LOCATION MAP
SCALE: 1" = ½ MILE

GADUS SOLAR

SHEET INDEX:

SHEET NUMBER	SHEET TITLE	DRAWING DATE	REVISION DATE
C-0.00	COVER PAGE PROPOSED SOLAR ARRAY	11/17/21	01/17/22
C-1.00	OVERALL SITE PLAN PRELIMINARY SOLAR ARRAY	05/03/21	01/17/22
C-1.01	EXISTING CONDITIONS AND PRE-DEVELOPMENT DRAINAGE PLAN	05/03/21	01/17/22
C-1.02	PROPOSED CLEARING PLAN	07/02/21	01/17/22
C-1.03	PROPOSED GRADING, ROAD INSTALLATION AND STORMWATER MANAGEMENT PLAN	07/14/21	01/17/22
C-1.04	DETAILED SITE PLAN	07/14/21	01/17/22
C-2.00	CROSS SECTION PLAN FOR NEIGHBORING BUILDING	05/03/21	01/17/22
C-3.00	DETAILS	05/03/21	12/20/21
C-3.01	DETAILS	05/03/21	11/17/21
C-3.02	DETAILS	08/06/21	11/17/21
C-3.03	DETAILS	09/17/21	11/17/21

LIST OF WAIVER REQUESTS:

- WAIVER FROM THE SURVEYING OF EVERY TREE 6" CALIPER OF GREATER WITHIN THE LIMIT OF DISTURBANCE (LOD). WESTPORT ZONING BY LAW 9.6.3.I (14).

WESTPORT PLANNING BOARD APPROVAL

DATE

GADUS SOLAR
Horseneck Road
Westport, Massachusetts

IRONWOOD RENEWABLES

BRI BIODIVERSITY RESEARCH INSTITUTE

KREBS & LANSING CONSULTING ENGINEERS
164 Main Street, Suite 201
Colchester, Vermont 05446
P: (802) 878-0375
www.krebsandlansing.com

ISSUED FOR PERMIT REVIEW
NOT FOR CONSTRUCTION

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

ENVIRONMENTAL:
BRI Environmental
30 Danforth Street
Suite 213
Portland, ME 04101

OWNER & PROPERTY INFORMATION:

Owner:	Bruce and Patricia Mayall
Owner Address:	124 Milton Street Fall River, MA 02720
Parcel ID:	76-69S-0
Parcel Address:	0 Horseneck Road Westport, MA 02790

STAMP:

COMMONWEALTH OF MASSACHUSETTS
GREGORY T. DIXSON
CIVIL ENGINEER
No. 55649
REGISTERED PROFESSIONAL ENGINEER

REV. NO.	REVISIONS/COMMENTS	DATE
1.	Updates after Town meeting	12/20/21
2.	Update project access	01/17/22

DRAWING TITLE:

COVER PAGE PROPOSED SOLAR ARRAY

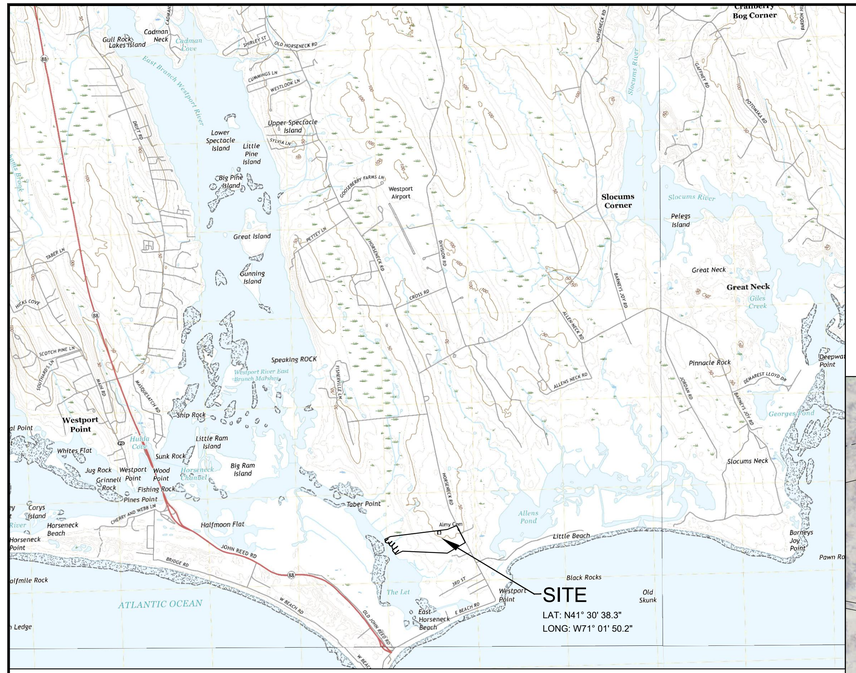
DATE of Issue: 11/17/2021

Drawn by: EJM/GTD Checked by: GTD

Project No.: 21220 Scale: 1" = 100'

Drawing No.: C-0.00

Rev No.: 2



LOCATION MAP

SCALE: 1" = ½ MILE

LEGEND

- EXISTING TREELINE
- EXISTING GRADE CONTOUR LINES (5 FOOT INTERVALS)
- EXISTING GRADE CONTOUR LINES (1 FOOT INTERVALS)
- APPROXIMATE PROPERTY LINES
- APPROXIMATE PROJECT PARCEL
- DELINEATED WETLANDS
- FEMA BASE FLOOD LIMIT OF 100 YEAR-24 HOUR STORM EVENT
- PROPOSED CLEARING LIMIT
- PROPOSED PERIMETER FENCING
- PROPOSED FIXED SOLAR PANEL RACKING
- PROPOSED OVERHEAD ELECTRIC LINE/POWER POLE
- PROPOSED UNDERGROUND POWER

NOTES:

1. ASPECTS OF PLAN ARE APPROXIMATE AND DERIVED FROM AERIAL PHOTOGRAPHY.
2. THE HORIZONTAL COORDINATE SYSTEM IS BASED ON NAD83 MASSACHUSETTS STATE PLANE, MAINLAND ZONE (US SURVEY FEET). ELEVATIONS ARE BASED ON THE NAVD88 (US SURVEY FEET).
3. EXISTING GROUND CONTOUR ELEVATIONS ARE BASED ON LIDAR DATA FROM NOAA OFFICE FOR COSTAL MANAGEMENT, COLLECTED IN 2018. ELEVATIONS ARE BASED ON THE NAVD88 (US SURVEY FEET).
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PROJECT SPECIFICATIONS:

NUMBER OF MODULES: 10,104 (@520 PER PANEL)

DC OUTPUT: 5.25 MW

AC OUTPUT: 4.00 MW

DC/AC RATIO: 1.31

DESIGN: FIXED TILT @ 25° TILT

GCR: 0.532 (53.2%)

PROJECT CALCULATIONS

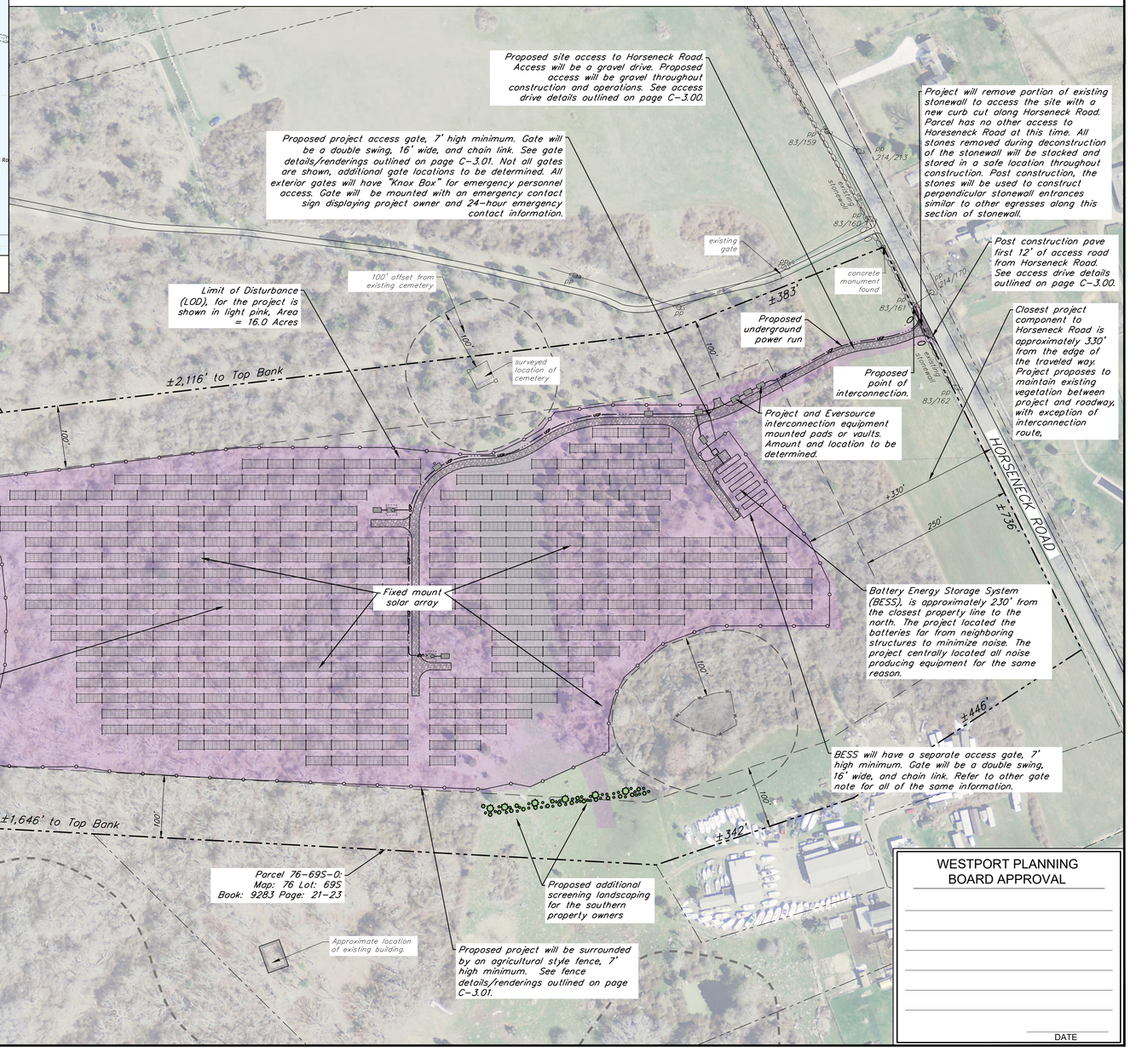
PROPOSED CLEARING
- 13.1 ACRES

PROPOSED TOTAL DISTURBANCE
- 16.0 ACRES

PROPOSED IMPERVIOUS AREA
- 0.70 ACRES (LIMITED PAVEMENT)

PROPOSED AREA WITHIN THE FENCE
- 15.1 ACRES

REQUIRED PROTECTED OPEN SPACE
- THE PROJECT INTENDS TO USE 16.0 ACRES OF THE PARCEL FOR THE INSTALLATION OF THE PROJECT. THE PROPERTY OWNER CURRENTLY HAS NO PLANS FOR THE REMAINING ±29.1 ACRES WHICH WILL REMAIN IN ITS NATURAL STATE, EXCEEDING THE REQUIRED MINIMUM OF 25%. ADDITIONALLY, AS PART OF IRONWOOD'S PLANNED GROUND LEASE AGREEMENT, AN ADDITIONAL MINIMUM 4.0 ACRES WILL BE INCLUDED, WHICH WILL REMAIN IN ITS NATURAL STATE. INCLUDING THE 4.0 ACRES IN THE AGREEMENT WILL ENSURE THAT THE MINIMUM 25% OPEN SPACE IS MAINTAINED IN ITS NATURAL STATE THROUGHOUT THE LIFE OF THE PROJECT.



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GREGORY T. DIXSON
CIVIL ENGINEER
No. 55649
REGISTERED PROFESSIONAL ENGINEER

0' 50' 100' 200' 300'
0" 1" 2" 3"
STANDARD GRAPHIC SCALE (1" = 100')
VALID WHEN PLOTTED ON 24" BY 36" MEDIA

REV. NO.	REVISIONS/COMMENTS	DATE
1.	Revise design for new wetlands and project updates	09/17/21
2.	Updates for Town and addressing comments from Field Engineering Co., Inc. Peer Review Report	11/17/21
3.	Updates after Town meeting	12/20/21
4.	Update access to project	01/11/22
5.	Update project access	01/17/22

DRAWING TITLE:

OVERALL SITE PLAN PRELIMINARY SOLAR ARRAY

DATE of Issue: 05/03/2021

Drawn by: EJM/GTD Checked by: GTD

Project No.: 21220 Scale: 1" = 100'

Drawing No.: C-1.00

Rev No.: 5

NOTES:

1. ASPECTS OF PLAN ARE APPROXIMATE AND DERIVED FROM AERIAL PHOTOGRAPHY.
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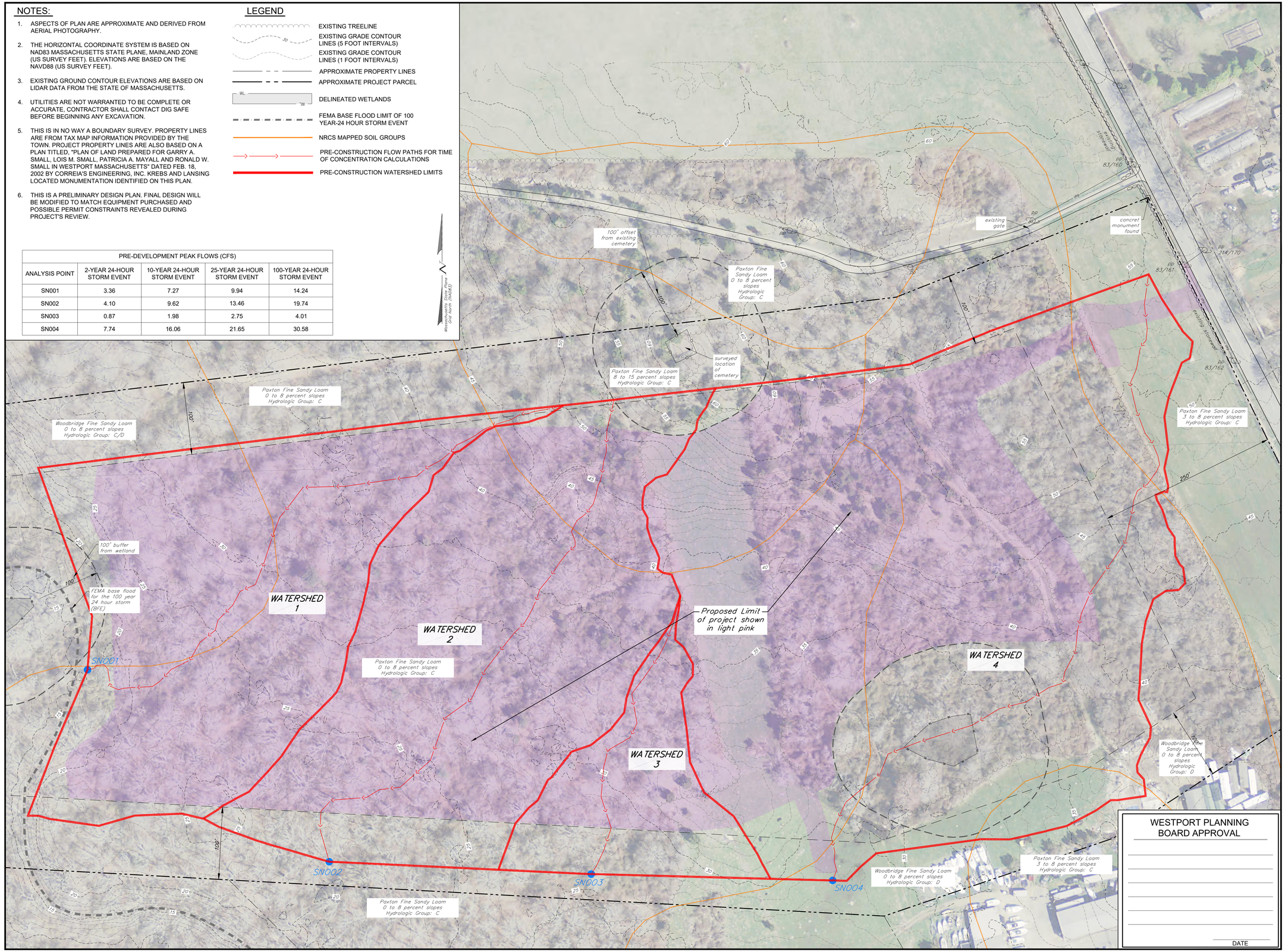
- NRCS MAPPED SOIL GROUPS
- PRE-CONSTRUCTION FLOW PATHS FOR TIME OF CONCENTRATION CALCULATIONS
- PRE-CONSTRUCTION WATERSHED LIMITS

Massachusetts State Plane Grid North (NAD83)

PRE-DEVELOPMENT PEAK FLOWS (CFS)				
ANALYSIS POINT	2-YEAR 24-HOUR STORM EVENT	10-YEAR 24-HOUR STORM EVENT	25-YEAR 24-HOUR STORM EVENT	100-YEAR 24-HOUR STORM EVENT
SN001	3.36	7.27	9.94	14.24
SN002	4.10	9.62	13.46	19.74
SN003	0.87	1.98	2.75	4.01
SN004	7.74	16.06	21.65	30.58



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GREGORY T. DIXSON
CIVIL ENGINEER
No. 55649
REGISTERED PROFESSIONAL ENGINEER

0' 30' 60' 120' 180'
0" 1" 2" 3"
STANDARD GRAPHIC SCALE (1" = 60')
VALID WHEN PLOTTED ON 24" BY 36" MEDIA

REV. NO.	REVISIONS/COMMENTS	DATE
1.	Revise design for new wetlands and project updates	09/17/21
2.	Updates for Town and addressing comments from Field Engineering Co., Inc. Peer Review Report	11/17/21
3.	Updates after Town meeting	12/20/21

DRAWING TITLE:

EXISTING CONDITIONS AND PRE-DEVELOPMENT DRAINAGE PLAN

DATE of Issue: 05/03/2021

Drawn by: EJM/GTD Checked by: GTD

Project No.: 21220 Scale: 1" = 60'

Drawing No.: C-1.01

Rev No.: 3

NOTES:

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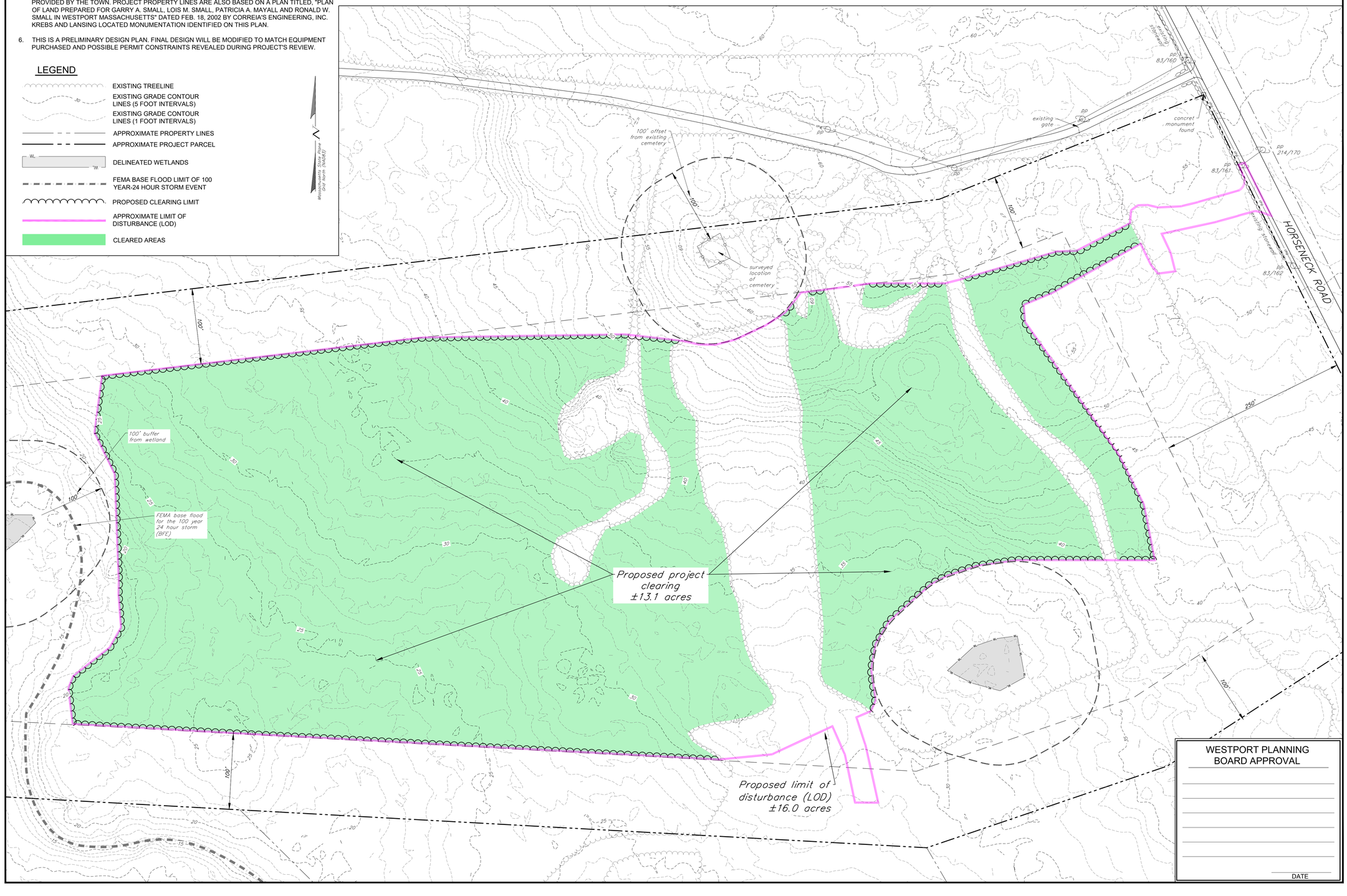
- PROPOSED CLEARING LIMIT
- APPROXIMATE LIMIT OF DISTURBANCE (LOD)
- CLEARED AREAS

Massachusetts State Plane Grid North (NAD83)

CLEARING NOTES:

1. ALL VEGETATION SHOWN IN LIGHT GREEN ON THIS PLAN WILL BE WILL BE CLEAR CUT. TOTAL AMOUNT OF CLEARING ±13.1 ACRES.
2. ALL AREAS WILL BE STUMPED AND GRUBBED. STUMPS WILL BE GROUND/CUT UP AND USE FOR EPSC. TREES MAY BE REMOVED FROM SITE (USED/SOLD). SMALLER TREES, SHRUBS AND BRANCHES WILL BE GROUND/CUT UP AND USED FOR EPSC.



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REV. NO.	REVISIONS/COMMENTS	DATE
1.	Revise design for new wetlands and project updates	09/17/21
2.	Updates for Town and addressing comments from Field Engineering Co., Inc. Peer Review Report	11/17/21
3.	Updates after Town meeting	12/20/21
4.	Update project access	01/17/22

DRAWING TITLE:

PROPOSED CLEARING PLAN

DATE of Issue: 07/02/2021
Drawn by: EJM/GTD Checked by: GTD
Project No.: 21220 Scale: 1" = 60'

Drawing No.: C-1.02
Rev No.: 4

NOTES:

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GENERAL GRADING AND SITE WORK NOTES

1. ALL AREA DISTURBED AND ALL AREAS WITHIN THE CLEARING LIMITS SHALL BE GRADED AND COVERED WITH A MINIMUM OF 4" OF LOAM TOPSOIL. THE AREAS TO BE LOAMED SHALL BE FREE AND CLEAR OF ROOTS, WASTE MATERIAL AND OTHER DELETERIOUS MATERIAL. TOPSOIL SHALL BE SPREAD AND LIGHTLY COMPACTED TO A DEPTH OF 4". TOPSOIL SHALL BE APPROVED BY THE ENGINEER. ALL SIDE SLOPES ARE TO BE LOAMED.
2. ALL TURF ESTABLISHMENT SHALL BE IN ACCORDANCE WITH SECTION 170 OF THE MA DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS 2020 AND THE TOWN'S SPECIFICATIONS. MULCHING SHALL FOLLOW SEEDING BY NO MORE THAN 24 HOURS.
3. ALL CUT SLOPES SHALL BE NO STEEPER THAN 2.5H ON 1.0V. ALL FILL SLOPES SHALL BE NO STEEPER THAN 2.5H ON 1.0V.
4. THE CONTRACTOR SHALL NOT DISTURB ANY GROUND BETWEEN OCTOBER 15TH BETWEEN APRIL 15TH WINTER MONTHS, UNLESS APPROVED BY THE ENGINEER.
5. TEMPORARY SILT FENCE SHALL BE ERECTED PRIOR TO ANY CLEARING OR CONSTRUCTION. FENCING MAY BE ERECTED IN PHASES, BUT IN NO CASE SHALL GROUND DISTURBANCE PRECEDE FENCING. SPECIAL AREAS MAY BE DESIGNATED BY THE OWNER FOR PRESERVATION OF EXISTING TREES. THESE AREAS SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO INSURE NO DAMAGE IS DONE TO DESIGNATED TREES.
6. EXISTING PLANTINGS ARE LOCATED IN GENERAL AREAS AS SHOWN ON THIS PLAN. CONTRACTOR SHALL PROTECT PLANTINGS SO AS NOT TO DAMAGE THESE OR THEIR ROOT SYSTEMS.
7. SLOPE STABILITY BASED UPON UNSATURATED SOIL CONDITIONS. IF DURING CONSTRUCTION SATURATED SOILS ARE ENCOUNTERED, CONTACT THE ENGINEER IMMEDIATELY.

POST-DEVELOPMENT PEAK FLOWS (CFS)				
ANALYSIS POINT	2-YEAR 24-HOUR STORM EVENT	10-YEAR 24-HOUR STORM EVENT	25-YEAR 24-HOUR STORM EVENT	100-YEAR 24-HOUR STORM EVENT
SN001	1.82	3.76	5.44	13.42
SN002	0.36	0.84	1.18	1.72
SN003	0.39	0.90	1.27	1.86
SN004	4.11	8.25	11.80	21.10

LEGEND

- EXISTING TREELINE
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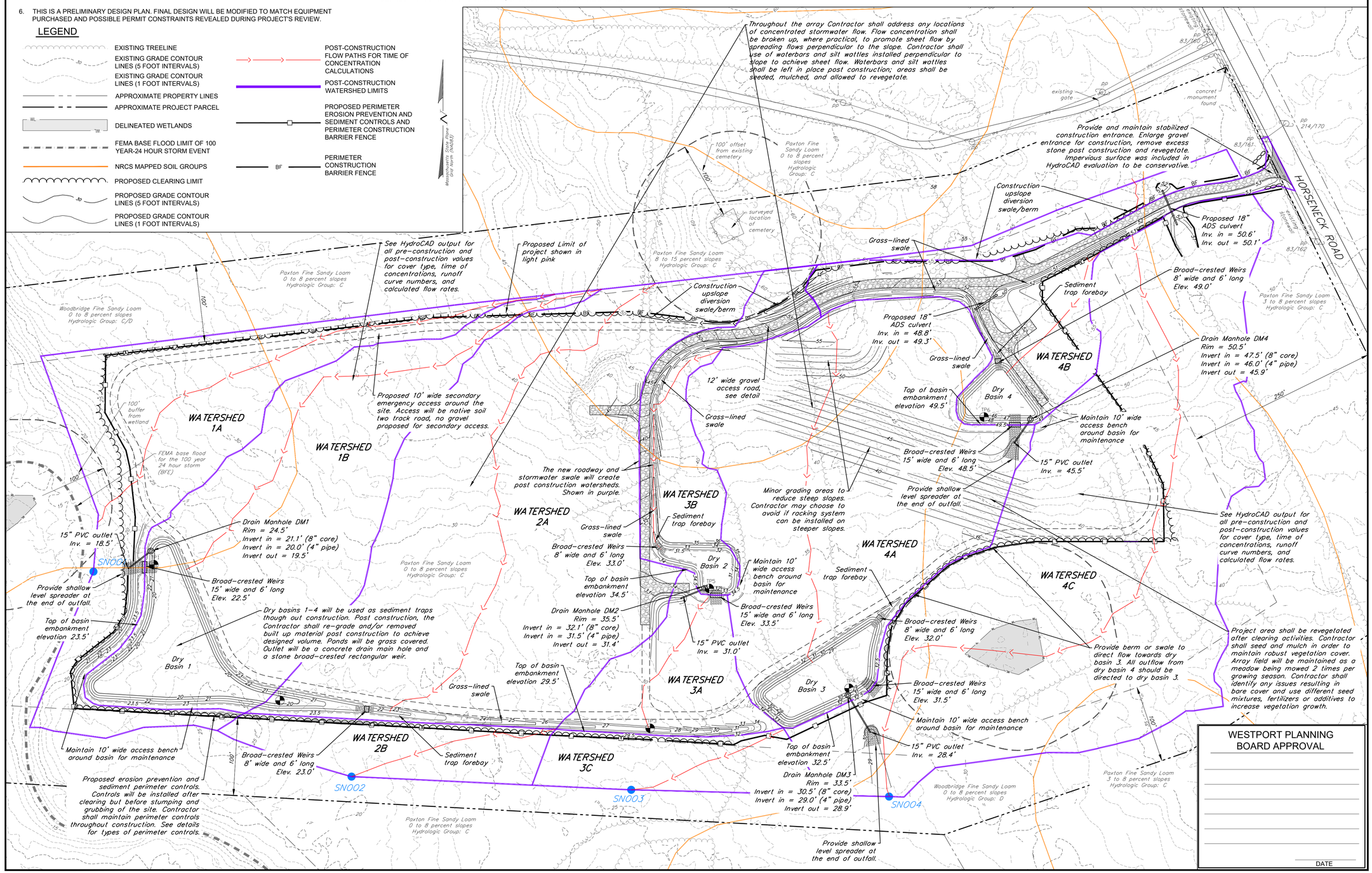
Massachusetts State Plane Grid North (NAD83)



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4.	Update project access	01/17/22

DRAWING TITLE:

PROPOSED GRADING, ROAD INSTALLATION AND STORMWATER MANAGEMENT PLAN

DATE of Issue: 07/14/2021
Drawn by: EJM/GTD
Checked by: GTD
Project No.: 21220
Scale: 1" = 60'

Drawing No.: C-1.03
Rev No.: 4

NOTES:

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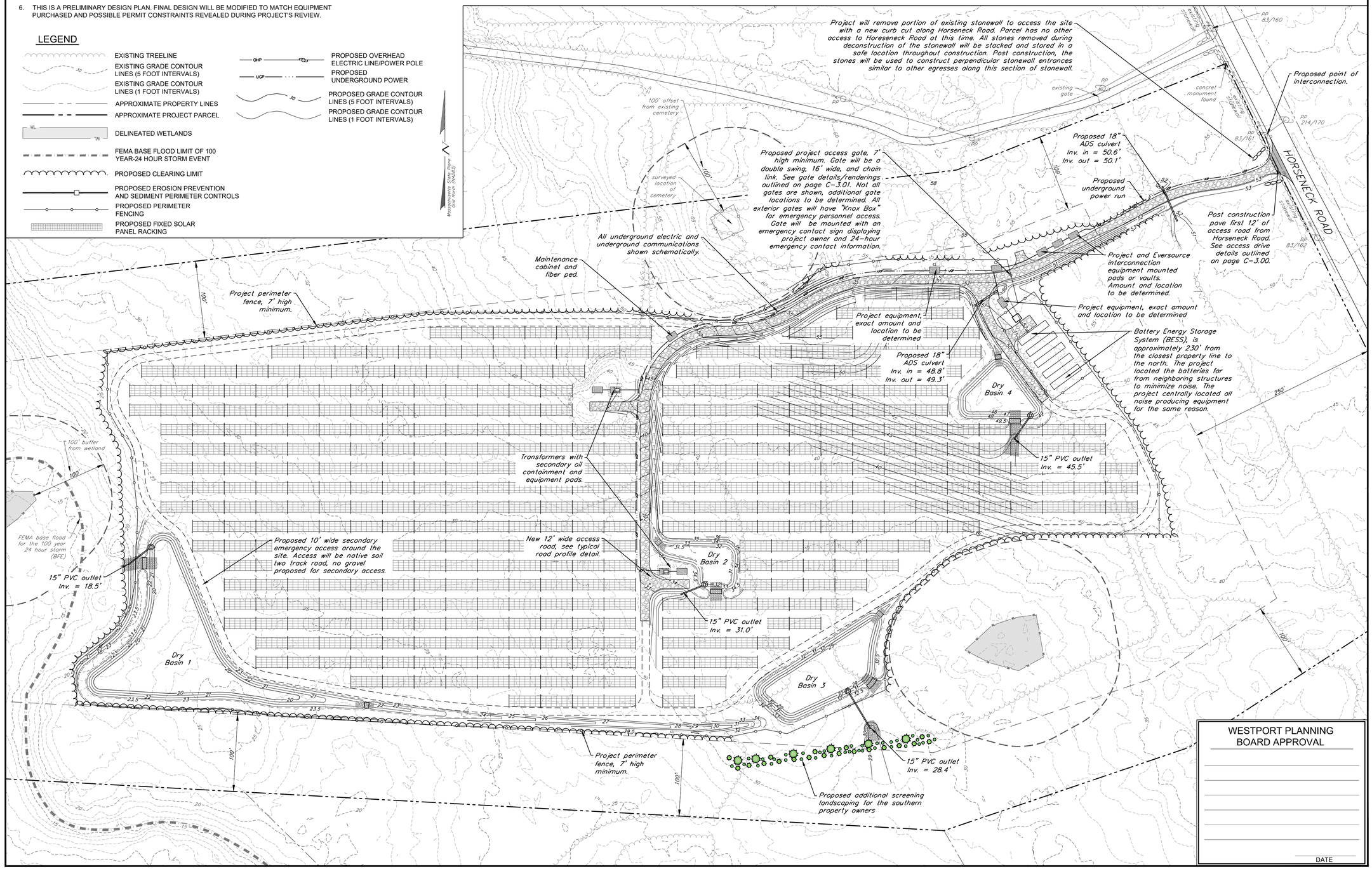
Massachusetts State Plane Grid North (NAD83)

CONSTRUCTION NOTES

1. 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.
2. 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.
3. 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.
4. THE CONTRACTOR SHALL VERIFY ALL TEMPORARY BENCH MARKS BEFORE USE.
5. 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.
6. THE CONTRACTOR SHALL VERIFY ALL UTILITY INTERSECTIONS AND CONTACT ENGINEER AND OWNER WITH CONFLICTS.
7. THE CONTRACTOR SHALL CALL, DIG SAFE OR OTHER APPROVED EQUAL UNDERGROUND UTILITY IDENTIFIER PRIOR TO ANY EXCAVATION.
8. THE CONTRACTOR SHALL COORDINATE WITH FINAL ELECTRICAL, STRUCTURAL AND LANDSCAPING PLANS.



WESTPORT PLANNING BOARD APPROVAL

DATE

GADUS SOLAR

Horseneck Road
Westport, Massachusetts

IRONWOOD RENEWABLES

BIODIVERSITY RESEARCH INSTITUTE

KREBS & LANSING CONSULTING ENGINEERS
164 Main Street, Suite 201
Colchester, Vermont 05446
P: (802) 878-0375
www.krebsandlansing.com

ISSUED FOR PERMIT REVIEW
NOT FOR CONSTRUCTION

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

ENVIRONMENTAL:
BRI Environmental
276 Canco Road
Portland, ME 04103

OWNER & PROPERTY INFORMATION:

Owner:	Bruce and Patricia Mayall
Owner Address:	124 Milton Street Fall River, MA 02720
Parcel ID:	76-69S-0
Parcel Address:	0 Horseneck Road Westport, MA 02790

STAMP:

COMMONWEALTH OF MASSACHUSETTS
GREGORY T. DIXSON
CIVIL ENGINEER
No. 55649
REGISTERED PROFESSIONAL ENGINEER

0' 30' 60' 120' 180'
0" 1" 2" 3"
STANDARD GRAPHIC SCALE (1" = 60')
VALID WHEN PLOTTED ON 24" BY 36" MEDIA

REV. NO.	REVISIONS/COMMENTS	DATE
1.	Revise design for new wetlands and	09/17/21
	project updates	
2.	Updates for Town and addressing	11/17/21
	comments from Field Engineering Co.,	
	Inc. Peer Review Report	
3.	Updates after Town meeting	12/20/21
4.	Update access to project	01/11/22
5.	Update project access	01/17/22

DRAWING TITLE:

DETAILED SITE PLAN

DATE of Issue: 07/14/2021

Drawn by: EJM/GTD | Checked by: GTD

Project No.: 21220 | Scale: 1" = 60'

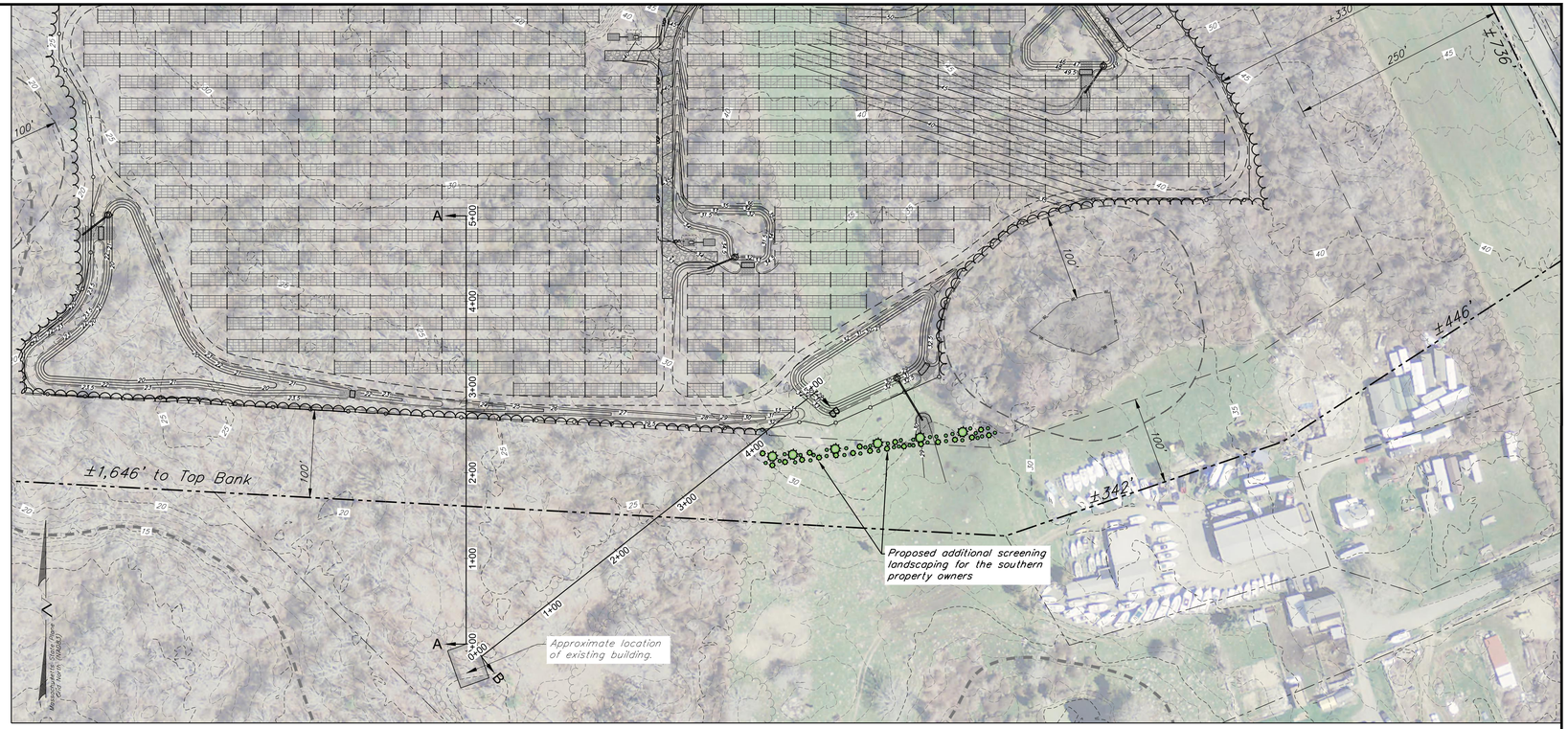
Drawing No.: C-1.04 | Rev No.: 5

LEGEND

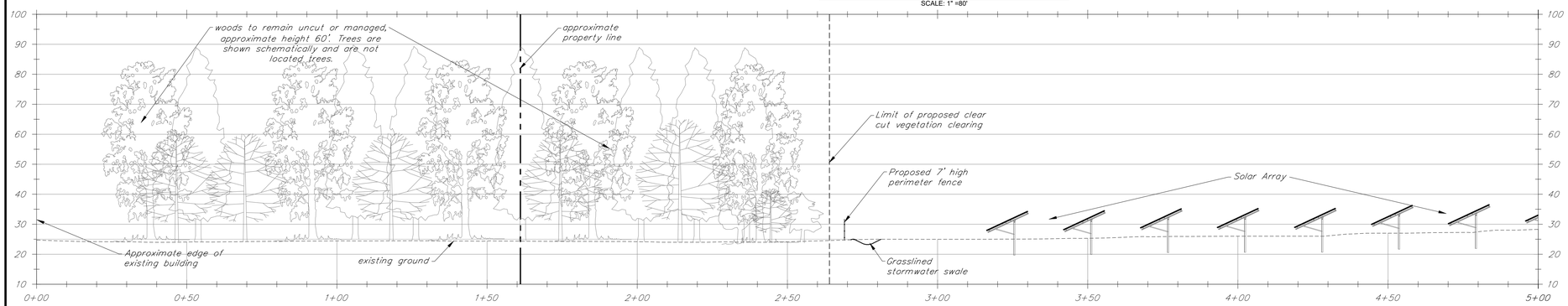
- EXISTING TREELINE
- EXISTING GRADE CONTOUR LINES (5 FOOT INTERVALS)
- EXISTING GRADE CONTOUR LINES (1 FOOT INTERVALS)
- APPROXIMATE PROPERTY LINES
- APPROXIMATE PROJECT PARCEL
- DELINEATED WETLANDS
- FEMA BASE FLOOD LIMIT OF 100 YEAR-24 HOUR STORM EVENT
- PROPOSED CLEARING LIMIT
- PROPOSED PERIMETER FENCING
- PROPOSED FIXED SOLAR PANEL RACKING
- PROPOSED OVERHEAD ELECTRIC LINE/POWER POLE
- PROPOSED UNDERGROUND POWER
- PROPOSED GRADE CONTOUR LINES (5 FOOT INTERVALS)
- PROPOSED GRADE CONTOUR LINES (1 FOOT INTERVALS)

NOTES:

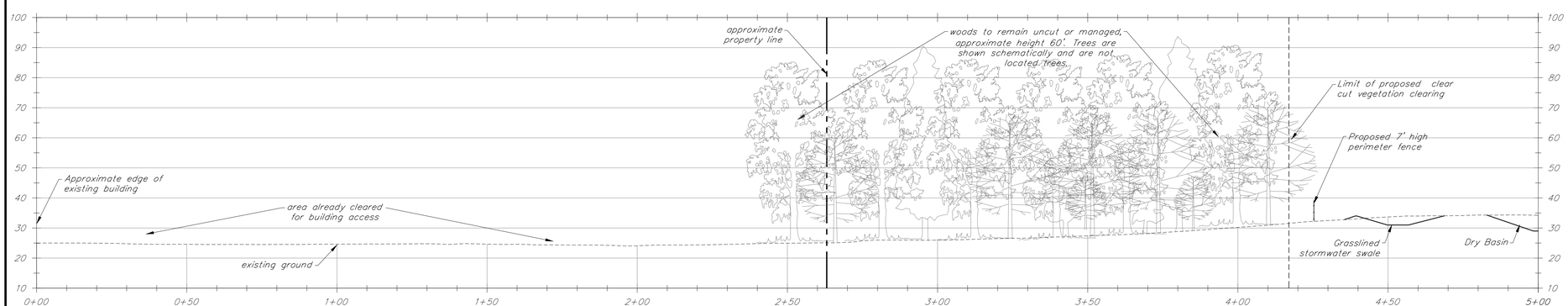
1. SEE PLAN NOTES ON PAGE C-1.00.



SITE PLAN VIEW
SCALE: 1" =80'



ABUTTING HOUSE VIEW SECTION A-A
HORIZONTAL & VERTICAL SCALE: 1" =20'



ABUTTING HOME VIEW SECTION B-B
HORIZONTAL & VERTICAL SCALE: 1" =20'

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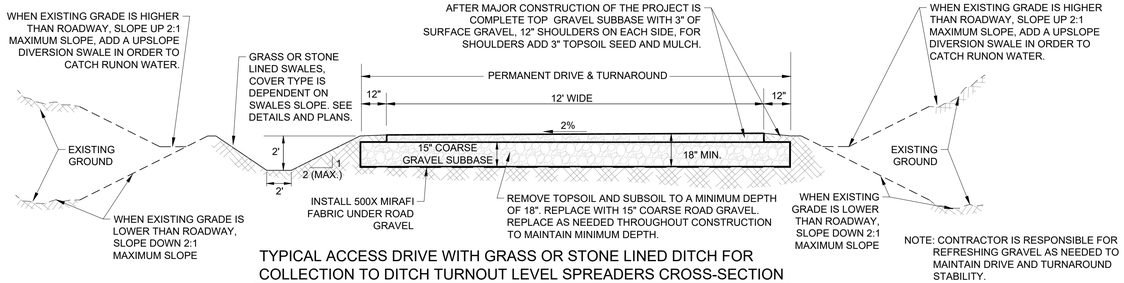
4.	Update project access	01/17/22

DRAWING TITLE:

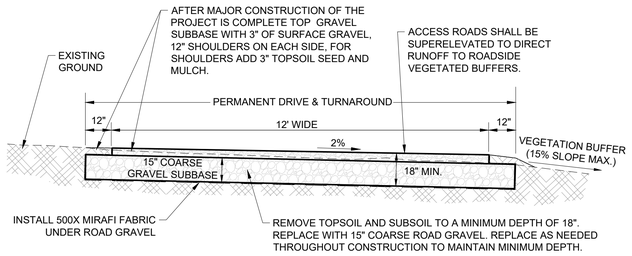
CROSS SECTION PLAN FOR NEIGHBORING BUILDING

DATE of Issue: 05/03/2021
Drawn by: EJM/GTD Checked by: GTD
Project No.: 21220 Scale: 1" = 80'
Drawing No.: C-2.00 Rev No.: 4



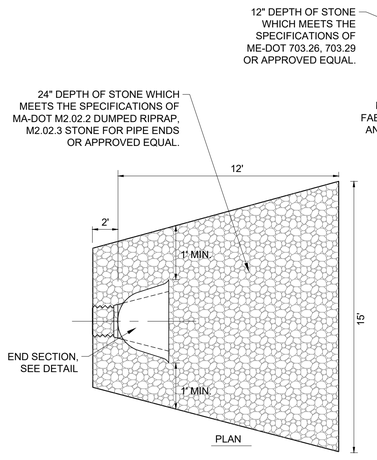
TYPICAL ACCESS DRIVE WITH GRASS OR STONE LINED DITCH FOR COLLECTION TO DITCH TURNOUT LEVEL SPREADERS CROSS-SECTION

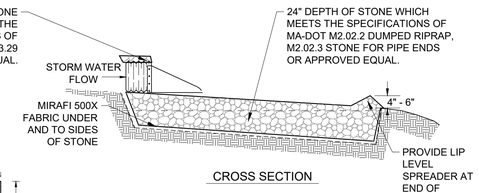
N.T.S.



PERMANENT ACCESS DRIVE CROSS SECTION

N.T.S.

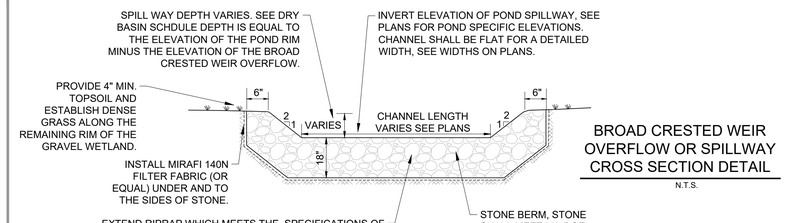




CROSS SECTION

STORMWATER OUTFALL DETAIL

N.T.S.



BROAD CRESTED WEIR OVERFLOW OR SPILLWAY CROSS SECTION DETAIL

N.T.S.

PERMANENT SEED MIX SHALL BE USED AS EARLY AS PRACTICABLE BETWEEN 5/15 AND 9/15 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 BETWEEN 9/16 AND 5/14 AND SHALL MEET THE FOLLOWING CRITERIA:

SEED	% WEIGHT	%GERMINATION
WINTER RYE	80% MIN.	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% MAX.	

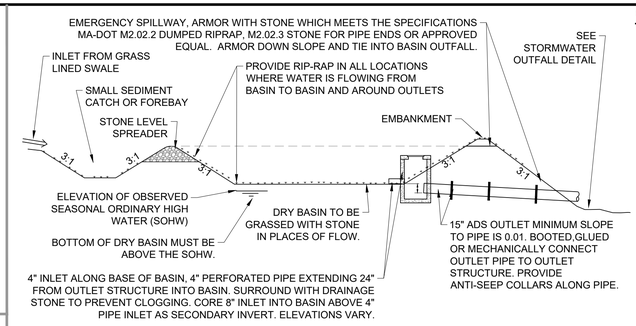
MASSACHUSETTS NCRS DRY SITE POLLINATOR MIX OR APPROVED EQUAL:

SEED	% WEIGHT
EASTERN COLUMBINE	5%
BLUE FALSE INDIGO	10%
HORSEFLYWEED	5%
TALL WHITE BEARD TONGUE	5%
OHIO SPIDERWORT	5%
COMMON MILKWEED	5%
BUTTERFLY MILKWEED	10%
PARTRIDGE PEA	10%
WILD BERGAMOT	5%
VIRGINIA MOUNTAIN MINT	2%
EARLY GOLDENROD	3%
SMOOTH ASTER	10%
NEW ENGLAND ASTER	10%.
HEATH ASTER	5%
GRAY GOLDEN ROD	5%
LITTLE BLUESTEM	5%

SEEDING 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 HYDROMULCHER. NO TIE DOWN REQUIRED. LESS EROSION CONTROL PROVIDED THAN 2 TONS OF HAY OR STRAW.
GRAVEL, CRUSHED STONE OR SLAG	WASHED; SIZE 2B OR 3A - 1½"	9 CU. YDS.	405 CU. YDS.	3"	EXCELLENT MULCH FOR SHORT SLOPES AND AROUND PLANTS AND ORNAMENTALS. USE 2B 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 2(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.) USE OF EROSION CONTROL MIX 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.



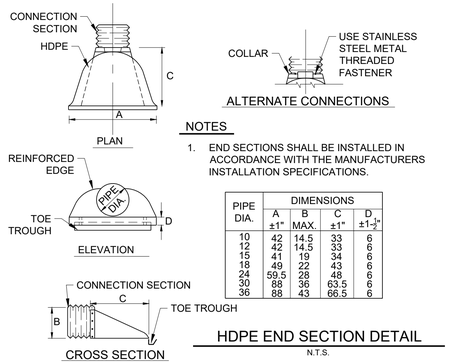
DRY BASIN SCHEDULE

DB ID	VOLUME PROVIDED IN POND (C.F.)	BOTTOM POND ELEV. (FT.)	BROAD CRESTED WEIR OVERFLOW ELEV. (FT.)	TOP OF POND ELEV. (FT.)
#1	±81,100	20.0'	22.5'	23.5'
#2	±11,850	31.5'	33.5'	34.5'
#3	±35,260	29.0'	31.5'	32.5'
#4	±18,200	46.0'	48.5'	49.5'

CROSS-SECTION DETENTION BASIN

N.T.S.

BLANK



NOTES

1. END SECTIONS SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURERS INSTALLATION SPECIFICATIONS.

PIPE DIA.	DIMENSIONS A ±1"	B MAX.	C ±1"	D ±1-½"
10	42	14.5	33	6
12	42	14.5	33	6
15	41	19	34	6
18	49	22	43	6
24	59.5	28	48	6
30	88	36	63.5	6
36	88	43	66.5	6

HDPE END SECTION DETAIL

N.T.S.

CONSTRUCTION OVERSIGHT NOTES

CONSTRUCTION SEQUENCE:

CONSTRUCTION CAN BE STARTED NO LATER THAN SEPTEMBER 1ST. IF SIDE SLOPES AND BANKS CANNOT BE REVEGETATED AND STABILIZED BY THE END OF THE GROWING SEASON, BASIN CONSTRUCTION SHOULD BE DELAYED TO THE FOLLOWING GROWING SEASON. SEEDING MUST OCCUR BEFORE SEPTEMBER 15TH OR OTHER STABILIZATION MEASURES MUST BE IMPLEMENTED BEFORE WINTER. DO NOT DISCHARGE STORMWATER TO THE BASIN UNTIL THE BASIN IS FULLY STABILIZED OR PROVIDES A SEDIMENT BARRIER AT THE OUTLET.

CONSTRUCTION OVERSIGHT:

- EMBANKMENT FILLS SHALL BE FREE OF FROZEN SOIL, ROCKS OVER 6", SOD, BRUSH STUMPS, TREE ROOTS, WOOD, OR OTHER PERISHABLE MATERIALS. EMBANKMENT FILLS SHALL BE COMPACTED USING METHODS THAT WOULD GUARANTEE A FILL DENSITY OF 90% OF THE MAXIMUM DENSITY AS DETERMINED BY STANDARD PROCTOR (ASTM-698). FILLS SHALL BE CONSTRUCTED IN 12" LIFTS.
- ALL AREAS OF CONCENTRATED FLOW IN OR OUT OF THE BASIN ARE TO BE ARMORED IN STONE RIP-RAP. STONE SHALL MEET THE SPECIFICATIONS OF MA-DOT M2.02.2 DUMPED RIPRAP, M2.02.3 STONE FOR PIPE ENDS OR APPROVED EQUAL.
- ALL THE MATERIAL USED FOR THE CONSTRUCTION OF THE BASIN MUST BE CONFIRMED AS SUITABLE BY THE DESIGN ENGINEER.
- INSPECTION OF THE DRY POND BY A PROFESSIONAL ENGINEER SHALL CONSIST AT A MINIMUM OF WEEKLY SITE VISITS TO THE SITE TO INSPECT EACH DRY POND. THIS SHALL INCLUDE MATERIAL AND PLACEMENT, FROM INITIAL GROUND DISTURBANCE TO FINAL STABILIZATION OF THE POND SIDESLOPES. INSPECTIONS SHALL INCLUDE WITNESSING THE INSTALLATION OF BERMS AND EMERGENCY SPILLWAYS.

TESTING AND SUBMITTALS:

THE CONTRACTOR SHALL IDENTIFY THE LOCATION OF THE SOURCE OF EACH COMPONENT OF THE BASIN. ALL RESULTS OF FIELD AND LABORATORY TESTING SHALL BE SUBMITTED TO THE PROJECT ENGINEER FOR CONFIRMATION.

WESTPORT PLANNING BOARD APPROVAL

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DRAWING TITLE:

DETAILS

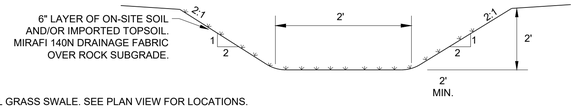
DATE of Issue: 05/03/2021

Drawn by: EJM/GTD Checked by: GTD

Project No.: 21220 Scale: N/A

Drawing No.: C-3.00

Rev No.: 3



NOTES

1. TYPICAL GRASS SWALE. SEE PLAN VIEW FOR LOCATIONS.
2. TYPICAL SIDE SLOPES TO BE 2:1.
3. DURING CONSTRUCTION TEMPORARILY SEEDED AND HEAVILY MULCHED. EROSION CONTROL BLANKET MAY BE NECESSARY IN STEEPER SLOPES, INSTALL BLANKET IF EROSION PERSISTS AND/OR GRASS IS HAVING DIFFICULTY GERMINATING. POST CONSTRUCTION CONTRACTOR SHALL RE-GRADE ANY EROSION, REMOVE BUILD UP SEDIMENTS, PERMANENT SEED AND HEAVILY RE-MULCH.
4. CROSS-SECTION SHALL BE EXCAVATED TO NEAT LINES AND GRADES. OVER-EXCAVATED AREAS SHALL BE BACKFILLED WITH MOIST SOIL COMPACTED TO DENSITY OF SURROUNDING MATERIAL.
5. ALL EARTH REMOVED AND NOT NEEDED IN CONSTRUCTION SHALL BE SPREAD OR DISPOSED OF IN APPROVED UPLAND AREA (PER ON SITE PLAN COORDINATOR) SUCH THAT IT DOES NOT INTERFERE WITH FUNCTION.

GRASS SWALE CROSS SECTION

N.T.S.

EROSION CONTROL BLANKET

NORTH AMERICAN GREEN S75BN

MATERIAL SPECIFICATIONS:

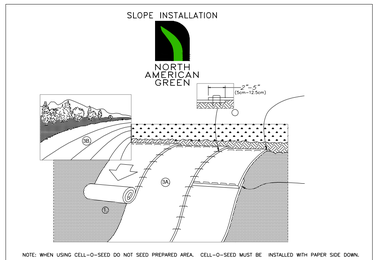
- EROSION CONTROL BLANKET SHALL BE A MACHINE-PRODUCED MAT OF 100% AGRICULTURAL STRAW.
- THE BLANKET SHALL BE OF CONSISTENT THICKNESS WITH THE STRAW EVENLY DISTRIBUTED OVER THE ENTIRE AREA OF THE MAT. THE BLANKET SHALL BE COVERED ON THE TOP SIDE WITH 100% BIODEGRADABLE WOVEN NATURAL ORGANIC FIBER NETTING 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% (0.50 lbs/sq.yd.)(0.27 kg/m^2)
- NETTING: ONE SIDE ONLY, LENO WOVEN 100% BIODEGRADABLE NATURAL ORGANIC FIBER (APPROX. WEIGHT 9.3 lbs./100 sq. ft.)
- THREAD: BIODEGRADABLE

PHYSICAL SPECIFICATIONS (ROLL):

- WIDTH: 6.67 feet (2.03 m)
- LENGTH: 108 feet (32.92 m)
- WEIGHT: 46.4 lbs. ± 10% (21.05 kg)
- AREA: 80 sq. yd. (50 m^2)



NOTE: BLANKET SHALL BE USED ON SLOPES 3:1 OR STEEPER

NOTE:
**IN LOOSE SOIL CONDITIONS, THE USE OF STAPLE OR STAKE LENGTHS GREATER THAN 6" (15cm) MAY BE NECESSARY TO PROPERLY SECURE THE BLANKETS.

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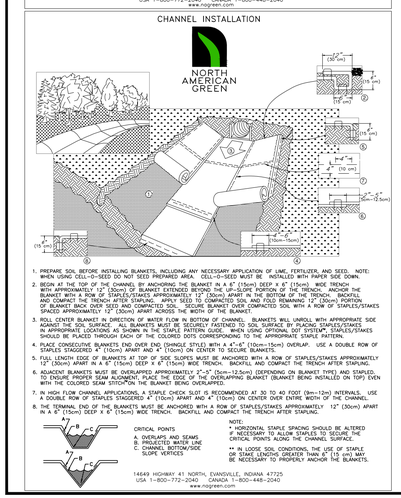
USA 1-800-772-2040 / CANADA 1-800-448-2040



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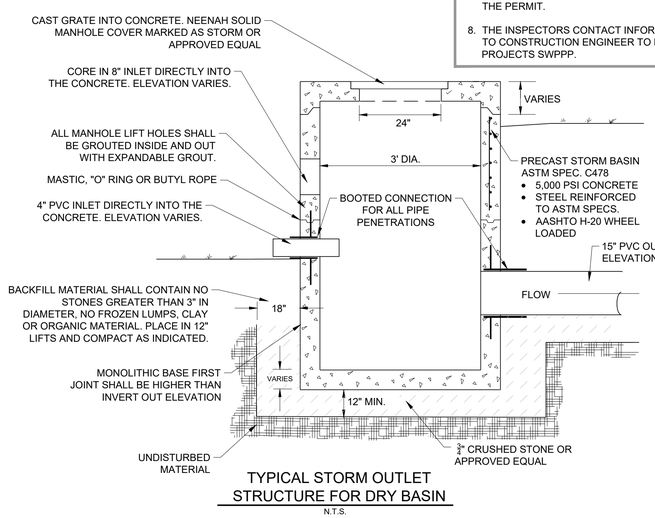
USA 1-800-772-2040 / CANADA 1-800-448-2040
www.nagreen.com

CONSTRUCTION EROSION AND SEDIMENT CONTROL INSPECTOR

1. THE CONTRACTOR SHALL DESIGNATE A "QUALIFIED PROJECT STORMWATER INSPECTOR" FOR THE ENTIRETY OF CONSTRUCTION. THE INSPECTOR OR THEIR DESIGNEE SHALL BE ON-SITE ON A DAILY BASIS DURING ACTIVE CONSTRUCTION.
2. THE INSPECTOR SHALL BE KNOWLEDGEABLE IN PRINCIPLES AND PRACTICES OF EROSION PREVENTION AND STORMWATER CONTROL. IMPLEMENTATION AND POSSESS SKILLS TO ASSESS CONDITIONS AT THE CONSTRUCTION SITE THAT COULD IMPACT STORMWATER QUALITY. TO ASSESS EFFECTIVENESS OF CONSTRUCTION BEST MANAGEMENT PRACTICES (BMPs) SELECTED TO CONTROL QUALITY OF STORMWATER DISCHARGES FROM CONSTRUCTION ACTIVITY.
3. THE INSPECTOR SHALL BE RESPONSIBLE FOR ON-SITE IMPLEMENTATION OF THIS EROSION AND SEDIMENT CONTROL PLAN, INCLUDING INSPECTIONS, MONITORING AND REPORTING.
4. INSPECTIONS SHALL BE PERFORMED AT MINIMUM ONCE EVERY 7 CALENDAR DAYS BUT ALSO PRIOR TO AND 24 HOURS AFTER A WET WEATHER EVENT. A "WET WEATHER EVENT" IS DEFINED AS 0.25 INCHES OR GREATER IN A 24 HOUR PERIOD.
5. THE SCOPE OF CONSTRUCTION INSPECTIONS SHALL INCLUDE BUT ARE NOT LIMITED TO ALL THE EROSION AND SEDIMENT CONTROL MEASURES ON SITE. DOCUMENTATION OF THE OVERALL DISTURBANCE FOR THE PROJECT SITE. REVIEW OF ALL STOCKPILE AREAS AND VEHICLE EGRESSES FROM THE PROJECT SITE.
6. CONSTRUCTION INSPECTION AND CORRECTIVE ACTION DOCUMENTATION RECORDS SHALL BE MAINTAINED FOR A MINIMUM OF 3 YEARS. THIS DOCUMENTATION SHALL BE MAINTAINED BY THE CONTRACTOR UNLESS OTHERWISE AUTHORIZED BY THE OWNER. CORRECTIVE ACTIONS SHOULD BE STARTED SAME DAY COMPLETED WITHIN 7 DAYS OR BEFORE THE NEXT STORM EVENT, WHICHEVER IS FIRST.
7. THE INSPECTOR SHALL HAVE AUTHORITY TO STOP AND/OR MODIFY CONSTRUCTION ACTIVITIES AS NECESSARY TO COMPLY WITH THESE PLANS AND TERMS AND CONDITIONS OF THE PERMIT.
8. THE INSPECTORS CONTACT INFORMATION SHALL BE PROVIDED TO CONSTRUCTION ENGINEER TO BE INCLUDED IN THE PROJECTS SWPPP.

MANHOLE SCHEDULE

MH ID	INVERT OUT 15" PVC	OUTFALL INVERT 15" PVC	INVERT IN 4" PVC	INVERT IN 8" CORE	TOP OF MH
#1	19.5'	18.5'	20.0'	21.1'	24.5'
#2	31.4'	31.0'	31.5'	32.1'	35.5'
#3	28.9'	28.4'	29.0'	30.5'	33.5'
#4	45.9	45.5	46.0'	47.5'	50.5'



TYPICAL STORM OUTLET STRUCTURE FOR DRY BASIN

N.T.S.

CONSTRUCTION LIMITS FOR EROSION AND SEDIMENT CONTROL

1. ALL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE PERFORMED IN ACCORDANCE WITH THIS PLAN SET, THE MEASURES MANUFACTURERS SPECIFICATIONS, DEPARTMENT OF ENVIRONMENTAL PROTECTION, LATEST REVISION. CONTRACTOR SHALL HAVE A COPY OF THE LATEST REVISION ON SITE AT ALL TIMES.
2. CONTRACTOR SHALL LIMIT EXCAVATION AND EARTHWORK TO NO MORE THAN 5 ACRES CONCURRENT THROUGHOUT THE CONSTRUCTION SITE AT ONE TIME. TEMPORARY STABILIZE ALL AREAS OF COMPLETED EXCAVATION AND EARTHWORK PRIOR TO MOVING ONTO A NEW AREA.
3. EXPOSED OR OPEN AREA FREE OF VEGETATION FROM CONSTRUCTION ACTIVITY SHALL BE LIMITED TO THAT WHICH CAN BE MULCHED IN ONE DAY.
4. CONTRACTOR SHALL MINIMIZE THE AMOUNT OF TIME AN AREA UNDERGOING ACTUAL CONSTRUCTION WILL BE LEFT EXPOSED OR FREE OF VEGETATION. AREAS WHICH ARE INITIALLY DISTURBED BUT FURTHER CONSTRUCT IS PLANNED MUST BE TEMPORARILY STABILIZED WITHIN 14 DAYS, IF THE AREAS ARE BEING LEFT FOR AN EXTENDED PERIOD OF TIME. AREAS WHICH ARE CONSIDERED FINISHED SHALL BE PERMANENTLY STABILIZED WITHIN 14 DAYS OF THE FINISH WORK.
5. ALL EROSION AND SEDIMENT CONTROL BMPs SHALL BE INSTALLED PRIOR TO ANY SOIL DISTURBANCE. CONTRACTOR SHALL MAINTAIN THE BMPS THROUGHOUT CONSTRUCTION. REFER TO INDIVIDUAL DETAILS FOR EACH BMP.
6. REPAIR AND/OR REPLACE ANY EROSION AND SEDIMENT CONTROL BMPs WHICH HAVE BEEN DAMAGED OR NEED MAINTENANCE. ONCE A PROBLEM HAS BEEN IDENTIFIED BY THE INSPECTOR OR OTHERS, THE REPAIR SHALL BE UNDERWAY WITHIN THE END OF THE NEXT WORKING DAY AND COMPLETED WITHIN 7 DAYS OR BEFORE THE NEXT STORM EVENT.
7. CONTRACTOR IS RESPONSIBLE TO REMOVE ALL EROSION AND SEDIMENT CONTROL BMPs WITHIN 30 DAYS OF PERMANENT STABILIZATION. PERMANENT STABILIZATION IS DEFINED AS 70% GRASS CATCH IN VEGETATED AREAS.

EPSC CONSTRUCTION NOTES:

1. EXISTING VEGETATION SHALL BE PROTECTED AND MAINTAINED TO THE EXTENT PRACTICABLE.
2. A VEGETATED BUFFER SHALL BE MAINTAINED FOR WATER BODIES WHERE FEASIBLE (E.G., WETLANDS AND STREAMS).
3. 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.
4. RESOURCE AREAS (E.G., WETLANDS, STREAMS, RTE PLANT SPECIES) SHALL BE FLAGGED PRIOR TO ANY CONSTRUCTION RELATED ACTIVITIES OCCURRING WITHIN CLOSE PROXIMITY TO THOSE AREAS.
5. 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 THE CONSTRUCTION ENGINEER PRIOR TO USE.
6. CONCENTRATED RUNOFF SHALL NOT FLOW DOWN STEEP SLOPES UNLESS CONTAINED WITHIN AN ADEQUATE TEMPORARY OR PERMANENT CHANNEL (SEE DETAILS), FLUME, OR SLOPE DRAIN STRUCTURE.
7. UNDERGROUND UTILITY LINES SHALL BE INSTALLED IN ACCORDANCE WITH THE FOLLOWING STANDARDS IN ADDITION TO OTHER APPLICABLE CRITERIA:
   A. NO MORE THAN 500 LINEAR FEET OF TRENCH MAY BE OPENED AT ONE TIME.
   B. EXCAVATED MATERIAL SHALL BE PLACED ON THE UPHILL SIDE OF TRENCHES, WHERE FEASIBLE, BUT NOT IN RESOURCE AREAS.
8. 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:
   A. LESS THAN ±5% SLOPE
   B. AT LEAST 100 FEET FROM ANY DOWNSLOPE WATER BODY OR CONVEYANCE TO A WATER BODY, INCLUDING A DITCH
   C. VEGETATED
9. 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.
10. 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.
11. DUST CONTROL SHALL BE HANDLED VIA WATER APPLICATION TO ROADWAYS AND OTHER AREAS WHERE DUST MAY BE GENERATED.

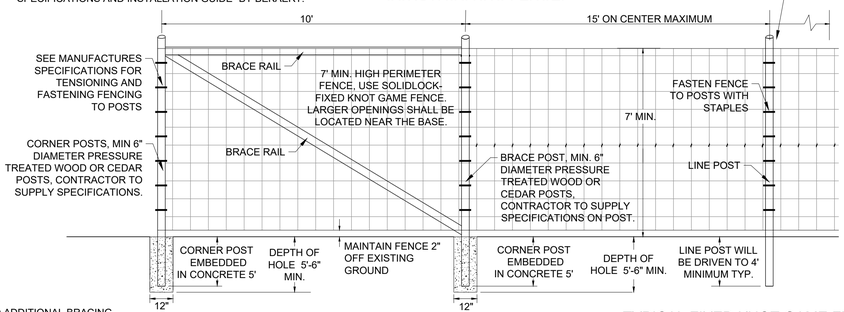
FENCE MATERIAL:
SOLIDLOCK FIXED KNOT GAME FENCE SPECIFICATION:

- FENCE FABRIC SHALL BE BEKAERT ZA-6" FIXED KNOT GAME FENCE
- 96" HIGH
- 12.5 GAUGE WIRE
- CLASS 3 GALVANIZED

INSTALL ALL FENCE COMPONENTS IN ACCORDANCE WITH MANUFACTURERS SPECIFICATIONS, SEE "FIXED KNOT BRACE SPECIFICATIONS AND INSTALLATION GUIDE" BY BEKAERT.

CONTRACTOR SHALL SUBMIT SHOP DRAWINGS TO ENGINEER FOR APPROVAL PRIOR TO ORDERING AND CONSTRUCTING FENCE.

LINE POSTS 15' ON CENTER MAXIMUM. LINE POSTS SHALL BE MIN. 4" DIAMETER PRESSURE TREATED WOOD OR CEDAR POST CONSTRUCTED IN SIMILAR FASHION AS CORNER POSTS ON THIS DETAIL.



TYPICAL FIXED KNOT GAME FENCE AROUND ARRAY (RENDERING)

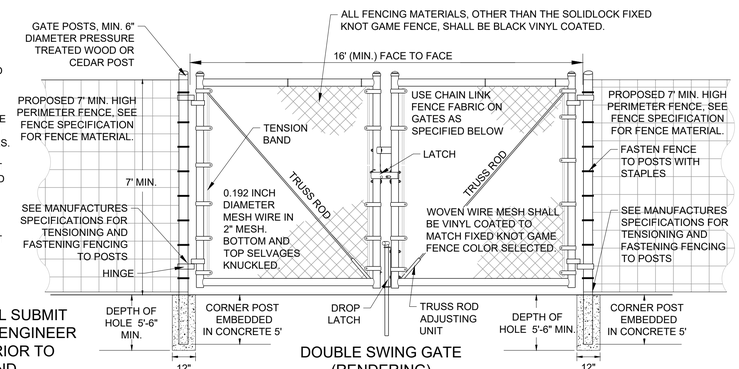
N.T.S.

NOTES

1. ADDITIONAL BRACING MAY BE REQUIRED ON LONGER FENCE RUNS. CONTRACTOR TO ADD ADDITIONAL BRACING WHEN CONTRACTOR OBSERVES CORNER POST DEFLECTION DURING FENCE TENSINOING/FASTENING.
2. FABRIC TO BE FASTENED TO POSTS WITH STAPLES APPROVED BY THE ENGINEER.

NOTES

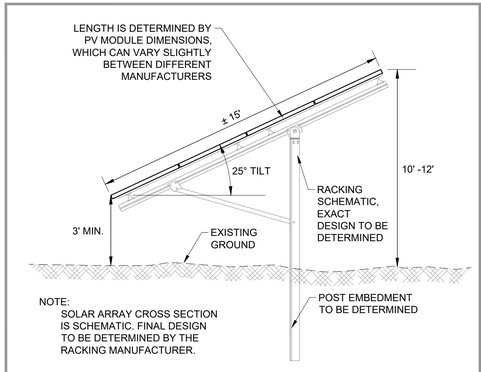
1. PAINT ALL GALVANIZED PIPE AND FITTINGS TO MATCH SOLIDLOCK FIXED KNOT GAME FENCE. PAINT SHALL BE SUITABLE FOR USE ON GALVANIZED SURFACES.
2. EMERGENCY CONTACT SIGN SHALL BE PLACED ON THE GATE, WHICH IDENTIFIES THE PROJECT OWNER AND PROVIDES A 24-HOUR EMERGENCY CONTACT PHONE NUMBER.



CONTRACTOR SHALL SUBMIT SHOP DRAWINGS TO ENGINEER FOR APPROVAL PRIOR TO ORDERING AND CONSTRUCTING FENCE.

DOUBLE SWING GATE (RENDERING)

N.T.S.



TYPICAL SOLAR ARRAY CROSS SECTION (RENDERING)

N.T.S.

WESTPORT PLANNING BOARD APPROVAL

DATE

GADUS SOLAR

Horseneck Road
Westport, Massachusetts

IRONWOOD RENEWABLES

BIODIVERSITY RESEARCH INSTITUTE

KREBS & LANSING CONSULTING ENGINEERS

164 Main Street, Suite 201
Colchester, Vermont 05446
P: (802) 878-0375
www.krebsandlansing.com

ISSUED FOR PERMIT REVIEW
NOT FOR CONSTRUCTION

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

ENVIRONMENTAL:
BRI Environmental
276 Canco Road
Portland, ME 04103

OWNER & PROPERTY INFORMATION:

Owner: Bruce and Patricia Mayall

Owner Address: 124 Milton Street
Fall River, MA 02720

Parcel ID: 76-69S-0

Parcel Address: 0 Horseneck Road
Westport, MA 02790

STAMP:

COMMONWEALTH OF MASSACHUSETTS
GREGORY T. DIXSON
CIVIL ENGINEER
No. 55649
REGISTERED PROFESSIONAL ENGINEER

REV. NO.	REVISIONS/COMMENTS	DATE
1.	Revise design for new wetlands and	09/17/21
	project updates	
2.	Updates for Town and addressing	11/17/21
	comments from Field Engineering Co.,	
	Inc. Peer Review Report	

DRAWING TITLE:

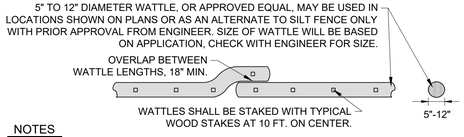
DETAILS

DATE of Issue: 05/03/2021

Drawn by: EJM/GTD Checked by: GTD

Project No.: 21220 Scale: N/A

Drawing No.: C-3.01 Rev No.: 2

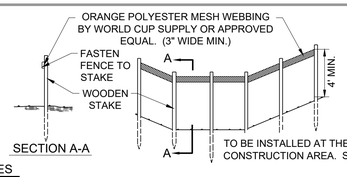


NOTES

1. CONTRACTOR SHALL BE RESPONSIBLE FOR THE INSTALLATION, MAINTENANCE, AND REMOVAL OF WATTLE IN ALL LOCATIONS SHOWN ON THE PLANS. WATTLE MAY BE LEFT IN PLACE IF THE CONTRACTOR SEEDS AND MULCHES OVER 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 WATTLE, LENGTHS WILL OVERLAP BY MINIMUM 18" WHEN TRANSITIONING TO A NEW LENGTH OF WATTLE.
4. CONTRACTOR SHALL REFER TO ALL MANUFACTURES SPECIFICATIONS AND DETAILS.
5. SILTSOXX IS A SPECIFIC MANUFACTURER, OTHER MANUFACTURERS WITH EQUAL PRODUCTS MAY BE USED IF APPROVED BY ENGINEER.
6. WATTLE CAN BE USED AS A SILT FENCE ALTERNATIVE, WITH PRIOR APPROVAL OF THE ENGINEER.

TYPICAL WATTLE SEDIMENT CONTROL

N.T.S.

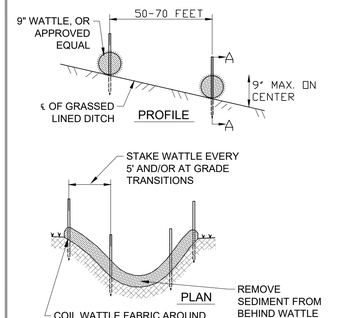


NOTES

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 FIBERGLASS 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.
4. MINIMUM 1 TO 2 ROWS OF MESH BARRIER TAPE TO BE INSTALLED ALONG CONSTRUCTION PERIMETER.
5. EACH ROW OF BARRIER TAPE TO BE 3" WIDE MINIMUM.
6. BARRIER TAPE TO BE ORANGE.
7. SECURE BARRIER TAPE TO STAKES OR EXISTING TREE TRUNKS WITH BOTTOM ROW AT 4' DISTANCE FROM GROUND SURFACE (MINIMUM).
8. MAINTAIN AND REPLACE AS NEEDED. REMOVE AT COMPLETION OF PROJECT PER OSPC.
9. IN EVENT THE OSPC DETERMINES BARRIER TAPE IS NOT SUFFICIENT, REPLACE WITH ORANGE CONSTRUCTION FENCE OR SNOW FENCE.

TYPICAL CONSTRUCTION LIMIT BARRIER

N.T.S.

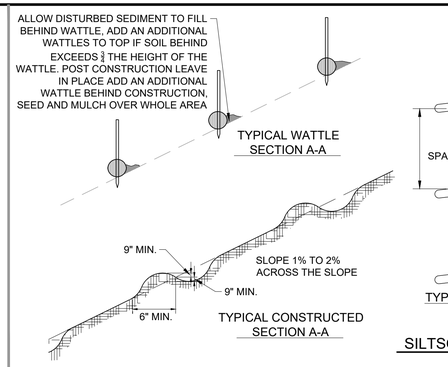


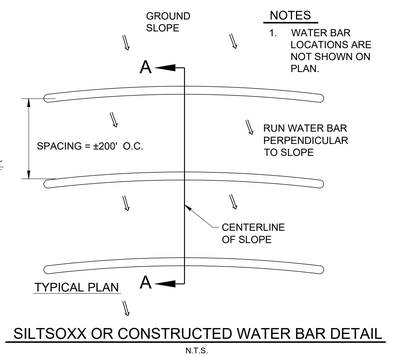
NOTES

1. CONTRACTOR SHALL BE RESPONSIBLE FOR THE INSTALLATION, MAINTENANCE, AND REMOVAL OF WATTLE IN ALL LOCATIONS SHOWN ON THE PLANS. WATTLE 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 WATTLE WILL BE ADDED WHEN SEDIMENT REACHES HALF OF PRODUCT HEIGHT.
3. WHEN INSTALLING LENGTHS OF WATTLE, LENGTHS WILL OVERLAP BY MINIMUM 18" WHEN TRANSITIONING TO A NEW LENGTH OF WATTLE.
4. CONTRACTOR SHALL REFER TO ALL MANUFACTURES SPECIFICATIONS AND DETAILS.
5. WATTLE CAN ONLY BE USED IN A GRASS LINED SWALE, MAY NOT BE USED IN STONE LINED SWALES.
6. WATTLE CHECK DAM CAN ONLY BE USED IN CHANNELS WITH SLOPES LESS THAN 5%.
5. SILTSOXX IS A SPECIFIC MANUFACTURER, OTHER MANUFACTURERS WITH EQUAL PRODUCTS MAY BE USED IF APPROVED BY ENGINEER.

TYPICAL WATTLE CHECK DAM DETAIL

N.T.S.





NOTES

1. WATER BAR LOCATIONS ARE NOT SHOWN ON PLAN.

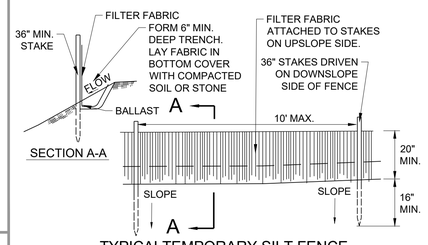
SILTSOXX OR CONSTRUCTED WATER BAR DETAIL

N.T.S.

NOTES

1. 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.
2. PERIMETER CONTROLS SHALL BE INSTALLED ON DOWNSLOPE SIDE OF PLANNED EARTH DISTURBANCE.
3. PERIMETER CONTROLS SHALL BE INSTALLED PRIOR TO ANY EARTH DISTURBING ACTIVITIES WITHIN UPSLOPE CONTRIBUTING AREA.
4. SILT FENCE SHALL NOT BE USED AS CONSTRUCTION DEMARCATION.
5. SILTSOXX CAN BE USED AS A SILT FENCE ALTERNATIVE, WITH PRIOR APPROVAL OF THE ENGINEER. SEE DETAIL.
6. IF SILT FENCE IS INSTALLED WHEN GROUND IS FROZEN, A GRAVEL, SHOT ROCK, OR SAND BALLAST MUST BE USED.

SILT FENCE SPACING CHART	
SLOPE	SPACING
5% TO 10%	50 FT. OR LESS
10% TO 20%	25 FT. OR LESS
> 20%	15 FT. OR LESS



TYPICALTEMPORARY SILT FENCE

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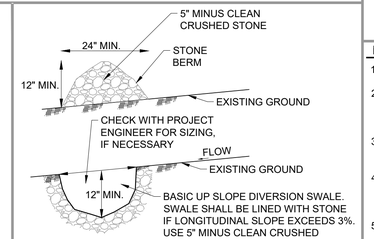
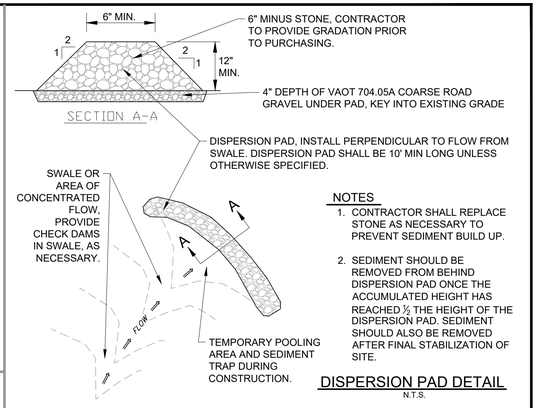


NOTES

1. UPSLOPE DIVERSION BERM WILL BE USED AS SHOWN ON PLAN AND DETAIL. DIVERSION SWALES ARE NOT PART OF THIS DESIGN. IF NECESSARY DURING CONSTRUCTION, CONTRACTOR SHALL CHECK WITH THE PROJECT ENGINEER FOR SIZING.

TYPICAL UPSLOPE DIVERSION DETAIL

N.T.S.



NOTES

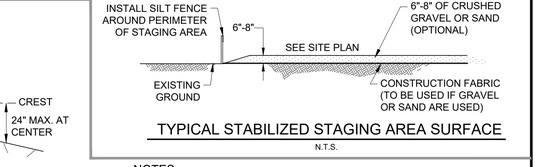
1. CONTRACTOR SHALL REPLACE STONE AS NECESSARY TO PREVENT SEDIMENT BUILD UP.
2. SEDIMENT SHOULD BE REMOVED FROM BEHIND DISPERSION PAD ONCE THE ACCUMULATED HEIGHT HAS REACHED ½ THE HEIGHT OF THE DISPERSION PAD. SEDIMENT SHOULD ALSO BE REMOVED AFTER FINAL STABILIZATION OF SITE.

DISPERSION PAD DETAIL

N.T.S.

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 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

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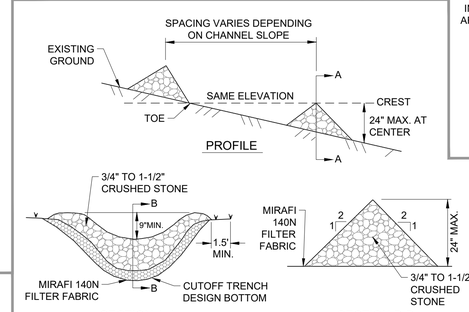


NOTES

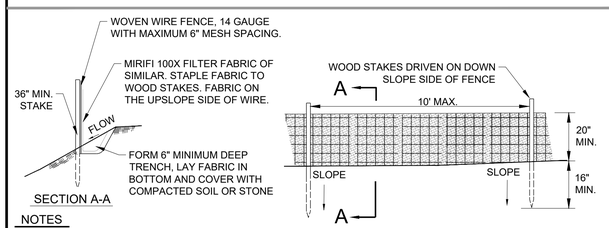
1. STONE WILL BE PLACED ON A FILTER FABRIC FOUNDATION TO THE LINES, GRADES AND LOCATIONS SHOWN IN THE PLAN.
2. SET SPACING OF CHECK DAMS TO ASSUME THAT THE ELEVATIONS OF THE CREST OF THE DOWNSTREAM DAM IS AT THE SAME ELEVATION OF THE TOE OF THE UPSTREAM DAM.
3. EXTEND THE STONE A MINIMUM OF 1.5 FEET BEYOND THE DITCH BANKS TO PREVENT CUTTING AROUND THE DAM.
4. PROTECT THE CHANNEL DOWNSTREAM OF THE LOWEST CHECK DAM FROM SCOUR AND EROSION WITH STONE OR LINER AS APPROPRIATE.
5. ENSURE THAT CHANNEL APPURTENANCES SUCH AS CULVERT ENTRANCES BELOW CHECK DAMS ARE NOT SUBJECT TO DAMAGE OR BLOCKAGE FROM DISPLACED STONES.

STONE CHECK DAM

N.T.S.

PERIMETER EROSION CONTROL SCHEDULE

DISTANCE FROM RECIEVING WATER AND ALL WATER RESOURCE AREAS (WRA)	SLOPE	ACCEPTABLE EPSC MEASURE
≤ 100 FEET	ALL	REINFORCED SILT FENCE, TWO ROWS OF NONREINFORCED SILT FENCE OR ROW OF WATTTLE INSIDE OF NONREINFORCED SILT FENCE
> 100 FEET	ALL	NONREINFORCED SILT FENCE OR WATTLE PER SPECIFICATIONS BELOW



NOTES

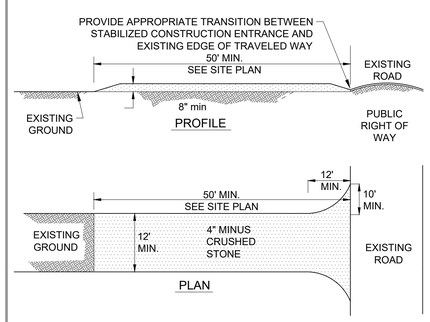
1. WOVEN WIRE FENCE TO BE FASTENED SECURELY TO FENCE POSTS WITH WIRE TIES WIRE FENCE REINFORCEMENT REQUIRED WITHIN 100 FT UPSLOPE OF RECEIVING WATERS.
2. FILTER CLOTH TO BE FASTENED SECURELY TO WOVEN WIRE FENCE WITH ITIES SPACED 24" AT THE TOP AND MID SECTION.
3. WHEN TWO SECTIONS OF FILTER CLOTH ADJOIN EACH OTHER THEY SHALL BE OVERLAPPED BY 6" AND FOLDED. FILTER CLOTH SHALL BE MIRAFI 100X OR APPROVED EQUIVALENT.
4. PREFABRICATED UNITS SHALL BE GEOFAB, ENVIROFENCE OR EQUIVALENT.
5. CONTRACTOR SHALL BE RESPONSIBLE FOR THE INSTALLATION, MAINTENANCE, AND REMOVAL OF SILT FENCE IN ALL LOCATIONS SHOWN ON THE PLANS.
6. MAINTENANCE SHALL BE PERFORMED AS NEEDED AND MATERIAL REMOVED WHEN SEDIMENT REACHES HALF OF FABRIC HEIGHT. REMOVE SILT FENCE AFTER SUCCESSFUL ESTABLISHMENT OF VEGETATION.
7. OTHER MEASURES MAY BE USED TO REINFORCE SILT FENCE IN PLACE OF WIRE MESH, CONTRACTOR WILL APPROVE ALL MEASURES WITH ENGINEER PRIOR TO USE.
8. IF SILT FENCE IS INSTALLED WHEN GROUND IS FROZEN, A GRAVEL, SAND OR WATTLE BALLAST MUST BE USED.
9. CONTRACTOR MAY USE IVI WIRE BACK SILT FENCE (IVI PRODUCT 940-3610-B48-W6H) OR EQUIVALENT.
10. SILT FENCE SHALL BE INSTALLED ALONG CONTOURS.
11. SILT FENCE SHALL NOT BE LOCATED IN AREAS OF CONCENTRATED FLOW.
12. DRAINAGE AREA SHALL BE ≤ ¼ ACRE PER 100 LINEAR FEET OF SILT FENCE.

TYPICAL TEMPORARY REINFORCED SILT FENCE

N.T.S.

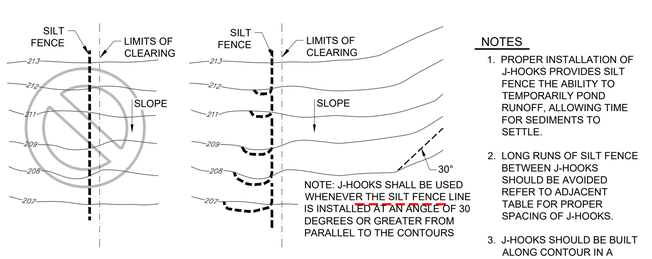
NOTES

1. CONTRACTOR SHALL STABILIZE 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 WHEN 80% OF THE VOIDS ARE FILLED WITH SEDIMENT.
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.

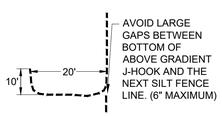


STABILIZED CONSTRUCTION ENTRANCE

N.T.S.



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



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.

TYPICAL SILT FENCE "J-HOOK" CONSTRUCTION

N.T.S.

WESTPORT PLANNING BOARD APPROVAL

DATE

GADUS SOLAR

Horseneck Road
Westport, Massachusetts

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Colchester, Vermont 05446

ENVIRONMENTAL:
BRI Environmental
276 Canco Road
Portland, ME 04103

OWNER & PROPERTY INFORMATION:

Owner:	Bruce and Patricia Mayall
Owner Address:	124 Milton Street Fall River, MA 02720
Parcel ID:	76-69S-0
Parcel Address:	0 Horseneck Road Westport, MA 02790

STAMP:

COMMONWEALTH OF MASSACHUSETTS
GREGORY T. DIXSON
CIVIL ENGINEER
No. 55649
REGISTERED PROFESSIONAL ENGINEER

REV. NO.	REVISIONS/COMMENTS	DATE
1.	Revise design for new wetlands and	09/17/21
	project updates	
2.	Updates for Town and addressing	11/17/21
	comments from Field Engineering Co.,	
	Inc. Peer Review Report	

DRAWING TITLE:

DETAILS

DATE of Issue: 05/03/2021

Drawn by: EJM/GTD — Checked by: GTD

Project No.: 21220 — Scale: N/A

Drawing No.: C-3.02

Rev No.: 2

NOTE: EXACT EQUIPMENT HAS NOT BEEN DETERMINED AT THIS TIME. SOLAR TECHNOLOGY IS AN EVOLVING FIELD AND THE CONSTRUCTION DATE FOR THIS PROJECT COULD BE YEARS OUT. PROJECT ENGINEERS WILL EVALUATE EQUIPMENT PURCHASED FOR CONSTRUCTION AND MAKE SURE IT MEETS THE SPECIFICATIONS BELOW.

VOLUME CALCULATIONS:

REQUIRED CAPACITY:
125% OF THE 500 GALLONS OF TRANSFORMER OIL = 625 GAL. = 84 C.F.

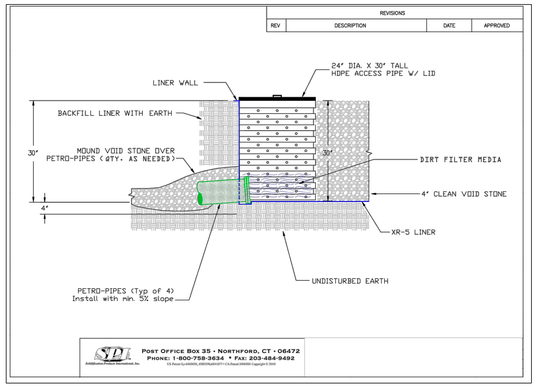
REQUIRED MINIMUM FREEBOARD
(24-HOUR DURATION, 25 YEAR STORM) = 6.02" (0.50')
CONTAINMENT AREA & PAD = 17' X 17' = 289 S.F.
VOLUME OF FREEBOARD REQUIRED = 289 S.F. X 0.50 FT. = 145C.F.

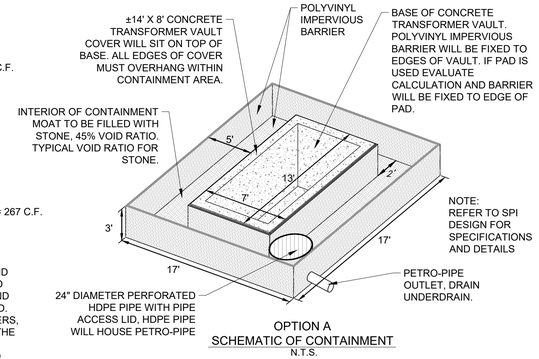
TOTAL CAPACITY REQUIRED = 84 C.F. + 145 C.F. = 229 C.F.

CAPACITY PROVIDED IN SECONDARY OIL CONTAINMENT SYSTEM:
AREA OF CONTAINMENT = (17'X17') - (13'X7') = 198 S.F.
VOLUME OF CONTAINMENT = 198 S.F. X 3.0' OF DEPTH = 594 C.F.
WHEN FILLED WITH STONE WITH 45% VOID RATIO = 594 C.F. * 0.45 = 267 C.F.
TOTAL CAPACITY PROVIDED = 267 C.F. > 229 C.F. REQUIRED

NOTE:

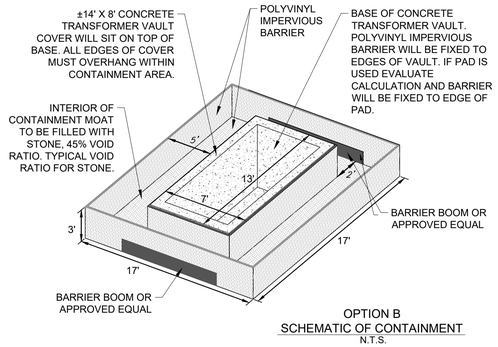
1. THE O&M FIRM WILL REVIEW THE INSTALLATION FOR SAFETY AND CODE COMPLIANCE (BY THE APPROPRIATE QUALIFIED LICENSED MECHANICAL AND ELECTRICAL PROFESSIONALS), ACCURATE AND UP TO DATE REPORTING INFORMATION AND UPDATES REQUIRED. PLEASE NOTE THAT KREBS AND LANSING CONSULTING ENGINEERS, INC. WORK PERTAINS TO THE STORMWATER CONTROLS ONLY. THE SAFETY AND CODE COMPLIANCE PORTION OF THE DESIGN AND REVIEW SHALL BE COMPLETED BY THE APPROPRIATE LICENSED MECHANICAL AND ELECTRICAL PROFESSIONALS (ENGINEERS) HIRED BY THE O&M FIRM PRIOR TO CONSTRUCTION OF THE PROJECT. ANY APPROPRIATE CODE OR SAFETY MODIFICATIONS DICTATED BY THAT REVIEW SHALL BE INCORPORATED INTO O&M PROTOCOLS FOR THE SITE PRIOR TO CONSTRUCTION COMMENCING.
2. THIS DESIGN ASSUMES THAT ALL PENETRATIONS THROUGH THE CONCRETE BASE OF THE TRANSFORMER VAULT COVER WILL BE SEALED. IF PENETRATIONS ARE NOT SEALED CONTRACTOR MUST MAKE BOTTOM OF THE TRANSFORMER VAULT SUMP WATER TIGHT OR INSTALL AN OIL REACTIVE PLUG IN ALL VAULT DRAINS, "PETRO PLUG" OR APPROVED EQUAL.
3. THIS DESIGN IS FOR A 2,000 KVA PAD MOUNTED TRANSFORMER BY COOPER POWER SYSTEMS, FILLED WITH 500 GALLONS OF FLUID.
4. SECONDARY OIL CONTAINMENT WILL BE REVIEWED PRIOR TO INSTALLATION AND DESIGNED SPECIFICALLY FOR THE EQUIPMENT BEING INSTALLED. EQUIPMENT MANUFACTURER MAY PROVIDE THEIR OWN SECONDARY OIL CONTAINMENT. CONTAINMENT DESIGN WILL NEED TO BE REVIEWED BY THE ENGINEER AND FIT THE STATE SPECIFIED VOLUME.





OPTION A
SCHEMATIC OF CONTAINMENT
N.T.S.

OR



OPTION B
SCHEMATIC OF CONTAINMENT
N.T.S.

TYPICAL SECONDARY OIL CONTAINMENT DESIGN FOR
1,500 kVA TO 2,000 kVA TRANSFORMERS
N.T.S.

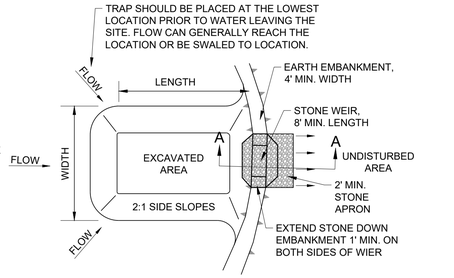
NOTES

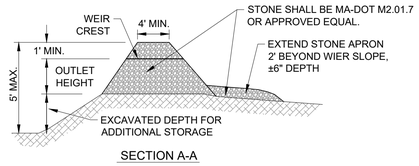
1. AREA UNDER EMBANKMENT SHALL BE CLEARED, GRUBBED AND STRIPPED OF ANY VEGETATION AND ROOT MAT (VEGETATION DUFF LAYER). THE POOL AREA SHALL BE CLEARED.
2. THE FILL MATERIAL FOR THE EMBANKMENT SHALL BE FREE OF ROOTS AND OTHER WOODY VEGETATION AS WELL AS OVER-SIZED STONES, ROCKS, ORGANIC MATERIAL OR OTHER OBJECTIONABLE MATERIAL. THE EMBANKMENT SHALL BE COMPACTED BY TRAVERSING WITH EQUIPMENT WHILE IT IS BEING CONSTRUCTED.
3. ALL CUT AND FILL SLOPES SHALL BE 2:1 OR FLATTER. THE USE OF GREATER SLOPES MAYBE PERMITTED WITH OSPC OR EPSC SPECIALIST APPROVAL.
4. THE STONE USED IN THE OUTLET SHALL BE VAOT 706.04 TYPE 1 STONE OR APPROVED ON SITE SHOT ROCK, PLACED ON MIRAFI 140N OR APPROVED EQUAL DRAINAGE FABRIC.
5. SEDIMENT SHALL BE REMOVED AND TRAP RESTORED TO ITS ORIGINAL DIMENSIONS WHEN THE SEDIMENT HAS ACCUMULATED TO $\frac{1}{2}$ THE DESIGN DEPTH OF THE TRAP. IT SHALL BE PLACED ON SITE AND STABILIZED.
6. THE STRUCTURE SHALL BE INSPECTED AFTER EACH RAIN AND AS REQUIRED BY THE PERMIT.
7. CONSTRUCTION OPERATIONS SHALL BE CARRIED OUT IN SUCH A MANNER THAT EROSION AND SEDIMENT ARE CONTROLLED.
8. IF THE SEDIMENT TRAP IS NOT IN THE LOCATION OF A PERMANENT STORMWATER POND, THE STRUCTURE SHALL BE REMOVED AND THE AREA STABILIZED WHEN THE DRAINAGE AREA HAS BEEN PROPERLY STABILIZED.
9. THE MAXIMUM CONTRIBUTING DRAINAGE AREA IS 5 ACRES.
10. GENERAL SIZING REQUIREMENTS FOR ANY SEDIMENT TRAPS NOT IN THE LOCATION OF A PERMANENT STORMWATER POND, SHALL BE 3,600 CUBIC FEET PER ACRE OF DRAINAGE AREA. VOLUME CALCULATION FOR NATURAL SEDIMENT TRAPS MAY BE APPROXIMATED USING THE SURFACE AREA AT OUTLET ELEVATION (A), TRAPS MAXIMUM DEPTH (D) AND THE FOLLOWING EQUATION:
    - TOTAL VOLUME = 0.4 * A (IN SQUARE FEET) * D (FEET)

    FOR CONSTRUCTED/EXCAVATED TEMPORARY SEDIMENT TRAPS THE SIZE SHALL BE ADJUSTED PROPORTIONALLY FOR LARGER DRAINAGE AREAS BASED ON THE BELOW CHART.

APPROX. DRAINAGE AREA	APPROX. STORAGE VOLUME	RECOMMENDED BOTTOM DIMENSIONS	RECOMMENDED DIMENSIONS AT OUTLET	DEPTH AT OUTLET	SIDE SLOPES
0.25 ACRES (±10,900 S.F.)	±900 C.F.	10 FT. WIDE X 13 FT. LONG	22 FT. WIDE X 25 FT. LONG	3 FT.	2:1

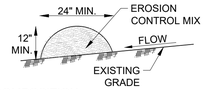
11. FOR THOSE TEMPORARY SEDIMENT TRAPS TO BE PERMANENT DRY OR WET PONDS, SEDIMENT SHALL BE REMOVED AND THE ENTIRE AREA SEEDED AND MULCHED OR COVERED WITH EROSION CONTROL MATTING PRIOR TO PUTTING THE STORMWATER POND INTO USE.
12. LOCATIONS FOR TEMPORARY SEDIMENT TRAPS TO BE APPROVED BY THE OSPC OR THE EPSC SPECIALIST.





SECTION A-A

TYPICAL TEMPORARY SEDIMENT TRAP
N.T.S.



COMPOSITION:

EROSION CONTROL MIX BERM SHALL BE MANUFACTURED ON OR OFF THE PROJECT SITE SUCH THAT ITS COMPOSITION IS IN ACCORDANCE WITH THE MAINE DEPT. OF EROSION CONTROL AND SEDIMENT CONTROL BMP, B-1 SEDIMENT BARRIERS. IT MUST CONSIST PRIMARILY OF ORGANIC MATERIAL, SEPARATED AT THE POINT OF GENERATION, AND MAY INCLUDE: SHREDDED BARK, STUMP GRINDINGS, COMPOSTED WOOD AND BARK CHIPS AND/OR ACCEPTABLE MANUFACTURED PRODUCTS. GROUND CONSTRUCTION DEBRIS OR REPROCESSED WOOD PRODUCTS WILL NOT BE ACCEPTABLE. ALL MATERIALS USED TO MANUFACTURE THE EROSION CONTROL MIX SHALL BE NATIVE MASSACHUSETTS MATERIALS.

NOTES

1. THE BARRIER MUST BE PLACED ALONG A RELATIVELY LEVEL CONTOUR.
2. EXISTING GROUND SHALL BE PREPARED AS NEEDED SUCH THAT THE BARRIER LIES NEARLY FLAT ALONG THE GROUND TO AVOID THE CREATION OF VOIDS AND BRIDGES IN ORDER TO MINIMIZE THE POTENTIAL OF WASH OUTS UNDER THE BARRIER.
3. ON SLOPES < 5% OR AT THE BOTTOM OF STEEPER SLOPES (<2:1) UP TO 20' LONG, THE BARRIER MUST BE A MINIMUM OF 12" HIGH, AS MEASURED ON THE UPHILL SIDE OF THE BARRIER, AND A MINIMUM OF 2 FT. WIDE. ON LONGER OR STEEPER SLOPES, THE BARRIER SHALL BE WIDER TO ACCOMMODATE ADDITIONAL FLOW.
4. EROSION CONTROL MIX MAY BE INSTALLED WHERE SILT FENCE IS ILLUSTRATED AND SCHEDULED ON THE DESIGN PLANS EXCEPT IN, BUT NOT LIMITED TO, THE FOLLOWING AREAS: WETLAND AREAS, AT POINTS OF CONCENTRATED FLOW, BELOW STORMWATER END SECTIONS AT OUTFALLS, AROUND CATCH BASINS AND CLOSED STORM SYSTEMS AND AT THE BOTTOM OF STEEP SLOPES (UP TO 2:1 WITH ENGINEER APPROVAL) THAT ARE MORE THAN 50 FEET FROM TOP TO BOTTOM. IN WETLAND BUFFER AREAS EROSION CONTROL MIX MAY BE USED ONLY IN THE SPECIFIC AREAS THAT HAVE RECEIVED REGULATORY APPROVAL FOR DISTURBANCE FROM EITHER THE STATE OF MASSACHUSETTS OR THE U.S. ARMY CORPS OF ENGINEERS. EROSION CONTROL MIX MAY NOT BE USED IN WETLAND AREAS.

WESTPORT PLANNING BOARD APPROVAL

DATE

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Westport, Massachusetts

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COMMONWEALTH OF MASSACHUSETTS
GREGORY T. DIXSON
CIVIL ENGINEER
No. 55649
REGISTERED PROFESSIONAL ENGINEER

REV. NO.	REVISIONS/COMMENTS	DATE
1.	Updates for Town and addressing comments from Field Engineering Co., Inc. Peer Review Report	11/17/21

DRAWING TITLE:
DETAILS

DATE of Issue: 09/17/2021
Drawn by: EJM/GTD
Checked by: GTD
Project No.: 21220
Scale: N/A
Drawing No.: C-3.03
Rev No.: 1