

CITY OF RAMSEY

WETLAND 114P OUTLET MODIFICATIONS

CITY IMPROVEMENT PROJECT NO. 19-07

GOVERNING SPECIFICATIONS

THE 2020 EDITION OF THE MINNESOTA DEPARTMENT OF TRANSPORTATION "STANDARD SPECIFICATIONS FOR CONSTRUCTION" SHALL GOVERN.

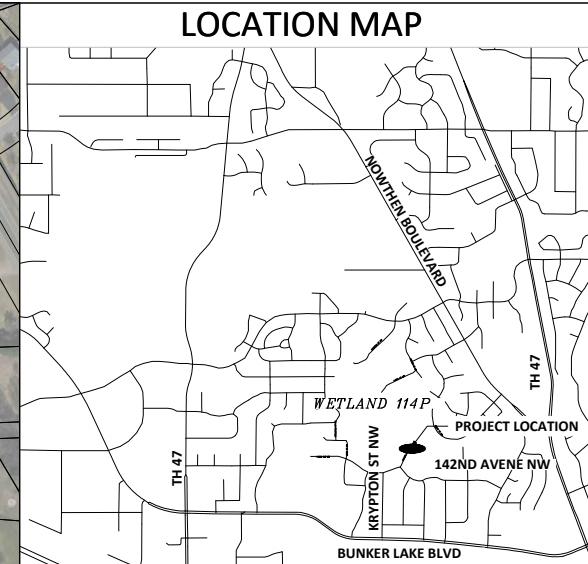
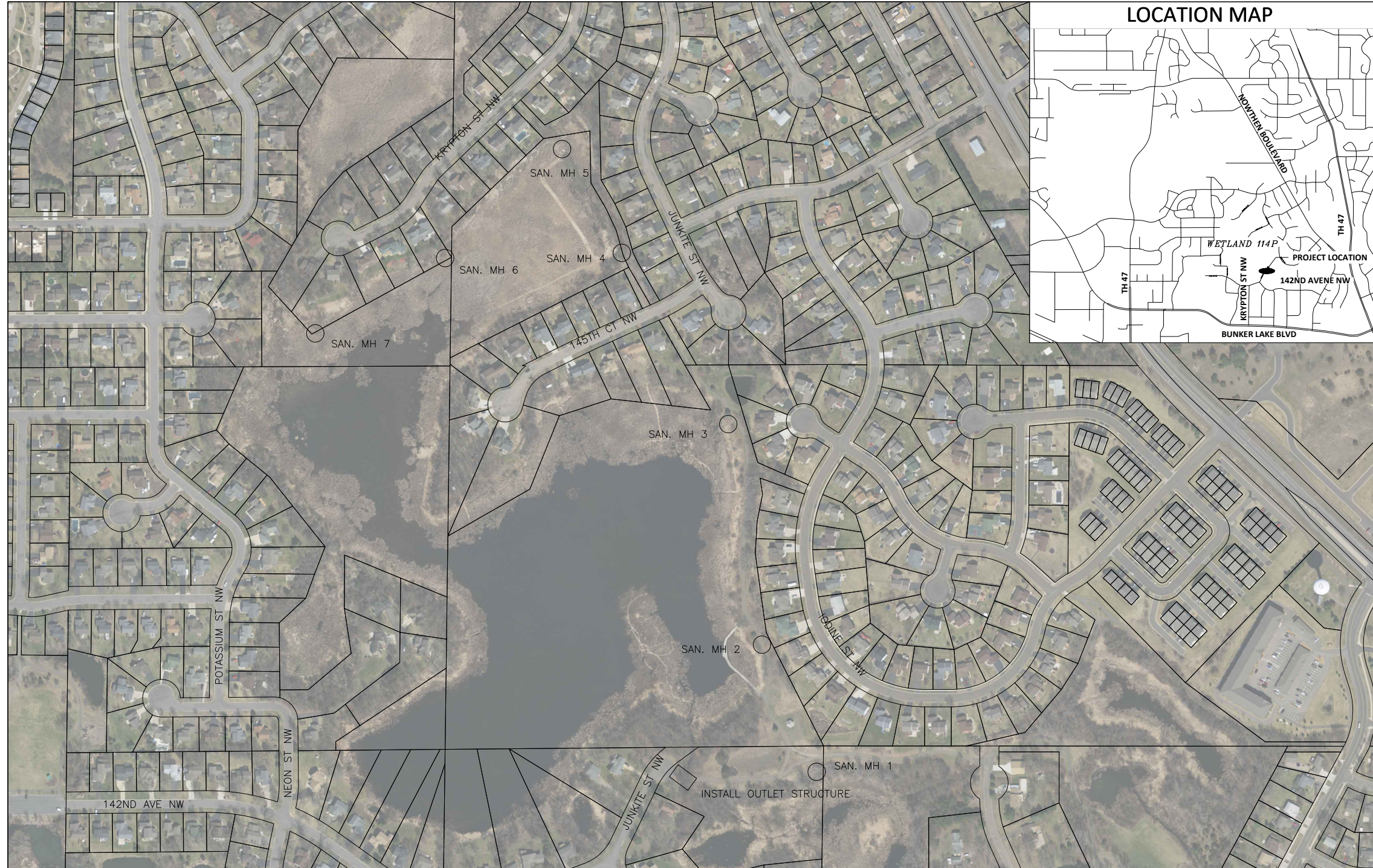
ALL FEDERAL, STATE AND LOCAL LAWS, REGULATIONS AND ORDINANCES SHALL BE COMPLIED WITH IN THE CONSTRUCTION OF THIS PROJECT.

ALL TRAFFIC CONTROL DEVICES AND SIGNING SHALL CONFORM TO THE MINNESOTA MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, INCLUDING THE FIELD MANUAL FOR TEMPORARY TRAFFIC CONTROL ZONE LAYOUTS.

SHEET INDEX

THIS PLAN CONTAINS 5 SHEETS

SHEET No.	DESCRIPTION
1	TITLE SHEET
2	STATEMENT OF ESTIMATED QUANTITIES / DETAIL SHEET
3	EXISTING CONDITIONS
4	OUTLET CONTROL STRUCTURE PLAN, PROFILE AND DETAIL
5	SANITARY MANHOLE CASTING ADJUSTMENTS
6	SANITARY MANHOLE CASTING ADJUSTMENTS



LEGEND

	LIGHT POLE		EASEMENT
	TREE		RIGHT OF WAY
	TREE		ELECTRIC
	SHRUB		OVERHEAD ELECTRIC
	SIGN		GAS
	VALVE		TELECOMMUNICATIONS
	UTILITY PEDESTAL		STORM SEWER
	HAND HOLE		SANITARY SEWER
	REMOVE TREE		WATERMAIN
	3'x2' CATCH BASIN		SAWCUT PAVEMENT
	MANHOLE		TREE LINE
	INLET PROTECTION		FENCE
	HYDRANT		LANDSCAPING
	VALVE		RETAINING WALL
			5' CONTOUR LINE
			1' CONTOUR LINE

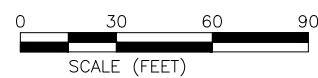
I hereby certify that this plan, specification, or report was prepared by me or under my direct supervision and that I am a duly Licensed Professional Engineer under the laws of the State of Minnesota.

Leonard Linton

21112 DATE 01/24/23

LEONARD LINTON, P.E.
CITY OF RAMSEY

LIC. NO.



CITY OF RAMSEY
7550 SUNWOOD DRIVE
RAMSEY, MN 55303
(763) 427-1410 FAX (763) 433-9898

THE SUBSURFACE UTILITY INFORMATION IN THIS PLAN IS UTILITY QUALITY LEVEL D. THIS QUALITY LEVEL WAS DETERMINED ACCORDING TO THE GUIDELINES OF CI/ASCE 38-02, ENTITLED "STANDARD GUIDELINES FOR THE COLLECTION AND DEPICTION OF EXISTING SUBSURFACE UTILITY DATA."

NOTE: EXISTING UTILITY INFORMATION SHOWN ON THIS PLAN HAS BEEN PROVIDED BY THE UTILITY OWNER. THE CONTRACTOR SHALL FIELD VERIFY EXACT LOCATIONS PRIOR TO COMMENCING CONSTRUCTION AS REQUIRED BY STATE LAW. NOTIFY GOPHER STATE ONE CALL 1-800-252-1166 OR 651-454-0002



Call before you dig
811
651 454-0002 Metro
800 252-1166 Outstate
www.gopherstateonecall.org

DATE	REVISION

Wetland 114P Outlet Improvements

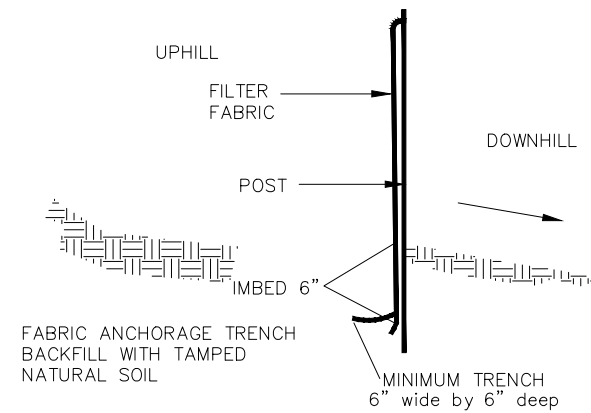
Notes	Item No.	MnDOT No.	Item	Unit	Estimated Quantity
2	1	2021.501	Mobilization	LS	1
	2	2105.507	Common Excavation (EV)	CY	20
	3	2506.502	Construct 60" Outlet Structure	EA	1
	4	2506.502	Remove Cone Section, Install 48" 1' section, Reinstall Cone Section, rings and Chimney Seal	EA	6
	5	2506.502	Furnish and Install Haala PS60-72 Grate	EA	1
3	6	2573.503	Silt Fence	LF	40
	7	2574.507	Topsoil (LV)	CY	10
	8	2575.504	Hydroseed disturbed areas	SY	314
	9	2105.601	Clean and stabilize ditch 50 FT down stream of existing pipe	LS	1
	10	2511.501	Random Riprap Class III	CY	13
	11		Remove Existing Boardwalk around manhole	SF	360

PAY ITEM NOTES:

- REMOVAL LIMITS SHALL BE MARKED IN THE FIELD BY CITY STAFF.
- EV TO CV CONVERSION FACTOR = 1.25.
- LV TO CV CONVERSION FACTOR = 1.30.

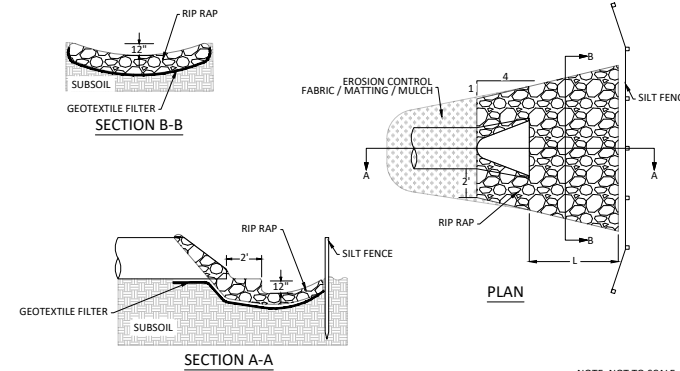
Notes:

- INSTALLATION OF 4" OF TOPSOIL REQUIRED ACROSS ALL DISTURBED AREAS.
- TOPSOIL IS DEFINED AS BLACK DIRT COMPOSED OF UNCONSOLIDATED MATERIAL, LARGELY UNDECOMPOSED ORGANIC MATTER WHICH IS SUITABLE FOUNDATION FOR VEGETATIVE GROWTH.
- THE COMPOSITION OF TOPSOIL SHOULD CONTAIN NO MORE THAN THIRTY-FIVE PERCENT (35%) SAND CONTENT.



INSTALL AS PER FILTER FABRIC MANUFACTURER'S RECOMMENDATIONS

SILT FENCE DETAIL
NO SCALE

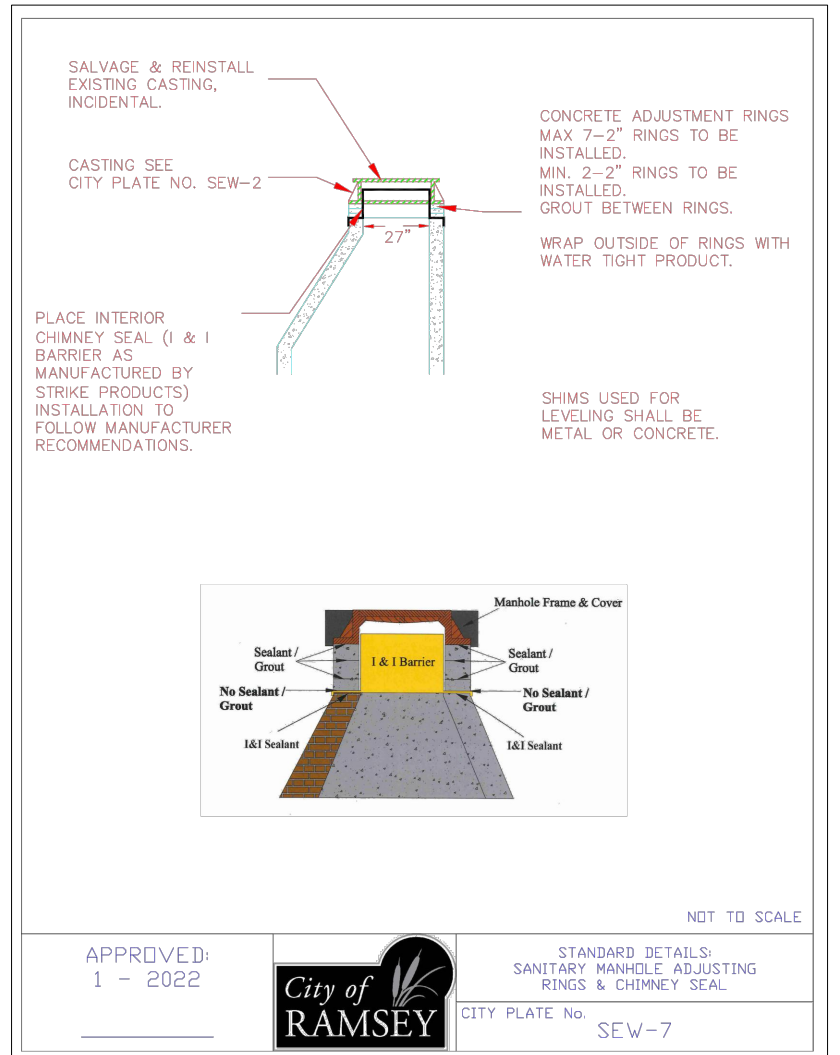


NOTES:

- ON SLOPES 4:1 OR GREATER, ANCHOR OR STRAIGHT DISKED STRAW MULCH, SEEDED NETTING, GABRIC, OR MATTING SUCH AS EXCELSIOR SHALL BE USED TO STABILIZE DISTURBED SOILS. THESE EXPOSED SOILS MUST BE STABILIZED IMMEDIATELY AFTER GRADING OF SOIL IS COMPLETE.
- A SKIRTING OF EROSION CONTROL FABRIC OR MULCH MUST BE USED TO PROTECT OUTLETS AS ILLUSTRATED REGARDLESS OF SLOPE.
- RIP RAP IS CLASS III PLACED 18" THICK.
- FOR PIPE GREATER THAN 48" DIAMETER OR 58" SPAN, QUANTITY OF GEOTEXTILE FABRIC AND RIP RAP WILL BE HANDLED IN A CASE BY CASE MANNER.
- GEOTEXTILE FABRIC SHALL COVER THE BOTTOM AND SIDES OF THE AREA EXCAVATED FOR THE RIP RAP MATERIAL.

DIA. OF PIPE (IN.)	L (FT.)	GEOTEXTILE FABRIC (SY)	18" DEPTH RIP RAP (CU. YD)
12	8	19.6	4.4
15	8	20.8	4.8
18	10	25.6	6.4
21	10	27.4	7.1
24	12	33.4	9.2
27	12	35.2	9.9
30	14	41.6	12.3
36	16	50.5	15.8
42	18	57.8	18.7
48	20	66.5	22.2

SPAN OF PIPE (IN.)	L (FT.)	GEOTEXTILE FABRIC (SY)	18" DEPTH RIP RAP (CU. YD)
22	10	25.6	6.1
28	12	33.2	8.5
36	14	41.5	11.2
43	16	50.5	14.3
51	18	57.5	16.9
58	20	65.2	19.8

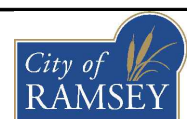


DATE	REVISION

I hereby certify that this plan, specification, or report was prepared by me or under my direct supervision and that I am a duly Licensed Professional Engineer under the laws of the State of Minnesota

Donald R. Eaton
Engineer
Date: 01/24/23 Lic. No. 21112

DESIGNED BY: LLL
DRAWN BY: LLL DATE: 01/24/23
CHECKED BY: LLL FILE No. 19-07



CITY OF RAMSEY
7550 SUNWOOD DRIVE
RAMSEY, MN 55303
(763) 427-1410 FAX (763) 433-9898

STATEMENT OF ESTIMATED QUANTITIES/ DETAIL SHEET

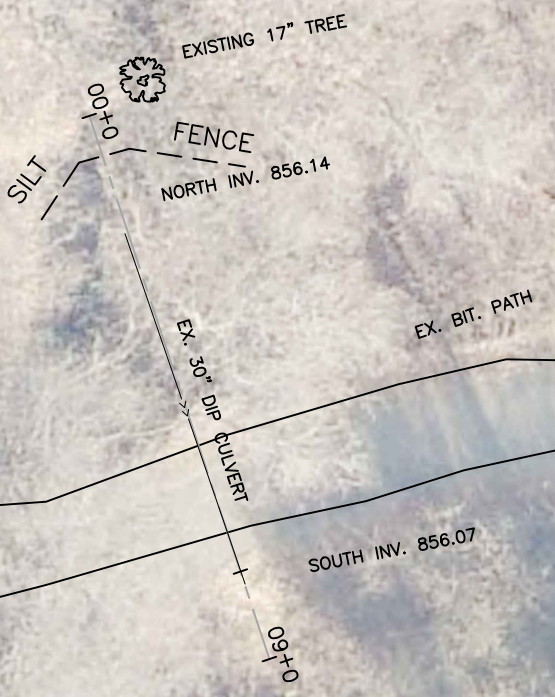
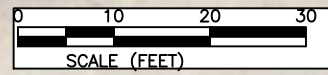
WETLAND 114P OUTLET MODIFICATIONS
CITY PROJECT NO. 19-07
CITY OF RAMSEY, MINNESOTA

26-32-25-44-0001
14260

26-32-25-44-0030
5455

JUNKITE STREET

26-32-25-44-0005
14249



LEGEND

- EX. MAJOR CONTOUR
- EX. MINOR CONTOUR
- - - - - SILT FENCE
- EDGE OF PAVEMENT
- LOT LINE

NOTE:

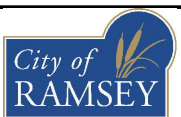
1. PROTECT EXISTING TREE WHILE INSTALLING STRUCTURE.
2. INSTALL SILT FENCE DOWNSLOPE OF DISTURBED AREA BEFORE EXCAVATING.

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Date 01/24/23 Lic. No. 21112

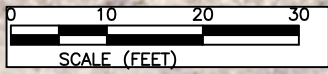
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CHECKED BY: LLL	



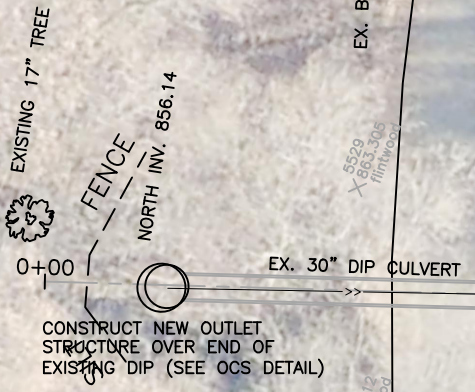
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EXISTING OUTLET CONDITION

WETLAND 114P OUTLET MODIFICATIONS
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CITY OF RAMSEY, MINNESOTA



0030

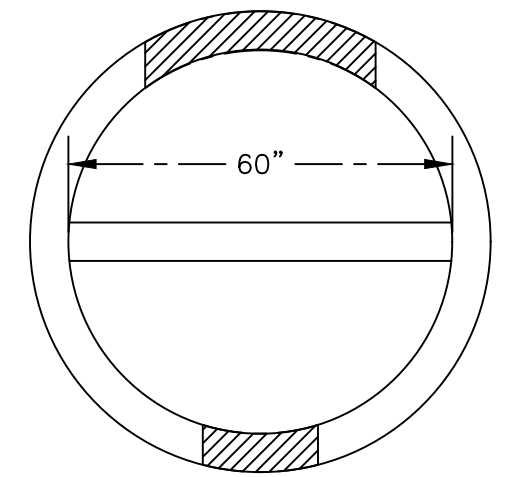


CLEAN UP DITCH 50 FT DOWNSTREAM OF EXISTING OUTLET PIPE, INSTALL CLASS III RIPRAP TO STABILIZE AREA AROUND PIPE OUTLET.

- NOTES:
1. PROTECT EXISTING TREE DURING INSTALLATION OF OCS.
 2. INSTALL OUTLET CONTROL STRUCTURE (OCS)
 3. RESTORE DISTURBED AREAS WITH HYDROSEED

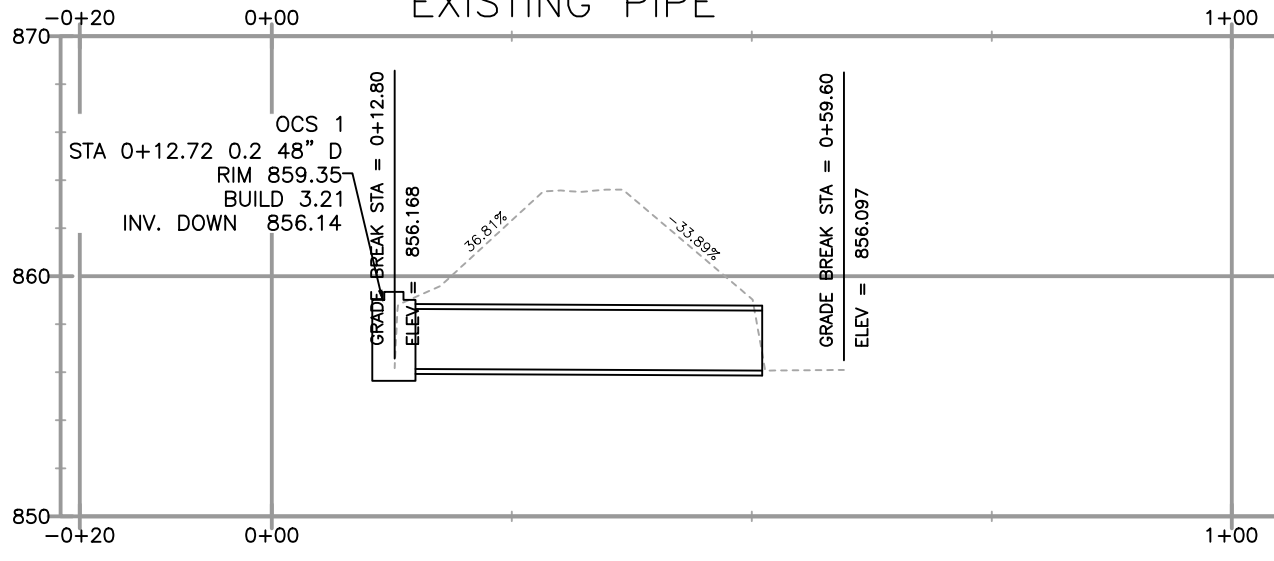
LEGEND

- LOT LINE
- CONSTRUCT NEW STORM STRUCTURE
- RIP RAP
- DITCH CLEANING AREA
- 30" DIP PIPE, BELL END TALL SIDE



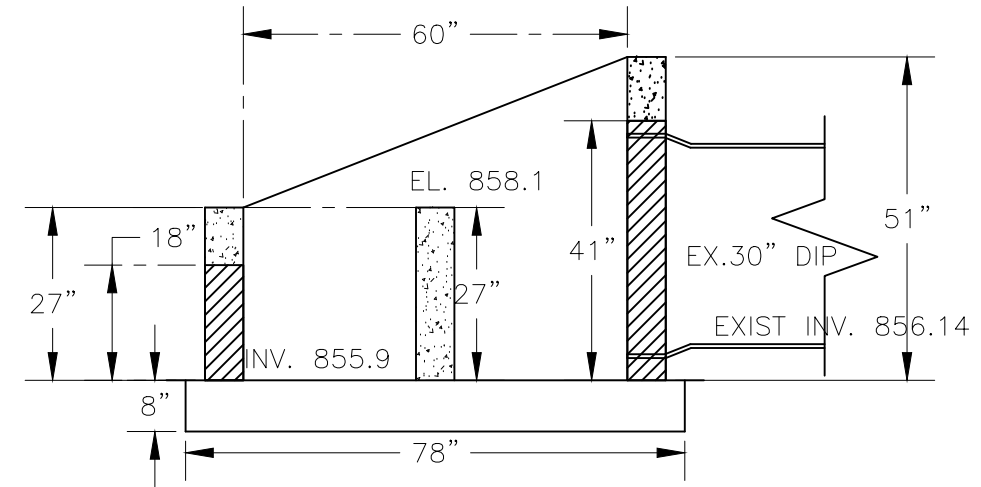
18" DOG - NO PIPE
PLAN VIEW

PLAN VIEW
EXISTING PIPE



PROFILE VIEW

SPLIT GRATE BY HALLA (PS60-72H)



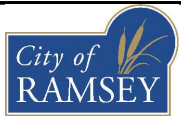
PROFILE VIEW
OCS DETAIL

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David A. Eaton
Engineer
Date: 01/24/23 Lic. No. 21112

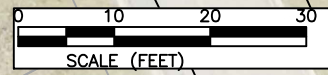
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PROFILE & DETAILS

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CITY OF RAMSEY, MINNESOTA



26-32-25-14-006
14612

26-32-25-41-0005
5589

26-32-25-14-0064
14600

26-32-25-41-0018

26-32-25-41-0011
14428

26-32-25-41-0018

26-32-25-41-0004
5588

26-32-25-14-0023

26-32-25-41-0016
14438

26-32-25-14-0074
14580

41-0016

26-32-25-14-0085

MH 2
SAN MH 2
RIM 857.9
REMOVE EXISTING BOARDWALK AS SHOWN,
INSTALL 48" - 1 FT RING BELOW CONE SECTION, AND STANDARD RINGS BELOW CASTING TO RAISE RIM TO 860.6

Rim 858.31
Inv 837.83

MH 3
SAN MH 3
RIM 858.5
INSTALL 48" - 1 FT RING BELOW CONE SECTION, AND STANDARD RINGS BELOW CASTING TO RAISE RIM TO 860.6

858.5

Rim 858.54
Inv 838.28

MH 4
SAN MH 4
RIM 860.0
INSTALL 48" - 1 FT RING BELOW CONE SECTION, AND STANDARD RINGS BELOW CASTING TO RAISE RIM TO 860.6

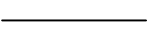


858.7

MH 2 & BOARDWALK

MH 3

MH 4

LEGEND

-  LOT LINE
-  REMOVE BOARDWALK
-  EXISTING SANITARY MANHOLE

NOTE:

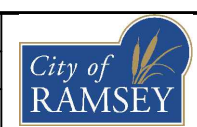
1. RAISE CASTING BY REMOVING EXISTING CASTING AND RINGS, INSTALLING NEW RINGS, REPLACING CASTING AND INSTALLING WATERTIGHT WRAP ON NEW RINGS AND CASTING, BONDING WRAP TO EXISTING STRUCTURE.
2. CONTRACTOR IS RESPONSIBLE FOR FIXING ANY DAMAGE TO EXISTING LANDSCAPING.

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Engineer
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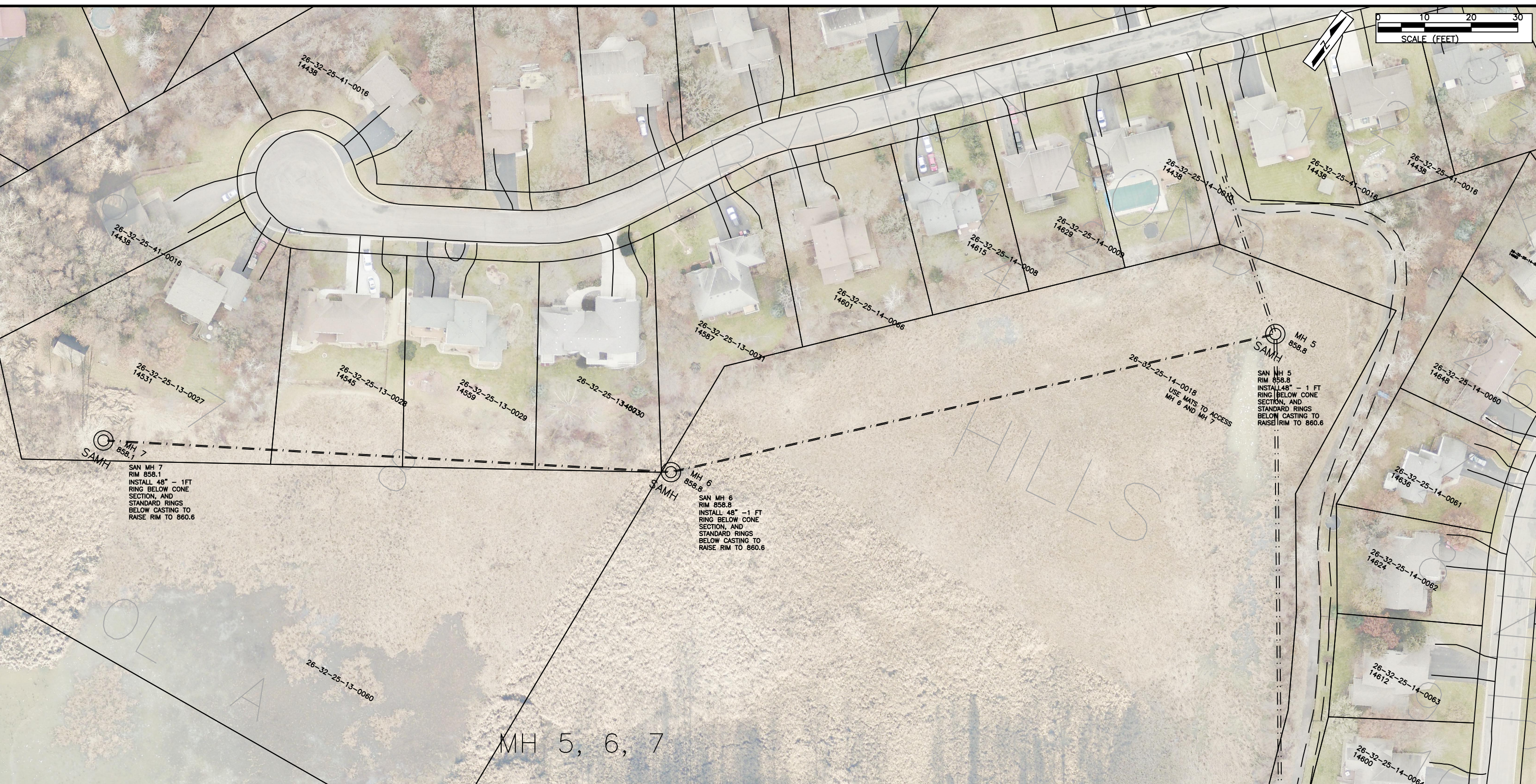
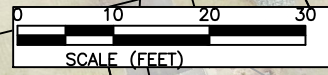
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SANITARY MANHOLE ADJUSTMENTS

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LEGEND

- LOT LINE
- ⊙ SAMH EXISTING SANITARY MANHOLE

NOTE:

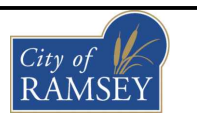
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Donald L. Luten
 Engineer
 Date 01/24/23 Lic. No. 21112

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STORM SEWER & GRADING

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