Feasibility Report

2022 Street & Utility Improvements
Yorkton Ridge & Maple Lane – Jackson Street

City of Little Canada November 17, 2021

Submitted by:

Bolton & Menk, Inc. 3507 High Point Drive Bldg. 1 Suite E130 Oakdale, MN 55128



Real People. Real Solutions.

Certification

Feasibility Report

For

2022 Street & Utility Improvements

Yorkton Ridge & Maple Lane - Jackson Street

City of Little Canada ON1.125241

November 17, 2021

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.

Typed or Printed Name: Eric J. Seaburg

Date: 11-17-2021 License Number: 53712

Table of Contents

I.	INTI	RODUCTION	1			
	A.	Yorkton Ridge Informational Meeting	1			
	B.	Maple Lane – Jackson Street Informational Meeting	1			
II.	YOR	KTON RIDGE	2			
	A.	Background	2			
	B.	Existing Conditions	2			
	C.	Proposed Improvements	3			
III.	MA	PLE LANE – JACKSON STREET	4			
	A.	Background	4			
	В.	Existing Conditions	4			
	C.	Proposed Improvements	5			
IV.	E:	STIMATED COSTS	7			
	A.	Yorkton Ridge	7			
	В.	Maple Lane – Jackson Street	7			
V.	FINANCING					
	A.	Special Assessment – Street Costs Assessed	8			
	В.	Financing Summary	9			
VI.	Р	ROJECT SCHEDULE	10			
VII.	E	ASEMENTS AND PERMITS	11			
VIII	Γ	ONCLUSION	. 11			

Tables

Table 1 – Estimated Cost Summary – Yorkton Ridge	7
Table 2 – Estimated Cost Summary – Maple Lane – Jackson Street	7
Table 3 – Financing Summary – Yorkton Ridge	9
Table 4 – Financing Summary – Maple Lane – Jackson Street	9
Exhibits	
Exhibit 1 – Existing Yorkton Ridge	2
Exhibit 2 – Reclaimed Aggregate Base	3
Exhibit 3 – Existing Maple Lane	4
Exhibit 4 – Fitting Bolt Replacement	5

Appendix

Appendix A: Figures

Appendix B: Preliminary Cost Estimates

Appendix C: Preliminary Assessment Roll

I. INTRODUCTION

The City of Little Canada is planning reconstruction and rehabilitation efforts on several residential and commercial streets during the 2022 construction season, in accordance with the Capital Improvement Plan. The City's 2022 work plan includes proposed street and utility improvements to the following streets:

- 1. Yorkton Ridge
- 2. Maple Lane Jackson Street
- 3. Woodlynn Avenue (detailed in a separate report)
- 4. Ryan Drive (detailed in a separate report)

Refer to Figure 1 in Appendix A for a depiction of the project areas.

This report focuses on City infrastructure improvements to the residential areas of Yorkton Ridge and Maple Lane & Jackson Street. Improvements to these streets include pavement rehabilitation, watermain improvements, storm and sanitary sewer improvements, and other improvements in accordance with the City's Comprehensive Plan.

See Figures 2A and 2B in Appendix B for maps of the existing conditions on each street, respectively.

This report will review the existing conditions of each defined project area and discuss, in detail, the proposed improvements. The report will also provide preliminary cost estimates for the proposed improvements with financing for the projects coming from a combination of special assessments and the City's Infrastructure Capital Improvement Fund.

Informational meetings for each project area were held with affected property owners in attendance. There, the proposed project scope, costs, and funding sources were discussed with the opportunity for property owners to comment on the project and ask questions.

A. Yorkton Ridge Informational Meeting

This meeting was held in-person with property owners on October 20, 2021. Representatives from 5 households attended the informational presentation and open floor project discussion with staff. Those in attendance had general project-related questions and did not voice any significant concerns with the proposed project.

B. Maple Lane – Jackson Street Informational Meeting

This informational meeting was held in-person with property owners on October 20, 2021. Representatives from 5 households were in attendance for the informational presentation and open floor project discussion with staff. Property owners brought forward a few desired improvements, including addressing pavement settlement at the Maple Lane/Jackson Street curve and sewer structure settlement in the cul-de-sac. Overall, residents did not voice any significant concerns with the proposed project.

If the City elects to proceed with the proposed street and utility improvements described in this report, it is anticipated that construction would begin in 2022 as detailed in the project schedule found on Page 10.

II. YORKTON RIDGE

A. Background

Yorkton Ridge is an urban residential street. Annual average daily traffic (AADT) data for this road is unavailable but assumed to be less than 1,000 vehicles per day classifying it as a low-volume road. Refer to Figure 1 in Appendix A for a depiction of the project location.

Over the years, Yorkton Ridge has received crack seal and sealcoat treatments in an effort to prolong the life of the pavement. Annual pavement patching has also occurred as needed. The utility infrastructure has been maintained on a routine basis since construction.

B. Existing Conditions

1. Streets

Yorkton Ridge is a bituminous roadway that measures 30 feet from face of curb to face of curb. Yorkton Ridge has surmountable concrete curb & gutter on the north and south sides. The pavement shows signs of wear and distress, including cracking and potholes, which are typical for a pavement of this age. Refer to Figure 2B in Appendix A for a depiction of the existing utility infrastructure.

2. Watermain

The existing watermain is an 8-inch diameter ductile iron pipe that extends west from Condit Street before terminating at the cul-de-sac fire hydrant. The water system has performed well, and there are no known deficiencies with the system. Based on the age, type, and positive performance of the



Exhibit 1 – Existing Yorkton Ridge

watermain, the useful life of the system is expected to outlast the pavement improvements described in this report.

3. Sanitary Sewer

The existing sanitary system is an 8-inch diameter vitrified clay pipe (VCP) which conveys wastewater west before connecting to the Metropolitan Council interceptor line that runs along Waterworks Trail. City maintenance staff have noted no known deficiencies with the sanitary sewer system. Bolton and Menk staff reviewed each of the sanitary sewer structures within the project area. The structures are precast and in good to very good condition. Based on the system's age, material, and positive performance, the useful life of the sanitary system is expected to outlast the pavement improvements described in this report.

4. Storm Sewer

The existing storm sewer system is composed of reinforced concrete pipe (RCP) varying in size from 12-inch diameter to 18-inch diameter. Stormwater is conveyed to five catch basins along existing curb & gutter before traveling northwest through the pipe network and outletting to a detention pond northwest of the cul-de-sac. City maintenance staff have noted no known deficiencies with the storm sewer system.

Bolton and Menk staff reviewed each of the storm sewer structures within the project area. The structures are precast and overall are in good condition with the exception of

the block-construction high capacity catch basin located in the cul-de-sac. Replacement of this structure and minor improvements to the other catch basins will ensure the system outlasts the pavement improvements proposed in this report.

C. Proposed Improvements

1. Street Improvements

Based on the pavement age and current distresses, the proposed street improvement for Yorkton Ridge is a full depth reclamation (FDR). A depiction of the proposed street and utility improvements is shown in Figure 3B in Appendix A.

Current pavement distress patterns indicate surface-level wear but no significant deterioration of the roadway base. Full depth reclamation is a cost-effective rehabilitation method that grinds the top 10-12 inches of existing bituminous pavement and aggregate base into a new aggregate that creates an improved foundation for 4 inches of new bituminous pavement.

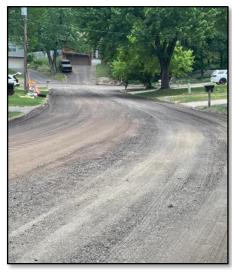


Exhibit 2 - Reclaimed Aggregate Base

In addition to pavement reclamation, curb and gutter that is cracked, weathered, or heaved will be removed and replaced with new curb and gutter. This improves stormwater conveyance to catch basins and prevents the intrusion of stormwater into the roadway base.

2. Watermain Improvements

The existing ductile iron watermain is in good condition and is proposed to be left in place. However, inspection and replacement of existing bolts at gate valves, hydrants, and mainline fittings is proposed. These features are typically the first to fail in the water system and proactive replacement of these bolts would limit the number of leaks and watermain breaks

3. Sanitary Sewer Improvements

The existing sanitary sewer network is in good condition and is proposed to be left in place. Existing sanitary sewer manholes in the pavement will receive new castings and be adjusted to the new pavement elevation. New castings will also be fitted with exterior chimney seals to prevent inflow and infiltration (I/I).

4. Storm Sewer Improvements

Overall, the existing storm sewer system is in good condition and proposed to be left in place. However, it is proposed that the high-capacity catch basin in the cul-de-sac be replaced with a precast structure that meets current City standards. Remaining catch basins will receive new castings and I/I barriers along with minor repairs to inverts and doghouses.

5. Water Quality Improvements

Rehabilitation of Yorkton Ridge will not trigger Ramsey-Washington Metro Watershed District (RWMWD) stormwater improvements. However, residents will be given the opportunity during final design to opt into the City's rain garden program. Any raingardens installed would be credited by the watershed towards other or future street improvement projects that trigger stormwater improvements.

III. MAPLE LANE – JACKSON STREET

A. Background

Maple Lane and Jackson Street are urban residential streets. Annual average daily traffic (AADT) data for these streets is unavailable, but it is assumed to be less than 1,000 vehicles per day, classifying it as a low-volume road. Refer to Figure 1 in Appendix A for a depiction of the project location.

Historically, Maple Lane and Jackson Street have received periodic crack seal and sealcoat treatment to prolong the life of the pavement. Additionally, annual pavement patching efforts have supported these pavement management practices on an as-needed basis. Similar maintenance on City utility infrastructure has occurred on the streets since their construction.

B. Existing Conditions

1. Streets

Maple Lane and Jackson Street are bituminous roadways that measure 30 feet from face of curb to face of curb. Surmountable concrete curb & gutter abut the bituminous pavement on both sides of the streets.

Surface-level pavement wear and distresses, including oxidation and cracking, indicate agerelated deterioration of the pavement surface. However, current pavement distresses do not indicate significant deterioration of the aggregate base and subbase of the roadway.

2. Watermain

The existing watermain is a 6-inch diameter ductile iron pipe which extends north along Jackson Street before routing west along Maple Lane and terminating at the cul-de-sac



Exhibit 3 – Existing Maple Lane

fire hydrant. The water system has performed well, and there are no known deficiencies within the system. Based on the age, type, and positive performance of the watermain, the useful life of the system is expected to outlast the pavement improvements detailed in this report.

3. Sanitary Sewer

The existing sanitary system is an 8-inch diameter vitrified clay pipe (VCP) that conveys wastewater north along Jackson Street and west to the Maple Lane cul-de-sac before continuing north through a utility easement. City maintenance personnel have noted no known deficiencies within the existing sanitary system. Additionally, Bolton and Menk staff reviewed each sanitary sewer structure within the project area. The structures are precast and found to be in good to very good condition. Based on the age, material, and historical performance, the sanitary sewer system is anticipated to outlast the pavement improvements described in this report.

4. Storm Sewer

The existing stormwater infrastructure in the project area is confined to the west half of Maple Lane and is composed of reinforced concrete pipe (RCP) ranging in size from 12-inch diameter to 18-inch diameter. Stormwater west of the high point located along the curve of Maple Lane and Jackson Street is conveyed west by curb and gutter to one of four catch basins. All stormwater entering the Maple Lane system then

passes through an additional storm manhole before outletting to a detention pond north of the cul-de-sac. All stormwater east of the high point along Jackson Street is conveyed south via curb and gutter to another storm sewer system.

City maintenance personnel have noted that there are no known deficiencies with the storm sewer system. Bolton and Menk evaluated each of the storm sewer structures within the project area. The structures are precast and found to be in fair to good condition. Overall, following minor rehabilitation to existing structures, the storm sewer system is expected to outlast the proposed pavement improvements.

C. Proposed Improvements

1. Street Improvements

Based upon the pavement age and distresses, the proposed street improvement for Maple Lane - Jackson Street is a full depth reclamation (FDR). A depiction of the proposed street and utility improvements is shown in Figure 3A in Appendix A.

Current pavement distress patterns indicate surface-level wear but no significant deterioration of the roadway base. Full depth reclamation is a cost-effective rehabilitation method that grinds the top 10-12 inches of existing bituminous pavement and aggregate base into a new aggregate that creates an improved foundation for 4 inches of new bituminous pavement.

In addition to pavement reclamation, curb and gutter that is cracked, weathered, or heaved will be removed and replaced with new curb and gutter. This improves stormwater conveyance to catch basins and prevents the intrusion of stormwater into the roadway base.

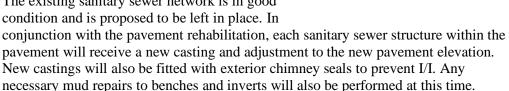
2. Watermain Improvements

The existing ductile iron watermain is in good condition and is proposed to be left in place. Similarly, existing water services are proposed to be left in place. However, pavement rehabilitation provides an advantageous opportunity to perform preventative maintenance on the system before the new pavement is constructed.

Bolted connections at gate valves, hydrants, and mainline fittings are typically the features that fail first within the water system. Inspection and replacement of bolts at these critical locations is a proactive way to limit leaks and breaks in the system beneath the new pavement.

3. Sanitary Sewer Improvements

The existing sanitary sewer network is in good condition and is proposed to be left in place. In



4. Storm Sewer Improvements

The existing storm sewer system is generally in good condition and is proposed to be left in place. Routine repairs to catch basins will repair deteriorating doghouses and



Exhibit 4 - Fitting Bolt Replacement

inverts. The manhole structure located in the cul-de-sac pavement will receive a new casting and I/I barrier before being adjusted to the new pavement elevation.

5. Water Quality Improvements

Rehabilitation of Maple Lane & Jackson Street will not trigger Ramsey-Washington Metro Watershed District (RWMWD) stormwater improvements. However, residents will be given the opportunity during final design to opt into the City's rain garden program. Any raingardens installed would be credited by the watershed towards other or future street improvement projects that trigger stormwater improvements.

IV. ESTIMATED COSTS

The estimated project cost to complete the improvements proposed herein are presented below. These costs include estimated construction costs, a 10% contingency, 18% engineering, and allowances for geotechnical investigations.

These cost estimates are based upon public construction cost information. Since the consultant has no control over 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 of the client and no warranty or guarantee as to the accuracy of construction cost estimates is made. It is recommended that costs for project financing should be based upon actual, competitive bid prices with reasonable contingencies.

A. Yorkton Ridge

Table 1 - Estimated Cost Summary - Yorkton Ridge (See Appendix B for Detailed Cost Estimate)

Item	Total Estimated Cost
Street	\$220,402
Sanitary Sewer	\$13,305
Watermain	\$41,276
Storm Sewer	\$27,193
Total	\$302,176

B. Maple Lane – Jackson Street

Table 2 - Estimated Cost Summary - Maple Lane - Jackson Street (See Appendix B for Detailed Cost Estimate)

Item	Total Estimated Cost
Street	\$251,522
Sanitary Sewer	\$13,889
Watermain	\$26,479
Storm Sewer	\$7,820
Total	\$299,710

V. FINANCING

Street: The City's Assessment Policy for rehabilitated urban streets outlines that 50% of street rehabilitation costs, including any cost associated with the repair of curb and gutter, shall be assessed to the benefited properties. The special assessment policy includes special provisions for corner lots, commercial properties, lots that have already been assessed, and minimum/maximum front footages; notes and adjustments for these parcels are listed in the Assessment Rolls in Appendix C. The remaining street costs will be funded using the City's Infrastructure Capital Improvement Fund.

Yorkton Ridge is recommended to be assessed on a *per unit* basis due to the similar size and use of the properties being assessed. As such, parcels are assigned a unit value, adjusted in accordance with the special provisions described above. The total assessable cost is then divided among the total units and assigned to each benefiting parcel according to its unit value.

Maple Lane – Jackson Street is recommended to be assessed on a *per unit* basis due to the similar size and use of the properties being assessed. As such, parcels are assigned a unit value, adjusted in accordance with the special provisions described above. The total assessable cost is then divided among the total units and assigned to each benefiting parcel according to its unit value.

Water, Sewer, and Storm: This project includes only minor water, sanitary, and storm sewer repairs. As such, in accordance with the City's Special Assessment Policy, water, sanitary, and storm sewer improvements will not be assessed. Instead, they will be funded by the City's Infrastructure Capital Improvement Fund.

A. Special Assessment – Street Costs Assessed

The unit assessments discussed below are estimates. At the conclusion of construction, City staff will tabulate actual/final construction costs and use those costs as the basis for the levied assessments. An Assessment Hearing will be held by the City Council to share these costs with the residents.

1. Yorkton Ridge

A per unit assessment method is being utilized for Yorkton Ridge due to the consistency of adjacent property sizes and uses.

The estimated per policy assessments for street improvements are:

• Unit Assessment Rate

\$4,750.00

Appendix C identifies the Assessment Roll and benefiting properties.

2. Maple Lane – Jackson Street

A per unit assessment method is being utilized for Maple Lane – Jackson Street due to the consistency of adjacent property sizes and uses.

The estimated per policy assessments for street improvements are:

• Unit Assessment Rate

\$3,810.00

Appendix C identifies the Assessment Roll and benefiting properties.

B. Financing Summary

The financing summaries shown below are based on the City's Special Assessment Policy as described in the previous sections.

Table 3 - Financing Summary - Yorkton Ridge

Location	Total Estimated Cost	Infrastructure Capital Improvement Fund	Assessments
Street	\$220,401	\$110,201	\$110,200
Sanitary Sewer	\$13,305	\$13,305	\$0
Watermain	\$41,276	\$41,276	\$0
Storm Sewer	\$27,193	\$27,193	\$0
	\$302,175	\$191,975	\$110,200

Table 4 - Financing Summary - Maple Lane - Jackson Street

Location	Total Estimated Cost	Infrastructure Capital Improvement Fund	Assessments
Street	\$251,522	\$129,602	\$121,920
Sanitary Sewer	\$13,889	\$13,889	\$0
Watermain	\$26,479	\$26,479	\$0
Storm Sewer	\$7,820	\$7,820	\$0
	\$299,710	\$177,790	\$121,920

VI. PROJECT SCHEDULE

The proposed project schedule is shown below:

Neighborhood Informational Meetings	October 20, 2021
Receive Feasibility Report, Call for Improvement Hearing*	November 17, 2021
Mail Improvement Hearing Notice	November 18, 2021
Advertise Improvement Hearing in Pioneer Press Newspaper	December 2 and 9, 2021
Improvement Hearing, Order Plans and Specifications*	December 15, 2021
Approve Plans and Specifications, Authorize Bidding*	January 12, 2022
Bid Opening	February 15, 2022
Receive Bids and Award Project *	February 23, 2022
Begin Construction	May 2022
Final Completion	August 2022
Advertise Assessment Hearing in Pioneer Press Newspaper	September 15, 2022
Mail Assessment Hearing Notice	September 15, 2022
Assessment Hearing*	October 5, 2022

^{*} Denotes Council action items

VII. EASEMENTS AND PERMITS

It is expected that all the proposed improvements will be limited to the existing City right-of-way and easements. No additional right-of-way, easements, or permits would be required for construction of these improvements.

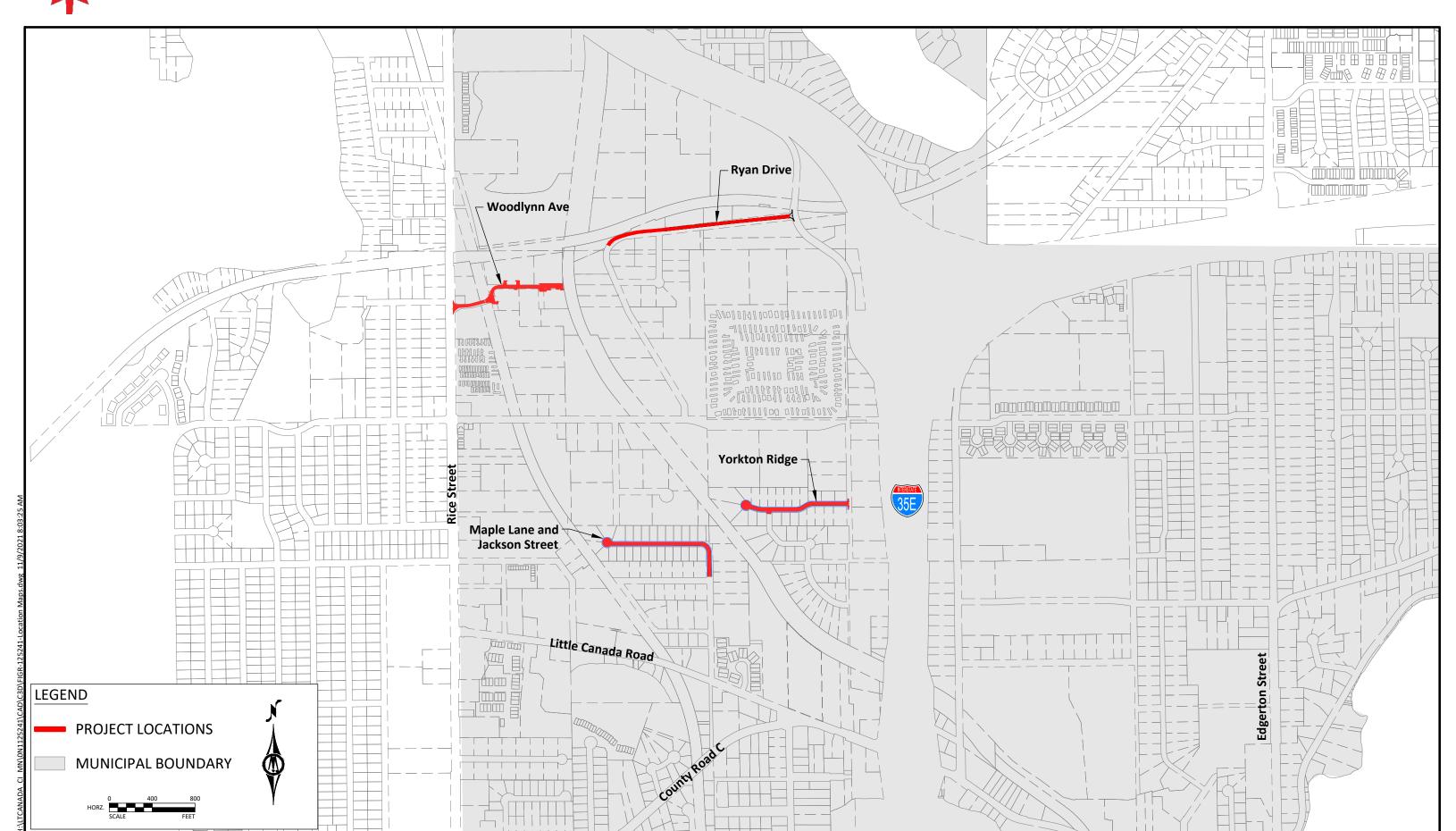
VIII. CONCLUSION

From an engineering standpoint, this project as proposed is feasible, cost effective, and necessary. It can best be accomplished by letting competitive bids for the work under one contract in order to complete the work in an orderly and efficient manner. The City will have to determine the economic feasibility of the proposed improvements.

Appendix A: Figures

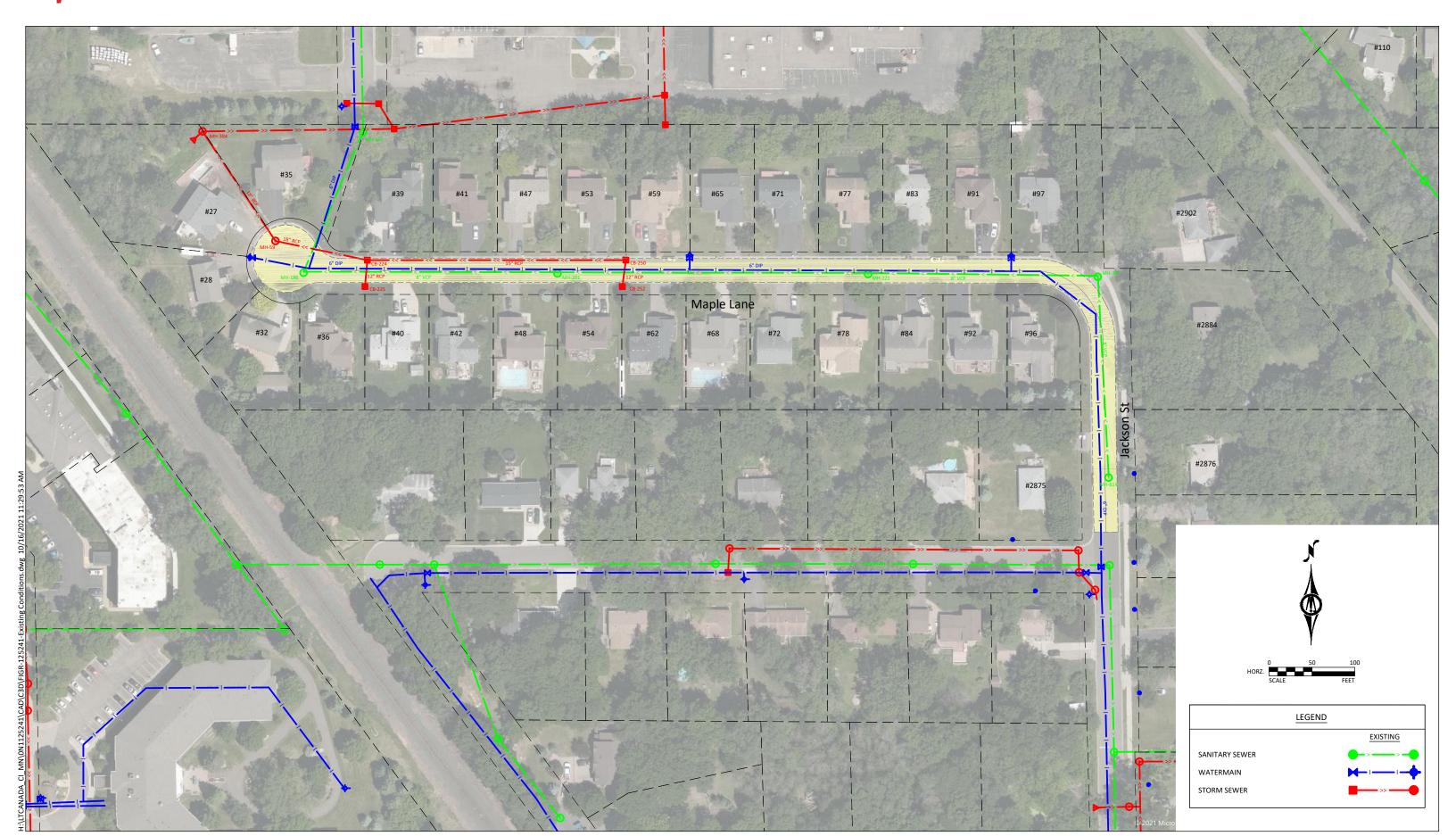
November 2021





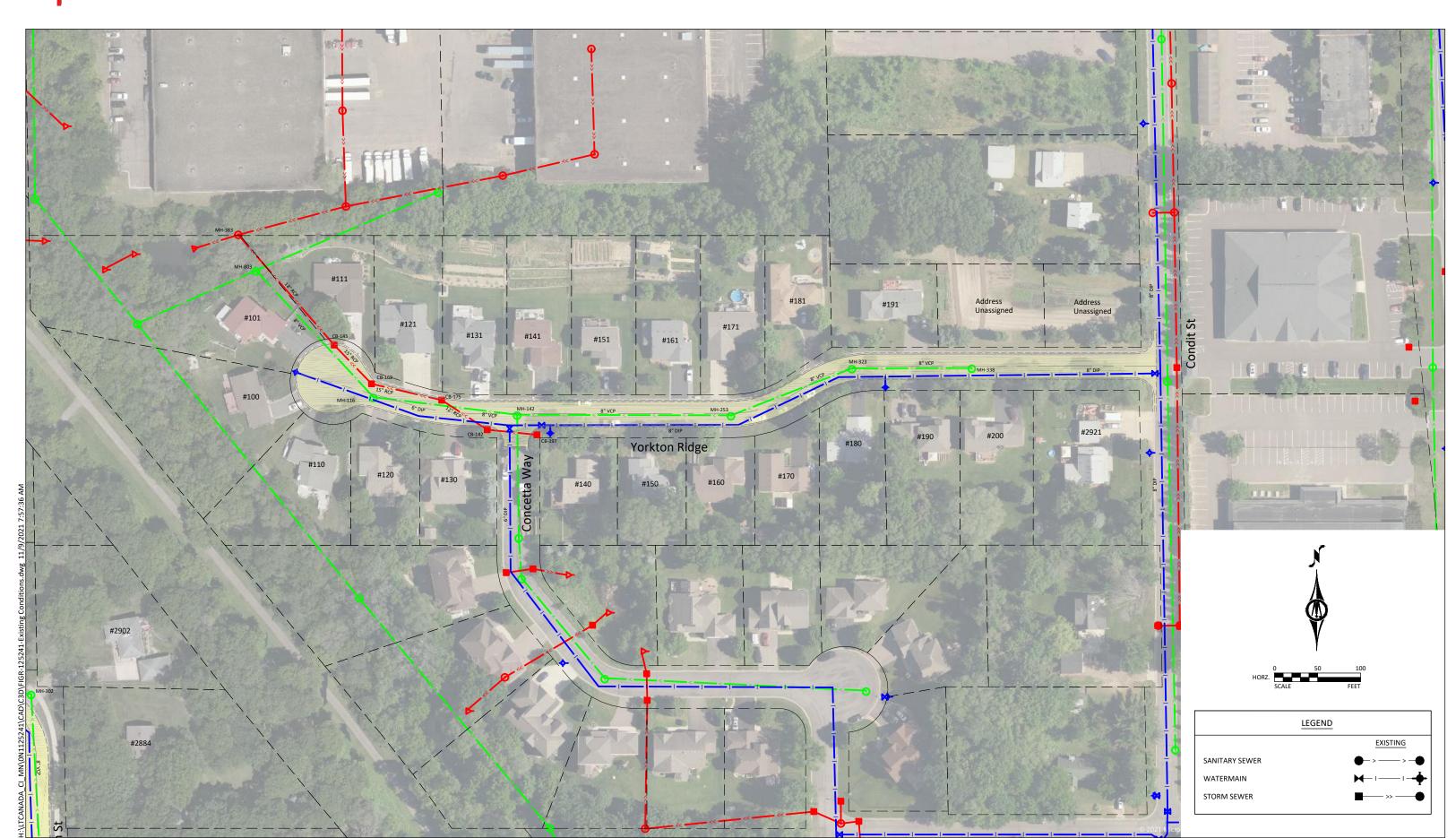
November 2021









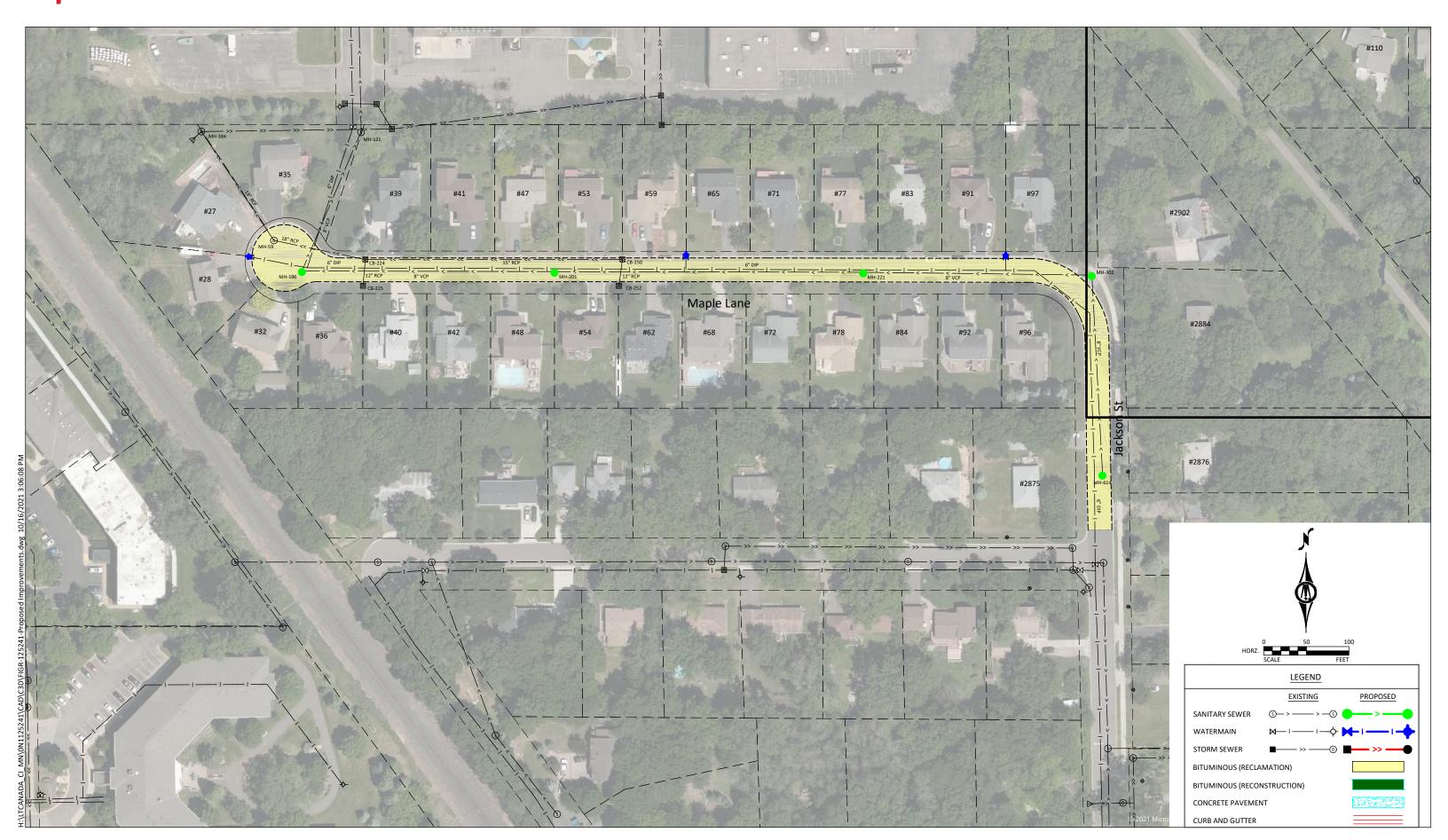


2022 Street Improvements

Little Canada, MN

November 2021





November 2021





Appendix B: Preliminary Cost Estimates

2022 STREET IMPROVEMENTS - MAPLE LANE & JACKSON STREET PRELIMINARY COST ESTIMATE

CITY PROJECT NUMBER:

BMI PROJECT NUMBER: 0N1.125241

11/9/2021

ITEM NO.	MNDOT SPEC.NO	DESCRIPTION	NOTES	UNIT	UNIT COST		LANE & N STREET
						QUANTITY	AMOUNT
PART 1: STRE	1					<u> </u>	
1	2021.501	MOBILIZATION		LS	\$11,000.00		\$11,000.00
2	2104.503	REMOVE CURB & GUTTER (SPOT REPAIR)		LF	\$11.00	520	\$5,720.00
3	2104.504	REMOVE BITUMINOUS DRIRVEWAY PAVEMENT		SY	\$15.00	50	\$750.00
4	2104.504	REMOVE CONCRETE DRIVEWAY PAVEMENT		SY	\$20.00	10	\$200.00
5	2105.604	FINISH GRADING		SY	\$2.00	4240	\$8,480.00
6	2105.607	SUBGRADE EXCAVATION (SPOT CORRECTION)		CY	\$30.00	150	\$4,500.00
7	2105.607	SUBGRADE CORRECTION - CLASS 5		CY	\$30.00	150	\$4,500.00
8	2130.501	WATER		MGAL	\$35.00	50	\$1,750.00
9	2215.504	FULL DEPTH RECLAMATION		SY	\$5.00	4240	\$21,200.00
10	2232.604	EDGE MILL BITUMINOUS SURFACE		SY	\$20.00	10	\$200.00
11	2331.603	JOINT ADHESIVE (MASTIC)		LF	\$0.65	2590	\$1,683.50
12	2357.506	BITUMINOUS MATERIAL FOR TACK COAT		GAL	\$3.50	300	\$1,050.00
13	2360.509	TYPE SP 9.5 WEARING COURSE MIXTURE (3,C)		TON	\$85.00	590	\$50,150.00
14	2360.509	TYPE SP 9.5 WEARING COURSE MIXTURE (2,E), DRIVEWAY		TON	\$200.00	10	\$2,000.00
15	2360.509	TYPE SP 12.5 NON WEARING COURSE MIXTURE (3,C)		TON	\$80.00	590	\$47,200.00
16	2531.503	CONCRETE CURB & GUTTER - SURMOUNTABLE (HAND POUR)		LF	\$30.00	520	\$15,600.00
17	2531.504	6" CONCRETE DRIVEWAY PAVEMENT		SY	\$120.00	10	\$1,200.00
18	2563.601	TRAFFIC CONTROL		LS	\$3,500.00	1	\$3,500.00
19	2573.501	EROSION CONTROL SUPERVISOR		LS	\$2,500.00	1	\$2,500.00
20	2573.501	STABILIZED CONSTRUCTION EXIT		LS	\$1,300.00	1	\$1,300.00
21	2573.502	STORM DRAIN INLET PROTECTION		EACH	\$225.00	7	\$1,575.00
22	2575.504	FILTER TOPSOIL BORROW (LV)		CY	\$50.00	25	\$1,250.00
23	2575.604	FLEXTERRA HYDROMULCH, SEED MIX 25-151, FERTILIZER		SY	\$3.00	230	\$690.00
	'	PART 1: STR	EETS - CON	STRUCTIO	N SUBTOTAL		\$187,999
				+10% C	ONTINGENCY		\$18,800
	PART 1: STREETS - CONSTRUCTION TOTAL						\$206,798
	+18% ENGINEERING						\$37,224
				G	EOTECHNICAL		\$7,500
			PART 1: STR	REETS - PR	OJECT TOTAL		\$251,522

2022 STREET IMPROVEMENTS - MAPLE LANE & JACKSON STREET PRELIMINARY COST ESTIMATE

CITY PROJECT NUMBER:

BMI PROJECT NUMBER: 0N1.125241

11/9/2021

ITEM NO.	MNDOT SPEC.NO	DESCRIPTION	NOTES	UNIT	UNIT COST		LE LANE & ON STREET	
						QUANTITY	AMOUNT	
PART 2: SANI	TARY SEWER							
24	2104.502	REMOVE FRAME AND RING CASTING (SANITARY)		EACH	\$350.00	4	\$1,400.00	
25	2503.603	RECONSTRUCT SANITARY MANHOLE		LF	\$500.00	5	\$2,500.00	
26	2506.602	NEW RINGS AND CASTING (SANITARY)		EACH	\$1,250.00	4	\$5,000.00	
27	2506.602	CHIMNEY SEAL (INFI-SHIELD)		EACH	\$450.00	4	\$1,800.00	
		PART 2: SANITARY SEV	VER - CON	STRUCTIO	N SUBTOTAL		\$10,700	
				+10% C	ONTINGENCY		\$1,070	
		PART 2: SANITARY	SEWER -	CONSTRU	CTION TOTAL		\$11,770	
				+18% [NGINEERING		\$2,119	
		PART 2: SA	NITARY SE	WER - PR	OJECT TOTAL		\$13,889	
PART 3: WAT	ERMAIN						•	
28	2504.602	REMOVE AND REPLACE HYDRANT & VALVE BOLTS		EACH	\$1,500.00	3	\$4,500.00	
29	2504.602	REMOVE AND REPLACE FITTING BOLTS		EACH	\$1,500.00	7	\$10,500.00	
30	2504.602	REMOVE & REPLACE GATE VALVE BOX		EACH	\$1,800.00	3	\$5,400.00	
		PART 3: WATERM	AIN - CON	STRUCTIO	N SUBTOTAL		\$20,400	
				+10% C	ONTINGENCY		\$2,040	
		PART 3: WAT	TERMAIN-	CONSTRU	CTION TOTAL		\$22,440	
				+18% [NGINEERING		\$4,039	
		PART	3: WATERI	MAIN - PR	OJECT TOTAL		\$26,479	

2022 STREET IMPROVEMENTS - MAPLE LANE & JACKSON STREET PRELIMINARY COST ESTIMATE

CITY PROJECT NUMBER:

BMI PROJECT NUMBER: 0N1.125241

11/9/2021

ITEM NO.	MNDOT SPEC.NO	DESCRIPTION	NOTES	UNIT	UNIT COST	MAPLE LANE & JACKSON STREET	
						QUANTITY	AMOUNT
PART 4: STOR	M SEWER		T		1	T	
31	2104.502	REMOVE CASTING & RINGS (STORM)		EACH	\$350.00	1	\$350.00
32	2503.602	2'X3' CB RING SEAL (FLEX-SEAL)		LF	\$850.00	3	\$2,550.00
33	2506.602	CHIMNEY SEAL (INFI-SHIELD)		EACH	\$450.00	1	\$450.00
34	2506.602	REPAIR DRAINAGE STRUCTURE		EACH	\$475.00	3	\$1,425.00
35	2506.602	NEW RINGS AND CASTING (STORM)		EACH	\$1,250.00	1	\$1,250.00
		PART 4: STORM SE	WER - CON	STRUCTIO	N SUBTOTAL		\$6,025
				+10% C	ONTINGENCY		\$603
		PART 4: STORI	vi SEWER -	CONSTRU	CTION TOTAL		\$6,628
				+18%	ENGINEERING		\$1,193
		PART 4	STORM SI	WER - PR	OJECT TOTAL		\$7,820
PROJECT SUB	TOTALS (CON	STRUCTION & CONTINGENCY)					
PART "	1" - STREETS						\$206,798
PART "	2" - SANITARY	SEWER					\$11,770
PART "	3" - WATERM	AIN					\$22,440
PART "	4" - STORM SE	WER					\$6,628
CONSTRUCTION	ON TOTAL						\$247,636
ENGINI	ENGINEERING						\$44,574
GEOTE	CHNICAL						\$7,500
PROJECT TOTA	AL						\$299,710

2022 STREET IMPROVEMENTS - YORKTON RIDGE PRELIMINARY COST ESTIMATE

BMI PROJECT NUMBER: 0N1.125241 11/9/2021

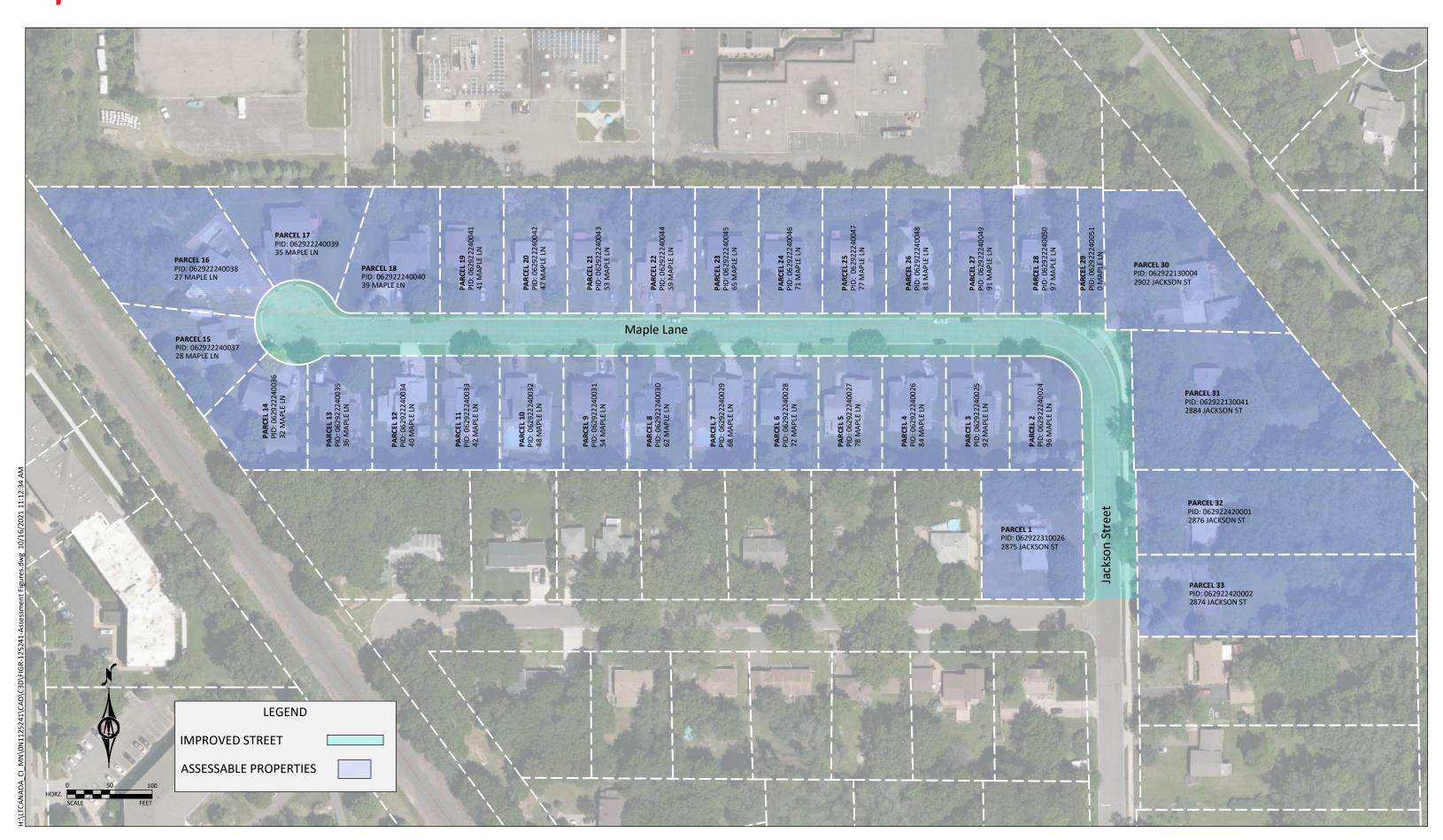
ITEM NO.	MNDOT	DESCRIPTION	NOTES	UNIT	UNIT	YORKTO	N RIDGE
	SPEC.NO	22301111 (1231		J	COST	QUANTITY	AMOUNT
PART 1: STRE	ETS						
1	2021.501	MOBILIZATION		LS	\$11,000.00	1	\$11,000.00
2	2104.503	REMOVE CURB & GUTTER (SPOT REPAIR)		LF	\$11.00	430	\$4,730.00
3	2104.504	REMOVE BITUMINOUS DRIRVEWAY PAVEMENT		SY	\$15.00	30	\$450.00
4	2104.504	REMOVE CONCRETE DRIVEWAY PAVEMENT		SY	\$20.00	10	\$200.00
5	2105.604	FINISH GRADING		SY	\$2.00	3630	\$7,260.00
6	2105.607	SUBGRADE EXCAVATION (SPOT CORRECTION)		CY	\$30.00	130	\$3,900.00
7	2105.607	SUBGRADE CORRECTION - CLASS 5		CY	\$30.00	130	\$3,900.00
8	2130.501	WATER		MGAL	\$35.00	40	\$1,400.00
9	2215.504	FULL DEPTH RECLAMATION		SY	\$5.00	3630	\$18,150.00
10	2232.604	EDGE MILL BITUMINOUS SURFACE		SY	\$20.00	60	\$1,200.00
11	2331.603	JOINT ADHESIVE (MASTIC)		LF	\$0.65	2136	\$1,388.40
12	2357.506	BITUMINOUS MATERIAL FOR TACK COAT		GAL	\$3.50	260	\$910.00
13	2360.509	TYPE SP 9.5 WEARING COURSE MIXTURE (3,C)		TON	\$85.00	506	\$43,010.00
14	2360.509	TYPE SP 9.5 WEARING COURSE MIXTURE (2,E), DRIVEWAY		TON	\$200.00	6	\$1,200.00
15	2360.509	TYPE SP 12.5 NON WEARING COURSE MIXTURE (3,C)		TON	\$80.00	506	\$40,480.00
16	2531.503	CONCRETE CURB & GUTTER - SURMOUNTABLE (HAND POUR)		LF	\$30.00	425	\$12,750.00
17	2531.504	6" CONCRETE DRIVEWAY PAVEMENT		SY	\$120.00	10	\$1,200.00
18	2563.601	TRAFFIC CONTROL		LS	\$3,500.00	1	\$3,500.00
19	2573.501	EROSION CONTROL SUPERVISOR		LS	\$2,500.00	1	\$2,500.00
20	2573.501	STABILIZED CONSTRUCTION EXIT		LS	\$1,300.00	1	\$1,300.00
21	2573.502	STORM DRAIN INLET PROTECTION		EACH	\$225.00	9	\$2,025.00
22	2575.504	FILTER TOPSOIL BORROW (LV)		CY	\$50.00	20	\$1,000.00
23	2575.604	FLEXTERRA HYDROMULCH, SEED MIX 25-151, FERTILIZER		SY	\$3.00	190	\$570.00
		PART 1: STRE	ETS - CON	STRUCTIO	N SUBTOTAL		\$164,023
				+10% C	ONTINGENCY		\$16,402
		PART 1: 9	STREETS -	CONSTRU	CTION TOTAL		\$180,426
				+18% E	NGINEERING		\$32,477
				GE	OTECHNICAL		\$7,500
		P/	ART 1: STR	EETS - PRO	OJECT TOTAL		\$220,402
PART 2: SANI	TARY SEWER						
24	2104.502	REMOVE FRAME AND RING CASTING (SANITARY)		EACH	\$350.00	5	\$1,750.00
25	2506.602	NEW RINGS AND CASTING (SANITARY)		EACH	\$1,250.00	5	\$6,250.00
26	2506.602	CHIMNEY SEAL (INFI-SHIELD)		EACH	\$450.00	5	\$2,250.00
		PART 2: SANITARY SEW	VER - CON	STRUCTIO	N SUBTOTAL		\$10,250
				+10% C	ONTINGENCY		\$1,025
		PART 2: SANITARY	SEWER -	CONSTRU	CTION TOTAL		\$11,275
				+18% E	NGINEERING		\$2,030
		PART 2: SAI	NITARY SE	WER - PRO	OJECT TOTAL		\$13,305

2022 STREET IMPROVEMENTS - YORKTON RIDGE PRELIMINARY COST ESTIMATE

BMI PROJECT NUMBER: 0N1.125241 11/9/2021

ITEM NO.	MNDOT	DESCRIPTION	NOTES	UNIT	UNIT	YORKTO	N RIDGE	
	SPEC.NO				COST	QUANTITY	AMOUNT	
PART 3: WAT	RMAIN							
27	2504.602	REMOVE AND REPLACE GATE VALVE BOLTS		EACH	\$1,500.00	3	\$4,500.00	
28	2504.602	REMOVE AND REPLACE HYDRANT & VALVE BOLTS		EACH	\$1,500.00	3	\$4,500.00	
29	2504.602	REMOVE AND REPLACE FITTING BOLTS		EACH	\$1,500.00	8	\$12,000.00	
30	2504.602	REMOVE & REPLACE GATE VALVE BOX		EACH	\$1,800.00	6	\$10,800.00	
		PART 3: WATERMA	AIN - CON	STRUCTIO	N SUBTOTAL		\$31,800	
	+10% CONTINGENCY							
		PART 3: WAT	ERMAIN-	CONSTRU	CTION TOTAL		\$34,980	
				+18% E	NGINEERING		\$6,296	
		PART 3	: WATERN	/IAIN - PR	OJECT TOTAL		\$41,276	
PART 4: STOR	M SEWER							
31	2104.502	REMOVE CASTING & RINGS (STORM)		EACH	\$350.00	4	\$1,400.00	
32	2104.502	REMOVE DRAINAGE STRUCTURE		EACH	\$550.00	1	\$550.00	
33	2104.503	REMOVE SEWER PIPE (STORM)		LF	\$25.00	16	\$400.00	
34	2503.503	12" RC PIPE SEWER CL V		LF	\$100.00	16	\$1,600.00	
35	2503.602	2'X3' CB RING SEAL (FLEX-SEAL)		LF	\$850.00	5	\$4,250.00	
36	2503.602	CONNECT TO EXISTING STORM SEWER		EACH	\$1,500.00	2	\$3,000.00	
37	2506.602	CONST DRAINAGE STRUCTURE DESIGN 4'		EACH	\$3,500.00	1	\$3,500.00	
38	2506.602	NEW RINGS AND CASTING (STORM)		EACH	\$1,250.00	5	\$6,250.00	
		PART 4: STORM SEV	/ER - CON	STRUCTIO	N SUBTOTAL		\$20,950	
				+10% C	ONTINGENCY		\$2,095	
		PART 4: STORM	SEWER -	CONSTRU	CTION TOTAL		\$23,045	
				+18% [NGINEERING		\$4,148	
		PART 4:	STORM SE	WER - PR	OJECT TOTAL		\$27,193	
PROJECT SUB	TOTALS (CO	NSTRUCTION & CONTINGENCY)						
PART "1" - ST	REETS						\$180,426	
PART "2" - SA	NITARY SEWI	ER					\$11,275	
PART "3" - WATERMAIN							\$34,980	
PART "4" - STORM SEWER							\$23,045	
CONSTRUCTION TOTAL							\$249,726	
ENGINEERING	NGINEERING							
GEOTECHNIC	AL.						\$7,500	
PROJECT TOT	AL						\$302,176	

Appendix C: Preliminary Assessment Roll



PRELIMINARY ASSESSMENT ROLL MAPLE LANE & JACKSON STREET

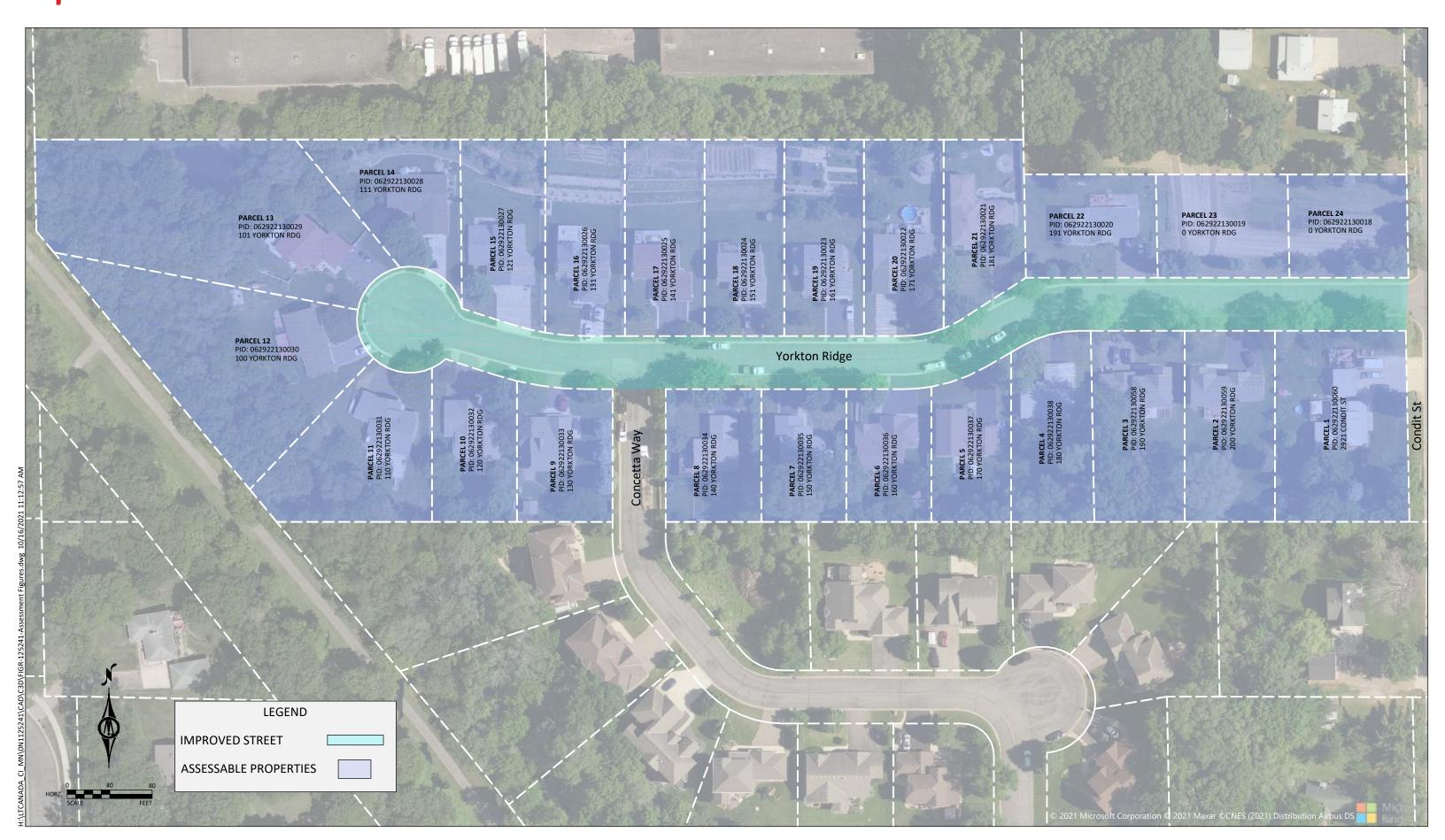
Total Streets Cost	Total Assessable Cost	Total Units	Unit Assessment
\$251,522	\$125,761	33.0	\$3,810.00

Parcel #	Parcel ID	Site Address	Units	Unit Assessment	Note
16	062922240038	27 MAPLE LN	1	\$3,810.00	
17	062922240039	35 MAPLE LN	1	\$3,810.00	
18	062922240040	39 MAPLE LN	1	\$3,810.00	
19	062922240041	41 MAPLE LN	1	\$3,810.00	
20	062922240042	47 MAPLE LN	1	\$3,810.00	
21	062922240043	53 MAPLE LN	1	\$3,810.00	
22	062922240044	59 MAPLE LN	1	\$3,810.00	
23	062922240045	65 MAPLE LN	1	\$3,810.00	
24	062922240046	71 MAPLE LN	1	\$3,810.00	
25	062922240047	77 MAPLE LN	1	\$3,810.00	
26	062922240048	83 MAPLE LN	1	\$3,810.00	
27	062922240049	91 MAPLE LN	1	\$3,810.00	
28	062922240050	97 MAPLE LN	1	\$3,810.00	
29	062922240051	0 MAPLE LN	1		(2)
30	062922130004	2902 JACKSON ST	1	\$3,810.00	
31	062922130041	2884 JACKSON ST	1	\$3,810.00	
32	062922420001	2876 JACKSON ST	1	\$3,810.00	
33	062922420002	2874 JACKSON ST	1	\$3,810.00	
		Total Assessed:		\$121,920.00	

NOTES

- (1) Corner Lot with Driveway on Road Improved, Assessed at 100% Rate
- (2) City Owned Parcel Included in Unit Total, but Not Assessed





PRELIMINARY ASSESSMENT ROLL YORKTON RIDGE

Total Street Cost	Total Assessable Cost	Total Units	Unit Assessment
\$220,402	\$110,201	23.2	\$4,750

Parcel #	Parcel ID	Site Address	Units	Unit Assessment	Note
1	062922130060	2921 CONDIT ST	0.20	\$950	(2)
2	062922130059	200 YORKTON RDG	1.00	\$4,750	
3	062922130058	190 YORKTON RDG	1.00	\$4,750	
4	062922130038	180 YORKTON RDG	1.00	\$4,750	
5	062922130037	170 YORKTON RDG	1.00	\$4,750	
6	062922130036	160 YORKTON RDG	1.00	\$4,750	
7	062922130035	150 YORKTON RDG	1.00	\$4,750	
8	062922130034	140 YORKTON RDG	1.00	\$4,750	(1)
9	062922130033	130 YORKTON RDG	1.00	\$4,750	(1)
10	062922130032	120 YORKTON RDG	1.00	\$4,750	
11	062922130031	110 YORKTON RDG	1.00	\$4,750	
12	062922130030	100 YORKTON RDG	1.00	\$4,750	
13	062922130029	101 YORKTON RDG	1.00	\$4,750	
14	062922130028	111 YORKTON RDG	1.00	\$4,750	
15	062922130027	121 YORKTON RDG	1.00	\$4,750	
16	062922130026	131 YORKTON RDG	1.00	\$4,750	
17	062922130025	141 YORKTON RDG	1.00	\$4,750	
18	062922130024	151 YORKTON RDG	1.00	\$4,750	
19	062922130023	161 YORKTON RDG	1.00	\$4,750	
20	062922130022	171 YORKTON RDG	1.00	\$4,750	
21	062922130021	181 YORKTON RDG	1.00	\$4,750	
22	062922130020	191 YORKTON RDG	1.00	\$4,750	
23	062922130019	0 YORKTON RDG	1.00	\$4,750	
24	062922130018	0 YORKTON RDG	1.00	\$4,750	
		Total Assessed:		\$110,200.00	

NOTES

- (1) Corner Lot with Driveway on Road Improved, Assessed at 100% Rate
- (2) Corner Lot with Driveway on Road Not Improved, Assessed at 20% Rate