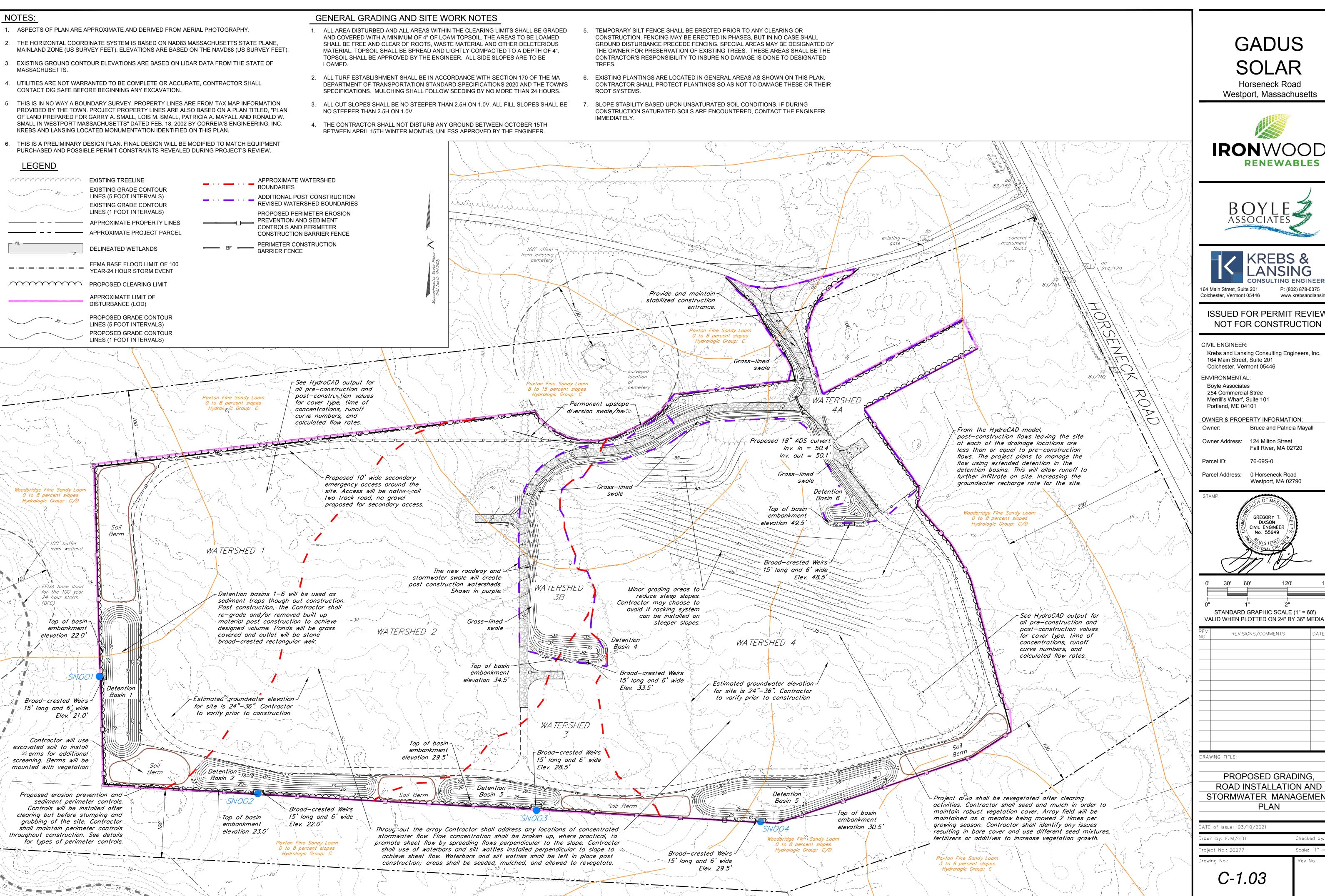


REV. NO.	REVISIONS/COMMENTS	DATE
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# **GADUS**

Horseneck Road Westport, Massachusetts







**ISSUED FOR PERMIT REVIEW** NOT FOR CONSTRUCTION

# CIVIL ENGINEER:

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

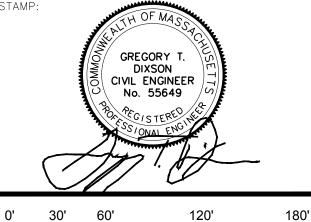
**ENVIRONMENTAL** Boyle Associates 254 Commercial Stree Merrill's Wharf, Suite 101

**OWNER & PROPERTY INFORMATION:** Bruce and Patricia Mayall

Fall River, MA 02720

76-69S-0

Parcel Address: 0 Horseneck Road Westport, MA 02790



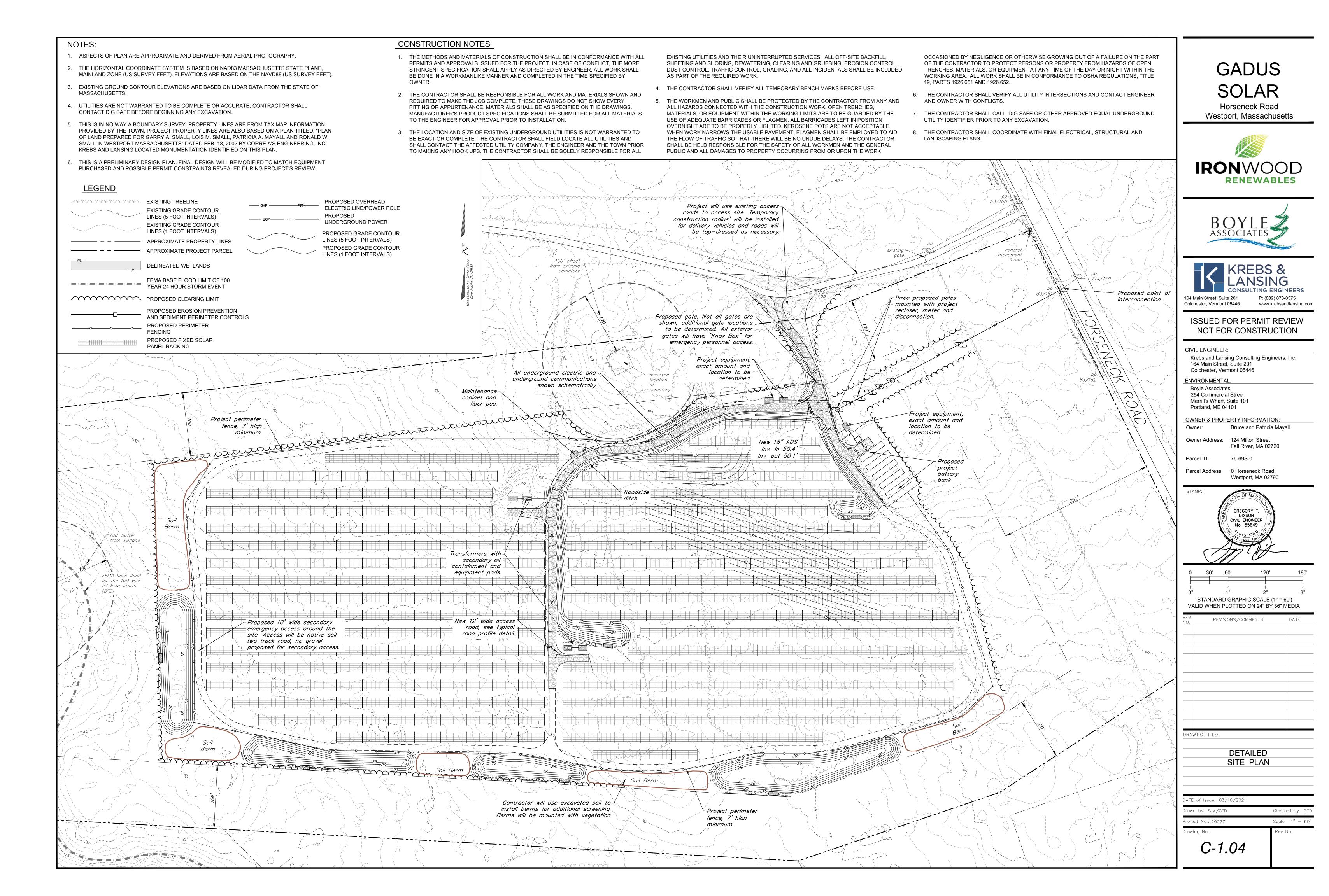
STANDARD GRAPHIC SCALE (1" = 60')

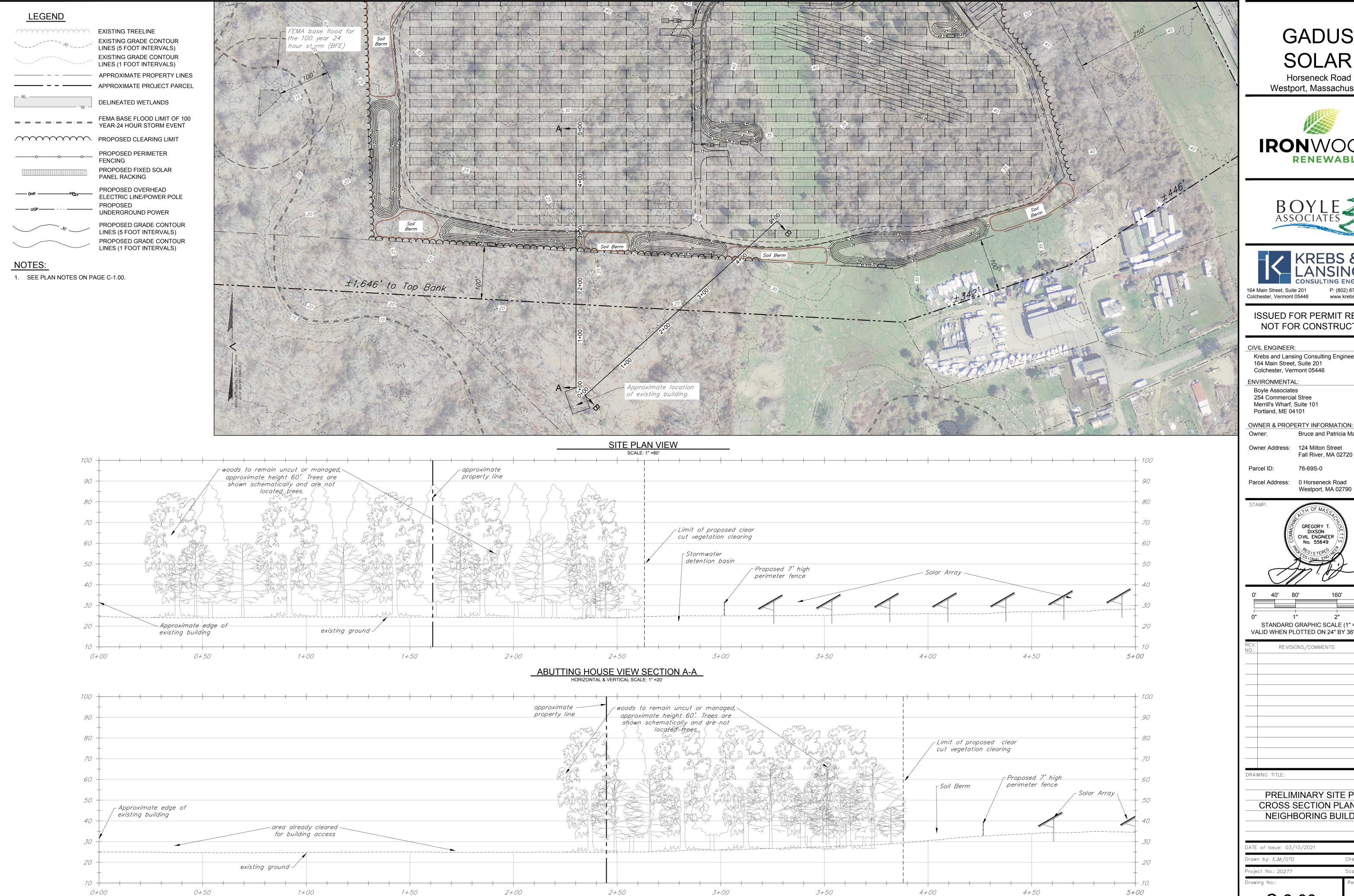
NO.	REVISIONS/COMMENTS	DATE
DRAWING	TITLE:	

PROPOSED GRADING, **ROAD INSTALLATION AND** STORMWATER MANAGEMENT PLAN

Drawn by: EJM/GTD Checked by: GTE Scale: 1" = 60 Project No.: 20277

C-1.03





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

# **GADUS** SOLAR

Horseneck Road Westport, Massachusetts







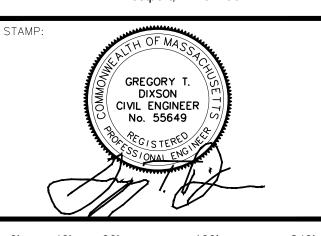
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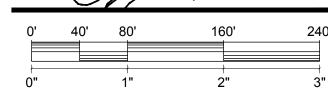
Krebs and Lansing Consulting Engineers, Inc. 164 Main Street, Suite 201

#### Bruce and Patricia Mayall

Fall River, MA 02720

Westport, MA 02790





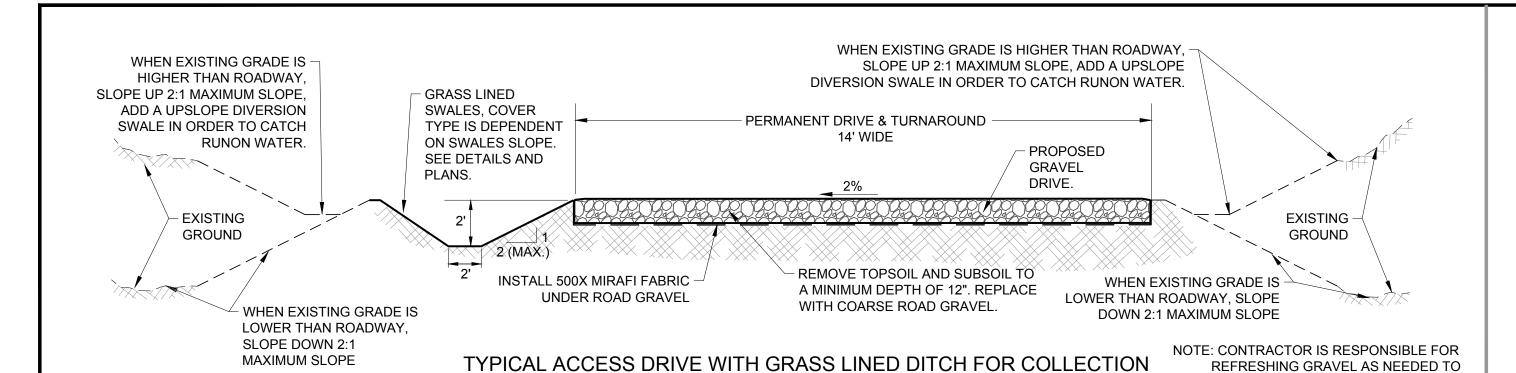
STANDARD GRAPHIC SCALE (1" = 80') VALID WHEN PLOTTED ON 24" BY 36" MEDIA

NO.	REVISIONS/COMMENTS	DATE
DRAWING	TITLE:	

PRELIMINARY SITE PLAN CROSS SECTION PLAN FOR NEIGHBORING BUILDING

Checked by: GTD Scale: 1" = 80'

C-2.00



EMERGENCY SPILLWAY, ARMOR WITH STONE WHICH MEETS THE SPECIFICATIONS OF MA-DOT M2.02.2 DUMPED RIPRAP, M2.02.3 STONE FOR PIPP ENDS OR APPROVED EQUAL. ARMOR DOWN SLOPE AND TIE INTO BASIN OUTFALL INLET FROM GRASS -LINED SWALE OR - PROVIDE RIP-RAP IN ALL MEADOW OVERLAND **LOCATIONS WHERE** FLOW WATER IS FLOWING FROM **EMBANKMENT** BASIN TO BASIN AND AROUND OUTLETS DRY BASIN TO BE **GRASSED WITH STONE** IN PLACES OF FLOW.

#### 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	±18,950	18.0'	21.0'	22.0'
#2	±14,320	18.0'	22.0'	23.0'
#3	±7,310	26.0'	28.5'	29.5'
#4	±5,480	30.0'	33.5'	34.5'
#5	±32,340	26.0'	29.5'	30.5'
#6	±2,730	45.0'	48.5'	49.5'

COLLAR

## CROSS-SECTION DETENTION BASIN

- USE STAINLESS

STEEL METAL

THREADED

**FASTENER** 

**ALTERNATE CONNECTIONS** 

ACCORDANCE WITH THE MANUFACTURERS

DIMENSIONS

±1" MAX. ±1" ±1-½"

HDPE END SECTION DETAIL

- LINE DEFINING DANGER TREES, TREES

WHICH COULD FALL AND DAMAGE THE

REMOVED IF DEEMED NECESSARY.

LINE. DANGER TREES OUTSIDE OF THE 70'

CLEARING ZONE WILL BE REVIEWED AND

1. END SECTIONS SHALL BE INSTALLED IN

INSTALLATION SPECIFICATIONS.

#### 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
- 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:**

END SECTION,

SEE DETAIL

12" DEPTH OF STONE

SPECIFICATIONS OF

ME-DOT 703.26, 703.29

OR APPROVED EQUAL.

STORM WATER

FLOW <sup>-</sup>

MIRAFI 500X -

OF STONE

FABRIC UNDER AND TO SIDES

THE ELECTRICAL ENGINEER

WHICH MEETS THE

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.

- 24" DEPTH OF STONE WHICH

MEETS THE SPECIFICATIONS OF

MA-DOT M2.02.2 DUMPED RIPRAP

PROVIDE LIP

SPREADER AT

LEVEL

END OF

OUTFALL.

M2.02.3 STONE FOR PIPE ENDS

OR APPROVED EQUAL.

LIMIT OF INITIAL CLEARING FOR LINE INSTALLATION.

HIGH. VEGETATION WILL BE ALLOWED TO REBOUND

MAINTENANCE IN THESE AREAS WILL BE LIMITED TO

OVERHEAD UTILITY VEGETATION

MANAGEMENT DETAIL

N.T.S.

LEAVING TREES AND SHRUBS LESS THAN 3-4 FEET

MAJORITY OF VEGETATION WILL BE REMOVED.

IN THIS AREA UP TO 15'. PROJECT PREDICTS

ONCE EVERY 5-7 YEARS.

# **GADUS** Horseneck Road

Westport, Massachusetts







#### CIVIL ENGINEER:

164 Main Street, Suite 201

Colchester, Vermont 05446

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

#### **ENVIRONMENTAL**

Boyle Associates 254 Commercial Stree Merrill's Wharf, Suite 101

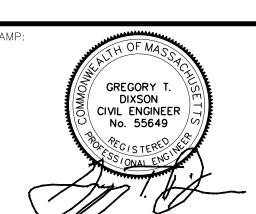
#### OWNER & PROPERTY INFORMATION:

Bruce and Patricia Mayall

Owner Address: 124 Milton Street

76-69S-0

Parcel Address: 0 Horseneck Road



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	DETAILS			
DATE	of Issue: 03/10/2021			
Draw	n by: EJM/GTD	Checke	ed by:	GT
Proje	ct No.: 20277	Scale:	N/A	
	ing No.:	Rev N		
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P: (802) 878-0375

www.krebsandlansing.com

#### ISSUED FOR PERMIT REVIEW NOT FOR CONSTRUCTION

Colchester, Vermont 05446

Portland, ME 04101

Fall River, MA 02720

Parcel ID:

Westport, MA 02790

REVISIONS/COMMENTS

C-3.00

#### NOTES TRAP SHOULD BE PLACED AT THE LOWEST AREA UNDER EMBANKMENT SHALL BE CLEARED, GRUBBED AND LOCATION PRIOR TO WATER LEAVING THE STRIPPED OF ANY VEGETATION AND ROOT MAT (VEGETATION SITE. FLOW CAN GENERALLY REACH THE DUFF LAYER). THE POOL AREA SHALL BE CLEARED. LOCATION OR BE SWALED TO LOCATION. 2. THE FILL MATERIAL FOR THE EMBANKMENT SHALL BE FREE OF ROOTS AND OTHER WOODY VEGETATION AS WELL AS LENGTH 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 <sup>1</sup>/<sub>2</sub> 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. 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

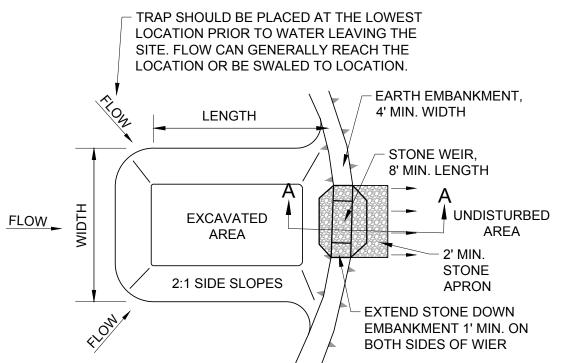
11. FOR THOSE TEMPORARY SEDIMENT TRAPS TO BE PERMANENT DRY OR WET PONDS, SEDIMENT SHALL BE REMOVED AND THE ENTIRE AREA SEEDED AND MULCHED OR COVERED WITH EROSION CONTROL MATTING PRIOR TO PUTTING THE STORMWATER POND INTO USE.

QUALITY STANDARDS

COARSE MATERIAL

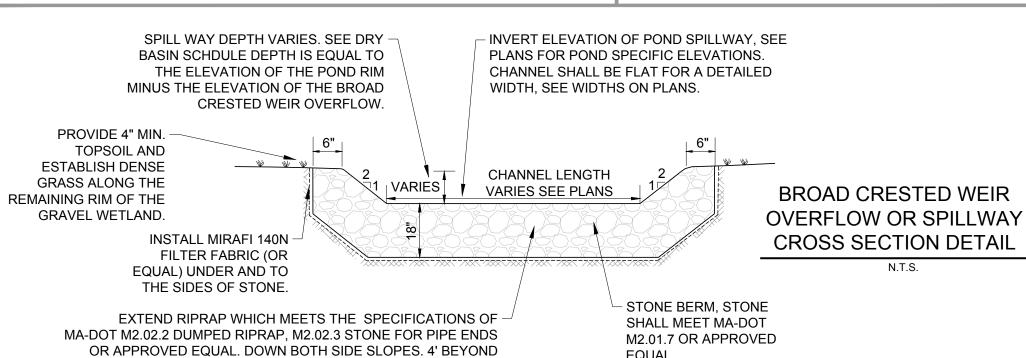
12. LOCATIONS FOR TEMPORARY SEDIMENT TRAPS TO BE APPROVED BY THE OSPC OR THE EPSC SPECIALIST.

WOOD CHIPS OR SHAVINGS | AIR-DRIED. FREE OF OBJECTIONABLE



STONE SHALL BE MA-DOT M2.01.7 OR APPROVED EQUAL. 4' MIN. CREST **→** - EXTEND STONE APRON 1' MIN. 2' BEYOND WIER SLOPE, ±6" DEPTH OUTLET HEIGHT **EXCAVATED DEPTH FOR** ADDITIONAL STORAGE SECTION A-A

# TYPICAL TEMPORARY SEDIMENT TRAP



#### GUIDE TO MULCH MATERIALS, RATES, AND USES DEPTH OF PER 1000 SQ. FT. PER ACRE APPLICATION 500-900 LBS 10-20 TONS 2.000 LBS.

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	* SLOPES 3(HZ.):1(VERT.) OR FLATTER = 2 INCH DEPTH PLUS ADDITIONAL			COMPRISED OF SHREDDED BARK, STUMP GRINDINGS, COMPOSTED BARK, OR

WELL-GRADED MIXTURE OF PARTICLE | \* SLOPES 3(HZ.):1(VERT.) OR FLATTER = 2 INCH DEPTH PLUS ADDITIONAL SIZES. ORGANIC CONTENT BETWEEN | 1/2 INCH DEPTH PER 20 FT. OF SLOPE UP TO 100 FT. ACCEPTABLE MANUFACTURED PRODUCTS. MAY CONTAIN ROCK < 4" IN DIAMETER. ORGANICS SHALL BE FIBROUS AND ELONGATED. NO LARGE PORTIONS OF SILTS, 80-100%, DRY WEIGHT. PARTICLE SIZE \*\* 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. CLAYS OR FINE SANDS. \* 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

EQUAL. THE BASE OF THE PONDS GRADING ON THE OUTFALL SIDE. 2' INTO THE LEVEL PORTION OF THE POND ON THE POND SIDE.

REMARKS USED PRIMARILY AROUND SHRUB AND TREE PLANTINGS AND RECREATION TRAILS TO INHIBIT WEED COMPETITION. RESISTANT TO WIND BLOWING. DECOMPOSES SLOWLY. APPLY WITH HYDROMULCHER. NO TIE DOWN REQUIRED. LESS EROSION CONTROL

MAINTAIN DRIVE AND TURNAROUND

RED FESCUE

RED TOP

SHEEP FESCUE

WHITE CLOVER

ANNUAL RYE

WINTER RYE

RED CLOVER

INERT MATTER

PERMANENT SEED MIX SHALL BE USED AS

AND SHALL MEET THE FOLLOWING CRITERIA:

EARLY AS PRACTICABLE BETWEEN 5/15 AND 9/15

% WEIGHT

50%

25%

5%

10%

10%

SEEDING SPECIFICATIONS

% WEIGHT

80% MIN

4% MIN.

3% MIN.

3% MIN.

0.5% MAX.

0.5% MAX.

1% MAX.

%GERMINATION

85% MIN.

80% MIN.

90% MIN.

90% MIN.

CONNECTION -

REINFORCED -

TOE -

TROUGH

**EDGE** 

ELEVATION

CONNECTION SECTION

TOE TROUGH

SECTION

TEMPORARY SEED MIX SHALL BE USED

BETWEEN 9/16 AND 5/14 AND SHALL

MEET THE FOLLOWING CRITERIA:

RED FESCUE (CREEPING)

PERENNIAL RYE GRASS

OTHER CROP GRASS

NOXIOUS WEED SEED

STABILITY.

**EXISTING** GROUND

VEGETATION REBOUND HEIGHT IS DEPENDENT ON TYPE OF VEGETATION AND THE DISTANCE OF THE POWER LINE FROM THE GROUND. HIGHER OR LOWER VEGETATION MAY BE ALLOWED AND SHOULD BE DETERMINED BY

#### 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.
- 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

#### **EROSION CONTROL BLANKET**

#### NORTH AMERICAN GREEN S75BN

#### MATERIAL SPECIFICATIONS:

SEWN TOGETHER WITH

BIODEGRADABLE THREAD.

- EROSION CONTROL BLANKET SHALL BE
   STRAW: 100% (0.50 lbs/sq.yd.)(0.27) 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
- STRAW EROSION CONTROL BLANKET SHALL BE S75BN AS MANUFACTURED BY NORTH AMERICAN GREEN, INC. (812-867-6632) OR EQUIVALENT EROSION CONTROL BLANKET SHALL

#### MATERIAL CONTENT:

- NETTING: ONE SIDE ONLY, LENO
- WOVEN 100% BIODEGRADABLE NATURAL ORGANIC FIBER (APPROX. WEIGHT 9.3 lbs./100 sq. ft.)

## PHYSICAL SPECIFICATIONS (ROLL):

THREAD: BIODEGRADABLE

- 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<sup>2</sup>)
- HAVE THE FOLLOWING PROPERTIES:

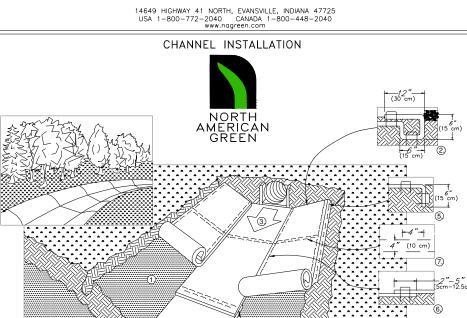
# SLOPE INSTALLATION

NOTE: WHEN USING CELL-O-SEED DO NOT SEED PREPARED AREA. CELL-O-SEED MUST BE INSTALLED WITH PAPER SIDE DOWN.

. PREPARE SOIL BEFORE INSTALLING BLANKETS, INCLUDING ANY NECESSARY APPLICATION OF LIME, FERTILIZER, AND SEED. 2. BEGIN AT THE TOP OF THE SLOPE BY ANCHORING THE BLANKET IN A 6" (15cm) DEEP X 6" (15cm) WIDE TRENCH WITH APPROXIMATELY 12" (30cm) OF BLANKET EXTENDED BEYOND THE UP-SLOPE PORTION OF THE TRENCH. ANCHOR THE BLANKET WITH A ROW OF STAPLES/STAKES APPROXIMATELY 12" (30cm) APART IN THE BOTTOM OF THE TRENCH. BACKFILL AND COMPACT THE TRENCH AFTER STAPLING. APPLY SEED TO COMPACTED SOIL AND FOLD REMAINING 12" (30cm) PORTION OF BLANKET BACK OVER SEED AND COMPACTED SOIL. SECURE BLANKET OVER COMPACTED SOIL WITH A ROW OF STAPLES/STAKES SPACED APPROXIMATELY 12" (30cm) APART ACROSS THE WIDTH OF THE BLANKET. ROLL THE BLANKETS (A.) DOWN OR (B.) HORIZONTALLY ACROSS THE SLOPE. BLANKETS WILL UNROLL WITH APPROPRIATE SIDE AGAINST THE SOIL SURFACE. ALL BLANKETS MUST BE SECURELY FASTENED TO SOIL SURFACE BY PLACING STAPLES/STAKES IN APPROPRIATE LOCATIONS AS SHOWN IN THE STAPLE PATTERN CUIDE. WHEN USING OPTIONAL DOT SYSTEM. STAPLES/STAKES SHOULD BE PLACED THROUGH EACH OF THE COLORED DOTS CORRESPONDING TO THE APPROPRIATE STAPLE PATTERN. THE EDGES OF PARALLEL BLANKETS MUST BE STAPLED WITH APPROXIMATELY 2"-5" (5cm-12.5cm) OVERLAP DEPENDING ON BLANKET TYPE. TO ENSURE PROPER SEAM ALIGNMENT, PLACE THE EDGE OF THE OVERLAPPING BLANKET (BLANKET BEING INSTALLED ON TOP) EVEN WITH THE COLORED SEAM STITCH ON THE PREVIOUSLY INSTALLED BLANKET.

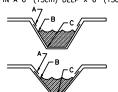
NOTE: BLANKET SHALL BE USED ON SLOPES 3:1 OR STEEPER

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



2. BEGIN AT THE TOP OF THE CHANNEL BY ANCHORING THE BLANKET IN A 6" (15cm) DEEP X 6" (15cm) WIDE TRENCH
WITH APPROXIMATELY 12" (30cm) OF BLANKET EXTENDED BETYOND THE UP-SLOPE PORTION OF THE TRENCH. ANCHOR THE
BLANKET WITH A ROW OF STAPLES/STAKES APPROXIMATELY 12" (30cm) APART IN THE BOTTOM OF THE TRENCH. BACKFILL
AND COMPACT THE TRENCH AFTER STAPLING. APPLY SEED TO COMPACTED SOIL AND FOLD REMAINING 12" (30cm) PORTION
OF BLANKET BACK OVER SEED AND COMPACTED SOIL. SECURE BLANKET OVER COMPACTED SOIL WITH A ROW OF STAPLES/STAKES
SPACED APPROXIMATELY 12" (30cm) APART ACROSS THE WIDTH OF THE BLANKET.

ROLL CENTER BLANKET IN DIRECTION OF WATER FLOW IN BOTTOM OF CHANNEL. BLANKETS WILL UNROLL WITH APPROPRIATE SIDE AGAINST THE SOIL SURFACE. ALL BLANKETS MUST BE SECURELY FASTENED TO SOIL SURFACE BY PLACING STAPLES/STAKES IN APPROPRIATE LOCATIONS AS SHOWN IN THE STAPLE PATTERN GUIDE. WHEN USING OPTIONAL DOT SYSTEM", STAPLES/STAKES SHOULD BE PLACED THROUGH EACH OF THE COLORED DOTS CORRESPONDING TO THE APPROPRIATE STAPLE PATTERN. 4. PLACE CONSECUTIVE BLANKETS END OVER END (SHINGLE STYLE) WITH A 4"-6" (10cm-15cm) OVERLAP. USE A DOUBLE ROW OF STAPLES STAGGERED 4" (10cm) APART AND 4" (10cm) ON CENTER TO SECURE BLANKETS. . FULL LENGTH EDGE OF BLANKETS AT TOP OF SIDE SLOPES MUST BE ANCHORED WITH A ROW OF STAPLES/STAKES APPROXIMATELY 12" (30cm) APART IN A 6" (15cm) DEEP X 6" (15cm) WIDE TRENCH. BACKFILL AND COMPACT THE TRENCH AFTER STAPLING. 6. ADJACENT BLANKETS MUST BE OVERLAPPED APPROXIMATELY 2"-5" (5cm-12.5cm) (DEPENDING ON BLANKET TYPE) AND STAPLED. TO ENSURE PROPER SEAM ALIGNMENT, PLACE THE EDGE OF THE OVERLAPPING BLANKET (BLANKET BEING INSTALLED ON TOP) EVEN WITH THE COLORED SEAM STITCH"ON THE BLANKET BEING OVERLAPPED.



8. THE TERMINAL END OF THE BLANKETS MUST BE ANCHORED WITH A ROW OF STAPLES/STAKES APPROXIMATELY 12" (30cm) APART IN A 6" (15cm) DEEP X 6" (15cm) WIDE TRENCH. BACKFILL AND COMPACT THE TRENCH AFTER STAPLING.

14649 HIGHWAY 41 NORTH, EVANSVILLE, INDIANA 47725 USA 1-800-772-2040 CANADA 1-800-448-2040 www.nogreen.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
- 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

## 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.
- 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:**

FEASIBLE, BUT NOT IN RESOURCE AREAS.

A. LESS THAN ±5% SLOPE

- 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.
- 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
- CONCENTRATED RUNOFF SHALL NOT FLOW DOWN STEEP SLOPES UNLESS CONTAINED WITHIN AN ADEQUATE TEMPORARY OR PERMANENT CHANNEL (SEE DETAILS), FLUME, OR SLOPE DRAIN STRUCTURE.
- 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
- 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:
- 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.

# **GADUS**

Westport, Massachusetts







ISSUED FOR PERMIT REVIEW NOT FOR CONSTRUCTION

#### **CIVIL ENGINEER:**

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

#### **ENVIRONMENTAL**

Boyle Associates 254 Commercial Stree Merrill's Wharf, Suite 101 Portland, ME 04101

#### OWNER & PROPERTY INFORMATION:

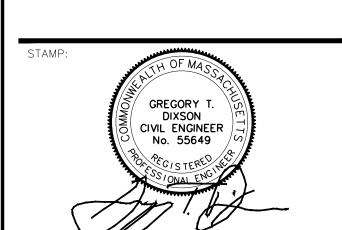
Owner: Bruce and Patricia Mayall

Owner Address: 124 Milton Street Fall River, MA 02720

Parcel ID: 76-69S-0

Parcel Address: 0 Horseneck Road

Westport, MA 02790

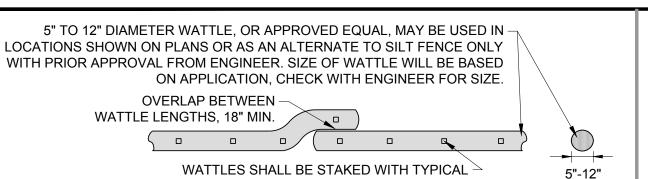


REV. NO.	REVISIONS/COMMENTS	DATE
DRAWING	TITLE:	
	DETAILS	

DATE of Issue: 03/10/2021

Drawn by: EJM/GTD Checked by: GTD Project No.: 20277 Scale: N/A

C-3.01



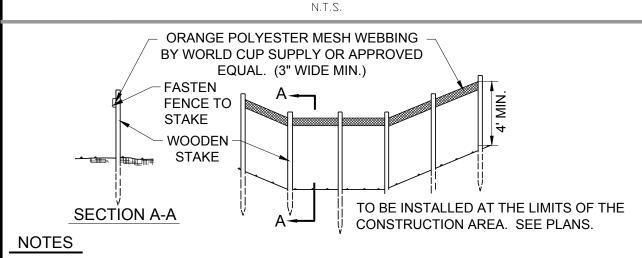
NOTES

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.

WOOD STAKES AT 10 FT. ON CENTER.

- 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



- . ACCEPTABLE EPSC MEASURE DETAILS ARE PROVIDED BELOW.
- 2. LIMITS OF DISTURBANCE (OR "CONSTRUCTION DEMARCATION") SHALL BE INSTALLED PRIOR TO ANY EARTH DISTURBING ACTIVITIES.
- 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.
- I. 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.
- BARRIER TAPE TO BE ORANGE.

DISTANCE FROM RECIEVING

WATER AND ALL WATER RESOURCE

AREAS (WRA

< 100 FEET

> 100 FEET

- 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

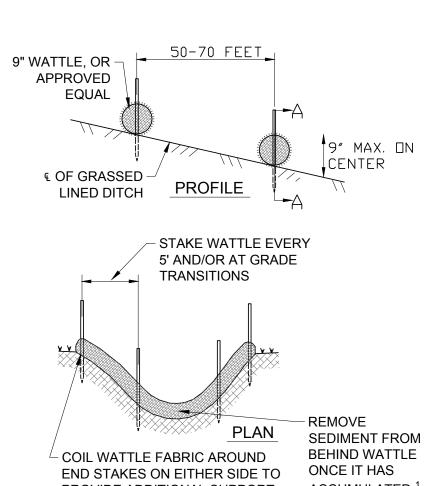
SLOPE

ALL

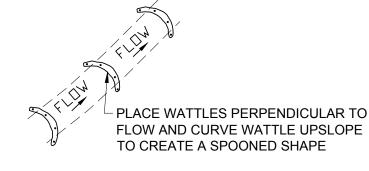
ALL

WOVEN WIRE FENCE, 14 GAUGE

WITH MAXIMUM 6" MESH SPACING



ACCUMULATED <sup>1</sup>/<sub>2</sub> PROVIDE ADDITIONAL SUPPORT THE HEIGHT OF THE WATTLE



ACCEPTABLE EPSC MEASURE

REINFORCED SILT FENCE, TWO ROWS OF NONREINFORCED SILT

FENCE OR ROW OF WATTTLE INSIDE OF NONREINFORCED SILT **FENCE** 

NONREINFORCED SILT FENCE OR WATTLE PER SPECIFICATIONS

BELOW

- 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.
- 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.
- WATTLE CHECK DAM CAN ONLY BE USED IN CHANNELS WITH SLOPES LESS THAN 5%.
- SILTSOXX IS A SPECIFIC MANUFACTURER, OTHER MANUFACTURERS WITH EQUAL PRODUCTS MAY BE USED IF APPROVED BY ENGINEER.

TYPICAL WATTLE CHECK DAM DETAIL

NOTES

#### ALLOW DISTURBED SEDIMENT TO FILL NOTES **GROUND** BEHIND WATTLE, ADD AN ADDITIONAL SLOPE WATER BAR WATTLES TO TOP IF SOIL BEHIND LOCATIONS ARE EXCEEDS <sup>3</sup>/<sub>4</sub> THE HEIGHT OF THE NOT SHOWN DN WATTLE. POST CONSTRUCTION LEAVE PLAN. IN PLACE ADD AN ADDITIONAL WATTLE BEHIND CONSTRUCTION, SEED AND MULCH OVER WHOLE AREA TYPICAL WATTLE **RUN WATER BAR** SECTION A-A PERPENDICULAR SPACING = $\pm 200'$ O.C. TO SLOPE - CENTERLINE OF SLOPE SLOPE 1% TO 2% ACROSS THE SLOPE TYPICAL PLAN TYPICAL CONSTRUCTED SECTION A-A SILTSOXX OR CONSTRUCTED WATER BAR DETAIL

#### NOTES

- 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.

. PERIMETER CONTROLS SHALL BE INSTALLED PRIOR TO ANY EARTH

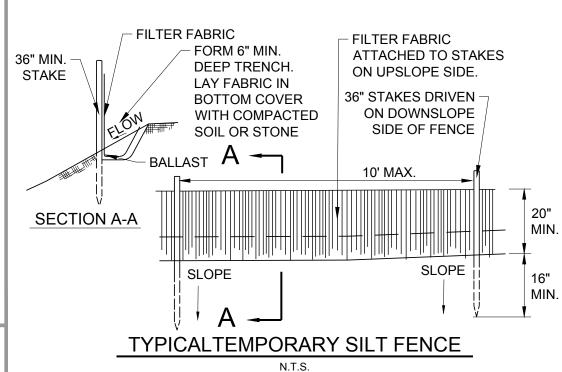
- DISTURBING ACTIVITIES WITHIN UPSLOPE CONTRIBUTING AREA.
- 4. SILT FENCE SHALL NOT BE USED AS CONSTRUCTION DEMARCATION.
- 5. SILTSOXX CAN BE USED AS A SILT FENCE ALTERNATIVE, WITH PRIOR APPROVAL OF THE ENGINEER. SEE DETAIL.
- 6. IF SILT FENCE IS INSTALLED WHEN GROUND IS FROZEN, A GRAVEL, SHOT ROCK, 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%

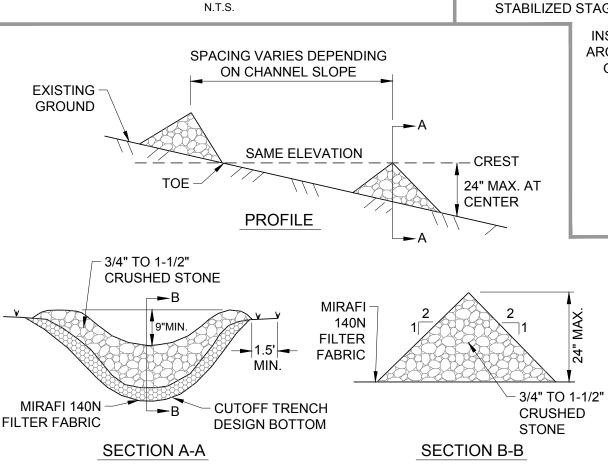
15 FT. OR LESS



#### 5" MINUS CLEAN CRUSHED STONE BERM 12" MIN. EXISTING GROUND - CHECK WITH PROJECT ENGINEER FOR SIZING, IF NECESSARY EXISTING GROUND 12" MIN. BASIC UP SLOPE DIVERSION SWALE. SWALE SHALL BE LINED WITH STONE IF LONGITUDINAL SLOPE EXCEEDS 3%. USE 5" MINUS CLEAN CRUSHED NOTES

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

TYPICAL UPSLOPE DIVERSION DETAIL



STONE CHECK DAM

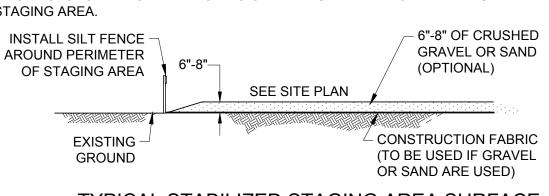
6" MINUS STONE, CONTRACTOR TO PROVIDE GRADATION PRIOR TO PURCHASING. 4" DEPTH OF VAOT 704.05A COARSE ROAD GRAVEL UNDER PAD, KEY INTO EXISTING GRADE DISPERSION PAD, INSTALL PERPENDICULAR TO FLOW FROM SWALE. DISPERSION PAD SHALL BE 10' MIN LONG UNLESS OTHERWISE SPECIFIED. SWALE OR AREA OF CONCENTRATED FLOW, 1. CONTRACTOR SHALL REPLACE **PROVIDE** STONE AS NECESSARY TO **CHECK DAMS** PREVENT SEDIMENT BUILD UP. IN SWALE, AS NECESSARY. 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 TEMPORARY POOLING AFTER FINAL STABILIZATION OF AREA AND SEDIMENT TRAP DURING

SILT FENCING TO BE INSTALLED BEFORE CONSTRUCTION OF STAGING AREA IS INSTALLED.

CONSTRUCTION

DISPERSION PAD DETAIL

- 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.
- INSTALL AND MAINTAIN STABILIZED CONSTRUCTION ENTRANCE, SEE DETAIL. INSTALL WOODEN GATE AT ENTRANCE OF OF STAGING AREA.
- 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.
- STAGING AREA IS LIKELY TO BE USED FOR PARKING DURING CONSTRUCTION, STAGING OF CONSTRUCTION MATERIALS, BASE OF PROJECT OPERATIONS AND MISCELLANEOUS PROJECT ACTIVITIES.
- 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.
- CONTRACTOR IS RESPONSIBLE FOR REFRESHING GRAVEL AS NEEDED TO MAINTAIN STABILITY OF STABILIZED STAGING AREA.



TYPICAL STABILIZED STAGING AREA SURFACE

#### NOTES

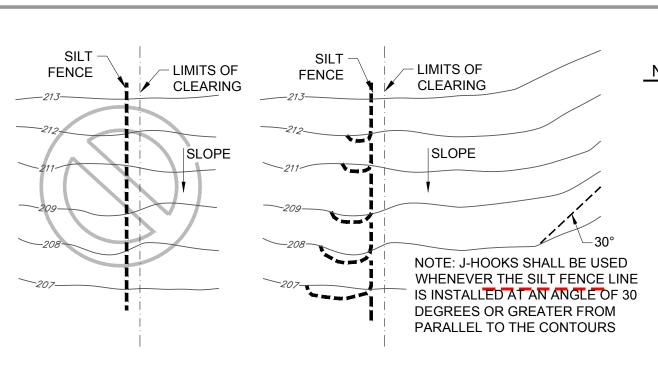
- 1. STONE WILL BE PLACED ON A FILTER FABRIC FOUNDATION TO THE LINES GRADES AND LOCATIONS SHOWN IN THE PLAN.
- 2. SET SPACING OF CHECK DAMS TO ASSUME THAT THE ELEVATIONS OF THE CREST OF THE DOWNSTREAM DAM IS AT THE SAME ELEVATION OF THE TOE OF THE UPSTREAM DAM.
- 3. EXTEND THE STONE A MINIMUM OF 1.5 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.

# USED TO MANUFACTURE THE EROSION CONTROL MIX SHALL BE NATIVE MASSACHUSETTS MATERIALS. NOTES

#### THE BARRIER MUST BE PLACED ALONG A RELATIVELY LEVEL CONTOUR.

- OUTS UNDER THE BARRIER.
- 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.
- 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.

TYPICAL EROSION CONTROL MIX BERM



**INCORRECT** CORRECT SILT FENCE INSTALLED IN SHORTER RUNS WITH SILT FENCE INSTALLED PARALLEL TO J-HOOKS TO AVOID CONCENTRATION OF FLOWS SLOPE (PERPENDICULAR TO CONTOUR) AT ONE LOCATION BY TRAPPING RUNOFF AT IN ONE, LONG RUN MULTIPLE POINTS ALONG A SLOPE.

- AVOID LARGE MAXIMUM SPACING SLOPE **GAPS BETWEEN** BETWEEN SILT FENCE **STEEPNESS BOTTOM OF** J-HOOKS (FT.) ABOVE GRADIENT 2:1 SLOPE (50% J-HOOK AND THE 3:1 SLOPE (33%) NEXT SILT FENCE 4:1 SLOPE (25% LINE. (6" MAXIMUM) 5:1 SLOPE OR 100 FLATTER (50%)

NOTES 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.

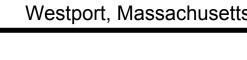
3. J-HOOKS SHOULD BE BUILT ALONG CONTOUR IN A "SMILE" SHAPE WITH A MINIMUM WIDTH OF 20 FEET AND MINIMUM DEPTH OF 10

4. ALONG A NARROW RIGHT OF WAY, NARROWER J-HOOKS CAN BE USED WITH A HIGHER SPACING FREQUENCY.

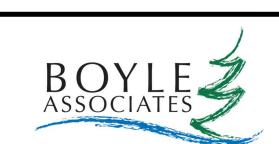
TYPICAL SILT FENCE "J-HOOK" CONSTRUCTION

N.T.S.

**GADUS** Horseneck Road









ISSUED FOR PERMIT REVIEW NOT FOR CONSTRUCTION

CIVIL ENGINEER:

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

**ENVIRONMENTAL** 

Portland, ME 04101

Boyle Associates 254 Commercial Stree Merrill's Wharf, Suite 101

Colchester, Vermont 05446

**OWNER & PROPERTY INFORMATION:** 

Owner: Bruce and Patricia Mayall

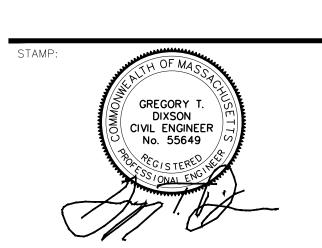
Owner Address: 124 Milton Street

Fall River, MA 02720

Parcel ID: 76-69S-0

Parcel Address:

0 Horseneck Road Westport, MA 02790



REV. NO.	REVISIONS/COMMENTS	DATE
DRAWING	TITLE:	
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DATE of Issue: 03/10/2021 Drawn by: EJM/GTD Checked by: GTD Project No.: 20277 Scale: N/A

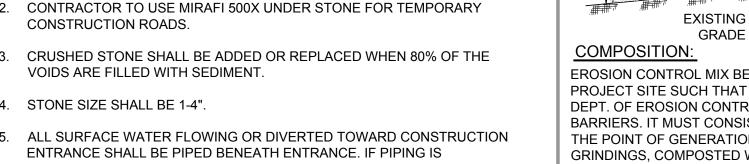
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Drawing No.:

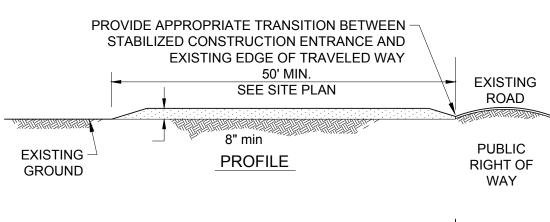
MIRIFI 100X FILTER FABRIC OF WOOD STAKES DRIVEN ON DOWN SIMILAR. STAPLE FABRIC TO SLOPE SIDE OF FENCE WOOD STAKES. FABRIC ON THE UPSLOPE SIDE OF WIRE. STAKE MIN. FORM 6" MINIMUM DEEP TRENCH, LAY FABRIC IN SLOPE SLOPE **BOTTOM AND COVER WITH** COMPACTED SOIL OR STONE **SECTION A-A NOTES** WOVEN WIRE FENCE TO BE FASTENED SECURELY TO FENCE POSTS WITH WIRE TIES WIRE FENCE

PERIMETER EROSION CONTROL SCHEDULE

- REINFORCEMENT REQUIRED WITHIN 100 FT UPSLOPE OF RECEIVING WATERS. FILTER CLOTH TO BE FASTENED SECURELY TO WOVEN WIRE FENCE WITH ITIES SPACED 24" AT THE TOP AND MID SECTION.
- 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. PREFABRICATED UNITS SHALL BE GEOFAB, ENVIROFENCE OR EQUIVALENT
- CONTRACTOR SHALL BE RESPONSIBLE FOR THE INSTALLATION, MAINTENANCE, AND REMOVAL OF SILT FENCE IN ALL LOCATIONS SHOWN ON THE PLANS. MAINTENANCE SHALL BE PERFORMED AS NEEDED AND MATERIAL REMOVED WHEN SEDIMENT REACHES HALF
- OF FABRIC HEIGHT. REMOVE SILT FENCE AFTER SUCCESSFUL ESTABLISHMENT OF VEGETATION. OTHER MEASURES MAY BE USED TO REINFORCE SILT FENCE IN PLACE OF WIRE MESH, CONTRACTOR WILL APPROVE ALL MEASURES WITH ENGINEER PRIOR TO USE IF SILT FENCE IS INSTALLED WHEN GROUND IS FROZEN, A GRAVEL, SAND OR WATTLE BALLAST MUST BE USED.
- CONTRACTOR MAY USE IVI WIRE BACK SILT FENCE (IVI PRODUCT 940-3610-B48-W6H) OR EQUIVALENT. 10. SILT FENCE SHALL BE INSTALLED ALONG CONTOURS. TYPICAL TEMPORARY
- 11. SILT FENCE SHALL NOT BE LOCATED IN AREAS OF CONCENTRATED FLOW. 12. DRAINAGE AREA SHALL BE  $\leq \frac{1}{4}$  ACRE PER 100 LINEAR FEET OF SILT FENCE. REINFORCED SILT FENCE



IMPRACTICAL, A MOUNTABLE BERM WITH 5:1 SLOPES IS ALLOWED.



CONTRACTOR SHALL STABILIZE CONSTRUCTION ENTRANCE AS REQUIRED

TO PREVENT TRACKING OF SEDIMENT OFF-SITE.

MIN. SEE SITE PLAN 4" MINUS EXISTING CRUSHED GROUND **EXISTING** STONE ROAD PLAN

> STABILIZED CONSTRUCTION ENTRANCE N.T.S.

- EROSION CONTROL MIX

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

- 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
- ON SLOPES < 5% OR AT THE BOTTOM OF STEEPER SLOPES (<2:1) UP TO 20'