

Exhibit CS-BW-33

Docket 8302

Exhibit CS-ECOS-4

*Site Plan, Construction
Details, and Elevations*

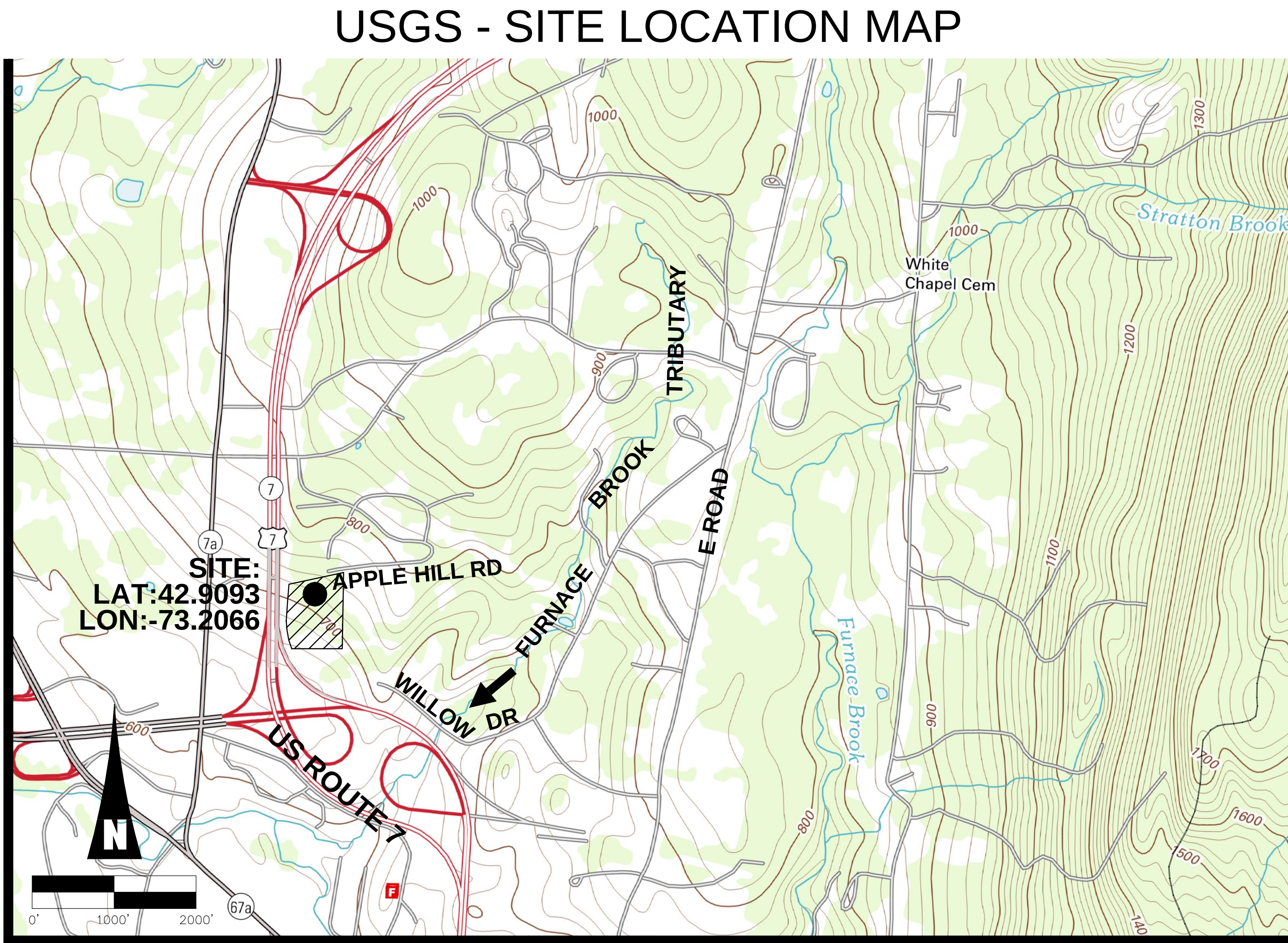
CHELSEA SOLAR CIVIL CONSTRUCTION PLANS

FOR

Site, Grading, Drainage/Erosion Control & Electrical Layout

IN

BENNINGTON, VERMONT



CONTACT INFO:

OWNER/DEVELOPER:
ECOS ENERGY
222 SOUTH 9TH STREET
SUITE 1600
MINNEAPOLIS, MN 55402

CIVIL ENGINEER:
SCOTT MICHAEL MAPES, P.E.
P.O. BOX 5517
BURLINGTON, VT 05402-5517
SMMAPES@AOL.COM

SURVEYOR:
VERMONT SURVEY CONSULTANTS, LLC
69 GROVE STREET
RUTLAND, VT 05701

WETLAND DELINEATION:
ARROWWOOD ENVIRONMENTAL
950 BERT WHITE ROAD
HUNTINGTON, VT 05462

SHEET INDEX

●	6/16/2014	1	COVER SHEET
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DRAWING INDEX LEGEND

●	FILLED CIRCLE INDICATES DRAWING INCLUDED WITHIN THIS ISSUE		
●	MOST RECENT REVISION NUMBER		
●	MOST RECENT ISSUE OR REVISION DATE		
○	-	X/XX/201X	X SHEET TITLE

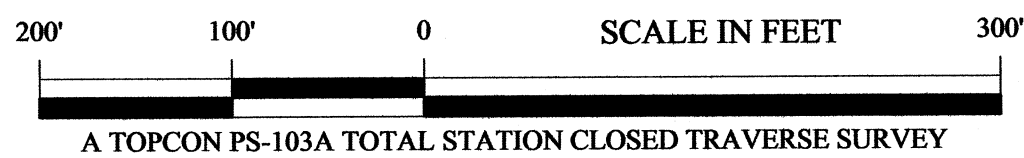


REVISION LOG:

2/3/2014 - 45 DAY NOTICE DOCUMENTS
6/13/2014 - PSB FILING DOCUMENTS



CHELSEA SOLAR
CIVIL CONSTRUCTION PLANS
1033 Willow Road
BENNINGTON, VT 05201
LAT: 42.9093 / LON: -73.2066
BENNINGTON COUNTY
COVER SHEET



U.S ROUTE NO. 7 (NORTH BOUND)

NO. 133 RUSSETT DR.
EARL J. SENECA
BK. 429 PG. 81 - SEPTEMBER 21, 2005

NO. 40 RUSSETT DR.
THOMAS A. CUSHMAN
K. 0-447 PG. 94 - AUGUST 22, 2007

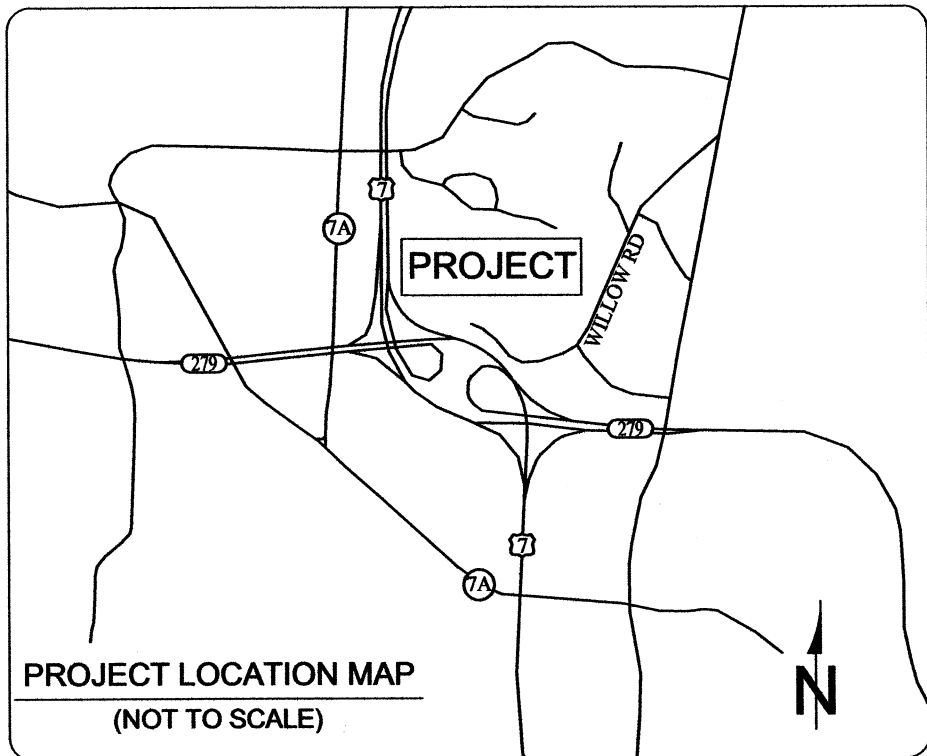
NO. 589 APPLE HILL RD.
DAVID B. & TERESA A. SHOLES
 BK. 385 PG. 164 - AUGUST 30, 2002
 BK. 385 PG. 165 - AUGUST 30, 2002
 (SEE REFERENCED SURVEY B)

REFERENCE IS MADE TO THE FOLLOWING SURVEY PLANS

- A) THE PLAN SET FOR HIGHWAY PROJECT # 019-(16) - ROUTE U.S. CONNECTOR - RAMPS E, F, & G - SHEETS 23 THROUGH SHEETS 26 DATED 11/14/1969. SAID PLANS WERE OBTAINED FROM THE STATE OF VERMONT AGENCY OF TRANSPORTATION DISTRICT NO. 4 OFFICE IN BENNINGTON, VT.
- B) A SURVEY PLAT PREPARED BY WEST MOUNTAIN ENGINEERING ENTITLED "SUBDIVISION OF PROPERTY - PAUL AND NANCY BOHNE - APPLE HILL ROAD - BENNINGTON, VERMONT" DATED AUGUST 2001. SAID PLAT WAS NOT FOUND TO BE OF RECORD IN THE TOWN OF BENNINGTON LAND RECORDS.
- C) A SURVEY PLAT PREPARED BY GERALD E. MORRISSEY, INC. ENTITLED "APPLE HILL DEVELOPMENT - ORCHARD LOT, OWNER-DEVELOPER PAUL & NANCY BOHNE, III - BENNINGTON, VERMONT," DATED JULY 1988 AND REVISED AUGUST 1988. SAID PLAT WAS NOT FOUND TO BE OF RECORD IN THE TOWN OF BENNINGTON LAND RECORDS.
- D) A SURVEY PLAT PREPARED BY GERALD E. MORRISSEY, INC. ENTITLED "MAP OF PROPERTY BELONGING TO MYRA ELWELL, VV NOSTRAND - BENNINGTON, VT" DATED DECEMBER 1990. SAID PLAT WAS NOT FOUND TO BE OF RECORD IN THE TOWN OF BENNINGTON LAND RECORDS.

LEGEND

IRON PIPE/PIN (EXISTING)	
IRON PIPE/PIN (SET)	
UNMONUMENTED POINT	
PROPERTY LINE	
R.O.W. LINE	
STONEWALL	
PAVED SURFACE	
UTILITY POLE	



MONUMENT SCHEDULE				
PROPERTY CORNER	MONUMENT	GRADE RELATIONSHIP	EXISTING/ SET	REMARKS
(A)	4" x 4" CONC. BOUND	ABOVE 8"	EXISTING	VT. HWY. DEPT.
(B)	4" x 4" CONC. BOUND	ABOVE 8"	EXISTING	VT. HWY. DEPT.
(C)	4" x 4" CONC. BOUND	ABOVE 10"	EXISTING	VT. HWY. DEPT.
(D)	1" IRON PIPE	ABOVE 12"	EXISTING	IN STONE WALL
(E)	4" x 4" CONC. BOUND	ABOVE 8"	EXISTING	VT. HWY. DEPT.
ADDITIONAL MONUMENTATION USED IN THIS SURVEY IS OFF LOCUS.				

SITE RESTRICTIONS:
ZONE: RURAL CONSERVATION
ALL SITE RESTRICTIONS WERE OBTAINED PER THE TOWN OF BENNINGTON
CONTACT NAME: DANIEL MONKS
TITLE: ZONING ADMINISTRATOR
CONTACT NUMBER: (802)-442-1037

SETBACK RESTRICTION
FRONT - 50' SIDE - 30' REAR - MIN 50'
MAX. BUILDING HEIGHT - 30' MAX. BUILDING COVERAGE - 10%

FLOOD NOTE:
BY GRAPHIC PLOTTING ONLY, THIS PROPERTY APPEAR TO BE IN ZONE "C" OF THE FLOOD INSURANCE RATE MAP, COMMUNITY PANEL NUMBER 500013 0005 C, WHICH BEARS AN EFFECTIVE DATE OF JUNE 17, 1986. THIS IS NOT A SPECIAL FLOOD HAZARD AREA.

EASEMENT & RIGHT-OF-WAY NOTES:

1. WILLLOW ROAD (TOWN HIGHWAY NO. 18) IN THE AREA OF THE SUBJECT PROPERTY IS A CLASS 4 PAVEMENT ROADWAY. THAT PORTION OF THE SAID WILLLOW ROAD NOTED AS CLASS 4 IS PURPORTED TO BE 63.7 MILES IN LENGTH, WHICH PLACES THE ADJACENT CLASS 4 RESERVING AREA NEARLY AT THE MIDDLE OF THE PROJECTED ROADWAY. THE ADJACENT CLASS 4 RESERVING AREA OF THE ROADWAY AS Laid OUT COULD NOT BE DETERMINED AND THUS BY VERMONT STATUTE THE LIMITS OF WILLLOW ROAD WERE SURVEYED AT 1-1/2 RODS (24.75') FROM THE CENTERLINE OF THE ROADWAY.
2. REFERENCE IS MADE TO THE DEEDS OF MYRA VAN NOSTRAND TO PHILIP & MARIAN VAN NOSTRAND (PREDECESSORS IN TITLE TO WARD) DATED DECEMBER 28, 1990 AND MARCH 14, 1991 AND RECORDED IN BK. 0-288 AT PG. 247 AND BK. 0-289 AT PG. 213 RESPECTIVELY. THE FIRST MENTIONED DEED CONVEYING A 1/2 INTEREST IN THE INTEREST IN THE SAID RESERVING AREA TO PHILIP & MARIAN VAN NOSTRAND FOR THE SAID WILLLOW ROAD 166' WIDE WITH A 621.5' LONG IN THE AREA INDICATED. THE SECOND CONVEYING THE REMAINING 1/2 INTEREST. FURTHER REFERENCE IS MADE TO THE DEED DATED NOVEMBER 10, 1994 AND RECORDED IN BK. 0-316 AT PG. 200. THIS DEED CONFIRMS A QUIT-CLAIM TO THE SAID PHILIP & MARIAN VAN NOSTRAND OF THE RIGHTS IN THE SAID WILLLOW ROAD. THE SAID MYRA VAN NOSTRAND. IT IS MY OPINION THAT THIS EASEMENT NO LONGER ENCOMPASSES THE SUBJECT PROPERTY.

THIS SURVEY WAS PREPARED FOR AND IS CERTIFIED TO ECOS ENERGY, LLC.

**VERMONT SURVEY
CONSULTANTS, LLC**

LAND SURVEYING - MAPPING - SUBDIVISIONS
69 GROVE STREET RUTLAND, VERMONT 05701 (802) 773-2210

ALTA/ACSM LAND TITLE SURVEY
PROPERTY OF JONATHAN M. & MICHELLE M. WARD
TO BE CONVEYED TO ECOS ENERGY, LLC

1031 WILLOW ROAD & U.S. ROUTE 7
TOWN OF BENNINGTON - COUNTY OF BENNINGTON
STATE OF VERMONT

PROJ. NO: 2013-25		DRAWN BY: KJB		RE -
SCALE: 1" = 100 FT.	DATE: AUGUST 2, 2013	SHEET 1 OF 1		

NOT VALID
UNTIL SEALED

REV.	DESCRIPTION	BY	DATE
<u>COPYRIGHT © 2013 VERMONT SURVEY CONSULTANTS, LLC</u> ALL RIGHTS RESERVED. THIS DOCUMENT OR ANY PART THEREOF MAY NOT BE REPRODUCED OR UTILIZED IN ANY FORM WITHOUT PRIOR WRITTEN PERMISSION FROM VERMONT SURVEY CONSULTANTS, LLC.			

1. PROPERTY SURVEY INFORMATION FOR THIS PROJECT PROVIDED BY VERMONT SURVEY CONSULTANTS, LLC.
2. REFER TO ALTA SURVEY FOR LOT BEARINGS, DIMENSIONS AND AREAS.
3. GEOTECHNICAL REPORTS HAVE BEEN PREPARED BY NEIL O ANDERSON AND ASSOCIATES. THE CONTRACTOR SHALL BE FAMILIAR WITH THE REPORTS AND SHALL REVIEW ALL RECOMMENDATIONS.
4. ALL DIMENSIONS ARE TO EDGE OF GRAVEL, FENCE LINES AND PERPENDICULAR TO PROPERTY LINES UNLESS OTHERWISE NOTED.

[illegible]

EXISTING PROPERTY LINE
 PROPOSED SETBACK
 PROPOSED FENCE
 PROPOSED GRAVEL ACCESS ROAD
 PROPOSED SOLAR ARRAY BLOCK
 2 STRINGS - 11 MODULES
 AC DISTRIBUTION TRENCH
 DC DISTRIBUTION TRENCH
 NRCS SOIL INFORMATION

IMPERVIOUS CALCULATIONS	EXISTING SITE		PROPOSED SITE	
	SF	AC	SF	AC
TOTAL SITE AREA	1189164	27.30	1189164	27.30
GRAVEL ACCESS ROAD			32760	0.75
RACKING FOUNDATIONS			500	0.01
INVERTER SKID AREA			1100	0.03
TOTAL IMPERVIOUS	0	0.00	34360	0.79
PERCENTAGES	PERVIOUS	IMPERVIOUS	PERVIOUS	IMPERVIOUS
	100.00%	0.00%	97.11%	2.89%

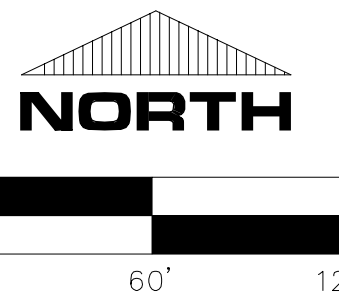


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Date: 6/16/14 Reg. No: 5007

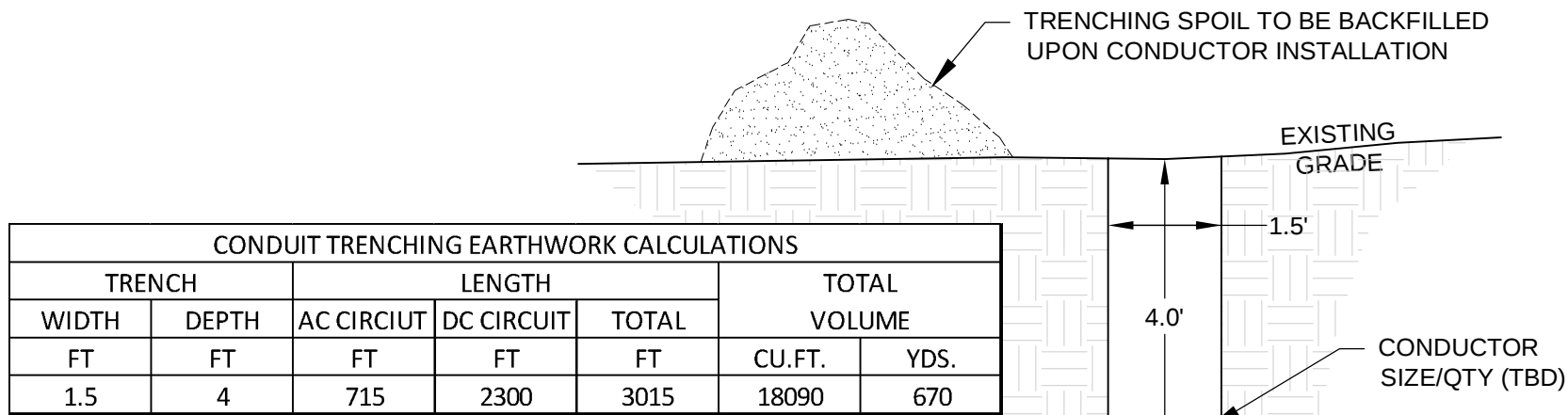


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CIVIL CONSTRUCTION PLANS**

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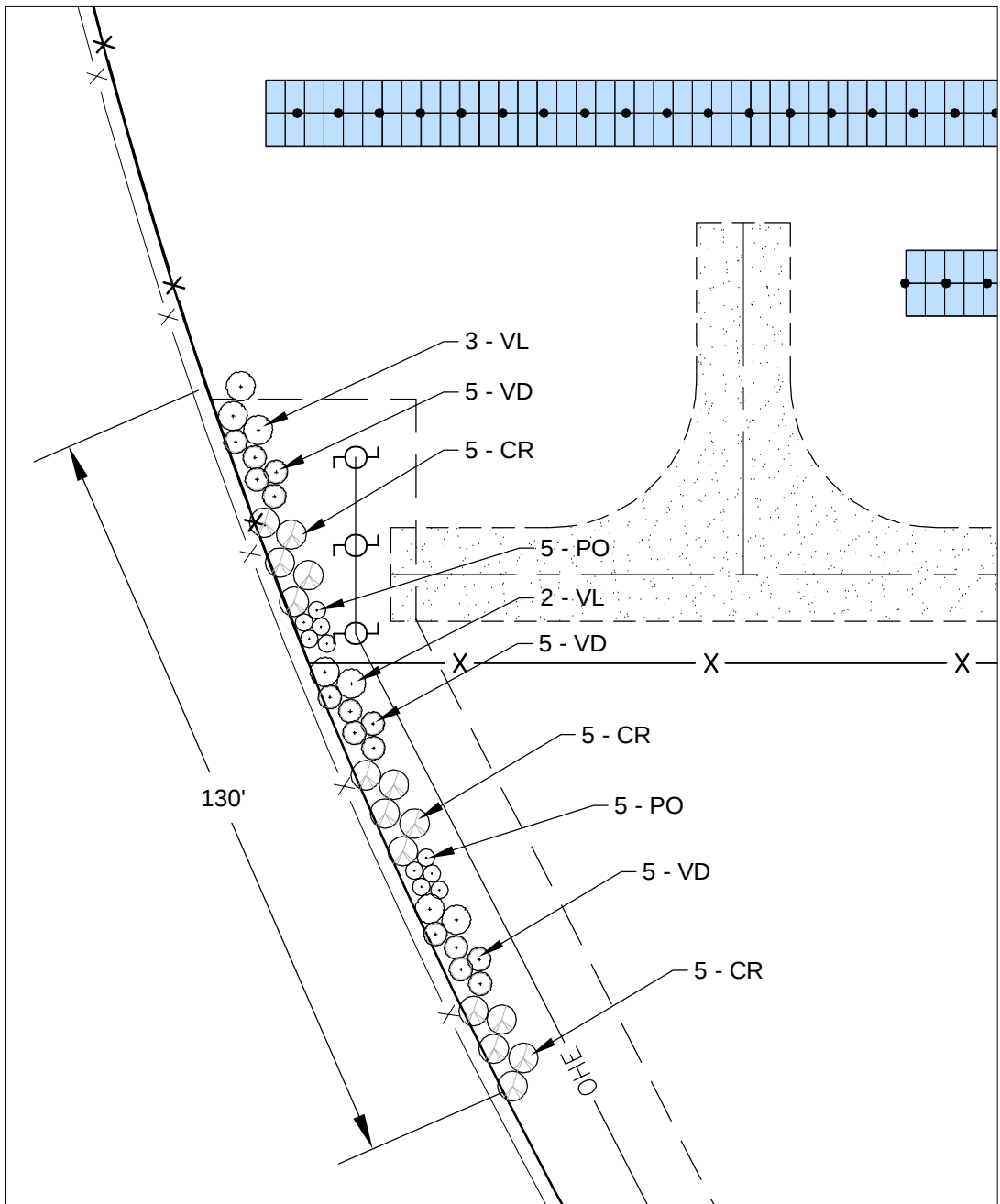
CIVIL SITE PLAN

3 of 7



- NOTES:
1. CONDUCTOR CLEARANCES DEPENDENT ON GEOTECHNICAL PARAMETERS AND ELECTRICAL DESIGN
 2. CONDUCTOR SIZING AND QUANTITIES PER TRENCH DEPENDENT ON FINAL ELECTRICAL DESIGN TRENCH DIMENSIONS FOR EARTHWORK QUANTITIES ARE CONSERVATIVE.

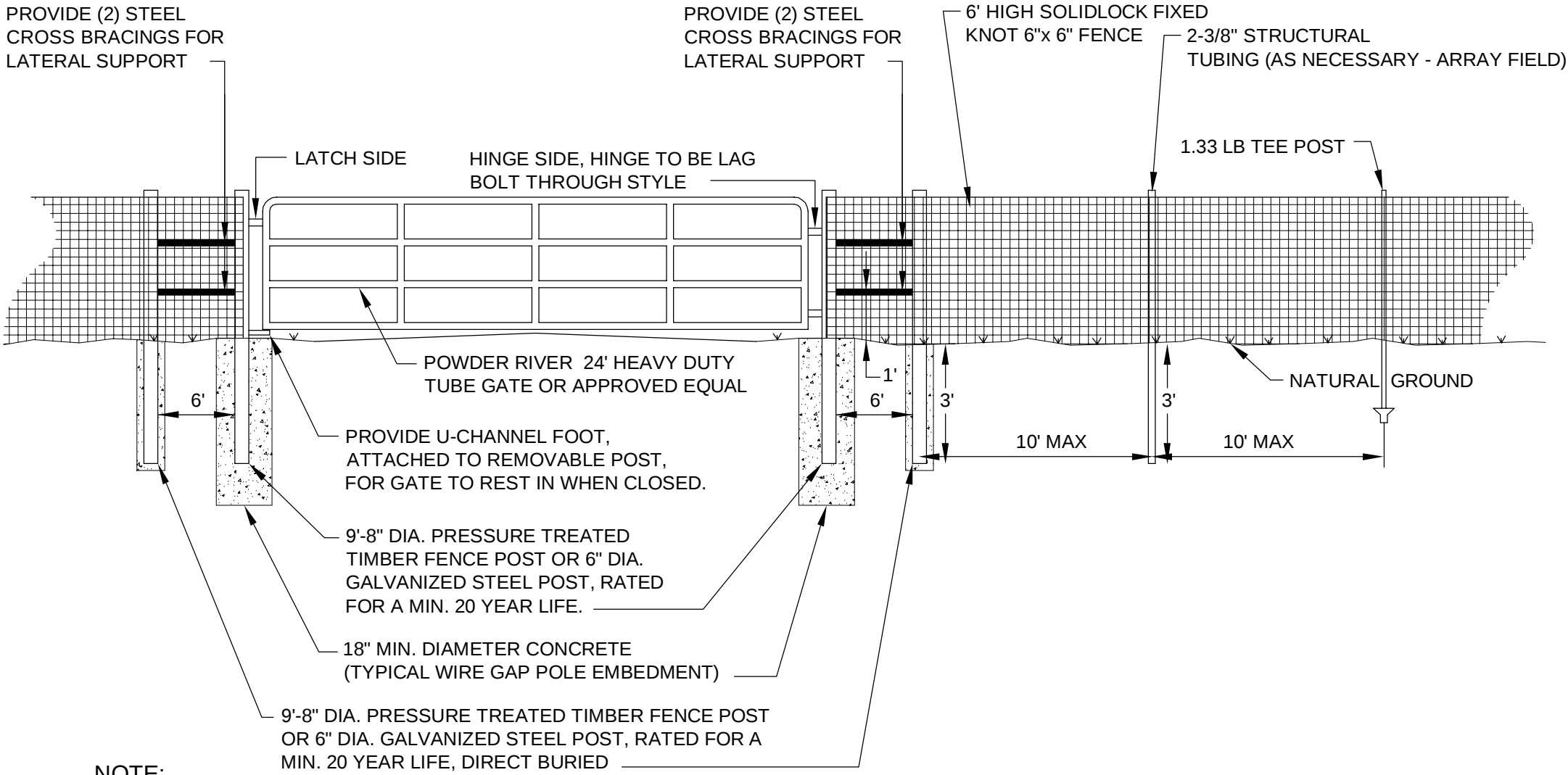
TRENCHING DETAIL



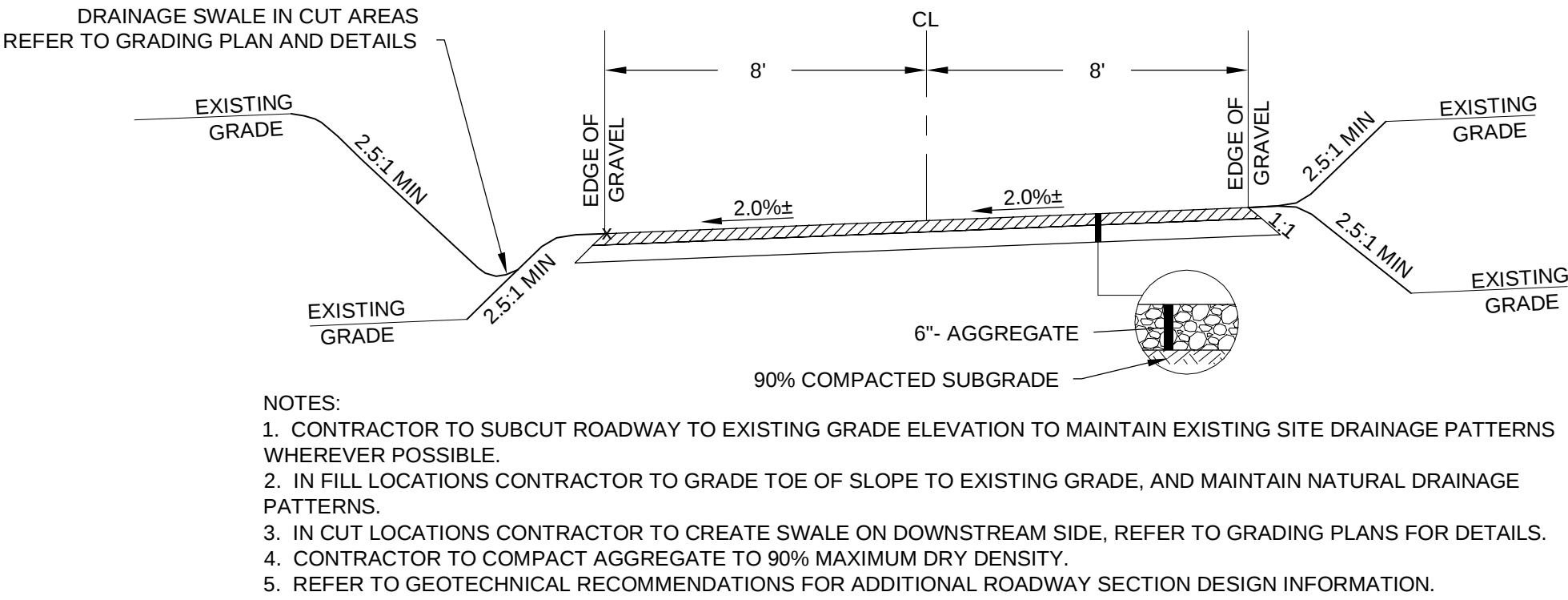
KEY	BOTANICAL NAME	COMMON NAME	QTY.	SIZE	REMARKS
SHRUBS					
⊙ CR	Cornus racemosa	Gray Dogwood	15	3-4' Ht.	B&B, Plant 60" o.c.
⊙ PO	Physocarpus opulifolius 'Nanus'	Common Ninebark	10	24-30" Wide	B&B, Plant 36" o.c.
⊙ VD	Viburnum dentatum	Arrowwood Viburnum	15	3-4' Ht.	B&B, Plant 48" o.c.
⊙ VL	Viburnum lentago	Nannyberry Viburnum	7	3-4' Ht.	B&B, Plant 60" o.c.

- NOTES:
1. LAYOUT/ARRANGEMENT OF ALL PLANT MATERIAL TO BE LOCATED BY THE LANDSCAPE ARCHITECT PRIOR TO INSTALLATION
 2. ALL PROPOSED PLANTINGS TO BE APPROVED BY GREEN MOUNTAIN POWER

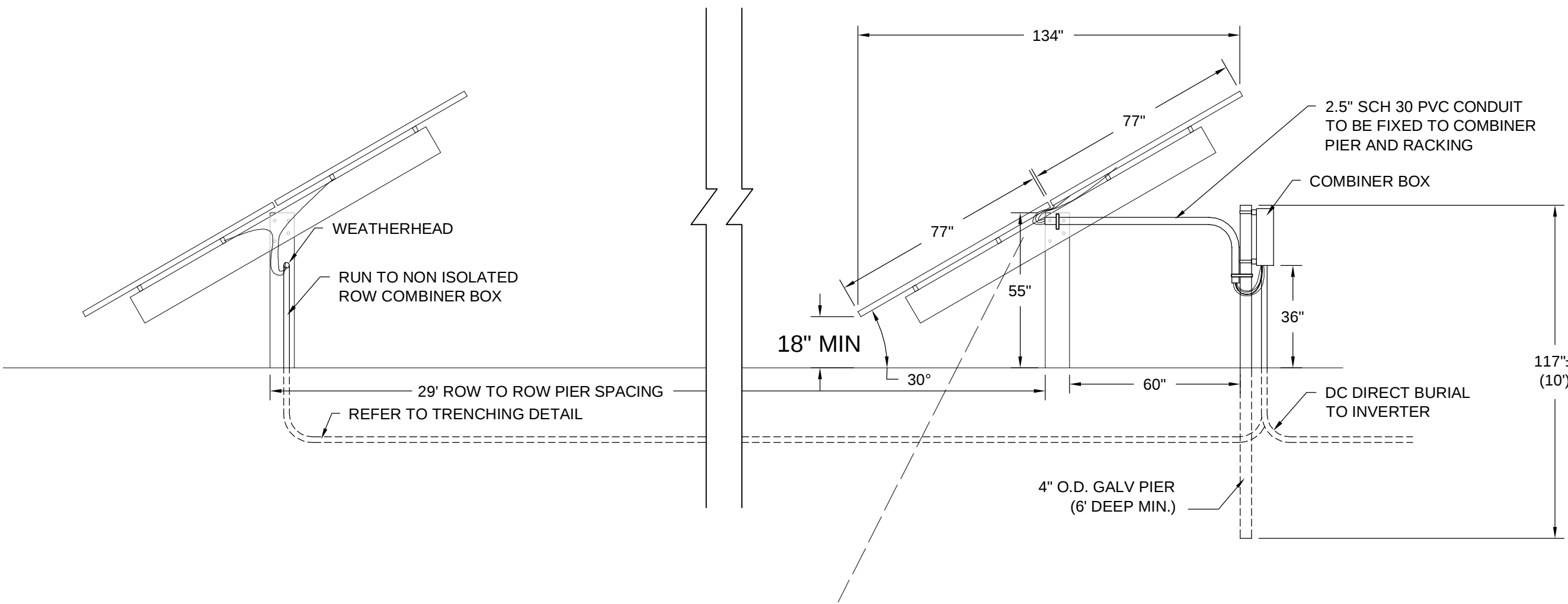
LANDSCAPING DETAIL - 1"=30'



ACCESS GATE & PERIMETER FENCE DETAIL



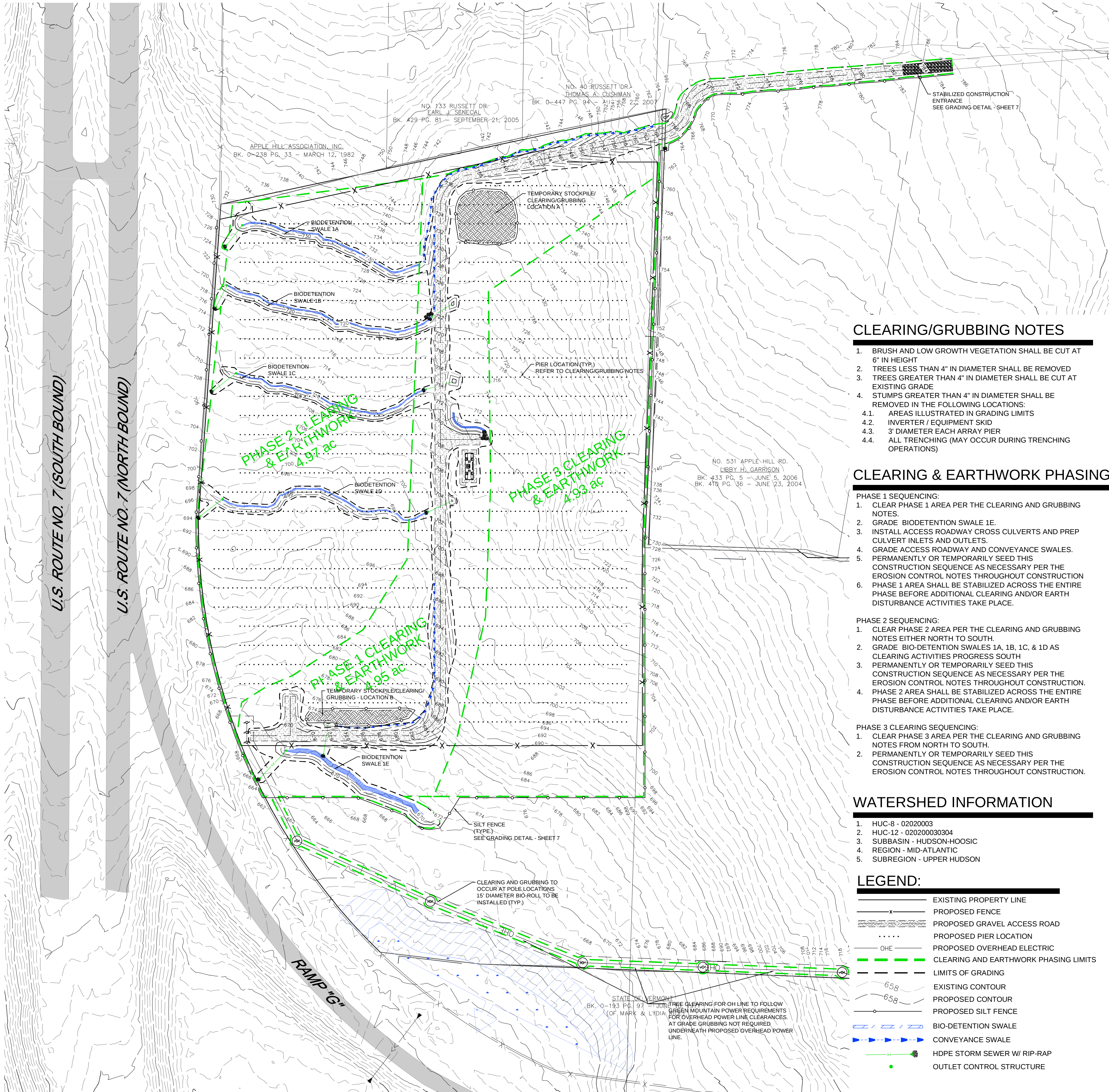
ACCESS ROAD DETAIL



ARRAY CROSS SECTION - COMBINER BOX MOUNTING DETAIL

EROSION CONTROL PLAN NOTES:

- THE OWNER/CONTRACTOR SHALL ADHERE TO ALL EROSION PREVENTION SEDIMENT CONTROL PLAN (EPSC) REQUIREMENTS AND ANY PERMIT CONDITIONS OF THE PUBLIC SERVICE BOARD.
- THE OWNER/CONTRACTOR SHALL FOLLOW THE GUIDANCE AND CONDITIONS IN THE STATE CONSTRUCTION GENERAL PERMIT 3-9020, THE VERMONT EPSC FIELD GUIDE AND VERMONT STANDARDS & SPECIFICATIONS FOREPSC (2006). THIS MODERATE RISK AUTHORIZATION INCLUDES THE FOLLOWING REQUIREMENTS:
 - IMPLEMENTATION OF EROSION PREVENTION AND SEDIMENT CONTROL PRACTICES REQUIRED BY THE VT EPSC FIELD GUIDE AUGUST 2006.
 - ALL AREAS OF DISTURBANCE MUST HAVE TEMPORARY OR FINAL STABILIZATION WITHIN 7 DAYS OF THE INITIAL DISTURBANCE. AFTER THIS TIME, ANY DISTURBANCE IN THE AREA MUST BE STABILIZED AT THE END OF EACH WORK DAY. THE FOLLOWING EXCEPTIONS APPLY:
 - STABILIZATION IS NOT REQUIRED IF WORK IS TO CONTINUE IN THE AREA WITHIN THE NEXT 24 HOURS AND THERE IS NO PRECIPITATION IN THE FORECAST WITHIN THE NEXT 24 HOURS.
 - STABILIZATION IS NOT REQUIRED IF THE WORK IS OCCURRING IN AN SELF CONTAINED EXCAVATION (I.E. NO OUTLET) WITH A DEPTH OF 2 FEET OR GREATER (E.G. FOUNDATION EXCAVATIONS, UTILITY TRENCHES).
 - NO MORE THAN 5.0 ACRES OF LAND MAY BE DISTURBED (EARTH DISTURBANCE OR CLEARING) AT ANY GIVEN TIME UNDER THIS AUTHORIZATION. DISTURBED LAND MUST BE STABILIZED IN ACCORDANCE WITH THE PROJECT PHASING PLAN BEFORE INITIATING NEW DISTURBANCE ON THE SITE.
 - INSPECTIONS SHALL BE CONDUCTED AT LEAST ONCE EVERY (7) CALENDAR DAYS AND WITHIN 24 HOURS OF THE END OF A RAIN EVENT RESULTING IN DISCHARGE OF STORMWATER FROM THE CONSTRUCTION SITE.
 - IF THERE IS A DISCHARGE OF VISIBLY DISCOLORED STORMWATER FROM THE CONSTRUCTION SITE OR FROM THE SITE TO THE WATERS OF THE STATE, THE PERMITTEE SHALL TAKE IMMEDIATE CORRECTIVE ACTION.
 - IF AFTER COMPLETING CORRECTIVE ACTION, THERE CONTINUES TO BE A DISCHARGE OF SEDIMENT FROM THE SITE TO THE WATERS OF THE STATE THE PERMITTEE SHALL NOTIFY THE DEC BY SUBMITTING A REPORT WITHIN 72 HOURS OF THE DISCHARGE.
- IMPLEMENTING A SUCCESSFUL EPSC, THE OWNER/CONTRACTOR SHALL SEEK TO:
 - PREVENT EROSION AND THE TRANSPORT OF SEDIMENT OFF SITE ONTO PRIVATE PROPERTY, PUBLIC STREETS AND SIDEWALKS, INTO THE MUNICIPAL OR STATE STORMWATER SYSTEM, AND/OR WATERS OF THE STATE.
 - PREVENT PARKING OF ANY CONSTRUCTION OR CONSTRUCTION RELATED VEHICLES ON PRIVATE PROPERTY WITHOUT RIGHT OR PERMISSION OR ON MUNICIPAL OWNED GREEN SPACE. ANY DAMAGE TO GREEN SPACE SHALL BE IMMEDIATELY ADDRESSED.
 - TAKE ANY AND ALL STEPS NECESSARY TO ABATE EROSION AND TO CLEAN UP ALL RESULTING SEDIMENT DEPOSITED, DISCHARGED OR FOUND TO EXIST OFF SITE, ON TOWN STREETS AND SIDEWALKS AND/OR IN THE MUNICIPAL OR STATE STORMWATER SYSTEM.
 - MAINTAIN ALL PROJECT EPSC DEVICES, MEASURES AND BMP'S AND PERFORM REQUISITE CLEANUP OF RESULTING SEDIMENTATION. THIS MAY INCLUDED BUT IS NOT LIMITED TO, DAILY SWEEPING OF STREETS AND SIDEWALKS AND CLEANING ANY STORMWATER CATCH BASINS.
 - SPECIFY AN APPROPRIATE MULCH WHEN AND WHERE NEEDED AND ADEQUATE ANCHORING MEASURES TO PREVENT BLOW AWAY.
 - SPECIFY AN EFFECTIVE GRASS REVEGETATION PROGRAM FOR TEMPORARY AND FINAL STABILIZATION. EMPLOY HYDRO-SEEDING, EC MATS AND/OR BLANKETS OR TURF REPLACEMENT IN AREAS WHERE REVEGETATION OF GRASS MAY BE DIFFICULT WITH USING TRADITIONAL SEED AND MULCH TO REESTABLISH ALL EXISTING AND PROPOSED GREEN SPACE. WHERE PRACTICAL CONSIDER POROUS (PERVIOUS) PAVERS OR PERMEABLE SURFACES.
 - BE PROACTIVE IN PLANNING AND EXECUTING CONSTRUCTION PHASE ACTIVITIES WITH THE GOAL OF PREVENTING EROSION AND CONTROLLING SEDIMENT AND LIMITING THE AREA OF EXPOSED EARTH.
 - IDENTIFY PARTIES TO THE EPSC PLAN AND CLEARLY DEFINE THEIR RESPECTIVE ROLES AND RESPONSIBILITIES INCLUDING, BUT NOT LIMITED TO, THE CONTRACTOR, THE ON SITE COORDINATOR, THOSE RESPONSIBLE FOR PROJECT ADHERENCE TO THE EPSC, AND THOSE PARTICIPATING IN INSPECTIONS AND ACCEPTANCE OF FINAL STABILIZATION.
- AT THE OUTSET OF CONSTRUCTION AND ESPECIALLY WHERE SITE DISTURBANCES, INCLUDING TREE AND BRUSH CLEARING AND GRUBBING, ARE TO OCCUR, THE OWNER/CONTRACTOR SHALL TAKE APPROPRIATE STEPS AND MEASURES TO DEFINE THE OVERALL STRATEGY FOR THE EPSC PLAN BY:
 - LIMITING AND/OR PHASING ACTUAL DISTURBANCE AREA AND TIMING OF DISTURBANCE WITH ALL CONSTRUCTION ACTIVITIES. THIS PROJECT SHALL ADHERE STRICTLY TO NO MORE THAN 5 ACRES OF DISTURBED OR CLEARED AREA LIMIT.
 - EMPLOYING PROPER SITE STABILIZATION TECHNIQUES AND ADDRESSING SOIL/SITE PREPARATION FOR TEMPORARY AND FINAL SEEDING AND LANDSCAPING, SEED AND MULCH.
 - INSTALLING STONE AND/OR GRASS SWALE LINING, TEMPORARY OR PERMANENT, WHERE APPROPRIATE OR AS DEPICTED ON THE PROJECT PLANS.
 - EMPLOYING EROSION CONTROL BLANKETS OR MATS, TEMPORARY OR PERMANENT, WHERE APPROPRIATE OR AS DEPICTED ON THE PROJECT PLANS.
 - INSTALLING AND MAINTAINING SILT FENCE AND CONSTRUCTION BARRIER FENCING.
- TO SUCCESSFULLY IMPLEMENT THE PROJECT EPSC PLAN IN ACCORDANCE WITH THE PROJECT 3-9020 CGP, THE OWNER/CONTRACTOR SHALL:
 - IDENTIFY THE CONTRACTOR WHO IS RESPONSIBLE FOR INSTALLING, IMPLEMENTING, AND MAINTAINING THE EPSC PLAN AND MEASURES.
 - IDENTIFY THE ONSITE CONTRACTOR WHO IS RESPONSIBLE FOR THE DAY-TO-DAY MONITORING, OVERSIGHT, AND INSPECTIONS REQUIRED BY THE EPSC PLAN.
 - ASSURE THAT ANY AMENDMENTS TO THE PROJECT EPSC PLAN ARE FILED WITH THE APPROPRIATE AGENCIES AND/OR APPROVED BY THE PROJECT ENGINEER.
 - ASSURE THE EROSION CONTROL MEASURES REMAIN IN PLACE UNTIL VEGETATION HAS BEEN ESTABLISHED ON ALL DISTURBED SURFACES AND CLEARLY IDENTIFY UNDER WHAT CONDITIONS FINAL SITE STABILIZATION HAS OCCURRED.
 - PROVIDE A PROCESS WHEREBY THE PUBLIC SERVICE BOARD PARTICIPATES IN THE FINAL SITE STABILIZATION PROGRAM IF THE PROJECT CERTIFICATE OF PUBLIC GOOD SO REQUIRES.
- AS PART OF DECOMMISSIONING THE FACILITY, THE OWNER SHALL IMPLEMENT THE MEASURES OUTLINED IN THE PROJECT CERTIFICATE OF PUBLIC GOOD SITE AND SOIL RECLAMATION PLAN.



CLEARING/GRUBBING NOTES

- BRUSH AND LOW GROWTH VEGETATION SHALL BE CUT AT 6" IN HEIGHT
- TREES LESS THAN 4" IN DIAMETER SHALL BE REMOVED
- TREES GREATER THAN 4" IN DIAMETER SHALL BE CUT AT EXISTING GRADE
- STUMPS GREATER THAN 4" IN DIAMETER SHALL BE REMOVED IN THE FOLLOWING LOCATIONS:
 - AREAS ILLUSTRATED IN GRADING LIMITS
 - INVERTER / EQUIPMENT SKID
 - 3' DIAMETER EACH ARRAY PIER
 - ALL TRENCHING (MAY OCCUR DURING TRENCHING OPERATIONS)

CLEARING & EARTHWORK PHASING

- PHASE 1 SEQUENCING:
- CLEAR PHASE 1 AREA PER THE CLEARING AND GRUBBING NOTES.
 - GRADE BIODETENTION SWALE 1E.
 - INSTALL ACCESS ROADWAY CROSS CULVERTS AND PREP CULVERT INLETS AND OUTLETS.
 - GRADE ACCESS ROADWAY AND CONVEYANCE SWALES.
 - PERMANENTLY OR TEMPORARILY SEED THIS CONSTRUCTION SEQUENCE AS NECESSARY PER THE EROSION CONTROL NOTES THROUGHOUT CONSTRUCTION
 - PHASE 1 AREA SHALL BE STABILIZED ACROSS THE ENTIRE PHASE BEFORE ADDITIONAL CLEARING AND/OR EARTH DISTURBANCE ACTIVITIES TAKE PLACE.

- PHASE 2 SEQUENCING:
- CLEAR PHASE 2 AREA PER THE CLEARING AND GRUBBING NOTES EITHER NORTH TO SOUTH.
 - GRADE BIO-DETENTION SWALES 1A, 1B, 1C, & 1D AS CLEARING ACTIVITIES PROGRESS SOUTH
 - PERMANENTLY OR TEMPORARILY SEED THIS CONSTRUCTION SEQUENCE AS NECESSARY PER THE EROSION CONTROL NOTES THROUGHOUT CONSTRUCTION.
 - PHASE 2 AREA SHALL BE STABILIZED ACROSS THE ENTIRE PHASE BEFORE ADDITIONAL CLEARING AND/OR EARTH DISTURBANCE ACTIVITIES TAKE PLACE.

- PHASE 3 CLEARING SEQUENCING:
- CLEAR PHASE 3 AREA PER THE CLEARING AND GRUBBING NOTES FROM NORTH TO SOUTH.
 - PERMANENTLY OR TEMPORARILY SEED THIS CONSTRUCTION SEQUENCE AS NECESSARY PER THE EROSION CONTROL NOTES THROUGHOUT CONSTRUCTION.

WATERSHED INFORMATION

- HUC-8 - 02020003
- HUC-12 - 020200030304
- SUBBASIN - HUDSON-HOOSIC
- REGION - MID-ATLANTIC
- SUBREGION - UPPER HUDSON

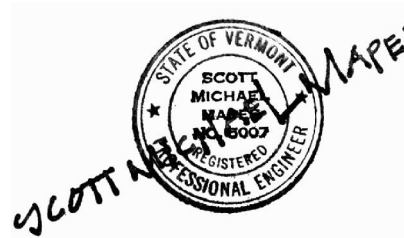
LEGEND:

- EXISTING PROPERTY LINE
- PROPOSED FENCE
- PROPOSED GRAVEL ACCESS ROAD
- PROPOSED PIER LOCATION
- PROPOSED OVERHEAD ELECTRIC
- CLEARING AND EARTHWORK PHASING LIMITS
- LIMITS OF GRADING
- EXISTING CONTOUR
- PROPOSED CONTOUR
- PROPOSED SILT FENCE
- BIO-DETENTION SWALE
- CONVEYANCE SWALE
- HDPE STORM SEWER W/ RIP-RAP
- OUTLET CONTROL STRUCTURE

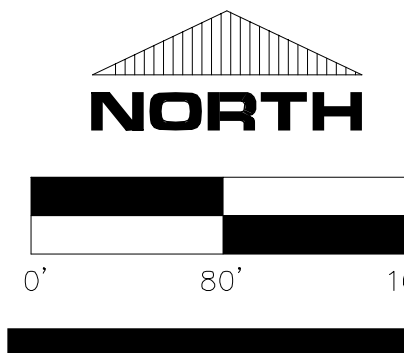


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CHelsea SOLAR
CIVIL CONSTRUCTION PLANS
1033 Willow Road
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LAT:42.9093 / LONG:73.2066
BENNINGTON COUNTY
EROSION CONTROL PLAN

1. BACKGROUND SURVEY INFORMATION FOR THIS PROJECT PROVIDED BY VERMONT SURVEY CONSULTANTS, LLC.
2. REFER TO ALTA SURVEY FOR LOT BEARINGS, DIMENSIONS AND AREAS.
3. TOPOGRAPHY INFORMATION PROVIDED BY VERMONT CENTER FOR GEOGRAPHIC INFORMATION, INC. AND IS BASED ON LIDAR POINT CLOUD GROUND INFORMATION.
4. LIDAR SAMPLE SET WAS A 1.4 METER RESOLUTION CONVERTED TO IMPERIAL UNITS.
5. AREA OF GRADE IS 1.0 ACRES
6. 800' D CUT / 1500 YD FILL IS ANTICIPATED FOR ACCESS ROADWAY AND INVERTER SKID CONSTRUCTION.
7. 600 YD OF AGGREGATE REQUIRED FOR ROADWAY CONSTRUCTION.
8. CUT AND FILL OF BIO-RETENTION SWALES SHALL BE A NET BALANCE OF EARTHWORK.

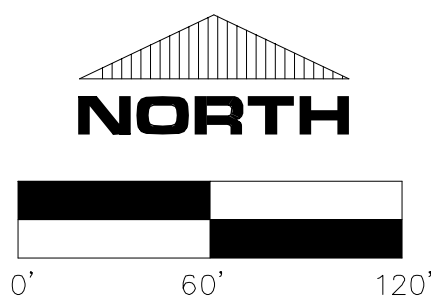


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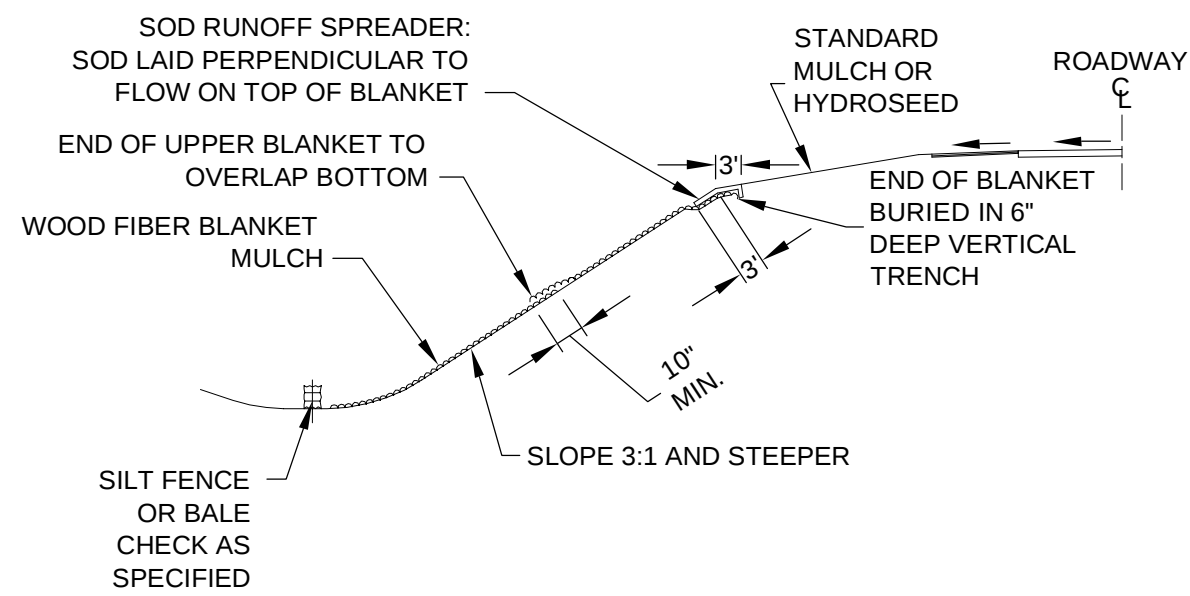
Date: 6/16/14 Reg. No: 5007



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LAT:42.9093 / LON:-73.2066
BENNINGTON COUNTY
GRADING PLAN

Sheet: 6 of 7



EROSION CONTROL BLANKET INSTALLATION ON AN INSLOPE
(WHEN REQUIRED)

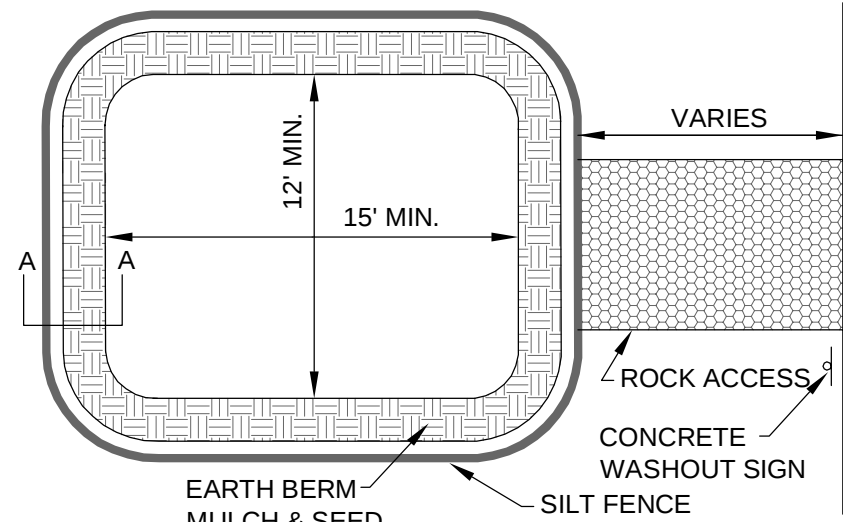
CATEGORY	SLOPE	VELOCITY
1	FLAT	-
2	3:1	< 5.0 fps
3	3:1	< 6.5 fps
4	2:1	< 7.0 fps

CATEGORY	ACCEPTABLE TYPES
1	STRAW RD 1S, WOOD FIBER RD 1S
2	STRAW 1S, WOOD FIBER 1S
3	STRAW 2S, WOOD FIBER 2S
4	STRAW/COCONUT 2S, WOOD FIBER HV 2S

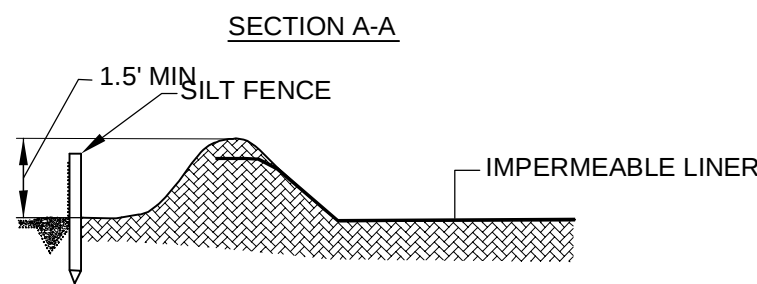
THE LETTERING DESIGNATION SHALL BE DEFINED AS FOLLOWS:

1S - NETTING ON ONE SIDE
RD - RAPIDLY DEGRADABLE
2S - NETTING ON TWO SIDES
HV - HIGH VELOCITY

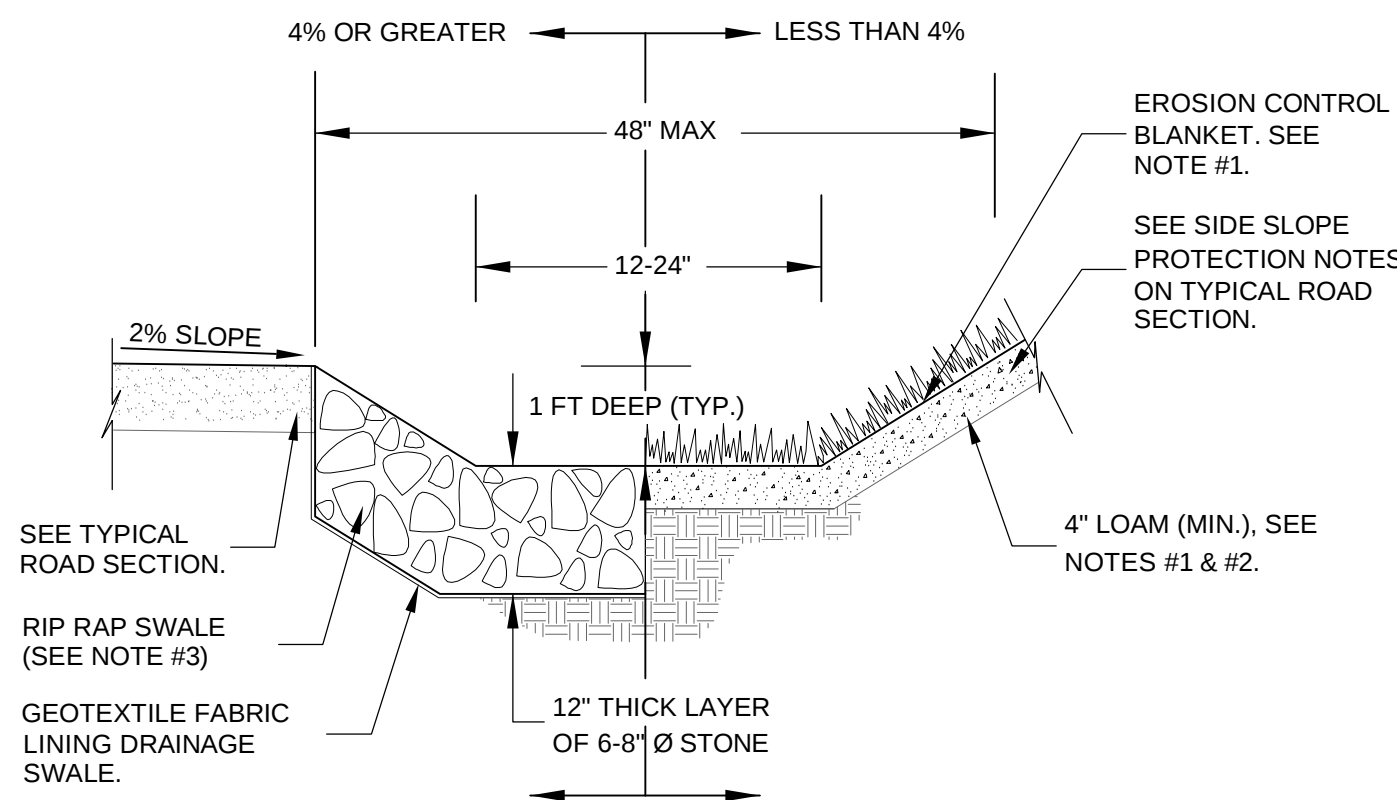
AN APPROVED ALTERNATE MAY BE USED



NOTE:
CONCRETE WASHOUT AREAS WILL HAVE AN IMPERMEABLE LINER TO PREVENT CONCRETE WASHOUT WATER FROM INFILTRATING/CONTACTING WITH SOIL. IMPERMEABLE LINER INCLUDES 10 MIL POLYLINER OR COMPACTED CLAY LINER. WASHOUT SYSTEMS CAN BE USED AS ALTERNATE WASHOUT AREAS.



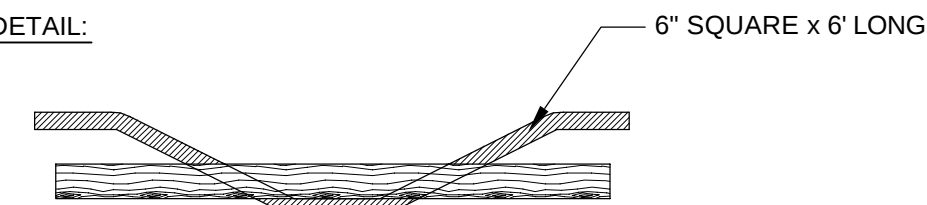
CONCRETE WASHOUT AREA



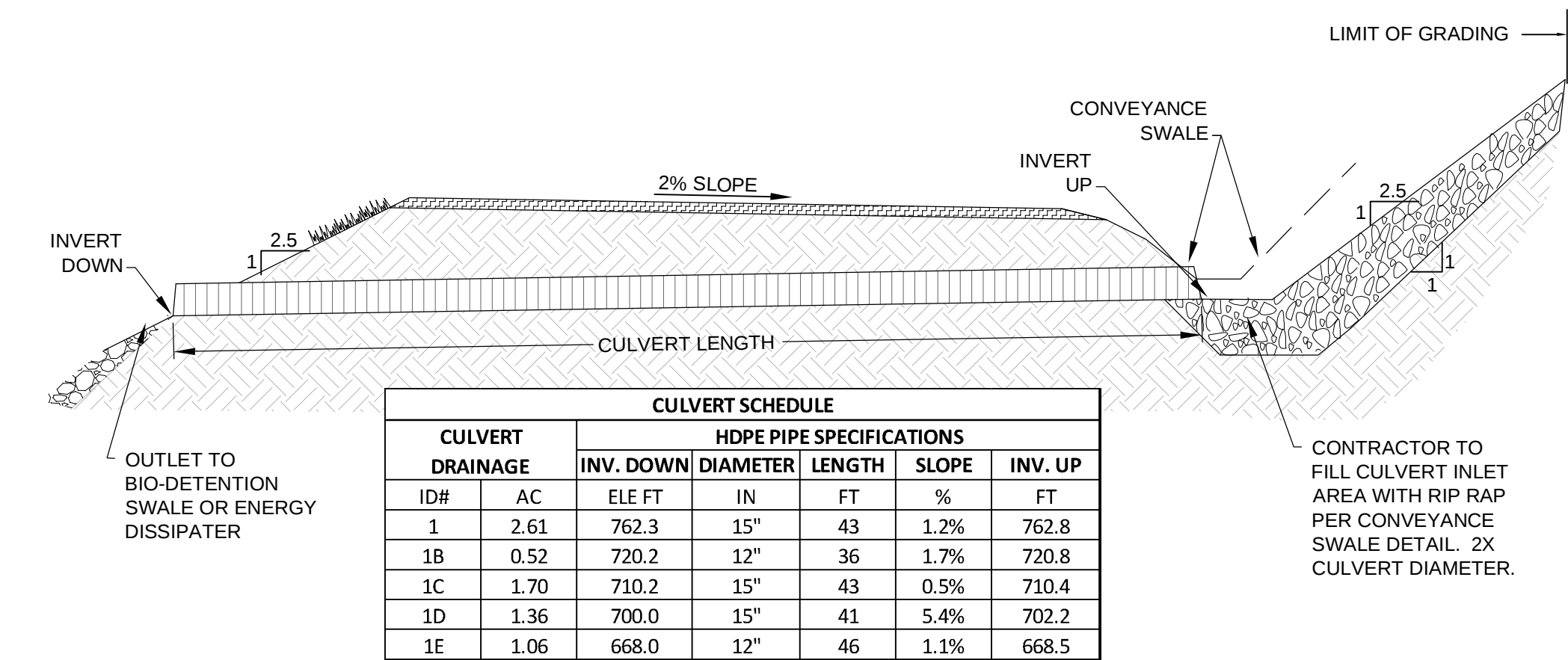
CONVEYANCE SWALE NOTES:

- FOR SLOPES 0 TO < 4%: 4\"/>

CHECK DAM DETAIL:

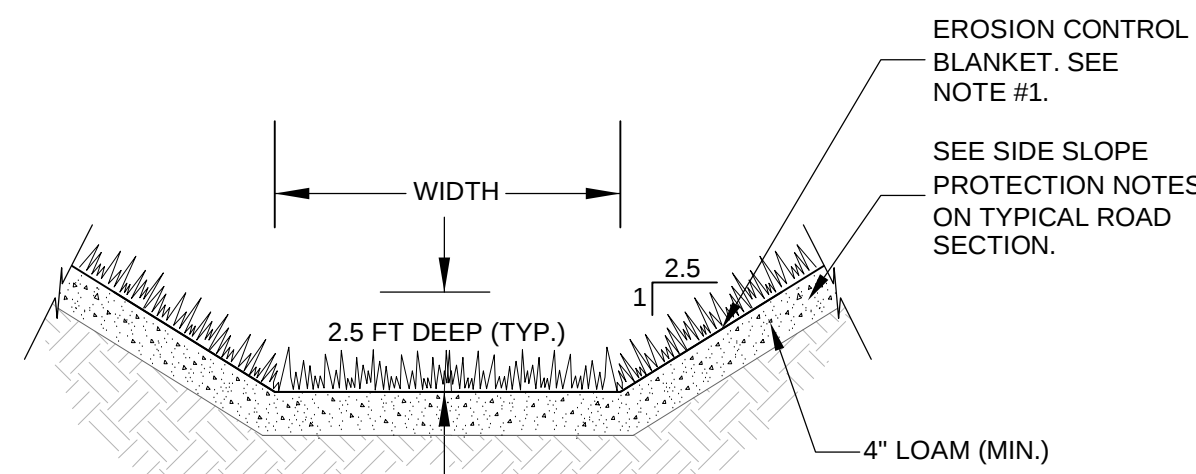
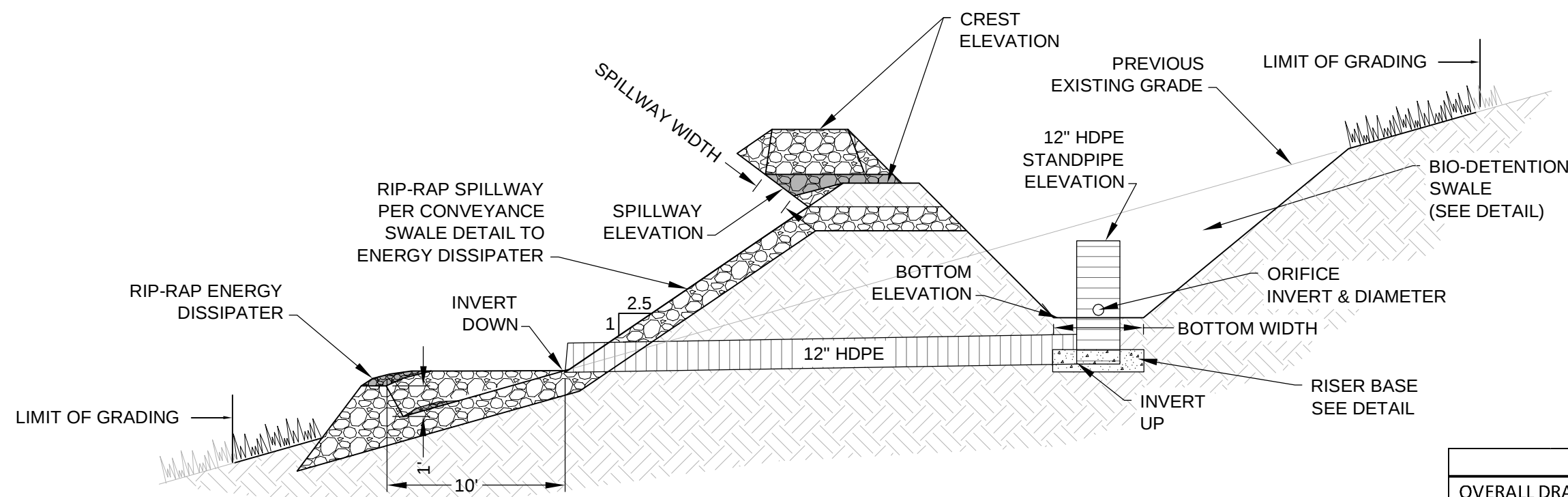


CONVEYANCE SWALE



CULVERT SCHEDULE						
CULVERT DRAINAGE	HDPE PIPE SPECIFICATIONS					
	INV. DOWN	DIAMETER	LENGTH	SLOPE	INV. UP	
ID#	AC	ELE FT	IN	FT	%	FT
1	2.61	762.3	15"	43	1.2%	762.8
1B	0.52	720.2	12"	36	1.7%	720.8
1C	1.70	710.2	15"	43	0.5%	710.4
1D	1.36	700.0	15"	41	5.4%	702.2
1E	1.06	668.0	12"	46	1.1%	668.5

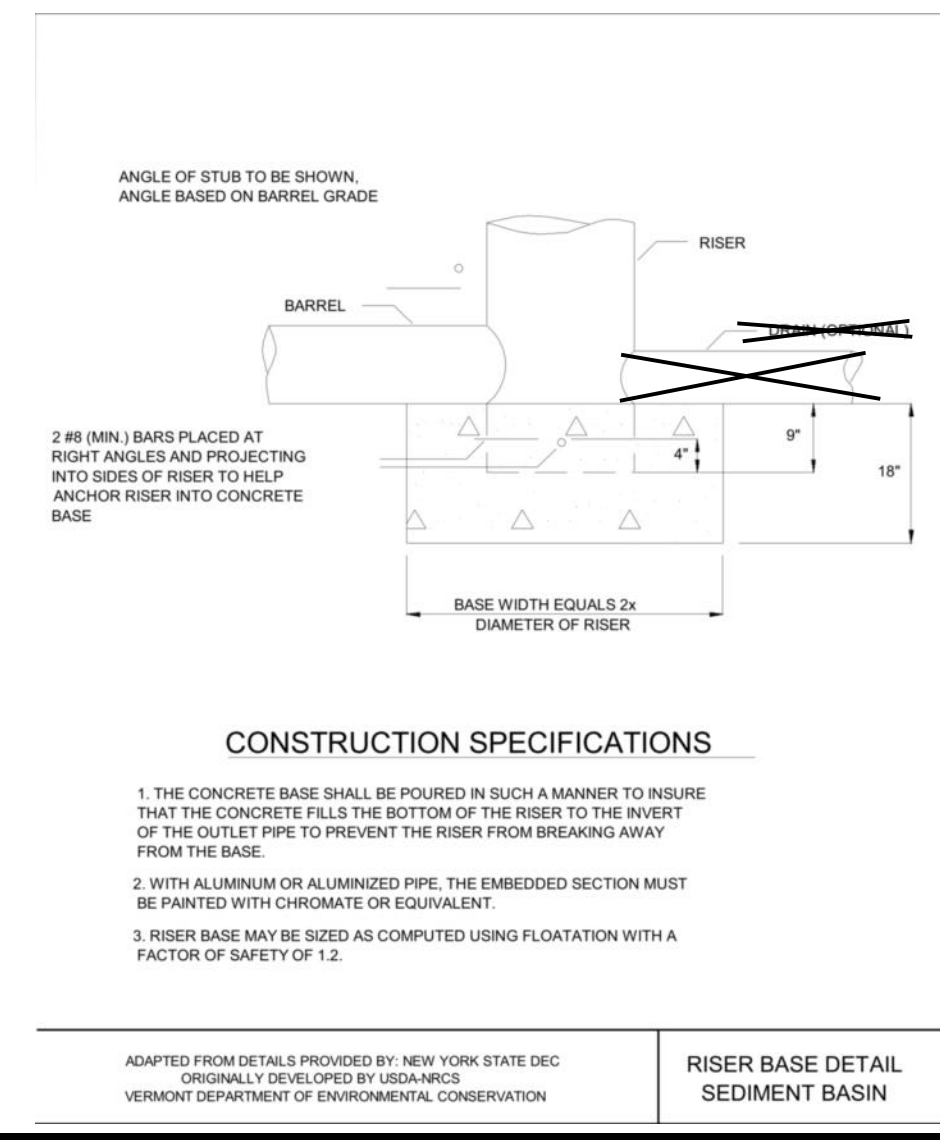
CULVERT & INLET DETAIL



BIO-DETENTION SWALE NOTES:

- 4\"/>

BIO DETENTION INFORMATION														
OVERALL DRAINAGE AREA		SWALE CHARACTERISTICS						ORIFICE		12" HDPE PIPE OUTLET				
		BOTTOM	BTM WIDTH	LENGTH	CREST	SPILLWAY		DIA	INV.	STANDPIPE	INV. UP	LENGTH	SLOPE	INV. DOWN
ID#	AC	ELE FT.	FT.	FT.	ELE FT.	ELE FT.	WIDTH FT.	IN	FT	INV.	ELE FT	FT	%	FT
1A	1.25	730.0	2	210	733.0	732.5	2	3	730.0	732.0	727.5	40	7.0%	724.7
1B	1.33	720.0	2	330	723.0	722.5	2	3	720.0	722.0	717.5	38	4.5%	715.8
1C	2.55	710.0	2	315	713.0	712.5	2	3	710.0	712.0	707.5	44	1.1%	707.0
1D	2.48	696.0	2	340	699.0	698.5	2	4	696.0	698.0	693.5	44	1.1%	693.0
1E	3.90	670.0	6	240	673.0	672.5	6	6	670.0	672.0	667.5	44	3.4%	666.0



CONSTRUCTION SPECIFICATIONS

- THE CONCRETE BASE SHALL BE POURED IN SUCH A MANNER TO INSURE THAT THE CONCRETE FILLS THE BOTTOM OF THE RISER TO THE INVERT OF THE OUTLET PIPE TO PREVENT THE RISER FROM BREAKING AWAY FROM THE BASE.
- WITH ALUMINUM OR ALUMINIZED PIPE, THE EMBEDDED SECTION MUST BE PAINTED WITH CHROMATE OR EQUIVALENT.
- RISER BASE MAY BE SIZED AS COMPUTED USING FLOATATION WITH A FACTOR OF SAFETY OF 1.2.

ADAPTED FROM DETAILS PROVIDED BY NEW YORK STATE DEC
ORIGINALLY DEVELOPED BY USGA-NRCS
VERMONT DEPARTMENT OF ENVIRONMENTAL CONSERVATION

RISER BASE DETAIL
SEDIMENT BASIN

BIO-DETENTION SWALE, OUTLET CONTROL & ENERGY DISSIPATER DETAIL

REVISION LOG:

2/3/2014 - 45 DAY NOTICE DOCUMENTS

6/13/2014 - PSB FILING DOCUMENTS

Date: 6/16/14 Reg. No: 5007

Sheet: