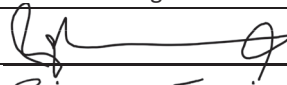
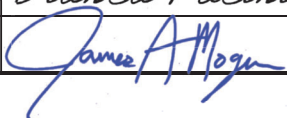


REQUEST FOR SIGNATURE FORM

Request for Signature	County Manager
1. Type of document	Cooperative/Maintenance/Revenue Agreement
2. Aspen PO, contract or document number	
3. Original contract number	PUBW2022-07R
4. Contractor or grantor name	White Bear Township
5. Contractor Aspen ID # and CERT SVN and/or DUN #	
6. Requesting business unit	PUBW
Additional business unit	
7. Authority (required - DO NOT leave blank)	Admin Code: Resolution Number: B2022-013
8. Program/project/service/grant name	
9. Brief description of goods, services or grant duties (will be used for the County Board monthly contract report)	Reconstruction and On-going Maintenance of South Shore Boulevard - 280 feet west of Bellaire Avenue to County Road F
10. Original contract start date	
11. Original contract end date	12/31/72
12. Amendment number and amendment start date	
13. Amendment end date	
14. Contract type	
15. Original contract amount	\$ 1,171,438.99
16. Previous amendment(s) total	
17. Amendment amount	
18. New total contract value	\$ 1,171,438.99
19. Funding string	17304 550880 00000 314101 P033447
Funding source	Local
20. Revenue agreement budgeted amount	\$ 1,171,438.99
21. County contact and phone number	Joey Lundquist 651-266-7213
22. Signatures	
Department Preparer	Tina Westling Date: 05/20/22
Interim Department Director	 Date: 5/20/22
Finance Analyst	Bianca Fucini Date: 6/3/22
Attorney	 Date: REVIEWED By TONY LUTGEN at 8:14 am, May 20, 2022

**RAMSEY COUNTY
COOPERATIVE AND MAINTENANCE AGREEMENT
WITH THE TOWNSHIP OF WHITE BEAR TOWNSHIP FOR
Reconstruction of South Shore Boulevard
Ramsey County Project # P8025**

Total Project Cost:	\$9,445,714.55
Ramsey County Cost:	\$7,735,620.76
White Bear Township Cost:	\$1,171,438.99

Attachments:

- A – Bid Tab
- B – Project Location Map
- C – Drainage Ownership

This Agreement is between the White Bear Township, a township form of government ("Township") and Ramsey County, a political subdivision of the State of Minnesota, ("County") for the reconstruction of South Shore Boulevard ("Project").

RECITALS

1. The Project is identified in Ramsey County's 2022 – 2026 Transportation Improvement Program.
2. The subject road between 280 feet west of Bellaire Avenue and County Road F is located within the Township.

AGREEMENTS

1. Responsibility for Design Engineering
 - 1.1 Plans, specifications, and proposals will be prepared in accordance with Mn/DOT State Aid requirements.
 - 1.2 Except for those portions identified in Section 1.2.1, the County will prepare plans, specifications, and proposals for the Project, which will include, among other things, the proposed reconstruction, alignment, profiles, grades, cross sections, paving, concrete curb and gutter, storm sewer, storm water

treatment, pedestrian curb ramps, turf establishment, street lighting, and utility adjustments.

1.2.1 The Township will prepare plans and specifications for the watermain to be incorporated into the plans and specifications prepared by the County.

1.3 Plans for the Project showing proposed construction will be presented to the Township and will be on file at Ramsey County Public Works Department.

1.4 Any costs associated with Project revisions after the completion of plans and specifications will be paid for by the party requesting the revisions. Revisions are subject to approval by the County.

2. Responsibility for the Right of Way Plan and Acquisition

2.1 The County will prepare a right of way acquisition plan showing easements and other property interests required for construction of the Project in accordance with Mn/DOT State Aid standards.

2.2 The County will acquire the proposed easements and right of way in accordance with Mn/DOT State Aid requirements.

3. Procurement and Award of Contract

3.1 The County will take bids in accordance with state law and County procedures.

3.2 The County will prepare an abstract of bids and a cost participation summary based on the lowest responsible bidder's proposal and will provide the same to the Township.

3.3 The Township, subject to receipt and review of bids, shall agree to the award of contract to the responsible bidder that has been recommended by the County. The Township's approval of contract award shall be limited solely to that portion of the contract dealing with Township watermain as described in the plans and specifications set forth in paragraph 1.2.1. Should the Township not approve the contract, the County shall remove the Township utility portion of the contract, as described in paragraph 1.2.1, prior to award of the contract.

3.4 The County will award a contract, and pay the contractor from the State funds, County funds and local funds identified for the Project.

4. Responsibility for Construction Engineering

4.1 Except for those portions identified in Section 4.1.1, the County shall perform or contract the performance of the construction engineering for all elements of the Project.

4.1.1 The Township will provide construction engineering for Township watermain at its own expense. Township shall have the authority to supervise all work performed concerning Township watermain.

5. Project Costs

5.1 The County shall pay for 100% of the costs for the roadway construction. The Township shall pay for the Township utility costs.

5.2 A list of the construction pay items and percentages of Township funding responsibility as well as the total estimated Township Project cost is attached as Exhibit A (Engineer's Estimate). Quantities and unit prices in Exhibit A are estimates. Actual costs shall be based on the contract unit prices and the quantities constructed.

5.3 Mobilization, Traffic Control, Traffic Control Supervisor are defined collectively as the "Prorated Items". The Township percentage of the Prorated Items is calculated as follows:

$$\text{Township \% Prorated Items} = \frac{(\text{Township Cost excluding the Prorated Items Cost})}{(\text{Total Project Cost excluding the Prorated Items Cost})}$$

5.4 The costs in the Prorated Items calculation will be based on contract unit prices and quantities at the time of contract award. No adjustments in the percentages will be made if unit prices or quantities vary during construction.

5.5 Design Engineering Costs

5.5.1. The County shall pay for 100% of the design engineering costs for the roadway. The township shall pay their engineer separately for the township's watermain design costs.

5.6. Right of Way Acquisition Costs

5.6.1. The County shall pay 100% of the Right of Way acquisition costs.

5.7. Construction Engineering Costs

- 5.7.1. The County shall pay 100% for the construction engineering fees not related to the construction of Township watermain.

6. Payment Schedule

- 6.1. The County will submit invoices to the Township's consulting engineer on the fifteenth day of each month. The Township's consulting engineers shall then prepare a progress payment request for the Township Board to approve.
 - 6.1.1 In the event of change orders, no change order related to Township watermain shall be effective until the change order has been approved by resolution of the Township Board. Any invoices relating to change orders shall be paid within thirty (30) days of Township approval of said invoices pursuant to the procedures set forth in 6.1.
 - 6.1.2 The Township shall retain, from any payment, an amount equal to 5% of the payment then due. No retention shall occur if the County has already withheld the retained amount. Retainage related Township watermain, whether held by the County or by the Township shall only be released upon resolution of the Township Board.
- 6.2 Payment will be made according to the terms set forth in paragraph 6.1 set forth above.
- 6.3 Final payment. No final payment shall be made to contractors until such time as the Township Board has approved said payment by resolution.

7. Ownership and Maintenance Responsibility for Project Elements

- 7.1. Ownership and Maintenance Responsibility of the Roadway
 - 7.2.1.1 The County will own the roadway and associated roadway elements located within the County Right of Way, until the roadway is turned back to the Township.
- 7.2. Ownership and Maintenance Responsibility of the Storm Sewer (catch basins and leads, main, infiltration systems, ponding, water treatment)

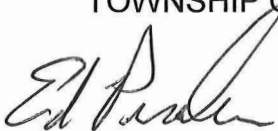
- 7.2.1. The County and Township shall own and maintain their respective elements of the storm sewer system as identified in Attachment C and as follows.
 - 7.2.2. The Township and County shall each maintain the components of the storm sewer system under their respective ownership.
 - 7.2.2.1 The Township shall own and maintain the following Underground Drainage Best Management Practices (BMPs):
BMP #6 near sta. 87+50
 - 7.1.2.2. The County shall own the following components of the storm sewer system:
Infiltration basin 05
- 7.3. Ownership and Maintenance of the Sanitary Sewer and Watermain
The Township will own and maintain the sanitary sewer and watermain systems including services.
- 7.4. Ownership and Maintenance of the Street Lights
The Township will own and maintain the street lights.
- 7.7. Ownership and Maintenance of the Trail
 - 7.7.1. Subject to the Township entering into a joint power's agreement with the City of Birchwood concerning snow removal and trail maintenance, including but not limited to trail resurfacing. The Township will own and maintain the trail, including snow removal and trail resurfacing.
- 8. The Township grants the County temporary construction permits over all Township owned rights-of-way and property within the limits of the Project for use during construction at no cost to the County.
- 9. The Township and County shall indemnify, defend, and hold each other harmless against any and all liability, losses, costs, damages, expenses, claims, or actions, including attorney's fees, which the indemnified party, its officials, agents, or employees may hereafter sustain, incur, or be required to pay, arising out of or by reason of any act or omission of the indemnifying party, its officials, agents, or employees, in the execution, performance, or failure to adequately perform the indemnifying party's obligation pursuant to this Agreement. Nothing in this Agreement shall constitute a waiver by the County

or the Township of any statutory or common law immunities, limits, or exceptions on liability.

10. This Agreement shall remain in full force and effect until terminated by mutual agreement of the parties.

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TOWNSHIP OF WHITE BEAR, MINNESOTA

By: 
Town Chair

Date: _____

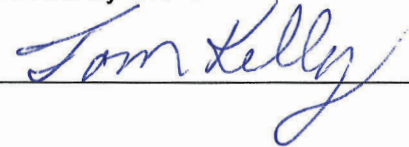
By: 
Town Clerk

Date: 5-17-22

By: 
Public Works Director

Date: 5/17/2022

Approved by the Office of Financial Services:

By: 

Approved as to Form:

By: 
Township Attorney

RAMSEY COUNTY, MINNESOTA

 signing on behalf of Date: 6/7/2022

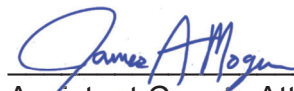
Ryan T. O'Connor, County Manager

Approval recommended:



Brian Isaacson, Interim Director
Public Works Department

Approved as to form:



Assistant County Attorney

ITEM NO.	ITEM DESCRIPTION	UNIT	TOTAL ESTIMATE D QUANTITY	UNIT COST	TOTAL ESTIMATED COST	RAMSEY COUNTY			CITY OF WHITE BEAR LAKE			WHITE BEAR TOWNSHIP		
						ROADWAY		STORM SEWER	NON-PARTICIPATING		ESTIMATED COST	NON-PARTICIPATING		ESTIMATED COST
						ESTIMATE D QUANTITY	ESTIMATED COST	ESTIMATE D QUANTITY	ESTIMATE D QUANTITY	ESTIMATED COST	ESTIMATE D QUANTITY	ESTIMATE D QUANTITY	ESTIMATED COST	ESTIMATE D QUANTITY
2011.601	CONSTRUCTION SURVEYING	LUMP SUM	1	\$ 61,682.00	\$ 61,682.00	1	\$ 61,682.00			\$ -			\$ -	
2011.601	AS BUILT	LUMP SUM	1	\$ 15,404.00	\$ 15,404.00	1	\$ 15,404.00			\$ -			\$ -	
2021.501	MOBILIZATION	LUMP SUM	1	\$ 331,513.63	\$ 331,513.63	0.74	\$ 245,320.09		0.08	\$ 26,521.09		0.18	\$ 59,672.45	
2031.502	FIELD OFFICE	EACH	1	\$ 12,000.00	\$ 12,000.00	1	\$ 12,000.00			\$ -			\$ -	
2101.505	CLEARING	ACRE	0.5	\$ 17,500.00	\$ 8,750.00	0.5	\$ 8,750.00			\$ -			\$ -	
2101.505	GRUBBING	ACRE	0.5	\$ 2,500.00	\$ 1,250.00	0.5	\$ 1,250.00			\$ -			\$ -	
2101.524	CLEARING	EACH	26	\$ 700.00	\$ 18,200.00	22	\$ 15,400.00			\$ -		4	\$ 2,800.00	
2101.524	GRUBBING	EACH	26	\$ 150.00	\$ 3,900.00	22	\$ 3,300.00			\$ -		4	\$ 600.00	
2103.502	DISCONNECT WATER SERVICE	EACH	3	\$ 284.00	\$ 852.00	0	\$ -		3	\$ 852.00			\$ -	
2104.502	REMOVE GATE VALVE & BOX	EACH	15	\$ 186.50	\$ 2,797.50	0	\$ -		0	\$ -		15	\$ 2,797.50	
2104.502	REMOVE CURB STOP & BOX	EACH	73	\$ 75.25	\$ 5,493.25	0	\$ -		2	\$ 150.50		71	\$ 5,342.75	
2104.502	REMOVE VALVE BOX	EACH	1	\$ 188.00	\$ 188.00	0	\$ -		0	\$ -		0	\$ -	
2104.502	REMOVE HYDRANT	EACH	2	\$ 560.00	\$ 1,120.00	0	\$ -		2	\$ 1,120.00		0	\$ -	
2104.502	REMOVE DRAINAGE STRUCTURE	EACH	15	\$ 411.00	\$ 6,165.00	15	\$ 6,165.00		0	\$ -		0	\$ -	
2104.502	REMOVE DELINEATOR / MARKER	EACH	2	\$ 35.00	\$ 70.00	2	\$ 70.00		0	\$ -		0	\$ -	
2104.502	REMOVE SIGN	EACH	58	\$ 40.00	\$ 2,320.00	58	\$ 2,320.00		0	\$ -		0	\$ -	
2104.502	REMOVE SIGN TYPE SPECIAL	EACH	9	\$ 50.00	\$ 450.00	9	\$ 450.00		0	\$ -		0	\$ -	
2104.502	REMOVE MAIL BOX SUPPORT	EACH	78	\$ 125.00	\$ 9,750.00	78	\$ 9,750.00		0	\$ -		0	\$ -	
2104.502	SALVAGE HYDRANT & VALVE	EACH	1	\$ 746.50	\$ 746.50	1	\$ 746.50		0	\$ -		0	\$ -	
2104.502	SALVAGE HYDRANT	EACH	5	\$ 560.00	\$ 2,800.00	0	\$ -		0	\$ -		5	\$ 2,800.00	
2104.502	SALVAGE LIGHTING UNIT	EACH	1	\$ 1,703.00	\$ 1,703.00	0	\$ -		1	\$ 1,703.00		0	\$ -	
2104.502	SALVAGE SIGN	EACH	8	\$ 40.00	\$ 320.00	8	\$ 320.00		0	\$ -		0	\$ -	
2104.502	SALVAGE SIGN TYPE SPECIAL	EACH	5	\$ 50.00	\$ 250.00	5	\$ 250.00		0	\$ -		0	\$ -	
2104.502	SALVAGE MAIL BOX SUPPORT	EACH	78	\$ 125.00	\$ 9,750.00	78	\$ 9,750.00		0	\$ -		0	\$ -	
2104.503	SAWING CONCRETE PAVEMENT (FULL DEPTH)	LIN FT	950	\$ 3.50	\$ 3,325.00	950	\$ 3,325.00		0	\$ -		0	\$ -	
2104.503	SAWING BIT PAVEMENT (FULL DEPTH)	LIN FT	2050	\$ 2.00	\$ 4,100.00	2050	\$ 4,100.00		0	\$ -		0	\$ -	
2104.503	REMOVE WATER MAIN	LIN FT	4578	\$ 7.50	\$ 34,335.00	0	\$ -		28	\$ 210.00		4550	\$ 34,125.00	
2104.503	REMOVE SEWER PIPE (STORM)	LIN FT	2325	\$ 18.50	\$ 43,012.50	0	\$ -		2325	\$ 43,012.50		0	\$ -	
2104.503	REMOVE SEWER PIPE (SANITARY)	LIN FT	2325	\$ 8.20	\$ 19,065.00	0	\$ -		2325	\$ 19,065.00		0	\$ -	
2104.503	REMOVE CURB & GUTTER	LIN FT	2000	\$ 2.50	\$ 5,000.00	2000	\$ 5,000.00		0	\$ -		0	\$ -	
2104.503	REMOVE FENCE	LIN FT	110	\$ 6.00	\$ 660.00	110	\$ 660.00		0	\$ -		0	\$ -	
2104.503	REMOVE GUARDRAIL	LIN FT	295	\$ 16.00	\$ 4,720.00	295	\$ 4,720.00		0	\$ -		0	\$ -	
2104.503	REMOVE WATER SERVICE PIPE	LIN FT	1688	\$ 3.30	\$ 5,504.40	0	\$ -		0	\$ -		1688	\$ 5,504.40	
2104.503	SALVAGE CHAIN LINK FENCE	LIN FT	65	\$ 8.00	\$ 520.00	65	\$ 520.00		0	\$ -		0	\$ -	
2104.503	SALVAGE WOODEN FENCE	LIN FT	130	\$ 8.00	\$ 1,040.00	130	\$ 1,040.00		0	\$ -		0	\$ -	
2104.503	SALVAGE RETAINING WALL	LIN FT	167	\$ 16.00	\$ 2,672.00	0	\$ -		0	\$ -		167	\$ 2,672.00	
2104.504	REMOVE CONCRETE DRIVEWAY PAVEMENT	SQ YD	1100	\$ 9.60	\$ 10,560.00	1015	\$ 9,744.00		0	\$ -		85	\$ 816.00	
2104.504	REMOVE CONCRETE PAVEMENT	SQ YD	150	\$ 10.25	\$ 1,537.50	150	\$ 1,537.50		0	\$ -		0	\$ -	
2104.504	REMOVE BITUMINOUS DRIVEWAY PAVEMENT	SQ YD	3800	\$ 4.20	\$ 15,960.00	3736	\$ 15,691.20		0	\$ -		64	\$ 268.80	
2104.504	REMOVE BITUMINOUS PAVEMENT	SQ YD	34422	\$ 4.50	\$ 154,899.00	34422	\$ 154,899.00		0	\$ -		0	\$ -	
2104.507	REMOVE RIPRAP	CU YD	20	\$ 35.75	\$ 715.00	20	\$ 715.00		0	\$ -		0	\$ -	

2104.507	REMOVE CONCRETE STEPS	CU YD	1	\$	219.50	\$	219.50	1	\$	219.50	0	\$	-	0	\$	-	0	\$	-
2104.518	REMOVE BITUMINOUS WALK	SQ FT	3600	\$	0.50	\$	1,800.00	3600	\$	1,800.00	0	\$	-	0	\$	-	0	\$	-
2104.518	REMOVE CONCRETE SIDEWALK	SQ FT	600	\$	0.90	\$	540.00	600	\$	540.00	0	\$	-	0	\$	-	0	\$	-
2104.602	RELOCATE MONUMENT	EACH	4	\$	230.50	\$	922.00	0	\$	-	0	\$	-	2	\$	461.00	2	\$	461.00
2104.602	REMOVE & REPLACE IRRIGATION SYSTEM	EACH	1	\$	1,000.00	\$	1,000.00	0	\$	-	0	\$	-	0	\$	-	1	\$	1,000.00
2104.602	SALVAGE & INSTALL DRIVEWAY LIGHTS	EACH	2	\$	1,271.00	\$	2,542.00	2	\$	2,542.00	0	\$	-	0	\$	-	0	\$	-
2104.603	RELOCATE SPRINKLER SYSTEM	LIN FT	200	\$	10.00	\$	2,000.00	200	\$	2,000.00	0	\$	-	0	\$	-	0	\$	-
2104.618	SALVAGE CONCRETE PAVERS	SQ FT	800	\$	4.50	\$	3,600.00	800	\$	3,600.00	0	\$	-	0	\$	-	0	\$	-
2104.618	SALVAGE BRICK PAVERS	SQ FT	2000	\$	4.50	\$	9,000.00	1876	\$	8,442.00	0	\$	-	0	\$	-	124	\$	558.00
2105.504	GEOTEXTILE FABRIC TYPE 1	SQ YD	1750	\$	2.80	\$	4,900.00	0	\$	-	1750	\$	4,900.00	0	\$	-	0	\$	-
2105.601	DEWATERING	LUMP SUM	1	\$	21,657.00	\$	21,657.00	0	\$	-	0.1	\$	2,165.70	0.1	\$	2,165.70	0.8	\$	17,325.60
2106.507	EXCAVATION - COMMON	CU YD	17600	\$	26.25	\$	462,000.00	16600	\$	435,750.00	0	\$	-	0	\$	-	1000	\$	26,250.00
2106.507	EXCAVATION - MUCK	CU YD	210	\$	26.25	\$	5,512.50	210	\$	5,512.50	0	\$	-	0	\$	-	0	\$	-
2106.507	EXCAVATION - SUBGRADE	CU YD	200	\$	26.25	\$	5,250.00	200	\$	5,250.00	0	\$	-	0	\$	-	0	\$	-
2106.507	SELECT GRANULAR EMBANKMENT (CV)	CU YD	10982	\$	28.50	\$	312,987.00	9857	\$	280,924.50	0	\$	-	0	\$	-	1125	\$	32,062.50
2106.507	COMMON EMBANKMENT (CV)	CU YD	851	\$	2.90	\$	2,467.90	851	\$	2,467.90	0	\$	-	0	\$	-	0	\$	-
2106.609	HAUL AND DISPOSE CONTAMINATED SOIL	TON	50	\$	37.00	\$	1,850.00	50	\$	1,850.00	0	\$	-	0	\$	-	0	\$	-
2112.604	SUBGRADE PREPARATION	SQ YD	125	\$	4.90	\$	612.50	125	\$	612.50	0	\$	-	0	\$	-	0	\$	-
2123.610	TRACTOR MOUNTED BACKHOE	hour	20	\$	195.00	\$	3,900.00	0	\$	-	0	\$	-	0	\$	-	20	\$	3,900.00
2123.610	STREET SWEEPER (WITH PICKUP BROOM)	hour	50	\$	155.00	\$	7,750.00	50	\$	7,750.00	0	\$	-	0	\$	-	0	\$	-
2130.523	WATER	M GALLON	100	\$	42.50	\$	4,250.00	100	\$	4,250.00	0	\$	-	0	\$	-	0	\$	-
2211.507	AGGREGATE BASE (CV) CLASS 5	CU YD	8506	\$	46.50	\$	395,529.00	8256	\$	383,904.00	0	\$	-	0	\$	-	250	\$	11,625.00
2301.504	CONCRETE PAVEMENT 7.0"	SQ YD	125	\$	86.00	\$	10,750.00	125	\$	10,750.00	0	\$	-	0	\$	-	0	\$	-
2301.508	SUPPLEMENTAL PAVEMENT REINFORCEMENT	POUND	125	\$	3.50	\$	437.50	125	\$	437.50	0	\$	-	0	\$	-	0	\$	-
2301.602	DRILL & GROUT DOWEL BAR (EPOXY COATED)	EACH	55	\$	6.00	\$	330.00	55	\$	330.00	0	\$	-	0	\$	-	0	\$	-
2301.602	DRILL & GROUT REINF BAR (EPOXY COATED)	EACH	49	\$	12.00	\$	588.00	49	\$	588.00	0	\$	-	0	\$	-	0	\$	-
2360.509	TYPE SP 9.5 WEARING COURSE MIX (2:B)	TON	418	\$	130.00	\$	54,340.00	407	\$	52,910.00	0	\$	-	0	\$	-	11	\$	1,430.00
2360.509	TYPE SP 9.5 WEARING COURSE MIX (3:C)	TON	2406	\$	90.50	\$	217,743.00	2406	\$	217,743.00	0	\$	-	0	\$	-	0	\$	-
2360.509	TYPE SP 12.5 WEARING COURSE MIX (3:C)	TON	3386	\$	85.00	\$	287,810.00	3386	\$	287,810.00	0	\$	-	0	\$	-	0	\$	-
2411.602	CONCRETE SPILLWAY	EACH	7	\$	440.00	\$	3,080.00	7	\$	3,080.00	0	\$	-	0	\$	-	0	\$	-
2411.603	INSTALL RETAINING WALL	LIN FT	167	\$	35.00	\$	5,845.00	0	\$	-	0	\$	-	0	\$	-	167	\$	5,845.00
2411.603	CONCRETE EDGE STRIP	LIN FT	54	\$	137.00	\$	7,398.00	54	\$	7,398.00	0	\$	-	0	\$	-	0	\$	-
2411.607	CONCRETE STEPS	CU YD	1	\$	2,500.00	\$	2,500.00	1	\$	2,500.00	0	\$	-	0	\$	-	0	\$	-
2433.601	TEMPORARY STRUCTURAL SUPPORT	LUMP SUM	5	\$	2,050.00	\$	10,250.00	0	\$	-	0	\$	-	0	\$	-	5	\$	10,250.00
2451.607	SPECIAL FILTER AGGREGATE (LV)	CU YD	750	\$	104.50	\$	78,375.00	0	\$	-	750	\$	78,375.00	0	\$	-	0	\$	-
2501.502	8" GS PIPE APRON	EACH	35	\$	501.00	\$	17,535.00	0	\$	-	35	\$	17,535.00	0	\$	-	0	\$	-
2501.502	15" RC PIPE APRON	EACH	4	\$	2,829.00	\$	11,316.00	0	\$	-	4	\$	11,316.00	0	\$	-	0	\$	-
2501.502	24" RC PIPE APRON	EACH	1	\$	2,298.00	\$	2,298.00	0	\$	-	1	\$	2,298.00	0	\$	-	0	\$	-
2501.502	27" RC PIPE APRON	EACH	1	\$	2,467.00	\$	2,467.00	0	\$	-	1	\$	2,467.00	0	\$	-	0	\$	-
2501.503	8" CAS PIPE CULVERT	LIN FT	511	\$	42.25	\$	21,589.75	0	\$	-	511	\$	21,589.75	0	\$	-	0	\$	-
2502.503	24" PERF PE PIPE DRAIN (SMOOTH)	LIN FT	809	\$	58.25	\$	47,124.25	0	\$	-	809	\$	47,124.25	0	\$	-	0	\$	-

2503.503	15" PVC PIPE SEWER	LIN FT	153 \$	71.75 \$	10,977.75 \$	0 \$	153 \$	10,977.75	0 \$	-	0 \$	-	0 \$	-
2503.503	51" SPAN RC PIPE-ARCH SEWER CL IIA	LIN FT	24 \$	359.50 \$	8,628.00	0 \$	24 \$	8,628.00	0 \$	-	0 \$	-	0 \$	-
2503.503	15" RC PIPE SEWER DES 3006 CL V	LIN FT	4611 \$	71.50 \$	329,686.50	0 \$	4611 \$	329,686.50	0 \$	-	0 \$	-	0 \$	-
2503.503	18" RC PIPE SEWER DES 3006	LIN FT	1338 \$	78.75 \$	105,367.50	0 \$	1338 \$	105,367.50	0 \$	-	0 \$	-	0 \$	-
2503.503	21" RC PIPE SEWER DES 3006	LIN FT	155 \$	89.75 \$	13,911.25	0 \$	155 \$	13,911.25	0 \$	-	0 \$	-	0 \$	-
2503.503	24" RC PIPE SEWER DES 3006	LIN FT	1181 \$	102.50 \$	121,052.50	0 \$	1181 \$	121,052.50	0 \$	-	0 \$	-	0 \$	-
2503.503	27" RC PIPE SEWER DES 3006	LIN FT	66 \$	135.00 \$	8,910.00	0 \$	66 \$	8,910.00	0 \$	-	0 \$	-	0 \$	-
2503.503	30" RC PIPE SEWER DES 3006	LIN FT	163 \$	152.00 \$	24,776.00	0 \$	163 \$	24,776.00	0 \$	-	0 \$	-	0 \$	-
2503.602	CONNECT TO EXISTING SANITARY SEWER	EACH	1 \$	1,728.00 \$	1,728.00	0 \$	0 \$	-	0 \$	-	0 \$	-	1 \$	1,728.00
2503.602	CONNECT TO EXISTING STORM SEWER	EACH	9 \$	600.00 \$	5,400.00	0 \$	9 \$	5,400.00	0 \$	-	0 \$	-	0 \$	-
2503.602	8" x 4" PVC PIPE SEWER WYE (SDR 26)	EACH	13 \$	605.00 \$	7,865.00	0 \$	0 \$	-	13 \$	7,865.00	0 \$	-	0 \$	-
2503.603	SANITARY SEWER SPOT REPAIR	LIN FT	200 \$	66.00 \$	13,200.00	0 \$	0 \$	-	0 \$	-	200 \$	-	13,200.00	
2503.603	15" PVC SLOTTED DRAIN	LIN FT	114 \$	897.50 \$	102,315.00	0 \$	114 \$	102,315.00	0 \$	-	0 \$	-	0 \$	-
2503.603	4" PVC SANITARY SERVICE PIPE	LIN FT	24 \$	51.75 \$	1,242.00	0 \$	0 \$	-	0 \$	-	24 \$	-	1,242.00	
2503.603	4" PVC SANITARY SERVICE PIPE (SDR 26)	LIN FT	410 \$	61.50 \$	25,215.00	0 \$	0 \$	-	410 \$	25,215.00	0 \$	-	0 \$	-
2503.603	8" PVC PIPE SEWER (SDR 26)	LIN FT	759 \$	88.00 \$	66,792.00	0 \$	0 \$	-	759 \$	66,792.00	0 \$	-	0 \$	-
2504.601	TEMPORARY WATER SERVICE	LUMP SUM	1 \$	34,295.00 \$	34,295.00	0 \$	0 \$	-	0 \$	-	1 \$	-	34,295.00	
2504.601	ENGINEER ALLOWANCE FOR WATERMAIN	LUMP SUM	1 \$	50,000.00 \$	50,000.00	0 \$	0 \$	-	0 \$	-	1 \$	-	50,000.00	
2504.602	RECONNECT WATER SERVICE	EACH	3 \$	284.00 \$	852.00	0 \$	0 \$	-	0 \$	-	3 \$	-	852.00	
2504.602	WATERMAIN OFFSET	EACH	6 \$	2,888.00 \$	17,328.00	0 \$	0 \$	-	0 \$	-	0 \$	-	6 \$	17,328.00
2504.602	CONNECT TO EXISTING WATER MAIN	EACH	9 \$	962.50 \$	8,662.50	0 \$	0 \$	-	0.5 \$	481.25	8.5 \$	-	8,181.25	
2504.602	HYDRANT	EACH	2 \$	7,891.00 \$	15,782.00	0 \$	0 \$	-	1.5 \$	11,836.50	0.5 \$	-	3,945.50	
2504.602	INSTALL HYDRANT	EACH	5 \$	1,549.00 \$	7,745.00	0 \$	0 \$	-	0 \$	-	5 \$	-	7,745.00	
2504.602	ADJUST VALVE BOX	EACH	6 \$	183.00 \$	1,098.00	6 \$	0 \$	1,098.00	0 \$	-	0 \$	-	0 \$	-
2504.602	6" PIPE PLUG	EACH	8 \$	492.00 \$	3,936.00	0 \$	0 \$	-	0 \$	-	8 \$	-	3,936.00	
2504.602	1" CORPORATION STOP	EACH	71 \$	962.50 \$	68,337.50	0 \$	0 \$	-	1 \$	962.50	70 \$	-	67,375.00	
2504.602	6" GATE VALVE & BOX	EACH	6 \$	2,585.00 \$	15,510.00	0 \$	0 \$	-	0.5 \$	1,292.50	5.5 \$	-	14,217.50	
2504.602	8" GATE VALVE & BOX	EACH	16 \$	3,406.00 \$	54,496.00	0 \$	0 \$	-	0 \$	-	16 \$	-	54,496.00	
2504.602	WATERMAIN SERVICE OFFSET	EACH	2 \$	852.00 \$	1,704.00	0 \$	0 \$	-	0 \$	-	2 \$	-	1,704.00	
2504.602	ADJUST CURB STOP	EACH	12 \$	79.00 \$	948.00	0 \$	0 \$	-	12 \$	948.00	0 \$	-	0 \$	-
2504.602	1" CURB STOP & BOX	EACH	70 \$	713.00 \$	49,910.00	0 \$	0 \$	-	0 \$	-	70 \$	-	49,910.00	
2504.602	8" INTERCONNECT VALVE AND BOX	EACH	2 \$	3,888.00 \$	7,776.00	0 \$	0 \$	-	1 \$	3,888.00	1 \$	-	3,888.00	
2504.602	VALVE BOX (AND BONNET W/ BONNET HOLDER)	EACH	1 \$	1,510.00 \$	1,510.00	0 \$	0 \$	-	1 \$	1,510.00	0 \$	-	0 \$	-
2504.602	6" SADDLE (1" SERVICE)	EACH	1 \$	962.50 \$	962.50	0 \$	0 \$	-	1 \$	962.50	0 \$	-	0 \$	-
2504.602	6" GATE VALVE & BOX (BONNET, & BONNET HOLDER)	EACH	3 \$	3,066.00 \$	9,198.00	0 \$	0 \$	-	3 \$	9,198.00	0 \$	-	0 \$	-
2504.602	1" CURB STOP & BOX (NO ROD)	EACH	2 \$	713.00 \$	1,426.00	0 \$	0 \$	-	2 \$	1,426.00	0 \$	-	0 \$	-
2504.603	1" TYPE K COPPER PIPE	LIN FT	1826 \$	44.75 \$	81,713.50	0 \$	0 \$	-	30 \$	1,342.50	1796 \$	-	80,371.00	
2504.603	6" WATERMAIN DUCTILE IRON CL 52	LIN FT	176 \$	87.00 \$	15,312.00	0 \$	0 \$	-	104 \$	9,048.00	72 \$	-	6,264.00	
2504.603	8" WATERMAIN DUCTILE IRON CL 52	LIN FT	4150 \$	97.50 \$	404,625.00	0 \$	0 \$	-	0 \$	-	4150 \$	-	404,625.00	
2504.604	4" POLYSTYRENE INSULATION	SQ YD	365 \$	52.75 \$	19,253.75	0 \$	0 \$	-	15 \$	791.25	350 \$	-	18,462.50	
2504.608	DUCTILE IRON FITTINGS	POUND	3162 \$	18.75 \$	59,287.50	0 \$	0 \$	-	322 \$	6,037.50	2840 \$	-	53,250.00	
2506.502	CONST DRAINAGE STRUCTURE DESIGN N	EACH	18 \$	2,741.00 \$	49,338.00	0 \$	18 \$	49,338.00	0 \$	-	0 \$	-	0 \$	-
2506.502	CONST DRAINAGE STRUCTURE DESIGN SPEC 1	EACH	1 \$	10,066.00 \$	10,066.00	0 \$	1 \$	10,066.00	0 \$	-	0 \$	-	0 \$	-
2506.502	CONST DRAINAGE STRUCTURE DESIGN SPEC 2	EACH	6 \$	12,078.00 \$	72,468.00	0 \$	6 \$	72,468.00	0 \$	-	0 \$	-	0 \$	-
2506.502	CASTING ASSEMBLY	EACH	65 \$	1,299.00 \$	84,435.00	0 \$	64 \$	83,136.00	1 \$	1,299.00	0 \$	-	0 \$	-
2506.502	ADJUST FRAME & RING CASTING	EACH	27 \$	485.50 \$	13,108.50	26 \$	0 \$	12,623.00	0 \$	-	1 \$	-	485.50	
2506.503	CONST DRAINAGE STRUCTURE DES 48-4020	LIN FT	269 \$	876.50 \$	235,778.50	0 \$	269 \$	235,778.50	0 \$	-	0 \$	-	0 \$	-

2506.503	CONST DRAINAGE STRUCTURE DES 60-4020	LIN FT	32	\$	1,230.00	\$	39,360.00		0	\$	-		32	\$	39,360.00		0	\$	-		0	\$	-
2506.503	CONST DRAINAGE STRUCTURE DES 72-4020	LIN FT	26	\$	1,649.00	\$	42,874.00		0	\$	-		26	\$	42,874.00		0	\$	-		0	\$	-
2506.503	CONST DRAINAGE STRUCTURE DES 84-4020	LIN FT	11	\$	1,854.00	\$	20,394.00		0	\$	-		11	\$	20,394.00		0	\$	-		0	\$	-
2506.503	CONST DRAINAGE STRUCTURE DES 96-4020	LIN FT	6	\$	3,272.00	\$	19,632.00		0	\$	-		6	\$	19,632.00		0	\$	-		0	\$	-
2506.503	RECONSTRUCT DRAINAGE STRUCTURE	LIN FT	10	\$	2,227.00	\$	22,270.00		0	\$	-		10	\$	22,270.00		0	\$	-		0	\$	-
2506.602	RAINGUARDIAN	EACH	5	\$	3,285.00	\$	16,425.00		0	\$	-		5	\$	16,425.00		0	\$	-		0	\$	-
2506.602	CASTING ASSEMBLY SPECIAL	EACH	20	\$	104.00	\$	2,080.00		0	\$	-		0	\$	-		0	\$	-		20	\$	2,080.00
2506.602	48" SANITARY SEWER MANHOLE DESIGN F (W/ CASTING)	EACH	3	\$	10,122.00	\$	30,366.00		0	\$	-		0	\$	-		3	\$	30,366.00		0	\$	-
2511.504	GEOTEXTILE FILTER TYPE 4	SQ YD	131.2	\$	5.70	\$	747.84		0	\$	-		131.2	\$	747.84		0	\$	-		0	\$	-
2511.507	RANDOM RIPRAP CLASS II	CU YD	49.3	\$	157.00	\$	7,740.10		0	\$	-		49.3	\$	7,740.10		0	\$	-		0	\$	-
2521.518	6" CONCRETE WALK	SQ FT	4300	\$	15.50	\$	66,650.00		4300	\$	66,650.00		0	\$	-		0	\$	-		0	\$	-
2521.518	3" BITUMINOUS WALK	SQ FT	77700	\$	1.80	\$	139,860.00		77700	\$	139,860.00		0	\$	-		0	\$	-		0	\$	-
2521.602	DRILL & GROUT REINF BAR (EPOXY COATED)	EACH	352	\$	12.00	\$	4,224.00		352	\$	4,224.00		0	\$	-		0	\$	-		0	\$	-
2531.503	CONCRETE CURB & GUTTER DESIGN B412	LIN FT	3570	\$	17.50	\$	62,475.00		3570	\$	62,475.00		0	\$	-		0	\$	-		0	\$	-
2531.503	CONCRETE CURB & GUTTER DESIGN B612	LIN FT	6170	\$	15.50	\$	95,635.00		4510	\$	69,905.00		0	\$	-		1660	\$	25,730.00		0	\$	-
2531.503	CONCRETE CURB & GUTTER DESIGN B618	LIN FT	88	\$	62.25	\$	5,478.00		88	\$	5,478.00		0	\$	-		0	\$	-		0	\$	-
2531.503	CONCRETE CURB & GUTTER DESIGN D412	LIN FT	880	\$	15.50	\$	13,640.00		880	\$	13,640.00		0	\$	-		0	\$	-		0	\$	-
2531.504	6" CONCRETE DRIVEWAY PAVEMENT	SQ YD	1800	\$	78.50	\$	141,300.00		1715	\$	134,627.50		0	\$	-		0	\$	-		85	\$	6,672.50
2531.603	CONCRETE RIBBON CURB DESIGN SPECIAL	LIN FT	5450	\$	16.25	\$	88,562.50		4610	\$	74,912.50		0	\$	-		840	\$	13,650.00		0	\$	-
2531.618	TRUNCATED DOMES	SQ FT	470	\$	47.00	\$	22,090.00		470	\$	22,090.00		0	\$	-		0	\$	-		0	\$	-
2531603/	CONCRETE CURB DESIGN V	LIN FT	25	\$	42.50	\$	1,062.50		25	\$	1,062.50		0	\$	-		0	\$	-		0	\$	-
2540.602	MAIL BOX SUPPORT	EACH	10	\$	125.00	\$	1,250.00		10	\$	1,250.00		0	\$	-		0	\$	-		0	\$	-
2540.602	RELOCATE MAIL BOX SUPPORT	EACH	78	\$	200.00	\$	15,600.00		78	\$	15,600.00		0	\$	-		0	\$	-		0	\$	-
2540.618	INSTALL BRICK PAVERS	SQ FT	2200	\$	10.00	\$	22,000.00		2076	\$	20,760.00		0	\$	-		0	\$	-		124	\$	1,240.00
2545.502	LIGHTING UNIT TYPE SPECIAL 1 WBL	EACH	13	\$	5,921.00	\$	76,973.00		0	\$	-		0	\$	-		13	\$	76,973.00		0	\$	-
2545.502	LIGHT FOUNDATION DESIGN E MODIFIED WBL	EACH	14	\$	1,127.00	\$	15,778.00		0	\$	-		0	\$	-		14	\$	15,778.00		0	\$	-
2545.502	SERVICE CABINET	EACH	1	\$	7,233.00	\$	7,233.00		0	\$	-		0	\$	-		1	\$	7,233.00		0	\$	-
2545.502	EQUIPMENT PAD B	EACH	1	\$	3,528.00	\$	3,528.00		0	\$	-		0	\$	-		1	\$	3,528.00		0	\$	-
2545.503	2" RIGID STEEL CONDUIT	LIN FT	30	\$	53.75	\$	1,612.50		0	\$	-		0	\$	-		30	\$	1,612.50		0	\$	-
2545.503	2" NON-METALLIC CONDUIT	LIN FT	7515	\$	7.90	\$	59,368.50		0	\$	-		0	\$	-		3975	\$	31,402.50		3540	\$	27,966.00
2545.503	UNDERGROUND WIRE 1/C 2 AWG	LIN FT	90	\$	5.60	\$	504.00		0	\$	-		0	\$	-		90	\$	504.00		0	\$	-
2545.503	UNDERGROUND WIRE 1/C 4 AWG	LIN FT	11925	\$	3.20	\$	38,160.00		0	\$	-		0	\$	-		11925	\$	38,160.00		0	\$	-
2545.503	UNDERGROUND WIRE 1/C 14 AWG	LIN FT	3540	\$	1.30	\$	4,602.00		0	\$	-		0	\$	-		0	\$	-		3540	\$	4,602.00
2545.602	INSTALL LIGHTING UNIT	EACH	1	\$	673.50	\$	673.50		0	\$	-		0	\$	-		1	\$	673.50		0	\$	-
2557.603	RAILING DESIGN SPECIAL	LIN FT	846	\$	212.00	\$	179,352.00		846	\$	179,352.00		0	\$	-		0	\$	-		0	\$	-
2563.601	TRAFFIC CONTROL SUPERVISOR	LUMP SUM	1	\$	1,395.00	\$	1,395.00		0.74	\$	1,032.30		0	\$	-		0.08	\$	111.60		0.18	\$	251.10
2563.601	TRAFFIC CONTROL	LUMP SUM	1	\$	8,950.00	\$	8,950.00		0.74	\$	6,623.00		0	\$	-		0.08	\$	716.00		0.18	\$	1,611.00
2563.601	ALTERNATE PEDESTRIAN ROUTE	LUMP SUM	1	\$	500.00	\$	500.00		1	\$	500.00		0	\$	-		0	\$	-		0	\$	-
2563.602	PORTABLE CHANGEABLE MESSAGE SIGN	EACH	2	\$	2,000.00	\$	4,000.00		2	\$	4,000.00		0	\$	-		0	\$	-		0	\$	-
2563.618	CONSTRUCTION SIGN-SPECIAL	SQ FT	25	\$	18.00	\$	450.00		25	\$	450.00		0	\$	-		0	\$	-		0	\$	-
2564.602	INSTALL SIGN	EACH	8	\$	175.00	\$	1,400.00		8	\$	1,400.00		0	\$	-		0	\$	-		0	\$	-
2564.602	INSTALL SIGN TYPE SPECIAL	EACH	14	\$	75.00	\$	1,050.00		14	\$	1,050.00		0	\$	-		0	\$	-		0	\$	-
2564.618	SIGN	SQ FT	492	\$	50.00	\$	24,600.00		489	\$	24,450.00		0	\$	-		3	\$	150.00		0	\$	-

MINNESOTA DEPARTMENT OF TRANSPORTATION

RAMSEY COUNTY, CITY OF WHITE BEAR LAKE & WHITE BEAR TOWNSHIP

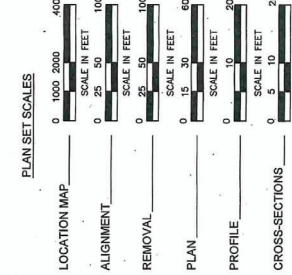
SOUTH SHORE TRAIL

RAMSEY COUNTY PROJECT NO. P-8025

PROJECT LOCATION
RAMSEY COUNTY
METRO DISTRICT

CONSTRUCTION PLANS FOR: BITUMINOUS SURFACING, AGGREGATE BASE, GRADING, ADA IMPROVEMENTS, CONCRETE CURB & GUTTER, STORM SEWER, STORMWATER POND IMPROVEMENTS & LIGHTING
LOCATED ON: SOUTH SHORE BOULEVARD FROM WHITE BEAR AVENUE TO COUNTY ROAD F

- LEGEND**
- EXISTING GATE VALVE
 - EXISTING HYDRANT
 - EXISTING CURB BOX
 - EXISTING WATERMAIN MANHOLE
 - EXISTING SANITARY MANHOLE
 - EXISTING STORM MANHOLE
 - EXISTING CATCH BASIN
 - EXISTING GAS VALVE
 - EXISTING CABLE TV BOX
 - EXISTING TELEPHONE BOX
 - EXISTING POWER POLE
 - EXISTING ELECTRICAL MANHOLE
 - EXISTING LIGHT POLE
 - EXISTING WATERMAIN
 - EXISTING SANITARY SEWER
 - EXISTING STORM SEWER
 - EXISTING GAS MAIN
 - EXISTING CABLE TV
 - EXISTING UNDERGROUND TELEPHONE LINE
 - EXISTING UNDERGROUND POWER
 - EXISTING OVERHEAD POWER
 - EXISTING FIBER LINE
 - EXISTING CURB AND GUTTER
 - EXISTING FENCE
 - EXISTING RIGHT-OF-WAY
 - EXISTING EASEMENT
 - EXISTING MAILBOX
 - EXISTING SOIL BORING
 - EXISTING STREET SIGN
 - EXISTING TREE
 - EXISTING TREE LINE
 - EXISTING CONTOUR
 - PROPOSED CONTOUR
 - DRAINAGE ARROW
 - PROPOSED MANHOLE (STORM/SANITARY)
 - PROPOSED CATCH BASIN
 - PROPOSED WATERMAIN
 - PROPOSED STORM SEWER
 - PROPOSED DRAIN TILE
 - PROPOSED CURB AND GUTTER
 - IN PLACE R/W
 - PROPOSED R/W
 - TEMPORARY EASEMENT
 - PERMANENT EASEMENT
 - PROPERTY LINE
 - LIMITS OF CONSTRUCTION



END SOUTH SHORE TRAIL STA. 88+97.66

CITY BOUNDARY STA. 51+20

BEGIN SOUTH SHORE TRAIL STA. 10+39.29



RANGE 22W

SOUTH SHORE BOULEVARD

GROSS LENGTH	2858.37	FEET/1.488 MILES
EXCEPTION LENGTH		FEET
NET LENGTH	2858.37	FEET/1.488 MILES

NOTE:
THE SUBSURFACE UTILITY INFORMATION IN THIS PLAN IS UTILITY COMPANY PROVIDED. THE QUALITY LEVEL WAS DETERMINED BY THE UTILITY COMPANY AND IS NOT GUARANTEED. THE CONTRACTOR SHALL FOLLOW "STANDARD GUIDELINES FOR THE COLLECTION AND DEPICTION OF EXISTING SUBSURFACE UTILITY DATA".
THE EXACT LOCATION OF UNDERGROUND UTILITIES SHOWN IN THIS PLAN SET ARE UNKNOWN. THE CONTRACTOR SHALL CONTACT Gopher State ONE PRIOR TO STARTING ANY EXCAVATION.
GOPHER STATE ONE CALL SYSTEM: 1-800-252-1166

GOVERNING SPECIFICATIONS
THE 2020 EDITION OF THE MINNESOTA DEPARTMENT OF TRANSPORTATION "STANDARD SPECIFICATIONS FOR CONSTRUCTION" SHALL GOVERN. ALL TRAFFIC CONTROL DEVICES SHALL BE IN ACCORDANCE WITH THE MINNESOTA TRAFFIC CONTROL MANUAL. TRAFFIC CONTROL DEVICES, INCLUDING "FIELD MANUAL FOR TEMPORARY TRAFFIC CONTROL ZONE LAYOUTS".

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27-30	MISCELLANEOUS DETAILS
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39-46	IMPROVEMENTS AND UTILITY PLAN
47-54	ALIGNMENT PLANS AND TABULATIONS
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THIS PLAN SET CONTAINS 258 SHEETS (INCLUDING CITY AND TOWNSHIP UTILITY PLANS)

Kimley-Horn

I HEREBY CERTIFY THAT THIS PLAN 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.

DATE 02/07/2022 L.C. NO. 22814
ENGINEER Gregory S. Brown, P.E.

APPROVED 2/17/2022
RAMSEY COUNTY ENGINEER

APPROVED 2/19/2022
CITY OF WHITE BEAR LAKE ENGINEER

Dale Reed

Digitally signed by Dale Reed
Date: 2022.02.15 09:40:02 -0500

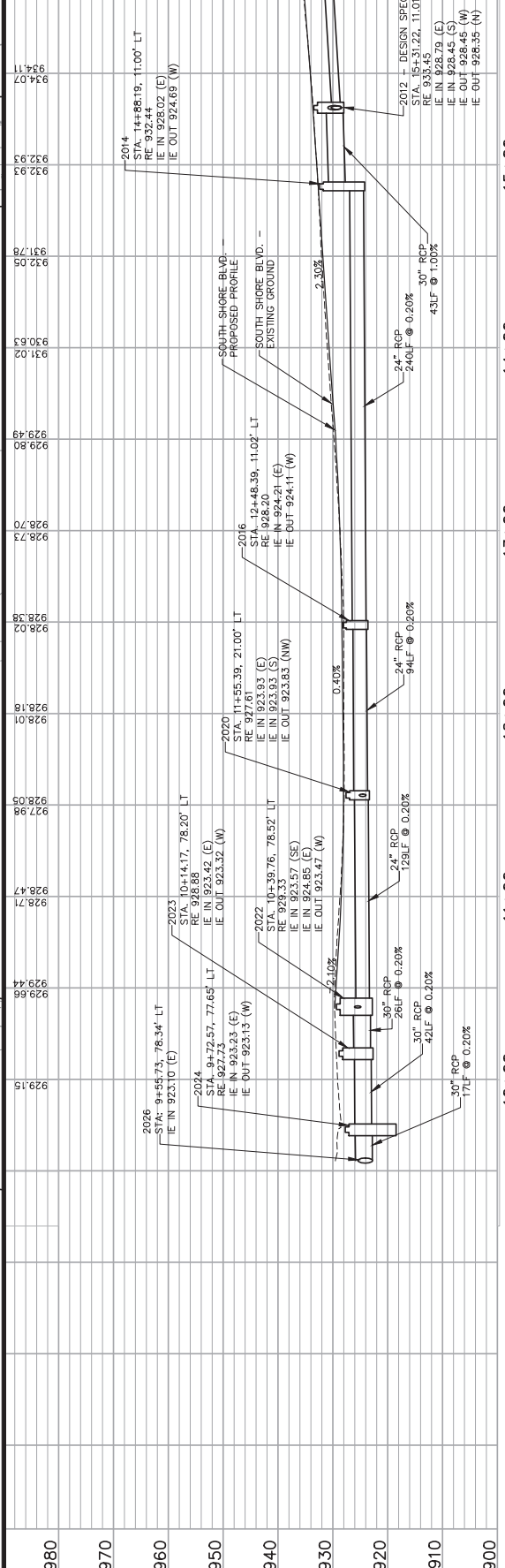
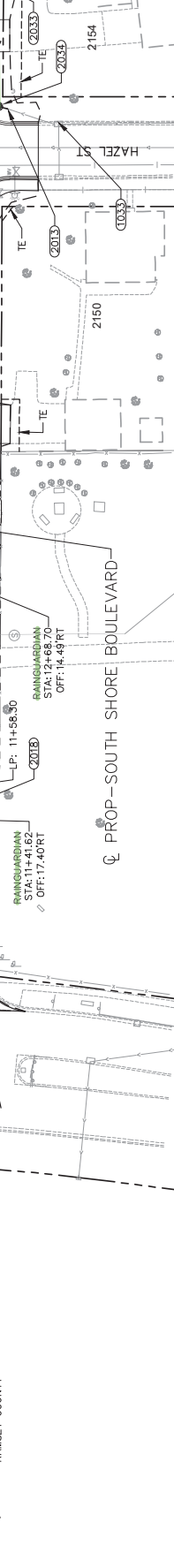
APPROVED
WHITE BEAR TOWNSHIP ENGINEER

LEGEND

- STRUCTURE NUMBER
PROPOSED STORM SEWER
EXISTING STORM SEWER
CATCH BASIN
DROP INLET
MANHOLE
FLARED END SECTION
CONSTRUCTION LIMITS
CONCRETE SPILLWAY
15" PVC SLOTTED DRAIN
CITY & TOWNSHIP PROPOSED PUBLIC UTILITIES
PROPOSED CITY/TOWNSHIP WATER*
PROPOSED CITY/TOWNSHIP SEWER*
*CITY & TOWNSHIP PROPOSED PUBLIC UTILITIES ARE FOR
PLAN REFERENCE ONLY. SEE CITY AND TOWNSHIP UTILITY
PLANS PROVIDED IN THE BACK OF THESE PLANS.

DRAINAGE OWNERSHIP

- WHITE BEAR LAKE
WHITE BEAR TOWNSHIP
RAMSEY COUNTY



900 910 920 930 940 950 960 970 980

11+00 12+00 13+00 14+00 15+00

MATCH LINE 16+00

PLAN AND PROFILE

STA. 10+00 TO STA. 16+00

DATE: 02/07/2022, MN LIC. NO. 22814

GREY S. BROWN, P.E.

767 ELSTIS STREET SUITE 100, ST. PAUL, MN 55114

PHONE: 651-645-4157

WWW.KIMLEY-HORN.COM

No.

Date

Revisions

APP.

DRAWING NAME

TO: DRN-PLAN-PROF-COLOR.DWG

DESIGNED BY:

MAK

DRAWN BY:

BKM

CHECKED BY:

GSB

DATE:

02/07/2022

PROJECT NO.

160610006

Kimley»Horn

767 ELSTIS STREET SUITE 100, ST. PAUL, MN 55114

PHONE: 651-645-4157

WWW.KIMLEY-HORN.COM

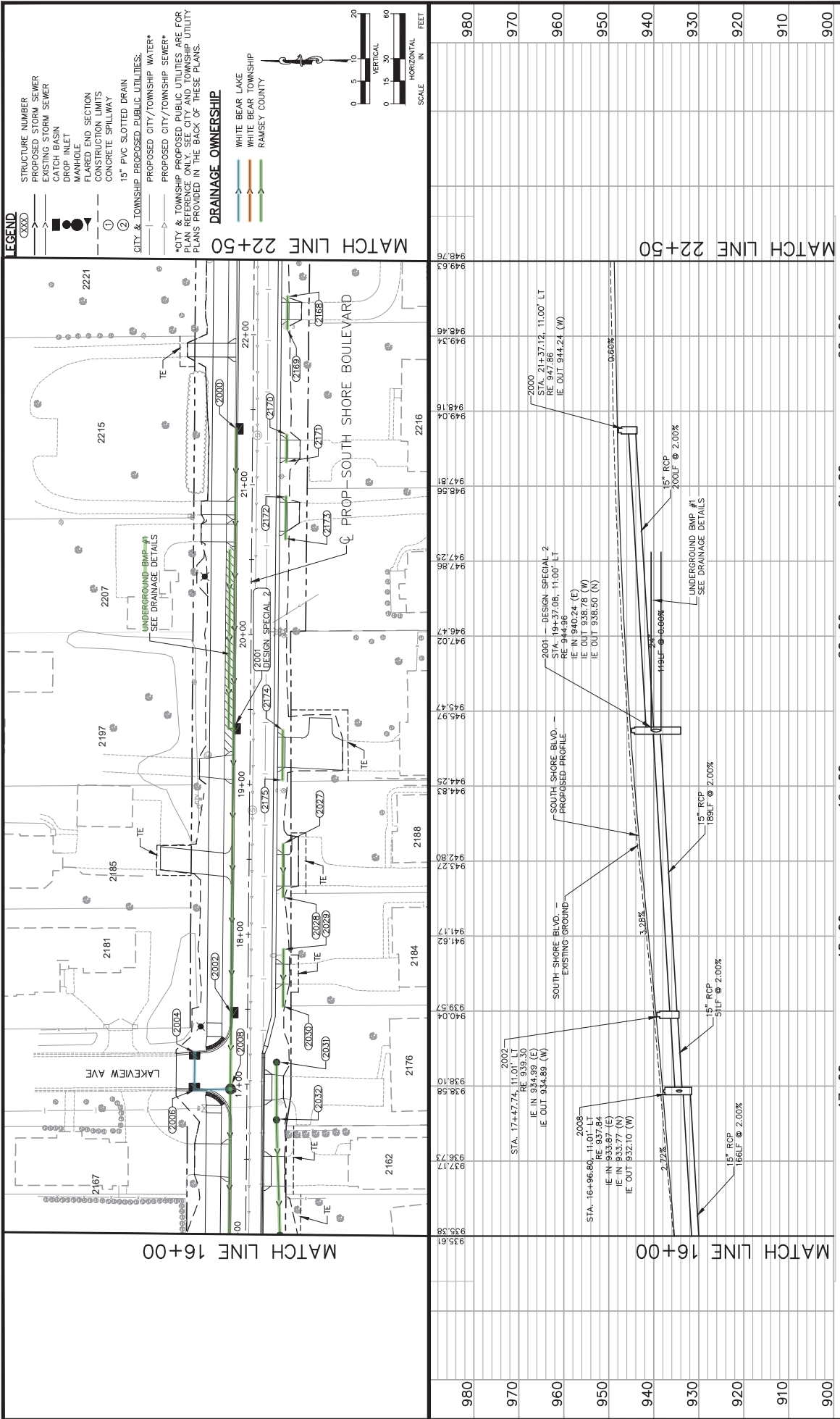
RAMSEY COUNTY

SOUTH SHORE TRAIL

RAMSEY COUNTY PROJECT: P-8025

SHEET NO. 120

235



LEGEND

XXXX

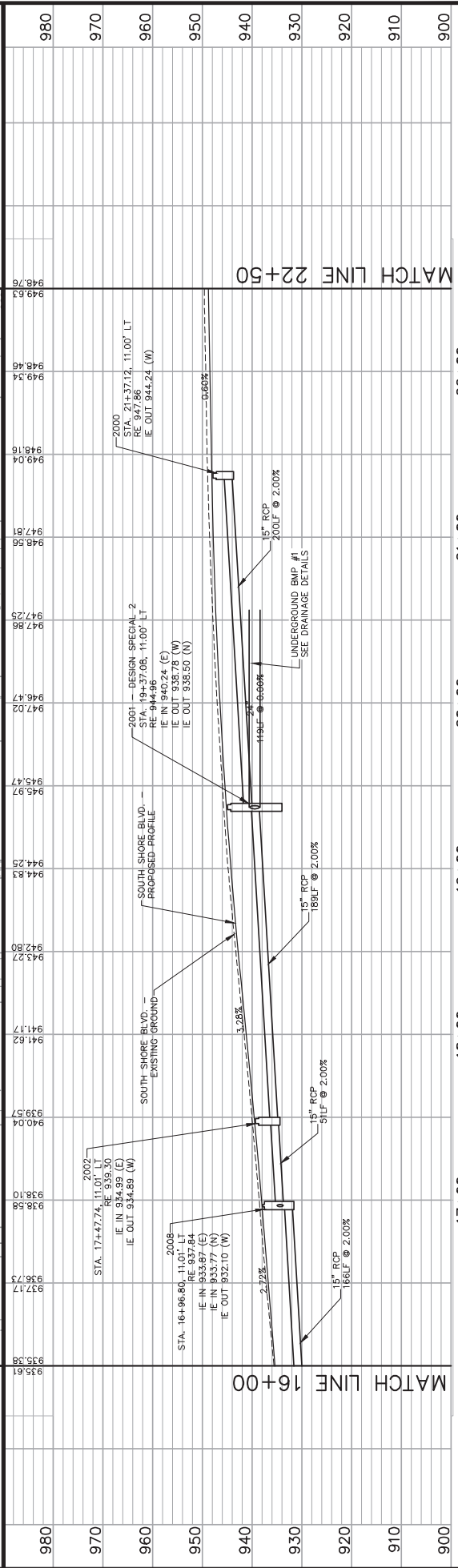
PROPOSED STORM SEWER
EXISTING STORM SEWER
MANHOLE
DROP INLET
FLARED END SECTION
CONSTRUCTION LIMITS
CONCRETE SPILLWAY
15" PVC SLOTTED DRAIN
CITY & TOWNSHIP PROPOSED PUBLIC UTILITIES:
PROPOSED CITY/TOWNSHIP WATER*
PROPOSED CITY/TOWNSHIP SEWER*
*CITY & TOWNSHIP PROPOSED PUBLIC UTILITIES ARE FOR
PLAN REFERENCE ONLY. SEE CITY AND TOWNSHIP UTILITY
PLANS PROVIDED IN THE BACK OF THESE PLANS.

DRAINAGE OWNERSHIP

WHITE BEAR LAKE
WHITE BEAR TOWNSHIP
RAMSEY COUNTY

MATCH LINE 22+50

0 5 10 20
VERTICAL
0 15 30 60
HORIZONTAL
SCALE IN FEET



No.	Date	Revisions

APP: C0553010_DRN-PLN-PROF-COLOR.DWG
DESIGNED BY: MAK
DRAWN BY: BKM
CHECKED BY: GSB
DATE: 02/07/2022
PROJECT NO. 160810006

Kimley»Horn
767 ELUSTI STREET SUITE 100, ST. PAUL, MN 55114
PHONE: 651-645-4157
WWW.KIMLEY-HORN.COM

I HEREBY CERTIFY THAT THIS PLAN, SPECIFICATION, AND CALCULATIONS WERE 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.
Gregory S. Brown, P.E.
DATE: 02/07/2022, MN LIC. NO. 22814

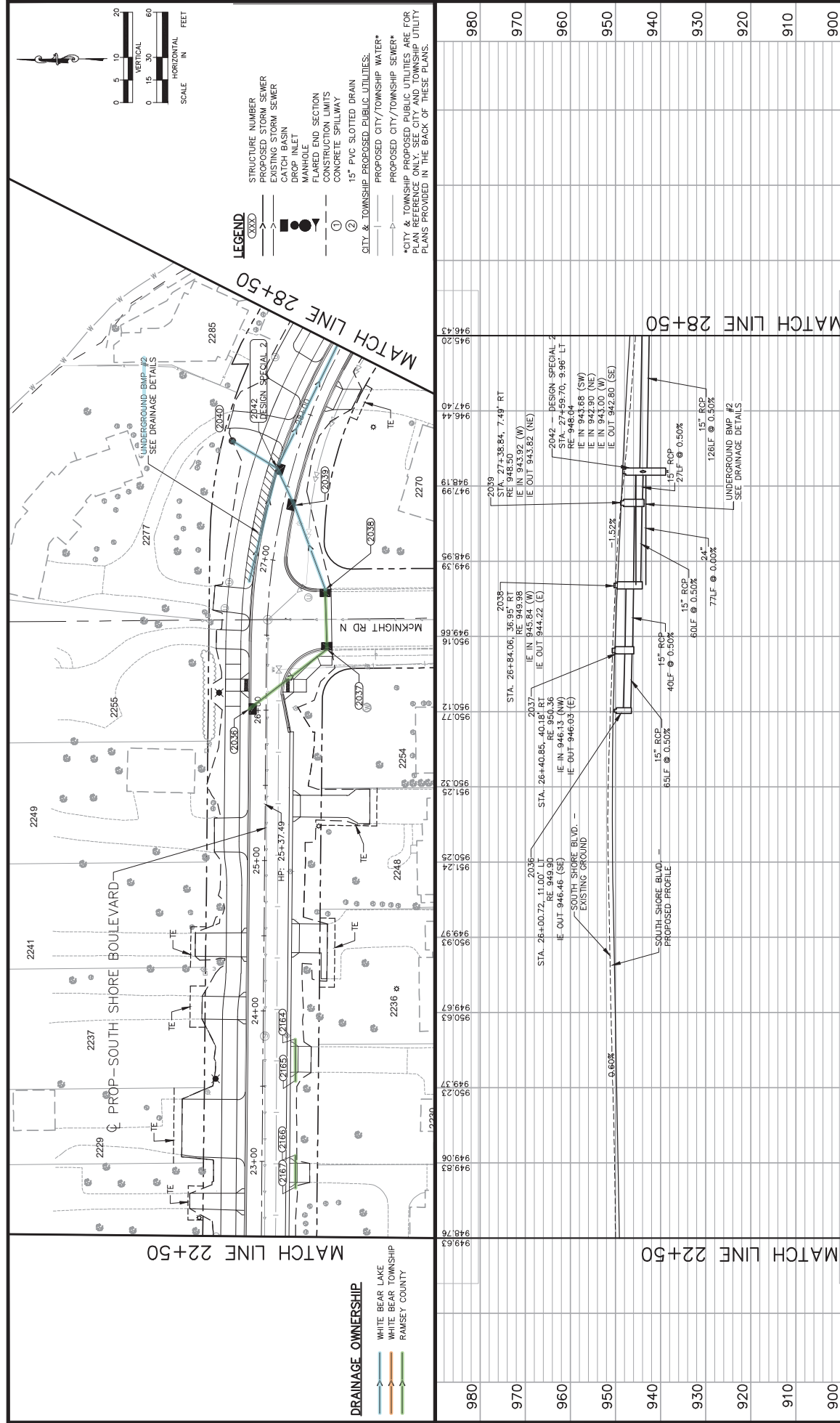
RAMSEY COUNTY
PLAN AND PROFILE
STA. 16+00 TO STA. 22+50

RAMSEY COUNTY
SOUTH SHORE TRAIL

RAMSEY COUNTY PROJECT: P-8025

SHEET NO. 121

235



No.	Date	Revisions
App. 00055		DRAWING NAME D10-DRN-PLN-PROF-COLORED.dwg
		DESIGNED BY: MAK
		DRAWN BY: BKM
		CHECKED BY: GSB
		DATE: 02/07/2022
		PROJECT NO. 160610006

Kimley»Horn

767 EUSTIS STREET SUITE 100, ST. PAUL, MN 55114
 PHONE: (651) 445-4197
 WWW.KIMLEY-HORN.COM

I HEREBY CERTIFY THAT THIS PLAN, SPECIFICATION AND EXHIBITS WERE 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.

Gregory S. Brown
 GREGORY S. BROWN, P.E.
 DATE: 02/07/2022 MN LIC. NO. 22814

235

SHEET NO.

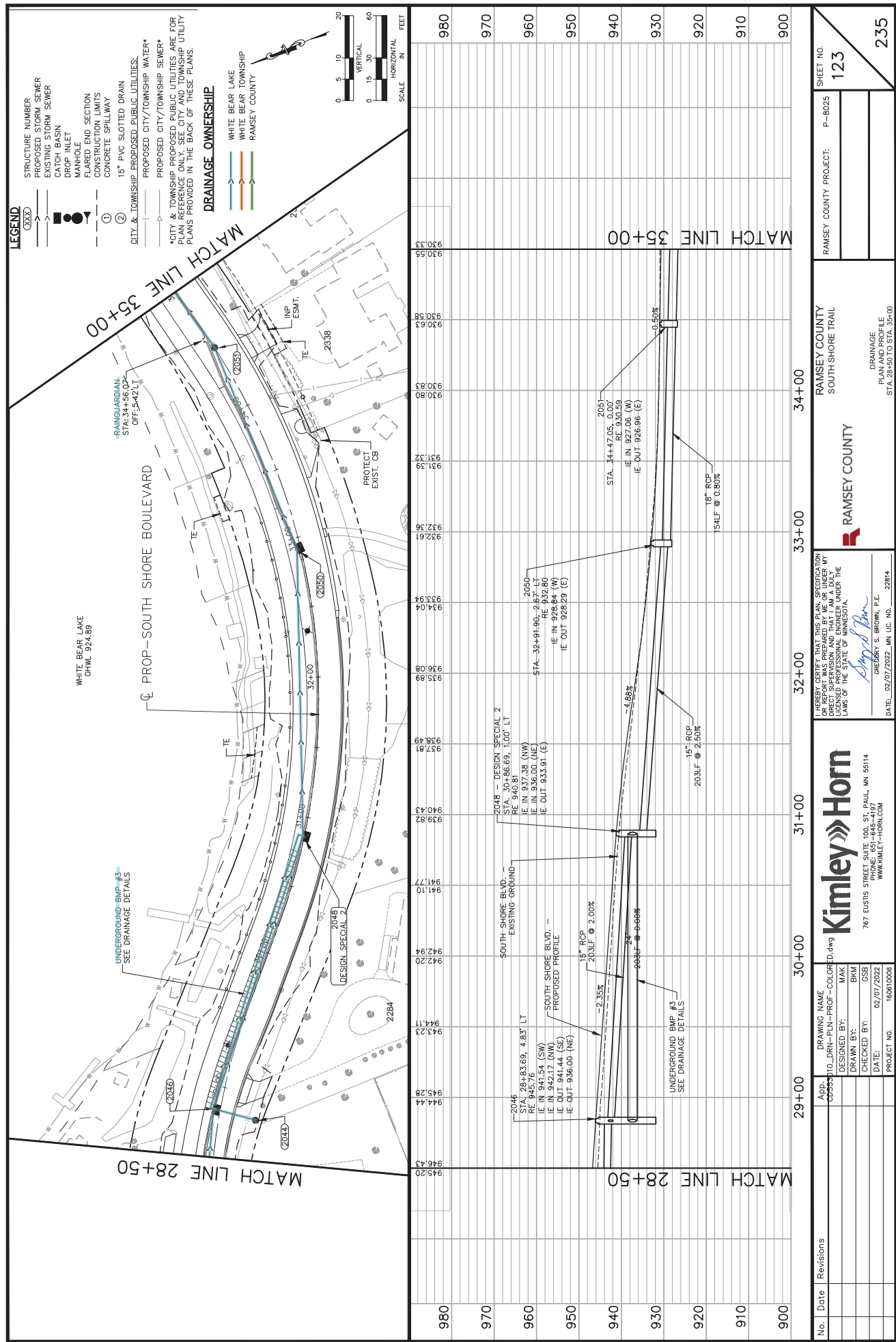
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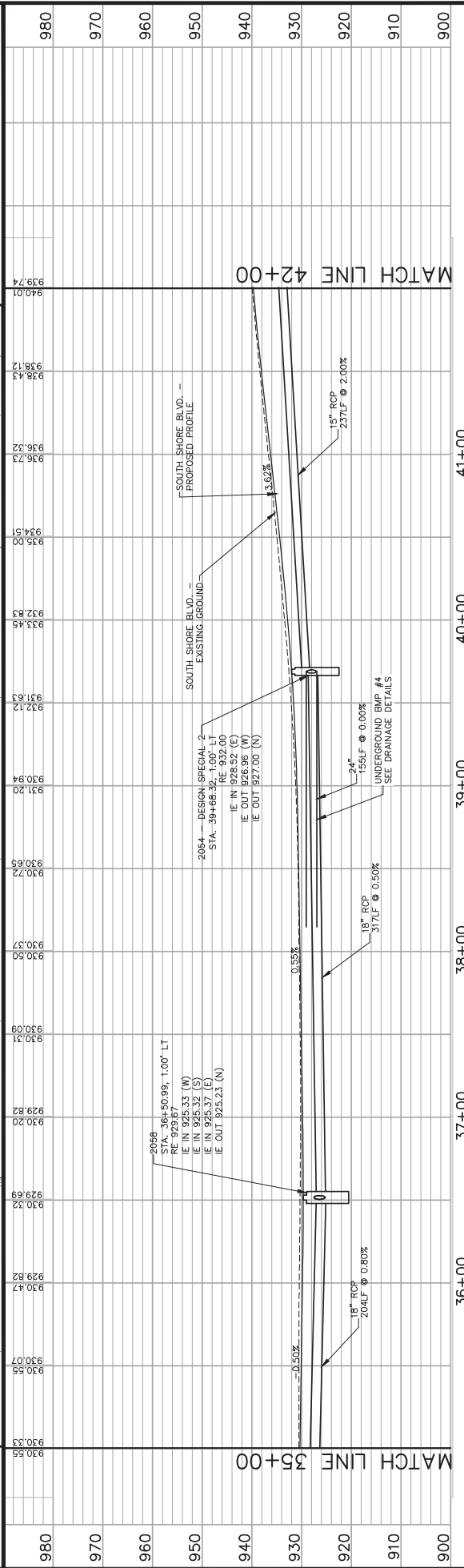
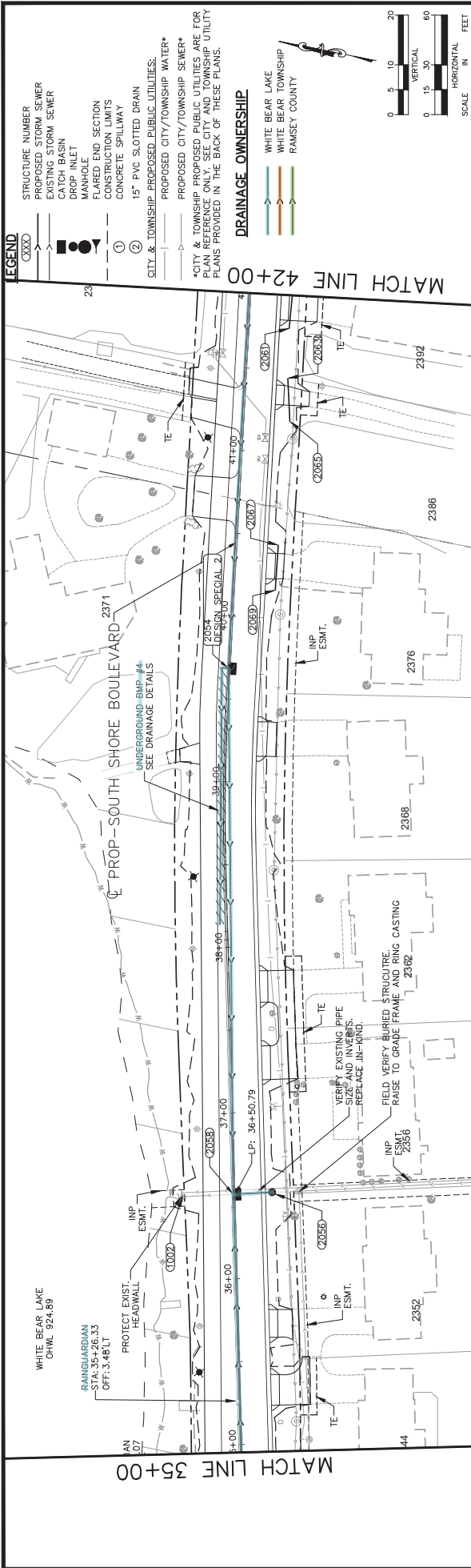
RAMSEY COUNTY PROJECT: P-8025

RAMSEY COUNTY SOUTH SHORE TRAIL

DRAINAGE
 PILLSBURY CREEK
 STA. 22+50 TO STA. 28+50

RAMSEY COUNTY





LEGEND

STRUCTURE NUMBER
PROPOSED STORM SEWER
EXISTING STORM SEWER
CATCH BASIN
DROP INLET
MANHOLE
FLARED END SECTION
CONSTRUCTION LIMITS
CONCRETE SPILLWAY
15" PVC SLOTTED DRAIN
PROPOSED CITY/TOWNSHIP WATER*
PROPOSED CITY/TOWNSHIP SEWER*
CITY & TOWNSHIP PROPOSED PUBLIC UTILITIES ARE FOR PLAN REFERENCE ONLY. SEE CITY AND TOWNSHIP UTILITY PLANS PROVIDED IN THE BACK OF THESE PLANS.

DRAINAGE OWNERSHIP

WHITE BEAR LAKE
WHITE BEAR TOWNSHIP
RAMSEY COUNTY

SCALE
HORIZONTAL
VERTICAL

No.	Date	Revisions

APP.	CD553010_DRN-PLN-PROF-COLOR.DWG
DESIGNED BY:	MAK
DRAWN BY:	BKM
CHECKED BY:	GSB
DATE:	02/07/2022
PROJECT NO.	160810006

Kimley»Horn

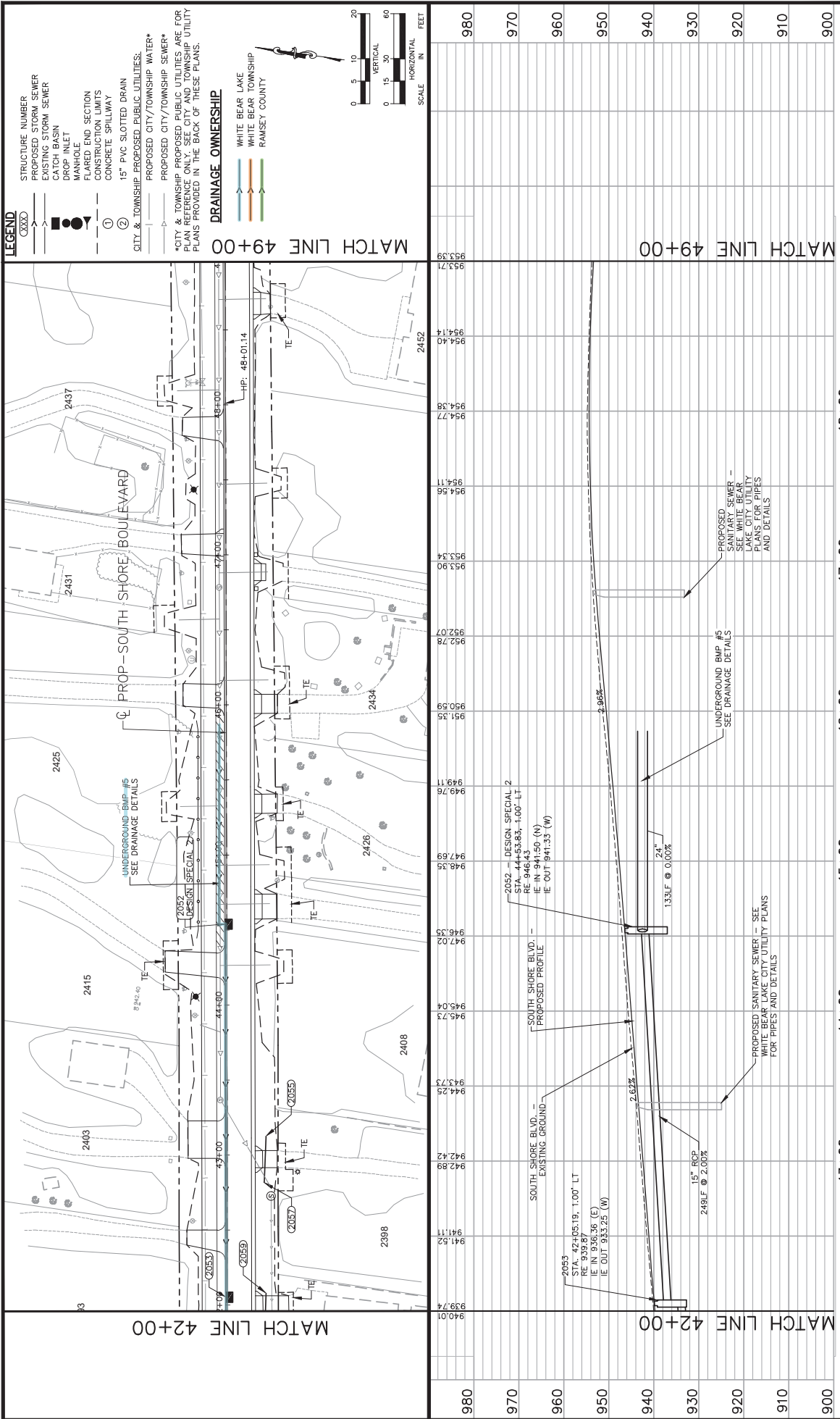
767 EULIST STREET SUITE 100, ST. PAUL, MN 55114
PHONE: 651-645-4157
WWW.KIMLEY-HORN.COM

DATE: 02/07/2022, MN LIC. NO.: 22814
GREGORY S. BROWN, P.E.
Gregory S. Brown

I, GREGORY S. BROWN, P.E., HEREBY CERTIFY THAT THIS PLAN, SPECIFICATION AND CONTRACT DOCUMENTS WERE 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.

RAMSEY COUNTY PROJECT: P-8025	
SHEET NO. 124	
235	

PLAN AND PROFILE
STA 35+00 TO STA 42+00
DRAINAGE



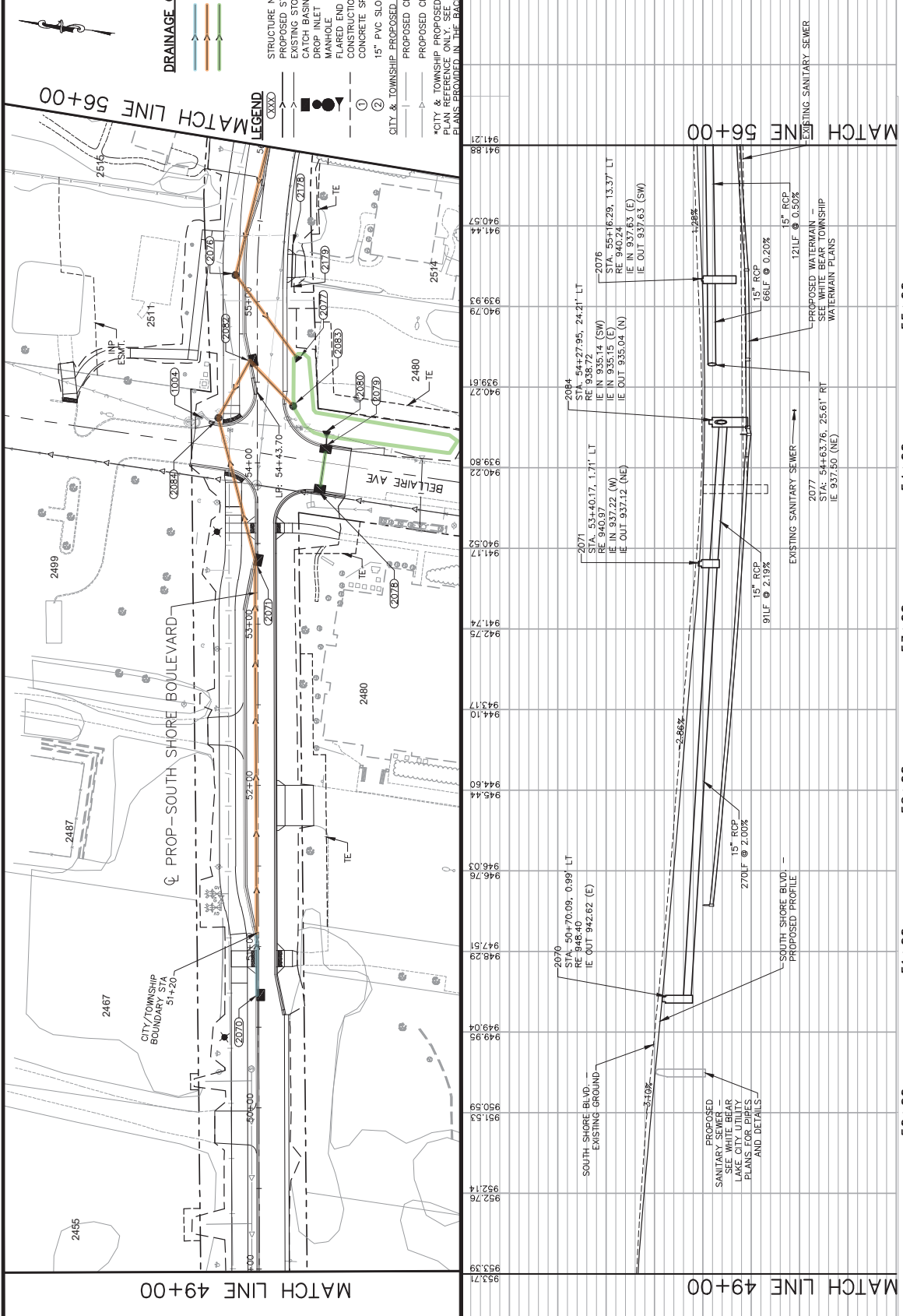
- LEGEND**
- STRUCTURE NUMBER
 - PROPOSED STORM SEWER
 - EXISTING STORM SEWER
 - CATCH BASIN
 - DROP INLET
 - MANHOLE
 - FLARED END SECTION
 - CONSTRUCTION LIMITS
 - CONCRETE SPILLWAY
 - 15" PVC SLOTTED DRAIN
 - CITY & TOWNSHIP PROPOSED PUBLIC UTILITIES
 - PROPOSED CITY/TOWNSHIP WATER*
 - PROPOSED CITY/TOWNSHIP SEWER*
 - *CITY & TOWNSHIP PROPOSED PUBLIC UTILITIES ARE FOR PLAN REFERENCE ONLY. SEE CITY AND TOWNSHIP UTILITY PLANS PROVIDED IN THE BACK OF THESE PLANS.

DRAINAGE OWNERSHIP

- WHITE BEAR LAKE
- WHITE BEAR TOWNSHIP
- RAMSEY COUNTY



No.	Date	Revisions	DRAWING NAME	APP.	DESIGNED BY:	DRAWN BY:	CHECKED BY:	DATE:	PROJECT NO.	160810006	Kimley»Horn	767 EULIST STREET SUITE 100, ST. PAUL, MN 55114 PHONE: 651-645-4157 WWW.KIMLEY-HORN.COM	I HEREBY CERTIFY THAT THIS PLAN, SPECIFICATION AND CONTRACT DOCUMENTS WERE 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. <i>Gregory S. Brown, P.E.</i> DATE: 02/07/2022, MN LIC. NO. 22814	RAMSEY COUNTY	RAMSEY COUNTY PROJECT: P-8025	SHEET NO. 125	235



0 5 10 20

VERTICAL

0 15 30 60

HORIZONTAL

SCALE

IN

FEET

DRainage Ownership

WHITE BEAR LAKE

WHITE BEAR TOWNSHIP

RAMSEY COUNTY

STRUCTURE NUMBER

PROPOSED STORM SEWER

EXISTING STORM SEWER

CATCH BASIN

DROP INLET

MANHOLE

FLARED END SECTION

CONSTRUCTION LIMITS

CONCRETE SPILLWAY

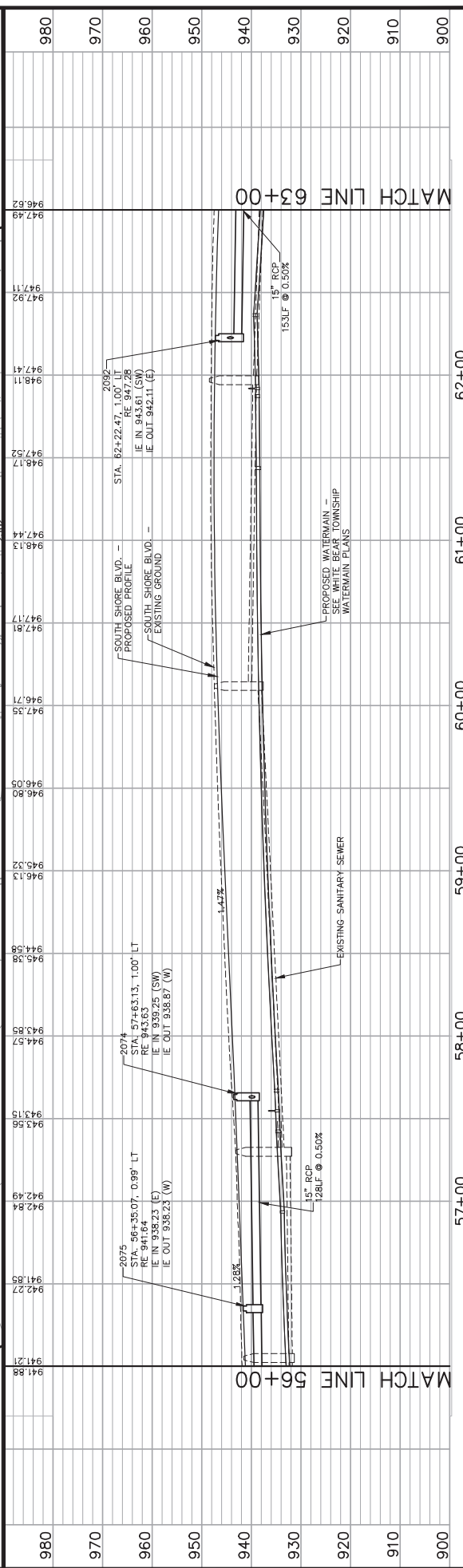
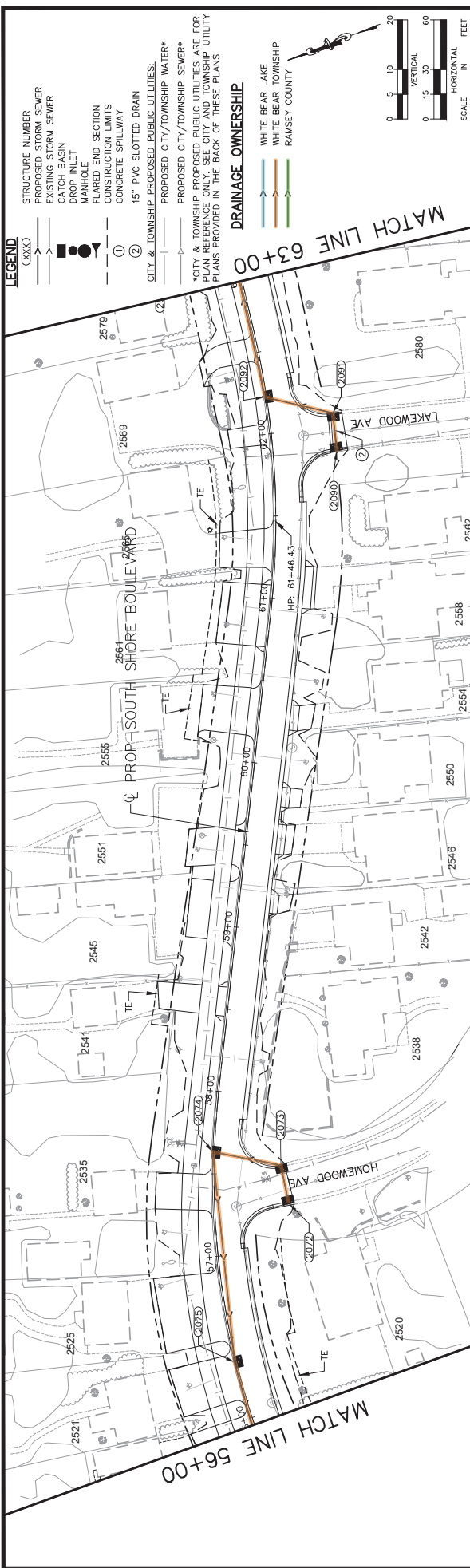
15" PVC SLOTTED DRAIN

CITY & TOWNSHIP PROPOSED PUBLIC UTILITIES.

PROPOSED CITY/TOWNSHIP WATER*

*CITY & TOWNSHIP PROPOSED PUBLIC UTILITIES ARE FOR INFORMATION ONLY. THE CITY/TOWNSHIP SHALL BE RESPONSIBLE FOR THE DESIGN AND CONSTRUCTION OF ANY PUBLIC UTILITY PLANS PROVIDED IN THE BACK OF THESE PLANS.

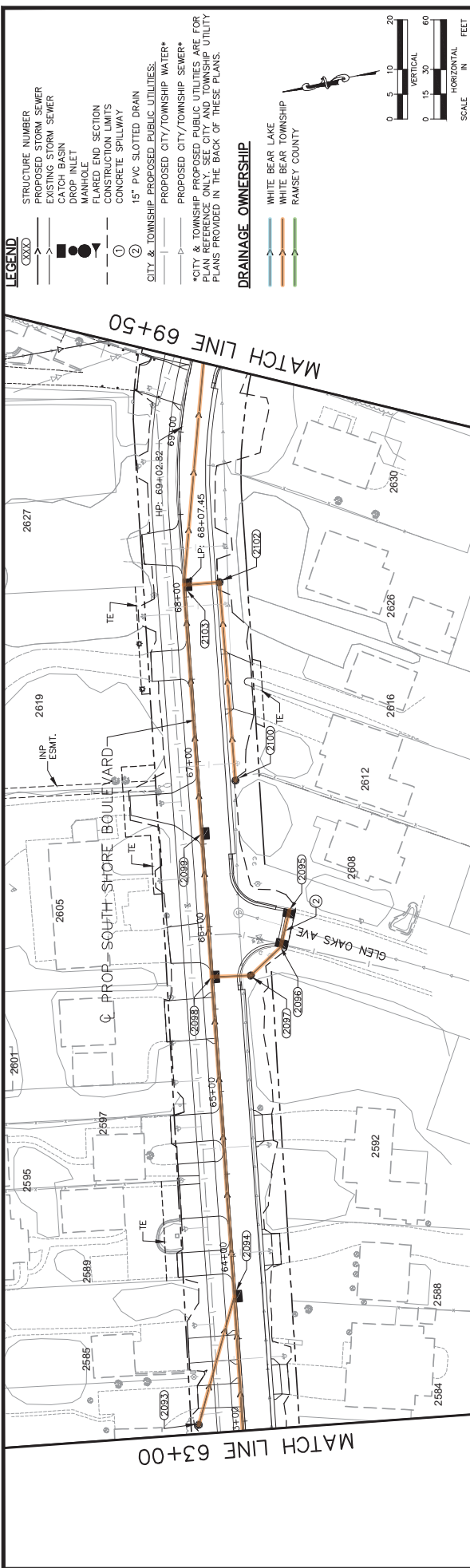
No.	Date	Revisions	APP. CS553010.DRN-PLN-PROF-COLOR.DWG	DRAWING NAME	DESIGNED BY: MAK	DRAWN BY: BKM	CHECKED BY: GSB	DATE: 02/07/2022	PROJECT NO. 160810006	KIMLEY-HORN	767 ELUSTI STREET SUITE 100, ST. PAUL, MN 55114 PHONE: 651-645-4157 WWW.KIMLEY-HORN.COM	I HEREBY CERTIFY THAT THIS PLAN, SPECIFICATION AND CONTRACT DOCUMENTS WERE 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. Gregory S. Brown, P.E. DATE: 02/07/2022, MN LIC. NO. 22814	RAMSEY COUNTY SOUTH SHORE TRAIL	RAMSEY COUNTY PROJECT: P-8025	SHEET NO. 126	235



No.	Date	Revisions	APP. CD55510	DRAWING NAME TO_DRN-PLN-PROF-COLOR.DWG	DESIGNED BY: MAK	DRAWN BY: BKM	CHECKED BY: GSB	DATE: 02/07/2022	PROJECT NO. 160610006	KIMLEY-HORN	767 ELUST STREET SUITE 100, ST. PAUL, MN 55114 PHONE: 651-645-4157 WWW.KIMLEY-HORN.COM	I HEREBY CERTIFY THAT THIS PLAN, SPECIFICATION AND CONTRACT DOCUMENTS WERE 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. Gregory S. Brown, P.E. DATE: 02/07/2022, MN LIC. NO. 22814	RAMSEY COUNTY	RAMSEY COUNTY SOUTH SHORE TRAIL	RAMSEY COUNTY PROJECT: P-8025	SHEET NO. 127

PLAN AND PROFILE
STA 56+00 TO STA 63+00

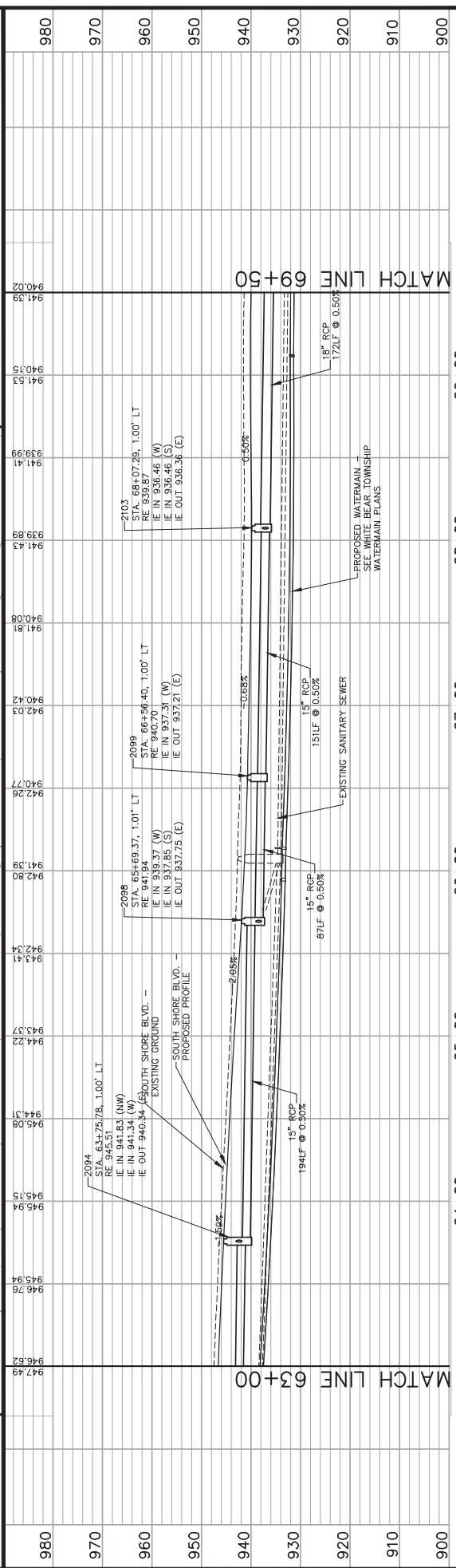
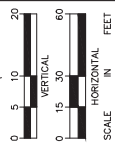
235



- LEGEND**
- STRUCTURE NUMBER
 - PROPOSED STORM SEWER
 - EXISTING STORM SEWER
 - CATCH BASIN
 - DROP INLET
 - MANHOLE
 - FLARED END SECTION
 - CONSTRUCTION LIMITS
 - CONCRETE SPILLWAY
 - 15" PVC SLOTTED DRAIN
 - CITY & TOWNSHIP PROPOSED PUBLIC UTILITIES:
 - PROPOSED CITY/TOWNSHIP WATER*
 - PROPOSED CITY/TOWNSHIP SEWER*
 - *CITY & TOWNSHIP PROPOSED PUBLIC UTILITIES ARE FOR PLAN REFERENCE ONLY. SEE CITY AND TOWNSHIP UTILITY PLANS PROVIDED IN THE BACK OF THESE PLANS.

DRAINAGE OWNERSHIP

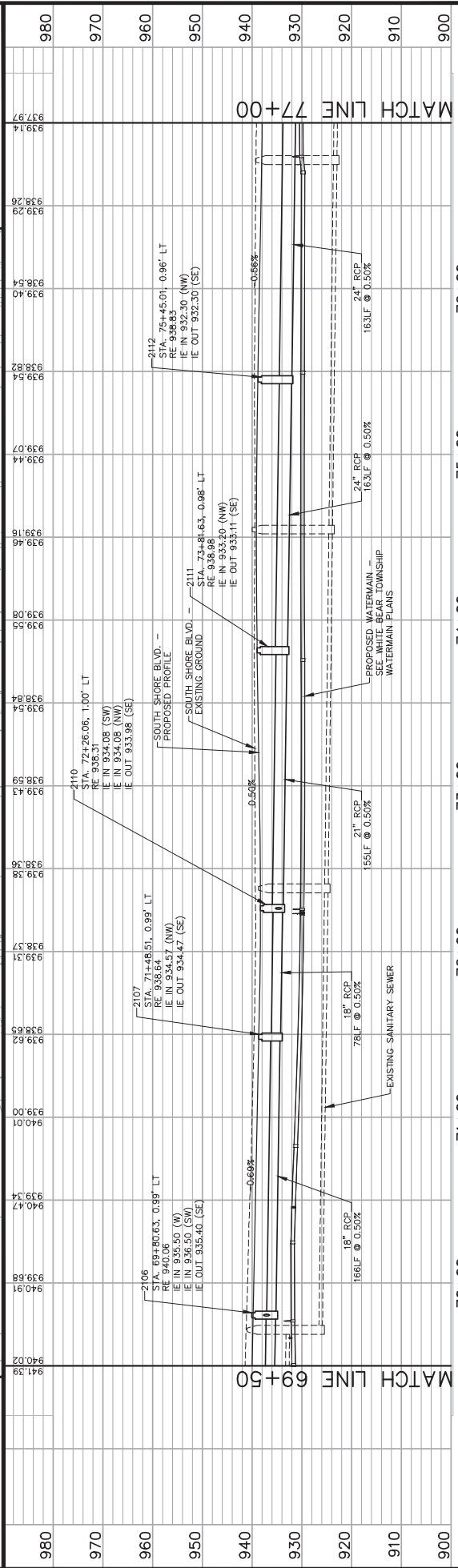
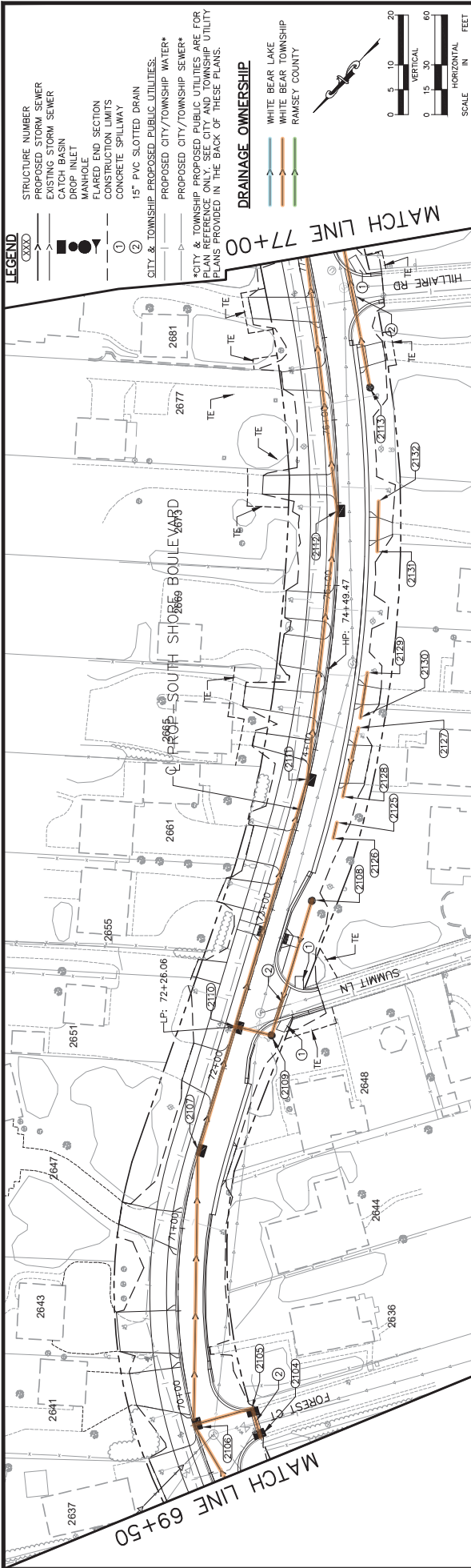
- WHITE BEAR LAKE
- WHITE BEAR TOWNSHIP
- RAMSEY COUNTY



No.	Date	Revisions	APP. CD553010_DRN-PLN-PROF-COLORED.dwg	DRAWING NAME	DESIGNED BY: MAK	DRAWN BY: BKM	CHECKED BY: GSB	DATE: 02/07/2022	PROJECT NO. 160610006	767 ELUSTIS STREET SUITE 100, ST. PAUL, MN 55114 PHONE: 651-645-4157 WWW.KIMLEY-HORN.COM	Kimley»Horn	I HEREBY CERTIFY THAT THIS PLAN, SPECIFICATION AND CONTRACT DOCUMENTS WERE 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. <i>Gregory S. Brown, P.E.</i> DATE: 02/07/2022, MIN. LIC. NO.: 22814	RAMSEY COUNTY	RAMSEY COUNTY SOUTH SHORE TRAIL	RAMSEY COUNTY PROJECT: P-8025	SHEET NO. 128

PLAN AND PROFILE
STA 63+00 TO STA 69+50

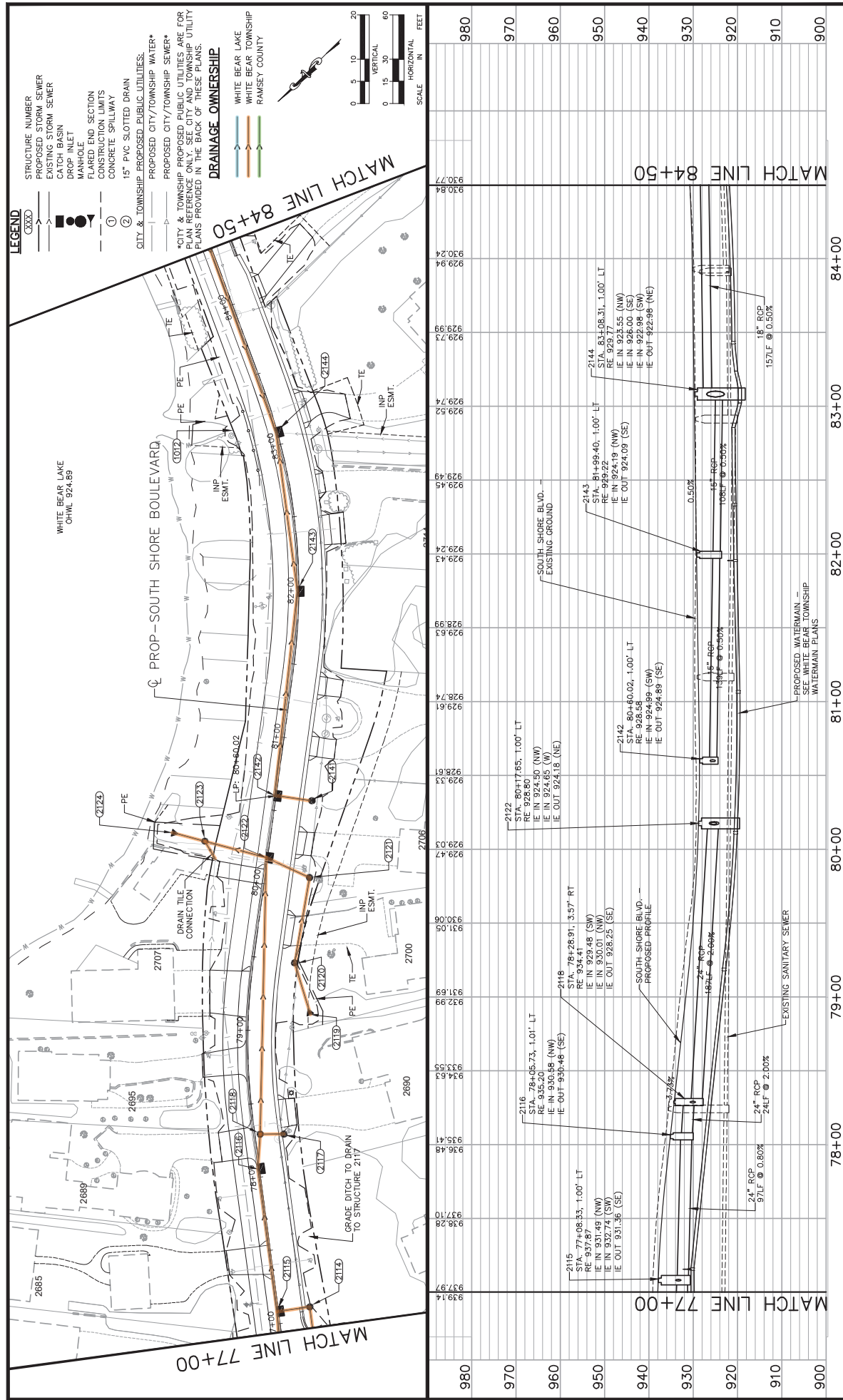
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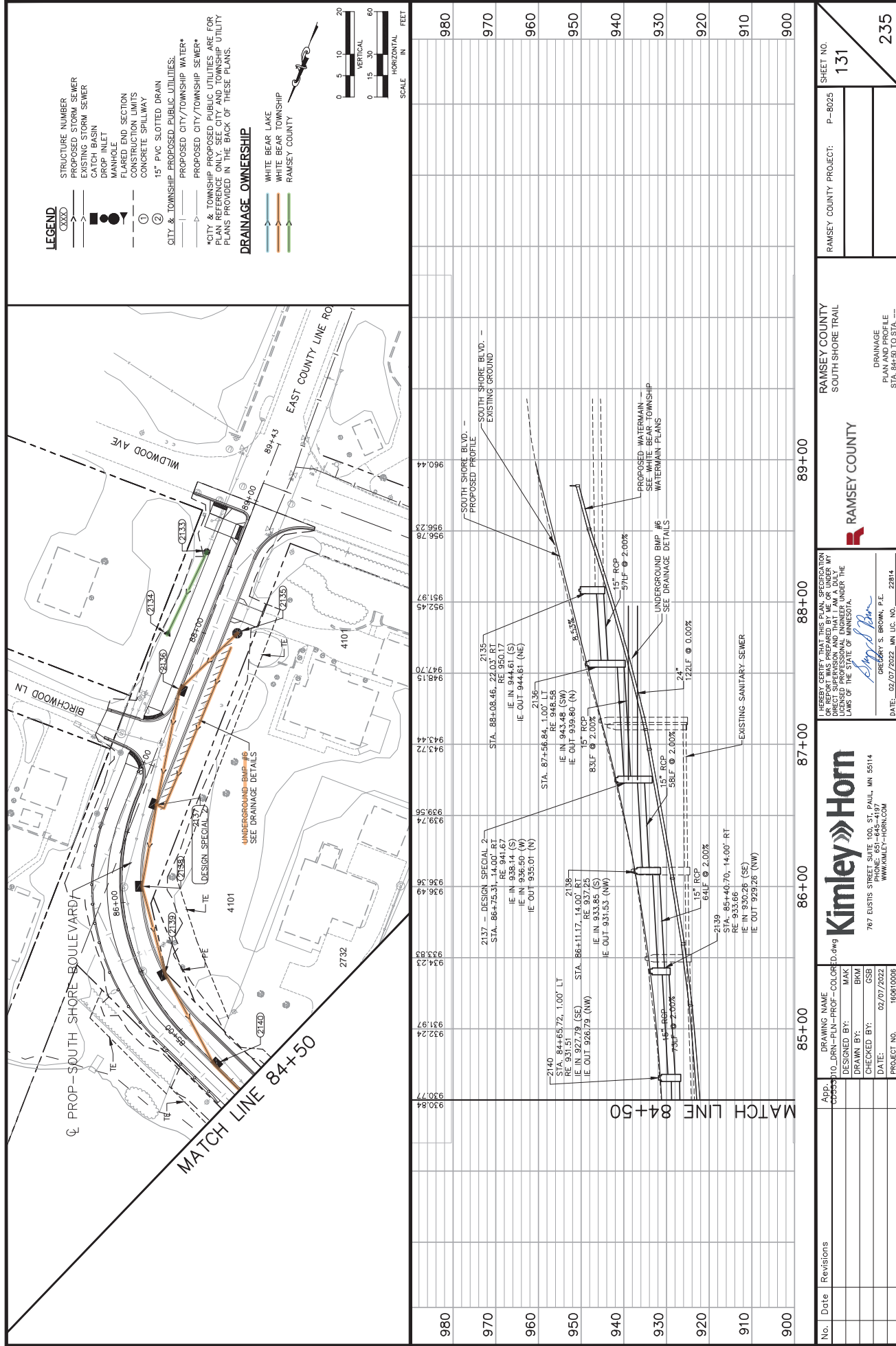
- LEGEND**
- STRUCTURE NUMBER
 - PROPOSED STORM SEWER
 - EXISTING STORM SEWER
 - CATCH BASIN
 - DROP INLET
 - MANHOLE
 - FLARED END SECTION
 - CONSTRUCTION LIMITS
 - CONCRETE SPILLWAY
 - 15" PVC SLOTTED DRAIN
 - CITY & TOWNSHIP PROPOSED PUBLIC UTILITIES:
 - PROPOSED CITY/TOWNSHIP WATER*
 - PROPOSED CITY/TOWNSHIP SEWER*
 - *CITY & TOWNSHIP PROPOSED PUBLIC UTILITIES ARE FOR PLAN REFERENCE ONLY. SEE CITY AND TOWNSHIP UTILITY PLANS PROVIDED IN THE BACK OF THESE PLANS.

- DRAINAGE OWNERSHIP**
- WHITE BEAR LAKE
 - WHITE BEAR TOWNSHIP
 - RAMSEY COUNTY

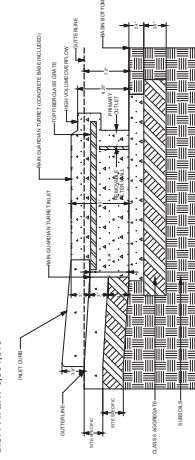
No.	Date	Revisions	DRAWING NAME	APP. CD553010_DRN-PLN-PROF-COLOR.dwg	DESIGNED BY: MAK	DRAWN BY: BKM	CHECKED BY: GSB	DATE: 02/07/2022	PROJECT NO. 160810006	DRAWING		SHEET NO. 129	
										PLAN AND PROFILE			
I HEREBY CERTIFY THAT THIS PLAN, SPECIFICATION, AND PROFILE WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.										RAMSEY COUNTY		RAMSEY COUNTY PROJECT: P-8025	SHEET NO. 129
DATE: 02/07/2022, MN LIC. NO. 22814										RAMSEY COUNTY SOUTH SHORE TRAIL			
Kimley»Horn										767 EUSTIS STREET SUITE 100, ST. PAUL, MN 55114 PHONE: 651-645-4157 WWW.KIMLEY-HORN.COM		235	



No.	Date	Revisions	App. 05553	DRAWING NAME J10-DRAIN-PROF-COLORED.dwg	DESIGNED BY: MAK	DRAWN BY: BKM	CHECKED BY: GSB	DATE: 02/07/2022	PROJECT NO. 160610066
 767 EUSTIS STREET SUITE 100, ST. PAUL, MN 55114 PHONE: 651-451-5555 WWW.KIMLEY-HORN.COM									
I HEREBY CERTIFY THAT THIS PLAN, SPECIFICATION AND 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. <i>Gregory S. Brown</i> GREGORY S. BROWN, P.E. DATE: 02/07/2022 MN LIC. NO. 22814									
 RAMSEY COUNTY				RAMSEY COUNTY SOUTH SHORE TRAIL DRAINAGE PLAN AND PROFILE STA. 77+00 TO STA. 84+90					
RAMSEY COUNTY PROJECT: P-8025				SHEET NO. 130					
				235					

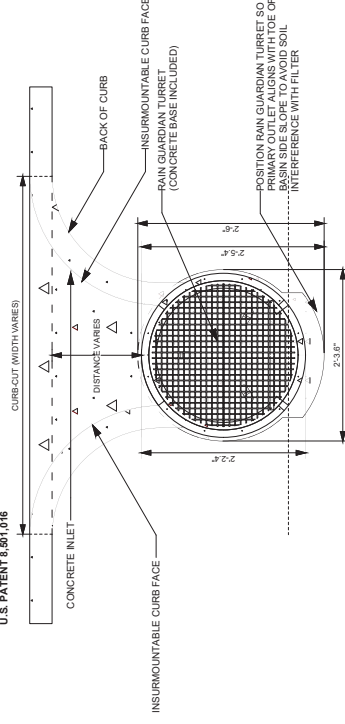


RAIN GUARDIAN TURRET CROSS-SECTION VIEW
U.S. PATENT 8,901,016



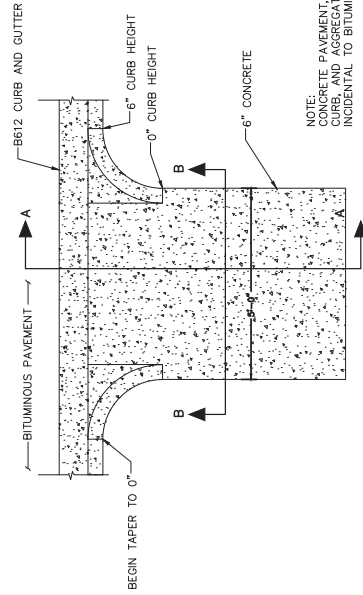
CROSS-SECTION VIEW NOTES
1. THE GUTTER PAN IS BASE COMPACTED TO 95%
STANDARD PROCTOR (AS PRESENTED BY 1" 4" BELOW THE
GUTTERLINE ELEVATION)

RAIN GUARDIAN TURRET PLAN VIEW
U.S. PATENT 8,901,016



PLAN VIEW NOTES
1. DISTANCE BETWEEN BACK OF CURB
AND RAIN GUARDIAN TURRET MAY VARY WITH SITE
CONDITIONS.
2. CONCRETE BASE EXTENDS BEYOND THE FILTER WALL
3. RAIN GUARDIAN TURRET TO SERVE AS A SPLASH
DISSIPATOR.

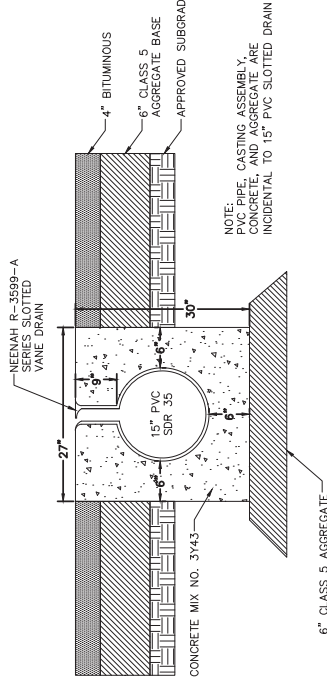
RAINGUARDIAN



NOTE:
CONCRETE PAVEMENT, CONCRETE
CURB, AND AGGREGATE ARE
INCIDENTAL TO BITUMINOUS SPILLWAY

PLAN VIEW

CONCRETE SPILLWAY



NOTE:
PVC PIPE, CASTING ASSEMBLY,
CONCRETE, AND AGGREGATE ARE
INCIDENTAL TO 15" PVC SLOTTED DRAIN

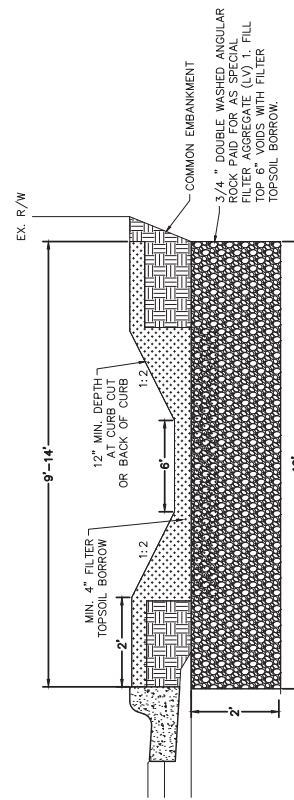
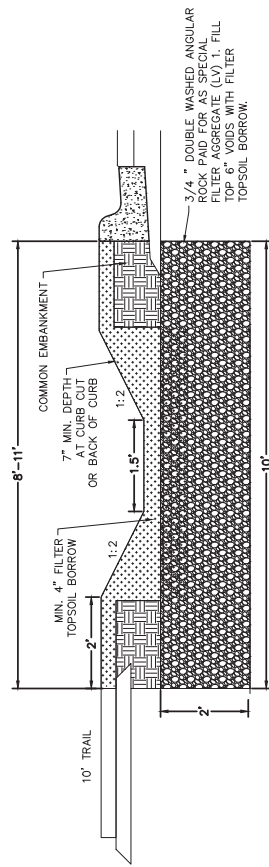
15" PVC SLOTTED DRAIN

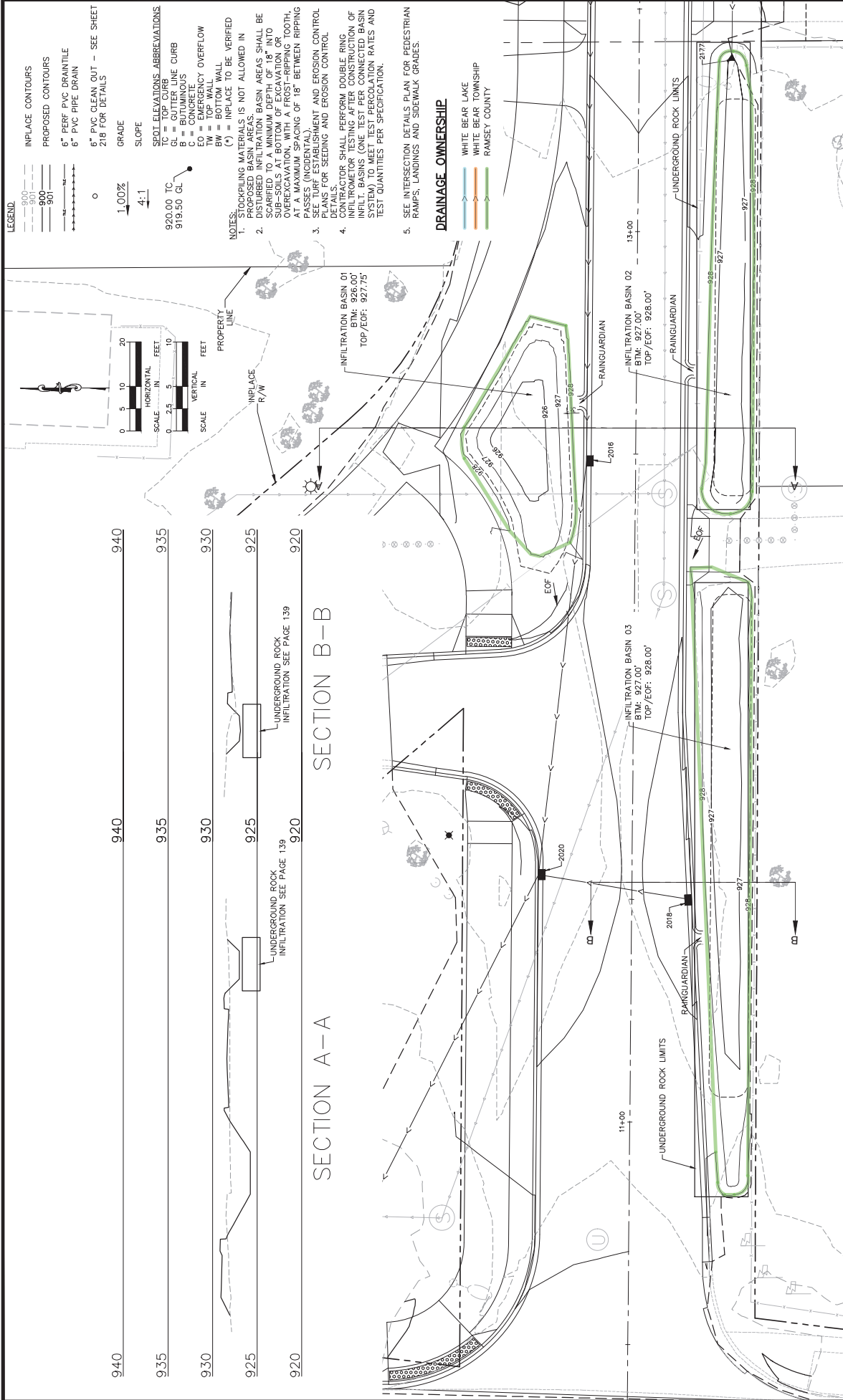
Kimley»Horn
787 ELUST STREET SUITE 100, ST. PAUL, MN 55114
PHONE: 651-645-4197
WWW.KIMLEY-HORN.COM

APP.	DRAWING NAME
DESIGNED BY:	CD553010_DRN-DETAIL.dwg
DRAWN BY:	MAK
CHECKED BY:	BSB
DATE:	02/07/2022
PROJECT NO.	160610006

RAMSEY COUNTY
SOUTH SHORE TRAIL
DRAINAGE
DETAILS

RAMSEY COUNTY PROJECT:	P-8025
SHEET NO.	138





- LEGEND**
- INPLACE CONTOURS
 - PROPOSED CONTOURS
 - 6" PERF PVC DRAIN
 - 6" PVC PIPE DRAIN
 - 6" PVC CLEAN OUT - SEE SHEET 218 FOR DETAILS
 - GRADE
 - SLOPE
 - SPOT ELEVATIONS ABBREVIATIONS
 - TC = TOP CURB
 - GL = GUTTER LINE CURB
 - EW = EMERGENCY OVERFLOW
 - TW = TOP WALL
 - BW = BOTTOM WALL
 - (*) = INPLACE TO BE VERIFIED

- NOTES:**
1. COUPLING MATERIALS IS NOT ALLOWED IN PROPOSED INFILTRATION BASIN AREAS.
 2. DISTURBED INFILTRATION BASIN AREAS SHALL BE SCARIFIED TO A MINIMUM DEPTH OF 18" INTO SUB-SOILS AT BOTTOM OF EXCAVATION OR OVER-EXCAVATION, WITH A FROST-RIPPING TOOTH, PASSING (INCIDENTAL) PASSING OF 18" BETWEEN RIPPING PASSES.
 3. SEE TURF ESTABLISHMENT AND EROSION CONTROL DETAILS FOR SEEDING AND EROSION CONTROL.
 4. INFILTRATION BASIN SHALL PERFORM DOUBLE RING INFILTRATION TESTING AFTER CONSTRUCTION OF INFILTRATION BASIN (ONE TEST PER CONNECTED BASIN SYSTEM) TO MEET TEST PERCOLATION RATES AND TEST QUANTITIES PER SPECIFICATION.
 5. SEE INTERSECTION DETAILS PLAN FOR PEDESTRIAN RAMPS, LANDINGS AND SIDEWALK GRADES.

- DRAINAGE OWNERSHIP**
- WHITE BEAR LAKE
 - WHITE BEAR TOWNSHIP
 - RAMSEY COUNTY

SECTION A-A

SECTION B-B

No.	Date	Revisions	APP.	DRAWING NAME	DESIGNED BY:	DRAWN BY:	CHECKED BY:	DATE:	PROJECT NO.	160610006	K:\TWC\Civil\County\RAMSEY\South Shore Trail - FINAL DESIGN\CAD\Plan Sheets\Exhibits\CD553010_Grading-Plan-COLORED.dwg April 19, 2022 - 4:05pm
Kimley»Horn 767 ELSTIS STREET SUITE 100, ST. PAUL, MN 55114 PHONE: 651-645-4197 WWW.KIMLEY-HORN.COM											
I HEREBY CERTIFY THAT THIS PLAN, SPECIFICATION AND ALL ATTACHED EXHIBITS, DRAWINGS, AND CALCULATIONS WERE 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. <i>Gregory S. Brown, P.E.</i> DATE: 02/07/2022, MN LIC. NO. 22814											
RAMSEY COUNTY SOUTH SHORE TRAIL BMP GRADING PLAN											
RAMSEY COUNTY PROJECT: P-8025											
SHEET NO. 140											
235											

SECTION A-A

- LEGEND:**
- INPLACE CONTOURS
 - PROPOSED CONTOURS
 - 6" PERF PVC DRAINILE
 - 6" PVC PIPE DRAIN
 - 6" PVC CLEAN OUT - SEE SHEET 218 FOR DETAILS
 - GRADE
 - SLOPE
 - SPOT ELEVATIONS ABBREVIATIONS
 - TC = TOP CURB
 - GL = GUTTER LINE CURB
 - TOURNOUS
 - C = CONCRETE
 - EO = EMERGENCY OVERFLOW
 - TW = TOP WALL
 - BW = BOTTOM WALL
 - (*) = INPLACE TO BE VERIFIED

NOTES:

1. PROPOSED INFILTRATION BASIN AREAS SHALL BE DISTURBED TO A MINIMUM DEPTH OF 18" INTO SUB-SOILS AT BOTTOM OF EXCAVATION OR OVEREXCAVATION WITH A FROST-RIPPING TOOTH, MINIMUM 18" DEEP, AND 18" BETWEEN RIPPING PASSES (INCIDENTAL).
2. PLANS FOR SEEDING AND EROSION CONTROL DETAILS.
3. INFILTRATOR SHALL PERFORM DOUBLE RING INFILTRATOR TESTING AFTER CONSTRUCTION OF INFILTRATOR TO MEET TEST PERCOLATION RATES AND TEST QUANTITIES PER SPECIFICATION.
4. SEE INTERSECTION DETAILS PLAN FOR PEDESTRIAN RAMPS, LANDINGS AND SIDEWALK GRADES.



940

935

930

925

920

UNDERGROUND ROCK
INFILTRATION SEE PAGE 139

SECTION A-A

10010006

DATE: 02/07/2022

PROJECT NO. 10010006

CHECKED BY: GSB

DRAWN BY: ART

DESIGNED BY: ART

APP: C0553010_GRADING-PLAN-COLORED.dwg

DRAWING NAME

160610006

767 ELUSTIS STREET SUITE 100, ST. PAUL, MN 55114

PHONE: 651-645-4197

WWW.KIMLEY-HORN.COM

Kimley»Horn

I HEREBY CERTIFY THAT THIS PLAN, SPECIFICATION AND CALCULATIONS WERE 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.

DATE: 02/07/2022, MN LIC. NO. 22814

GREY S. BROWN, P.E.

BMP
GRADING
PLAN

RAMSEY COUNTY
SOUTH SHORE TRAIL

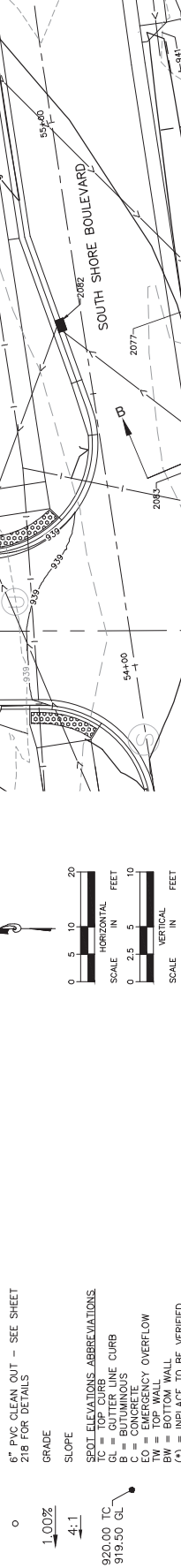
RAMSEY COUNTY PROJECT: P-8025

SHEET NO. 141

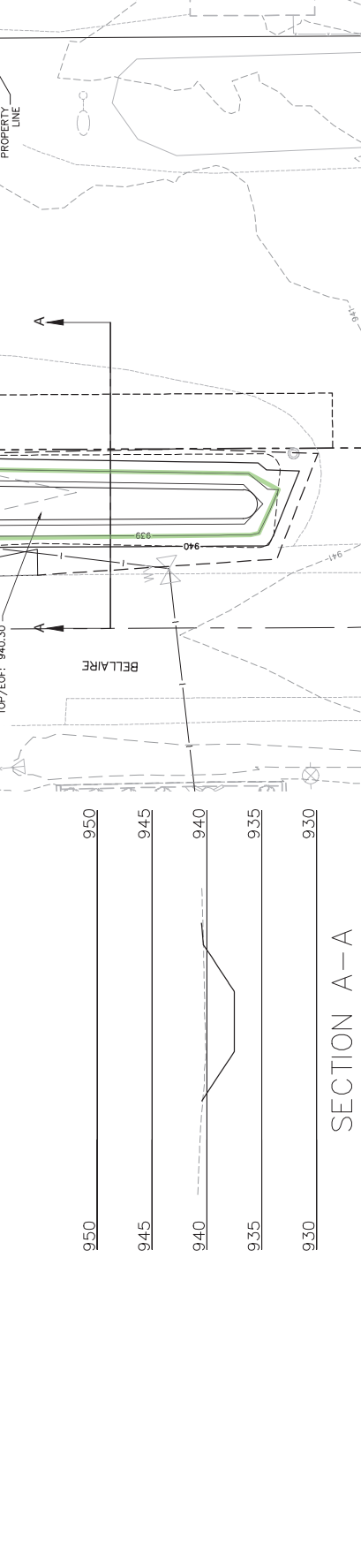
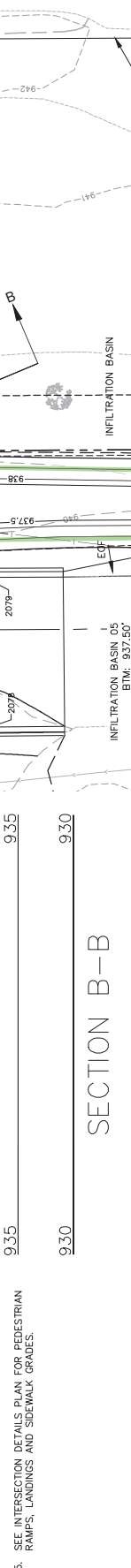
235

LEGEND:

- INPLACE CONTOURS
PROPOSED CONTOURS
900
901
6" PERF PVC DRAIN
6" PVC CLEAN OUT - SEE SHEET 218 FOR DETAILS
TRAFFIC



- NOTES:
1. PROPOSED INFILTRATION BASIN AREAS SHALL BE DISTURBED TO A MINIMUM DEPTH OF 18" INTO SUB-SOILS AT BOTTOM OF EXCAVATION OR OVEREXCAVATION WITH A FROST-RIPPING TOOTH, SEE TYPICAL DETAIL FOR FROST-RIPPING PASSES (INCIDENTAL).
 2. PLANS FOR SEEDING AND EROSION CONTROL DETAILS.
 3. INFILTRATOR SHALL PERFORM DOUBLE RING INFILTRATOR TESTING AFTER CONSTRUCTION OF INFILTRATOR TO MEET TEST PERCOLATION RATES AND TEST QUANTITIES PER SPECIFICATION.
 4. SEE INTERSECTION DETAILS PLAN FOR PEDESTRIAN RAMP, LANDINGS AND SIDEWALK GRADES.



DATE: 02/07/2022, MN LIC. NO. 22814

GRADY S. BROWN, P.E.

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GRADY S. BROWN, P.E.

DATE: 02/07/2022, MN LIC. NO. 22814

Sponsor: Public Works

Meeting Date: 1/11/2022

Title: 2022-2026 Transportation Improvement Program

File Number: 2021-685

Background and Rationale:

In order to qualify for state and federal funding and to proceed with construction projects, the Ramsey County Board of Commissioners must approve the Public Works 5-year Transportation Improvement Program (TIP). The TIP is a planning document and funding estimates identified in the TIP are reflected in the county's Capital Improvements Program Budget. Similar programs have been developed each year since 1988.

Public Works annually prepares the TIP using a collaborative process whereby the county solicits projects and input from area municipalities. Project inclusion in the TIP is based on a cooperative dialogue with municipal and state partners, along with technical analysis and consideration of funding opportunities. While funding limits will continue to challenge program delivery, communication and engagement with municipal partners ensures local needs and priorities are examined and addressed to the extent possible.

Projects included in the TIP are also looked at through the lens of the Ramsey County All Abilities Transportation Network (AATN) policy, which prioritizes the most vulnerable users (i.e. pedestrians, bicyclists, people with disabilities) first.

The design, construction and right of way costs identified in the TIP are estimates based on best practices in the industry. The funding landscape for transportation projects can be volatile and the ultimate delivery of the TIP is dependent on future funding levels. Partnering on projects with area communities, bordering counties, the Minnesota Department of Transportation and other state agencies will continue to be a critical way for Ramsey County to get the most from our available funds.

The approved 2022-2026 TIP may be accessed on the county's website at
<https://www.ramseycounty.us/residents/roads-transit/transportation-improvement-program>

Recommendation:

The Ramsey County Board of Commissioners resolved to:

1. Adopt the 2022-2026 Public Works Transportation Improvement Program.
2. Authorize the County Engineer to prepare plans and agreements for all projects identified in the Transportation Improvement Program, and to issue solicitations in accordance with county policies and procedures and the Minnesota Department of Transportation's list of "Pre-Qualified Vendors by Work Type".
3. Authorize the County Engineer to execute Right of Way Plats and Certificate of Surveys for Highway projects that require the determination of existing right of way for the delineation and /or acquisition of property, for planning studies or disposition of excess county property.
4. Authorize the County Manager to enter into contracts and agreements, and execute change orders and amendments to contracts, supplemental agreements, and agreements related to the expenditure of Transportation Improvement Program Project Funds utilizing County State Aid, Federal, state and participating funding associated with the construction of the approved projects in the 2022-2026 or a previously approved Transportation Improvement Program in accordance with the county's procurement policies and procedures.
5. Authorize the County Engineer and County Attorney to acquire temporary easements, permanent easements, fee title, and enter into Limited Use Permits with the state of Minnesota for projects in the 2022-2026 Transportation Improvement Program, or previously approved Transportation Improvement Program, by negotiation or condemnation.
6. Authorize the County Engineer to approve negotiated settlements for up to \$100,000 over the county's appraised value per parcel for temporary and permanent easements and fee title.
7. Authorize the County Manager to approve and execute purchase agreements, settlements, closing documents, Limited Use Permits and other related real estate documentation associated with Ramsey County Board approved acquisitions of real property.
8. Authorize the County Manager to approve and execute cooperative agreements and maintenance agreements with cities, counties, state, and other governmental agencies for their participation in projects listed in the 2022-2026 Public Works Transportation Improvement Program or previously approved Transportation Improvement Program.
9. Authorize temporary cash loans from the County General Fund to the Road and Bridge Capital Improvement Program fund and the Wheelage Tax fund for costs of projects listed in the 2022-2026 Public Works Transportation Program, or previously approved Transportation Improvement Program, and for maintenance project expenditures occurring before bond or wheelage tax proceeds are received pending receipt of Federal, County State Aid Highway, state, participating funds.
10. Authorize the County Manager to submit grant applications for state and federal funding for projects listed in the 2022-2026 Public Works Transportation Improvement Program.
11. Authorize the County Manager to accept grants and execute grant agreements agreeing to the grant terms and conditions for grant award and for grants that so require, the county agrees to be responsible for any additional amount by which the cost exceeds the county's construction cost estimate and will return to the grantor any grant amount appropriated for the project but not utilized for the project under the terms of the grant agreement.

A motion to approve was made by Commissioner McGuire, seconded by Commissioner Reinhardt. Motion passed.

Aye: - 7: Carter, Frethem, MatasCastillo, McDonough, McGuire, Ortega, and Reinhardt

By: _____



Mee Cheng, Chief Clerk - County Board