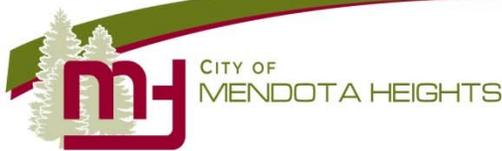


**2019 – 2023
Capital Improvement Plan**





July 13, 2018

To the Honorable Mayor and City Council Members:

The purpose of the Capital Improvement Plan (CIP) is to provide a long range improvement plan to meet the needs of our community. The CIP provides policy makers and the community with a strategic approach to the implementation and administration of improvement projects. Decisions about improving the city's infrastructure must be made not only on the basis of need, but also on the basis of availability of resources, and the long-term impact on the community. The Capital Improvement Plan identifies the city's infrastructure, development objectives and allocation of financial resources.

The 2019-2023 Capital Improvement Plan represents an excellent planning tool and provides for approximately \$35.1 million of infrastructure improvements and assets during the next five years. While the improvements in the proposed Capital Improvement Plan are not "written in stone", they do provide a framework for allocating personnel and finances. The total project costs used in the CIP are rough estimates using 2018 dollar amounts, which will be refined during the budget, feasibility study and bidding process for each project. The improvement projects outlined in the CIP are designed to meet the city's infrastructure needs and provide a safe environment for the community.

Respectfully submitted,

Ryan E. Ruzek, P.E.
Public Works Director

Certification

I hereby certify that this 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.

Ryan E. Ruzek, PE
Reg. No. 44990

Date

Reviewed By:

Mark McNeill

Date

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CIP OVERVIEW

Capital Improvement Plan (CIP)

The Capital Improvement Plan (CIP) is a planning tool that forecasts the city's needs over a five year period based on city-adopted long-range plans, goals and policies. The CIP includes detailed descriptions of improvement projects the city anticipates to initiate during the five-year period. The CIP is updated annually to ensure consistency and the reflection of changing demands and financial resources.

CIP Goals

The goals of the CIP are to:

- Provide a balanced program for improvements given anticipated funding revenues over a five-year planning period.
- Enable the Mendota Heights City Council to evaluate the needs of the entire city objectively.
- Anticipate needed improvements in advance, rather than being overlooked until critically needed.
- Provide a plan for improvements that can be used in preparing the budget for the coming fiscal year.

Project Financing

The 2019-2023 Capital Improvement Plan which is detailed on the following pages is financed from a variety of sources. The purpose of this section is to describe and analyze these sources, in as much detail as possible, so that the users of this CIP can be certain that the program as outlined can be financed from available funding sources.

Municipal State Aid (MSA) Fund

The Minnesota Department of Transportation (MnDOT) provides funding assistance for improvements to those municipal streets which are designated as part of its MSA system. The City of Mendota Heights receives an annual allotment of approximately \$452,000 from the State of Minnesota Municipal State Aid Street Construction Account.

The Municipal State Aid rules allow cities, subject to MnDOT approval, to request advanced funding for municipal state aid eligible projects from any municipal state aid funds available, provided that the amount of the advances do not exceed the city's total estimated apportionment for the three years following the advance.

Sanitary Sewer Utility Fund

This fund receives revenue from the utility billing for sanitary sewer. It also is responsible for any expenses relating to the sanitary sewer system.

Storm Water Utility Fund

This fund receives revenue from the utility billings and is responsible for the expenses related to maintaining the city's storm water system.

Water Revenue Fund

This fund accumulates the water surcharges the city receives from St Paul Regional Water Services. These funds are used for any city expenses that are incurred relating to the city's water system and water tower.

Special Assessments

The City of Mendota Heights Street Rehabilitation and Reconstruction Assessment Policy approved in June 1992 states that the city will be responsible for financing up to 50% of street reconstruction and rehabilitation projects with the property owner being assessed for the remaining.

City Funding (Municipal Bond Sales)

Since it often takes several years for the city to collect special assessments, the city typically issues bonds for the remaining improvement costs for cash flow purposes. The bond payments relating to street improvement projects are then levied. If there are project costs relating to the above mentioned fund sources, the amount of bonds to be issued can be reduced by monies received from any of those funds.

Special Park Fund

This fund receives revenue from the Park Dedication fees. It also is responsible for expenses relating to new improvements to the Park system.



2019 – 2023
Street Improvement Plan



SIP OVERVIEW

Street Improvement Plan (SIP)

The Street Improvement Plan (SIP) is a planning tool that forecasts the city's needs over a five year period based on city-adopted long-range plans, goals and policies. The SIP includes detailed descriptions of street improvement projects the city anticipates to initiate during the five-year period. The SIP is updated annually to ensure consistency and the reflection of changing demands and financial resources.

SIP Goals

The goals of the SIP are to:

- Provide a balanced program for street improvements given anticipated funding revenues over a five-year planning period.
- Enable the Mendota Heights City Council to evaluate the needs of the entire city objectively.
- Anticipate needed street improvements in advance, rather than being overlooked until critically needed.
- Provide a plan for street improvements that can be used in preparing the budget for the coming fiscal year.

Project Details

The street improvement projects being reported in the SIP will be shown within the following sections:

- Street Reconstruction
- Street Rehabilitation
- Municipal State Aid
- Preventative Maintenance

Street Reconstruction

A street reconstruction project will be defined as a project whereby many or all meaningful elements of an existing street are being removed and replaced. This would include curb and gutter, trails, bituminous or concrete pavement, aggregate base and items appurtenant to these elements.

There are approximately 2 miles of streets in the City of Mendota Heights that have no curb and gutter. It has been the policy of the city that streets will be reconstructed with curb & gutter to maximize the life of the pavement surface, promote a uniform and standard appearance across the city, increase public safety, increase the efficiency of snow removal, and to capture and treat storm water prior to discharging into area water bodies. Typically, the City of Mendota Heights completes one street reconstruction project a year.

Street Rehabilitation

A street rehabilitation project will be defined as a project in which one or more of the meaningful elements are modified or supplemented in-place, to restore the serviceability of the existing street (i.e. bituminous overlays or pavement replacement).

The City of Mendota Heights maintains approximately 71.5 miles of public streets. As the street infrastructure ages, it requires preservation/rehabilitation to protect or extend its useful life. If the street infrastructure is not preserved, it will deteriorate prematurely and its benefit to the community will be lost. In addition, reconstruction costs are frequently four to five times the cost of preservation/rehabilitation and maintenance. As a result, the SIP reflects the broad direction of the City Council to preserve existing streets and infrastructure before they fall into such disrepair that expensive reconstruction is required.

Municipal State Aid (MSA)

The Minnesota Department of Transportation (MnDOT) provides funding assistance for improvements to those municipal streets which are designated as part of its MSA system. Money for this fund is supplied with a dedicated portion of revenues collected from road use and gasoline taxes. Funds are released for improvements on those streets on the system whose design and construction meet MSA standards. Funds may be expended for any street on the MSA system at any time, and MSA funds may be accumulated over several years.

The City of Mendota Heights maintains approximately 15.1 miles of streets that are designated Minnesota State Aid (MSA).

Preventative Maintenance

Preventative maintenance includes activities such as snow removal, crack sealing, seal coating, street patching, street striping and street sweeping. Street maintenance activities are funded through the city's general fund.

Street Sweeping

Street sweeping provides two primary benefits to the city. The more obvious benefit is the collection and removal of paper, leaves, and other visible debris that collect in the gutters. In addition to being unsightly, this debris can block the catch basins and other storm water facilities, causing localized flooding during heavy rains. An equally important, but less visible benefit is the removal of pollutants and other hazardous waste products left by passing vehicles. Although they are virtually invisible, these particles can be extremely harmful to the fish and other wildlife, if they reach our creeks and lakes. Bi-annual sweeping is recommended for storm water quality.

Street crack sealing and seal coating

Seal coating is the process of distributing bituminous oil, or liquid asphalt, on the street surface and then covering it with small rock chips. After the rock has been allowed to work into the oil, the excess rock is swept up and the seal coat provides the street with a new water proof surface and uniform look. Prior to seal coating, the city cleans and fills pot holes and cracks, and thoroughly sweeps the streets.

There are two main reasons for seal coating streets. The first reason to seal coat streets is to seal the bituminous surface against the elements. The older that a bituminous surface gets, the more porous it becomes. This is due to the wearing away of the surface due to sunlight, rain, snow, ice and traffic. As the bituminous surface becomes more porous due to these factors, it becomes more vulnerable to deterioration, and can form potholes. Potholes are formed when water seeps into the cracked pavement, expands and displaces the ground under the bituminous pavement. As the temperatures rise, the ground returns to normal but the pavement often remains raised creating a gap. When a vehicle drives over the raised pavement and gap, the pavement surface cracks and falls into the hollow space leading to a pothole. One method of avoiding this result is to routinely seal coat the streets to keep the water out. Streets are recommended to be seal coated 5 years after their initial construction or reconstruction and then again 13 years after their construction or reconstruction.

The second reason to seal coat streets with a hard material like granite is to coat the surface with a wear resistant material. This not only minimizes damage done by normal traffic wear, but it also protects our streets from damage that might be done by routine snowplowing. Consequently seal coating does not add strength to the street; therefore, it is not used on older streets that need other type of repair such as overlaying or total reconstruction.

Project Financing

The 2019-2023 Street Improvement Plan which is detailed on the following pages is financed from a variety of sources. The purpose of this section is to describe and analyze these sources, in as much detail as possible, so that the users of this SIP can be certain that the program as outlined can be financed from available funding sources.

Transportation Facilities

Improvements totaling approximately \$16.8 million are planned for the 2019-2023 SIP.

Summary of Project Costs and Funding Sources

MSA Street Fund Summary

Improvement Projects

Street Reconstruction & Rehabilitation Policy



STREET IMPROVEMENT PLAN 2019-2023

CITY OF MENDOTA HEIGHTS

SUMMARY OF PROJECT COSTS AND FUNDING SOURCES

Project Name	Proj. #	2019	2020	2021	2022	2023	Total
Marie Avenue Rehabilitation 2	110	\$1,450,000	\$0	\$0	\$0	\$0	\$1,450,000
Wesley Neighborhood Rehabilitation	111	\$517,000	\$0	\$0	\$0	\$0	\$517,000
Dodd Road Trail/Relocate Maple Street	304	\$525,000	\$0	\$0	\$0	\$0	\$525,000
Centre Pointe & Commerce Drive Rehabilitation	112	\$0	\$1,732,000	\$0	\$0	\$0	\$1,732,000
Sylvandale Road Neighborhood Rehabilitation	113	\$0	\$0	\$1,081,000	\$0	\$0	\$1,081,000
Brompton/Winston Water Main Replacement	107	\$0	\$0	\$710,000	\$0	\$0	\$710,000
Victoria Curve	114	\$0	\$0	\$0	\$1,250,000	\$0	\$1,250,000
Marie/Dodd Mini Roundabout	119	\$0	\$0	\$0	\$325,000	\$0	\$325,000
Wentworth/Dodd Mini Roundabout	120	\$0	\$0	\$0	\$325,000	\$0	\$325,000
Friendly Hills Water Main Replacement	106	\$0	\$0	\$0	\$0	\$4,205,000	\$4,205,000
Decorah Realignment w/Wagon Wheel	121	\$0	\$0	\$0	\$0	\$575,000	\$575,000
Dodd & Highway 110 Intersection - Super street	122	\$0	\$0	\$0	\$0	\$3,300,000	\$3,300,000
Delaware Reconstruction Study	123	\$0	\$0	\$0	\$0	\$575,000	
Annual Street Crack Sealing and Seal Coating	401	\$200,000	\$100,000	\$100,000	\$100,000	\$100,000	\$600,000
Annual Pavement Markings	402	\$17,000	\$17,000	\$17,000	\$17,000	\$17,000	\$85,000
Annual Street Sweeping	403	\$20,000	\$20,000	\$20,000	\$20,000	\$20,000	\$100,000
Total		\$2,729,000	\$1,869,000	\$1,928,000	\$2,037,000	\$8,792,000	\$16,780,000

Funding Sources	2019	2020	2021	2022	2023	Total
Municipal Bond Sales	\$722,500	\$698,600	\$1,010,800	\$760,000	\$1,411,800	\$4,603,700
Municipal State Aid Fund	\$750,000	\$400,000	\$0	\$1,050,000	\$1,500,000	\$3,700,000
Other Government Unit Funding	\$632,000	\$132,000	\$132,000	\$132,000	\$2,432,000	\$3,460,000
Sanitary Sewer Utility Fund	\$0	\$0	\$0	\$0	\$0	\$0
Special Assessments	\$419,500	\$561,400	\$730,200	\$40,000	\$853,200	\$2,604,300
Storm Water Utility Fund	\$205,000	\$77,000	\$55,000	\$55,000	\$5,000	\$397,000
Water Revenue Fund	\$0	\$0	\$0	\$0	\$2,015,000	\$2,015,000
Total	\$2,729,000	\$1,869,000	\$1,928,000	\$2,037,000	\$8,217,000	\$16,780,000

Future Projects	Year	Cost
Curly's/Valley View	2024	\$710,000
Tilsens Neighborhood	2024	\$750,000
Bunker Hills Neighborhood	2025	\$1,100,000
Carmen Lane/Dakota Drive/Waters Drive	2026	\$1,200,000



STREET IMPROVEMENT PLAN 2019-2023

CITY OF MENDOTA HEIGHTS

MUNICIPAL STATE AID (MSA) STREET FUND

Available Balance (12/31/2017)	\$260,852
Anticipated 2017/2018 Expenditures	\$100,000
2018 Revenue	\$452,565
Total Available (12/31/2018)	\$613,417

Revenue	2019	2020	2021	2022	2023
Cash Balance	\$613,417	\$315,982	\$368,547	\$821,112	\$223,677
Annual Construction Allotment From State	\$452,565	\$452,565	\$452,565	\$452,565	\$452,565
Total Revenue	\$1,065,982	\$768,547	\$821,112	\$1,273,677	\$676,242

Expenditures	Proj. #	2019	2020	2021	2022	2023
Marie Avenue Rehabilitation 2	110	\$500,000	\$0	\$0	\$0	\$0
Wesley Neighborhood Rehabilitation	111	\$0	\$0	\$0	\$0	\$0
Dodd Road Trail/Relocate Maple Street	304	\$250,000	\$0	\$0	\$0	\$0
Centre Pointe & Commerce Drive Rehabilitation	112	\$0	\$400,000	\$0	\$0	\$0
Sylvandale Road Neighborhood Rehabilitation	113	\$0	\$0	\$0	\$0	\$0
Brompton/Winston Water Main Replacement	107	\$0	\$0	\$0	\$0	\$0
Victoria Curve	114	\$0	\$0	\$0	\$400,000	\$0
Marie/Dodd Mini Roundabout	119	\$0	\$0	\$0	\$325,000	\$0
Wentworth/Dodd Mini Roundabout	120	\$0	\$0	\$0	\$325,000	\$0
Friendly Hills Water Main Replacement	106	\$0	\$0	\$0	\$0	\$0
Decorah Realignment w/Wagon Wheel	121	\$0	\$0	\$0	\$0	\$500,000
Dodd & Highway 110 Intersection - Super street	122	\$0	\$0	\$0	\$0	\$1,000,000
Total Expenditures		\$750,000	\$400,000	\$0	\$1,050,000	\$1,500,000

Unreserved Cash Balance (12/31)	\$315,982	\$368,547	\$821,112	\$223,677	-\$823,758
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STREET IMPROVEMENT PLAN 2019-2023

CITY OF MENDOTA HEIGHTS

PROJECT NAME: Marie Avenue Rehabilitation 2
 PROJECT #: 110

TOTAL COST: \$1,450,000
 PROJECT TYPE: Rehabilitation

Project Description

Rehabilitation of the following road segments with complete pavement removal:
 - Marie Avenue (Lexington Avenue to Dodd Road)

Project Location



Project Justification

Replace retaining walls Marie/Victoria, Replace Pedestrian underpass, Install bump outs at Eagle Ridge & Trail Rd/Wachtler, Redeck bridge, Weir replacement, guard rail, trail overlay, curb on Lexington.

 Pond improvements, Water main Replacement, Dig ditch on south side of Ped crossing

Project History

Project Costs	2019	2020	2021	2022	2023	Total
Planning/Design	\$250,000					\$250,000
Construction/Maintenance	\$1,200,000					\$1,200,000
Total	\$1,450,000	\$0	\$0	\$0	\$0	\$1,450,000

Funding Sources	2019	2020	2021	2022	2023	Total
Municipal Bond Sales	\$172,000					\$172,000
Municipal State Aid Funds	\$500,000					\$500,000
Other Government Unit Funding	\$400,000					\$400,000
Sanitary Sewer Utility Funds						\$0
Special Assessments	\$228,000					\$228,000
Storm Sewer Utility Funds	\$150,000					\$150,000
Water Utility Funds						\$0
Total	\$1,450,000	\$0	\$0	\$0	\$0	\$1,450,000



STREET IMPROVEMENT PLAN 2019-2023

CITY OF MENDOTA HEIGHTS

PROJECT NAME: Wesley Neighborhood Rehabilitation
 PROJECT #: 111

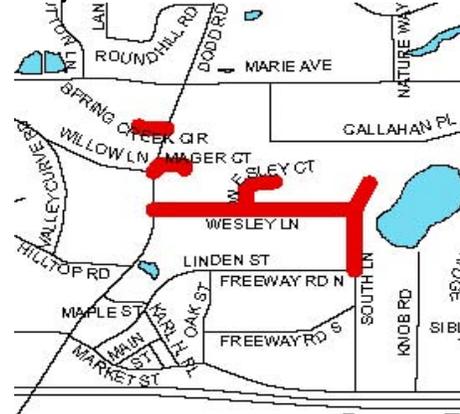
TOTAL COST: \$517,000
 PROJECT TYPE: Rehabilitation

Project Description

Rehabilitation of the following road segments with complete pavement removal:

- Mager Court, Spring Creek Circle, Wesley Court, Wesley Lane
- South Lane between Freeway Road North and the cul-de-sac

Project Location



Project Justification

Maintenance costs are increasing and the streets are cracking, rutting and showing wear due to traffic and weathering. Rehabilitation with complete pavement removal and replacing the bituminous surface will extend life of roadway to a like new condition.

Project History

Project Costs	2019	2020	2021	2022	2023	Total
Planning/Design	\$86,000					\$86,000
Construction/Maintenance	\$431,000					\$431,000
Total	\$517,000	\$0	\$0	\$0	\$0	\$517,000

Funding Sources	2019	2020	2021	2022	2023	Total
Municipal Bond Sales	\$300,500					\$300,500
Municipal State Aid Funds						\$0
Other Government Unit Funding						\$0
Sanitary Sewer Utility Funds						\$0
Special Assessments	\$191,500					\$191,500
Storm Sewer Utility Funds	\$25,000					\$25,000
Water Utility Funds						\$0
Total	\$517,000	\$0	\$0	\$0	\$0	\$517,000



STREET IMPROVEMENT PLAN 2019-2023

CITY OF MENDOTA HEIGHTS

PROJECT NAME: Dodd Road Trail/Relocate Maple Street
 PROJECT #: 304

TOTAL COST: \$525,000
 PROJECT TYPE: MSA

Project Description

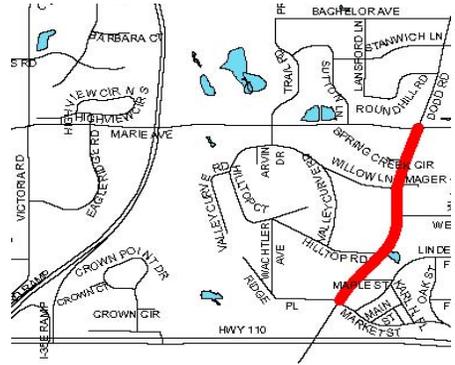
Construction of a trail adjacent to the following road segments:

- Dodd Road between Market Street and Wesley Lane

Project Justification

This section of trail has been identified as a gap in our trail system.

Project Location



Project History

Project Costs	2019	2020	2021	2022	2023	Total
Planning/Design	\$50,000					\$50,000
Construction/Maintenance	\$475,000					\$475,000
Total	\$525,000	\$0	\$0	\$0	\$0	\$525,000

Funding Sources	2019	2020	2021	2022	2023	Total
Municipal Bond Sales	\$250,000					\$250,000
Municipal State Aid Fund	\$250,000					\$250,000
Other Government Unit Funding						\$0
Sanitary Sewer Utility Fund						\$0
Special Assessments						\$0
Storm Water Utility Fund	\$25,000					\$25,000
Water Revenue Fund						\$0
Total	\$525,000	\$0	\$0	\$0	\$0	\$525,000



STREET IMPROVEMENT PLAN 2019-2023

CITY OF MENDOTA HEIGHTS

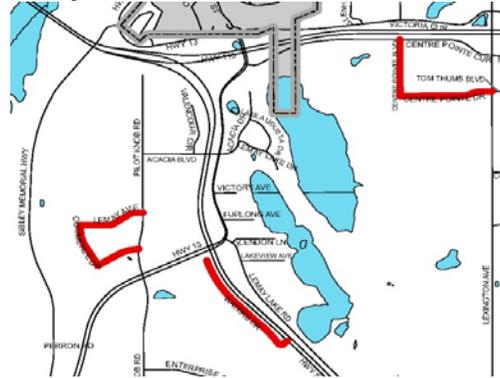
PROJECT NAME: Centre Pointe & Commerce Drive Rehabilitation
 PROJECT #: 112

TOTAL COST: \$1,732,000
 PROJECT TYPE: Rehabilitation

Project Description

Rehabilitation of the following road segments with complete pavement removal:
 - Centre Pointe Drive, Centre Pointe Boulevard, Commerce Drive and Lemay Avenue
 Rehabilitation of the following road segments with an edge mill and bituminous overlay:
 - Waters Drive

Project Location



Project Justification

Maintenance costs are increasing and the streets are cracking, rutting and showing wear due to traffic and weathering. Rehabilitation with complete pavement removal and replacing the bituminous surface will extend life of roadway to a like new condition.
 Rehabilitation with edge milling and overlaying with a new wearing surface will extend life of roadway to a like new condition.

Project History

Project Costs	2019	2020	2021	2022	2023	Total
Planning/Design		\$205,000				\$205,000
Construction/Maintenance		\$1,527,000				\$1,527,000
Total	\$0	\$1,732,000	\$0	\$0	\$0	\$1,732,000

Funding Sources	2019	2020	2021	2022	2023	Total
Municipal Bond Sales		\$698,600				\$698,600
Municipal State Aid Fund		\$400,000				\$400,000
Other Government Unit Funding						\$0
Sanitary Sewer Utility Fund						\$0
Special Assessments		\$561,400				\$561,400
Storm Water Utility Fund		\$72,000				\$72,000
Water Revenue Fund						\$0
Total	\$0	\$1,732,000	\$0	\$0	\$0	\$1,732,000



STREET IMPROVEMENT PLAN 2019-2023

CITY OF MENDOTA HEIGHTS

PROJECT NAME: Sylvandale Road Neighborhood Rehabilitation
 PROJECT #: 113

TOTAL COST: \$1,081,000
 PROJECT TYPE: Rehabilitation

Project Description

Rehabilitation of the following road segments with complete pavement removal:
 - Emerson Avenue, Ivy Falls Court, Ivy Hill Drive, Laura Court, Laura Street, Maple Park Drive, Sylvandale Court, Sylvandale Court South and Sylvandale Road
 There have been a few water main breaks on these streets. Staff will determine if the water main should be replaced closer to the proposed project year.

Project Justification

Maintenance costs are increasing and the streets are cracking, rutting and showing wear due to traffic and weathering. Rehabilitation with complete pavement removal and replacing the bituminous surface will extend life of roadway to a like new condition.

Project Location



Project History

Project was proposed as a 2016 rehabilitation project in the 2012-2016 SIP. Engineering staff recommends delaying the project to 2018 based on the pavement conditions of other city streets that need more repairs. This project is anticipated to be added to the 2014-2018 SIP in the future.

Project Costs	2019	2020	2021	2022	2023	Total
Planning/Design			\$216,200			\$216,200
Construction/Maintenance			\$864,800			\$864,800
Total	\$0	\$0	\$1,081,000	\$0	\$0	\$1,081,000

Funding Sources	2019	2020	2021	2022	2023	Total
Municipal Bond Sales			\$594,200			\$594,200
Municipal State Aid Fund						\$0
Other Government Unit Funding						\$0
Sanitary Sewer Utility Fund						\$0
Special Assessments			\$436,800			\$436,800
Storm Water Utility Fund			\$50,000			\$50,000
Water Revenue Fund						\$0
Total	\$0	\$0	\$1,081,000	\$0	\$0	\$1,081,000



STREET IMPROVEMENT PLAN 2019-2023

CITY OF MENDOTA HEIGHTS

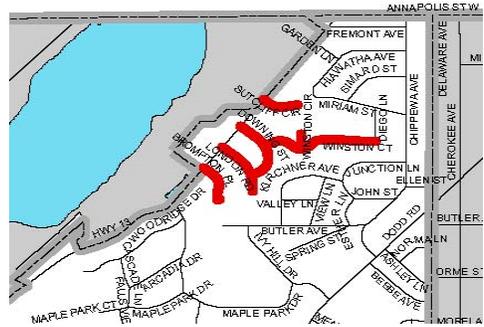
PROJECT NAME: Brompton/Winston Water Main Replacement
 PROJECT #: 107

TOTAL COST: \$710,000
 PROJECT TYPE: Recon-Water Main

Project Description

Reconstruction of the following road segments with complete pavement removal and replacing the water main:
 - Brompton Place, Downing Street, London Road, Sutcliff Circle
 Winston Circle, Winston Court

Project Location



Project Justification

The existing water main on these streets is cast iron pipe and the water main break frequency on these streets is nearing the limits established by SPRWS.

Project History

These streets were reconstructed in 1994 when the curb and gutters were installed.

Project Costs	2019	2020	2021	2022	2023	Total
Planning/Design			\$110,000			\$110,000
Construction/Maintenance			\$600,000			\$600,000
Total	\$0	\$0	\$710,000	\$0	\$0	\$710,000

Funding Sources	2019	2020	2021	2022	2023	Total
Municipal Bond Sales			\$416,600			\$416,600
Municipal State Aid Funds						\$0
Other Government Unit Funding						\$0
Sanitary Sewer Utility Funds						\$0
Special Assessments			\$293,400			\$293,400
Storm Sewer Utility Funds						\$0
Water Utility Funds						\$0
Total	\$0	\$0	\$710,000	\$0	\$0	\$710,000



STREET IMPROVEMENT PLAN 2019-2023

CITY OF MENDOTA HEIGHTS

PROJECT NAME: Victoria Curve

PROJECT #: 114

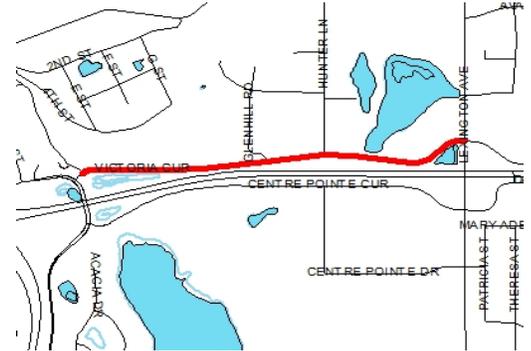
TOTAL COST: \$1,250,000

PROJECT TYPE: XXX00001

Project Description

Reconstruct Frontage Road

Project Location



Project Justification

Project History

Project Costs	2019	2020	2021	2022	2023	Total
Planning/Design				\$250,000		\$250,000
Construction/Maintenance				\$1,000,000		\$1,000,000
Total	\$0	\$0	\$0	\$1,250,000	\$0	\$1,250,000

Funding Sources	2019	2020	2021	2022	2023	Total
Municipal Bond Sales				\$760,000		\$760,000
Municipal State Aid Funds				\$400,000		\$400,000
Other Government Unit Funding						\$0
Sanitary Sewer Utility Funds						\$0
Special Assessments				\$40,000		\$40,000
Storm Sewer Utility Funds				\$50,000		\$50,000
Water Utility Funds						\$0
Total	\$0	\$0	\$0	\$1,250,000	\$0	\$1,250,000



STREET IMPROVEMENT PLAN 2019-2023

CITY OF MENDOTA HEIGHTS

PROJECT NAME: Marie/Dodd Mini Roundabout

PROJECT #: 119

TOTAL COST: \$325,000

PROJECT TYPE: XXX00001

Project Description

Intersection Improvement

Project Location



Project Justification

Project History

Project Costs	2019	2020	2021	2022	2023	Total
Planning/Design				\$75,000		\$75,000
Construction/Maintenance				\$250,000		\$250,000
Total	\$0	\$0	\$0	\$325,000	\$0	\$325,000

Funding Sources	2019	2020	2021	2022	2023	Total
Municipal Bond Sales				\$0		\$0
Municipal State Aid Funds				\$325,000		\$325,000
Other Government Unit Funding						\$0
Sanitary Sewer Utility Funds						\$0
Special Assessments						\$0
Storm Sewer Utility Funds						\$0
Water Utility Funds						\$0
Total	\$0	\$0	\$0	\$325,000	\$0	\$325,000



STREET IMPROVEMENT PLAN 2019-2023

CITY OF MENDOTA HEIGHTS

PROJECT NAME: Wentworth/Dodd Mini Roundabout

PROJECT #: 120

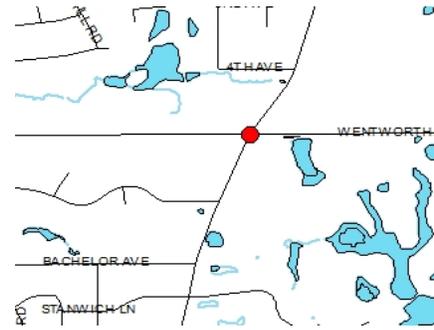
TOTAL COST: \$325,000

PROJECT TYPE: XXX00001

Project Description

Intersection Improvement

Project Location



Project Justification

Project History

Project Costs	2019	2020	2021	2022	2023	Total
Planning/Design				\$75,000		\$75,000
Construction/Maintenance				\$250,000		\$250,000
Total	\$0	\$0	\$0	\$325,000	\$0	\$325,000

Funding Sources	2019	2020	2021	2022	2023	Total
Municipal Bond Sales				\$0		\$0
Municipal State Aid Funds				\$325,000		\$325,000
Other Government Unit Funding						\$0
Sanitary Sewer Utility Funds						\$0
Special Assessments						\$0
Storm Sewer Utility Funds						\$0
Water Utility Funds						\$0
Total	\$0	\$0	\$0	\$325,000	\$0	\$325,000



STREET IMPROVEMENT PLAN 2019-2023

CITY OF MENDOTA HEIGHTS

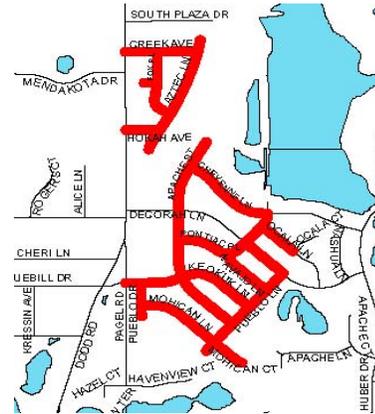
PROJECT NAME: Friendly Hills Water Main Replacement
 PROJECT #: 106

TOTAL COST: \$4,205,000
 PROJECT TYPE: Recon-Water Main

Project Description

Reconstruction of the following road segments with complete pavement removal and replacing the water main:
 - Apache Street, Aztec Lane, Cheyenne Lane, Creek Avenue, Decorah Lane, Fox Place, Hokah Avenue, Keokuk Lane, Mohican Court, Mohican Lane, Navajo Lane, Ocala Lane, Pontiac Place, Pueblo Drive, and Pueblo Lane

Project Location



Project Justification

The existing water main on these streets is cast iron pipe and the water main break frequency on these streets is nearing the limits established by SPRWS.

 Project Planned for 2023

Project History

These streets were reconstructed in 1995 when the curb and gutters were installed.

Project Costs	2019	2020	2021	2022	2023	Total
Planning/Design					\$841,000	\$841,000
Construction/Maintenance					\$3,364,000	\$3,364,000
Total	\$0	\$0	\$0	\$0	\$4,205,000	\$4,205,000

Funding Sources	2019	2020	2021	2022	2023	Total
Municipal Bond Sales					\$1,336,800	\$1,336,800
Municipal State Aid Fund						\$0
Other Government Unit Funding						\$0
Sanitary Sewer Utility Fund						\$0
Special Assessments					\$853,200	\$853,200
Storm Water Utility Fund						\$0
Water Revenue Fund					\$2,015,000	\$2,015,000
Total	\$0	\$0	\$0	\$0	\$4,205,000	\$4,205,000



STREET IMPROVEMENT PLAN 2019-2023

CITY OF MENDOTA HEIGHTS

PROJECT NAME: Decorah Realignment w/Wagon Wheel

PROJECT #: 121

TOTAL COST: \$575,000

PROJECT TYPE: XXX00001

Project Description

Project Location



Project Justification

Project History

Project Costs	2019	2020	2021	2022	2023	Total
Planning/Design					\$75,000	\$75,000
Construction/Maintenance					\$500,000	\$500,000
Total	\$0	\$0	\$0	\$0	\$575,000	\$575,000

Funding Sources	2019	2020	2021	2022	2023	Total
Municipal Bond Sales					\$75,000	\$75,000
Municipal State Aid Funds					\$500,000	\$500,000
Other Government Unit Funding						\$0
Sanitary Sewer Utility Funds						\$0
Special Assessments						\$0
Storm Sewer Utility Funds						\$0
Water Utility Funds						\$0
Total	\$0	\$0	\$0	\$0	\$575,000	\$575,000



STREET IMPROVEMENT PLAN 2019-2023

CITY OF MENDOTA HEIGHTS

PROJECT NAME: Dodd & Highway 110 Intersection - Super street

PROJECT #: 122

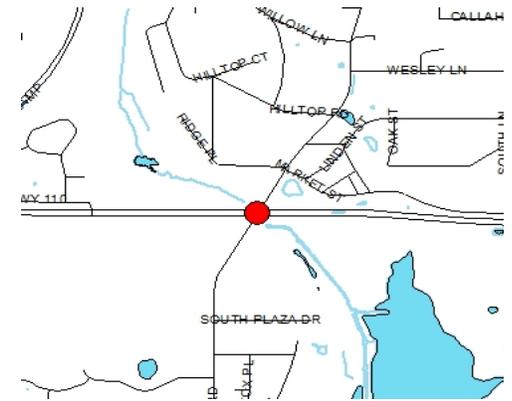
TOTAL COST: \$3,300,000

PROJECT TYPE: XXX00001

Project Description

Short term Traffic Improvement

Project Location



Project Justification

Project History

Project Costs	2019	2020	2021	2022	2023	Total
Planning/Design					\$300,000	\$300,000
Construction/Maintenance					\$3,000,000	\$3,000,000
Total	\$0	\$0	\$0	\$0	\$3,300,000	\$3,300,000

Funding Sources	2019	2020	2021	2022	2023	Total
Municipal Bond Sales						\$0
Municipal State Aid Funds					\$1,000,000	\$1,000,000
Other Government Unit Funding					\$2,300,000	\$2,300,000
Sanitary Sewer Utility Funds						\$0
Special Assessments						\$0
Storm Sewer Utility Funds						\$0
Water Utility Funds						\$0
Total	\$0	\$0	\$0	\$0	\$3,300,000	\$3,300,000



STREET IMPROVEMENT PLAN 2019-2023

CITY OF MENDOTA HEIGHTS

PROJECT NAME: Delaware Reconstruction Study

PROJECT #: 123

TOTAL COST: \$100,000

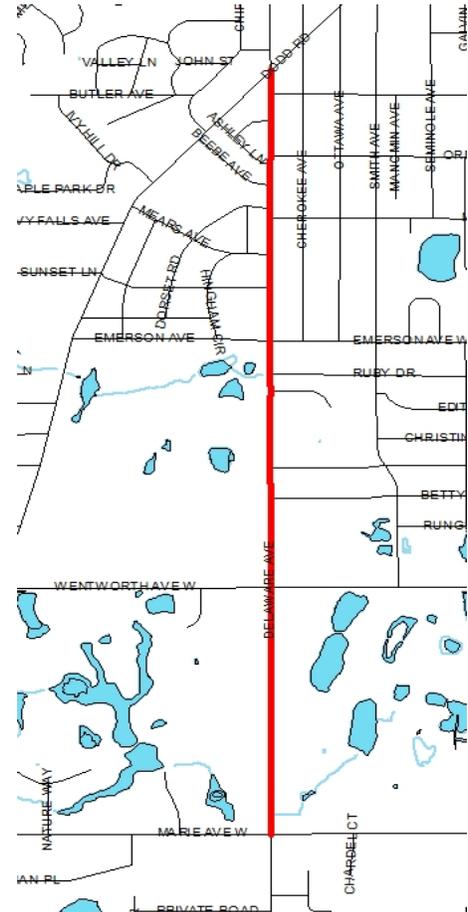
PROJECT TYPE: XXX00001

Project Description

Project Justification

Project History

Project Location



Project Costs	2019	2020	2021	2022	2023	Total
Planning/Design					\$100,000	\$100,000
Construction/Maintenance						\$0
Total	\$0	\$0	\$0	\$0	\$100,000	\$100,000

Funding Sources	2019	2020	2021	2022	2023	Total
Municipal Bond Sales						\$0
Municipal State Aid Funds					\$100,000	\$100,000
Other Government Unit Funding						\$0
Sanitary Sewer Utility Funds						\$0
Special Assessments						\$0
Storm Sewer Utility Funds						\$0
Water Utility Funds						\$0
Total	\$0	\$0	\$0	\$0	\$100,000	\$100,000



STREET IMPROVEMENT PLAN 2019-2023

CITY OF MENDOTA HEIGHTS

PROJECT NAME: Annual Street Crack Sealing and Seal Coating
 PROJECT #: 401

TOTAL COST: \$600,000
 PROJECT TYPE: PM

Project Description

Each year, staff will determine an area that can be crack sealed and seal coated within the allotted budget based upon current estimated project costs. The areas tentatively planned for crack sealing and seal coating is shown on the map of seal coating projects.

Project Location

Project Justification

The sealing of street cracks will significantly extend the useful life of the streets. This will extend the time frame when a costly street reconstruction project will be necessary. The sealing of cracks in the street surface reduces/eliminates water from entering the road base and subgrade. This process reduces the freeze/thaw cycles of the subgrade, maintaining the integrity of the road. Crack sealing is completed in a particular area one year prior to seal coating. This allows the crack sealing material to cure and minimize bleed through once seal coated.

Seal coating will extend the useful life of roads by protecting the bituminous from oxidation due to adverse weather conditions (sun, rain, wind, snow, etc.). The prevention of oxidation will prolong the useful life of the pavement and defer the need for a costly reconstruction. Seal coating also improves the skid resistance of the roadway surface by increasing the friction between vehicle tires and the roadway. Streets that are reconstructed or rehabilitated are typically seal coated five years after they are paved.

Project Costs	2019	2020	2021	2022	2023	Total
Planning/Design						\$0
Construction/Maintenance	\$200,000	\$100,000	\$100,000	\$100,000	\$100,000	\$600,000
Total	\$200,000	\$100,000	\$100,000	\$100,000	\$100,000	\$600,000

Funding Sources	2019	2020	2021	2022	2023	Total
Municipal Bond Sales						\$0
Municipal State Aid Fund						\$0
Other Government Unit Funding	\$200,000	\$100,000	\$100,000	\$100,000	\$100,000	\$600,000
Sanitary Sewer Utility Fund						\$0
Special Assessments						\$0
Storm Water Utility Fund						\$0
Water Revenue Fund						\$0
Total	\$200,000	\$100,000	\$100,000	\$100,000	\$100,000	\$600,000

CITY OF MENDOTA HEIGHTS

STREET REHABILITATION AND RECONSTRUCTION POLICY

PURPOSE

The City of Mendota Heights Street Rehabilitation and Reconstruction policy is intended to provide a plan for maintaining the City's existing streets, and encourage the upgrade of rural streets to urban design.

This document sets forth the methods and policies relating to local street improvements and special assessments practiced in the City of Mendota Heights. It is emphasized that the following summary is general in nature and that certain circumstances may justify deviations from stated policy as determined by the Mendota Heights City Council in its discretion. This policy may also be amended from time to time by vote of City Council.

SECTION I

DEFINITIONS

1. **RECONSTRUCTION** - will be defined as a project whereby many or all meaningful elements of an existing street are being removed and replaced. This would include curb and gutter, sidewalks, bituminous or concrete pavement, granular base and items appurtenant to these elements.
2. **REHABILITATION** - will be defined as a project in which one or more of the aforementioned elements is modified or supplemented in-place, to restore the serviceability of the existing street (i.e. bituminous overlays).
3. **PREVENTIVE MAINTENANCE** - will be defined as work that involves a level of effort less than that involved in reconstruction or rehabilitation, the extent of which is to extend the life of the existing improvement. Preventive maintenance will include but not be limited to crack filling, patching, and seal coating.
4. **RURAL STREET** - any street that has no curb and gutter or storm sewer, or does not otherwise meet City design standards for thickness and width.
5. **URBAN STREET** - a street that has curb and gutter, storm sewer, and is designed to City standards for thickness and width.

SECTION II

GENERAL POLICIES AND PROCEDURES

The following are general principles, policies and procedures applicable to all types of improvement:

1. Project costs shall include the cost of all necessary construction work required to accomplish the improvement, plus engineering, legal, financing, easement acquisition and contingency costs.
2. Assessable costs are project costs minus the City and County share and other credits. MSA funds will not be credited to offset assessments as they will be utilized in a revenue pool fund to offset total reconstruction program costs.
3. Special assessments will be levied as soon as practical. Normally this will be within one year after completion of the project.
4. Publicly owned properties, including but not limited to municipal building sites, schools, parks, County, State and Federal building sites, but not including public streets and alleys, are regarded as being assessable on the same basis as if such property were privately owned.
5. Revenue sources for these types of improvements will be many, including, but not limited to assessments, MSA Funds, infrastructure replacement funds and general tax levies.

SECTION III

SPECIFIC POLICIES

Project Initiation and Hearing Process

This section describes the initiation of improvement projects and the administration required to receive final City Council action, pursuant to the requirements of Minnesota Statutes Chapter 429.

A. Project Initiation

1. **By Petition:** Citizen petitions for initiating improvement will be prepared by City staff upon request. Such petitions circulated by the affected property owners should bear the signatures of the property owners of 51 % or more, of the benefitted property(ies).

When projects are initiated through this process the costs of doing engineering feasibility studies and associated project consideration costs will be borne by the property owner(s) so petitioning.

If the project proceeds through construction and assessment those costs will be considered project costs under Section II.1 above.

If the project does not proceed through construction these costs will be billed back to the property owners petitioning or will be recorded for future project costs consideration at which time the project is concluded. Determination of the method of cost recovery will be made by the City Council.

2. **By Council Action:** If the Council determines that an improvement is in the best interest of the City, it can, without petition, initiate the improvement with a four/fifths vote of the Council.

The Engineering Department shall inventory and rate the condition of streets in the City. This rating shall then be used to determine the priority of street improvements in the City's 5 Year Street Improvement Plan. The City will generally improve streets that have the highest priority first.

B. Hearing Process

1. **Improvement Hearing:** After a petition is filed and its adequacy determined, or the Council initiates the project, the City Engineer is directed to study and report as to the feasibility of the improvement. If after reviewing the feasibility report, the Council feels the project has merit, a public hearing is scheduled, notice published twice, and persons benefitted by the project notified in writing in accordance with applicable State Statutes and City Standards.

If after the improvement hearing, at which all persons are heard, the Council feels that the project still has merit, then the Council will authorize the preparation of necessary plans and specifications, and upon receipt and acceptance of those plans, will authorize the advertisement for bids, by resolution, for the construction of the project.

C. Determining Assessment Method to Use

1. **Front Footage Assessment -** The front footage assessment method will generally be used on all multiple land use projects as per the City's adopted assessment policy. That is, if an improvement project affects parcels that are not zoned similarly the front footage method will generally be used.

2. **Unit Assessment** - Where a project affects parcels which are all zoned similarly or part of a multi-unit development, the Unit Assessment method may be applied.
3. **Area Assessment** - Area assessment may be used for storm sewer improvements. This may be necessary for projects where the storm sewer is installed for reasons other than just elimination of ditches.

If necessary or desirable to achieve equitable distribution of assessments, the City Council may adopt alternative methods for calculating assessments consistent with the City's adopted assessment policy.

D. Amount of Assessments

1. **Rehabilitated Rural Streets** - Rural streets that are rehabilitated or are reconstructed as a rural section shall be financed 100% through assessments to the abutting properties. As rural street sections are not considered desirable, no City funding assistance shall be available.
2. **Upgraded Rural Streets** - It is the City desire to upgrade rural street sections to urban street sections where possible. Therefore when a rural street is scheduled for an improvement, upgrading to urban design will be the objective unless otherwise determined by the City Council. In making such a determination the City Council may consider a petition from property owners to perpetuate a rural street.

The City will finance up to 50% of the total project cost through the Infrastructure Replacement Fund for an upgrade project. The affected property owners will be assessed the cost of the storm sewer pipe, the new curb, and a portion of the street reconstruction cost.

3. **Rehabilitated Urban Streets** - For streets that are urban design, the City shall finance 50% of rehabilitation costs.
4. **Reconstructed Urban Streets** - When an urban street is reconstructed all of the reconstruction costs shall be assessed to the abutting property owners. The City will finance 50% of that portion of the project that could be classified as rehabilitation (the final lift of blacktop).
5. **Preventive Maintenance** - The City shall perform routine and regular preventative maintenance to the extent practical on all streets in the City, until such time as the street has aged or deteriorated to the extent that such maintenance is no longer cost effective.

When a street has reached its expected life, in accordance with the City's infrastructure rating system, no additional preventative maintenance shall be performed. The only work performed will be the minimum amount necessary to keep the street reasonably safe for vehicular traffic.

All preventative maintenance shall be funded by the City for streets where preventative maintenance is cost effective. On deteriorated streets, no preventative maintenance shall be performed except at the sole expense and request of the adjoining property owners

E. Period of Assessments

Assessments shall be spread over the life of the project. The expected life of various projects to be used in levying assessments is presented here:

<u>Project Type</u>	<u>Life</u>
Rural Rehabilitation	10 years
Rural Reconstruction as Rural	10 years
Rural Reconstruction as Urban	20 years
Urban Rehabilitation	10 years
Urban Reconstruction	20 years

SECTION IV

CONSTRUCTION STANDARDS

Minimum Design Standards

The following are minimum design standards applied to the design and construction of improvements in the City of Mendota Heights and are for reference to this policy.

A. Storm Sewer System

Lateral pipe and catch basin size shall be generally be designed to handle a 10 year event and trunk facilities shall generally be designed to handle a 100 year event as determined by the City Engineer.

B. Sidewalks, Trails and Bikeways

Concrete - 5' wide with 6" sand base - 4" thick

Bituminous - 8' wide (2341) Bit. with 6" Class 5, 100 percent crushed rock and 2" Bituminous

All trails and sidewalks will be located 1' off property line if at all possible, pedestrian ramps and curb drops will be installed according to MN/DOT Standards.

C. **Streets**

Urban streets shall be classified as either local or collector streets. Urban local streets shall normally be 33 feet wide, face to face, and 7 ton design, curb and gutter on local streets shall be B618. Collector streets shall be 9 ton design and shall normally be constructed to Municipal State Aid (MSA) standards.

Rural streets are not desirable. Therefore for any rural street reconstruction project the City shall proceed as if the rural street is to be upgraded to urban design. Unless a neighborhood opposes this upgrade, it shall occur. Rural streets that are not upgraded will generally be rehabilitated via an overlay of 1.5"-2" of blacktop.

SECTION V

ASSESSMENT DEFERRAL POLICY

Deferral of Special Assessments

A. **Purpose** - To indicate in certain instances the City may allow deferral of special assessments levied under this policy.

B. **Conditions of Deferral:**

Application for deferral of special assessments under these provisions must be filed within thirty (30) days from the date the assessment roll is adopted. Applications granted shall continue in effect for subsequent years until the property no longer qualifies. Applications shall be filed with the assessor of the taxing district in which the real property is located.

C. **Situations of Discretionary Deferral:**

1. **Senior citizen/low income deferral.** At its discretion the City may defer assessments against any homestead property owned by a person 65 years of age or older or retired by virtue of a permanent and total disability and for whom it would be a hardship to make the assessment payments. The standards and guidelines governing what constitutes hardship are established by City ordinance or resolution.

Additionally, the City may grant a deferral in situations where its hardships standards and guidelines have not been met if exceptional and unusual circumstances exist and no preference or discriminatory treatment will occur.

This deferral is subject to the provisions of Minnesota Statutes 435.193.

2. **Unimproved property deferral.** The City may also defer the assessments of improvements with respect to property which is not directly and immediately affected by the improvement for which the assessment is levied. If applicable, at such times as extensions or connections regarding the improvement directly benefit such unimproved property, the City may require payment of the deferred assessments as well as those relating to the connection or extension.

This deferral is subject to the provisions of Minnesota Statutes 429.051.

Any such deferral shall be subject to such other terms and conditions including accrual of interest, and shall be subject to termination, all as determined by City Council.

Adopted by the Mendota Heights City Council this 16th day of June 1992.

CITY COUNCIL
CITY OF MENDOTA HEIGHTS

By: 
Charles E. Mertensotto, Mayor

ATTEST:


Kathleen M. Swanson, City Clerk

KHE:dfw



2019 – 2023 Sanitary Sewer Improvement and Maintenance Plan



**City of
Mendota Heights**

OVERVIEW OF SANITARY SEWER SYSTEM

Sanitary Sewer Collection System

The City of Mendota Heights sanitary sewer collection system is available to the majority of existing land uses. Almost 100 percent of Mendota Heights current population is connected to the sanitary sewer collection system with the exception of a limited number of scattered sites that still utilize Individual Sewage Treatment Systems (ISTS) which are private on-site septic systems.

Wastewater from the City of Mendota Heights is collected and conveyed to the wastewater treatment plant through a network of over 79.1 miles of gravity sewers, 2.6 miles of pressure sewer (force main), 2,067 sanitary manholes and 6 lift stations.

The City of Mendota Heights is completely within the Metropolitan Urban Service Area (MUSA). The sanitary sewage system in Mendota Heights was developed based upon the Sanitary Sewer System Master Plan dated March 28, 1966. In 1972, the Sanitary Sewer Master Plan was approved by the Metropolitan Council (formerly the Metropolitan Sewer Board and Metropolitan Waste Control Commission). The City of Mendota Heights is serviced by the Metropolitan Council waste water system managed by Metropolitan Council Environmental Services (MCES). The sanitary sewerage collection system in Mendota Heights is a tributary to the Metropolitan Council system. The majority of the Mendota Heights system flows into a Metropolitan Council sewer interceptor connection, which crosses under the Mississippi River near the Interstate 35E Bridge to the West Seventh Street interceptor and ultimately to the treatment plant at Pig's Eye Island. A portion of the northeastern part of the City flows directly into the St. Paul system at Chippewa Avenue and Annapolis Street.

Individual Sewage Treatment Systems (ISTS)

Approximately 45 Individual Sewage Treatment Systems (ISTS) are still utilized in Mendota Heights. The largest concentrations of on-site septic systems are in the Super Block neighborhood located in the east central part of the City, adjacent to the City of West St. Paul and the Olivia T. Dodge Nature Center.

City Code (10-3-3: Individual Sewage Treatment Systems) outlines management practices for properties served by an Individual Sewer Treatment System (ISTS):

- The system must be pumped/inspected at least once every three years.
- The Pumping/Inspection must be performed by a person with a current MPCA sewage contractor license.
- The licensed contractor is responsible for filing a septic maintenance log with Dakota County.
- Upon verification of required maintenance, the City shall issue a statement of compliance in letter form, permitting three additional years of operation.
- The City will notify the owner of an ISTS no later than two months before permit expiration. The City has contracted Dakota County to perform this work.

Individual Service Connections

The City of Mendota Heights is not responsible for the cleaning, maintaining, or repairing individual service connections from their building up to and including the connection to the sanitary sewer main; the property owner bears the responsibility.

Sanitary sewer system regulations, ordinances and management practices

The City of Mendota Heights has adopted a number of practices that are aimed at protecting the quality of water resources within Mendota Heights and the integrity of the sanitary sewer system. These practices are crucial to the future performance and investment required by the utility system because they represent the manner in which this and previous sanitary sewer plans are implemented.

- The sanitary sewer ordinance prescribes the design and manner in which individual connections and use of public sewers are to be made. To limit the amount of inflow into the sanitary sewer system, the ordinance prohibits the flows of storm water, ground water, roof runoff, surface water, unpolluted drainage, unpolluted industrial cooling water, or unpolluted industrial process water into any public sanitary sewer.
- The city zoning regulations determine the specific use and development intensity of individual parcels in the community.
- The city subdivision ordinance requires that properties to be developed be served by the municipal sanitary sewer system, and that, all new sanitary sewers must be constructed according to plans approved by the Public Works Director.
- The construction of the municipal and MCES sanitary sewer systems and their on-going operations are financed by: Service Availability Charges (SAC), assessments to properties, and by customer charges that are paid on a regular basis.
- The City of Mendota Heights has updated its on-site septic system ordinance to comply with Minnesota Pollution Control Agency (MPCA) requirements.
- The Mendota Heights Public Works Department Utilities Division is responsible for all maintenance activities associated with the sanitary sewer system.

Existing system issues

Basic problems that can affect the operation of a sewer collection system include infiltration, inflow, and blockages. It is important that infiltration and inflow flows be kept to a minimum to maintain pipe capacity and preserve treatment plant capacity. The most common sources of sewer blockages are tree root obstructions, and solids settling out and collecting within the sanitary sewer collection system as a result of sewer lines flowing at less than design capacity.

Inflow and Infiltration

The condition of sanitary sewer systems can greatly impact total sewage flow. Inflow and Infiltration (I/I) are terms for the ways that clear water (rain and groundwater) makes its way into sanitary sewer pipes. Infiltration occurs when groundwater seeps into sewer pipes through cracks, leaky joints or deteriorated manholes. Inflow is a direct connection that allows rainwater to enter the sewer system through roof leaders, basement sump pumps, or foundation drains illegally connected to the system. I/I are of great concern as it results in the unnecessary

treatment of water and consumes capacity in the large regional sewer pipes. I/I can also contribute to sewer backups into homes and overflows into local lakes and rivers. In order to minimize I/I, the City of Mendota Heights prohibits the connection of sump pumps, rain leaders and passive drain tile into the sanitary sewer system.

The current I/I goal for the City of Mendota Heights is an allowable peak hourly flow of 4.83 MGD with an adjusted average of 1.67 MGD.

In 2016, The city began an inspection of the city to find, and ultimately eliminate, residential sump pump connections to the city sewer system. Eliminating these connections will reduce the amount of storm drainage into the sanitary sewer.

SSIMP OVERVIEW

Sanitary Sewer Improvement and Maintenance Plan (SSIMP)

The Sanitary Sewer Improvement and Maintenance Plan (SSIMP) is a planning tool that forecasts the city's needs over a five year period based on city-adopted long-range plans, goals and policies. The SSIMP includes detailed descriptions of sanitary sewer improvement projects and maintenance projects the city anticipates to initiate during the five-year period. The SSIMP is updated annually to ensure consistency and the reflection of changing demands and financial resources.

SSIMP Goals

The goals of the SSIMP are to:

- Provide a balanced program for sanitary sewer improvements given anticipated funding revenues over a five-year planning period.
- Enable the Mendota Heights City Council to evaluate the needs of the entire city objectively.
- Anticipate needed sanitary sewer improvements in advance, rather than being overlooked until critically needed.
- Provide a plan for sanitary sewer improvements that can be used in preparing the budget for the coming fiscal year.

Project Details

The sanitary sewer improvement projects being reported in the SSIMP will be shown within the following sections:

- Preventative Maintenance
- Sanitary Sewer Rehabilitation

Preventative Maintenance

Preventative maintenance includes activities such as cleaning and televising sanitary sewer lines, visual inspection of manholes, annual inspection and maintenance of lift stations, and root

cutting in the main lines. Sanitary sewer maintenance and activities are funded through the Sanitary Sewer Utility Fund.

Cleaning and Televising

In 2006, the City of Mendota Heights started a cleaning and televising program with the goal of cleaning and televising the entire sanitary sewer system in a 5 year period. Currently, Public Works Staff along with one seasonal employee clean approximately 7-10 miles of pipe per year. In addition, the city hires a contractor each year to clean an additional 7-8 miles of pipe and televise all of the pipes that are cleaned that year. At our current rate, the city is cleaning and televising the entire sanitary sewer system every 5-6 years.

Sanitary sewer pipes are cleaned and televised to identify problem areas, including leaking joints, collapsed sections of pipe and excessive root intrusion through cracks and joints. Excessive root intrusion can cause plugging, which can lead to sewage backups into basements.

Through routine televising and maintenance logs, Public Works staff have identified and prioritized those sections of sewers that require disproportionate maintenance to remain functional or have a history of excessive root intrusion. The SSIMP was then developed to address these problem areas using a variety of rehabilitation techniques, including: conventional excavation and pipe replacement; pipe lining with cured-in-place pipe (CIPP); additional root treatments.

CIPP installation involves inverting an epoxy saturated fiber lining into a sewer line and using water/stream pressure to cure the epoxy. Services and lateral connections are opened after the pipe has cured using a camera and robotic cutter. This process results in a continuous, joint free, structural liner that can be installed with minimal disruption to adjacent residents and traffic, and requires no excavation or street reconstruction.

Sanitary Sewer Rehabilitation

A sanitary sewer rehabilitation project will be defined as a project in which the sanitary sewer is modified or supplemented in-place, to restore the serviceability of the existing sanitary sewer system.

The City of Mendota Heights maintains approximately 81.7 miles of sanitary sewer pipe. As the sanitary sewer infrastructure ages, it requires rehabilitation to protect or extend its useful life. If the sanitary sewer infrastructure is not preserved, it will deteriorate prematurely and its benefit to the community will be lost. As a result, the SSIMP reflects the broad direction of the City Council to preserve existing sanitary sewer infrastructure before they fall into such disrepair that expensive reconstruction is required. Typically, the City of Mendota Heights completes one sanitary sewer lining project a year and additional sanitary sewer rehabilitation projects as needed.

Reconstruction projects are identified and planned as part of the Street Improvement Plan (SIP) as sanitary sewer reconstruction often involves removal of the road surface for utility access. Sanitary sewer reconstruction projects that do not impact streets are identified in this plan.

Sanitary Sewer Facilities

Improvements totaling approximately \$4 million are planned for in the 2019-2023 SSIMP. Highlights of the planned projects are as follows:

Preventative Maintenance Projects:

Annual Sanitary Sewer Cleaning and Televising

Sanitary Sewer Rehabilitation Projects:

Annual Sanitary Sewer Lining

Sanitary Sewer Replacement Projects:

2019: 816 Ridge Place Sanitary Sewer Rehabilitation

Sanitary Sewer Utility Fund Summary

Improvement Projects



SANITARY SEWER IMPROVEMENT & MAINTENANCE PLAN 2019-2023

CITY OF MENDOTA HEIGHTS

SANITARY SEWER UTILITY FUND SUMMARY

Available Balance (12/31/2017) \$87,000

Revenue	2018	2019	2020	2021	2022	2023
Cash Balance	\$87,000	\$226,000	\$83,000	\$51,000	\$288,000	\$560,000
Estimated Annual Sanitary Sewer Revenue	\$2,084,000	\$2,292,000	\$2,407,000	\$2,527,000	\$2,653,000	\$2,786,000
Total Revenue	\$2,171,000	\$2,518,000	\$2,490,000	\$2,578,000	\$2,941,000	\$3,346,000

Expenditures	2018	2019	2020	2021	2022	2023
Estimated MCES Sewer Fees	\$1,343,000	\$1,410,000	\$1,481,000	\$1,555,000	\$1,633,000	\$1,715,000
Estimated City Operational Costs	\$430,000	\$448,000	\$646,000	\$423,000	\$436,000	\$449,000
Annual Sanitary Sewer Cleaning and Televising	\$62,000	\$62,000	\$62,000	\$62,000	\$62,000	\$62,000
Annual Sanitary Sewer Lining	\$200,000	\$200,000	\$250,000	\$250,000	\$250,000	\$250,000
Lift Station Rehabilitation	\$0	\$0	\$0	\$0	\$0	\$0
816 Ridge Place Sanitary Sewer Rehabilitation	\$0	\$315,000	\$0	\$0	\$0	\$0
Total Expenditures	\$2,035,000	\$2,435,000	\$2,439,000	\$2,290,000	\$2,381,000	\$2,476,000

Total Unreserved Cash Balance on 12/31 **\$136,000** **\$83,000** **\$51,000** **\$288,000** **\$560,000** **\$870,000**

2019 Revenue includes an estimated \$90,000 MCES grant

2019 Operation costs include \$49,000 towards Public Works Improvements (Fence, Salt Bin)

2020 Operation costs includes \$235,000 for replacement of Water Jet Truck (1991)



SANITARY SEWER IMPROVEMENT & MAINTENANCE PLAN 2019-2023

CITY OF MENDOTA HEIGHTS

PROJECT NAME: Annual Sanitary Sewer Lining
 PROJECT #: 502

TOTAL COST: \$1,200,000
 PROJECT TYPE: San. Sewer Rehab

Project Description

Each year, staff will determine the sanitary sewer to be lined within the allotted budget based on previous cleaning and televising reports

Project Location

Project Justification

Mendota Heights sanitary sewer system is aging. Many of its pipes are 60 years old and will soon be in need of repair. Cleaning the sewer system on a regular cycle will help extend the life of the pipes. Televising of the system will show where immediate repairs are needed. Lining pipes and manholes in need of repair will extend the life of our system.

Project History

Project Costs	2019	2020	2021	2022	2023	Total
Planning/Design						\$0
Construction/Maintenance	\$200,000	\$250,000	\$250,000	\$250,000	\$250,000	\$1,200,000
Total	\$200,000	\$250,000	\$250,000	\$250,000	\$250,000	\$1,200,000

Funding Sources	2019	2020	2021	2022	2023	Total
Municipal Bond Sales						\$0
Municipal State Aid Fund						\$0
Other Government Unit Funding						\$0
Sanitary Sewer Utility Fund	\$200,000	\$250,000	\$250,000	\$250,000	\$250,000	\$1,200,000
Special Assessments						\$0
Storm Water Utility Fund						\$0
Water Revenue Fund						\$0
Total	\$200,000	\$250,000	\$250,000	\$250,000	\$250,000	\$1,200,000



SANITARY SEWER IMPROVEMENT & MAINTENANCE PLAN 2019-2023

CITY OF MENDOTA HEIGHTS

PROJECT NAME: 816 Ridge Place Sanitary Sewer Rehabilitation
 PROJECT #: 504

TOTAL COST: \$315,000
 PROJECT TYPE: San. Sewer Rehab

Project Description

This sanitary sewer rehabilitation project was identified in the 2010 Sanitary Sewer Cleaning and Televising report. The sanitary sewer manhole located at 816 Ridge Place has sunk approximately 1.5 feet. Proposed rehabilitation consists of replacing the manhole and approximately 200 ft of 27" sanitary sewer pipe.

Project Location

Project Justification

Rehabilitation of the City's sanitary sewer system is necessary to keep these utility operating at a high level of service. This sanitary sewer pipe serves approximately 40% of the city.

Project History

Project Costs	2019	2020	2021	2022	2023	Total
Planning/Design	\$65,000					\$65,000
Construction/Maintenance	\$250,000					\$250,000
Total	\$315,000	\$0	\$0	\$0	\$0	\$315,000

Funding Sources	2019	2020	2021	2022	2023	Total
Municipal Bond Sales						\$0
Municipal State Aid Fund						\$0
Other Government Unit Funding						\$0
Sanitary Sewer Utility Fund	\$315,000					\$315,000
Special Assessments						\$0
Storm Water Utility Fund						\$0
Water Revenue Fund						\$0
Total	\$315,000	\$0	\$0	\$0	\$0	\$315,000



SANITARY SEWER IMPROVEMENT & MAINTENANCE PLAN 2019-2023

CITY OF MENDOTA HEIGHTS

PROJECT NAME: Operation & Maintenance

PROJECT #: 504

TOTAL COST: \$2,401,788

PROJECT TYPE: San. Sewer Rehab

Project Description

The Sanitary Sewer Utility is self funded including salaries, fleet, O&M and Capital Improvements

Project Location

Project Justification

Project History

Project Costs	2019	2020	2021	2022	2023	Total
Operation & Maintenance	\$398,895	\$410,862	\$423,188	\$435,883	\$448,960	\$2,117,788
Fleet/Facility	\$49,000	\$235,000				\$284,000
Total	\$447,895	\$645,862	\$423,188	\$435,883	\$448,960	\$2,401,788

Funding Sources	2019	2020	2021	2022	2023	Total
Municipal Bond Sales						\$0
Municipal State Aid Fund						\$0
Other Government Unit Funding						\$0
Sanitary Sewer Utility Fund	\$447,895	\$645,862	\$423,188	\$435,883	\$448,960	\$2,401,788
Special Assessments						\$0
Storm Water Utility Fund						\$0
Water Revenue Fund						\$0
Total	\$447,895	\$645,862	\$423,188	\$435,883	\$448,960	\$2,401,788

CITY OF MENDOTA HEIGHTS

SANITARY SEWER MAINTENANCE POLICY

1. Purpose

The purpose of this policy is to provide the City of Mendota Heights procedures for maintaining its sanitary sewer system. These procedures are necessary to prevent sewer backups into homes, businesses and the natural environment. Maintenance also protects and extends the life of the city's sanitary sewer system. The City will provide such maintenance in a safe and cost effective manner, keeping in mind safety, budget, personnel and environmental concerns. The City will use city employees, equipment and/or private contractors to conduct this maintenance.

2. Routine Maintenance and Inspection

A. Sanitary Sewer Lines –

1. Scope of City's Responsibility – The City will maintain the city's sanitary sewer lines. Private property owners are responsible for the maintenance of the private lines from the city's main line to any buildings.
2. Schedule – The city will clean every city sanitary sewer line every three to five years.
3. Problem Area – This is defined as an area that has had a sewer backup, blockage or a known problem such as grease accumulation or shallow slope. This area will be cleaned twice a year for the first year. If there are no further problems, it will be cleaned once the second year and then returned to the regular schedule the third year.
4. Equipment – Lines will be cleaned with a jetter or a rodder machine. The equipment used depends on the location, type of line and if there are any known problems that are handled better with one of the machines.
5. Television inspection – The lines will be inspected by television camera every 10 years. Any lines that are located on a street where a street maintenance project is planned will be inspected prior to those projects. The city will also use the camera to inspect any sewer lines in a new development before the city accepts those lines as city lines. Camera inspection will also be available to inspect lines where there are possible problems.

6. Visual inspection – The lines will be visually inspected annually by employees looking down the manholes to determine if there are any problems.

B. Sanitary Sewer Lift Stations

1. Schedule – The city will maintain the lift stations annually using specific maintenance that is reasonable and recommended. That maintenance is reflected in the checklists developed for each lift station.
2. Electrical components – An electrician or pump and control company will be hired annually to inspect and maintain the electrical components of the lift station.
3. Flow meters – The flow meters at the lift stations will be checked on a regular basis to ensure that the lift stations are working properly and to detect any problems in the system.

3. **Emergency Response**

- A. Definition – An emergency response occurs in response to a call from citizens, fellow employees, or an alarm that indicates that there is a possible problem in the sanitary sewer system.
- B. Response – After receiving notice of a possible problem, an employee will respond and determine if there is a problem in the city's system. If there is, he or she will remedy is based on accepted procedures. If necessary, the city employee will obtain assistance from other city employees or outside contractors such as electricians or engineers.

4. **Inflow/Infiltration**

- A. Definitions: Inflow is where storm water is misdirected into the sanitary sewer system through intentional connections such as sump pumps and roof leaders. Infiltration is where storm and ground water get into the sanitary sewer system through cracks or leaks in the sewer pipes or manholes. Inflow and infiltration can lead to backups, overflows, and unnecessary and expensive treatment of storm water.
- B. Inflow: To reduce inflow, the City has developed an ordinance prohibiting illegal connections to the sanitary sewer system. This includes enforcement of the ordinance banning such connections and public education to encourage voluntary compliance. The City

recognized that a significant amount of inflow may originate on private property or in private systems that discharge into the City owned system. The City will work to identify sources attributable to private entities and notify them when such sources are found. The City will work to eliminate these sources of inflow using methods appropriate to the problem identified. Note that this is not a commitment of the City of fund the costs of making such repairs or otherwise correcting the problem.

- C. Infiltration: To reduce infiltration, the city employees will annually inspect manholes and repair any that contribute to this problem. The sewer lines are maintained and inspected pursuant to Section 2 of this policy. Sanitary sewer repairs are done annually on an as-needed basis.

5. **Training**

The city will provide training on a regular basis to employees that will be involved in the routine maintenance, the emergency response on the procedures to follow and on how to use the proper equipment.

6. **Weather conditions**

Sewer maintenance operations will be conducted only when weather conditions do not endanger the safety of city employees and equipment. Factors that may delay sewer maintenance operations include; severe cold, flooding, rain, snow and wind.

7. **Documentation**

The city will document all of its inspections, maintenance, emergency responses and training for its sanitary sewer system. The city will also document any circumstances where something has occurred that limits its ability to comply with this policy. These records will be kept in accordance with the city's record retention schedule.



2019 – 2023
**Storm Water Improvement
and Maintenance Plan**



OVERVIEW OF PONDS AND STORM SEWER SYSTEM

Storm Water System

The City of Mendota Heights has an extensive network of storm water conveyances which include: 81.9 miles of storm sewer pipe, 4908 catch basins, manholes and aprons, 52 sump manholes, 5 miles of streams, 124 ponds and wetlands operated by city, county, state, and private entities.

SWIMP OVERVIEW

Storm Water Improvement and Maintenance Plan (SWIMP)

The Storm Water Improvement and Maintenance Plan (SWIMP) is a planning tool that forecasts the city's needs over a five year period based on city-adopted long-range plans, goals and policies. The SWIMP includes detailed descriptions of storm sewer and pond improvement projects and maintenance projects the city anticipates to initiate during the five-year period. The SWIMP is updated annually to ensure consistency and the reflection of changing demands and financial resources.

SWIMP Goals

The goals of the SWIMP are to:

- Provide a balanced program for storm water and pond improvements given anticipated funding revenues over a five-year planning period.
- Enable the Mendota Heights City Council to evaluate the needs of the entire city objectively.
- Anticipate needed storm water improvements in advance, rather than being overlooked until critically needed.
- Provide a plan for storm water improvements that can be used in preparing the budget for the coming fiscal year.

Project Details

The storm water improvement projects being reported in the SWIMP will be shown within the following sections:

- Storm Sewer Maintenance and Improvements
- Pond Maintenance
- Streambank Stabilization

Storm Water Facilities

Storm Water improvements totaling approximately \$2.3 million are planned for in the 2019-2023 SWIMP.

***Summary of SWIMP Project Costs and Funding Sources
Improvement Projects***



SURFACE WATER IMPROVEMENT & MAINT. PLAN 2019-2023

CITY OF MENDOTA HEIGHTS

STORM WATER FUND

Total Available (12/31/2017) **\$179,000**

Revenue	2018	2019	2020	2021	2022	2023
Cash Balance	\$179,000	\$233,000	\$112,000	\$76,000	\$135,000	\$189,000
Annual Revenue	\$446,000	\$476,000	\$476,000	\$476,000	\$476,000	\$476,000
Total Revenue	\$625,000	\$709,000	\$588,000	\$552,000	\$611,000	\$665,000

Expenditures	2018	2019	2020	2021	2022	2023
Operations & Maintenance	\$152,000	\$157,000	\$162,000	\$167,000	\$172,000	\$177,000
Ivy Hills Park Pond Improvements	\$90,000	\$0	\$0	\$0	\$0	\$0
541 Marie Repair	\$0	\$20,000	\$0	\$0	\$0	\$0
Cherokee Heights Ravine	\$0	\$75,000	\$0	\$0	\$0	\$0
South Plaza/Mendakota Improvements	\$50,000	\$0	\$0	\$0	\$0	\$0
Lexington Highlands Improvements	\$80,000	\$0	\$0	\$0	\$0	\$0
Lilydale Drop Structure	\$20,000	\$0	\$0	\$0	\$0	\$0
Marie Avenue Rehabilitation 2	\$0	\$150,000	\$0	\$0	\$0	\$0
Wesley Lane Improvements	\$0	\$25,000	\$0	\$0	\$0	\$0
Dodd Road Trail/Maple Street Relocation	\$0	\$50,000	\$0	\$0	\$0	\$0
2019 Streambank Stabilization	\$0	\$120,000	\$0	\$0	\$0	\$0
Centre Pointe Rehabilitation	\$0	\$0	\$50,000	\$0	\$0	\$0
Lake Augusta Erosion	\$0	\$0	\$150,000	\$0	\$0	\$0
2020 Pond Improvement	\$0	\$0	\$100,000	\$0	\$0	\$0
2020 Streambank Stabilization	\$0	\$0	\$50,000	\$0	\$0	\$0
Sylvandale Rehabilitation	\$0	\$0	\$0	\$50,000	\$0	\$0
2021 Pond Improvement	\$0	\$0	\$0	\$100,000	\$0	\$0
2021 Streambank Stabilization	\$0	\$0	\$0	\$100,000	\$0	\$0
Victoria Curve Rehabilitation	\$0	\$0	\$0	\$0	\$50,000	\$0
2022 Pond Improvements	\$0	\$0	\$0	\$0	\$100,000	\$0
2022 Streambank Stabilization	\$0	\$0	\$0	\$0	\$100,000	\$0
Friendly Hills Rehabilitation	\$0	\$0	\$0	\$0	\$0	\$100,000
2023 Pond Improvement	\$0	\$0	\$0	\$0	\$0	\$100,000
2023 Streambank Stabilization	\$0	\$0	\$0	\$0	\$0	\$50,000
Total Expenditures	\$392,000	\$597,000	\$512,000	\$417,000	\$422,000	\$427,000

Unreserved Cash Balance (12/31) **\$233,000** **\$112,000** **\$76,000** **\$135,000** **\$189,000** **\$238,000**

Future Projects	Year
Lake Augusta Outlet	2024
Curley's Neighborhood Rehabilitation	2024
Tilsens's Neighborhood Rehabilitation	2024
2024 Pond Improvements	2024
2024 Streambank Stabilization	2024
Bunker Hills Neighborhood Rehabilitation	2025
2025 Pond Improvement	2025
2025 Streambank Stabilization	2025
Carmen Lane, Dakota Drive, and Waters Drive	2026
2026 Pond Improvements	2026
2026 Streambank Stabilization	2026



SURFACE WATER IMPROVEMENT & MAINTENANCE PLAN 2019-2023

CITY OF MENDOTA HEIGHTS

PROJECT NAME: Operations & Maintenance

TOTAL COST: \$835,000

Project Description

Operaton and Maintence includes:
Salaries, Rent, Repairs, Software, WMO dues, Natrive Plantings/
Rain Gardens, and other appurtenent costs.

Project Location

Project Justification

Project History

Project Costs	2019	2020	2021	2022	2023	Total
Planning/Design						\$0
Construction/Maintenance						\$0
Total	\$0	\$0	\$0	\$0	\$0	\$0

Funding Sources	2019	2020	2021	2022	2023	Total
Municipal Bond Sales						\$0
Municipal State Aid Funds						\$0
Other Government Unit Funding						\$0
Sanitary Sewer Utility Funds						\$0
Special Assessments						\$0
Storm Sewer Utility Funds	\$157,000	\$162,000	\$167,000	\$172,000	\$177,000	\$835,000
Water Utility Funds						\$0
Total	\$157,000	\$162,000	\$167,000	\$172,000	\$177,000	\$835,000



SURFACE WATER IMPROVEMENT & MAINTENANCE PLAN 2019-2023

CITY OF MENDOTA HEIGHTS

PROJECT NAME: 541 Marie Repair

TOTAL COST: \$20,000

Project Description

Repair pond outlet at 541 Marie Ave

Project Location

Project Justification

Project History

Project Costs	2019	2020	2021	2022	2023	Total
Planning/Design	\$5,000					\$5,000
Construction/Maintenance	\$15,000					\$15,000
Total	\$20,000	\$0	\$0	\$0	\$0	\$20,000

Funding Sources	2019	2020	2021	2022	2023	Total
Municipal Bond Sales						\$0
Municipal State Aid Funds						\$0
Other Government Unit Funding						\$0
Sanitary Sewer Utility Funds						\$0
Special Assessments						\$0
Storm Sewer Utility Funds	\$20,000					\$20,000
Water Utility Funds						\$0
Total	\$20,000	\$0	\$0	\$0	\$0	\$20,000



SURFACE WATER IMPROVEMENT & MAINTENANCE PLAN 2019-2023

CITY OF MENDOTA HEIGHTS

PROJECT NAME: Cherokee Heights Ravine

TOTAL COST: \$75,000

Project Description

JPA with St. Paul for erosion repair and hydrodynamic separators

Project Location

Project Justification

Project History

Project Costs	2019	2020	2021	2022	2023	Total
Planning/Design						\$0
Construction/Maintenance	\$75,000					\$75,000
Total	\$75,000	\$0	\$0	\$0	\$0	\$75,000

Funding Sources	2019	2020	2021	2022	2023	Total
Municipal Bond Sales						\$0
Municipal State Aid Funds						\$0
Other Government Unit Funding						\$0
Sanitary Sewer Utility Funds						\$0
Special Assessments						\$0
Storm Sewer Utility Funds	\$75,000					\$75,000
Water Utility Funds						\$0
Total	\$75,000	\$0	\$0	\$0	\$0	\$75,000



SURFACE WATER IMPROVEMENT & MAINTENANCE PLAN 2019-2023

CITY OF MENDOTA HEIGHTS

PROJECT NAME: Marie Avenue Rehabilitation 2

TOTAL COST: \$150,000

Project Description

Dredge Lex/Marie Pond, Dredge Sutton Pond

Project Location

Project Justification

Project History

Project Costs	2019	2020	2021	2022	2023	Total
Planning/Design	\$25,000					\$25,000
Construction/Maintenance	\$125,000					\$125,000
Total	\$150,000	\$0	\$0	\$0	\$0	\$150,000

Funding Sources	2019	2020	2021	2022	2023	Total
Municipal Bond Sales						\$0
Municipal State Aid Funds						\$0
Other Government Unit Funding						\$0
Sanitary Sewer Utility Funds						\$0
Special Assessments						\$0
Storm Sewer Utility Funds	\$150,000					\$150,000
Water Utility Funds						\$0
Total	\$150,000	\$0	\$0	\$0	\$0	\$150,000



SURFACE WATER IMPROVEMENT & MAINTENANCE PLAN 2019-2023

CITY OF MENDOTA HEIGHTS

PROJECT NAME: Wesley Lane Improvements

TOTAL COST: \$25,000

Project Description

Replace Dodd Road structures at Wesley, fill and pipe ditch to south.
Add extension at Wesley Court

Project Location

Project Justification

Project History

Project Costs	2019	2020	2021	2022	2023	Total
Planning/Design						\$0
Construction/Maintenance	\$25,000					\$25,000
Total	\$25,000	\$0	\$0	\$0	\$0	\$25,000

Funding Sources	2019	2020	2021	2022	2023	Total
Municipal Bond Sales						\$0
Municipal State Aid Funds						\$0
Other Government Unit Funding						\$0
Sanitary Sewer Utility Funds						\$0
Special Assessments						\$0
Storm Sewer Utility Funds	\$25,000					\$25,000
Water Utility Funds						\$0
Total	\$25,000	\$0	\$0	\$0	\$0	\$25,000



SURFACE WATER IMPROVEMENT & MAINTENANCE PLAN 2019-2023

CITY OF MENDOTA HEIGHTS

PROJECT NAME: Dodd Road Trail/Maple Street Relocation

TOTAL COST: \$50,000

Project Description

Fill ditch, install storm sewer

Project Location

Project Justification

Project History

Project Costs	2019	2020	2021	2022	2023	Total
Planning/Design						\$0
Construction/Maintenance	\$50,000					\$50,000
Total	\$50,000	\$0	\$0	\$0	\$0	\$50,000

Funding Sources	2019	2020	2021	2022	2023	Total
Municipal Bond Sales						\$0
Municipal State Aid Funds						\$0
Other Government Unit Funding						\$0
Sanitary Sewer Utility Funds						\$0
Special Assessments						\$0
Storm Sewer Utility Funds	\$50,000					\$50,000
Water Utility Funds						\$0
Total	\$50,000	\$0	\$0	\$0	\$0	\$50,000



SURFACE WATER IMPROVEMENT & MAINTENANCE PLAN 2019-2023

CITY OF MENDOTA HEIGHTS

PROJECT NAME: 2019 Streambank Stabilization

TOTAL COST: \$120,000

Project Description

Streambank Stabilization with Ridge Place Sewer Project

Project Location

Project Justification

Project History

Project Costs	2019	2020	2021	2022	2023	Total
Planning/Design						\$0
Construction/Maintenance	\$120,000					\$120,000
Total	\$120,000	\$0	\$0	\$0	\$0	\$120,000

Funding Sources	2019	2020	2021	2022	2023	Total
Municipal Bond Sales						\$0
Municipal State Aid Funds						\$0
Other Government Unit Funding						\$0
Sanitary Sewer Utility Funds						\$0
Special Assessments						\$0
Storm Sewer Utility Funds	\$120,000					\$120,000
Water Utility Funds						\$0
Total	\$120,000	\$0	\$0	\$0	\$0	\$120,000



SURFACE WATER IMPROVEMENT & MAINTENANCE PLAN 2019-2023

CITY OF MENDOTA HEIGHTS

PROJECT NAME: Centre Pointe Rehabilitation

TOTAL COST: \$50,000

Project Description

Street Reconstruction, Improvements to 1110 Centre Point
Drainage (Undersized Pipe Replacement)

Project Location

Project Justification

Project History

Project Costs	2019	2020	2021	2022	2023	Total
Planning/Design						\$0
Construction/Maintenance		\$50,000				\$50,000
Total	\$0	\$50,000	\$0	\$0	\$0	\$50,000

Funding Sources	2019	2020	2021	2022	2023	Total
Municipal Bond Sales						\$0
Municipal State Aid Funds						\$0
Other Government Unit Funding						\$0
Sanitary Sewer Utility Funds						\$0
Special Assessments						\$0
Storm Sewer Utility Funds		\$50,000				\$50,000
Water Utility Funds						\$0
Total	\$0	\$50,000	\$0	\$0	\$0	\$50,000



SURFACE WATER IMPROVEMENT & MAINTENANCE PLAN 2019-2023

CITY OF MENDOTA HEIGHTS

PROJECT NAME: Lake Augusta Erosion

TOTAL COST: \$150,000

Project Description

Repair Erosion at Lake Augusta Inlets

Project Location

Project Justification

Project History

Project Costs	2019	2020	2021	2022	2023	Total
Planning/Design						\$0
Construction/Maintenance		\$150,000				\$150,000
Total	\$0	\$150,000	\$0	\$0	\$0	\$150,000

Funding Sources	2019	2020	2021	2022	2023	Total
Municipal Bond Sales						\$0
Municipal State Aid Funds						\$0
Other Government Unit Funding						\$0
Sanitary Sewer Utility Funds						\$0
Special Assessments						\$0
Storm Sewer Utility Funds		\$150,000				\$150,000
Water Utility Funds						\$0
Total	\$0	\$150,000	\$0	\$0	\$0	\$150,000



SURFACE WATER IMPROVEMENT & MAINTENANCE PLAN 2019-2023

CITY OF MENDOTA HEIGHTS

PROJECT NAME: 2020 Pond Improvement

TOTAL COST: \$100,000

Project Description

Wentworth move to 2018
Rogers Lake keep in 2020

Project Location

Project Justification

Project History

Project Costs	2019	2020	2021	2022	2023	Total
Planning/Design						\$0
Construction/Maintenance		\$100,000				\$100,000
Total	\$0	\$100,000	\$0	\$0	\$0	\$100,000

Funding Sources	2019	2020	2021	2022	2023	Total
Municipal Bond Sales						\$0
Municipal State Aid Funds						\$0
Other Government Unit Funding						\$0
Sanitary Sewer Utility Funds						\$0
Special Assessments						\$0
Storm Sewer Utility Funds		\$100,000				\$100,000
Water Utility Funds						\$0
Total	\$0	\$100,000	\$0	\$0	\$0	\$100,000



SURFACE WATER IMPROVEMENT & MAINTENANCE PLAN 2019-2023

CITY OF MENDOTA HEIGHTS

PROJECT NAME: 2020 Streambank Stabilization

TOTAL COST: \$50,000

Project Description

Location to be Determined

Project Location

Project Justification

Project History

Project Costs	2019	2020	2021	2022	2023	Total
Planning/Design						\$0
Construction/Maintenance		\$50,000				\$50,000
Total	\$0	\$50,000	\$0	\$0	\$0	\$50,000

Funding Sources	2019	2020	2021	2022	2023	Total
Municipal Bond Sales						\$0
Municipal State Aid Funds						\$0
Other Government Unit Funding						\$0
Sanitary Sewer Utility Funds						\$0
Special Assessments						\$0
Storm Sewer Utility Funds		\$50,000				\$50,000
Water Utility Funds						\$0
Total	\$0	\$50,000	\$0	\$0	\$0	\$50,000



SURFACE WATER IMPROVEMENT & MAINTENANCE PLAN 2019-2023

CITY OF MENDOTA HEIGHTS

PROJECT NAME: Sylvandale Rehabilitation

TOTAL COST: \$50,000

Project Description

Street Project costs

Project Location

Project Justification

Project History

Project Costs	2019	2020	2021	2022	2023	Total
Planning/Design						\$0
Construction/Maintenance			\$50,000			\$50,000
Total	\$0	\$0	\$50,000	\$0	\$0	\$50,000

Funding Sources	2019	2020	2021	2022	2023	Total
Municipal Bond Sales						\$0
Municipal State Aid Funds						\$0
Other Government Unit Funding						\$0
Sanitary Sewer Utility Funds						\$0
Special Assessments						\$0
Storm Sewer Utility Funds			\$50,000			\$50,000
Water Utility Funds						\$0
Total	\$0	\$0	\$50,000	\$0	\$0	\$50,000



SURFACE WATER IMPROVEMENT & MAINTENANCE PLAN 2019-2023

CITY OF MENDOTA HEIGHTS

PROJECT NAME: 2021 Pond Improvement

TOTAL COST: \$100,000

Project Description

Marie Park, Park Place
Sediment Removal

Project Location

Project Justification

Project History

Project Costs	2019	2020	2021	2022	2023	Total
Planning/Design						\$0
Construction/Maintenance			\$100,000			\$100,000
Total	\$0	\$0	\$100,000	\$0	\$0	\$100,000

Funding Sources	2019	2020	2021	2022	2023	Total
Municipal Bond Sales						\$0
Municipal State Aid Funds						\$0
Other Government Unit Funding						\$0
Sanitary Sewer Utility Funds						\$0
Special Assessments						\$0
Storm Sewer Utility Funds			\$100,000			\$100,000
Water Utility Funds						\$0
Total	\$0	\$0	\$100,000	\$0	\$0	\$100,000



SURFACE WATER IMPROVEMENT & MAINTENANCE PLAN 2019-2023

CITY OF MENDOTA HEIGHTS

PROJECT NAME: 2021 Streambank Stabilization

TOTAL COST: \$100,000

Project Description

Location to be Determined

Project Location

Project Justification

Project History

Project Costs	2019	2020	2021	2022	2023	Total
Planning/Design						\$0
Construction/Maintenance			\$100,000			\$100,000
Total	\$0	\$0	\$100,000	\$0	\$0	\$100,000

Funding Sources	2019	2020	2021	2022	2023	Total
Municipal Bond Sales						\$0
Municipal State Aid Funds						\$0
Other Government Unit Funding						\$0
Sanitary Sewer Utility Funds						\$0
Special Assessments						\$0
Storm Sewer Utility Funds			\$100,000			\$100,000
Water Utility Funds						\$0
Total	\$0	\$0	\$100,000	\$0	\$0	\$100,000



SURFACE WATER IMPROVEMENT & MAINTENANCE PLAN 2019-2023

CITY OF MENDOTA HEIGHTS

PROJECT NAME: Victoria Curve Rehabilitation

TOTAL COST: \$50,000

Project Description

Street Porject Costs

Project Location

Project Justification

Project History

Project Costs	2019	2020	2021	2022	2023	Total
Planning/Design						\$0
Construction/Maintenance				\$50,000		\$50,000
Total	\$0	\$0	\$0	\$50,000	\$0	\$50,000

Funding Sources	2019	2020	2021	2022	2023	Total
Municipal Bond Sales						\$0
Municipal State Aid Funds						\$0
Other Government Unit Funding						\$0
Sanitary Sewer Utility Funds						\$0
Special Assessments						\$0
Storm Sewer Utility Funds				\$50,000		\$50,000
Water Utility Funds						\$0
Total	\$0	\$0	\$0	\$50,000	\$0	\$50,000



SURFACE WATER IMPROVEMENT & MAINTENANCE PLAN 2019-2023

CITY OF MENDOTA HEIGHTS

PROJECT NAME: 2022 Pond Improvements

TOTAL COST: \$100,000

Project Description

Victoria Highlands, Burrow
Sediment Removal

Project Location

Project Justification

Project History

Project Costs	2019	2020	2021	2022	2023	Total
Planning/Design						\$0
Construction/Maintenance				\$100,000		\$100,000
Total	\$0	\$0	\$0	\$100,000	\$0	\$100,000

Funding Sources	2019	2020	2021	2022	2023	Total
Municipal Bond Sales						\$0
Municipal State Aid Funds						\$0
Other Government Unit Funding						\$0
Sanitary Sewer Utility Funds						\$0
Special Assessments						\$0
Storm Sewer Utility Funds				\$100,000		\$100,000
Water Utility Funds						\$0
Total	\$0	\$0	\$0	\$100,000	\$0	\$100,000



SURFACE WATER IMPROVEMENT & MAINTENANCE PLAN 2019-2023

CITY OF MENDOTA HEIGHTS

PROJECT NAME: 2022 Streambank Stabilization

TOTAL COST: \$100,000

Project Description

Location to be Determined

Project Location

Project Justification

Project History

Project Costs	2019	2020	2021	2022	2023	Total
Planning/Design						\$0
Construction/Maintenance				\$100,000		\$100,000
Total	\$0	\$0	\$0	\$100,000	\$0	\$100,000

Funding Sources	2019	2020	2021	2022	2023	Total
Municipal Bond Sales						\$0
Municipal State Aid Funds						\$0
Other Government Unit Funding						\$0
Sanitary Sewer Utility Funds						\$0
Special Assessments						\$0
Storm Sewer Utility Funds				\$100,000		\$100,000
Water Utility Funds						\$0
Total	\$0	\$0	\$0	\$100,000	\$0	\$100,000



SURFACE WATER IMPROVEMENT & MAINTENANCE PLAN 2019-2023

CITY OF MENDOTA HEIGHTS

PROJECT NAME: Friendly Hills Rehabilitation

TOTAL COST: \$100,000

Project Description

Street Project Costs

Project Location

Project Justification

Project History

Project Costs	2019	2020	2021	2022	2023	Total
Planning/Design						\$0
Construction/Maintenance					\$100,000	\$100,000
Total	\$0	\$0	\$0	\$0	\$100,000	\$100,000

Funding Sources	2019	2020	2021	2022	2023	Total
Municipal Bond Sales						\$0
Municipal State Aid Funds						\$0
Other Government Unit Funding						\$0
Sanitary Sewer Utility Funds						\$0
Special Assessments						\$0
Storm Sewer Utility Funds					\$100,000	\$100,000
Water Utility Funds						\$0
Total	\$0	\$0	\$0	\$0	\$100,000	\$100,000



SURFACE WATER IMPROVEMENT & MAINTENANCE PLAN 2019-2023

CITY OF MENDOTA HEIGHTS

PROJECT NAME: 2023 Pond Improvement

TOTAL COST: \$100,000

Project Description

Friendly Hills
Sediment Removal

Project Location

Project Justification

Project History

Project Costs	2019	2020	2021	2022	2023	Total
Planning/Design						\$0
Construction/Maintenance					\$100,000	\$100,000
Total	\$0	\$0	\$0	\$0	\$100,000	\$100,000

Funding Sources	2019	2020	2021	2022	2023	Total
Municipal Bond Sales						\$0
Municipal State Aid Funds						\$0
Other Government Unit Funding						\$0
Sanitary Sewer Utility Funds						\$0
Special Assessments						\$0
Storm Sewer Utility Funds					\$100,000	\$100,000
Water Utility Funds						\$0
Total	\$0	\$0	\$0	\$0	\$100,000	\$100,000



SURFACE WATER IMPROVEMENT & MAINTENANCE PLAN 2019-2023

CITY OF MENDOTA HEIGHTS

PROJECT NAME: 2023 Streambank Stabilization

TOTAL COST: \$50,000

Project Description

Location to be Determined

Project Location

Project Justification

Project History

Project Costs	2019	2020	2021	2022	2023	Total
Planning/Design						\$0
Construction/Maintenance					\$50,000	\$50,000
Total	\$0	\$0	\$0	\$0	\$50,000	\$50,000

Funding Sources	2019	2020	2021	2022	2023	Total
Municipal Bond Sales						\$0
Municipal State Aid Funds						\$0
Other Government Unit Funding						\$0
Sanitary Sewer Utility Funds						\$0
Special Assessments						\$0
Storm Sewer Utility Funds					\$50,000	\$50,000
Water Utility Funds						\$0
Total	\$0	\$0	\$0	\$0	\$50,000	\$50,000



2019 – 2023
Parks Improvement
and Maintenance Plan



OVERVIEW OF PARK AND TRAIL SYSTEM

Park and Trail System

The City of Mendota Heights enjoys an extensive park, open space, and trail system with 15 city parks. In 1989, a voter approved park referendum was passed which funded upgrading 8 existing neighborhood parks, constructing 5 new parks, and constructing 7.8 miles of trails. In addition to city parks, the City purchased the 17-acre Mendota Heights Par 3 Golf Course by a separate referendum in 2007. The City also joined with other public entities and purchased the 25.5-acre Historic Pilot Knob site in 2006/2007, which will be retained as open space.

Park and trail facilities maintained by others located within or near the city boundaries are Fort Snelling State Park, Harriet Island-Lilydale Regional Park, Dodge Nature Center, Big Rivers Regional Trail, and North Urban Regional Trail, renamed the River to River Greenway (Mendota-Kaposia Trail).

Park Improvement and Maintenance Plan (PIMP)

The Park Improvement and Maintenance Plan (PIMP) is a planning tool that forecasts the city's needs over a five year period based on city-adopted long-range plans, goals and policies. The PIMP includes detailed descriptions of park improvement projects and maintenance projects the city anticipates to initiate during the five-year period. The PIMP is updated annually to ensure consistency and the reflection of changing demands and financial resources.

PIMP Goals

The goals of the PIMP are to:

- Provide a balanced program for park improvements given anticipated funding revenues over a five-year planning period.
- Enable the Mendota Heights City Council to evaluate the needs of the entire city objectively.
- Anticipate needed park improvements in advance, rather than being overlooked until critically needed.
- Provide a plan for park improvements that can be used in preparing the budget for the coming fiscal year.

Park Facilities

Park improvements totaling approximately \$2.4 million are planned for in the 2019-2023 PIMP.

Exhibits

Park Needs

Summary of Trail Project Costs and Funding Sources

Park Detail Sheets



PARKS IMPROVEMENT & MAINTENANCE PLAN 2019-2023

CITY OF MENDOTA HEIGHTS

SUMMARY OF CITY PARKS

Park Name	Area (Acres)
Caren Road	2.0
Civic Center (Mertensotto Fields)	17.6
Copperfield Ponds	24.8
Delaware Ponds	5.6
Dodd/Marie	1.9
Dog Park	8.2
Friendly Hills	15.5
Friendly Marsh	34.5
Hagestrom King	9.6
Ivy Hills	9.1
Kensington	14.5
Lexington Marie	3.9
Marie	6.6
Market Square	0.24
Mendakota	19.7
Pilot Knob Preservation	27.0
Rogers Lake	8.7
Sibley	10.8
Tot Lot	0.9
Valley	93.5
Valley View Heights	0.6
Victoria Highlands	6.7
Wentworth	10.4
Total	332.3

SUMMARY OF REGIONAL PARKS

Park Name	Area (Acres)
Dodge Nature Center	162.3
Fort Snelling State Park	800
Lilydale Harriet Island Cherokee Park	374
Total	1336.3

Future Park Options

Park Name	Area (Acres)
Augusta Lemay Conservation Area	53
Ivy Falls	7.0
Pilot Knob Preservation Expansion	2.35
Total	62.4



PARKS IMPROVEMENT & MAINTENANCE PLAN 2019-2023

CITY OF MENDOTA HEIGHTS

SUMMARY OF PARKS COSTS AND FUNDING SOURCES

Park Name	2019	2020	2021	2022	2023	Total
Caren Road	\$0	\$0	\$0	\$0	\$0	\$0
Civic Center (Mertensotto Fields)	\$0	\$0	\$0	\$0	\$0	\$0
Copperfield Ponds	\$0	\$0	\$0	\$0	\$0	\$0
Delaware Ponds	\$0	\$0	\$0	\$0	\$0	\$0
Dodd/Marie	\$0	\$0	\$0	\$0	\$0	\$0
Dog Park	\$0	\$0	\$0	\$0	\$0	\$0
Friendly Hills	\$0	\$0	\$0	\$60,000	\$0	\$60,000
Friendly Marsh	\$0	\$0	\$0	\$0	\$0	\$0
Hagestrom King	\$180,000	\$0	\$0	\$0	\$0	\$180,000
Ivy Hills	\$0	\$0	\$0	\$125,000	\$0	\$125,000
Kensington	\$0	\$0	\$0	\$0	\$0	\$0
Lexington Marie	\$0	\$200,000	\$0	\$0	\$0	\$200,000
Marie	\$80,000	\$100,000	\$0	\$0	\$0	\$180,000
Market Square	\$0	\$0	\$0	\$0	\$0	\$0
Mendakota	\$140,000	\$0	\$60,000	\$0	\$0	\$200,000
Pilot Knob Preservation	\$7,000	\$7,000	\$7,000	\$7,000	\$7,000	\$35,000
Rogers Lake	\$155,000	\$0	\$0	\$100,000	\$100,000	\$355,000
Sibley	\$22,000	\$22,000	\$22,000	\$22,000	\$22,000	\$110,000
Tot Lot	\$0	\$0	\$0	\$0	\$0	\$0
Valley	\$5,000	\$35,000	\$105,000	\$202,500	\$102,500	\$450,000
Valley View Heights	\$0	\$0	\$50,000	\$0	\$0	\$50,000
Victoria Highlands	\$0	\$0	\$0	\$0	\$0	\$0
Wentworth	\$370,000	\$60,000	\$0	\$0	\$50,000	\$480,000
Total	\$959,000	\$424,000	\$244,000	\$516,500	\$281,500	\$2,425,000

Funding Sources	2019	2020	2021	2022	2023	Total
Municipal Bond Sales	\$0	\$100,000	\$0	\$0	\$0	\$100,000
Special Park Fund	\$590,000	\$100,000	\$50,000	\$225,000	\$150,000	\$1,115,000
Other Government Unit Funding/Levy	\$289,000	\$94,000	\$94,000	\$91,500	\$31,500	\$600,000
Sanitary Sewer Utility Fund	\$0	\$0	\$0	\$0	\$0	\$0
Special Assessments	\$0	\$0	\$0	\$0	\$0	\$0
Storm Water Utility Fund	\$80,000	\$130,000	\$100,000	\$200,000	\$100,000	\$610,000
Water Revenue Fund	\$0	\$0	\$0	\$0	\$0	\$0
Total	\$959,000	\$424,000	\$244,000	\$516,500	\$281,500	\$2,425,000



PARKS IMPROVEMENT & MAINTENANCE PLAN 2019-2023

CITY OF MENDOTA HEIGHTS

PARK NAME: Friendly Hills

TOTAL COST: \$60,000

Park Size (Acres): 15.5

Park Description

Friendly Hills Park is located at 2360 Pueblo Lane

Park Location



Park Amenities

One Youth Softball Field - Outfield Depth 220/250/225 feet, not fenced.
 Youth Overlay Soccer field in Fall.
 Hockey Rink (192' x 80') with asphalt surface, lighting, and warming house. Adjacent free skating rink.
 Two Picnic Shelters - No electric. Additional Picnic Area next to Tennis Courts.
 Double (2) Tennis Courts - Fenced, Surfaced replaced in 2009/2010.
 Playground area (New surfacing, borders, equipment in 2009).
 Concrete Basketball Half Court.
 Grass Volleyball Court.
 Paved Walking Trail, Open Space, Pond.

Park Needs

New Hockey boards, Warming House and lighting in 2017.
 Invasive Species, Tennis Court Resurfacing, Playground equipment.

Project Costs	2019	2020	2021	2022	2023	Total
Tennis Court Resurfacing				\$60,000		\$60,000
Playground Equipment						\$0
Total	\$0	\$0	\$0	\$60,000	\$0	\$60,000

Funding Sources	2019	2020	2021	2022	2023	Total
Municipal Bond Sales						\$0
Special Park Funds						\$0
Levy				\$60,000		\$60,000
Sanitary Sewer Utility Funds						\$0
Special Assessments						\$0
Storm Sewer Utility Funds						\$0
Water Utility Funds						\$0
Total	\$0	\$0	\$0	\$60,000	\$0	\$60,000



PARKS IMPROVEMENT & MAINTENANCE PLAN 2019-2023

CITY OF MENDOTA HEIGHTS

PARK NAME: Hagestrom King

TOTAL COST: \$180,000

Park Size (Acres): 9.6

Park Description

Located at 555 Mendota Heights Road.

Park Location



Park Amenities

One Youth Baseball/Softball Field Outfield at 240 feet, fenced, backstop safety net, no pitching mound.
 Playground Area. 2003 Updated
 Concrete Basketball Half Court.
 Pond, Natural Area, Paved Walking Trails

Park Needs

Playground equipment, Zipline

Project Costs	2019	2020	2021	2022	2023	Total
Playground Equipment	\$120,000					\$120,000
Dedicated Pickleball	\$60,000					\$60,000
Total	\$180,000	\$0	\$0	\$0	\$0	\$180,000

Funding Sources	2019	2020	2021	2022	2023	Total
Municipal Bond Sales						\$0
Special Park Funds	\$180,000					\$180,000
Levy						\$0
Sanitary Sewer Utility Funds						\$0
Special Assessments						\$0
Storm Sewer Utility Funds						\$0
Water Utility Funds						\$0
Total	\$180,000	\$0	\$0	\$0	\$0	\$180,000



PARKS IMPROVEMENT & MAINTENANCE PLAN 2019-2023

CITY OF MENDOTA HEIGHTS

PARK NAME: Ivy Hills

Park Size (Acres): 9.1

TOTAL COST: \$125,000

Park Description

Ivy Hills is located at 645 Butler Avenue.

Park Location



Park Amenities

One Youth Softball Field - Outfield at 180/240/180 feet - Not Fenced.
 Playground Area. 2007 Update
 Concrete Basketball Half Court.
 Pond, Natural Area, Paved Walking Trail

Park Needs

Playground equipment, expand basketball

Project Costs	2019	2020	2021	2022	2023	Total
Pond Dredging						\$0
Playground Equipment				\$100,000		\$100,000
Expand Basketball Court				\$25,000		\$25,000
Total	\$0	\$0	\$0	\$125,000	\$0	\$125,000

Funding Sources	2019	2020	2021	2022	2023	Total
Municipal Bond Sales						\$0
Special Park Funds				\$125,000		\$125,000
Levy						\$0
Sanitary Sewer Utility Funds						\$0
Special Assessments						\$0
Storm Sewer Utility Funds	\$0					\$0
Water Utility Funds						\$0
Total	\$0	\$0	\$0	\$125,000	\$0	\$125,000



PARKS IMPROVEMENT & MAINTENANCE PLAN 2018-2022

CITY OF MENDOTA HEIGHTS

PARK NAME: Lexington Marie

TOTAL COST: \$200,000

Park Size (Acres): 3.9

Park Description

Located on the Southeast corner of Lexington Avenue and Marie Avenue.

Park Location



Park Amenities

Pond, Natural Area, Paved Walking Trail.

Park Needs

Dredge Pond, Trail Improvements for safety enhancement along Lexington Avenue.

Project Costs	2018	2019	2020	2021	2022	Total
Dredge Pond, Improvements		\$100,000				\$100,000
Trail Improvements		\$100,000				\$100,000
Total	\$0	\$200,000	\$0	\$0	\$0	\$200,000

Funding Sources	2018	2019	2020	2021	2022	Total
Municipal Bond Sales		\$100,000				\$100,000
Municipal State Aid Funds						\$0
Other Government Unit Funding						\$0
Sanitary Sewer Utility Funds						\$0
Special Assessments						\$0
Storm Sewer Utility Funds		\$100,000				\$100,000
Water Utility Funds						\$0
Total	\$0	\$200,000	\$0	\$0	\$0	\$200,000



PARKS IMPROVEMENT & MAINTENANCE PLAN 2019-2023

CITY OF MENDOTA HEIGHTS

PARK NAME: Marie

Park Size (Acres): 6.6

TOTAL COST: \$180,000

Park Description

Marie Park is located at 1780 Lilac Lane.

Park Location



Park Amenities

One Youth Softball Field - Outfield at 180/210/200 feet - Not Fenced
 Hockey Rink (200' x 84') with asphalt surface, lighting, and warming house. Adjacent free skating rink.
 Playground Area. 2005 Update
 Concrete Basketball Half Court.
 Pond, Natural Area, Paved Walking Trails.

Park Needs

Pond Maintenance, Playground Equipment, basketball hoops, Tennis Court Resurfacing.

Tennis Court and Basketball proposed for 2018

Project Costs	2019	2020	2021	2022	2023	Total
Tennis Courts	\$60,000					\$60,000
Basketball Hoops	\$20,000					\$20,000
Playground Equipment		\$100,000				\$100,000
Total	\$80,000	\$100,000	\$0	\$0	\$0	\$180,000

Funding Sources	2019	2020	2021	2022	2023	Total
Municipal Bond Sales						\$0
Special Park Funds	\$20,000	\$100,000				\$120,000
Levy	\$60,000					\$60,000
Sanitary Sewer Utility Funds						\$0
Special Assessments						\$0
Storm Sewer Utility Funds						\$0
Water Utility Funds						\$0
Total	\$80,000	\$100,000	\$0	\$0	\$0	\$180,000



PARKS IMPROVEMENT & MAINTENANCE PLAN 2019-2023

CITY OF MENDOTA HEIGHTS

PARK NAME: Mendakota

TOTAL COST: \$200,000

Park Size (Acres): 19.7

Park Description

Is located at 2171 Dodd Road

Park Location



Park Amenities

Four Adult size softball fields - 290' & 300' outfield fences.
 One Youth Soccer Field - 240'x120'.
 Concession Building with Restrooms and elevated covered viewing deck.
 Double Batting Cage - 30'x80' with electrical outlets.
 Asphalt Basketball Full Court.
 Playground Area. 2013 Update
 Picnic Shelter, Paved Walking Paths.

Park Needs

ADA Improvements

Project Costs	2019	2020	2021	2022	2023	Total
Playground Equipment (ADA)						\$0
Dugouts/field	\$140,000					\$140,000
Field Lighting						\$0
Parking Lot			\$60,000			\$60,000
Total	\$140,000	\$0	\$60,000	\$0	\$0	\$200,000

Funding Sources	2019	2020	2021	2022	2023	Total
Municipal Bond Sales						\$0
Special Park Funds	\$140,000					\$140,000
Levy			\$60,000			\$60,000
Sanitary Sewer Utility Funds						\$0
Special Assessments						\$0
Storm Sewer Utility Funds						\$0
Water Utility Funds						\$0
Total	\$140,000	\$0	\$60,000	\$0	\$0	\$200,000



PARKS IMPROVEMENT & MAINTENANCE PLAN 2019-2023

CITY OF MENDOTA HEIGHTS

PARK NAME: Rogers Lake

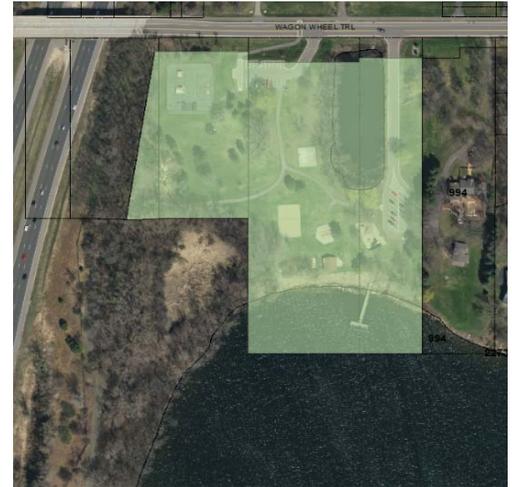
TOTAL COST: \$355,000

Park Size (Acres): 8.7

Park Description

Rogers Lake Park is located at 1000 Wagon Wheel Trail.

Park Location



Park Amenities

Sand Volleyball - Timber border.
 Skate Park - Tier 1 (Max 3' height, no supervision).
 Picnic Shelter with electric.
 Fishing Pier, No Swim Beach.
 Concrete Basketball Half Court.
 Playground Area. 2008 Update
 Pond, Natural Areas, Paved Walking Trails

Park Needs

Skate Park Maintenance, Pond Dredging, Running Water, ADA ramp at pavillion

Project Costs	2019	2020	2021	2022	2023	Total
ADA Ramp	\$5,000					\$5,000
Running Water/bathrooms	\$150,000					\$150,000
Playground Equipment					\$100,000	\$100,000
Pond Dredging				\$100,000		\$100,000
Total	\$155,000	\$0	\$0	\$100,000	\$100,000	\$355,000

Funding Sources	2019	2020	2021	2022	2023	Total
Municipal Bond Sales						\$0
Special Park Funds	\$150,000				\$100,000	\$250,000
Levy	\$5,000					\$5,000
Sanitary Sewer Utility Funds						\$0
Special Assessments						\$0
Storm Sewer Utility Funds				\$100,000		\$100,000
Water Utility Funds						\$0
Total	\$155,000	\$0	\$0	\$100,000	\$100,000	\$355,000



PARKS IMPROVEMENT & MAINTENANCE PLAN 2019-2023

CITY OF MENDOTA HEIGHTS

PARK NAME: Valley

Park Size (Acres): 93.5

TOTAL COST: \$450,000

Park Description

Valley Park is located at 821 Marie Avenue.

Park Location



Park Amenities

One Youth Baseball Field - Outfield at 175 feet, No Fence.
 Double Tennis Court with Sport Tiles.
 Picnic Shelter - No Electricricity.
 Ashpalt Basketball Half Court.
 Playground Area. 2007 Update
 Nature Areas, Paved Walking Trails.

Park Needs

Streambank Stabilization, Weir Construction, Invasive species, Playground Equipment.

Trail Maintenace needs exist. Dakota County interested in managing trail in future.

Project Costs	2019	2020	2021	2022	2023	Total
Power Line Pollinator Planting	\$2,500	\$2,500	\$2,500			\$7,500
Buckthorn/Garlic Mustard	\$2,500	\$2,500	\$2,500	\$2,500	\$2,500	
Weir Construction		\$30,000				
Streambank Stabilization			\$100,000	\$100,000	\$100,000	
Playground Equipment				\$100,000		
Total	\$5,000	\$35,000	\$105,000	\$202,500	\$102,500	\$7,500

Funding Sources	2019	2020	2021	2022	2023	Total
Municipal Bond Sales						\$0
Special Park Funds				\$100,000		\$100,000
Levy	\$5,000	\$5,000	\$5,000	\$2,500	\$2,500	\$20,000
Sanitary Sewer Utility Funds						\$0
Special Assessments						\$0
Storm Sewer Utility Funds		\$30,000	\$100,000	\$100,000	\$100,000	\$330,000
Water Utility Funds						\$0
Total	\$5,000	\$35,000	\$105,000	\$202,500	\$102,500	\$450,000



PARKS IMPROVEMENT & MAINTENANCE PLAN 2019-2023

CITY OF MENDOTA HEIGHTS

PROJECT NAME: Valley View Heights

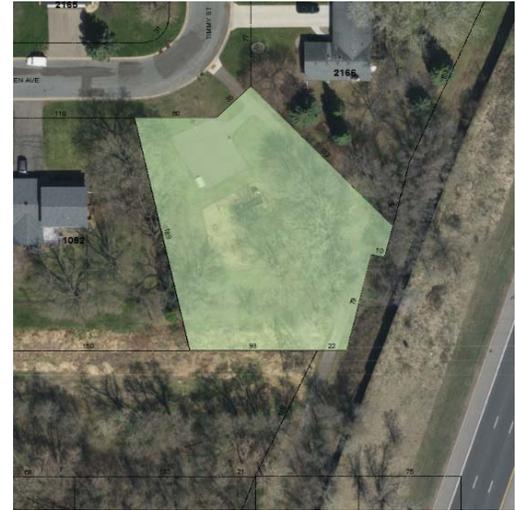
TOTAL COST: \$50,000

Park Size (Acres): 0.6

Park Description

Valley View Heights Park is located at 1056 Cullen Avenue.

Park Location



Park Amenities

Asphalt Basketball Half Court.
Playground Area. 2006 Update
Paved Walking Trail.

Park Needs

Playground Equipment, ADA needs

Project Costs	2019	2020	2021	2022	2023	Total
Playground Equipment			\$50,000			\$50,000
						\$0
Total	\$0	\$0	\$50,000	\$0	\$0	\$50,000

Funding Sources	2019	2020	2021	2022	2023	Total
Municipal Bond Sales						\$0
Special Park Funds			\$50,000			\$50,000
Levy						\$0
Sanitary Sewer Utility Funds						\$0
Special Assessments						\$0
Storm Sewer Utility Funds						\$0
Water Utility Funds						\$0
Total	\$0	\$0	\$50,000	\$0	\$0	\$50,000



PARKS IMPROVEMENT & MAINTENANCE PLAN 2019-2023

CITY OF MENDOTA HEIGHTS

PARK NAME: Wentworth

TOTAL COST: \$480,000

Park Size (Acres): 10.4

Park Description

Wentworth Park is located at 739 Wentworth Avenue

Park Location



Park Amenities

One Youth Softball Field - Outfield at 220/235/210 Feet, No Fence.
 Youth Overlay Soccer in Fall.
 Concrete Basketball Half Court.
 Two Picnic Shelters.
 Hockey Rink (200' x 84') with lighting, and warming house. Adjacent free skating rink.
 Double Tennis Court.
 Playground Area. 2005 Update
 Pond, Nature Areas, Paved Walking Trails.

Park Needs

Rink Lighting, Warming House, Running Water, Tennis Court Resurfacing, Park Redesign, Playground Equipment

Project Costs	2019	2020	2021	2022	2023	Total
Rink Lighting	\$55,000					\$55,000
Parking lot/Trails	\$80,000					\$80,000
Running Water					\$50,000	\$50,000
Playground Equipment	\$100,000					\$100,000
Tennis Court Resurfacing		\$60,000				\$60,000
Pond Dredging	\$80,000					\$80,000
Warming House	\$55,000					\$55,000
Total	\$370,000	\$60,000	\$0	\$0	\$50,000	\$480,000

Funding Sources	2019	2020	2021	2022	2023	Total
Municipal Bond Sales						\$0
Special Park Funds	\$100,000				\$50,000	\$150,000
Levy	\$190,000	\$60,000				\$250,000
Sanitary Sewer Utility Funds						\$0
Special Assessments						\$0
Storm Sewer Utility Funds	\$80,000					\$80,000
Water Utility Funds						\$0
Total	\$370,000	\$60,000	\$0	\$0	\$50,000	\$480,000



DATE: January 4, 2015
TO: Mayor and City Council
FROM: Sloan Wallgren, Recreation Program Coordinator
SUBJECT: Declaring the City of Mendota Heights a Pollinator-Friendly City

Background

The Parks and Recreation Commission is consistently looking for ways to improve the Mendota Heights community and parks. Recent research has shown that the pollinator population is declining nationwide due to the loss of basic habitat, the simplification of landscapes, and the increased use of neonicotinoid systemic insecticides. It is important to participate in pollinator-friendly practices, because pollinators are a necessary component to a healthy ecosystem.

At the October 13, 2015 Parks and Recreation Commission meeting, the commission passed a motion for the council to consider, which would declare Mendota Heights to be a Pollinator-Friendly City. It further outlined ways to help the desired result to become a reality. The following is a list of the actions steps the commission recommends for implementation in order for the City of Mendota Heights to become a Pollinator-Friendly City:

1. The City would make sure that future plantings on city property are pollinator-friendly.
2. The City will include an article in the April 2016 issue of the Heights Highlights to educate the residents as to why it is important to be pollinator-friendly and how to become pollinator-friendly.
3. The City will provide links on the city's website to pollinator-friendly websites, which will include best practices and a list of pollinator-friendly plants.
4. Individual members of the Commission would work to establish a plant sharing program.
5. The City will continue to work with Green River Greening to plant pollinator-friendly plants when the opportunity presents itself.
6. The City would continue to not use neonicotinoid systemic insecticides.

Staff has attached a sample of the resolution and an example of the information that would be available on the City's website.

Budget Impact

There will be no impact to the budget.

Recommendations

The Parks and Recreation Commission recommends that the City Council adopt a resolution, declaring the City's intent to become a Pollinator –Friendly community.

**CITY OF MENDOTA HEIGHTS
DAKOTA COUNTY, MINNESOTA**

RESOLUTION 2016-01

**RESOLUTION DECLARING THE CITY OF MENDOTA HEIGHTS
TO BE A POLLINATOR-FRIENDLY COMMUNITY**

WHEREAS, bees and other pollinators are a necessary component of a healthy ecosystem and food system, providing pollination of plants in order to grow vegetables, herbs and fruits; and

WHEREAS, pollinator populations are in sharp decline due to an ongoing loss of habitat as a result of human land practices, which is coupled with a simultaneous large-scale expansion of insecticide use by homeowners, landscapers, property managers and farmers; and

WHEREAS, neonicotinoid and other systemic insecticides have been shown to cause illness and death to bees and pollinators; and

WHEREAS, alternative land management practices are available that dramatically increase pollinator forage while decreasing maintenance costs; and

WHEREAS, the monetary and social cost of maintaining pollinator-friendly landscapes can be less expensive than costs associated with maintaining chemically-treated monocrop landscapes; and

WHEREAS, many Mendota Heights residents and businesses are pledging to manage their land in a pollinator-friendly way; and

WHEREAS, acting in a pollinator friendly manner is not expected to inhibit any potential treatments for Emerald Ash Borer infestation.

NOW, THEREFORE, BE IT RESOLVED by the City Council of the City of Mendota Heights, Minnesota, that the City of Mendota Heights is hereby declared a Pollinator-Friendly Community, and that the City celebrates current policies and practices that protect and support pollinator health by minimizing the use of insecticides.

BE IT FURTHER RESOLVED that the City of Mendota Heights urges all Mendota Heights property owners, residents, businesses, institutions and neighborhoods to become more pollinator-friendly by adopting practices including:

- Committing to avoiding the use of insecticides, including systemic insecticides, on their property;
- Avoiding the planting of flowering plants which are treated with systemic insecticides;
- Planting more pollinator-supporting forage on their property, and adopting organic or chemical-free lawn and landscaping practices.

Adopted by the City Council of the City of Mendota Heights this 5th day of January, 2016.

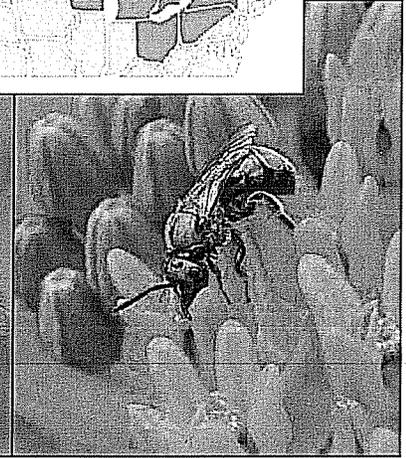
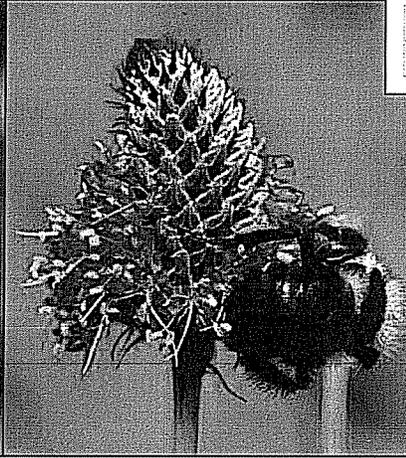
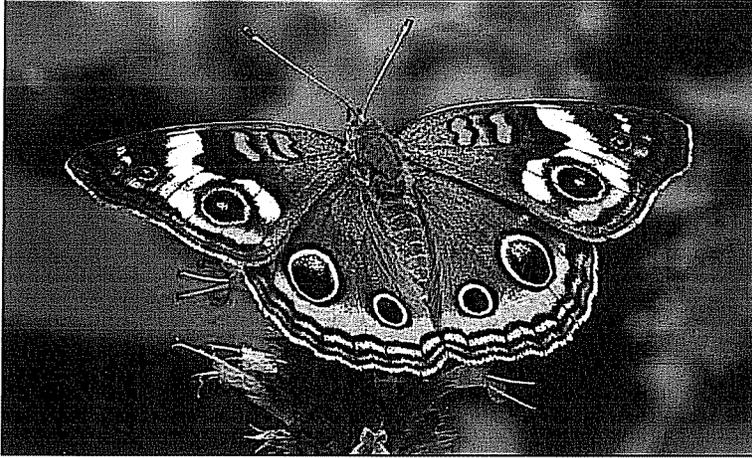
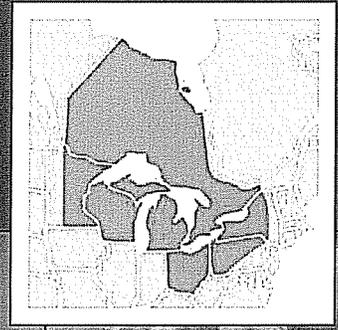
Sandra Krebsbach, Mayor

ATTEST:

Lorri Smith, City Clerk

POLLINATOR PLANTS

Great Lakes Region



Purple giant hyssop, purple prairie clover, and butterfly milkweed.

The Great Lakes region includes an incredibly diverse range of plant communities from wild blueberry barrens and northern boreal forest in Ontario and northern Minnesota, to tallgrass prairie in Wisconsin and Ohio, and mixed broadleaf forests in Ohio, Michigan, Pennsylvania, and New York.

Corresponding to this striking diversity of plant communities is an equally remarkable range of pollinators including the endangered Karner blue butterfly (*Lycaeides melissa samuelis*), more than 20 species of bumble bees (*Bombus* spp.), and the northernmost population of migrating monarch butterflies (*Danaus plexippus*). As a group, these and other pollinators maintain healthy, productive plant communities, provide food that sustains wildlife, and play an essential role in crop production.

Providing wildflower-rich habitat is the most significant action you can take to support pollinators. Adult bees, butterflies, and other pollinators require nectar as their primary food source. Female bees also collect pollen as food for their offspring. Native plants, which are adapted to local soils and climates, are usually the best sources of nectar and pollen for native pollinators. Incorporating native wildflowers, shrubs, and trees into any landscape promotes local biological diversity and provides shelter and food for a diversity of wildlife. Additional advantages of native plants are that they often require less water than non-natives, do not require fertilizers, and are less likely to become weedy.

This guide features regional native plants that are highly attractive to pollinators and are well-suited for small-scale plantings in gardens, on business and school campuses, in urban greenspaces, and in farm field borders. In addition to supporting native bees and honey bees, many of these plants attract nectar-seeking butterflies, moths, and hummingbirds, and some are host plants for butterfly and moth caterpillars. With few exceptions, these species occur broadly across the region and can be purchased as seed or transplants. Please consult regional Floras, the Biota of North America's North American Plant Atlas (<http://bonap.net/napa>), or the USDA's PLANTS database (<http://plants.usda.gov>) for details on species's distributions in your area.

**BRING BACK
THE
POLLINATORS**
A Xerces Society Conservation Campaign

Our Bring Back the Pollinators campaign is based on four principles: grow pollinator-friendly flowers, protect bee nests and butterfly host plants, avoid pesticides, and spread the word.

You can participate by taking the Pollinator Protection Pledge and registering your habitat on our nationwide map of pollinator corridors.

www.bringbackthepollinators.org

THE XERCES SOCIETY
FOR INVERTEBRATE CONSERVATION

Protecting the life that sustains us

Bloom Period	Common Name	Scientific Name	Life Cycle	Flower Color	Max. Height (Feet)	Water Needs	Notes
			Annual, Biennial, or Perennial		(Feet)	Low, Medium, or High	Max. Height is an average. Individual plants may vary.
Early	Lanceleaf coreopsis	<i>Coreopsis lanceolata</i>	P	yellow	2	L	This early bloomer can hold its own among grasses and taller species; bees and syrphid flies are common visitors
	Smooth penstemon	<i>Penstemon digitalis</i>	P	white	2	M	Semi-evergreen; prolific nectar producer; visited by a huge diversity of butterflies, moths, and bees, including honey bees
Mid	Wild lupine	<i>Lupinus perennis</i>	P	blue	2	L	Larval host plant for the endangered Karner blue butterfly (<i>Lycæides melissa samuelis</i>), shown, and various other blue butterflies
	Butterfly milkweed	<i>Asclepias tuberosa</i>	P	orange	3	L	Milkweeds (<i>Asclepias</i> spp.) are host plants for the monarch butterfly (<i>Danaus plexippus</i>), and nectar sources for many bees
Mid	Dotted mint	<i>Monarda punctata</i>	A, B, P	purple	3	M	Tolerates dry, sandy soils; blooms prolifically; highly attractive to beneficial wasps and bees, including honey bees
	Great blue lobelia	<i>Lobelia siphilitica</i>	P	blue	3	H	Great blue lobelia is an exceptional bumble bee plant, and is excellent for rain gardens
Mid	Purple coneflower	<i>Echinacea purpurea</i>	P	purple	4	M	Visitors include bees in the genera <i>Bombus</i> , <i>Melissodes</i> , and <i>Svaestra</i> , and the leafcutter bee (<i>Megachile pugnata</i>)
	Purple prairie clover	<i>Dalea purpurea</i>	P	purple	2	L	Honey bees and bumble bees are voracious visitors, as well as several specialist polyester bees (<i>Colletes</i> spp.)
Mid-Late	Virginia mountain mint	<i>Pycnanthemum virginianum</i>	P	white	3	M	This and related species have fragrant foliage, and are visited by blue and copper butterflies, honey bees, and more
	Wild bergamot	<i>Monarda fistulosa</i>	P	purple	4	M	Hawk moths, hummingbirds, and long-tongued bumble bees (such as <i>Bombus pensylvanicus</i>) are common visitors
Mid-Late	Cup plant	<i>Siphium perfoliatum</i>	P	yellow	8	M	Attracts many bees and butterflies; thick hollow stems make excellent nests for leafcutter bees and small carpenter bees (<i>Ceratina</i> spp.)
	Prairie blazing star	<i>Liatris pycnostachya</i>	P	purple	5	M	Blazingstars (<i>Liatris</i> spp.) support a broad community of butterflies including monarchs, swallowtails, skippers, and sulfurs
Late	Purple giant hyssop	<i>Agastache scrophularifolia</i>	P	purple	6	M	This and other wild hyssops (<i>Agastache</i> spp.) provide long-lasting, nectar-rich flowers and mint-like foliage
	Rattlesnake master	<i>Eryngium yuccifolium</i>	P	white	5	M	Attracts incredible insect diversity and is the host plant for the rattlesnake master borer moth (<i>Papaipernia eryngii</i>)
Late	Joe Pye weed	<i>Eutrochium fistulosum</i>	P	pink	7	H	Primarily known as a butterfly plant, Joe Pye weed also attracts bees; tolerant of partial shade and wet soils
	Wingstem	<i>Verbesina alternifolia</i>	P	yellow	6	H	A major honey producer; great as a shade-tolerant rain garden or wetland edge plant; may be hard to find in nurseries
Late	Bottle gentian	<i>Gentiana andrewsii</i>	P	blue	2	M	Its flower petals never open; almost exclusively pollinated by bumble bees, which pry the petals apart to climb inside
	Calico aster	<i>Symphoricaricum lateriflorum</i>	P	white	3	M	Its shallow nectararies attract more insect diversity than some related species; is also tolerant of partial shade
Late	Field thistle	<i>Cirsium discolor</i>	B, P	purple	6	M	Not to be confused with non-native thistles; a now uncommon but important plant for butterflies and bumble bees
	New England aster	<i>Symphoricaricum novae-angliae</i>	P	purple	6	M	One of the latest fall-blooming plants; frequented by honey bees and pre-hibernation bumble bee queens
Early	Showy goldenrod	<i>Solidago speciosa</i>	P	yellow	5	M	Goldenrods (<i>Solidago</i> spp.) are frequented by beneficial solitary wasps, pollen-eating soldier beetles, honey bees, and much more
Early	Cockspur hawthorn	<i>Crataegus crus-galli</i>	P	white	35	L	Tough native tree that attracts bumble bees, honey bees, species of mining bees (<i>Andrena</i> spp.), as well as songbirds
Mid	Leadplant	<i>Amorpha canescens</i>	P	purple	3	L	Leadplant is generally tolerant of disturbed soils; readily visited by leafcutter bees, honey bees, and other beneficial insects
Mid	New Jersey tea	<i>Ceanothus americanus</i>	P	white	4	M	Pollinator magnet that attracts species of flies, wasps, bees, and butterflies; slow growing and prone to deer browsing

Planting for Success

Sun Exposure

Most pollinator-friendly plants prefer sites that receive full sun throughout most of the day and are mostly open, with few large trees. A southern exposure can provide the warmest habitat, but is not required.

Plant Diversity

Choosing a variety of plants with overlapping and sequential bloom periods will provide food for pollinators throughout the seasons.

Habitat Size and Shape

Habitat patches that are bigger and closer to other patches are generally better than those that are smaller and more isolated from one another. However, even a small container garden can attract and support pollinators!

Planting Layout

Flowers clustered into clumps of one species will attract more pollinators than individual plants scattered through a habitat patch. Where space allows, plant clumps of the same species within a few feet of one another.

Seeds or Transplants

It is usually cheaper to establish large habitat areas from seed; however, seeding native wildflowers on a large-scale is an art unto itself. For step-by-step instructions, see *Establishing Pollinator Meadows from Seed* and the Pollinator Habitat Installation Guides listed in the Additional Resources section. For smaller areas like gardens, transplants are usually easier to use and will bloom faster than plants started from seed.

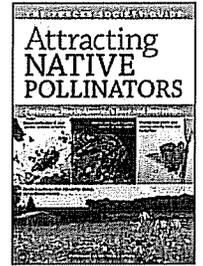
Protect Pollinators from Insecticides

Although dependent on timing, rate, and method of application, all insecticides have the potential to poison or kill pollinators. Systemic insecticides in particular have received significant attention for their potential role in pollinator declines (imidacloprid, dinotefuran, clothianidin, and thiamethoxam are examples of systemic insecticides now found in various farm and garden products). Because plants absorb systemic insecticides as they grow, the chemicals become distributed throughout plant tissues and are sometimes present in pollen and nectar. You can help protect pollinators by avoiding the use of these and other insecticides. Before purchasing plants from nurseries and garden centers, be sure to ask whether they have been treated with insecticides. To read more about threats to pollinators from pesticides, please visit: www.xerces.org/pesticides.

Additional Resources

Attracting Native Pollinators

Our best-selling book highlights the role of native pollinators in natural ecosystems, gardens, and farms. This comprehensive guide includes information about pollinator ecology, detailed profiles of over 30 common bee genera, and habitat designs for multiple landscapes with over 50 pages of fully illustrated regional plant lists. Available in bookstores everywhere, and through www.xerces.org/books.



The Xerces Pollinator Conservation Resource Center

Our Pollinator Conservation Resource Center includes regional information on pollinator plants, habitat conservation guides, nest management instructions, bee identification and monitoring resources, and directories of native pollinator plant nurseries. www.xerces.org/pollinator-resource-center

Lady Bird Johnson Wildflower Center

The Xerces Society has collaborated with the Lady Bird Johnson Wildflower Center to create lists of plants that are attractive to native bees, bumble bees, honey bees, and other beneficial insects, as well as plant lists with value as nesting materials for native bees. These lists can be narrowed down with additional criteria such as state, soil moisture, bloom time, and sunlight requirements. The Center's website also features image galleries, how-to articles on native plant gardening, and more. www.wildflower.org/conservation_pollinators

Establishing Pollinator Meadows from Seed

These guidelines provide step-by-step instructions for establishing pollinator meadows from seed in areas that range in size from a small backyard garden up to an acre. Topics include: site selection, site preparation, plant selection, planting techniques, and ongoing management. www.xerces.org/establishing-pollinator-meadows-from-seed

Pollinator Habitat Installation Guides

These regional guidelines, developed in collaboration with the USDA's Natural Resources Conservation Service, provide in-depth practical guidance on how to install foraging and nesting habitat for bees in the form of wildflower meadow plantings or linear rows of native flowering shrubs. Region-specific seed mixes and plant recommendations are included in the appendices of each guide. www.xerces.org/pollinator-conservation/agriculture/pollinator-habitat-installation-guides

Acknowledgements

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Written by Nancy Lee Adamson, Brianna Borders, Jessa Cruz, Sarah Foltz Jordan, Kelly Gill, Jennifer Hopwood, Eric Lee-Mäder, Ashley Minnerath, and Mace Vaughan. Designed by Kaitlyn Rich. Formatted by Sara Morris. PHOTO CREDITS: Nancy Lee Adamson, The Xerces Society: 1. Aecole*: 3. Susan Ellis, Bugwood.org: 7. Sarah Foltz Jordan, The Xerces Society: 4 (inside and cover), 8 (inside), 10. Peter Gorman (pchgorman)*: 17, 20, 24. Rich Hatfield, The Xerces Society: 14, 15. Jennifer Hopwood, The Xerces Society: 5. JanetandPhil*: 21. Eric Lee-Mäder, The Xerces Society: 9. Joshua Mayer (wackybadger)*: 8 (cover). Dan Mullen (milesizz)*: 18, 22. Tom Potterfield (tpotterfield)*: 2, 6, 11, 13 (inside and cover), 16. Scott Seigfried: 12, 19, 23. *Via flickr.com. Photographs remain under the copyright of the photographer.

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2019 – 2023
**Trail Improvement
and Maintenance Plan**



OVERVIEW OF TRAIL SYSTEM

Park and Trail System

The City of Mendota Heights provides 27.9 miles of city trails and on street connections (wide shoulders), 2.7 miles of county trails, 3.8 miles of MnDOT maintained on street connections, and 3.2 miles of privately owned and maintained sidewalks.

In 1989, a voter-approved park referendum was passed which funded upgrading 8 existing neighborhood parks, constructing 5 new parks, and constructing 7.8 miles of trails.

The City of Mendota Heights currently has sufficient park acreage to serve its residents, although not all residents have equal access to those facilities. Future improvements will focus on updating existing facilities and adding trail connections to neighborhoods that lack access to parks. Trails are an important component and are the focus of this plan because they connect neighborhoods to one another and the community to regional recreational opportunities. A comprehensive trail system also enhances alternative opportunities for transportation.

Identified Trail Gaps

Improved trail connections are important because many residential areas are divided by highways and arterial roads. The recent construction of the Big Rivers Regional Trail along the Minnesota River and the trail connection to the I-35E Bridge trailway have also heightened the awareness and demand for improved access to the river valley. Access to the Big Rivers Regional Trail is difficult due to the significant elevation changes. As a result, many areas of the community cannot be easily accessed on bikes, roller blades or foot from other areas of the community. Additional or improved trail connections create opportunities for alternative transportation and healthy living and are needed to provide residents access to City parks and other recreational opportunities in the region.

Trail gaps and proposed connections/improvements planned by the City are shown on the existing trail system map and are listed below.

Proposed Connection/Improvements (As identified in the Street Improvement Plan (SIP))

- Dodd Road (Market Street to Wesley Lane)

Identified Gaps

- Mendota Heights Road (Highway 13 to Scenic Overlook)
- Dodd Road (Wesley Lane to Marie Avenue)
- Dodd Road (Marie Avenue to Delaware Avenue)
- Lexington Avenue (Wagon Wheel to Tom Thumb)

TIMP OVERVIEW

Trail Improvement and Maintenance Plan (TIMP)

The Trail Improvement and Maintenance Plan (TIMP) is a planning tool that forecasts the city's needs over a five year period based on city-adopted long-range plans, goals and policies. The TIMP includes detailed descriptions of trail improvement projects and maintenance projects the city anticipates to initiate during the five-year period. The TIMP is updated annually to ensure consistency and the reflection of changing demands and financial resources.

TIMP Goals

The goals of the TIMP are to:

- Provide a balanced program for trail improvements given anticipated funding revenues over a five-year planning period.
- Enable the Mendota Heights City Council to evaluate the needs of the entire city objectively.
- Anticipate needed trail improvements in advance, rather than being overlooked until critically needed.
- Provide a plan for trail improvements that can be used in preparing the budget for the coming fiscal year.

Project Details

The trail improvement projects being reported in the TIMP will be shown within the following sections:

- Preventative Maintenance
- Trail Rehabilitation
- Trail Construction

Preventative Maintenance

Preventative maintenance activities that are performed on a continuous schedule are tasks such as trail sweeping, crack sealing, pothole patching, and spot repairs. Preventative maintenance activities that are performed on an as-needed basis are tasks such as snow and ice removal, drainage control, signage replacement, and graffiti control. Trail maintenance activities are funded through the Public Works Parks Department - Parks Maintenance Fund out of the General Fund Levy.

Trail Sweeping

Trail sweeping is an important aspect of trail maintenance, helping ensure trail user safety. Sweeping should be performed on a regular schedule.

Crack Sealing, Pothole Patching and Spot Repairs

Repair of bituminous trails should be closely tied to trail inspection and setting priorities for repairs. The time between observation and repair of a trail will depend on whether the needed repair is deemed a hazard, to what degree the needed repair will affect the safety

of the trail user, and whether the needed repair can be performed by the trail maintenance crew or if it is so extensive that it needs to be repaired by contracted services.

Snow and Ice Removal

The Mendota Heights trail system is open year round, requiring snow and ice removal. Removal of ice and snow is important for safety reasons and long term life expectancy of the trail system. Attention must be paid to those areas where there is a grade change and/or curves.

Drainage Control

In places where low spots on the trail catch water, trail surfaces should be raised, or drains built, to carry water away. Some trail drainage control can be achieved through the proper edging of trails. If trail drainage is corrected near steep slopes, the possibility of erosion must be considered.

Signage Replacement

Trail signs fall into two categories: safety and information. Trail users should be informed of their location, where they are going, and how to safely use trails. Signs related to safety are most important, thus they should receive the highest priority. Information signage can enhance the trail users experience and is prioritized behind safety signage.

Graffiti Control

The key to graffiti control is prompt observation and removal. Graffiti should be noted during trail inspections and the graffiti should be removed as soon as possible.

Trail Rehabilitation

A trail rehabilitation project will be defined as a project in which the trail is modified or supplemented in-place, to restore the serviceability of the existing trail.

The City of Mendota Heights maintains approximately 27.9 miles of trails of which 26.2 miles are off-street trails maintained by the Parks Department and 1.7 miles are on-street connections (wide shoulders) maintained by the Street Department.

As the trail infrastructure ages, it requires rehabilitation to protect or extend its useful life. If the trail infrastructure is not preserved, it will deteriorate prematurely and its benefit to the community will be lost. As a result, the TIMP reflects the broad direction of the City Council to preserve existing trail infrastructure before they fall into such disrepair that expensive reconstruction is required. Typically, the City of Mendota Heights completes trail rehabilitation projects in conjunction with nearby street improvement projects and as funding is available.

Trail Construction

A trail construction project will be defined as a project whereby many or all meaningful elements of a new trail (previously non-existent) are being constructed. Typically, the City of Mendota Heights completes new trail construction projects as funding is available.

Trail Facilities

Trail improvements totaling approximately \$1.0 million are planned for in the 2019-2023 TIMP.

Existing Trail System

Summary of Trail Project Costs and Funding Sources

Improvement Projects



TRAIL IMPROVEMENT & MAINTENANCE PLAN 2019-2023

CITY OF MENDOTA HEIGHTS

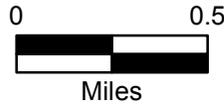
SUMMARY OF TRAIL PROJECT COSTS AND MAINTENANCE NEEDS

Project Name	Trail LF	Trail Rehabilitation	Identified Trail Gaps	Maintenance Needs	Total
Center Pointe Curve Trail Rehabilitation	3920	\$89,091			\$89,091
Dodd Road Trail Rehabilitation	1240	\$28,182			\$28,182
Lexington Avenue Trail Rehabilitation	980	\$22,273			\$22,273
Marie Avenue Trail Rehabilitation	6990	\$158,864			\$158,864
Mendota Heights Road Trail Rehabilitation	6360	\$144,545			\$144,545
Northland Drive Trail Rehabilitation	1880	\$42,727			\$42,727
Pilot Knob Road Trail Rehabilitation	2080	\$47,273			\$47,273
Somerset Elementary Trail Rehabilitation	740	\$16,818			\$16,818
Lexington Avenue (b/t Wagon Wheel & Tom Thumb)	2230		\$253,409		\$253,409
Sibley Memorial Hwy (b/t Hwy 13 & Overlook)	600		\$68,182		\$68,182
Trail System Five Year General Maintenance				\$72,000	\$72,000
Total		\$549,773	\$321,591	\$72,000	\$943,364

Trail Improvement and Maintenance Plan 2018-2023

Existing Trail System

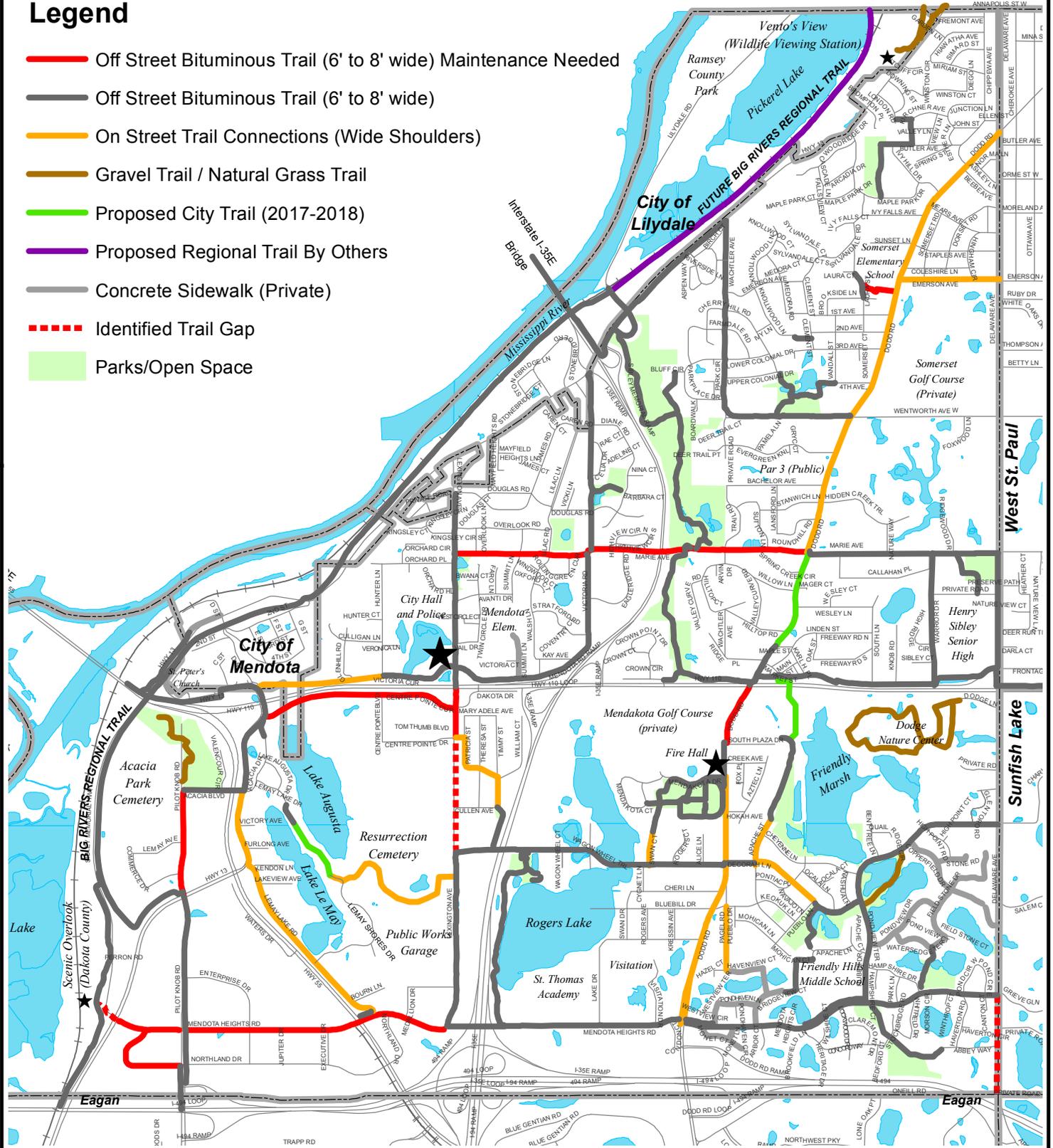
May 1, 2017



City of
Mendota
Heights

Legend

- Off Street Bituminous Trail (6' to 8' wide) Maintenance Needed
- Off Street Bituminous Trail (6' to 8' wide)
- On Street Trail Connections (Wide Shoulders)
- Gravel Trail / Natural Grass Trail
- Proposed City Trail (2017-2018)
- Proposed Regional Trail By Others
- Concrete Sidewalk (Private)
- - - Identified Trail Gap
- Parks/Open Space





2019 – 2023
Facility Improvement
and Maintenance Plan



OVERVIEW OF MENDOTA HEIGHTS FACILITIES

The City of Mendota Heights has four public facility buildings; City Hall & Police, Fire Hall, Par 3, and Public Works.

City Hall & Police

City Hall was completed in 1989. The building currently houses the police department, administrative functions and the Council Chambers.

In 2017/2018, improvements to address water infiltrating the lower level were undertaken. Some remodeling of the police facilities were also completed.

Fire Hall

The Fire Hall was completed in 1985. The building currently houses the fire department and the Health East Paramedics.

The Fire Hall is currently in the process of investigating a building expansion project.

Par 3

The Par 3 Golf Course was privately constructed in 1961. This property was purchased through a voter approved referendum in 2007 and has been operated by the city ever since.

Public Works

The Public Works Facility was completed in 1979, and had a small expansion in 1990. The building currently houses the Parks, Streets, Sewer and Fleet Maintenance departments.

EXHIBITS

Summary of Facility Costs and Funding Sources

City Hall Costs and Funding Sources

Fire Hall Costs and Funding Sources

Par 3 Costs and Funding Sources

Public Works Costs and Funding Sources



FACILITY IMPROVEMENT & MAINTENANCE PLAN 2019-2023

CITY OF MENDOTA HEIGHTS

SUMMARY OF FACILITY COSTS AND FUNDING SOURCES

Facility Name	2019	2020	2021	2022	2023	Total
City Hall	\$136,500	\$376,500	\$66,500	\$66,500	\$66,500	\$712,500
Fire Hall	\$6,017,000	\$17,000	\$17,000	\$17,000	\$17,000	\$6,085,000
Par 3	\$2,000	\$2,000	\$2,000	\$2,000	\$2,000	\$10,000
Public Works	\$180,000	\$168,000	\$18,000	\$228,000	\$18,000	\$612,000
Total	\$6,335,500	\$563,500	\$103,500	\$313,500	\$103,500	\$7,419,500

Funding Sources	2019	2020	2021	2022	2023	Total
Municipal Bond Sales	\$6,000,000	\$240,000	\$0	\$0	\$0	\$6,240,000
Municipal State Aid Fund	\$0	\$0	\$0	\$0	\$0	\$0
Levy	\$275,500	\$267,500	\$97,500	\$237,500	\$97,500	\$975,500
Sanitary Sewer Utility Fund	\$60,000	\$56,000	\$6,000	\$76,000	\$6,000	\$204,000
Special Assessments	\$0	\$0	\$0	\$0	\$0	\$0
Storm Water Utility Fund	\$0	\$0	\$0	\$0	\$0	\$0
Water Revenue Fund	\$0	\$0	\$0	\$0	\$0	\$0
Total	\$6,335,500	\$563,500	\$103,500	\$313,500	\$103,500	\$7,419,500



FACILITY IMPROVEMENT & MAINTENANCE PLAN 2019-2023

CITY OF MENDOTA HEIGHTS
 FACILITY NAME: City Hall

TOTAL COST: \$712,500

Facility Description

City Hall houses the Council Chambers, Administration & Police

Facility Location



Facility Needs

Exterior sidewalks are heaved and present a tripping hazard.

Project Costs	2019	2020	2021	2022	2023	Total
Maintenance	\$46,500	\$46,500	\$46,500	\$46,500	\$46,500	\$232,500
Generator	\$60,000					\$60,000
Security System						\$0
Electrical/Lighting Upgrade	\$15,000					\$15,000
Telephone Upgrade						\$0
Sidewalk, Parking Lot Expansion	\$15,000	\$165,000				\$180,000
Parking Lot paving		\$75,000				\$75,000
Boilers & Pumps		\$70,000				\$70,000
Air Handler		\$20,000	\$20,000	\$20,000	\$20,000	\$80,000
						\$0
						\$0
Total	\$136,500	\$376,500	\$66,500	\$66,500	\$66,500	\$712,500

Funding Sources	2019	2020	2021	2022	2023	Total
Municipal Bond Sales		\$240,000				\$240,000
Municipal State Aid Funds						\$0
Levy	\$136,500	\$136,500	\$66,500	\$66,500	\$66,500	\$472,500
Sanitary Sewer Utility Funds						\$0
Special Assessments						\$0
Storm Sewer Utility Funds						\$0
Water Utility Funds						\$0
Total	\$136,500	\$376,500	\$66,500	\$66,500	\$66,500	\$712,500



FACILITY IMPROVEMENT & MAINTENANCE PLAN 2019-2023

CITY OF MENDOTA HEIGHTS

FACILITY NAME: Fire Hall

TOTAL COST: \$6,085,000

Facility Description

Facility Location

Facility Needs

The Fire Department has outgrown its existing facility and is working on an remodeling plan

Project Costs	2019	2020	2021	2022	2023	Total
Maintenance	\$17,000	\$17,000	\$17,000	\$17,000	\$17,000	\$85,000
Expansion	\$6,000,000					\$6,000,000
						\$0
						\$0
						\$0
Total	\$6,017,000	\$17,000	\$17,000	\$17,000	\$17,000	\$6,085,000

Funding Sources	2019	2020	2021	2022	2023	Total
Municipal Bond Sales	\$6,000,000					\$6,000,000
Municipal State Aid Funds						\$0
Levy	\$17,000	\$17,000	\$17,000	\$17,000	\$17,000	\$85,000
Sanitary Sewer Utility Funds						\$0
Special Assessments						\$0
Storm Sewer Utility Funds						\$0
Water Utility Funds						\$0
Total	\$6,017,000	\$17,000	\$17,000	\$17,000	\$17,000	\$6,085,000



FACILITY IMPROVEMENT & MAINTENANCE PLAN 2019-2023

CITY OF MENDOTA HEIGHTS

FACILITY NAME: Public Works

TOTAL COST: \$612,000

Facility Description

Facility Location

Facility Needs

Project Costs	2019	2020	2021	2022	2023	Total
Maintenance	\$18,000	\$18,000	\$18,000	\$18,000	\$18,000	\$90,000
Fence	\$27,000					\$27,000
Salt Storage Facility	\$120,000					\$120,000
HVAC	\$15,000					\$15,000
Parking Lot		\$150,000				\$150,000
Material Storage bins				\$210,000		\$210,000
						\$0
Total	\$180,000	\$168,000	\$18,000	\$228,000	\$18,000	\$522,000

Funding Sources	2019	2020	2021	2022	2023	Total
Municipal Bond Sales						\$0
Municipal State Aid Funds						\$0
Levy	\$120,000	\$112,000	\$12,000	\$152,000	\$12,000	\$408,000
Sanitary Sewer Utility Funds	\$60,000	\$56,000	\$6,000	\$76,000	\$6,000	\$204,000
Special Assessments						\$0
Storm Sewer Utility Funds						\$0
Water Utility Funds						\$0
Total	\$180,000	\$168,000	\$18,000	\$228,000	\$18,000	\$612,000



2019 – 2023
Fleet Improvement
and Maintenance Plan



OVERVIEW OF FLEET

City Fleet

The City of Mendota Heights maintains a fleet of equipment for department use in serving its residents. Fleet maintenance is funded through respective department budgets. Fleet acquisition is generally accomplished using the tax levy, general fund or other associated fund (Utility, Special Park, etc.).

Mendota Heights adopted a Fleet Safety Policy on August 20, 2013. An equipment fund was established in 2016. Over time, this fund will provide a more predictable source of funding for larger costs of capital equipment.

Public Works, Engineering, and Administration

Fleet improvements totaling approximately \$1.1 million are planned for in the 2019-2023 Public Works, Engineering & Administration FLIMP. The current fleet practice is to maintain equipment for the following time frames:

Pick Up Trucks, Skid Steer	10 years
Plow Trucks	15 years
Trailers	20 years
Loader, Jetter, Generator	25+ years

See summary sheets.

Exhibits

- ***Summary of Fleet Costs and Funding Sources***
- ***Public Works, Engineering, and Administration Summary***
- ***Public Works Equipment list***



FLEET IMPROVEMENT & MAINTENANCE PLAN 2019-2023

CITY OF MENDOTA HEIGHTS

DEPARTMENT NAME: Public Works, Engineering, and Administration

TOTAL COST: \$1,104,000

Fleet Description

Public Works operates and maintains a variety of equipment. In addition there is also an engineering pick up, a facility pick up and a Ford explorer for use by administrative staff.

Project Costs	2019	2020	2021	2022	2023	Total
Xmark Mower Replacement - Parks	\$17,000					\$17,000
Field Mower Replacement - Parks	\$100,000					\$100,000
3/4 Ton Pick Up _ Streets	\$40,000					\$40,000
Full-Ton Pickup - Streets	\$70,000					\$70,000
KM 800T Hot Box Asphalt Trailer	\$27,000					\$27,000
Water Jetter - Sewer		\$260,000				\$260,000
Full-Ton Pick up - Parks			\$60,000			\$60,000
Plow Truck Mack Truck - Streets		\$200,000				\$200,000
Utility Vehicle		\$25,000				\$25,000
Kubota 1		\$25,000				\$25,000
Trailer		\$10,000				\$10,000
Brush Chipper		\$40,000				\$40,000
Skid Steer			\$60,000			\$60,000
Trailer			\$10,000			\$10,000
Kubota 2				\$25,000		\$25,000
510 John Deere				\$25,000		\$25,000
F350 Streets				\$60,000		\$60,000
Engineering Vehicle				\$30,000		\$30,000
John Deere Zero Turn					\$20,000	\$20,000
Total	\$254,000	\$560,000	\$130,000	\$140,000	\$20,000	\$1,104,000

Funding Sources	2019	2020	2021	2022	2023	Total
Municipal Bond Sales						\$0
Municipal State Aid Funds						\$0
Levy	\$254,000	\$300,000	\$130,000	\$140,000	\$20,000	\$844,000
Sanitary Sewer Utility Funds		\$260,000				\$260,000
Special Assessments						\$0
Storm Sewer Utility Funds						\$0
Water Utility Funds						\$0
Total	\$254,000	\$560,000	\$130,000	\$140,000	\$20,000	\$1,104,000