

Addendum 1

Solicitation 21-99400

2021 Street Preservation Project

This addendum serves to notify all bidders of the following changes to the solicitation documents:

1. CHANGES TO PROJECT MANUAL

- a. BID FORM has been replaced due to a change in bid items used in the project. Please note changes in bid item descriptions and use the enclosed (Exhibit A) for project bid submittals.

2. CHANGES TO DRAWINGS

- a. See attached Sheets 5, 6, 7 and 8 (Statement of Estimated Quantities) which reflect the changes to the Select Granular Borrow (CV) bid item. The bid item has changed from Select Granular Borrow (CV) to Select Granular Borrow Mod 7% (CV).
- b. See attached Sheet 9 (Legend-Notes-Index) which reflects the addition of note 20 referenced on the Statement of Estimated Quantities and the addition of MnDOT Standard Plate Number 7000E.
- c. See attached Sheets 98, 102, 127, 145 and 152 which provide clarifications for bid items on the Typical Sections for the Burning Tree Road, Mountain Shadow Drive, Norton Road, North Lake Avenue and Matterhorn Drive segments of the project.

3. CLARIFICATIONS/ADDITIONS

- a. The contract documents show Motor Grader paid by Hour and Compactor paid by Week. These payments are based on pay items in the 2018 MnDOT Standard for Specifications for Construction and will be paid as shown in the Statement of Estimated Quantities.
- b. Sheet 78 for Elinor Street shows Remove Sign (Yield) and Install Sign Type C (Yield). Contractor shall remove the yield sign and then furnish and install a new Yield sign and post. Other instances of Salvage Sign type C and Install Sign Type C are also correct. Contractor shall salvage the existing sign and install with a new Breakaway Mount Post.
- c. Seeding and mulch (Sheets 47, 48, 49 and 50) are noted as incidental work on Elk Street. Shoulders are to be seeded with Seed Mixture 25-141 at a rate of 59 lbs/acre and then covered with a mulch or blanket for erosion protection. All work shall be paid and considered incidental to Common Topsoil Borrow pay item.
- d. Adjust Valve Box. This item is noted as Specification 2504 (which doesn't exist in the MnDOT Standard for Specifications for Construction) and doesn't have a special provision describing it. This item will include furnishing and installing a

1.5" or 2" height adjuster on the Mill & Overlay and Overlay portions of the project. The Reclaim and Reconstruct segments will require concrete collars as specified in The City of Duluth, Minnesota Construction Standards and shown in the Plans.

- e. Street segments with striping are noted with Solid Line Multi Comp (i.e. 4" Double Solid Multi Comp) on the plan sheets and the Statement of Estimated Quantities shows Solid Line Paint (i.e. 4" Double Solid Line Paint). **The Statement of Estimated Quantities is correct, Solid Line Paint shall be used and not Solid Multi Comp.**
- f. The "Site Restoration" note is hereby removed from Sheet 64 adjacent to the 4-Inch Concrete Walk item. Note 2 on Sheet 9 gives a description of the type of incidental work to be completed around finished concrete work, including turf establishment.
- g. On Plan Sheet 118 for Vermilion Road, there is bituminous pavement being constructed over an existing gravel surface. Any grading and compaction time necessary to prepare the gravel road grade will be incidental to paving the 130-foot long section of Bituminous Overlay.
- h. Plan Sheet 145 for North Lake Avenue shows placement of a non-wearing course of SPNWB340B. Contractor shall use SPWEA340B for bituminous pavement at this location. See attachment for the updated Typical Section (Sheet 145).
- i. Plan Sheets for Burning Tree Road, Matterhorn Drive, and Mountain Shadow Drive show placement of a non-wear course of SPNWB340C. Contractor shall use the wear course mixture of SPWEA340C on all lifts as shown in the SEQ. See attached Sheets 98, 102 and 152 for updated Typical Sections showing these changes.
- j. Norton Road and all reclaim roadway sections shall be constructed with two lifts of SPWEA340C of bituminous pavement. See attached Sheet 127 for the updated Norton Road Typical Section.
- k. The Statement of Estimated Quantities refers to Note 20 with the Bituminous Curb pay item. See attached Sheet 9 for an updated Legend-Notes-Index list with Note 20 and the addition of MnDOT Standard Plate Number 7000E.

Addendum 1 consists of these two (2) pages, Exhibit A (bid sheet), and ten (10) revised plan sheets.

Please acknowledge receipt of this Addendum by checking the acknowledgement box within the www.bidexpress.com solicitation. Failure to acknowledge this addendum may disqualify your bid.

Posted: **April 27, 2021**

Order No.	Item No.	Description	Units	Quantity
1	2021.501	MOBILIZATION	LUMP SUM	1
2	2104.502	REMOVE MANHOLE OR CATCH BASIN	EACH	19
3	2104.509	REMOVE VALVE BOX	EACH	9
4	2104.502	SALVAGE SIGN TYPE C	EACH	3
5	2104.503	REMOVE PIPE CULVERTS	LIN FT	546
6	2104.503	REMOVE CURB & GUTTER	LIN FT	5148
7	2104.053	REMOVE GUARDRAIL	LIN FT	150
8	2104.502	REMOVE SIGN	EACH	1
9	2104.504	REMOVE CONCRETE DRIVEWAY PAVEMENT	SQ YD	1061
10	2104.504	REMOVE BITUMINOUS DRIVEWAY PAVEMENT	SQ YD	1145
11	2104.504	REMOVE BITUMINOUS PAVEMENT	SQ YD	3813
12	2104.518	REMOVE CONCRETE WALK	SQ FT	11404
13	2104.618	REMOVE BRICK PAVERS	SQ FT	21333
14	2105.507	COMMON EXCAVATION	CU YD	3549
15	2105.507	SELECT GRANULAR BORROW MOD 7% (CV)	CU YD	2507
16	2112.519	SUBGRADE PREPARATION	ROAD STA	14
17	2118.507	AGGREGATE SURFACING (LV), CLASS 5	CU YD	706
18	2123.510	MOTOR GRADER	HOUR	12
19	2123.612	COMPACTOR	WEEK	0.5
20	2130.523	WATER	M GALLON	5
21	2131.506	CALCIUM CHLORIDE SOLUTION	GALLON	11969
22	2211.509	AGGREGATE BASE (CV) CLASS 5	CU YD	984
23	2215.504	FULL DEPTH RECLAMATION	SQ YD	47874
24	2232.504	MILL BITUMINOUS SURFACE (1.5")	SQ YD	49533
25	2232.504	MILL BITUMINOUS SURFACE (2.0")	SQ YD	40200
26	2357.506	BITUMINOUS MATERIAL FOR TACK COAT	GALLON	9115
27	2360.509	TYPE SP 9.5 WEARING COURSE MIXTURE (3,B)	TON	6482
28	2360.509	TYPE SP 9.5 WEARING COURSE MIXTURE (3,C)	TON	12039
29	2502.503	4" PERF PVC PIPE DRAIN	LIN FT	2460
30	2503.503	12" RC PIPE SEWER DES. 3006 CL V	LIN FT	377
31	2503.503	18" RC PIPE SEWER DES. 3006 CL V	LIN FT	229
32	2503.602	CONNECT TO EXISTING STORM SEWER	EACH	24
33	2504.602	ADJUST VALVE BOX	EACH	59
34	2504.602	ADJUST CURB STOP	EACH	6
35	2504.602	CONCRETE ENCASED VALVE BOX COLLAR	EACH	5
36	2506.502	CONSTRUCT DRAINAGE STRUCTURE DESIGN F	EACH	2
37	2506.502	CONSTRUCT DRAINAGE STRUCTURE DESIGN G	EACH	13
38	2506.502	CONSTRUCT DRAINAGE STRUCTURE DESIGN 60-4020	EACH	2
39	2506.502	CONSTRUCT DRAINAGE STRUCTURE DESIGN 72-4020	EACH	2
40	2506.502	CASTING ASSEMBLY	EACH	21
41	2506.503	RECONSTRUCT DRAINAGE STRUCTURE	LIN FT	4
42	2506.602	ADJUST FRAME RING & CASTING	EACH	60
43	2506.602	GRATE CASTING SPECIAL	EACH	1
44	2506.602	ADJUST FRAME RING & CASTING (SPECIAL)	EACH	30
45	2506.602	CONCRETE ENCASED CASTING COLLAR	EACH	3
46	2521.518	4" CONCRETE WALK	SQ FT	9375

47	2521.518	6" CONCRETE WALK	SQ FT	12125
48	2531.503	CONCRETE CURB & GUTTER DESIGN B624	LIN FT	5148
49	2531.504	7" CONCRETE DRIVEWAY PAVEMENT	SQ YD	1167
50	2531.603	CONCRETE CURB DESIGN V	LIN FT	22
51	2531.618	TRUNCATED DOMES	SQ FT	1093
52	2535.503	BITUMINOUS CURB	LIN FT	2265
53	2540.602	CONSTRUCT SURVEY MONUMENT	EACH	3
54	2540.602	RELOCATE MAIL BOX SUPPORT	EACH	39
55	2554.502	END TREATMENT-ENERGY ABSORBING TERMINAL	EACH	2
56	2554.603	INSTALL GUARDRAIL	LIN FT	150
57	2563.601	TRAFFIC CONTROL	LUMP SUM	1
58	2564.502	INSTALL SIGN TYPE C	EACH	4
59	2574.507	COMMON TOPSOIL BORROW	CU YD	114
60	2575.601	EROSION CONTROL	LUMP SUM	1
61	2582.503	4" SOLID LINE PAINT	LIN FT	24681
62	2582.503	12" SOLID LINE PAINT	LIN FT	576
63	2582.503	24" SOLID LINE PAINT	LIN FT	445
64	2582.503	4" DOUBLE SOLID LINE PAINT	LIN FT	18185
65	2582.518	PAVEMENT MESSAGE PAINT	SQ FT	201
66	2582.518	CROSSWALK PREF THERMO GR IN	SQ FT	936

STATEMENT OF ESTIMATED QUANTITIES DULUTH 2021 STREET PRESERVATION DULUTH, MINNESOTA						OVERLAY				
ITEM NO.	GENERAL NOTES	SPEC. NO.	ITEM DESCRIPTION	UNIT	TOTAL ESTIMATED QUANTITY	131ST AVE W - W 3RD ST TO HISSON CREEK PKWY	W 9TH ST - 5TH AVE W TO 8TH AVE W	E 12TH ST ALLEY - 5TH AVE E WESTERLY	MATTERHORN CIRCLE - MATTERHORN DR TO CUL-DE-SAC	ELK ST - VERMILION RD TO LOCHAIRE AVE
1		2021.501	MOBILIZATION	LUMP SUM	1	0.04	0.04	0.04	0.04	0.04
2		2104.502	REMOVE MANHOLE OR CATCH BASIN	EACH	19	0	0	0	0	0
3		2104.509	REMOVE VALVE BOX	EACH	9	0	0	0	0	0
4		2104.502	SALVAGE SIGN TYPE C	EACH	3	0	0	0	0	0
5		2104.503	REMOVE PIPE CULVERTS	LIN FT	546	0	0	0	0	0
6	3	2104.503	REMOVE CURB & GUTTER	LIN FT	5148	0	0	86	0	0
7		2104.053	REMOVE GUARDRAIL	LIN FT	150	0	0	0	0	0
8		2104.502	REMOVE SIGN	EACH	1	0	0	0	0	0
9	3	2104.504	REMOVE CONCRETE DRIVEWAY PAVEMENT	SQ YD	1061	0	0	19	73	0
10	3	2104.504	REMOVE BITUMINOUS DRIVEWAY PAVEMENT	SQ YD	1145	0	0	0	0	0
11		2104.504	REMOVE BITUMINOUS PAVEMENT	SQ YD	3813	0	0	0	0	0
12	3	2104.518	REMOVE CONCRETE WALK	SQ FT	11404	0	0	160	0	0
13		2104.618	REMOVE BRICK PAVERS	SQ FT	21333	0	0	0	0	0
14		2105.507	COMMON EXCAVATION	CU YD	3549	7	0	52	0	0
15		2105.507	SELECT GRANULAR BORROW MOD 7% (CV)	CU YD	2507	0	0	0	0	0
16		2112.519	SUBGRADE PREPARATION	ROAD STA	14	0	0	0	0	0
17	13	2118.507	AGGREGATE SURFACING (LV), CLASS 5	CU YD	706	59	97	13	0	10
18	10	2123.510	MOTOR GRADER	HOURL	12	0	6	6	0	0
19	10	2123.612	COMPACTOR	WEEK	0.5	0	0.25	0.25	0	0
20		2130.523	WATER	MGALLON	5	0	2	3	0	0
21	7	2131.506	CALCIUM CHLORIDE SOLUTION	GALLON	11969	0	0	0	0	0
22		2211.509	AGGREGATE BASE (CV) CLASS 5	CU YD	984	0	0	0	0	0
23	1	2215.504	FULL DEPTH RECLAMATION	SQ YD	47874	0	0	0	0	0
24	1, 16	2232.504	MILL BITUMINOUS SURFACE (1.5")	SQ YD	49533	0	0	0	0	0
25	1, 16	2232.504	MILL BITUMINOUS SURFACE (2.0")	SQ YD	40200	0	0	0	0	0
26	6	2357.506	BITUMINOUS MATERIAL FOR TACK COAT	GALLON	9115	344	297	83	31	410
27	6, 8, 9, 15, 18	2360.509	TYPE SP 9.5 WEARING COURSE MIXTURE (3,B)	TON	6482	629	0	0	55	738
28	6, 8, 15, 18	2360.509	TYPE SP 9.5 WEARING COURSE MIXTURE (3,C)	TON	12039	0	535	148	0	0
29		2502.503	4" PERF PVC PIPE DRAIN	LIN FT	2460	0	0	0	0	0
30	17	2503.503	12" RC PIPE SEWER DES. 3006 CL V	LIN FT	377	0	0	60	0	0
31		2503.503	18" RC PIPE SEWER DES. 3006 CL V	LIN FT	229	0	0	0	0	0
32		2503.602	CONNECT TO EXISTING STORM SEWER	EACH	24	0	0	1	0	0
33	5	2504.602	ADJUST VALVE BOX	EACH	59	15	0	0	4	0
34		2504.602	ADJUST CURB STOP	EACH	6	0	0	0	0	0
35		2504.602	CONCRETE ENCASED VALVE BOX COLLAR	EACH	5	0	0	0	0	0
36	17	2506.502	CONSTRUCT DRAINAGE STRUCTURE DESIGN F	EACH	2	0	0	0	0	0
37	17	2506.502	CONSTRUCT DRAINAGE STRUCTURE DESIGN G	EACH	13	0	0	1	0	0
38	17	2506.502	CONSTRUCT DRAINAGE STRUCTURE DESIGN 60-4020	EACH	2	0	0	0	0	0
39	17	2506.502	CONSTRUCT DRAINAGE STRUCTURE DESIGN 72-4020	EACH	2	0	0	0	0	0
40		2506.502	CASTING ASSEMBLY	EACH	21	0	0	1	0	0
41		2506.503	RECONSTRUCT DRAINAGE STRUCTURE	LIN FT	4	0	0	0	0	0
42	12	2506.602	ADJUST FRAME RING & CASTING	EACH	60	0	0	0	0	0
43		2506.602	GRATE CASTING SPECIAL	EACH	1	0	0	1	0	0
44	11	2506.602	ADJUST FRAME RING & CASTING (SPECIAL)	EACH	30	0	0	0	2	0
45		2506.602	CONCRETE ENCASED CASTING COLLAR	EACH	3	0	0	0	0	0
46	2, 4, 14	2521.518	4" CONCRETE WALK	SQ FT	9375	0	0	74	0	0
47	2, 4, 14	2521.518	6" CONCRETE WALK	SQ FT	12125	0	0	86	0	0
48	4	2531.503	CONCRETE CURB & GUTTER DESIGN B624	LIN FT	5148	0	0	86	0	0
49	2	2531.504	7" CONCRETE DRIVEWAY PAVEMENT	SQ YD	1167	0	0	19	73	0
50		2531.603	CONCRETE CURB DESIGN V	LIN FT	22	0	0	0	0	0
51	4, 14	2531.618	TRUNCATED DOMES	SQ FT	1093	0	0	16	0	0
52	20	2535.503	BITUMINOUS CURB	LIN FT	2265	0	0	0	0	0
53		2540.602	CONSTRUCT SURVEY MONUMENT	EACH	3	1	0	0	0	0
54		2540.602	RELOCATE MAIL BOX SUPPORT	EACH	39	0	3	0	0	0
55		2554.502	END TREATMENT-ENERGY ABSORBING TERMINAL	EACH	2	0	0	0	0	0
56		2554.603	INSTALL GUARDRAIL	LIN FT	150	0	0	0	0	0
57		2563.601	TRAFFIC CONTROL	LUMP SUM	1	0.04	0.04	0.04	0.04	0.04
58	19	2564.502	INSTALL SIGN TYPE C	EACH	4	0	0	0	0	0
59		2574.507	COMMON TOPSOIL BORROW	CU YD	114	0	0	0	0	114
60		2575.601	EROSION CONTROL	LUMP SUM	1	0.04	0.04	0.04	0.04	0.04
61		2582.503	4" SOLID LINE PAINT	LIN FT	24681	0	0	0	0	0
62		2582.503	12" SOLID LINE PAINT	LIN FT	576	0	0	0	0	0
63		2582.503	24" SOLID LINE PAINT	LIN FT	445	0	0	0	0	0
64		2582.503	4" DOUBLE SOLID LINE PAINT	LIN FT	18185	0	0	0	0	0
65		2582.518	PAVEMENT MESSAGE PAINT	SQ FT	201	0	0	0	0	0
66		2582.518	CROSSWALK PREF THERMO GR IN	SQ FT	936	0	0	0	0	0

ADDENDUM 1 -- REVISION DATE: 04/26/2021

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: 04/15/2021

SIGNATURE: _____

Jeffrey S. Goetzman
TYPE NAME

LIC. NO: 26422



CITY OF DULUTH
ENGINEERING DIVISION
411 W. 1ST ST. STE. 211
DULUTH, MN 55802

2021 DULUTH STREET PRESERVATION

CITY PROJECT NO.:

1693

STATE AID PROJECT NO.:

N/A

DRAWN BY:	TSM
STATEMENT OF ESTIMATED QUANTITIES--1 OF 4	
SHEET NO. 5 OF 172	

STATEMENT OF ESTIMATED QUANTITIES
DULUTH 2021 STREET PRESERVATION
DULUTH, MINNESOTA

ITEM NO.	GENERAL NOTES	SPEC. NO.	ITEM DESCRIPTION	UNIT	TOTAL ESTIMATED QUANTITY	MILL & OVERLAY							
						FALCON ST - 33RD AVE W TO 88TH AVE W	90TH AVE W - HILTON ST TO FALCON ST	RALEIGH ST - CENTRAL AVE TO 59TH AVE W	N 58TH AVE W - EUNOR ST TO W 8TH ST	N 56TH AVE W - EUNOR ST TO W 8TH ST	EUNOR ST - N 56TH AVE W TO CENTRAL AVE	RESTORMEL ST - W 3RD ST TO DEAD END	N 3RD AVE W - W 2ND ST ALLEY TO 4TH ST
1		2021.501	MOBILIZATION	LUMP SUM	1	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04
2		2104.502	REMOVE MANHOLE OR CATCH BASIN	EACH	19	2	0	0	0	0	0	0	0
3		2104.509	REMOVE VALVE BOX	EACH	9	0	0	9	0	0	0	0	0
4		2104.502	SALVAGE SIGN TYPE C	EACH	3	0	0	1	0	0	0	0	0
5		2104.503	REMOVE PIPE CULVERTS	LINE FT	546	40	0	0	0	0	0	0	0
6	3	2104.503	REMOVE CURB & GUTTER	LINE FT	5148	252	72	298	197	298	138	327	10
7		2104.053	REMOVE GUARDRAIL	LINE FT	150	0	0	0	0	0	0	0	0
8		2104.502	REMOVE SIGN	EACH	1	0	0	0	0	0	1	0	0
9	3	2104.504	REMOVE CONCRETE DRIVEWAY PAVEMENT	SQ YD	1061	0	0	161	241	0	0	0	115
10	3	2104.504	REMOVE BITUMINOUS DRIVEWAY PAVEMENT	SQ YD	1145	0	0	0	0	0	0	0	0
11		2104.504	REMOVE BITUMINOUS PAVEMENT	SQ YD	3813	0	0	0	0	0	0	0	0
12	3	2104.518	REMOVE CONCRETE WALK	SQ FT	11404	829	338	3149	453	1407	982	1483	0
13		2104.618	REMOVE BRICK PAVERS	SQ FT	21333	0	0	0	0	0	0	0	0
14		2105.507	COMMON EXCAVATION	CU YD	3549	0	0	0	0	0	0	0	0
15		2105.507	SELECT GRANULAR BORROW MOD 7% (CV)	CU YD	2507	0	0	0	0	0	0	0	0
16		2112.519	SUBGRADE PREPARATION	ROAD STA	14	0	0	0	0	0	0	0	0
17	13	2118.507	AGGREGATE SURFACING (LV), CLASS 5	CU YD	706	0	0	0	0	0	0	0	0
18	10	2123.510	MOTOR GRADER	HOUR	12	0	0	0	0	0	0	0	0
19	10	2123.612	COMPACTOR	WEEK	0.5	0	0	0	0	0	0	0	0
20		2130.523	WATER	M GALLON	5	0	0	0	0	0	0	0	0
21	7	2131.506	CALCIUM CHLORIDE SOLUTION	GALLON	11969	0	0	0	0	0	0	0	0
22		2211.509	AGGREGATE BASE (CV) CLASS 5	CU YD	984	0	0	0	0	0	0	0	0
23	1	2215.504	FULL DEPTH RECLAMATION	SQ YD	47874	0	0	0	0	0	0	0	0
24	1, 16	2232.504	MILL BITUMINOUS SURFACE (1.5")	SQ YD	49533	5271	2513	6236	1806	4227	1365	3667	3470
25	1, 16	2232.504	MILL BITUMINOUS SURFACE (2.0")	SQ YD	40200	0	0	0	0	0	0	0	0
26	6	2357.506	BITUMINOUS MATERIAL FOR TACK COAT	GALLON	9115	264	126	312	91	212	69	184	175
27	6, 8, 9, 15, 18	2360.509	TYPE SP 9.5 WEARING COURSE MIXTURE (B,B)	TON	6482	475	227	562	163	381	123	354	314
28	6, 9, 15, 18	2360.509	TYPE SP 9.5 WEARING COURSE MIXTURE (B,C)	TON	12039	0	0	0	0	0	0	0	0
29		2502.503	4" PERIF PVC PIPE DRAIN	LINE FT	2460	0	0	0	0	0	0	0	0
30	17	2503.503	12" RC PIPE SEWER DES. 3006 CLV	LINE FT	377	40	0	0	0	0	0	0	0
31		2503.503	18" RC PIPE SEWER DES. 3006 CLV	LINE FT	229	0	0	0	0	0	0	0	0
32		2503.602	CONNECT TO EXISTING STORM SEWER	EACH	24	6	0	0	0	0	0	0	0
33	5	2504.602	ADJUST VALVE BOX	EACH	59	4	2	18	0	3	0	2	1
34		2504.602	ADJUST CURB STOP	EACH	6	0	0	0	2	0	0	0	1
35		2504.602	CONCRETE ENCASED VALVE BOX COLLAR	EACH	5	0	0	0	0	0	0	0	0
36	17	2506.502	CONSTRUCT DRAINAGE STRUCTURE DESIGN F	EACH	2	1	0	0	0	0	0	0	0
37	17	2506.502	CONSTRUCT DRAINAGE STRUCTURE DESIGN G	EACH	13	0	0	0	0	0	0	0	0
38	17	2506.502	CONSTRUCT DRAINAGE STRUCTURE DESIGN 60-4020	EACH	2	0	0	0	0	0	0	0	0
39	17	2506.502	CONSTRUCT DRAINAGE STRUCTURE DESIGN 72-4020	EACH	2	0	0	0	0	0	0	0	0
40		2506.502	CASTING ASSEMBLY	EACH	21	1	0	0	2	0	0	0	0
41		2506.503	RECONSTRUCT DRAINAGE STRUCTURE	LINE FT	4	0	0	0	0	3	0	0	1
42	12	2506.602	ADJUST FRAME RING & CASTING	EACH	60	9	0	10	2	5	4	10	3
43		2506.602	GRATE CASTING SPECIAL	EACH	1	0	0	0	0	0	0	0	0
44	11	2506.602	ADJUST FRAME RING & CASTING (SPECIAL)	EACH	30	0	0	0	0	0	0	4	10
45		2506.602	CONCRETE ENCASED CASTING COLLAR	EACH	3	0	0	0	0	0	0	0	0
46	2, 4, 14	2521.518	4" CONCRETE WALK	SQ FT	9375	467	152	2123	364	512	409	966	0
47	2, 4, 14	2521.518	6" CONCRETE WALK	SQ FT	12125	362	186	1026	89	895	573	517	0
48	4	2531.503	CONCRETE CURB & GUTTER DESIGN B624	LINE FT	5148	252	72	298	197	298	138	327	10
49	2	2531.504	7" CONCRETE DRIVEWAY PAVEMENT	SQ YD	1167	71	17	161	241	0	0	0	115
50		2531.603	CONCRETE CURB DESIGN V	LINE FT	22	0	0	0	0	22	0	0	0
51	4, 14	2531.618	TRUNCATED DOMES	SQ FT	1093	83	49	234	16	92	120	164	0
52	20	2535.503	BITUMINOUS CURB	LINE FT	2265	0	0	0	0	0	0	0	0
53		2540.602	CONSTRUCT SURVEY MONUMENT	EACH	3	0	0	2	0	0	0	0	0
54		2540.602	RELOCATE MAIL BOX SUPPORT	EACH	39	0	0	0	0	0	0	0	0
55		2554.502	END TREATMENT-ENERGY ABSORBING TERMINAL	EACH	2	0	0	0	0	0	0	0	0
56		2554.603	INSTALL GUARDRAIL	LINE FT	150	0	0	0	0	0	0	0	0
57		2563.601	TRAFFIC CONTROL	LUMP SUM	1	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04
58	19	2564.502	INSTALL SIGN TYPE C	EACH	4	0	0	1	0	0	1	0	0
59		2574.507	COMMON TOP SOIL BORROW	CU YD	114	0	0	0	0	0	0	0	0
60		2575.601	EROSION CONTROL	LUMP SUM	1	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04
61		2582.503	4" SOLID LINE PAINT	LINE FT	24681	0	0	0	0	0	0	0	0
62		2582.503	12" SOLID LINE PAINT	LINE FT	576	0	0	0	0	0	0	0	0
63		2582.503	24" SOLID LINE PAINT	LINE FT	445	0	0	0	0	0	0	0	76
64		2582.503	4" DOUBLE SOLID LINE PAINT	LINE FT	18185	0	0	1068	0	0	0	0	690
65		2582.518	PAVEMENT MESSAGE PAINT	SQ FT	201	0	0	0	0	0	0	0	0
66		2582.518	CROSSWALK PREF THERMO GR IN	SQ FT	916	0	0	0	0	576	360	0	0

ADDENDUM 1 -- REVISION DATE: 04/26/2021

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.

SIGNATURE: _____

Jeffrey S. Goetzman
TYPE NAME

DATE: 04/15/2021

LIC. NO: 26422



CITY OF DULUTH
ENGINEERING DIVISION
411 W. 1ST ST. STE. 211
DULUTH, MN 55802

2021 DULUTH STREET PRESERVATION

CITY PROJECT NO.:

1693

STATE AID PROJECT NO.:

N/A

DRAWN BY: TSM

STATEMENT OF ESTIMATED QUANTITIES--2 OF 4

SHEET NO. 6 OF 172

STATEMENT OF ESTIMATED QUANTITIES
DULUTH 2021 STREET PRESERVATION
DULUTH, MINNESOTA

ITEM NO.	GENERAL NOTES	SPEC. NO.	ITEM DESCRIPTION	UNIT	TOTAL ESTIMATED QUANTITY	MILL & OVERLAY							
						JOSHUA AVE - CENTRAL ENTRANCE TO MAPLE GROVE RD	FRONTAGE RD - JOSHUA AVE TO 360 FT WESTERLY	MATTERHORN DR - BURNING TREE RD TO MAPLE GROVE RD	MOUNTAIN SHADOW DR - BURNING TREE RD TO HALL DR	MALL DR - MOUNTAIN SHADOW DR TO DECKER RD	STUART CT - BROOKLINE ST TO WEST STM ARIE ST	MELROSE AVE - W ARROWHEAD RD TO BROOKLINE ST	VERMILLION RD - E OXFORD ST TO END OF PAVEMENT
1		2021.501	MOBILIZATION	LUMP SUM	1	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04
2		2104.502	REMOVE MANHOLE OR CATCH BASIN	EACH	19	0	0	2	0	0	0	0	2
3		2104.509	REMOVE VALVE BOX	EACH	9	0	0	0	0	0	0	0	0
4		2104.502	SALVAGE SIGN TYPE C	EACH	3	0	0	0	0	0	0	0	0
5		2104.503	REMOVE PIPE CULVERTS	LIN FT	546	0	0	26	0	0	0	0	229
6	3	2104.503	REMOVE CURB & GUTTER	LIN FT	5148	0	0	368	312	60	0	0	69
7		2104.053	REMOVE GUARDRAIL	LIN FT	150	0	0	0	0	150	0	0	0
8		2104.502	REMOVE SIGN	EACH	1	0	0	0	0	0	0	0	0
9	3	2104.504	REMOVE CONCRETE DRIVEWAY PAVEMENT	SQ YD	1061	0	0	116	123	0	0	0	0
10	3	2104.504	REMOVE BITUMINOUS DRIVEWAY PAVEMENT	SQ YD	1145	0	0	17	50	49	0	0	0
11		2104.504	REMOVE BITUMINOUS PAVEMENT	SQ YD	3813	0	0	363	157	0	0	0	0
12	3	2104.518	REMOVE CONCRETE WALK	SQ FT	11404	0	0	266	0	212	0	67	116
13		2104.618	REMOVE BRICK PAVERS	SQ FT	21333	0	0	0	0	0	0	0	0
14		2105.507	COMMON EXCAVATION	CU YD	3549	0	0	363	157	0	0	0	0
15		2105.507	SELECT GRANULAR BORROW MOD 7% (CV)	CU YD	2507	0	0	242	105	0	0	0	0
16		2112.519	SUBGRADE PREPARATION	ROAD STA	14	0	0	2	0	0	0	0	0
17	13	2118.507	AGGREGATE SURFACING (LV), CLASS 5	CU YD	706	0	0	0	0	0	0	0	0
18	10	2123.510	MOTOR GRADER	HOUR	12	0	0	0	0	0	0	0	0
19	10	2123.612	COMPACTOR	WEEK	0.5	0	0	0	0	0	0	0	0
20		2130.523	WATER	M GALLON	5	0	0	0	0	0	0	0	0
21	7	2131.506	CALCIUM CHLORIDE SOLUTION	GALLON	11969	0	0	0	0	0	0	0	0
22		2211.509	AGGREGATE BASE (CV) CLASS 5	CU YD	984	0	0	121	53	0	0	0	0
23	1	2215.504	FULL DEPTH RECLAMATION	SQ YD	47874	0	0	0	0	0	0	0	0
24	1, 16	2232.504	MILL BITUMINOUS SURFACE (1.5")	SQ YD	49533	7818	757	1289	2253	1915	1463	1776	3707
25	1, 16	2232.504	MILL BITUMINOUS SURFACE (2.0")	SQ YD	40200	0	0	0	0	0	0	0	0
26	6	2357.506	BITUMINOUS MATERIAL FOR TACK COAT	GALLON	9115	391	38	102	129	96	74	89	202
27	6, 8, 9, 15, 18	2360.509	TYPE SP 9.5 WEARING COURSE MIXTURE (3,B)	TON	6482	704	69	117	212	288	132	160	372
28	6, 9, 15, 18	2360.509	TYPE SP 9.5 WEARING COURSE MIXTURE (3,C)	TON	12039	0	0	88	38	0	0	0	0
29		2502.503	4" PERF PVC PIPE DRAIN	LIN FT	2460	0	0	0	150	0	0	0	0
30	17	2503.503	12" RC PIPE SEWER DES. 3006 CL V	LIN FT	377	0	0	26	0	0	0	0	0
31		2503.503	18" RC PIPE SEWER DES. 3006 CL V	LIN FT	229	0	0	0	0	0	0	0	229
32		2503.602	CONNECT TO EXISTING STORM SEWER	EACH	24	0	0	2	1	0	0	0	3
33	5	2504.602	ADJUST VALVE BOX	EACH	59	7	0	0	0	0	0	0	0
34		2504.602	ADJUST CURB STOP	EACH	6	0	0	0	0	0	3	0	0
35		2504.602	CONCRETE ENCASED VALVE BOX COLLAR	EACH	5	0	0	0	0	0	0	0	0
36	17	2506.502	CONSTRUCT DRAINAGE STRUCTURE DESIGN F	EACH	2	0	0	0	0	0	0	0	1
37	17	2506.502	CONSTRUCT DRAINAGE STRUCTURE DESIGN G	EACH	13	0	0	2	0	0	0	0	1
38	17	2506.502	CONSTRUCT DRAINAGE STRUCTURE DESIGN 60-4020	EACH	2	0	0	0	0	0	0	0	0
39	17	2506.502	CONSTRUCT DRAINAGE STRUCTURE DESIGN 72-4020	EACH	2	0	0	0	0	0	0	0	0
40		2506.502	CASTING ASSEMBLY	EACH	21	0	0	2	0	0	0	0	2
41		2506.503	RECONSTRUCT DRAINAGE STRUCTURE	LIN FT	4	0	0	0	0	0	0	0	0
42	12	2506.602	ADJUST FRAMING & CASTING	EACH	60	0	0	2	0	2	1	0	4
43		2506.602	GRATE CASTING SPECIAL	EACH	1	0	0	0	0	0	0	0	0
44	11	2506.602	ADJUST FRAMING & CASTING (SPECIAL)	EACH	30	6	0	4	0	0	1	0	0
45		2506.602	CONCRETE ENCASED CASTING COLLAR	EACH	3	0	0	0	0	0	0	0	0
46	2, 4, 14	2521.518	4" CONCRETE WALK	SQ FT	9375	0	0	90	2352	88	0	19	58
47	2, 4, 14	2521.518	6" CONCRETE WALK	SQ FT	12125	0	0	176	82	124	0	48	58
48	4	2531.503	CONCRETE CURB & GUTTER DESIGN B624	LIN FT	5148	0	0	368	312	60	0	0	69
49	2	2531.504	7" CONCRETE DRIVEWAY PAVEMENT	SQ YD	1167	0	0	133	123	49	0	0	0
50		2531.603	CONCRETE CURB DESIGN V	LIN FT	22	0	0	0	0	0	0	0	0
51	4, 14	2531.618	TRUNCATED DOMES	SQ FT	1093	0	0	24	40	38	0	8	8
52	20	2535.503	BITUMINOUS CURB	LIN FT	2265	0	0	0	0	0	1071	1194	0
53		2540.602	CONSTRUCT SURVEY MONUMENT	EACH	3	0	0	0	0	0	0	0	0
54		2540.602	RELOCATE MAIL BOX SUPPORT	EACH	39	0	0	0	0	0	0	0	0
55		2554.502	END TREATMENT-ENERGY ABSORBING TERMINAL	EACH	2	0	0	0	0	2	0	0	0
56		2554.603	INSTALL GUARDRAIL	LIN FT	150	0	0	0	0	150	0	0	0
57		2563.601	TRAFFIC CONTROL	LUMP SUM	1	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04
58	19	2564.502	INSTALL SIGN TYPE C	EACH	4	0	0	0	0	0	0	0	0
59		2574.507	COMMON TOPSOIL BORROW	CU YD	114	0	0	0	0	0	0	0	0
60		2575.601	EROSION CONTROL	LUMP SUM	1	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04
61		2582.503	4" SOLID LINE PAINT	LIN FT	24681	1462	0	0	0	115	0	0	0
62		2582.503	12" SOLID LINE PAINT	LIN FT	576	0	0	0	161	0	0	0	0
63		2582.503	24" SOLID LINE PAINT	LIN FT	445	156	0	11	34	32	0	0	0
64		2582.503	4" DOUBLE SOLID LINE PAINT	LIN FT	18185	1257	0	1121	828	514	0	0	0
65		2582.518	PAVEMENT MESSAGE PAINT	SQ FT	201	182	0	0	0	19	0	0	0
66		2582.518	CROSSWALK PREF THERMO GR IN	SQ FT	936	0	0	0	0	0	0	0	0

ADDENDUM 1 -- REVISION DATE: 04/26/2021

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.

SIGNATURE: _____

Jeffrey S. Goetzman
TYPE NAME

DATE: 04/15/2021

LIC. NO: 26422



CITY OF DULUTH
ENGINEERING DIVISION
411 W. 1ST ST. STE. 211
DULUTH, MN 55802

2021 DULUTH STREET PRESERVATION

CITY PROJECT NO.:

1693

STATE AID PROJECT NO.:

N/A

DRAWN BY: TSM
STATEMENT OF ESTIMATED QUANTITIES-3 OF 4
SHEET NO. 7 OF 172

STATEMENT OF ESTIMATED QUANTITIES DULUTH 2021 STREET PRESERVATION DULUTH, MINNESOTA						RECLAIM			REMOVE BRICK /PAVE	RECONSTRUCT
ITEM NO.	GENERAL NOTES	SPEC. NO.	ITEM DESCRIPTION	UNIT	TOTAL ESTIMATED QUANTITY	W STOWE ST - GRIK DR TO COMMONWEALTH AVE	NORTON RD -HOWARD GRISEN RD TO RICE LAKE RD	THURBER RD -NORTON RD TO END OF PAVEMENT	N LAKE AVE - 1ST ST ALLEY TO 2ND ST ALLEY	BURNING TREE RD - MAPLE GROVE RD TO 160 FT SOUTH OF MOUNTAIN SHADOW DR
1		2021.501	MOBILIZATION	LUMP SUM	1	0.04	0.04	0.04	0.04	0.04
2		2104.502	REMOVE MANHOLE OR CATCH BASIN	EACH	19	0	0	0	0	13
3		2104.509	REMOVE VALVE BOX	EACH	9	0	0	0	0	0
4		2104.502	SALVAGE SIGN TYPE C	EACH	3	1	0	0	0	1
5		2104.503	REMOVE PIPE CULVERTS	LIN FT	546	0	0	0	0	251
6	3	2104.503	REMOVE CURB & GUTTER	LIN FT	5148	175	0	0	176	2310
7		2104.053	REMOVE GUARDRAIL	LIN FT	150	0	0	0	0	0
8		2104.502	REMOVE SIGN	EACH	1	0	0	0	0	0
9	3	2104.504	REMOVE CONCRETE DRIVEWAY PAVEMENT	SQ YD	1061	0	72	0	84	57
10	3	2104.504	REMOVE BITUMINOUS DRIVEWAY PAVEMENT	SQ YD	1145	126	879	0	0	24
11		2104.504	REMOVE BITUMINOUS PAVEMENT	SQ YD	3813	54	0	0	0	3239
12	3	2104.518	REMOVE CONCRETE WALK	SQ FT	11404	1155	0	0	787	0
13		2104.618	REMOVE BRICK PAVERS	SQ FT	21333	0	0	0	21333	0
14		2105.507	COMMON EXCAVATION	CU YD	3549	0	0	0	0	2970
15		2105.507	SELECT GRANULAR BORROW MOD 7% (CV)	CU YD	2507	0	0	0	0	2160
16		2112.519	SUBGRADE PREPARATION	ROAD STA	14	0	0	0	0	12
17	13	2118.507	AGGREGATE SURFACING (LV), CLASS 5	CU YD	706	50	373	104	0	0
18	10	2123.510	MOTOR GRADER	HOUR	12	0	0	0	0	0
19	10	2123.612	COMPACTOR	WEEK	0.5	0	0	0	0	0
20		2130.523	WATER	M GALLON	5	0	0	0	0	0
21	7	2131.506	CALCIUM CHLORIDE SOLUTION	GALLON	11969	861	9750	1358	0	0
22		2211.509	AGGREGATE BASE (CV) CLASS 5	CU YD	984	0	0	0	0	810
23	1	2215.504	FULL DEPTH RECLAMATION	SQ YD	47874	3444	39000	5430	0	0
24	1, 16	2232.504	MILL BITUMINOUS SURFACE (1.5")	SQ YD	49533	0	0	0	0	0
25	1, 16	2232.504	MILL BITUMINOUS SURFACE (2.0")	SQ YD	40200	3444	31326	5430	0	0
26	6	2357.506	BITUMINOUS MATERIAL FOR TACK COAT	GALLON	9115	345	3909	543	113	486
27	6, 8, 9, 15, 18	2360.509	TYPE SP 9.5 WEARING COURSE MIXTURE (3,B)	TON	6482	0	0	0	407	0
28	6, 9, 15, 18	2360.509	TYPE SP 9.5 WEARING COURSE MIXTURE (3,C)	TON	12039	620	8205	1141	0	1264
29		2502.503	4" PERF PVC PIPE DRAIN	LIN FT	2460	0	0	0	0	2310
30	17	2503.503	12" RC PIPE SEWER DES. 3006 CLV	LIN FT	377	0	0	0	0	251
31		2503.503	18" RC PIPE SEWER DES. 3006 CLV	LIN FT	229	0	0	0	0	0
32		2503.602	CONNECT TO EXISTING STORM SEWER	EACH	24	0	0	0	0	11
33	5	2504.602	ADJUST VALVE BOX	EACH	59	0	0	0	0	3
34		2504.602	ADJUST CURB STOP	EACH	6	0	0	0	0	0
35		2504.602	CONCRETE ENCASED VALVE BOX COLLAR	EACH	5	3	2	0	0	0
36	17	2506.502	CONSTRUCT DRAINAGE STRUCTURE DESIGN F	EACH	2	0	0	0	0	0
37	17	2506.502	CONSTRUCT DRAINAGE STRUCTURE DESIGN G	EACH	13	0	0	0	0	9
38	17	2506.502	CONSTRUCT DRAINAGE STRUCTURE DESIGN 60-4020	EACH	2	0	0	0	0	2
39	17	2506.502	CONSTRUCT DRAINAGE STRUCTURE DESIGN 72-4020	EACH	2	0	0	0	0	2
40		2506.502	CASTING ASSEMBLY	EACH	21	0	0	0	0	13
41		2506.503	RECONSTRUCT DRAINAGE STRUCTURE	LIN FT	4	0	0	0	0	0
42	12	2506.602	ADJUST FRAME RING & CASTING	EACH	60	6	0	0	2	0
43		2506.602	GRATE CASTING SPECIAL	EACH	1	0	0	0	0	0
44	11	2506.602	ADJUST FRAME RING & CASTING (SPECIAL)	EACH	30	0	0	0	0	3
45		2506.602	CONCRETE ENCASED CASTING COLLAR	EACH	3	3	0	0	0	0
46	2, 4, 14	2521.518	4" CONCRETE WALK	SQ FT	9375	529	0	0	1172	0
47	2, 4, 14	2521.518	6" CONCRETE WALK	SQ FT	12125	339	0	0	634	6930
48	4	2531.503	CONCRETE CURB & GUTTER DESIGN B624	LIN FT	5148	175	0	0	176	2310
49	2	2531.504	7" CONCRETE DRIVEWAY PAVEMENT	SQ YD	1167	0	0	0	84	81
50		2531.603	CONCRETE CURB DESIGN V	LIN FT	22	0	0	0	0	0
51	4, 14	2531.618	TRUNCATED DOMES	SQ FT	1093	73	0	0	104	24
52	20	2535.503	BITUMINOUS CURB	LIN FT	2265	0	0	0	0	0
53		2540.602	CONSTRUCT SURVEY MONUMENT	EACH	3	0	0	0	0	0
54		2540.602	RELOCATE MAIL BOX SUPPORT	EACH	39	0	36	0	0	0
55		2554.502	END TREATMENT ENERGY ABSORBING TERMINAL	EACH	2	0	0	0	0	0
56		2554.603	INSTALL GUARDRAIL	LIN FT	150	0	0	0	0	0
57		2563.601	TRAFFIC CONTROL	LUMP SUM	1	0.04	0.04	0.04	0.04	0.04
58	19	2564.502	INSTALL SIGN TYPE C	EACH	4	1	0	0	0	1
59		2574.507	COMMON TOPSOIL BORROW	CU YD	114	0	0	0	0	0
60		2575.601	EROSION CONTROL	LUMP SUM	1	0.04	0.04	0.04	0.04	0.04
61		2582.503	4" SOLID LINE PAINT	LIN FT	24681	0	22922	0	160	22
62		2582.503	12" SOLID LINE PAINT	LIN FT	576	122	0	0	293	0
63		2582.503	24" SOLID LINE PAINT	LIN FT	445	96	0	0	40	0
64		2582.503	4" DOUBLE SOLID LINE PAINT	LIN FT	18185	0	11461	0	360	886
65		2582.518	PAVEMENT MESSAGE PAINT	SQ FT	201	0	0	0	0	0
66		2582.518	CROSSWALK PREF THERMO GR IN	SQ FT	936	0	0	0	0	0

ADDENDUM 1 – REVISION DATE: 04/26/2021

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.

SIGNATURE: _____

Jeffrey S. Goetzman
TYPE NAME

DATE: 04/15/2021

LIC. NO: 26422



CITY OF DULUTH
ENGINEERING DIVISION
411 W. 1ST ST. STE. 211
DULUTH, MN 55802

2021 DULUTH STREET PRESERVATION

CITY PROJECT NO.:

1693

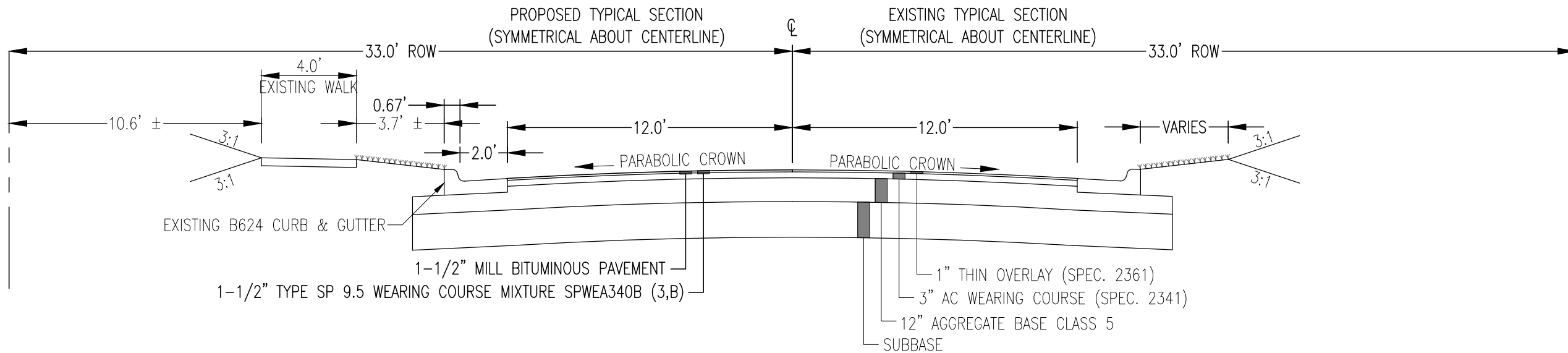
STATE AID PROJECT NO.:

N/A

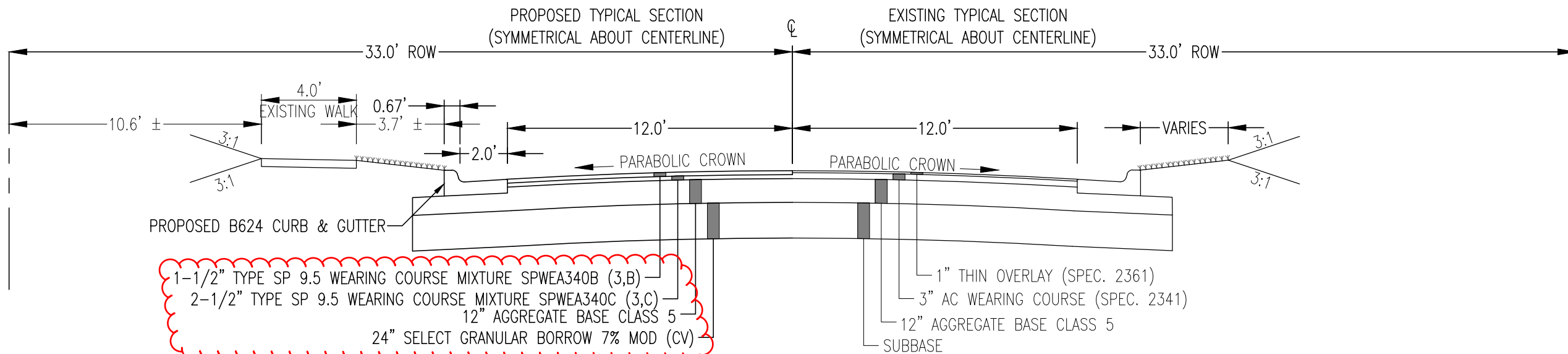
DRAWN BY: TSM

STATEMENT OF ESTIMATED QUANTITIES-4 OF 4

SHEET NO. 8 OF 172



MATTERHORN DR – MAPLE GROVE RD TO BURNING
TREE RD IN-PLACE TYPICAL SECTION APPLIES:
STA 1+00.00 – 11+50.00



MATTERHORN DR – MAPLE GROVE RD TO BURNING
TREE RD IN-PLACE TYPICAL SECTION APPLIES:
STA 11+50.00 – 12+79.00

ADDENDUM 1 – REVISION DATE: 04/26/2021

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: 04/15/2021

SIGNATURE: _____

Jeffrey S. Goetzman
TYPE NAME

LIC. NO: 26422



CITY OF DULUTH
ENGINEERING DIVISION
411 W. 1ST ST. STE. 211
DULUTH, MN 55802

2021 DULUTH STREET PRESERVATION

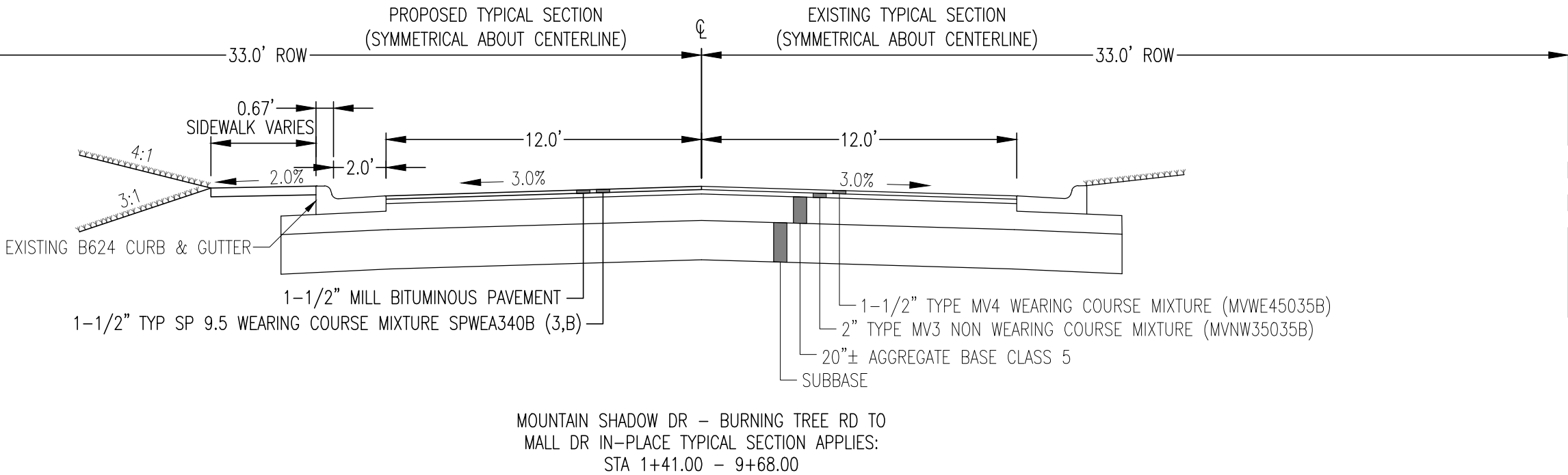
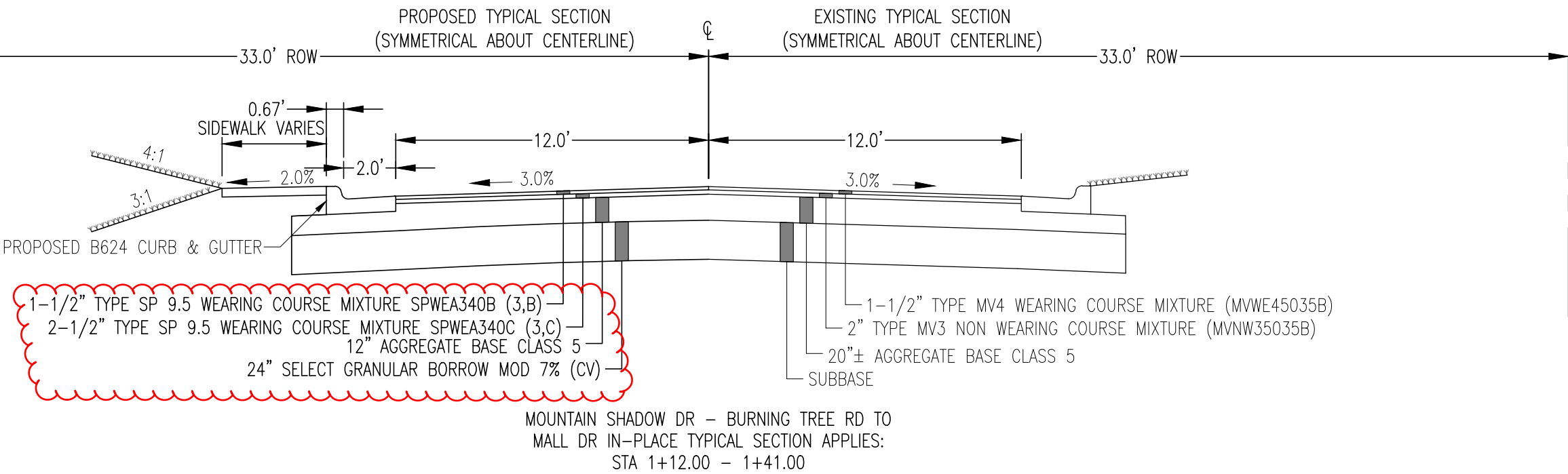
CITY PROJECT NO.:

1693

STATE AID PROJECT NO.:

N/A

DRAWN BY:	TSM
TYPICAL SECTIONS – MATTERHORN DR	
SHEET NO.	98 OF 172



ADDENDUM 1 - REVISION DATE: 04/26/2021

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: 04/15/2021

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Jeffrey S. Goetzman
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CITY OF DULUTH
ENGINEERING DIVISION
411 W. 1ST ST. STE. 211
DULUTH, MN 55802

2021 DULUTH STREET PRESERVATION

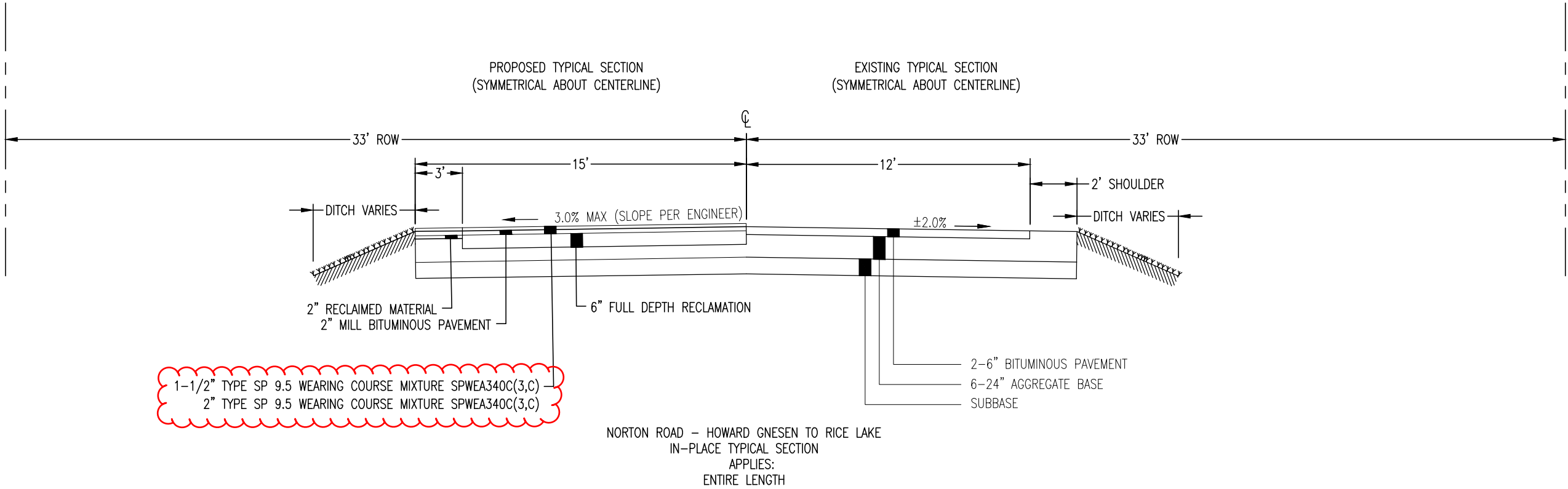
CITY PROJECT NO.:

1693

STATE AID PROJECT NO.:

N/A

DRAWN BY: TSM
TYPICAL SECTIONS - MOUNTAIN SHADOW DR
SHEET NO. 102 OF 172



ADDENDUM 1 - REVISION DATE: 04/26/2021

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: 04/15/2021

SIGNATURE: _____

Jeffrey S. Goetzman
TYPE NAME

LIC. NO: 26422



CITY OF DULUTH
ENGINEERING DIVISION
411 W. 1ST ST. STE. 211
DULUTH, MN 55802

2021 DULUTH STREET PRESERVATION

CITY PROJECT NO.:

1693

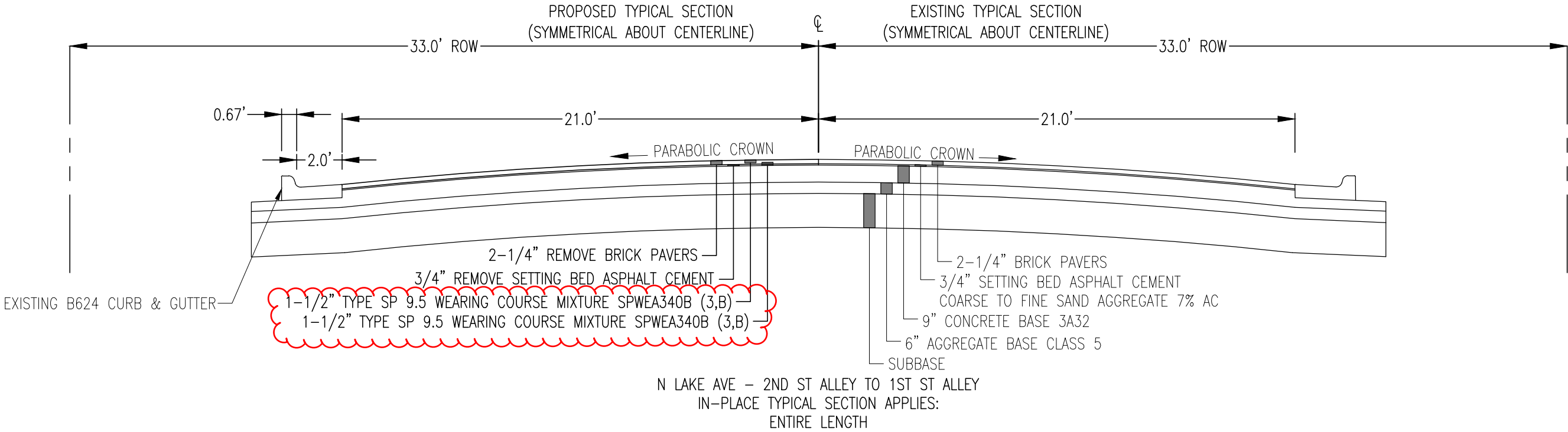
STATE AID PROJECT NO.:

N/A

DRAWN BY: TSM

TYPICAL SECTIONS - NORTON RD

SHEET NO. 127 OF 172



ADDENDUM 1 - REVISION DATE: 04/26/2021

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: 04/15/2021

SIGNATURE: _____

Jeffrey S. Goetzman
TYPE NAME

LIC. NO: 26422



CITY OF DULUTH
ENGINEERING DIVISION
411 W. 1ST ST. STE. 211
DULUTH, MN 55802

2021 DULUTH STREET PRESERVATION

CITY PROJECT NO.:

1693

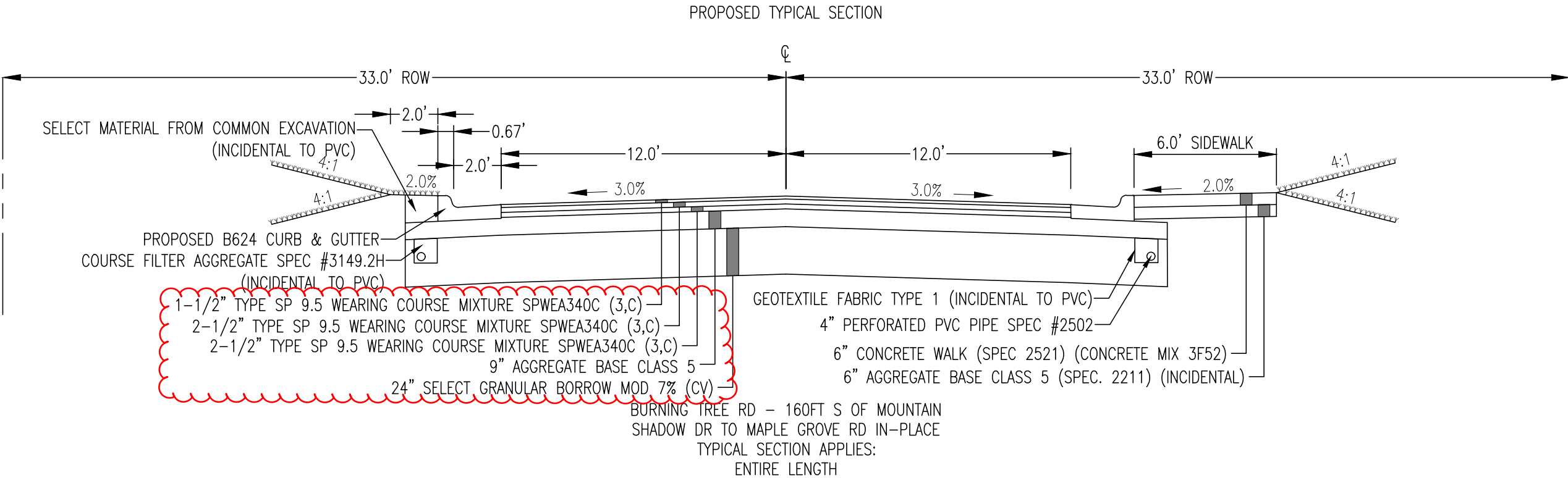
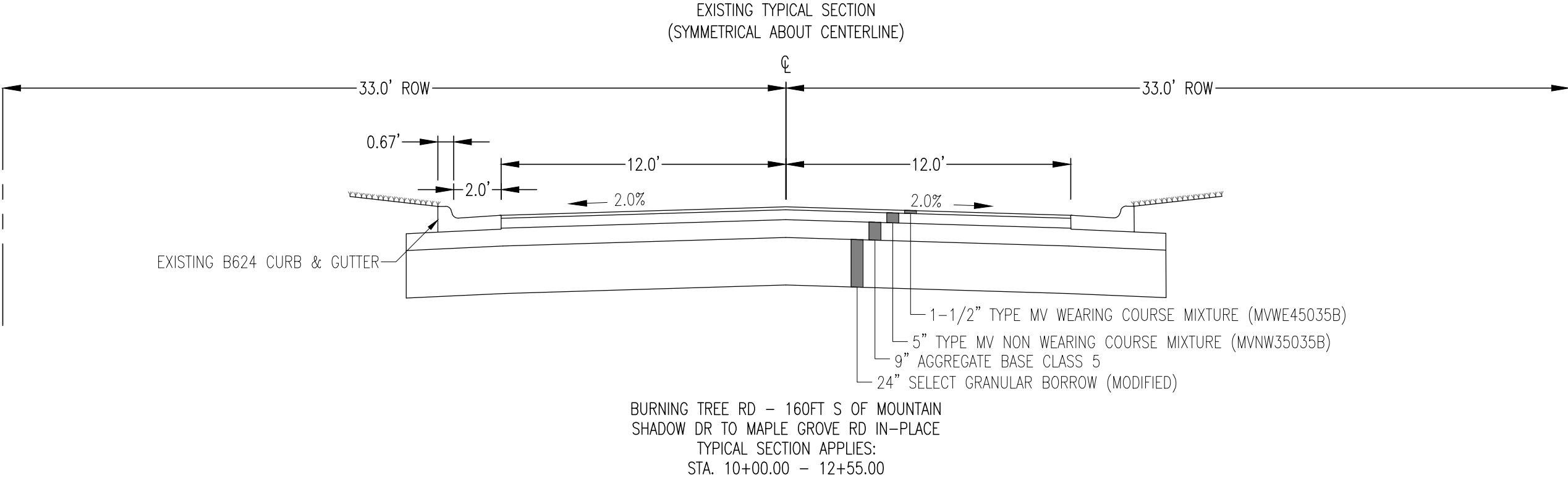
STATE AID PROJECT NO.:

N/A

DRAWN BY: TSM

TYPICAL SECTIONS - N LAKE AVE

SHEET NO. 145 OF 172



ADDENDUM 1 - REVISION DATE: 04/26/2021

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: 04/15/2021

SIGNATURE: _____

Jeffrey S. Goetzman
TYPE NAME

LIC. NO: 26422



CITY OF DULUTH
ENGINEERING DIVISION
411 W. 1ST ST. STE. 211
DULUTH, MN 55802

2021 DULUTH STREET PRESERVATION

CITY PROJECT NO.:

1693

STATE AID PROJECT NO.:

N/A

DRAWN BY: TSM
TYPICAL SECTIONS - BURNING TREE RD
SHEET NO. 152 OF 172