ATTACHMENT 8: EROSION CONTROL PLAN

A. Introduction

The following plan has been developed to provide a strategy for controlling erosion and sedimentation associated with the Project both during and after construction.

Details of erosion and sedimentation control during construction of roadways and turbine pads can be found in the civil design plan included within Attachment 5 Civil Engineering Plan Set, Sheet C-410 Erosion Control Notes and Civil Details.

Soil erosion is the detachment of soil particles by water, ice, gravity, or wind. This is a naturally occurring process that also can be caused by human activities that involve soil disturbance. Soil erosion can lead to sedimentation when eroded soil particles are carried by water and deposited and can have adverse effects on aquatic and terrestrial natural resources.

The erosion potential for projects involving soil disturbance on mountainsides can be very high. Large watersheds comprised of steep slopes and shallow-to-bedrock soils (with a low capacity to absorb water) can result in unusually large volumes of runoff moving at high velocities. These factors can contribute to erosion of disturbed soils and lead to sedimentation downstream. However, the linear nature of the Project design, along with carefully designed stormwater management and erosion control measures, reduces the potential for substantive erosion and sedimentation downstream from the Project. In addition, the Applicant is proposing construction of the Project in smaller segments (as described in Section B), thereby reducing the extent of exposed, disturbed soils at any given time. Western Maine plans to utilize MDEP's Third-Party Inspection Program and will contract an independent environmental inspector approved by the MDEP.

B. Construction of Roads, Turbine Pads, and Substation

Construction of all roads, turbine pads, and the substation shall be performed in accordance with design specifications, which have been developed to avoid changing the runoff characteristics, of adjacent undisturbed surroundings. It is best to construct the roads in the spring, summer, or fall. Winter construction also is possible; however, techniques for overwinter construction and stabilization, as explained in Section D, shall be used. The roads will be constructed in segments. Each segment shall not exceed an area that can be stabilized within 1 week. While it is acceptable to clear vegetation from the entire road system in one effort, any further construction involving soil disturbance or grading must be done incrementally. Clearing is defined as the cutting and removing of over-story vegetative cover. After clearing, erosion control barriers must be installed. Only then can grubbing and earthwork commence. Grubbing is defined as the removal of grass, stumps, roots, shrubs, and low trees, and it is the initial action that exposes soils to erosive forces. Earthwork is defined as the movement of soil by mechanical means. Earthwork includes excavation, filling, shaping, trenching, placement of gravel, and grading. Sediments trapped by erosion control barriers will be removed during construction in accordance with Project specifications.

Each segment of road shall be properly finished and stabilized before removing the erosion control barriers. Temporary and permanent erosion and sedimentation control techniques proposed as part of the Project are described in the following sections.

C. Transmission Line Construction

Only existing roads will be used to access the transmission line during construction and no new impervious area will be created. The transmission line along Stream Road and the distribution line to the O&M building and additional erosion control measures will be installed as necessary. The installation of the transmission and distribution lines

will create very little chance of erosion as new soils should not be displaced, as only poles need to be set and wire strung. However, erosion control methods will be implemented when needed, according to the following "toolbox" system (see Attachment 5 Civil Engineering Plan Set, Sheet C 411):

- In areas showing a high ground water table, or where a high-water table is suspected, timber matting should be used to avoid damaging the existing surface;
- In areas where there is a high possibility of erosion, erosion control barriers will be used;
- If underdrainage is opened during the course of construction, slash can be used to seal the rut; and
- Any area that is damaged during construction must be restored upon completion.

D. Temporary Erosion Control Measures

Exposed soils shall be seeded, mulched, and stabilized. Temporary seeding and mulching will be used to create temporary vegetated cover that will reduce erosion and sedimentation by stabilizing disturbed areas that will not be brought to final grade within 30 days and up to 1 year. This is the most efficient way to control sheet and rill erosion.

Temporary Vegetation planted in compliance with the Temporary Seeding Specifications in Table 8-1 will be applied to exposed soils that are not to be fine-graded within 30 days of grubbing or earthwork.

Where soil has been compacted by construction operations, loosening the soil to a depth of 2 inches will occur before applying seed. Mulch will be applied over all seeded areas.

Temporary Mulching will be performed on exposed soils to protect them from erosion and aid the growth of vegetation. Hay or straw mulches, erosion control mix, and erosion control blankets can be used. Hay or straw mulches or erosion control mix can be applied to any disturbed slopes less than 2:1. Erosion control blankets or netted hay or straw mulches can be used to stabilize slopes between 2:1 and 1:1. Any slope greater than 2:1 that will not hold mulch, and seed will require riprap or other stabilization. The Project engineer, in consultation with the Third-Party Environmental Inspector, will determine the most practical mulch for each scenario at the site. In sensitive areas, such as within 100 feet of streams, wetlands, and in lake watersheds, temporary mulching must be applied within 7 days of exposing the soil and prior to storm events. In other areas, the time period can range from 14 to 30 days according to site conditions. Areas that have been seeded will be mulched immediately following seeding. Areas that cannot be seeded during the growing season (April 15–September 15) will be mulched for overwinter protection and will be seeded at the beginning of the next growing season. These areas will be mulched to a depth of 4 inches for the overwinter period. If permanent vegetation is desired, the mulch will be removed in the springtime, and the area will be seeded and re-mulched. Temporary mulching rates are shown in Table 8-2.

Hay or Straw Mulches shall be applied at a rate of two bales per 1,000 square feet and shall cover 75% to 90% of ground surface. If the mulch is applied to slopes between 2:1 and 1:1, netting will be used to anchor the mulch. Netting can be jute, wood fiber, or plastic. Only clean straw mulch will be used within wetlands and within 25 feet of state or federal jurisdictional streams.

Erosion Control Mix mulch will be used to prevent erosion. This mulch will consist of primarily organic material and may include shredded bark, stump grindings, composted bark or other acceptable products in compliance with Project specifications. The erosion control mix will be used as a stand-alone reinforcement on slopes up to 2:1, frozen ground or forested areas, and at the edge of gravel parking areas and areas under construction. Erosion control mix shall not be used within jurisdictional wetlands or waterbodies. Erosion control mix composition shall meet the standards listed in Attachment 5 Civil Engineering Plan Set, Sheet C-310 and Sheet C-311.

Table 8-1. Temporary Seeding Specifications

Seed Type	Pounds of Seed per Acre	Seeding Depth	Recommended Seeding Dates	Remarks
Winter Rye	112	1-1.5 inch (in.)	8/15 – 10/15	Good for fall seeding. Select a hardy species, such as Aroostook Rye.
Oats	80	1-1.5 in.	4/15 – 7/1 8/15 – 9/15	Best for spring seeding. Early seeding will die when winter weather moves in, but mulch provides protection.
Annual Rye Grass	40	0.25 in.	4/15– 7/1	Grows quickly but is of short duration. Use where appearance is important. With mulch, seeding may be done throughout growing season.
Sudan Grass	40	0.5-1 in.	5/15 – 8/15	Good growth during hot summer periods.
Perennial Rye Grass	40	0.25 in.	8/15 – 9/15	Good cover, longer lasting than annual rye grass. Mulching will allow seeding throughout growing season.
Dormant Seeding Mix Winter Rye/Annual Rye	112 40	1 in.	10/15 – 4/15	Refer to Temporary Mulching and/or Permanent Vegetation.

Table 8-2. Temporary Mulching Schedules

Maximum Expected Interim Period[1] (Days)	Temporary Mulching[2] (Hay)
0-7 (0-2)	None
7-30 (2-14)	2 bales per 1,000 square feet (sq.ft.)
30-60 (14-30)	2 bales per 1,000 sq.ft.
More than 7 days during winter season	4 bales per 1,000 sq.ft.

1. Values in parentheses indicates interim period for sensitive and critical areas. Interim Period is defined as any period where exposed soil is not actively being worked on.
2. Mulch application rates shall be doubled for winter construction.

Erosion Control Blankets can be used for slopes steeper than 2:1. These blankets are a combination of mulch and netting designed to retain soil moisture and modify soil temperature. Erosion control blankets should be used on the base of grassed waterways, steep slopes, and on disturbed soils within 100 feet of lakes, streams, and wetlands during the growing season (April 15–September 15). During the late fall and winter seasons (September 15–April

15), blankets also should be added to side slopes of grassed waterways and moderate slopes, in addition to areas mentioned above.

Topsoil will be stockpiled uphill of erosion and sediment control barriers for reuse onsite. These stockpiles will be placed in areas of minimal erosion, such as flat surfaces. Stockpiles remaining for extended periods of time will be stabilized and surrounded by erosion control barriers.

Stabilized Construction Exits will reduce the amount of sediment tracked onto public roads. The Project will have one permanent exit at the entrance of the site on Stream Road. All Project roads will contain a road surface topped with inch and one half minus stone, and the two road exits will not have any additional stabilization. However, if Western Maine's engineer or a Third-Party Environmental Inspector determine that a stabilized construction exit is warranted, Western Maine will employ the appropriate protective measures.

Maintenance will be conducted on all erosion control elements as needed. All mulches must be inspected weekly, especially after significant rainstorm events. Significant rainstorm events are defined as rainfall of a 0.5 inch or more. If less than 90% of the soil surface is covered in mulch, additional mulch will be immediately added. Nets must be inspected after all rainstorm events for failure. If washouts occur, the nets will be reinstalled after damage to the slope has been repaired. These inspections will take place until 95% of the soil is vegetated with grass or stabilized with mulch.

E. Temporary Sediment Barriers

Sediment barriers will be installed on the downhill side of all construction. Erosion control mix berms and geosynthetic berms will be used to intercept and retain small amounts of sediment from disturbed and unprotected areas during access and ridgeline road construction. Silt fences, hay bales, or other means may be used as determined by the Third-Party Environmental Inspector. Sediment barriers will not be installed in areas of concentrated flow. Sediment barriers shall be installed prior to any soil disturbance in the contributing drainage area above them. Silt fences or hay bales will be used in areas where entrenchment and driving stakes are possible. Erosion control mix berms or continuous contained berms will be used where soil cover is shallow or ground is frozen. Sediment barriers will be doubled within 100 feet of any wetland. The Project engineer, in consultation with the Third-Party Environmental Inspector, will determine the most practical sediment barrier for each scenario at the site.

Silt Fences utilize synthetic filter fabrics. The synthetic fabric is attached with a series of 1-inch square hardwood stakes. The filter fabric will be a pervious sheet of propylene, nylon, polyester, or ethylene yarn. The filter fabric will contain ultraviolet inhibitors and stabilizers to provide a minimum of 6 months of expected usable construction life at a temperature range of 0 degrees (^{o}) Fahrenheit (F) to 120^{o}F. The height of the silt fence shall not exceed 36 inches. If joints between the filter fabric are necessary, they will be spliced at stakes with an overlap of 6 inches. Stake spacing shall not exceed 6 feet. Ten (10) inches of the filter fabric shall be imbedded in a 4-inch-wide by 6-inch-deep trench located on the upgradient side of the barrier. The trench will then be backfilled and compacted over the filter fabric. Pre-fabricated silt fences are acceptable if installed to the manufacturer's standards.

Hay Bales will be placed in a single row, lengthwise along the contour, with ends tightly abutting adjacent hay bales. The hay bale barrier will be entrenched to a depth of 6 inches and backfilled. Soil backfill will be used to conform to the ground level on the downhill side and shall be built up against the uphill side of the barrier. At least two hardwood stakes shall be driven a minimum of 12 inches into the ground. The gaps between bales shall be wedged with hay to prevent water from leaking through the bales.

Erosion Control Mix Berms primarily consist of organic material and may include shredded bark, stump grindings, composted bark, or acceptable manufactured products. The mix will contain a well-graded mixture of particles and may contain rocks less than 4 inches in diameter. The mix also will abide by certain standards listed on Attachment

5 Civil Engineering Plan Set, Sheet C-410 (Erosion Control Notes and Civil Details). The erosion control mix berms must be placed along a relatively level contour. The barrier should be a minimum of 12 inches high, as measured on the uphill side of the barrier. These berms are very effective on frozen or heavily rooted ground. Erosion control berms will not be used within wetlands.

Geosynthetic Berms consist of a filter sock full of erosion control mix. The organic mix is placed in the synthetic tubular netting and performs as a sturdy sediment barrier. This method works well in areas where trenching is not possible, such as on frozen ground or bedrock outcrops. The detail is shown on Attachment 5 Civil Engineering Plan Set, Sheet C-410 (Erosion Control Notes and Civil Details).

Maintenance will be performed on all erosion control elements as needed. Sediment barriers will be inspected weekly and immediately after each significant rainfall event. They will be repaired if there is any sign of erosion or sedimentation below them. Damaged or degraded fabric on a silt fence will be replaced immediately. Sediment deposits should be removed after each storm event. They must be removed when deposits reach one-half the height of the barrier. Any sediment remaining after a barrier is no longer needed should be graded, prepared, and seeded.

F. Overwinter Construction and Stabilization

Overwinter construction and stabilization will be necessary if an area of construction has not been stabilized with a road gravel base, 75% mature vegetation cover, or riprap by November 15. The winter construction period is November 1 to April 15. Winter excavation and earthwork shall be conducted on no more than 1 acre of the site without stabilization at one time. Exposed areas are to be limited to areas (1) where work will occur within 15 days and (2) that can be mulched in 1 day prior to any snow event. Areas within 100 feet of any natural resource and lacking 75% mature vegetative cover shall be mulched by December 1 and protected with an erosion control cover. A double row of sediment barriers will be placed between the disturbed area and any natural resource during winter construction. When the ground is frozen, sediment barriers may consist of erosion control berms and continuous contained berms. Mulch application shall be doubled to four bales per 1,000 square feet of hay or straw mulch or a 4-inch layer of erosion control mix. Mulch will be applied after snow is removed to a 1-inch depth. All areas will be properly stabilized with anchored hay or straw or erosion control matting at the end of each day of final grading. Permanent seeding shall not be attempted by the contractor, unless advised by the engineer. Dormant seeding will be applied between October 15 and April 15 at the appropriate specified rates (Table 8-1).

Site Stabilization Schedule Before Winter

September 15	All disturbed areas must be seeded and mulched. All slopes will be stabilized, seeded, and mulched. All grass lined ditches must be stabilized with mulch or an erosion control blanket.
October 1	All disturbed areas to be protected with an annual grass must be seeded at a seeding rate of 3 pounds per 1,000 square feet and mulched.
November 15	All stone-lined ditches and channels must be constructed and stabilized. All slopes requiring riprap must be constructed by this date.
December 1	All disturbed areas where the growth of vegetation fails to be at least 3 inches tall or at least 75% of the disturbed soil is covered by vegetation, must be protected for over-winter.

All disturbed areas shall be inspected in the spring. Any damaged spots will be repaired. Spring seeding will commence as shown in Table 8-3. An established vegetative cover means a minimum of 85% to 90% of an area is vegetated with vigorous growth.

G. Permanent Erosion Control Measures

Permanent Vegetation cover will be used on most disturbed areas to permanently stabilize the soil and reduce sediment and runoff. Spring seeding usually gives the best results for all seed mixes. Permanent seeding will be done 45 days prior to the first killing frost or, as an alternative to permanent seeding, dormant seeding can be utilized with mulch after the first killing frost and before snowfall. Permanent seeding will be applied in compliance with specifications provided in Table 8-3.

Table 8-3. Permanent Seeding Specifications

September 15–May 15 (Over-winter)		May 15–September 15	
Seed Type	Percent by Weight	Seed Type	Percent by Weight
Winter Rye	80%	Red Fescue	50%
Red Fescue	10%	Sheep Fescue	25%
Sheep Fescue	5%	Red Top	5%
Red Top	1%	White Clover	10%
White Clover	2%	Annual Rye	10%
Annual Rye	2%		

Riprap Slope Stabilization will be used on slopes between 1:1 and ½:1 and in areas where existing conditions require it. Riprap is a permanent, erosion-resistant ground cover constructed of large, loose, angular or sub-angular rounded stone. Riprap protects the soil from concentrated runoff and slows the velocity of runoff which enhances the potential for infiltration. The application of riprap is composed of three sections. Before riprap is added to a slope, the surface is to be covered with a geosynthetic filter fabric or a gravel filter blanket. Once the filter fabric or blanket is secured, it is covered with a layer of riprap. These layers are stabilized at the toe of the slope with larger entrenched stones. The riprap will have a mean size (D_{50}) of 6 inches. The riprap can be produced on-site using a rock crusher, as long as it meets Project specifications. Any slope receiving riprap stabilization will first be cleared of trees, stumps, and other brush. If fill is added to the area, it will be compacted to 95% determined by Standard Proctor Density. The geotextile filter fabric should be placed directly on the prepared slope. The edges should overlap and be entrenched at the upper and lower ends of the slope. The entrenched toe can be secured with larger stone. The fabric will be anchored to the slope according to the manufacturer's recommendations. The riprap will then be added to its full thickness in one operation. The finished slope shall not contain pockets of small stones or clusters of large stones. Hand placing may be necessary to achieve a good distribution.

Riprap-stabilized slopes require inspections in the spring, in the fall, and after severe storms during construction and operation of the Project. Severe slumping or sliding may indicate that the slope is failing internally. Careful inspection of the land located on both sides of the riprap is necessary because of the potential for erosion to be accelerated in these areas.

Dust Control is necessary when disturbed soils are exposed to wind. When the soil dries out dusty conditions can occur. Dust can cause off-site damage, be a health hazard to humans, wildlife and plant life, or become a traffic safety hazard. Dust will be reduced by using phasing of construction to minimize the area of disturbed land at one

time. Mulching and vegetative cover also will be used to reduce dust, and rock crushers will utilize water sprays to control dust.

H. Permanent Erosion Control Devices

Riprap Ditches will be used to protect road surfaces from erosion and to slow runoff velocities. These riprap-lined ditches will be installed along the upgradient shoulder of proposed roads. Stormwater will be intercepted in these ditches, slowing runoff and preserving the condition of gravel roads. The ditch will be constructed in two layers. First, a layer of filter fabric is laid and secured, similar to riprap slope stabilization. Riprap is then added on the filter fabric cautiously. The riprap will be Maine Department of Transportation 703.29 Stone Ditch Protection specification and will have a D_{50} of 6 inches (shown on Attachment 5 Civil Engineering Plan Set, Sheet C-310). The riprap can be produced on-site using a rock crusher. The finished slope shall not contain pockets of small stone or clusters of large stones. Hand placing may be necessary to achieve a good distribution.

Rip rap ditches will be inspected semi-annually and appropriate maintenance such as removing sediment buildup, leaves, litter, or other debris from the bottom and side slopes, as well as repositioning stones to restore channel to original dimensions to be conducted as necessary.

Pipes/Culverts will be used to carry water from upgradient roadside ditches under the road. These culverts and pipes are spaced incrementally along the road to drain the stormwater based on flow anticipated stormwater flow characteristics and topographic conditions. The culverts vary between 12-inch and 36-inch pipes flared at both ends. Culvert inlets and outlets are detailed in Attachment 5 Civil Engineering Plan Set, Sheet C-303 and Sheet C-304.

The inlet and outlet of all culverts and pipes will be inspected in the spring, in late fall, and after significant rain events. Sediment collected at these locations will be removed, as needed, after each inspection to maintain capacity of the culverts.

Level Spreaders/Ditch Turnouts are used at the outlet of culverts and ditches to convert concentrated flow into sheet flow. Sheet flow is more natural and reduces erosion and the movement of sediment. Level spreaders must be installed with 0% grade on the spreader lip to ensure a uniform distribution of flow. Each level spreader shall have a riprap receiving area with the capacity to pass the flow without erosion. The receiving area shall be stable prior to the construction of the level spreader. If a vegetative cover is required downgradient, level spreaders must be installed during the growing season. Level spreaders and ditch turnouts are detailed in Attachment 5 Civil Engineering Plan Set, Sheet C-403 and Sheet C-404.

Level spreaders will be inspected in the spring, in late fall, and after significant rain events for signs of channelization or sedimentation. Damage to level spreaders or associated ditches will be repaired immediately. Level spreaders filled with sediment will be cleaned out regularly. Stones will be repositioned to restore original dimensions of the pool and create a uniform surface. Woody vegetation growing within the pool will be cut and removed.

Erosion and sedimentation control plans were prepared for the Project and are incorporated into the civil design plans (see Attachment 5 Civil Engineering Plan Set). During construction, a variety of stabilization measures will be used to prevent sedimentation from soils due to wind and water action. The locations and details of proposed stabilization measures are illustrated in the drawings provided in the Project's civil design plans. All erosion control and stabilization measures have been designed to adequately address the requirements of the basic stabilization standards as defined in Chapter 500, *Stormwater Management Rules*.

I. Conclusions

The Project was designed to comply with the Basic Standards and General Standards of Maine's Stormwater Law. The post-development drainage analysis shows a negligible increase in runoff volume for a 25-year storm event. A series of BMPs and buffers have been incorporated into the design to replicate pre-development conditions. The

Project's post-development drainage analysis shows no increase in peak flow rates; therefore, Western Maine is requesting a waiver from the Flooding Standard. The proposed low impact development BMPs and natural buffers will provide sufficient stormwater quantity and quality management without producing adverse impacts. A schedule of the proposed Project BMPs is provided in Exhibit 8-1 Schedule of Stormwater Best Management Practices. The proposed stormwater management system will be constructed and maintained in accordance with MDEP Standards and is designed to closely replicate pre-development stormwater conditions at the site, and therefore will not result in flooding or degradation of existing water quality in the Project area.

Exhibits

- Exhibit 8-1 Schedule of Stormwater Best Management Practices

EXHIBIT 8-1 SCHEDULE OF STORMWATER BEST MANAGEMENT PRACTICES

File: Moscow-Model
Date: 3/10/2021

Western Maine Renewable Energy Project

Stormwater Treatment Calculations:
Watersheds draining to the Kennebec River via Chase Chase Stream, Basset Brook, Austin Stream and Mink brook
Chapter 500, Stormwater Management, Section 4.B.(3).(c) describes a linear project
Required stormwater treatment of impervious area = 75%

BMP ID Legend
RSF = Road side Forested buffer
RSM = Road side Meadow buffer
BF = Forested buffer adjacent to road/small impervious area
BM = Meadow buffer adjacent to road/small impervious area
LSF = Forested level lip spreader buffer
LSM = Meadow level lip spreader buffer
DTF = Forested Ditch Turnout
DTM = Meadow Ditch Turnout

Road ID	Station Location				BMP ID	Soil HSG	Buffer Slope (ft./ft.)	Min. Flow Path Length (ft.)	Buffer or Stone Berm Length (ft.)	Impervious Area (acres)	Impervious Area Treated (acres)
Access Road-1	00+00	to	07+50	-	-	-	-	-	-	0.207	0.000
Access Road-1	07+50	to	19+25	R	RSM 03A	D	0.030	55	1175	0.324	0.324
Access Road-1	28+25	to	30+50	R	RSM 03B	D	0.030	55	225	0.062	0.062
Access Road-1	31+50	to	44+25	R	RSM 03C	D	0.030	55	1275	0.351	0.351
Access Road-1	44+25	to	44+50	-	-	-	-	-	-	0.007	0.000
Access Road-2	00+00	to	02+25	-	-	-	-	-	-	0.062	0.000
Access Road-2	02+25	to	13+50	R	LSF 02	C	0.022	100	67	0.310	0.310
Access Road-2	13+50		15+00	R	RSF 01	C	0.015	35	170	0.041	0.041
Access Road-2	15+00	to	16+25	-	-	-	-	-	-	0.034	0.000
Access Road-2	16+25	to	19+75	R	RSM 01	C	0.021	55	300	0.096	0.096
Access Road-2	19+75	to	22+50	R	RSF 02	C	0.035	35	300	0.076	0.076
Access Road-2	22+50	to	24+25	-	-	-	-	-	-	0.048	0.000
Access Road-2	24+25	to	26+00	R	LSF 01	C	0.025	100	125	0.048	0.048
Access Road-3	00+00	to	16+50	-	-	-	-	-	-	0.455	0.000
Access Road-3	16+50	to	23+00	L	LSF 04	D	0.093	150	107	0.179	0.179
Access Road-3	23+00	to	26+50	L	RSF 04	D	0.073	35	360	0.096	0.096
Access Road-3	26+50	to	28+50	R	BF 04	D	0.143	180	209	0.055	0.055
Access Road-3	28+50	to	32+00	R	RSF 05	D	0.122	35	335	0.096	0.096
Access Road-3	32+00	to	40+50	R	LSF 05	C	0.079	100	93	0.234	0.234
Access Road-3	40+50	to	59+50	-	-	-	-	-	-	0.523	0.000
Access Road-3	59+50	to	63+50	L	LSF 06	C	0.142	100	129	0.110	0.110
Access Road-3	63+50	to	67+50	-	-	-	-	-	-	0.110	0.000
Access Road-3	67+75	to	73+50	L	LSM 01	C	0.122	150	203	0.158	0.158
Access Road-3	73+50	to	84+00	L	LSM 02	C	0.135	150	135	0.289	0.289
Access Road-3	84+00	to	87+50	L	RSF 06	C	0.105	35	265	0.096	0.096
Access Road-3	87+50	to	93+00	-	-	-	-	-	-	0.152	0.000
Radar Tower 1 Access	00+00	to	01+00	-	BF 05	C/D	0.011	150	150	0.046	0.046
Radar Tower 2 Access	00+00	to	02+50	-	-	-	-	-	-	0.115	0.000
Radar Tower 2 Access	02+50	to	04+00	-	LSF 06	C	0.200	100	70	0.069	0.069
Radar Tower 3 Access	21+00	to	33+50	-	-	-	-	-	-	0.344	0.000
T01	Turbine Pad Access				LSF 01	C	0.025	100	125	0.082	0.082
T01	Crane Pad				LSF 01	C	0.025	100	125	0.149	0.149
T01	Turbine Gravel Apron				LSF 01	C	0.025	100	125	0.097	0.097
T02	Turbine Pad Access				LSF 02	C	0.022	100	70	0.056	0.056
T02	Crane Pad				LSF 02	C	0.022	100	70	0.149	0.149
T02	Turbine Gravel Ring				LSF 02	C	0.022	100	70	0.097	0.097
T03	Turbine Pad Access				BF 01	C	0.031	100	210	0.044	0.044
T03	Crane Pad				BF 01	C	0.031	100	210	0.149	0.149
T03	Turbine Gravel Ring				BF 01	C	0.031	100	210	0.097	0.097
T04	Turbine Pad Access				LSF 03	C	0.035	100	115	0.073	0.073
T04	Crane Pad				LSF 03	C	0.035	100	115	0.149	0.149
T04	Turbine Gravel Ring				LSF 03	C	0.035	100	115	0.097	0.097
T05	Turbine Pad Access				BF 02	C	0.030	100	105	0.045	0.045
T05	Crane Pad				BF 02	C	0.030	100	105	0.149	0.149
T05	Turbine Gravel Ring				BF 02	C	0.030	100	105	0.097	0.097
T06	Turbine Pad Access				BM 01	C	0.017	150	165	0.215	0.215
T06	Crane Pad				BM 01	C	0.017	150	165	0.149	0.149
T06	Turbine Gravel Ring				BM 01	C	0.017	150	165	0.097	0.097

T07	Turbine Pad Access	BM 02	D	0.010	150	200	0.246	0.246
T07	Crane Pad	BM 02	D	0.010	150	200	0.149	0.149
T07	Turbine Gravel Ring	BM 02	D	0.010	150	200	0.097	0.097
T08	Turbine Pad Access	BF 03	C	0.041	150	230	0.041	0.041
T08	Crane Pad	BF 03	C	0.149	150	230	0.149	0.149
T08	Turbine Gravel Ring	BF 03	C	0.097	150	230	0.097	0.097
T09	Turbine Pad Access	LSF 04	D	0.061	150	110	0.061	0.013
T09	Crane Pad	LSF 04	D	0.149	150	110	0.149	0.149
T09	Turbine Gravel Ring	LSF 04	D	0.097	150	110	0.097	0.097
T10	Turbine Pad Access	BF 04	D	0.061	180	208	0.061	0.061
T10	Crane Pad	BF 04	D	0.149	180	208	0.149	0.149
T10	Turbine Gravel Ring	BF 04	D	0.097	180	208	0.097	0.097
T11	Turbine Pad Access	LSF 05	C	0.041	100	95	0.062	0.062
T11	Crane Pad	LSF 05	C	0.149	100	95	0.149	0.149
T11	Turbine Gravel Ring	LSF 05	C	0.097	100	95	0.097	0.097
T12	Turbine Pad Access	LSF 06	C	0.041	100	130	0.043	0.043
T12	Crane Pad	LSF 07	C	0.149	100	130	0.149	0.149
T12	Turbine Gravel Ring	LSF 08	C	0.097	100	130	0.097	0.097
T13	Turbine Pad Access	LSM 01	D	0.041	150	203	0.044	0.044
T13	Crane Pad	LSM 01	D	0.149	150	203	0.149	0.149
T13	Turbine Gravel Ring	LSM 01	D	0.097	150	203	0.097	0.097
T14	Turbine Pad Access	BF 04	C	0.041	90	220	0.038	0.038
T14	Crane Pad	BF 04	C	0.149	90	220	0.149	0.149
T14	Turbine Gravel Ring	BF 04	C	0.097	90	220	0.097	0.097
Radar Tower 1	Radar Tower Pad	BF 05	C/D	0.110	150	150	0.230	0.230
Radar Tower 2	Radar Tower Pad	LSF 07	C	0.110	100	65	0.230	0.230
Radar Tower 3	Radar Tower Pad	BF 06	C	0.093	100	50	0.230	0.230
Substation	Substation Pad	LSF 08	C	0.110	100	300	1.313	1.313
						Totals:	**11.354**	**9.249**

Impervious Area Eliminated:

Impervious Area	Total Area (acres)
Existing Roads	0.000
Total:	**0.000**

Revised Totals:	**11.354**	**9.249**
Percentage Impervious Area Treated:		**81.46%**
Percentage Required:		**75.00%**