

PRACTICE(S) 412-GRASSED WATERWAY(CLASS II D.A.) 608-SUBSURFACE DRAIN(CLASS I D.D.)  
500-OBSTRUCTION REMOVAL 342-CRITICAL AREA PLANTING 484-MULCHING

FIELD OFFICE GREEN LAKE TELEPHONE NO. 920-294-4051

Website  
www.diggershotline.com



LOCATION MAP

Job Approval Class II, I

Quantities are estimated to the neat lines and grades of in-place materials shown on the construction plan unless otherwise stated. Truck yardage, loose fill, shrinkage, etc., must be calculated and compensated for by the contractor preparing a bid or constructing the project.

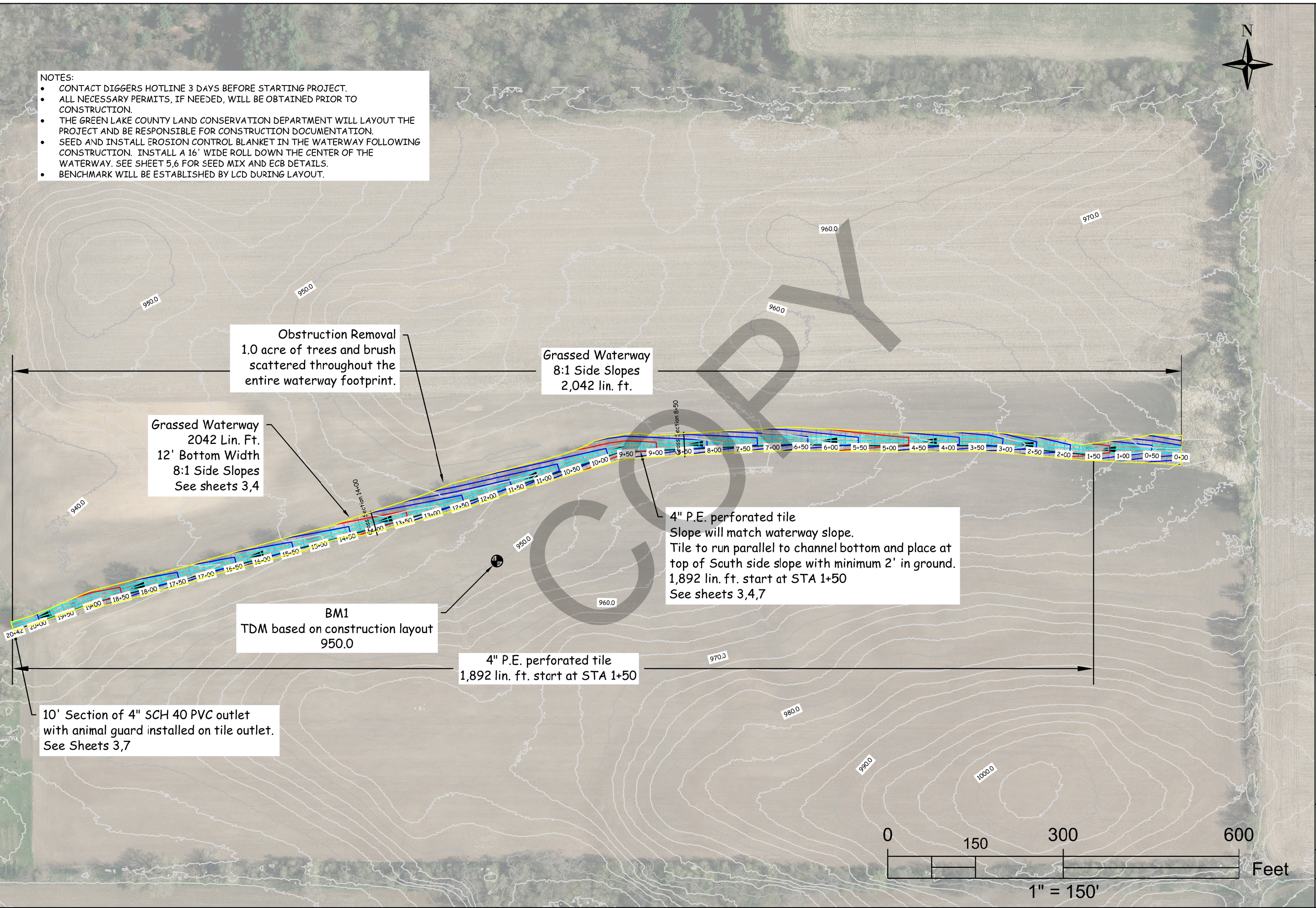


COUNTY: GREEN LAKE

Approved \_\_\_\_\_

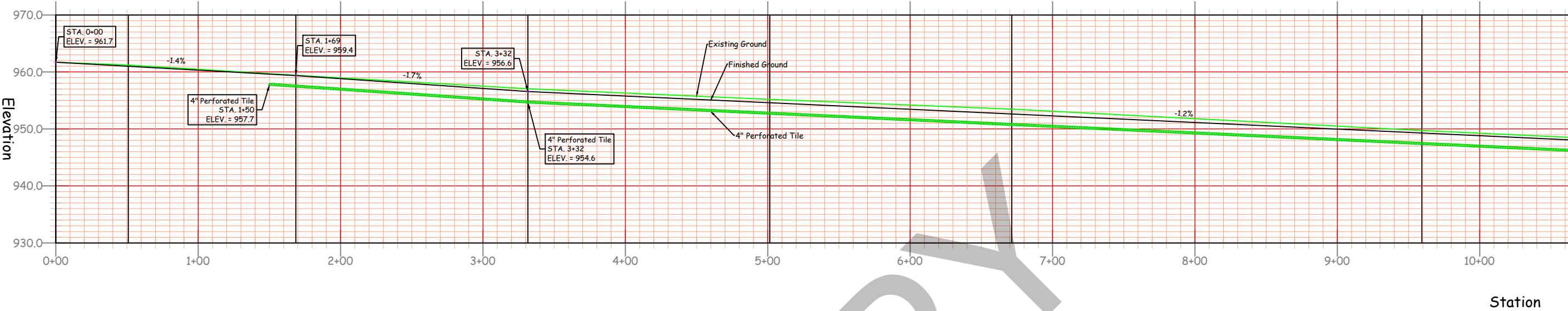
Sheet 1 of 7

- NOTES:
- CONTACT DIGGERS HOTLINE 3 DAYS BEFORE STARTING PROJECT.
  - ALL NECESSARY PERMITS, IF NEEDED, WILL BE OBTAINED PRIOR TO CONSTRUCTION.
  - THE GREEN LAKE COUNTY LAND CONSERVATION DEPARTMENT WILL LAYOUT THE PROJECT AND BE RESPONSIBLE FOR CONSTRUCTION DOCUMENTATION.
  - SEED AND INSTALL EROSION CONTROL BLANKET IN THE WATERWAY FOLLOWING CONSTRUCTION. INSTALL A 16' WIDE ROLL DOWN THE CENTER OF THE WATERWAY. SEE SHEET 5,6 FOR SEED MIX AND ECB DETAILS.
  - BENCHMARK WILL BE ESTABLISHED BY LCD DURING LAYOUT.

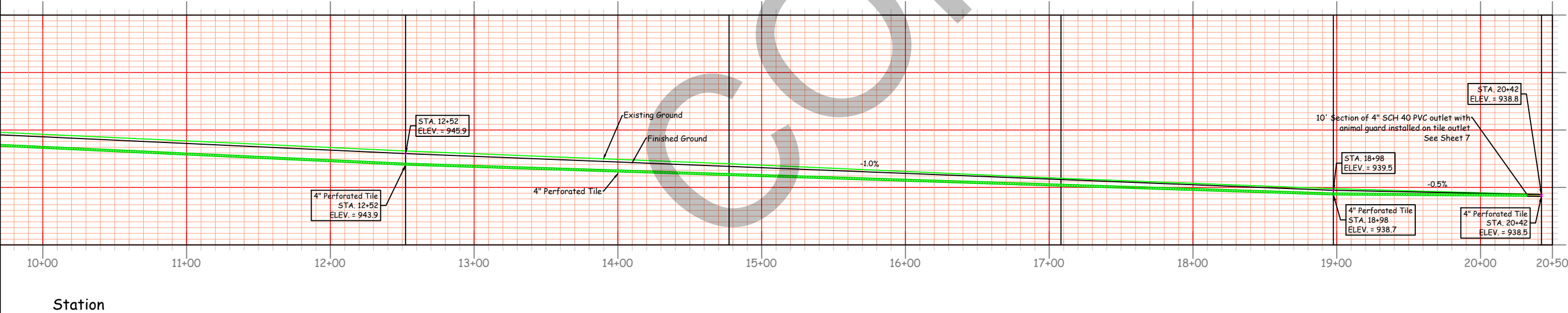


<div>LCD</div> <div>GREEN LAKE COUNTY DEPARTMENT OF LAND CONSERVATION</div>		<div>Edward J &amp; Kathy I Housey Trust</div> <div>PLAN VIEW GRASS WATERWAY</div>		<div>DATE: 10/22/25</div> <div>DESIGNED: P. RICHTER</div> <div>DRAWN:</div> <div>CHECKED:</div> <div>APPROVED:</div> <div>SHEET 2 OF 7</div> <div>SLC# A-16-0000-LakeCountyLogo_color.jpg</div>

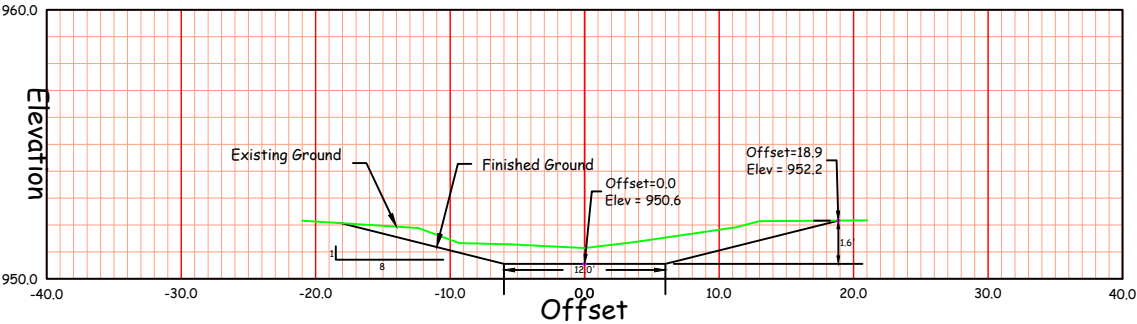
Profile View of CL Waterway



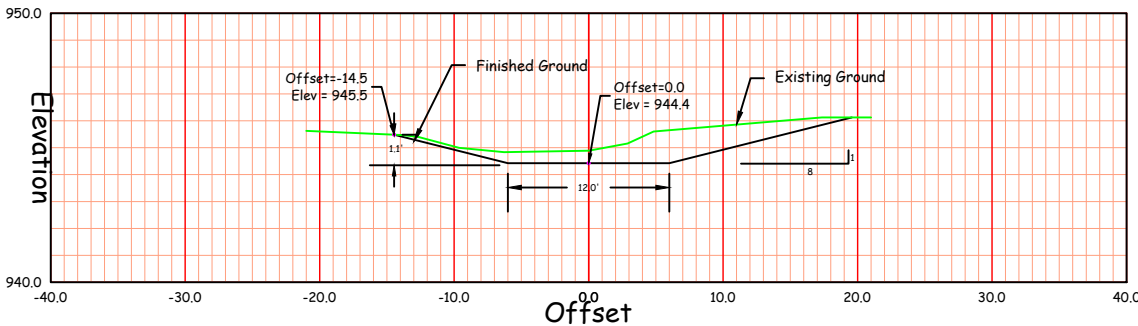
Profile View of CL Waterway



8+50.0



14+00.0



Edward J & Kathy I Housey Trust

PROFILE

LCD  
GREEN LAKE COUNTY  
DEPARTMENT OF  
LAND CONSERVATION

FILE NAME  
FILE NAME  
DRAWING NAME  
GLC-PRO-004  
DATE: 08/21/2018  
SHEET 3 OF 7

DESIGNED: P. RICHTER  
DRAWN:  
CHECKED:  
APPROVED:  
DATE: 12/11/23

\\slc01\arc\GIS\env\lakecounty\logo\_color.jpg

DESIGN DATA

WATERWAY SOILS<sup>1</sup> SC-SM/CL-ML

MAXIMUM PERMISSIBLE VELOCITY = 5 FPS

WATERWAY NUMBER	REACH		D.A. IN (ACRES)	DESIGN FREQ.	Q (CFS)	RET 2 (VEL)	RET 2 (CAP)	DESIGN V (FPS)	CHANNEL SLOPE (%)	BOTTOM WIDTH (B)	SIDE SLOPES (Z)	FLOW DEPTH (FT.)
	FROM	TO										
GWW	0+00	1+69	61.4	10 YR	50.0	D	C	2.30	1.4	12 FT.	8:1	1.1 FT
GWW	1+69	3+32	61.4	10 YR	50.0	D	C	2.50	1.7	12 FT.	8:1	1.0 FT
GWW	3+32	12+52	61.4	10 YR	50.0	D	C	2.16	1.2	12 FT.	8:1	1.1 FT
GWW	12+52	18+98	61.4	10 YR	50.0	D	C	2.00	1.0	12 FT.	8:1	1.2 FT
GWW	18+98	20+42	61.4	10 YR	50.0	D	C	1.49	0.5	12 FT.	8:1	1.4 FT

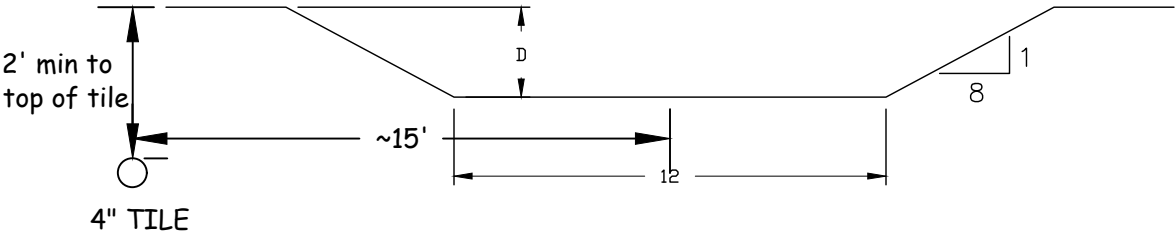
1. UNIFIED SOIL CLASSIFICATION SYSTEM
2. RET (VEL) IS THE RETARDANCE FOR DETERMINING DESIGN VELOCITY (NORMALLY "D").  
RET (CAP) IS THE RETARDANCE FOR DETERMINING THE FLOW DEPTH FOR CAPACITY (NORMALLY "B" OR "C").

SEEDING AND CONSTRUCTION CHECK											
DESIGN DATA					AS-BUILT DATA						
WATERWAY NUMBER	REACH		WIDTH TO VEGETATE (FT.)	AREA (ACRES) (SQ.YDS.)	SEEDING IN (ACRES)	SODDING IN (SQ.YDS.)	CHANNEL SLOPE (%)	BOTTOM WIDTH (FT.)	SIDE SLOPES (Z)	DEPTH (FT.)	LENGTH (FT.)
	FROM	TO									
GWW	0+00	20+42	30 FT	1.4 AC							
TOTALS							TOTAL				

THIS PRACTICE MEETS NRCS STANDARDS,  
SPECIFICATIONS, AND CONSTRUCTION PLANS.

SIGNATURE & TITLE

DATE



TRAPEZOIDAL CROSS SECTION

CONSTRUCTION DETAILS

WATERWAY NUMBER	REACH		CHANNEL SLOPE(%)	BOTTOM WIDTH(B) FEET	DEPTH(D) FEET	SIDE SLOPE(Z)	LENGTH FEET
	FROM	TO					
GWW	0+00	20+42	0.5-1.7	12 FT	1.0-1.4	8:1	2,042

NOTES AND SPECIFICATIONS:

1. TOPSOIL SHALL BE STOCKPILED AND RESPREAD ON THE WATERWAY WHEN NEEDED TO FACILITATE REVEGETATION.
2. PLACE SPOIL WHERE IT WILL NOT INTERFERE WITH SURFACE WATER FLOW INTO THE WATERWAY.
3. MAINTENANCE ITEMS – REPAIR AREAS OF DAMAGED VEGETATION. DO NOT USE THE WATERWAY FOR A TRAVEL LANE. DO NOT PLOW INTO THE WATERWAY SIDES.



United States  
Department of  
Agriculture  
  
Natural Resources  
Conservation Service

TRAPEZOIDAL GRASSED WATERWAY

CLIENT: Edward J & Kathy I Housey Trust  
COUNTY: GREEN LAKE

Date  
Designed P. RICHTER 10/22/25  
Drawn \_\_\_\_\_  
Checked \_\_\_\_\_  
Approved \_\_\_\_\_

WI-402A

File Name  
WI-402A  
Date  
07/14  
Sheet 4 of 7

SEEDING DATES

CENTRAL

TIME PERIOD	DATES			TYPE OF SEEDING
Spring	April 15	through	June 1	Permanent
Summer	June 2	through	see WI-710 ss pg 2	Temporary *
Late Summer	August 1	through	August 21	Permanent
Fall	August 22	through	see WI-710 ss pg 2	Temporary *
Late Fall	November 1	through	Snow Cover	Dormant
Winter	Snow Cover	through	April 14	Not Allowed

MATERIALS

If no soil test is available, apply a minimum of 150 pounds of 20-10-10 fertilizer per acre. This is equivalent to 30 pounds nitrogen (N), 15 pounds phosphate (P205), and 15 pounds potash (K2O) per acre. Apply two tons / acre of 80-89 lime or equivalent. (See page 2 for equivalent)

\* Seed a temporary cover crop of **Oats** at 64 #/ac ( 2 bu/ac)  
A permanent seeding shall be completed during the next acceptable time period following a temporary seeding.

MINIMUM PURE LIVE SEED (PLS) <sup>1</sup> RATE PER ACRE AND TOTAL POUNDS OF SEED NEEDED

SEEDING MIX (DESIGN)	9	LOCATION: ACRES:	Dist. Area 1.40	SEEDING MIX (AS-BUILT)	LOCATION ACRES	
SPECIES		RATE	POUNDS	SPECIES	RATE	POUNDS
Kentucky Bluegrass		3.8	5.3			
Creeping Red Fescue		5.0	7.0			
Perennial Ryegrass		12.5	17.5			
** Annual Ryegrass		6.0	8.4			

1 PLS lbs. = [ total % Germination / 100 \* % Purity / 100 ] \* Net Weight (lbs.)  
\*\* Companion Crop  
ADDITIONAL SEED PERCENT: 25 %  
Mulching Required No

Total % Germination may also be termed Total % Viable Seed on a tag. If a tag only shows % Germination, the user must include percentage of the seed that germinated during the lab test (% Germination) plus the percentage of hard and/or dormant seed. Hard seed and dormant seed are seeds that are still capable of germinating and producing a plant but did not germinate under the conditions of the test in the lab.

Additional native seeds may be required by permitting agencies. These addition are allowed.  
Seed mixture shall meet all requirements of the WI weed laws.  
Species identified as restricted or prohibited by law shall not be planted.  
Certified seed shall be used, and the seeding rates will be based on pure live seed.  
For dormant seedings, increase the seeds per square foot by 15%.

SEEDBED PREPARATION

Seedbed preparation shall immediately follow construction activities.  
Prepare a fine, firm seedbed to a minimum depth of three inches. A seedbed is considered firm when a footprint penetrates less than 1/4 inch deep.

SEEDING

Inoculate legumes with the specific inoculum for the species in accordance with the manufacturer's recommendations. When using a hydroseeder, five times the recommended rate of inoculant shall be added to the hydroseeder. Inoculant shall not be mixed with liquid fertilizer.

Seed may be broadcast or drilled as appropriate to the site.  
Seed, fertilize, and lime as soon as possible after construction.  
Seeding perpendicular to direction of flow is required to limit erosion.

Seed grasses and legumes no more than 1/4 inch deep.

Consider seeding at a lower rate and making 2 passes to ensure more uniform distribution.

TEMPORARY SEEDING OPTIONS

Select one of the following species for temporary cover if:

- 1) The required seeds or plant stock are not available or the normal permanent seeding period for the species has passed  
Forage Sorghum - 1/2 bushel per acre (May 15-July 15)  
Sorghum - Sudangrass Hybrid - 1 bushel per acre (May 15-July 15)  
Sudangrass - 1 bushel per acre (May 15-July 15)  
Winter Wheat - 2 bushels per acre (Aug 1-Oct 1)  
Winter Cereal Rye - 2 bushels per acre (Aug 1-Oct 15)  
Oats - 2 bushels per acre (Apr 1-Sept 1)  
Annual Ryegrass - 20 Pounds per acre (Apr 1-Sept 1)
- 2) Triazine herbicide carryover will not allow establishment of permanent cover immediately.  
Forage Sorghum - 1/2 Bushel per acre (May 15-July 15)  
Sorghum - Sudangrass Hybrid - 1 Bushel per acre (May 15-July 15)  
Sudangrass - 1 Bushel per acre (May 15-July 15)  
Mulching not required

DORMANT SEEDING

Seed is broadcast and incorporated, no-tilled, or drilled into the seedbed .  
Seedbed preparations and conditions are similar to conventional seeding.

MULCHING

Mulching not required

Date 10/22/25  
Designed P. RICHTER  
Drawn  
Checked  
Approved

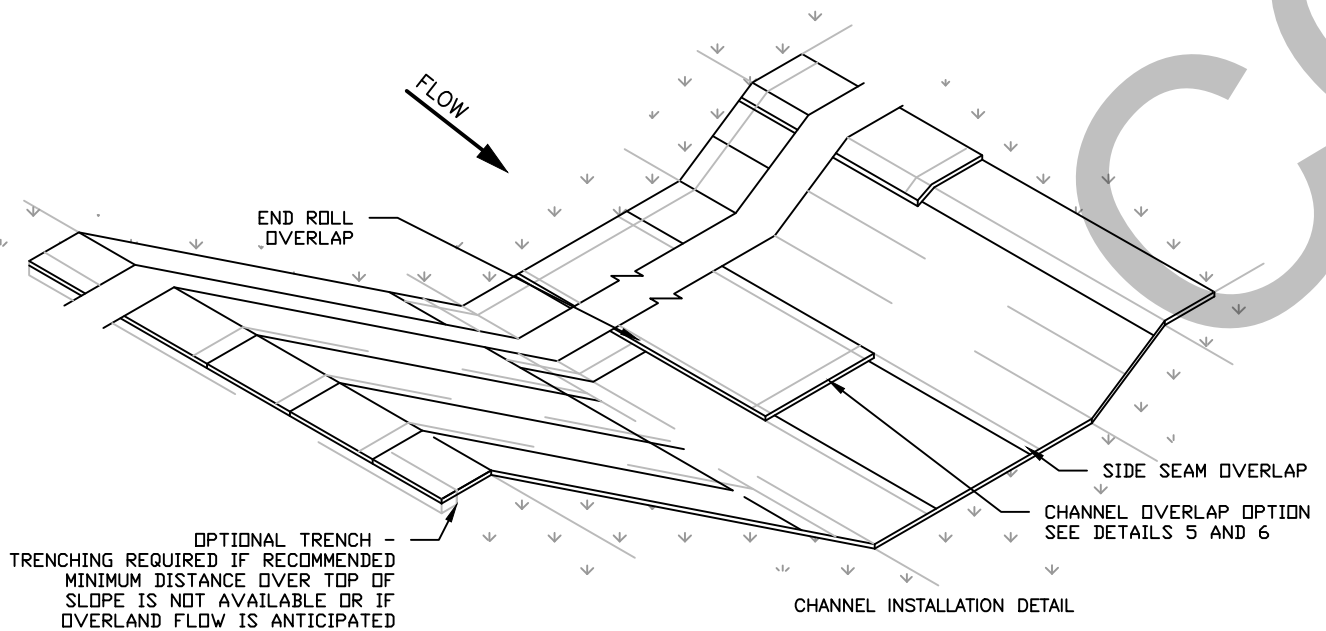
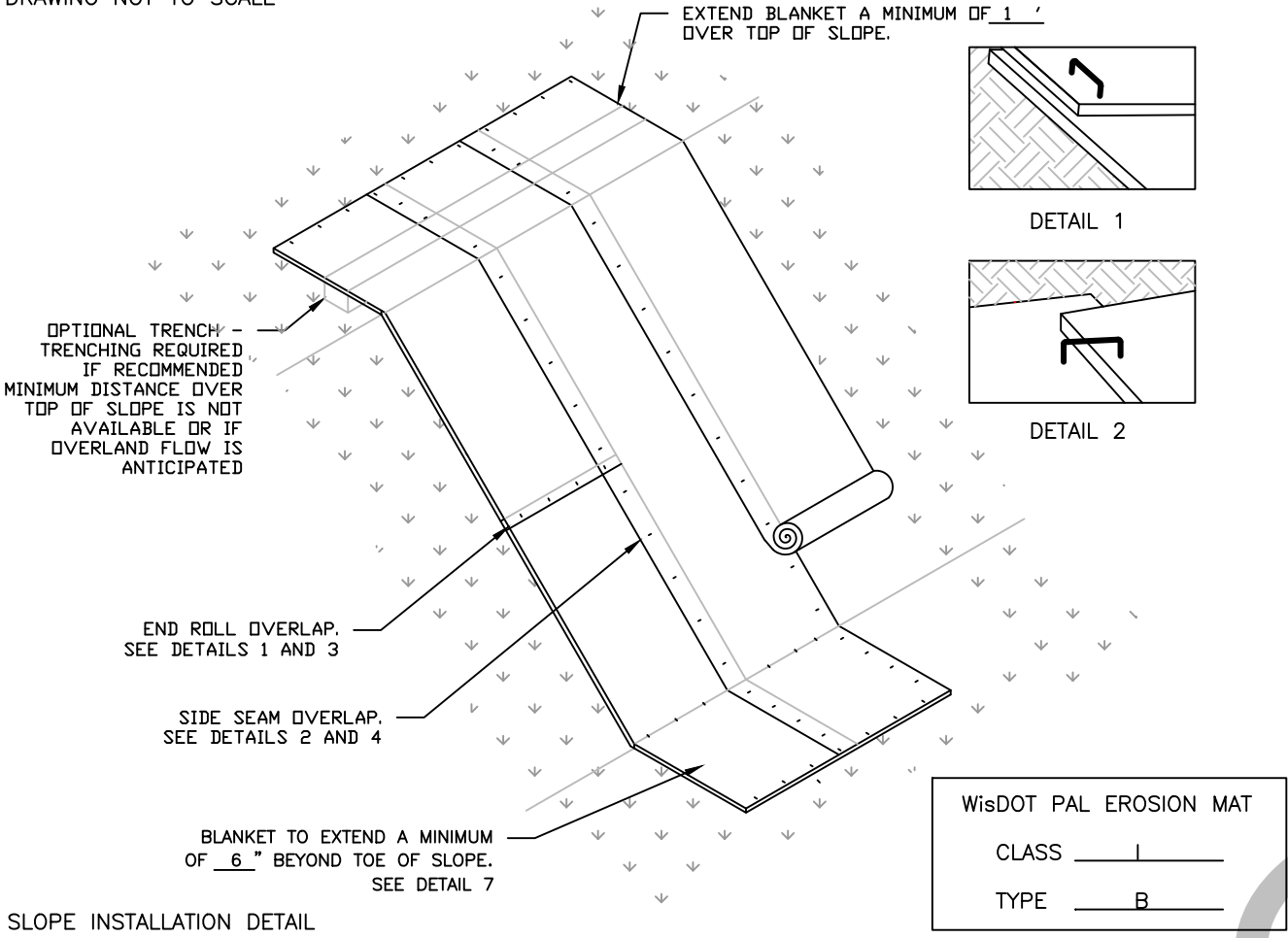
INTRODUCED SPECIES SEEDING ESTABLISHMENT

OWNER: Edward J & Kathy I Housey Trust  
COUNTY: GREEN LAKE

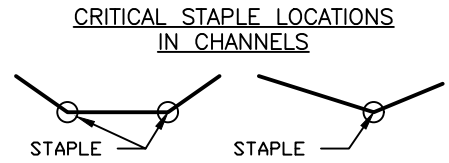
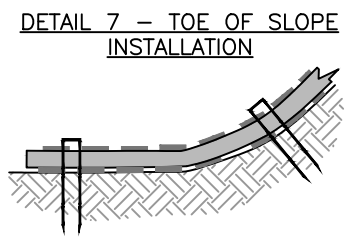
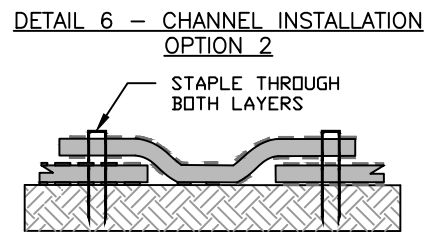
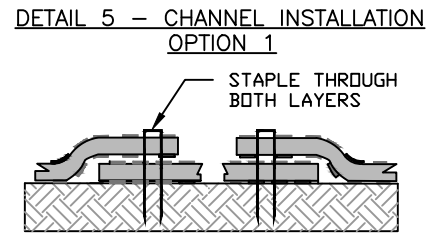
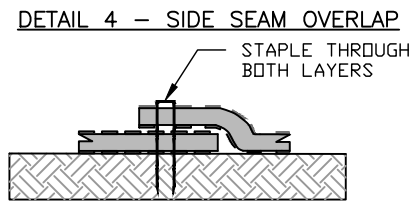
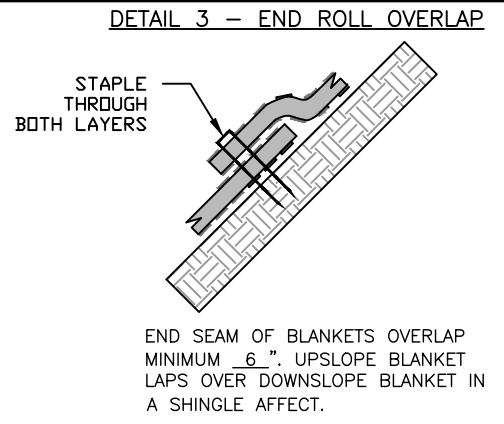
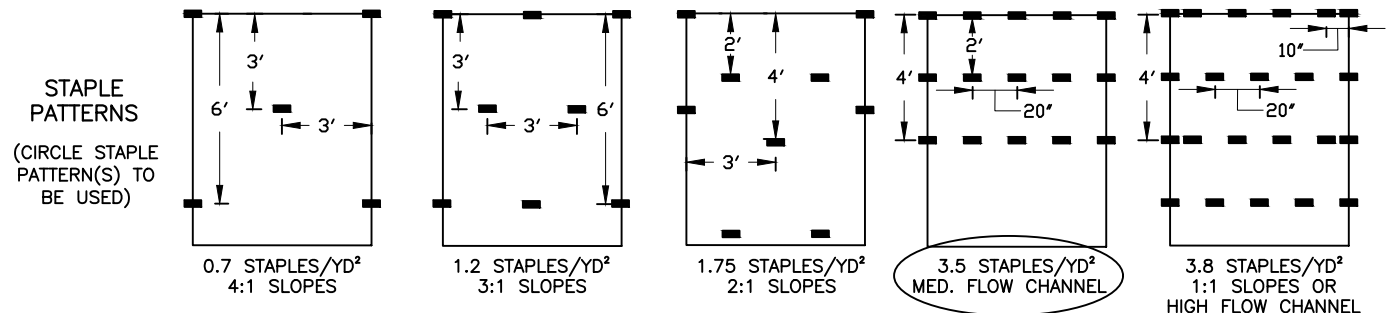
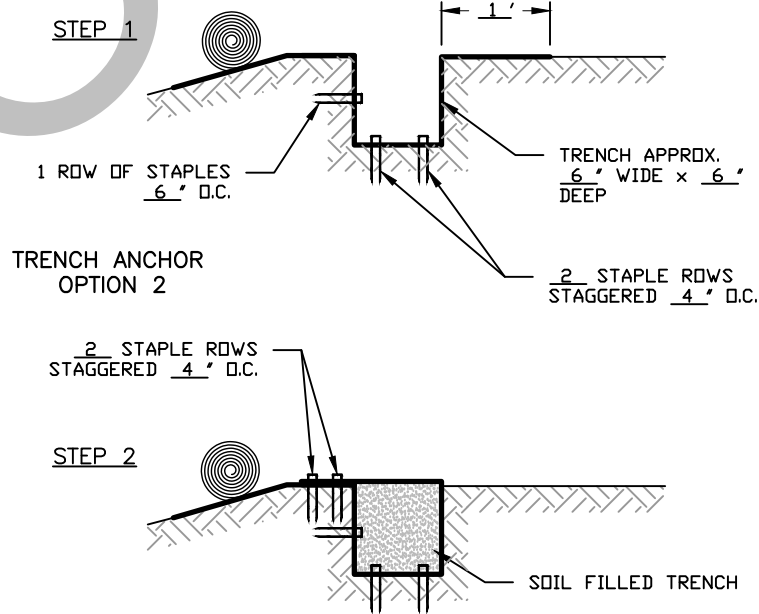
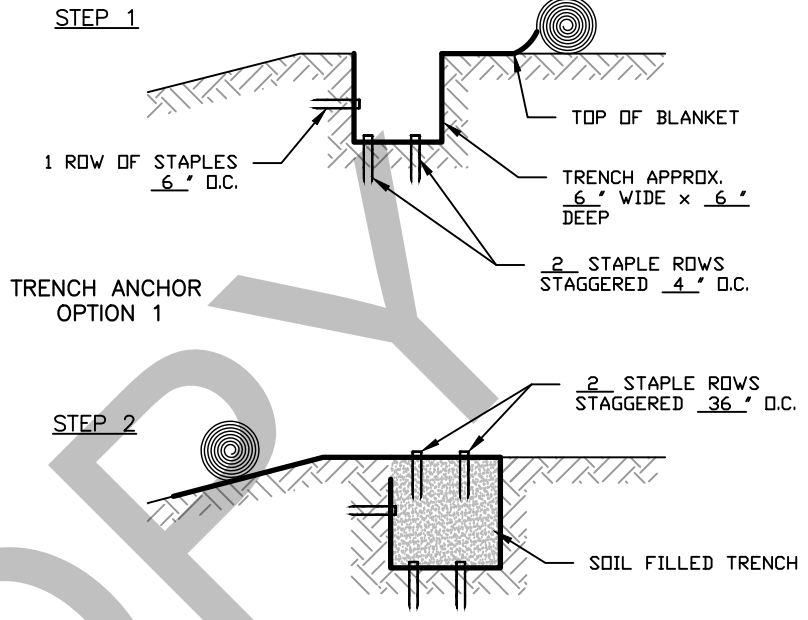
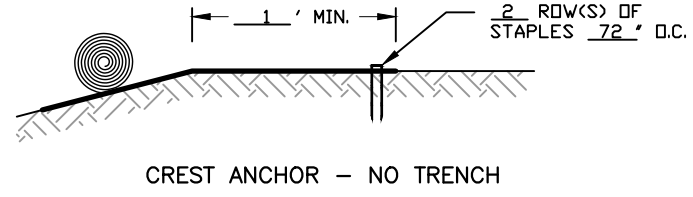


Drawing Name  
WI-710  
Date  
12/2016

DRAWING NOT TO SCALE



- NOTES:
1. STAPLE PATTERNS ARE DEPENDENT UPON SLOPE CONDITIONS AND MANUFACTURER'S RECOMMENDATIONS.
  2. STAPLES OF 11 GAUGE OR HEAVIER SHALL BE USED TO HOLD MATS AND NETS IN PLACE.
  3. STAPLES SHALL BE U-SHAPED WITH A 1-INCH CROWN.
  4. STAPLE LENGTHS ARE DETERMINED BASED ON SOIL CONDITION. SEE WI STANDARD 484-MULCHING FOR STAPLE LENGTH REQUIREMENTS. STAPLES SHALL BE 6" LONG.
  5. FOLLOW MANUFACTURER'S RECOMMENDATIONS FOR BOTH END AND EDGE OVERLAP LENGTH.
  6. CONSIDER THE USE OF BIODEGRADABLE STAPLES IN LOCATIONS WHERE WIRE STAPLES ARE DETERMINED TO BE A RISK.



Date 10/22/25

Designed P. RICHTER

Drawn \_\_\_\_\_

Checked \_\_\_\_\_

Approved \_\_\_\_\_

EROSION CONTROL MAT INSTALLATION

OWNER: Edward J & Kathy I Housey Trust

COUNTY: GREEN LAKE

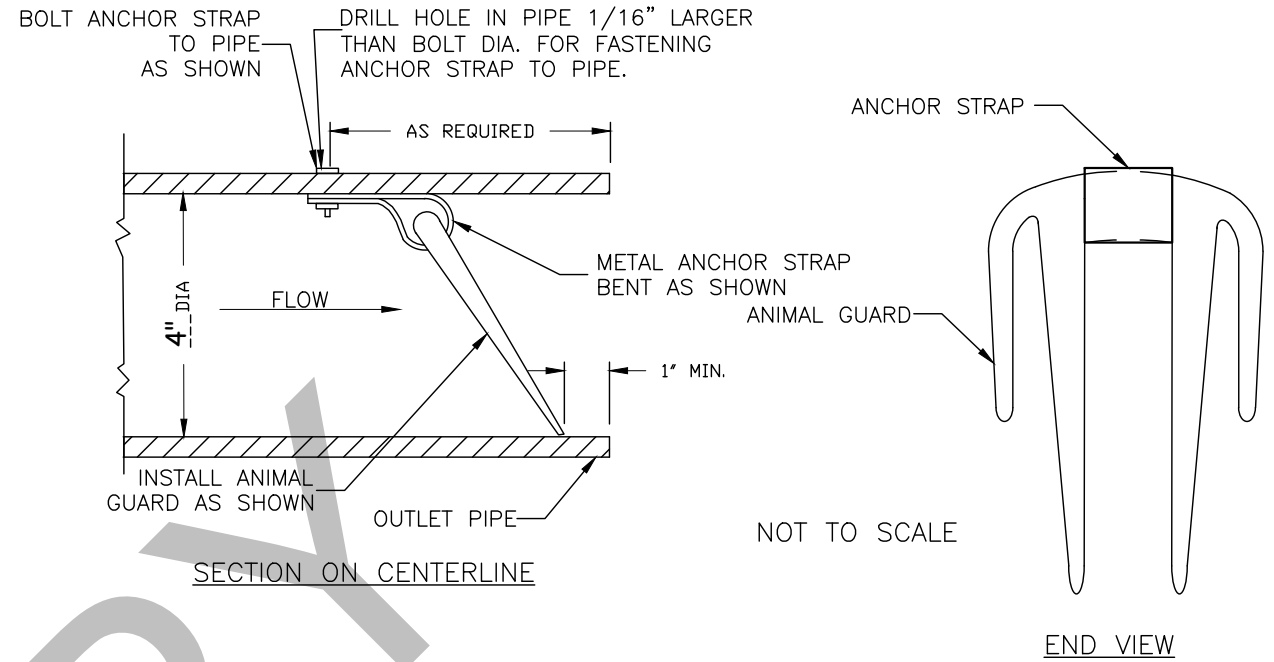
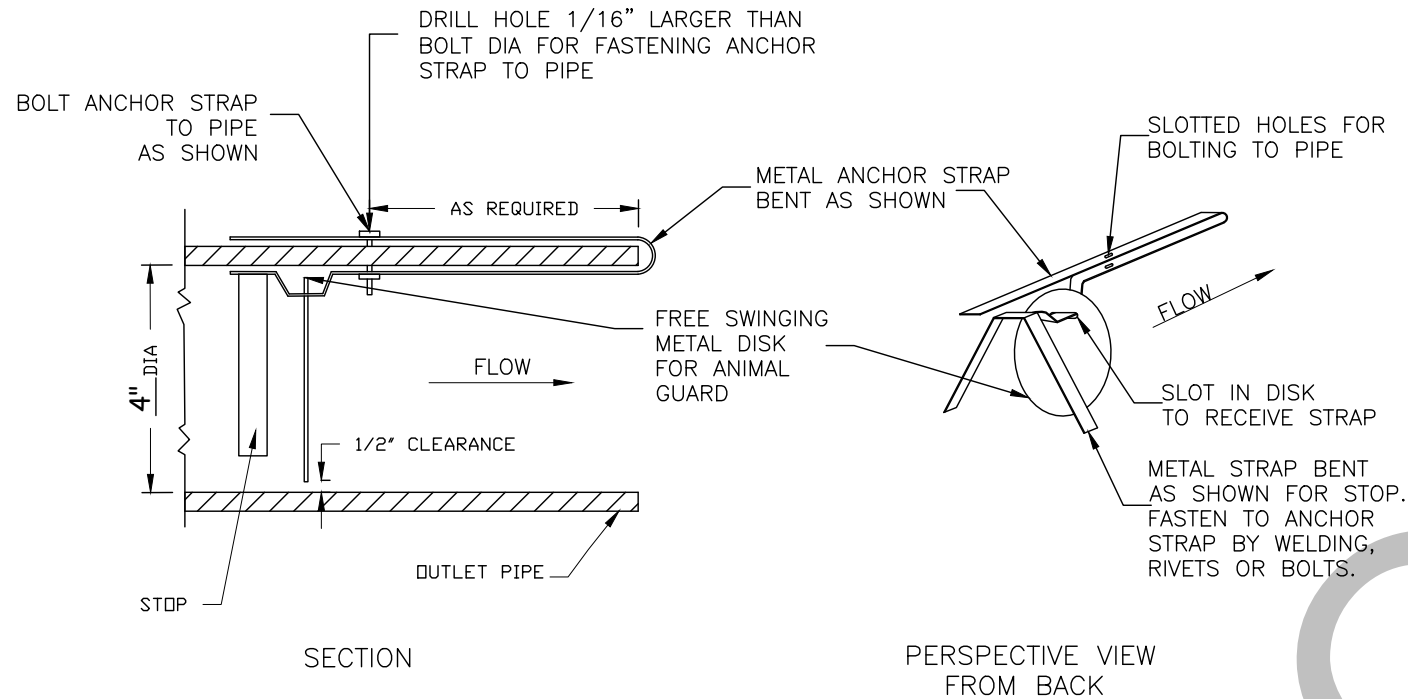


Drawing Name WI-790

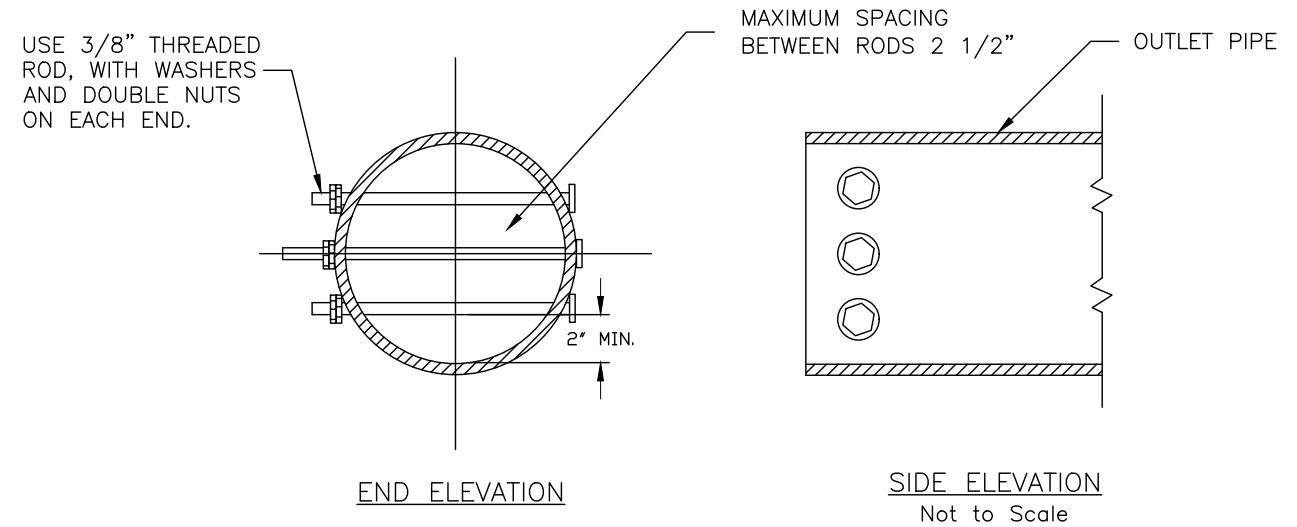
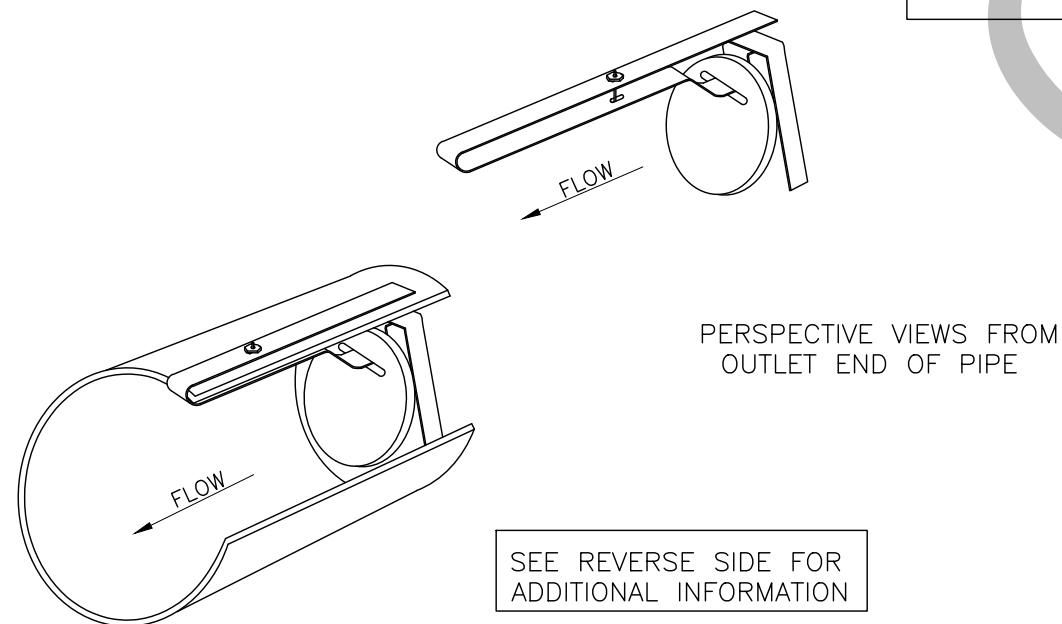
Date 11/2017

Sheet 6 of 7

NOTE: ANIMAL GUARD SHALL BE FABRICATED OF MATERIAL THAT RESISTS CORROSION AND IS COMPATIBLE WITH THE OUTLET PIPE.



CHOOSE ONE STYLE



SV00p A-1 Green Lake County Reg. Color.jpg

DATE: 10/22/25  
DESIGNED BY: RICHTER  
DRAWN:  
CHECKED:  
APPROVED:

Edward J & Kathy I Housey Trust

ANIMAL GUARDS FOR TILE OUTLETS

LCD  
GREEN LAKE COUNTY  
DEPARTMENT OF  
LAND CONSERVATION

FILE NAME

FILE NAME

DRAWING NAME

WI-602

DATE: 07/2014

SHEET 7 OF 7