers Solar Applicant Name: Three Rivers Solar Power, LLC

Symbol: O Horizon Thickness: 0" Symbol: O Horizon Thickness: 0"

Test Pit: EXTP-RS-56 Hydric (y/n): N
Soil Name: Lamoine silt loam

Test Pit: EXTP-RS-60 Hydric (y/n): N
Soil Name: Lamoine silt loam, variant

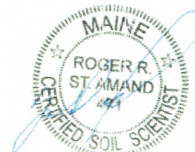
Horiz	0	Texture	Consistency	Color	Mottling
Ap	1				
	2				
	3				
	4	silt	friable	10YR 3/3	
	5	loam			
	6				
	7				
	8				
Bw	9				
	10	silt	friable	2.5Y 5/4	
	12	loam			
Bw	16	silt			cmp 10YR 4/6
	18	loam	firm	5Y 5/3	cmd 5Y 6/1
	20				
C	25				cmp
	30				10YR 4/6
	35	silty			cmd
	40	clay	firm	5Y 4/3	5Y 6/1
	45	loam			
	50				
	55				
	60				
	65				
	70				
	75				
	80				

LLI = 60"

Horiz	0	Texture	Consistency	Color	Mottling
A	1				
	2				
	3	silt			
	4	loam	friable	2.5Y 3/3	
	5				
	6				
	7				none observed
	8				
Bw	9				
	10	silt	friable	2.5Y 5/4	
	12	loam			
BC	16				
	18	silt			cmp 10YR 4/6
	20	loam	firm	2.5Y 5/3	cmd 5Y 6/2
C	25				
	30				cmp
	35	silty			5Y 5/2
	40	clay	firm	5Y 4/3	cmd 10YR 4/6
	45	loam			
	50				
	55				
	60				
ZC	55	gravelly			saturated 8 1/2"
	60	loamy sand	loose	5Y 4/3	
	65				
	70				
	75				
	80				

LLI = 66"

C.S.S. Name: Roger St. Amand Date: 01/18/19 License #: #SS471



Appendix D
Proposed Deed Restriction for Buffers

DECLARATION OF RESTRICTIONS

(Non-Wooded Meadow Buffer)

THIS DECLARATION OF RESTRICTIONS is made this _____ day of _____, 20____, by

_____, _____
(name) (street address)
_____, _____ County, Maine, _____, (herein referred to as the
(city or town) (county) (zip code)

"Declarant"), pursuant to a permit received from the Maine Department of Environmental Protection under the Stormwater Management Law, to preserve a buffer area on a parcel of land near

_____, _____.
(road name) (known feature and/or town)

WHEREAS, the Declarant holds title to certain real property situated in _____, Maine
(town)

described in a deed from _____ to _____, dated
(name) (name of Declarant)

_____, 20____, and recorded in Book ____ Page ____ at the _____ County
Registry of Deeds, herein referred to as the "property"; and

WHEREAS, Declarant desires to place certain restrictions, under the terms and conditions herein, over a portion of said real property (hereinafter referred to as the "Restricted Buffer") described as follows: (Note: Insert description of restricted buffer location here)

WHEREAS, pursuant to the Stormwater Management Law, 38 M.R.S. Section 420-D and Chapter 500 of rules promulgated by the Maine Board of Environmental Protection ("Stormwater Management Rules"), Declarant has agreed to impose certain restrictions on the Restricted Buffer Area as more particularly set forth herein and has agreed that these restrictions may be enforced by the Maine Department of Environmental Protection or any successor (hereinafter the "MDEP"),

NOW, THEREFORE, the Declarant hereby declares that the Restricted Buffer Area is and shall forever be held, transferred, sold, conveyed, occupied and maintained subject to the conditions and restrictions set forth herein. The Restrictions shall run with the Restricted Buffer Area and shall be binding on all parties having any right, title or interest in and to the Restricted Buffer Area, or any portion thereof, and their heirs, personal representatives, successors, and assigns. Any present or future owner or occupant of the Restricted Buffer Area or any portion thereof, by the acceptance of a deed of conveyance of all or part of the Covenant Area or an instrument conveying any interest therein, whether or not the deed or instrument shall so express, shall be deemed to have accepted the Restricted Buffer Area subject to the Restrictions and shall agree to be bound by, to comply with and to be subject to each and every one of the Restrictions hereinafter set forth.

1. **Restrictions on Restricted Buffer Area.** Unless the owner of the Restricted Buffer Area, or any successors or assigns, obtains the prior written approval of the MDEP, the Restricted Buffer Area must remain undeveloped in perpetuity. To maintain the ability of the Restricted Buffer Area to filter and absorb stormwater, and to maintain compliance with the Stormwater Management Law and the permit issued thereunder to the Declarant, the use of the Restricted Buffer Area is hereinafter limited as follows.
 - a. No soil, loam, peat, sand, gravel, concrete, rock or other mineral substance, refuse, trash, vehicle bodies or parts, rubbish, debris, junk waste, pollutants or other fill material will be placed, stored or dumped on the Restricted Buffer Area, nor may the topography or the natural mineral soil of the area be altered or manipulated in any way;
 - b. A dense cover of grassy vegetation must be maintained over the Restricted Buffer Area, except that shrubs, trees and other woody vegetation may also be planted or allowed to grow in the area. The Restricted Buffer Area may not be maintained as a lawn or used as a pasture. If vegetation in the Restricted Buffer Area is mowed, it may be mown no more than two times per year.
 - c. No building or other temporary or permanent structure may be constructed, placed or permitted to remain on the Restricted Buffer Area, except for a sign, utility pole or fence (whether constructed of wood, steel or other materials) and appurtenant equipment such as guys and guy anchors;
 - d. No trucks, cars, dirt bikes, ATVs, bulldozers, backhoes, or other motorized vehicles or mechanical equipment may be permitted on the Restricted Buffer Area, except for vehicles used in mowing;
 - e. Any level lip spreader directing flow to the Restricted Buffer Area must be regularly inspected and adequately maintained to preserve the function of the level spreader.

Any activity on or use of the Restricted Buffer Area inconsistent with the purpose of these Restrictions is prohibited. Any future alterations or changes in use of the Restricted Buffer Area must receive prior approval in writing from the MDEP. The MDEP may approve such alterations and changes in use if such alterations and uses do not impede the stormwater control and treatment capability of the Restricted Buffer Area or if adequate and appropriate alternative means of stormwater control and treatment are provided.

2. **Enforcement.** The MDEP may enforce any of the Restrictions set forth in Section 1 above.
3. **Binding Effect.** The restrictions set forth herein shall be binding on any present or future owner of the Restricted Buffer Area. If the Restricted Buffer Area is at any time owned by more than one owner, each owner shall be bound by the foregoing restrictions to the extent that any of the Restricted Buffer Area is included within such owner's property.
4. **Amendment.** Any provision contained in this Declaration may be amended or revoked only by the recording of a written instrument or instruments specifying the amendment or the revocation signed by the owner or owners of the Restricted Buffer Area and by the MDEP.
5. **Effective Provisions of Declaration.** Each provision of this Declaration, and any agreement, promise, covenant and undertaking to comply with each provision of this Declaration, shall be deemed a land use restriction running with the land as a burden and upon the title to the Restricted Buffer Area.

6. **Severability.** Invalidity or unenforceability of any provision of this Declaration in whole or in part shall not affect the validity or enforceability of any other provision or any valid and enforceable part of a provision of this Declaration.
7. **Governing Law.** This Declaration shall be governed by and interpreted in accordance with the laws of the State of Maine.

(NAME)

STATE OF MAINE, _____, County, dated _____, 20__ .
(County)

Personally appeared before me the above named _____, who swore to the truth of the foregoing to the best of (his/her) knowledge, information and belief and acknowledged the foregoing instrument to be (his/her) free act and deed.

Notary Public

DECLARATION OF RESTRICTIONS

(Forested Buffer, Limited Disturbance)

THIS DECLARATION OF RESTRICTIONS is made this _____ day of _____, 20____,
by _____,

(name)

(street address)

_____, _____ County, Maine, _____, (herein referred to as the
(city or town) (county) (zip code)

"Declarant"), pursuant to a permit received from the Maine Department of Environmental Protection under
the Stormwater Management Law, to preserve a buffer area on a parcel of land near

_____.
(road name) (known feature and/or town)

WHEREAS, the Declarant holds title to certain real property situated in _____, Maine
(town)

described in a deed from _____ to _____ dated
(name) (name of Declarant)

_____, 20____, and recorded in Book ____ Page ____ at the _____ County
Registry of Deeds, herein referred to as the "property"; and

WHEREAS, Declarant desires to place certain restrictions, under the terms and conditions herein, over a
portion of said real property (hereinafter referred to as the "Restricted Buffer") described as follows: (Note:
Insert description of restricted buffer area location here)

WHEREAS, pursuant to the Stormwater Management Law, 38 M.R.S. Section 420-D and Chapter 500 of
rules promulgated by the Maine Board of Environmental Protection ("Stormwater Management Rules"),
Declarant has agreed to impose certain restrictions on the Restricted Buffer Area as more particularly set
forth herein and has agreed that these restrictions may be enforced by the Maine Department of
Environmental Protection or any successor (hereinafter the "MDEP"),

NOW, THEREFORE, the Declarant hereby declares that the Restricted Buffer Area is and shall forever be
held, transferred, sold, conveyed, occupied and maintained subject to the conditions and restrictions set
forth herein. The Restrictions shall run with the Restricted Buffer Area and shall be binding on all parties
having any right, title or interest in and to the Restricted Buffer Area, or any portion thereof, and their heirs,
personal representatives, successors, and assigns. Any present or future owner or occupant of the Restricted
Buffer Area or any portion thereof, by the acceptance of a deed of conveyance of all or part of the Covenant
Area or an instrument conveying any interest therein, whether or not the deed or instrument shall so express,
shall be deemed to have accepted the Restricted Buffer Area subject to the Restrictions and shall agree to
be bound by, to comply with and to be subject to each and every one of the Restrictions hereinafter set
forth.

1. **Restrictions on Restricted Buffer Area.** Unless the owner of the Restricted Buffer Area, or any
successors or assigns, obtains the prior written approval of the MDEP, the Restricted Buffer Area must
remain undeveloped in perpetuity. To maintain the ability of the Restricted Buffer Area to filter and
absorb stormwater, and to maintain compliance with the Stormwater Management Law and the permit

issued thereunder to the Declarant, the use of the Restricted Buffer Area is hereinafter limited as follows.

- a. No soil, loam, peat, sand, gravel, concrete, rock or other mineral substance, refuse, trash, vehicle bodies or parts, rubbish, debris, junk waste, pollutants or other fill material may be placed, stored or dumped on the Restricted Buffer Area, nor may the topography of the area be altered or manipulated in any way;
- b. Any removal of trees or other vegetation within the Restricted Buffer Area must be limited to the following:
 - (i) No purposefully cleared openings may be created and an evenly distributed stand of trees and other vegetation must be maintained. An "evenly distributed stand of trees" is defined as maintaining a minimum rating score of 24 points in any 25 foot by 50 foot rectangle (1,250 square feet) area, as determined by the rating scheme in Table 11:

**Table 11.
Point System for Determining an Evenly
Distributed Stand of Trees**

Diameter of tree at 4½ feet above ground level	Points
2 - 4 inches	1
4 - 8 inches	2
8 - 12 inches	4
>12 inches	8

Where existing trees and other vegetation result in a rating score less than 24 points, no trees may be cut or sprayed with biocides except for the normal maintenance of dead, windblown or damaged trees and for pruning of tree branches below a height of 12 feet provided two thirds of the tree's canopy is maintained;

- (ii) No undergrowth, ground cover vegetation, leaf litter, organic duff layer or mineral soil may be disturbed except that one winding path, that is no wider than six feet and that does not provide a downhill channel for runoff, is allowed through the area;
- c. No building or other temporary or permanent structure may be constructed, placed or permitted to remain on the Restricted Buffer Area, except for a sign, utility pole (whether constructed of wood, steel or other materials) and appurtenant equipment such as guys and guy anchors, or fence;
- d. No trucks, cars, dirt bikes, ATVs, bulldozers, backhoes, or other motorized vehicles or mechanical equipment may be permitted on the Restricted Buffer Area;
- e. Any level lip spreader directing flow to the Restricted Buffer Area must be regularly inspected and adequately maintained to preserve the function of the level spreader.

Any activity on or use of the Restricted Buffer Area inconsistent with the purpose of these Restrictions is prohibited. Any future alterations or changes in use of the Restricted Buffer Area must receive prior approval in writing from the MDEP. The MDEP may approve such alterations and changes in use if

such alterations and uses do not impede the stormwater control and treatment capability of the Restricted Buffer Area or if adequate and appropriate alternative means of stormwater control and treatment are provided.

2. **Enforcement.** The MDEP may enforce any of the Restrictions set forth in Section 1 above.
3. **Binding Effect.** The restrictions set forth herein shall be binding on any present or future owner of the Restricted Buffer Area. If the Restricted Buffer Area is at any time owned by more than one owner, each owner shall be bound by the foregoing restrictions to the extent that any of the Restricted Buffer Area is included within such owner's property.
4. **Amendment.** Any provision contained in this Declaration may be amended or revoked only by the recording of a written instrument or instruments specifying the amendment or the revocation signed by the owner or owners of the Restricted Buffer Area and by the MDEP.
5. **Effective Provisions of Declaration.** Each provision of this Declaration, and any agreement, promise, covenant and undertaking to comply with each provision of this Declaration, shall be deemed a land use restriction running with the land as a burden and upon the title to the Restricted Buffer Area.
6. **Severability.** Invalidity or unenforceability of any provision of this Declaration in whole or in part shall not affect the validity or enforceability of any other provision or any valid and enforceable part of a provision of this Declaration.
7. **Governing Law.** This Declaration shall be governed by and interpreted in accordance with the laws of the State of Maine.

(NAME)

STATE OF MAINE _____ County, _____, 20__.
(County) (date)

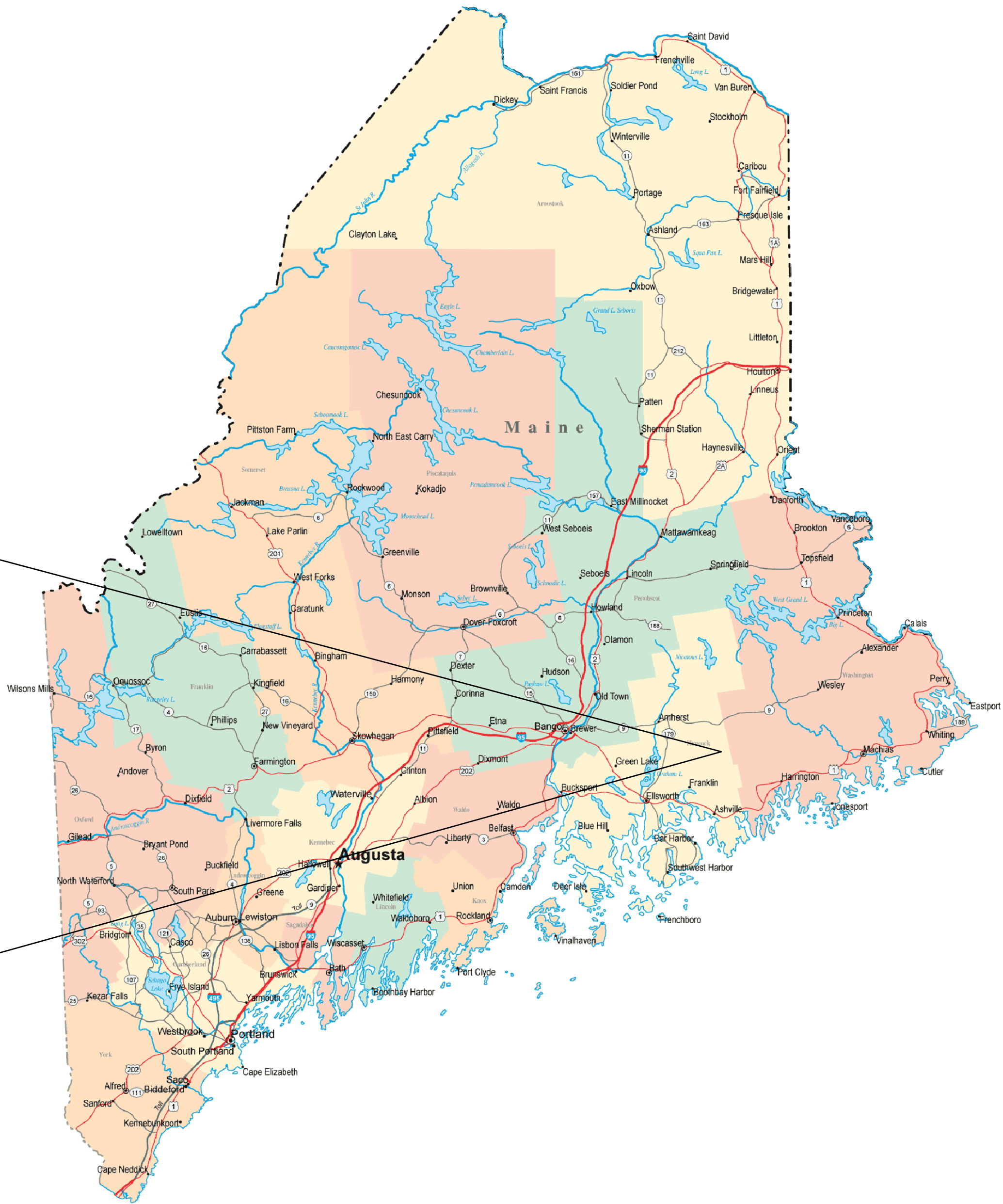
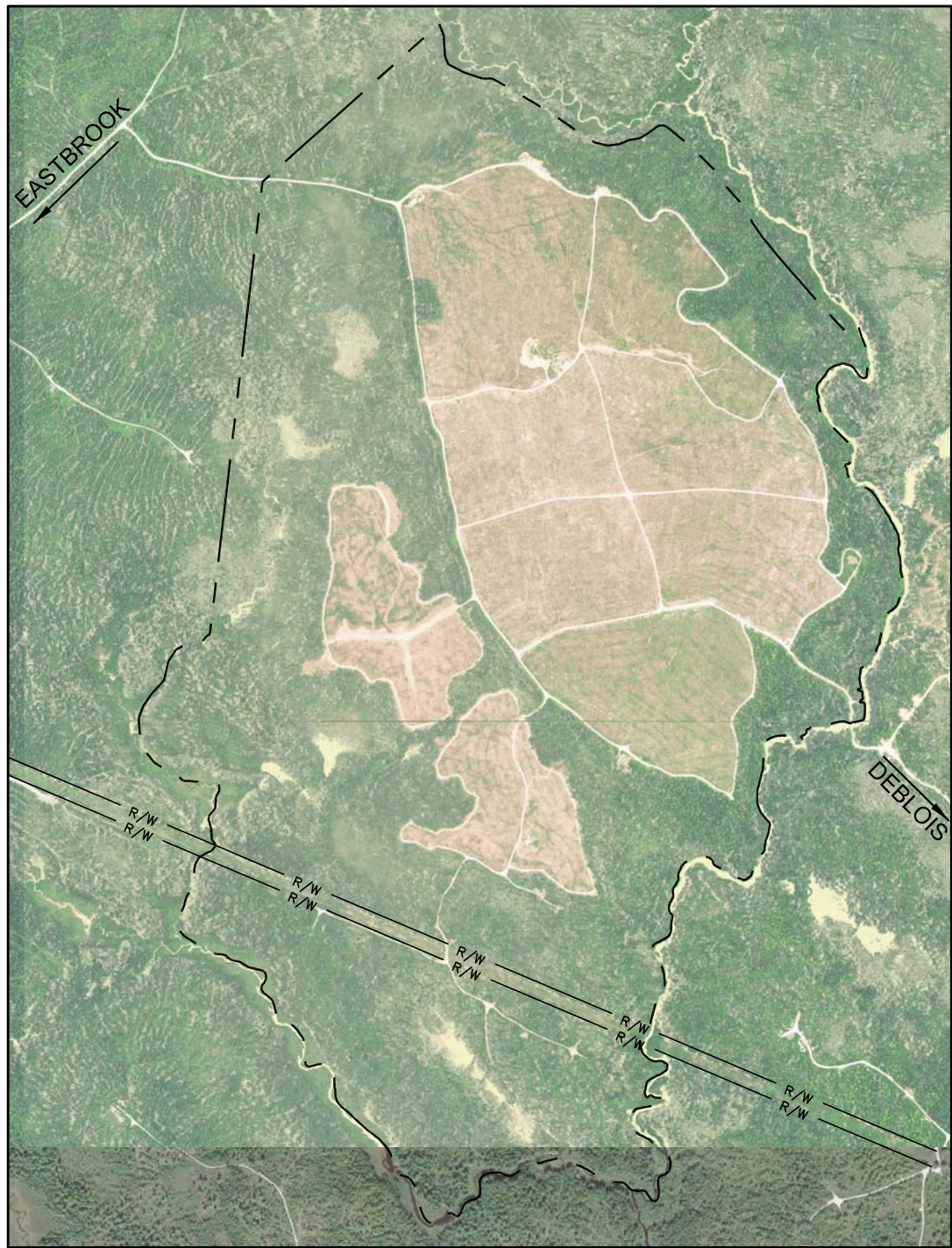
Personally appeared before me the above named _____, who swore to the truth of the foregoing to the best of (his/her) knowledge, information and belief and acknowledged the foregoing instrument to be (his/her) free act and deed.

Notary Public

Appendix E

Plans

Three Rivers Solar Power, LLC.
Township 16 MD
Hancock County, Maine



ACHERON ENGINEERING SERVICES
Engineering, Environmental & Geologic Consultants

www.AcheronEngineering.com

147 Main St. Newport, ME. 04953 (207)-368-5700	24466 Powell Rd. Brooksville, FL 34602 (352)-796-6236 <small>Acheron International, Inc.</small>
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3. ACHERON ENGINEERING HAS USED A REASONABLE STANDARD OF CARE TO TRY TO LOCATE UNDERGROUND FACILITIES IN THE VICINITY OF THIS PROJECT. LOCATIONS OF UNDERGROUND FACILITIES DEPICTED ON THESE DRAWINGS ARE APPROXIMATE. EXCAVATORS MUST COMPLY WITH ALL REQUIREMENTS OF TITLE 23 SECTION 3360, PROTECTION OF UNDERGROUND FACILITIES, BEFORE COMMENCING OPERATIONS.
2. SPILL PREVENTION: CONTROLS MUST BE USED TO PREVENT POLLUTANTS FROM CONSTRUCTION AND WASTE MATERIALS STORED ON SITE TO ENTER STORMWATER, WHICH INCLUDES: STORAGE PRACTICES TO MINIMIZE EXPOSURE OF MATERIALS TO STORMWATER, THE SITE CONTRACTOR OR OPERATOR MUST DEVELOP AND IMPLEMENT, AS NECESSARY, APPROPRIATE SPILL PREVENTION, CONTAINMENT AND RESPONSE PLANNING MEASURES.
3. ANY SPILL OR RELEASE OF TOXIC OR HAZARDOUS SUBSTANCES MUST BE REPORTED TO THE MAINE DEPARTMENT OF ENVIRONMENTAL PROTECTION. FOR OIL SPILLS, CALL 1-800-482-0777 WHICH IS AVAILABLE 24 HOURS A DAY. FOR SPILLS OF TOXIC OR HAZARDOUS MATERIAL, CALL 1-800-482-4664 WHICH IS AVAILABLE 24 HOURS A DAY. FOR MORE INFORMATION VISIT THE MEDEP WEBSITE AT: WWW.MAINE.GOV/DEP/SPILLS/EMERGPSILLRESP/
4. GROUNDWATER PROTECTION: DURING CONSTRUCTION, LIQUID PETROLEUM PRODUCTS AND OTHER HAZARDOUS MATERIALS WITH THE POTENTIAL TO CONTAMINATE GROUNDWATER MUST BE STORED OR HANDLED IN AREAS OF THE SITE THAT ARE DRAINED TO AN INFILTRATION AREA. AN "INFILTRATION AREA" IS ANY AREA OF THE SITE THAT BY DESIGN OR AS A RESULT OF SOILS, TOPOGRAPHY AND OTHER RELEVANT FACTORS ACCUMULATES RUNOFF THAT INFILTRATES INTO THE SOIL. DIKES, BERMS, SUMPS AND OTHER FORMS OF SECONDARY CONTAINMENT THAT PREVENT DISCHARGE TO GROUNDWATER MAY BE USED TO ISOLATE PORTIONS OF THE SITE FOR THE PURPOSES OF STORAGE AND HANDLING OF THESE MATERIALS. ANY PROJECT PROPOSING INFILTRATION OF STORMWATER MUST PROVIDE ADEQUATE PRE-TREATMENT OF STORMWATER PRIOR TO DISCHARGE OF STORMWATER TO THE INFILTRATION AREA, OR PROVIDE FOR TREATMENT WITHIN THE INFILTRATION AREA, IN ORDER TO PREVENT ACCUMULATION OF FINES, REDUCTION IN INFILTRATION RATE AND CONSEQUENT FLOODING AND DESTABILIZATION. NOTE: LACK OF APPROPRIATE POLLUTANT REMOVAL BEST MANAGEMENT PRACTICES (BMPs) MAY RESULT IN VIOLATIONS OF THE GROUNDWATER QUALITY STANDARD ESTABLISHED BY M.R.S.A. §465-C (1).
5. DEBRIS AND OTHER MATERIALS: MINIMIZE THE EXPOSURE OF CONSTRUCTION DEBRIS, BUILDING AND LANDSCAPING MATERIALS, TRASH, FERTILIZERS, PESTICIDES, HERBICIDES, DETERGENTS, SANITARY WASTE AND OTHER MATERIAL TO PRECIPITATION AND STORMWATER RUNOFF. THESE MATERIALS MUST BE PREVENTED FROM BECOMING A POLLUTANT SOURCE. NOTE: TO PREVENT THESE MATERIALS FROM BECOMING A SOURCE OF POLLUTANTS, CONSTRUCTION AND POST CONSTRUCTION ACTIVITIES RELATED TO A PROJECT MAY BE REQUIRED TO COMPLY WITH APPLICABLE PROVISIONS OF RULES RELATED TO SOLID, UNIVERSAL AND HAZARDOUS WASTES, INCLUDING BUT NOT LIMITED TO, THE MAINE SOLID WASTE MANAGEMENT RULES; MAINE HAZARDOUS WASTE RULES; MAINE OIL CONVEYANCE AND STORAGE RULES AND MAINE PESTICIDE REQUIREMENTS.
6. AUTHORIZED NON-STORMWATER DISCHARGES: IDENTIFY AND PREVENT CONTAMINATION BY NON-STORMWATER DISCHARGES. WHERE ALLOWED NON-STORMWATER DISCHARGES EXIST, THEY MUST BE IDENTIFIED AND STEPS TAKEN TO ENSURE THE IMPLEMENTATION OF APPROPRIATE POLLUTION MEASURES FOR THE NON-STORMWATER COMPONENT(S) OF THE DISCHARGE. AUTHORIZED NON-STORMWATER DISCHARGES ARE: DISCHARGES FROM FIREFIGHTING ACTIVITY, FIRE HYDRANT FLUSHING, VEHICLE WASHWATER IF DETERGENTS ARE NOT USED AND WASHING IS LIMITED TO THE EXTERIOR OF VEHICLES (ENGINE, UNDERCARRIAGE AND TRANSMISSION WASHING IS PROHIBITED), DUST CONTROL RUNOFF IN ACCORDANCE WITH PERMIT CONDITIONS, ROUTINE EXTERNAL BUILDING WASHDOWN (NOT INCLUDING PAINT REMOVAL, NO DETERGENTS), PAVEMENT WASHWATER (WHERE SPILLS/LEAKS OF TOXIC OR HAZARDOUS MATERIALS HAVE NOT OCCURRED, UNLESS ALL SPILLED MATERIAL HAD BEEN REMOVED, NO DETERGENTS), UNCONTAMINATED AIR CONDITIONING OR COMPRESSOR CONDENSATE, UNCONTAMINATED GROUNDWATER OR SPRING WATER, FOUNDATION OR FOOTER DRAIN-WATER WHERE FLOWS ARE NOT CONTAMINATED, UNCONTAMINATED EXCAVATION DEWATERING, POTABLE WATER SOURCES INCLUDING WATERLINE FLUSHING AND LANDSCAPE IRRIGATION.
7. UNAUTHORIZED NON-STORMWATER DISCHARGES: THE MAINE DEP'S APPROVAL DOES NOT AUTHORIZE A DISCHARGE THAT IS MIXED WITH A SOURCE OF NON-STORMWATER, OTHER THAN THOSE MENTIONED IN GENERAL NOTE 7 SPECIFICALLY. THE MAINE DEP'S APPROVAL DOES NOT AUTHORIZE DISCHARGE OF THE FOLLOWING: WASTEWATER FROM THE WASHOUT OR CLEANOUT OF CONCRETE, STUCCO, PAINT, FORM RELEASE OIL, CURING COMPOUNDS OR OTHER CONSTRUCTION MATERIALS; FUELS, OILS, OR OTHER POLLUTANTS USED IN VEHICLE AND EQUIPMENT OPERATION AND MAINTENANCE; SOAPS, SOLVENTS OR DETERGENTS USED IN VEHICLE AND EQUIPMENT WASHING; AND TOXIC OR HAZARDOUS SUBSTANCES FROM A SPILL OR RELEASE.

3. DURING CONSTRUCTION USE PRECAUTION TO AVOID ANY EROSION AND TO PREVENT SILTING OF OCEANS, RIVERS, STREAMS, RIVERS, STREAMS, LAKES, RESERVOIRS, IMPOUNDMENTS, AND DRAINAGE DITCHES AND SWALES.
2. CONSTRUCTION SEQUENCE
 - INSTALL TEMPORARY EROSION CONTROL MEASURES.
 - DE-STUMP AND REMOVE BOULDERS.
 - SEED ANY DISTURBED AREAS.
 - CONSTRUCT STORMWATER MANAGEMENT FACILITIES.
 - INSTALL SOLAR PANELS, SUBSTATION AND EQUIPMENT.
 - INSTALL COLLECTOR LINES, REGRADE AND REVEGETATE ROADS.
 - FINAL GRADING AND RESEEDING OF DISTURBED AREAS.
 - REMOVE EROSION CONTROL DEVICES PENDING SUFFICIENT GROWTH IN SEEDD AREAS.
3. ALL CONSTRUCTION ACTIVITIES SHOULD FOLLOW GUIDANCE AS PRESENTED IN "MAINE EROSION AND SEDIMENT CONTROL PRACTICES, FIELD GUIDE FOR CONTRACTORS" PUBLISHED BY THE MAINE DEPARTMENT OF ENVIRONMENTAL PROTECTION IN 2014.
4. MINIMUM EROSION CONTROL MEASURES WILL NEED TO BE IMPLEMENTED AND THE CONTRACTOR WILL BE RESPONSIBLE TO MAINTAIN ALL COMPONENTS OF THE EROSION CONTROL PLAN UNTIL THE SITE IS FULLY STABILIZED. HOWEVER, BASED ON SITE AND WEATHER CONDITIONS DURING CONSTRUCTION, ADDITIONAL EROSION CONTROL MEASURES MAY BE NEED TO BE IMPLEMENTED. ALL AREAS OF INSTABILITY AND EROSION MUST BE REPAIRED IMMEDIATELY DURING CONSTRUCTION AND NEED TO BE MAINTAINED UNTIL THE SITE IS FULLY STABILIZED OR VEGETATION IS ESTABLISHED. A CONSTRUCTION LOG MUST BE MAINTAINED FOR EROSION AND SEDIMENTATION CONTROL AND MAINTENANCE.
5. LOCATE AND MARK ALL PROJECT BOUNDARIES PRIOR TO CONSTRUCTION.
6. LIMIT THE AMOUNT OF SOIL DISTURBANCE TO NO MORE THAN 2 ACRES AT ONE TIME OR NO LARGER AREA THAN CAN BE MULCHED IN ONE DAY.
7. MARK ALL SOIL DISTURBANCE LIMITS AND INSTALL SEDIMENT BARRIERS PRIOR TO DISTURBING SOILS.
8. MULCH EXPOSED SOIL AS SOON AS POSSIBLE, AND REVEGETATE AS SOON AS FINAL GRADE IS ATTAINED.
9. INSPECT AND REPAIR EROSION CONTROL AND SEDIMENT TRAPPING MEASURES WEEKLY AND AFTER EVERY STORM EVENT.
10. REMOVE TEMPORARY EROSION CONTROLS WITHIN 30 DAYS AFTER PERMANENT STABILIZATION IS ATTAINED. PERMANENT STABILIZATION CONSISTS OF AT LEAST 90% VEGETATION, PAVEMENT, GRAVEL BASE OR RIP-RAP.
11. STABILIZE DITCHES WITHIN 24 HOURS OF FINAL GRADE.
12. ALL FILL MATERIAL MUST BE FREE OF FROZEN SOIL, ROCKS OVER 6-INCHES, SOD, BRUSH, STUMPS, TREE ROOTS, WOOD OR OTHER PERISHABLE MATERIALS.
13. INSTALL SEDIMENT BARRIERS DOWN SLOPE OF SOIL STOCK PILES.
14. DO NOT SITE SOIL STOCK PILE IN AREAS OF CONCENTRATED STORMWATER FLOW OR AREAS OF POTENTIAL FLOODING.
15. THE DURATION OF EXPOSURE OF UNCOMPLETED CUT SLOPES, EMBANKMENTS, TRENCH EXCAVATIONS, AND SITE GRADED AREAS SHALL BE MINIMIZED. INITIATE SEEDING AND OTHER EROSION CONTROL MEASURES ON EACH SEGMENT AS SOON AS REASONABLY POSSIBLE.
16. SHOULD IT BECOME NECESSARY TO SUSPEND CONSTRUCTION FOR MORE THAN 7 DAYS, SHAPE AND STABILIZE ALL EXCAVATED AND GRADED AREAS. PROVIDE AND MAINTAIN TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES, SUCH AS BERMS, DIKES, SLOPE DRAINS, SILT STOPS, AND SEDIMENTATION BASINS, UNTIL PERMANENT DRAINAGE FACILITIES OR EROSION CONTROL FEATURES HAVE BEEN COMPLETED AND ARE OPERATIVE. IF DISTURBED AREAS ARE WITHIN 75 FEET OF A WETLAND OR WATERBODY, STABILIZE DISTURBANCE WITHIN 48 HOURS OR PRIOR TO ANY STORM EVENT, WHICHEVER COMES FIRST.
17. FINE MATERIAL PLACED OR EXPOSED DURING THE WORK SHALL BE HANDLED AND TREATED AS TO MINIMIZE THE POSSIBILITY OF IT REACHING ANY SURFACE WATERS. USE DIVERSION CHANNELS, DIKES, SEDIMENT TRAPS, OR ANY OTHER EFFECTIVE AND APPROVED CONTROL MEASURES.
18. PROVIDE SILT STOPS WHEREVER EROSION CONTROL MEASURES MAY NOT BE TOTALLY CAPABLE OF CONTROLLING EROSION, SUCH AS IN DRAINAGE CHANNELS AND WHERE STEEP SLOPES MAY EXIST.
19. BEFORE WATER IS ALLOWED TO FLOW IN ANY DITCH, SWALE, OR CHANNEL, INSTALL THE PERMANENT EROSION CONTROL MEASURES IN THE WATERWAY SO THAT THE WATERWAY WILL BE SAFE AGAINST EROSION.
20. TAKE SPECIAL PRECAUTIONS IN THE USE OF CONSTRUCTION EQUIPMENT TO MINIMIZE EROSION. DO NOT LEAVE WHEEL TRACKS WHERE EROSION MIGHT BEGIN.
21. MULCHING SHALL FOLLOW THE SEEDING OPERATION BY NOT MORE THAN 24 HOURS.
22. SHOULD ANY PROTECTIVE MEASURES EMPLOYED INDICATE ANY DEFICIENCIES OR EROSION TAKING PLACE, IMMEDIATELY PROVIDE ADDITIONAL MATERIALS OR EMPLOY DIFFERENT TECHNIQUES TO CORRECT THE SITUATION AND TO PREVENT SUBSEQUENT EROSION.
23. DISTURBANCE WITHIN 30 FEET OF ANY PROTECTED NATURAL RESOURCE WILL REQUIRE DOUBLING THE PERIMETER EROSION CONTROLS AND DISTURBED AREAS MUST BE STABILIZED WITHIN 7 DAYS.

3. CONTINUE EROSION CONTROL MEASURES UNTIL THE PERMANENT MEASURES HAVE BEEN FULLY ESTABLISHED AND ARE CAPABLE OF CONTROLLING EROSION ON THEIR OWN.
25. REMOVE ALL TEMPORARY CONTROL MEASURES WITHIN 30 DAYS AFTER PERMANENT STABILIZATION IS ATTAINED.
26. COMPLY WITH ALL FEDERAL, STATE, AND LOCAL LAWS, ORDINANCES, RULES AND REGULATIONS. ALL WORK SHALL COMPLY WITH THE REQUIREMENTS SET FORTH IN THE BEST MANAGEMENT PRACTICES OF MAINE AS PREPARED BY THE DEPARTMENT OF ENVIRONMENTAL PROTECTION.
27. AREAS CONTAINING EXPOSED SOILS MUST BE STABILIZED WITHIN 7 DAYS OF CESSATION OF AN ACTIVITY.
28. BEGIN PERMANENT STABILIZATION WITHIN 7 DAYS OF OBTAINING FINAL GRADE.
29. WINTERIZATION SCHEDULE
- ALL STONE LINER DITCHES AND CHANNELS SHALL BE CONSTRUCTED AND STABILIZED BY NOVEMBER 15TH.
 - ALL STONE COVERED SLOPES SHALL BE CONSTRUCTED AND STABILIZED BY NOVEMBER 15TH.
 - ALL DISTURBED SLOPES HAVING A SLOPE LESS THAN 15% TO BE SEEDED AND MULCHED BY SEPTEMBER 15TH.
 - ALL VEGETATED SLOPE GREATER THAN 15% TO BE SEED AND MULCHED BY SEPTEMBER 1ST.
 - ALL VEGETATED DITCHES AND CHANNELS TO BE SEEDED AND MULCHED BY SEPTEMBER 1ST.
30. SITE WINTERIZATION
- IF THE SEPTEMBER 1ST DEADLINE CANNOT BE MET FOR VEGETATED SLOPES, THEN BY OCTOBER 1ST THE SLOPE SHALL BE SEEDED WITH WINTER RYE AT THE RATE OF 3 POUNDS PER 1000 SQUARE FEET AND COVERED WITH EROSION CONTROL MATS OR ANCHORED MULCH. IF RYE FAILS TO GROW 3 INCHES BY NOVEMBER 1ST THE SLOPE SHALL BE COVERED WITH AN EROSION CONTROL MIX OR COVERED WITH STONE RIPRAP.
 - IF THE SEPTEMBER 1ST DEADLINE CANNOT BE MET FOR GRASSED LINED DITCHES, THEN A SOD OR STONE LINING SHALL BE INSTALLED.
 - IF THE SEPTEMBER 15TH DEADLINE CANNOT BE MET FOR DISTURBED AREAS WITH A SLOPE LESS THAN 15%, THEN BY NOVEMBER 15TH MULCH AREAS AT A RATE OF 150 POUNDS PER 1000 SQUARE FEET SUCH THAT NO SOIL IS VISIBLE THROUGH MULCH.
31. WINTER CONSTRUCTION
- WINTER CONSTRUCTION IS CONSTRUCTION ACTIVITY PERFORMED BETWEEN NOVEMBER 1ST AND APRIL 15TH.
 - IF AN AREA IS NOT STABILIZED IN ACCORDANCE WITH THE ABOVE SCHEDULE OR PERMANENTLY STABILIZED THAN ADDITIONAL STABILIZATION MEASURES MUST BE EMPLOYED.
 - PERMANENT STABILIZATION CONSISTS OF AT LEAST 90% VEGETATION, PAVEMENT, GRAVEL BASE OR RIPRAP.
 - APPLY HAY MULCH AT 150 POUNDS PER 1000 SQUARE FEET SUCH THAT NO SOIL IS VISIBLE THROUGH MULCH.
 - USE MULCH AND NETTING OR AN EROSION CONTROL BLANKET OR MIX ON ALL SLOPES GRATER THAN 8 PERCENT.
 - INSTALL AN EROSION CONTROL BLANKET IN ALL DRAINAGE WAYS WITH A SLOPE GREATER THAN 3 PERCENT.
 - WINTER EXCAVATION AND EARTH WORK SHALL NOT EXPOSE MORE THAN 1 ACRE OF THE SITE WITHOUT STABILIZATION AT ANY ONE TIME.
 - IN AN AREA WITHIN 75 FEET OF A NATURAL PROTECTED RESOURCE, DOUBLE ROW SEDIMENT BARRIERS SHALL BE INSTALLED.
 - TEMPORARY MULCH MUST BE APPLIED WITHIN 7 DAYS OF SOIL EXPOSURE OR PRIOR TO ANY STORM EVENT, BUT AFTER EVERY WORKING DAY IN AREAS WITHIN 75 FEET OF A NATURAL PROTECTED RESOURCE.
 - AREAS THAT HAVE BEEN BROUGHT TO FINAL GRADE SHALL BE MULCHED THE SAME DAY.
 - NO MULCH SHALL BE SPREAD OVER SNOW. SNOW SHALL BE REMOVED WITHIN ONE QUARTER INCH PRIOR TO MULCHING.
 - LOAM SHALL BE FREE OF FROZEN CLUMPS BEFORE BEING APPLIED.
 - INSPECT WEEKLY AND AFTER EACH STORM TO CHECK FOR EROSION AND REPAIR IMMEDIATELY.
 - IN SPRING, REMOVE ANY EXCESS MULCH, SEED AND MONITOR FOR EROSION AND PLANT GROWTH.
32. EXCAVATION DE-WATERING: EXCAVATION DE-WATERING IS THE REMOVAL OF WATER FROM TRENCHES, FOUNDATIONS, COFFERDAMS, PONDS, AND OTHER AREAS WITHIN THE CONSTRUCTION AREA THAT RETAIN WATER AFTER EXCAVATION. IN MOST CASES THE COLLECTED WATER IS HEAVILY Silted AND HINDERS CORRECT AND SAFE CONSTRUCTION PRACTICES. THE COLLECTED WATER REMOVED FROM THE PONDED AREA, EITHER THROUGH GRAVITY OR PUMPING, MUST BE SPREAD THROUGH NATURAL WOODEN BUFFERS OR REMOVED TO AREAS THAT ARE SPECIFICALLY DESIGNED TO COLLECT THE MAXIMUM AMOUNT OF SEDIMENT POSSIBLE, LIKE A COFFERDAM SEDIMENTATION BASIN OR DIRTBAG GEOTEXTILE SEDIMENT FILTER. AVOID ALLOWING THE WATER TO FLOW OVER DISTURBED AREAS OF THE SITE. EQUIVALENT MEASURES MAY BE TAKEN IF APPROVED BY THE MAINE DEP. NOTE: DEWATERING CONTROLS ARE DISCUSSED IN THE MAINE EROSION AND SEDIMENT CONTROL BMPs, MAINE DEPARTMENT OF ENVIRONMENTAL PROTECTION."
33. A DEWATERING PLAN IS NEEDED TO ADDRESS EXCAVATION DE-WATERING FOLLOWING HEAVY RAINFALL OR WHERE THE EXCAVATION MY INTERCEPT THE GROUNDWATER TABLE DURING CONSTRUCTION. PRIOR TO ANY DEWATERING ACTIVITIES SUBMIT A DEWATERING PLAN TO OWNER AND ENGINEER FOR APPROVAL.
34. FUGITIVE SEDIMENT AND DUST: ACTION MUST BE TAKEN TO ENSURE THAT ACTIVITIES DO NOT RESULT IN NOTICEABLE EROSION OF SOILS OR FUGITIVE DUST EMISSIONS DURING OR AFTER CONSTRUCTION. OIL MAY NOT USED FOR DUST CONTROL, BUT OTHER WATER ADDITIVES MAY BE CONSIDERED AS NEEDED. A STABILIZED CONSTRUCTION ENTRANCE (SCE) SHOULD BE INCLUDED TO MINIMIZE TRACKING OF MUD AND SEDIMENT. IF OFF-SITE TRACKING OCCURS, PUBLIC ROADS SHOULD BE SWEEP IMMEDIATELY AND NO LESS THAN ONCE A WEEK AND PRIOR TO SIGNIFICANT STORM EVENTS. OPERATIONS DURING DRY MONTHS, THAT EXPERIENCE FUGITIVE DUST PROBLEMS, SHOULD WET DOWN UNPAVED ACCESS ROADS ONCE PER WEEK OR MORE FREQUENTLY AS NEEDED WITH A WATER ADDITIVE TO SUPPRESS FUGITIVE SEDIMENT AND DUST.
35. IN LIEU OF SILT FENCE, EROSION CONTROL MIX CAN BE USED IF THE FOLLOWING CONDITIONS ARE MET.
- FOLLOW GUIDELINE IN THE MAINE EROSION AND SEDIMENT CONTROL PRACTICES FIELD GUIDE, 2014.
 - THE EROSION CONTROL MIX BERM SHOULD BE MINIMUM OF 12" HIGH AND A MINIMUM OF 2' WIDE. ON STEEPER SLOPES, THE BERM WILL NEED TO BE WIDER AND HIGHER. BERMS COMPOSED OF EROSION CONTROL MIX CAN BE SHAPED WHEN NECESSARY.
 - THE EROSION CONTROL MIX MUST BE WELL-GRADED WITH AN ORGANIC COMPONENT THAT IS BETWEEN 50 AND 100% OF DRY WEIGHT, AND THAT IS COMPOSED OF FIBROUS AND ELONGATED FRAGMENTS. THE MINERAL PORTION OF THE MIX SHOULD BE NATURALLY INCLUDED IN THE PRODUCT WITH NO ROCKS LARGER THAN 4" OR LARGE AMOUNTS OF FINES (SILTS AND CLAYS). IN STUMP GRINDING, THE MINERAL SOIL ORIGINATES FROM THE ROOT BALL AND SHOULD NOT BE REMOVED BEFORE GRINDING. THE MIX SHOULD BE FREE OF REFUSE, MATERIAL TOXIC TO PLANT GROWTH OR UNSUITABLE MATERIAL (BARK CHIPS, GROUND CONSTRUCTION DEBRIS OR PROCESSES WOOD PRODUCTS).
36. SEEDING:
- COMPLETE SEEDING WITHIN 7 DAYS OF FINAL GRADING.
 - BROADCAST SEED OVER ENTIRE DITCH AND SURFACE AND RAKE INTO SOIL.
 - APPLY HAY MULCH TO ALL SEEDED AREAS.
 - SUMMER SEEDING DATES ARE FROM APRIL 1 TO SEPTEMBER 15.
 - PERMANENT SEEDING SHOULD BE DONE 45 DAYS BEFORE A KILLING FROST.
 - THE SEED MIXTURE SHOULD BE PROPORTIONED BY WEIGHT AS FOLLOWS:
- | | POUNDS/ACRE |
|---------------------|-------------|
| KENTUCKY BLUEGRASS | 20 |
| CREeping RED FESCUE | 20 |
| PERENNIAL RYE GRASS | 5 |
37. MULCHING:
- APPLY TEMPORARY MULCH ON DISTURBED AREAS WITHIN 7 DAYS OF INITIAL DISTURBANCE OR PRIOR TO ANY STORM.
 - DO NOT APPLY EROSION CONTROL MIX OR HAY MULCH IN CONCENTRATED WATER FLOWS.
 - DO NOT USE EROSION CONTROL MIX OR HAY MULCH FOR SLOPES STEEP THAN 2:1.
 - USE HAY MULCH AS A TEMPORARY MEASURE TO PROTECT BARE SOILS OR TO COVER NEWLY SEEDED AREAS.
 - APPLY AT A RATE OF TWO SQUARE BALES (70-90 POUNDS) PER 1,000 SQUARE FEET.

INDEX	
#	SHEET TITLE
-	COVER SHEET
i	GENERAL NOTES & INDEX
C-1	EXISTING CONDITIONS SITE PLAN
C-2	PROPOSED CONDITIONS SITE PLAN
C-3	PROPOSED CONDITIONS SITE PLAN WITHOUT SOLAR PANELS
C-4	STORMWATER MANAGEMENT PLAN - EXISTING SITE PLAN
C-5	STORMWATER MANAGEMENT PLAN - PROPOSED SITE PLAN
C-6	STORMWATER MANAGEMENT PLAN - SUBSTATION LOCATION EXISTING CONDITIONS SITE PLAN
C-7	STORMWATER MANAGEMENT PLAN - SUBSTATION LOCATION PROPOSED CONDITIONS SITE PLAN
C-8	STORMWATER MANAGEMENT PLAN - SITE PLAN ROAD GRADING NORTH SECTION
C-9	STORMWATER MANAGEMENT PLAN - SITE PLAN ROAD GRADING MID SECTION
C-10	STORMWATER MANAGEMENT PLAN - SITE PLAN ROAD GRADING SOUTH SECTION
D-1	CONSTRUCTION DETAILS



SWIFT CURRENT

No.	Revision Description	Drawn	Ckcd	Date

Drawn By: BFG
Desg By: BPG / KJB
Chkd By: KJB
Aprvd By: KJB
Date: 10/8/2019

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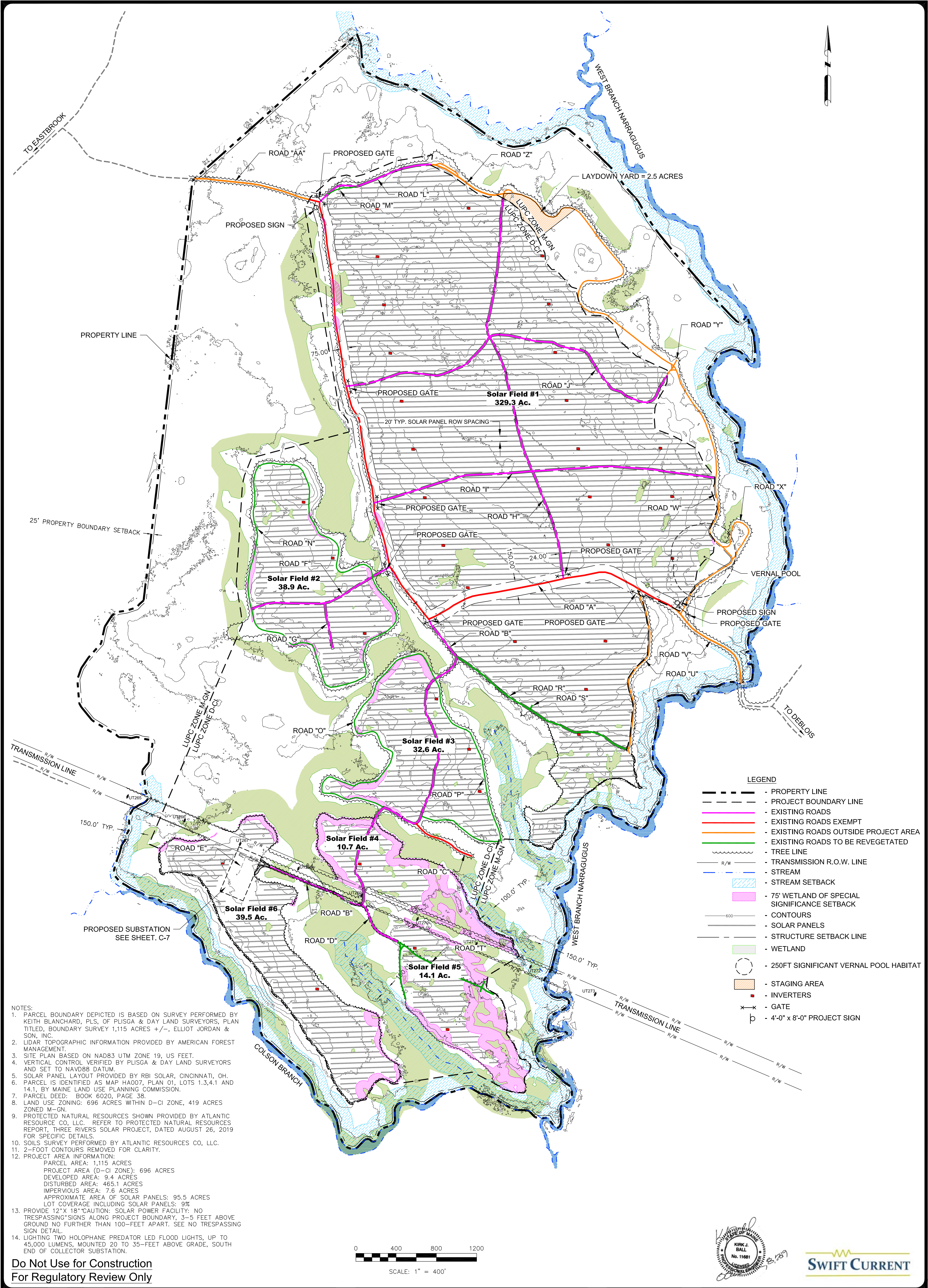
Acheron International, Inc.

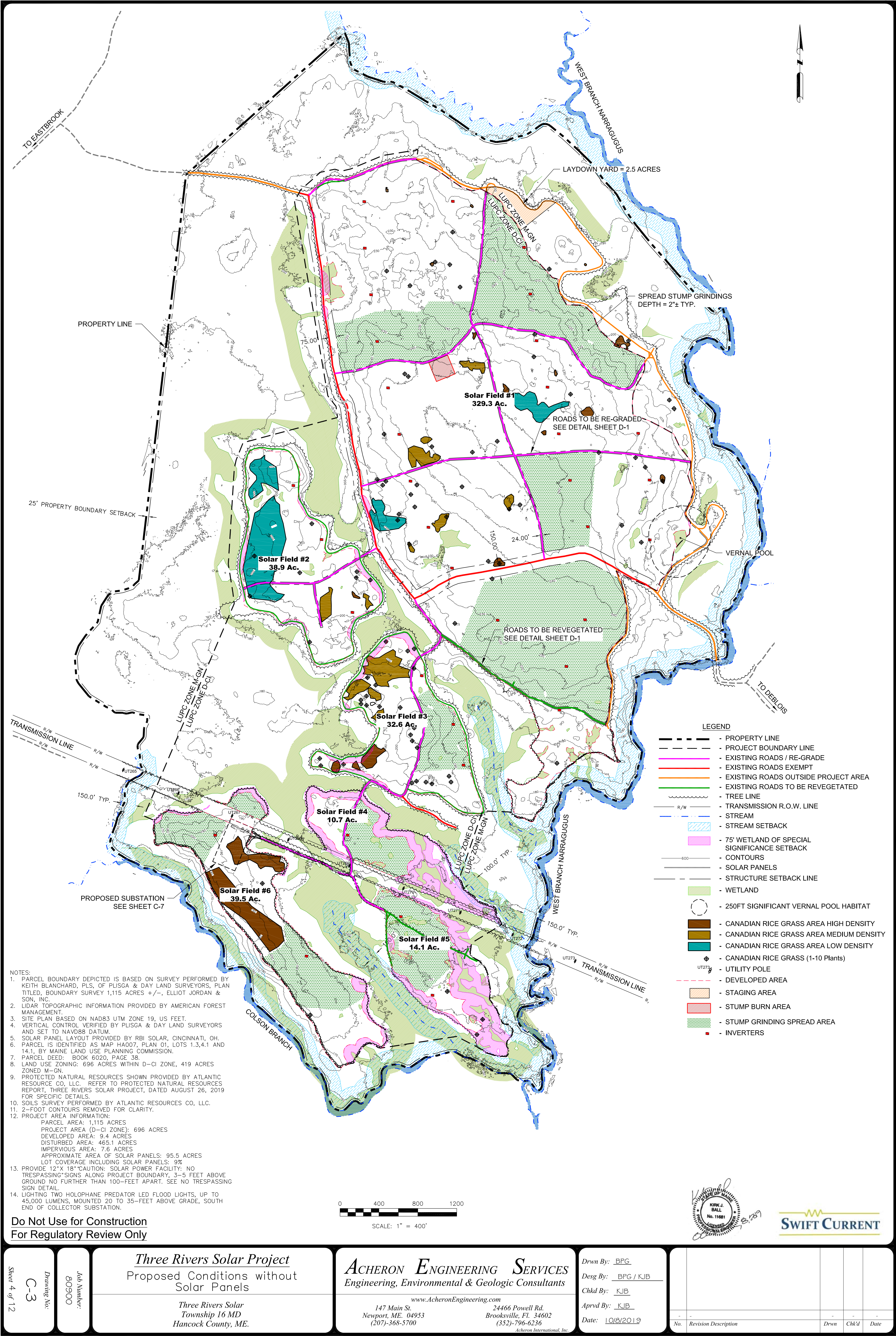
Three Rivers Solar Project
General Notes & Index
*Three Rivers Solar
Township 16 MD
Hancock County, ME.*

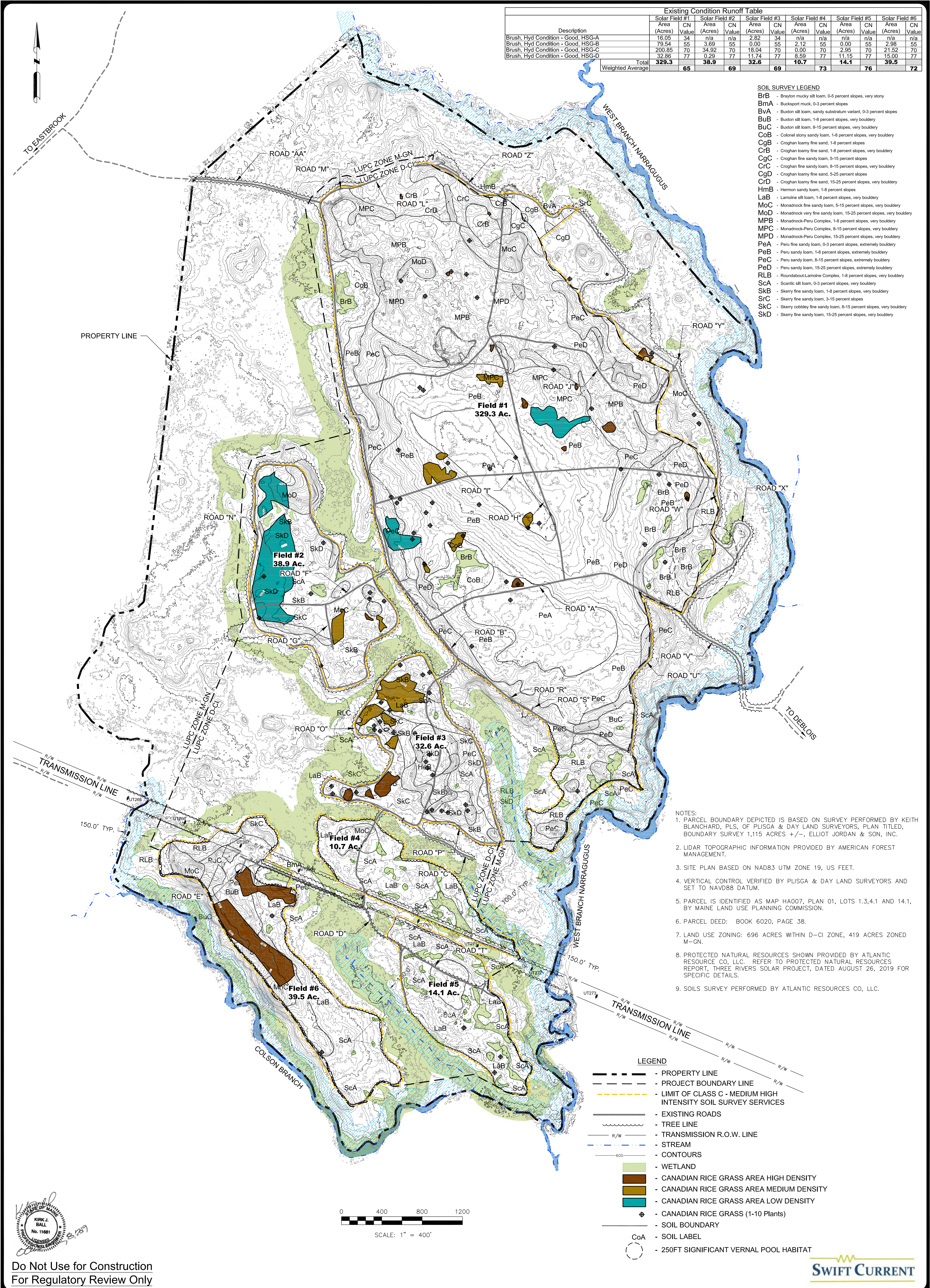
Job Number:
80900

Drawing No:

Sheet 1 of 12





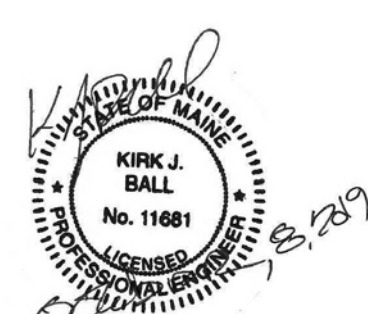


Existing Condition Runoff Table												
Description	Solar Field #1		Solar Field #2		Solar Field #3		Solar Field #4		Solar Field #5		Solar Field #6	
	Area (Acres)	CN Value	Area (Acres)	CN Value	Area (Acres)	CN Value	Area (Acres)	CN Value	Area (Acres)	CN Value	Area (Acres)	CN Value
Brush, Hyd Condition - Good, HSG-A	16.05	34	n/a	n/a	2.82	34	n/a	n/a	n/a	n/a	n/a	n/a
Brush, Hyd Condition - Good, HSG-B	79.54	55	3.69	55	0.00	55	2.12	55	0.00	55	2.98	55
Brush, Hyd Condition - Good, HSG-C	200.85	70	34.92	70	18.04	70	0.00	70	2.95	70	21.52	70
Brush, Hyd Condition - Good, HSG-D	32.86	77	0.29	77	11.74	77	8.59	77	11.15	77	15.00	77
Total	329.3		38.9		32.6		10.7		14.1		39.5	
Weighted Average		65		69		69		73		76		72

- SOIL SURVEY LEGEND
- BrB - Brayton mucky silt loam, 0-5 percent slopes, very stony
 - BmA - Bucksport muck, 0-3 percent slopes
 - BvA - Buxton silt loam, sandy substratum variant, 0-3 percent slopes
 - BuB - Buxton silt loam, 1-8 percent slopes, very bouldery
 - BuC - Buxton silt loam, 8-15 percent slopes, very bouldery
 - CoB - Colonel stony sandy loam, 1-8 percent slopes, very bouldery
 - CgB - Croghan loamy fine sand, 1-8 percent slopes
 - CrB - Croghan loamy fine sand, 1-8 percent slopes, very bouldery
 - CgC - Croghan fine sandy loam, 5-15 percent slopes
 - CrC - Croghan fine sandy loam, 8-15 percent slopes, very bouldery
 - CgD - Croghan loamy fine sand, 5-25 percent slopes
 - CrD - Croghan loamy fine sand, 15-25 percent slopes, very bouldery
 - HmB - Hermon sandy loam, 1-8 percent slopes
 - LaB - Lamorne silt loam, 1-8 percent slopes, very bouldery
 - MoC - Monadnock fine sandy loam, 5-15 percent slopes, very bouldery
 - MoD - Monadnock very fine sandy loam, 15-25 percent slopes, very bouldery
 - MPB - Monadnock-Peru Complex, 1-8 percent slopes, very bouldery
 - MPC - Monadnock-Peru Complex, 8-15 percent slopes, very bouldery
 - MPD - Monadnock-Peru Complex, 15-25 percent slopes, very bouldery
 - PeA - Peru fine sandy loam, 0-3 percent slopes, extremely bouldery
 - PeB - Peru sandy loam, 1-8 percent slopes, extremely bouldery
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 - PeD - Peru sandy loam, 15-25 percent slopes, extremely bouldery
 - RLB - Roundabout-Lamorne Complex, 1-8 percent slopes, very bouldery
 - ScA - Scantic silt loam, 0-3 percent slopes, very bouldery
 - SkB - Skerry fine sandy loam, 1-8 percent slopes, very bouldery
 - SrC - Skerry fine sandy loam, 3-15 percent slopes
 - SkC - Skerry cobbly fine sandy loam, 8-15 percent slopes, very bouldery
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- NOTES:
1. PARCEL BOUNDARY DEPICTED IS BASED ON SURVEY PERFORMED BY KEITH BLANCHARD, PLS. OF PLUSGA & DAY LAND SURVEYORS, PLAN TITLED, BOUNDARY SURVEY 1,115 ACRES +/-, ELLIOT JORDAN & SON, INC.
 2. LIDAR TOPOGRAPHIC INFORMATION PROVIDED BY AMERICAN FOREST MANAGEMENT.
 3. SITE PLAN BASED ON NAD83 UTM ZONE 19, US FEET.
 4. VERTICAL CONTROL VERIFIED BY PLUSGA & DAY LAND SURVEYORS AND SET TO NAVD88 DATUM.
 5. PARCEL IS IDENTIFIED AS MAP HA007, PLAN 01, LOTS 1,3,4,1 AND 14.1, BY MAINE LAND USE PLANNING COMMISSION.
 6. PARCEL DEED: BOOK 6020, PAGE 38.
 7. LAND USE ZONING: 696 ACRES WITHIN D-CI ZONE, 419 ACRES ZONED M-GN.
 8. PROTECTED NATURAL RESOURCES SHOWN PROVIDED BY ATLANTIC RESOURCE CO, LLC. REFER TO PROTECTED NATURAL RESOURCES REPORT, THREE RIVERS SOLAR PROJECT, DATED AUGUST 26, 2019 FOR SPECIFIC DETAILS.
 9. SOILS SURVEY PERFORMED BY ATLANTIC RESOURCES CO, LLC.

- LEGEND
- - - - - PROPERTY LINE
 - - - - - PROJECT BOUNDARY LINE
 - - - - - LIMIT OF CLASS C - MEDIUM HIGH INTENSITY SOIL SURVEY SERVICES
 - - - - - EXISTING ROADS
 - - - - - TREE LINE
 - - - - - TRANSMISSION R.O.W. LINE
 - - - - - STREAM
 - - - - - CONTOURS
 - - - - - WETLAND
 - - - - - CANADIAN RICE GRASS AREA HIGH DENSITY
 - - - - - CANADIAN RICE GRASS AREA MEDIUM DENSITY
 - - - - - CANADIAN RICE GRASS AREA LOW DENSITY
 - - - - - CANADIAN RICE GRASS (1-10 Plants)
 - - - - - SOIL BOUNDARY
 - - - - - SOIL LABEL
 - - - - - 250FT SIGNIFICANT VERNAL POOL HABITAT



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Stormwater Management Plan

Existing Site Plan

Three Rivers Solar
Township 16 MD
Hancock County, ME.

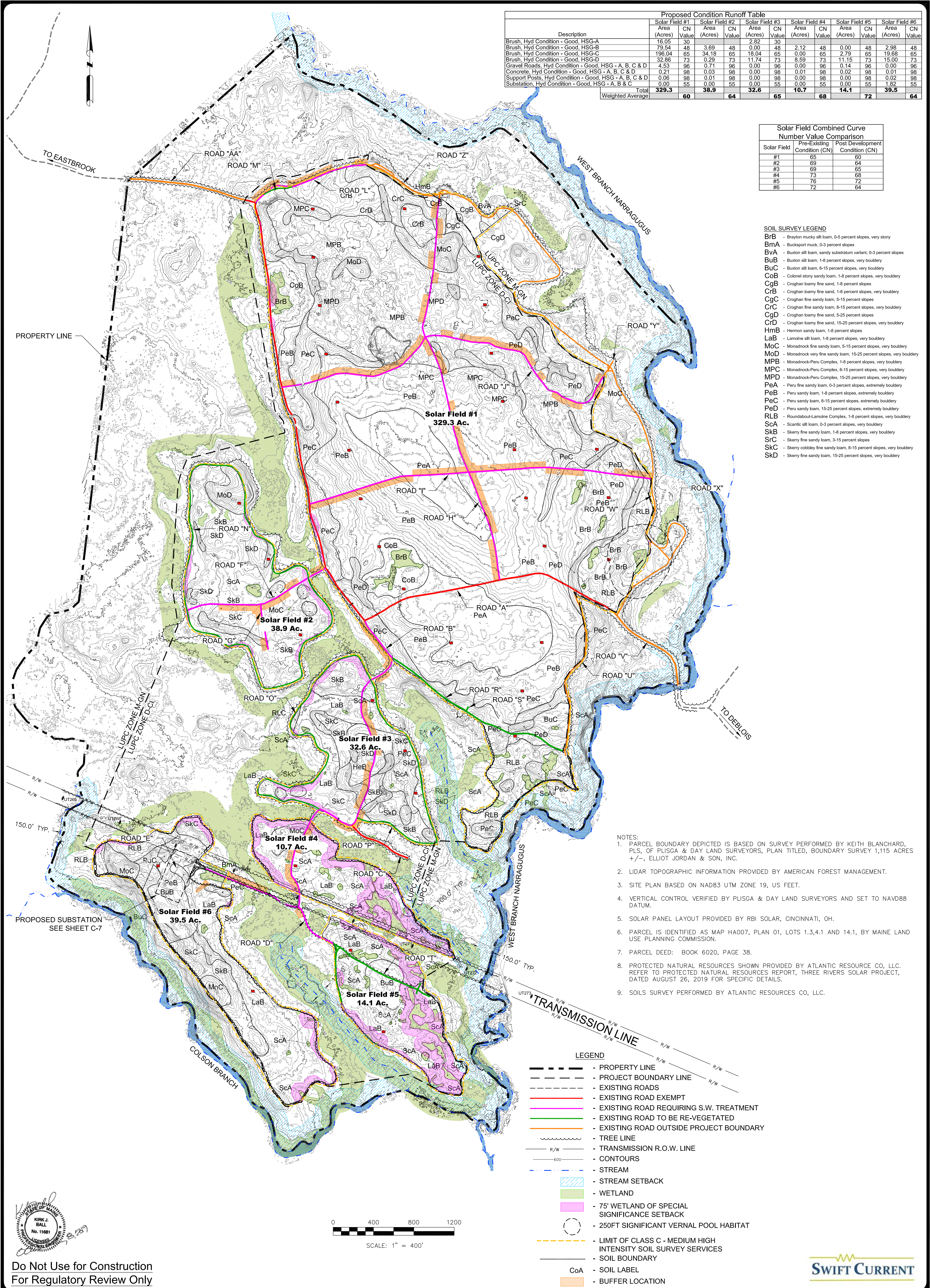
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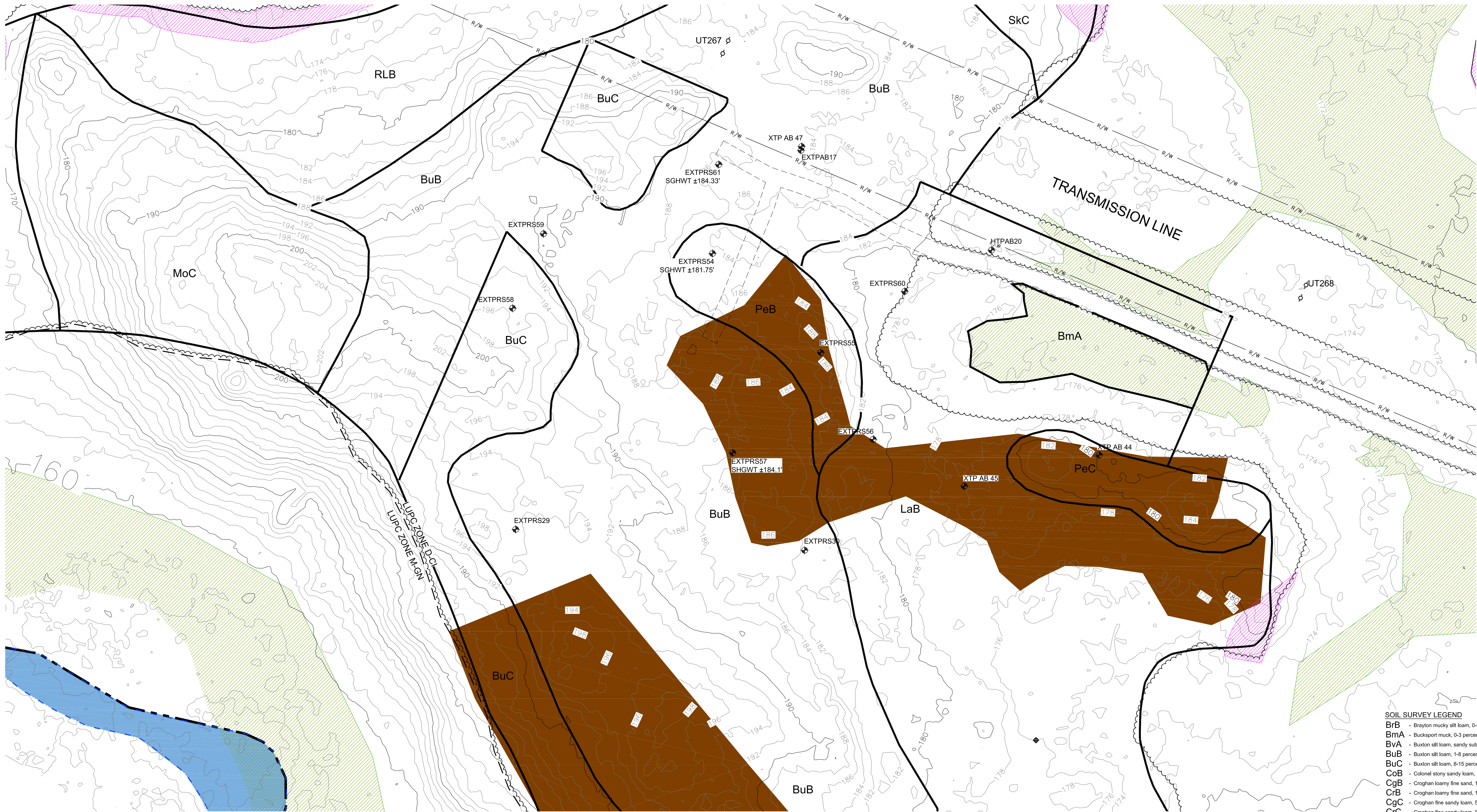
Drwn By: BPG
Desg By: BPG / KJB
Chkd By: KJB
Aprvd By: KJB
Date: 10/8/2019

No.	Revision Description	Drwn	Chkd	Date
-	-	-	-	-

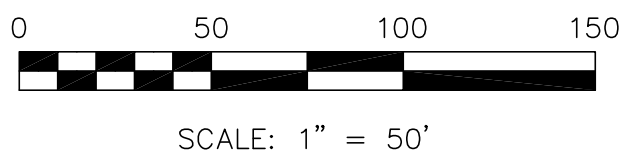


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- LEGEND**
- PROPERTY LINE
 - PROJECT BOUNDARY LINE
 - EXISTING ROAD
 - TREE LINE
 - TRANSMISSION R.O.W. LINE
 - STREAM
 - CONTOURS
 - UTILITY POLE
 - WETLAND
 - 75' WETLAND OF SPECIAL SIGNIFICANCE SETBACK
 - SOIL BOUNDARY
 - SOIL LABEL
 - CANADIAN RICE GRASS (1-10 Plants)
 - CANADIAN RICE GRASS AREA HIGH DENSITY
 - TEST PITS

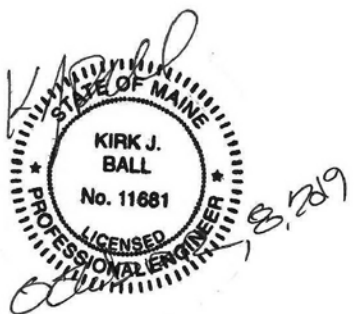


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 - SOILS SURVEY PERFORMED BY ATLANTIC RESOURCES CO, LLC.
 - 2-FOOT CONTOURS REMOVED FOR CLARITY.

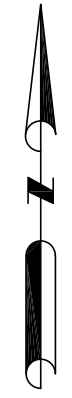
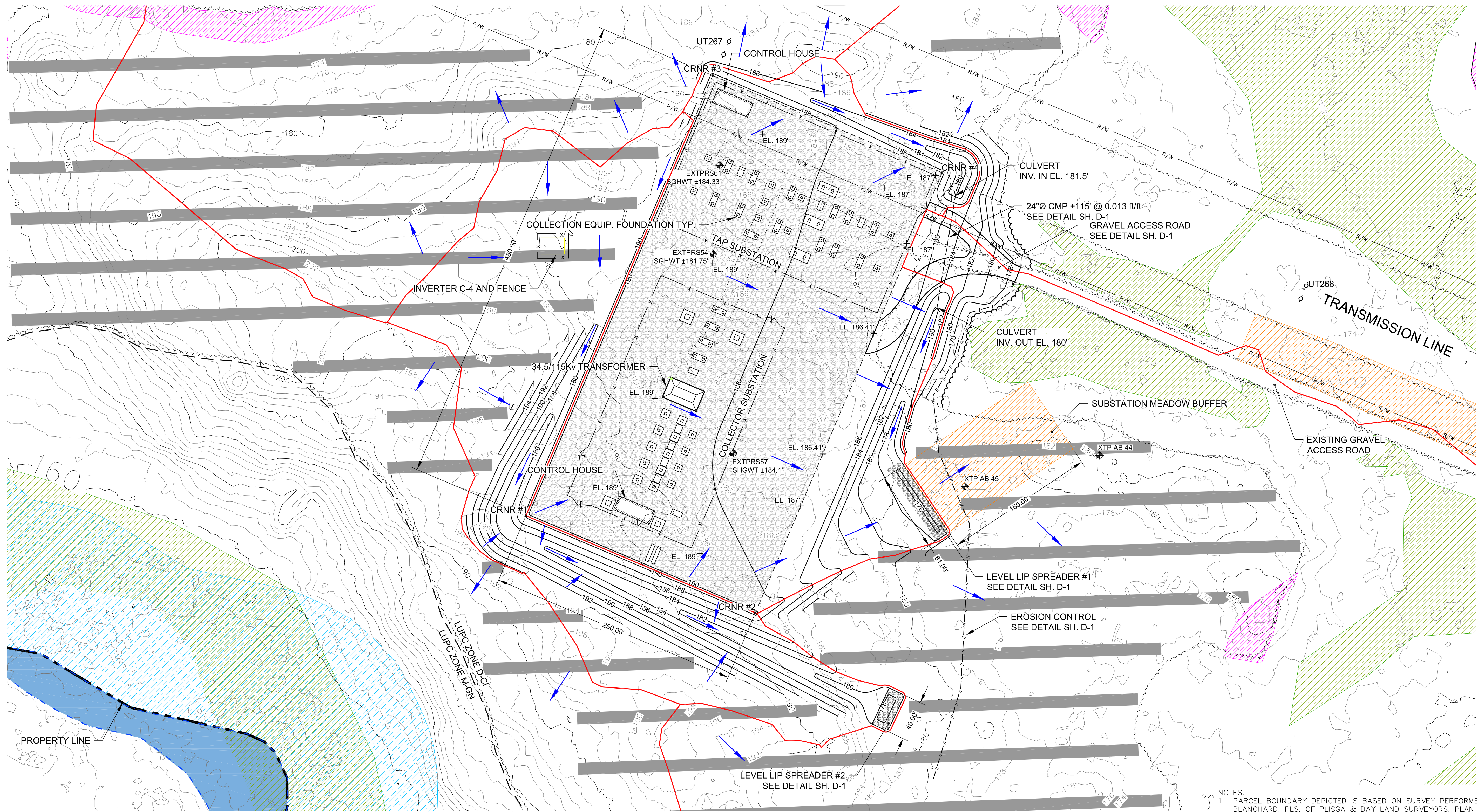
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No.		Revision Description		Drwn		Chkd		Date	
ACHERON ENGINEERING SERVICES Engineering, Environmental & Geologic Consultants www.AcheronEngineering.com 147 Main St Newport, ME 04953 (207)-568-5700									
Stormwater Management Plan Substation Location Existing Conditions Site Plan Three Rivers Solar Township 16 MD Hancock County, ME.									
Job Number: 80900									
Drawing No: C-6									
Sheet 7 of 12									



PROPERTY LINE

EXISTING

- PROPERTY LINE
- PROJECT BOUNDARY LINE
- EXISTING ROAD
- TREE LINE
- TRANSMISSION R.O.W. LINE
- CONTOURS
- UTILITY POLE
- WETLAND
- 75' WETLAND OF SPECIAL SIGNIFICANCE SETBACK
- 150' RIVER SETBACK

LEGEND

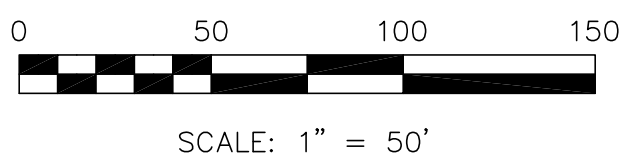
PROPOSED

- BUFFER LOCATION
- CONTOURS
- 8' CHAIN LINK PERIMETER FENCE
- NEW SUBSTATION YARD
- DRAINAGE BOUNDARY
- FLOW DIRECTION
- TEST PITS
- TREE LINE
- CULVERT
- EROSION CONTROL BERM
- LOCATION POINT
- SPOT ELEVATIONS
- SOLAR PANELS

Description	Proposed Area (SF)		Amount of Area Treated (SF)			
	Developed	Impervious	Developed	BMP	Impervious	BMP
Substation Foot Print (480' x 250')	120,000	6,932	113,068	Stone & Gravel Base	6,932	Meadow Buffer
Regraded Area	50,645	0	35,928	Stone & Gravel Base	0	Meadow Buffer
Totals	170,645	6,932	148,996		6,932	

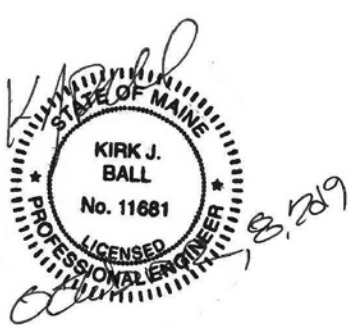
Percent of Developed Area Treated: 87%
Percent of Impervious Area Treated: 100%
Note: Regraded Gravel Substation Access Part of Linear Portion of Project.

Substation Level Lip Spreader Length Calculation Table					
BMP	Acres of Impervious Area (Acres)	Acres of Landscaped Area (Acres)	Berm Length per Acre of Impervious Area (Ft/Acre)	Berm Length per Acre of Landscaped Area (Ft/Acre)	Length of Level Lip Spreader (Ft)
Meadow Buffer with Stone Bermed Level Lip Spreader	0.16	0.82	200	60	81



LOCATION POINT TABLE			
LABEL	NORTHING	EASTING	DESCRIPTION
CRNR #1	16244383.2022	1871359.6579	SOUTHWEST CORNER OF SUBSTATION
CRNR #2	16244285.6145	1871589.8245	SOUTHEAST CORNER OF SUBSTATION
CRNR #3	16244825.1220	1871547.0265	NORTHWEST CORNER OF SUBSTATION
CRNR #4	16244727.5342	1871777.1930	NORTHEAST CORNER OF SUBSTATION

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 - SOILS SURVEY PERFORMED BY ATLANTIC RESOURCES CO, LLC.
 - SUBSTATION LAYOUT BASED ON DESIGN PROVIDED BY SGC ENGINEERING, AUGUSTA, MAINE.
 - SEE INDEX SHEET FOR DETAILS REGARDING EROSION CONTROL.



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Stormwater Management Plan
Substation Location
Proposed Conditions Site Plan

Three Rivers Solar
Township 16 MD
Hancock County, ME.

Job Number:
80900

Drawing No:
C-7

Sheet 8 of 12

Drwn By: BFG
Desg By: BFG / KJB / SGC
Chkd By: KJB
Aprvd By: KJB
Date: 10/21/2019

No.	Revision Description	Drwn	Chkd	Date

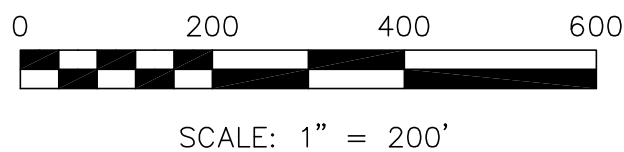
Road Grading Table				
Road I.D.	Grade Road to Buffer	Start Station	End Station	Plan Sheet #
B	B1	0+00	6+00	C-3
	B2	6+09	7+41	C-3
	B3	10+10	15+83	C-3
	B4	16+70	21+55	C-4
	B5	21+55	25+13	C-4
	B6	28+40	31+84	C-4
	B7	31+84	32+73	C-4
	B8	33+20	36+00	C-4
	B9	41+20	45+30	C-4
	D1	0+08	1+13	C-4
D	F1	0+08	1+48	C-3
	F2	3+00	4+40	C-3
	F3	4+40	7+41.85	C-3
G	F4	7+41.85	11+53.85	C-3
	G1	0+00	1+93	C-3
	G2	3+40	4+55	C-3
H	H1	0+90	2+40	C-2
	H2	2+40	4+35	C-2
	H3	5+75	7+50	C-2
	H4	7+90	8+80	C-2
	H5	10+10	12+90	C-2
	H6	14+45.53	16+20	C-2
	H7	16+20	18+40	C-2
	H8	21+20	28+51.68	C-3
	H9	28+51.68	35+00	C-3
	H10	35+00	39+61.98	C-3
I	I1	0+08.13	10+65	C-3
	I2	10+65	16+10.62	C-3
	I3	16+27.71	23+85	C-3
	I4	23+85	27+60	C-3
	I5	30+65	34+38	C-3
	J1	0+08.05	1+35	C-2
	J2	3+05	15+86.21	C-2
	J3	17+55	18+65	C-2
	J4	19+40	27+45	C-2
	J5	28+40	29+25	C-2
J	J6	30+85	34+00	C-2
	J7	35+30	36+80	C-2
	J8	36+80	37+61	C-2
	L1	0+09.49	2+86	C-2
	L2	3+90	8+65	C-2
	L3	10+90	12+06	C-2
L				

*See Site Plan Road Grading for Direction to Super Elevate Roads.

- NOTES:
1. PARCEL BOUNDARY DEPICTED IS BASED ON SURVEY PERFORMED BY KEITH BLANCHARD, PLS. OF PLUSGA & DAY LAND SURVEYORS, PLAN TITLED, BOUNDARY SURVEY 1,115 ACRES +/-, ELLIOT JORDAN & SON, INC.
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 7. PARCEL DEED: BOOK 6020, PAGE 38.
 8. PROTECTED NATURAL RESOURCES SHOWN PROVIDED BY ATLANTIC RESOURCE CO, LLC. REFER TO PROTECTED NATURAL RESOURCES REPORT, THREE RIVERS SOLAR PROJECT, DATED AUGUST 26, 2019 FOR SPECIFIC DETAILS.
 9. SOILS SURVEY PERFORMED BY ATLANTIC RESOURCES CO, LLC.
 10. SUBSTATION LAYOUT BASED ON DESIGN PROVIDED BY SGC ENGINEERING, AUGUSTA, MAINE.
 11. SEE INDEX SHEET FOR DETAILS REGARDING EROSION CONTROL.
 12. REGRADE ROADS AS INDICATED BY SUPERELEVATING EXISTING ROADS IN THE DIRECTION SHOWN ON SITE PLAN. REFER TO ROAD GRADING TABLE FOR SPECIFIC LOCATION OF REGADING.



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- LEGEND
- PROPERTY LINE
 - PROJECT BOUNDARY LINE
 - EXISTING ROADS
 - EXISTING ROAD EXEMPT
 - EXISTING ROAD REQUIRING S.W. TREATMENT
 - EXISTING ROAD TO BE RE-VEGETATED
 - EXISTING ROAD OUTSIDE PROJECT BOUNDARY
 - TREE LINE
 - TRANSMISSION R.O.W. LINE
 - STREAM
 - CONTOURS
 - WETLAND
 - TEST PIT LABEL
 - BUFFER LOCATION
 - GATE
 - 4'-0" x 8'-0" PROJECT SIGN
 - DIRECTION OF ROAD GRADE SEE DETAIL SH. D-1
 - EROSION CONTROL BERM

Drwn By: BFG
Desg By: BFG / KJB
Chkd By: KJB
Apprd By: KJB
Date: 10/2/2019

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(352)-796-6236
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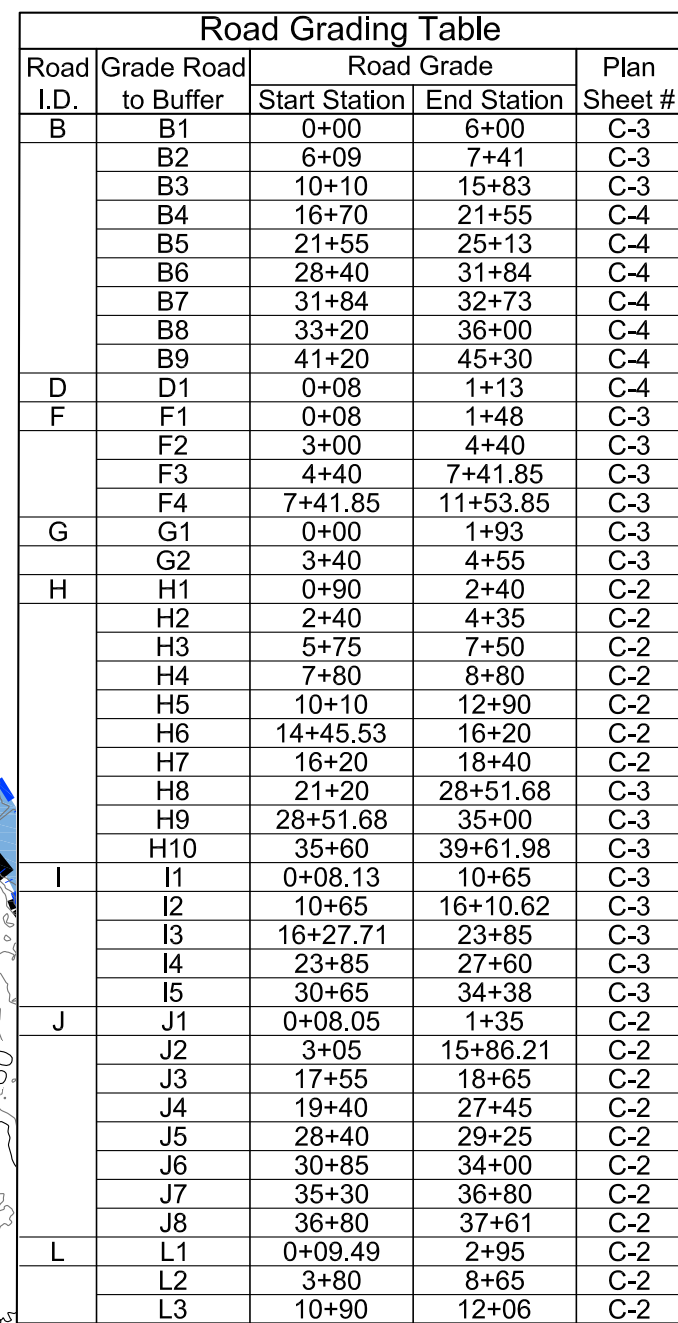
Stormwater Management Plan
Site Plan Road Grading North Section

Three Rivers Solar
Township 16 MD
Hancock County, ME.

Job Number:
80900

Drawing No:
C-8

Sheet 9 of 12



*See Site Plan Road Grading for Direction to Super Elevation Roads.

No.	Revision Description	Drawn	Chkd	Date

Drawn By: BPG
 Desg By: BPG / KJB
 Chkd By: KJB
 Apprd By: KJB
 Date: 10/8/2019

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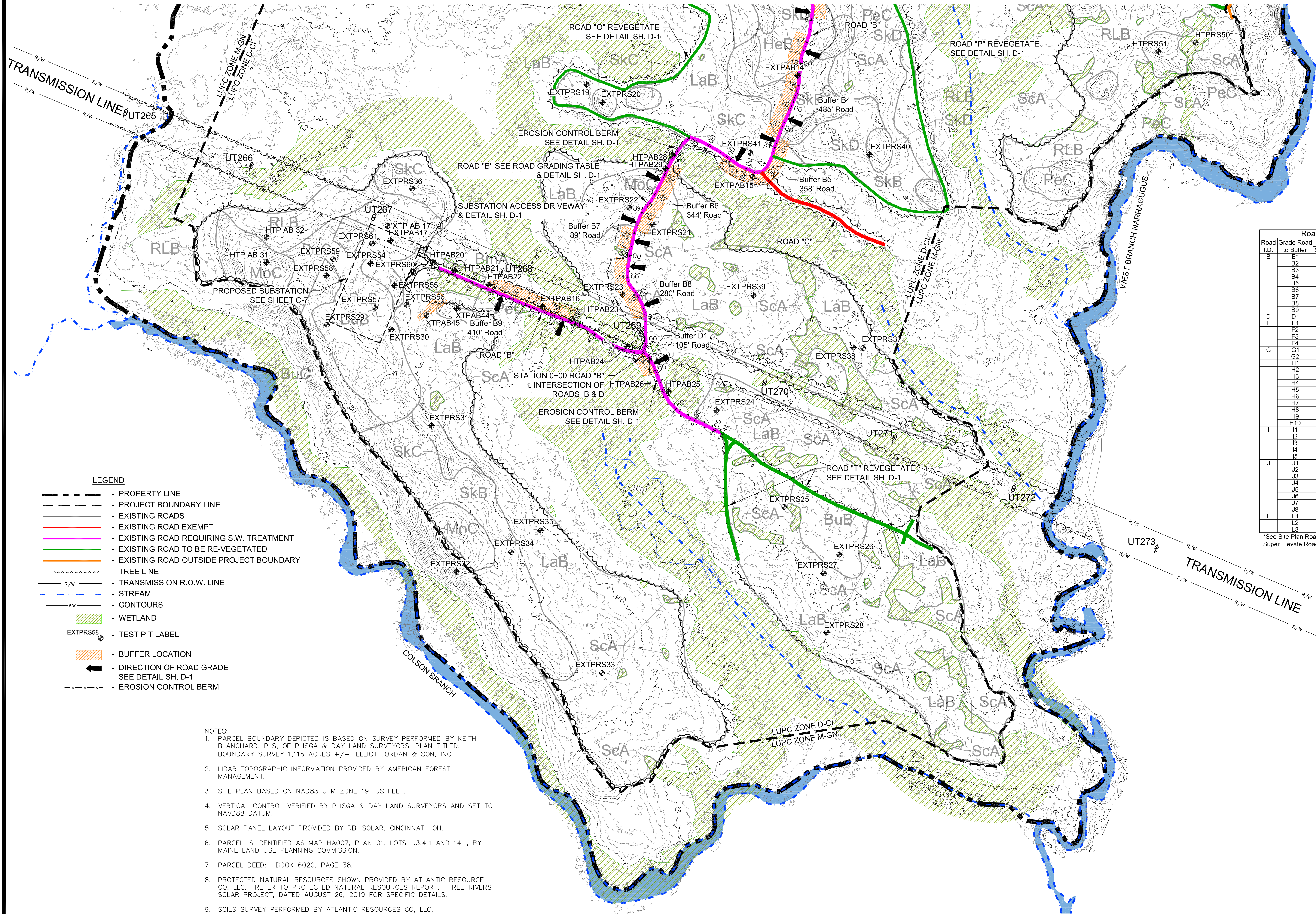
Stormwater Management Plan

Job Number:
80900

Drawing No:
C-9

Sheet 10 of 12





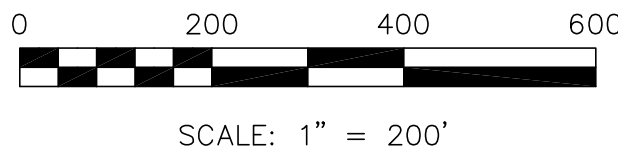
Road Grading Table				
Road I.D.	Grade Road to Buffer	Road Grade		Plan Sheet #
B	B1	0+00	6+00	C-3
	B2	6+09	7+41	C-3
	B3	10+10	15+83	C-3
	B4	16+70	21+55	C-4
	B5	21+55	25+13	C-4
	B6	28+40	31+84	C-4
	B7	31+84	32+73	C-4
	B8	33+20	36+00	C-4
	B9	41+20	45+30	C-4
	D1	0+08	1+13	C-3
D	F1	0+08	1+48	C-3
	F2	3+00	4+40	C-3
	F3	4+40	7+41.85	C-3
	F4	7+41.85	11+53.85	C-3
G	G1	0+00	1+93	C-3
	G2	3+40	4+55	C-3
H	H1	0+90	2+40	C-2
	H2	2+40	4+35	C-2
	H3	5+75	7+50	C-2
	H4	7+80	8+80	C-2
	H5	10+10	12+90	C-2
	H6	14+45.53	16+20	C-2
	H7	16+20	19+40	C-2
	H8	21+20	28+51.68	C-3
	H9	28+51.68	35+00	C-3
	H10	35+60	39+61.98	C-3
I	I1	0+08.13	10+65	C-3
	I2	10+65	16+10.62	C-3
	I3	16+27.71	23+85	C-3
	I4	23+85	27+60	C-3
	I5	30+65	34+38	C-3
	I6	30+65	34+38	C-3
J	J1	0+08.05	1+35	C-2
	J2	3+05	15+86.21	C-2
	J3	17+55	18+65	C-2
	J4	19+40	27+45	C-2
	J5	28+40	29+25	C-2
	J6	30+85	34+00	C-2
	J7	35+30	36+80	C-2
	J8	36+80	37+61	C-2
L	L1	0+09.49	2+95	C-2
	L2	3+80	8+65	C-2
	L3	10+90	12+06	C-2

*See Site Plan Road Grading for Direction to Super Elevate Roads.

- NOTES:
1. PARCEL BOUNDARY DEPICTED IS BASED ON SURVEY PERFORMED BY KEITH BLANCHARD, PLS. OF PLISGA & DAY LAND SURVEYORS, PLAN TITLED, BOUNDARY SURVEY 1,115 ACRES +/-, ELLIOT JORDAN & SON, INC.
 2. LIDAR TOPOGRAPHIC INFORMATION PROVIDED BY AMERICAN FOREST MANAGEMENT.
 3. SITE PLAN BASED ON NAD83 UTM ZONE 19, US FEET.
 4. VERTICAL CONTROL VERIFIED BY PLISGA & DAY LAND SURVEYORS AND SET TO NAVD88 DATUM.
 5. SOLAR PANEL LAYOUT PROVIDED BY RBI SOLAR, CINCINNATI, OH.
 6. PARCEL IS IDENTIFIED AS MAP HA007, PLAN 01, LOTS 1,3,4,1 AND 14.1, BY MAINE LAND USE PLANNING COMMISSION.
 7. PARCEL DEED: BOOK 6020, PAGE 38.
 8. PROTECTED NATURAL RESOURCES SHOWN PROVIDED BY ATLANTIC RESOURCE CO, LLC. REFER TO PROTECTED NATURAL RESOURCES REPORT, THREE RIVERS SOLAR PROJECT, DATED AUGUST 26, 2019 FOR SPECIFIC DETAILS.
 9. SOILS SURVEY PERFORMED BY ATLANTIC RESOURCES CO, LLC.
 10. SUBSTATION LAYOUT BASED ON DESIGN PROVIDED BY SGC ENGINEERING, AUGUSTA, MAINE.
 11. SEE INDEX SHEET FOR DETAILS REGARDING EROSION CONTROL.
 12. REGRADE ROADS AS INDICATED BY SUPERELEVATING EXISTING ROADS IN THE DIRECTION SHOWN ON SITE PLAN. REFER TO ROAD GRADING TABLE FOR SPECIFIC LOCATION OF REGADING.



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Stormwater Management Plan
Site Plan Road Grading South Section

Three Rivers Solar
Township 16 MD
Hancock County, ME.

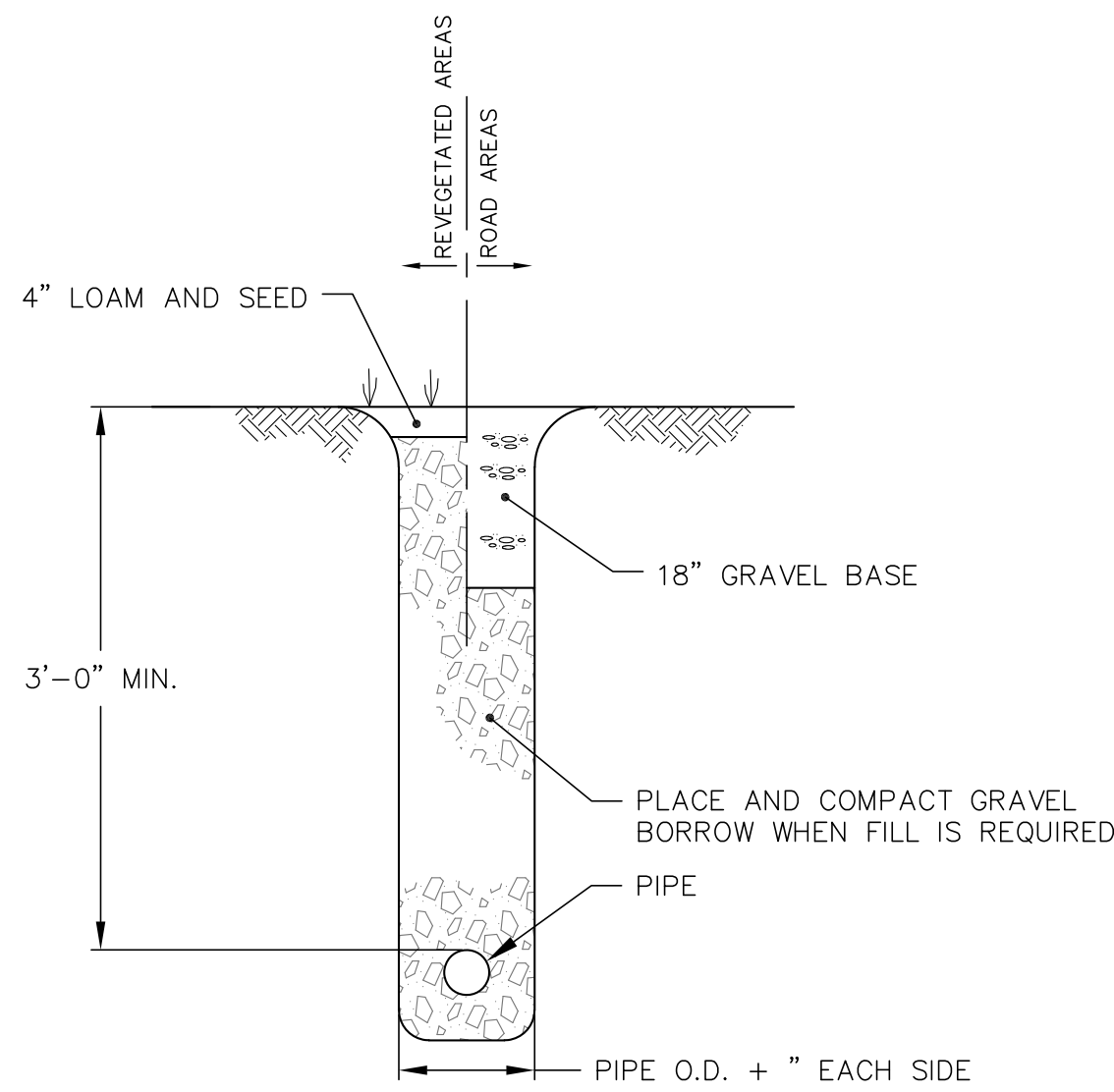
Job Number:
80900

Drawing No:
C-10

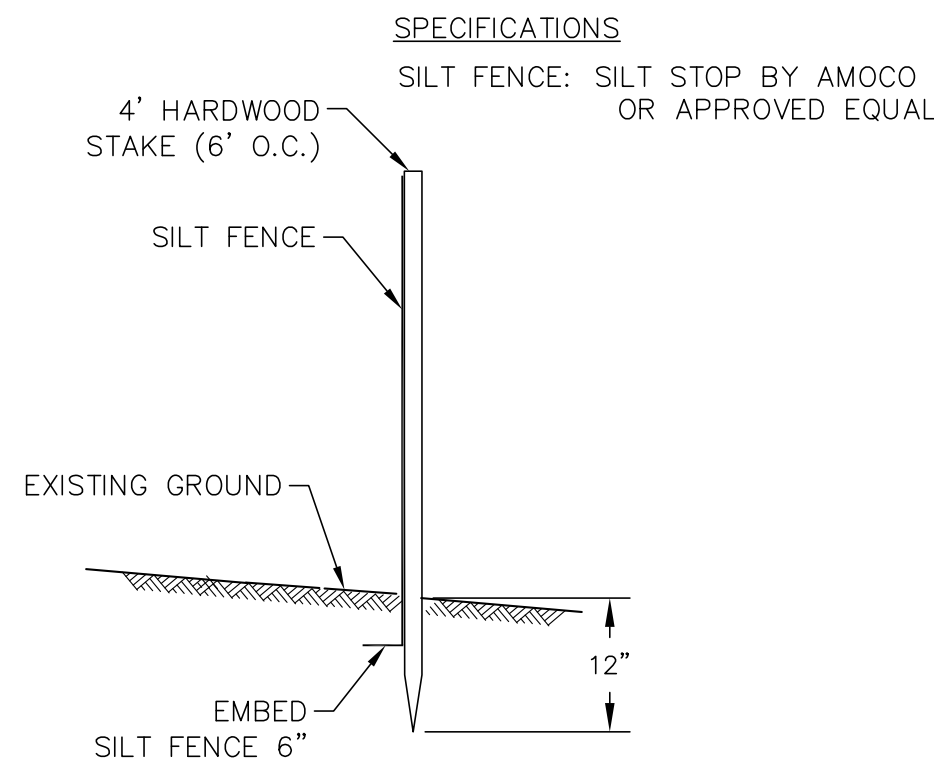
Sheet 11 of 12

No.	Revision Description	Drwn	Chkd	Date

Drwn By: BFC	Desg By: BFC / KJB	Chkd By: KJB	Aprvd By: KJB	Date: 10/21/2019
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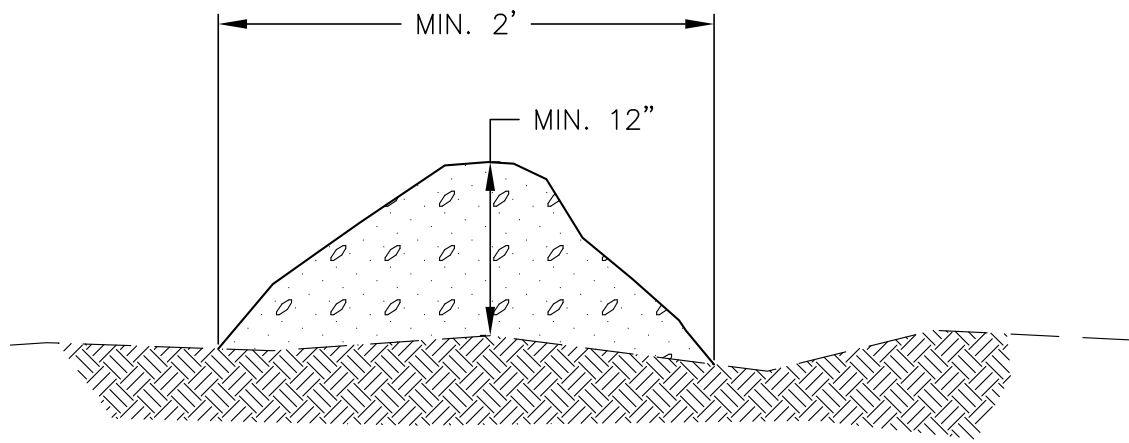


TYPICAL TRENCH DETAIL
NOT TO SCALE

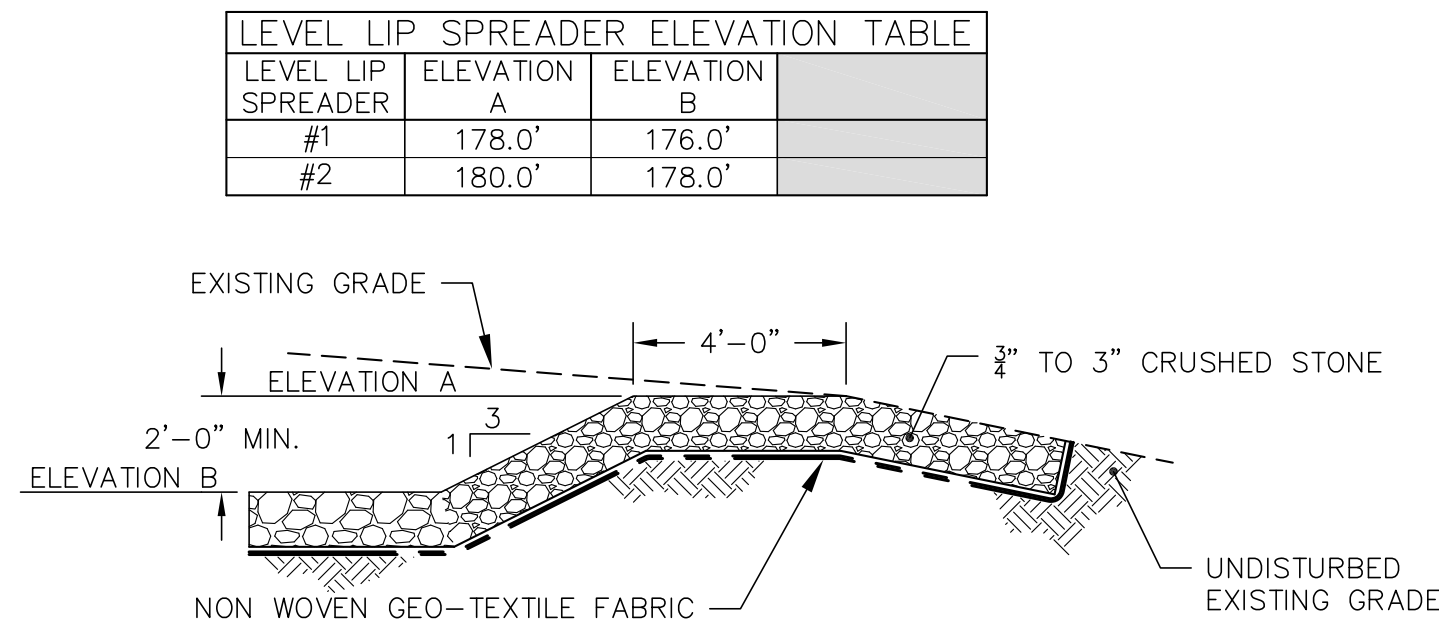


SILT FENCE DETAIL
NOT TO SCALE

NOTE:
IN LIEU OF SILT FENCE EROSION CONTROL MIX CAN BE USED IF CONDITIONS BELOW ARE MET:
FOLLOW MAINE EROSION AND SEDIMENT CONTROL BEST MANAGEMENT PRACTICES 2016.
EROSION CONTROL MIX BERM:
THE ECM BERM SHOULD BE A MINIMUM OF 12" HIGH AND A MINIMUM OF TWO FEET WIDE. ON LONGER OR STEEPER SLOPES, THE BERM WILL NEED TO BE WIDER AND HIGHER. BERMS COMPOSED OF ECM CAN BE RESHAPED WHEN NECESSARY.
EROSION CONTROL MIX:
THE MIX MUST BE WELL-GRADED WITH AN ORGANIC COMPONENT THAT IS BETWEEN 50 AND 100% OF DRY WEIGHT, AND THAT IS COMPOSED OF FIBROUS AND ELONGATED FRAGMENTS. THE MINERAL PORTION OF THE MIX SHOULD BE NATURALLY INCLUDED IN THE PRODUCT WITH NO LARGER ROCKS (>4") OR LARGE AMOUNTS OF FINES (SILTS AND CLAYS). IN STUMP GRINDING, THE MINERAL SOIL ORIGINATES FROM THE ROOT BALL AND SHOULD NOT BE REMOVED BEFORE GRINDING. THE MIX SHOULD BE FREE OF REFUSE, MATERIAL TOXIC TO PLANT GROWTH OR UNSUITABLE MATERIAL (BARK CHIPS, GROUND CONSTRUCTION DEBRIS OR REPROCESSED WOOD PRODUCTS).

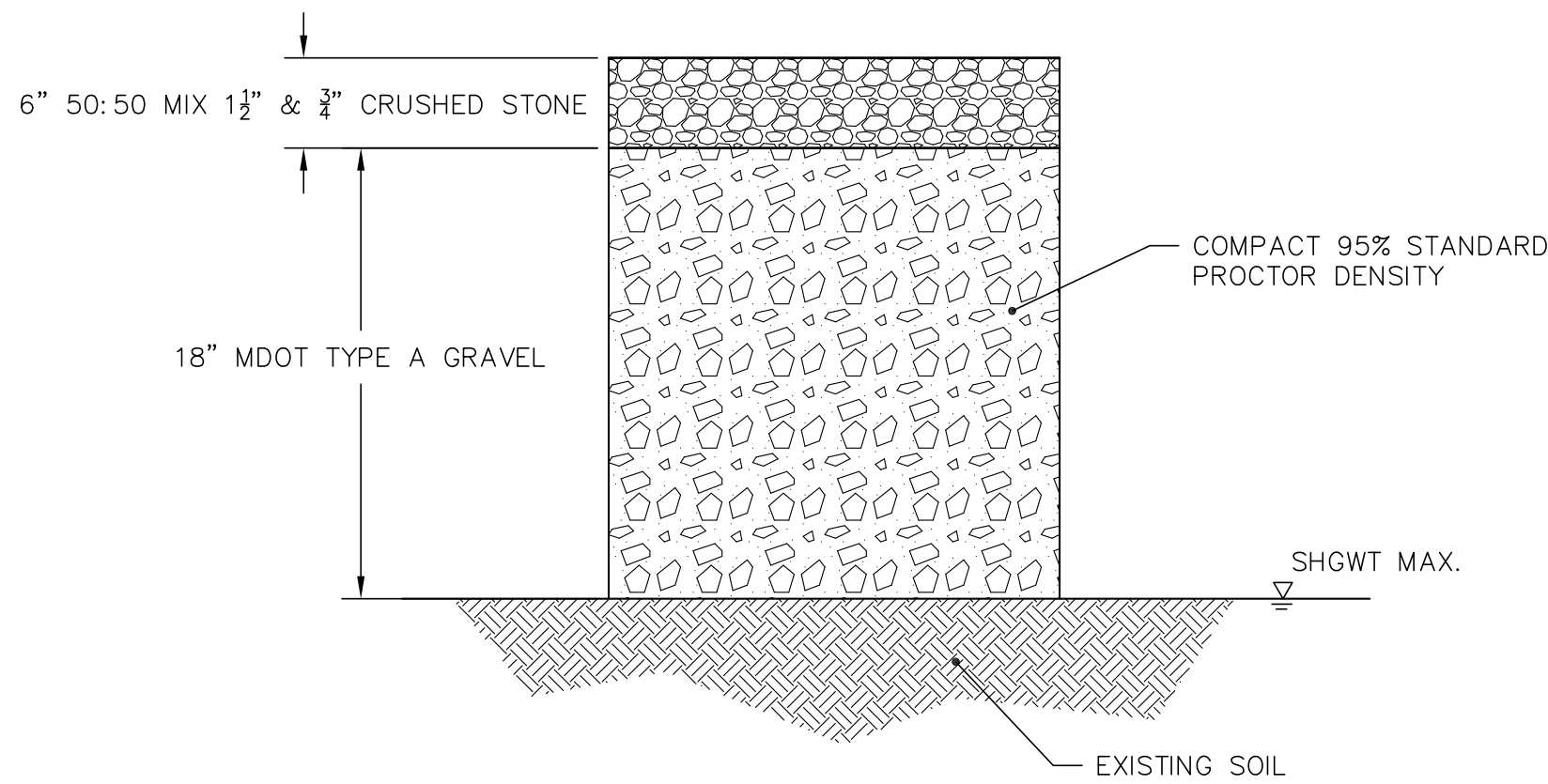


EROSION CONTROL MIX BERM DETAIL
SCALE: NTS

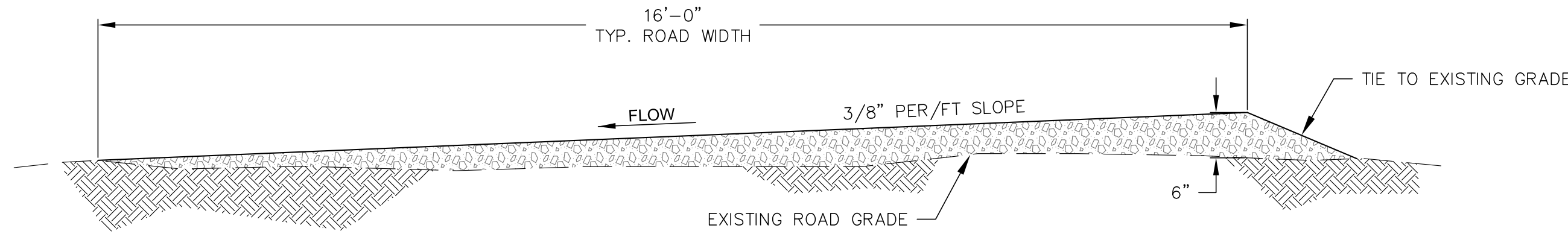


LEVEL LIP SPREADER DETAIL
NOT TO SCALE

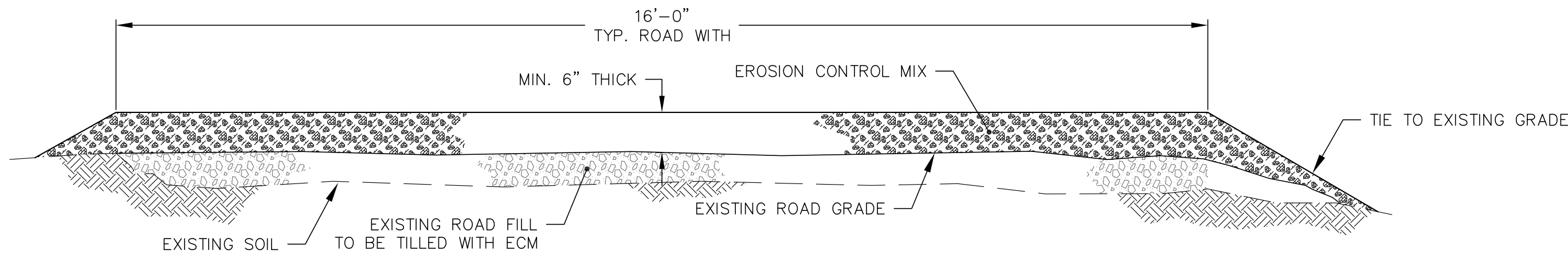
NOTE:
INSPECTIONS BY A PROFESSIONAL ENGINEER SHALL CONSIST OF WEEKLY VISITS TO THE SITE TO INSPECT EACH LEVEL SPREADER'S CONSTRUCTION, STONE BERM MATERIAL AND PLACEMENT, SETTLING BASIN FROM INITIAL GROUND DISTURBANCE TO FINAL STABILIZATION OF THE LEVEL SPREADER.



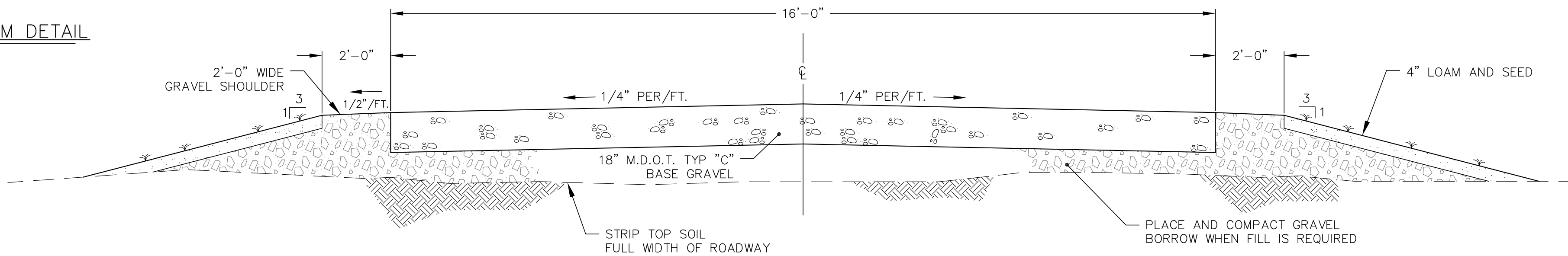
SUBSTATION SUBBASE PROFILE
SCALE: NTS



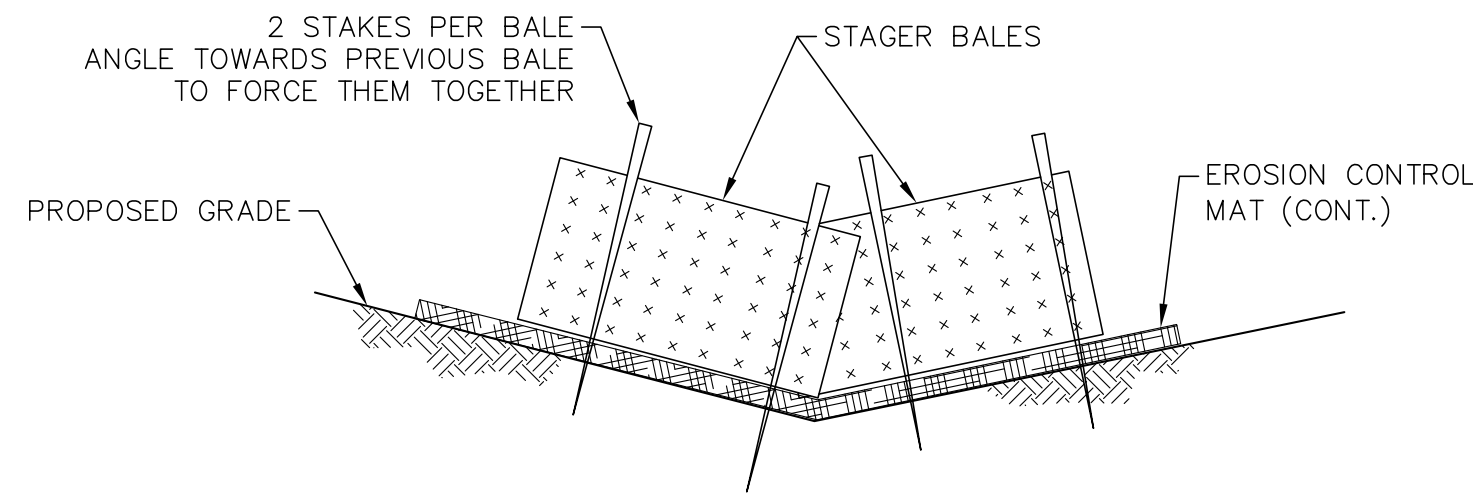
ROAD GRADING DETAIL
SCALE: NTS



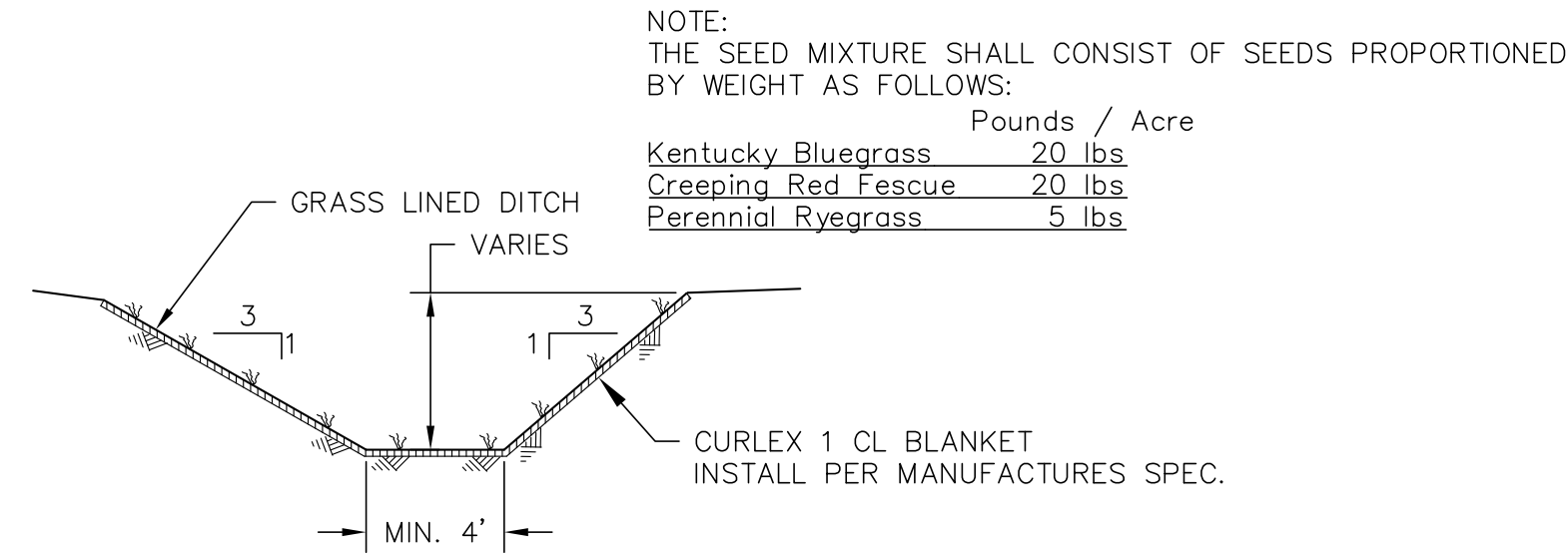
ROAD RE-VEGETATION DETAIL
SCALE: NTS



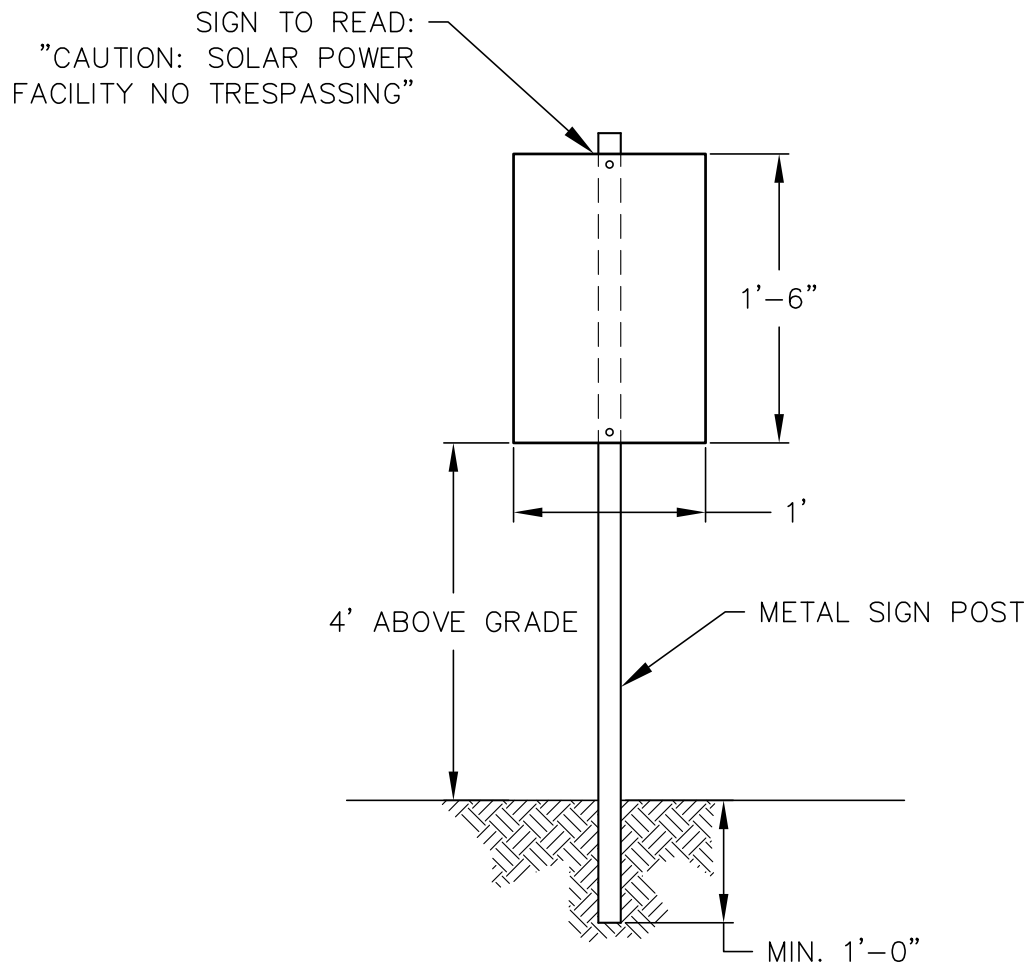
PROPOSED SUBSTATION ACCESS DRIVEWAY
SCALE: NTS



HAY BALE CHECK DAM DETAIL
NOT TO SCALE



GRASS LINED COLLECTION SWALE DETAIL
NOT TO SCALE



NO TRESPASSING SIGN DETAIL
SCALE: NTS

NOTE:
SIGNS SHOULD BE PLACED AT A MAXIMUM OF 100' SPACING ALONG PROJECT BOUNDARY.

No.	Revision Description	Drwn	Chkd	Date

Drwn By: BFG	Desg By: BFG / KJB
Chkd By: KJB	Aprvd By: KJB
Date: 10/21/2019	

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Acheron International, Inc.

Three Rivers Solar Project
Construction Details
Three Rivers Solar
Township 16 MD
Hancock County, ME.

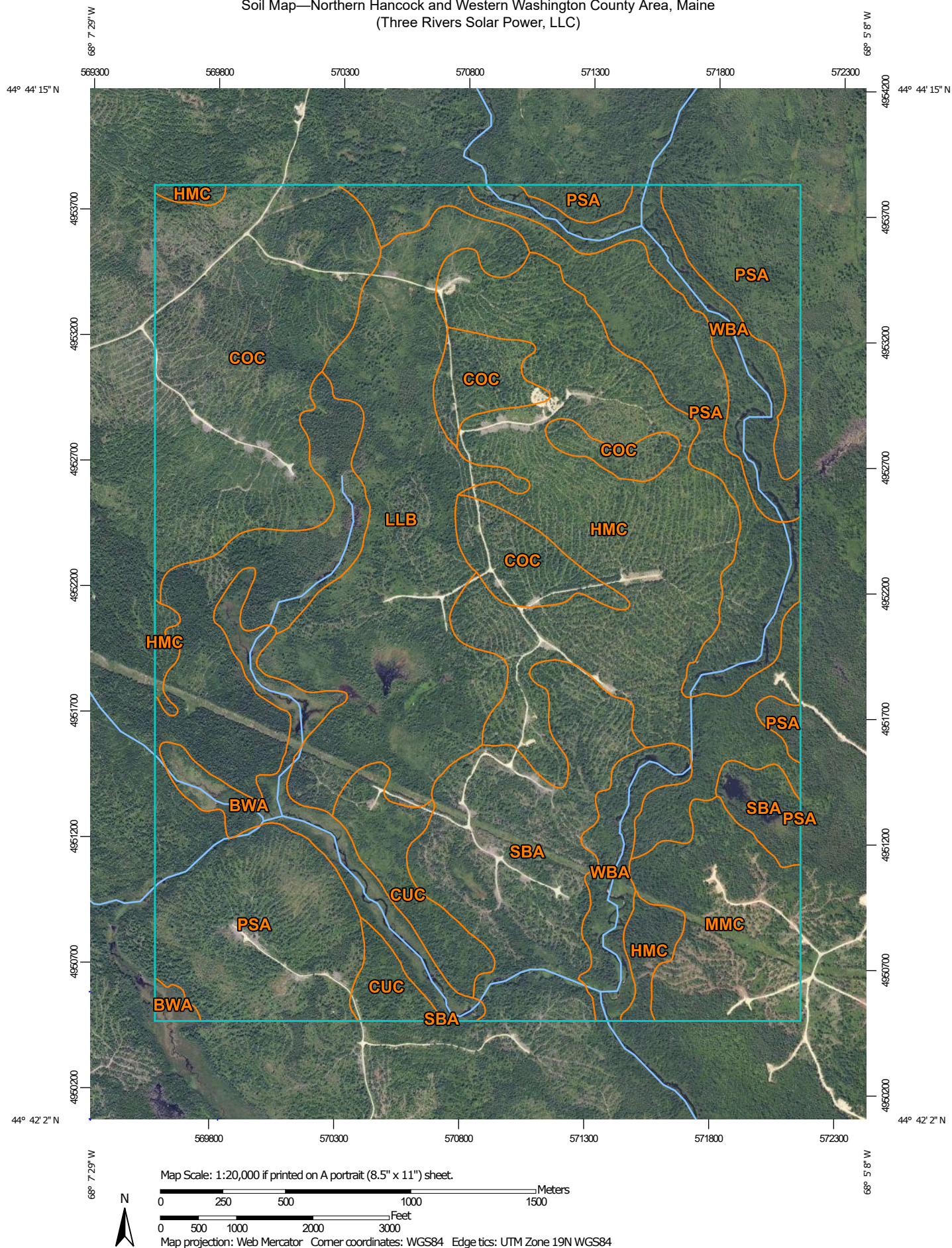
Job Number:
80900

Drawing No:
D-1

Sheet 12 of 12

Appendix F
SCS-Soils Map


Soil Map—Northern Hancock and Western Washington County Area, Maine
(Three Rivers Solar Power, LLC)




Soil Map—Northern Hancock and Western Washington County Area, Maine
(Three Rivers Solar Power, LLC)


MAP LEGEND

Area of Interest (AOI)

 Area of Interest (AOI)

Soils

 Soil Map Unit Polygons

 Soil Map Unit Lines

 Soil Map Unit Points

Special Point Features



Blowout



Borrow Pit



Clay Spot



Closed Depression



Gravel Pit



Gravelly Spot



Landfill



Lava Flow



Marsh or swamp



Mine or Quarry



Miscellaneous Water



Perennial Water



Rock Outcrop



Saline Spot



Sandy Spot



Severely Eroded Spot



Sinkhole



Slide or Slip



Sodic Spot



Spoil Area



Stony Spot



Very Stony Spot



Wet Spot



Other



Special Line Features

Water Features



Streams and Canals

Transportation



Rails



Interstate Highways



US Routes



Major Roads



Local Roads

Background



Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:24,000.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service

Web Soil Survey URL:

Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Northern Hancock and Western Washington County Area, Maine

Survey Area Data: Version 9, Sep 16, 2019

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Jul 27, 2010—Aug 31, 2010

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
BWA	Bucksport and Wonsqueak mucks, 0 to 2 percent slopes	83.6	3.9%
COC	Colonel-Skerry-Brayton association, 0 to 15 percent slopes, very stony	342.5	16.1%
CUC	Colton-Hermon association, 5 to 15 percent slopes, very bouldery	65.4	3.1%
HMC	Hermon-Monadnock-Peru complex, 0 to 15 percent slopes, very bouldery	393.9	18.5%
LLB	Lamoine-Scantic-Colonel complex, 0 to 8 percent slopes, very stony	294.1	13.8%
MMC	Masardis-Adams complex, 3 to 15 percent slopes	107.2	5.0%
PSA	Pushaw-Swanville association, 0 to 3 percent slopes	519.3	24.4%
SBA	Scantic-Biddeford complex, 0 to 3 percent slopes	199.8	9.4%
WBA	Wonsqueak and Bucksport mucks, 0 to 2 percent slopes, frequently flooded	126.6	5.9%
Totals for Area of Interest		2,132.4	100.0%