

NOTES:

- ASPECTS OF PLAN ARE APPROXIMATE AND DERIVED FROM AERIAL PHOTOGRAPHY.
- THE HORIZONTAL COORDINATE SYSTEM IS BASED ON NAD83 MASSACHUSETTS STATE PLANE (US SURVEY FEET). ELEVATIONS ARE BASED ON THE NAVD88 (US SURVEY FEET).
- EXISTING GROUND CONTOUR ELEVATIONS ARE BASED ON CONTOUR LINES FROM STATE OF MASSACHUSETTS LIDAR MAPPING, 2 FOOT CONTOUR INTERVAL.
- THE WETLAND LOCATIONS SHOWN WERE PROVIDED BY SILVA ENGINEERING.
- UTILITIES ARE NOT WARRANTED TO BE COMPLETE OR ACCURATE. CONTRACTOR SHALL CONTACT DIG SAFE BEFORE BEGINNING ANY EXCAVATION.
- THIS IS IN NO WAY A BOUNDARY SURVEY. FOR ALL BOUNDARY INFORMATION SEE PLAT BY SILVA ENGINEERING ASSOCIATES, P.C. ENTITLED "PLAN OF LAND, SITE, ASSESSOR'S MAP 117, LOT 1, RIVER STREET, HALIFAX, MASSACHUSETTS, PREPARED FOR V. S. HASEOTES & SONS" DATED 1-17-18.
- THIS IS A PRELIMINARY DESIGN PLAN. FINAL DESIGN WILL BE MODIFIED TO MATCH EQUIPMENT PURCHASED AND POSSIBLE PERMIT CONSTRAINTS REVEALED DURING PROJECT'S REVIEW.

LEGEND

- EXISTING POWER POLE / PROPOSED POLE
- EXISTING OVERHEAD POWER
- EXISTING GRADE CONTOUR LINES (10 FOOT INTERVALS)
- EXISTING GRADE CONTOUR LINES (2 FOOT INTERVALS)
- UNDERGROUND ELECTRIC AND COMMUNICATIONS ALONG AC GENERATION PATH WITH UNDERGROUND PULL BOXES
- UNDERGROUND ELECTRIC FOR AC FOR ARRAY GENERATION LOCATIONS - PROPOSED 50 KV STRING INVERTERS 99 TOTAL ON SITE
- PROJECT POWER SKID WITH INTERFACING TRANSFORMER AND 480V SWITCHBOARD
- APPROXIMATE PROPERTY LINES
- PROJECT FENCE
- PROPERTY LINES (LIMITS OF HALIFAX SOLAR PROJECT PARCEL)
- WETLANDS FROM SILVA ENGINEERING, SEE WETLAND REPORT
- TOWN OF HALIFAX WETLAND SETBACK 50' TO 100' FROM WETLAND
- TOWN OF HALIFAX "NO TOUCH" WETLAND SETBACK 0' TO 50' FROM WETLAND
- 100 YEAR FLOOD ZONE, AREAS WITHIN "ZONE A" FROM FEMA FLOOD INSURANCE RATE MAP NUMBER 25023C0300K, LAST REVISED 7-16-15
- PERMEABLE PORTION OF PROPOSED PROJECT ACCESS ROAD, SEE DETAIL
- IMPERMEABLE PORTION OF PROPOSED PROJECT ACCESS ROAD, SEE DETAIL
- POST CONSTRUCTION TREELINE

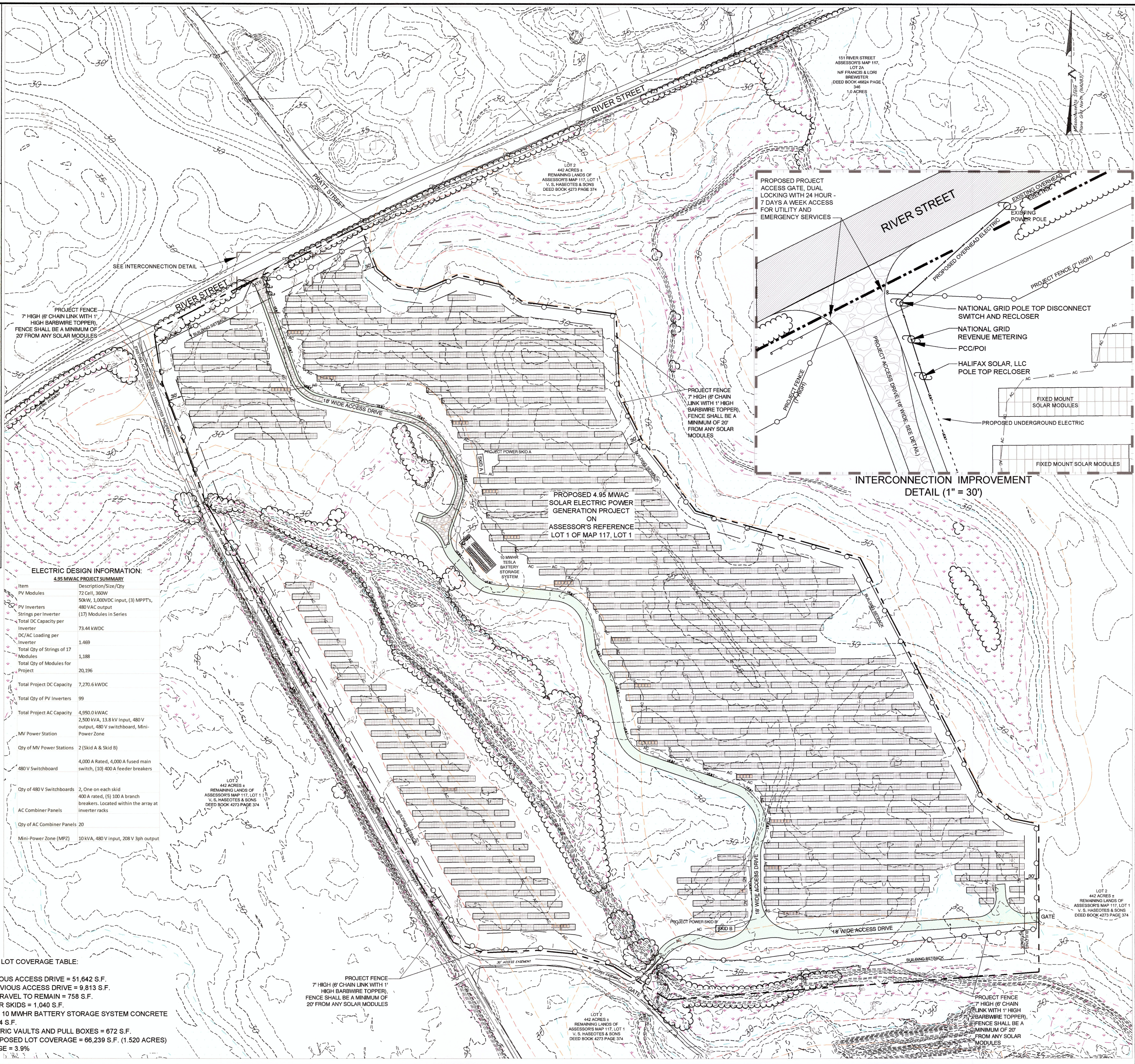
ELECTRIC DESIGN INFORMATION:

4.95 MWAC PROJECT SUMMARY

Item	Description/Size/Qty
PV Modules	72 Cell, 360W
PV Inverters	50kW, 1,000VDC input, (3) MPPTs, 480 VAC output
Strings per Inverter	(17) Modules in Series
Total DC Capacity per Inverter	73.44 kWDC
DC/AC Loading per Inverter	1.469
Total Qty of Strings of 17 Modules	1,188
Total Qty of Modules for Project	20,196
Total Project DC Capacity	7,270.6 kWDC
Total Qty of PV Inverters	99
Total Project AC Capacity	4,950.0 kWAC
	2,500 kVA, 13.8 kV input, 480 V output, 480 V switchboard, Mini-Power Zone
MV Power Station	
Qty of MV Power Stations	2 (Skid A & Skid B)
480 V Switchboard	4,000 A Rated, 4,000 A fused main switch, (10) 400 A feeder breakers
Qty of 480 V Switchboards	2, One on each skid 400 A rated, (5) 100 A branch breakers. Located within the array at inverter racks
AC Combiner Panels	
Qty of AC Combiner Panels	20
Mini-Power Zone (MPZ)	10 kVA, 480 V input, 208 V 3ph output

PROPOSED LOT COVERAGE TABLE:

NEW PERVIOUS ACCESS DRIVE = 51,642 S.F.
NEW IMPERVIOUS ACCESS DRIVE = 9,813 S.F.
EXISTING GRAVEL TO REMAIN = 758 S.F.
NEW POWER SKIDS = 1,040 S.F.
NEW TESLA 10 MWHR BATTERY STORAGE SYSTEM CONCRETE SLAB = 2,314 S.F.
NEW ELECTRIC VAULTS AND PULL BOXES = 672 S.F.
TOTAL PROPOSED LOT COVERAGE = 66,239 S.F. (1,520 ACRES)
% COVERAGE = 3.9%



HALIFAX SOLAR

River Street
Halifax, Massachusetts

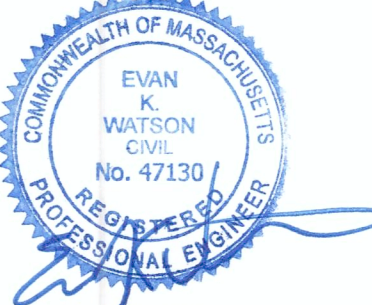


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SOURCE DATA LEGEND

MAPPING SOURCE DATA USED FOR PLAN COMPIATION

Civil Engineering:

Krebs and Lansing Consulting Engineers, Inc.
164 Main Street, Suite 201
Colchester, Vermont 05446

Electrical AC Design:

Applied High Voltage, LLC
403 New Karner Road
Albany, New York 12205

Electrical DC Design:

Brian Browning
Solar Power Engineering
272 Spring Hollow Lane
Montpelier, Vermont 05602

PROPERTY AND ZONING INFORMATION:

ASSESSOR'S REFERENCE: LOT 1 OF MAP 117, LOT 1
LAND OWNER: V.S. HASEOTES & SONS LP, C/O GARY R. ALGER, ESQ., PO BOX 8000, CUMBERLAND, RI 02864
DEED REFERENCE: BOOK 4273, PAGE 374 (MASTER DEED), ALSO SEE BOOK 3844, PAGE 175

PARCEL AREA = 38.1 ACRES (1,707,302 SQUARE FEET)
34.7 ACRES UPLAND, SHAPE FACTOR 302

ZONING DISTRICT, INDUSTRIAL ZONE

ZONING DISTRICT DIMENSIONAL REQUIREMENTS:

MAXIMUM COVERAGE = 25%

MINIMUM LOT AREA = 40,000 SQUARE FEET

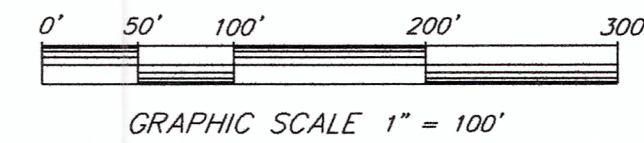
MINIMUM FRONTAGE = 150 FEET

MINIMUM DEPTH = 200 FEET

MINIMUM FRONT YARD SETBACK = 50 FEET

MINIMUM SIDE YARD SETBACK = 30 FEET

MINIMUM REAR YARD SETBACK = 40 FEET



REV. NO.	REVISIONS/COMMENTS	DATE

Drawing Title:

LAYOUT & MATERIALS PLAN
HALIFAX SOLAR
4.95 MWAC SOLAR ELECTRIC
POWER GENERATION PROJECT

DATE of Issue: 2/22/18

Drawn by: GTD

Checked by: IAJ

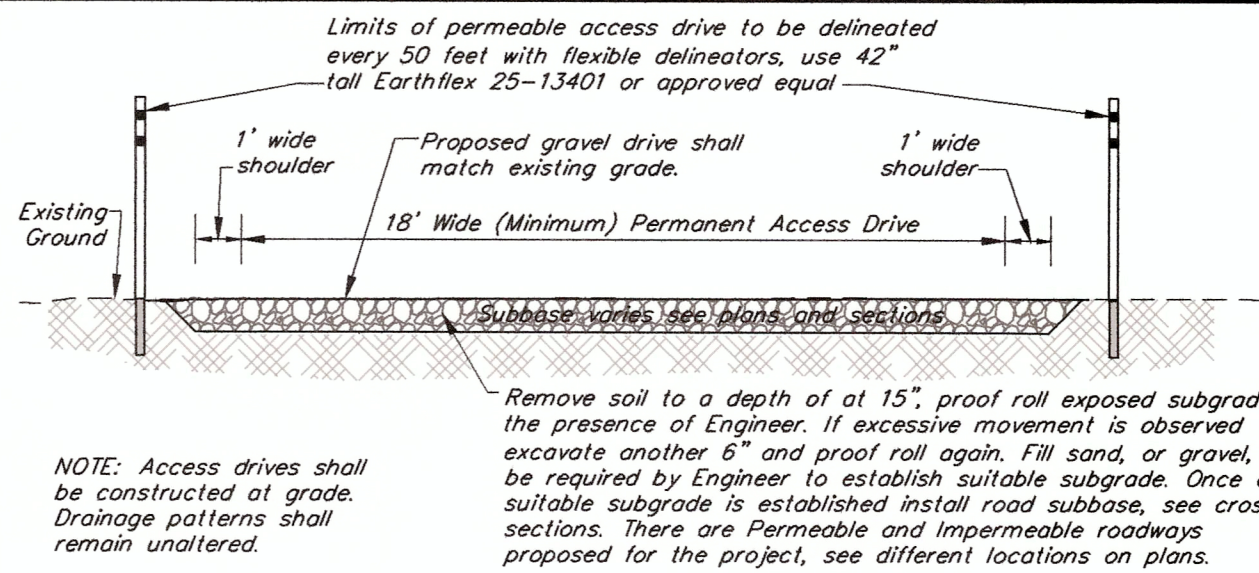
Project No.: 17185

SCALE 1" = 100'

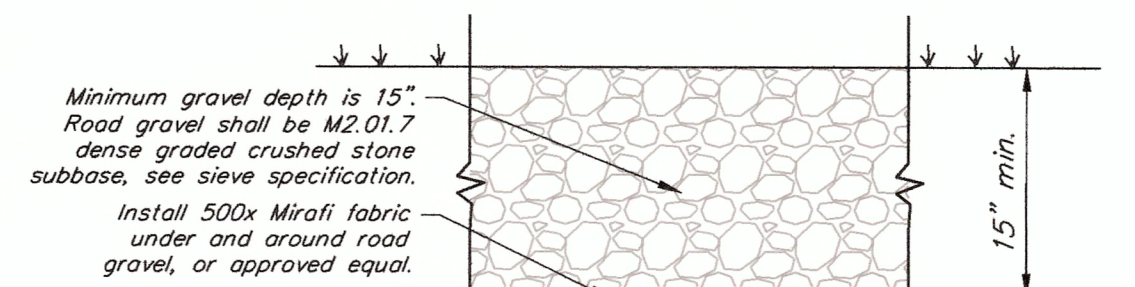
Drawing No.:

Rev No.:

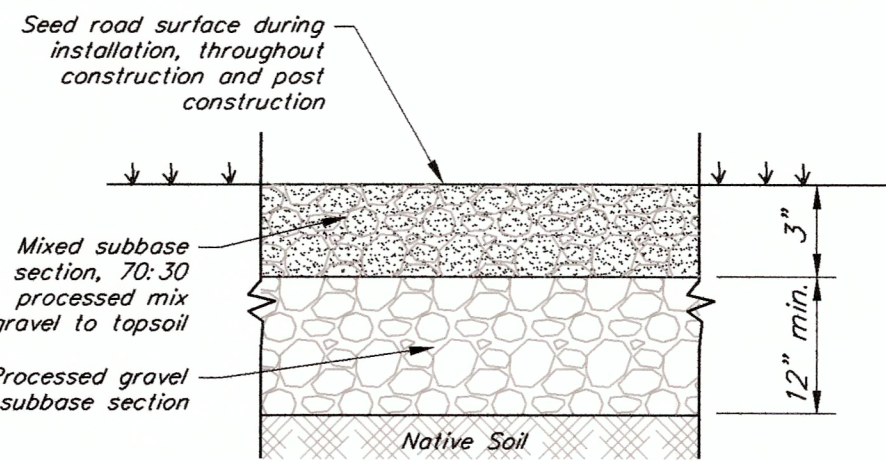
C-103



Typical Road Section
Project Access Drives and Turnarounds
N.T.S.



Permeable Subbase Cross Section
N.T.S.



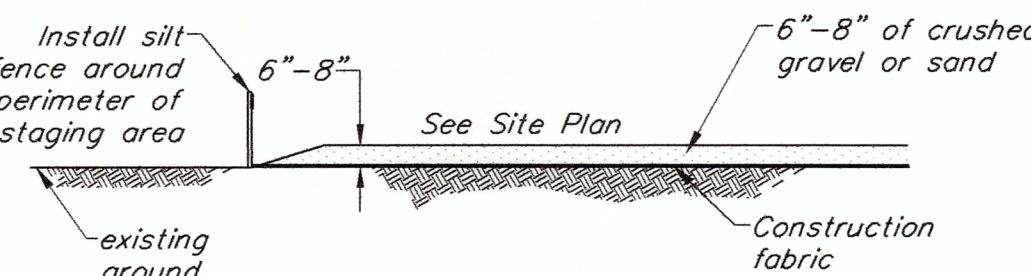
Permeable Subbase Cross Section
N.T.S.

M2.01.7 DENSE GRADED CRUSHED STONE FOR SUBBASE

SIEVE DESIGNATION	PERCENTAGE BY WEIGHT PASSING SQUARE SIEVE
MESH SIZES	
2 INCH	100
1.5 INCH	70-100
0.75 INCH	50-85
NO. 4	30-55
NO. 50	8-24
NO. 200	3-10

Staging Area Notes:

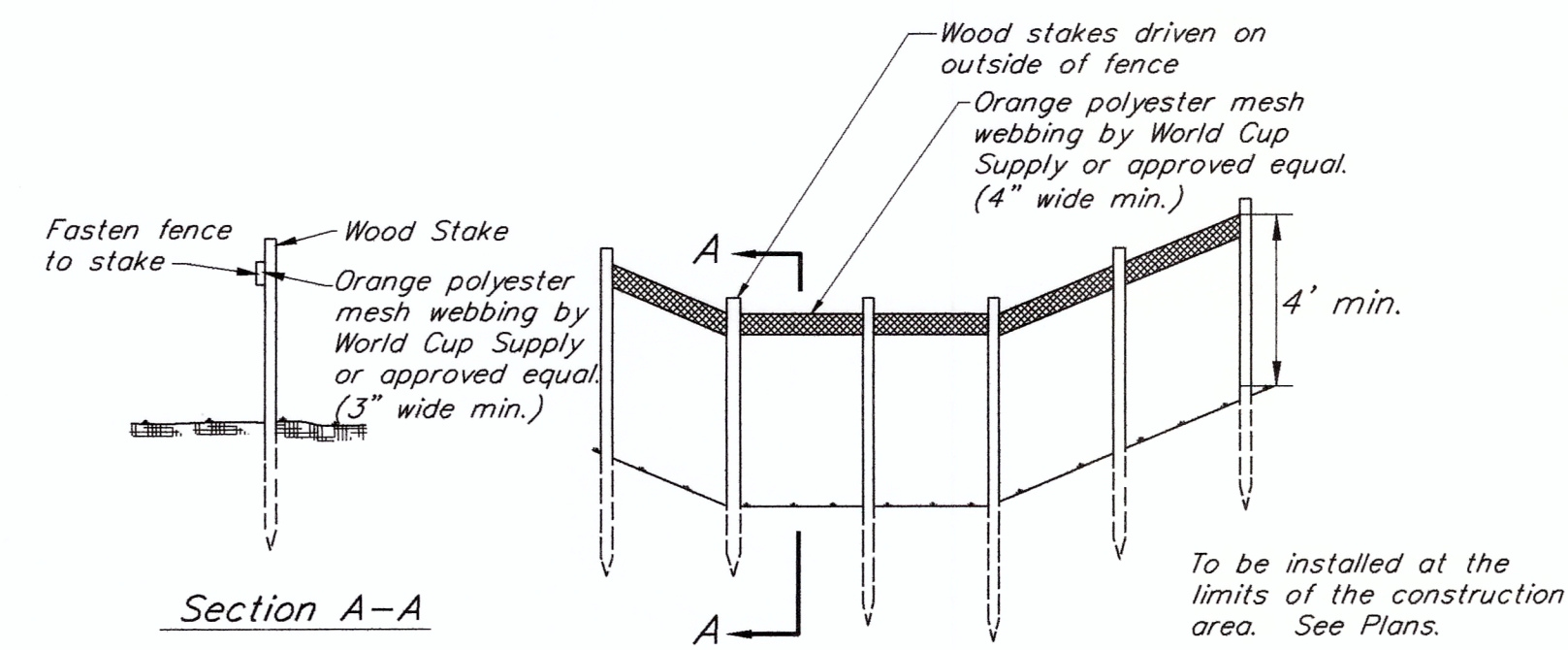
1. Silt fencing to be installed before construction of staging area is installed.
2. Install and maintain surface of staging area with construction fabric over existing ground. Cover with 6"-8" of crushed gravel or sand, see detail. Maintain depth of gravel or sand throughout project construction.
3. Install and maintain stabilized construction entrance, see detail. Install wooden gate at entrance of staging area.
4. All abutters to staging area will be notified of the project. Due to likely construction noise, activities at staging area and construction site shall abide by local noise ordinances.
5. Staging area is likely to be used for parking during construction, staging of construction materials, base of project operations and miscellaneous project activities.
6. Close to project construction completion, staging area will be removed. Top layer of gravel or sand and construction fabric shall be removed and properly disposed of. Restore the portion of existing meadow covered by staging area by seeding, mulching, aerating, etc as necessary to restore field to its natural preconstruction state.
7. Contractor is responsible for refreshing gravel as needed to maintain stability of stabilized staging area.



Typical Stabilized Staging Area Surface
N.T.S.

NOTES:

1. Acceptable EPSC Measure details are provided below.
2. Limits of disturbance (or "construction demarcation") shall be installed prior to any earth disturbing activities.
3. Barrier Tape/Rope: for use where proposed disturbance borders non-wooded, vegetated areas more than 100 ft from the nearest water resource (stream, brook, lake, pond, wetland, etc.). Barrier tape is high visibility fiber-glass tape, minimum 3" in width commonly used in ski areas for demarcating closed areas. Barrier tape and rope should be attached to stakes, at a minimum height of 4 ft from the ground.

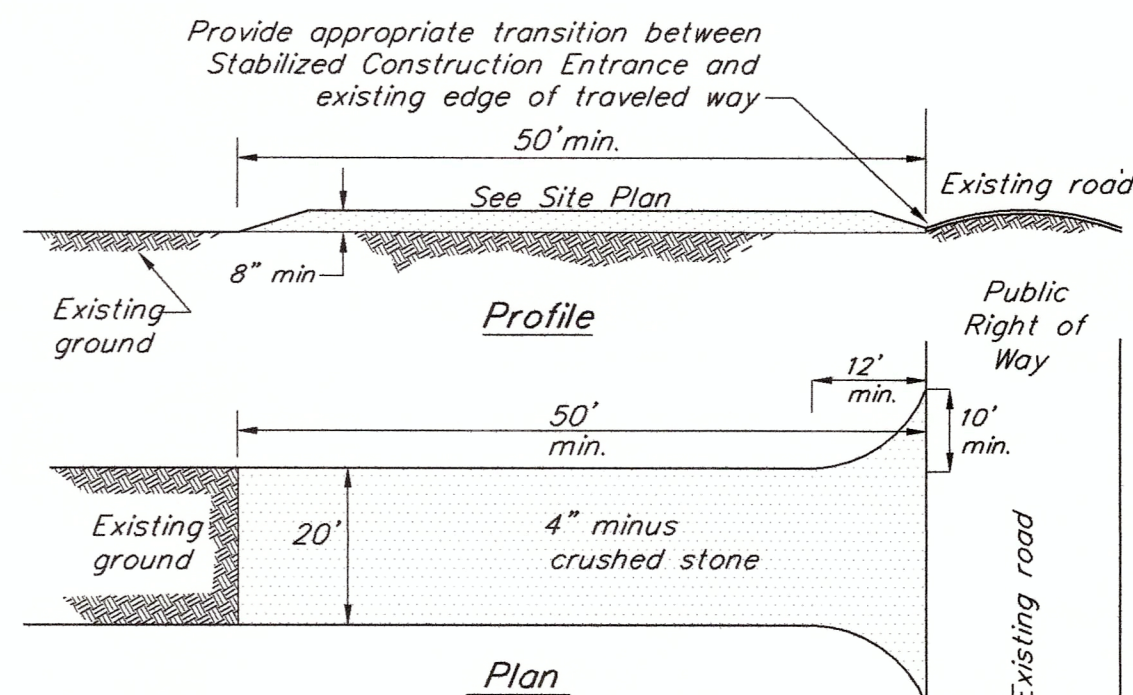


NOTES:

1. Minimum 1 to 2 rows of mesh barrier tape to be installed along construction perimeter.
2. Each row of barrier tape to be 4" wide minimum.
3. Barrier tape to be orange.
4. Secure barrier tape to stakes or existing tree trunks with bottom row at 4' distance from ground surface (minimum).
5. Maintain and replace as needed. Remove at completion of project per OSPC.
6. In event the OSPC determines barrier tape is not sufficient, replace with orange construction fence or snow fence.

On-Site Plan Coordinator Notes

1. A qualified person or persons shall be designated as the On-Site Plan Coordinator (OSPC).
2. The OSPC shall be knowledgeable in principles and practices of EPSC implementation and possess skills to assess conditions at the construction site that could impact stormwater quality and to assess effectiveness of EPSC measures selected to control quality of stormwater discharges from construction activity.
3. The OSPC shall be responsible for on-site implementation of this EPSC Plan, including Turbidity Monitoring and Discharge Reporting.
4. The OSPC shall have authority to stop and/or modify construction activities as necessary to comply with this EPSC Plan and terms and conditions of the permit.
5. The OSPC shall be responsible for inspections and reporting per the permit.
6. The OSPC or his/her designee shall be on-site on a daily basis during active construction.
7. The OSPC's contact information shall be provided to VT DEC prior to start of construction.



Stabilized Construction Entrance
N.T.S.

Notes:

1. Contractor shall stabilized construction entrance as required to prevent tracking of sediment off-site.
2. Contractor to use Mirafi 500x under stone for temporary construction roads.
3. Crushed stone shall be added or replaced to ensure that there is no sediment tracking off-site.
4. Stone size shall be 1-4".
5. All surface water flowing or diverted toward construction entrance shall be piped beneath entrance. If piping is impractical, a mountable berm with 5:1 slopes is allowed.

Permanent Seed Mix shall be used as early as practicable between 4/15 and 10/15 and shall meet the following criteria:

Seed	% Weight
Red Fescue	50%
Sheep Fescue	25%
Red Top	5%
White Clover	10%
Annual Rye	10%

Temporary Seed Mix shall be used for temporary stabilization and between 10/16 and 4/14 and shall meet the following criteria:

Seed	% Weight	% Germination
Winter Rye	80% Minimum	85 Min.
Red Fescue (Creeping)	4 Min.	80 Min.
Perennial Rye Grass	3 Min.	90 Min.
Red Clover	3 Min.	90 Min.
Other Crop Grass	0.5 Max.	
Noxious Weed Seed	0.5 Max.	
Inert Matter	1.0 Max.	

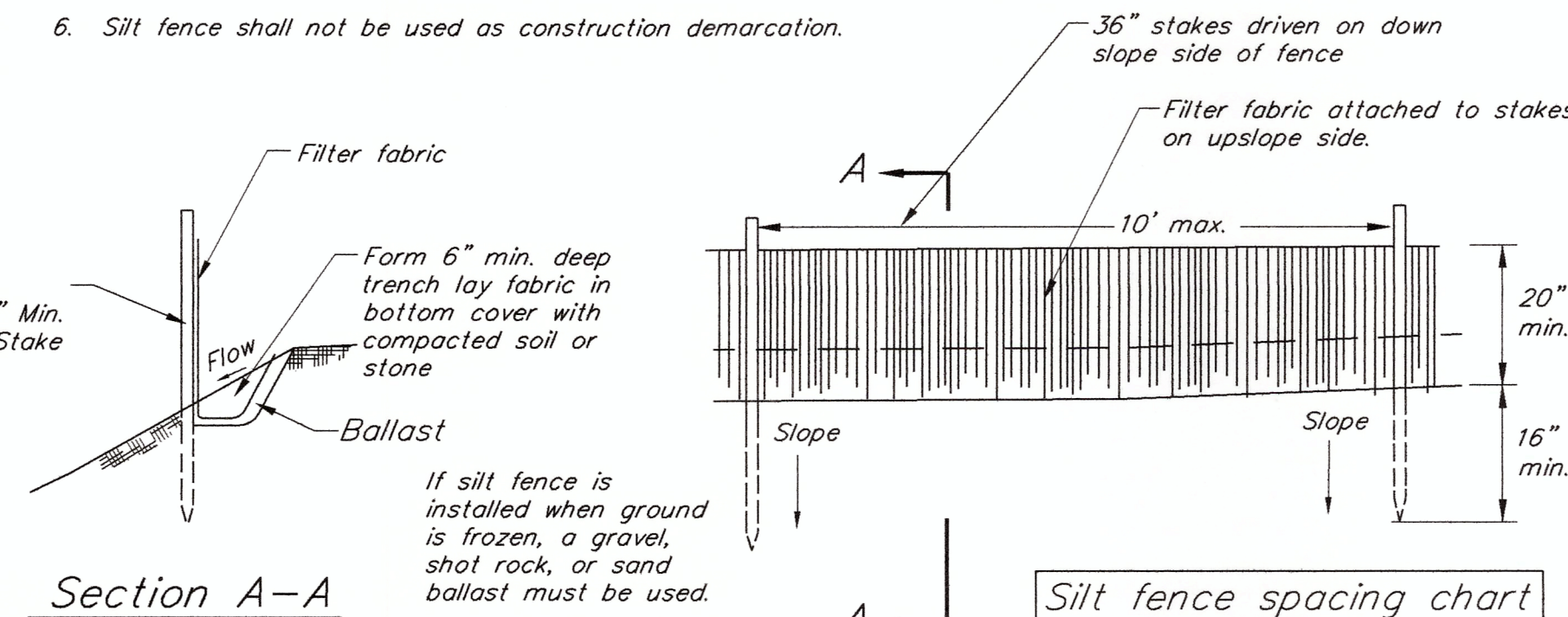
Seeding Specifications

Perimeter Erosion Control Schedule

Distance From Receiving Water and all Water Resource Areas (WRA)	Slope	Acceptable EPSC Measure (Note: Measures are interchangeable)
≤ 50 feet	All	Silt Fence with Straw Wattle
50-100 feet	All	Silt Fence per Specifications Below

NOTES:

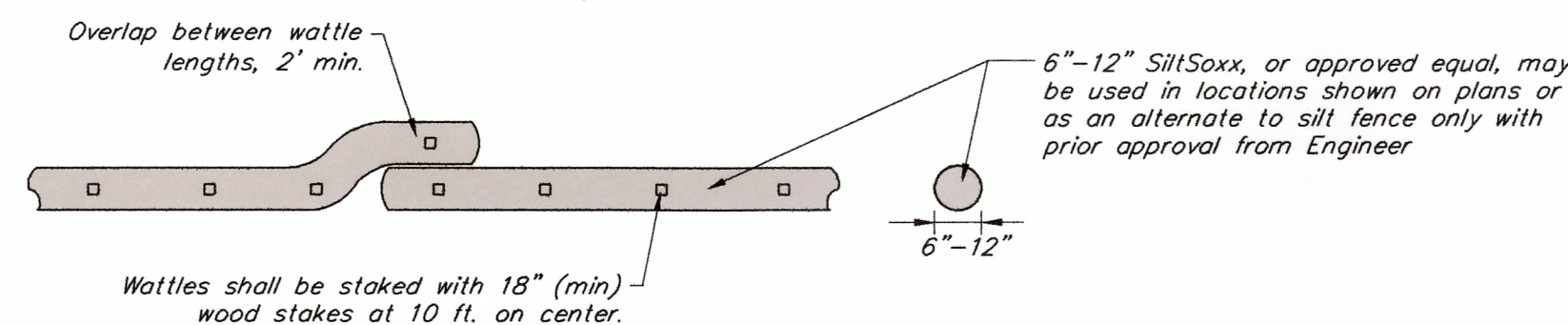
1. Acceptable EPSC Measure details are provided above.
2. At a minimum, EPSC measures meet VT DEC Standards and Specifications for Erosion Prevention and Sediment Control or previously approved interchangeable practices.
3. Perimeter controls shall be utilized in small areas ≤ 1 acre. In areas > 1 acre, temporary sediment traps or temporary sediment basins are to be utilized.
4. Perimeter controls shall be installed on downslope side of planned earth disturbance.
5. Perimeter controls shall be installed prior to any earth disturbing activities within upslope contributing area.
6. Silt fence shall not be used as construction demarcation.



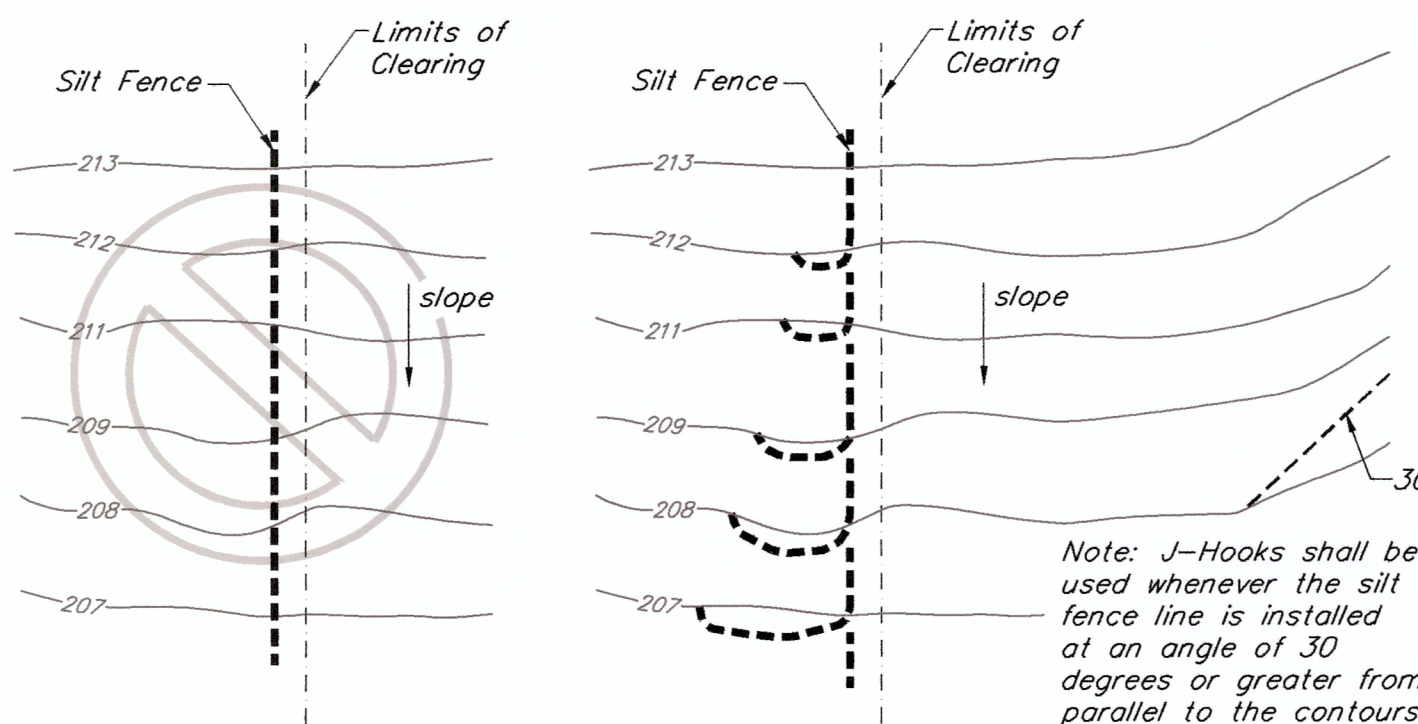
Typical Temporary Silt Fence
N.T.S.

NOTE:

1. Contractor shall be responsible for the installation, maintenance, and removal of straw wattles in all locations shown on the plans. Wattles may be left in place if the contractor seeds and mulches wattle for growth post construction.
2. Maintenance shall be performed as needed and additional wattles will be added when sediment reaches half of product height.
3. When installing lengths of wattles, lengths will overlap by minimum 2' when transitioning to a new length of wattle.
4. Contractor shall refer to all manufacturers specifications and details.



Typical Straw Wattle Sediment Control (SiltSoxx)
N.T.S.



NOTES:

1. Proper installation of J-Hooks provides silt fence the ability to temporarily pond runoff, allowing time for sediments to settle.
2. Long runs of silt fence between J-Hooks should be avoided refer to adjacent table for proper spacing of J-Hooks.
3. J-Hooks should be built along contour in a "smile" shape with a minimum width of 20 feet and minimum depth of 10 feet.
4. Along a narrow right of way, narrower J-Hooks can be used with a higher spacing frequency.

INCORRECT
Silt fence installed parallel to slope (perpendicular to contour) in one, long run

Slope Steepness	Maximum spacing between silt fence J-Hooks (ft.)
2:1 Slope (50%)	25
3:1 Slope (33%)	50
4:1 Slope (25%)	75
5:1 Slope or Flatter (50%)	100

CORRECT
Silt fence installed in shorter runs with J-Hooks to avoid concentration of flows at one location by trapping runoff at multiple points along a slope.

Typical Silt Fence "J-Hook" Construction
N.T.S.

HALIFAX SOLAR

River Street
Halifax, Massachusetts

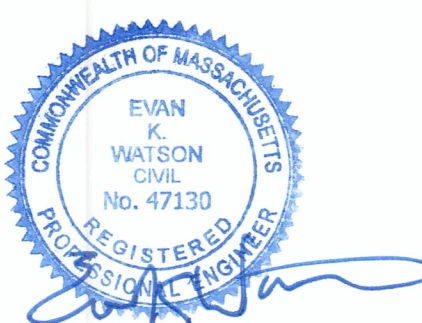


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SOURCE DATA LEGEND

MAPPING SOURCE DATA USED FOR PLAN COMPILATION

Civil Engineering:

Krebs and Lansing Consulting Engineers, Inc.
164 Main Street, Suite 201
Colchester, Vermont 05446

Electrical AC Design:

Applied High Voltage, LLC
403 New Kanner Road
Albany, New York 12205

Electrical DC Design:

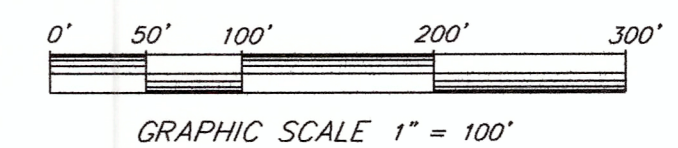
Brian Browning
Solar Power Engineering
272 Spring Hollow Lane
Montpelier, Vermont 05602

PROPERTY AND ZONING INFORMATION:

ASSESSOR'S REFERENCE: LOT 1 OF MAP 117, LOT 1
LAND OWNER: V.S. HASECOTES & SONS LP, C/O GARY R.
ALGER, ESQ., PO BOX 8000, CUMBERLAND, RI 02864
DEED REFERENCE: BOOK 4273, PAGE 374 (MASTER
DEED), ALSO SEE BOOK 3844, PAGE 175

PARCEL AREA = 39.1 ACRES (1,707,302 SQUARE FEET)
34.7 ACRES UPLAND, SHAPE FACTOR 302

ZONING DISTRICT: INDUSTRIAL ZONE
ZONING DISTRICT DIMENSIONAL REQUIREMENTS:
MAXIMUM COVERAGE = 25%
MINIMUM LOT AREA = 40,000 SQUARE FEET
MINIMUM FRONTAGE = 150 FEET
MINIMUM DEPTH = 200 FEET
MINIMUM FRONT YARD SETBACK = 50 FEET
MINIMUM SIDE YARD SETBACK = 30 FEET
MINIMUM REAR YARD SETBACK = 40 FEET



REV. NO.	REVISIONS/COMMENTS	DATE

Drawing Title:

DETAILS
HALIFAX SOLAR
4.95 MWAC SOLAR ELECTRIC
POWER GENERATION PROJECT

DATE of Issue: 2/22/18

Drawn by: GTD Checked by: IAJ

Project No.: 17185 SCALE: 1" = 100'

Drawing No.: Rev No.:

C-104

Construction Notes

- The methods and materials of construction shall be in conformance with all permits and approvals issued for the project. In case of conflict, the more stringent specification shall apply as directed by Engineer. All work shall be done in a workmanlike manner and completed in the time specified by Owner.
- The Contractor shall be responsible for all work and materials shown and required to make the job complete. These drawings do not show every fitting or appurtenance. Materials shall be as specified on the drawings. Manufacturer's product specifications shall be submitted for all materials to the Engineer for approval prior to installation.
- The location and size of existing underground utilities is not warranted to be exact or complete. The Contractor shall field locate all utilities and shall contact the affected utility company, the Engineer and the Town prior to making any hook ups. The Contractor shall be solely responsible for all existing utilities and their uninterrupted services. All off-site backfill, sheeting and shoring, dewatering, clearing and grubbing, erosion control, dust control, traffic control, grading, and all incidentals shall be included as part of the required work.
- The Contractor shall verify all temporary bench marks before use.
- The workmen and public shall be protected by the Contractor from any and all hazards connected with the construction work. Open trenches, materials, or equipment within the working limits are to be guarded by the use of adequate barricades or flagmen. All barricades left in position overnight are to be properly lighted. Kerosene pots are not acceptable. When work narrows the usable pavement, flagmen shall be employed to aid the flow of traffic so that there will be no undue delays. The Contractor shall be held responsible for the safety of all workmen and the general public and all damages to property occurring from or upon the work occasioned by negligence or otherwise growing out of a failure on the part of the Contractor to protect persons or property from hazards of open trenches, materials, or equipment at any time of the day or night within the working area. All work shall be in conformance to OSHA regulations, Title 19, Parts 1926.651 and 1926.652.
- The Contractor shall verify all utility intersections and contact Engineer and Owner with conflicts.
- The Contractor shall call, Dig Safe or other approved equal underground utility identifier prior to any excavation.
- The Contractor shall coordinate with final electrical, structural and landscaping plans.

Construction EPSC Notes

- Existing vegetation shall be protected and maintained to the extent practicable.
- A vegetated buffer shall be maintained for water bodies where feasible (e.g., wetlands and streams).
- To the extent practicable, surface flow shall be diverted away from exposed soils via diversion berms, earth dikes, perimeter dikes/swales, temporary swales, water bars, and/or check dams (see details).
- Effluent from dewatering operations shall be filtered or passed through an approved sediment trapping device, or both, and discharged in a manner that does not violate water quality standards or contribute to erosion. Dewatering details shall be reviewed and approved by OSPC or EPSC Specialist prior to use.
- Concentrated runoff shall not flow down cut or fill slopes unless contained within an adequate temporary or permanent channel (see details), flume, or slope drain structure.
- Adequate drainage or other protection shall be provided whenever water seeps from a slope face.
- Underground utility lines shall be installed in accordance with the following standards in addition to other applicable criteria:
 - No more than 500 linear feet of trench may be opened at one time.
 - Excavated material shall be placed on the uphill side of trenches, where feasible, but not in resource areas.
- Where feasible, all sediment removed from sediment control practices as part of maintenance shall be disposed of in an area that is at least one of the following, with immediate stabilization following disposal of material:
 - Less than 5% slope
 - At least 100 feet from any downslope water body or conveyance to a water body, including a ditch
 - Vegetated
- Disturbed areas bordering or draining to existing roads shall have an appropriate sediment barrier (e.g., silt fence) spanning the edge of the disturbance to prevent washing of sediment onto roadways or into road ditches.
- In advance of predicted rainfall or snowmelt, all EPSC measures that are located in active areas of earth disturbance shall be inspected and repaired, as needed. If necessary, this shall include temporary stabilization of all disturbed soils on the site in advance of the anticipated runoff period.
- Dust control shall be handled via water application to roadways and other areas where dust may be generated.

Temporary & Final Stabilization Notes

- All areas of earth disturbance associated with this project must be stabilized as soon as practical after construction has finished in that location.
- Contractor shall limit the overall area of earth disturbance at any one time. That limit shall be set to the extent practical for workers/equipment on site.
- Soil stabilization shall be achieved by seed and mulch (see details), hydroseeding with mulch tackifier, sod, stone, and/or rolled erosion control products (e.g., erosion control blanket; see detail). Mulch shall be comprised of straw, hay, compost, woodchips, wood stump grindings, and/or erosion control mix (see detail).
- Appropriate seed mix shall be applied to designated areas per this EPSC Plan and seed specifications (see details). For an area to be stabilized for winter by vegetated cover, seeding must be completed by October 15.
- Areas to be stabilized for winter that do not have established vegetation by October 15 shall be stabilized by anchored mulch at the winter application rate, or other approved stabilization measures (e.g., rolled erosion control product; see detail). Dormant seeding with Winter Rye is recommended (see detail).
- All temporary EPSC measures shall be removed within 30 days after final site stabilization or after the temporary EPSC measures are no longer needed i.e. 70% revegetation, unless otherwise authorized and approved in writing by the Owner.
- Following temporary or permanent stabilization, maintenance shall be performed as necessary to ensure continued stabilization.
- Except as noted below, all areas of disturbance shall be seeded and stabilized with EPSC measures (e.g., mulch, erosion control mix, rock rip rap, or rolled erosion control product), including areas where construction has been suspended or sections completed. The following shall also apply:
 - For active construction areas such as borrow or stockpile areas, roadway improvements, and areas within 50 feet of a building under construction, a perimeter sediment control system (e.g., silt fence) shall be installed and maintained to contain soil. Exposed disturbed areas adjacent to a conveyance that provides rapid offsite discharge of sediment (e.g., a cut slope at an entrance) shall be covered with plastic or geotextile to prevent soil loss until the area can be stabilized. Stabilized construction entrances shall be maintained to control equipment and vehicles from tracking material off site.
 - Permanent seeding shall only be undertaken in the spring season from April through May and in late summer and early fall until October 15; summer planting may be conducted if adequate watering is provided. During the peak summer months and in the fall after October 15, on appropriate temporary stabilization shall be implemented. Temporary summer planting may suffice for permanent seeding if adequate natural rainfall allows for vigorous growth during the mid summer period. The Contractor's scope of work shall include return to the site the spring following construction to perform any further seeding that may be required and to remove any remaining erosion control measures that are no longer needed.
 - Temporary sediment trapping devices (e.g., silt fence) shall not be removed until permanent stabilization is established in all contributory drainage areas. Similarly, stabilization shall be established prior to converting sediment traps and/or sediment basins into permanent (post-construction) stormwater management practices.
 - Stabilization measures shall be applied to bare earth surfaces with seed and anchored straw mulch, or other approved stabilization measures (e.g., rolled erosion control product) as soon as possible after disturbance.

Relevant Definitions

"EPSC" – Erosion Prevention & Sediment Control
"OSPC" – On-Site Plan Coordinator (See Notes)
"Construction Site" – The land or water area where any facility or activity is physically located or conducted, including adjacent land used in connection with the facility or activity or the area of earth disturbance directly associated with the permitted activity.
"Disturbed Earth" – Any soil on a construction site or associated support activities (e.g., staging area, borrow area, disposal site for excess fill) that is exposed to erosive effects of wind, rain, or runoff due to construction or construction related activities.
"Final (or Permanent) Stabilization" – All soil disturbing activities at the site have been completed and either of the two following criteria are met:

- A uniform (e.g., evenly distributed, without large bare areas) perennial vegetative cover with a density of 70 percent of the native background vegetative cover for the area has been established on all unpaved areas and areas not covered by permanent structures, or
- Equivalent final stabilization measures (such as the use of gravel, riprap, shot rock, gabions, geotextiles, or erosion control mix) have been employed.

"Principal Operator" – Any party associated with a construction project that meets either of the following two criteria:

- The party has operational control over construction plans and specifications including, but not limited to, the ability to make modifications to those plans and specifications; or
- The party has day-to-day operational control of those activities at a project which are necessary to ensure compliance with a EPSC Plan for the site or other permit conditions (e.g., they are authorized to direct workers at a site to carry out activities required by the EPSC Planner comply with other permit conditions).

"Stormwater" – Stormwater runoff, snowmelt runoff, and surface runoff and drainage.
"Stormwater Discharge-Related Activities" – Activities that cause, contribute to, or result in stormwater point source pollutant discharges, including but not limited to: excavation, site development, grading and other surface disturbance activities; and measures to control stormwater including the siting, construction and operation of BMPs to control, reduce or prevent stormwater pollution.
"Temporary Stabilization" – Protecting soils in areas where additional soil disturbance activities from erosion by rainfall, runoff, or wind, with a surface cover, including, but not limited to, establishment of ground vegetation, application of mulch, rolled erosion control products, shot rock, graveling, erosion control mix or paving.

Erosion Control Blanket

North American Green S75BN

Material Specifications

Erosion control blanket shall be a machine-produced mat of 100% agricultural straw.
The blanket shall be of consistent thickness with the straw evenly distributed over the entire area of the mat. The blanket shall be covered on the top side with 100% biodegradable woven natural organic fiber netting having an approximate 1/2" X 1" mesh and be sewn together with biodegradable thread.

Straw erosion control blanket shall be S75BN as manufactured by North American Green, Inc. (812-867-6632) or equivalent. Erosion control blanket shall have the following properties:

Material Content

Straw	100% (50 lbs/sq.yd.) (.27 kg/m ²)
Netting	One side only, Leno Woven 100% biodegradable natural organic fiber Weight approximately 9.3 lbs/1000 sq. ft.
Thread	Biodegradable

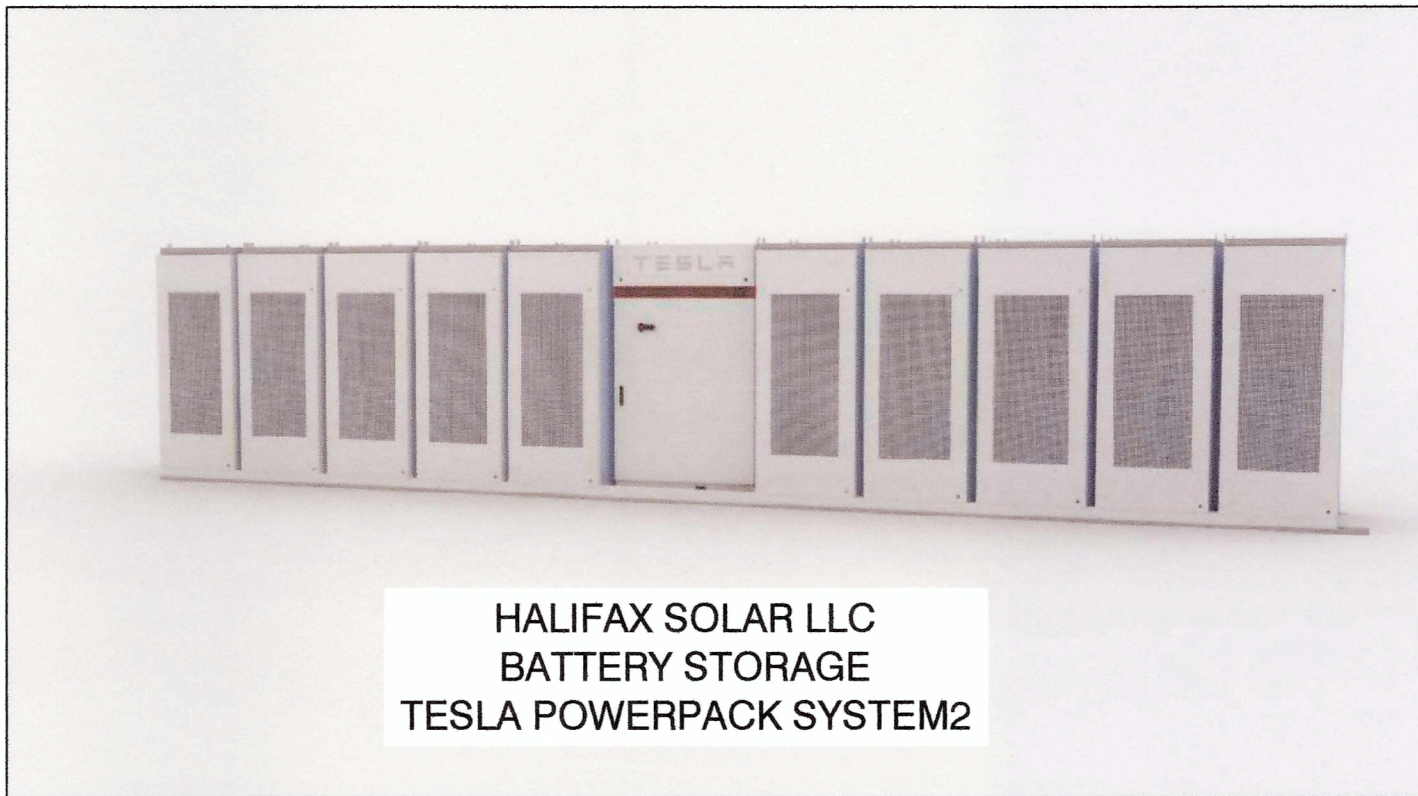
Physical Specifications (Roll)

Width	6.67 feet (2.03m)
Length	108 feet (32.92m)
Weight	46.4 lbs +/- 10% (21.05 kg)
Area	80 sq. yds. (50m ²)

Installed as per manufacturer's specifications.

Guide to Mulch Materials, Rates, and Uses

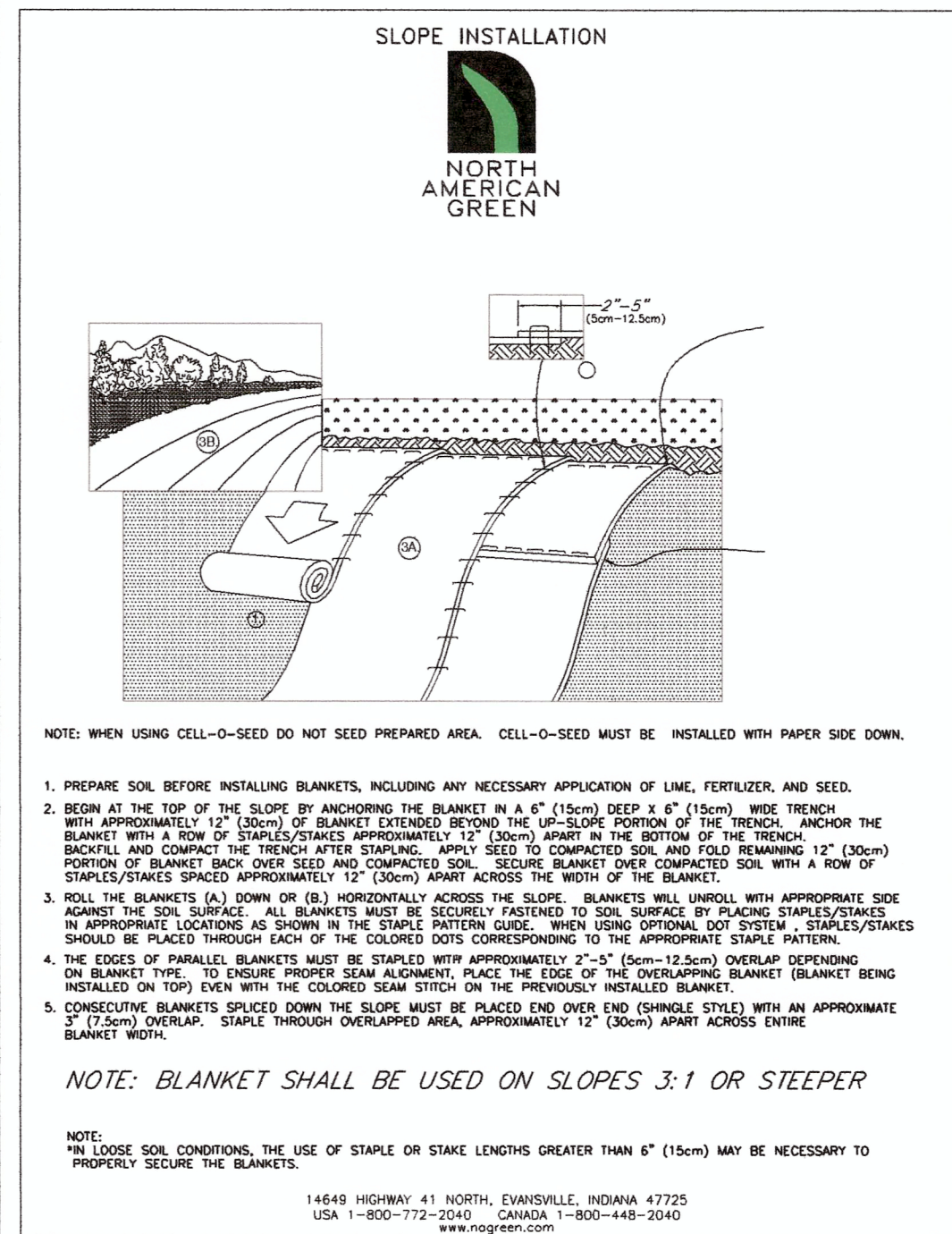
	Quality Standards	Per 1000 sq. ft.	Per Acre	Depth of Application	Remarks
Wood chips or shavings	Air-dried. Free of objectionable coarse material	500-900 lbs	10-20 tons	2" - 7"	Used primarily around shrub and tree plantings and recreation trails to inhibit weed competition. Resistant to wind blowing. Decomposes slowly.
Wood fiber cellulose (partly digested wood fibers)	Made from natural wood usually with green dye and dispersing agent	50 lbs	2,000 lbs.	-	Apply with hydramulcher. No tie down required. Less erosion control provided than 2" landscape hay or straw.
Gravel, Crushed Stone or Slog	Washed; Size 28 or 3A - 1/2"	9 cu. yds.	405 cu. yds.	3"	Excellent mulch for short slopes and around plants and ornaments. Use 28 where subject to traffic. (Approximately 2,000 lbs./cu. yd.). Frequently used over filter fabric for better weed control.
Hay or Straw	Air-dried; free of undesirable seeds & coarse materials	90-100 lbs 2-3 bales	2 tons (100-120 bales)	Cover about 90% surface	Use small grain straw where mulch is maintained for more than three months. Subject to wind blowing unless anchored. Most commonly used mulching material. Provides the best micro-environmental for germinating seeds.
Compost	Up to 3" pieces, moderately to highly stable	3-9 cu. yds.	134-402 cu. yds.	1" - 3"	Coarser textured mulches may be more effective in reducing weed growth and wind erosion.
Erosion Control Mix	Well-graded mixture of particle sizes. Organic content between 80-100% dry weight. Particle size shall pass 6" screen (100%)	* Slopes 3(Hz.):1(Vert.) or flatter = 2 inch depth plus additional 1/2 inch depth per 20 ft. of slope up to 100 ft. * Slopes between 3(Hz.):1(Vert.) and 5(Hz.):1(Vert.) = 4 inch depth plus additional 1/2 inch per 20 ft. of slope up to 100 ft. *** Slopes steeper than 2(Hz.):1(Vert.) applicability to specific site and mulch depth to be reviewed and approved prior to use by OSPC or EPSC Specialist			Comprised of shredded bark, stump grindings, composted bark, or acceptable manufactured products. May contain rock < 4" in diameter. Organics shall be fibrous and elongated. No large portions of silts, clays or fine sands.



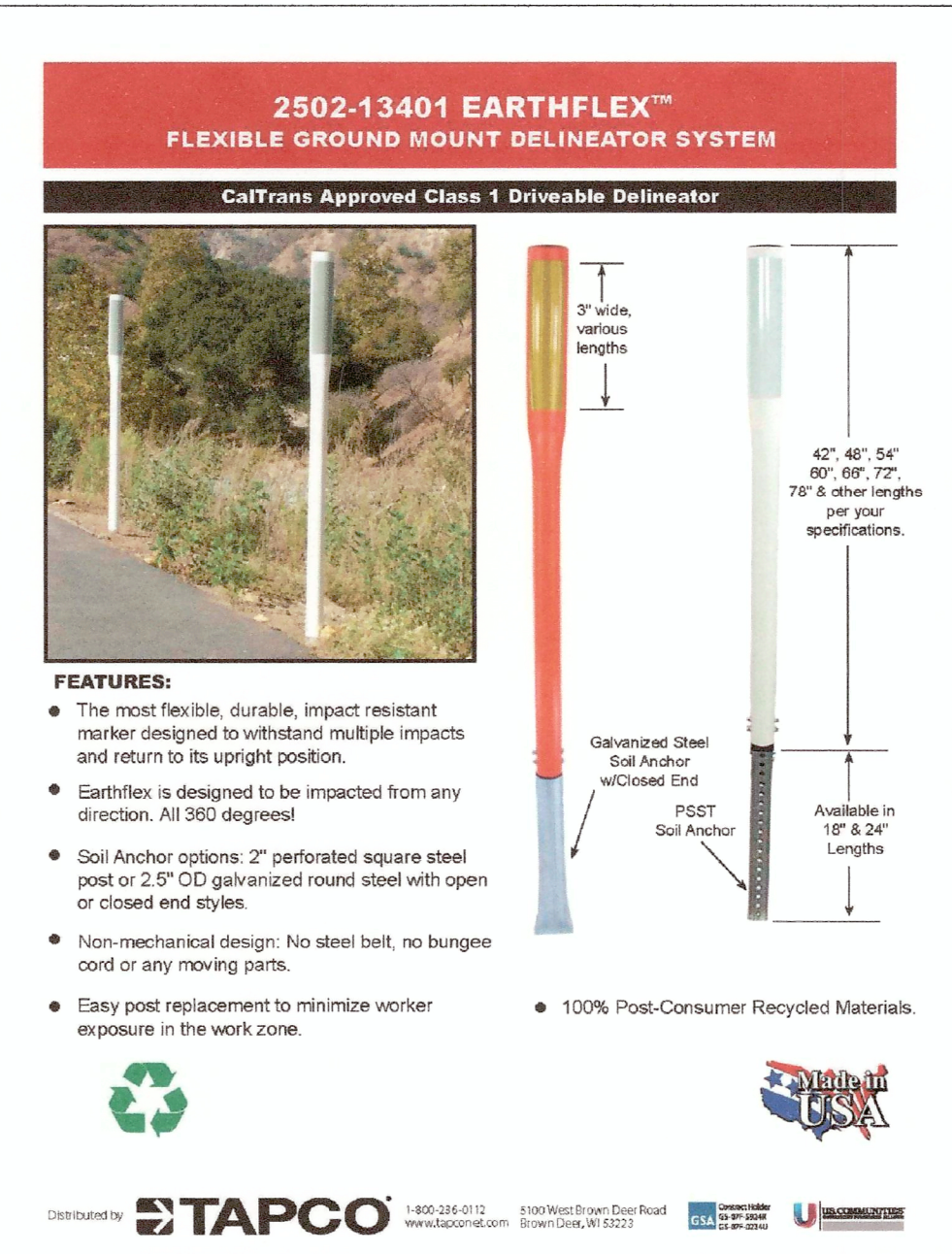
HALIFAX SOLAR LLC
BATTERY STORAGE
TESLA POWERPACK SYSTEM2



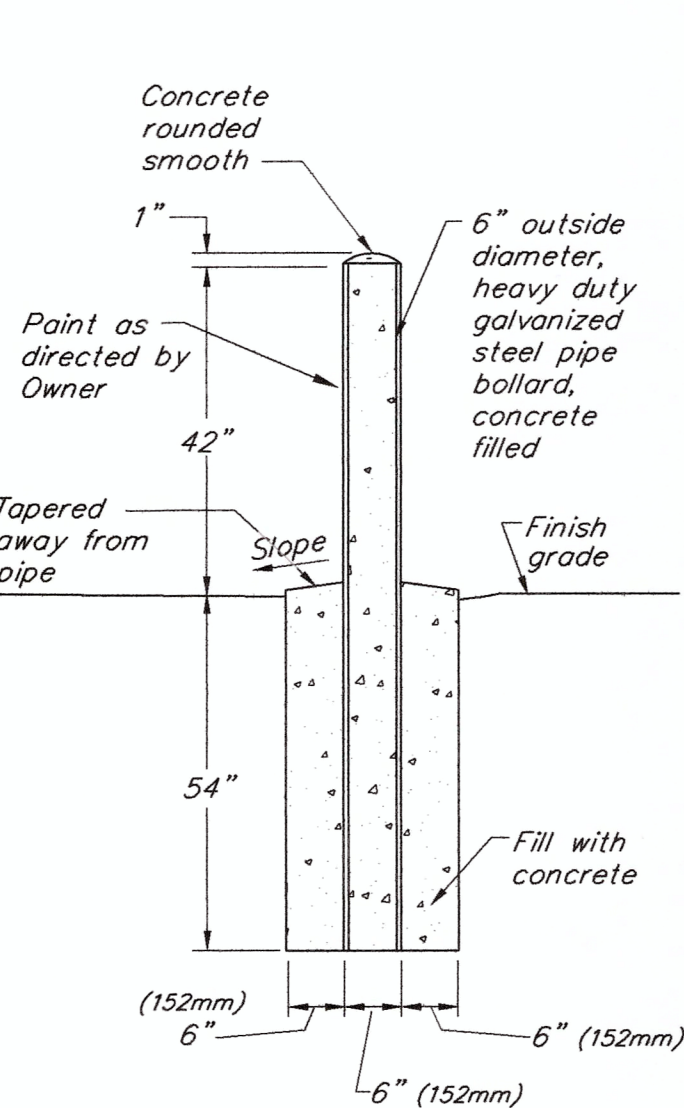
Electric Equipment Specifications



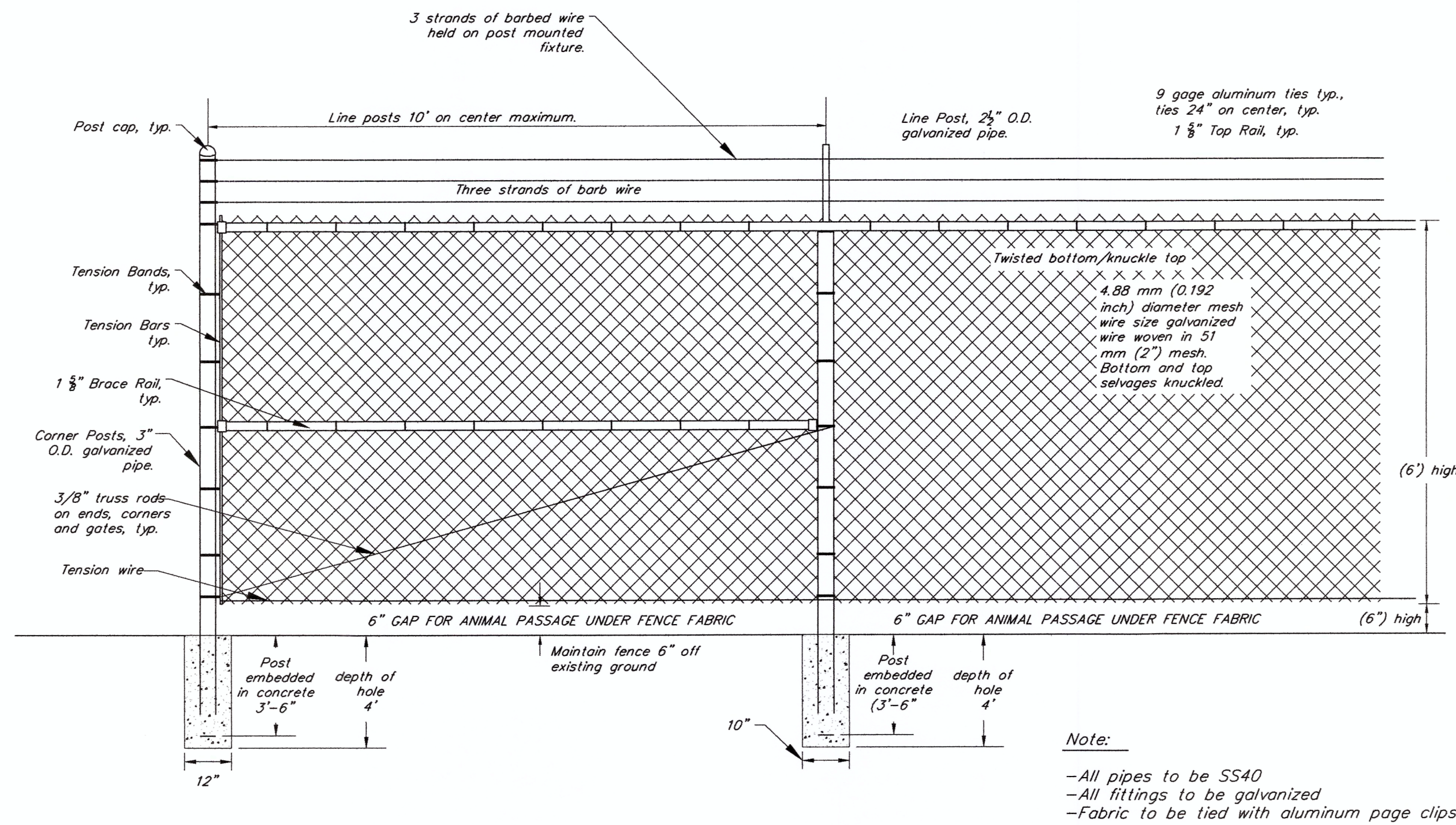
Erosion Control Blanket



Flexible Delineators Detail
N.T.S.



Pipe Bollard Detail
N.T.S.



Typical Galvanized Chain Link Fence

HALIFAX SOLAR

River Street
Halifax, Massachusetts



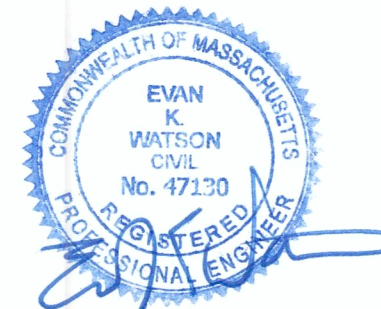
• CIVIL ENGINEERING
• LAND SURVEYING
• ENVIRONMENTAL ASSESSMENT

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LAKEVILLE, MA 02347
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F: (802) 878-9618
email@krebssandlansing.com
Krebssandlansing.com

ISSUED FOR PERMIT REVIEW
NOT FOR CONSTRUCTION



SOURCE DATA LEGEND

MAPPING SOURCE DATA USED FOR PLAN COMPILATION

Civil Engineering:

Krebs and Lansing Consulting Engineers, Inc.
164 Main Street, Suite 201
Colchester, Vermont 05446

Electrical AC Design:

Applied High Voltage, LLC
403 New Kanner Road
Albany, New York 12205

Electrical DC Design:

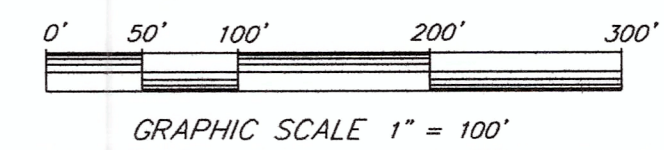
Brian Browning
Solar Power Engineering
272 Spring Hollow Lane
Montpelier, Vermont 05602

PROPERTY AND ZONING INFORMATION:

ASSESSOR'S REFERENCE: LOT 1 OF MAP 117, LOT 1
LAND OWNER: V.S. HASEOTES & SONS LP, C/O GARY R.
ALGER, ESQ., PO BOX 8000, CUMBERLAND, RI 02864
DEED REFERENCE: BOOK 4273, PAGE 374 (MASTER
DEED), ALSO SEE BOOK 3844, PAGE 175

PARCEL AREA = 39.1 ACRES (1,707,302 SQUARE FEET)
34.7 ACRES UPLAND, SHAPE FACTOR 302

ZONING DISTRICT: INDUSTRIAL ZONE
ZONING DISTRICT DIMENSIONAL REQUIREMENTS:
MAXIMUM COVERAGE = 25%
MINIMUM LOT AREA = 40,000 SQUARE FEET
MINIMUM FRONTAGE = 150 FEET
MINIMUM DEPTH = 200 FEET
MINIMUM FRONT YARD SETBACK = 50 FEET
MINIMUM SIDE YARD SETBACK = 30 FEET
MINIMUM REAR YARD SETBACK = 40 FEET



REV. NO.	REVISIONS/COMMENTS	DATE

Drawing Title:

DETAILS AND
SPECIFICATIONS
HALIFAX SOLAR
4.95 MWAC SOLAR ELECTRIC
POWER GENERATION
PROJECT

DATE of Issue: 2/22/18

Drawn by: GTD

Checked by: IAJ

Project No.: 17185

SCALE: 1" = 100'

Drawing No.:

Rev No.:

C-105