

Plot Date: 10/30/2020
 Xref: F:\Bases\Xrefs
 Deer_Lake_Conservancy\0015_2020_creeks_survey\09_GIS\dwg\CD\Drawing_deer_Lake_Creek-Survey.dwg

| 6 | | | |
|----|------|----|----------|
| 5 | | | |
| 4 | | | |
| 3 | | | |
| 2 | | | |
| 1 | | | |
| NO | DATE | BY | REVISION |

NOT FOR CONSTRUCTION

SUBMISSION DATE:
10-30-2020

DESIGN BY: DRL
DRAWN BY: BR

EOR PROJECT NO.
1292-0007

EOR Emmons & Olivier
Resources, Inc.
1919 Univ. Ave W #300
St Paul, MN 55014
Tele: 651.770.8448
www.eorinc.com

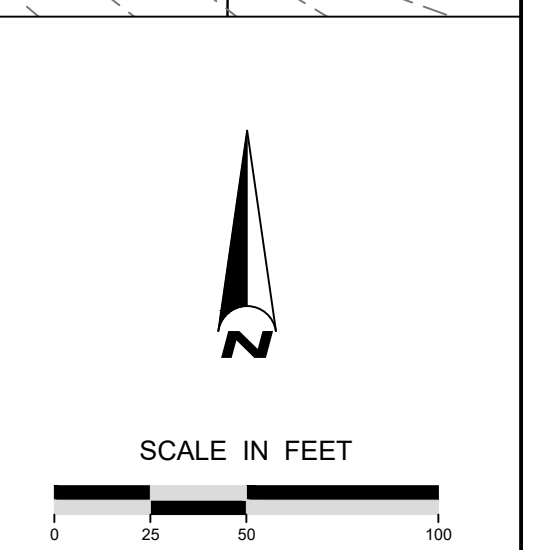
DEER LAKE CONSERVANCY
1492 150TH AVE, ST CROIX FALLS, WI
54024
DEER LAKE, WI, 54024

DEER LAKE RAVINE STABILIZATION
DEER LAKE CONSERVANCY, POLK
COUNTY, WISCONSIN

STATE PROJECT NO. ---
CITY PROJECT NO. ---

SITE LOCATION PLAN 1

SHEET 02 OF 05 SHEETS



Plot Date: 10/30/2020
 Xrefs: E:\Bases\X_Bases
 User: jrbal00096_deer_lake_conservancy\0015_2020_creeks_survey\09_GIS\dwg\CD-Drawing_deer_Lake_Creek-Survey.dwg



| NO | DATE | BY | REVISION |
|----|------|----|----------|
| 6 | | | |
| 5 | | | |
| 4 | | | |
| 3 | | | |
| 2 | | | |
| 1 | | | |

NOT FOR CONSTRUCTION

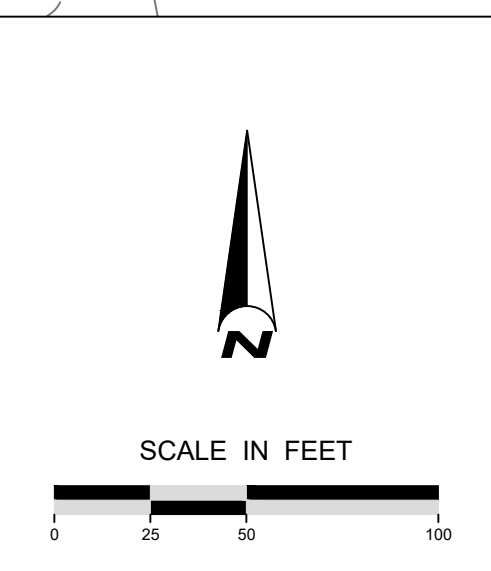
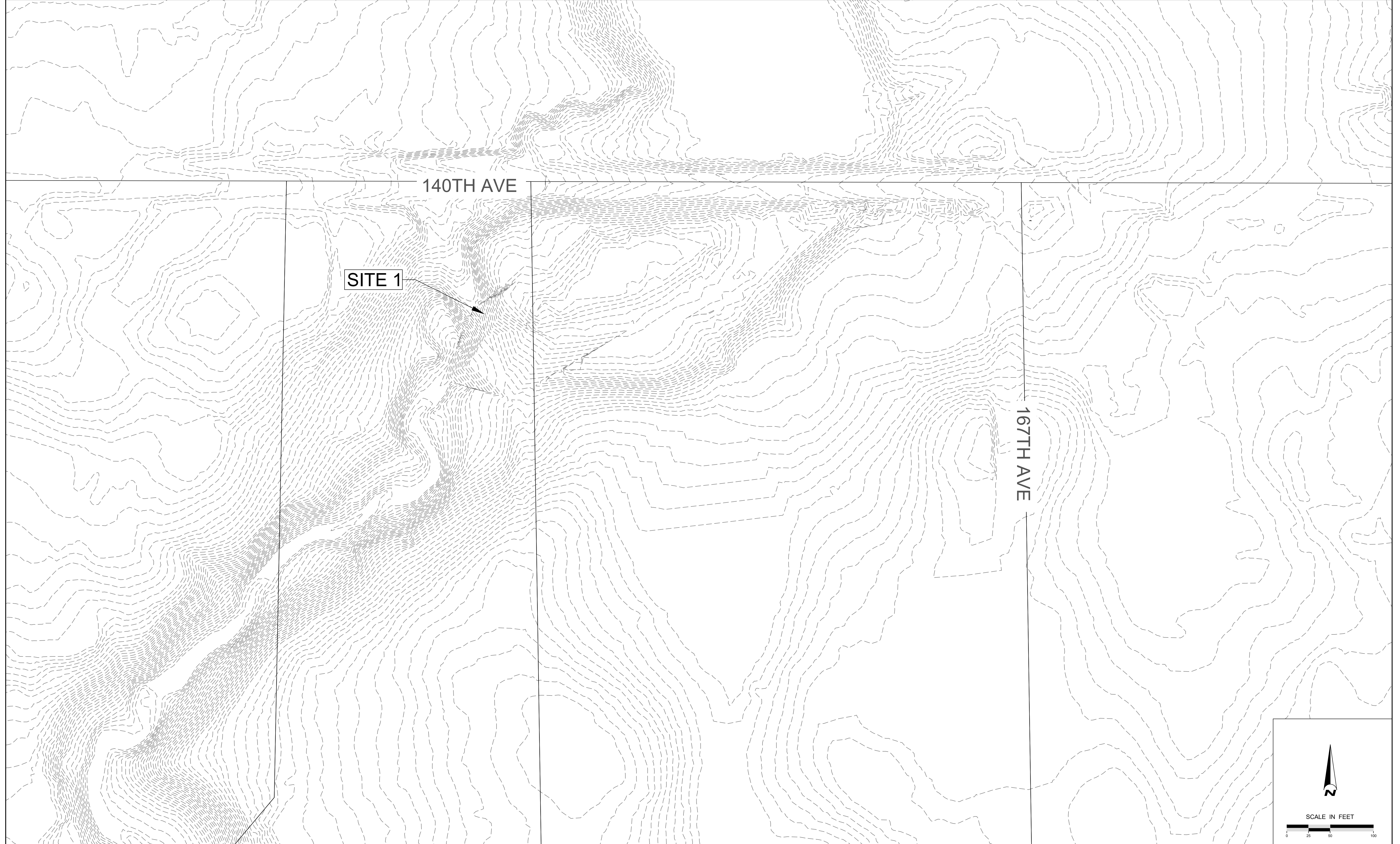
SUBMISSION DATE:
 10-30-2020
 DESIGN BY: DRL
 DRAWN BY: BR
 EOR PROJECT NO.
 1292-0007

Emmons & Olivier Resources, Inc.
 1919 Univ. Ave W #300
 St Paul, MN 55014
 Tele: 651.770.8448
 www.eorinc.com

DEER LAKE CONSERVANCY
 1492 150TH AVE, ST CROIX FALLS, WI
 54024
 DEER LAKE, WI, 54024

DEER LAKE RAVINE STABILIZATION
DEER LAKE CONSERVANCY, POLK
COUNTY, WISCONSIN
 STATE PROJECT NO. --- CITY PROJECT NO. ---

SITE LOCATION PLAN 2
 SHEET 03 OF 05 SHEETS



Plot Date: 10/30/2020
 User: jfratelli\jfratelli\00996_deer_lake_conservancy\0015_2020_creeks_survey\09_GIS\dwg\CD\Drawing_deer_Lake_Creek-Survey.dwg
 Xref: F:\Bases\X_Bases

| 6 | | | |
|----|------|----|----------|
| 5 | | | |
| 4 | | | |
| 3 | | | |
| 2 | | | |
| 1 | | | |
| NO | DATE | BY | REVISION |

NOT FOR CONSTRUCTION

SUBMISSION DATE:
10-30-2020

DESIGN BY: DRL
DRAWN BY: BR

EOR PROJECT NO.
1292-0007

EOR Emmons & Olivier
Resources, Inc.
1919 Univ. Ave W #300
St Paul, MN 55014
Tele: 651.770.8448
www.eorinc.com

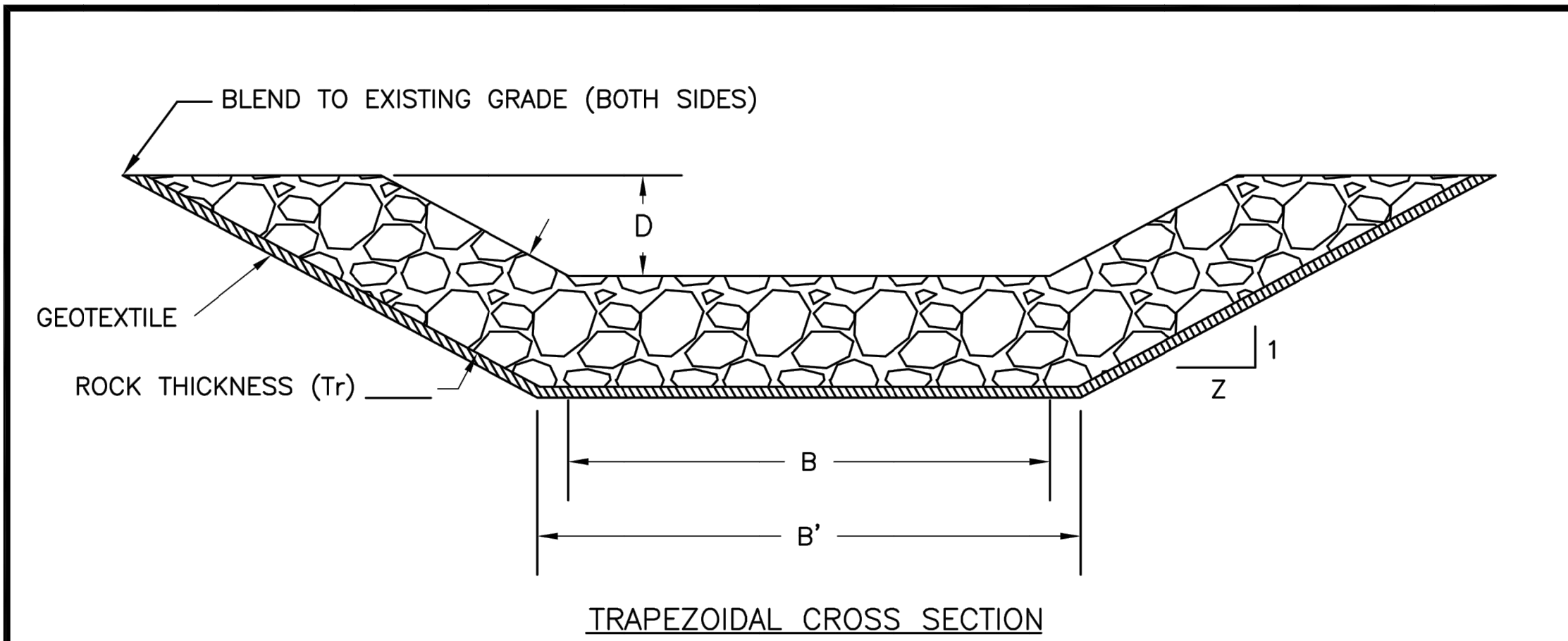
DEER LAKE CONSERVANCY
1492 150TH AVE, ST CROIX FALLS, WI
54024
DEER LAKE, WI, 54024

DEER LAKE RAVINE STABILIZATION
DEER LAKE CONSERVANCY, POLK
COUNTY, WISCONSIN

STATE PROJECT NO. ---
CITY PROJECT NO. ---

SITE LOCATION PLAN 3

SHEET 04 OF 05 SHEETS



- NOTES:
1. PLACE SPOIL WHERE IT WILL NOT INTERFERE WITH SURFACE WATER FLOW INTO THE WATERWAY.
 2. DO NOT USE THE WATERWAY FOR A TRAVEL LANE.
 3. B IS DESIGN BOTTOM WIDTH. B' IS REQUIRED CONSTRUCTED WIDTH OF FOUNDATION BEFORE PLACEMENT OF GEOTEXTILE AND ROCK.
 $B' = B + (Tr/Z)$ WHERE Tr = THICKNESS OF ROCK IN FEET.

CONSTRUCTION DETAILS

| WATERWAY NUMBER | REACH | | CHANNEL SLOPE(%) | BOTTOM WIDTH(B) FEET | DEPTH(D) FEET | SIDE SLOPE(Z) | LENGTH FEET |
|-----------------|-------|----|------------------|----------------------|---------------|---------------|-------------|
| | FROM | TO | | | | | |
| | | | | | | | |
| | | | | | | | |

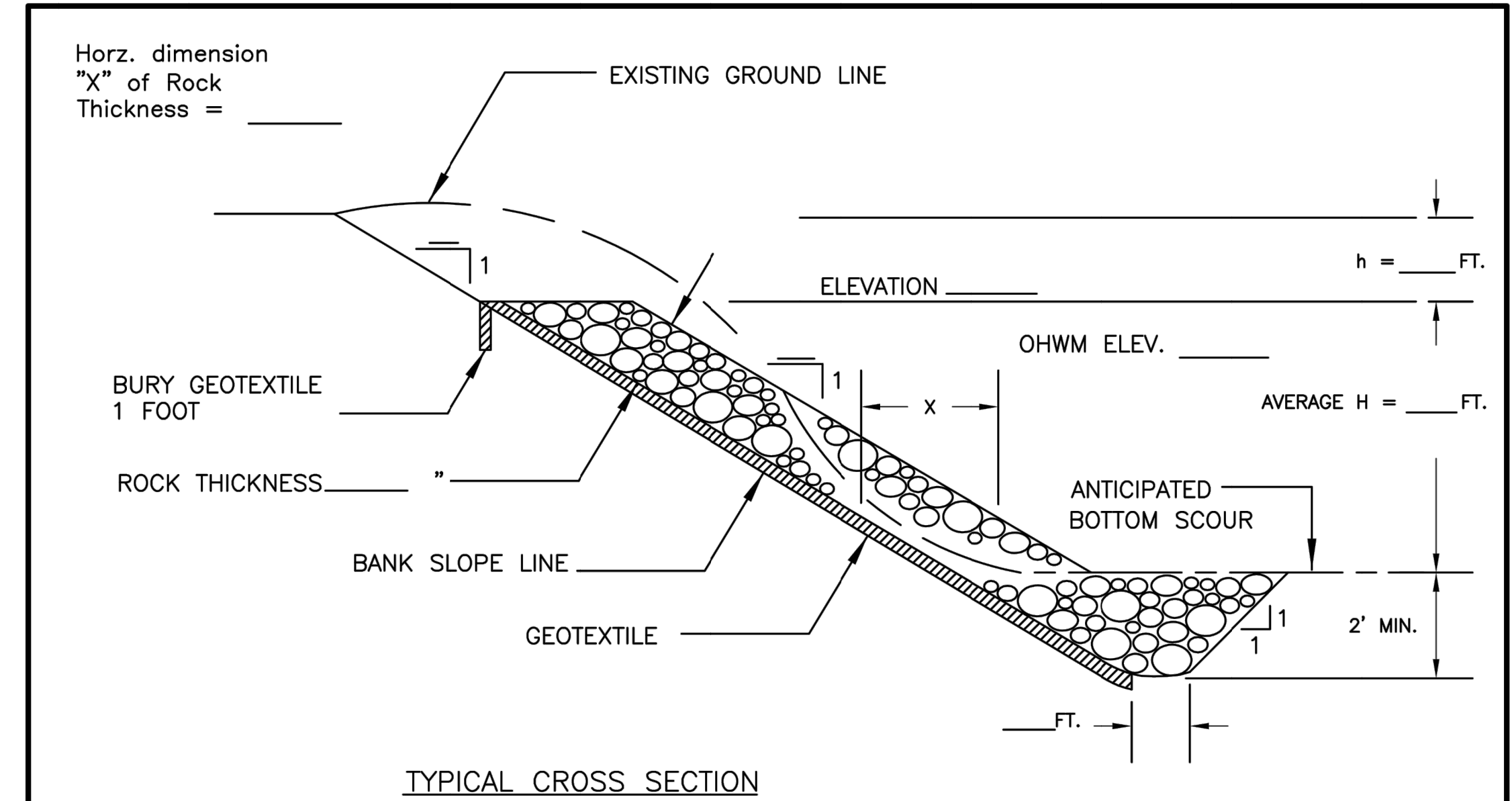
| ROCK GRADATION | |
|-----------------|---|
| PERCENT PASSING | SIZE ¹ (in.) |
| 100 | 1.5xD ₅₀ - 2.0xD ₅₀ |
| 85 | 1.3xD ₅₀ - 1.8xD ₅₀ |
| 50 | 1.0xD ₅₀ - 1.5xD ₅₀ |
| 10 | 0.8xD ₅₀ - 1.3xD ₅₀ |

¹ ROUND UP TO NEAREST INCH.

| QUANTITIES* | |
|---|---------|
| EXCAVATION (W.C.S.* 2) | CU. YD. |
| ROCK RIPRAP (W.C.S. 9) | CU. YD. |
| GEOTEXTILE (W.C.S. 13) CLASS (WOVEN) (NONWOVEN) | SQ. FT. |
| SEEDING | ACRES |

* ESTIMATED TO THE NEAT LINES AND GRADE
 * WIS. CONSTRUCTION SPECIFICATION

| | | | |
|---|---|--|--|
| United States Department of Agriculture Natural Resources Conservation Service | ROCK RIPRAP LINED WATERWAY CLIENT: _____ COUNTY: _____ | Date _____ Designed _____ Drawn _____ Checked _____ Approved _____ | Drawing Name WI-402E Date 07/14 Sheet _____ of _____ |
|---|---|--|--|



GRADATION OF ROCK

| PERCENT PASSING BY WEIGHT | SIZE (INCHES) |
|---------------------------|---------------|
| 100 | |
| 60-85 | |
| 25-50 | |
| 5-20 | |
| 0-5 | |

QUANTITY ESTIMATE*

| | |
|--|----------------|
| BANK SLOPING FOR RIPRAP | _____ LIN. FT. |
| BANK SLOPING (SEEDING ONLY) | _____ LIN. FT. |
| ROCK FOR RIPRAP (WI CONST. SPEC. 9) | _____ CU. YD. |
| GEOTEXTILE (WI CONST. SPEC. 13) CLASS _____ (WOVEN) (NONWOVEN) | _____ SQ. YD. |
| SEEDING | _____ ACRES |

*ESTIMATED TO THE NEAT LINES AND GRADE

NOTES:

1. DOUBLE THE ROCK THICKNESS FOR A DISTANCE OF _____ FEET AT THE UPSTREAM AND DOWNSTREAM ENDS OF THE RIPRAP. BLEND THE ROCK SURFACE TO MATCH THE EXISTING STABLE BANK SURFACE.

THIS STANDARDIZED DESIGN MUST BE ADAPTED TO THE SPECIFIC SITE.

| | | | |
|---|--|--|---|
| United States Department of Agriculture Natural Resources Conservation Service | STREAMBANK PROTECTION WITH GEOTEXTILE (PARTIAL BANK HEIGHT) CLIENT: _____ COUNTY: _____ | Date _____ Designed _____ Drawn _____ Checked _____ Approved _____ | File Name WI-404C Date 07/14 Sheet _____ of _____ |
|---|--|--|---|

01 RIP RAP LINED WATERWAY

05

02 STREAMBANK PROTECTION WITH GEOTEXTILE

05

NOT FOR CONSTRUCTION

SUBMISSION DATE:
10-30-2020
DESIGN BY: DRL
DRAWN BY: BR
EOR PROJECT NO.
1292-0007

Emmons & Olivier Resources, Inc.
 1919 Univ. Ave W #300
 St Paul, MN 55014
 Tele: 651.770.8448
 www.eorinc.com

DEER LAKE CONSERVANCY
 1492 150TH AVE, ST CROIX FALLS, WI 54024
 DEER LAKE, WI, 54024

DEER LAKE RAVINE STABILIZATION
 DEER LAKE CONSERVANCY, POLK COUNTY, WISCONSIN

DETAIL SHEET

SHEET 05 OF 05 SHEETS