

City of MANKATO

Leading the way...

Surface Transportation CIP



2018 CIP Fund Overview - STREET PROJECTS

Project Name	Project Year	Project Costs
2018 Alleys	2018	386,628
2018 Resurfacing Project	2018	1,471,996
221 Lamm Street Redevelopment (former public works site)	2018	920,000
Development Project	2018	1,000,000
North Fifth Street Main Street to Washington Street	2018	1,254,635
Petition, Expansion and Major Streets	2018	1,000,000
Record Street	2018	2,026,010
Warren Street Corridor	2018	721,485
Subtotal		**8,780,754**
Total		**8,780,754**

2019 CIP Fund Overview

Project Name	Project Year	Project Costs
2019 Alleys	2019	369,816
2019 Resurfacing Projects	2019	612,801
Cherry Street from S Front Street to Hanover Street	2019	2,913,573
Development Project	2019	1,000,000
Germania Park Redevelopment Phase 1	2019	1,857,665
Hazel Street	2019	623,652
Highway 14 and Riverfront Drive - Roundabout	2019	1,000,000
Madison Avenue - Haefner Drive Roundabout	2019	1,000,000
Petition, Expansion and Major Streets	2019	350,000
Poplar Street - Tressel to Riverfront Drive	2019	955,677
Riverfront Drive Demonstration Project	2019	65,000
Shaubut Street	2019	964,544
Subtotal		**11,712,729**
Total		**11,712,729**

2020 CIP Fund Overview

Project Name	Project Year	Project Costs
2020 Alleys	2020	381,802
2nd Street Warren to Main	2020	2,737,805
Development Project	2020	1,000,000
Fourth Street from Warren Street to Main Street	2020	2,770,281
Germania Park Redevelopment Phase 2	2020	1,210,000
Pavement Rehabilitation	2020	610,000
Petition, Expansion and Major Streets	2020	850,000
Phol Road and Stadium Road Intersection improvements	2020	1,000,000
Riverfront Drive/Owatonna Street	2020	1,000,000
Subtotal		**11,559,888**
Total		**11,559,888**

2021 CIP Fund Overview

Project Name	Project Year	Project Costs
2021 Alleys	2021	311,569
2nd Street Plum to Madison	2021	2,552,966
Development Project	2021	1,000,000
Fourth Ave from Main Street to Madison Ave	2021	2,389,055
Germania Park Redevelopment Phase 3	2021	1,221,000
Gwyn Drive Reconstruction	2021	411,278
Pavement Rehabilitation	2021	610,000
Petition, Expansion and Major Streets	2021	225,000
TH 14 Riverfront Drive intersection improvements	2021	5,705,800
Tile Street	2021	995,524
Subtotal		**15,422,191**
Total		**15,422,191**

2022 CIP Fund Overview

Project Name	Project Year	Project Costs
2022 Alleys	2022	357,270
Adams Street - CSAH 12 to CSAH 17	2022	4,811,569
Broad Street - Warren Street To Main Street	2022	3,411,197
Development Project	2022	1,000,000
Germaina Park Redevelopment Phase 4	2022	1,084,000
Pavement Rehabilitation	2022	610,000
Petition, Expansion and Major Streets	2022	475,000
Riverfront Drive Main to Madison	2022	4,663,475
Subtotal		**16,412,510**
Total		**16,412,510**

Project: 2018 Alleys

Department: STREET PROJECTS

Project Years: 2018 - 2018

Project Description

In June of 2009, Short Elliott Hendrickson Inc. (SEH) was approved by the City of Mankato to develop an Alley Master Plan to assist in more efficiently programming alley improvements over the next 5 to 10 years. After the 2017 construction year, using the guidelines that were established for the 2009 Alley Master Plan, City Staff put another Alley Plan for years 2018-2022.

The alleys in this study are the remainder of the alleys that were identified as a part of the study that are need of improvements. The order of projects for the designated year were established through there geographic location to minimize mobilizations and increase contractor efficiencies, ensuring minimal disruption to neighborhoods. The projects were also grouped to maintain a consistent per year project cost. After all of the alleys within this appendix to the Master Plan are completed any future alley improvements shall be done by petition or on an as need basis for maintenance.

Project Justification

Alleys proposed from improvement in 2018 include:

Alley 5-305, from Ruby Street to Dukes Street; it is a bituminous alley with a PCI of 40

Alley 5-329, from Good Counsel Drive to the End, it is a bituminous alley with a PCI of 1

Alley 7-277, from Lime Street to the end, grass alley and does not have a PCI

Alley 8-152, from Fountain Street to Thompson Street, it is a bituminous alley with a PCI of 45

Alley 17-132, from Dane Street to the end, it is a gravel alley, with a PCI of 1

Alley 17-207, from Marsh Street to the end, it is a bituminous alley with a PCI of 21

Alley 17-209, from Long Street to the end, it is a gravel and has a PCI of 1

Alley 7-326, from Elm Street to Rock Street, it is a bituminous alley with a PCI of 1

Alley 7-403, from Spring Street to Elm Street, it is a bituminous alley with a PCI of 52

Alley 7-402, from Elm Street to Rock Street, it is a bituminous alley with a PCI of 1

Alley 7-254, from Rock Street to Vine Street, it is a bituminous alley with a PCI of 47

Alley 7-256, from Vine Street to Madison Avenue, it is a bituminous alley with a PCI of 52

Alley 7-428, from Lafayette Street to Madison Avenue, it's a bituminous alley with a PCI of 29

Project Uses

	2018	2019	2020	2021	2022	Total
Admin/bonding	19,998	0	0	0	0	19,998
Contingency	30,300	0	0	0	0	30,300
Engineering	33,330	0	0	0	0	33,330
Storm Water	34,000	0	0	0	0	34,000
Street	269,000	0	0	0	0	269,000
Total	**386,628**	**0**	**0**	**0**	**0**	**386,628**

Funding and Sources

	2018	2019	2020	2021	2022	Total
G.O. Bonding	172,628	0	0	0	0	172,628
Special Assessments	180,000	0	0	0	0	180,000
Stormwater Utility	34,000	0	0	0	0	34,000
Total	**386,628**	**0**	**0**	**0**	**0**	**386,628**

Project Timeline

January - Feasibility

February - Hearing

March - Bid

May - Start construction

October - Project completion

Project: 2018 Resurfacing Project

Department: STREET PROJECTS

Project Years: 2018 - 2018

Project Description

This project is for pavement rehabilitation on various roadways as well as intersection improvements. Additionally it includes non-motorized improvements as well including bike trails and sidewalks. The proposed projects for 2018 include pavement rehabilitation on Bassett Drive between Belle Ave and TH 22, Concrete Pavement Repair on Adams Street between Star Street and Raintree Road, and storm drainage improvements and bituminous paving on Adams Street between Navaho Avenue and Star Street. Proposed improvements on Bassett Drive included cold in place reclamation, cement stabilization, where necessary, and new bituminous pavement. Proposed improvements on Adams Street include select concrete joint and panel repair, storm drainage improvements, and new bituminous paving.

Project Justification

The aggregate pavement rating for Bassett Drive is a 75 and Adams Street is a 77. Both of these are in the fair to good rating. However, what is not readily apparent from the pavement ratings are that current pavement distresses are such that timely, critical maintenance activities need to be performed to ensure that the desired pavement life is met.

Bassett Drive currently suffers from deep cracking. This is due to the overly thick (relative to the aggregate base) bituminous pavement section. These cracks often extend through the entire pavement section and to the road subgrade. This allows for water intrusion into the pavement section and accelerate the overall deterioration of the roadway. By reclaiming the road all of the deep cracks are removed and new pavement can be installed. Additionally sections that may be deficient in overall pavement strength will be cement stabilized to increase the pavement load capacity.

Adams Street is beginning to suffer from concrete joint failure. Much like the deep cracks discussed with Bassett Drive, these cracks allow water to reach the subgrade accelerating pavement deterioration. By removing and replacing select concrete joints and panels on Adams Street it will preserve the remaining pavement for the intended life of the road. In addition, deficiencies in the storm drain capacity of the area were discovered which necessitated the addition of drainage capacity between Navaho Avenue and the outlet to Lake Dorothy.

Both of these roads are major collectors carrying over 5,300 cars a day in the major commercial section of the hilltop. As such, many residents and visitors travel these roads and are aware of the condition and the image that it creates for one of the major commercial areas in Mankato.

Neither of these projects have any obstacles to implementation and can be designed and constructed within a single construction season. Since parallel routes exist closely to these roadways,

impact to the traffic network will be minimized. These roads also have sufficient road width so that certain construction practices can be performed under traffic.

Overall the proposed improvements increase the standard of service for the area and allow for more effective delivery service while reducing the investment needed in annual repairs to the road.

Project Uses

	2018	2019	2020	2021	2022	Total
Admin/Bonding	76,137	0	0	0	0	76,137
Construction Contingency	115,360	0	0	0	0	115,360
Engineering	126,896	0	0	0	0	126,896
Sanitary Sewer	7,717	0	0	0	0	7,717
Storm Water	135,025	0	0	0	0	135,025
Street	1,005,727	0	0	0	0	1,005,727
Watermain	5,132	0	0	0	0	5,132
Total	**1,471,994**	**0**	**0**	**0**	**0**	**1,471,994**

Funding and Sources

	2018	2019	2020	2021	2022	Total
G.O. Bonding	43,104	0	0	0	0	43,104
MSAS	500,000	0	0	0	0	500,000
Sewer Utility	50,000	0	0	0	0	50,000
Special Assessments	656,600	0	0	0	0	656,600
Stormwater Utility	172,292	0	0	0	0	172,292
Water Utility	50,000	0	0	0	0	50,000
Total	**1,471,996**	**0**	**0**	**0**	**0**	**1,471,996**

Project Timeline

January - Feasibility Hearing

February - Assessment Hearing

March - Bid

May - Construction

October - Project completion

Project: 221 Lamm Street Redevelopment (former public works site)

Department: STREET PROJECTS

Project Years: 2018 - 2018

Project Description

Redevelopment of the former public works site at 221 Lamm Street will likely include removals, soil cleanup, and potentially installing new infrastructure. Site will be redeveloped by yet to be determined developer.

Project Justification

Former public works site at 221 Lamm Street is no longer needed for city operations and redevelopment of the site fits within the Sibley Parkway Redevelopment Plan.

Project Uses

	2018	2019	2020	2021	2022	Total
Demo/removals	260,000	0	0	0	0	260,000
Infrastructure	400,000	0	0	0	0	400,000
Legal/appraisal	10,000	0	0	0	0	10,000
Remediation	250,000	0	0	0	0	250,000
Total	**920,000**	**0**	**0**	**0**	**0**	**920,000**

Funding and Sources

	2018	2019	2020	2021	2022	Total
Central Garage	370,000	0	0	0	0	370,000
Grant	150,000	0	0	0	0	150,000
Sale proceeds	400,000	0	0	0	0	400,000
Total	**920,000**	**0**	**0**	**0**	**0**	**920,000**

Project Timeline

Project: Development Project

Department: STREET PROJECTS

Project Years: 2018 - 2018

Project Description

Improvements for a developer petitioned project as identified in a development or subdivision agreement.

Project Justification

Developers are able, through the agreement process, to petition and assess project cost through the special assessment process. These projects are 100% assessable. An allowance has been accounted for in the overall Community Investment budget.

Project Uses

	2018	2019	2020	2021	2022	Total
Construction	1,000,000	0	0	0	0	1,000,000
Total	**1,000,000**	**0**	**0**	**0**	**0**	**1,000,000**

Funding and Sources

	2018	2019	2020	2021	2022	Total
Special Assessments	1,000,000	0	0	0	0	1,000,000
Total	**1,000,000**	**0**	**0**	**0**	**0**	**1,000,000**

Project Timeline

Project: North Fifth Street Main Street to Washington Street

Department: STREET PROJECTS

Project Years: 2018 - 2018

Project Description

The proposed project is a full reconstruction of North Fifth Street from Main Street to Washington Street. This project will remove and replace the sanitary sewer, watermain, storm sewer, aggregate base, concrete curb and gutter; bituminous pavement, sidewalk, and end services to each and every lot.

Project Justification

North Fifth Street was originally constructed in the mid 1890ís. A trunk water main was added along North Fifth Street in the 1950ís and new concrete pavement was installed at that time. Since that improvement no major work has been performed on the roadway with the sanitary sewer and watermain serving the homes being the original system installed in the 1890ís. It was also discovered as a part of the North Fifth Street project between Washington Street and Madison Avenue, that the stormwater system south of Washington Street was in poor repair and provides a less than desired level of service.

North Fifth Street has an aggregate pavement rating of 65, which is fair. However, the utilities, specifically the storm sewer, are in poor condition and failing to meet the required level of service needed. Often times during high intensity rain events the system becomes surcharged and causes the covers of manholes to be displaced. This creates an unsafe condition on the roadway.

This project has been proposed by residents since the reconstruction of North Fifth Street from Washington Street to Madison Avenue project was completed. Additionally a signed petition for this project has been submitted to Engineering Personnel. The parish administrator for SS. Peter and Paul’s Catholic Church has been working with the neighborhood to advance this project.

Overall the project has no readily apparent obstacles and can be designed and constructed in a single construction season.

By reconstructing North Fifth Street, several service standards can be improved. As previously discussed the storm sewer system is failing to meet the required level of service that is generally provided by the City of Mankato. Additionally the non-compliant 90 degree angle parking along the 100 block of the street will be converted to 45, or 60 degree angle parking ensuring the level of service for parking in the neighborhood is maintained, while allowing for safe parking maneuvers to take place.

Overall the renewal of this infrastructure would allow for more effective service delivery and reduce the investment in operational budgets within the project area.

Project Uses

	2018	2019	2020	2021	2022	Total
Admin/bonding	64,895	0	0	0	0	64,895
Construction Contingency	98,326	0	0	0	0	98,326
Engineering	108,158	0	0	0	0	108,158
Sanitary Sewer	219,967	0	0	0	0	219,967
Storm Water	148,028	0	0	0	0	148,028
Street	453,443	0	0	0	0	453,443
Watermain	161,819	0	0	0	0	161,819
Total	**1,254,636**	**0**	**0**	**0**	**0**	**1,254,636**

Funding and Sources

	2018	2019	2020	2021	2022	Total
G.O. Bonding	331,093	0	0	0	0	331,093
Sewer Utility	280,678	0	0	0	0	280,678
Special Assessments	247,500	0	0	0	0	247,500
Stormwater Utility	188,884	0	0	0	0	188,884
Water Utility	206,481	0	0	0	0	206,481
Total	**1,254,635**	**0**	**0**	**0**	**0**	**1,254,635**

Project Timeline

January - Feasibility Hearing

February - Assessment Hearing

March - Bid

May - Construction

October - Project completion

Project: Petition, Expansion and Major Streets

Department: STREET PROJECTS

Project Years: 2018 - 2018

Project Description

Improvement to minor local roads and alleys. Typically pavement and transportation related.

Project Justification

Each year the Public Works Department receives request for improvements to the transportation system. Many of these project are local streets, or alleys. This budget line item exists to allow for minor projects that are petitioned to be designed and constructed within a single construction season, outside of the normal Community Investment Plan process.

Project Uses

	2018	2019	2020	2021	2022	Total

Funding and Sources

	2018	2019	2020	2021	2022	Total
G.O. Bonding	1,000,000	0	0	0	0	1,000,000
Total	**1,000,000**	**0**	**0**	**0**	**0**	**1,000,000**

Project Timeline

Project: Record Street

Department: STREET PROJECTS

Project Years: 2018 - 2018

Project Description

This project will reconstruct Record Street from South Front Street to Shaubut Street. This will include the installation of new sanitary sewer, water main, storm sewer, aggregate base, concrete curb and gutter, bituminous pavement, sidewalk, and end services to each and every lot. Record Street remains one of the last streets in the Lincoln Park Neighborhood that has not be reconstructed.

Project Justification

Record Street and its utilities date to some of the original development of the Lincoln Park Neighborhood. Records indicate that select watermain replacement was performed in the mid-1970's. The aggregate pavement rating of Record Street is 38, which is failing. This project has been proposed for inclusion with the Community Investment Program for several years, but has been delayed due to a combination of other community priorities and the high amount of General Obligation Bond funding needed to complete this project.

This project advances the strategic goal of providing functional and maintainable infrastructure. With the reconstruction of Record Street several non-conforming utility issues can be addressed bringing all of the properties with utility services from Record Street in to compliance with State Plumbing Code. This project provides a direct benefit to the residents along it as well as to the overall neighborhood. During several neighborhood association meetings as well as neighborhood walks, the request has been made to reconstruct this street.

By reconstructing Record Street and investing in new infrastructure, it is well documented that a city project encourages private property owners to invest in their own property thus benefiting the neighborhood.

This project is being proposed within the fiscal constraints of the annual CIP budget. This project is also of a reasonable size that it can be accomplished within one construction season. Access for the residents will be minimally disrupted due to the existence of alleys and side streets. There are no obstacles to completing this project.

By completing this project the ability to delivery service to the residents of Record Street will be improved and it will reduce the demand for operational cost in performing costly repairs, especially under an emergency condition.

Project Uses

	2018	2019	2020	2021	2022	Total
Admin/bonding	104,794	0	0	0	0	104,794
Construction Contingency	158,778	0	0	0	0	158,778
Engineering	174,656	0	0	0	0	174,656
Sanitary Sewer	277,491	0	0	0	0	277,491
Storm Water	237,809	0	0	0	0	237,809
Street	843,579	0	0	0	0	843,579
Watermain	228,902	0	0	0	0	228,902
Total	**2,026,010**	**0**	**0**	**0**	**0**	**2,026,010**

Funding and Sources

	2018	2019	2020	2021	2022	Total
G.O. Bonding	953,163	0	0	0	0	953,163
Sewer Utility	277,491	0	0	0	0	277,491
Special Assessments	328,644	0	0	0	0	328,644
Stormwater Utility	237,809	0	0	0	0	237,809
Water Utility	228,902	0	0	0	0	228,902
Total	**2,026,010**	**0**	**0**	**0**	**0**	**2,026,010**

Project Timeline

January - Feasibility Hearing

February - Assessment Hearing

March - Bid

May - Construction

October - Project completion

Project: Warren Street Corridor

Department: STREET PROJECTS

Project Years: 2018 - 2018

Project Description

The public transit system, Minnesota State University Mankato (MSUM), pedestrians, non-motorized users and the general public that travel through this corridor will benefit from this improvement. This project will direct pedestrians to three-key signalized crossing locations by the installation of traffic signals, missing sidewalk links, as well as private pedestrian channelization. Motorized and non-motorized vehicles are significantly delayed due to the large number of pedestrians in the area that cross Warren Street at all the way stop intersections and multiple mid-block crossings. The installation of these traffic signals will assign an appropriate time for all modes of travel through the corridor. Non-motorized users will also benefit by the installation of marked on street bicycle routes.

Project Justification

MSUM has contacted the City of Mankato regarding pedestrian crossing issues along Warren Street. Currently, MSUM traffic control officials direct traffic at various intersections to balance pedestrian traffic and motorized traffic. The City of Mankato has been working with the university as they have had their engineering students conduct studies along Warren Street due to these issues in the recent years. The public transit system experiences difficulty navigating through the corridor due to high volume of pedestrians that cross Warren Street. MSUM as well as the City have identified this as an area for improvement due to the high volume of pedestrians that travel to and from the university.

Project Uses

	2018	2019	2020	2021	2022	Total
Admin/Bonding	37,318	0	0	0	0	37,318
Engineering	62,197	0	0	0	0	62,197
Street	621,970	0	0	0	0	621,970
Total	**721,485**	**0**	**0**	**0**	**0**	**721,485**

Funding and Sources

	2018	2019	2020	2021	2022	Total
MSAS	321,485	0	0	0	0	321,485
TAP	400,000	0	0	0	0	400,000
Total	**721,485**	**0**	**0**	**0**	**0**	**721,485**

Project Timeline

December - Informational meeting

January - Feasibility Hearing

February - Assessment Hearing

March - Bid

May - Start construction

August - Project completion

Project: 2019 Alleys

Department: STREET PROJECTS

Project Years: 2019 - 2019

Project Description

In June of 2009, Short Elliott Hendrickson Inc. (SEH) was approved by the City of Mankato to develop an Alley Master Plan to assist in more efficiently programming alley improvements over the next 5 to 10 years. After the 2017 construction year, using the guidelines that were established for the 2009 Alley Master Plan, City Staff put another Alley Plan for years 2018-2022.

The alleys in this study are the remainder of the alleys that were identified as a part of the study that are need of improvements. The order of projects for the designated year were established through there geographic location to minimize mobilizations and increase contractor efficiencies, ensuring minimal disruption to neighborhoods. The projects were also grouped to maintain a consistent per year project cost. After all of the alleys within this appendix to the Master Plan are completed any future alley improvements shall be done by petition or on an as need basis for maintenance.

Project Justification

Alleys proposed from improvement in 2019 include:

Alley 7-480, from Marsh Street to Elm Street; it is a bituminous alley with a PCI of 14

Alley 7-479, from Rock Street to Vine Street, it is a bituminous alley with a PCI of 1

Alley 7-479, from Elm Street to Rock Street, it is a bituminous alley with a PCI of 1

Alley 18-131, from Walnut Street to Main Street, it is a bituminous alley with a PCI of 38

Alley 18-254, from Putnam Street to Pearl Street, it is a bituminous alley with a PCI of 52

Alley 18-278, from Pearl Street to South End, it is a bituminous alley with a PCI of 1

Alley 13-380, from Moreland Avenue to West Ninth Street, it is a bituminous alley with a PCI of 48

Project Uses

	2018	2019	2020	2021	2022	Total
Admin/bonding	0	19,128	0	0	0	19,128
Construction Contingency	0	28,982	0	0	0	28,982
Engineering	0	31,881	0	0	0	31,881
Storm Water	0	86,240	0	0	0	86,240
Street	0	203,585	0	0	0	203,585
Total	**0**	**369,816**	**0**	**0**	**0**	**369,816**

Funding and Sources

	2018	2019	2020	2021	2022	Total
G.O. Bonding	0	259,773	0	0	0	259,773
Special Assessments	0	1	0	0	0	1
Stormwater Utility	0	110,042	0	0	0	110,042
Total	**0**	**369,816**	**0**	**0**	**0**	**369,816**

Project Timeline

January - Feasibility Hearing

February - Assessment Hearing

March - Bid

May - Start of construction

October - Project Completion

Project: 2019 Resurfacing Projects

Department: STREET PROJECTS

Project Years: 2019 - 2019

Project Description

This project is for pavement rehabilitation on various roadways as well as intersection improvements. Additionally it includes non-motorized improvements as well including bike trails and sidewalks. The proposed projects for 2019 included pavement rehabilitation on Elm Street between 7th Street and Division Street, East Main Street from Victory Drive to Kennedy Street, and the addition of subsurface drainage along with pavement rehabilitation on Rita Road from Monks Avenue to the end. Proposed improvements will include milling 2-inches of existing pavement from the roadway and overlaying it with new bituminous pavement on Elm Street and East Main Street. Rita Road will have cold in place reclamation performed after the installation of sub drain tile and new bituminous pavement installed.

Project Justification

Elm Street is experiencing pavement determination due to the pavement being on a hill and remaining partially shaded during the spring and fall when pavements are more sensitive to freeze/thaw cycles. This cause the road surface to ravel (lose aggregate from the pavement) and reducing the friction and there for safety of the roadway. Elm Street is a minor collector, has an aggregate pavement rating of 56 and carries approximately 2,200 vehicles per day.

East Main Street from Victory Drive to Kennedy Street will complete the pavement rehabilitation of Main Street from Riverfront Drive to Hosanna Drive. There are area of the roadway that are beginning to show signs of determination and the pavement is in need of interval maintenance to extend the life of the pavement section. This road is classified as a major collector and carries approximately 6,500 vehicles per day. The aggregate pavement rating is a 70.

Rita Road from Monks Avenue to the end is one of the few roads in Mankato that do not have underdrain installed. The installation of underdrain aids in removing subsurface moisture prolonging the lift of the pavement. Additionally it provide residents a reliable location to discharge sump pumps to minimize damage to the pavement and reduce the creation of a nuisance condition. This area will benefit greatly from this improvement due to the seasonally high water table in the area. Rita Road is a local roadway with less than 1,500 vehicles per day. It has an aggregate pavement rating of 49.

None of these projects have any obstacles to implementation and can be designed and constructed within a single construction season. Since parallel routes exist closely to these roadways, impact to the traffic network will be minimized. These roads also have sufficient road width so that certain construction practices can be performed under traffic.

Overall the proposed improvements increase the standard of service for the area and allow for more effective delivery service while reducing the investment needed in annual repairs to the road.

Project Uses

	2018	2019	2020	2021	2022	Total
Admin/bonding	0	31,700	0	0	0	31,700
Construction Contingency	0	48,025	0	0	0	48,025
Engineering	0	52,827	0	0	0	52,827
Sanitary Sewer	0	1,710	0	0	0	1,710
Storm Water	0	70,176	0	0	0	70,176
Street	0	406,769	0	0	0	406,769
Watermain	0	1,594	0	0	0	1,594
Total	**0**	**612,801**	**0**	**0**	**0**	**612,801**

Funding and Sources

	2018	2019	2020	2021	2022	Total
G.O. Bonding	0	162,418	0	0	0	162,418
Sewer Utility	0	50,000	0	0	0	50,000
Special Assessments	0	263,250	0	0	0	263,250
Stormwater Utility	0	87,133	0	0	0	87,133
Water Utility	0	50,000	0	0	0	50,000
Total	**0**	**612,801**	**0**	**0**	**0**	**612,801**

Project Timeline

January - Feasibility Hearing

February - Assessment Hearing

March - Bid

May - Start of construction

October - Project Completion

Project: Cherry Street from S Front Street to Hanover Street

Department: STREET PROJECTS

Project Years: 2019 - 2019

Project Description

This project will reconstruct Cherry Street from South Front Street to Hanover Street. This will include the installation of new sanitary sewer, water main, storm sewer, aggregate base, concrete curb and gutter, bituminous pavement, sidewalk, and end services to each and every lot.

Project Justification

Pavement and utilities are near the end of their useful life and interim maintenance activities are no longer economical. Pavement condition index is 58 and utilities are in need of renewal. The underlying concrete pavement was installed in 1970 with a bituminous overlay completed in 2005. The utilities were installed in 1970 and consist of vitrified clay sanitary sewer pipe and cast iron watermain. In addition, pedestrian realm improvements and ADA compliance requirements are needed in this well traveled downtown corridor.

Project Uses

	2018	2019	2020	2021	2022	Total
Admin/bonding	0	150,702	0	0	0	150,702
Construction Contingency	0	228,336	0	0	0	228,336
Engineering	0	251,170	0	0	0	251,170
Sanitary Sewer	0	71,208	0	0	0	71,208
Storm Water	0	297,862	0	0	0	297,862
Street	0	1,638,145	0	0	0	1,638,145
Watermain	0	276,150	0	0	0	276,150
Total	**0**	**2,913,573**	**0**	**0**	**0**	**2,913,573**

Funding and Sources

	2018	2019	2020	2021	2022	Total
G.O. Bonding	0	165,957	0	0	0	165,957
MSAS	0	1,500,552	0	0	0	1,500,552
Sewer Utility	0	90,861	0	0	0	90,861
Special Assessments	0	613,800	0	0	0	613,800
Stormwater Utility	0	190,036	0	0	0	190,036
Water Utility	0	352,367	0	0	0	352,367
Total	**0**	**2,913,573**	**0**	**0**	**0**	**2,913,573**

Project Timeline

January - Feasibility Hearing

February - Assessment Hearing

March - Bid

May - Construction

October - Project completion

Project: Development Project

Department: STREET PROJECTS

Project Years: 2019 - 2019

Project Description

Improvements for developer petitioned projects as identified in a development or subdivision agreement.

Project Justification

Developers are able, through the agreement process, to petition and assess project costs through the special assessment process. These projects are 100% assessable. An allowance has been accounted for in the overall Community Investment Plan budget.

Project Uses

	2018	2019	2020	2021	2022	Total

Funding and Sources

	2018	2019	2020	2021	2022	Total
Special Assessments	0	1,000,000	0	0	0	1,000,000
Total	**0**	**1,000,000**	**0**	**0**	**0**	**1,000,000**

Project Timeline

Project: Germania Park Redevelopment Phase 1

Department: STREET PROJECTS

Project Years: 2019 - 2019

Project Description

The Germania Park Capital Improvements Plan (CIP) covers an area of Mankato generally bounded by Riverfront Drive, 1st Avenue, Trunk Highway 14 (TH 14), and the Minnesota River. The existing subsurface of this area is predominantly bedrock, which has limited the development to smaller residential developments and industrial businesses. Most of the city-owned infrastructure is original and dates 50 to 75 years in age, with the exception of Pine Street and a few residential streets on the east side of 3rd Avenue.

Project Justification

The project area generally has utilities that are 50-75 years old. Sewer is believed to be made of vitrified clay. Vitrified clay is a brittle material susceptible to cracking, joint displacement, root intrusion, and infiltration. The sanitary sewer manholes are of a similar age and likely block or brick built. Due to the age and material build of the sanitary sewer, it is suggested that all sanitary sewer within the project area be reconstructed and replaced with polyvinyl chloride (PVC) pipe. The watermain is most likely made of cast iron, which is susceptible to breaking due to deterioration and freezing conditions in colder weather. It is also 6-inch in diameter, which is undersized compared to current standards. Fire flow in the CIP area was known to be substandard before construction of water main on Cleveland Street in the summer of 2011, due to a lack of water main looping and small pipe sizes.

Project Uses

	2018	2019	2020	2021	2022	Total
Admin/Bonding	0	96,086	0	0	0	96,086
Construction Contingency	0	145,585	0	0	0	145,585
Engineering	0	160,144	0	0	0	160,144
Sanitary Sewer	0	293,273	0	0	0	293,273
Storm Water	0	62,997	0	0	0	62,997
Street	0	893,988	0	0	0	893,988
Watermain	0	205,593	0	0	0	205,593
Total	**0**	**1,857,665**	**0**	**0**	**0**	**1,857,665**

Funding and Sources

	2018	2019	2020	2021	2022	Total
G.O. Bonding	0	646,728	0	0	0	646,728
Sewer Utility	0	374,216	0	0	0	374,216
Special Assessments	0	494,000	0	0	0	494,000
Stormwater Utility	0	80,384	0	0	0	80,384
Water Utility	0	262,337	0	0	0	262,337
Total	**0**	**1,857,665**	**0**	**0**	**0**	**1,857,665**

Project Timeline

January - Feasibility Hearing

February - Assessment Hearing

March - Bid

May - Construction

October - Project Completion

Project: Hazel Street

Department: STREET PROJECTS

Project Years: 2019 - 2019

Project Description

Complete reconstruction of Hazel Street from Moreland Avenue to West 8th Street, including complete replacement of all pavement, along with the watermain, sanitary sewer, storm sewer, services to each lot, curb and gutter, sidewalk, and driveway and alley aprons as applicable.

Project Justification

Hazel Street and it's utilities were originally constructed in the 1920's. The existing street and utilities are deteriorating and in need of repair. Without improvements, this roadway will warrant high maintenance costs, along with further deterioration, until failure. These improvements will reduce the cost of maintenance expenditures in the future. In 2017, patching and sealcoating of the street were performed to prolong the life of the pavement until a major project can be undertaken.

Project Uses

	2018	2019	2020	2021	2022	Total
Admistration	0	32,262	0	0	0	32,262
Construction Contingency	0	48,875	0	0	0	48,875
Enigneering	0	53,762	0	0	0	53,762
Sanitary Sewer	0	140,865	0	0	0	140,865
Storm	0	21,040	0	0	0	21,040
Street	0	245,209	0	0	0	245,209
Watermain	0	81,639	0	0	0	81,639
Total	**0**	**623,652**	**0**	**0**	**0**	**623,652**

Funding and Sources

	2018	2019	2020	2021	2022	Total
G.O. Bonding	0	233,106	0	0	0	233,106
Sewer Utility	0	140,865	0	0	0	140,865
Special Assessments	0	147,000	0	0	0	147,000
Stormwater Utility	0	21,040	0	0	0	21,040
Water Utility	0	81,640	0	0	0	81,640
Total	**0**	**623,652**	**0**	**0**	**0**	**623,652**

Project Timeline

January - Feasibility Hearing

February - Assessment Hearing

March - Bid

May - Construction

October - Project Completion

Project: Highway 14 and Riverfront Drive - Roundabout

Department: STREET PROJECTS

Project Years: 2019 - 2019

Project Description

The project consists of constructing a roundabout at the north ramps of Highway 14 and Riverfront Drive. This was identified as a short term improvement in the Riverfront Drive Corridor Study. Associated with the improvement is a trail along the east side of Riverfront Drive, extending under the bridge, to aid in safer pedestrian access to the Sakatah Singing Hills Trail/North Minnesota River Trail.

Project Justification

Issues with the TH 14/Riverfront Drive interchange include delays and back-ups on the westbound TH 14 off ramp entering Riverfront Drive and the lack of a pedestrian crossing from Good Counsel Drive to the North Minnesota River Trail and the Sakatah Singing Hills Trail. At this time, the south ramps do not meet warrants for further improvements.

Project Uses

	2018	2019	2020	2021	2022	Total
Roundabout	0	1,000,000	0	0	0	1,000,000
Total	**0**	**1,000,000**	**0**	**0**	**0**	**1,000,000**

Funding and Sources

	2018	2019	2020	2021	2022	Total
Blue Earth County	0	250,000	0	0	0	250,000
City MSA	0	250,000	0	0	0	250,000
MnDOT	0	500,000	0	0	0	500,000
Total	**0**	**1,000,000**	**0**	**0**	**0**	**1,000,000**

Project Timeline

2018 Design and coordination with partners for funding agreement.

2019 Construction

Project: Madison Avenue - Haefner Drive Roundabout

Department: STREET PROJECTS

Project Years: 2019 - 2019

Project Description

Property owners in the area of the Madison Avenue and Haefner Drive intersection have requested an improvement to this unsafe intersection. The desire is to preserve full access to Haefner Drive from Madison Avenue while increasing safety. Currently the preferred improvement is a roundabout.

Project Justification

This project is considered a safety project. Safety is a concern and enough data is present from past accident history and the roundabout study conducted for the City by Spack Consulting which identified the intersection as having 1.49 crashes per million vehicles entering the intersection when compared to the statewide average of 0.26 crashes per million vehicles. The study concluded that a special hazard exists and an improvement is warranted.

Project Uses

	2018	2019	2020	2021	2022	Total
Bonding	0	51,724	0	0	0	51,724
Construction Cost	0	783,699	0	0	0	783,699
Contingency	0	78,370	0	0	0	78,370
Engineering	0	86,207	0	0	0	86,207
Total	**0**	**1,000,000**	**0**	**0**	**0**	**1,000,000**

Funding and Sources

	2018	2019	2020	2021	2022	Total
Blue Earth County	0	550,000	0	0	0	550,000
Special Assessments	0	100,000	0	0	0	100,000
Unidentified sources	0	350,000	0	0	0	350,000
Total	**0**	**1,000,000**	**0**	**0**	**0**	**1,000,000**

Project Timeline

Project: Petition, Expansion and Major Streets

Department: STREET PROJECTS

Project Years: 2019 - 2019

Project Description

Improvement to minor local roads and alleys. Typically pavement and transportation related.

Project Justification

Each year the Public Works Department receives request for improvements to the transportation system. Many of these project are local streets, or alleys. This budget line item exists to allow for minor projects that are petitioned to be designed and constructed within a single construction season, out side of the normal Community Investment Plan process.

Project Uses

	2018	2019	2020	2021	2022	Total

Funding and Sources

	2018	2019	2020	2021	2022	Total
G.O. Bonding	0	350,000	0	0	0	350,000
Total	**0**	**350,000**	**0**	**0**	**0**	**350,000**

Project Timeline

Project: Poplar Street - Tressel to Riverfront Drive

Department: STREET PROJECTS

Project Years: 2019 - 2019

Project Description

This project will reconstruct Poplar Street from it's southern intersection with South Riverfront Drive to Sibley Parkway. This will include the installation of new sanitary sewer, water main, storm sewer, aggregate base, concrete curb and gutter, bituminous pavement, sidewalk, and end services to each and every lot.

Project Justification

Most of the utilities date back to 1925 and are old and deteriorating. Poplar Street was last resurfaced in 1993. The Pavement Condition Index rating is 40. In addition, there is a 30 inch trunk sanitary sewer line serving a majority of west Mankato along this section of Poplar that is in poor shape and in need of replacement. This will provide reliability, capacity, and reduce inflow and infiltration (I&I) into the system.

Project Uses

	2018	2019	2020	2021	2022	Total
Admin/bonding	0	49,432	0	0	0	49,432
Construction Contingency	0	74,896	0	0	0	74,896
Engineering	0	82,386	0	0	0	82,386
Sanitary Sewer	0	299,960	0	0	0	299,960
Storm Water	0	90,282	0	0	0	90,282
Street	0	328,683	0	0	0	328,683
Watermain	0	30,038	0	0	0	30,038
Total	**0**	**955,677**	**0**	**0**	**0**	**955,677**

Funding and Sources

	2018	2019	2020	2021	2022	Total
G.O. Bonding	0	210,399	0	0	0	210,399
Sewer Utility	0	382,750	0	0	0	382,750
Special Assessments	0	209,000	0	0	0	209,000
Stormwater Utility	0	115,200	0	0	0	115,200
Water Utility	0	38,329	0	0	0	38,329
Total	**0**	**955,677**	**0**	**0**	**0**	**955,677**

Project Timeline

January - Feasibility Hearing

February - Assessment Hearing

March - Bid

May - Construction

October - Project completion

Project: Riverfront Drive Demonstration Project

Department: STREET PROJECTS

Project Years: 2019 - 2019

Project Description

This demonstration project consists of testing the conversion of the four lane section of Riverfront Drive to three lanes from Cherry and Warren streets to Vine Street. The project will consist of temporary traffic control, lane shifts, and other temporary improvements that convert the section to three lanes to determine if traffic assumptions in the Riverfront Drive Corridor study are valid before permanent improvements are planned.

Project Justification

Identified as part of the Riverfront Drive Corridor Study, the project will address identified pedestrian improvements and traffic calming goals of the Old Town Master Plan and the corridor study.

Project Uses

	2018	2019	2020	2021	2022	Total
Test 3 lane	0	65,000	0	0	0	65,000
Total	**0**	**65,000**	**0**	**0**	**0**	**65,000**

Funding and Sources

	2018	2019	2020	2021	2022	Total
City MSA	0	65,000	0	0	0	65,000
Total	**0**	**65,000**	**0**	**0**	**0**	**65,000**

Project Timeline

2017/2018. Work with property owners and confirm test configuration.

2018. Review final plans and request association/property owner petition

2019. Install for summer months - May - October 1.

Project: Shaubut Street

Department: STREET PROJECTS

Project Years: 2019 - 2019

Project Description

This project will reconstruct Shaubut Street from Byron Street to the western terminus. This will include the installation of new sanitary sewer, water main, storm sewer, aggregate base, concrete curb and gutter, bituminous pavement, sidewalk, and end services to each and every lot. Shaubut Street remains one of the last streets in the Lincoln Park Neighborhood that has not be reconstructed.

Project Justification

Record Street and its utilities date to some of the original development of the Lincoln Park Neighborhood. The aggregate pavement rating of Record Street is 33, which is failing. This project has been proposed for inclusion with the Community Investment Program for several years, but has been delayed due to a combination of other community priorities and the high amount of General Obligation Bond funding needed to complete this project.

By reconstructing Shaubut Street and investing in new infrastructure, it is well documented that a city project encourages private property owners to invest in their own property thus benefiting the neighborhood.

This project is being proposed within the fiscal constraints of the annual CIP budget. This project is also of a reasonable size that it can be accomplished within one construction season. Access for the residents will be minimally disrupted due to the existence of alleys and side streets. There are no obstacles to completing this project.

By completing this project the ability to delivery service to the residents of Shaubut Street will be improved and it will reduce the demand for operational cost in performing costly repairs, especially under an emergency condition.

Project Uses

	2018	2019	2020	2021	2022	Total
Admin/bonding	0	49,890	0	0	0	49,890
Construction Contingency	0	75,591	0	0	0	75,591
Engineering	0	83,150	0	0	0	83,150
Sanitary Sewer	0	161,362	0	0	0	161,362
Storm Water	0	44,748	0	0	0	44,748
Street	0	461,987	0	0	0	461,987
Watermain	0	87,815	0	0	0	87,815
Total	**0**	**964,544**	**0**	**0**	**0**	**964,544**

Funding and Sources

	2018	2019	2020	2021	2022	Total
G.O. Bonding	0	521,795	0	0	0	521,795
Sewer Utility	0	161,362	0	0	0	161,362
Special Assessments	0	148,824	0	0	0	148,824
Stormwater Utility	0	44,748	0	0	0	44,748
Water Utility	0	87,815	0	0	0	87,815
Total	**0**	**964,544**	**0**	**0**	**0**	**964,544**

Project Timeline

January - Feasibility Hearing

February - Assessment Hearing

March - Bid

May - Start of construction

October - Project Completion

City of Mankato

Leading the way...

Community Investment Plan



2019 CIP Fund Overview

Project Name	Project Year	Project Costs
Unmanned Aerial System (UAS)	2019	32,000
Subtotal		**32,000**
Total		**32,000**

Illustrious CIP Fund Overview

Project Name	Project Year
Fire Townhome #2	513,000
Public Safety Training Facility	550,000
Subtotal	**1,063,000**
Total	**1,063,000**

Project: Unmanned Aerial System (UAS)

Department: PUBLIC SAFETY GRANTS & EQUIPMENT FUND

Project Years: 2019 - 2019

Project Description

UAS (drone aircraft) including tablet and appropriate software for flight, zoom camera lens, thermal imaging camera, obstacle avoidance system, multi-charger, additional batteries, night operations strobe light kit, dual monitor system, plus licensing/training requirements.

Project Justification

A UAS (drone aircraft) will allow DPS to enhance Mankato Community safety and well-being by providing real-time aerial views. The UAS technology allows for immediate aerial deployment versus the traditional methods of requesting a State Patrol helicopter or airplane. An UAS provides almost instantaneous deployment when timeliness matters most. Some of the identified uses for a UAS device are: search and rescue (especially during nighttime operations), natural disaster planning and evacuation, crime scene aerial photography and incident risk assessments. DPS respects our community privacy rights, and an UAS use would be consistent with judicial rulings and licensing.

Project Uses

	2018	2019	2020	2021	2022	Total
DPS	0	32,000	0	0	0	32,000
Total	**0**	**32,000**	**0**	**0**	**0**	**32,000**

Funding and Sources

	2018	2019	2020	2021	2022	Total
DPS Emergency Management	0	32,000	0	0	0	32,000
Total	**0**	**32,000**	**0**	**0**	**0**	**32,000**

Project Timeline

1st Quarter 2018 - identify vendors and assess for cross departmental usages

2st Quarter 2018 - purchase equipment

2nd Quarter 2018 - training and license

3nd Quarter 2018 - operationalize

2018 CIP Fund Overview - CIVIC CENTER CAPITAL REPLACEMENT FUND

Project Name	Project Year	Project Costs
Ameresco Energy Project	2018	633,000
Arena Energy Conservation Measures (De-Humidification)	2018	798,635
Arena Improvements (De-Humidification)	2018	346,248
Arena Upgrades (De-humidification)	2018	1,361,953
FF & E	2018	100,000
Roof Replacement (1995 Portion of building)	2018	151,396
Roof Replacement - 1995 Original	2018	151,396
Walk-through Meal Detectors	2018	45,000
Subtotal		**3,587,628**
Total		**3,587,628**

2019 CIP Fund Overview

Project Name	Project Year	Project Costs
FF and E	2019	100,000
Portable Screen and Projector for Assembly Halls	2019	55,000
Replace Commissary Refrigeration Compressors	2019	18,000
Roof Replacement - Civic Center & Banquet Hall	2019	407,834
Roof Replacement Civic Center and Banquet Hall	2019	407,834
Ticket Window Expansion	2019	15,000
Walk-Thru Metal Detectors	2019	45,000
Subtotal		**1,048,668**
Total		**1,048,668**

Illustrious CIP Fund Overview

Project Name	Project Year
Additional Customized Shipping Container Concessions and Seating Structure	51,000
Arena Audio System Replacement	375,000
Arena Fourth Floor Club Level	500,000
Banquet Chairs	156,000
Concert Stage Replacement	145,000
Convention Center 2nd Floor Carpet Replacement	57,645
Customized Merchandise Shipping Container	12,500
Customized Shipping Container Concession Stand & Seating Structure	51,000
Customized Shipping Container Ticket Office	17,500
Dressing/Green Room/Offices	150,000
Efface Painting of Arena Exterior	300,000
Event Center Club Level Drink Rail	25,000
Reroute Park Entrance	100,000
Riding Scrubber Replacement	61,000
Riverfront Park Chain Link Fence	18,000
Roof for Amphitheater; Repair Stage and Loading Dock	876,160
Stage Pieces for Secondary Location	25,000
Used Ice Resurfacer	65,000
Walk Behind Scrubber Replacement	16,000
Walk-In Cooler at Riverfront Park	21,750
Wheelchair Lift	9,000
Subtotal	**3,032,555**
Total	**3,032,555**

Project: Ameresco Energy Project

Department: CIVIC CENTER CAPITAL REPLACEMENT FUND

Project Years: 2018 - 2018

Project Description

Project Justification

Project Uses

	2018	2019	2020	2021	2022	Total
Equipment	633,000	0	0	0	0	633,000
Total	**633,000**	**0**	**0**	**0**	**0**	**633,000**

Funding and Sources

	2018	2019	2020	2021	2022	Total
Civic Center Capital	633,000	0	0	0	0	633,000
Total	**633,000**	**0**	**0**	**0**	**0**	**633,000**

Project Timeline

Project: Arena Energy Conservation Measures (De-Humidification)

Department: CIVIC CENTER CAPITAL REPLACEMENT FUND

Project Years: 2018 - 2018

Project Description

Project Justification

Project Uses

	2018	2019	2020	2021	2022	Total
Construction	798,635	0	0	0	0	798,635
Total	**798,635**	**0**	**0**	**0**	**0**	**798,635**

Funding and Sources

	2018	2019	2020	2021	2022	Total
Civic Center Capital	798,635	0	0	0	0	798,635
Total	**798,635**	**0**	**0**	**0**	**0**	**798,635**

Project Timeline

Project: Arena Improvements (De-Humidification)

Department: CIVIC CENTER CAPITAL REPLACEMENT FUND

Project Years: 2018 - 2018

Project Description

Project Justification

Project Uses

	2018	2019	2020	2021	2022	Total
Construction	346,248	0	0	0	0	346,248
Total	**346,248**	**0**	**0**	**0**	**0**	**346,248**

Funding and Sources

	2018	2019	2020	2021	2022	Total
Civic Center Capital	346,248	0	0	0	0	346,248
Total	**346,248**	**0**	**0**	**0**	**0**	**346,248**

Project Timeline

Project: Arena Upgrades (De-humidification)

Department: CIVIC CENTER CAPITAL REPLACEMENT FUND

Project Years: 2018 - 2018

Project Description

Project Justification

Project Uses

	2018	2019	2020	2021	2022	Total
Construction	1,361,953	0	0	0	0	1,361,953
Total	**1,361,953**	**0**	**0**	**0**	**0**	**1,361,953**

Funding and Sources

	2018	2019	2020	2021	2022	Total
Capital Replacement Fund	1,361,953	0	0	0	0	1,361,953
Total	**1,361,953**	**0**	**0**	**0**	**0**	**1,361,953**

Project Timeline

Project: FF & E

Department: CIVIC CENTER CAPITAL REPLACEMENT FUND

Project Years: 2018 - 2018

Project Description

Project Justification

Project Uses

	2018	2019	2020	2021	2022	Total
Construction/Equipment	100,000	0	0	0	0	100,000
Total	**100,000**	**0**	**0**	**0**	**0**	**100,000**

Funding and Sources

	2018	2019	2020	2021	2022	Total
Capital Replacement Fund	100,000	0	0	0	0	100,000
Total	**100,000**	**0**	**0**	**0**	**0**	**100,000**

Project Timeline

Project: Roof Replacement (1995 Portion of building)

Department: CIVIC CENTER CAPITAL REPLACEMENT FUND

Project Years: 2018 - 2018

Project Description

This will be a 30 year roof replacement for all the various roof levels of the building that make up the arena portion of the building

Project Justification

The current twenty year roof is deteriorating and allowing water into concourse and suite level areas of the arena. It is in desperate need of replacement as we have contractors repairing it every rainfall and spring thaw.

Project Uses

	2018	2019	2020	2021	2022	Total
Equipment	151,396	0	0	0	0	151,396
Total	**151,396**	**0**	**0**	**0**	**0**	**151,396**

Funding and Sources

	2018	2019	2020	2021	2022	Total
Capital Replacement Fund	151,396	0	0	0	0	151,396
Total	**151,396**	**0**	**0**	**0**	**0**	**151,396**

Project Timeline

Project: Roof Replacement - 1995 Original

Department: CIVIC CENTER CAPITAL REPLACEMENT FUND

Project Years: 2018 - 2018

Project Description

Project Justification

Project Uses

	2018	2019	2020	2021	2022	Total
Construction	151,396	0	0	0	0	151,396
Total	**151,396**	**0**	**0**	**0**	**0**	**151,396**

Funding and Sources

	2018	2019	2020	2021	2022	Total
Civic Center Capital	151,396	0	0	0	0	151,396
Total	**151,396**	**0**	**0**	**0**	**0**	**151,396**

Project Timeline

Project: Walk-through Meal Detectors

Department: CIVIC CENTER CAPITAL REPLACEMENT FUND

Project Years: 2018 - 2018

Project Description

Project Justification

Project Uses

	2018	2019	2020	2021	2022	Total
Equipment	45,000	0	0	0	0	45,000
Total	**45,000**	**0**	**0**	**0**	**0**	**45,000**

Funding and Sources

	2018	2019	2020	2021	2022	Total
Capital Replacement Fund	45,000	0	0	0	0	45,000
Total	**45,000**	**0**	**0**	**0**	**0**	**45,000**

Project Timeline

Project: FF and E

Department: CIVIC CENTER CAPITAL REPLACEMENT FUND

Project Years: 2019 - 2019

Project Description

Project Justification

Project Uses

	2018	2019	2020	2021	2022	Total
Equipment/Construction	0	100,000	0	0	0	100,000
Total	**0**	**100,000**	**0**	**0**	**0**	**100,000**

Funding and Sources

	2018	2019	2020	2021	2022	Total
Capital Replacement Fund	0	100,000	0	0	0	100,000
Total	**0**	**100,000**	**0**	**0**	**0**	**100,000**

Project Timeline

Project: Portable Screen and Projector for Assembly Halls

Department: CIVIC CENTER CAPITAL REPLACEMENT FUND

Project Years: 2019 - 2019

Project Description

This will be a portable video system for large audiences in our various assembly halls. It will consist of a Barco RLM W14 Projector, long throw lens, mounting frame, 16í x 10í fast fold screen, cabling and mounting hardware.

Project Justification

An additional screen has become a popular request of clients in the new event center. We are currently renting additional video packages for clients through outside sources. With the purchase of this system, we can pass on savings to our clients while increasing our income to completely pay for the equipment in an estimated two years.

Project Uses

	2018	2019	2020	2021	2022	Total
Equipment	0	55,000	0	0	0	55,000
Total	**0**	**55,000**	**0**	**0**	**0**	**55,000**

Funding and Sources

	2018	2019	2020	2021	2022	Total
Capital Replacement Fund	0	55,000	0	0	0	55,000
Total	**0**	**55,000**	**0**	**0**	**0**	**55,000**

Project Timeline

Project: Replace Commissary Refrigeration Compressors

Department: CIVIC CENTER CAPITAL REPLACEMENT FUND

Project Years: 2019 - 2019

Project Description

Will replace aging refrigeration compressors in four concession stands and the commissary kitchen.

Project Justification

The refrigeration compressors in our concession stands haven't been replace since the building opened. The coolers go down frequently, costing us product spoilage, and high repair fees.

Project Uses

	2018	2019	2020	2021	2022	Total
Equipment	0	18,000	0	0	0	18,000
Total	**0**	**18,000**	**0**	**0**	**0**	**18,000**

Funding and Sources

	2018	2019	2020	2021	2022	Total
Capital Replacement Fund	0	18,000	0	0	0	18,000
Total	**0**	**18,000**	**0**	**0**	**0**	**18,000**

Project Timeline

Project: Roof Replacement - Civic Center & Banquet Hall

Department: CIVIC CENTER CAPITAL REPLACEMENT FUND

Project Years: 2019 - 2019

Project Description

Project Justification

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Project Uses

	2018	2019	2020	2021	2022	Total
Construction	0	407,834	0	0	0	407,834
Total	**0**	**407,834**	**0**	**0**	**0**	**407,834**

Funding and Sources

	2018	2019	2020	2021	2022	Total
Capital Replacement Fund	0	407,834	0	0	0	407,834
Total	**0**	**407,834**	**0**	**0**	**0**	**407,834**

Project Timeline

Project: Roof Replacement Civic Center and Banquet Hall

Department: CIVIC CENTER CAPITAL REPLACEMENT FUND

Project Years: 2019 - 2019

Project Description

This will be a 30 year roof replacement for all the various roof levels of the building that make up the civic center and reception Hall portions of the building.

Project Justification

The current twenty year roof is deteriorating and allowing water into the reception hall and upstairs meeting rooms of the civic center. It is in desperate need of replacement as we have contractors repairing it every rainfall and spring thaw.

Project Uses

	2018	2019	2020	2021	2022	Total
Equipment	0	407,834	0	0	0	407,834
Total	**0**	**407,834**	**0**	**0**	**0**	**407,834**

Funding and Sources

	2018	2019	2020	2021	2022	Total
Allocation of Fund Balance	0	250,000	0	0	0	250,000
Capital Replacement Fund	0	157,834	0	0	0	157,834
Total	**0**	**407,834**	**0**	**0**	**0**	**407,834**

Project Timeline

Project: Ticket Window Expansion

Department: CIVIC CENTER CAPITAL REPLACEMENT FUND

Project Years: 2019 - 2019

Project Description

Expand ticket window to allow for three ticket selling stations in Arena ticket office.

Project Justification

Having three ticket lines, opposed to two, would increase the efficiency of the ticket office during large shows and events. This would increase customer satisfaction by improving the customer's experience. In addition, there would be flexibility to use this space for "Will Call." Currently customers are directed around the corner, through the security, to get their will call tickets. This could eliminate that congestion and inconvenience.

Project Uses

	2018	2019	2020	2021	2022	Total
Construction	0	15,000	0	0	0	15,000
Total	**0**	**15,000**	**0**	**0**	**0**	**15,000**

Funding and Sources

	2018	2019	2020	2021	2022	Total
Capital Replacement Fund	0	15,000	0	0	0	15,000
Total	**0**	**15,000**	**0**	**0**	**0**	**15,000**

Project Timeline

Construction completed prior to September 15, 2019.

Project: Walk-Thru Metal Detectors

Department: CIVIC CENTER CAPITAL REPLACEMENT FUND

Project Years: 2019 - 2019

Project Description

Purchase Ten (10) Walk-Thru Metal Detectors. Portable and Weather Resistant so we can utilize at all facilities.

Project Justification

Providing walk-thru metal detectors in addition to wands is the new standard in security protocol in the concert and event industry. In order to satisfy artist's requests we will either need to rent these or purchase and the cost to rent vs purchase will pay for itself after 10 shows. In addition to concerts we will utilize the metal detectors at all Hockey games, concerts at Riverfront Park and any other large ticketed events to create a consistency with the public's expectations when coming to an event.

Project Uses

	2018	2019	2020	2021	2022	Total
Equipment	0	45,000	0	0	0	45,000
Total	**0**	**45,000**	**0**	**0**	**0**	**45,000**

Funding and Sources

	2018	2019	2020	2021	2022	Total
Capital Replacement Fund	0	45,000	0	0	0	45,000
Total	**0**	**45,000**	**0**	**0**	**0**	**45,000**

Project Timeline

Purchase - January 2019. They ship in 4-5 days.

2018 CIP Fund Overview - WATER CAPITAL IMPROVEMENT FUND

Project Name	Project Year	Project Costs
Backwash Piping Replacement	2018	20,000
Crack seal and preservation of WTP Blacktop	2018	13,000
High Lift Station Pump #1 Rehab	2018	25,000
Membrane Replacement	2018	480,000
Waste Handling Facility Hazelton Pump #1 Rehab	2018	15,000
Waste Handling Facility Lime Filter Press #1 Upgrade	2018	63,000
Well 15 Pump 2 inspection	2018	45,000
Subtotal		**661,000**
Total		**661,000**

2019 CIP Fund Overview

Project Name	Project Year	Project Costs
Dolph Booster Upgrade	2019	100,000
High Lift Station Pump 2 Rehab	2019	25,000
Lime Slaker Rehab	2019	12,000
Lime Storage Vent System	2019	35,000
Membrane Valve Replacement	2019	10,000
PLC Upgrade	2019	150,000
Softener #1 Piping Rehab	2019	85,000
Softener Ventilation Installation	2019	40,000
Waste Handling Facility Hazelton Pump #2 Rehab	2019	15,000
Waste Handling Facility Mixer Pump Rehab	2019	12,500
Subtotal		**484,500**
Total		**484,500**

Illustrious CIP Fund Overview

Project Name	Project Year
Generator Contract	55,000
Sibley Park Reservoir Demolition	120,000
Solar Bee installation-Hilltop Reservoir	21,500
Transmission Water Line Cleaning/Inspection	30,000
West Kato Rehab Evaluation	20,000
Subtotal	**246,500**
Total	**246,500**

Project: Backwash Piping Replacement

Department: WATER CAPITAL IMPROVEMENT FUND

Project Years: 2018 - 2018

Project Description

Replace backwash supply piping.

Priority - High

Project Justification

October 2008 stainless steel piping was installed to convey backwash supply water to the membranes. Through years of chemical washes, Hydrochloric acid has corroded the piping to a point where pinhole leaks have formed. A contract welder has patched it multiple times in the last two years. They reported that the in some spots the wall thickness is too thin to complete the weld. At this point in the piping system, the water pressure is roughly 50 psi and flowing 3600gpm. If this pipe were to fail we would not be able to backwash the membranes and in turn not be able to filter water. The WTP maintenance team has installed measures to reduce the HCL concentration throughout the piping, but the damage has already been done to the pipe.

Project Uses

	2018	2019	2020	2021	2022	Total
Construction	16,708	0	0	0	0	16,708
Contingency	1,567	0	0	0	0	1,567
Engineering	1,725	0	0	0	0	1,725
Total	**20,000**	**0**	**0**	**0**	**0**	**20,000**

Funding and Sources

	2018	2019	2020	2021	2022	Total
Revolving Fund	20,000	0	0	0	0	20,000
Total	**20,000**	**0**	**0**	**0**	**0**	**20,000**

Project Timeline

Summer of 2018 and based on contractor's schedule.

Project: Crack seal and preservation of WTP Blacktop

Department: WATER CAPITAL IMPROVEMENT FUND

Project Years: 2018 - 2018

Project Description

Crack seal and preservation of the WTP Blacktop.

Priority - Medium

Project Justification

The WTP pavement have not been sealed in over 15 years. This will prolong the life of the black-top and push back future repairs. Quote in File

Project Uses

	2018	2019	2020	2021	2022	Total
Constrution	11,981	0	0	0	0	11,981
Contingency	1,019	0	0	0	0	1,019
Total	**13,000**	**0**	**0**	**0**	**0**	**13,000**

Funding and Sources

	2018	2019	2020	2021	2022	Total
Unidentified sources	13,000	0	0	0	0	13,000
Total	**13,000**	**0**	**0**	**0**	**0**	**13,000**

Project Timeline

Project: High Lift Station Pump #1 Rehab

Department: WATER CAPITAL IMPROVEMENT FUND

Project Years: 2018 - 2018

Project Description

Pull and inspect the columns, bowls, and motor integrity of the High Lift Station Pump #1. Replace wear parts as well as coat metal as needed, based on an indication of corrosion.

Priority - Medium

Project Justification

This is needed to maintain the inspection rotation of Mankato's water supply. These items are on a 10 year rotation. These pumps provide the quantity of water to the distribution system. We cannot afford to deviate from the recommended inspection cycle. They have never been pulled for inspection. After the first inspection we would be able to provide a more detailed baseline on pump maintenance.

Project Uses

	2018	2019	2020	2021	2022	Total
Construction	23,040	0	0	0	0	23,040
Contingency	1,960	0	0	0	0	1,960
Total	**25,000**	**0**	**0**	**0**	**0**	**25,000**

Funding and Sources

	2018	2019	2020	2021	2022	Total
Unidentified sources	25,000	0	0	0	0	25,000
Total	**25,000**	**0**	**0**	**0**	**0**	**25,000**

Project Timeline

Fall of 2018. This is all contract work which will not require an extended amount of City personnel's time.

Project: Membrane Replacement

Department: WATER CAPITAL IMPROVEMENT FUND

Project Years: 2018 - 2018

Project Description

Replacement of 320 membrane modules.

Priority - High

Project Justification

The facility has 8 membranes filter skids consisting of 80 modules each making a total of 640 filter modules total in the facility. 320 modules will be replaced in 2017 and 320 in 2018. This will begin to spread out future module replacements. The membranes cannot be stored on site. They must be put into service when purchased since there is no guaranteed shelf life if they are not actually on-line receiving water. As the filter modules age the small internal strands become brittle and break. This breakage has increased drastically since early 2015.

Detection is through declining Log Removal Values (LRV), increase Membrane Integrity Testing (MIT)-water flow testing, and the use of sounding gear. The WTP maintenance department is spending one full day every month to maintain an acceptable LRV. The MN Department of Health requires an LRV of 4.0 for potable water. The WTP has set a standard of removing a filter from service for repair if an LRV falls below 4.30. We feel that this proactive approach will keep our team ahead of any arising issues. It will also allow us the time to attend to other emergency repairs before completing membrane repairs. Due to the regulations, extended lead time and increasing maintenance costs it is critical that these be replaced in a timely manner.

*The LRV is a number that is calculated by using the last known filtration volume, last known pressure/trans membrane pressure, and the displaced flow on the Membrane Integrity Panel. This test is done daily to record any perforations in the membrane surface where contaminants would have the possibility to pass.

*Membrane pinning is a process where the leaks are isolated to the A or B side of the filter. Maintenance will conduct a MIT Diagnostic on the filter in question. At this time they will use an electronic stethoscope to listen for fiber breakage. All vessels with possible leaks are recorded. The filter is then drained and locked out. The modules are pulled and submerged in a water bath, the filtrate side of the fiber is pressurized with air. If there is a leak, air bubbles will expose themselves from one of the 10,000 fibers on the module surface.

Project Uses

	2018	2019	2020	2021	2022	Total
Construction	442,383	0	0	0	0	442,383
Contingency	37,617	0	0	0	0	37,617
Total	**480,000**	**0**	**0**	**0**	**0**	**480,000**

Funding and Sources

	2018	2019	2020	2021	2022	Total
Unidentified sources	480,000	0	0	0	0	480,000
Total	**480,000**	**0**	**0**	**0**	**0**	**480,000**

Project Timeline

Installation spring of 2018

Project: Waste Handling Facility Hazelton Pump #1 Rehab

Department: WATER CAPITAL IMPROVEMENT FUND

Project Years: 2018 - 2018

Project Description

Inspection and rehab of #1 Hazelton lime press pump. Replacement of seals, impeller, pump casing, and gaskets. This will be the first overhaul in almost 20 years.

Priority - High

Project Justification

The Hazelton pumps feed lime slurry to the dewatering presses for roughly 6 hours a day. If one were to fail we would lose 50% of our dewatering capacity. The pumps have not been rehabbed in 19 years. The seals on both pumps are leaking. If we are completing a seal repair it would be more feasible to replace the other items in need of attention the same time the seals are replaced. An individual seal for the pump is $6,800 per part.

Project Uses

	2018	2019	2020	2021	2022	Total
Construction	13,824	0	0	0	0	13,824
Contingency	1,176	0	0	0	0	1,176
Total	**15,000**	**0**	**0**	**0**	**0**	**15,000**

Funding and Sources

	2018	2019	2020	2021	2022	Total
Unidentified sources	15,000	0	0	0	0	15,000
Total	**15,000**	**0**	**0**	**0**	**0**	**15,000**

Project Timeline

Fall of 2018

Project: Waste Handling Facility Lime Filter Press #1 Upgrade

Department: WATER CAPITAL IMPROVEMENT FUND

Project Years: 2018 - 2018

Project Description

Upgrade hydraulic and electrical controls of lime filter press #1. Press #2 was completed spring of 2017.

Priority - High

Project Justification

The lime filter presses were installed in 1999. The electrical and hydraulic components have not been upgraded since installation. The hydraulic controls are available, but are expensive and difficult to acquire. The parts needed to control this press are obsolete and are not available third party. If we were to have a failure in the electrical controls this upgrade will need to be completed as an emergency repair. Press #2 was upgraded in 2017 which would allow the operation of one press if #1 were to fail. With the increase in water demand it is required that we operate both presses daily from May through September or during high consumption (over 5.0MGD).

Project Uses

	2018	2019	2020	2021	2022	Total
Construction	63,000	0	0	0	0	63,000
Total	**63,000**	**0**	**0**	**0**	**0**	**63,000**

Funding and Sources

	2018	2019	2020	2021	2022	Total
Unidentified sources	63,000	0	0	0	0	63,000
Total	**63,000**	**0**	**0**	**0**	**0**	**63,000**

Project Timeline

Once supplies are onsite the project will last less than a week.

Project: Well 15 Pump 2 inspection

Department: WATER CAPITAL IMPROVEMENT FUND

Project Years: 2018 - 2018

Project Description

Inspection and rehab of Well 15 pump #2. Motor integrity, bearings, pump casing, and pump bowls are to be inspected. Caisson and Pump one are to be rehabbed/inspected in 2017.

Priority - Medium

Project Justification

The integrity of the pump and associated parts are inspected on a 10 year rotation. The motor is sent off for inspection of the windings and bearings. Pump casing and bowls are inspected for corrosion and coated to prevent future corrosion. This inspection is outside the scope of ability of the WTP maintenance team.

Project Uses

	2018	2019	2020	2021	2022	Total
Construction	41,473	0	0	0	0	41,473
Contingency	3,527	0	0	0	0	3,527
Total	**45,000**	**0**	**0**	**0**	**0**	**45,000**

Funding and Sources

	2018	2019	2020	2021	2022	Total
Unidentified sources	45,000	0	0	0	0	45,000
Total	**45,000**	**0**	**0**	**0**	**0**	**45,000**

Project Timeline

Fall of 2018. All pump rehabs wait until after peak pumping.

Project: Dolph Booster Upgrade

Department: WATER CAPITAL IMPROVEMENT FUND

Project Years: 2019 - 2019

Project Description

Replace and upsize one pump, motor, and Variable Frequency Drive (VFD) to accommodate consumption on the upper system. The available pumps would be two pumps with a capacity of 1,250gpm and one of 2,000gpm plus.

Priority - High

Project Justification

All three boosters are sized the same at 1250gpm. The city has grown to the East in recent years along with the consumption. The need for a second station with a larger booster (over 2,000gpm) is needed. During the summer months two boosters at Dolph are needed to accommodate the overnight demand. If one high efficiency motor with a VFD were installed water would be pumped to the upper system more efficiently.

Project Uses

	2018	2019	2020	2021	2022	Total
Construction	0	83,542	0	0	0	83,542
Contingency	0	7,837	0	0	0	7,837
Engineering	0	8,621	0	0	0	8,621
Total	**0**	**100,000**	**0**	**0**	**0**	**100,000**

Funding and Sources

	2018	2019	2020	2021	2022	Total
Unidentified sources	0	100,000	0	0	0	100,000
Total	**0**	**100,000**	**0**	**0**	**0**	**100,000**

Project Timeline

Summer of 2019. Dependent on contractor schedule.

Project: High Lift Station Pump 2 Rehab

Department: WATER CAPITAL IMPROVEMENT FUND

Project Years: 2019 - 2019

Project Description

Pull and inspect the columns, bowls, and motor integrity of the High Lift Station Pump 2. Replace wear parts as well as coat metal as needed, based on an indication of corrosion.

Priority - Medium

Project Justification

This is needed to maintain the inspection rotation of Mankato's water supply. These items are on a 10 year rotation. These pumps provide the quantity of water to the distribution system. We cannot afford to deviate from the recommended inspection cycle. They have never been pulled for inspection. After the first inspection we would be able to provide a more detailed baseline on pump maintenance.

Project Uses

	2018	2019	2020	2021	2022	Total
Construction	0	20,885	0	0	0	20,885
Contingency	0	1,960	0	0	0	1,960
Engineering	0	2,155	0	0	0	2,155
Total	**0**	**25,000**	**0**	**0**	**0**	**25,000**

Funding and Sources

	2018	2019	2020	2021	2022	Total
Unidentified sources	0	25,000	0	0	0	25,000
Total	**0**	**25,000**	**0**	**0**	**0**	**25,000**

Project Timeline

Fall of 2019. This is all contract work which will not require an extended amount of City personnel's time.

Project: Lime Slaker Rehab

Department: WATER CAPITAL IMPROVEMENT FUND

Project Years: 2019 - 2019

Project Description

Overhaul of the Lime slaker wear parts.

Priority - Low

Project Justification

The lime slaker runs 24 hours a day 6 months out of the year. It is the heart of the softening process, without it we will not be able to lime soften the water. The purpose of the slaker is to take pebble lime and turn it into hydrated lime by separating excess grit and rocks from the lime. These rocks wear down the internal parts and reduce the efficiency. The proposal is to replace paddle shafts, grit forks, grit conveyor, and replace seals. The reduced efficiency of a slaker will cause grit carry over into the following process which will increase the burden on the maintenance crew for grit removal from the softening basin as well as the blowdown tanks.

Project Uses

	2018	2019	2020	2021	2022	Total
Construction	0	10,025	0	0	0	10,025
Contingency	0	940	0	0	0	940
Engineering	0	1,035	0	0	0	1,035
Total	**0**	**12,000**	**0**	**0**	**0**	**12,000**

Funding and Sources

	2018	2019	2020	2021	2022	Total
Unidentified sources	0	12,000	0	0	0	12,000
Total	**0**	**12,000**	**0**	**0**	**0**	**12,000**

Project Timeline

Spring 2019

Project: Lime Storage Vent System

Department: WATER CAPITAL IMPROVEMENT FUND

Project Years: 2019 - 2019

Project Description

Remove the stationary lime vents and install a self-cleaning ventilation system. The purpose of this upgrade is to reduce a safety concern as well as an ongoing maintenance item. A quote was received on the install.

Priority - Medium

Project Justification

The current ventilation system requires cleaning monthly-weather dependent. The maintenance personnel are to climb on top of the lime storage basin with tools, remove the ventilation system, and chisel or hammer all lime build up off the screens. A self-cleaning system would automatically vibrate the screens allowing the particles to fall back into the raw product. If the pressure were to build too high in the storage tank the welded seams would explode. This has happened once before. The only access to the roof after the install would be to complete a monthly PM which would reduce a safety concern.

Project Uses

	2018	2019	2020	2021	2022	Total
Construction	0	32,256	0	0	0	32,256
Contingency	0	2,756	0	0	0	2,756
Total	**0**	**35,012**	**0**	**0**	**0**	**35,012**

Funding and Sources

	2018	2019	2020	2021	2022	Total
Unidentified sources	0	35,000	0	0	0	35,000
Total	**0**	**35,000**	**0**	**0**	**0**	**35,000**

Project Timeline

Summer of 2019

Project: Membrane Valve Replacement

Department: WATER CAPITAL IMPROVEMENT FUND

Project Years: 2019 - 2019

Project Description

Ultra-Filter Valve replacement back stocking of the current valves.

Priority - High

Project Justification

GE filter valve replacement-There are 219 valves on the membrane filters. The manufacturer's recommendation is 8 years on valve bodies. We have had multiple failures the past two years. Each full valve assembly is roughly $2,500 each. This would include Valve body, Actuator, and Position indicator. With the sheer volume of valves in operation we cannot have this repetitive replacement item come out of the line items until we have established an inventory of valves. Quote is attached.

8"-$2,200

10"-$2,600

12"-$2,900

Project Uses

	2018	2019	2020	2021	2022	Total
Construction	0	10,000	0	0	0	10,000
Total	**0**	**10,000**	**0**	**0**	**0**	**10,000**

Funding and Sources

	2018	2019	2020	2021	2022	Total
Unidentified sources	0	10,000	0	0	0	10,000
Total	**0**	**10,000**	**0**	**0**	**0**	**10,000**

Project Timeline

Throughout 2019 as time allows for replacement.

Project: PLC Upgrade

Department: WATER CAPITAL IMPROVEMENT FUND
Project Years: 2019 - 2019

Project Description

Upgrade current/outdated Programming Logic Controllers (PLC). This project would entail purchasing new equipment, install the current program, and install into the new cabinets.

Priority - High

Project Justification

PLC Upgrade-The current PLC's are outdated. Our programmer and their suppliers do not stock our current PLC cards. They have been discontinued. If one were to fail, our only option for replacement would be upgrade or searching E-Bay for a replacement. This upgrade was suggested by IN-Control while they were programming our current system. PLC cards become obsolete quickly and are not able to be refurbished. If a card were to fail that particular portion of the process would be run in manual until a replacement is found. If no replacement is found, an emergency upgrade would be needed. In 2012 there was an analysis of all PLC cards on hand and recommended spares needed. I have a quote to upgrade the PLC's from 2012 with a total of $171,276. It is suggested to do the PLC upgrade in two phases. Phase 1 would be in 2019 with upgrading from GE Fanuc to Rockwell. The $150,000 would cover the hardware and programming costs. Phase 2 would be to complete the PLC2 with another $125,000. Between the phase 1 and 2 we would get an accurate cost estimate to upgrade the remote sites as well as spare parts for the Membrane PLC system.

Project Uses

	2018	2019	2020	2021	2022	Total
Construction	0	138,245	0	0	0	138,245
Contingency	0	11,755	0	0	0	11,755
Total	**0**	**150,000**	**0**	**0**	**0**	**150,000**

Funding and Sources

	2018	2019	2020	2021	2022	Total
Unidentified sources	0	150,000	0	0	0	150,000
Total	**0**	**150,000**	**0**	**0**	**0**	**150,000**

Project Timeline

Summer of 2019. This will be an extended project 2-3 Months. There will be multiple plant shutdowns to facilitate the electrical changes.

Project: Softener #1 Piping Rehab

Department: WATER CAPITAL IMPROVEMENT FUND

Project Years: 2019 - 2019

Project Description

Replace the spiral wound piping from the pipe installed in 2011 to the softener inlet.

Project Justification

The current piping is a spiral wound pipe that was installed in the late 50ís. The pipe is excessively corroded and in need of repair. After the upgrade in 2011 the original thought was to mothball softener #1 and #2 until a decision was made what direction to go in the next master plan. With rising TOC concentrations I made the decision to operate softener #1 along with a new softener as a hydraulic buffer to assist in settling solids pre membrane as well as treat at a higher pH to remove magnesium hardness. The high pH removes roughly 20% more TOC in turn reducing the TTHM formation potential. Operating this way has dramatically increased the quality of Mankato's water. I would like to see this continue until a master plan is complete. If we were able to only operate the two new softeners we lose the ability to remove the percent TOC needed to maintain a low TTHM formation potential.

Project Uses

	2018	2019	2020	2021	2022	Total
Construction	0	71,011	0	0	0	71,011
Contingency	0	6,661	0	0	0	6,661
Engineering	0	7,328	0	0	0	7,328
Total	**0**	**85,000**	**0**	**0**	**0**	**85,000**

Funding and Sources

	2018	2019	2020	2021	2022	Total
Revolving Fund	0	85,000	0	0	0	85,000
Total	**0**	**85,000**	**0**	**0**	**0**	**85,000**

Project Timeline

Spring of 2019. The project will be complete before spring runoff and there is an increase in demand and TOC.

Project: Softener Ventilation Installation

Department: WATER CAPITAL IMPROVEMENT FUND

Project Years: 2019 - 2019

Project Description

Remove 4 skylights and replace with a ventilation system. There is a quote utilizing Javens Mechanical and Gish Electric.

Priority - Medium

Project Justification

There is no ventilation system to remove harmful gasses or dust during maintenance projects. Current air exchanger will only exchange a portion of the air if it is manually hard wired to do so. During projects there will be pressure washing, grinding, and painting that creates an excessive amount of dust and potentially harmful gases. We currently only manage the issue, but the upgrade will create the proper amount of air exchanges to remove all constituents in the air.

May be eligible for a grant.

Project Uses

	2018	2019	2020	2021	2022	Total
Construction	0	36,865	0	0	0	36,865
Contingency	0	3,135	0	0	0	3,135
Total	**0**	**40,000**	**0**	**0**	**0**	**40,000**

Funding and Sources

	2018	2019	2020	2021	2022	Total
Unidentified sources	0	40,000	0	0	0	40,000
Total	**0**	**40,000**	**0**	**0**	**0**	**40,000**

Project Timeline

This is a contract item and will be based on the contractor's schedule. It would be completed in 2019.

Project: Waste Handling Facility Hazelton Pump #2 Rehab

Department: WATER CAPITAL IMPROVEMENT FUND

Project Years: 2019 - 2019

Project Description

Inspection and rehab of #2 Hazelton lime press pump. Replacement of seals, impeller, pump casing, and gaskets. This will be the first overhaul in almost 20 years.

Priority - High

Project Justification

The Hazelton pumps feed lime slurry to the dewatering presses for roughly 6 hours a day. If one were to fail we would lose 50% of our dewatering capacity. The pumps have not been rehabbed in 19 years. The seals on both pumps are leaking. If we are completing a seal repair it would be more feasible to replace the other items in need of attention the same time the seals are replaced. An individual seal for the pump is $6,800 per part.

Project Uses

	2018	2019	2020	2021	2022	Total
Construction	0	12,531	0	0	0	12,531
Contingency	0	1,176	0	0	0	1,176
Engineering	0	1,293	0	0	0	1,293
Total	**0**	**15,000**	**0**	**0**	**0**	**15,000**

Funding and Sources

	2018	2019	2020	2021	2022	Total
Unidentified sources	0	15,000	0	0	0	15,000
Total	**0**	**15,000**	**0**	**0**	**0**	**15,000**

Project Timeline

Fall of 2019.

Project: Waste Handling Facility Mixer Pump Rehab

Department: WATER CAPITAL IMPROVEMENT FUND

Project Years: 2019 - 2019

Project Description

Replace mixer impellers, pump housing, bearings, rehab motors, and associated seals.

Priority - Medium

Project Justification

The mixers have been online since 1999 with no major rehabilitation. There are two mixer sets that operate 24 hours a day 365 days a year. The purpose of a mixing pump is to keep the waste lime solids in suspension before pressing. If a pump were to fail we would have to operate on one tank which would put excessive work on all shifts to operate presses to maintain levels in the blowdown tanks. A rehabilitation will also increase the mixing efficiency of the tanks. The pumps have been inspected in 2016, excessive wear has been noted.

Project Uses

	2018	2019	2020	2021	2022	Total
Construction	0	11,520	0	0	0	11,520
Contingency	0	980	0	0	0	980
Total	**0**	**12,500**	**0**	**0**	**0**	**12,500**

Funding and Sources

	2018	2019	2020	2021	2022	Total
Unidentified sources	0	12,500	0	0	0	12,500
Total	**0**	**12,500**	**0**	**0**	**0**	**12,500**

Project Timeline

Two weeks of in house repairs along with another 2 in the contract motor inspection.

2018 CIP Fund Overview - WASTEWATER CAPITAL IMPROVEMENT FUND

Project Name	Project Year	Project Costs
Aeration Diffuser replacement	2018	25,000
Disc Filter Panel Replacement	2018	115,000
EQ influent flow meter	2018	20,000
Main lift pump rebuild 6 of 6	2018	60,000
Phase 1 of 2 - Link USGS river station to the WWTP SCADA	2018	50,000
Phase 2 of 3 - PLC upgrade	2018	50,000
Subtotal		**320,000**
Total		**320,000**

2019 CIP Fund Overview

Project Name	Project Year	Project Costs
Phase 2 of 2 - Link USGS river station to the WWTP SCADA	2019	50,000
Phase 3 of 3 - PLC upgrade	2019	50,000
Reclaim Pump 2 of 2 rebuild	2019	40,000
Subtotal		**140,000**
Total		**140,000**

Illustrious CIP Fund Overview

Project Name	Project Year
Add new primary clarifier	3,500,000
Aeration DO probe replacement	12,000
Belt Filter Press Upgrade	558,000
Digester Complex Upgrade	18,600,000
EQ forcemain replacement	930,000
EQ valve replacement 4 or 4	17,000
Expansion of Existing Biosolids storage	1,800,000
Guide rail replacement - 2 liftstations	12,000
HVAC upgrade for main switchgear	50,000
Inspection of Water Reclaim main drives 1 of 2	40,000
Inspection of Water Reclaim main drives 2 of 2	40,000
Level Sensor Replacements	18,000
Madison Lake Regional Liftstation Odor control	432,000
Main lift pump rebuild 1 of 6	60,000
Main lift pump rebuild 2 of 6	65,000
Main lift pump rebuild 3 of 6	65,000
Monks Liftstation Upgrade	150,000
Muffin Monster Grinder replacement	38,000
New Disc Filter	1,300,000
ORP / pH probe replacement	20,000
Pohl Creek (Tanager) liftstation upgrade	140,000
Primary Knife valve replacement	50,000
Reclaim Pump Level Controls	25,000
Replace DAF with new thickening process	1,650,000
Replace existing chlorine contact basin	3,600,000
Replacement of existing washer compactor, and install a second compactor	585,000
Replacement of fall protection equipment	15,000
Solids boiler tube replacement	35,000
Switchgear Bucket Cleaning	15,000
Upgrade barscreen to improve removal of debris	1,400,000
Upgrade current DAF electrical MCC	395,000
Upgrade Harper liftstation - pump and forcemain upsize	122,261
Upgrade MCC 5	400,000
Subtotal	**36,139,261**
Total	**36,139,261**

Project: Aeration Diffuser replacement

Department: WASTEWATER CAPITAL IMPROVEMENT FUND

Project Years: 2018 - 2018

Project Description

Diffusers are 10" neoprene disks which supply fine bubbled air to our aeration basins, we have about 12,000 diffusers. The current ones installed have reached the end of their expected useful life. We would order the diffuser's, and installed the diffusers with on-site staff.

Project Justification

We have found a replacement interval of every eight years is best to reduce the potential of failures which would affect the treatment process.

Project Uses

	2018	2019	2020	2021	2022	Total
Unidentified	25,000	0	0	0	0	25,000
Total	**25,000**	**0**	**0**	**0**	**0**	**25,000**

Funding and Sources

	2018	2019	2020	2021	2022	Total
Line Item	25,000	0	0	0	0	25,000
Total	**25,000**	**0**	**0**	**0**	**0**	**25,000**

Project Timeline

1st quarter 2018 order membranes.

2nd quarter 2018 receive membranes, and monitor facility to find a 2 week window to cover installation.

Project: Disc Filter Panel Replacement

Department: WASTEWATER CAPITAL IMPROVEMENT FUND

Project Years: 2018 - 2018

Project Description

Purchase 672 panels to replace the existing panels on our disc filters. Price includes panels, and delivery from the sole supplier of these in Sweden. Installation is performed by on-site staff.

Project Justification

The current filters have been online for six years, and we are beginning to experience an increase in panels tearing due to their age. The original set lasted five years before needing replacement. These filters are required to meet our reuse water standards, thus we would not be able to supply the Mankato Energy Center with water if we run out of our spare panels.

Project Uses

	2018	2019	2020	2021	2022	Total
Contingency	5,000	0	0	0	0	5,000
Equipment	105,000	0	0	0	0	105,000
Shipping	5,000	0	0	0	0	5,000
Total	**115,000**	**0**	**0**	**0**	**0**	**115,000**

Funding and Sources

	2018	2019	2020	2021	2022	Total
Revolving Fund	115,000	0	0	0	0	115,000
Total	**115,000**	**0**	**0**	**0**	**0**	**115,000**

Project Timeline

Order 4th quarter of 2017

Receive panels 1st quarter 2018

Install panels 1st quarter 2018

Project: EQ influent flow meter

Department: WASTEWATER CAPITAL IMPROVEMENT FUND

Project Years: 2018 - 2018

Project Description

Replace failed flow meter with a new flow meter. This involves purchasing a new flow meter, and assisting an outside contractor with the installation of the meter. Our controls contractor would then hook up the software needed.

Project Justification

The existing flow meter is not operational, and is unable to be repaired. This flow meter is going to be needed when Mankato Energy Center completes its expansion in order for facility staff to accurately track equalization of flow during days of heavy reuse usage.

Project Uses

	2018	2019	2020	2021	2022	Total
Equipment	20,000	0	0	0	0	20,000
Total	**20,000**	**0**	**0**	**0**	**0**	**20,000**

Funding and Sources

	2018	2019	2020	2021	2022	Total
General Fund	20,000	0	0	0	0	20,000
Total	**20,000**	**0**	**0**	**0**	**0**	**20,000**

Project Timeline

4th quarter 2017 order flow tube / meter.

2nd quarter 2018 receive meter and install flow tube.

3rd quarter 2018 install software and verify calibration.

Project: Main lift pump rebuild 6 of 6

Department: WASTEWATER CAPITAL IMPROVEMENT FUND

Project Years: 2018 - 2018

Project Description

Schedule to have a 3rd part company assist with removal of pump, send pump to manufacturer for inspection and rebuild of worn components, deliver parts back to facility, and reinstall pump by onsite staff.

Project Justification

In 2010 the facility began rebuilding the six main lift pumps, these have been online since 2000 and need various work done to maintain the proper pump capacity. The request for 2018 would be the final pump to be pulled and rebuilt in this series.

Project Uses

	2018	2019	2020	2021	2022	Total
Contractual	60,000	0	0	0	0	60,000
Total	**60,000**	**0**	**0**	**0**	**0**	**60,000**

Funding and Sources

	2018	2019	2020	2021	2022	Total
General Fund	60,000	0	0	0	0	60,000
Total	**60,000**	**0**	**0**	**0**	**0**	**60,000**

Project Timeline

1st quarter 2018 schedule removal

2nd quarter 2018 remove pump and have repair preformed.

3rd quarter 2018 receive pump back and reinstall.

Project: Phase 1 of 2 - Link USGS river station to the WWTP SCADA

Department: WASTEWATER CAPITAL IMPROVEMENT FUND

Project Years: 2018 - 2018

Project Description

Link USGS river station to the WWTP SCADA network via radio signal, link Stoltzmann liftstation to SCADA via repeater on light pole on Stolzmann, add pump down programming at each liftstation to allow flow data as well as pump times are each liftstation. The purpose of this is to allow better integration and data recording of the river level (a service we spend several thousand dollars a year to maintain), and increase overall data acquisition of flow information at all Mankato liftstations.

Project Justification

This was originally proposed for 2017, but is being pushed back due to some un expected work needed at the facility.

The purpose of this is to allow better integration and data recording of the river level (a service we spend several thousand dollars a year to maintain), and increase overall data acquisition of flow information at all Mankato liftstations.

Project Uses

	2018	2019	2020	2021	2022	Total
Construction Cost	39,185	0	0	0	0	39,185
Contingency	6,270	0	0	0	0	6,270
Engineering	4,545	0	0	0	0	4,545
Total	**50,000**	**0**	**0**	**0**	**0**	**50,000**

Funding and Sources

	2018	2019	2020	2021	2022	Total
General Fund	50,000	0	0	0	0	50,000
Total	**50,000**	**0**	**0**	**0**	**0**	**50,000**

Project Timeline

1st quarter 2018 develop plan with In Control and Corps of Engineers for addition of telemetry at Mulberry flood station.

2nd quarter 2018 begin installing panel, and develop telemetry plan.

3rd quarter 2018 break for winter season.

Project: Phase 2 of 3 - PLC upgrade

Department: WASTEWATER CAPITAL IMPROVEMENT FUND

Project Years: 2018 - 2018

Project Description

Replace existing plc's from GE Fanuc to Rockwell PLC's. 2018 will be PLC's 7,8,9.

Project Justification

Our current PLC's are utilizing defunct technology, and we are beginning to be unable to find replacement hardware. These PLC's will also provide the needed capacity for future expansion, thus this would reduce some expense on future projects in the area of controls.

Project Uses

	2018	2019	2020	2021	2022	Total
Construction Costs	40,000	0	0	0	0	40,000
Contingency	10,000	0	0	0	0	10,000
Total	**50,000**	**0**	**0**	**0**	**0**	**50,000**

Funding and Sources

	2018	2019	2020	2021	2022	Total
General Fund	50,000	0	0	0	0	50,000
Total	**50,000**	**0**	**0**	**0**	**0**	**50,000**

Project Timeline

1st quarter develop plan with In Control for replacement, and they will build new panels.

2nd quarter begin installing new PLC's

Project: Phase 2 of 2 - Link USGS river station to the WWTP SCADA

Department: WASTEWATER CAPITAL IMPROVEMENT FUND

Project Years: 2019 - 2019

Project Description

Link USGS river station to the WWTP SCADA network via radio signal, link Stoltzmann liftstation to SCADA via repeater on light pole on Stolzmann, add pump down programming at each liftstation to allow flow data as well as pump times are each liftstation. The purpose of this is to allow better integration and data recording of the river level (a service we spend several thousand dollars a year to maintain), and increase overall data acquisition of flow information at all Mankato liftstations.

Project Justification

The purpose of this is to allow better integration and data recording of the river level (a service we spend several thousand dollars a year to maintain), and increase overall data acquisition of flow information at all Mankato liftstations.

Project Uses

	2018	2019	2020	2021	2022	Total
Contractor	0	40,000	0	0	0	40,000
Equipment	0	10,000	0	0	0	10,000
Total	**0**	**50,000**	**0**	**0**	**0**	**50,000**

Funding and Sources

	2018	2019	2020	2021	2022	Total
General Fund	0	50,000	0	0	0	50,000
Total	**0**	**50,000**	**0**	**0**	**0**	**50,000**

Project Timeline

1st quarter 2019 continue plan with In Control and Corps of Engineers for addition of telemetry at Mulberry flood station.

3rd quarter 2019 complete project

Project: Phase 3 of 3 - PLC upgrade

Department: WASTEWATER CAPITAL IMPROVEMENT FUND

Project Years: 2019 - 2019

Project Description

Replace existing plc's from GE Fanuc to Rockwell PLC's. 2018 will be PLC's 10, 11, 12, 13, 14.

Project Justification

Our current PLC's are utilizing defunct technology, and we are beginning to be unable to find replacement hardware. These PLC's will also provide the needed capacity for future expansion, thus this would reduce some expense on future projects in the area of controls.

Project Uses

	2018	2019	2020	2021	2022	Total
Contractor	0	10,000	0	0	0	10,000
Equipment	0	40,000	0	0	0	40,000
Total	**0**	**50,000**	**0**	**0**	**0**	**50,000**

Funding and Sources

	2018	2019	2020	2021	2022	Total
General Fund	0	50,000	0	0	0	50,000
Total	**0**	**50,000**	**0**	**0**	**0**	**50,000**

Project Timeline

1st quarter develop plan with In Control for replacement, and they will build new panels.

2nd quarter begin installing new PLC's

Project: Reclaim Pump 2 of 2 rebuild

Department: WASTEWATER CAPITAL IMPROVEMENT FUND

Project Years: 2019 - 2019

Project Description

Hire contractor to pull pump utilizing a crane, and haul pump offsite for inspection and rebuild. After repair, higher contractor to reinstall pump utilizing crane.

Project Justification

Four years ago the last reclaim pump was rebuilt with minor repairs needed, and we want to rebuild the second one in 2019 as this will be the year Mankato Energy Center is planning on going online. We would schedule this to be complete prior to them starting for the season.

Project Uses

	2018	2019	2020	2021	2022	Total
Unidentified	0	40,000	0	0	0	40,000
Total	**0**	**40,000**	**0**	**0**	**0**	**40,000**

Funding and Sources

	2018	2019	2020	2021	2022	Total
General Fund	0	40,000	0	0	0	40,000
Total	**0**	**40,000**	**0**	**0**	**0**	**40,000**

Project Timeline

4th quarter 2018 schedule contractor to remove and repair drive.

1st quarter 2019 inspect the drives and have repairs completed.

April 2019 receive pump back and reinstall prior to May when demand begins to increase.

2018 CIP Fund Overview - STORMWATER CAPITAL FUND

Project Name	Project Year	Project Costs
10460 Viking Ravine Sanitary Sewer Lining Project	2018	634,132
Airport Liftstation Rehab	2018	151,470
Barnes Creek Improvements	2018	150,000
Private Property BMPs	2018	100,000
Street Reconstruction Projects 2018	2018	668,552
University Park Pond	2018	764,978
Wilson Creek Vegitation Management	2018	160,000
Subtotal		**2,629,132**
Total		**2,629,132**

2019 CIP Fund Overview

Project Name	Project Year	Project Costs
2019 Warren Street Basin Expansion	2019	1,200,000
Lake Street Pumping Station	2019	339,800
Premier Pond Cleaning and Stabilization	2019	750,000
Private Property BMPs	2019	100,000
Southeast Water Quality Project	2019	13,750,000
Street Reconstruction Projects 2019	2019	412,560
Subtotal		**16,552,360**
Total		**16,552,360**

2020 CIP Fund Overview

Project Name	Project Year	Project Costs
Indian Creek Pump Station Facility & Electrical	2020	611,300
Indian Creek Stabilization	2020	250,000
Monks Avenue Ravine	2020	173,163
Private Property BMPs	2020	100,000
Street Reconstruction Projects 2020	2020	706,865
Subtotal		**1,841,328**
Total		**1,841,328**

2021 CIP Fund Overview

Project Name	Project Year	Project Costs
Honeymead Pump Station Facility & Electrical	2021	282,900
Lake Dorthy & Clover Leaf Pond	2021	1,500,000
Private Property BMPs	2021	100,000
Street Reconstruction Projects 2021	2021	610,936
Subtotal		**2,493,836**
Total		**2,493,836**

2022 CIP Fund Overview

Project Name	Project Year	Project Costs
Private Property BMPs	2022	100,000
Southview Estate I & II Vegitation	2022	179,991
Street Reconstruction Projects 2022	2022	551,272
Warren Creek Facility & Electrical	2022	621,550
Subtotal		**1,452,813**
Total		**1,452,813**

Project: 10460 Viking Ravine Sanitary Sewer Lining Project

Department: STORMWATER CAPITAL FUND

Project Years: 2018 - 2018

Project Description

Line 3,375 feet of 12 inch vitrified clay sanitary sewer piping from manhole #23-72 located at 313 Viking Drive, to manhole #23-56 located at James Avenue and Bartholomew Lane.

Project Justification

Piping is starting to fail. We have pipe separation, off set joints, cracked and broken pipe through-out this area. We cannot do routine maintenance on our system in this area, because we cannot get our equipment into this area. Gray water leaking from the system can easily go undetected because the pipe follows the creek all the way to James Avenue.

Project Uses

	2018	2019	2020	2021	2022	Total
Construction Contingency	49,697	0	0	0	0	49,697
Engineering Fee	54,667	0	0	0	0	54,667
Finance Fee	32,800	0	0	0	0	32,800
Sanitary Sewer	442,917	0	0	0	0	442,917
Street	54,053	0	0	0	0	54,053
Total	**634,133**	**0**	**0**	**0**	**0**	**634,133**

Funding and Sources

	2018	2019	2020	2021	2022	Total
Sewer Utility	634,132	0	0	0	0	634,132
Total	**634,132**	**0**	**0**	**0**	**0**	**634,132**

Project Timeline

Project: Airport Liftstation Rehab

Department: STORMWATER CAPITAL FUND

Project Years: 2018 - 2018

Project Description

Manhole structures # 33-65 and # 33-64 located just off of Airport Drive and 589th Avenue need to be replaced. Manhole structures are in poor shape, they are deteriorating rapidly. Deterioration of the structures is being caused by very high concentrations of hydrogen sulfide. Manhole structures need to be removed and new structures needs to be installed. In addition, the Airport lift station and some adjacent structures will be lined to prevent further deterioration.

Project Justification

Manhole structures are failing. There are chunks of deteriorated concrete falling off the sides of the structures and blocking the channel. City staff inspects these structures weekly to make sure we do not have channels plugged off causing a backup. Possibility of having a sanitary sewer backup is moderately high.

This project allows the City of Mankato to meet its obligations with the Lake Washington Sanitary Sewer District (LWSSD) by providing reliable, uninterrupted service. This project allows for the level of service currently provided to be maintained and done so in a manner that will ensure reliability of the system. While this infrastructure is not something the public is aware of on a daily basis, it is something that should it fail, will be highly disruptive to the lives of those that utilize it.

By providing reliable, uninterrupted service sanitary sewer service to the Lake Washington Sanitary Sewer District it allows for the area within the district to develop and operate at its highest potential thereby creating economic development for the communities around the lakes within the district.

Currently the cost of the project will be shared in accordance with the LWSSD interconnection agreement. At this time a formal endorsement of the project from the LWSSD board has not taken place and will need to occur prior to award of a contract. However, plans and specifications for the project have been completed and ready to be bid at any time.

Improving the operation of the lift station and interconnect point will reduce calls for service due to odor and reduce the investment of staff time needed to clean and maintain these structures.

Project Uses

	2018	2019	2020	2021	2022	Total
Admin/bonding	7,835	0	0	0	0	7,835
Construction Contingency	11,871	0	0	0	0	11,871
Engineering	13,058	0	0	0	0	13,058
Sanitary Sewer	118,707	0	0	0	0	118,707
Total	**151,470**	**0**	**0**	**0**	**0**	**151,470**

Funding and Sources

	2018	2019	2020	2021	2022	Total
Sewer Utility	151,470	0	0	0	0	151,470
Total	**151,470**	**0**	**0**	**0**	**0**	**151,470**

Project Timeline

Dependent upon LWSSD Board endorsement

Project: Barnes Creek Improvements

Department: STORMWATER CAPITAL FUND

Project Years: 2018 - 2018

Project Description

This project will provide channel and bank stabilization along a developed portion of the waterway. This improvement will be limited to the 10-year water level and below. Provisions will be made to allow petitioned private improvements above the 10-year water level be undertaken as a part of the project that will be assessed to property owners.

Project Justification

Barnes Creek has reached a critical point with respect to bank erosion along developed parcels. Velocity reduction measures are needed to ensure that the channel banks remain within the drainage easement and meander corridor as established in the surface water management policy. In order to accomplish this, in-channel velocity reduction will be needed.

Project Uses

	2018	2019	2020	2021	2022	Total
Contingency	12,383	0	0	0	0	12,383
Engineering	13,793	0	0	0	0	13,793
Stormwater	123,824	0	0	0	0	123,824
Total	**150,000**	**0**	**0**	**0**	**0**	**150,000**

Funding and Sources

	2018	2019	2020	2021	2022	Total
Stormwater Utility	150,000	0	0	0	0	150,000
Total	**150,000**	**0**	**0**	**0**	**0**	**150,000**

Project Timeline

October - Neighborhood Meeting

January - Feasibility Hearing/Advertise for bids

April - Construction

June - Completion

Project: Private Property BMPs

Department: STORMWATER CAPITAL FUND

Project Years: 2018 - 2022

Project Description

As a part of the Surface Water Management Policy, a cost sharing program for property owners has been established. This program provides a public contribution to private improvements that are on surface water conveyances that carry public water.

Project Justification

In order to promote improvements along surface waters a cost sharing program was established as a part of the Surface Water Management Policy. By promoting private investment along surface waters conveying public drainage property owner will be able to achieve the desired level of service of an improvement should for private property.

Project Uses

	2018	2019	2020	2021	2022	Total

Funding and Sources

	2018	2019	2020	2021	2022	Total
Stormwater Utility	100,000	100,000	100,000	100,000	100,000	500,000
Total	**100,000**	**100,000**	**100,000**	**100,000**	**100,000**	**500,000**

Project Timeline

Project: Street Reconstruction Projects 2018

Department: STORMWATER CAPITAL FUND

Project Years: 2018 - 2018

Project Description

Each year, the City of Mankato performs reconstruction and resurfacing projects identified in the Community Investment Plan. While each project has a different mix of funding sources, the costs associated with storm drainage improvements have generally been funded through the storm water utility fund. These costs represent the total storm drainage costs for all of the 2018 Surface Transportation Community Investment Plan.

Project Justification

Project Uses

	2018	2019	2020	2021	2022	Total
Construction	668,552	0	0	0	0	668,552
Total	**668,552**	**0**	**0**	**0**	**0**	**668,552**

Funding and Sources

	2018	2019	2020	2021	2022	Total
Stormwater Utility	668,552	0	0	0	0	668,552
Total	**668,552**	**0**	**0**	**0**	**0**	**668,552**

Project Timeline

Project: University Park Pond

Department: STORMWATER CAPITAL FUND

Project Years: 2018 - 2018

Project Description

The University Park Pond is located east of Heron Drive and south of Plato Street in the University Park neighborhood. During significant rainfall events, runoff routed to this pond exceeds the storage capacity resulting in surface flow onto Heron Drive through an emergency overflow. The City of Mankato is coordinating with the developer of the land immediately south of the existing pond and has identified an opportunity to improve the storm water conditions for this area by expanding the University Park Pond. The City of Mankato has evaluated pond modification alternatives with the following primary goals: (1) reduce the 100-year high water level (HWL) to provide 2 feet of freeboard prior to overflow onto Heron Drive, (2) reduce the hydraulic grade line in the downstream storm sewer system, and (3) provide water quality benefits for the existing upstream area and the proposed development.

Project Justification

In addition to the lack of storage capacity within the University Park Pond, the modeling results for the 10-year event indicate that most of the downstream system (between University Park Pond and Copperfield Pond) is undersized, resulting in surcharge conditions. Based on this finding, it is recommended that any modifications to the University Park Pond do not result in increased discharge rates. This lack of capacity at the standard 10-year design event can cause unwanted consequences to the system as well as the properties that drain into this system. This lack of capacity can result in minor flooding and pond in the streets, or under more intense rain events, flooding on private property.

The proposed project would expand the pond from approximately 2.5 acres to almost 6 acres in size. Additionally, the pond would be converted from the wet pond with a permeant pool to a dry pond, providing even greater storage. The use of a dry pond system has also been found to better improve the treatment of the stormwater and increase the maintenance interval for the pond.

While the project is proposed on the standard design-bid-build schedule typically used for CIP projects, it is subject to the schedule of the proposed development. At this time a schedule has not been provided, but the project is anticipated to start in FY 2018.

Project Uses

	2018	2019	2020	2021	2022	Total
Admin/bonding	39,568	0	0	0	0	39,568
Contingency	59,951	0	0	0	0	59,951
Engineering	65,946	0	0	0	0	65,946
Storm Water	599,513	0	0	0	0	599,513
Total	**764,978**	**0**	**0**	**0**	**0**	**764,978**

Funding and Sources

	2018	2019	2020	2021	2022	Total
Stormwater Utility	764,978	0	0	0	0	764,978
Total	**764,978**	**0**	**0**	**0**	**0**	**764,978**

Project Timeline

December - Informational meeting

January - Feasibility Hearing

March - Bid

May - Start construction

August - Project completion

Project: Wilson Creek Vegetation Management

Department: STORMWATER CAPITAL FUND

Project Years: 2018 - 2018

Project Description

This project would remove and establish vegetation along Wilson Creek between Hoffman Road and CSAH 60 (Stadium Road) in order to provide vegetation management in accordance with the Surface Water Management Policy.

Project Justification

A management plan for this corridor has been developed over the past few years that will reduce overall ongoing maintenance costs and address most of the concerns raised by the residents in the area.

The removal of dead trees and debris will target both fallen trunks within the banks and cutting the larger trees on the edge of banks which are in imminent danger of falling resulting in a larger slope failure area. Cut trees and logs should be removed from the floodplain, except in the cases in which they can be utilized for erosion control or bank stabilization projects. In addition, removal of invasive species, primarily buckthorn, and overall thinning of and reduction of less desirable tree species to open the tree canopy and reduce shading along the floodplain corridor.

Efforts will be made to promote and promulgate the establishment of denser deeper rooted grassy vegetation along the riparian corridor to reduce further erosion. This planting program will focus on native resilient plants that can not only contribute to area aesthetics but also provide some screening cover and help control erosion.

Once maintainable vegetation is established, regular maintenance activities can take place as outlined in the Surface Water Management Plan. Additional improvements and projects can be incorporated into the Community Investment Plan as funding streams for reach wide improvements is identified.

Project Uses

	2018	2019	2020	2021	2022	Total
Stormwater	160,000	0	0	0	0	160,000
Total	**160,000**	**0**	**0**	**0**	**0**	**160,000**

Funding and Sources

	2018	2019	2020	2021	2022	Total
Stormwater Utility	160,000	0	0	0	0	160,000
Total	**160,000**	**0**	**0**	**0**	**0**	**160,000**

Project Timeline

January - Feasibility Hearing

March - Bid

April - Start construction

June - Project completion

Project: 2019 Warren Street Basin Expansion

Department: STORMWATER CAPITAL FUND

Project Years: 2019 - 2019

Project Description

This project increase the capacity and treatment of the Warren Street storm water basin through rerouting pipes and constructing a second basin. IN order to complete the project, land acquisition or an easement is required from Minnesota State University, Mankato.

Project Justification

This basin no longer has the required level of service to meet the needs of the watershed. The low level of service results in overtopping in lower intensity storms and increase the chance of failure of the embankment.

Project Uses

	2018	2019	2020	2021	2022	Total
Stormwater	0	1,200,000	0	0	0	1,200,000
Total	**0**	**1,200,000**	**0**	**0**	**0**	**1,200,000**

Funding and Sources

	2018	2019	2020	2021	2022	Total
PFA	0	960,000	0	0	0	960,000
Sales Tax	0	240,000	0	0	0	240,000
Total	**0**	**1,200,000**	**0**	**0**	**0**	**1,200,000**

Project Timeline

January - Feasibility Hearing

March - Bid

May - Start of construction

October - Project Completion

Project: Lake Street Pumping Station

Department: STORMWATER CAPITAL FUND

Project Years: 2019 - 2019

Project Description

Lake Street Pump Station is located at the end of a cul-de-sac, near the intersection of North River Drive and Pauley Way. The total drainage area for the Lake Street pump station is approximately 292 acres. The Lake Street pump station has three vertical turbine pumps, with a design capacity of 10,000 GPM. This project will include necessary repairs outlined in the Flood Risk Reduction System report conducted by SEH. The improvements include reroofing and building envelope repairs, ventilation improvements, replacing the aging control and electrical gear, installation of a standby generator for emergency power, and installation of fall protection.

Project Justification

Several deficiencies were noted in the station. These included structural deterioration in the building components and electrical issues that need to be addressed to ensure the reliability of the station. The detail of the deterioration and reliability issues are noted in the 2017 Flood Risk Reduction System Pump Station Modernization Study performed by SEH.

Project Uses

	2018	2019	2020	2021	2022	Total
Bonding	0	17,576	0	0	0	17,576
Construction Cost	0	266,301	0	0	0	266,301
Contingency	0	26,630	0	0	0	26,630
Engineering	0	29,293	0	0	0	29,293
Total	**0**	**339,800**	**0**	**0**	**0**	**339,800**

Funding and Sources

	2018	2019	2020	2021	2022	Total
Sales Tax	0	198,500	0	0	0	198,500
Stormwater Utility	0	141,300	0	0	0	141,300
Total	**0**	**339,800**	**0**	**0**	**0**	**339,800**

Project Timeline

January - Feasibility Hearing
March - Bid
May - Construction
October - Project Completion

Project: Premier Pond Cleaning and Stabilization

Department: STORMWATER CAPITAL FUND

Project Years: 2019 - 2019

Project Description

The Premier Pond Cleaning and stabilization project will remove sediment that has been collected in the pond. Additionally, it will regrade and stabilize the banks of the pond to prevent erosion from wave action. Minor modifications may be made to the pond to meet current pollution removal standards and discharge rate requirements.

Project Justification

The Premier Pond was constructed as a part of the Eastwood Energy Center development in the early 1990s. This pond was built as a rate control pond as pollutant removal standards were not in effect at the time of design. This pond not only is a stormwater facility it also is a part of the overall gateway treatment along the TH 22 corridor. As such it is required to be maintained to a standard in conformance with district requirements. No major maintenance has been performed on this pond, and sediment levels are over 2 feet, in most location warranting removal and disposal.

Project Uses

	2018	2019	2020	2021	2022	Total
Administration	0	38,794	0	0	0	38,794
Contingency	0	58,777	0	0	0	58,777
Engineering	0	64,655	0	0	0	64,655
Stormwater	0	587,774	0	0	0	587,774
Total	**0**	**750,000**	**0**	**0**	**0**	**750,000**

Funding and Sources

	2018	2019	2020	2021	2022	Total
Stormwater Utility	0	750,000	0	0	0	750,000
Total	**0**	**750,000**	**0**	**0**	**0**	**750,000**

Project Timeline

April - Design
June - Bid
October - Construction
May 2020 - Final completion

Project: Southeast Water Quality Project

Department: STORMWATER CAPITAL FUND

Project Years: 2019 - 2019

Project Description

The SE Water Quality Project seeks to implement drainage management and associated water quality enhancements that are focused in the Southeast Drainage District and associated stream courses, including the main stem of the Minnesota River.

The first phase of the project is already underway and consists of a comprehensive watershed study to identify the hydrologic and hydraulic characteristics of the watershed and the major creeks, ravine, and waterways. The study will also document areas with existing erosion issues, develop a watershed erosion management plan with recommended best management practices (BMP's), estimate potential sediment and pollution load reductions with the recommended BMPs, and potential agency permits required. The study is expected to be completed within the next 90 days.

Several projects have already become apparent during the study and staff suggests that a bonding request is made by June 16, which is the deadline for preliminary submittal. The final bonding request is due on October 20, 2017, which will allow sufficient time for study results to be further analyzed and costs refined.

The following projects and costs have been identified:

1. Regional ponding and wetland construction in the agricultural areas of the minor watersheds that drain into the city system 52 acres - $10 million

2. In-channel improvements, including stream bank stabilization and fortification, right sizing crossing culverts and in-channel velocity reduction to reduce flow, and other in-channel mitigation - $1 million

3. Bridge replacement/modification at the Indian Creek Diversion at Indian Lake Road - $750,000

4. Riverbank stabilization along the Minnesota River - including Land of Memories and Riverfront Park/Waste Water Treatment Plant - $2 million

The project planned for 2019 will encompass the wetland restoration to achieve a large portion of the water quantity benefits.

Project Justification

The public purpose of the projects is to mitigate existing water quality issues associated with the Southeast watershed. These projects will reduce discharges of sediment and nutrients, such as nitrogen and phosphorus, into the Minnesota River. For example, construction of the regional

ponding in the rural minor watersheds will reduce uncontrolled peak flows into the city systems that currently reduce the system's capacity by 50 percent during high flows and has caused severe erosion within urban ravine systems and flooding of residential areas. Wetland impacts in the rural areas of the minor watersheds have removed approximately 210-acre feet of natural storm water retention and the constructed basins will aim to restore the retention capacity. In addition, the retention improvements will reduce total suspended solids by over 63 percent and reduce phosphorus discharge by over 70 percent. Mitigating bank erosion along the Minnesota River will also improve water quality by reducing sediment and associated nutrient loads, and will also protect city assets, such as the Land of Memories Well Field and the Regional Waste Water Treatment Plan.

It is expected that these projects can serve as a template for best management practices to reduce total maximum daily loads of nutrients and sediment into the Minnesota River and can be replicated elsewhere in the Minnesota River Watershed. Replicating and implementing the best management practices is imperative as municipalities in the watershed are facing increased challenges in treating water supplies that are designed to be sustainable by reducing reliance on deep aquifers and instead rely on shallower aquifers linked to the river systems. In Mankato's case, over 75 percent of the water supply is drawn from shallow aquifers under the Blue Earth and Minnesota Rivers; however, increasing nitrogen levels from non-point sources are forcing Mankato to consider either drawing additional water from deep aquifers, which have a limited supply due to longer recharge time, or examining additional treatment options that may cost upwards of $10 million. The reduction of pollutants is a State mandate, but State enforcement and implementation to reduce non-point source pollutants are lacking and the costs to address the State's failure is falling to local governments. It is likely that unless nitrogen levels are addressed in the Minnesota River that Mankato will be forced to implement additional water treatment options and will request State assistance with those costs.

Project Uses

	2018	2019	2020	2021	2022	Total
In-channel improvements	0	1,000,000	0	0	0	1,000,000
Indian Creek Diversion bridge modification	0	750,000	0	0	0	750,000
Minnesota River Bank Stabilization	0	2,000,000	0	0	0	2,000,000
Wetland Restoration	0	10,000,000	0	0	0	10,000,000
Total	**0**	**13,750,000**	**0**	**0**	**0**	**13,750,000**

Funding and Sources

	2018	2019	2020	2021	2022	Total
Sales Tax	0	6,875,000	0	0	0	6,875,000
State Bonding	0	6,875,000	0	0	0	6,875,000
Total	**0**	**13,750,000**	**0**	**0**	**0**	**13,750,000**

Project Timeline

Design will take place last 2018 early 2019 with constriction taking place after harvest in 2019. The project is anticipated to be completed in spring of 2020.

Project: Street Reconstruction Projects 2019

Department: STORMWATER CAPITAL FUND

Project Years: 2019 - 2019

Project Description

Each year, the City of Mankato performs reconstruction and resurfacing projects identified in the Community Investment Plan. While each project has a different mix of funding sources, the costs associated with storm drainage improvements have generally been funded through the storm water utility fund. These costs represent the total storm drainage costs for all of the 2019 Surface Transportation Community Investment Plan.

Project Justification

Project Uses

	2018	2019	2020	2021	2022	Total
Construction	0	412,560	0	0	0	412,560
Total	**0**	**412,560**	**0**	**0**	**0**	**412,560**

Funding and Sources

	2018	2019	2020	2021	2022	Total
Stormwater Utility	0	412,560	0	0	0	412,560
Total	**0**	**412,560**	**0**	**0**	**0**	**412,560**

Project Timeline

2018 CIP Fund Overview - AIRPORT CAPITAL IMPROVEMENT FUND

Project Name	Project Year	Project Costs
Mankato Regional Airport - Airport Master Plan Phase II	2018	300,000
Mankato Regional Airport - Airport Trim Mower	2018	70,000
Mankato Regional Airport - Repair Existing Hangars	2018	150,000
Mankato Regional Airport - Runway Snowblower	2018	133,000
Mankato Regional Airport - Terminal Interior Remodel	2018	350,000
Mankato Regional Airport Part 139 Certification	2018	372,350
Subtotal		**1,375,350**
Total		**1,375,350**

2019 CIP Fund Overview

Project Name	Project Year	Project Costs
Mankato Regional - MALSR Approach	2019	300,000
Mankato Regional Airport - Runway 15/33 Concrete Repair	2019	50,000
Mankato Regional Airport - SRE Building Addition	2019	800,000
Mankato Regional Airport - Wildlife Perimeter Fencing	2019	382,000
Mankato Regional Airport Part 139 Certification	2019	241,250
Subtotal		**1,773,250**
Total		**1,773,250**

Illustrious CIP Fund Overview

Project Name	Project Year
Mankato Regional Airport - Airport Maintenance Vehicle	70,000
Mankato Regional Airport - FAA Air Traffic Control Tower	1,405,000
Mankato Regional Airport - Runway 15 Safety Area	500,000
Mankato Regional Airport - Taxiway B2 Connector	550,000
Mankato Regional Airport ñ Fuel Farm Replacement	230,000
Subtotal	**2,755,000**
Total	**2,755,000**

Project: Mankato Regional Airport - Airport Master Plan Phase II

Department: AIRPORT CAPITAL IMPROVEMENT FUND

Project Years: 2018 - 2018

Project Description

Master Plan Phase Two - Consulting and Engineering services: Phase Two of the Airport Master Plan will include work on an Aeronautical Geographic Information System (AGIS), Exhibit A Update (Land Use/Ownership) and Wildlife Hazard Mitigation plan.

Project Justification

Phase One of the Airport Master Plan identified the need to evaluate additional items not listed in the original scope of work to include an AGIS, Exhibit A update and Wildlife Hazard Mitigation plan. Much of this is project is due to the evolving FAA requirements and is required to complete and closeout the FAA Airport Master Plan. Project is dependent on grants from the FAA and/or MnDOT.

Project Uses

	2018	2019	2020	2021	2022	Total
Master Plan Phase 2	300,000	0	0	0	0	300,000
Total	**300,000**	**0**	**0**	**0**	**0**	**300,000**

Funding and Sources

	2018	2019	2020	2021	2022	Total
Airport CIP	15,000	0	0	0	0	15,000
FFA	270,000	0	0	0	0	270,000
MnDOT	15,000	0	0	0	0	15,000
Total	**300,000**	**0**	**0**	**0**	**0**	**300,000**

Project Timeline

Fall 2017- Potential grant award from FAA.

Winter 2017 - Qualify consultants and bid project.

Summer 2018 - Complete Phase two of the Master Plan.

Project: Mankato Regional Airport - Airport Trim Mower

Department: AIRPORT CAPITAL IMPROVEMENT FUND

Project Years: 2018 - 2018

Project Description

Purchase equipment - New airport trim mower. The trim mower is used daily during the summer months to trim around hundreds of light fixtures and signs, along with close in mowing work near buildings and in ditches.

Project Justification

Airport grass must be kept mowed for safety and wildlife control reasons. The current airport trim mower is reaching the end its useful life. It has approximately 7000 hours on it and is subject to more frequent breakdowns. The trim mower is critical to mow in areas where the large airport tractor mowers cannot reach. A new mower will result in more productive mowing and less maintenance expense. Project is dependent on grants from the FAA and/or MnDOT.

Project Uses

	2018	2019	2020	2021	2022	Total
Trim Mower	70,000	0	0	0	0	70,000
Total	**70,000**	**0**	**0**	**0**	**0**	**70,000**

Funding and Sources

	2018	2019	2020	2021	2022	Total
Airport CIP	21,000	0	0	0	0	21,000
MnDOT	49,000	0	0	0	0	49,000
Total	**70,000**	**0**	**0**	**0**	**0**	**70,000**

Project Timeline

Fall 2017- Potential grant award from MNDOT.

Spring 2018 - Request bids and purchase new trim mower.

Project: Mankato Regional Airport - Repair Existing Hangars

Department: AIRPORT CAPITAL IMPROVEMENT FUND

Project Years: 2018 - 2018

Project Description

Repair Existing T-Hangars: Regrade pavement in front of hangar bays and installation of heat tape in pavement to clear ice from hangar doors. Project covers 28 total hangar spaces in two hangar buildings.

Project Justification

Hangar buildings 3180 and 3190 experience water infiltration during rain and snow. Current slope of pavement in front of hangars does not allow for water to drain away from hangars. Correction with re-slope of pavement and installation of heat tape to clear ice from hangar doors will result in better leasing potential. Project is dependent on grants from the FAA and/or MnDOT.

Project Uses

	2018	2019	2020	2021	2022	Total
Hangar Repairs	150,000	0	0	0	0	150,000
Total	**150,000**	**0**	**0**	**0**	**0**	**150,000**

Funding and Sources

	2018	2019	2020	2021	2022	Total
Airport CIP	45,000	0	0	0	0	45,000
MnDOT	105,000	0	0	0	0	105,000
Total	**150,000**	**0**	**0**	**0**	**0**	**150,000**

Project Timeline

Project: Mankato Regional Airport - Runway Snowblower

Department: AIRPORT CAPITAL IMPROVEMENT FUND

Project Years: 2018 - 2018

Project Description

Purchase used Airport Runway Snowblower to complement existing Runway Snowblower.

Project Justification

The current Oshkosh Snowblower is 20+ years old and occasionally breaks down. Due to the large, open pavement areas at the airport, it is very challenging to maintain clear pavement without an operational snowblower. FAA require airfield runways and taxiways to be cleared of snow and ice to allow safe operation of aircraft. A backup snowblower will allow for faster snow clearing and airport operations during breakdowns. Project is dependent on grants from the FAA and/or MnDOT.

Project Uses

	2018	2019	2020	2021	2022	Total
Runway Snowblower	133,000	0	0	0	0	133,000
Total	**133,000**	**0**	**0**	**0**	**0**	**133,000**

Funding and Sources

	2018	2019	2020	2021	2022	Total
Airport CIP	39,900	0	0	0	0	39,900
MnDOT	93,100	0	0	0	0	93,100
Total	**133,000**	**0**	**0**	**0**	**0**	**133,000**

Project Timeline

Fall 2017- Potential grant award from MNDOT.

Spring 2018 - Request bids and purchase used runway snowblower.

Project: Mankato Regional Airport - Terminal Interior Remodel

Department: AIRPORT CAPITAL IMPROVEMENT FUND

Project Years: 2018 - 2018

Project Description

Terminal Interior Remodel: Remodeling would repurpose existing terminal areas to better use current space for the growing MSU aviation program. Current carpet, wall coatings and fixtures would be replaced. Some interior walls would be moved / added to better utilize existing space.

Project Justification

Remodeling the terminal would repurpose existing areas to better use the floor space. The carpet, wall coatings and fixtures are 20 years old and need to be replaced. The remodel will allow for the better use of existing space, increase leasable space and retain the two existing terminal tenants. Project is dependent on grants from the FAA and/or MnDOT.

Project Uses

	2018	2019	2020	2021	2022	Total
Terminal Remodel	350,000	0	0	0	0	350,000
Total	**350,000**	**0**	**0**	**0**	**0**	**350,000**

Funding and Sources

	2018	2019	2020	2021	2022	Total
MnDOT	245,000	0	0	0	0	245,000
Tenants	45,000	0	0	0	0	45,000
Terminal Depreciation	60,000	0	0	0	0	60,000
Total	**350,000**	**0**	**0**	**0**	**0**	**350,000**

Project Timeline

Fall 2017- Potential grant award from MNDOT.

Spring 2018 - Complete design

Summer 2018 - Remodel Terminal

Project: Mankato Regional Airport Part 139 Certification

Department: AIRPORT CAPITAL IMPROVEMENT FUND

Project Years: 2018 - 2019

Project Description

Purchase equipment and train personnel pursuant to Part 139.315b1 under Index A enabling the Mankato Regional Airport to accommodate and service corporate aircraft under 90-feet with less than 31 passengers. Total cost is $613,600 with annual estimated operating costs of $87,000, which includes depreciation value of equipment.

Project Justification

Personnel from Public Works and Public Safety worked together to determine the costs of training and equipment to comply with Part 139.315b1 under Index A. Having the appropriate equipment and personnel trained to react to emergencies out at the airport is important not only for the ability to accommodate corporate aircraft, it is also important to the current primary use of the airport, which is aviation training. Funding is dependent on grants from the FAA and/or MnDOT.

Project Uses

	2018	2019	2020	2021	2022	Total
ARFF	350,000	0	0	0	0	350,000
Certification	3,600	0	0	0	0	3,600
GSE	0	222,500	0	0	0	222,500
Training	18,750	18,750	0	0	0	37,500
Total	**372,350**	**241,250**	**0**	**0**	**0**	**613,600**

Funding and Sources

	2018	2019	2020	2021	2022	Total
Airport CIP	175,000	222,500	0	0	0	397,500
Airport Consultant	3,600	0	0	0	0	3,600
General Fund	18,750	18,750	0	0	0	37,500
MnDOT	175,000	0	0	0	0	175,000
Total	**372,350**	**241,250**	**0**	**0**	**0**	**613,600**

Project Timeline

Project: Mankato Regional - MALSR Approach

Department: AIRPORT CAPITAL IMPROVEMENT FUND

Project Years: 2019 - 2019

Project Description

MALSR ñ Approach Lighting System (ALS): This project would install a medium intensity approach lighting system (MALSR) to Runway 15. The approach lighting system allows pilots to locate the runway in poor or instrument weather conditions.

Project Justification

MALSR ñ Approach Lighting System (ALS): This project would install a medium intensity approach lighting system (MALSR) to Runway 15. The approach lighting system allows pilots to locate the runway in poor or instrument weather conditions.

Project Uses

	2018	2019	2020	2021	2022	Total
Approach Lighting System	0	300,000	0	0	0	300,000
Total	**0**	**300,000**	**0**	**0**	**0**	**300,000**

Funding and Sources

	2018	2019	2020	2021	2022	Total
Airport CIP	0	60,000	0	0	0	60,000
MnDOT	0	240,000	0	0	0	240,000
Total	**0**	**300,000**	**0**	**0**	**0**	**300,000**

Project Timeline

Fall 2018 - Potential grant award from MNDOT.

Spring 2019 - Design project and request bids.

Summer 2019 - Approach Lighting construction.

Project: Mankato Regional Airport - Runway 15/33 Concrete Repair

Department: AIRPORT CAPITAL IMPROVEMENT FUND

Project Years: 2019 - 2019

Project Description

Runway 15/33 Concrete Repair: Runway 15/33 has experienced cracking in concrete panels not along control joints. This runway is the primary instrument and large aircraft runway. The project will route, fill and seal concrete cracking, along with grooving Runway 04/22.

Project Justification

Concrete crack repair will extend the pavement life of this $15 million asset by preventing water intrusion. This will result in long term pavement preservation of the primary runway. Project is dependent on grants from the FAA and/or MnDOT.

Project Uses

	2018	2019	2020	2021	2022	Total
Concrete Crack Repair	0	50,000	0	0	0	50,000
Total	**0**	**50,000**	**0**	**0**	**0**	**50,000**

Funding and Sources

	2018	2019	2020	2021	2022	Total
Airport CIP	0	5,000	0	0	0	5,000
FFA	0	45,000	0	0	0	45,000
Total	**0**	**50,000**	**0**	**0**	**0**	**50,000**

Project Timeline

Spring 2018 - Potential grant award from FAA.

Summer 2018 - Crack repair and runway grooving.

Project: Mankato Regional Airport - SRE Building Addition

Department: AIRPORT CAPITAL IMPROVEMENT FUND

Project Years: 2019 - 2019

Project Description

Snow Removal Equipment (SRE) Building Addition: Construct a four bay addition for Snow Removal Equipment to the current Airport Maintenance Shop / Fire Station. Addition will consist of drive through bay access along with a light equipment maintenance and material storage area. Remodel existing Fire Station bay to allow for current generation fire truck.

Project Justification

Current building has a total of four equipment bays. The airport operates and stores seven pieces of heavy equipment to include snow plows, snow blowers, mowing tractors and a fire truck, along with several smaller mowers, bobcats and gator. Currently equipment that will not fit in the four bays is ¾ mile away in hangars. The addition will centralize all airport maintenance activities in one location resulting in increased efficiency, more leasable hangar space and better environmental protection for over $600,000 in equipment assets.

Project Uses

	2018	2019	2020	2021	2022	Total
SRE Building Addition	0	800,000	0	0	0	800,000
Total	**0**	**800,000**	**0**	**0**	**0**	**800,000**

Funding and Sources

	2018	2019	2020	2021	2022	Total
Airport CIP	0	40,000	0	0	0	40,000
FFA	0	720,000	0	0	0	720,000
MnDOT	0	40,000	0	0	0	40,000
Total	**0**	**800,000**	**0**	**0**	**0**	**800,000**

Project Timeline

Fall 2018 - Potential grant award from FAA.

Spring 2019 - Design project and request bids.

Summer 2019 - SRE building addition construction.

Project: Mankato Regional Airport - Wildlife Perimeter Fencing

Department: AIRPORT CAPITAL IMPROVEMENT FUND

Project Years: 2019 - 2019

Project Description

Wildlife Perimeter Fencing: Install a 10í Wildlife Perimeter fence in selected portions of the airport boundary.

Project Justification

The current perimeter fence is designed to secure airport boundary, but does not prevent all wildlife from entering the airport, especially deer. Due to the location of the airport, near lakes and wooded areas, the USDA has identified deer on the runways as a significant hazard to aircraft at Mankato. The wildlife fence would help to mitigate wildlife / aircraft collisions. Project is dependent on grants from the FAA and/or MnDOT.

Project Uses

	2018	2019	2020	2021	2022	Total
Wildlife Fence	0	382,000	0	0	0	382,000
Total	**0**	**382,000**	**0**	**0**	**0**	**382,000**

Funding and Sources

	2018	2019	2020	2021	2022	Total
Airport CIP	0	19,100	0	0	0	19,100
FFA	0	343,800	0	0	0	343,800
MnDOT	0	19,100	0	0	0	19,100
Total	**0**	**382,000**	**0**	**0**	**0**	**382,000**

Project Timeline

Fall 2018 - Potential grant award from FAA.

Spring 2019 - Design project and request bids.

Summer 2019 - Wildlife Fence construction.

2018 CIP Fund Overview - PUBLIC WORKS - PARKING

Project Name	Project Year	Project Costs
Parking Lot Resurfacing	2018	75,000
Parking-Civic Center Ramp Stairwells Rehab	2018	150,000
Subtotal		**225,000**
Total		**225,000**

2019 CIP Fund Overview

Project Name	Project Year	Project Costs
PARKING-Rehab Down Town Area Surface Parking Lots	2019	120,000
Subtotal		**120,000**
Total		**120,000**

Illustrious CIP Fund Overview

Project Name	Project Year
Parking-Cherry St Ramp Alley Expansion Joint	65,000
Parking-Ramp surface scrubber	70,000
Replace expansion joints in Mankato Place Ramp	60,000
Subtotal	**195,000**
Total	**195,000**

Project: Parking Lot Resurfacing

Department: PUBLIC WORKS - PARKING

Project Years: 2018 - 2018

Project Description

This project consists of resurfacing and restriping city parking lots located south of the Mankato Place Ramp (Lot #5), south of Blue Bricks along Cherry Street (Lot #4), and west of the Second Street Ramp (Lot #2).

Project Justification

These parking lots are in poor condition and have numerous potholes and cracks.

Project Uses

	2018	2019	2020	2021	2022	Total
Contingency	7,500	0	0	0	0	7,500
Engineering	3,750	0	0	0	0	3,750
Finance	1,500	0	0	0	0	1,500
Total	**12,750**	**0**	**0**	**0**	**0**	**12,750**

Funding and Sources

	2018	2019	2020	2021	2022	Total
Parking Ramps	75,000	0	0	0	0	75,000
Total	**75,000**	**0**	**0**	**0**	**0**	**75,000**

Project Timeline

Project: Parking-Civic Center Ramp Stairwells Rehab

Department: PUBLIC WORKS - PARKING

Project Years: 2018 - 2018

Project Description

NE Stairwell- Remove and replace 4 flights of stairs. Remove and replace windows, repair/ replace doors, closures, and hardware. Paint Stairwell SW Stairwell- Remove and replace exterior glass, repair/replace doors, frames, and hardware. Paint Stairwell

Project Justification

Stairwells are currently in poor condition. The 4 flights of stairs are deteriorated and created a safety risk. Majority of doors are damaged and do not close or open properly. Glass and seals on the SW stairwell leak and are causing water damage in the stairwell. Both stairwells are in need of paint.

Project Uses

	2018	2019	2020	2021	2022	Total
Construction	124,500	0	0	0	0	124,500
Contingency	15,000	0	0	0	0	15,000
Engineering	7,500	0	0	0	0	7,500
Finance	3,000	0	0	0	0	3,000
Total	**150,000**	**0**	**0**	**0**	**0**	**150,000**

Funding and Sources

	2018	2019	2020	2021	2022	Total
Parking Ramps	150,000	0	0	0	0	150,000
Total	**150,000**	**0**	**0**	**0**	**0**	**150,000**

Project Timeline

Project: PARKING-Rehab Down Town Area Surface Parking Lots

Department: PUBLIC WORKS - PARKING

Project Years: 2018 - 2019

Project Description

Mill, overlay and re-stripe downtown area parking lots 16 (MN Iron), 17 (Denco)

Project Justification

Lots are currently in poor condition. Numerous potholes, cracks, etc.

Project Uses

	2018	2019	2020	2021	2022	Total
Construction	99,600	99,600	0	0	0	199,200
Contingency	12,000	12,000	0	0	0	24,000
Engineering	6,000	6,000	0	0	0	12,000
Finance	2,400	2,400	0	0	0	4,800
Total	**120,000**	**120,000**	**0**	**0**	**0**	**240,000**

Funding and Sources

	2018	2019	2020	2021	2022	Total
Parking Ramps	0	120,000	0	0	0	120,000
Total	**0**	**120,000**	**0**	**0**	**0**	**120,000**

Project Timeline

2018 CIP Fund Overview - INFO TECH CAPITAL REPLACEMENT

Project Name	Project Year	Project Costs
Council / Board Room Technology	2018	35,000
Fiber Communications Infrastructure Expansion and Maintenance	2018	50,000
Security Camera System Upgrades and Expansion	2018	50,000
Video Storage Solution	2018	95,000
Subtotal		**230,000**
Total		**230,000**

2019 CIP Fund Overview

Project Name	Project Year	Project Costs
Fiber Communications Infrastructure Expansion and Maintenance	2019	50,000
Security Camera System Upgrades and Expansion	2019	50,000
Video Storage Solution	2019	85,000
Subtotal		**185,000**
Total		**185,000**

Illustrious CIP Fund Overview

Project Name	Project Year
Security Access Control System Upgrades and Expansion	120,000
Subtotal	**120,000**
Total	**120,000**

Project: Council / Board Room Technology

Department: INFO TECH CAPITAL REPLACEMENT

Project Years: 2018 - 2018

Project Description

Upgrade the recording cameras to HD quality and production switcher.

Project Justification

All Council and Board meetings are now live steamed to KTV and the internet. The recording analog cameras and switcher equipment are very outdated and reaching end of life. By upgrading the recording equipment to HD quality the production output will be in line with today's video standards.

Project Uses

	2018	2019	2020	2021	2022	Total
Fiber Infrastructure and Maintenance	35,000	0	0	0	0	35,000
Total	**35,000**	**0**	**0**	**0**	**0**	**35,000**

Funding and Sources

	2018	2019	2020	2021	2022	Total
IT Capital Replacement Fund	35,000	0	0	0	0	35,000
Total	**35,000**	**0**	**0**	**0**	**0**	**35,000**

Project Timeline

Project: Fiber Communications Infrastructure Expansion and Maintenance

Department: INFO TECH CAPITAL REPLACEMENT

Project Years: 2018 - 2022

Project Description

Expand and maintain the city's fiber communication infrastructure to key city facilities. Identified facilities include; Airport, Water Utility Sites, Traffic Signals, Lighting System. As the city's fiber footprint continues to expand, portions of these funds need to be allocated for relocation and maintenance to the existing fiber communication infrastructure.

Project Justification

By investing in high speed communication infrastructure, the network foundation is created for the City to facilitate the deployment of enterprise level technology systems (VoIP, Security Access, Security Cameras, etc.) across the City's network. The fiber infrastructure also interconnects other critical systems; Traffic Signals and Lighting System.

Project Uses

	2018	2019	2020	2021	2022	Total
Fiber Infrastructure and Maintenance	50,000	50,000	50,000	50,000	50,000	250,000
Total	**50,000**	**50,000**	**50,000**	**50,000**	**50,000**	**250,000**

Funding and Sources

	2018	2019	2020	2021	2022	Total
IT Capital Replacement Fund	50,000	50,000	50,000	50,000	50,000	250,000
Total	**50,000**	**50,000**	**50,000**	**50,000**	**50,000**	**250,000**

Project Timeline

Project: Security Camera System Upgrades and Expansion

Department: INFO TECH CAPITAL REPLACEMENT

Project Years: 2018 - 2022

Project Description

Continue to expand and maintain the city's video security camera system. Portions of these funds need to be allocated to replace aging analog cameras with High Definition (HD) cameras.

Project Justification

Continue to expand and maintain the city's video security camera system. Portions of these funds need to be allocated to replace aging analog cameras with High Definition (HD) cameras.

Project Uses

	2018	2019	2020	2021	2022	Total
Fiber Infrastructure and Maintenance	50,000	50,000	50,000	50,000	50,000	250,000
Total	**50,000**	**50,000**	**50,000**	**50,000**	**50,000**	**250,000**

Funding and Sources

	2018	2019	2020	2021	2022	Total
IT Capital Replacement Fund	50,000	50,000	50,000	50,000	20,000	220,000
Total	**50,000**	**50,000**	**50,000**	**50,000**	**20,000**	**220,000**

Project Timeline

Project: Video Storage Solution

Department: INFO TECH CAPITAL REPLACEMENT

Project Years: 2018 - 2022

Project Description

Implement a unified video storage solution for the city's security video systems. Incorporating both the video security system and public safety squad car video system.

Project Justification

Our current video storage configuration consists of 7 standalone video storage servers on the network. By implementing a unified storage solution, the city will have a more agile, scalable, reliable, and cost effective solution for future video storage demands. And looking into the future, public safety body cameras will eventually become a reality.

Project Uses

	2018	2019	2020	2021	2022	Total
Fiber Infrastructure and Maintenance	95,000	85,000	25,000	25,000	25,000	255,000
Total	**95,000**	**85,000**	**25,000**	**25,000**	**25,000**	**255,000**

Funding and Sources

	2018	2019	2020	2021	2022	Total
IT Capital Replacement Fund	95,000	85,000	25,000	25,000	25,000	255,000
Total	**95,000**	**85,000**	**25,000**	**25,000**	**25,000**	**255,000**

Project Timeline

2018 CIP Fund Overview - IGC CAPITAL REPLACEMENT FUND

Project Name	Project Year	Project Costs
IGC Compactor Replacement	2018	35,000
IGC Roof Replacement - Back Half	2018	115,000
IGC Roof Top HVAC Unit Replacement	2018	120,000
IGC-Boiler Replacement	2018	12,230
IGC-Systematic replacement of HVAC Equip & Controls	2018	110,000
Subtotal		**392,230**
Total		**392,230**

2019 CIP Fund Overview

Project Name	Project Year	Project Costs
IGC Roof Replacement - Front Half	2019	225,000
Subtotal		**225,000**
Total		**225,000**

Illustrious CIP Fund Overview

Project Name	Project Year
Total	

Project: IGC Compactor Replacement

Department: IGC CAPITAL REPLACEMENT FUND

Project Years: 2018 - 2018

Project Description

This project consists of replacing the Intergovernmental Center compactor and controls.

Project Justification

The compactor and controls at the Intergovernmental Center are passed their life expectancy and have proven to be unreliable. The structural components are showing serious signs of corrosion and wear. The unit has broken down numerous times in 2017 creating excess labor hours to transport trash to another location.

Project Uses

	2018	2019	2020	2021	2022	Total
Contingency	35,000	0	0	0	0	35,000
Total	**35,000**	**0**	**0**	**0**	**0**	**35,000**

Funding and Sources

	2018	2019	2020	2021	2022	Total
IGC Building	35,000	0	0	0	0	35,000
Total	**35,000**	**0**	**0**	**0**	**0**	**35,000**

Project Timeline

Project: IGC Roof Replacement - Back Half

Department: IGC CAPITAL REPLACEMENT FUND

Project Years: 2018 - 2018

Project Description

Replace South 2nd floor roofs over the Finance, Information Technology, and Community Development areas of the Intergovernmental Center.

Project Justification

This roof section has exceeded its original life expectancy and is being recommended for replacement. There have been several leaks in the past on this section.

Project Uses

	2018	2019	2020	2021	2022	Total
Construction	115,000	0	0	0	0	115,000
Total	**115,000**	**0**	**0**	**0**	**0**	**115,000**

Funding and Sources

	2018	2019	2020	2021	2022	Total
IGC Building	115,000	0	0	0	0	115,000
Total	**115,000**	**0**	**0**	**0**	**0**	**115,000**

Project Timeline

Project: IGC Roof Top HVAC Unit Replacement

Department: IGC CAPITAL REPLACEMENT FUND

Project Years: 2018 - 2018

Project Description

This project will evaluate the current conditions of the Intergovernmental Center HVAC roof top units. Units A and B service the back half of the IGC while unit H services a portion of the front half of the building. Units 5, 7, and 8 service the common spaces in the Mankato Place Mall near the Mankato Room (Council Chambers).

Project Justification

These RTUs have reached their life expectancy. Units A, B and H will be evaluated separately from 5, 7, & 8. RTU 7 and 8 are not operational. The recommendation is to replace 5, 7, and 8 with one larger unit.

Project Uses

	2018	2019	2020	2021	2022	Total
Contingency	120,000	0	0	0	0	120,000
Total	**120,000**	**0**	**0**	**0**	**0**	**120,000**

Funding and Sources

	2018	2019	2020	2021	2022	Total
IGC Building	120,000	0	0	0	0	120,000
Total	**120,000**	**0**	**0**	**0**	**0**	**120,000**

Project Timeline

Project: IGC-Boiler Replacement

Department: IGC CAPITAL REPLACEMENT FUND

Project Years: 2018 - 2018

Project Description

As a part of the Ameresco energy project, the Intergovernmental Center boilers were replaced in 2017. The agreement with Ameresco requires payments over a period of 10 years starting in 2018 to repay the capital cost of the boiler replacement.

Project Justification

The existing boilers are near their life expectancy, they have been problematic because of the original exhaust design, creating high maintenance. Replacing the boilers under the Ameresco project allowed the City to capture the energy savings to use towards partial repayment of the capital expenditure.

Project Uses

	2018	2019	2020	2021	2022	Total
Contingency	12,230	0	0	0	0	12,230
Total	**12,230**	**0**	**0**	**0**	**0**	**12,230**

Funding and Sources

	2018	2019	2020	2021	2022	Total
IGC Building	12,230	0	0	0	0	12,230
Total	**12,230**	**0**	**0**	**0**	**0**	**12,230**

Project Timeline

Project: IGC-Systematic replacement of HVAC Equip & Controls

Department: IGC CAPITAL REPLACEMENT FUND

Project Years: 2018 - 2018

Project Description

This project will upgrade the Building Automation System (BAS) Controller to a web based system allowing for continuous monitoring by staff from remote locations.

Project Justification

The existing BAS controller is a network based system and is 22 years old. It is now obsolete and no longer being supported by the manufacturer. Updating the system will allow a more efficient use of staff time and provide an enhanced level of service to the building tenants.

Project Uses

	2018	2019	2020	2021	2022	Total
Contingency	110,000	0	0	0	0	110,000
Total	**110,000**	**0**	**0**	**0**	**0**	**110,000**

Funding and Sources

	2018	2019	2020	2021	2022	Total
IGC Building	110,000	0	0	0	0	110,000
Total	**110,000**	**0**	**0**	**0**	**0**	**110,000**

Project Timeline

Project: IGC Roof Replacement - Front Half

Department: IGC CAPITAL REPLACEMENT FUND

Project Years: 2019 - 2019

Project Description

Replace North 2nd floor roofs, Region 9 roof, and lower level bump out roofs

Project Justification

These Roof sections were evaluated in 2017 and been identified for replacement within 2-3 years, they have exceeded its life expectancy and are continuously in need of numerous repairs.

Project Uses

	2018	2019	2020	2021	2022	Total
Contingency	0	225,000	0	0	0	225,000
Total	**0**	**225,000**	**0**	**0**	**0**	**225,000**

Funding and Sources

	2018	2019	2020	2021	2022	Total
IGC Building	0	225,000	0	0	0	225,000
Total	**0**	**225,000**	**0**	**0**	**0**	**225,000**

Project Timeline

2018 CIP Fund Overview - PARKS CAPITAL REPLACEMENT FUND

Project Name	Project Year	Project Costs
Jaycee Park Ball Field Fencing	2018	80,000
Park Monument Signs	2018	30,000
Playground Surface Upgrades	2018	20,000
Sanger Gravel Pit	2018	55,000
Stoltzman Park Improvements	2018	175,000
Tennis Court Resurfacing	2018	30,000
Subtotal		**390,000**
Total		**390,000**

2019 CIP Fund Overview

Project Name	Project Year	Project Costs
Hiniker Pond-Sand Volleyball Courts	2019	30,000
Park Monument Signs	2019	18,000
Playground Surface Upgrades	2019	20,000
Stoltzman Park Improvements	2019	30,000
Tourtellotte Park Drinking Fountain	2019	32,000
Subtotal		**130,000**
Total		**130,000**

Illustrious CIP Fund Overview

Project Name	Project Year
Total	

Project: Jaycee Park Ball Field Fencing

Department: PARKS CAPITAL REPLACEMENT FUND

Project Years: 2018 - 2018

Project Description

This project involves the removal of the existing fencing and installation of new fencing at Jaycee ball fields.

Project Justification

The existing fencing was initially installed in the 70ís when the ball fields were constructed. The fencing is aged and in need of replacement.

Project Uses

	2018	2019	2020	2021	2022	Total
CMR Amount	80,000	0	0	0	0	80,000
Total	**80,000**	**0**	**0**	**0**	**0**	**80,000**

Funding and Sources

	2018	2019	2020	2021	2022	Total
Capital Replacement Fund	80,000	0	0	0	0	80,000
Total	**80,000**	**0**	**0**	**0**	**0**	**80,000**

Project Timeline

Project: Park Monument Signs

Department: PARKS CAPITAL REPLACEMENT FUND

Project Years: 2018 - 2019

Project Description

Park monument signs are installed in five city parks each year. The sign identifies the park name, address, and city logo. The proposed parks for 2018 are Country Club Park, Hiniker Park, Franklin Rogers Park, Stoltzman Park, and West Mankato Park.

Project Justification

To develop a consistent image of Mankato's park system with an easily identifiable, contemporary and timeless look.

Project Uses

	2018	2019	2020	2021	2022	Total
CMR Amount	30,000	18,000	0	0	0	48,000
Total	**30,000**	**18,000**	**0**	**0**	**0**	**48,000**

Funding and Sources

	2018	2019	2020	2021	2022	Total
Capital Replacement Fund	30,000	18,000	0	0	0	48,000
Total	**30,000**	**18,000**	**0**	**0**	**0**	**48,000**

Project Timeline

Project: Playground Surface Upgrades

Department: PARKS CAPITAL REPLACEMENT FUND

Project Years: 2018 - 2019

Project Description

Remove the sand fall surface in municipal playgrounds and install a woodchip fall surface.

Project Justification

Many of our playgrounds with sand surfaces have ground bees and a variety of wasps living in the sand/grass interface. Some of these insects pose a threat to public safety while others just look threatening. This deters use of our public parks and increases operation costs to have eradications performed.

Project Uses

	2018	2019	2020	2021	2022	Total
CMR Amount	20,000	20,000	0	0	0	40,000
Total	**20,000**	**20,000**	**0**	**0**	**0**	**40,000**

Funding and Sources

	2018	2019	2020	2021	2022	Total
Parks Building	20,000	20,000	0	0	0	40,000
Total	**20,000**	**20,000**	**0**	**0**	**0**	**40,000**

Project Timeline

Project: Sanger Gravel Pit

Department: PARKS CAPITAL REPLACEMENT FUND

Project Years: 2018 - 2018

Project Description

Install a 5,700 foot long 8 foot wide gravel trail in the Sanger Pit property.

Project Justification

To provide accessibility and enhance the recreational opportunities for the public use at the property.

Project Uses

	2018	2019	2020	2021	2022	Total
CMR Amount	5,000	0	0	0	0	5,000
Construction	42,500	0	0	0	0	42,500
Engineering Fee	5,000	0	0	0	0	5,000
Finance Fee	2,500	0	0	0	0	2,500
Total	**55,000**	**0**	**0**	**0**	**0**	**55,000**

Funding and Sources

	2018	2019	2020	2021	2022	Total
Public Works Building	55,000	0	0	0	0	55,000
Total	**55,000**	**0**	**0**	**0**	**0**	**55,000**

Project Timeline

Project: Stoltzman Park Improvements

Department: PARKS CAPITAL REPLACEMENT FUND

Project Years: 2018 - 2019

Project Description

Make improvements to Stoltzman Park and add amenities to the area for public usage such as a playground, shelter, grill and other park amenities defined during neighborhood outreach.

Project Justification

The Lincoln Park neighborhood is lacking a neighborhood park. We have received multiple requests from this neighborhood requesting a neighborhood park be established. There is current a neighborhood working group that is meeting to discuss park elements and organizing neighborhood input.

Project Uses

	2018	2019	2020	2021	2022	Total
Park Elements tbd by Public Process	75,000	0	0	0	0	75,000
Playground Equipment	100,000	0	0	0	0	100,000
Shelter	0	30,000	0	0	0	30,000
Total	**175,000**	**30,000**	**0**	**0**	**0**	**205,000**

Funding and Sources

	2018	2019	2020	2021	2022	Total
Capital Replacement Fund	75,000	30,000	0	0	0	105,000
CBDG	100,000	0	0	0	0	100,000
Total	**175,000**	**30,000**	**0**	**0**	**0**	**205,000**

Project Timeline

2018-Playground installation & Park elements determined by public process

2019-Shelter installation

Project: Tennis Court Resurfacing

Department: PARKS CAPITAL REPLACEMENT FUND

Project Years: 2018 - 2018

Project Description

This project will remove and reconstruct the existing tennis court surface located in Alexander Park and resurface the tennis courts at Erlandson Park. The Pickleball courts will also be resurfaced to ensure a quality playing surface in Tourtellotte Park.

Project Justification

The existing surface at Alexander Park has extensive cracking and requires annual repair to ensure public safety. An overlay of the existing pavement will not address the issues with the base which is leading to the cracking. The courts at Erlandson and Tourtellotte have minor cracking which can be addressed through a resurfacing program without the expense of a full reconstruction.

Project Uses

	2018	2019	2020	2021	2022	Total
CMR Amount	12,000	0	0	0	0	12,000
Engineering Fee	12,000	0	0	0	0	12,000
Finance Fee	6,000	0	0	0	0	6,000
Total	**30,000**	**0**	**0**	**0**	**0**	**30,000**

Funding and Sources

	2018	2019	2020	2021	2022	Total
Public Works Building	30,000	0	0	0	0	30,000
Total	**30,000**	**0**	**0**	**0**	**0**	**30,000**

Project Timeline

August-October 2018

Project: Hiniker Pond-Sand Volleyball Courts

Department: PARKS CAPITAL REPLACEMENT FUND

Project Years: 2019 - 2019

Project Description

Installation of Sand Volleyball Courts at Hiniker Pond.

Project Justification

Hiniker Pond currently has minimal amenities. As we work towards revitalization of the facility, the addition of a sand volleyball court will increase the number of activities available to the public and promote additional use.

Project Uses

	2018	2019	2020	2021	2022	Total
CMR Amount	0	30,000	0	0	0	30,000
Total	**0**	**30,000**	**0**	**0**	**0**	**30,000**

Funding and Sources

	2018	2019	2020	2021	2022	Total
Parks Building	0	30,000	0	0	0	30,000
Total	**0**	**30,000**	**0**	**0**	**0**	**30,000**

Project Timeline

Project: Tourtellotte Park Drinking Fountain

Department: PARKS CAPITAL REPLACEMENT FUND

Project Years: 2019 - 2019

Project Description

Install a drinking fountain at Tourtellotte Park near the pickleball courts.

Project Justification

To provide the public with a safe and reliable water source while recreating in the park.

Project Uses

	2018	2019	2020	2021	2022	Total
CMR Amount	0	32,000	0	0	0	32,000
Total	**0**	**32,000**	**0**	**0**	**0**	**32,000**

Funding and Sources

	2018	2019	2020	2021	2022	Total
Parks Building	0	32,000	0	0	0	32,000
Total	**0**	**32,000**	**0**	**0**	**0**	**32,000**

Project Timeline

2018 CIP Fund Overview - PUBLIC WORKS CAPITAL REPLACEMENT FUND

Project Name	Project Year	Project Costs
Public Works Campus - Asbestos Abatement	2018	45,000
Public Works Campus - HVAC Chiller Update	2018	175,000
Public Works Campus - New MAU for Mechanics Bay	2018	130,000
Public Works Campus - Work Flow Site Improvements Developments	2018	25,000
Subtotal		**375,000**
Total		**375,000**

2019 CIP Fund Overview

Project Name	Project Year	Project Costs
Total		

Illustrious CIP Fund Overview

Project Name	Project Year
Public Works Campus - New Fuel Station	250,000
Subtotal	**250,000**
Total	**250,000**

Project: Public Works Campus - Asbestos Abatement

Department: PUBLIC WORKS CAPITAL REPLACEMENT FUND

Project Years: 2018 - 2018

Project Description

Demo unused steam lines, steam heaters, and abate asbestos insulation

Project Justification

Equipment is no longer in use. Remove to promote a clean and safe working environment

Project Uses

	2018	2019	2020	2021	2022	Total
Construction	37,350	0	0	0	0	37,350
Contingency	4,500	0	0	0	0	4,500
Engineering	2,250	0	0	0	0	2,250
Finance	900	0	0	0	0	900
Total	**45,000**	**0**	**0**	**0**	**0**	**45,000**

Funding and Sources

	2018	2019	2020	2021	2022	Total
Public Works Building	45,000	0	0	0	0	45,000
Total	**45,000**	**0**	**0**	**0**	**0**	**45,000**

Project Timeline

Project: Public Works Campus - HVAC Chiller Update

Department: PUBLIC WORKS CAPITAL REPLACEMENT FUND

Project Years: 2018 - 2018

Project Description

Replace chiller and chiller equipment that serves the Public Works Center Administration Building

Project Justification

Unit is the original unit MNDOT had installed back in the mid 80's, it has exceeded its life expectancy and is problematic, requiring more than usual maintenance.

Project Uses

	2018	2019	2020	2021	2022	Total
Construction	145,250	0	0	0	0	145,250
Contingency	17,500	0	0	0	0	17,500
Engineering	8,750	0	0	0	0	8,750
Finance	3,500	0	0	0	0	3,500
Total	**175,000**	**0**	**0**	**0**	**0**	**175,000**

Funding and Sources

	2018	2019	2020	2021	2022	Total
Public Works Building	175,000	0	0	0	0	175,000
Total	**175,000**	**0**	**0**	**0**	**0**	**175,000**

Project Timeline

Project: Public Works Campus - New MAU for Mechanics Bay

Department: PUBLIC WORKS CAPITAL REPLACEMENT FUND

Project Years: 2018 - 2018

Project Description

Replace the fresh air Make-Up Unit supplying the mechanic shop.

Project Justification

This Unit is the original MAU that MNDOT had installed and no longer has a heat source to condition the air during the winter months because the steam boilers have been removed. Has exceeded its life expectancy and is unreliable. If this unit were to fail, it would create a safety hazard

Project Uses

	2018	2019	2020	2021	2022	Total
Construction	107,900	0	0	0	0	107,900
Contingency	13,000	0	0	0	0	13,000
Engineering	6,500	0	0	0	0	6,500
Finance	2,600	0	0	0	0	2,600
Total	**130,000**	**0**	**0**	**0**	**0**	**130,000**

Funding and Sources

	2018	2019	2020	2021	2022	Total
Public Works Building	130,000	0	0	0	0	130,000
Total	**130,000**	**0**	**0**	**0**	**0**	**130,000**

Project Timeline

Project: Public Works Campus - Work Flow Site Improvements Developments

Department: PUBLIC WORKS CAPITAL REPLACEMENT FUND

Project Years: 2018 - 2018

Project Description

Public Works Campus - Work Flow Site Improvements Development Costs

Project Justification

Engineering and Design services for developing a detailed site plan with associated cost estimates.

Project Uses

	2018	2019	2020	2021	2022	Total
Engineering	25,000	0	0	0	0	25,000
Total	**25,000**	**0**	**0**	**0**	**0**	**25,000**

Funding and Sources

	2018	2019	2020	2021	2022	Total
Public Works Building	25,000	0	0	0	0	25,000
Total	**25,000**	**0**	**0**	**0**	**0**	**25,000**

Project Timeline

City of MANKATO

Leading the way...

Sales Tax CIP

2018 CIP Fund Overview - SALES TAX

Project Name	Project Year	Project Costs
Tourtellotte Park Pool Study	2018	40,000
Subtotal		**40,000**
Total		**40,000**

2019 CIP Fund Overview

Project Name	Project Year	Project Costs
ARMER Radios	2019	501,800
Subtotal		**501,800**
Total		**501,800**

Illustrious CIP Fund Overview

Project Name	Project Year
All seasons Arena/Curling Rinks	1,734,460
Eagle Lake Sewer Force	965,000
East Field Capacity Improvements	1,292,000
Erosion Control/River Bank Stabilization	2,048,490
Franklin Rogers Ball Park-ADA	2,552,000
Franklin Rogers Park - Capacity Expansion	2,250,000
General Park Improvements	1,810,000
Indoor Ice Facilities	2,016,000
Kiwanis/Land of Memories Park Impr.	261,000
Minnesota River Trail Connections	670,000
New Regional Recreational Facilities	17,000,000
Regional Transportation	4,000,000
Rosa Parks Community Athletic Fields	1,670,000
Rural Septic System Connections	986,000
Thomas Fields	1,450,000
Tourtellotte Pool Capacity Expansion	4,880,525
Tourtellotte Pool-ADA	3,542,500
Wastewater Treatment Plant - I & I	135,000
Subtotal	**49,262,975**
Total	**49,262,975**

Project: Tourtellotte Park Pool Study

Department: SALES TAX

Project Years: 2018 - 2018

Project Description

Tourtellotte Pool Core Needs - mechanical upgrades, ADA compliance renovations, building addition for mechanical and family changing rooms, zero depth pool addition with water features.

Project Justification

The last major investment to Tourtellotte pool occurred over 30 years ago. This project will aim to address ADA deficiencies and modernize an aging mechanical system, building, and pool features.

Project Uses

	2018	2019	2020	2021	2022	Total
Study Cost	40,000	0	0	0	0	40,000
Total	**40,000**	**0**	**0**	**0**	**0**	**40,000**

Funding and Sources

	2018	2019	2020	2021	2022	Total
Sales Tax	40,000	0	0	0	0	40,000
Total	**40,000**	**0**	**0**	**0**	**0**	**40,000**

Project Timeline

Project: ARMER Radios

Department: SALES TAX

Project Years: 2019 - 2019

Project Description

Replacement of the full-time police and fire staff portable radios and police and fire vehicle radios.

Project Justification

Motorola announced the end of life of the current radios for 2019. This means that they will no longer manufacture parts for the radios. The radios are like computers and will all be 8 years old in 2019. Technology and software updates will prompt us to have to replace the radios more frequently than we are used to. We will keep the old radios for part-time and reserves.

Project Uses

	2018	2019	2020	2021	2022	Total
110 X $2600 PD-P	0	286,000	0	0	0	286,000
13 X $4000 FD-M	0	52,000	0	0	0	52,000
63 X $2600 FD-P	0	163,800	0	0	0	163,800
Total	**0**	**501,800**	**0**	**0**	**0**	**501,800**

Funding and Sources

	2018	2019	2020	2021	2022	Total
Sales Tax	0	501,800	0	0	0	501,800
Total	**0**	**501,800**	**0**	**0**	**0**	**501,800**

Project Timeline