

# PROPOSED SOLAR DEVELOPMENT

459 SNAKE HILL ROAD  
PLAT 18 LOT 10  
GLOCESTER, RHODE ISLAND

ISSUED FOR PERMITTING

APPLICANT:  
**ECONOX RENEWABLES, INC.**  
48 WATERFIELD ROAD  
P.O. BOX 808  
WINCHESTER, MA 01890

ISSUED: SEPTEMBER 21, 2020

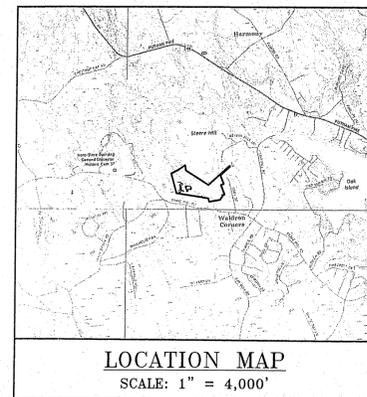
Environmental Management  
SEP 23 2020  
Office of Water Resources

DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
OFFICE OF WATER RESOURCES  
FRESHWATER WETLANDS PROGRAM  
REVIEWED SITE PLAN APPLICATION NO.: 20-0102  
DATED NOV 13 2020  
SEE LETTER OF SAME DATE.

*Nancy C. Freeman*

**PROPERTY OWNER**

PLAT - LOT	PROPERTY ADDRESS	PROPERTY OWNER NAME	MAILING ADDRESS
018 - 010	459 SNAKE HILL ROAD	JAY FORGUE LIVING TRUST JAY FORGUE TRUSTEE	459 SNAKE HILL ROAD



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**LATEST ISSUE**

- 09/21/2020
- 09/21/2020
- 09/21/2020
- 09/21/2020
- 12/16/2019

**NOT FOR CONSTRUCTION**

SEAL:  
**GREGORY A. AVENIA**  
No. 9562  
REGISTERED PROFESSIONAL ENGINEER  
CIVIL  
9/22/20

REVISION	DATE	DESCRIPTION
3	09/21/2020	RIDEM COMMENTS
2	05/08/2020	FIRE DEPARTMENT COMMENTS
1	03/25/2020	TOWN COMMENTS

CLIENT:  
**ECONOX RENEWABLES, INC**  
48 WATERFIELD ROAD,  
P.O. BOX 808  
WINCHESTER, MA 01890

PROJECT:  
**250 KW DC SOLAR DEVELOPMENT**  
AP 18 LOT 10  
459 SNAKE HILL ROAD  
GLOCESTER, RHODE ISLAND

TITLE:  
**COVER**

ISSUED FOR:	PERMITTING
DATE:	FEBRUARY 26, 2020
SCALE:	AS SHOWN
DRAWN BY:	DED
CHECKED BY:	GAA
PROJECT NO:	3653180038

**C-1**

DEM COPY

SHEET 1 OF 4

**GENERAL NOTES:**

- THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE REVIEW OF ALL DRAWINGS AND SPECIFICATIONS PRIOR TO CONSTRUCTION. ANY DISCREPANCY SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER, INCLUDING DISCREPANCIES TO ANY CODE/REGULATORY REQUIREMENTS. IF ANY DISCREPANCIES ARE ENCOUNTERED DURING CONSTRUCTION, THE CONTRACTOR SHALL NOTIFY THE ENGINEER BEFORE PROCEEDING WITH THE WORK.
- ALL ACTIVITIES SHALL BE CONDUCTED IN ACCORDANCE WITH THE DRAWINGS, THE CONTRACTOR SHALL GIVE ALL NOTICES AND COMPLY WITH ALL LAWS, ORDINANCES, RULES, REGULATIONS AND LAWFUL ORDERS OF ANY PUBLIC AUTHORITY, MUNICIPAL AND UTILITY COMPANY SPECIFICATIONS, AND LOCAL, STATE, AND FEDERAL JURISDICTIONAL CODES BEARING ON THE PERFORMANCE OF THE WORK. THE WORK PERFORMED ON THE PROJECT AND THE MATERIALS INSTALLED SHALL BE IN STRICT ACCORDANCE WITH ALL APPLICABLE CODES, REGULATIONS, AND ORDINANCES.
- THE CONTRACTOR SHALL OBTAIN AUTHORIZATION FROM OWNER AND/OR ENGINEER TO PROCEED WITH CONSTRUCTION PRIOR TO STARTING WORK.
- THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR ALL CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES, AND PROCEDURES AND FOR COORDINATING ALL WORK.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL PERMITS AND INSPECTIONS WHICH MAY BE REQUIRED BY THE OWNER, ENGINEER, THE STATE, COUNTY OR LOCAL GOVERNMENT AUTHORITY.
- THE CONTRACTOR SHALL KEEP THE GENERAL WORK AREA CLEAN AND HAZARD FREE DURING CONSTRUCTION AND DISPOSE OF ALL DIRT, DEBRIS, RUBBISH, AND EQUIPMENT AS SPECIFIED. CONTRACTOR SHALL CLEAN AND SUPPLY A ROLL-OFF CONTAINER OR DUMPSTER TO BE EMPLOYED AS NEEDED. CLEANING SHALL BE IN COMPLIANCE WITH ALL FEDERAL, STATE, AND LOCAL REGULATIONS. PREMISES SHALL BE LEFT IN CLEAN CONDITION AND FREE FROM TRASH, DEBRIS, DUST, OR OTHER HAZARDS OF ANY NATURE AT PROJECT COMPLETION.
- DISPOSAL OF ALL MATERIALS SHALL BE COMPLETED IN ACCORDANCE WITH APPLICABLE LOCAL, STATE, AND FEDERAL REGULATIONS AND SHALL BE THE CONTRACTOR'S RESPONSIBILITY.
- THE CONTRACTOR SHALL COMPLY WITH ALL OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA) REQUIREMENTS AS THEY APPLY TO THIS PROJECT.
- THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS, ELEVATIONS, AND EXISTING FEATURES PRIOR TO THE START OF ANY WORK. ANY DISCREPANCIES SHALL BE REPORTED TO THE ENGINEER. CONTRACTOR SHALL VERIFY ACTUAL FIELD CONDITIONS PRIOR TO CONSTRUCTION.
- THE CONTRACTOR IS RESPONSIBLE FOR MAINTAINING ALL UTILITIES AND SERVICES THROUGHOUT THE DURATION OF THE PROJECT. THE CONTRACTOR SHALL PROTECT ALL UTILITY LINES THROUGHOUT ALL PHASES OF WORK.
- UTILITY LOCATIONS SHOWN ARE APPROXIMATE AND MAY NOT INCLUDE ALL UTILITIES WITHIN THE PROJECT SITE.
- THE CONTRACTOR SHALL VERIFY THE LOCATIONS OF ALL UNDERGROUND PIPING AND STRUCTURES PRIOR TO ANY EXCAVATION ACTIVITIES BY CONTACTING THE TOWN OF GLOUCESTER AND RHODE ISLAND DIG-SAFE (1-800-DIG-SAFE) SEVENTY TWO (72) HOURS BEFORE STARTING CONSTRUCTION ACTIVITIES (OR FIELD MARKING UNDERGROUND UTILITIES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING UNDERGROUND UTILITIES THAT MAY NOT BE MARKED BY THE UTILITY COMPANIES. SUBSURFACE CONDITIONS ARE NOT GUARANTEED. THE CONTRACTOR SHALL REPAIR CONTRACTOR-CAUSED DAMAGE ACCORDING TO LOCAL STANDARDS AT CONTRACTOR'S EXPENSE.
- UNLESS OTHERWISE NOTED, ALL EXISTING FEATURES DESIGNATED ON THE PLANS ARE TO REMAIN, INCLUDING, BUT NOT LIMITED TO, TREES, SIGNS, FENCING/GATES, AND SIGN POSTS. FEATURES SHALL BE VERIFIED, LOCATED, AND PROTECTED DURING ALL PHASES OF CONSTRUCTION.
- ALL CONSTRUCTION ACTIVITIES MUST BE COMPLETED WITH RESPECT TO THE ONGOING ACTIVITIES OF THE SURROUNDING AREAS. ACCESS ROADWAYS SHALL REMAIN OPEN AND FREE OF DEBRIS AS MUCH AS PRACTICABLE.
- ALL ACTIVITIES SHALL BE CONDUCTED IN ACCORDANCE WITH THE RHODE ISLAND DEPARTMENT OF ENVIRONMENTAL MANAGEMENT SOIL EROSION AND SEDIMENT CONTROL PLAN (SESC), RHODE ISLAND STORMWATER DESIGN AND INSTALLATION STANDARDS MANUAL, AND THE RHODE ISLAND POLLUTION DISCHARGE ELIMINATION SYSTEM (RIPDES) CONSTRUCTION GENERAL PERMIT, IF APPLICABLE.
- CONTRACTOR SHALL LIMIT ALL CONSTRUCTION ACTIVITIES TO THE PROPOSED FENCE LINE, LIMITS OF TREE CLEARING (IF REQUIRED), AND THE ELECTRICAL INTERCONNECTION ROUTE.
- CONTRACTOR TO DISABLE AND SECURE ALL EQUIPMENT PRIOR TO DAILY SHUTDOWN. CLIENT IS NOT RESPONSIBLE FOR VANDALISM, OR LOSS DUE TO TRESPASSING.
- JOB SITE OR NEIGHBORHOOD COMPLAINTS OF EXCESSIVE NOISE, VIBRATION, OR ODORS MUST BE COMMUNICATED WITH ENGINEER UPON RECEIPT OF FIRST COMPLAINT EACH PROJECT DAY. CONTRACTOR MUST HAVE CONTINGENCY PLANS FOR EXCESSIVE NOISE AND ODORS AS APPLICABLE.
- EXISTING CONDITIONS, INCLUDING HORIZONTAL AND VERTICAL DATUMS, ARE FROM THE FOLLOWING SOURCES:
  - VERTICAL DATUM FOR THE PROJECT IS REFERENCED TO NAVD 1988. ELEVATIONS SHOWN ON THE PLANS ARE FROM LIDAR DATA OBTAINED FROM RIGIS.
  - HORIZONTAL DATUM FOR THE PROJECT IS REFERENCED TO NAD83.
  - LOCATION OF WETLANDS AND WATERBODIES ARE APPROXIMATE AND WERE TAKEN FROM RIGIS AND TOWN OF GLOUCESTER GIS MAPS.
- ACCORDING TO THE NATURAL RESOURCES CONSERVATION SERVICE (NRCS) WEB SOIL SURVEY, SOILS WITHIN THE AREA OF PROPOSED DEVELOPMENT ARE CANTON AND CHARLTON FINE SANDY LOAMS, 0-8% SLOPES, VERY STONY.
- ACCORDING TO FEMA FIRM 44007C0185G (EFFECTIVE 03/02/2009) THE SITE IS ENTIRELY WITHIN ZONE X, AN AREA OF MINIMAL FLOOD HAZARD.
- ALL INFORMATION SHOWN ON THIS PLAN IS FROM WEB BASED GIS AND/OR AERIAL IMAGES AND SHOULD BE CONSIDERED APPROXIMATE. WOOD HAS NOT INDEPENDENTLY VERIFIED THE INFORMATION SHOWN AND MAKES NO GUARANTEE TO THE COMPLETENESS OR ACCURACY OF ANY FEATURE SHOWN.
- NO CHANGES TO EXISTING TOPOGRAPHY OR GROUND COVER ARE PROPOSED FOR THE PROPOSED DEVELOPMENT.
- STORMWATER MANAGEMENT FEATURES ARE NOT ANTICIPATED TO BE NECESSARY DUE TO THE PRESERVATION OF EXISTING GROUND COVER AND GRADING.
- PER THE RIDEM ENVIRONMENTAL RESOURCE MAP, RIGIS, AND THE TOWN OF GLOUCESTER GIS, GROUNDWATER ON-SITE IS CLASSIFIED GA NO WELLHEAD PROTECTION AREAS OR WASTEWATER OVERLAY DISTRICTS ARE PRESENT ON-SITE.
- ACCORDING TO THE RIDEM ENVIRONMENTAL RESOURCE MAP, THERE ARE NO KNOWN CULTURAL FEATURES EXISTING WITHIN THE PROPOSED DEVELOPMENT AREA.
- SUBJECT PARCEL IS WITHIN A PLANNED DISTRICT.

**GRADING, DRAINAGE, AND EROSION CONTROL NOTES:**

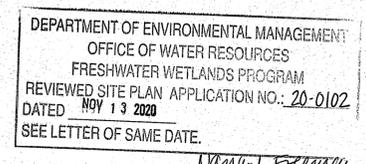
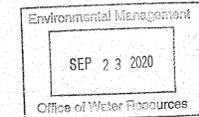
- NO VEGETATION SHALL BE DISTURBED EXCEPT AS NECESSARY FOR CONSTRUCTION AND ONLY AS APPROVED BY THE ENGINEER. NO HEAVY EQUIPMENT SHALL BE OPERATED OR STORED AND NO MATERIALS SHALL BE HANDLED OR STORED WITHIN THE DRIP LINES OF UNDISTURBED TREES OR WITHIN 100 FEET FROM THE LIMIT OF STREAMS.
- PERMANENT CONTROLS OR SURFACE STABILIZATION SHALL COMMENCE AS SOON AS PRACTICABLE BUT IN NO CASE MORE THAN 14 DAYS AFTER COMPLETION OF FILLING AND GRADING ACTIVITIES. AREAS WHICH WILL NOT BE REWORKED FOR 14 CALENDAR DAYS SHALL BE TEMPORARILY SEEDED AND MULCHED AS SOON AS IT IS KNOWN WITH REASONABLE CERTAINTY THAT WORK WILL BE STOPPED FOR AT LEAST 14 CALENDAR DAYS.
- CONSTRUCT TEMPORARY EROSION CONTROLS AS SHOWN ON THE DRAWINGS PRIOR TO STARTING WORK. THE SMALLEST PRACTICAL AREA OF LAND SHOULD BE EXPOSED AT ANY ONE TIME DURING CONSTRUCTION. WHEN LAND IS EXPOSED DURING CONSTRUCTION, THE EXPOSURE SHOULD BE KEPT TO THE SHORTEST PRACTICAL PERIOD OF TIME. LAND SHOULD NOT BE LEFT EXPOSED DURING THE WINTER MONTHS IF APPLICABLE.
- STRAW WATTLE SHALL BE INSTALLED AND MAINTAINED WHERE SHOWN. ADDITIONAL PERIMETER CONTROLS SHALL BE ADDED AS REQUIRED BY THE ENGINEER PRIOR TO ANY ON SITE DISTURBANCE OF EXISTING SURFACE MATERIAL. STRAW WATTLE SHALL BE MAINTAINED DURING AND AFTER CONSTRUCTION TO REMOVE SEDIMENT FROM RUNOFF WATER AND FROM LAND UNDERGOING CONSTRUCTION. ACCUMULATED SEDIMENT SHALL BE REMOVED WHEN ITS DEPTH REACHES 50% OF THE HEIGHT OF THE WATTLE. REPLACE DAMAGED STRAW WATTLE AS REQUIRED BY THE ENGINEER AND IN ACCORDANCE WITH THE CONTRACT DOCUMENTS. WHERE POSSIBLE, NATURAL DRAINAGE WAYS SHOULD BE UTILIZED AND LEFT OPEN TO REMOVE CLEAN EXCESS SURFACE WATER.
- ALL LOCATIONS OF TEMPORARY EROSION CONTROL DEVICES SHALL BE SUBJECT TO ADJUSTMENT AS DIRECTED BY THE ENGINEER, AND SHALL BE REPLACED IF NECESSARY.
- TEMPORARY EROSION AND SEDIMENT CONTROL BMPs (INCLUDING SILT FENCE AND CONSTRUCTION ENTRANCE) SHALL BE REMOVED WITHIN 30 CALENDAR DAYS AFTER FINAL SITE STABILIZATION IS ACHIEVED OR AFTER THE TEMPORARY BMPs ARE NO LONGER NEEDED AS DETERMINED BY THE ENGINEER. TRAPPED SEDIMENT SHALL BE REMOVED OR STABILIZED ON SITE. DISTURBED SOIL RESULTING FROM REMOVAL OF BMPs OR VEGETATION SHALL BE PERMANENTLY STABILIZED (95% VEGETATION DENSITY).
- EXISTING CONTOUR LINES ARE SHOWN BASED ON GIS AND LIDAR DATA. SHOULD THE CONTRACTOR HAVE ANY QUESTIONS OF THEIR INTENT OR ANY PROBLEMS WITH CONTINUITY OF GRADES, THE ENGINEER SHALL BE CONTACTED PRIOR TO BEGINNING WORK.
- STABILIZED CONSTRUCTION ENTRANCES SHALL BE INSTALLED AS SHOWN ON THE DRAWINGS AND WHEREVER CONSTRUCTION TRAFFIC ENTERS AND LEAVES THE SITE. EXISTING CONSTRUCTION ENTRANCES SHALL BE INSPECTED AND MAINTAINED.
- THE EROSION CONTROL DEVICES SHOWN ON THE DRAWING REPRESENT THE MINIMUM REQUIRED FOR EROSION CONTROL AND SHALL BE INSTALLED AS REQUIRED. THE CONTRACTOR SHALL ADD TO THESE DEVICES ANY AND ALL MEASURES AS REQUIRED BY THE ENGINEER TO EFFECTIVELY PREVENT EROSION AND MIGRATION OF SEDIMENT FROM THE WORK AREA.
- EROSION CONTROL MATTING SHALL BE INSTALLED ON ALL SLOPES 3:1 OR GREATER. IF EROSION IS OBSERVED ALONG THE LOWER EDGE OF THE SOLAR PANEL ARRAY ("DRIP EDGE"), EROSION CONTROL MATTING SHALL BE INSTALLED ALONG THE LENGTH OF THE DRIP EDGE.
- EXCESS SOILS REMOVED FOR UNDERGROUND ELECTRICAL CONDUIT SHALL BE REUSED FOR TRENCH BACKFILL AND SHALL BE BACKFILLED THE SAME DAY OF EXCAVATION. SOILS EXCAVATED FROM TRENCH SHALL BE PLACED ON THE UPGRADIENT SIDE OF THE TRENCH TO MITIGATE THE POTENTIAL FOR EROSION BEYOND THE TRENCH. BACKFILLED TRENCH SURFACE SHALL BE MULCHED PRIOR TO VEGETATIVE GROWTH IF NECESSARY TO PREVENT EROSION.
- EXCEPT WHERE OTHERWISE NOTED ON THESE PLANS, NO GRADING IS PROPOSED AS PART OF THIS PROJECT AND EXISTING GROUND COVER WILL BE MAINTAINED IN PROPOSED CONDITIONS. THE PROPOSED CONDITIONS ALLOW FOR AMPLE INFILTRATION TO MAINTAIN EXISTING INFILTRATING CONDITIONS. WITH THESE CONSIDERATIONS, RUNOFF RATES ARE NOT ANTICIPATED TO CHANGE FROM EXISTING TO PROPOSED CONDITIONS.

**SEEDING AND REVEGETATION PLAN:**

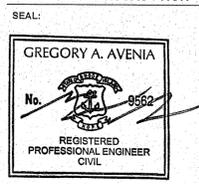
- UPON COMPLETION OF SITE CONSTRUCTION, ALL AREAS PREVIOUSLY DISTURBED SHALL BE TREATED AS STATED BELOW PER THE RHODE ISLAND SOIL EROSION AND SEDIMENT CONTROL HANDBOOK (RI SESC). THESE AREAS WILL BE CLOSELY MONITORED BY THE CONTRACTOR UNTIL SUCH TIME AS A SATISFACTORY GROWTH OF VEGETATION IS ESTABLISHED. SATISFACTORY GROWTH SHALL MEAN APPROXIMATELY 95% OF THE AREA IS VEGETATED WITH VIGOROUS GROWTH.
- DISTURBED AREAS SHALL BE PREPARED FOR SEEDING BY RAKING 3-4" OF THE GROUND SURFACE TO LOOSEN THE EXISTING SOIL.
  - SLOW RELEASE FERTILIZER SHALL BE APPLIED AT A 10-20-20 PROPORTION AT A RATE NOT TO EXCEED 1,500 LBS. PER ACRE. GROUND LIMESTONE SHALL BE APPLIED AT A RATE OF 1-3 TONS PER ACRE DEPENDING ON SOIL TYPE AS SPECIFIED IN THE RI SESC.
  - HAY OR STRAW MULCH SHALL BE APPLIED AT A RATE OF 2 TONS PER ACRE FOR MAXIMUM MOISTURE RETENTION RESULTS. CELLULOSE FIBER MULCH APPLICATION RATE SHALL FOLLOW MANUFACTURER'S RECOMMENDATIONS.
  - DISTURBED AREAS SHALL BE SEEDED USING THE FOLLOWING MIX OR OTHER APPROVED MIX AS DIRECTED BY THE OWNER AND ENGINEER DEPENDING ON THE TIME OF YEAR AND AMOUNT OF SEEDING REQUIRED:  
  
AT THE RATE OF 3.5 LBS. PER 1,000 SQ. FT. OF THE FOLLOWING MIXTURE: KENTUCKY BLUE GRASS (0.5LB/1,000 SF), CREEPING RED FESCUE (2.5 LB/1,000 SF), PERENNIAL RYE GRASS (0.5 LB/1,000 SF). SEEDING SHOULD BE PLANTED TO A DEPTH OF 0.25" TO 0.5" INCHES. SEEDING METHODS MAY BE DRILL SEEDINGS, BROADCASTS AND ROLLED, CULTPACKED, OR TRACKED WITH A SMALL TRACK PIECE OF CONSTRUCTION EQUIPMENT.
  - SEEDING FOR NON-NATIVE SPECIES SHALL BE COMPLETED BETWEEN THE DATES OF APRIL 1 THROUGH JUNE 1 AND AUGUST 15 THROUGH SEPTEMBER 30. SEEDING FOR NATIVE SPECIES SHALL BE COMPLETED IN AUGUST AND SEPTEMBER. WATERING MAY BE REQUIRED DURING DRY PERIODS.
  - IF FINAL SEEDING OF THE DISTURBED AREA IS NOT COMPLETED BY OCTOBER 1ST OF THE YEAR OF CONSTRUCTION THEN TEMPORARY VEGETATIVE COVER SHALL BE INSTALLED PER THE RI SESC.
  - STEEP SLOPES (3:1 AND STEEPER) SHALL BE STABILIZED BY INSTALLING EROSION CONTROL MATTING (E.G., NORTH AMERICAN GREEN OR EXCELSIOR).
  - INSPECT SEEDED AREAS FOR FAILURE AND MAKE NECESSARY REPAIRS AND RESEED IMMEDIATELY. CONDUCT A FOLLOW-UP SURVEY AFTER ONE YEAR AND RESEED WHERE NECESSARY.
  - IF THERE ARE AREAS WITH LESS THAN 40% COVER, REEVALUATE CHOICE OF PLANT MATERIALS AND QUANTITIES OF LIME AND FERTILIZER. IF THE SEASON PREVENTS RESEEDING, MULCH OR JUTE NETTING IS AN EFFECTIVE TEMPORARY COVER.
  - LIME AND FERTILIZE THEREAFTER AT PERIODIC INTERVALS, AS NEEDED.
  - ALL SEDIMENT CONTROL STRUCTURES WILL REMAIN IN PLACE UNTIL VEGETATION IS ESTABLISHED. ESTABLISHED MEANS APPROXIMATELY 95%, AS DETERMINED BY CONSTRUCTION INSPECTOR, OF THE AREA IS VEGETATED WITH VIGOROUS GROWTH.

**DUST CONTROL:**

- CONSTRUCTION ACTIVITIES SHALL BE SCHEDULED SO THAT A MINIMUM OF DISTURBED SOIL IS EXPOSED AT ONE TIME.
- DUST SHALL BE CONTROLLED ON CONSTRUCTION ROUTES AND OTHER DISTURBED AREAS SUBJECT TO SURFACE DUST MOVEMENT AND DUST BLOWING. THE SITE MAY BE SPRINKLED WITH WATER UNTIL THE SURFACE IS WET. SPRINKLING IS ESPECIALLY EFFECTIVE FOR DUST CONTROL ON HAUL ROADS AND OTHER TRAFFIC ROUTES.
- MAINTAIN DUST CONTROL MEASURES PROPERLY THROUGH DRY WEATHER PERIODS UNTIL ALL DISTURBED AREAS HAVE BEEN PERMANENTLY STABILIZED.
- DUST CONTROL METHODS SHALL INCLUDE VEGETATIVE COVER, MULCH (INCLUDING GRAVEL MULCH), WATER SPRINKLING, STONE, AND BARRIERS.
- VEGETATIVE COVER - FOR DISTURBED AREAS NOT SUBJECT TO TRAFFIC, VEGETATION PROVIDES THE MOST PRACTICAL METHOD OF DUST CONTROL.
- MULCH (INCLUDING GRAVEL MULCH) - WHEN PROPERLY APPLIED, MULCH OFFERS A FAST, EFFECTIVE MEANS OF CONTROLLING DUST.
- STONE - USED TO STABILIZE CONSTRUCTION ROADS; CAN ALSO BE EFFECTIVE FOR DUST CONTROL.
- BARRIERS - A BOARD FENCE, WIND FENCE, SEDIMENT FENCE, OR SIMILAR BARRIER CAN CONTROL AIR CURRENTS AND BLOWING SOIL. ALL OF THESE FENCES ARE NORMALLY CONSTRUCTED OF WOOD AND THEY PREVENT EROSION BY OBSTRUCTING THE WIND NEAR THE GROUND AND PREVENTING THE SOIL FROM BLOWING OFFSITE.



**NOT FOR CONSTRUCTION**



9/22/20

REVISION	DATE	DESCRIPTION
3	09/21/2020	RIDEM COMMENTS
2	05/08/2020	FIRE DEPARTMENT COMMENTS
1	03/25/2020	TOWN COMMENTS

CLIENT:  
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**250 KW DC SOLAR DEVELOPMENT**  
AP 18 LOT 10  
459 SNAKE HILL ROAD  
GLOUCESTER, RHODE ISLAND

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SEP 23 2020  
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  2. NO CHANGES TO EXISTING TOPOGRAPHY OR GROUND COVER ARE PROPOSED FOR THE PROPOSED DEVELOPMENT.
  3. STORMWATER MANAGEMENT FEATURES ARE NOT ANTICIPATED TO BE NECESSARY DUE TO THE PRESERVATION OF EXISTING GROUND COVER AND GRADING.
  4. PER THE RIDEM ENVIRONMENTAL RESOURCE MAP, RIGIS, AND THE TOWN OF GLOUCESTER GIS, GROUNDWATER ON-SITE IS CLASSIFIED GA. NO WELLHEAD PROTECTION AREAS OR WASTEWATER OVERLAY DISTRICTS ARE PRESENT ON-SITE.
  5. ACCORDING TO FEMA FIRM 44007C0165G (EFFECTIVE 03/02/2009) THE SITE IS ENTIRELY WITHIN ZONE X, AN AREA OF MINIMAL FLOOD HAZARD.
  6. ACCORDING TO THE RIDEM ENVIRONMENTAL RESOURCE MAP, THERE ARE NO KNOWN CULTURAL FEATURES EXISTING WITHIN THE PROPOSED DEVELOPMENT AREA.
  7. SUBJECT PARCEL IS WITHIN A PLANNED DISTRICT.
  8. THE SHUT-OFF FOR BOTH SOLAR FIELDS SHALL BE LOCATED OUT BY THE ENTRANCE TO THE PROPERTY AND SHALL BE IDENTIFIED AS FIELD A AND B.
  9. PROPOSED ARBORVITAE HEDGE ROW, ARBORVITAE TO BE INSTALLED WITHIN EXISTING VEGETATION TO SCREEN VIEWS FROM NEIGHBORS.

NOT FOR CONSTRUCTION

SEAL:  
GREGORY A. AVENIA  
REGISTERED PROFESSIONAL ENGINEER  
CIVIL  
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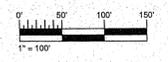
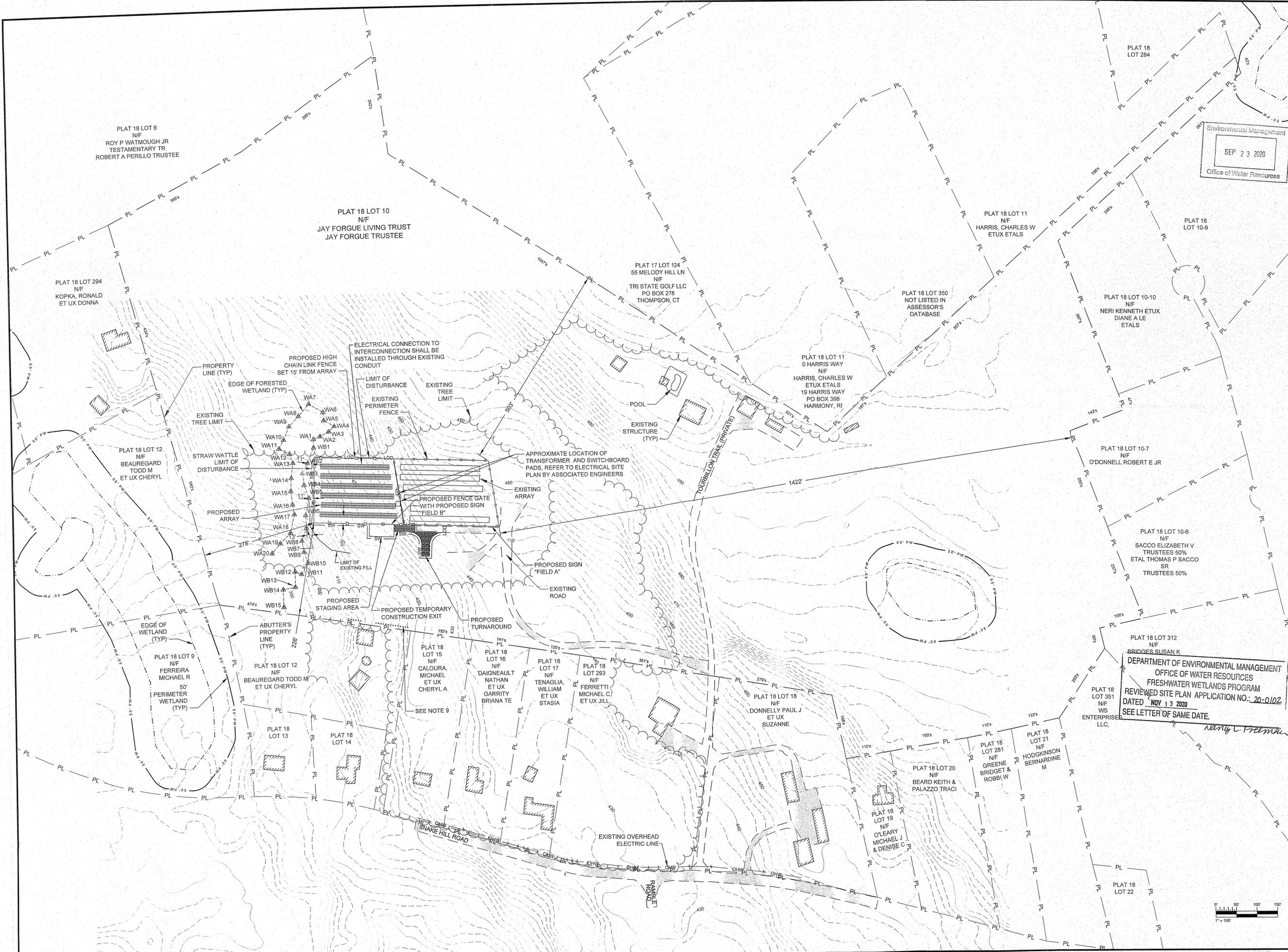
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AP 18 LOT 10  
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TITLE:  
**OVERALL SITE PLAN**

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DRAWN BY: DEE  
CHECKED BY: GAA  
PROJECT NO: 3853180038

**C-3**  
SHEET 3 OF 4

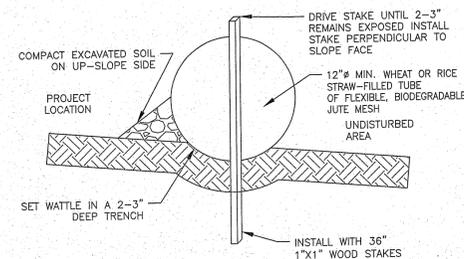


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*Nancy Freeman*

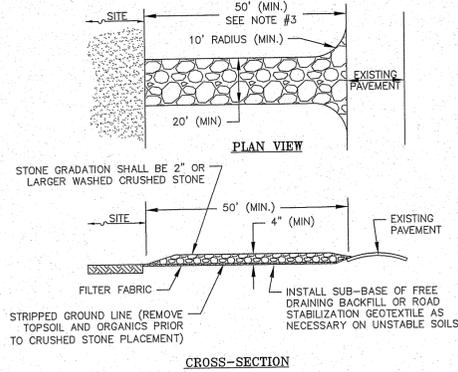
SLOPE STEEPNESS	MAXIMUM LENGTH (FT)
2:1	25
3:1	50
4:1	75
5:1 OR FLATTER	100



- NOTES:**
- BEGIN AT THE LOCATION WHERE THE WATTLE IS TO BE INSTALLED BY EXCAVATING A 2-3" DEEP X 9" WIDE TRENCH ALONG THE CONTOUR OF THE SLOPE. EXCAVATED SOIL SHALL BE PLACED UP-SLOPE FROM THE ANCHOR TRENCH.
  - PLACE THE WATTLE IN THE TRENCH SO THAT IT CONTOURS TO THE SOIL SURFACE. COMPACT THE SOIL FROM THE EXCAVATED TRENCH AGAINST THE WATTLE ON THE UP-HILL SIDE. ADJACENT WATTLES SHOULD TIGHTLY ABUT.
  - SECURE THE WATTLE WITH 18-24" STAKES EVERY 3-4' WITH A STAKE ON EACH END. STAKES SHALL BE DRIVEN THROUGH THE MIDDLE OF THE WATTLES LEAVING AT LEAST 2-3" OF STAKE EXTENDING ABOVE THE WATTLE. THE WATTLE STAKES SHALL BE DRIVEN PERPENDICULAR TO SLOPE FACE.
  - MAX. DRAINAGE AREA ≤ 0.25 ACRES/100 LINEAR FEET.

**STRAW WATTLE**

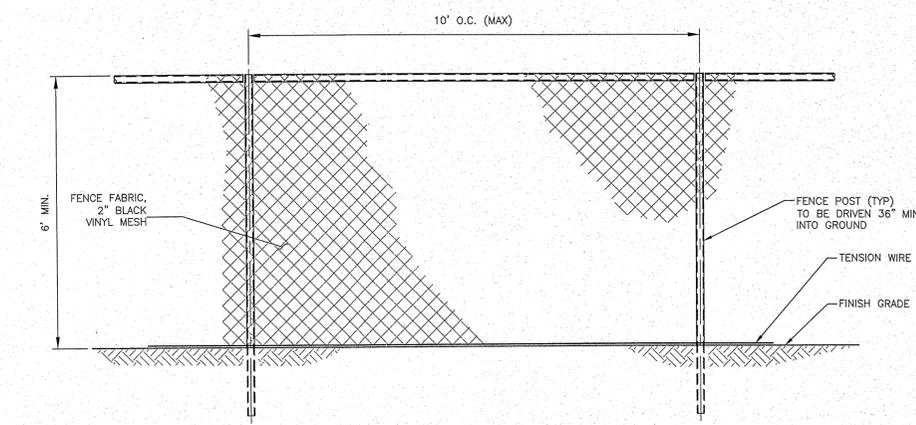
NTS wood



- NOTES:**
- ENTRANCE WIDTH SHALL BE TWENTY (20) FEET WIDE MINIMUM, BUT NOT LESS THAN THE FULL WIDTH AT POINTS WHERE INGRESS OR EGRESS OCCURS.
  - THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PAVED SURFACES. PROVIDE PERIODIC TOP DRESSING WITH ADDITIONAL STONE OR ADDITIONAL LENGTH AS CONDITIONS DEMAND. REPAIR ANY MEASURES USED TO TRAP SEDIMENT AS NEEDED. IMMEDIATELY REMOVE ALL SEDIMENT SPILLED, DROPPED, WASHED OR TRACKED ONTO PAVED SURFACES. ROADS ADJACENT TO A CONSTRUCTION SITE SHALL BE LEFT CLEAN AT THE END OF EACH DAY.
  - 50 FEET MINIMUM WHERE THE SOILS ARE SANDS OR GRAVELS OR 100 FEET MINIMUM WHERE SOILS ARE CLAYS OR SILTS, EXPECT WHERE THE TRAVELED LENGTH IS LESS THAN 50 OR 100 FEET RESPECTIVELY.

**TEMPORARY CONSTRUCTION EXIT**

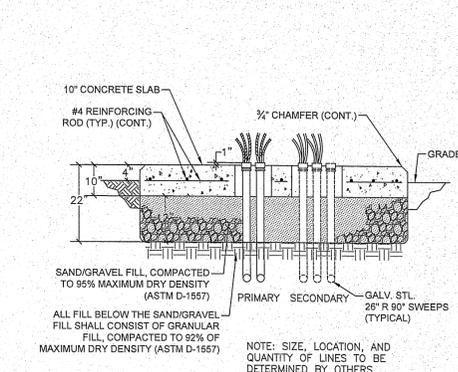
NTS wood



- NOTE:**
- FENCE SHALL BE INSTALLED IN ACCORDANCE WITH NFPA70.

**CHAIN LINK PERIMETER FENCE**

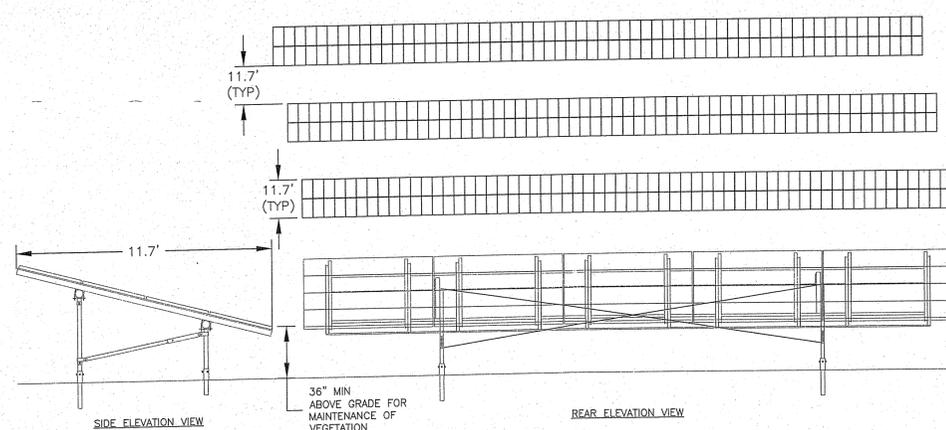
NTS wood



- NOTES:**
- MATS/SLABS TO BE SUPPORTED ON A MINIMUM 12" OF COMPACTED SAND/GRAVEL BASE COURSE.
  - REMOVED ALL ORGANIC SOIL BELOW PROPOSED MATS/SLABS AREAS.

**CONCRETE PAD**

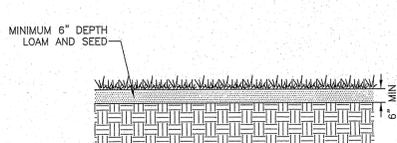
NTS wood



- NOTE:**
- DESIGN FOR FOUNDATIONS, RACKING, AND MODULES BY OTHERS. DETAILS SHOWN FOR ILLUSTRATION PURPOSES ONLY.

**TYPICAL SOLAR ARRAY**

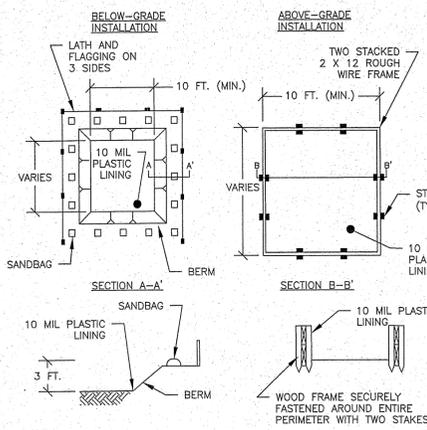
NTS wood



- NOTE:**
- SEED MIX SHALL BE URI #3 OR APPROVED EQUAL.
  - LOAM AND SEED ONLY IN AREAS WHERE EXISTING VEGETATION WAS DAMAGED DURING CONSTRUCTION.
  - USE OF FERTILIZER SHALL BE LIMITED TO THE MINIMAL AMOUNT NEEDED FOR THE INITIAL ESTABLISHMENT OF VEGETATIVE COVER ONLY.

**TYPICAL SEEDING CROSS-SECTION**

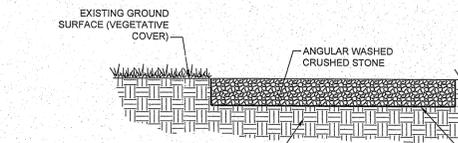
NTS wood



- NOTES:**
- ACTUAL LAYOUT DETERMINED IN THE FIELD.
  - LOCATE A MIN. OF 50 FEET FROM STORM DRAINS, OPEN CHANNELS, WATER BODIES, AND JURISDICTIONAL WETLANDS.
  - SOIL BASE SHALL BE PREPARED FREE OF ROCKS OR OTHER DEBRIS THAT COULD CAUSE A TEAR IN THE LINER.
  - LOCATE WASHOUT AREA AT LEAST 50 FEET FROM SENSITIVE AREAS SUCH AS STORM DRAINS, OPEN DITCHES, OR WATER BODIES, INCLUDING ALL JURISDICTIONAL WETLANDS.

**TEMPORARY CONCRETE WASHOUT**

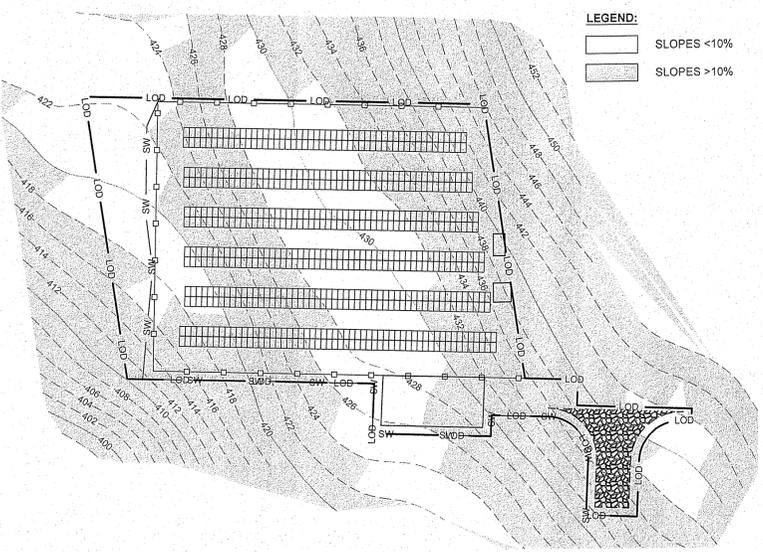
NTS wood



- NOTES:**
- ACCESS ROAD TO BE CONSTRUCTED OF A MINIMUM 12" OF ANGULAR WASHED CRUSHED STONE FILL.
  - REMOVE ALL ORGANIC SOIL BELOW PROPOSED CRUSHED STONE ROAD AREAS.

**ACCESS ROAD**

NTS wood



**SLOPES EXCEEDING 10% GRADE**

NTS wood

NOT FOR CONSTRUCTION

GREGORY A. AVENIA  
No. 9562  
REGISTERED PROFESSIONAL ENGINEER  
CIVIL

9/22/20

REVISION	DATE	DESCRIPTION
3	09/21/2020	RIDEM COMMENTS
2	05/08/2020	FIRE DEPARTMENT COMMENTS
1	03/25/2020	TOWN COMMENTS

CLIENT:  
**ECONOX RENEWABLES, INC**  
48 WATERFIELD ROAD,  
P.O. BOX 808  
WINCHESTER, MA 01890

PROJECT:  
**250 KW DC SOLAR DEVELOPMENT**  
AP 18 LOT 10  
489 SNAKE HILL ROAD  
GLOUCESTER, RHODE ISLAND

TITLE:  
**DETAILS**

ISSUED FOR:	PERMITTING
DATE:	FEBRUARY 26, 2020
SCALE:	AS SHOWN
DRAWN BY:	DED
CHECKED BY:	GAA
PROJECT NO.:	3653180038

**C-4**

SHEET 4 OF 4

NEW SOLAR FIELD 702 355 WATT MODULES AND 4 SOLECTRIA PV150TL INVERTERS FOR A TOTAL OF 249.2 KW/DC AND 200.0KW/200.0KVA AC

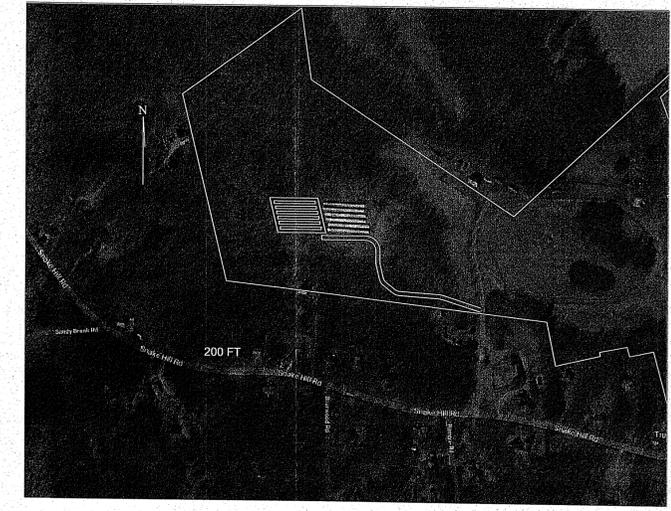
NEW 400 AMP. MAIN SWITCHBOARD

EXISTING SOLAR FIELD

EXISTING 400 AMP. MAIN SWITCHBOARD

EXISTING CUSTOMER OWNER 300 KVA TRANSFORMER 12.47 KV PRIMARY 480/277 VOLT SECDARY WITH TAPS

NEW CUSTOMER OWNER 300 KVA TRANSFORMER 12.47 KV PRIMARY 480/277 VOLT SECDARY WITH TAPS



DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
OFFICE OF WATER RESOURCES  
FRESHWATER WETLANDS PROGRAM  
REVIEWED SITE PLAN APPLICATION NO.: 20-0102  
DATED NOV 13 2020  
SEE LETTER OF SAME DATE.

*Nancy L. Freeman*

ASSOCIATED  
**AE**  
ENGINEERS  
640 GEORGE WASHINGTON HIGHWAY  
BUILDING B, SUITE 103  
LINCOLN, RHODE ISLAND  
401-851-0473  
401-824-3815  
ASSOCIATEDENGINEERS.NET

REVISIONS:

No	DATE	REVISION
1		

Environmental Management  
SEP 23 2020  
Office of Water Resources

RALPH A. DE VITO  
REGISTERED PROFESSIONAL ENGINEER  
ELECTRICAL  
No. 06590

ECONOX RENEWABLES INC.  
401 SNAKE HILL ROAD  
GLOUCESTER, RHODE ISLAND.

PROJECT TITLE:

ISSUED FOR PERMITTING  
DRAWING TITLE:  
249.2 KW/DC - 200.0 KW/200KVA AC  
SITE PLAN

PROJECT No.: 17075  
DRAWN BY: RAD  
CHECKED BY: RAD  
CAD FILE: 17075  
DATE: 16 DEC 2019

SHEET No:

**E-2**

