



City of Sunfish Lake

2017-2021

Capital Improvement Plan

DRAFT

June 6, 2016

*Sunfish Lake,
Dakota County, Minnesota*

WSB Project Number: 01011-99



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**2017 to 2021
CAPITAL IMPROVEMENT PLAN**

CITY OF SUNFISH LAKE, MN

June 1, 2016

Prepared By:

**WSB & Associates, Inc.
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(763) 541-1700 (Fax)**

CERTIFICATION

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.



Donald W. Sterna, PE

Date: June 1, 2016

Lic. No. 19103

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CERTIFICATION SHEET
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2017 to 2021 CAPITAL IMPROVEMENT PLAN

1. INTRODUCTION

The Capital Improvement Plan (CIP) is a multi-year planning tool utilized by City officials to plan, finance, and maintain City infrastructure, usually based on a five to ten-year period. The City's Capital Improvement Plan identifies street and drainage improvements and major street maintenance items to sustain and maintain the City's infrastructure to obtain the most useful life. The CIP process allows for a systematic evaluation of all potential projects at the same time.

As with all plans, the Capital Improvement Plan is not a legally binding document and is subject to change due to unforeseen pavement deterioration or failures, available funding, and scheduling. The plan is intended to be updated on an annual basis as part of the City's budgeting process.

2. CAPITAL IMPROVEMENT PLAN

The Capital Improvement Plan is based on the condition of the City's existing infrastructure and anticipated Capital Improvements and the typical maintenance requirements for the stated condition. What is defined as a capital project is a tangible improvement that has a life expectancy greater than one year. Improvements are then identified to maintain or reconstruct streets, drainage systems, and other infrastructure facilities. The CIP identifies an estimated project cost and determines a schedule utilizing anticipated budget availability and maintenance priority. The CIP should be reviewed annually every spring to reassess the City's infrastructure needs prior to establishing the next year's City budget. The identified costs are our early assessment of anticipated costs that will be refined along with funding options prior to authorization by the City Council.

2.1 Scheduled Maintenance

A majority of the City's current infrastructure, with the exception of Charlton Road, was constructed between 1989 to present. **Appendix A, Exhibit A** shows a map of the City streets and what year they were originally constructed. Bituminous roadway maintenance cycle is crack seal and sealcoat every seven to ten years to extend the life cycle of the City's paved roadways. The methodology of the City's pavement management is outlined in the 2007 Pavement Management Report which discusses pavement life cycle, maintenance strategies, and how pavements are evaluated. Copies of this 2007 report are available upon request.

Appendix B is the 2015 Pavement Condition Index Map that indicates the most currently evaluated pavement conditions. This Capital Improvement Plan identifies pavement and infrastructure management strategies and the City's street condition evaluated in 2015 and observed 2014 issue areas. The City should re-evaluate its infrastructure on a three-year cycle to track pavement, culvert, and street-sign conditions to better manage our infrastructure maintenance. The next pavement evaluation year is recommended in 2018.

The maintenance items indicated in the Capital Improvement Plan are:

Crack Sealing – The repair of longitudinal and transverse cracks to impede moisture from penetrating the streets aggregate base and subgrade.

Seal Coat – The surface application of bituminous oil and aggregate to provide a new traveling surface and impede the rate of oxidation of the existing bituminous pavement.

Overlay – Crack sealing the existing bituminous pavement and placing additional bituminous surfacing over the entire roadway surface.

Mill and Overlay – The milling (removal) of the existing deteriorated bituminous surface and placement of a bituminous surfacing across the entire roadway surface.

Reconstruction – The reconstruction of an existing roadway due to bituminous surface, aggregate base, or subgrade failure resulting in severe bituminous cracking and fracture. The process constructs a new street section including subgrade corrections, aggregate base construction, and bituminous surfacing.

Drainage System – The cleaning, inspection, repair and/or replacement of drainage ways and culverts.

2.2 Recent/Current Capital Improvements

Recent Capital Improvements in which City financing included bonding are:

- Salem Church Road Reconstruction, Roanoke Road to Delaware Avenue Constructed in 2009, bond payment through 2020
- 2012 Crack Seal Project, funded through City general funds
- 2013 Seal Coat Project, funded through City general funds
- 2014 Street Improvements Project, funded under bonds through 2024
- 2016 Seal Coat Project, funded through City general funds

2.3 2017 to 2021 Capital Improvements

The proposed CIP identifies the major improvements scheduled shown in the following exhibits:

- *Appendix A, Exhibits B and C* - Proposed 2017 to 2021 Capital Improvements
- *Appendix A, Exhibit D* - Proposed 2022 to 2026 Capital Improvements

It is anticipated that after 2020, the roadway system in the City will be in good to very good condition with the ongoing, yearly maintenance activities on Charlton Road.

2.4 Capital Improvements Funding

The Capital Improvements identified in the plan are improvements that are funded by the City general funds (collected from the City general tax levy), bonding and financing through assessment to benefiting properties.

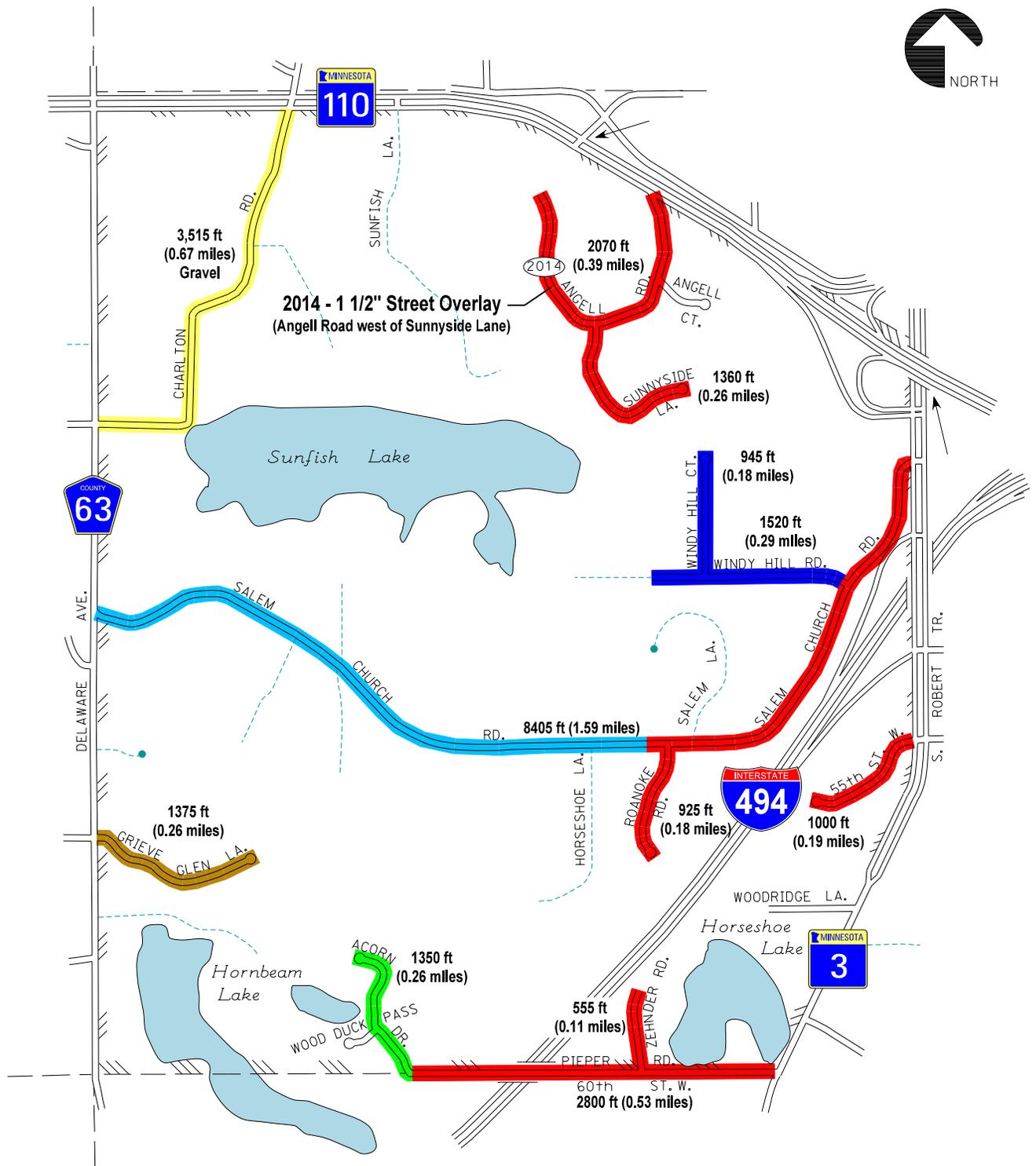
Appendix B includes the Capital Improvement Plan Project Summary of the currently identified capital improvements. It is important to note that the costs identified do not include legal, engineering, administration, and financing cost. The City's Special Assessment Policy is included in Appendix D for reference.

3. RECOMMENDATION

It is recommended the City updates its CIP every year in the spring to evaluate City infrastructure needs and assist in establishing the City budgets for road maintenance and capital improvements. It is recommended the CIP budget be separated from the routine road maintenance activities such as street sweeping, pavement patching, and sign maintenance from the capital improvement projects. We recommend that a Capital Improvement Fund be established to fund Capital Improvements accumulating funds, as needed, to complete Capital Improvement projects.

APPENDIX A

Exhibits



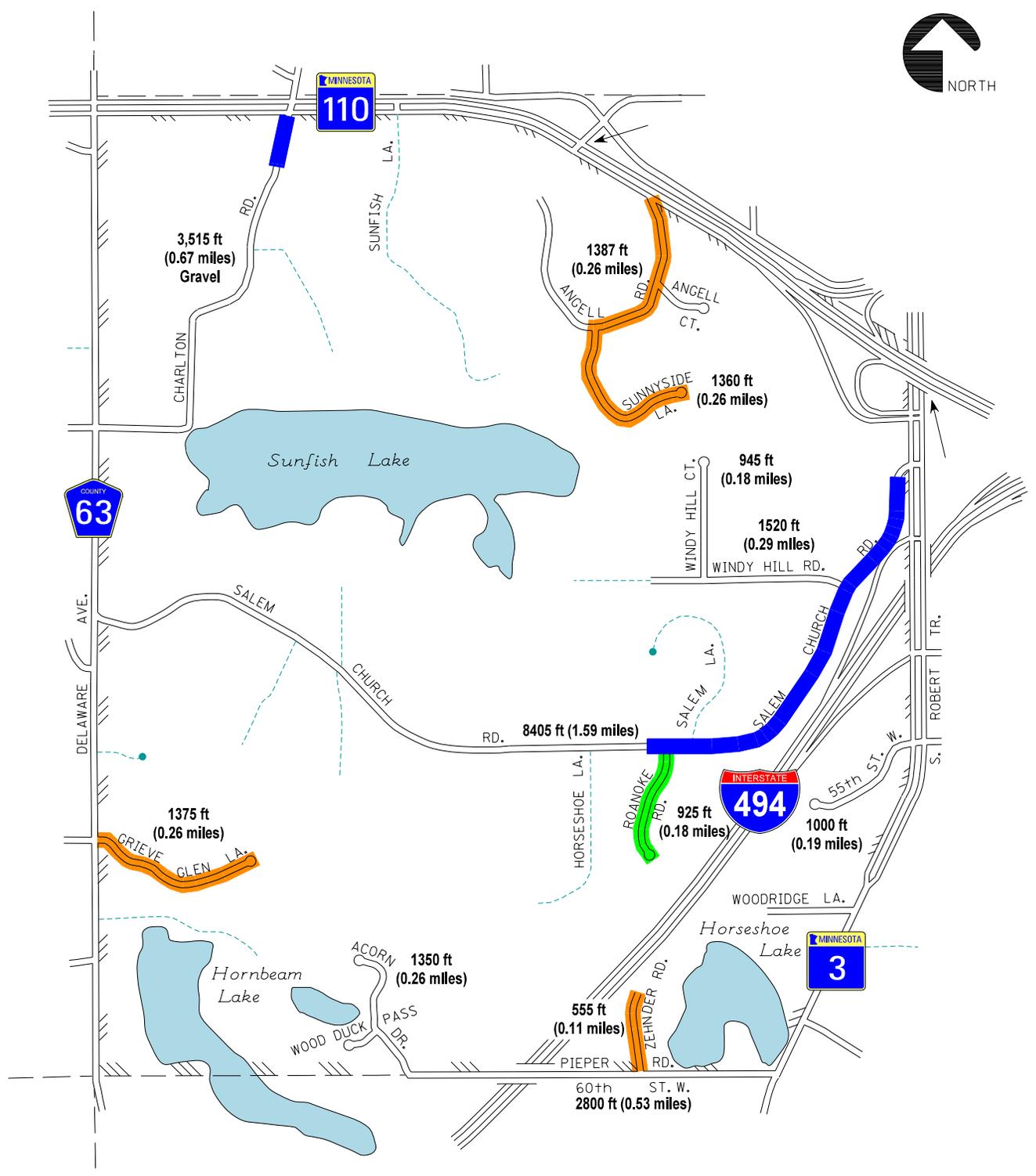
Note:

(XXXX) Year of Street Overlay

Year of Street Construction	1989	1994	1996	2006	2009	2014

City Street Lengths: 4.24 miles of Paved Streets & 0.67 miles of Gravel Streets

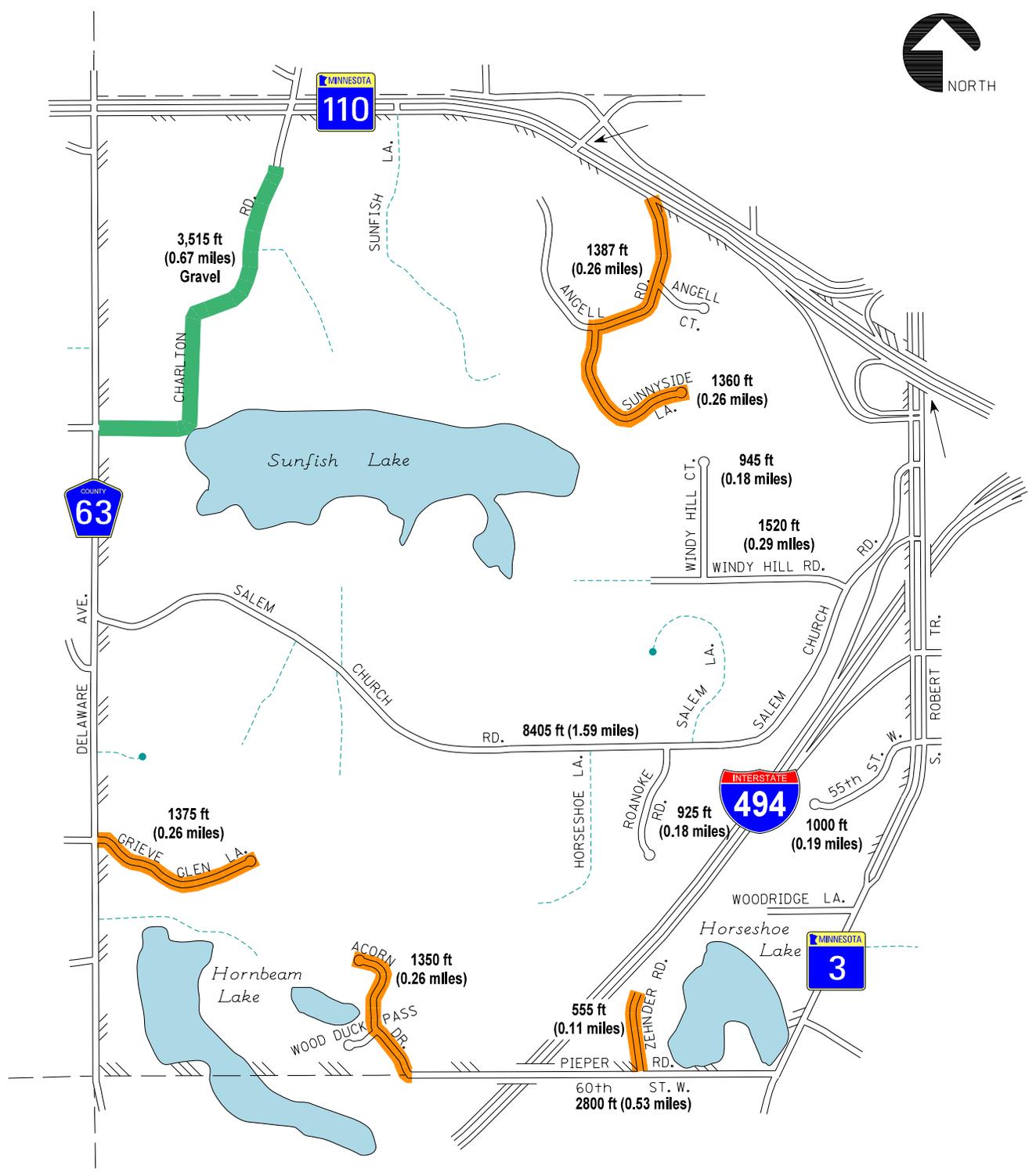
Date: Printed: 6/2/2016
WSB Filename: T:\011-990\2016 CIP MAP\Exhibit A - 2016 City Street Map.dgn



Date: Printed: 6/2/2016
WSB Filename: T:\01-990\2016 CIP MAP\Exhibit B - 2017 to 2021 Pavement Rehab.dgn

2017 to 2021 Improvements (Pavement Rehabilitation)

█ 2017 Overlay	█ 2017 Reconstruction	█ 2020 Overlay
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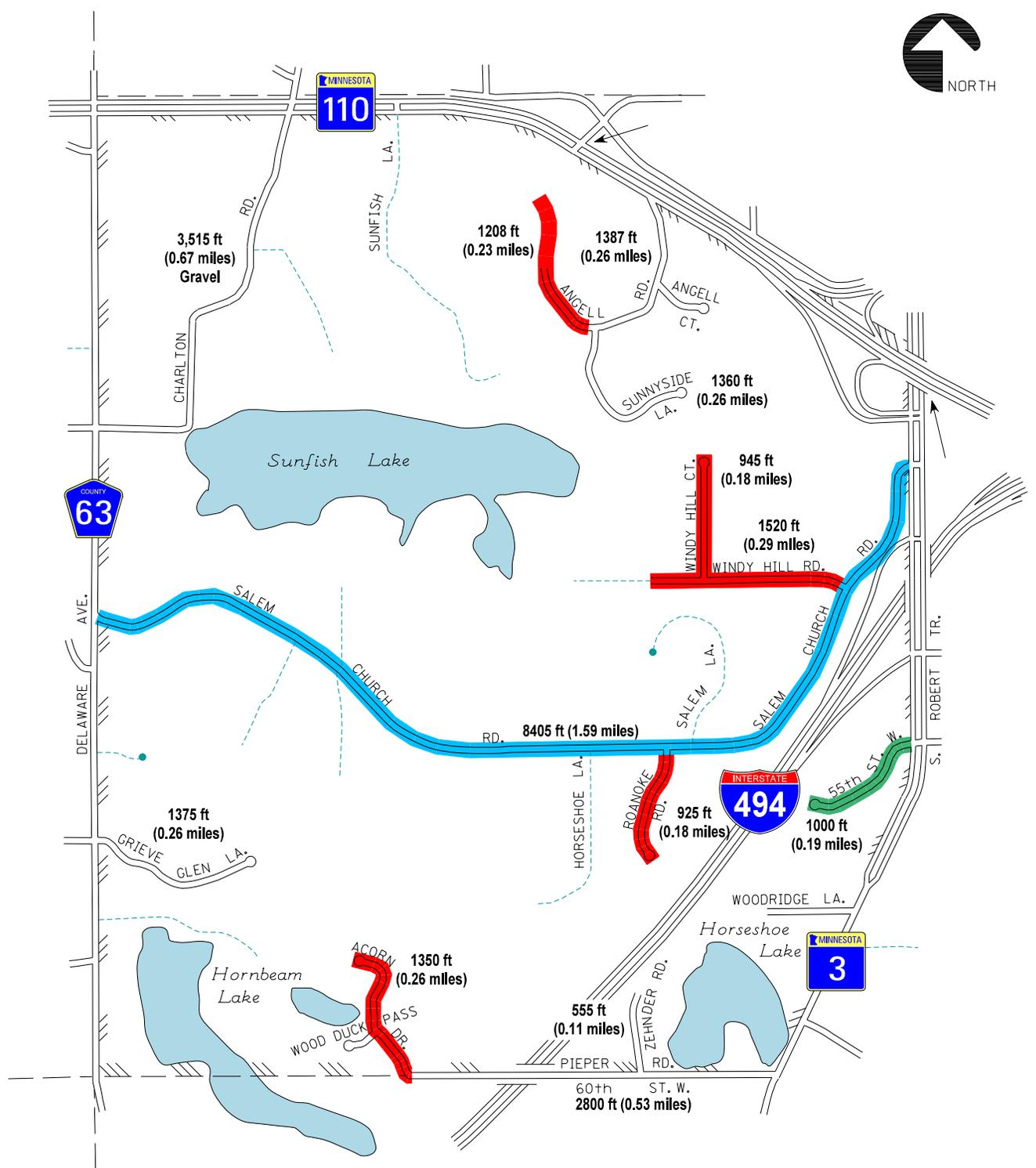


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**2017 to 2021
Roadway Maintenance**

Yearly Gravel Surface Repairs

2017 Crack Fill



2022 to 2026 Improvements	█	2021 Crack Fill / 2025 Crack Fill & Seal Coat	█	2023 Crack Fill & Seal Coat
	█	2025 Overlay & Reconstruct		

Date: Printed: 6/2/2016
WSB Filename: T:\01-990\2016 CIP MAP\Exhibit D - 2022 to 2026 CIP.dgn

APPENDIX B

Capital Improvement Plan Summary

2017 - 2021 CAPITAL IMPROVEMENT PLAN

**SUMMARY
APPENDIX B**

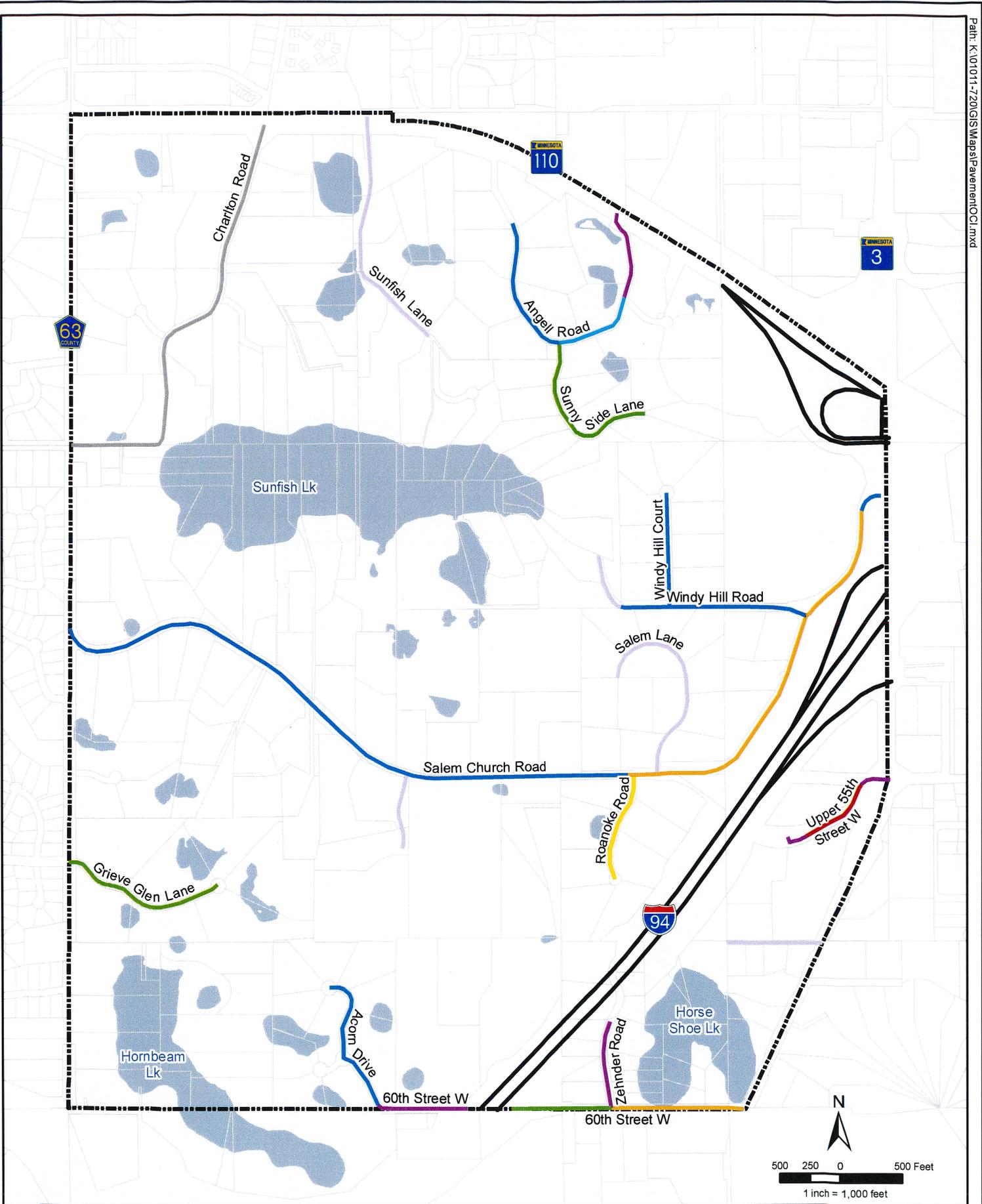
	Notes	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	TOTALS
Improvement Project Costs												
A.) Charlton Road Maintenance (100% City Tax Levy)												
1.) Street Grading		\$7,750	\$7,750	\$7,750	\$8,000	\$8,000	\$8,000	\$8,000	\$8,000	\$8,250	\$8,250	
2.) Dust Control		\$1,850	\$1,950	\$1,950	\$1,950	\$1,950	\$2,000	\$2,000	\$2,100	\$2,100	\$2,100	
3.) Repair and Ditch Cleaning			\$6,500		\$3,500		\$3,500		\$6,000			
Subtotal Annual Road Maintenance		\$9,600	\$16,200	\$9,700	\$13,450	\$9,950	\$13,500	\$10,000	\$16,100	\$10,350	\$10,350	
B.) General Street Maintenance (100% City Tax Levy)												
1.) Street Sweeping		\$1,600	\$1,600	\$1,650	\$1,650	\$1,700	\$1,700	\$1,750	\$1,750	\$1,800	\$1,800	
2.) Sign Replacement and maintenance	1	\$5,000	\$1,000	\$1,200	\$1,200	\$1,200	\$7,500	\$1,000	\$1,000	\$1,200	\$1,200	
3.) Striping maintenance	1			\$4,600					\$4,700			
4.) Bituminous Maintenance		\$3,500	\$3,500	\$3,500	\$3,500	\$4,500	\$4,500	\$4,500	\$5,000	\$5,000	\$5,000	
5.) Shoulder Maintenance		\$1,000	\$1,000	\$1,100	\$1,100	\$1,100	\$1,200	\$1,200	\$1,200	\$1,300	\$1,300	
6.) Annual Lake Water Quality Monitoring	6	\$1,200	\$1,300	\$1,300	\$1,300	\$1,300	\$1,300	\$1,300	\$1,300	\$1,400	\$1,400	
Subtotal General Street Maintenance		\$12,300	\$8,400	\$13,350	\$8,750	\$9,800	\$16,200	\$9,750	\$14,950	\$10,700	\$10,700	
Capital Improvement Plan												
C.) 100% City Levy Improvements												
1.) Infrastructure Management Update			\$5,500			\$5,500			\$6,000			
2.) Crack Seal		\$7,500		\$0		\$4,500	\$0	\$7,500		\$5,000	\$0	
3.) Crack Seal & Seal Coat				\$0		\$30,000	\$0	\$37,500		\$45,000	\$0	
4.) Culvert Cleaning & End Section Repair	2		\$3,500							\$0		
5.) Sunfish Lake TMDL Improvements	4						\$20,000	\$0				
6.) Miscellaneous Storm Water Improvements	4		\$0									
7.) SWPPP Program and Implementation	5	\$2,750	\$7,500	\$2,750	\$3,000	\$2,750	\$8,000	\$3,500	\$3,500	\$3,500	\$3,500	
8.) Watershed Emergency Outlet Repair (Inver Grove Heights)		\$3,500										
9.) 2017 Street Improvement Feasibility Report		\$15,000										
Sub Total CIP Projects		\$28,750	\$16,500	\$2,750	\$3,000	\$42,750	\$28,000	\$48,500	\$9,500	\$53,500	\$3,500	
D.) Assessed City Improvements (Bonding Requirements)												
1.) 2009 Salem Church Road Project (Final Payment 2/1/2020)		\$45,282	\$44,536	\$43,740	\$42,896							\$176,454
2.) 2014 Street Improvement Project		\$38,756	\$38,362	\$43,218	\$42,375	\$41,528	\$40,682	\$39,837	\$38,808	\$37,779		\$361,345
3.) 2017 Street Improvement Project, East half of Salem Church Road and Roanoke Road	3		\$36,000	\$36,000	\$36,000	\$36,000	\$36,000	\$36,000	\$36,000	\$36,000	\$36,000	\$324,000
4.) 2020 Street Improvement Project, 2" Overlays	3					\$23,000	\$23,000	\$23,000	\$23,000	\$23,000	\$23,000	\$138,000
5.) 2025 Street Improvement Project (55th Street W.)	3					\$0	\$0	\$0	\$0	\$0	\$14,000	\$14,000
Sub Total Assessed City Projects		\$84,038	\$118,898	\$122,958	\$121,271	\$100,528	\$99,682	\$98,837	\$97,808	\$96,779	\$73,000	\$1,013,799
E.) Assessed City Improvements (Collected from Special Assessments)												
1.) Salem Church Road Levy		\$17,360	\$16,520	\$15,680	\$14,840							\$64,400
2.) 2014 Street Improvement Levy		\$25,395	\$24,634	\$23,874	\$23,113	\$22,353	\$21,592	\$20,832	\$20,071	\$19,311		\$201,175
3.) 2017 Street Improvement Levy			\$10,500	\$10,500	\$10,500	\$10,500	\$10,500	\$10,500	\$10,500	\$10,500	\$10,500	\$94,500
4.) 2020 Street Improvement Levy						\$12,500	\$12,500	\$12,500	\$10,000	\$10,000	\$10,000	\$67,500
5.) 2025 Street Improvement Levy						\$0	\$0	\$0	\$0	\$0	\$2,200	\$2,200
Subtotal Special Assessment Funding		\$42,755	\$51,654	\$50,054	\$48,453	\$45,353	\$44,592	\$43,832	\$40,571	\$39,811	\$22,700	
General Fund Expenditures												
City Tax Levy (Collected from General Tax Levy)												
GENERAL TAX LEVY (A+B+C)		\$50,650	\$41,100	\$25,800	\$25,200	\$62,500	\$57,700	\$68,250	\$40,550	\$74,550	\$24,550	
ASSESSED PROJECTS LEVY (D-E)		\$41,283	\$67,244	\$72,904	\$72,818	\$55,175	\$55,090	\$55,005	\$57,237	\$56,968	\$50,300	
Subtotal City Tax Levy Funding Requirements		\$91,933	\$108,344	\$98,704	\$98,018	\$117,675	\$112,790	\$123,255	\$97,787	\$131,518	\$74,850	

Notes

- 1.) Replace Regulatory Signs
- 2.) Charlton Road, Grieve Glen Lane, Sunny Side Lane and Windy Hill Court Culverts
- 3.) Overlay, Mill and Overlay and / or Reconstruct; assumes project to be assessed
- 4.) Storm Water Improvements Required by MS4 Permit
- 5.) Water Quality Improvements per MPCA requirements
- 6.) Watershed typically reimburses City \$400 per lake for CAMP monitoring

APPENDIX C

2015 Pavement Condition Index



2015 Pavement Condition Index

City of Sunfish Lake, Minnesota

Pavement Condition Index

- 0 - 39
- 40 - 49
- 50 - 59
- 60 - 69
- 70 - 79
- 80 - 89
- 90 - 100
- Private Roads
- Gravel



APPENDIX D
Assessment Policy

**CITY OF SUNFISH LAKE
DAKOTA COUNTY, MINNESOTA**

RESOLUTION NO. 11- 12

**RESOLUTION APPROVING ASSESSMENT POLICY FOR
THE CITY OF SUNFISH LAKE**

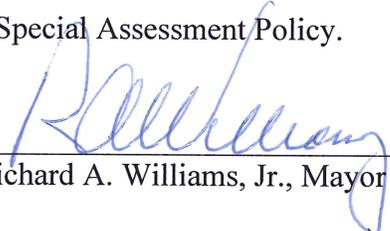
WHEREAS, Chapter 429 of the Minnesota Statutes authorizes the City to levy special assessments for certain public improvements.

WHEREAS, the City desires to adopt a formal written policy with respect to the methodology of allocating project costs between the City and special assessments and a methodology for dividing the special assessment amount among the specially benefitted properties.

NOW, THEREFORE, BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF SUNFISH LAKE:

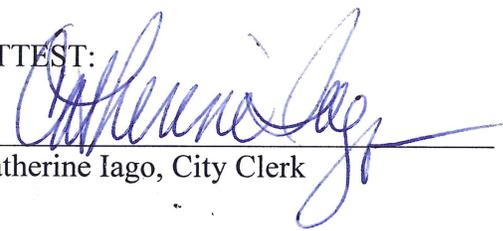
1. The Council hereby approves the attached Special Assessment Policy.

Passed this 5th day of July, 2011.



Richard A. Williams, Jr., Mayor

ATTEST:



Catherine Iago, City Clerk

CITY OF SUNFISH LAKE
DAKOTA COUNTY, MINNESOTA

SPECIAL ASSESSMENT POLICY

Section 1. Background. Chapter 429 of the Minnesota Statutes authorizes the City to levy special assessments for certain public improvements. The two most common types of public improvements within the City are street improvements and storm water improvements.

The City acknowledges that the validity of any special assessment to a particular lot depends on whether the amount of the assessment is equal to or less than the benefit conferred upon the lot by reason of the public improvement. Under state law, the benefit is determined by the increase in fair market value of the lot caused by reason of the improvement. The benefit rule controls all special assessments and supersedes any City formulas and calculations relating to how project costs are allocated. The City also acknowledges that assessments have to be uniformly imposed on similarly situated properties within a class of properties.

The first step in determining an assessment is to determine which portion of project costs will be paid by the City and which portion will be specially assessed. The second step is to spread or divide the total assessment amount among the various lots that have received a special benefit. This policy addresses both steps. The policy is a guideline and the Council has the authority to alter the policy from time to time based on facts and circumstances that the Council believes justify such changes.

Section 2. Street Improvements. The typical types of street improvements in the City are:

- a. Sealcoating;
- b. Mill and overlay; and
- c. Street reconstruction, including new pavement where none existed before.

If only sealcoating is being performed, the policy is not to assess the cost of the sealcoating. Rather, the City will pay the cost of sealcoating out of the general fund as a maintenance item.

Projects involving mill and overlay and street reconstruction will be specially assessed. The percentage of costs that will be specially assessed depends on the type of street.

Within the City, there are three (3) types of streets. They are:

- a. Collector Street. – A collector street is a City street that provides access to local streets, private streets, direct driveway access and is utilized by the surrounding area for trips originating outside of the City and terminating outside of the City limits. The number of through trips exceed the number of local trips. The City streets that meet this criteria are:

- Salem Church Road; and
- Charlton Road.

The assessment policy for a Collector Street is to assess 40% of street improvement cost to the specially benefitted properties.

- b. Neighborhood Collector Street - a neighborhood collector street is a City street that provides direct access to local streets, private streets, direct driveway access and has fewer trips that originate outside of the area and terminate outside the area than local trips. A local trip is considered a trip that remains within the City limits. The City streets that meet this criteria are:

- 60th Street North;
- Windy Hill Road; and
- Angell Road (east of Sunnyside Lane).

The assessment policy for a Neighborhood Collector Street is to assess 60% of street improvement cost to the specially benefitted properties.

- c. Local Street - a local street is a City Street that only provides direct access to private driveways which has trips that originate on the street and or terminate on the street. A local street includes a public street that provides access to shared driveways. The City Streets that meet this criteria are:

- Acorn Drive;
- Zehnder Road;
- 55th Street West;
- Roanoke Road;
- Grieve Glen Lane;
- Windy Hill Court;
- Angell Road (west of Sunnyside Lane); and
- Sunnyside Lane.

The assessment policy for a Local Street is to assess 80% of street improvement cost to the specially benefitted properties.

The special assessments for mill and overlay and for street reconstruction will be spread or divided on a per buildable lot basis with each such lot receiving an equal amount of assessment.

A special assessment for mill and overlay and for street reconstruction will be amortized over a period of time not less than five years and not more than ten years. The interest rate payable by the landowners on the remaining balance of the special assessments will not be more than 2% above the bond interest rate charged the City. If the City has not issued bonds, the interest rate charged the landowners will not be more than 2% above the estimated interest rate that the City would have incurred if bonds were issued to finance the project. Interest will begin to accrue from the date the assessments are levied.

To the extent storm water improvements are constructed with the street improvements and are incident and ancillary to the street improvement and do not otherwise confer significant benefit to properties outside of the lots that would typically be assessed for the street improvements and do not constitute more than 50% of the project costs, the storm water improvements will be considered as part of the street assessments and will be levied on the same basis as the street assessments.

In general, in determining the specially benefitted properties for a street assessment, the following lots will be included:

- a. The lots that adjoin a public street or have indirect driveway access to the public street.
- b. The lots that adjoin or have indirect driveway access to a private street where the private street has access to the public street that is being improved.

Section 3. Storm Water Improvements. Storm water improvements include such items as culvert repair or reconstruction, holding ponds, erosion control, drainage ditch reconstruction, surface drainage improvements, trunk lines, and lateral lines.

Storm water improvements can generally be placed into two (2) categories:

- a. Lateral Storm Water Management Improvements. Lateral storm water management improvements benefit the immediate adjacent area. Lateral storm water management improvements are storm water infrastructure facilities that receive runoff from adjacent public right of way or from some or all adjacent parcels but do not include significant runoff from locations that are off site of the improvements.
- b. Trunk Storm Water Management Improvements. Trunk storm water management improvements benefit an area that extends beyond the immediate property (i.e. beyond the lateral benefit). Trunk storm water management improvements manage runoff from areas of the City that are not immediately adjacent to the improvement. The trunk portion of an improvement is the size or cost of the improvement that exceeds the lateral storm water needs. Trunk storm water management improvements usually have a design and capacity to receive storm water runoff from lots that adjoin the improvement as well as non-adjoining lots.

Lateral storm water management improvements will be assessed to the adjacent specially benefitted properties on the same basis as a street assessment, taking into account the different classes of streets and allocating the assessable portion of the project on a per buildable lot basis.

With respect to trunk storm water management improvements, 50% of the project costs will be assessed and the assessable amount will be spread or divided among the specially benefitted properties on a per buildable lot basis with each such lot receiving an equal amount of assessment.

Special assessments for lateral storm water management improvements and trunk storm water management improvements will be amortized over a period of time not less than five years and not more than ten years. The interest rate payable by the landowners on the remaining balance of the special assessments will not be more than 2% above the bond interest rate charged the City. If the City has not issued bonds, the interest rate charged the landowners will not be more than 2% above the estimated interest rate that the City would have incurred if bonds were issued to finance the project. Interest will begin to accrue from the date the assessments are levied.