2023 Street & Utility Improvements

CSAH 8 (East Farmer Street)

City of Spring Valley, Minnesota August 2022

> Submitted by: Bolton & Menk, Inc. 2900 43rd Street NW Rochester, MN 55901 P: 507-208-4332



Real People. Real Solutions.

Certification

Preliminary Engineering Report

For

2023 Street & Utility Improvements CSAH 8 (East Farmer Street)

City of Spring Valley, Minnesota 0H1.125861

August 2022

PROFESSIONAL ENGINEER

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

Signature:	hlm
Typed or Printed Name:	Drew P. Weber, P.E.
Date: 8/4/2022	License Number: 58643

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I. EXECUTIVE SUMMARY

The existing streets and utilities in the project area are deteriorated and in need of repair. If the infrastructure is not replaced, maintenance costs will continue to rise as further deterioration occurs and the street and utilities will ultimately fail.

The proposed improvements include the replacement of the existing storm sewer, sanitary sewer, and watermain systems, bituminous surface, curb and gutter, driveway aprons, and sidewalk. The reconstruction would also include subsurface drains to improve drainage along the street and provide an outlet for sump pumps.

The estimated cost of the proposed improvements is approximately \$3.5 million. This will be a joint project between the City of Spring Valley and Fillmore County and the project costs will be split according to an Cooperative Agreement. Funding for the City portion of the proposed improvements is proposed to come from the sale of bonds, to be repaid through special assessments, enterprise funds and ad valorem funds.

According to the City's Assessment Policy, the proposed improvements are assessable to the benefitting properties as follows:

- Street Reconstruction, Sanitary Sewer, and Storm Sewer 20% Assessable, 80% City Cost
- Watermain 0% Assessable, 100% Spring Valley Public Utilities Cost

Applying the City of Spring Valley's Assessment Policy to the project costs results in a per foot assessment rate of \$195.98 per foot. The average assessment would be \$15,455.35 per parcel. Actual per parcel assessments will vary depending on lot frontage. If the Council wishes to reduce the assessments to an amount more comparable to previous projects, it could consider assessing for 20% of the street costs and sanitary sewer costs and 0% of the storm sewer costs. Under this scenario, the average assessment would be \$10,130.67.

According to Minnesota Statute 429, special assessments for improvement projects must not exceed the special benefit to the properties being assessed.

From an engineering standpoint, the proposed improvements are feasible, cost effective, necessary, and can be best accomplished by letting competitive bids for the work. We recommend that the Council accept this Preliminary Engineering Report and call for a public hearing on the proposed improvements. The proposed schedule for the project is as follows:

- Design, Hearings, Approvals, and Bidding July 2022 to December 2022
- Assessment Notices, Hearings and Award of Contract January 2023 to February 2023
- Construction April/May 2023 to October 2023

II. PROJECT INTRODUCTION

This Preliminary Engineering Report considers street and utility reconstruction along East Farmer Street (County State Aid Highway 8) beginning at North Section Avenue (CSAH 1) and extending to 1400' east of East Avenue.

A project location map is illustrated in *Figure 1* of *Appendix A*.

In accordance with Minnesota Statutes, Chapter 429, the City Council has authorized the preparation of a Preliminary Engineering Report to define the scope and determine the feasibility of the proposed project. The specific objectives of this Preliminary Engineering Report are to:

- 1. Evaluate the need for the project.
- 2. Determine the necessary improvements.
- 3. Provide information on the estimated costs for the proposed project.
- 4. Determine the project schedule.
- 5. Determine the feasibility of the proposed project.

The project as proposed would consist of reconstructing the streets indicated above, with a total length of 2,500 feet. Specific items of construction will consist of:

- 1. Removal of existing pavement and curb and gutter.
- 2. Removal and replacement of sanitary sewer and services.
- 3. Removal and replacement of watermain and services.
- 4. Removal and replacement of storm sewer and catch basins.
- 5. Construction of subsurface drains with connections for sump pumps.
- 6. Construction of bituminous pavement with concrete curb and gutter.
- 7. Construction of concrete sidewalk and driveway aprons.
- 8. Construction of bituminous trail.
- 9. Establishment of turf.

III. EXISTING CONDITIONS

The existing conditions of the road surface, sidewalks, driveways, and underground utilities were evaluated throughout the project area.

A. Street and Surface

Farmer Street (CSAH 8) has an existing bituminous surface, with curb and gutter on both t. The table below provides a summary of existing street widths, right-of-way, and street elements.

Table 1 – Existing Street Elements											
From	То	Existing Street Width (ft)	Curb & Gutter	Right-of-Way Width (ft)							
CSAH 1	550' E of East Ave	43'	North &	66'							
(Section Ave N)											
550' E of East Ave	of East Ave 900' E of East Ave		North	66'							
900' E of East Ave	WWTP Driveway	24'	None	66'							

The bituminous pavement throughout the project is in poor condition and the driveway aprons are in fair to poor condition. In general, the bituminous pavement shows noticeable signs of oxidation, fatigue, alligator cracking, some rutting, and patched areas. Between CSAH 1 and East Avenue, there are sections of fragmented sidewalk in poor condition. The condition of the existing street is shown in the photos to follow.



Exhibit 1 – Farmer Street (CSAH 1)



Exhibit 2 – Farmer Street (CSAH 1)

B. Storm Sewer

The storm sewer within the project area is located along Farmer Street between Hillcrest Drive to Maple Lane Avenue. There are catch basins located at multiple intersections adjacent streets including Hillcrest Drive, Center Avenue, Warren Avenue, and Maple Lane Avenue. The storm sewer main runs parallel along Farmer Street before running south down the alley between Center Avenue and Warren Avenue. The storm sewer then discharges into a ditch along the north side of Trunk Highway 16 and ultimately into Spring Valley Creek.

The storm sewer system within the project area consists of 12 to 36-inch reinforced concrete pipe (RCP). The catch basins and manholes are made up of both concrete block and precast concrete. In general, the storm sewer is in poor condition with structures showing signs of deterioration and infiltration.

There is approximately 30-ft of elevation drop from the high point 550' east of East Avenue to the low point between Center Avenue and East Avenue.

The existing storm sewer system is illustrated on the Existing Utilities Map, *Figure 2* of *Appendix A*.

C. Sanitary Sewer

The existing sanitary sewer within the project area consists of three sanitary sewer trunk lines that run from north to south. One main running from Hillcrest Drive to Center Avenue, one from Maple Lane Avenue to Warren Avenue, and another main runs along East Farmer Street to East Avenue. The majority of the main consists of 8-inch vitrified clay pipe (VCP). The VCP is estimated to be greater than 50 years old.

The three mains join along the north side of TH 16 and flow east toward the WWTP.

Previous televising of the sewer main indicates that the sewer within the project area is in

poor condition and needs replacement. Given the condition of the main and the age of the system in general, it is likely the sewer services are also in poor condition and need replacement.

The existing sanitary sewer system is shown on the Existing Utilities Map, *Figure 2* of *Appendix A*.

D. Watermain

The existing water distribution system within the project area consists of 4-inch and 6-inch cast iron pipe and ductile iron pipe. For the cast iron sections, the main is likely over 50 years old. Watermain of this material and age is commonly brittle (susceptible to breaks) and corroded (reduced hydraulic capacity). In addition, 4-inch watermain does not meet current standards for fire protection.

The condition of the services is unknown at this time, but due to the age of the water system, it is likely they are in poor condition and in need of replacement as well.

The existing water distribution system is shown on the Existing Utilities Map, *Figure 2* of *Appendix A*.

E. Other Utilities

Other non-municipal owned utilities are present in the right-of-way. These include natural gas and telecommunication.

IV. PROPOSED IMPROVEMENTS

Proposed improvements have been determined based on existing conditions, regulatory requirements, and engineering standards.

A. Street and Surface

East Farmer Street will be reconstructed as a bituminous street. The table below provides a summary of proposed street widths and street elements.

Table 2 – Proposed Street Elements											
From	То	Proposed Street Width (ft)	Curb & Gutter	Sidewalk (*Trail)							
CSAH 1	EEO' E of East Avo	26'	North &	North &							
(Section Ave N)	JJU E UI Edst AVE	50	South	South							
550' E of East Ave 900' E of East Ave		30'	North	South*							
900' E of East Ave	WWTP Driveway	24'	None	South*							

Concrete driveway aprons will be constructed from the back of the curb to the sidewalk. Where necessary the driveways may be reconstructed beyond the sidewalk. In these locations the driveway will be reconstructed of the same type as the remaining existing driveway.

All streets will be constructed with 6-inches of bituminous pavement over 18-inches of aggregate base.

All disturbed turf will be restored with topsoil and sod. Trees and/or bushes located within the street right of way will be removed, per city policy.

The proposed street and surface improvements are illustrated on *Figure 3* of *Appendix A*.

The proposed typical street section for the project is shown on *Figure 4* of *Appendix A*.

B. Storm Sewer

The city's design standard for storm sewer is a 10-year design storm frequency. The new storm sewer system will be constructed to adequately convey the 10-year event.

The new storm sewer will be constructed of gasketed joint reinforced concrete pipe or polypropylene pipe and precast concrete manholes. The proposed pipes will be between 12-inch and 36-inch in size.

In general, the proposed storm sewer will follow the layout of the existing storm sewer and connect to existing mains at Hillcrest Drive, Maple Lane Avenue and the alley between Warren Avenue and Center Avenue. The proposed storm sewer system will include additional catch basins for collection and underground conveyance of the run-off.

Perforated PVC pipe drains are proposed along the curb lines on each street. The new subsurface drains will be connected to downstream catch basins. The purpose of these drains is to remove subsurface water from the pavement section and underlying soils. This will help keep the underlying soils stable and help to preserve the life of the street. Additionally, sump pump services will be provided to each lot. Buried sump service connections provide homeowners with an additional option for sump pumps which may reduce the number of illegal sanitary connections and is generally more favorable than discharging water to yards or the street gutter.

The proposed storm sewer construction is shown on *Figure 3* of *Appendix A*.

C. Sanitary Sewer

Based on the sanitary sewer televising completed in 2014 & 2018, the VCP sanitary sewer within the project area is in very poor condition, therefore construction of a new sanitary sewer is recommended. The new sanitary sewer will be constructed of PVC pipe and precast concrete manholes to provide for a watertight system. Manholes will be spaced at a maximum of 400-feet intervals and at vertical and horizontal alignment changes to facilitate maintenance and cleaning.

New, gasketed PVC sanitary sewer services will be constructed from the sewer main to the right-of-way line. Residential connections generally require a 4-inch diameter service. The new services will be connected to the existing services by watertight means, typically a rubber coupling.

The proposed sanitary sewer construction is illustrated on the *Figure 3* of *Appendix A*.

D. Watermain

Given the age, condition, and inadequate size of the existing water main within the project area, it is recommended that the existing cast iron water main be replaced with new ductile iron pipe (DIP) water main. In order to provide proper fire protection, the current standard for minimum water main size is 8-inch diameter pipe. Hydrants will be installed at appropriate intervals and valves will be provided to properly isolate the system for flushing, repair, and maintenance.

New, 1-inch copper water service pipe will be constructed to the right-of-way for each home, and new curb stops will be installed.

The proposed watermain construction is illustrated on *Figure 3* of *Appendix A*.

E. Other Utilities

The design of the proposed improvements will be coordinated with the owners of other utilities such as natural gas and communications. A design coordination meeting will be held with all private utility companies to identify those utilities that conflict with the proposed improvements. Private utility companies will be requested to submit proposed designs and construction schedules for any relocation. The construction schedule for the proposed improvements will be coordinated with the utility relocation schedule to avoid unnecessary delays.

F. Right-of-Way and Easements

Although the project will be designed to limit construction of the proposed improvements to within the existing right-of-way, it is possible that minor disturbances on private property will occur during construction of sidewalks, driveways, and sewer and water services. Therefore, temporary construction easements may be necessary along the project frontage to accommodate these minor disturbances.

V. APPROVALS & PERMITS

Approvals and Permits are required from various agencies for the construction of the project. They include the following:

- Minnesota Pollution Control Agency (MPCA) General Construction Storm Water Permit
- Minnesota Department of Health (MDH) Plan Review for watermain construction
- Minnesota Pollution Control Agency (MPCA) Sanitary Sewer Extension Permit

VI. PROJECT COST ESTIMATE & FINANCING

Table 3 – Preliminary Cost Estimate City of Spring Valley Item **Fillmore County** Total **Public Utilities Spring Valley** Street & Site \$2,208,081.41 \$640,496.33 \$1,567,585.08 Sanitary Sewer \$271,264.33 \$271,264.33 Watermain \$436,968.67 \$436,968.67 Storm Sewer \$239,610.42 \$239,610.42 \$479,220.84 Trail \$73,003.15 \$73,003.15 **Total Estimated** \$1,224,374.23 \$436,968.67 \$1,807,195.50 \$3,468,538.40 **Project Costs**

The estimated project costs for the base project area are summarized in the following table.

A detailed cost estimate is included in *Appendix B*.

These cost estimates are based on public construction cost information from other recent projects which are similar in scope. Since the cost estimates are dependent on the cost of labor, materials, competitive bidding process, weather conditions, and other factors affecting the cost of construction, all cost estimates are opinions for general information and no warranty or guarantee as to the accuracy of construction cost is made. Therefore, financing for this project should be based upon actual competitive bid prices with reasonable contingencies.

Funding for the proposed improvement is proposed to come from the sale of bonds and/or a loan

through the Minnesota Public Facilities Authority (PFA), to be repaid through special assessments, City enterprise funds and ad valorem funds. According to the City's Assessment Policy, the proposed improvements are assessable to the benefitting properties as follows:

- Street Reconstruction, Sanitary Sewer, and Storm Sewer 20% Assessable, 80% City Cost
- Watermain 0% Assessable, 100% Spring Valley Public Utilities Cost

The assessable portion of the project costs will be applied to the benefitting properties on a footage basis with adjustments made for corner, cul-de-sac, curved frontage, and irregular shaped lots.

Applying the City of Spring Valley's Assessment Policy to the project costs, results in a per foot assessment rate of \$195.98 per foot. The average assessment is \$15,455.35 per parcel. Actual per parcel assessments will vary depending on lot frontage. If the Council wishes to reduce the assessments to an amount more comparable to previous projects, it could consider assessing for 20% of the street and sanitary sewer costs and 0% of the storm sewer costs. Under this scenario, the average assessment would be \$10,130.67. Average assessments from previous project can be found in the table below.

Table 4 – Historical Assessment Rates										
Project	Average Assessment	Average Assessment (Adjusted for Inflation)								
2016 Project	\$6,936.66	\$9,600.00								
2018 Project	\$8,168.94	\$10,200.00								
2022 Project	\$8,674.55	\$9,000.00								

According to Minnesota Statute 429, special assessments for improvement projects must not exceed the special benefit to the properties being assessed. Based on court cases, the special benefit has been determined to be equivalent to the increase in property value as a result of the improvement.

Assessment proceedings (hearings, notices, etc.) for the project would follow the requirements of Chapter 429. Detailed assessment rolls will be prepared once additional direction from City Council and Staff is received confirming the assessment rates for this project. It is also recommended that City Staff seek input from the City Attorney and the City's financial advisors related to the project financing and special assessment process.

VII. PROPOSED SCHEDULE

The following table shows the schedule for the project.

Table 5 – Project Schedule									
Resolution Ordering Preparation of Report	7/25/22								
Prepare Feasibility Report	7/25/22 – 8/8/22								
Resolution Receiving Report and Calling for Hearing on	8/8/22								
Improvement									
Published Notice of Hearing on Improvement	8/29/22 and 9/5/22								
Mailed Notice of Hearing on Improvement	8/26/22								
Neighborhood Informational Meeting	9/8/22								
Improvement Hearing	9/12/22								
Resolution Ordering Improvement and Preparation of Plans and	9/12/22								
Specifications									
Prepare Plans and Specifications	9/12/22 - 11/14/22								
Resolution Approving Plans and Specifications and Ordering	11/14/22								
Advertisement for Bids									
Advertise for Bids	11/21/22								
Open Bids	12/15/22								
Prepare Assessment Roll & Contractor Evaluations	12/15/22 – 1/9/23								
Resolution Declaring Cost to Be Assessed and Ordering	1/9/23								
Preparation of Proposed Assessment									
Resolution for Hearing on Proposed Assessment	1/9/23								
Published Notice of Hearing on Proposed Assessment	1/23/23								
Mailed Notice of Hearing on Proposed Assessment	1/23/23								
Neighborhood Informational Meeting	2/9/23								
Assessment Hearing	2/13/23								
Resolution Adopting Assessment	2/13/23								
Resolution Awarding Contract	2/13/23								
Begin Construction	April/May 2023								
End Construction	Fall 2023								

VIII. CONCLUSIONS & RECOMMENDATIONS

The existing streets and utilities within the project area are deteriorated and in need of repair. Without replacement, maintenance costs will continue to rise as further deterioration occurs, and the infrastructure will ultimately fail. From an engineering standpoint, this project is feasible, cost effective, necessary, and can be best accomplished by letting competitive bids for the work. Feasibility is contingent upon City Council findings with respect to project financing.

If the Council wishes to proceed with the project in any form, we recommend that the Council accept this report, call for a hearing on the proposed improvements, and consider scheduling a neighborhood meeting to solicit further public input on this project.

Appendix A: Figures

CITY OF SPRING VALLEY



FIGURE 1 - PROJECT LOCATION MAP AUGUST 2022

CITY OF SPRING VALLEY

FIGURE 2 - EXISTING UTILITY MAP AUGUST 2022

CITY OF SPRING VALLEY

FIGURE 3 - PROPOSED LAYOUT AUGUST 2022

CITY OF SPRING VALLEY

FIGURE 4 - TYPICAL SECTIONS AUGUST 2022

Appendix B: Preliminary Cost Estimates

BOLTON & MENK		Ρ	RELIMINARY CC 2023 STREET & UTILITY CITY OF SPRING ' BMI PROJECT NO. Updated: 07/	DST ESTIN Y IMPROVEMENT VALLEY, MN : 0H1.125861 /27/2022	IATE ^{'s}				
TEM				PAF	TICIPATING	NON P	ARTICIPATING	TOT	AL PROJECT
NO.	ITEM	UNIT	UNIT PRICE	QTY	TOTAL	QTY	TOTAL	QTY	TOTAL

BASE PROJECT

SIREEI	AND SITE								
1	MOBILIZATION	LS	\$150,000.00	0.5	\$75,000.00	0.5	\$75,000.00	1	\$150,000.00
2	CLEARING	TREE	\$750.00	15	\$11,250.00	15	\$11,250.00	30	\$22,500.00
3	GRUBBING	TREE	\$300.00	15	\$4,500.00	15	\$4,500.00	30	\$9,000.00
4	SAWING CONCRETE PAVEMENT (FULL DEPTH)	LF	\$5.00	125	\$625.00	125	\$625.00	250	\$1,250.00
5	SAWING BITUMINOUS PAVEMENT (FULL DEPTH)	LF	\$3.00	136	\$408.00	136	\$408.00	272	\$816.00
6	REMOVE CURB AND GUTTER	LF	\$4.50	1,400	\$6,300.00	1,400	\$6,300.00	2,800	\$12,600.00
7	REMOVE RETAINING WALL	LF	\$75.00	45	\$3,375.00	45	\$3,375.00	90	\$6,750.00
8	REMOVE CONCRETE DRIVEWAY PAVEMENT	S Y	\$10.00	235	\$2,350.00	235	\$2,350.00	470	\$4,700.00
9	REMOVE BITUMINOUS PAVEMENT	S Y	\$5.00	11,492	\$57,460.00	0	\$0.00	11,492	\$57,460.00
10	REMOVE CONCRETE WALK	S F	\$3.00	2,750	\$8,250.00	2,750	\$8,250.00	5,500	\$16,500.00
11	GEOTEXTILE FABRIC TYPE 5	S Y	\$3.00	200	\$600.00	0	\$0.00	200	\$600.00
12	SUBGRADE EXCAVATION (EV)	CY	\$15.00	610	\$9,150.00	0	\$0.00	610	\$9,150.00
13	STABILIZING AGGREGATE (CV)	CY	\$35.00	610	\$21,350.00	0	\$0.00	610	\$21,350.00
14	EXCAVATION - COMMON (EV)(P)	CY	\$15.00	12,360	\$185,400.00	0	\$0.00	12,360	\$185,400.00
15	SELECT GRANULAR EMBANKMENT (CV)(P)	CY	\$30.00	3,630	\$108,900.00	0	\$0.00	3,630	\$108,900.00
16	AGGREGATE SURFACING CLASS 2	TON	\$25.00	50	\$1,250.00	50	\$1,250.00	100	\$2,500.00
17	STREET SWEEPER (WITH PICKUP BROOM)	HOUR	\$180.00	10	\$1,800.00	10	\$1,800.00	20	\$3,600.00
18	EXPLORATORY EXCAVATION	HOUR	\$350.00	10	\$3,500.00	10	\$3,500.00	20	\$7,000.00
19	AGGREGATE BASE CLASS 5 (CV)(P)	CY	\$40.00	5,440	\$217,600.00	0	\$0.00	5,440	\$217,600.00
20	3" BITUMINOUS WALK	S F	\$3.00	0	\$0.00	19,000	\$57,000.00	19,000	\$57,000.00
21	BITUMINOUS PATCH SPECIAL	S Y	\$35.00	55	\$1,925.00	55	\$1,925.00	110	\$3,850.00
22	DRILL AND GROUT REINF BAR (EPOXY COATED)	EACH	\$10.00	0	\$0.00	0	\$0.00	0	\$0.00
23	BITUMINOUS MATERIAL FOR TACK COAT	GAL	\$3.00	760	\$2,280.00	0	\$0.00	760	\$2,280.00
24	TYPE SP 12.5 WEARING COURSE MIXTURE (3;C)	TON	\$120.00	2,166	\$259,920.00	0	\$0.00	2,166	\$259,920.00
25	CONCRETE STAIR RISER	EACH	\$250.00	4	\$1,000.00	4	\$1,000.00	8	\$2,000.00
26	BLOCK RETAINING WALL	S F	\$60.00	270	\$16,200.00	270	\$16,200.00	540	\$32,400.00
27	6" PERF PVC PIPE DRAIN	LF	\$18.00	2,490	\$44,820.00	2,490	\$44,820.00	4,980	\$89,640.00
28	6" PVC PIPE DRAIN CLEANOUT	EACH	\$200.00	9	\$1,700.00	9	\$1,700.00	17	\$3,400.00
29	SUMP PUMP SERVICE	EACH	\$1,100.00	0	\$0.00	18	\$19,800.00	18	\$19,800.00
30	DRAIN TILE REPAIR	LF	\$25.00	0	\$0.00	200	\$5,000.00	200	\$5,000.00
31	4" CONCRETE WALK	S F	\$7.00	4,589	\$32,123.00	4,589	\$32,123.00	9,178	\$64,246.00
32	6" CONCRETE WALK	S F	\$12.00	1,170	\$14,040.00	1,170	\$14,040.00	2,340	\$28,080.00
33	CONCRETE CURB AND GUTTER DESIGN B624	LF	\$21.00	2,490	\$52,290.00	2,490	\$52,290.00	4,980	\$104,580.00
34	6" CONCRETE DRIVEWAY PAVEMENT	S Y	\$70.00	205	\$14,350.00	205	\$14,350.00	410	\$28,700.00
35	7" CONCRETE DRIVEWAY PAVEMENT	S Y	\$85.00	220	\$18,700.00	220	\$18,700.00	440	\$37,400.00
36	TRUNCATED DOMES	S F	\$60.00	200	\$12,000.00	200	\$12,000.00	400	\$24,000.00
37	REMOVE/SALVAGE/INSTALL MAILBOXES	LS	\$3,000.00	0.5	\$1,500.00	0.5	\$1,500.00	1	\$3,000.00
38	TEMPORARY MAIL BOX BANK	LS	\$3,000.00	0.5	\$1,500.00	0.5	\$1,500.00	1	\$3,000.00
39	TRAFFIC CONTROL	LS	\$20,000.00	0.5	\$10,000.00	0.5	\$10,000.00	1	\$20,000.00
40	STABILIZED CONSTRUCTION EXIT	LS	\$2,500.00	0.5	\$1,250.00	0.5	\$1,250.00	1	\$2,500.00
41	EROSION CONTROL SUPERVISOR	LS	\$5,000.00	0.5	\$2,500.00	0.5	\$2,500.00	1	\$5,000.00
42	STORM DRAIN INLET PROTECTION	EACH	\$250.00	15	\$3,750.00	15	\$3,750.00	30	\$7,500.00
43	SILT FENCE; TYPE MS	LF	\$4.00	750	\$3,000.00	750	\$3,000.00	1,500	\$6,000.00
44	ROCK DITCH CHECK	EACH	\$150.00	15	\$2,250.00	15	\$2,250.00	30	\$4,500.00
45	COMPOST GRADE 2 (LV)	СҮ	\$39.50	150	\$5,925.00	150	\$5,925.00	300	\$11,850.00
46	FERTILIZER TYPE 1	LB	\$2.00	156	\$311.00	156	\$311.00	311	\$622.00
47	TOPSOIL PREPARATION	S Y	\$0.50	2,700	\$1,350.00	2,700	\$1,350.00	5,400	\$2,700.00
48	SODDING TYPE SALT TOLERANT	S Y	\$9.00	2,700	\$24,300.00	2,700	\$24,300.00	5,400	\$48,600.00
49	TURF MAINTENANCE	DAY	\$500.00	15	\$7,500.00	15	\$7,500.00	30	\$15,000.00
50	RAPID STABILIZATION METHOD 3	S Y	\$2.00	2,700	\$5,400.00	2,700	\$5,400.00	5,400	\$10,800.00
			SUBTOTAL:		\$1,260,952.00		\$480,092.00		\$1,741,044.00

SANITARY SEWER

51	REMOVE MANHOLE (SANITARY)	EACH	\$550.00	0	\$0.00	7	\$3,850.00	7	\$3,850.00
52	REMOVE SEWER PIPE (SANITARY)	LF	\$5.00	0	\$0.00	910	\$4,550.00	910	\$4,550.00
53	ROCK EXCAVATION IN TRENCH	CY	\$75.00	0	\$0.00	420	\$31,500.00	420	\$31,500.00
54	CONNECT TO EXISTING SANITARY SEWER	EACH	\$1,000.00	0	\$0.00	5	\$5,000.00	5	\$5,000.00
55	8"X4" PVC WYE	EACH	\$400.00	0	\$0.00	18	\$7,200.00	18	\$7,200.00
56	8" PVC PIPE SEWER	LF	\$70.00	0	\$0.00	950	\$66,500.00	950	\$66,500.00
57	4" PVC SANITARY SERVICE PIPE	LF	\$40.00	0	\$0.00	630	\$25,200.00	630	\$25,200.00
58	CASTING ASSEMBLY (SANITARY)	EACH	\$1,000.00	0	\$0.00	8	\$8,000.00	8	\$8,000.00
59	ADJUST FRAME AND RING CASTING (SANITARY)	EACH	\$500.00	0	\$0.00	8	\$4,000.00	8	\$4,000.00
60	SANITARY SEWER I&I BARRIER	EACH	\$375.00	0	\$0.00	8	\$3,000.00	8	\$3,000.00
61	CONSTRUCT MANHOLE DESIGN 4007	LF	\$600.00	0	\$0.00	80	\$48,000.00	80	\$48,000.00
62	SANITARY SEWER TRACER WIRE	LS	\$5,000.00	0	\$0.00	1	\$5,000.00	1	\$5,000.00
			SUBTOTAL:		\$0.00		\$211,800.00		\$211,800,00

BOLTON & MENK

PRELIMINARY COST ESTIMATE

2023 STREET & UTILITY IMPROVEMENTS CITY OF SPRING VALLEY, MN BMI PROJECT NO.: 0H1.125861 Updated: 07/27/2022

ITEM				F	PARTICIPATING	NO	N PARTICIPATING	T	OTAL PROJECT
NO.	ITEM	UNIT	UNIT PRICE	QTY	TOTAL	QTY	TOTAL	QTY	TOTAL
WATER	MAIN								
63	REMOVE GATE VALVE AND BOX	EACH	\$250.00	0	\$0.00	10	\$2,500.00	10	\$2,500.00
64	SALVAGE HYDRANT	EACH	\$750.00	0	\$0.00	3	\$2,250.00	3	\$2,250.00
65	REMOVE WATER MAIN	LF	\$5.00	0	\$0.00	1,550	\$7,750.00	1,550	\$7,750.00
66	ROCK EXCAVATION IN TRENCH	CY	\$75.00	0	\$0.00	680	\$51,000.00	680	\$51,000.00
67	TEMPORARY WATER SERVICE	LS	\$10,000.00	0	\$0.00	1	\$10,000.00	1	\$10,000.00
68	CONNECT TO EXISTING WATER MAIN	EACH	\$1,200.00	0	\$0.00	6	\$7,200.00	6	\$7,200.00
69	HYDRANT	EACH	\$6,000.00	0	\$0.00	4	\$24,000.00	4	\$24,000.00
70	ADJUST VALVE BOX	EACH	\$350.00	0	\$0.00	14	\$4,900.00	14	\$4,900.00
71	1" CORPORATION STOP	EACH	\$400.00	0	\$0.00	18	\$7,200.00	18	\$7,200.00
72	6" GATE VALVE AND BOX	EACH	\$2,500.00	0	\$0.00	4	\$10,000.00	4	\$10,000.00
73	8" GATE VALVE AND BOX	EACH	\$2,900.00	0	\$0.00	10	\$29,000.00	10	\$29,000.00
74	1" CURB STOP AND BOX	EACH	\$350.00	0	\$0.00	18	\$6,300.00	18	\$6,300.00
75	1" TYPE K COPPER PIPE	LF	\$40.00	0	\$0.00	630	\$25,200.00	630	\$25,200.00
76	6" WATERMAIN DUCTILE IRON CL 52	LF	\$84.00	0	\$0.00	80	\$6,720.00	80	\$6,720.00
77	8" WATERMAIN DUCTILE IRON CL 52	LF	\$88.00	0	\$0.00	1,470	\$129,360.00	1,470	\$129,360.00
78	4" INSULATION	S Y	\$50.00	0	\$0.00	100	\$5,000.00	100	\$5,000.00
79	WATERMAIN FITTINGS	LB	\$16.00	0	\$0.00	800	\$12,800.00	800	\$12,800.00
			SUBTOTAL:		\$0.00		\$341,180.00		\$341,180.00

STOR	N	SEWER
80		REMOVE CATCH BASIN
81		REMOVE SEWER PIPE (STORM)

80	REMOVE CATCH BASIN	EACH	\$550.00	4	\$2,200.00	4	\$2,200.00	8	\$4,400.00
81	REMOVE SEWER PIPE (STORM)	LF	\$10.00	430	\$4,300.00	430	\$4,300.00	860	\$8,600.00
82	18" RC PIPE APRON	EACH	\$750.00	2	\$1,500.00	2	\$1,500.00	4	\$3,000.00
83	CONNECT TO EXISTING STORM SEWER	EACH	\$1,100.00	2	\$2,200.00	2	\$2,200.00	4	\$4,400.00
84	12" PIPE SEWER	LF	\$50.00	155	\$7,750.00	155	\$7,750.00	310	\$15,500.00
85	15" PIPE SEWER	LF	\$58.00	45	\$2,610.00	45	\$2,610.00	90	\$5,220.00
86	18" PIPE SEWER	LF	\$63.00	365	\$22,995.00	365	\$22,995.00	730	\$45,990.00
87	24" PIPE SEWER	LF	\$92.00	165	\$15,180.00	165	\$15,180.00	330	\$30,360.00
88	36" PIPE SEWER	LF	\$150.00	300	\$45,000.00	300	\$45,000.00	600	\$90,000.00
89	CASTING ASSEMBLY (STORM)	EACH	\$650.00	16	\$10,400.00	16	\$10,400.00	32	\$20,800.00
90	ADJUST FRAME AND RING CASTING (STORM)	EACH	\$450.00	16	\$7,200.00	16	\$7,200.00	32	\$14,400.00
91	STORM SEWER CHIMNEY SEAL	EACH	\$275.00	16	\$4,400.00	16	\$4,400.00	32	\$8,800.00
92	CONSTRUCT DRAINAGE STRUCTURE DESIGN 48-4020	LF	\$600.00	18	\$10,800.00	18	\$10,800.00	36	\$21,600.00
93	CONSTRUCT DRAINAGE STRUCTURE DESIGN 60-4020	LF	\$1,000.00	15	\$15,000.00	15	\$15,000.00	30	\$30,000.00
94	CONSTRUCT DRAINAGE STRUCTURE DESIGN 72-4020	LF	\$1,200.00	9	\$10,800.00	9	\$10,800.00	18	\$21,600.00
95	CONSTRUCT DRAINAGE STRUCTURE DESIGN SPECIAL	EACH	\$2,750.00	9	\$24,750.00	9	\$24,750.00	18	\$49,500.00
			SUBTOTAL:		\$187,085.00		\$187,085.00		\$374,170.00
CONST	RUCTION ALLOWANCE								

96	CONSTRUCTION ALLOWANCE	UNIT	\$1.00	20,000	\$20,000.00	20,000	\$20,000.00	40,000	\$40,000.00
			SUBTOTAL:		\$20,000.00		\$20,000.00		\$40,000.00

	COUNTY SHARE	CITY SHARE	TOTAL PROJECT
CONSTRUCTION SUBTOTAL:	\$1,468,037.00	\$1,240,157.00	\$2,708,194.00
CONSTRUCTION CONTINGENCIES (10%):	\$146,803.70	\$124,015.70	\$270,819.40
ESTIMATED CONSTRUCTION COST:	\$1,614,840.70	\$1,364,172.70	\$2,979,013.40
ENGINEERING, ADMIN & LEGAL:	\$168,700.00	\$315,100.00	\$483,800.00
GEOTECHNICAL REPORT	\$2,862.50	\$2,862.50	\$5,725.00
ESTIMATED PROJECT TOTAL:	\$1,786,403.20	\$1,682,135.20	\$3,468,538.40

Appendix C: Preliminary Assessment Roll

BOLTON & MENK

PRELIMINARY ASSESSMENT ROLL

2023 STREET & UTILITY IMPROVEMENTS CITY OF SPRING VALLEY, MN BMI PROJECT NO.: 0H1.125861 Updated: 07/27/2022

					ACTUAL TOTAL FRONTAGE	MULTIPLE FRONTAGES	ASSESSABLE FRONTAGE	STREET & SITE	SANITARY SEWER	STORM SEWER	PRELIMINARY
PROPERTY OWNER	PARCEL I.D.	PROPERTY ADDRESS	OWNER ADDRESS	PROPERTY DESCRIPTION				COST (PROP OWNER)	COST (PROP OWNER)	COST (PROP OWNER)	
		•	-		•	С	OST PER FRONTAGE=	\$90.24	\$38.22	\$0.00	
RICHARD J SCHAD VALERIE J SCHAD	360030040	201 FARMER ST E	201 E FARMER ST SPRING VALLEY, MN 55975	Sect-27 Twp-103 Range-13 COM AT SW COR NW1/4 SW1/4 SEC 27 N155' E198' S155' W198' TO BEG	165.0	YES	82.5	\$7,445.01	\$3,153.13	\$0.00	\$10,598.13
MELISSA MESSNER	360030020	217 FARMER ST E	PO BOX 5778 ROCHESTER, MN 55903	Sect-27 Twp-103 Range-013 PC 66'X133' OL 6 NW1/4 SW1/4	67.0	NO	67.0	\$6,046.25	\$2,560.72	\$0.00	\$8,606.97
KAYLA J DUXBURY	360030010	221 FARMER ST E	221 E FARMER ST SPRING VALLEY, MN 55975	Sect-27 Twp-103 Range-013 PC 66'X133' OF OL 6 IN NW1/4 SW1/4	67.0	YES	33.5	\$3,023.12	\$1,280.36	\$0.00	\$4,303.48
JESSY G BETTS	360878000	301 FARMER ST E	301 EAST FARMER ST SPRING VALLEY, MN 55975	SHELDON ADDITION Lot-001 LOT 1 EX N 20' SHELDON ADD	95.0	YES	47.5	\$4,286.52	\$1,815.44	\$0.00	\$6,101.96
WILLIAM G VREEMAN JANET K VREEMAN	360028000	309 FARMER ST E	309 EAST FARMER ST SPRING VALLEY, MN 55975	Sect-27 Twp-103 Range-013 OL 4 NW1/4 SW1/4	99.0	NO	99.0	\$8,934.01	\$3,783.75	\$0.00	\$12,717.76
RICARDO W KVAM ARLETTE M KVAM	360027000	317 FARMER ST E	317 E FARMER ST SPRING VALLEY, MN 55975	Sect-27 Twp-103 Range-013 S 208' OL 3 NW1/4 SW1/4	132.0	NO	132.0	\$11,912.01	\$5,045.00	\$0.00	\$16,957.01
PAMELA L SOMA-MORI REV TRUST	360026020	319 FARMER ST E	319 FARMER ST E SPRING VALLEY, MN 55975	Sect-27 Twp-103 Range-13 195' X 70' OL 2 NW1/4 SW1/4	70.0	NO	70.0	\$6,316.98	\$2,675.38	\$0.00	\$8,992.36
BRIAN COOKE HEATHER COOKE	360026000	405 FARMER ST E	405 FARMER ST E SPRING VALLEY, MN 55975	Sect-27 Twp-103 Range-013 195' X 95' OF OL 2 NW1/4 SW1/4	95.0	YES	47.5	\$4,286.52	\$1,815.44	\$0.00	\$6,101.96
TRAVIS A VOLKART	360958000	417 FARMER ST E	11639 COUNTY 8 SPRING VALLEY, MN 55975	FREEMANS SUBDIVISION Lot-009 Block-001 LOTS 9-10 FREEMAN SUBDIV	158.0	YES	79.0	\$7,129.16	\$3,019.36	\$0.00	\$10,148.52
STEVEN E MAJORS	360618000	417 SECTION AVE E	417 SECTION AVE N SPRING VALLEY, MN 55975	GRISWOLD & WARNERS ADDITION Lot-010 Block-002 LOT 10 BLK 2 GRISWOLD & WARNERS ADDITION	149.0	YES	74.5	\$6,723.07	\$2,847.37	\$0.00	\$9,570.44
TONYA STECKMAN	360609000	416 CENTER AVE	416 CENTER AVE SPRING VALLEY, MN 55975	GRISWOLD & WARNERS ADDITION Lot-001 Block-002 LOT 1 BLK 2 GRISWOLD & WARNERS ADDITION	149.0	YES	74.5	\$6,723.07	\$2,847.37	\$0.00	\$9,570.44
JAMES ALAN SCHMIDT	360608000	417 CENTER AVE	17690 OPEN EAST LOOP WYKOFF, MN 55990	GRISWOLD & WARNERS ADDITION Lot-010 Block-001 LOT 10 BLK 1 GRISWOLD & WARNERS ADDITION	149.0	YES	74.5	\$6,723.07	\$2,847.37	\$0.00	\$9,570.44
HEATHER KNAPP	360600000	416 WARNER AVE	416 WARNER AVE SPRING VALLEY, MN 55975	GRISWOLD & WARNERS ADDITION Lot-001 Block-001 LOT 1 BLK 1 GRISWOLD & WARNERS ADD	149.0	YES	74.5	\$6,723.07	\$2,847.37	\$0.00	\$9,570.44
ARICA J SCHMOLL CHRISTOPHER SCHMOLL	360699000	421 WARNER AVE	421 WARNER AVE SPRING VALLEY, MN 55975	SMITHS ADDITION Lot-2-3 Block-002 LOTS 2-3 BLK 2 SMITHS ADD EX TO WIERSMA INCL ADJOINING VACATED ALLEY	166.0	YES	83.0	\$7,490.13	\$3,172.24	\$0.00	\$10,662.36
CHELSIE VREEMAN	360698000	416 EAST AVE	416 EAST AVE SPRING VALLEY, MN 55975	SMITHS ADDITION Lot-001 Block-002 N65' LOT 1 BLK 2 SMITHS ADD INCL ADJOINING VACATED ALLEY	86.0	YES	43.0	\$3,880.43	\$1,643.45	\$0.00	\$5,523.88
JESSE RATHBUN	360697010	421 EAST AVE	421 EAST AVE SPRING VALLEY, MN 55975	SMITHS ADDITION Lot-010 Block-001 LOTS 10-11 BLK 1 SMITHS ADD	187.0	YES	93.5	\$8,437.68	\$3,573.54	\$0.00	\$12,011.22
LARRY E WENDT SHERRY A WENDT	360026010	505 FARMER ST E	505 FARMER ST E SPRING VALLEY, MN 55975	Sect-27 Twp-103 Range-013 E2A OF BEG 43 19/32RDS E SW COR NW1/4 SW1/4	105.0	NO	105.0	\$9,475.47	\$4,013.07	\$0.00	\$13,488.53
LORI A METCALF BOYD A METCALF	360025000	509 FARMER ST E	509 E FARMER ST SPRING VALLEY, MN 55975	Sect-27 Twp-103 Range-013 E 2A OL 2 NW1/4 SW1/4 & OL 5 NE1/4 SW1/4 EX 1/4A METHODIST CHURCH	139.0	NO	139.0	\$12,543.71	\$5,312.54	\$0.00	\$17,856.25
TOTALS					2227		1419.5	\$128,099.27	\$54,252.87	\$0.00	\$182,352.13

ASSESSMENT CALCULATION SUMMARY								
ITEM	PERCENT ASSESSED	TOTAL COST	ASSESSABLE COST	NON ASSESSABLE COST	ASSESSABLE FRONTAGE	COST PER FRONTAGE		
STREET & SITE	20.0%	\$640,496.33	\$128,099.27	\$512,397.06	1419.5	\$90.24		
COUNTY STREET & SITE	0.0%	\$1,567,585.08	\$0.00	\$1,567,585.08		-		
SANITARY SEWER	20.0%	\$271,264.33	\$54,252.87	\$217,011.46	1419.5	\$38.22		
WATERMAIN	0.0%	\$436,968.67	\$0.00	\$436,968.67	-	-		
STORM SEWER	0.0%	\$479,220.84	\$0.00	\$479,220.84	1419.5	\$0.00		
FRAIL	0.0%	\$73,003.15	\$0.00	\$73,003.15	-	-		
PROJECT TOTALS	-	\$3,468,538.40	\$182,352.13	\$3,286,186.27	-	\$128.46		

ITEM COST PER FT (FRO AVERAGE ASSESS MAXIMUM ASSESSI MINIMUM ASSESSM MEDIAN ASSESSME

SUMMARY OF ASSESSMENTS

	COST
NTAGE)	\$128.46
MENT (18 PARCELS)	\$10,130.67
MENT	\$17,856.25
IENT	\$4,303.48
ENT	\$9,570.44