

CITY OF RAMSEY

BUNKER LAKE BOULEVARD UTILITIES EXTENSION

CITY IMPROVEMENT PROJECT NO. 17-09

GOVERNING SPECIFICATIONS

THE 2016 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.

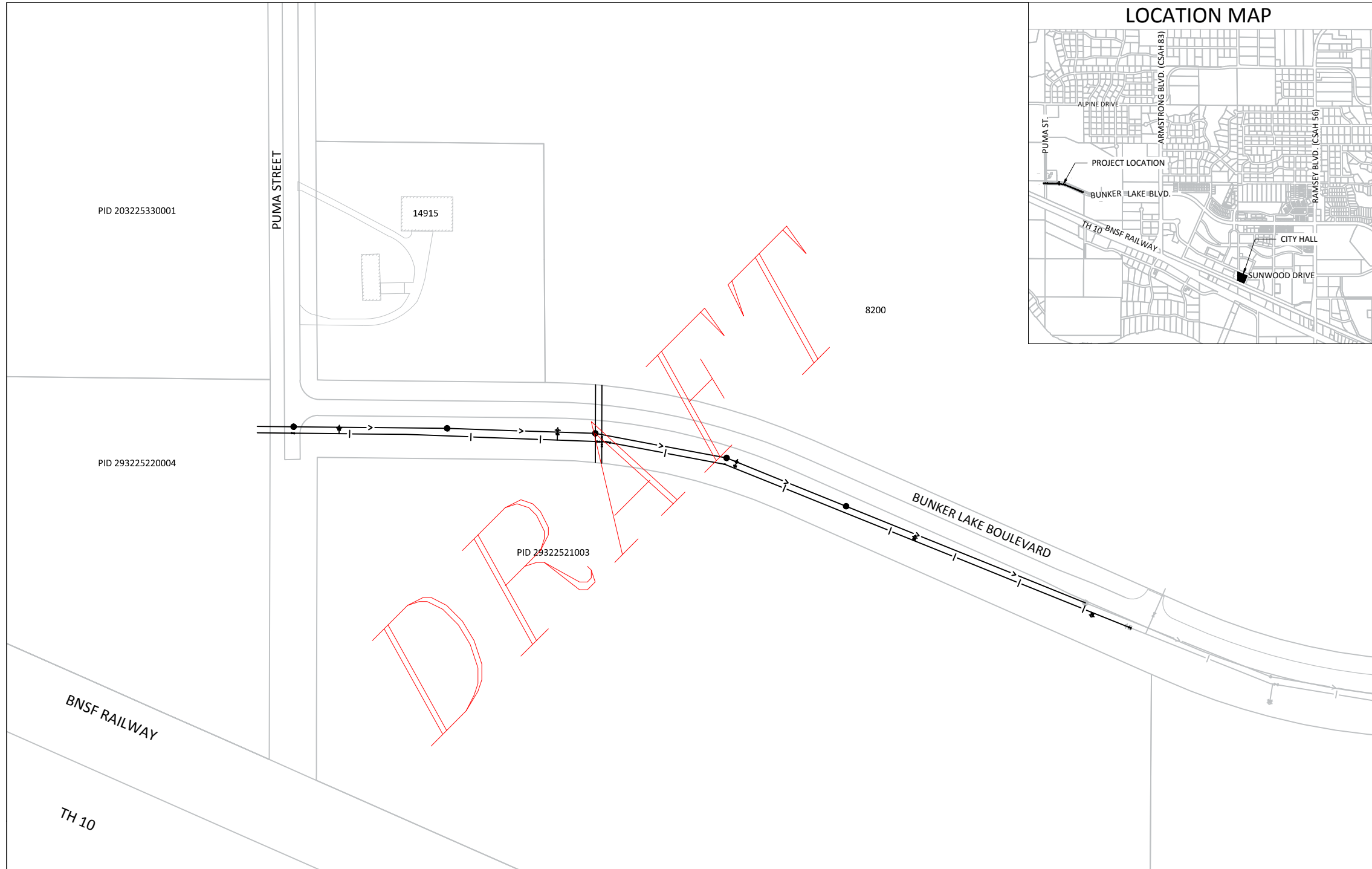
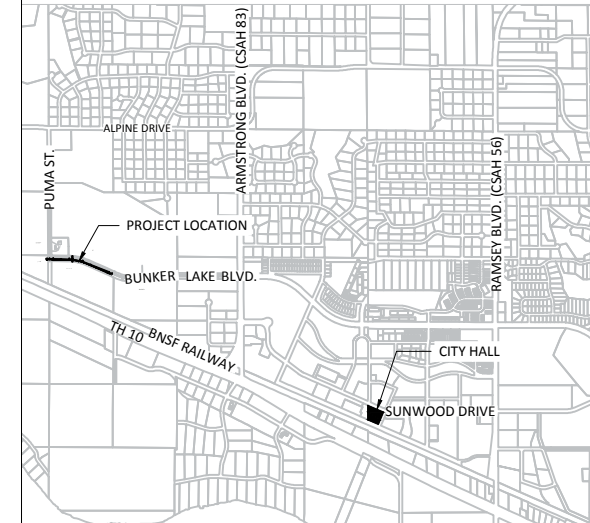
SHEET INDEX

THIS PLAN CONTAINS 7 SHEETS

SHEET No. DESCRIPTION

1	TITLE SHEET
2	STATEMENT OF ESTIMATED QUANTITIES
3-4	DETAILS
5	EXISTING CONDITIONS AND REMOVALS
6	EROSION CONTROL PLAN AND RESTORATION PLAN
7	SANITARY SEWER & WATERMAIN CONSTRUCTION

LOCATION MAP



LEGEND

	LIGHT POLE		EASEMENT
	TREE		RIGHT OF WAY
	SHRUB		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		SPLIT RAIL FENCE
	HYDRANT		LANDSCAPING
	VALVE		RETAINING WALL
			5' CONTOUR LINE
			1' CONTOUR LINE
			SILT FENCE
			CONCRETE CURB & GUTTER
			REMOVE BITUMINOUS PAVEMENT
			EROSION CONTROL BLANKET
			CONCRETE PAVEMENT
			BITUMINOUS PAVEMENT
			GRAVEL SURFACE

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.

BRUCE R WESTBY, P.E.
RAMSEY CITY ENGINEER

40116 DATE
LIC. NO.

DATE	REVISION



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

May 18, 2017 - 2:48pm
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17-09 BUNKER LAKE BOULEVARD UTILITIES EXTENTSION - ESTIMATED QUANTITIES

PAGE NO.	NOTE	ITEM NO.	ITEM	UNIT	ESTIMATED QUANTITY
		2021.501	MOBILIZATION (6%)	LS	1
		2101.501	CLEARING AND GRUBBING	ACRE	0.04
		2104.501	REMOVE WATERMAIN	LF	10
		2104.505	REMOVE BITUMINOUS PAVEMENT	SY	336
		2104.513	SAWING BITUMINOUS PAVEMENT - FULL DEPTH	LF	330
		2104.523	SALVAGE GATE VALVE & BOX	EA	1
		2104.523	SALVAGE HYDRANT	EA	1
		2105.501	COMMON EXCAVATION (CV)	CY	500
		2105.522	SELECT GRANULAR BORROW (CV)	CY	3500
		2105.601	UTILITY DEWATERING	LS	1
		2211.503	AGGREGATE BASE CLASS 5 (CV)	CY	404
		2503.511	8" PVC PIPE SEWER (SDR 26)	LF	120
		2503.511	18" PVC PIPE SEWER (SDR 26)	LF	1332
		2503.602	8" PIPE PLUG (SANITARY)	EA	2
		2503.602	18" PIPE PLUG (SANITARY)	EA	1
		2503.602	CONNECT TO EXISTING MANHOLE (SANITARY)	EA	1
		2503.603	CLEAN AND VIDEO TAPE PIPE SEWER (SANITARY)	LF	1350
		2504.602	6" GATE VALVE & BOX	EA	4
		2504.602	8" GATE VALVE & BOX	EA	2
		2504.602	16" GATE VALVE & BOX	EA	4
		2504.602	FURNISH HYDRANT	EA	4
		2504.602	INSTALL HYDRANT	EA	5
		2504.602	CONNECT TO EXISTING WATERMAIN	EA	1
		2504.603	6" WATERMAIN DUCTILE IRON CL 53	LF	45
		2504.603	8" WATERMAIN DUCTILE IRON CL 52	LF	121
		2504.603	16" WATERMAIN DUCTILE IRON CL 52	LF	1406
		2504.608	DUCTILE IRON FITTINGS	LBS	560
		2506.516	CASTING ASSEMBLY (SANITARY)	EA	5
		2506.521	INSTALL CASTING	EA	5
		2506.601	CONSTRUCT SANITARY STRUCTURE DESIGN 48-4007 (0-12')	LF	90
		2563.601	TRAFFIC CONTROL	LS	1
		2573.503	SILT FENCE	LF	500
		2573.530	STORM DRAIN INLET PROTECTION	EA	2
		2573.533	SEDIMENT CONTROL LOG TYPE STRAW	LF	150
		2574.508	FERTILIZER TYPE 3	LBS	276
		2575.502	MNDOT SEED MIXTURE 21-111	LBS	138
		2575.523	EROSION CONTROL BLANKET CATEGORY 3	SY	6696
		2575.605	SEEDING	ACRE	1.38

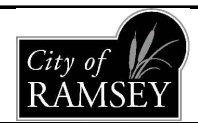
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BRUCE WESTBY
Date 5/18/17 Lic. No.

DESIGNED BY: JJF
DRAWN BY: JJF
CHECKED BY: BRW

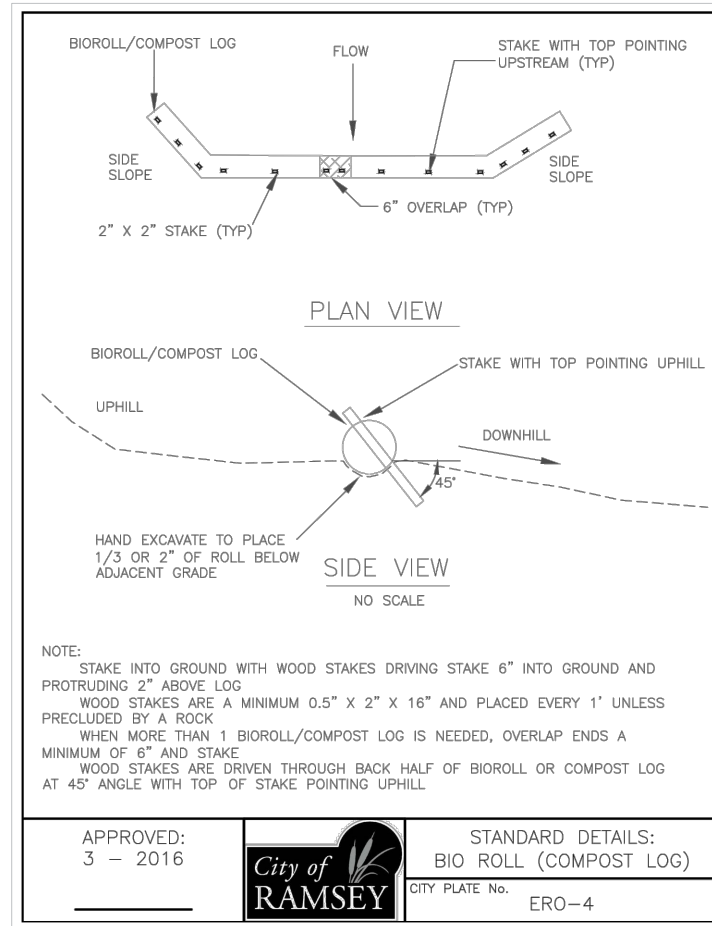
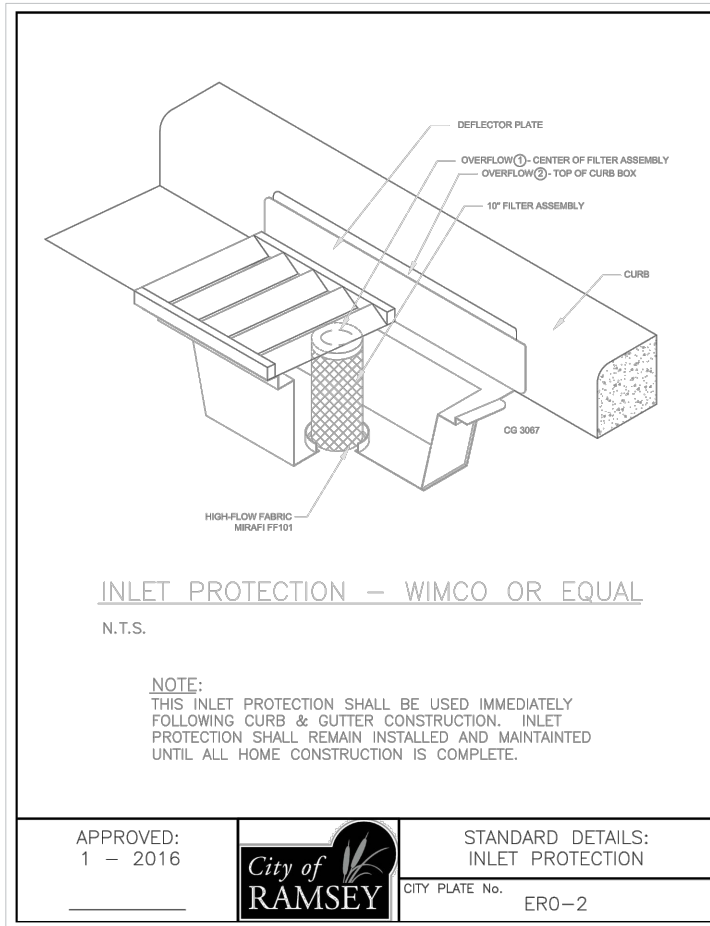
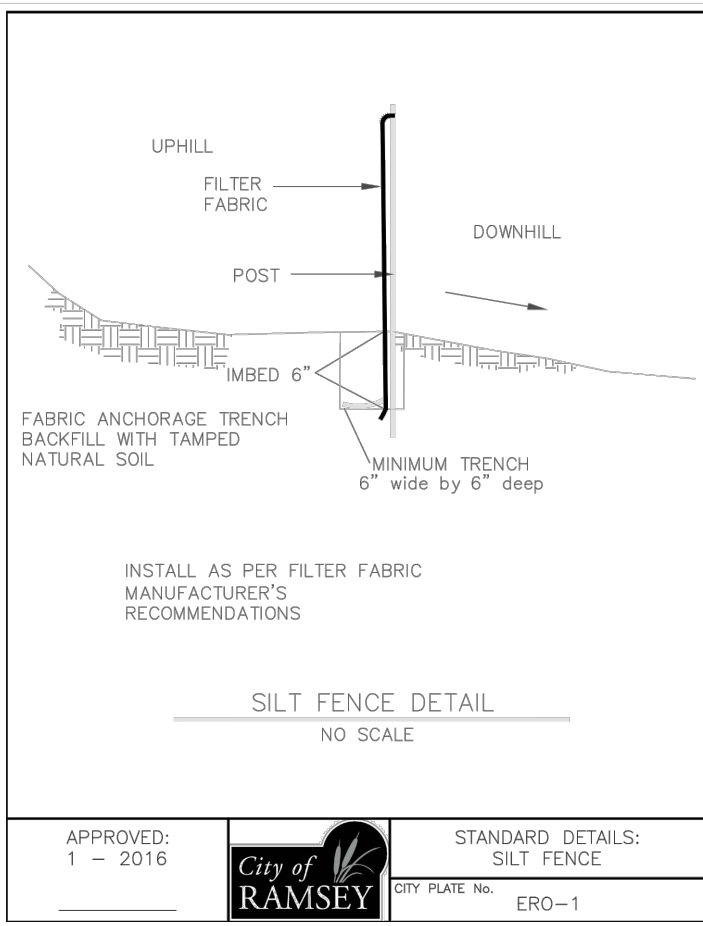
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STATEMENT OF ESTIMATED QUANTITIES

BUNKER LAKE BLVD. UTILITIES EXTENSION
CITY PROJECT NO. 17-09
CITY OF RAMSEY, MINNESOTA

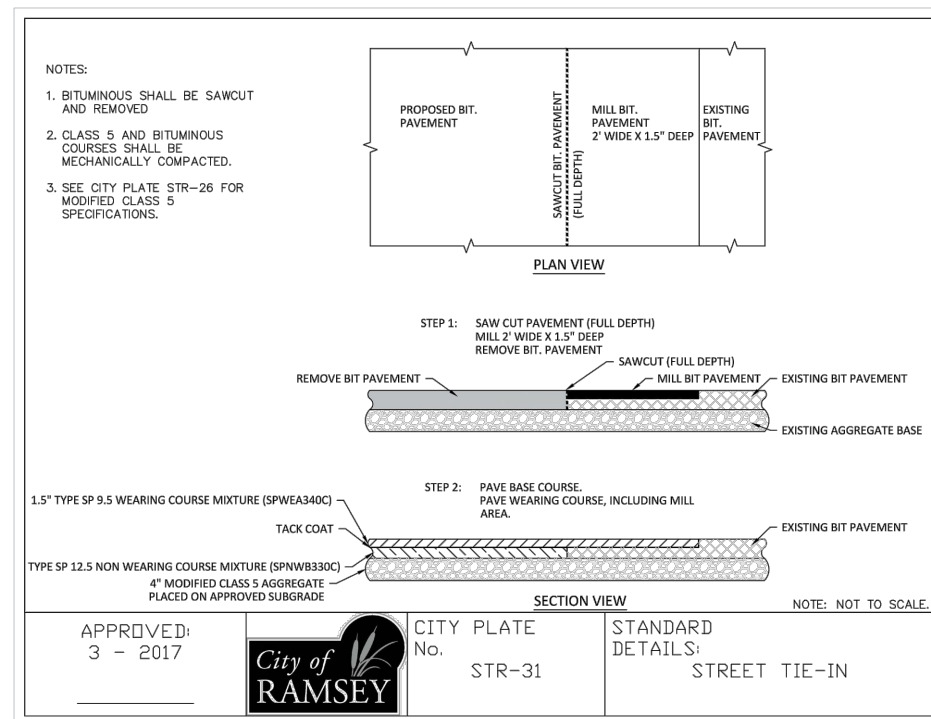


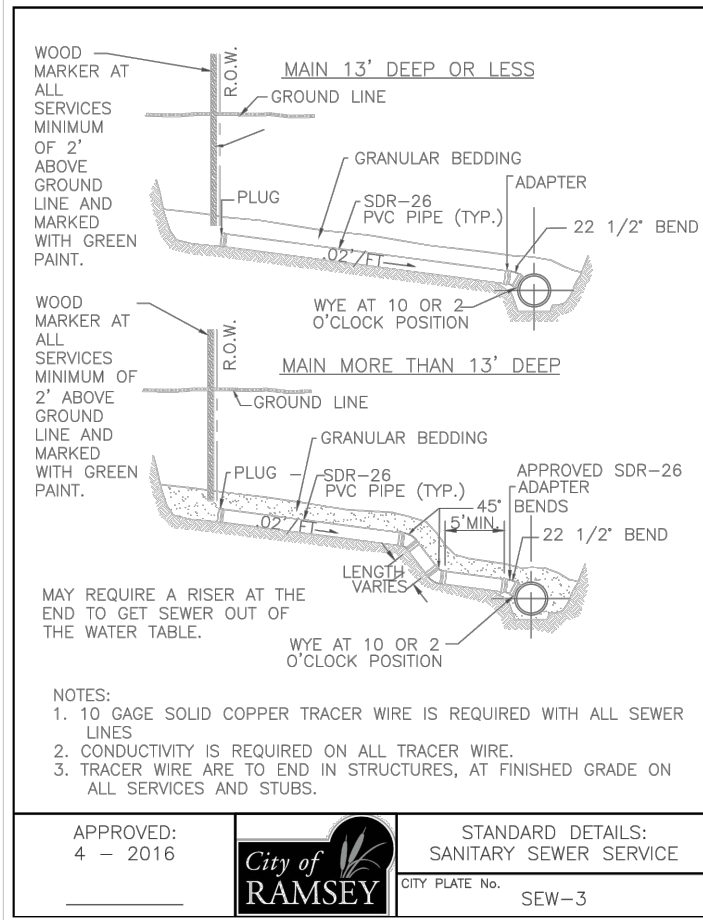
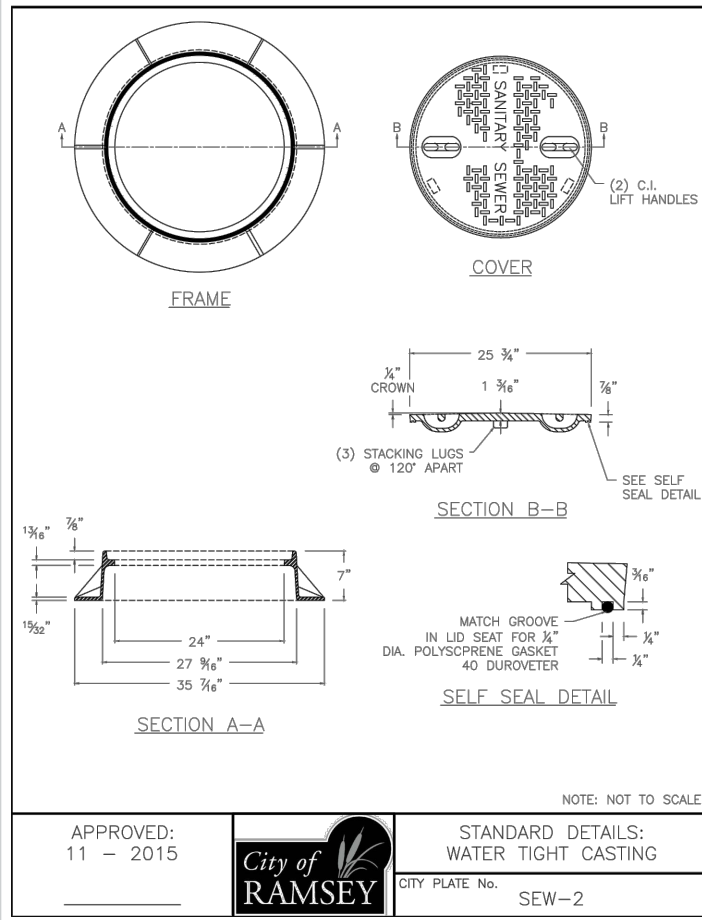
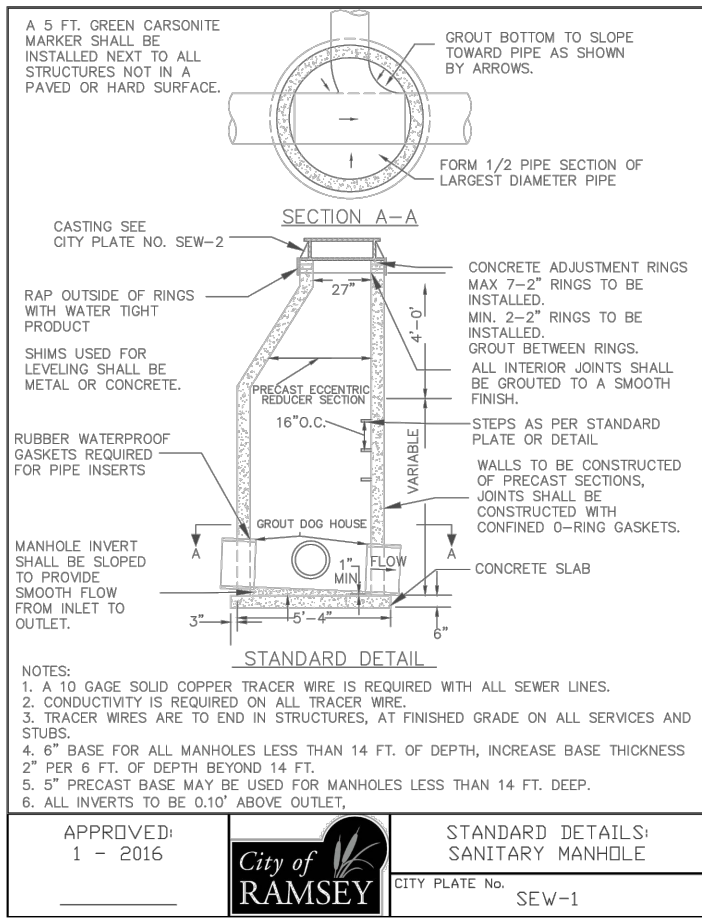
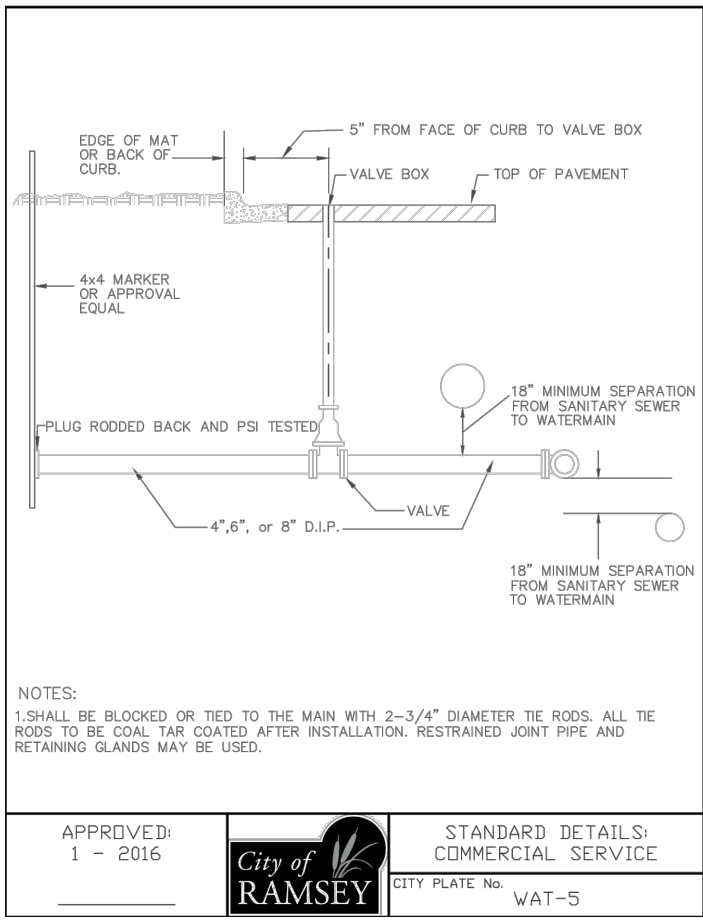
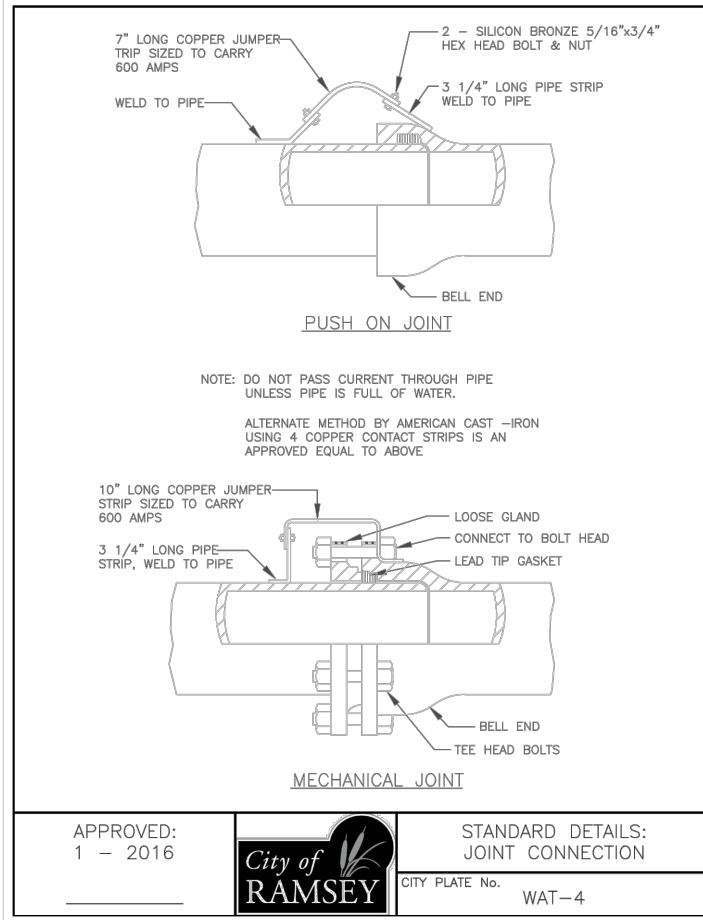
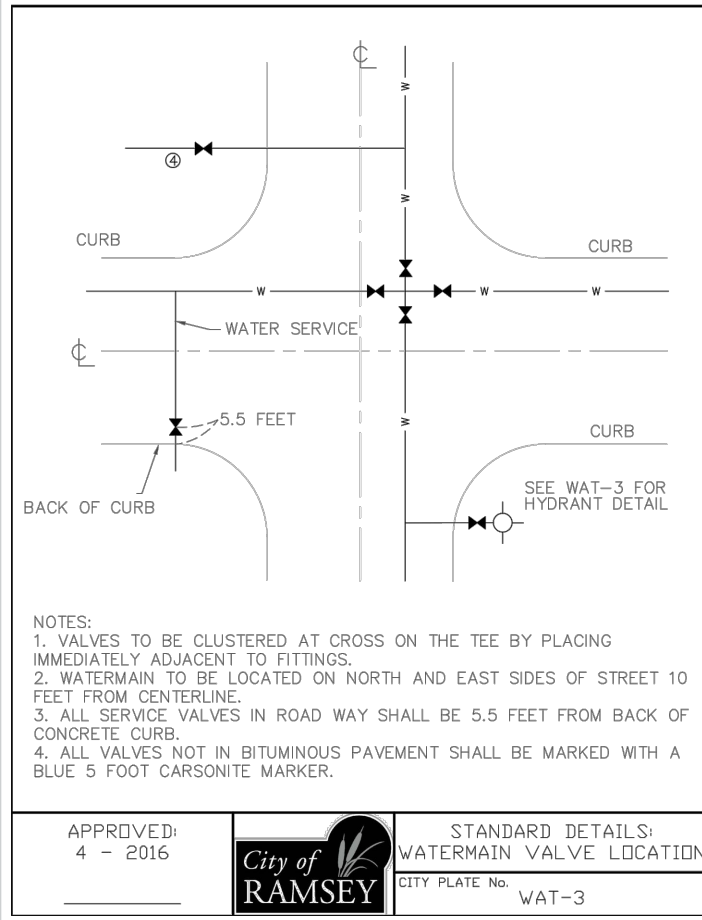
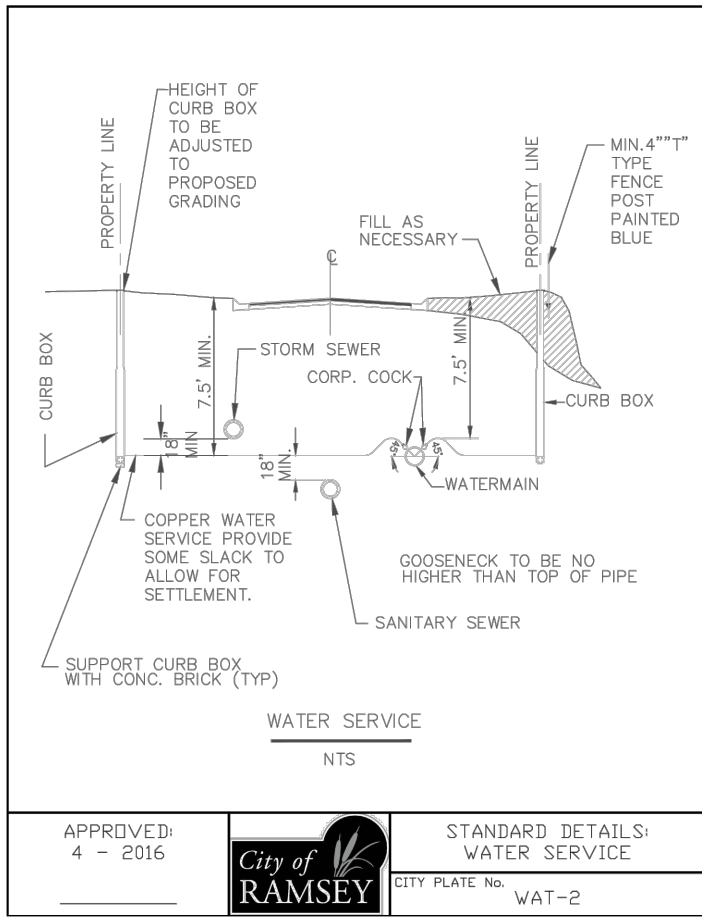
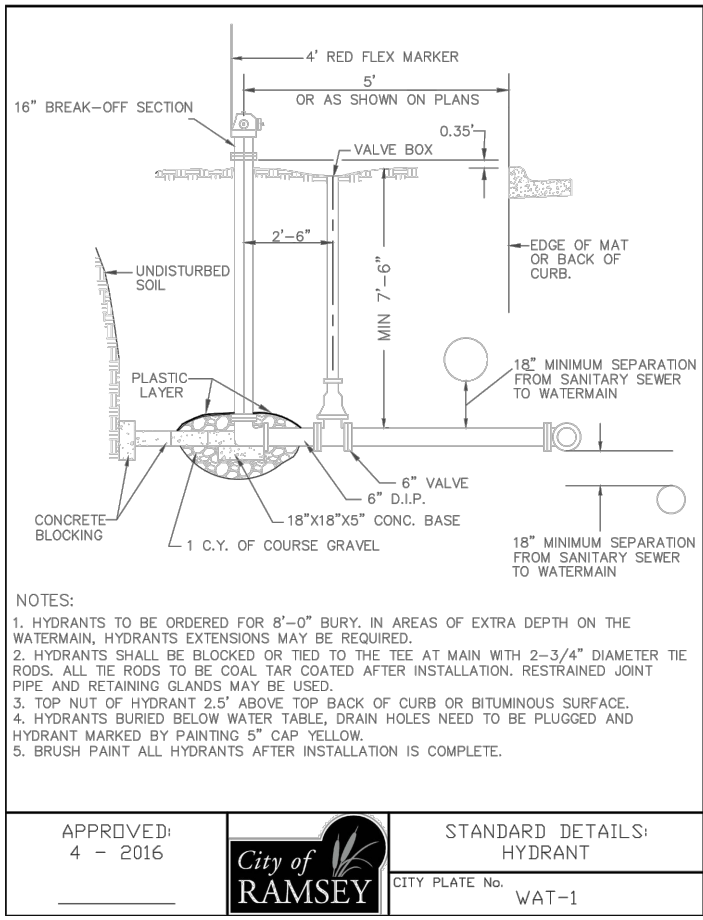
MNDOT 2016 SPEC

MNDOT 2016 SPEC TABLE 3877-1 COMMON TOPSOIL BORROW REQUIREMENT		
REQUIREMENT	RANGE	TEST METHOD
MATERIAL PASSING THE 3/4 IN [19MM]	100%	ASTM D 422
MATERIAL PASSING NO. 4 [4.75MM]	>85%	-
CLAY	5% - 35%	ASTM D 422
SILT	5% - 70%	ASTM D 422
SAND	10% - 75%	ASTM D 422
ORGANIC MATTER	3% - 15%	ASTM D 2974
pH	6.1-7.8	ASTM G 51

NOTE:
1. INSTALLATION OF 4" OF TOPSOIL MEETING MNDOT SPECIFICATION 3877A COMMON TOPSOIL BORROW, MAY BE REQUIRED ACROSS ALL DISTURBED AREAS.
2. A SOIL CERTIFICATION FROM A GEOTECHNICAL FIRM MUST BE PROVIDED VERIFYING THE TOPSOIL MEETS SPECIFICATION ALONG WITH LOAD TICKETS TO VERIFY THE SOURCE OF MATERIAL AND QUANTITY.
3. TOPSOIL MUST COME FROM A CITY APPROVED SOURCE.

APPROVED: 1 - 2016
CITY OF RAMSEY
CITY PLATE No. ERO-6
STANDARD DETAILS: TOPSOIL REQUIREMENTS





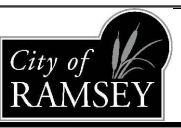
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CITY OF RAMSEY
 7550 SUNWOOD DRIVE
 RAMSEY, MN 55303
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DETAILS

BUNKER LAKE BLVD. UTILITIES EXTENSION
 CITY PROJECT NO. 17-09
 CITY OF RAMSEY, MINNESOTA



PUMA STREET

14915

8200

REMOVE BITUMINOUS PAVEMENT
SAWCUT - FULL DEPTH

REMOVE BITUMINOUS PAVEMENT
SAWCUT - FULL DEPTH

BUNKER LAKE BOULEVARD

CLEAR AND GRUB TREES
0.04 ACRES

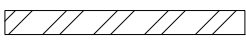





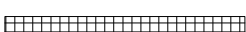





PID 29322521003

REMOVE BITUMINOUS PAVEMENT
SAWCUT - FULL DEPTH

REMOVE WATERMAIN

SALVAGE HYDRANT
SALVAGE GATE VALVE & BOX

LEGEND

	REMOVE BITUMINOUS PAVEMENT		EXISTING GROUND CONTOUR
	REMOVE WATERMAIN		EXISTING 1' CONTOUR LINE
	SAWCUT PAVEMENT		EXISTING 5' CONTOUR LINE
	CLEAR AND GRUB TREES		OVERHEAD ELECTRIC LINE
	SALVAGE HYDRANT		UNDERGROUND ELECTRIC LINE
	SALVAGE GATE VALVE & BOX		TELECOMMUNICATIONS LINE

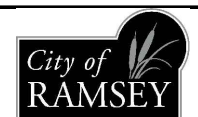
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EXISTING CONDITIONS AND REMOVALS

BUNKER LAKE BLVD. UTILITIES EXTENSION
CITY PROJECT NO. 17-09
CITY OF RAMSEY, MINNESOTA



PUMA STREET

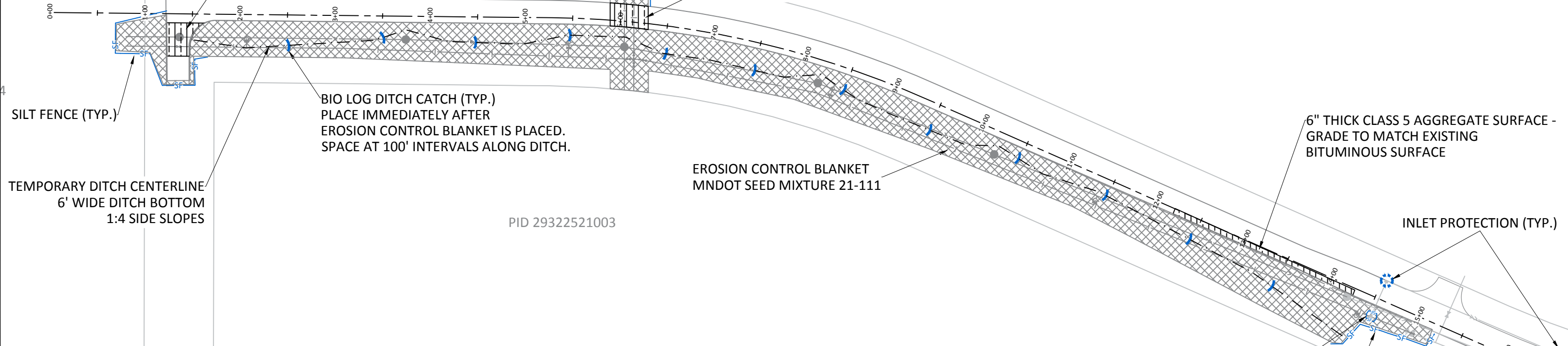
14915

8200

6" THICK CLASS 5 AGGREGATE SURFACE -
GRADE TO MATCH EXISTING
BITUMINOUS SURFACE

6" THICK CLASS 5 AGGREGATE SURFACE -
GRADE TO MATCH EXISTING
BITUMINOUS SURFACE

BUNKER LAKE BOULEVARD



SILT FENCE (TYP.)

TEMPORARY DITCH CENTERLINE
6' WIDE DITCH BOTTOM
1:4 SIDE SLOPES

BIO LOG DITCH CATCH (TYP.)
PLACE IMMEDIATELY AFTER
EROSION CONTROL BLANKET IS PLACED.
SPACE AT 100' INTERVALS ALONG DITCH.

EROSION CONTROL BLANKET
MNDOT SEED MIXTURE 21-111

PID 29322521003

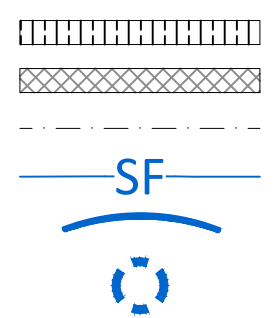
6" THICK CLASS 5 AGGREGATE SURFACE -
GRADE TO MATCH EXISTING
BITUMINOUS SURFACE

INLET PROTECTION (TYP.)

SILT FENCE (TYP.)

SILT FENCE (TYP.)

LEGEND



GRAVEL SURFACE

EROSION CONTROL BLANKET

TEMPORARY DITCH CENTERLINE

SILT FENCE

BIO LOG DITCH CATCH

INLET PROTECTION

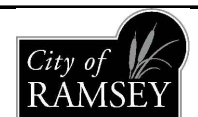
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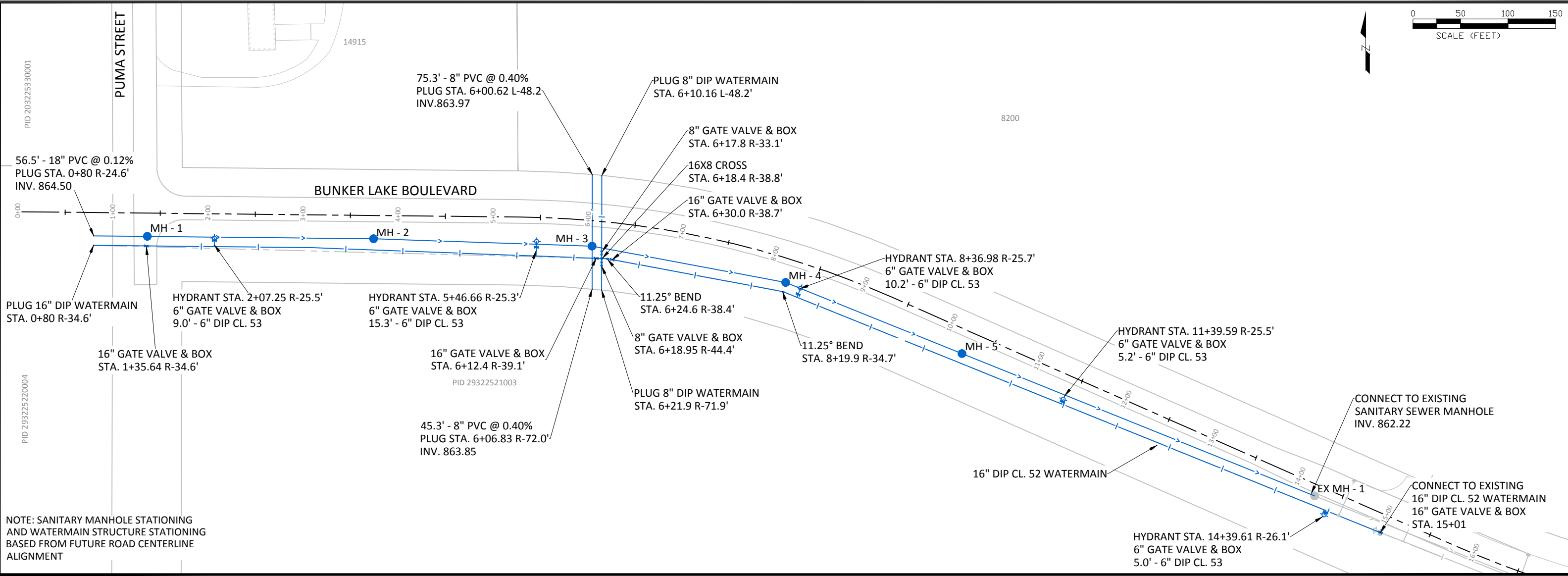
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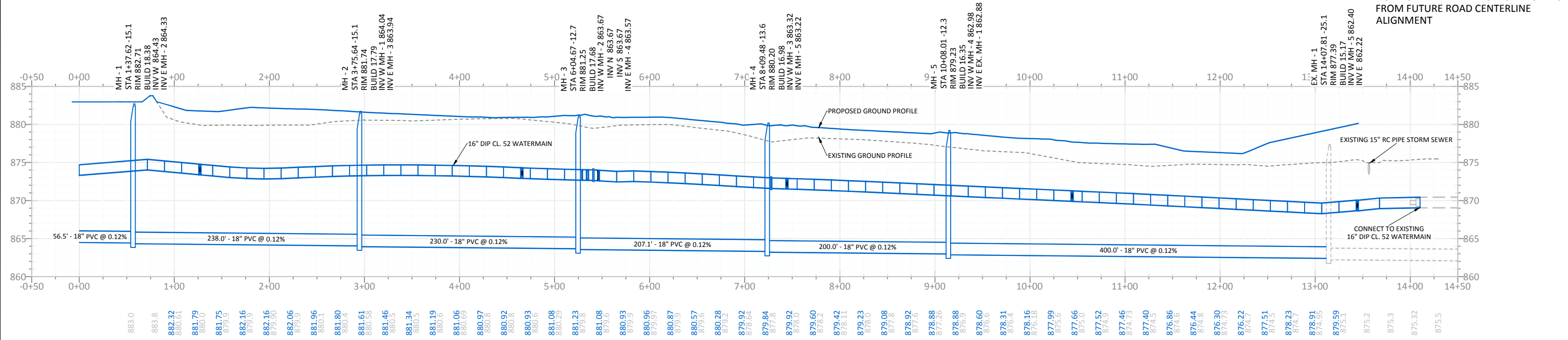
EROSION CONTROL PLAN AND RESTORATION PLAN

BUNKER LAKE BLVD. UTILITIES EXTENSION
CITY PROJECT NO. 17-09
CITY OF RAMSEY, MINNESOTA



NOTE: SANITARY MANHOLE STATIONING AND WATERMAIN STRUCTURE STATIONING BASED FROM FUTURE ROAD CENTERLINE ALIGNMENT

PROPOSED WATERMAIN ALIGNMENT



NOTE: SANITARY MANHOLE STATIONING FROM FUTURE ROAD CENTERLINE ALIGNMENT

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May 18, 2017 - 2:50pm	G:\Engineering\AutoCad Dwg\Projects A-M\Bunker Lake Blvd Utilities Extension - 2017\Plan Drawings\Water and Sewer Plan.dwg

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SANITARY SEWER & WATERMAIN CONSTRUCTION

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SHEET 7 OF 7 SHEETS