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Six Year Capital Improvement Plan

All Projects Submitted for 2020-2021

Budget Year 2020-2021 by Program Name

Bold - Indicates projects occurring in the first FY of the plan . + - Indicates projects with multiple funding										Overall Programming Cost		
Project ID	Cat	Previous	Fiscal Year 2020-2021	Fiscal Year 2021-2022	Fiscal Year 2022-2023	Fiscal Year 2023-2024	Fiscal Year 2024-2025	Fiscal Year 2025-2026		Project Cost	City Funds	Non-City Funds
Bridges												
714-20-CIP	200 Block Alley Enhanced Improvements	V	\$0	\$0	\$817,000	\$0	\$0	\$0	\$0	\$817,000	\$817,000	\$0
+ 58-20-CIP	Eighth Street Bridge Repair	V	\$0	\$1,357,217	\$0	\$0	\$0	\$0	\$0	\$1,520,426	\$644,717	\$712,500
+ 885-20-CIP	North Cass Street Bridge Rehabilitation	V	\$228,000	\$1,115,000	\$0	\$0	\$0	\$0	\$0	\$1,343,000	\$246,500	\$1,096,500
+ 586-20-CIP	Park Street Bridge Repair	V	\$0	\$957,500	\$0	\$0	\$0	\$0	\$0	\$640,965	\$150,000	\$807,500
+ 187-20-CIP	South Cass Street Bridge Repair	V	\$0	\$939,500	\$0	\$0	\$0	\$0	\$0	\$806,720	\$132,000	\$807,500
+ 186-20-CIP	South Union Street Bridge Repair	V	\$0	\$0	\$1,318,000	\$0	\$0	\$0	\$0	\$1,323,000	\$260,500	\$1,057,500
+ 535-20-CIP	West Front Street Bridge Replacement	V	\$0	\$1,550,935	\$0	\$0	\$0	\$0	\$0	\$1,829,538	\$369,375	\$1,181,560
Total Bridges			\$5,920,152	\$2,135,000	\$0	\$0	\$0	\$0	\$0	\$8,280,650	\$2,620,092	\$5,663,060



Six Year Capital Improvement Program

BRIDGES-20-CIP

Bridges

714-20-CIP 200 Block Alley Enhanced Improvements

Project Information

Submitted By:	Rob Baciagalupi	Department:	Downtown Development	Pedestrian bridge, riverwalk and pedestrian improvements to north East Front alley between Cass and Park.
Category:	Visionary	Department Head:	Jean Derenzy	
Fund Group:	Tax Increment Financing	Staff Priority:	Essential (Should Do)	
Fund Detail:	TIF 97	Council Priority:		

200 Block Alley Enha 200 Block Alley Enhanced Improvements - Cost

Funding Sources:

		Previous	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	2025/2026	Total
TIF97	TIF 97	\$0	\$0	\$817,000	\$0	\$0	\$0	\$0	\$817,000
Project Total:									\$817,000

COST DETAIL:

Study:	\$0	
Land Acquisition / ROW:	\$0	
Engineering / Design:	\$0	
Construction:	\$817,000	Cost Total: \$817,000
Annual Maint. Cost:		Project Difference: \$0
Maint. Year Start:	1905	

Service Impact:

Landscaping and streetscape elements will result in additional services. Trash receptacle pick up

Project Justification:

TIF 97

Location Description:

Alley north of the 200 block of E. Front Street



Six Year Capital Improvement Program

BRIDGES-20-CIP

Bridges

58-20-CIP

Eighth Street Bridge Repair

Project Information

Submitted By: Jean Derenzy
Category: Visionary
Fund Group: Tax Increment Financing
Fund Detail: TIF 2

Department: Downtown Development
Department Head: Tim Lodge
Staff Priority: Imperitive (Must Do)
Council Priority:

The work will include concrete box beam deck removal and replacement, railing replacement, sidewalk widening, riverbank slope protection, approach work and related work including aesthetic treatments. Twenty percent of the composite deck area is delaminated/defective. The City received \$750,000 in funding thru the MDOT Local Bridge Program which requires a 5% local match and the City to perform engineering for the project.
 This project needs to be coordinated with the Midtown Water Transmission Line #115 project included in the Water Fund.

It is our intention to package the following bridges and bid as one large project: Eighth St, S. Cass St, Park St, and W. Front St. By doing so, the overall bid package will have an estimated surplus of \$7,501.89.

Eighth Street Bridge | Eighth Street Bridge Repair (+Grant) - Cost

Funding Sources:

		Previous	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	2025/2026	Total
ACPF	Available Capital Projects Fund	\$0	\$195,000	\$0	\$0	\$0	\$0	\$0	\$195,000
FSG	Federal / State Grant	\$0	\$712,500	\$0	\$0	\$0	\$0	\$0	\$712,500
TIFOT	TIF Old Town	\$0	\$150,000	\$0	\$0	\$0	\$0	\$0	\$150,000
WAT	Water Fund	\$0	\$299,717	\$0	\$0	\$0	\$0	\$0	\$299,717
Project Total:									\$1,357,217

COST DETAIL:

Study:	\$0	
Land Acquisition / ROW:	\$0	
Engineering / Design:	\$35,506	
Construction:	\$1,484,920	Cost Total:
Annual Maint. Cost:	\$5,500	Project Difference:
Maint. Year Start:		\$1,520,426
		\$-163,209

Service Impact:

See Project Description.

Project Justification:

See Project Description.

Location Description:



City of
TRAVERSE CITY

BRIDGES-20-CIP

Bridges

See Project Description.

Six Year Capital Improvement Program



Six Year Capital Improvement Program

BRIDGES-20-CIP

Bridges

885-20-CIP

North Cass Street Bridge Rehabilitation

Project Information

Submitted By:	Jean Derenzy	Department:	Downtown Development	The work anticipated includes the removal and replacement of the existing concrete box beam supported deck, widening and replacement of the sidewalks, railings, approach pavement and related work.
Category:	Visionary	Department Head:	Tim Lodge	
Fund Group:	Tax Increment Financing	Staff Priority:	Imperitive (Must Do)	
Fund Detail:	TIF 97	Council Priority:		

North Cass Street Bri North Cass Street Bridge Rehabilitation (+ - Cost

Funding Sources:

		Previous	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	2025/2026	Total
FSG	Federal / State Grant	\$0	\$913,500	\$0	\$0	\$0	\$0	\$0	\$913,500
IN	Inkind	\$183,000	\$0	\$0	\$0	\$0	\$0	\$0	\$183,000
TIF97	TIF 97	\$45,000	\$201,500	\$0	\$0	\$0	\$0	\$0	\$246,500
Project Total:									\$1,343,000

COST DETAIL:

Study:	\$0	
Land Acquisition / ROW:	\$0	
Engineering / Design:	\$183,000	
Construction:	\$1,160,000	Cost Total: \$1,343,000
Annual Maint. Cost:		Project Difference: \$0
Maint. Year Start:	1905	

Service Impact:

Improvement should lessen service burden.

Project Justification:

Bridge rehabilitation due the deck condition and known foundation type information.

Location Description:

North Cass Street bridge located between Grandview Parkway and E. Front Street.



Six Year Capital Improvement Program

BRIDGES-20-CIP

Bridges

586-20-CIP Park Street Bridge Repair

Project Information

Submitted By:	Rob Baciagalupi	Department:	Downtown Development	Rehabilitate bridge superstructure.
Category:	Visionary	Department Head:	Jean Derenzy	
Fund Group:	Tax Increment Financing	Staff Priority:	Essential (Should Do)	It is our intention to package the following bridges and bid as one large project: Eighth St, S. Cass St, Park St, and W. Front St. By doing so, the overall bid package will have an estimated surplus of \$7,501.89.
Fund Detail:	TIF 97	Council Priority:		

Park Street Bridge Repair - Cost

Funding Sources:

		Previous	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	2025/2026	Total
FSG	Federal / State Grant	\$0	\$807,500	\$0	\$0	\$0	\$0	\$0	\$807,500
TIF97	TIF 97	\$0	\$150,000	\$0	\$0	\$0	\$0	\$0	\$150,000
Project Total:									\$957,500

COST DETAIL:

Study:	\$0		
Land Acquisition / ROW:	\$0		
Engineering / Design:	\$24,705		
Construction:	\$616,260	Cost Total:	\$640,965
Annual Maint. Cost:	\$5,500	Project Difference:	\$316,535
Maint. Year Start:	1905		

Service Impact:

N/A

Project Justification:

Based on bridge assessment

Location Description:

Park St



Six Year Capital Improvement Program

BRIDGES-20-CIP

Bridges

187-20-CIP South Cass Street Bridge Repair

Project Information

Submitted By:	Jean Derenzy	Department:	Downtown Development	Concrete arch rehabilitation.
Category:	Visionary	Department Head:	Tim Lodge	
Fund Group:	Tax Increment Financing	Staff Priority:	Essential (Should Do)	It is our intention to package the following bridges and bid as one large project: Eighth St, S. Cass St, Park St, and W. Front St. By doing so, the overall bid package will have an estimated surplus of \$7,501.89.
Fund Detail:	TIF 97	Council Priority:		

South Cass Street Br South Cass Street Bridge Repair(+TIF2) - Cost

Funding Sources:

		Previous	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	2025/2026	Total
FSG	Federal / State Grant	\$0	\$807,500	\$0	\$0	\$0	\$0	\$0	\$807,500
TIF97	TIF 97	\$0	\$66,000	\$0	\$0	\$0	\$0	\$0	\$66,000
TIFOT	TIF Old Town	\$0	\$66,000	\$0	\$0	\$0	\$0	\$0	\$66,000
Project Total:									\$939,500

COST DETAIL:

Study:	\$0		
Land Acquisition / ROW:	\$0		
Engineering / Design:	\$62,578		
Construction:	\$744,142	Cost Total:	\$806,720
Annual Maint. Cost:	\$5,500	Project Difference:	\$132,780
Maint. Year Start:			

Service Impact:

See Project Description.

Project Justification:

See Project Description.

Location Description:

See Project Description.



Six Year Capital Improvement Program

BRIDGES-20-CIP

Bridges

186-20-CIP South Union Street Bridge Repair

Project Information

Submitted By:	Jean Derenzy	Department:	Downtown Development	Rehabilitate bridge superstructure.
Category:	Visionary	Department Head:	Tim Lodge	
Fund Group:	Tax Increment Financing	Staff Priority:	Essential (Should Do)	
Fund Detail:	TIF 97	Council Priority:		

South Union Street B South Union Street Bridge Repair (+TIF2) - Cost

Funding Sources:

		Previous	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	2025/2026	Total
FSG	Federal / State Grant	\$0	\$0	\$1,057,500	\$0	\$0	\$0	\$0	\$1,057,500
GEN	General Fund	\$0	\$0	\$74,500	\$0	\$0	\$0	\$0	\$74,500
TIF97	TIF 97	\$0	\$0	\$93,000	\$0	\$0	\$0	\$0	\$93,000
TIFOT	TIF Old Town	\$0	\$0	\$93,000	\$0	\$0	\$0	\$0	\$93,000

Project Total: **\$1,318,000**

COST DETAIL:

Study: \$0

Land Acquisition / ROW: \$0

Engineering / Design: \$189,000

Construction: \$1,134,000

Annual Maint. Cost:

Maint. Year Start: 1905

Cost Total: **\$1,323,000**

Project Difference: **\$-5,000**

Service Impact:

See Project Description.

Project Justification:

See Project Description.

Location Description:

See Project Description.



Six Year Capital Improvement Program

BRIDGES-20-CIP

Bridges

535-20-CIP

West Front Street Bridge Replacement

Project Information

Submitted By: Jean Derenzy

Department: Downtown Development

Category: Visionary

Department Head: Tim Lodge

Fund Group: Tax Increment Financing

Staff Priority: Imperitive (Must Do)

Fund Detail: TIF 97

Council Priority:

This project includes the complete removal and replacement of the existing concrete arch bridge with a new concrete bridge including aesthetic treatments. The current condition of the Front Street bridge is poor and very poor and it cannot be properly evaluated and renovated to meet current service and load carrying requirements. The City received \$1,100,000 in funding thru the MDOT Local Bridge Program which requires a 5% local match and the City to perform engineering for the project.

It is our intention to package the following bridges and bid as one large project: Eighth St, S. Cass St, Park St, and W. Front St. By doing so, the overall bid package will have an estimated surplus of \$7,501.89.

West Front Street Bri West Front Street Bridge Replacement - Cost

Funding Sources:

		Previous	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	2025/2026	Total
FSG	Federal / State Grant	\$0	\$1,181,560	\$0	\$0	\$0	\$0	\$0	\$1,181,560
TIF97	TIF 97	\$0	\$220,000	\$0	\$0	\$0	\$0	\$0	\$220,000
WAT	Water Fund	\$0	\$149,375	\$0	\$0	\$0	\$0	\$0	\$149,375
Project Total:									\$1,550,935

COST DETAIL:

Study: \$0

Land Acquisition / ROW: \$0

Engineering / Design: \$38,405

Construction: \$1,791,133

Annual Maint. Cost: \$5,500

Maint. Year Start:

Cost Total: **\$1,829,538**

Project Difference: **\$-278,604**

Service Impact:

See Project Description.

Project Justification:

See Project Description.

Location Description:

See Project Description.

Six Year Capital Improvement Plan

All Projects Submitted for 2020-2021

Budget Year 2020-2021 by Program Name

Bold - Indicates projects occurring in the first FY of the plan . + - Indicates projects with multiple funding										<u>Overall Programming Cost</u>		
Project ID	Cat	Previous	Fiscal Year 2020-2021	Fiscal Year 2021-2022	Fiscal Year 2022-2023	Fiscal Year 2023-2024	Fiscal Year 2024-2025	Fiscal Year 2025-2026		Project Cost	City Funds	Non-City Funds
Brown Bridge												
+ 1106-20-CIP	ADA Accessible Watercraft Landing	V	\$0	\$0	\$0	\$0	\$100,000	\$0	\$0	\$100,000	\$50,000	\$50,000
+ 1105-20-CIP	Boardman River Recreation Plan	V	\$5,000	\$25,000	\$0	\$0	\$0	\$0	\$0	\$30,000	\$5,000	\$25,000
+ 975-20-CIP	Fish & Wildlife Habitat Improvements	M	\$70,000	\$180,000	\$0	\$0	\$0	\$0	\$0	\$250,000	\$45,000	\$205,000
853-20-CIP	Invasive Species Treatment	M	\$5,000	\$0	\$5,000	\$0	\$0	\$0	\$0	\$10,000	\$10,000	\$0
+ 856-20-CIP	Overlook (2) and Access Steps (3 sets)	V	\$0	\$0	\$0	\$45,000	\$0	\$0	\$0	\$45,000	\$22,500	\$22,500
+ 855-20-CIP	Overlook and Historical Display at Former Powerho	V	\$0	\$0	\$0	\$20,000	\$0	\$0	\$0	\$20,000	\$10,000	\$10,000
Total Brown Bridge			\$205,000	\$5,000	\$65,000	\$100,000	\$0	\$0		\$455,000	\$142,500	\$312,500



Six Year Capital Improvement Program

BB-20-CIP

Brown Bridge

1106-20-CIP

ADA Accessible Watercraft Landing

Project Information

Submitted By:	Grand Traverse Conservation L	Department:	Department of Public Services	Replace existing landing with ADA accessible watercraft landing.
Category:	Visionary	Department Head:	Frank Dituri	
Fund Group:	Brown Bridge Trust Parks Impr	Staff Priority:	Essential (Should Do)	
Fund Detail:	Brown Bridge Trust Parks Impr	Council Priority:		

ADA Accessible Watercraft Landing

Funding Sources:

		Previous	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	2025/2026	Total
BBTP	Brown Bridge Trust Parks	\$0	\$0	\$0	\$0	\$50,000	\$0	\$0	\$50,000
FSG	Federal / State Grant	\$0	\$0	\$0	\$0	\$50,000	\$0	\$0	\$50,000
Project Total:									\$100,000

COST DETAIL:

Study:	\$0	
Land Acquisition / ROW:	\$0	
Engineering / Design:	\$25,000	
Construction:	\$75,000	
Annual Maint. Cost:		
Maint. Year Start:		
Cost Total:		\$100,000
Project Difference:		\$0

Service Impact:

Resource Management Contract w/GTCD

Project Justification:

River access for those with physical disabilities

Location Description:

3405 Brown Bridge Rd



Six Year Capital Improvement Program

BB-20-CIP

Brown Bridge

1105-20-CIP

Boardman River Recreation Plan

Project Information

Submitted By:	Grand Traverse Conservation L	Department:	Department of Public Services	Development of a recreation plan for the Boardman River post dam removal to protect the river at Brown Bridge and the quiet area its self.
Category:	Visionary	Department Head:	Frank Dituri	
Fund Group:	Brown Bridge Trust Parks Impr	Staff Priority:	Essential (Should Do)	
Fund Detail:	Brown Bridge Trust Parks Impr	Council Priority:		

Boardman River Rec Boardman River Recreation Plan - Cost

Funding Sources:

		Previous	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	2025/2026	Total
BBTP	Brown Bridge Trust Parks	\$0	\$5,000	\$0	\$0	\$0	\$0	\$0	\$5,000
FSG	Federal / State Grant	\$0	\$20,000	\$0	\$0	\$0	\$0	\$0	\$20,000
P	Private	\$5,000	\$0	\$0	\$0	\$0	\$0	\$0	\$5,000
Project Total:									\$30,000

COST DETAIL:

Study: \$30,000
Land Acquisition / ROW: \$0
Engineering / Design: \$0
Construction: \$0
Annual Maint. Cost:
Maint. Year Start:

Cost Total: \$30,000
Project Difference: \$0

Service Impact:

Resource Management Contract w/GTCD

Project Justification:

Resource Protection

Location Description:

3405 Brown Bridge Rd



Six Year Capital Improvement Program

BB-20-CIP

Brown Bridge

849-20-CIP

Bucks Landing Renovation

Project Information

Submitted By:	Dave Green	Department:	Department of Public Services	Gravel and re-grade existing parking lot at Bucks Landing off Brown
Category:	Maintenance	Department Head:	Frank Dituri	Bridge Road; Replace fencing
Fund Group:	Brown Bridge Maintenance Fur	Staff Priority:	Important (Could Do)	
Fund Detail:	Brown Bridge Maintenance Fur	Council Priority:		

Funding Sources:

Previous	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	2025/2026	Total
\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Project Total:							\$0

COST DETAIL:

Study:	\$0	
Land Acquisition / ROW:	\$0	
Engineering / Design:	\$0	
Construction:	\$0	
Annual Maint. Cost:		
Maint. Year Start:		
Cost Total:		\$0
Project Difference:		\$0

Service Impact:

Brown Bridge Resource Management Contract w/GTCD

Project Justification:

Public Access maintenance

Location Description:

3405 Brown Bridge Rd



Six Year Capital Improvement Program

BB-20-CIP

Brown Bridge

975-20-CIP

Fish & Wildlife Habitat Improvements

Project Information

Submitted By:	Grand Traverse Conservation L	Department:	Department of Public Services	Phase II Wood - In stream habitat and native species planting to provide forage, nesting and breeding sites for fish & wildlife. Riparian Planting will provide bank stabilization as well as habitat benefits. \$15,000 Grant funded 2018/2019
Category:	Maintenance	Department Head:	Frank Dituri	
Fund Group:	Brown Bridge Maintenance Fur	Staff Priority:	Important (Could Do)	
Fund Detail:	Brown Bridge Maintenance Fur	Council Priority:		

Fish & Wildlife Habita Fish & Wildlife Habitat Improvements

Funding Sources:

		Previous	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	2025/2026	Total
BBM	Brown Bridge Maintenance Fund	\$0	\$5,000	\$0	\$0	\$0	\$0	\$0	\$5,000
BBTP	Brown Bridge Trust Parks	\$40,000	\$0	\$0	\$0	\$0	\$0	\$0	\$40,000
FSG	Federal / State Grant	\$30,000	\$175,000	\$0	\$0	\$0	\$0	\$0	\$205,000
								Project Total:	\$250,000

COST DETAIL:

Study:	\$0	
Land Acquisition / ROW:	\$0	
Engineering / Design:	\$0	
Construction:	\$250,000	Cost Total: \$250,000
Annual Maint. Cost:		Project Difference: \$0
Maint. Year Start:		

Service Impact:

Brown Bridge Resource Management Contract w/GTCD

Project Justification:

Dam Removal

Location Description:

3405 Brown Bridge Rd



Six Year Capital Improvement Program

BB-20-CIP

Brown Bridge

853-20-CIP

Invasive Species Treatment

Project Information

Submitted By:	Grand Traverse Conservation L	Department:	Department of Public Services	Treat/remove invasive species that threaten ecologic integrity of Brown Bridge.
Category:	Maintenance	Department Head:	Frank Dituri	
Fund Group:	Brown Bridge Maintenance Fur	Staff Priority:	Essential (Should Do)	
Fund Detail:	Brown Bridge Maintenance Fur	Council Priority:		

Invasive Species Tre: Invasive Species Treatment - Cost

Funding Sources:

		Previous	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	2025/2026	Total
BBM	Brown Bridge Maintenance Fund	\$5,000	\$0	\$5,000	\$0	\$0	\$0	\$0	\$10,000
Project Total:									\$10,000

COST DETAIL:

Study:	\$0	
Land Acquisition / ROW:	\$0	
Engineering / Design:	\$0	
Construction:	\$10,000	Cost Total: \$10,000
Annual Maint. Cost:		Project Difference: \$0
Maint. Year Start:		

Service Impact:

Brown Bridge Resource Management Contract w/GTCD

Project Justification:

Bottom lands management

Location Description:

3405 Brown Bridge Rd



Six Year Capital Improvement Program

BB-20-CIP

Brown Bridge

856-20-CIP

Overlook (2) and Access Steps (3 sets)

Project Information

Submitted By:	Grand Traverse Conservation L	Department:	Department of Public Services	Provide viewing opportunities and river access points to the "new" section of river to limit stream bank erosion caused by recreational foot traffic.
Category:	Visionary	Department Head:	Frank Dituri	
Fund Group:	Brown Bridge Trust Parks Impr	Staff Priority:	Important (Could Do)	
Fund Detail:	Brown Bridge Trust Parks Impr	Council Priority:		

Overlook (2) and Acc Overlook (2) and Access Steps (3 sets) - Cost

Funding Sources:

		Previous	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	2025/2026	Total
BBTP	Brown Bridge Trust Parks	\$0	\$0	\$0	\$22,500	\$0	\$0	\$0	\$22,500
FSG	Federal / State Grant	\$0	\$0	\$0	\$11,250	\$0	\$0	\$0	\$11,250
P	Private	\$0	\$0	\$0	\$11,250	\$0	\$0	\$0	\$11,250
Project Total:									\$45,000

COST DETAIL:

Study:	\$0	
Land Acquisition / ROW:	\$0	
Engineering / Design:	\$0	
Construction:	\$45,000	Cost Total: \$45,000
Annual Maint. Cost:		Project Difference: \$0
Maint. Year Start:		

Service Impact:

Brown Bridge Resource Management Contract w/GTCD

Project Justification:

Improve Recreation Access

Location Description:

3405 Brown Bridge Rd



Six Year Capital Improvement Program

BB-20-CIP

Brown Bridge

855-20-CIP

Overlook and Historical Display at Former Powerho

Project Information

Submitted By:	Grand Traverse Conservation L	Department:	Department of Public Services	Design and install an overlook and historic display featuring one of the turbines removed from the powerhouse during decommissioning of the dam.
Category:	Visionary	Department Head:	Frank Dituri	
Fund Group:	Brown Bridge Trust Parks Impr	Staff Priority:	Essential (Should Do)	
Fund Detail:	Brown Bridge Trust Parks Impr	Council Priority:		

Overlook and Historic Overlook and Historical Display at Former - Cost

Funding Sources:

		Previous	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	2025/2026	Total
BBTP	Brown Bridge Trust Parks	\$0	\$0	\$0	\$10,000	\$0	\$0	\$0	\$10,000
FSG	Federal / State Grant	\$0	\$0	\$0	\$5,000	\$0	\$0	\$0	\$5,000
P	Private	\$0	\$0	\$0	\$5,000	\$0	\$0	\$0	\$5,000
Project Total:									\$20,000

COST DETAIL:

Study:	\$0		
Land Acquisition / ROW:	\$0		
Engineering / Design:	\$0		
Construction:	\$20,000	Cost Total:	\$20,000
Annual Maint. Cost:		Project Difference:	\$0
Maint. Year Start:			

Service Impact:

Brown Bridge Resource Management Contract w/GTCD

Project Justification:

Improved Recreation experience

Location Description:

3405 Brown Bridge Rd

Six Year Capital Improvement Plan

All Projects Submitted for 2020-2021

Budget Year 2020-2021 by Program Name

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Project ID		Cat	Previous	Fiscal Year 2020-2021	Fiscal Year 2021-2022	Fiscal Year 2022-2023	Fiscal Year 2023-2024	Fiscal Year 2024-2025	Fiscal Year 2025-2026	Project Cost	City Funds	Non-City Funds
Cemetery												
47-20-CIP	Install Cremation Niches in Mausoleum	V	\$0	\$0	\$0	\$22,000	\$0	\$0	\$0	\$22,000	\$22,000	\$0
48-20-CIP	Paving of Main Loop in First Addition	V	\$0	\$0	\$110,000	\$0	\$0	\$0	\$0	\$110,000	\$110,000	\$0
Total Cemetery				\$0	\$110,000	\$22,000	\$0	\$0	\$0	\$132,000	\$132,000	\$0



Six Year Capital Improvement Program

CEMETERY-20-CIP

Cemetery

47-20-CIP Install Cremation Niches in Mausoleum

Project Information

Submitted By:	Lauren Vaughn	Department:	Department of Public Services	This project would allow additional burial options for families and utilize an area of the mausoleum that is currently not being used. It would also make the lobby area more attractive and provide more revenue potential.
Category:	Visionary	Department Head:	Frank Dituri	
Fund Group:	General	Staff Priority:	Important (Could Do)	
Fund Detail:	Cemetery	Council Priority:		

Install Cremation Niche Install Cremation Niches in Mausoleum - Cost

Funding Sources:

		Previous	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	2025/2026	Total
GEN	General Fund	\$0	\$0	\$0	\$22,000	\$0	\$0	\$0	\$22,000
Project Total:									\$22,000

COST DETAIL:

Study:	\$0	
Land Acquisition / ROW:	\$0	
Engineering / Design:	\$0	
Construction:	\$22,000	Cost Total: \$22,000
Annual Maint. Cost:	\$300	Project Difference: \$0
Maint. Year Start:	1905	

Service Impact:

Little to no maintenance outside of that related to the sale and subsequent use of a niche.

Project Justification:

As more families use cremation as an option, having a Niche inside the mausoleum would fill a service need and also provide a revenue potential for the cemetery.

Location Description:

1400 East 8th



Six Year Capital Improvement Program

CEMETERY-20-CIP

Cemetery

48-20-CIP

Paving of Main Loop in First Addition

Project Information

Submitted By:	Lauren Vaughn	Department:	Department of Public Services	The roads in this area are dusty gravel and often have rough areas. This project would provide paved connections to all main parts of the cemetery. This would tie together the main cemetery road through Plat 1 to First Addition and Fourth Addition.
Category:	Visionary	Department Head:	Frank Dituri	
Fund Group:	General	Staff Priority:	Imperitive (Must Do)	
Fund Detail:	Cemetery	Council Priority:		

Paving of Main Loop Paving of Main Loop in First Addition - Cost

Funding Sources:

		Previous	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	2025/2026	Total
GEN	General Fund	\$0	\$0	\$110,000	\$0	\$0	\$0	\$0	\$110,000
Project Total:									\$110,000

COST DETAIL:

Study:	\$0	
Land Acquisition / ROW:	\$0	
Engineering / Design:	\$0	
Construction:	\$110,000	Cost Total: \$110,000
Annual Maint. Cost:	\$500	Project Difference: \$0
Maint. Year Start:	1905	

Service Impact:

Future patching and longterm replacement will be required.

Project Justification:

Increasing the paved pathways through the cemetery would help with dust control, winter maintenance (plowing) and aesthetics.

Location Description:

1400 East 8th Street

Six Year Capital Improvement Plan

All Projects Submitted for 2020-2021

Budget Year 2020-2021 by Program Name

Bold - Indicates projects occurring in the first FY of the plan . + - Indicates projects with multiple funding										<u>Overall Programming Cost</u>		
Project ID	Cat	Previous	Fiscal Year 2020-2021	Fiscal Year 2021-2022	Fiscal Year 2022-2023	Fiscal Year 2023-2024	Fiscal Year 2024-2025	Fiscal Year 2025-2026		Project Cost	City Funds	Non-City Funds
Civic												
+ 870-20-CIP	Civic Square	V	\$0	\$0	\$0	\$0	\$6,000,000	\$0	\$0	\$6,000,000	\$1,000,000	\$5,000,000
+ 781-20-CIP	Farmers Market	V	\$0	\$0	\$3,300,000	\$0	\$0	\$0	\$0	\$3,300,000	\$600,000	\$2,700,000
82-20-CIP	Lower Boardman River Universal Access	C	\$0	\$300,000	\$0	\$0	\$0	\$0	\$0	\$300,000	\$300,000	\$0
1141-20-CIP	Stormwater	C	\$0	\$300,000	\$0	\$0	\$0	\$0	\$0	\$300,000	\$300,000	\$0
Total Civic			\$600,000	\$3,300,000	\$0	\$6,000,000	\$0	\$0	\$0	\$9,900,000	\$2,200,000	\$7,700,000



Six Year Capital Improvement Program

CIVIC-20-CIP

Civic

870-20-CIP Civic Square

Project Information

Submitted By:	Rob Baciagalupi	Department:	Downtown Development	Public gathering space for Traverse Cityans and visitors
Category:	Visionary	Department Head:	Jean Derenzy	
Fund Group:	Tax Increment Financing	Staff Priority:	Important (Could Do)	
Fund Detail:	TIF 97	Council Priority:		

Civic Square (+Privat Civic Square (+Private) - Cost

Funding Sources:

		Previous	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	2025/2026	Total
P	Private	\$0	\$0	\$0	\$0	\$5,000,000	\$0	\$0	\$5,000,000
TIF97	TIF 97	\$0	\$0	\$0	\$0	\$1,000,000	\$0	\$0	\$1,000,000
Project Total:									\$6,000,000

COST DETAIL:

Study:	\$0	
Land Acquisition / ROW:	\$1,000,000	
Engineering / Design:	\$0	
Construction:	\$5,000,000	
Annual Maint. Cost:		
Maint. Year Start:	1905	
		Cost Total: \$6,000,000
		Project Difference: \$0

Service Impact:

Additional landscaping and streetscape elements will result in additional services. Addition of restrooms will result in contracting services for maintenance if open year round.
Renovation of the space will may result in rental i.e. issuing permits for use

Project Justification:

TIF 97

Location Description:

NE corner of State and Cass is where it is designate in the TIF plan



Six Year Capital Improvement Program

CIVIC-20-CIP

Civic

781-20-CIP

Farmers Market

Project Information

Submitted By:	Rob Baciagalupi	Department:	Downtown Development	Reconstruction of the Farmers Market Lot B with permanent structure, wider sidewalks, river enhancements, lighting, and reconstruction of parking lot. \$400,000 from Parking Fund.
Category:	Visionary	Department Head:	Jean Derenzy	
Fund Group:	Tax Increment Financing	Staff Priority:	Essential (Should Do)	
Fund Detail:	TIF 97	Council Priority:		

Farmers Market - Co: Farmers Market - Cost

Funding Sources:

		Previous	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	2025/2026	Total
P	Private	\$0	\$0	\$2,700,000	\$0	\$0	\$0	\$0	\$2,700,000
TIF97	TIF 97	\$0	\$0	\$600,000	\$0	\$0	\$0	\$0	\$600,000
Project Total:									\$3,300,000

COST DETAIL:

Study:	\$0		
Land Acquisition / ROW:	\$0		
Engineering / Design:	\$300,000		
Construction:	\$3,000,000	Cost Total:	\$3,300,000
Annual Maint. Cost:	\$10,000	Project Difference:	\$0
Maint. Year Start:	1905		

Service Impact:

Additional landscaping and placement of shed will require additional snowplowing services. Addition of restrooms will result in contracting services for maintenance if open year round. Renovation of the space and "birdhouse" will may result in rental i.e. issuing permits for use

Project Justification:

Boardman River Enhancement

Location Description:

See Lot B Rehab.



Six Year Capital Improvement Program

CIVIC-20-CIP

Civic

82-20-CIP

Lower Boardman River Universal Access

Project Information

Submitted By:	Rob Baciagalupi	Department:	Downtown Development	To beautify and enhance the river environment for recreationalist and fisheries.
Category:	Capital	Department Head:	Jean Derenzy	
Fund Group:	Tax Increment Financing	Staff Priority:	Essential (Should Do)	
Fund Detail:	TIF 97	Council Priority:		

Lower Boardman Riv Lower Boardman River Universal Access- Cost

Funding Sources:

		Previous	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	2025/2026	Total
TIF97	TIF 97	\$0	\$300,000	\$0	\$0	\$0	\$0	\$0	\$300,000
Project Total:									\$300,000

COST DETAIL:

Study:	\$0		
Land Acquisition / ROW:	\$0		
Engineering / Design:	\$0		
Construction:	\$300,000	Cost Total:	\$300,000
Annual Maint. Cost:		Project Difference:	\$0
Maint. Year Start:			

Service Impact:

The project may be in conjunction with other items, but would most likely result in maintenance to a boardwalk and landscaping and require additional services for snow removal

Project Justification:

Boardman River Enhancement

Location Description:

Lower Boardman River



Six Year Capital Improvement Program

CIVIC-20-CIP

Civic

646-20-CIP

Redevelopment of Lot O

Project Information

Submitted By:	Jean Derenzy	Department:	Downtown Development	Private/public partnership for developing a mixed use development
Category:	Visionary	Department Head:	Jean Derenzy	
Fund Group:	Tax Increment Financing	Staff Priority:	Essential (Should Do)	
Fund Detail:	TIF 97	Council Priority:		

Funding Sources:

Previous	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	2025/2026	Total
\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Project Total:							\$0

COST DETAIL:

Study: \$0

Land Acquisition / ROW: \$0

Engineering / Design: \$0

Construction: \$0

Annual Maint. Cost:

Maint. Year Start:

Cost Total: \$0

Project Difference: \$0

Service Impact:

Remove 25 space parking lot to build a mixed use development

Project Justification:

Better land use

Location Description:

NW Corner of State and Cass



Six Year Capital Improvement Program

CIVIC-20-CIP

Civic

1141-20-CIP

Stormwater

Project Information

Submitted By:	Jean Derenzy	Department:	Downtown Development	STORMWATER IMPROVEMENTS FOR DDA DISTRICT PER AECOM
Category:	Capital	Department Head:	Jean Derenzy	STUDY
Fund Group:	Tax Increment Financing	Staff Priority:	Essential (Should Do)	
Fund Detail:	TIF 97	Council Priority:	Essential (Should Do)	

STORMWATER STORMWATER

Funding Sources:

		Previous	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	2025/2026	Total
TIF97	TIF 97	\$0	\$300,000	\$0	\$0	\$0	\$0	\$0	\$300,000
Project Total:									\$300,000

COST DETAIL:

Study:	\$0	
Land Acquisition / ROW:	\$0	
Engineering / Design:	\$0	
Construction:	\$300,000	Cost Total: \$300,000
Annual Maint. Cost:	\$5,000	Project Difference: \$0
Maint. Year Start:	1905	

Service Impact:

WILL REDUCE STORMWATER IMPACTS INTO BOARDMAN RIVER AND BAY

Project Justification:

AECOM STUDY

Location Description:

DDA DISTRICT

Six Year Capital Improvement Plan

All Projects Submitted for 2020-2021

Budget Year 2020-2021 by Program Name

Bold - Indicates projects occurring in the first FY of the plan . + - Indicates projects with multiple funding										<u>Overall Programming Cost</u>		
Project ID		Cat	Previous	Fiscal Year 2020-2021	Fiscal Year 2021-2022	Fiscal Year 2022-2023	Fiscal Year 2023-2024	Fiscal Year 2024-2025	Fiscal Year 2025-2026	Project Cost	City Funds	Non-City Funds
Facilities												
1074-20-CIP	Harbor Master Building Foundation Repair	M	\$0	\$0	\$300,000	\$0	\$0	\$0	\$0	\$300,000	\$300,000	\$0
+ 1114-20-CIP	NOAA Culvert Replacement	M	\$1,302,300	\$866,300	\$0	\$0	\$0	\$0	\$0	\$2,168,600	\$358,000	\$1,810,600
168-20-CIP	Union Street Dam Improvements	V	\$1,000,000	\$9,000,000	\$9,000,000	\$0	\$0	\$0	\$0	\$19,000,000	\$0	\$19,000,000
Total Facilities				\$9,866,300	\$9,300,000	\$0	\$0	\$0	\$0	\$25,468,600	\$4,408,000	\$21,060,600



Six Year Capital Improvement Program

FACILITIES-20-CIP

Facilities

1074-20-CIP Harbor Master Building Foundation Repair

Project Information

Submitted By:	Barry Smith	Department:	Department of Public Services	Repairs to the Harbor Master Building foundation and the interior and exterior of the building per the recommendations from the crack monitoring done in the summer of 2018. Repairs to the exterior includes concrete removal and replacement, helical piles, backfilling and mobilization and demobilization. Interior repairs include masonry remove and replace, joint repair, drywall repair, painting and caulking. Per cost estimate provided by Machin Engineering in 2018.
Category:	Maintenance	Department Head:	Frank Dituri	
Fund Group:	Marina	Staff Priority:	Imperative (Must Do)	
Fund Detail:	Marina	Council Priority:		

Harbor Master Buildir Harbor Master Building Foundation Repair

Funding Sources:

		Previous	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	2025/2026	Total
MAR	Marina Fund	\$0	\$0	\$300,000	\$0	\$0	\$0	\$0	\$300,000
Project Total:									\$300,000

COST DETAIL:

Study:	\$0	
Land Acquisition / ROW:	\$0	
Engineering / Design:	\$0	
Construction:	\$300,000	Cost Total: \$300,000
Annual Maint. Cost:		Project Difference: \$0
Maint. Year Start:		

Service Impact:

Once the repairs are complete, there should be no additional future repairs for this issue as this project should resolve the cracking and foundation issues.

Project Justification:

The foundation at the marina is cracking and causing damage to the harbor master building. Delaying the repairs could mean additional damage to the building which could result in increased repair costs as the scope changes.

Location Description:

1011 E Grandview Pkwy, Traverse City, MI 49684



Six Year Capital Improvement Program

FACILITIES-20-CIP

Facilities

1114-20-CIP NOAA Culvert Replacement

Project Information

Submitted By: Tim Lodge
Category: Maintenance
Fund Group: General
Fund Detail: Facilities
Department: Engineering
Department Head: Tim Lodge
Staff Priority: Essential (Should Do)
Council Priority:

Ongoing restoration work in Kids Creek by improving in-stream habitat on a 3,000-foot section of the creek on City property south of Silver Lake Road. Restoration includes riparian buffer plantings along the creek, large wood placement at key locations, and the placement of toe wood on outside of stream meanders for habitat purposes. The project will improve a total of 4 priority road crossings in the City of Traverse City along Kids Creek that are having a negative hydrological effect on the stream by removing undersized culverts and replacing them with open bottom bridge structures.

City Engineering will lead design and construction efforts for the road crossing improvements and will provide engineering services and construction oversight as project match at an estimated amount to be \$166,500 over a period of 4 years. Construction is slated for the first two crossings in 2021.

NOAA Culvert Replac NOAA Culvert Replacement-C

Funding Sources:

		Previous	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	2025/2026	Total
FSG	Federal / State Grant	\$822,000	\$822,000	\$0	\$0	\$0	\$0	\$0	\$1,644,000
IN	Inkind	\$122,300	\$44,300	\$0	\$0	\$0	\$0	\$0	\$166,600
S	Sewer Fund	\$162,000	\$0	\$0	\$0	\$0	\$0	\$0	\$162,000
WAT	Water Fund	\$196,000	\$0	\$0	\$0	\$0	\$0	\$0	\$196,000
Project Total:									\$2,168,600

COST DETAIL:

Study:	\$0	
Land Acquisition / ROW:	\$0	
Engineering / Design:	\$166,600	
Construction:	\$2,002,000	
Annual Maint. Cost:		
Maint. Year Start:		
		Cost Total: \$2,168,600
		Project Difference: \$0

Service Impact:

Replacement of four street and stream crossings for which the City would otherwise be responsible.

Project Justification:

Will allow us to leverage receipt of nearly \$2.3 million in grant funds for improvements to Kids Creek.



City of
TRAVERSE CITY

Six Year Capital Improvement Program

FACILITIES-20-CIP

Facilities

Location Description:

Kids Creek south of Silver Lake Rd.

2 locations on Cedar Street. One location on Sixth Street and one location of Tributary A on Elmwood Avenue near Seventh Street.



Six Year Capital Improvement Program

FACILITIES-20-CIP

Facilities

871-20-CIP

Senior Center building renovation

Project Information

Submitted By: Tim Lodge

Department: Engineering

Building Renovation- The Grand Traverse County Senior Center Network is presently housed at the city owned building at 801 E. Front Street in Traverse City. For some years it has been apparent that the facility is inadequate to meet the numerous uses and needs of our local seniors. This program is presently managed by the Grand Traverse County Commission on Aging.

Category: Visionary

Department Head: Tim Lodge

Fund Group: Senior Center Fund

Staff Priority: Important (Could Do)

Fund Detail: Senior Center

Council Priority:

The Senior Center Fund has \$423,000 in savings originally collected by donations to the center toward a new building and which the City Commission has agreed to release the funds for a building remodel. The existing building footprint is 5,760 square feet. A design consultant has been hired and a proposed site plan with a building of 12,000 sft is being presented to county/city boards.

Senior Center buildin Senior Center building renovation (+Privat - Cost

Funding Sources:

		Previous	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	2025/2026	Total
LFG	Local / Foundation Grant	\$250,000	\$0	\$0	\$0	\$0	\$0	\$0	\$250,000
P	Private	\$3,327,000	\$0	\$0	\$0	\$0	\$0	\$0	\$3,327,000
SCB	Senior Center Building Fund	\$423,000	\$0	\$0	\$0	\$0	\$0	\$0	\$423,000

Project Total: \$4,000,000

COST DETAIL:

Study: \$0

Land Acquisition / ROW: \$0

Engineering / Design: \$320,000

Construction: \$3,680,000

Annual Maint. Cost:

Maint. Year Start:

Cost Total: \$4,000,000

Project Difference: \$0

Service Impact:

None.

Project Justification:

Building upgrade.

Location Description:

801 E. Front Street



Six Year Capital Improvement Program

FACILITIES-20-CIP

Facilities

168-20-CIP

Union Street Dam Improvements

Project Information

Submitted By:	Tim Lodge	Department:	Engineering
Category:	Visionary	Department Head:	Frank Dituri
Fund Group:	General	Staff Priority:	Essential (Should Do)
Fund Detail:	Facilities	Council Priority:	

The goal of FishPass is to provide bi-directional movement of native and desirable fishes while removing or blocking invasive fishes on the Boardman River, Michigan. As part of the ongoing Boardman River Restoration Project, the Union Street Dam will be removed and replaced with a new and improved barrier. Below the barrier, a facility with multiple sorting channels and nature-like channel will be constructed as a place to demonstrate an integrated suite of technologies and techniques for selective fish passage and invasive species control. The project consists of a 1,481 square foot building with an office, fabrication room and public bathrooms is planned in the vicinity where a small cement block building currently exists. There are plans for connecting walks to adjacent parks and properties along with other features shown in the attached report. Approved by the Planning Commission for consistency with Master Plan on 1/3/17.

Union Street Dam Im Union Street Dam Improvements- Cost

Funding Sources:

		Previous	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	2025/2026	Total
FSG	Federal / State Grant	\$0	\$9,000,000	\$9,000,000	\$0	\$0	\$0	\$0	\$18,000,000
P	Private	\$1,000,000	\$0	\$0	\$0	\$0	\$0	\$0	\$1,000,000

Project Total: \$19,000,000

COST DETAIL:

Study:	\$0		
Land Acquisition / ROW:	\$0		
Engineering / Design:	\$0		
Construction:	\$19,000,000	Cost Total:	\$19,000,000
Annual Maint. Cost:		Project Difference:	\$0
Maint. Year Start:			

Service Impact:

The building and public restroom will require ongoing maintenance. The improvements to the grounds may also require additional maintenance.

Project Justification:

Boardman River Enhancement

Location Description:

235 S. Union Street. The project is located in and around the existing earthen Union Street Dam which is located on Boardman River between Cass and Union Streets south of State Street.

Six Year Capital Improvement Plan

All Projects Submitted for 2020-2021

Budget Year 2020-2021 by Program Name

Bold - Indicates projects occurring in the first FY of the plan . + - Indicates projects with multiple funding										<u>Overall Programming Cost</u>		
Project ID	Cat	Previous	Fiscal Year 2020-2021	Fiscal Year 2021-2022	Fiscal Year 2022-2023	Fiscal Year 2023-2024	Fiscal Year 2024-2025	Fiscal Year 2025-2026		Project Cost	City Funds	Non-City Funds
Fire												
977-20-CIP	Fire detection and suppression system installatio	M	\$0	\$131,250	\$89,250	\$0	\$0	\$0	\$0	\$220,500	\$220,500	\$0
Total Fire			\$131,250	\$89,250	\$0	\$0	\$0	\$0	\$0	\$220,500	\$220,500	\$0



Six Year Capital Improvement Program

TCFD-20-CIP

Fire

977-20-CIP Fire detection and suppression system installatio

Project Information

Submitted By: Jim Tuller
Category: Maintenance
Fund Group: General
Fund Detail: Fire

Department: Fire
Department Head: Jim Tuller
Staff Priority: Imperitive (Must Do)
Council Priority:

Both City fire stations currently have no fire detection or fire suppression systems in place to warn occupants of a fire, or to suppress a fire that breaks out. Both Stations house City Fire personnel 24/7 and hundreds of thousands of dollars of emergency equipment.

Fire detection and su Fire detection and suppression system inst - Cost

Funding Sources:

		Previous	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	2025/2026	Total
GEN	General Fund	\$0	\$131,250	\$89,250	\$0	\$0	\$0	\$0	\$220,500
Project Total:									\$220,500

COST DETAIL:

Study:	\$0	
Land Acquisition / ROW:	\$0	
Engineering / Design:	\$0	
Construction:	\$220,500	Cost Total: \$220,500
Annual Maint. Cost:		Project Difference: \$0
Maint. Year Start:		

Service Impact:

None.

Project Justification:

Protection of personnel and equipment

Location Description:

Traverse City Fire Department Station 1, 500 West Front Street and Station 2, 1313 E. 8th Street

Six Year Capital Improvement Plan

All Projects Submitted for 2020-2021

Budget Year 2020-2021 by Program Name

Bold - Indicates projects occurring in the first FY of the plan . + - Indicates projects with multiple funding										<u>Overall Programming Cost</u>		
Project ID	Cat	Previous	Fiscal Year 2020-2021	Fiscal Year 2021-2022	Fiscal Year 2022-2023	Fiscal Year 2023-2024	Fiscal Year 2024-2025	Fiscal Year 2025-2026		Project Cost	City Funds	Non-City Funds
Garage												
126-20-CIP	Annual Vehicle and Equipment Replacement	C	\$2,044,300	\$1,307,000	\$1,359,800	\$1,294,976	\$2,637,300	\$2,210,926	\$0	\$0	\$10,854,302	\$0
1187-20-CIP	Demolition of Building @ 535 Woodmere	C	\$0	\$150,000	\$0	\$0	\$0	\$0	\$0	\$150,000	\$150,000	\$0
1166-20-CIP	Hoist Replacement	C	\$0	\$0	\$0	\$0	\$220,000	\$0	\$0	\$220,000	\$220,000	\$0
1165-20-CIP	Old Salt Barn Repairs	M	\$0	\$55,000	\$0	\$0	\$0	\$0	\$0	\$55,000	\$55,000	\$0
Total Garage			\$1,512,000	\$1,359,800	\$1,294,976	\$2,857,300	\$2,210,926	\$0		\$425,000	\$11,279,302	\$0



Six Year Capital Improvement Program

GARAGE-20-CIP

Garage

126-20-CIP Annual Vehicle and Equipment Replacement

Project Information

Submitted By:	Dave Courtad	Department:	Department of Public Services	The garage annually purchases new equipment, vehicles, and machinery to replace existing assets. These items to be replaced on an annual basis are based on cost effectiveness of ownership. This allocation will not replace all vehicles and equipment
Category:	Capital	Department Head:	Frank Dituri	
Fund Group:	Garage	Staff Priority:	Imperitive (Must Do)	
Fund Detail:	Garage	Council Priority:		

Annual Vehicle and E Annual Vehicle and Equipment Replacement - Cost

Funding Sources:

		Previous	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	2025/2026	Total
GAR	Garage Fund	\$2,044,300	\$1,307,000	\$1,359,800	\$1,294,976	\$2,637,300	\$2,210,926	\$0	\$10,854,302
Project Total:									\$10,854,302

COST DETAIL:

Study:	\$0
Land Acquisition / ROW:	\$0
Engineering / Design:	\$0
Construction:	\$0
Annual Maint. Cost:	
Maint. Year Start:	

Cost Total: \$0

Project Difference: \$10,854,302

Service Impact:

continued ability to carryout current level of service

Project Justification:

work force equipment needs

Location Description:

City-wide



Six Year Capital Improvement Program

GARAGE-20-CIP

Garage

1187-20-CIP

Demolition of Building @ 535 Woodmere

Project Information

Submitted By:	Dave Courtad	Department:	Department of Public Services	Building at 535 Woodmere demolition and abatement of asbestos and lead paint materials
Category:	Capital	Department Head:	Frank Dituri	
Fund Group:	Garage	Staff Priority:	Imperative (Must Do)	
Fund Detail:	Garage	Council Priority:		

Demolition of Building @ 535 Woodmere

Funding Sources:

		Previous	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	2025/2026	Total
GAR	Garage Fund	\$0	\$150,000	\$0	\$0	\$0	\$0	\$0	\$150,000
Project Total:									\$150,000

COST DETAIL:

Study:	\$0	
Land Acquisition / ROW:	\$0	
Engineering / Design:	\$0	
Construction:	\$150,000	Cost Total: \$150,000
Annual Maint. Cost:		Project Difference: \$0
Maint. Year Start:		

Service Impact:

clearing of properties for future City use

Project Justification:

Garage Ad-Hoc request to determine use of property recently purchased by the Garage Fund

Location Description:

535 Woodmere Ave



Six Year Capital Improvement Program

GARAGE-20-CIP

Garage

1166-20-CIP

Hoist Replacement

Project Information

Submitted By: Dave Courtad

Department: Department of Public Services Replacement of in ground Hoists, repair parts have become obsolete

Category: Capital

Department Head: Frank Dituri

Fund Group: Garage

Staff Priority: Essential (Should Do)

Fund Detail: Garage

Council Priority:

Funding Sources:

		Previous	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	2025/2026	Total
GAR	Garage Fund	\$0	\$0	\$0	\$0	\$220,000	\$0	\$0	\$220,000
Project Total:									\$220,000

COST DETAIL:

Study: \$0

Land Acquisition / ROW: \$0

Engineering / Design: \$20,000

Construction: \$200,000

Annual Maint. Cost: \$1,000

Maint. Year Start: 1905

Cost Total: **\$220,000**

Project Difference: **\$0**

Service Impact:

continued Garage use for reopairs

Project Justification:

Hoists are getting old and obsolete, repair parts such as seals are become difficult to find.

Location Description:

625 Woodmere



Six Year Capital Improvement Program

GARAGE-20-CIP

Garage

1165-20-CIP

Old Salt Barn Repairs

Project Information

Submitted By: Dave Courtad

Department: Department of Public Services Re roof Barn and add a lean too.

Category: Maintenance

Department Head: Frank Dituri

Fund Group: Garage

Staff Priority: Imperative (Must Do)

Fund Detail: Garage

Council Priority:

Old Salt Barn Repair Old Salt Barn Repair

Funding Sources:

		Previous	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	2025/2026	Total
GAR	Garage Fund	\$0	\$55,000	\$0	\$0	\$0	\$0	\$0	\$55,000
Project Total:									\$55,000

COST DETAIL:

Study: \$0

Land Acquisition / ROW: \$0

Engineering / Design: \$0

Construction: \$55,000

Annual Maint. Cost:

Maint. Year Start:

Cost Total: \$55,000

Project Difference: \$0

Service Impact:

continued Streets division use

Project Justification:

Must be repaired to maintain the integrity of the building

Location Description:

625 Woodmere

Six Year Capital Improvement Plan

All Projects Submitted for 2020-2021

Budget Year 2020-2021 by Program Name

Bold - Indicates projects occurring in the first FY of the plan . + - Indicates projects with multiple funding										<u>Overall Programming Cost</u>		
Project ID		Cat	Previous	Fiscal Year 2020-2021	Fiscal Year 2021-2022	Fiscal Year 2022-2023	Fiscal Year 2023-2024	Fiscal Year 2024-2025	Fiscal Year 2025-2026	Project Cost	City Funds	Non-City Funds
General Government												
784-20-CIP	Annual City Computers	M	\$30,000	\$30,000	\$30,000	\$30,000	\$30,000	\$30,000	\$30,000	\$0	\$210,000	\$0
4-20-CIP	City Document Management System	V	\$0	\$25,000	\$25,000	\$25,000	\$0	\$0	\$0	\$0	\$75,000	\$0
1029-20-CIP	Master Plan Vision and Re-Write_PlanningCommission	V	\$20,000	\$0	\$80,000	\$0	\$0	\$0	\$0	\$100,000	\$100,000	\$0
1111-20-CIP	Network Upgrade & Redesign - City Portion	M	\$27,600	\$27,600	\$27,600	\$27,600	\$27,600	\$0	\$0	\$138,000	\$138,000	\$0
+ 1104-20-CIP	New Utility Billing Software	M	\$0	\$116,000	\$0	\$0	\$0	\$0	\$0	\$116,000	\$116,000	\$0
1112-20-CIP	Purchase & Install Backup Generator - Opera House	C	\$0	\$30,000	\$25,000	\$0	\$0	\$0	\$0	\$55,000	\$55,000	\$0
1103-20-CIP	Replace Boiler - Carnegie Building	M	\$0	\$12,000	\$0	\$0	\$0	\$0	\$0	\$12,000	\$12,000	\$0
1101-20-CIP	Replace Chiller Unit - Carnegie Building	M	\$0	\$0	\$0	\$0	\$0	\$0	\$36,500	\$36,200	\$36,500	\$0
1096-20-CIP	Replace Packaged A/C Rooftop Units - Opera House	M	\$0	\$15,000	\$20,000	\$0	\$0	\$0	\$0	\$35,000	\$35,000	\$0
Total General Government				\$255,600	\$207,600	\$82,600	\$57,600	\$30,000	\$66,500	\$556,200	\$841,500	\$0



Six Year Capital Improvement Program

GEN GOVT-20-CIP

General Government

784-20-CIP Annual City Computers

Project Information

Submitted By:	Penny Hill	Department:	Manager	Replacement of general computer hardware and software
Category:	Maintenance	Department Head:	Marty Colburn	
Fund Group:	General	Staff Priority:	Essential (Should Do)	
Fund Detail:	General Government	Council Priority:		

Annual City Compute Annual City Computers - Cost Funding Sources:

		Previous	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	2025/2026	Total
GEN	General Fund	\$30,000	\$30,000	\$30,000	\$30,000	\$30,000	\$30,000	\$30,000	\$210,000
Project Total:									\$210,000

COST DETAIL:

Study:	\$0	
Land Acquisition / ROW:	\$0	
Engineering / Design:	\$0	
Construction:	\$0	Cost Total: \$0
Annual Maint. Cost:	\$30,000	Project Difference: \$210,000
Maint. Year Start:		

Service Impact:

Provides efficiencies in operations City-wide

Project Justification:

Cycles out obsolete or non-functioning equipment

Location Description:

City Wide



Six Year Capital Improvement Program

GEN GOVT-20-CIP

General Government

4-20-CIP

City Document Management System

Project Information

Submitted By: Penny Hill
Category: Visionary
Fund Group: General
Fund Detail: General Government

Department: Manager
Department Head: Marty Colburn
Staff Priority: Essential (Should Do)
Council Priority: Essential (Should Do)

Document Imaging various City records.
 For FY 2020-2021, City Manager's Office: Scan all current City easements, coordinate with GIS, Assessing, and Asset Management to include these easements in a GIS layer and database.

Future Imaging project include:
 Treasurer's office: Image all invoices, journal entries, financial reports, and receipts that support financial transactions. These documents would then be searchable by anyone with inquiry access.

City Document Mana City Document Management System - Cost

Funding Sources:

		Previous	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	2025/2026	Total
GEN	General Fund	\$0	\$25,000	\$25,000	\$25,000	\$0	\$0	\$0	\$75,000
Project Total:									\$75,000

COST DETAIL:

Study: \$0

Land Acquisition / ROW: \$0

Engineering / Design: \$0

Construction: \$0

Annual Maint. Cost: \$9,400

Maint. Year Start:

Cost Total: **\$0**

Project Difference: **\$75,000**

Service Impact:

This will increase Efficiency in the operations of the City and its Departments, and will reduce the time necessary to research and locate documents.

Project Justification:

This will move the City toward its goal of becoming more paperless, creating less waste and reducing our carbon footprint.

Location Description:

City Wide

**Six Year Capital Improvement Program****GEN GOVT-20-CIP****General Government****1098-20-CIP****Lighting Retrofit - Incandescents - Opera House****Project Information**

Submitted By: Penny Hill
Category: Maintenance
Fund Group: Opera House
Fund Detail: Opera House

Department: Manager
Department Head: Marty Colburn
Staff Priority: Imperitive (Must Do)
Council Priority: Imperitive (Must Do)

Per the 2018 Energy Assessment through Michigan Energy Options and SEEDS, it is recommended that the incandescent lights be replaced with LED and TLED lights. 80% of energy consumed by incandescent lights is lost in the form of heat.

Lighting Retrofit - Inc: Lighting Retrofit - Incandescent - Opera House

Funding Sources:

		Previous	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	2025/2026	Total
TIF97	TIF 97	\$18,000	\$0	\$0	\$0	\$0	\$0	\$0	\$18,000
Project Total:									\$18,000

COST DETAIL:

Study: \$0

Land Acquisition / ROW: \$0

Engineering / Design: \$0

Construction: \$18,000

Annual Maint. Cost:

Maint. Year Start: 1905

Cost Total: **\$18,000**

Project Difference: **\$0**

Service Impact:

Reduces energy consumption

Project Justification:

The recommended measure should provide an annual electricity savings of 56,759 kWh. The recommended measure will provide a total annual cost savings of \$6,972.66. Using the estimated initial investment of \$17,276, the project will have a simple payback of 2.48 years, and a Savings to Investment ratio (SIR) of 6.004

Location Description:

106 E Front Street



Six Year Capital Improvement Program

GEN GOVT-20-CIP

General Government

1102-20-CIP Lighting Retrofit - T-8 fixtures - Carnegie Bldg

Project Information

Submitted By:	Penny Hill	Department:	Manager	Per the 2018 Energy Assessment through Michigan Energy Options and SEEDS, it is recommended that the current T-8 lights be retrofitted with TLED Fixtures.
Category:	Maintenance	Department Head:	Marty Colburn	
Fund Group:	General	Staff Priority:	Imperitive (Must Do)	
Fund Detail:	General Government	Council Priority:	Essential (Should Do)	

Lighting Retrofit - T-8 Lighting Retrofit - T-8 fixtures - Carnegie Bldg

Funding Sources:

		Previous	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	2025/2026	Total
GEN	General Fund	\$16,500	\$0	\$0	\$0	\$0	\$0	\$0	\$16,500
Project Total:									\$16,500

COST DETAIL:

Study:	\$0		
Land Acquisition / ROW:	\$0		
Engineering / Design:	\$0		
Construction:	\$16,500	Cost Total:	\$16,500
Annual Maint. Cost:		Project Difference:	\$0
Maint. Year Start:	1905		

Service Impact:

Reduces Energy Consumption

Project Justification:

The recommended measure should provide an annual electricity savings of 17,652 kWh. The recommended measure will provide a total annual cost savings of \$2,215. Using the estimated initial investment of \$19,484, the project will have a simple payback of 8.80 years, and a Savings to Investment ratio (SIR) of 1.692

Location Description:

322 Sixth Street



Six Year Capital Improvement Program

GEN GOVT-20-CIP

General Government

1099-20-CIP

Lighting Retrofit - T-8 fixtures - Opera House

Project Information

Submitted By: Penny Hill
Category: Maintenance
Fund Group: Opera House
Fund Detail: Opera House

Department: Manager
Department Head: Marty Colburn
Staff Priority: Imperitive (Must Do)
Council Priority: Imperitive (Must Do)

Per the 2018 Energy Assessment through Michigan Energy Options and SEEDS, it is recommended that all T-8 fluorescent lights lamps be replaced with LED Lamps and TLED lamps.

Lighting Retrofit - T-8 Lighting Retrofit - T-8 fixtures - Opera House

Funding Sources:

		Previous	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	2025/2026	Total
TIF97	TIF 97	\$17,500	\$0	\$0	\$0	\$0	\$0	\$0	\$17,500
Project Total:									\$17,500

COST DETAIL:

Study: \$0

Land Acquisition / ROW: \$0

Engineering / Design: \$0

Construction: \$17,500

Annual Maint. Cost:

Maint. Year Start: 1905

Cost Total: \$17,500

Project Difference: \$0

Service Impact:

Reduce Energy consumption

Project Justification:

The recommended measure should provide an annual electricity savings of 5,354 kWh. The recommended measure will provide a total annual cost savings of \$657.77. Using the estimated initial investment of \$5,657, the project will have a simple payback of 8.60 years, and a Savings to Investment ratio (SIR) of 1.73.

Location Description:

106 E Front St



Six Year Capital Improvement Program

GEN GOVT-20-CIP

General Government

1029-20-CIP

Master Plan Vision and Re-Write_PlanningCommission

Project Information

Submitted By: Missy Luick

Department: Planning and Zoning

Master Plan Review Committee recommended that the Planning Commission add a project to the CIP for an eventual Master Plan re-write. The process they envisioned included a community engagement/vision process that could be followed by a Master Plan re-write should the vision process result in that outcome.

Category: Visionary

Department Head: Russ Soyring

Fund Group: General

Staff Priority: Imperitive (Must Do)

Fund Detail: General Government

Council Priority:

Master Plan Vision ar Master Plan Vision and Re-Write_PlanningCommission

Funding Sources:

		Previous	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	2025/2026	Total
GEN	General Fund	\$20,000	\$0	\$80,000	\$0	\$0	\$0	\$0	\$100,000
Project Total:									\$100,000

COST DETAIL:

Study: \$100,000

Land Acquisition / ROW: \$0

Engineering / Design: \$0

Construction: \$0

Annual Maint. Cost:

Maint. Year Start:

Cost Total: \$100,000

Project Difference: \$0

Service Impact:

None.

Project Justification:

To make sure the Master Plan reflects the communities values

Location Description:

City-wide



Six Year Capital Improvement Program

GEN GOVT-20-CIP

General Government

1111-20-CIP

Network Upgrade & Redesign - City Portion

Project Information

Submitted By:	Penny Hill	Department:	Manager	City portion of City/County Network upgrade & redesign including Core/firewall, Distribution, Network Access Controls, and cabling upgrades
Category:	Maintenance	Department Head:	Marty Colburn	
Fund Group:	General	Staff Priority:	Imperitive (Must Do)	
Fund Detail:	General Government	Council Priority:		

Network Upgrade & F Network Upgrade & Redesign - City Portion

Funding Sources:

		Previous	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	2025/2026	Total
GEN	General Fund	\$27,600	\$27,600	\$27,600	\$27,600	\$27,600	\$0	\$0	\$138,000
Project Total:									\$138,000

COST DETAIL:

Study:	\$0	
Land Acquisition / ROW:	\$0	
Engineering / Design:	\$0	
Construction:	\$138,000	Cost Total: \$138,000
Annual Maint. Cost:		Project Difference: \$0
Maint. Year Start:		

Service Impact:

Improve efficiency in operations due to increased internet speed and capacity. Improve security and reliability.

Project Justification:

Included in Grand Traverse County IT Strategic Plan

Location Description:

400 Boardman Avenue



Six Year Capital Improvement Program

GEN GOVT-20-CIP

General Government

1104-20-CIP

New Utility Billing Software

Project Information

Submitted By:	Penny Hill	Department:	Manager	Replace existing HTE-Sungard-Superion software with BS&A Software. HTE-Sungard-Superion utilizes the IBM iSeries (AS-400) platform. It is the mutual goal of the City and Grand Traverse County to phase out software applications based on the AS-400 platform.
Category:	Maintenance	Department Head:	Marty Colburn	
Fund Group:	General	Staff Priority:	Essential (Should Do)	
Fund Detail:	General Government	Council Priority:		

New Utility Billing Sof New Utility Billing Software

Funding Sources:

		Previous	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	2025/2026	Total
S	Sewer Fund	\$0	\$58,000	\$0	\$0	\$0	\$0	\$0	\$58,000
WAT	Water Fund	\$0	\$58,000	\$0	\$0	\$0	\$0	\$0	\$58,000
Project Total:									\$116,000

COST DETAIL:

Study:	\$0		
Land Acquisition / ROW:	\$0		
Engineering / Design:	\$0		
Construction:	\$116,000	Cost Total:	\$116,000
Annual Maint. Cost:	\$6,600	Project Difference:	\$0
Maint. Year Start:	1905		

Service Impact:

Improve Efficiency and reliability by using an integrated software system

Project Justification:

It is the mutual goal of the City and Grand Traverse County to phase out software applications based on the AS-400 platform.

Location Description:

400 Boardman Avenue



Six Year Capital Improvement Program

GEN GOVT-20-CIP

General Government

1112-20-CIP Purchase & Install Backup Generator - Opera House

Project Information

Submitted By:	Penny Hill	Department:	Manager	Purchase and install backup generator on rooftop for emergency electricity.
Category:	Capital	Department Head:	Marty Colburn	
Fund Group:	Opera House	Staff Priority:	Essential (Should Do)	
Fund Detail:	Opera House	Council Priority:		

Purchase & Install Backup Generator - Opera House

Funding Sources:

		Previous	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	2025/2026	Total
OPH	Opera House	\$0	\$30,000	\$25,000	\$0	\$0	\$0	\$0	\$55,000
Project Total:									\$55,000

COST DETAIL:

Study:	\$0	
Land Acquisition / ROW:	\$0	
Engineering / Design:	\$0	
Construction:	\$55,000	Cost Total: \$55,000
Annual Maint. Cost:		Project Difference: \$0
Maint. Year Start:	1905	

Service Impact:

Improve reliability of systems in the event of power failure.

Project Justification:

Equipment is needed in the event of power failure, will prevent people from getting stuck in the elevator during a power outage.

Location Description:

106 E. Front Street



Six Year Capital Improvement Program

GEN GOVT-20-CIP

General Government

1103-20-CIP

Replace Boiler - Carnegie Building

Project Information

Submitted By: Penny Hill
Category: Maintenance
Fund Group: General
Fund Detail: General Government

Department: Manager
Department Head: Marty Colburn
Staff Priority: Essential (Should Do)
Council Priority:

Per the 2018 Energy Assessment through Michigan Energy Options and SEEDS, it is recommended that the existing two hydronic boilers be replaced with new, high efficiency condensing boilers, which will improve the overall heating efficiency from 80% to approximately 95%. By recovering energy from condensed water in the exhaust stream, the boiler requires less fuel input for the same output of heating. In 2019 received a grant through MCACA to assist with this project.

Replace Boiler - Carr Replace Boiler - Carnegie Bldg

Funding Sources:

		Previous	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	2025/2026	Total
GEN	General Fund	\$0	\$12,000	\$0	\$0	\$0	\$0	\$0	\$12,000
Project Total:									\$12,000

COST DETAIL:

Study: \$0

Land Acquisition / ROW: \$0

Engineering / Design: \$0

Construction: \$12,000

Annual Maint. Cost:

Maint. Year Start:

Cost Total: \$12,000

Project Difference: \$0

Service Impact:

Reduces Energy Consumption

Project Justification:

The recommended measure should provide an annual natural gas savings of 1,339 ccf and will provide a total annual cost savings of \$803. Using the estimated initial investment of \$11,625, the project will have a simple payback of 14.47 years, and a Savings to Investment ratio (SIR) of 1.028.

Location Description:

322 Sixth Street



Six Year Capital Improvement Program

GEN GOVT-20-CIP

General Government

1097-20-CIP

Replace Boiler - Opera House

Project Information

Submitted By:	Penny Hill	Department:	Manager	Per the 2018 Energy Assessment through Michigan Energy Options and SEEDS, it is recommended that the existing boiler be replaced with a new high efficiency condensing boiler. Condensing boilers are an efficient way to heat a building. By recovering energy from condensed water in the exhaust stream, the boiler requires less fuel input for the same output of heat.
Category:	Maintenance	Department Head:	Marty Colburn	
Fund Group:	Opera House	Staff Priority:	Essential (Should Do)	
Fund Detail:	Opera House	Council Priority:		

Replace Boiler - Opera House

Funding Sources:

		Previous	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	2025/2026	Total
TIF97	TIF 97	\$12,000	\$0	\$0	\$0	\$0	\$0	\$0	\$12,000
Project Total:									\$12,000

COST DETAIL:

Study:	\$0	
Land Acquisition / ROW:	\$0	
Engineering / Design:	\$0	
Construction:	\$12,000	Cost Total: \$12,000
Annual Maint. Cost:		Project Difference: \$0
Maint. Year Start:	1905	

Service Impact:

Reduces Energy Consumption

Project Justification:

The recommended measure should provide an annual natural gas savings of -2,015 ccf and an annual cost savings of \$1,758.49. Using the estimated initial investment of \$11,325.00, the project will have a simple payback of 6.44 years, and a Savings to Investment ratio (SIR) of 2.31

Location Description:

106 E Front Street



Six Year Capital Improvement Program

GEN GOVT-20-CIP

General Government

1101-20-CIP

Replace Chiller Unit - Carnegie Building

Project Information

Submitted By:	Penny Hill	Department:	Manager	Per the 2018 Energy Assessment through Michigan Energy Options and SEEDS, it is recommended that the current Chiller rooftop unit is approaching the end of its useful life, and should be replaced with a new, higher efficiency unit.
Category:	Maintenance	Department Head:	Marty Colburn	
Fund Group:	General	Staff Priority:	Essential (Should Do)	
Fund Detail:	General Government	Council Priority:		

Replace Chiller Unit - Replace Chiller Unit - Carnegie Bldg

Funding Sources:

		Previous	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	2025/2026	Total
GEN	General Fund	\$0	\$0	\$0	\$0	\$0	\$0	\$36,500	\$36,500
Project Total:									\$36,500

COST DETAIL:

Study:	\$0	
Land Acquisition / ROW:	\$0	
Engineering / Design:	\$0	
Construction:	\$36,200	Cost Total: \$36,200
Annual Maint. Cost:		Project Difference: \$300
Maint. Year Start:	1905	

Service Impact:

Reduces energy consumption

Project Justification:

The recommended measure should provide an annual electricity savings of 8,293 kWh. The recommended measure will provide a total annual cost savings of \$1,041. Using the estimated initial investment of \$36,200, the project will have a simple payback of 34.78 years, and a Savings to Investment ratio (SIR) of .501.

Location Description:

322 Sixth Street



Six Year Capital Improvement Program

GEN GOVT-20-CIP

General Government

1096-20-CIP Replace Packaged A/C Rooftop Units - Opera House

Project Information

Submitted By:	Penny Hill	Department:	Manager	Per the 2018 Energy Assessment through Michigan Energy Options and SEEDS, it is recommended that the five rooftop A/C units are approaching the end of their useful lives, and should be replaced with new, high efficiency units
Category:	Maintenance	Department Head:	Marty Colburn	
Fund Group:	Opera House	Staff Priority:	Essential (Should Do)	
Fund Detail:	Opera House	Council Priority:		

Replace Packaged A. Replace Packaged A/C Rooftop Units - Opera House

Funding Sources:

		Previous	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	2025/2026	Total
OPH	Opera House	\$0	\$15,000	\$20,000	\$0	\$0	\$0	\$0	\$35,000
Project Total:									\$35,000

COST DETAIL:

Study:	\$0		
Land Acquisition / ROW:	\$0		
Engineering / Design:	\$0		
Construction:	\$35,000	Cost Total:	\$35,000
Annual Maint. Cost:		Project Difference:	\$0
Maint. Year Start:	1905		

Service Impact:

Reduces Energy Consumption

Project Justification:

The recommended measure will provide an annual electricity savings of 6,552 kWh, and provide a an annual cost savings of \$804.59. Using the estimated initial investment of \$34,675, the project will have a simple payback of 43.096 years and a Savings to Investment ratio (SIR) of 0.345.

Location Description:

106 E Front Street

Six Year Capital Improvement Plan

All Projects Submitted for 2020-2021

Budget Year 2020-2021 by Program Name

Bold - Indicates projects occurring in the first FY of the plan . + - Indicates projects with multiple funding										Overall Programming Cost		
Project ID		Cat	Previous	Fiscal Year 2020-2021	Fiscal Year 2021-2022	Fiscal Year 2022-2023	Fiscal Year 2023-2024	Fiscal Year 2024-2025	Fiscal Year 2025-2026	Project Cost	City Funds	Non-City Funds
Light and Power												
1041-20-CIP	ALLEY BETWEEN STATE AND FRONT STREET	C	\$0	\$0	\$0	\$0	\$0	\$0	\$1,500,000	\$1,500,000	\$1,500,000	\$0
1039-20-CIP	BUILDING D REHABILITATION	C	\$50,000	\$0	\$250,000	\$0	\$0	\$0	\$0	\$300,000	\$300,000	\$0
1108-20-CIP	CRITICAL AND LARGE CUSTOMERS	C	\$925,000	\$925,000	\$0	\$0	\$0	\$0	\$0	\$1,850,000	\$1,850,000	\$0
1043-20-CIP	EAST FRONT STREET STREETScape LIGHTING	C	\$0	\$0	\$0	\$0	\$56,000	\$0	\$0	\$56,000	\$56,000	\$0
808-20-CIP	EXTENSIONS AND NEW SERVICES	C	\$600,000	\$650,000	\$700,000	\$750,000	\$800,000	\$850,000	\$900,000	\$5,250,000	\$5,250,000	\$0
1030-20-CIP	FIBER TO THE PREMISE	C	\$4,050,000	\$4,050,000	\$4,050,000	\$4,050,000	\$0	\$0	\$0	\$16,200,000	\$16,200,000	\$0
1038-20-CIP	GRAND TRAVERSE SUBSTATION UPGRADES	C	\$500,000	\$693,000	\$0	\$0	\$0	\$0	\$0	\$1,193,000	\$1,193,000	\$0
1005-20-CIP	HARTMAN ROAD OVERHEAD TIE	C	\$0	\$400,000	\$600,000	\$0	\$0	\$0	\$0	\$1,000,000	\$1,000,000	\$0
824-20-CIP	HASTINGS SERVICE CENTER FACILITY IMPROVEMENTS	C	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000	\$350,000	\$350,000	\$0
811-20-CIP	OVERHEAD LINE IMPROVEMENTS	C	\$350,000	\$400,000	\$450,000	\$500,000	\$550,000	\$600,000	\$650,000	\$3,500,000	\$3,500,000	\$0
1179-20-CIP	REBUILD CIRCUIT - CD-24 - SECTIONALIZING (NEW)	C	\$0	\$0	\$0	\$0	\$0	\$0	\$250,000	\$250,000	\$250,000	\$0
1125-20-CIP	REBUILD CIRCUIT - CD-31/SS-30 - SMART GRID	C	\$0	\$0	\$0	\$0	\$0	\$200,000	\$0	\$200,000	\$200,000	\$0
1116-20-CIP	REBUILD CIRCUIT - GRANDVIEW PKWY - PRIMARY	C	\$0	\$0	\$0	\$650,000	\$650,000	\$0	\$0	\$1,300,000	\$1,300,000	\$0
1124-20-CIP	REBUILD CIRCUIT - HL-33 - LOCUST STREET	C	\$0	\$0	\$0	\$0	\$0	\$400,000	\$0	\$400,000	\$400,000	\$0
1117-20-CIP	REBUILD CIRCUIT - HL-33 - WADSWORTH ST	C	\$0	\$0	\$0	\$0	\$0	\$85,000	\$0	\$85,000	\$85,000	\$0
1180-20-CIP	REBUILD CIRCUIT - PC 32 - ASPEN DRIVE (NEW)	C	\$0	\$0	\$0	\$0	\$0	\$0	\$250,000	\$250,000	\$250,000	\$0
1127-20-CIP	REBUILD CIRCUIT - PC-22 - PARSONS RD/MUNSON AVE	C	\$0	\$0	\$82,000	\$0	\$0	\$0	\$0	\$82,000	\$82,000	\$0
1121-20-CIP	REBUILD CIRCUIT - PC-22 - MUNSON AVE - AVE B TO E	C	\$0	\$0	\$0	\$0	\$300,000	\$0	\$0	\$300,000	\$300,000	\$0
1118-20-CIP	REBUILD CIRCUIT - PC-22 - MUNSON, DAVIS TO 3 MILE	C	\$0	\$0	\$0	\$0	\$0	\$370,000	\$0	\$370,000	\$370,000	\$0
1122-20-CIP	REBUILD CIRCUIT - PC-22 - TOM'S MARKET EAST	C	\$0	\$0	\$0	\$0	\$0	\$150,000	\$0	\$150,000	\$150,000	\$0

Six Year Capital Improvement Plan

All Projects Submitted for 2020-2021

Budget Year 2020-2021 by Program Name

Bold - Indicates projects occurring in the first FY of the plan . + - Indicates projects with multiple funding										<u>Overall Programming Cost</u>		
Project ID	Cat	Previous	Fiscal Year 2020-2021	Fiscal Year 2021-2022	Fiscal Year 2022-2023	Fiscal Year 2023-2024	Fiscal Year 2024-2025	Fiscal Year 2025-2026		Project Cost	City Funds	Non-City Funds
Light and Power												
809-20-CIP	REBUILD CIRCUIT - PC-23 - MITCHELL CREEK	C	\$0	\$0	\$0	\$125,000	\$0	\$0	\$0	\$125,000	\$125,000	\$0
1119-20-CIP	REBUILD CIRCUIT - PC-23 - MUNSON AVENUE	C	\$0	\$0	\$0	\$0	\$0	\$320,000	\$0	\$320,000	\$320,000	\$0
1123-20-CIP	REBUILD CIRCUIT - SS-31 - CRESTWOOD	C	\$0	\$0	\$0	\$0	\$0	\$250,000	\$0	\$250,000	\$250,000	\$0
1040-20-CIP	SCADA SYSTEM UPGRADE	C	\$0	\$0	\$0	\$250,000	\$0	\$0	\$0	\$250,000	\$250,000	\$0
1177-20-CIP	SUBSTATION IMPROVEMENT - DISTRIBUTION RELAY (NEW)	C	\$0	\$0	\$0	\$0	\$0	\$0	\$250,000	\$250,000	\$250,000	\$0
1178-20-CIP	SUBSTATION IMPROVEMENT - TRANSMISSION RELAY (NEW)	C	\$0	\$0	\$0	\$0	\$0	\$0	\$600,000	\$600,000	\$600,000	\$0
815-20-CIP	SUBSTATION SWITCHING STATIONS	C	\$998,000	\$1,200,000	\$0	\$0	\$0	\$0	\$0	\$2,198,000	\$2,198,000	\$0
819-20-CIP	SUBSTATION TRANSFORMER UPGRADES	C	\$0	\$0	\$0	\$0	\$1,525,000	\$0	\$0	\$1,525,000	\$1,525,000	\$0
820-20-CIP	TRANSMISSION LINE RECONSTRUCTION	C	\$0	\$0	\$1,500,000	\$1,500,000	\$0	\$1,045,000	\$0	\$4,045,000	\$4,045,000	\$0
1109-20-CIP	UNDERGROUND LINE IMPROVEMENTS	C	\$275,000	\$325,000	\$375,000	\$425,000	\$475,000	\$525,000	\$575,000	\$2,975,000	\$2,975,000	\$0
829-20-CIP	UPGRADE FRONT ST LIGHTING CIRCUITS & RECEPTACLES	C	\$0	\$0	\$0	\$0	\$0	\$0	\$1,340,000	\$1,340,000	\$1,340,000	\$0
1110-20-CIP	UTILITY BILLING SOFTWARE	C	\$0	\$350,000	\$0	\$0	\$0	\$0	\$0	\$350,000	\$350,000	\$0
Total Light and Power			\$9,043,000	\$8,057,000	\$8,300,000	\$4,406,000	\$4,845,000	\$6,365,000		\$48,814,000	\$48,814,000	\$0



Six Year Capital Improvement Program

TCLP-20-CIP

Light and Power

1041-20-CIP

ALLEY BETWEEN STATE AND FRONT STREET

Project Information

Submitted By:	Karla Myers-Beman	Department:	Light and Power Service	Remove all overhead lines and transformers and install new underground lines and transformers. The utility may need to purchase easements/real estate to set equipment or purchase vaults to set in alley right of way.
Category:	Capital	Department Head:	Tim Arends	
Fund Group:	Light and Power	Staff Priority:	Essential (Should Do)	
Fund Detail:	Light and Power	Council Priority:		

ALLEY BETWEEN S' ALLEY BETWEEN STATE AND FRONT STREET

Funding Sources:

		Previous	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	2025/2026	Total
LAP	Light and Power	\$0	\$0	\$0	\$0	\$0	\$0	\$1,500,000	\$1,500,000
Project Total:									\$1,500,000

COST DETAIL:

Study:	\$0	
Land Acquisition / ROW:	\$0	
Engineering / Design:	\$0	
Construction:	\$1,500,000	Cost Total: \$1,500,000
Annual Maint. Cost:		Project Difference: \$0
Maint. Year Start:		

Service Impact:

Increase reliability and aesthetics of the system

Project Justification:

Joint Project

Location Description:

Alley between State and Front Street



Six Year Capital Improvement Program

TCLP-20-CIP

Light and Power

1039-20-CIP

BUILDING D REHABILITATION

Project Information

Submitted By: Karla Myers-Beman

Department: Light and Power

Eliminate driveway, demolish the front office portion of the building, brick the new front of the building to match the existing service center building.

Category: Capital

Department Head: Tim Arends

Fund Group: Light and Power

Staff Priority: Essential (Should Do)

Fund Detail: Light and Power

Council Priority:

BUILDING D REHAB BUILDING D REHABILITATION

Funding Sources:

		Previous	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	2025/2026	Total
LAP	Light and Power	\$50,000	\$0	\$250,000	\$0	\$0	\$0	\$0	\$300,000
Project Total:									\$300,000

COST DETAIL:

Study: \$0

Land Acquisition / ROW: \$0

Engineering / Design: \$0

Construction: \$300,000

Annual Maint. Cost:

Maint. Year Start:

Cost Total: \$300,000

Project Difference: \$0

Service Impact:

Improve the inventory cycle process

Project Justification:

Internal analysis

Location Description:

1125 Hastings Street



Six Year Capital Improvement Program

TCLP-20-CIP

Light and Power

1108-20-CIP

CRITICAL AND LARGE CUSTOMERS

Project Information

Submitted By:	Karla Myers-Beman	Department:	Light and Power Service	Replacement of underground distribution facilities involving the use of wire, meters, cabinets and transformers.
Category:	Capital	Department Head:	Tim Arends	
Fund Group:	Light and Power	Staff Priority:	Imperitive (Must Do)	
Fund Detail:	Light and Power	Council Priority:		

CRITICAL AND LARGE CUSTOMER

Funding Sources:

		Previous	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	2025/2026	Total
LAP	Light and Power	\$925,000	\$925,000	\$0	\$0	\$0	\$0	\$0	\$1,850,000
Project Total:									\$1,850,000

COST DETAIL:

Study:	\$0	
Land Acquisition / ROW:	\$0	
Engineering / Design:	\$0	
Construction:	\$1,850,000	Cost Total: \$1,850,000
Annual Maint. Cost:		Project Difference: \$0
Maint. Year Start:		

Service Impact:

Upgrading lines will improve system reliability and minimize future maintenance costs.

Project Justification:

System study

Location Description:

Aero Park Industrial Park



Six Year Capital Improvement Program

TCLP-20-CIP

Light and Power

1043-20-CIP

EAST FRONT STREET STREETSCAPE LIGHTING

Project Information

Submitted By:	Karla Myers-Beman	Department:	Light and Power Service	New street lighting installations in conjunction with planned streetscapes on East Front Street from Boardman Avenue to Holiday Inn with funding in accordance with TCL&P Street Lighting Operations and Maintenance Planning and Decorative Lighting Policy.
Category:	Capital	Department Head:	Tim Arends	
Fund Group:	Light and Power	Staff Priority:	Essential (Should Do)	
Fund Detail:	Light and Power	Council Priority:		

EAST FRONT STREET STREETSCAPE LIGHTING

Funding Sources:

		Previous	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	2025/2026	Total
LAP	Light and Power	\$0	\$0	\$0	\$0	\$56,000	\$0	\$0	\$56,000
Project Total:									\$56,000

COST DETAIL:

Study:	\$0	
Land Acquisition / ROW:	\$0	
Engineering / Design:	\$0	
Construction:	\$56,000	Cost Total: \$56,000
Annual Maint. Cost:		Project Difference: \$0
Maint. Year Start:		

Service Impact:

Joint Project

Project Justification:

Joint Project

Location Description:

East Front Street between Boardman Avenue and Holiday Inn.



Six Year Capital Improvement Program

TCLP-20-CIP

Light and Power

808-20-CIP

EXTENSIONS AND NEW SERVICES

Project Information

Submitted By:	Karla Myers-Beman	Department:	Light and Power Service	Construction/replacements of services involving the use of wire, poles, meters, cabinets and transformers.
Category:	Capital	Department Head:	Tim Arends	
Fund Group:	Light and Power	Staff Priority:	Imperitive (Must Do)	
Fund Detail:	Distribution	Council Priority:		

EXTENSIONS AND NEW SERVICES

Funding Sources:

		Previous	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	2025/2026	Total
LAP	Light and Power	\$600,000	\$650,000	\$700,000	\$750,000	\$800,000	\$850,000	\$900,000	\$5,250,000
Project Total:									\$5,250,000

COST DETAIL:

Study:	\$0		
Land Acquisition / ROW:	\$0		
Engineering / Design:	\$0		
Construction:	\$5,250,000	Cost Total:	\$5,250,000
Annual Maint. Cost:		Project Difference:	\$0
Maint. Year Start:			

Service Impact:

Upgrading lines and extension and installing new services improving reliability and minimizing maintenance costs.

Project Justification:

New extensions and some upgrades are request of new customers and other improvements are to increase reliability of the system.

Location Description:

Entire service area



Six Year Capital Improvement Program

TCLP-20-CIP

Light and Power

1030-20-CIP

FIBER TO THE PREMISE

Project Information

Submitted By:	Karla Myers-Beman	Department:	Light and Power Service	Deployment of a fiber optic network.
Category:	Capital	Department Head:	Tim Arends	
Fund Group:	Light and Power	Staff Priority:	Essential (Should Do)	
Fund Detail:	Light and Power	Council Priority:		

FIBER TO THE PREI FIBER TO THE PREMISE

Funding Sources:

		Previous	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	2025/2026	Total
FBR	FIBER	\$4,050,000	\$4,050,000	\$4,050,000	\$4,050,000	\$0	\$0	\$0	\$16,200,000
Project Total:									\$16,200,000

COST DETAIL:

Study:	\$0	
Land Acquisition / ROW:	\$0	
Engineering / Design:	\$0	
Construction:	\$16,200,000	Cost Total: \$16,200,000
Annual Maint. Cost:		Project Difference: \$0
Maint. Year Start:		

Service Impact:

A new business within the utility

Project Justification:

Economic development

Location Description:

Entire service area.



Six Year Capital Improvement Program

TCLP-20-CIP

Light and Power

1038-20-CIP

GRAND TRAVERSE SUBSTATION UPGRADES

Project Information

Submitted By:	Karla Myers-Beman	Department:	Light and Power	Installation of new control system, breakers, and switches along with land improvements of removing an unused foundation and expanding the fence perimeter.
Category:	Capital	Department Head:	Tim Arends	
Fund Group:	Light and Power	Staff Priority:	Imperitive (Must Do)	
Fund Detail:	Light and Power	Council Priority:		

GRAND TRAVERSE GRAND TRAVERSE SUBSTATION UPGRADES

Funding Sources:

		Previous	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	2025/2026	Total
LAP	Light and Power	\$500,000	\$693,000	\$0	\$0	\$0	\$0	\$0	\$1,193,000
Project Total:									\$1,193,000

COST DETAIL:

Study:	\$0	
Land Acquisition / ROW:	\$0	
Engineering / Design:	\$0	
Construction:	\$1,193,000	Cost Total: \$1,193,000
Annual Maint. Cost:		Project Difference: \$0
Maint. Year Start:		

Service Impact:

Improve reliability

Project Justification:

Internal analysis and analysis completed by Wolverine Power Cooperative

Location Description:

Grand Traverse Substation - Keystone Road



Six Year Capital Improvement Program

TCLP-20-CIP

Light and Power

1005-20-CIP

HARTMAN ROAD OVERHEAD TIE

Project Information

Submitted By:	Karla Myers-Beman	Department:	Light and Power Service	Allow a second feed into a circuit to enhance reliability in the southwest service area.
Category:	Capital	Department Head:	Tim Arends	
Fund Group:	Light and Power	Staff Priority:	Essential (Should Do)	
Fund Detail:	Distribution	Council Priority:		

HARTMAN ROAD O\ HARTMAN ROAD OVERHEAD TIE

Funding Sources:

		Previous	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	2025/2026	Total
LAP	Light and Power	\$0	\$400,000	\$600,000	\$0	\$0	\$0	\$0	\$1,000,000
Project Total:									\$1,000,000

COST DETAIL:

Study:	\$0	
Land Acquisition / ROW:	\$0	
Engineering / Design:	\$0	
Construction:	\$1,000,000	Cost Total: \$1,000,000
Annual Maint. Cost:		Project Difference: \$0
Maint. Year Start:		

Service Impact:

Reduce the potential of future maintenance costs and increase reliability of the system.

Project Justification:

System study

Location Description:

Southeast part of the distribution system.



Six Year Capital Improvement Program

TCLP-20-CIP

Light and Power

824-20-CIP

HASTINGS SERVICE CENTER FACILITY IMPROVEMENTS

Project Information

Submitted By:	Karla Myers-Beman	Department:	Light and Power Service	Site improvements to existing facility.
Category:	Capital	Department Head:	Tim Arends	
Fund Group:	Light and Power	Staff Priority:	Essential (Should Do)	
Fund Detail:	Facilities	Council Priority:		

HASTINGS SERVICE CENTER FACILITY IMPROVEMENTS

Funding Sources:

		Previous	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	2025/2026	Total
LAP	Light and Power	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000	\$350,000
Project Total:									\$350,000

COST DETAIL:

Study:	\$0	
Land Acquisition / ROW:	\$0	
Engineering / Design:	\$0	
Construction:	\$350,000	Cost Total: \$350,000
Annual Maint. Cost:		Project Difference: \$0
Maint. Year Start:		

Service Impact:

Efficiency of operations

Project Justification:

Internal analysis

Location Description:

1131 Hastings Street



Six Year Capital Improvement Program

TCLP-20-CIP

Light and Power

811-20-CIP

OVERHEAD LINE IMPROVEMENTS

Project Information

Submitted By:	Karla Myers-Beman	Department:	Light and Power	Accumulation of small construction/replacement projects of overhead distribution facilities involving the use of wire, poles, meters, cabinets and transformers.
Category:	Capital	Department Head:	Tim Arends	
Fund Group:	Light and Power	Staff Priority:	Imperitive (Must Do)	
Fund Detail:	Distribution	Council Priority:		

OVERHEAD LINE IM OVERHEAD LINE IMPROVEMENTS

Funding Sources:

		Previous	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	2025/2026	Total
LAP	Light and Power	\$350,000	\$400,000	\$450,000	\$500,000	\$550,000	\$600,000	\$650,000	\$3,500,000
Project Total:									\$3,500,000

COST DETAIL:

Study:	\$0	
Land Acquisition / ROW:	\$0	
Engineering / Design:	\$0	
Construction:	\$3,500,000	Cost Total: \$3,500,000
Annual Maint. Cost:		Project Difference: \$0
Maint. Year Start:		

Service Impact:

Reduce the potential of future maintenance costs.

Project Justification:

Reliability of the system.

Location Description:

Entire Service Area



Six Year Capital Improvement Program

TCLP-20-CIP

Light and Power

1179-20-CIP

REBUILD CIRCUIT - CD-24 - SECTIONALIZING (NEW)

Project Information

Submitted By: Karla Myers-Beman

Department: Light and Power

Replace deteriorated overhead/underground facilities with new wire, conduit, poles, et to include conversion of overhead facilities to underground as appropriate.

Category: Capital

Department Head: Tim Arends

Fund Group: Light and Power

Staff Priority: Imperative (Must Do)

Fund Detail: Light and Power

Council Priority:

REBUILD CIRCUIT - REBUILD CIRCUIT - CD 24 - SECTIONALIZING (NEW)

Funding Sources:

		Previous	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	2025/2026	Total
LAP	Light and Power	\$0	\$0	\$0	\$0	\$0	\$0	\$250,000	\$250,000
Project Total:									\$250,000

COST DETAIL:

Study: \$0

Land Acquisition / ROW: \$0

Engineering / Design: \$0

Construction: \$250,000

Annual Maint. Cost:

Maint. Year Start:

Cost Total: \$250,000

Project Difference: \$0

Service Impact:

Rebuilding circuits to increase reliability of the system and minimize the potential of future maintenance costs.

Project Justification:

System study

Location Description:

Pine St south of Fourteenth St



Six Year Capital Improvement Program

TCLP-20-CIP

Light and Power

1125-20-CIP

REBUILD CIRCUIT - CD-31/SS-30 - SMART GRID

Project Information

Submitted By: Karla Myers-Beman

Department: Light and Power

Replace deteriorated overhead/underground facilities with new wire, conduit, poles, etc to include conversion of overhead facilities to underground as appropriate.

Category: Capital

Department Head: Tim Arends

Fund Group: Light and Power

Staff Priority: Imperitive (Must Do)

Fund Detail: Light and Power

Council Priority:

REBUILD CIRCUIT- CD 31/SS-30 - SMART GRID

Funding Sources:

		Previous	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	2025/2026	Total
LAP	Light and Power	\$0	\$0	\$0	\$0	\$0	\$200,000	\$0	\$200,000
Project Total:									\$200,000

COST DETAIL:

Study: \$0

Land Acquisition / ROW: \$0

Engineering / Design: \$0

Construction: \$200,000

Annual Maint. Cost:

Maint. Year Start:

Cost Total: \$200,000

Project Difference: \$0

Service Impact:

Rebuilding circuits to increase reliability of the system and minimize the potential of future maintenance costs.

Project Justification:

System study

Location Description:

Smart Grid Automatic Restoration



Six Year Capital Improvement Program

TCLP-20-CIP

Light and Power

1116-20-CIP

REBUILD CIRCUIT - GRANDVIEW PKWY - PRIMARY

Project Information

Submitted By: Karla Myers-Beman

Department: Light and Power

Replace deteriorated overhead/underground facilities with new wire, conduit, poles, etc to include conversion of overhead facilities to underground as appropriate.

Category: Capital

Department Head: Tim Arends

Fund Group: Light and Power

Staff Priority: Imperitive (Must Do)

Fund Detail: Distribution

Council Priority:

REBUILD CIRCUIT - REBUILD CIRCUIT - GRANDVIEW PKWY - PRIMARY

Funding Sources:

		Previous	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	2025/2026	Total
LAP	Light and Power	\$0	\$0	\$0	\$650,000	\$650,000	\$0	\$0	\$1,300,000
Project Total:									\$1,300,000

COST DETAIL:

Study: \$0

Land Acquisition / ROW: \$0

Engineering / Design: \$0

Construction: \$1,300,000

Annual Maint. Cost:

Maint. Year Start:

Cost Total: \$1,300,000

Project Difference: \$0

Service Impact:

Rebuilding circuits to increase reliability of the system and minimize the potential of future maintenance costs.

Project Justification:

System study

Location Description:

Grandview Parkway and behind buildings north of Front Street



Six Year Capital Improvement Program

TCLP-20-CIP

Light and Power

1124-20-CIP

REBUILD CIRCUIT - HL-33 - LOCUST STREET

Project Information

Submitted By: Karla Myers-Beman

Department: Light and Power

Replace deteriorated overhead/underground facilities with new wire, conduit, poles, etc to include conversion of overhead facilities to underground as appropriate.

Category: Capital

Department Head: Tim Arends

Fund Group: Light and Power

Staff Priority: Imperitive (Must Do)

Fund Detail: Light and Power

Council Priority:

REBUILD CIRCUIT - REBUILD CIRCUIT - HL-33 - LOCUST STREET

Funding Sources:

		Previous	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	2025/2026	Total
LAP	Light and Power	\$0	\$0	\$0	\$0	\$0	\$400,000	\$0	\$400,000
Project Total:									\$400,000

COST DETAIL:

Study: \$0

Land Acquisition / ROW: \$0

Engineering / Design: \$0

Construction: \$400,000

Annual Maint. Cost:

Maint. Year Start:

Cost Total: \$400,000

Project Difference: \$0

Service Impact:

Rebuilding circuits to increase reliability of the system and minimize the potential of future maintenance costs.

Project Justification:

System study

Location Description:

Locust Street



Six Year Capital Improvement Program

TCLP-20-CIP

Light and Power

1117-20-CIP

REBUILD CIRCUIT - HL-33 - WADSWORTH ST

Project Information

Submitted By: Karla Myers-Beman

Department: Light and Power

Replace deteriorated overhead/underground facilities with new wire, conduit, poles, etc to include conversion of overhead facilities to underground as appropriate.

Category: Capital

Department Head: Tim Arends

Fund Group: Light and Power

Staff Priority: Imperitive (Must Do)

Fund Detail: Light and Power

Council Priority:

REBUILD CIRCUIT - REBUILD CIRCUIT - HL-33 - WADSWORTH ST

Funding Sources:

		Previous	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	2025/2026	Total
LAP	Light and Power	\$0	\$0	\$0	\$0	\$0	\$85,000	\$0	\$85,000
Project Total:									\$85,000

COST DETAIL:

Study: \$0

Land Acquisition / ROW: \$0

Engineering / Design: \$0

Construction: \$85,000

Annual Maint. Cost:

Maint. Year Start:

Cost Total: **\$85,000**

Project Difference: **\$0**

Service Impact:

Rebuilding circuits to increase reliability of the system and minimize the potential of future maintenance costs.

Project Justification:

System study

Location Description:

Wadsworth St from Fifth to Thirteenth Street



Six Year Capital Improvement Program

TCLP-20-CIP

Light and Power

1180-20-CIP

REBUILD CIRCUIT - PC 32 - ASPEN DRIVE (NEW)

Project Information

Submitted By: Karla Myers-Beman

Department: Light and Power

Replace deteriorate and overhead/underground facilities with new wire, conduit, poles, etc to include conversion of overhead facilities to underground as appropriate.

Category: Capital

Department Head: Tim Arends

Fund Group: Light and Power

Staff Priority: Imperative (Must Do)

Fund Detail: Light and Power

Council Priority:

REBUILD CIRCUIT - REBUILD CIRCUIT - PC 32 - ASPEN DRIVE (NEW)

Funding Sources:

		Previous	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	2025/2026	Total
LAP	Light and Power	\$0	\$0	\$0	\$0	\$0	\$0	\$250,000	\$250,000
Project Total:									\$250,000

COST DETAIL:

Study: \$0

Land Acquisition / ROW: \$0

Engineering / Design: \$0

Construction: \$250,000

Annual Maint. Cost:

Maint. Year Start:

Cost Total: \$250,000

Project Difference: \$0

Service Impact:

Rebuilding circuits to increase reliability of the system and minimize the potential of future maintenance costs.

Project Justification:

System study

Location Description:

Aspen Drive



Six Year Capital Improvement Program

TCLP-20-CIP

Light and Power

1127-20-CIP

REBUILD CIRCUIT - PC-22 - PARSONS RD/MUNSON AVE

Project Information

Submitted By: Karla Myers-Beman

Department: Light and Power

Replace deteriorated overhead/underground facilities with new wire, conduit, poles, etc to include conversion of overhead facilities to underground as appropriate.

Category: Capital

Department Head: Tim Arends

Fund Group: Light and Power

Staff Priority: Imperitive (Must Do)

Fund Detail: Light and Power

Council Priority:

REBUILD CIRCUIT - REBUILD CIRCUIT - PC-22 - MUNSON AVENUE

Funding Sources:

		Previous	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	2025/2026	Total
LAP	Light and Power	\$0	\$0	\$82,000	\$0	\$0	\$0	\$0	\$82,000
Project Total:									\$82,000

COST DETAIL:

Study: \$0

Land Acquisition / ROW: \$0

Engineering / Design: \$0

Construction: \$82,000

Annual Maint. Cost:

Maint. Year Start:

Cost Total: **\$82,000**

Project Difference: **\$0**

Service Impact:

Rebuilding circuits to increase reliability of the system and minimize the potential of future maintenance costs.

Project Justification:

System study

Location Description:

Back lot area from Parsons Rd to Munson Ave



Six Year Capital Improvement Program

TCLP-20-CIP

Light and Power

1121-20-CIP

REBUILD CIRCUIT - PC-22 - MUNSON AVE - AVE B TO E

Project Information

Submitted By: Karla Myers-Beman

Department: Light and Power

Replace deteriorated overhead/underground facilities with new wire, conduit, poles, etc to include conversion of overhead facilities to underground as appropriate.

Category: Capital

Department Head: Tim Arends

Fund Group: Light and Power

Staff Priority: Imperitive (Must Do)

Fund Detail: Light and Power

Council Priority:

REBUILD CIRCUIT - REBUILD CIRCUIT - PC-22 - MUNSON AVE - AVE B TO E

Funding Sources:

		Previous	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	2025/2026	Total
LAP	Light and Power	\$0	\$0	\$0	\$0	\$300,000	\$0	\$0	\$300,000
Project Total:									\$300,000

COST DETAIL:

Study: \$0

Land Acquisition / ROW: \$0

Engineering / Design: \$0

Construction: \$300,000

Annual Maint. Cost:

Maint. Year Start:

Cost Total: \$300,000

Project Difference: \$0

Service Impact:

Rebuilding circuits to increase reliability of the system and minimize the potential of future maintenance costs.

Project Justification:

System study

Location Description:

Munson Avenue from Avenue B to Avenue E



Six Year Capital Improvement Program

TCLP-20-CIP

Light and Power

1118-20-CIP

REBUILD CIRCUIT - PC-22 - MUNSON, DAVIS TO 3 MILE

Project Information

Submitted By: Karla Myers-Beman

Department: Light and Power

Replace deteriorated overhead/underground facilities with new wire, conduit, poles, etc to include conversion of overhead facilities to underground as appropriate.

Category: Capital

Department Head: Tim Arends

Fund Group: Light and Power

Staff Priority: Imperitive (Must Do)

Fund Detail: Light and Power

Council Priority:

REBUILD CIRCUIT - REBUILD CIRCUIT - PC-22 - MUNSON, DAVIS TO 3 MILE

Funding Sources:

		Previous	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	2025/2026	Total
LAP	Light and Power	\$0	\$0	\$0	\$0	\$0	\$370,000	\$0	\$370,000
Project Total:									\$370,000

COST DETAIL:

Study: \$0

Land Acquisition / ROW: \$0

Engineering / Design: \$0

Construction: \$370,000

Annual Maint. Cost:

Maint. Year Start:

Cost Total: **\$370,000**

Project Difference: **\$0**

Service Impact:

Rebuilding circuits to increase reliability of the system and minimize the potential of future maintenance costs.

Project Justification:

System study

Location Description:

OH Munson Avenue from Davis Street to Three Mile Rd



Six Year Capital Improvement Program

TCLP-20-CIP

Light and Power

1122-20-CIP

REBUILD CIRCUIT - PC-22 - TOM'S MARKET EAST

Project Information

Submitted By: Karla Myers-Beman

Department: Light and Power

Replace deteriorated overhead/underground facilities with new wire, conduit, poles, etc to include conversion of overhead facilities to underground as appropriate.

Category: Capital

Department Head: Tim Arends

Fund Group: Light and Power

Staff Priority: Imperitive (Must Do)

Fund Detail: Light and Power

Council Priority:

REBUILD CIRCUIT - REBUILD CIRCUIT - PC-22 - TOM'S MARKET EAST

Funding Sources:

		Previous	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	2025/2026	Total
LAP	Light and Power	\$0	\$0	\$0	\$0	\$0	\$150,000	\$0	\$150,000
Project Total:									\$150,000

COST DETAIL:

Study: \$0

Land Acquisition / ROW: \$0

Engineering / Design: \$0

Construction: \$150,000

Annual Maint. Cost:

Maint. Year Start:

Cost Total: \$150,000

Project Difference: \$0

Service Impact:

Rebuilding circuits to increase reliability of the system and minimize the potential of future maintenance costs.

Project Justification:

System study

Location Description:

Behind Tom's Market East Bay



Six Year Capital Improvement Program

TCLP-20-CIP

Light and Power

809-20-CIP

REBUILD CIRCUIT - PC-23 - MITCHELL CREEK

Project Information

Submitted By:	Karla Myers-Beman	Department:	Light and Power Service	Replace deteriorated overhead/underground facilities with new wire, conduit, poles, etc to include conversion of overhead facilities to underground as appropriate.
Category:	Capital	Department Head:	Tim Arends	
Fund Group:	Light and Power	Staff Priority:	Imperitive (Must Do)	
Fund Detail:	Distribution	Council Priority:		

REBUILD CIRCUIT F REBUILD CIRCUIT PC-23- MITCHELL CREEK

Funding Sources:

		Previous	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	2025/2026	Total
LAP	Light and Power	\$0	\$0	\$0	\$125,000	\$0	\$0	\$0	\$125,000
Project Total:									\$125,000

COST DETAIL:

Study:	\$0	
Land Acquisition / ROW:	\$0	
Engineering / Design:	\$0	
Construction:	\$125,000	Cost Total: \$125,000
Annual Maint. Cost:		Project Difference: \$0
Maint. Year Start:		

Service Impact:

Rebuilding circuits to increase reliability of the system and minimize the potential of future maintenance costs.

Project Justification:

System study

Location Description:

Mitchell Creek



Six Year Capital Improvement Program

TCLP-20-CIP

Light and Power

1119-20-CIP

REBUILD CIRCUIT - PC-23 - MUNSON AVENUE

Project Information

Submitted By: Karla Myers-Beman

Department: Light and Power

Replace deteriorated overhead/underground facilities with new wire, conduit, poles, etc to include conversion of overhead facilities to underground as appropriate.

Category: Capital

Department Head: Tim Arends

Fund Group: Light and Power

Staff Priority: Imperitive (Must Do)

Fund Detail: Light and Power

Council Priority:

REBUILD CIRCUIT - REBUILD CIRCUIT - PC-23 - MUNSON AVENUE

Funding Sources:

		Previous	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	2025/2026	Total
LAP	Light and Power	\$0	\$0	\$0	\$0	\$0	\$320,000	\$0	\$320,000
Project Total:									\$320,000

COST DETAIL:

Study: \$0

Land Acquisition / ROW: \$0

Engineering / Design: \$0

Construction: \$320,000

Annual Maint. Cost:

Maint. Year Start:

Cost Total: \$320,000

Project Difference: \$0

Service Impact:

Rebuilding circuits to increase reliability of the system and minimize the potential of future maintenance costs.

Project Justification:

System study

Location Description:

Munson Avenue from Three Mile to Four Mile Road



Six Year Capital Improvement Program

TCLP-20-CIP

Light and Power

1123-20-CIP

REBUILD CIRCUIT - SS-31 - CRESTWOOD

Project Information

Submitted By: Karla Myers-Beman

Department: Light and Power

Replace deteriorated overhead/underground facilities with new wire, conduit, poles, etc to include conversion of overhead facilities to underground as appropriate.

Category: Capital

Department Head: Tim Arends

Fund Group: Light and Power

Staff Priority: Imperitive (Must Do)

Fund Detail: Light and Power

Council Priority:

REBUILD CIRCUIT - REBUILD CIRCUIT - SS-31 - CRESTWOOD

Funding Sources:

		Previous	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	2025/2026	Total
LAP	Light and Power	\$0	\$0	\$0	\$0	\$0	\$250,000	\$0	\$250,000
Project Total:									\$250,000

COST DETAIL:

Study: \$0

Land Acquisition / ROW: \$0

Engineering / Design: \$0

Construction: \$250,000

Annual Maint. Cost:

Maint. Year Start:

Cost Total: \$250,000

Project Difference: \$0

Service Impact:

Rebuilding circuits to increase reliability of the system and minimize the potential of future maintenance costs.

Project Justification:

System study

Location Description:

Crestwood



Six Year Capital Improvement Program

TCLP-20-CIP

Light and Power

1040-20-CIP

SCADA SYSTEM UPGRADE

Project Information

Submitted By:	Karla Myers-Beman	Department:	Light and Power Service	Upgrade the system to allow it to interconnect with other related systems such as AMI, billing, GIS, OMS and other technologies.
Category:	Capital	Department Head:	Tim Arends	
Fund Group:	Light and Power	Staff Priority:	Essential (Should Do)	
Fund Detail:	Light and Power	Council Priority:		

SCADA SYSTEM UP SCADA SYSTEM UPGRADE

Funding Sources:

		Previous	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	2025/2026	Total
LAP	Light and Power	\$0	\$0	\$0	\$250,000	\$0	\$0	\$0	\$250,000
Project Total:									\$250,000

COST DETAIL:

Study:	\$0	
Land Acquisition / ROW:	\$0	
Engineering / Design:	\$0	
Construction:	\$250,000	Cost Total: \$250,000
Annual Maint. Cost:		Project Difference: \$0
Maint. Year Start:		

Service Impact:

Improve reliability of the system

Project Justification:

Internal analysis

Location Description:

1131 Hastings Street and Substations



Six Year Capital Improvement Program

TCLP-20-CIP

Light and Power

1177-20-CIP

SUBSTATION IMPROVEMENT - DISTRIBUTION RELAY (NEW)

Project Information

Submitted By:	Karla Myers-Beman	Department:	Light and Power	Installation of more advanced relays to allow for faster identification and clearing of faults within the distribution system.
Category:	Capital	Department Head:	Tim Arends	
Fund Group:	Light and Power	Staff Priority:	Imperative (Must Do)	
Fund Detail:	Light and Power	Council Priority:		

SUBSTATION IMPROVEMENT - DISTRIBUTION RELAY (NEW)

Funding Sources:

		Previous	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	2025/2026	Total
LAP	Light and Power	\$0	\$0	\$0	\$0	\$0	\$0	\$250,000	\$250,000
Project Total:									\$250,000

COST DETAIL:

Study:	\$0	
Land Acquisition / ROW:	\$0	
Engineering / Design:	\$0	
Construction:	\$250,000	Cost Total: \$250,000
Annual Maint. Cost:		Project Difference: \$0
Maint. Year Start:		

Service Impact:

Increase distribution system reliability.

Project Justification:

System study

Location Description:

All distribution substations



Six Year Capital Improvement Program

TCLP-20-CIP

Light and Power

1178-20-CIP

SUBSTATION IMPROVEMENT - TRANSMISSION RELAY (NEW)

Project Information

Submitted By:	Karla Myers-Beman	Department:	Light and Power	Installatio of more advanced relays to allow for faster identification and clearing of faults within the transmission system.
Category:	Capital	Department Head:	Tim Arends	
Fund Group:	Light and Power	Staff Priority:	Imperative (Must Do)	
Fund Detail:	Light and Power	Council Priority:		

SUBSTATION IMPROVEMENT - TRANSMISSION RELAY (NEW)

Funding Sources:

		Previous	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	2025/2026	Total
LAP	Light and Power	\$0	\$0	\$0	\$0	\$0	\$0	\$600,000	\$600,000
Project Total:									\$600,000

COST DETAIL:

Study:	\$0	
Land Acquisition / ROW:	\$0	
Engineering / Design:	\$0	
Construction:	\$600,000	Cost Total: \$600,000
Annual Maint. Cost:		Project Difference: \$0
Maint. Year Start:		

Service Impact:

Increase system reliability

Project Justification:

System study

Location Description:

Transmission Substations



Six Year Capital Improvement Program

TCLP-20-CIP

Light and Power

815-20-CIP

SUBSTATION SWITCHING STATIONS

Project Information

Submitted By:	Karla Myers-Beman	Department:	Light and Power Service	Installation of substation infrastructure and equipment. The addition of switching equipment will allow for switching load on the looped transmission system for increased reliability.
Category:	Capital	Department Head:	Tim Arends	
Fund Group:	Light and Power	Staff Priority:	Imperitive (Must Do)	
Fund Detail:	Light and Power	Council Priority:		

SUBSTATION SWITCHING STATION

Funding Sources:

		Previous	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	2025/2026	Total
LAP	Light and Power	\$998,000	\$1,200,000	\$0	\$0	\$0	\$0	\$0	\$2,198,000
Project Total:									\$2,198,000

COST DETAIL:

Study:	\$0	
Land Acquisition / ROW:	\$0	
Engineering / Design:	\$0	
Construction:	\$2,198,000	Cost Total: \$2,198,000
Annual Maint. Cost:		Project Difference: \$0
Maint. Year Start:		

Service Impact:

Increase system reliability

Project Justification:

System study

Location Description:

Barlow Street Substation



Six Year Capital Improvement Program

TCLP-20-CIP

Light and Power

819-20-CIP

SUBSTATION TRANSFORMER UPGRADES

Project Information

Submitted By:	Karla Myers-Beman	Department:	Light and Power Service	Installation of higher rated transformers as recommended by Engineers for system reliability due to load growth and age of transformers.
Category:	Capital	Department Head:	Tim Arends	
Fund Group:	Light and Power	Staff Priority:	Imperitive (Must Do)	
Fund Detail:	Substation	Council Priority:		

SUBSTATION TRANSFORMER UPGRADES

Funding Sources:

		Previous	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	2025/2026	Total
LAP	Light and Power	\$0	\$0	\$0	\$0	\$1,525,000	\$0	\$0	\$1,525,000
Project Total:									\$1,525,000

COST DETAIL:

Study:	\$0	
Land Acquisition / ROW:	\$0	
Engineering / Design:	\$0	
Construction:	\$1,525,000	Cost Total: \$1,525,000
Annual Maint. Cost:		Project Difference: \$0
Maint. Year Start:		

Service Impact:

Minimize the potential of future maintenance costs.

Project Justification:

System study

Location Description:

Cass and Parsons Road Substations



Six Year Capital Improvement Program

TCLP-20-CIP

Light and Power

820-20-CIP

TRANSMISSION LINE RECONSTRUCTION

Project Information

Submitted By:	Karla Myers-Beman	Department:	Light and Power	Reconductor/rebuilding of existing 69kv transmission lines with new lines, higher poles and undergrounding portion of the line to bring circuits to current day standards and in compliance with FAA regulations.
Category:	Capital	Department Head:	Tim Arends	
Fund Group:	Light and Power	Staff Priority:	Imperitive (Must Do)	
Fund Detail:	Transmission	Council Priority:		

TRANSMISSION LIN TRANSMISSION LINE RECONSTRUCTION

Funding Sources:

		Previous	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	2025/2026	Total
LAP	Light and Power	\$0	\$0	\$1,500,000	\$1,500,000	\$0	\$1,045,000	\$0	\$4,045,000
Project Total:									\$4,045,000

COST DETAIL:

Study:	\$0	
Land Acquisition / ROW:	\$0	
Engineering / Design:	\$0	
Construction:	\$4,045,000	Cost Total: \$4,045,000
Annual Maint. Cost:		Project Difference: \$0
Maint. Year Start:		

Service Impact:

Minimize the potential of future maintenance costs and increase reliability of the system.

Project Justification:

System study

Location Description:

1) Cass Road Substation to Cass Road Junction 2) Cass Road Junction to Hall Street Substation 3) Barlow Street Substation to Parsons Road Substation



Six Year Capital Improvement Program

TCLP-20-CIP

Light and Power

1109-20-CIP

UNDERGROUND LINE IMPROVEMENTS

Project Information

Submitted By:	Karla Myers-Beman	Department:	Light and Power Service	Accumulation of small construction/replacement projects of underground distribution facilities involving the use of wire, poles, meters, cabinets and transformers.
Category:	Capital	Department Head:	Tim Arends	
Fund Group:	Light and Power	Staff Priority:	Imperitive (Must Do)	
Fund Detail:	Light and Power	Council Priority:		

UNDERGROUND LINE IMPROVEMENTS

Funding Sources:

		Previous	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	2025/2026	Total
LAP	Light and Power	\$275,000	\$325,000	\$375,000	\$425,000	\$475,000	\$525,000	\$575,000	\$2,975,000
Project Total:									\$2,975,000

COST DETAIL:

Study:	\$0	
Land Acquisition / ROW:	\$0	
Engineering / Design:	\$0	
Construction:	\$2,975,000	Cost Total: \$2,975,000
Annual Maint. Cost:		Project Difference: \$0
Maint. Year Start:		

Service Impact:

Improve reliability of the system.

Project Justification:

Internal analysis

Location Description:

Entire service area.



Six Year Capital Improvement Program

TCLP-20-CIP

Light and Power

829-20-CIP

UPGRADE FRONT ST LIGHTING CIRCUITS & RECEPTACLES

Project Information

Submitted By:	Karla Myers-Beman	Department:	Light and Power	Upgrade circuit to accommodate increased load and will consist of new conduit, wire and addition of event outlets.
Category:	Capital	Department Head:	Tim Arends	
Fund Group:	Light and Power	Staff Priority:	Essential (Should Do)	
Fund Detail:	Joint Projects	Council Priority:		

UPGRADE FRONT ST LIGHTING CIRCUITS & RECEPTACLES

Funding Sources:

		Previous	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	2025/2026	Total
LAP	Light and Power	\$0	\$0	\$0	\$0	\$0	\$0	\$1,340,000	\$1,340,000
Project Total:									\$1,340,000

COST DETAIL:

Study:	\$0	
Land Acquisition / ROW:	\$0	
Engineering / Design:	\$0	
Construction:	\$1,340,000	Cost Total: \$1,340,000
Annual Maint. Cost:		Project Difference: \$0
Maint. Year Start:		

Service Impact:

Increase reliability and service to event holders for that circuit.

Project Justification:

Internal analysis

Location Description:

Downtown north and south along Front Street.



Six Year Capital Improvement Program

TCLP-20-CIP

Light and Power

1110-20-CIP

UTILITY BILLING SOFTWARE

Project Information

Submitted By: Karla Myers-Beman
Category: Capital
Fund Group: Light and Power
Fund Detail: Light and Power

Department: Light and Power Service
Department Head: Tim Arends
Staff Priority: Imperitive (Must Do)
Council Priority:

The current utility billing software does not have multi-speak capability needed to integrate with the other software programs used at Light and Power to manage system outages, the GIS System and engineering analysis. Nor does it have a suitable customer service platform that provides the customer instantaneous information or requested variety of payment options. Additionally, the current software company has been sold several times with continuing diminish customer service with upgrades and customer cases.

UTILITY BILLING SC UTILITY BILLING SOFTWARE

Funding Sources:

		Previous	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	2025/2026	Total
LAP	Light and Power	\$0	\$350,000	\$0	\$0	\$0	\$0	\$0	\$350,000
Project Total:									\$350,000

COST DETAIL:

Study:	\$0	
Land Acquisition / ROW:	\$0	
Engineering / Design:	\$0	
Construction:	\$350,000	Cost Total: \$350,000
Annual Maint. Cost:		Project Difference: \$0
Maint. Year Start:		

Service Impact:

Improve customer service

Project Justification:

Internal analysis

Location Description:

Utility billing and Hastings Service Center

Six Year Capital Improvement Plan

All Projects Submitted for 2020-2021

Budget Year 2020-2021 by Program Name

Bold - Indicates projects occurring in the first FY of the plan . + - Indicates projects with multiple funding										<u>Overall Programming Cost</u>		
Project ID	Cat	Previous	Fiscal Year 2020-2021	Fiscal Year 2021-2022	Fiscal Year 2022-2023	Fiscal Year 2023-2024	Fiscal Year 2024-2025	Fiscal Year 2025-2026		Project Cost	City Funds	Non-City Funds
Parking												
1133-20-CIP	Bike Infrastructure Expansion	V	\$0	\$20,000	\$20,000	\$20,000	\$20,000	\$20,000	\$0	\$100,000	\$100,000	\$0
1135-20-CIP	Hardy Handicap Door Operators	M	\$0	\$0	\$24,000	\$0	\$0	\$0	\$0	\$24,000	\$24,000	\$0
545-20-CIP	Lot B Rehab	V	\$0	\$0	\$400,000	\$0	\$0	\$0	\$0	\$400,000	\$400,000	\$0
979-20-CIP	Lot C Resurfacing	M	\$0	\$80,000	\$0	\$0	\$0	\$0	\$0	\$80,000	\$80,000	\$0
980-20-CIP	Lot J Resurfacing	M	\$0	\$50,000	\$0	\$0	\$0	\$0	\$0	\$50,000	\$50,000	\$0
981-20-CIP	Lot K Resurfacing	M	\$0	\$0	\$0	\$0	\$30,000	\$0	\$0	\$30,000	\$30,000	\$0
708-20-CIP	Lot O Remediation	M	\$0	\$0	\$430,000	\$0	\$0	\$0	\$0	\$430,000	\$430,000	\$0
982-20-CIP	Lot T Resurfacing	M	\$0	\$0	\$200,000	\$0	\$0	\$0	\$0	\$200,000	\$200,000	\$0
1134-20-CIP	Mobility Amenities	V	\$0	\$15,000	\$15,000	\$10,000	\$10,000	\$0	\$0	\$50,000	\$50,000	\$0
1136-20-CIP	Old Town ADA Door Operators	M	\$0	\$18,000	\$0	\$0	\$0	\$0	\$0	\$18,000	\$18,000	\$0
1082-20-CIP	Old Town Battery Backup Convert to Generator	M	\$0	\$50,000	\$0	\$0	\$0	\$0	\$0	\$50,000	\$50,000	\$0
1138-20-CIP	Old Town Boiler #1 and Pump Replacement	C	\$0	\$0	\$30,000	\$0	\$0	\$0	\$0	\$30,000	\$30,000	\$0
1139-20-CIP	Old Town Boiler #2 and Pump Replacement	C	\$0	\$0	\$15,000	\$0	\$0	\$0	\$0	\$15,000	\$15,000	\$0
1140-20-CIP	Old Town Boiler #3 and Pump Replacement	C	\$0	\$0	\$0	\$15,000	\$0	\$0	\$0	\$15,000	\$15,000	\$0
1072-20-CIP	Old Town Boiler Replacement	M	\$0	\$0	\$0	\$0	\$80,000	\$0	\$0	\$80,000	\$80,000	\$0
1059-20-CIP	Old Town Garage LED Light Conversion	M	\$0	\$0	\$0	\$100,000	\$0	\$0	\$0	\$100,000	\$100,000	\$0
1083-20-CIP	Old Town PTAC Units	M	\$0	\$0	\$0	\$0	\$50,000	\$0	\$0	\$50,000	\$50,000	\$0
1137-20-CIP	Old Town Solar Panels/Inverters	M	\$0	\$0	\$0	\$0	\$0	\$30,000	\$0	\$30,000	\$30,000	\$0
1132-20-CIP	Single Space Meter Expansion	V	\$0	\$20,000	\$20,000	\$20,000	\$20,000	\$20,000	\$0	\$100,000	\$100,000	\$0
1131-20-CIP	Single Space Meter Replacement	C	\$0	\$100,000	\$0	\$100,000	\$100,000	\$0	\$0	\$300,000	\$300,000	\$0
645-20-CIP	West Front St Redevelopment (BOND)	V	\$0	\$0	\$652,975	\$611,657	\$631,548	\$670,993	\$909,511	\$11,350,000	\$3,476,684	\$0
Total Parking				\$353,000	\$1,806,975	\$876,657	\$941,548	\$740,993	\$909,511	\$13,532,000	\$5,658,684	\$0



Six Year Capital Improvement Program

PARKING-20-CIP

Parking

1133-20-CIP Bike Infrastructure Expansion

Project Information

Submitted By:	Nicole VanNess	Department:	Parking Services	Expand bike parking options throughout the City; new or replace inverted Us, bike shelter, bike shelter construction.
Category:	Visionary	Department Head:	Jean Derenzy	
Fund Group:	Traverse City Parking System	Staff Priority:	Important (Could Do)	
Fund Detail:	Parking System	Council Priority:		

Bike Infrastructure Expansion
Funding Sources:

		Previous	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	2025/2026	Total
APS	Parking System	\$0	\$20,000	\$20,000	\$20,000	\$20,000	\$20,000	\$0	\$100,000
Project Total:									\$100,000

COST DETAIL:

Study:	\$0	
Land Acquisition / ROW:	\$0	
Engineering / Design:	\$0	
Construction:	\$100,000	Cost Total: \$100,000
Annual Maint. Cost:	\$2,000	Project Difference: \$0
Maint. Year Start:	1905	

Service Impact:

No service impact

Project Justification:

Meets the objectives of the TDM Study

Location Description:

Any locations identified where bike parking should be replaced or added



Six Year Capital Improvement Program

PARKING-20-CIP

Parking

1135-20-CIP Hardy Handicap Door Operators

Project Information

Submitted By:	Nicole VanNess	Department:	Parking Services	Scheduled replacement for 13 automatic door openers, replacement hardware and contractor services
Category:	Maintenance	Department Head:	Jean Derenzy	
Fund Group:	Traverse City Parking System	Staff Priority:	Essential (Should Do)	
Fund Detail:	Parking System	Council Priority:		

Hardy Handicap Door Hardy Handicap Door Openers

Funding Sources:

		Previous	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	2025/2026	Total
APS	Parking System	\$0	\$0	\$24,000	\$0	\$0	\$0	\$0	\$24,000
Project Total:									\$24,000

COST DETAIL:

Study:	\$0		
Land Acquisition / ROW:	\$0		
Engineering / Design:	\$0		
Construction:	\$24,000	Cost Total:	\$24,000
Annual Maint. Cost:	\$500	Project Difference:	\$0
Maint. Year Start:	1905		

Service Impact:

Temporary pedestrian tower access restrictions during replacement

Project Justification:

Scheduled replacement of existing automated buttons to increase performance

Location Description:

Hardy Parking Garage, 303 E State Street



Six Year Capital Improvement Program

PARKING-20-CIP

Parking

1081-20-CIP

Hardy PTAC Units

Project Information

Submitted By: Nicole VanNess

Department: Parking Services

Replace all PTAC units at the Hardy Parking Garage

Category: Maintenance

Department Head: Jean Derenzy

Fund Group: Traverse City Parking System

Staff Priority: Essential (Should Do)

Fund Detail: Parking System

Council Priority:

Hardy PTAC Units - C Hardy PTAC Units - Cost

Funding Sources:

		Previous	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	2025/2026	Total
APS	Parking System	\$30,000	\$0	\$0	\$0	\$0	\$0	\$0	\$30,000
Project Total:									\$30,000

COST DETAIL:

Study: \$0

Land Acquisition / ROW: \$0

Engineering / Design: \$0

Construction: \$30,000

Annual Maint. Cost:

Maint. Year Start: 1905

Cost Total: \$30,000

Project Difference: \$0

Service Impact:

No service impact

Project Justification:

Routine replacement, equipment at end of life

Location Description:

Hardy Parking Garage, 303 E State Street



Six Year Capital Improvement Program

PARKING-20-CIP

Parking

545-20-CIP Lot B Rehab

Project Information

Submitted By:	Nicole VanNess	Department:	Parking Services	Reconstruct Lot B per Farmers Market Plan. Could include the replacement of meters with pay stations.
Category:	Visionary	Department Head:	Jean Derenzy	
Fund Group:	Traverse City Parking System	Staff Priority:	Important (Could Do)	
Fund Detail:	Parking System	Council Priority:		

Lot B Rehab - Cost Lot B Rehab - Cost

Funding Sources:

		Previous	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	2025/2026	Total
APS	Parking System	\$0	\$0	\$400,000	\$0	\$0	\$0	\$0	\$400,000
Project Total:									\$400,000

COST DETAIL:

Study:	\$0	
Land Acquisition / ROW:	\$0	
Engineering / Design:	\$0	
Construction:	\$400,000	Cost Total: \$400,000
Annual Maint. Cost:	\$2,500	Project Difference: \$0
Maint. Year Start:	1905	

Service Impact:

Stop patches and replace lot.

Project Justification:

Lot is at max life. We need to replace top coat and reconstruct.

Location Description:

100 E. Grandview Pkwy; corner of Cass/Grandview Pkwy



Six Year Capital Improvement Program

PARKING-20-CIP

Parking

979-20-CIP

Lot C Resurfacing

Project Information

Submitted By:	Nicole VanNess	Department:	Parking Services	Resurface Lot C, which serves Clinch Park and downtown businesses
Category:	Maintenance	Department Head:	Jean Derenzy	
Fund Group:	Traverse City Parking System	Staff Priority:	Essential (Should Do)	
Fund Detail:	Parking System	Council Priority:		

Lot C Resurfacing - C Lot C Resurfacing - Cost

Funding Sources:

		Previous	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	2025/2026	Total
APS	Parking System	\$0	\$80,000	\$0	\$0	\$0	\$0	\$0	\$80,000
Project Total:									\$80,000

COST DETAIL:

Study:	\$0		
Land Acquisition / ROW:	\$0		
Engineering / Design:	\$0		
Construction:	\$80,000	Cost Total:	\$80,000
Annual Maint. Cost:		Project Difference:	\$0
Maint. Year Start:	1905		

Service Impact:

Stop patches and replace lot.

Project Justification:

Lot will near end of life. Should be included in Pavement Preservation for replacement.

Location Description:

200 E. Grandview Pkwy



Six Year Capital Improvement Program

PARKING-20-CIP

Parking

980-20-CIP

Lot J Resurfacing

Project Information

Submitted By: Nicole VanNess

Department: Parking Services

Resurface Lot J, which serves the Union Street Dam area.

Category: Maintenance

Department Head: Jean Derenzy

Fund Group: Traverse City Parking System

Staff Priority: Essential (Should Do)

Fund Detail: Parking System

Council Priority:

Lot J Resurfacing - C Lot J Resurfacing - Cost

Funding Sources:

		Previous	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	2025/2026	Total
APS	Parking System	\$0	\$50,000	\$0	\$0	\$0	\$0	\$0	\$50,000
Project Total:									\$50,000

COST DETAIL:

Study: \$0

Land Acquisition / ROW: \$0

Engineering / Design: \$0

Construction: \$50,000

Annual Maint. Cost:

Maint. Year Start: 1905

Cost Total: \$50,000

Project Difference: \$0

Service Impact:

Stop patches and replace lot.

Project Justification:

Lot will near end of life. Should be included in Pavement Preservation for replacement.

Location Description:

300 S. Union/Union Street Dam



Six Year Capital Improvement Program

PARKING-20-CIP

Parking

981-20-CIP Lot K Resurfacing

Project Information

Submitted By:	Nicole VanNess	Department:	Parking Services	Add approximately 8 parking spaces east of existing Lot K if City is able to acquire/lease the Consumers Energy Property just north of the Union Street Dam
Category:	Maintenance	Department Head:	Jean Derenzy	
Fund Group:	Traverse City Parking System	Staff Priority:	Essential (Should Do)	
Fund Detail:	Parking System	Council Priority:		

Lot K resurfacing- Co Lot K resurfacing- Cost

Funding Sources:

		Previous	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	2025/2026	Total
APS	Parking System	\$0	\$0	\$0	\$0	\$30,000	\$0	\$0	\$30,000
Project Total:									\$30,000

COST DETAIL:

Study:	\$0	
Land Acquisition / ROW:	\$0	
Engineering / Design:	\$0	
Construction:	\$30,000	Cost Total: \$30,000
Annual Maint. Cost:		Project Difference: \$0
Maint. Year Start:	1905	

Service Impact:

None.

Project Justification:

Maintenance

Location Description:

North of Union Street Dam



Six Year Capital Improvement Program

PARKING-20-CIP

Parking

708-20-CIP

Lot O Remediation

Project Information

Submitted By:	Nicole VanNess	Department:	Parking Services	Mitigation of contamination that likely is affecting adjacent properties and the water table in close proximity to the Boardman River.
Category:	Maintenance	Department Head:	Jean Derenzy	
Fund Group:	Traverse City Parking System	Staff Priority:	Important (Could Do)	
Fund Detail:	Parking System	Council Priority:		Five underground storage tanks exist at Lot O and likely are contributing to soil contamination.

Lot O Remediation - (Lot O Remediation - Cost

Funding Sources:

		Previous	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	2025/2026	Total
APS	Parking System	\$0	\$0	\$430,000	\$0	\$0	\$0	\$0	\$430,000
Project Total:									\$430,000

COST DETAIL:

Study:	\$0	
Land Acquisition / ROW:	\$0	
Engineering / Design:	\$0	
Construction:	\$430,000	Cost Total: \$430,000
Annual Maint. Cost:		Project Difference: \$0
Maint. Year Start:	1905	

Service Impact:

Stop patches and replace lot.

Project Justification:

Lot will near end of life. Should be included in Pavement Preservation for replacement.

Location Description:

100 E. State Street. Corner of State/Cass.



Six Year Capital Improvement Program

PARKING-20-CIP

Parking

982-20-CIP

Lot T Resurfacing

Project Information

Submitted By:	Nicole VanNess	Department:	Parking Services	Resurface Lot T
Category:	Maintenance	Department Head:	Jean Derenzy	
Fund Group:	Traverse City Parking System	Staff Priority:	Essential (Should Do)	
Fund Detail:	Parking System	Council Priority:		

Lot T Resurfacing - C Lot T Resurfacing - Cost

Funding Sources:

		Previous	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	2025/2026	Total
APS	Parking System	\$0	\$0	\$200,000	\$0	\$0	\$0	\$0	\$200,000
Project Total:									\$200,000

COST DETAIL:

Study:	\$0	
Land Acquisition / ROW:	\$0	
Engineering / Design:	\$0	
Construction:	\$200,000	Cost Total: \$200,000
Annual Maint. Cost:		Project Difference: \$0
Maint. Year Start:	1905	

Service Impact:

Stop patches and replace lot

Project Justification:

Lot near end of life. Should be included in Pavement Preservation for replacement.

Location Description:

100 E. Grandview Pkwy, Corner of Grandview Parkway/Union.



Six Year Capital Improvement Program

PARKING-20-CIP

Parking

1134-20-CIP

Mobility Amenities

Project Information

Submitted By:	Nicole VanNess	Department:	Parking Services	Expand mobility amenities near parking locations.
Category:	Visionary	Department Head:	Jean Derenzy	
Fund Group:	Traverse City Parking System	Staff Priority:	Important (Could Do)	
Fund Detail:	Parking System	Council Priority:		

Mobility Amenities Mobility Amenities

Funding Sources:

		Previous	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	2025/2026	Total
APS	Parking System	\$0	\$15,000	\$15,000	\$10,000	\$10,000	\$0	\$0	\$50,000
Project Total:									\$50,000

COST DETAIL:

Study:	\$0	
Land Acquisition / ROW:	\$0	
Engineering / Design:	\$0	
Construction:	\$50,000	Cost Total: \$50,000
Annual Maint. Cost:	\$1,000	Project Difference: \$0
Maint. Year Start:	1905	

Service Impact:

No service impact.

Project Justification:

Meets the recommendations of the TDM Study

Location Description:

Any area near a parking location that will aid in park-once initiatives or make mobility options more appealing.



Six Year Capital Improvement Program

PARKING-20-CIP

Parking

1136-20-CIP

Old Town ADA Door Operators

Project Information

Submitted By:	Nicole VanNess	Department:	Parking Services	Replace ADA door openers at all pedestrian doors.
Category:	Maintenance	Department Head:	Jean Derenzy	
Fund Group:	Traverse City Parking System	Staff Priority:	Essential (Should Do)	
Fund Detail:	Parking System	Council Priority:		

Old Town ADA Door (Old Town ADA Door Operators

Funding Sources:

		Previous	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	2025/2026	Total
APS	Parking System	\$0	\$18,000	\$0	\$0	\$0	\$0	\$0	\$18,000
Project Total:									\$18,000

COST DETAIL:

Study:	\$0	
Land Acquisition / ROW:	\$0	
Engineering / Design:	\$0	
Construction:	\$18,000	Cost Total: \$18,000
Annual Maint. Cost:	\$500	Project Difference: \$0
Maint. Year Start:	1905	

Service Impact:

Minimal impact during replacement

Project Justification:

The ADA openers are original to the install and need to be replaced to increase performance.

Location Description:

125 E Eighth Street at the Old Town Parking Garage



Six Year Capital Improvement Program

PARKING-20-CIP

Parking

1082-20-CIP

Old Town Battery Backup Convert to Generator

Project Information

Submitted By:	Nicole VanNess	Department:	Parking Services	Replace battery backup system with a natural gas powered generator
Category:	Maintenance	Department Head:	Jean Derenzy	
Fund Group:	Traverse City Parking System	Staff Priority:	Important (Could Do)	
Fund Detail:	Parking System	Council Priority:		

Old Town Battery Backup Old Town Battery Backup Convert to Generator - Cos

Funding Sources:

		Previous	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	2025/2026	Total
APS	Parking System	\$0	\$50,000	\$0	\$0	\$0	\$0	\$0	\$50,000
Project Total:									\$50,000

COST DETAIL:

Study:	\$0		
Land Acquisition / ROW:	\$0		
Engineering / Design:	\$0		
Construction:	\$50,000	Cost Total:	\$50,000
Annual Maint. Cost:	\$1,500	Project Difference:	\$0
Maint. Year Start:	1905		

Service Impact:

Failure of battery backup system could result in failure of emergency lighting, inoperable equipment, and inoperable elevators

Project Justification:

A natural gas powered generator is cheaper than purchasing a replacement battery back up system, and the generator life is longer than the battery.

Location Description:

Old Town Parking Garage, 125 E Eighth Street



Six Year Capital Improvement Program

PARKING-20-CIP

Parking

1138-20-CIP

Old Town Boiler #1 and Pump Replacement

Project Information

Submitted By: Nicole VanNess

Department: Parking Services

Unit has exceeded useful life and should be replaced. This replacement will include the pump and relocating the sensor from Level 4 to the ground level. The snowmelt controls the entry/exit lanes at Old Town.

Category: Capital

Department Head: Jean Derenzy

Fund Group: Traverse City Parking System

Staff Priority: Imperative (Must Do)

Fund Detail: Parking System

Council Priority:

Old Town Boiler #1 at Old Town Boiler #1 and Pump Replacement

Funding Sources:

		Previous	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	2025/2026	Total
APS	Parking System	\$0	\$0	\$30,000	\$0	\$0	\$0	\$0	\$30,000
Project Total:									\$30,000

COST DETAIL:

Study: \$0

Land Acquisition / ROW: \$0

Engineering / Design: \$0

Construction: \$30,000

Annual Maint. Cost: \$3,000

Maint. Year Start: 1905

Cost Total: **\$30,000**

Project Difference: **\$0**

Service Impact:

System will be inoperable during replacement. Additional annual maintenance contract for HVAC services and increase gas billing during months of operation.

Project Justification:

Needed to ensure lanes are clear from snow and ice.

Location Description:

125 E Eighth Street at the Old Town Parking Garage



Six Year Capital Improvement Program

PARKING-20-CIP

Parking

1139-20-CIP Old Town Boiler #2 and Pump Replacement

Project Information

Submitted By:	Nicole VanNess	Department:	Parking Services	Replace boiler #2 that provides snow melt
Category:	Capital	Department Head:	Jean Derenzy	
Fund Group:	Traverse City Parking System	Staff Priority:	Imperative (Must Do)	
Fund Detail:	Parking System	Council Priority:		

Old Town Boiler #2 at Old Town Boiler #2 and Pump Replacement

Funding Sources:

		Previous	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	2025/2026	Total
APS	Parking System	\$0	\$0	\$15,000	\$0	\$0	\$0	\$0	\$15,000
Project Total:									\$15,000

COST DETAIL:

Study:	\$0		
Land Acquisition / ROW:	\$0		
Engineering / Design:	\$0		
Construction:	\$15,000	Cost Total:	\$15,000
Annual Maint. Cost:	\$3,000	Project Difference:	\$0
Maint. Year Start:	1905		

Service Impact:

Annual HVAC contract services and increase gas billing during months of operation

Project Justification:

Needed to ensure lanes are clear of snow and ice

Location Description:

125 E Eighth Street at the Old Town Parking Garage



Six Year Capital Improvement Program

PARKING-20-CIP

Parking

1140-20-CIP Old Town Boiler #3 and Pump Replacement

Project Information

Submitted By:	Nicole VanNess	Department:	Parking Services	Replace boiler #3 and pump
Category:	Capital	Department Head:	Jean Derenzy	
Fund Group:	Traverse City Parking System	Staff Priority:	Imperative (Must Do)	
Fund Detail:	Parking System	Council Priority:		

Old Town Boiler #3 at Old Town Boiler #3 and Pump Replacement

Funding Sources:

		Previous	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	2025/2026	Total
APS	Parking System	\$0	\$0	\$0	\$15,000	\$0	\$0	\$0	\$15,000
Project Total:									\$15,000

COST DETAIL:

Study:	\$0		
Land Acquisition / ROW:	\$0		
Engineering / Design:	\$0		
Construction:	\$15,000	Cost Total:	\$15,000
Annual Maint. Cost:	\$3,000	Project Difference:	\$0
Maint. Year Start:	1905		

Service Impact:

Annual HVAC maintenance and increased gas billing during months of operation

Project Justification:

Needed to ensure lanes are free and clear of snow and ice.

Location Description:

125 E Eighth Street at Old Town Parking Garage



Six Year Capital Improvement Program

PARKING-20-CIP

Parking

1072-20-CIP

Old Town Boiler Replacement

Project Information

Submitted By: Nicole VanNess

Department: Parking Services

Boilers are original to 2009 install. Boiler life is 10 years. 3 boilers onsite.

Category: Maintenance

Department Head: Jean Derenzy

Fund Group: Traverse City Parking System

Staff Priority: Essential (Should Do)

Fund Detail: Parking System

Council Priority:

Old Town Boiler Repl. Old Town Boiler Replacement-C

Funding Sources:

		Previous	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	2025/2026	Total
APS	Parking System	\$0	\$0	\$0	\$0	\$80,000	\$0	\$0	\$80,000
Project Total:									\$80,000

COST DETAIL:

Study: \$0

Land Acquisition / ROW: \$0

Engineering / Design: \$0

Construction: \$80,000

Annual Maint. Cost:

Maint. Year Start: 1905

Cost Total: **\$80,000**

Project Difference: **\$0**

Service Impact:

None.

Project Justification:

Ensure operational snow melt

Location Description:

Old Town Parking Garage, 125 E. Eighth St.



Six Year Capital Improvement Program

PARKING-20-CIP

Parking

1059-20-CIP

Old Town Garage LED Light Conversion

Project Information

Submitted By:	Nicole VanNess	Department:	Parking Services	Concert lighting to LED in order to reduce lighting costs and repairs.
Category:	Maintenance	Department Head:	Jean Derenzy	
Fund Group:	Traverse City Parking System	Staff Priority:	Important (Could Do)	
Fund Detail:	Parking System	Council Priority:		

Old Town Garage LEI Old Town Garage LED Light Conversion-Cost

Funding Sources:

		Previous	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	2025/2026	Total
APS	Parking System	\$0	\$0	\$0	\$100,000	\$0	\$0	\$0	\$100,000
Project Total:									\$100,000

COST DETAIL:

Study:	\$0		
Land Acquisition / ROW:	\$0		
Engineering / Design:	\$0		
Construction:	\$100,000	Cost Total:	\$100,000
Annual Maint. Cost:		Project Difference:	\$0
Maint. Year Start:	1905		

Service Impact:

Lighting swap out may reduce lighting on some levels as conversion is taking place over replacement period.

Project Justification:

Replace all existing lighting and convert to a more energy efficient lighting system.

Location Description:

125 E. Eighth Street. Old Town Garage



Six Year Capital Improvement Program

PARKING-20-CIP

Parking

1083-20-CIP

Old Town PTAC Units

Project Information

Submitted By: Nicole VanNess

Department: Parking Services

Replace all PTAC units at the Old Town Parking Garage. Replacement will be from the Old Town Fund 585-587

Category: Maintenance

Department Head: Jean Derenzy

Fund Group: Traverse City Parking System

Staff Priority: Essential (Should Do)

Fund Detail: Parking System

Council Priority:

Old Town PTAC Units Old Town PTAC Units - Cost

Funding Sources:

		Previous	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	2025/2026	Total
APS	Parking System	\$0	\$0	\$0	\$0	\$50,000	\$0	\$0	\$50,000
Project Total:									\$50,000

COST DETAIL:

Study: \$0

Land Acquisition / ROW: \$0

Engineering / Design: \$0

Construction: \$50,000

Annual Maint. Cost: \$1,000

Maint. Year Start: 1905

Cost Total: **\$50,000**

Project Difference: **\$0**

Service Impact:

No impact, equipment replacement

Project Justification:

Routine equipment replacement for end of life equipment.

Location Description:

Old Town Parking Garage, 125 E Eighth Street



Six Year Capital Improvement Program

PARKING-20-CIP

Parking

1137-20-CIP

Old Town Solar Panels/Inverters

Project Information

Submitted By:	Nicole VanNess	Department:	Parking Services	Replace inverters for the solar panels
Category:	Maintenance	Department Head:	Jean Derenzy	
Fund Group:	Traverse City Parking System	Staff Priority:	Important (Could Do)	
Fund Detail:	Parking System	Council Priority:		

Old Town Solar Pane Old Town Solar Panels/Inverters

Funding Sources:

		Previous	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	2025/2026	Total
APS	Parking System	\$0	\$0	\$0	\$0	\$0	\$30,000	\$0	\$30,000
Project Total:									\$30,000

COST DETAIL:

Study:	\$0		
Land Acquisition / ROW:	\$0		
Engineering / Design:	\$0		
Construction:	\$30,000	Cost Total:	\$30,000
Annual Maint. Cost:	\$1,500	Project Difference:	\$0
Maint. Year Start:	1905		

Service Impact:

Minimal impact

Project Justification:

Extend useful life

Location Description:

125 E Eighth Street at the Old Town Parking Garage



Six Year Capital Improvement Program

PARKING-20-CIP

Parking

1132-20-CIP

Single Space Meter Expansion

Project Information

Submitted By: Nicole VanNess

Department: Parking Services

This project will allow for expanding meter districts and adding metered parking.

Category: Visionary

Department Head: Jean Derenzy

Fund Group: Traverse City Parking System

Staff Priority: Important (Could Do)

Fund Detail: Parking System

Council Priority:

Single Space Meter E Single Space Meter Expansion

Funding Sources:

		Previous	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	2025/2026	Total
APS	Parking System	\$0	\$20,000	\$20,000	\$20,000	\$20,000	\$20,000	\$0	\$100,000
Project Total:									\$100,000

COST DETAIL:

Study: \$0

Land Acquisition / ROW: \$0

Engineering / Design: \$0

Construction: \$100,000

Annual Maint. Cost: \$5,000

Maint. Year Start: 1905

Cost Total: \$100,000

Project Difference: \$0

Service Impact:

No service impact

Project Justification:

Planning for meter zone expansion and the costs associated with adding newly metered areas.

Location Description:

Newly created metered zones



Six Year Capital Improvement Program

PARKING-20-CIP

Parking

1131-20-CIP

Single Space Meter Replacement

Project Information

Submitted By: Nicole VanNess

Department: Parking Services

This project will replace existing coin only meters with pay stations or single space mechanisms that accept coin, cash and credit.

Category: Capital

Department Head: Jean Derenzy

Fund Group: Traverse City Parking System

Staff Priority: Essential (Should Do)

Fund Detail: Parking System

Council Priority:

Single Space Meter F Single Space Meter Replacement

Funding Sources:

		Previous	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	2025/2026	Total
APS	Parking System	\$0	\$100,000	\$0	\$100,000	\$100,000	\$0	\$0	\$300,000
Project Total:									\$300,000

COST DETAIL:

Study: \$0

Land Acquisition / ROW: \$0

Engineering / Design: \$0

Construction: \$300,000

Annual Maint. Cost: \$20,000

Maint. Year Start: 1905

Cost Total: \$300,000

Project Difference: \$0

Service Impact:

Improved service to the public. Change over will require additional monthly fees for credit card processing and software subscription.

Project Justification:

Newer mechanisms will offer better reporting and ability to configure/schedule rate changes.

Location Description:

Metered zones throughout Traverse City



Six Year Capital Improvement Program

PARKING-20-CIP

Parking

645-20-CIP West Front St Redevelopment (BOND)

Project Information

Submitted By:	Jean Derenzy	Department:	Parking Services	Build an approximately 410 space parking deck to serve the west side of downtown. This project is a bond.
Category:	Visionary	Department Head:	Jean Derenzy	
Fund Group:	Tax Increment Financing	Staff Priority:	Essential (Should Do)	
Fund Detail:	TIF 97	Council Priority:		

West Front St Redevel West Front St Redevelopment (BOND) - Cost

Funding Sources:

		Previous	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	2025/2026	Total
TIF97	TIF 97	\$0	\$0	\$652,975	\$611,657	\$631,548	\$670,993	\$909,511	\$3,476,684
Project Total:									\$3,476,684

COST DETAIL:

Study:	\$0	
Land Acquisition / ROW:	\$0	
Engineering / Design:	\$1,050,000	
Construction:	\$10,300,000	Cost Total: \$11,350,000
Annual Maint. Cost:	\$220,000	Project Difference: \$-7,873,316
Maint. Year Start:	1905	

Service Impact:

Estimated annual maintenance of \$220,000

Project Justification:

Provide parking on west end. Free up existing surface lots for development.

Location Description:

145 W. Front Street. Corner W. Front/Pine.

Six Year Capital Improvement Plan

All Projects Submitted for 2020-2021

Budget Year 2020-2021 by Program Name

Bold - Indicates projects occurring in the first FY of the plan . + - Indicates projects with multiple funding										<u>Overall Programming Cost</u>		
Project ID	Cat	Previous	Fiscal Year 2020-2021	Fiscal Year 2021-2022	Fiscal Year 2022-2023	Fiscal Year 2023-2024	Fiscal Year 2024-2025	Fiscal Year 2025-2026		Project Cost	City Funds	Non-City Funds
Parks												
+ 928-20-CIP	American Legion Park Improvements	V	\$0	\$0	\$150,000	\$0	\$0	\$0	\$0	\$150,000	\$35,000	\$115,000
306-20-CIP	Ashton Park Playground	V	\$0	\$0	\$0	\$30,000	\$0	\$0	\$0	\$30,000	\$30,000	\$0
539-20-CIP	Boon Street Park Playground Improvements	V	\$0	\$58,000	\$0	\$0	\$0	\$0	\$0	\$58,000	\$58,000	\$0
+ 26-20-CIP	Bryant Park Improvements	V	\$15,000	\$50,000	\$145,000	\$0	\$0	\$0	\$0	\$210,000	\$95,000	\$115,000
1188-20-CIP	F&M Park Basketball Court Upgrade	M	\$0	\$30,000	\$0	\$0	\$0	\$0	\$0	\$30,000	\$30,000	\$0
1090-20-CIP	Franklin Street Promenade	C	\$0	\$0	\$0	\$0	\$79,500	\$0	\$0	\$79,500	\$79,500	\$0
1192-20-CIP	Hickory Hills Site Work	M	\$0	\$35,000	\$0	\$0	\$0	\$0	\$0	\$35,000	\$35,000	\$0
+ 1164-20-CIP	Hickory Hills Snowmaking	M	\$0	\$100,000	\$0	\$0	\$0	\$0	\$0	\$100,000	\$0	\$100,000
1190-20-CIP	Highland Park Play Equipment and entrance	C	\$0	\$30,000	\$0	\$0	\$0	\$0	\$0	\$30,000	\$30,000	\$0
+ 309-20-CIP	Indian Woods Playground	V	\$0	\$112,000	\$0	\$0	\$0	\$0	\$0	\$120,000	\$62,000	\$50,000
+ 972-20-CIP	Mini Park Upgrade and East Downtown Entrance	V	\$0	\$0	\$0	\$0	\$55,000	\$0	\$0	\$55,000	\$30,000	\$25,000
785-20-CIP	Natural Features Inventory (Planning Commission)	V	\$0	\$20,000	\$0	\$0	\$0	\$0	\$0	\$20,000	\$20,000	\$0
684-20-CIP	Park Sign Replacement	M	\$30,000	\$30,000	\$0	\$0	\$0	\$0	\$0	\$60,000	\$60,000	\$0
543-20-CIP	Rose and Boyd Triangle Park (Jupiter Gardens)	V	\$0	\$23,000	\$0	\$0	\$0	\$0	\$0	\$23,000	\$23,000	\$0
+ 602-20-CIP	Senior Center -Bayfront Plan	V	\$0	\$0	\$0	\$0	\$0	\$161,888	\$0	\$161,888	\$0	\$161,888
+ 926-20-CIP	Senior Citizen Park Improvements	V	\$0	\$0	\$0	\$0	\$0	\$75,000	\$0	\$75,000	\$35,000	\$40,000
+ 927-20-CIP	Sunset Park Improvements	V	\$0	\$0	\$0	\$250,000	\$0	\$0	\$0	\$250,000	\$100,000	\$150,000
+ 1020-20-CIP	West End Beach Bathhouse Project	V	\$0	\$100,000	\$283,000	\$0	\$0	\$0	\$0	\$383,000	\$163,000	\$220,000
Total Parks			\$588,000	\$578,000	\$280,000	\$134,500	\$236,888	\$0		\$1,870,388	\$885,500	\$976,888



Six Year Capital Improvement Program

PARK-20-CIP

Parks

928-20-CIP American Legion Park Improvements

Project Information

Submitted By:	Derek Melville	Department:	Department of Public Services	The improvements to American Legion Park could include terracing to create different levels of the park to make it more usable for sitting areas, small events and river access opportunities. Landscaping around the Veteran's monument would also be important.
Category:	Visionary	Department Head:	Frank Dituri	
Fund Group:	General	Staff Priority:	Important (Could Do)	
Fund Detail:	Parks & Rec	Council Priority:		

American Legion Par American Legion Park Improvements (+Grant - Cost
Funding Sources:

		Previous	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	2025/2026	Total
BBTP	Brown Bridge Trust Parks	\$0	\$0	\$35,000	\$0	\$0	\$0	\$0	\$35,000
LFG	Local / Foundation Grant	\$0	\$0	\$65,000	\$0	\$0	\$0	\$0	\$65,000
P	Private	\$0	\$0	\$50,000	\$0	\$0	\$0	\$0	\$50,000
Project Total:									\$150,000

COST DETAIL:

Study:	\$0	
Land Acquisition / ROW:	\$0	
Engineering / Design:	\$10,000	
Construction:	\$140,000	Cost Total: \$150,000
Annual Maint. Cost:	\$1,000	Project Difference: \$0
Maint. Year Start:	1905	

Service Impact:

Minimal increased costs for maintenance as compared to current operations.

Project Justification:

Currently the landscape of the park makes it difficult for the space to be used for gathering or small events so improvements would help activate the park. This project is listed in the Parks & Recreation 5 year master plan.

Location Description:

200 Washington Street



Six Year Capital Improvement Program

PARK-20-CIP

Parks

306-20-CIP

Ashton Park Playground

Project Information

Submitted By:	Derek Melville	Department:	Department of Public Services	Replace existing play equipment with small structure designed for younger children. Larger play structure for older children is available at Willow Hill Elementary School. The new equipment would meet current safety and ADA accessibility standards.
Category:	Visionary	Department Head:	Frank Dituri	
Fund Group:	General	Staff Priority:	Essential (Should Do)	
Fund Detail:	Parks & Rec	Council Priority:		

Ashton Park Playgro Ashton Park Playground - Cost

Funding Sources:

		Previous	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	2025/2026	Total
BBTP	Brown Bridge Trust Parks	\$0	\$0	\$0	\$30,000	\$0	\$0	\$0	\$30,000
Project Total:									\$30,000

COST DETAIL:

Study:	\$0		
Land Acquisition / ROW:	\$0		
Engineering / Design:	\$0		
Construction:	\$30,000	Cost Total:	\$30,000
Annual Maint. Cost:	\$500	Project Difference:	\$0
Maint. Year Start:	1905		

Service Impact:

Minor impacts for City Parks operations. Annually wood chips will need to be spread.

Project Justification:

The existing playground equipment is outdated and non-ADA accessible. All new equipment will be selected to increase safety and ADA accessibility.

Location Description:

1200 Wayne Street



Six Year Capital Improvement Program

PARK-20-CIP

Parks

539-20-CIP

Boon Street Park Playground Improvements

Project Information

Submitted By:	Derek Melville	Department:	Department of Public Services	This neighborhood park has a mixture of thirty year old and older pieces of play equipment. All equipment should be replaced, a new picnic area should be established and the trail should have defined ada pathways (sidewalk or limestone fines) to improve access.
Category:	Visionary	Department Head:	Frank Dituri	
Fund Group:	General	Staff Priority:	Essential (Should Do)	
Fund Detail:	Parks & Rec	Council Priority:		

Boon Street Park Pla Boon Street Park Playground Improvements - Cost

Funding Sources:

		Previous	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	2025/2026	Total
BBTP	Brown Bridge Trust Parks	\$0	\$58,000	\$0	\$0	\$0	\$0	\$0	\$58,000
Project Total:									\$58,000

COST DETAIL:

Study:	\$0		
Land Acquisition / ROW:	\$0		
Engineering / Design:	\$3,000		
Construction:	\$55,000	Cost Total:	\$58,000
Annual Maint. Cost:	\$1,000	Project Difference:	\$0
Maint. Year Start:	1905		

Service Impact:

Annually the parks department would have to spread woodchips and minor increased maintenance activities when the picnic area is heavily used.

Project Justification:

All playground equipment is in need of replacement along with the addition of ADA accessible play pieces and general park accessibility. Creating an improved picnic area will increase park use over time.

Location Description:

925 Boon Street



Six Year Capital Improvement Program

PARK-20-CIP

Parks

26-20-CIP

Bryant Park Improvements

Project Information

Submitted By: Lauren Vaughn
Category: Visionary
Fund Group: General
Fund Detail: Parks & Rec

Department: Department of Public Services
Department Head: Frank Dituri
Staff Priority: Essential (Should Do)
Council Priority:

Bryant Park is one of the most utilized parks in the City, so it has been identified that expanding and updating the bathhouse, adding an outside foot wash station and creating small picnic areas with mini pavilions and grills are desired. Additionally, a retaining wall will greatly reduce the amount of sand that blows up into the turf area during the late fall to early spring period. It will also help to stop the encroachment of the sand and shrinking of the turf areas.

Bryant Park Improver Bryant Park Improvements

Funding Sources:

		Previous	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	2025/2026	Total
BBTP	Brown Bridge Trust Parks	\$0	\$0	\$95,000	\$0	\$0	\$0	\$0	\$95,000
FSG	Federal / State Grant	\$0	\$50,000	\$50,000	\$0	\$0	\$0	\$0	\$100,000
LFG	Local / Foundation Grant	\$15,000	\$0	\$0	\$0	\$0	\$0	\$0	\$15,000

Project Total: **\$210,000**

COST DETAIL:

Study: \$0

Land Acquisition / ROW: \$0

Engineering / Design: \$15,000

Construction: \$195,000

Annual Maint. Cost: \$2,000

Maint. Year Start: 1905

Cost Total: **\$210,000**

Project Difference: **\$0**

Service Impact:

Increased cleaning costs will come from a larger facility, as well as increased maintenance costs of additional pavilions and the retaining wall.

Project Justification:

The installation of a retaining wall at Bryant Park is identified in the Parks & Recreation 5 year master plan, and the other amenities have been identified as needed due to the high use the park sees throughout the summer, specifically on weekends and during special events.

Location Description:

1101 Peninsula Dr



Six Year Capital Improvement Program

PARK-20-CIP

Parks

1188-20-CIP

F&M Park Basketball Court Upgrade

Project Information

Submitted By:	Derek Melville	Department:	Department of Public Services	Replace asphalt at F&M Court and replace basketball hoops with new system. Paint lines on court.
Category:	Maintenance	Department Head:	Frank Dituri	
Fund Group:	Brown Bridge Trust Parks Impr	Staff Priority:	Essential (Should Do)	
Fund Detail:	Brown Bridge Trust Parks Impr	Council Priority:		

Funding Sources:

		Previous	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	2025/2026	Total
BBTP	Brown Bridge Trust Parks	\$0	\$30,000	\$0	\$0	\$0	\$0	\$0	\$30,000
Project Total:									\$30,000

COST DETAIL:

Study:	\$0	
Land Acquisition / ROW:	\$0	
Engineering / Design:	\$2,000	
Construction:	\$28,000	
Annual Maint. Cost:		
Maint. Year Start:		
Cost Total:		\$30,000
Project Difference:		\$0

Service Impact:

Very little cost for future maintenance. Should not impact any future operations.

Project Justification:

Requested by Parks & Rec Commission as part of their CIP list and also approved as part of the BBTF ballot initiative.

Location Description:

716 E State St, Traverse City, MI 49686



Six Year Capital Improvement Program

PARK-20-CIP

Parks

1090-20-CIP

Franklin Street Promenade

Project Information

Submitted By: Russ Soyring
Category: Capital
Fund Group: General
Fund Detail: Parks & Rec

Department: Planning and Zoning
Department Head: Russ Soyring
Staff Priority: Important (Could Do)
Council Priority:

Phase 1: An extension of Franklin Street as a promenade to connect the North Boardman Lake District to Boardman Lake. To do this, the project includes moving security gates for the wastewater treatment plant and relocating security fencing.

Phase 2: At a future time when Franklin Street is reconstructed, the street ending should be re-built as a shared street with pedestrian amenities.

Franklin Street Promenade
Funding Sources:

		Previous	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	2025/2026	Total
GEN	General Fund	\$0	\$0	\$0	\$0	\$79,500	\$0	\$0	\$79,500
Project Total:									\$79,500

COST DETAIL:

Study: \$0

Land Acquisition / ROW: \$0

Engineering / Design: \$0

Construction: \$79,500

Annual Maint. Cost:

Maint. Year Start:

Cost Total: **\$79,500**

Project Difference: **\$0**

Service Impact:

Increase service impact due to landscaping, lighting.

Project Justification:

Envision 8th Master Plan

Location Description:

Extension of the 500 block of Franklin to Boardman Lake



Six Year Capital Improvement Program

PARK-20-CIP

Parks

1192-20-CIP

Hickory Hills Site Work

Project Information

Submitted By: Derek Melville
Category: Maintenance
Fund Group: General
Fund Detail: Parks & Rec

Department: Department of Public Services
Department Head: Frank Dituri
Staff Priority: Essential (Should Do)
Council Priority: Demolition of the old lodge on site and restoration of the area to allow for future use of the space.

Hickory Hills Site Work Hickory Hills Site Work

Funding Sources:

		Previous	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	2025/2026	Total
GEN	General Fund	\$0	\$35,000	\$0	\$0	\$0	\$0	\$0	\$35,000
Project Total:									\$35,000

COST DETAIL:

Study: \$0

Land Acquisition / ROW: \$0

Engineering / Design: \$0

Construction: \$35,000

Annual Maint. Cost:

Maint. Year Start:

Cost Total: **\$35,000**

Project Difference: **\$0**

Service Impact:

Upon completion this will reduce long term maintenance and repair costs to upkeep this aging building.

Project Justification:

The removal of the old lodge upon completion of the new lodge has been part of the Hickory Hills Master Plan discussions for a number of years.

Location Description:

2000 Randolph Street



Six Year Capital Improvement Program

PARK-20-CIP

Parks

1164-20-CIP

Hickory Hills Snowmaking

Project Information

Submitted By:	Derek Melville	Department:	Department of Public Services	Snowmaking project at Hickory Hills to expand infrastructure to serve the Nordic Trails as well as the addition of a booster pump and an expansion to the pump house.
Category:	Maintenance	Department Head:	Frank Dituri	
Fund Group:	Other	Staff Priority:	Essential (Should Do)	
Fund Detail:	Parks & Rec	Council Priority:		

Hickory Hills Snowm Hickory Hills Snowmaking Expansion

Funding Sources:

		Previous	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	2025/2026	Total
FSG	Federal / State Grant	\$0	\$50,000	\$0	\$0	\$0	\$0	\$0	\$50,000
P	Private	\$0	\$50,000	\$0	\$0	\$0	\$0	\$0	\$50,000
Project Total:									\$100,000

COST DETAIL:

Study:	\$0	
Land Acquisition / ROW:	\$0	
Engineering / Design:	\$0	
Construction:	\$100,000	Cost Total: \$100,000
Annual Maint. Cost:	\$1,000	Project Difference: \$0
Maint. Year Start:	1905	

Service Impact:

Increased skiing days for the Nordic community, therefore increased revenue potential. Increased maintenance costs are limited to long term repairs, electricity to run the well and pumps and equipment, which can vary greatly depending on weather.

Project Justification:

Part of the Hickory Hills Master Plan.

Location Description:

2000 Randolph Street



Six Year Capital Improvement Program

PARK-20-CIP

Parks

1190-20-CIP

Highland Park Play Equipment and entrance

Project Information

Submitted By:	Derek Melville	Department:	Department of Public Services	Replace existing playground equipment at Highland Park, improve entrance area with signage, bike parking, bench.
Category:	Capital	Department Head:	Frank Dituri	
Fund Group:	Brown Bridge Trust Parks Impr	Staff Priority:	Important (Could Do)	
Fund Detail:	Brown Bridge Trust Parks Impr	Council Priority:		

Funding Sources:

		Previous	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	2025/2026	Total
BBTP	Brown Bridge Trust Parks	\$0	\$30,000	\$0	\$0	\$0	\$0	\$0	\$30,000
Project Total:									\$30,000

COST DETAIL:

Study:	\$0	
Land Acquisition / ROW:	\$0	
Engineering / Design:	\$0	
Construction:	\$30,000	Cost Total: \$30,000
Annual Maint. Cost:		Project Difference: \$0
Maint. Year Start:		

Service Impact:

Minor maintenance costs, no operational impact.

Project Justification:

Included within BBTF ballot renewal plan.

Location Description:

HIGHLAND PARK Dr



Six Year Capital Improvement Program

PARK-20-CIP

Parks

309-20-CIP

Indian Woods Playground

Project Information

Submitted By: Lauren Vaughn
Category: Visionary
Fund Group: General
Fund Detail: Parks & Rec

Department: Department of Public Services
Department Head: Frank Dituri
Staff Priority: Essential (Should Do)
Council Priority:

This would replace most of the existing play equipment with a small new structure that would meet current safety and ADA accessibility standards. Some of the existing play pieces could remain as they were replaced and/or added in the past 15 years. Additionally, the neighborhood has identified they'd like to have a connection between the upper and lower tiers of the park, possibly through a sidewalk or trail. Also, hill slides and an improved picnic area has been identified to be added.

Indian Woods Playgr Indian Woods Playground - Cost

Funding Sources:

		Previous	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	2025/2026	Total
BBTP	Brown Bridge Trust Parks	\$0	\$62,000	\$0	\$0	\$0	\$0	\$0	\$62,000
FSG	Federal / State Grant	\$0	\$50,000	\$0	\$0	\$0	\$0	\$0	\$50,000
Project Total:									\$112,000

COST DETAIL:

Study: \$0

Land Acquisition / ROW: \$0

Engineering / Design: \$10,000

Construction: \$110,000

Annual Maint. Cost: \$1,000

Maint. Year Start: 1905

Cost Total: **\$120,000**

Project Difference: **\$-8,000**

Service Impact:

Ongoing repairs and maintenance to the improved facilities will be similar to existing levels.

Project Justification:

Improving Indian Woods Park and playground is identified in the Parks & Recreation 5 year master plan. Due to the age and condition of the existing playground equipment it should be replaced with ADA compliant pieces. Additionally, connecting the two tiers, if possible, would be a positive improvement for users of all abilities.

Location Description:

1765 Indian Woods Drive



Six Year Capital Improvement Program

PARK-20-CIP

Parks

972-20-CIP

Mini Park Upgrade and East Downtown Entrance

Project Information

Submitted By:	Lauren Vaughn	Department:	Department of Public Services	Improvements to Mini Park at the corner of East Front Street and Grandview Parkway will become a focal point for the entrance to downtown. Improvements should include lighting, reworked trails around the "guardian" plaza and landscaping updates.
Category:	Visionary	Department Head:	Frank Dituri	
Fund Group:	General	Staff Priority:	Important (Could Do)	
Fund Detail:	Parks & Rec	Council Priority:		

Mini Park Upgrade ar Mini Park Upgrade and East Downtown Entran - Cost

Funding Sources:

		Previous	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	2025/2026	Total
BBTP	Brown Bridge Trust Parks	\$0	\$0	\$0	\$0	\$25,000	\$0	\$0	\$25,000
GEN	General Fund	\$0	\$0	\$0	\$0	\$5,000	\$0	\$0	\$5,000
P	Private	\$0	\$0	\$0	\$0	\$25,000	\$0	\$0	\$25,000
Project Total:									\$55,000

COST DETAIL:

Study:	\$0	
Land Acquisition / ROW:	\$0	
Engineering / Design:	\$10,000	
Construction:	\$45,000	Cost Total: \$55,000
Annual Maint. Cost:	\$1,000	Project Difference: \$0
Maint. Year Start:	1905	

Service Impact:

With increased use of the area the Parks department will have to increase general maintenance and trash removal.

Project Justification:

With the new Coast Guard plaza, reworking the bike traffic and trails is crucial to help with traffic flow and safety. Lighting and other amenities in collaboration with a streetscape improvement will tie the parcel together.

Location Description:

539 East Front Street



Six Year Capital Improvement Program

PARK-20-CIP

Parks

785-20-CIP

Natural Features Inventory (Planning Commission)

Project Information

Submitted By:	Russ Soyring	Department:	Planning and Zoning	Conduct an extensive Natural Features Inventory (NFI), including flora, fauna, soil types, air quality and water quality to establish baseline criteria on city properties. After the completion of the NFI, specific priorities, goals and standards can be developed. Currently, some natural features data is being collected as part of the SAW grant.
Category:	Visionary	Department Head:	Russ Soyring	
Fund Group:	General	Staff Priority:	Important (Could Do)	
Fund Detail:	Parks & Rec	Council Priority:		

Natural Features Inve Natural Features Inventory (Planning) - Cost

Funding Sources:

		Previous	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	2025/2026	Total
GEN	General Fund	\$0	\$20,000	\$0	\$0	\$0	\$0	\$0	\$20,000
Project Total:									\$20,000

COST DETAIL:

Study:	\$20,000
Land Acquisition / ROW:	\$0
Engineering / Design:	\$0
Construction:	\$0
Annual Maint. Cost:	
Maint. Year Start:	

Cost Total: \$20,000

Project Difference: \$0

Service Impact:

None.

Project Justification:

Natural Resources Element in the Master Plan calls for this plan to provide a baseline for policy making.

Location Description:

City-wide.



Six Year Capital Improvement Program

PARK-20-CIP

Parks

684-20-CIP

Park Sign Replacement

Project Information

Submitted By: Lauren Vaughn
Category: Maintenance
Fund Group: General
Fund Detail: Parks & Rec

Department: Department of Public Services
Department Head: Frank Dituri
Staff Priority: Essential (Should Do)
Council Priority:

This project would replace all main park entrance signs with a different style and color to bring the parks up to date. This would also include a new branding design (logo) on the signs and some additional signs for marking trails and for wayfinding.

Park Sign Replacement - Cost

Funding Sources:

		Previous	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	2025/2026	Total
GEN	General Fund	\$30,000	\$30,000	\$0	\$0	\$0	\$0	\$0	\$60,000
Project Total:									\$60,000

COST DETAIL:

Study: \$0

Land Acquisition / ROW: \$0

Engineering / Design: \$4,000

Construction: \$56,000

Annual Maint. Cost: \$500

Maint. Year Start: 1905

Cost Total: **\$60,000**

Project Difference: **\$0**

Service Impact:

A full sign replacement will result in an immediate decrease of park sign maintenance costs, but ongoing replacement for damaged/vandalized signs should be built into the budget.

Project Justification:

The Parks & Recreation 5 year master plan identifies a sign replacement project as a priority, as the P&R Commission has identified a desire to re-brand the Parks as a whole, with all new signs being part of that plan. Additionally, many of the Parks signs are past their useful life and need to be replaced so they reflect positively on the City.

Location Description:

n/a



Six Year Capital Improvement Program

PARK-20-CIP

Parks

543-20-CIP

Rose and Boyd Triangle Park (Jupiter Gardens)

Project Information

Submitted By:	Derek Melville	Department:	Department of Public Services	The North Traverse Heights neighborhood group and other individuals have expressed an interest in seeing improvements to this park to include: a small trailside shelter, sidewalks, native/edible gardens, water and bike repair stations, natural playscapes and trails within the park. The use of this park could greatly increase if these amenities are added.
Category:	Visionary	Department Head:	Frank Dituri	
Fund Group:	General	Staff Priority:	Essential (Should Do)	
Fund Detail:	Parks & Rec	Council Priority:		

Jupiter Gardens Upgr Jupiter Gardens Upgrade
Funding Sources:

		Previous	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	2025/2026	Total
BBTP	Brown Bridge Trust Parks	\$0	\$23,000	\$0	\$0	\$0	\$0	\$0	\$23,000
Project Total:									\$23,000

COST DETAIL:

Study:	\$0		
Land Acquisition / ROW:	\$0		
Engineering / Design:	\$1,000		
Construction:	\$22,000	Cost Total:	\$23,000
Annual Maint. Cost:	\$1,500	Project Difference:	\$0
Maint. Year Start:	1905		

Service Impact:

The gardens would require seasonal attention and the natural areas would require annual woodchips/mulch.

Project Justification:

Users of the TART trail and neighborhood residents would benefit most from this improvement that would create a stopping point for trail traffic and a community garden that residents could help support. Additionally, the natural playscapes would allow for opportunities for play for young children without the need for a large playground.

Location Description:

912 Boyd Ave



Six Year Capital Improvement Program

PARK-20-CIP

Parks

602-20-CIP

Senior Center -Bayfront Plan

Project Information

Submitted By:	Russ Soyring	Department:	Planning and Zoning	Sidewalks, new parking lot improvement and Stormwater Treatment Structure are key elements of the project.
Category:	Visionary	Department Head:	Frank Dituri	
Fund Group:	Bayfront Plan NON-TIF Implem	Staff Priority:	Important (Could Do)	
Fund Detail:	Parks & Rec	Council Priority:		

Senior Center Bayfro Senior Center Bayfront Phase (+Grant) - Cost

Funding Sources:

		Previous	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	2025/2026	Total
FSG	Federal / State Grant	\$0	\$0	\$0	\$0	\$0	\$50,000	\$0	\$50,000
P	Private	\$0	\$0	\$0	\$0	\$0	\$111,888	\$0	\$111,888
Project Total:									\$161,888

COST DETAIL:

Study:	\$4,000		
Land Acquisition / ROW:	\$0		
Engineering / Design:	\$11,410		
Construction:	\$146,478	Cost Total:	\$161,888
Annual Maint. Cost:	\$8,000	Project Difference:	\$0
Maint. Year Start:			

Service Impact:

Service requirements would increase- Sidewalk and stormwater maintenance

Project Justification:

2010 Bayfront Plan

Location Description:

801 E. Front Street



Six Year Capital Improvement Program

PARK-20-CIP

Parks

926-20-CIP

Senior Citizen Park Improvements

Project Information

Submitted By:	Lauren Vaughn	Department:	Department of Public Services	These improvements would include an adult "playground" with components designed to help the Senior population with strength, balance, and mobility and a path connecting these features. Additionally, irrigation for the grounds and improved parking should be part of this project or it could aligned with the new Senior Center building discussions to create a comprehensive plan for the space.
Category:	Visionary	Department Head:	Frank Dituri	
Fund Group:	General	Staff Priority:	Essential (Should Do)	
Fund Detail:	Parks & Rec	Council Priority:		

Senior Citizen Park Ir Senior Citizen Park Improvements (Grant +P - Cost

Funding Sources:

		Previous	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	2025/2026	Total
BBTP	Brown Bridge Trust Parks	\$0	\$0	\$0	\$0	\$0	\$35,000	\$0	\$35,000
LFG	Local / Foundation Grant	\$0	\$0	\$0	\$0	\$0	\$35,000	\$0	\$35,000
P	Private	\$0	\$0	\$0	\$0	\$0	\$5,000	\$0	\$5,000
Project Total:									\$75,000

COST DETAIL:

Study:	\$0	
Land Acquisition / ROW:	\$0	
Engineering / Design:	\$2,000	
Construction:	\$73,000	Cost Total: \$75,000
Annual Maint. Cost:	\$500	Project Difference: \$0
Maint. Year Start:	1905	

Service Impact:

The installation of an irrigation system and fitness amenities will require seasonal and periodic preventative maintenance, repair and servicing of the equipment.

Project Justification:

This project is listed as part of the Parks and Recreation 5 year master plan. Providing a fitness loop for senior center users onsite would

Location Description:

801 E Front Street



Six Year Capital Improvement Program

PARK-20-CIP

Parks

927-20-CIP

Sunset Park Improvements

Project Information

Submitted By:	Lauren Vaughn	Department:	Department of Public Services	The improvements to Sunset Parks would include: a small picnic pavilion with restrooms, a new playground, fitness stations, a walking path, landscaping, irrigation and retaining wall at the sand/grass interface and a drinking fountain/water bottle filling station. It was also recently supported by the Parks & Recreation Commission that a potential raquetball/handball court be placed as part of this project.
Category:	Visionary	Department Head:	Frank Dituri	
Fund Group:	General	Staff Priority:	Essential (Should Do)	
Fund Detail:	Parks & Rec	Council Priority:		

Sunset Park Improve Sunset Park Improvements (+Grant +Private - Cost

Funding Sources:

		Previous	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	2025/2026	Total
BBTP	Brown Bridge Trust Parks	\$0	\$0	\$0	\$100,000	\$0	\$0	\$0	\$100,000
FSG	Federal / State Grant	\$0	\$0	\$0	\$100,000	\$0	\$0	\$0	\$100,000
LFG	Local / Foundation Grant	\$0	\$0	\$0	\$25,000	\$0	\$0	\$0	\$25,000
P	Private	\$0	\$0	\$0	\$25,000	\$0	\$0	\$0	\$25,000

Project Total: \$250,000

COST DETAIL:

Study:	\$0		
Land Acquisition / ROW:	\$0		
Engineering / Design:	\$20,000		
Construction:	\$230,000	Cost Total:	\$250,000
Annual Maint. Cost:	\$2,500	Project Difference:	\$0
Maint. Year Start:	1905		

Service Impact:

The cleaning and maintenance of the restrooms will be the source of the largest maintenance cost increase, with a need for repair and part replacement for the fitness and playground equipment.

Project Justification:

The 5 year Parks and Rec Master Plan highlights the need to update Sunset Park with the proposed amenities. A conceptual plan has been approved by the Parks and Rec Commission, with further refining needed as the project nears.

Location Description:

635 E Front



Six Year Capital Improvement Program

PARK-20-CIP

Parks

1020-20-CIP

West End Beach Bathhouse Project

Project Information

Submitted By:	Derek Melville	Department:	Department of Public Services	The existing bathroom facility is old, non-ADA compliant and in disrepair. This project proposes to build a new bathhouse/changing room that will be a modern, energy efficient ADA compliant facility. Additionally, the addition of an ADA access to the beach along with picnic & seating areas around the rebuilt bathhouse will be important.
Category:	Visionary	Department Head:	Frank Dituri	
Fund Group:	General	Staff Priority:	Essential (Should Do)	
Fund Detail:	Parks & Rec	Council Priority:		

West End Beach Batl West End Beach Bathhouse Project

Funding Sources:

		Previous	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	2025/2026	Total
BBTP	Brown Bridge Trust Parks	\$0	\$0	\$120,000	\$0	\$0	\$0	\$0	\$120,000
GEN	General Fund	\$0	\$0	\$43,000	\$0	\$0	\$0	\$0	\$43,000
LFG	Local / Foundation Grant	\$0	\$100,000	\$120,000	\$0	\$0	\$0	\$0	\$220,000
Project Total:									\$383,000

COST DETAIL:

Study:	\$0	
Land Acquisition / ROW:	\$0	
Engineering / Design:	\$43,000	
Construction:	\$340,000	Cost Total: \$383,000
Annual Maint. Cost:	\$2,000	Project Difference: \$0
Maint. Year Start:	1905	

Service Impact:

Minimal impact to city operations with regard to maintenance or cost increases as there is an existing bathhouse we currently maintain.

Project Justification:

Existing bathhouse is in disrepair and not ADA compliant. This project is referenced in the Parks & Recreation 5 year master plan as a necessity due to the lack of ADA usability. The addition of an ADA access to the beach will provide access to the beach on the West End to all users in proximity to parking.

Location Description:

706 West Grandview Parkway- West End

Six Year Capital Improvement Plan

All Projects Submitted for 2020-2021

Budget Year 2020-2021 by Program Name

Bold - Indicates projects occurring in the first FY of the plan . + - Indicates projects with multiple funding										<u>Overall Programming Cost</u>		
Project ID	Cat	Previous	Fiscal Year 2020-2021	Fiscal Year 2021-2022	Fiscal Year 2022-2023	Fiscal Year 2023-2024	Fiscal Year 2024-2025	Fiscal Year 2025-2026		Project Cost	City Funds	Non-City Funds
Police												
+ 1154-20-CIP	Digital Cameras for Downtown Traverse City	C	\$0	\$125,000	\$0	\$0	\$0	\$0	\$0	\$125,000	\$25,000	\$100,000
Total Police				\$125,000	\$0	\$0	\$0	\$0	\$0	\$125,000	\$25,000	\$100,000



Six Year Capital Improvement Program

POLICE-20-CIP

Police

1154-20-CIP Digital Cameras for Downtown Traverse City

Project Information

Submitted By:	Jeffery O'Brien	Department:	Police	Digital Cameras to be installed on city streets to increase the public's safety and to reduce illicit behavior in our downtown.
Category:	Capital	Department Head:	Jeffery O'Brien	
Fund Group:	General	Staff Priority:	Imperative (Must Do)	
Fund Detail:	Police	Council Priority:		

Funding Sources:

		Previous	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	2025/2026	Total
FSG	Federal / State Grant	\$0	\$100,000	\$0	\$0	\$0	\$0	\$0	\$100,000
TIF97	TIF 97	\$0	\$25,000	\$0	\$0	\$0	\$0	\$0	\$25,000
Project Total:									\$125,000

COST DETAIL:

Study:	\$0		
Land Acquisition / ROW:	\$0		
Engineering / Design:	\$0		
Construction:	\$125,000	Cost Total:	\$125,000
Annual Maint. Cost:	\$10,000	Project Difference:	\$0
Maint. Year Start:	1905		

Service Impact:

Minimal maintenance is expected on these cameras as they will be stationary - Hardware maintenance and possible software updates.

Project Justification:

We have an active downtown area where we have experienced increased issues concerning public safety and well-being of our citizens. Cameras will help capture undesirable activities within the downtown area.

Location Description:

Throughout the City of Traverse City - initial focus on the downtown area/establishments

Six Year Capital Improvement Plan

All Projects Submitted for 2020-2021

Budget Year 2020-2021 by Program Name

Bold - Indicates projects occurring in the first FY of the plan . + - Indicates projects with multiple funding										<u>Overall Programming Cost</u>		
Project ID	Cat	Previous	Fiscal Year 2020-2021	Fiscal Year 2021-2022	Fiscal Year 2022-2023	Fiscal Year 2023-2024	Fiscal Year 2024-2025	Fiscal Year 2025-2026		Project Cost	City Funds	Non-City Funds
Streets												
+ 14-20-CIP	Annual Street Reconstruction Program	M	\$2,473,638	\$1,331,181	\$519,046	\$510,000	\$515,738	\$0	\$0	\$0	\$5,349,602	\$0
320-20-CIP	Division Street	V	\$100,000	\$25,000	\$0	\$0	\$0	\$0	\$0	\$0	\$125,000	\$0
+ 717-20-CIP	East Front St Reconstruction (400-500 blocks)	V	\$0	\$0	\$0	\$0	\$915,000	\$0	\$0	\$915,000	\$915,000	\$0
1087-20-CIP	Front Street Streetscapes	M	\$0	\$250,000	\$500,000	\$250,000	\$0	\$0	\$0	\$1,000,000	\$1,000,000	\$0
+ 1115-20-CIP	Garfield Ave Reconstruction (Hannah to Front St)	C	\$0	\$0	\$412,500	\$0	\$0	\$0	\$0	\$412,500	\$82,500	\$330,000
616-20-CIP	Grand Traverse Commons Infrastructure	V	\$0	\$223,095	\$690,000	\$310,000	\$0	\$0	\$0	\$1,223,095	\$0	\$1,223,095
713-20-CIP	Grandview Parkway Pedestrian Crossing Enhancement	V	\$0	\$0	\$0	\$0	\$500,000	\$0	\$0	\$500,000	\$500,000	\$0
+ 1130-20-CIP	Highway Safety Improvement Program (HSIP)	C	\$20,000	\$600,000	\$0	\$0	\$0	\$0	\$0	\$620,000	\$80,000	\$540,000
1088-20-CIP	State Street Streetscapes	M	\$0	\$250,000	\$500,000	\$250,000	\$0	\$0	\$0	\$1,000,000	\$1,000,000	\$0
889-20-CIP	Traffic Calming	V	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$0	\$0	\$0	\$500,000	\$0
15-20-CIP	Traffic Signal Power Backup	V	\$22,500	\$22,500	\$22,500	\$22,500	\$0	\$0	\$0	\$0	\$90,000	\$0
16-20-CIP	Traffic Signal Upgrades	V	\$120,000	\$60,000	\$60,000	\$60,000	\$60,000	\$0	\$0	\$0	\$360,000	\$0
1089-20-CIP	Tree Replacement	M	\$0	\$50,000	\$50,000	\$0	\$0	\$0	\$0	\$100,000	\$100,000	\$0
Total Streets			\$2,911,776	\$2,854,046	\$1,502,500	\$2,090,738	\$0	\$0		\$5,870,595	\$10,202,102	\$2,093,095



Six Year Capital Improvement Program

STREETS-20-CIP

Streets

14-20-CIP Annual Street Reconstruction Program

Project Information

Submitted By: Tim Lodge
Category: Maintenance
Fund Group: General
Fund Detail: Streets
Department: Engineering
Department Head: Tim Lodge
Staff Priority: Essential (Should Do)
Council Priority:

This is an annual program that provides funds to resurface major and minor streets within the city limits. The streets division determines locations for pavement preservation funded by the Grand Traverse County Road Commission Millage. Funds can only be used for street reconstruction and/or rehabilitation. Sidewalk or utility projects are not eligible. The Eighth Street Reconstruction project utilized the general fund allocations for 2019/20 and 2020/21 fiscal years. Randolph Street from Bay Street to Division St. will be reconstructed in 2020. This location was deferred from 2019 to ensure that the 8th Street project was fully funded. In the coming fiscal years the following streets: E. 11th, E. 10th, Jefferson, Monroe, Madison, 7th, Sheffer, Pinecrest, W. Orchard, E. Orchard, S. Orchard, N. Orchard, and existing gravel streets (Griffin, Fulton) are on the list for street reconstruction and are coordinated with utility fund projects.

Annual Street Recon: Annual Street Reconstruction Program (+GTC - Cost Funding Sources:

		Previous	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	2025/2026	Total
ACPF	Available Capital Projects Fund	\$330,000	\$0	\$0	\$0	\$0	\$0	\$0	\$330,000
GEN	General Fund	\$523,638	\$521,181	\$519,046	\$510,000	\$515,738	\$0	\$0	\$2,589,602
RCMF	Road Commission Millage Fund	\$1,620,000	\$810,000	\$0	\$0	\$0	\$0	\$0	\$2,430,000
Project Total:									\$5,349,602

COST DETAIL:

Study: \$0
Land Acquisition / ROW: \$0
Engineering / Design: \$0
Construction: \$0
Annual Maint. Cost:
Maint. Year Start:

Cost Total: \$0

Project Difference: \$5,349,602

Service Impact:

None.

Project Justification:

Maintenance

Location Description:



City of
TRAVERSE CITY

STREETS-20-CIP

Streets

City-wide

Six Year Capital Improvement Program



Six Year Capital Improvement Program

STREETS-20-CIP

Streets

320-20-CIP

Division Street

Project Information

Submitted By: Tim Lodge
Category: Visionary
Fund Group: General
Fund Detail: Streets

Department: Engineering
Department Head: Tim Lodge
Staff Priority: Important (Could Do)
Council Priority:

In 2015/16, MDOT completed a PEL Study for the corridor. To implement a portion of the study, MDOT secured funding for improvements to Division Street. MDOT will be making improvements between 10th Street and Griffin St. along Division St. MDOT's two primary goals are to provide a left-turn lane into 11th Street and to provide some pedestrian refuge. MDOT will also add sidewalk and landscaping along Division St. The City will provide funds to relocate power poles on the east side in the MDOT right-of-way, lighting enhancements, streetscape amenities, irrigation, and other project enhancements. Construction is anticipated for Fall 2020/Spring 2021.

Division Street - Cost Division Street - Cost

Funding Sources:

		Previous	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	2025/2026	Total
GEN	General Fund	\$100,000	\$25,000	\$0	\$0	\$0	\$0	\$0	\$125,000
Project Total:									\$125,000

COST DETAIL:

Study: \$0
Land Acquisition / ROW: \$0
Engineering / Design: \$0
Construction: \$0
Annual Maint. Cost:
Maint. Year Start:

Cost Total: \$0

Project Difference: \$125,000

Service Impact:

Additional infrastructure requiring operation, maintenance, and replacement.

Project Justification:

Partnering with MDOT for value added features of their improvement project.

Location Description:

Division Street from 10th Street to Griffin Street.



Six Year Capital Improvement Program

STREETS-20-CIP

Streets

717-20-CIP East Front St Reconstruction (400-500 blocks)

Project Information

Submitted By:	Tim Lodge	Department:	Engineering	Street reconstruction with utility rehabilitation and replacement. New curbs, street trees, benches, bike racks, and sidewalk along East Front between Park Street and Grandview Parkway. Project pending SID. The City will request participation from TCLP for lighting associated with the streetscape. Utility funds will be utilized and coordinated with the street project. The utility projects associated with this project are in the CIP: 1052-19-CIP and 1053-19-CIP.
Category:	Visionary	Department Head:	Tim Lodge	
Fund Group:	Tax Increment Financing	Staff Priority:	Essential (Should Do)	
Fund Detail:	TIF 97	Council Priority:		

East Front Reconstru East Front Reconstructio (Park to Grand - Cost

Funding Sources:

		Previous	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	2025/2026	Total
FSG	Federal / State Grant	\$0	\$0	\$0	\$0	\$400,000	\$0	\$0	\$400,000
SAF	Special Assessment Fund	\$0	\$0	\$0	\$0	\$257,500	\$0	\$0	\$257,500
TIF97	TIF 97	\$0	\$0	\$0	\$0	\$257,500	\$0	\$0	\$257,500

Project Total: \$915,000

COST DETAIL:

Study:	\$0		
Land Acquisition / ROW:	\$0		
Engineering / Design:	\$0		
Construction:	\$915,000	Cost Total:	\$915,000
Annual Maint. Cost:		Project Difference:	\$0
Maint. Year Start:			

Service Impact:

Increased service likely due to addition of street trees and site amenities.

Project Justification:

TIF 97

Location Description:

East Front Street 400-500 blocks.



Six Year Capital Improvement Program

STREETS-20-CIP

Streets

1087-20-CIP

Front Street Streetscapes

Project Information

Submitted By:	Jean Derenzy	Department:	Downtown Development	Upgrade streetscapes in the 100 and 200 blocks of East Front
Category:	Maintenance	Department Head:	Jean Derenzy	
Fund Group:	Tax Increment Financing	Staff Priority:	Essential (Should Do)	
Fund Detail:	TIF 97	Council Priority:		

Front Street Streetsc: Front Street Streetscapes Cost

Funding Sources:

		Previous	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	2025/2026	Total
TIF97	TIF 97	\$0	\$250,000	\$500,000	\$250,000	\$0	\$0	\$0	\$1,000,000
Project Total:									\$1,000,000

COST DETAIL:

Study:	\$0	
Land Acquisition / ROW:	\$0	
Engineering / Design:	\$0	
Construction:	\$1,000,000	Cost Total: \$1,000,000
Annual Maint. Cost:		Project Difference: \$0
Maint. Year Start:	1905	

Service Impact:

Minor sidewalk and street closures

Project Justification:

Original streetscapes at end of life and need to be upgraded

Location Description:

100/200 blocks of East Front Street



Six Year Capital Improvement Program

STREETS-20-CIP

Streets

1115-20-CIP Garfield Ave Reconstruction (Hannah to Front St)

Project Information

Submitted By:	Tim Lodge	Department:	Engineering	Garfield Ave. Reconstruction project to utilize small urban funds.
Category:	Capital	Department Head:	Tim Lodge	Proposed work includes mill and pave with 4 to 3 lane conversion with
Fund Group:	General	Staff Priority:	Essential (Should Do)	bike lanes south of Eighth St. (existing 2 lane section with bike lanes
Fund Detail:	Streets	Council Priority:		north of Eighth St). Narrow width of roadway near intersection of Garfield Ave. and Front St; new sidewalks.

TBD Street Reconstr TBD Street Reconstruction-C

Funding Sources:

		Previous	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	2025/2026	Total
FSG	Federal / State Grant	\$0	\$0	\$330,000	\$0	\$0	\$0	\$0	\$330,000
GEN	General Fund	\$0	\$0	\$82,500	\$0	\$0	\$0	\$0	\$82,500
Project Total:									\$412,500

COST DETAIL:

Study:	\$0	
Land Acquisition / ROW:	\$0	
Engineering / Design:	\$0	
Construction:	\$412,500	Cost Total: \$412,500
Annual Maint. Cost:		Project Difference: \$0
Maint. Year Start:		

Service Impact:

None.

Project Justification:

Street Reconstruction

Location Description:

Garfield Ave. between Hannah and Front Street (.6 miles)



Six Year Capital Improvement Program

STREETS-20-CIP

Streets

616-20-CIP

Grand Traverse Commons Infrastructure

Project Information

Submitted By: Tim Lodge
Category: Visionary
Fund Group: General
Fund Detail: Streets

Department: Engineering
Department Head: Tim Lodge
Staff Priority: Imperitive (Must Do)
Council Priority:

Please refer to the Brownfield Plan for detailed project plans at grandtraverse.org/444/Grand-Traverse-Commons
This project is comprised of street and utility infrastructure improvements and site preparation at the Grand Traverse Commons Development within the City limits. Reimbursement anticipated from Brownfield TIF. All infrastructure improvements proposed will be publicly owned, maintained and operated. This project will promote the reuse of vacant and environmentally distressed property; rehabilitation and reuse of historically significant buildings, and preservation of rare architectural elements; remediation of contamination and abatement of significant quantities of hazardous substances, thus enhancing public health; creation of a walkable neighborhood; substantial enhancement of the tax base for the City; creation of permanent jobs and opportunities for new business.

Grand Traverse Com Grand Traverse Commons Infrastructure - Cost

Funding Sources:

		Previous	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	2025/2026	Total
BR	Brownfield	\$0	\$223,095	\$690,000	\$310,000	\$0	\$0	\$0	\$1,223,095
Project Total:									\$1,223,095

COST DETAIL:

Study:	\$0	
Land Acquisition / ROW:	\$0	
Engineering / Design:	\$0	
Construction:	\$1,223,095	Cost Total: \$1,223,095
Annual Maint. Cost:		Project Difference: \$0
Maint. Year Start:		

Service Impact:

Converting private utilities to public utilities.

Project Justification:

Replacing aged infrastructure as part of Brownfield Place.

Location Description:

Grand Traverse Commons Development.



Six Year Capital Improvement Program

STREETS-20-CIP

Streets

713-20-CIP Grandview Parkway Pedestrian Crossing Enhancement

Project Information

Submitted By:	Rob Baciagalupi	Department:	Downtown Development	Pedestrian enhancements to cross Grandview Parkway between Hall Street to Cass Street. Possible gateway treatment at Union Street. Project to be coordinated with MDOT enhancements in 2022.
Category:	Visionary	Department Head:	Jean Derenzy	
Fund Group:	Tax Increment Financing	Staff Priority:		
Fund Detail:	TIF 97	Council Priority:		

Grandview Parkway | Grandview Parkway Pedestrian Crossing Enha - Cost

Funding Sources:

		Previous	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	2025/2026	Total
TIF97	TIF 97	\$0	\$0	\$0	\$0	\$500,000	\$0	\$0	\$500,000
Project Total:									\$500,000

COST DETAIL:

Study:	\$0	
Land Acquisition / ROW:	\$0	
Engineering / Design:	\$0	
Construction:	\$500,000	Cost Total: \$500,000
Annual Maint. Cost:		Project Difference: \$0
Maint. Year Start:		

Service Impact:

None foreseen

Project Justification:

Crossing enhancement/Connectivity

Location Description:

Grandview Parkway



Six Year Capital Improvement Program

STREETS-20-CIP

Streets

1130-20-CIP

Highway Safety Improvement Program (HSIP)

Project Information

Submitted By:	Tim Lodge	Department:	Engineering	Replacement of the traffic signal at the Parsons and Airport Access Intersection with a roundabout for MDOT's 2020 fiscal year. The project is valued at \$600,000 for which the City is responsible for 10% or \$60,000 with the program paying the other 90%. The City will be responsible for other costs such as engineering, surveying and construction testing. Pedestrian improvements will accommodate pedestrians wish to cross at the intersection and provide easier access to the existing shared path that runs parallel to Parsons (south side) to help reduce the number of pedestrians and cyclists in the roadway.
Category:	Capital	Department Head:	Tim Lodge	
Fund Group:	General	Staff Priority:	Essential (Should Do)	
Fund Detail:	Available Capital Projects Fund	Council Priority:		

Highway Safety Impr Highway Safety Improvement Program (HSIP)

Funding Sources:

		Previous	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	2025/2026	Total
FSG	Federal / State Grant	\$0	\$540,000	\$0	\$0	\$0	\$0	\$0	\$540,000
GEN	General Fund	\$20,000	\$60,000	\$0	\$0	\$0	\$0	\$0	\$80,000
Project Total:									\$620,000

COST DETAIL:

Study:	\$0		
Land Acquisition / ROW:	\$0		
Engineering / Design:	\$20,000		
Construction:	\$600,000	Cost Total:	\$620,000
Annual Maint. Cost:		Project Difference:	\$0
Maint. Year Start:			

Service Impact:

We would optimize the footprint to reduce maintenance costs. The roundabout will eliminate replacement costs of the traffic signal, as well as cost of operating the traffic signal.

Project Justification:

Converting intersection to a roundabout to reduce speed, therefore reducing the number and severity of accidents.

Location Description:

Intersection of Parsons Rd and Airport Access Rd.



Six Year Capital Improvement Program

STREETS-20-CIP

Streets

1088-20-CIP

State Street Streetscapes

Project Information

Submitted By:	Jean Derenzy	Department:	Downtown Development	Upgrade streetscapes in the 100 and 200 blocks of East State Street
Category:	Maintenance	Department Head:	Jean Derenzy	
Fund Group:	Tax Increment Financing	Staff Priority:	Essential (Should Do)	
Fund Detail:	TIF 97	Council Priority:		

State Street Streetsc: State Street Streetscapes Cost

Funding Sources:

		Previous	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	2025/2026	Total
TIF97	TIF 97	\$0	\$250,000	\$500,000	\$250,000	\$0	\$0	\$0	\$1,000,000
Project Total:									\$1,000,000

COST DETAIL:

Study:	\$0	
Land Acquisition / ROW:	\$0	
Engineering / Design:	\$0	
Construction:	\$1,000,000	Cost Total: \$1,000,000
Annual Maint. Cost:		Project Difference: \$0
Maint. Year Start:	1905	

Service Impact:

Temporary sidewalk and street closures

Project Justification:

Current streetscapes are near end of life and need to be upgraded

Location Description:

100/200 East State Street



Six Year Capital Improvement Program

STREETS-20-CIP

Streets

889-20-CIP Traffic Calming

Project Information

Submitted By:	Tim Lodge	Department:	Engineering	Funding for Traffic Calming infrastructure improvements per City Commission.
Category:	Visionary	Department Head:	Tim Lodge	
Fund Group:	General	Staff Priority:	Important (Could Do)	
Fund Detail:	Streets	Council Priority:		

Traffic Calming - Cos Traffic Calming - Cost

Funding Sources:

		Previous	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	2025/2026	Total
GEN	General Fund	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$0	\$0	\$500,000
Project Total:									\$500,000

COST DETAIL:

Study:	\$0
Land Acquisition / ROW:	\$0
Engineering / Design:	\$0
Construction:	\$0
Annual Maint. Cost:	
Maint. Year Start:	

Cost Total: \$0

Project Difference: \$500,000

Service Impact:

Additional infrastructure requiring operation, maintenance, and replacement.

Project Justification:

Improving safety and traffic concerns.

Location Description:

City-wide.



Six Year Capital Improvement Program

STREETS-20-CIP

Streets

1070-20-CIP

Traffic Signal Mast Arm

Project Information

Submitted By: Jean Derenzy

Department: Downtown Development

For installing mast arm signal posts in conjunction with MDOT Traffic Signal Upgrade project at the Grandview Parkway/E. Front intersection and Grandview Parkway/Union Street intersection.

Category: Capital

Department Head: Tim Lodge

Fund Group: Tax Increment Financing

Staff Priority: Essential (Should Do)

Fund Detail: TIF 97

Council Priority:

Traffic Signal Mast Ar Traffic Signal Mast Arm

Funding Sources:

		Previous	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	2025/2026	Total
TIF97	TIF 97	\$100,000	\$0	\$0	\$0	\$0	\$0	\$0	\$100,000
Project Total:									\$100,000

COST DETAIL:

Study: \$0

Land Acquisition / ROW: \$0

Engineering / Design: \$0

Construction: \$100,000

Annual Maint. Cost:

Maint. Year Start:

Cost Total: \$100,000

Project Difference: \$0

Service Impact:

None.

Project Justification:

Signal Upgrade

Location Description:

Grandview pkwy/E. Front and Grandview pkwy/Union St



Six Year Capital Improvement Program

STREETS-20-CIP

Streets

15-20-CIP

Traffic Signal Power Backup

Project Information

Submitted By: Tim Lodge

Department: Engineering

Provide funding to install battery backup power systems in all signal equipment by 2022.

Category: Visionary

Department Head: Tim Lodge

Fund Group: General

Staff Priority: Essential (Should Do)

Fund Detail: Streets

Council Priority:

Traffic Signal Power I Traffic Signal Power Backup - Cost

Funding Sources:

		Previous	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	2025/2026	Total
GEN	General Fund	\$22,500	\$22,500	\$22,500	\$22,500	\$0	\$0	\$0	\$90,000
Project Total:									\$90,000

COST DETAIL:

Study: \$0

Land Acquisition / ROW: \$0

Engineering / Design: \$0

Construction: \$0

Annual Maint. Cost:

Maint. Year Start:

Cost Total: \$0

Project Difference: \$90,000

Service Impact:

Reducing the need for response in brief power outages.

Project Justification:

Replacing aged traffic signal equipment and providing back up emergency power.

Location Description:

Various locations city-wide.



Six Year Capital Improvement Program

STREETS-20-CIP

Streets

16-20-CIP

Traffic Signal Upgrades

Project Information

Submitted By: Tim Lodge
Category: Visionary
Fund Group: General
Fund Detail: Streets

Department: Engineering
Department Head: Tim Lodge
Staff Priority: Essential (Should Do)
Council Priority:

This is an annual program that will fund traffic signal consulting and design for upgrade to the Garfield/Hannah, Parsons traffic signal and the Parsons/Hastings intersection signal.

Traffic Signal Upgrad Traffic Signal Upgrades - Cost

Funding Sources:

		Previous	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	2025/2026	Total
GEN	General Fund	\$120,000	\$60,000	\$60,000	\$60,000	\$60,000	\$0	\$0	\$360,000
Project Total:									\$360,000

COST DETAIL:

Study: \$0
Land Acquisition / ROW: \$0
Engineering / Design: \$0
Construction: \$0
Annual Maint. Cost:
Maint. Year Start:

Cost Total: \$0

Project Difference: \$360,000

Service Impact:

Reduce operational and maintenance costs.

Project Justification:

Replacing aged traffic signal equipment.

Location Description:

Various locations city-wide.



Six Year Capital Improvement Program

STREETS-20-CIP

Streets

1089-20-CIP

Tree Replacement

Project Information

Submitted By: Jean Derenzy

Department:

Downtown Development

Replace Trees throughout the DDA District

Category: Maintenance

Department Head:

Jean Derenzy

Fund Group: Tax Increment Financing

Staff Priority:

Essential (Should Do)

Fund Detail: TIF 97

Council Priority:

Tree Replacement Cx Tree Replacement Cost

Funding Sources:

		Previous	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	2025/2026	Total
TIF97	TIF 97	\$0	\$50,000	\$50,000	\$0	\$0	\$0	\$0	\$100,000
Project Total:									\$100,000

COST DETAIL:

Study: \$0

Land Acquisition / ROW: \$0

Engineering / Design: \$0

Construction: \$100,000

Annual Maint. Cost:

Maint. Year Start: 1905

Cost Total: \$100,000

Project Difference: \$0

Service Impact:

Temporary Sidewalk Closures

Project Justification:

Trees are overgrown/dying and need to be replaced.

Location Description:

DDA District

Six Year Capital Improvement Plan

All Projects Submitted for 2020-2021

Budget Year 2020-2021 by Program Name

Bold - Indicates projects occurring in the first FY of the plan . + - Indicates projects with multiple funding										<u>Overall Programming Cost</u>		
Project ID	Cat	Previous	Fiscal Year 2020-2021	Fiscal Year 2021-2022	Fiscal Year 2022-2023	Fiscal Year 2023-2024	Fiscal Year 2024-2025	Fiscal Year 2025-2026		Project Cost	City Funds	Non-City Funds
Walkways												
+ 570-20-CIP	Boardman Lake Trail-West (14th to S. Airport)	V	\$652,538	\$6,378,599	\$81,132	\$71,503	\$61,551	\$51,200	\$193,729	\$7,490,252	\$0	\$7,490,252
316-20-CIP	Boardman River Walk south of 8th Street Bridge	V	\$0	\$0	\$0	\$0	\$0	\$690,700	\$0	\$690,700	\$690,700	\$0
946-20-CIP	Expand Sidewalk System/Infill Gaps	V	\$431,347	\$373,215	\$375,351	\$377,165	\$378,659	\$374,911	\$375,923	\$4,500,000	\$2,686,571	\$0
+ 1023-20-CIP	Expand Sidewalk System/Infill Gaps (SR2S)	C	\$1,250,000	\$1,150,000	\$0	\$0	\$0	\$0	\$0	\$2,400,000	\$400,000	\$2,000,000
1191-20-CIP	M-72 Sidewalk New Construction	V	\$0	\$0	\$0	\$206,553	\$0	\$0	\$0	\$206,553	\$206,553	\$0
1025-20-CIP	Rivers Edge Riverwalk Decking Replacement	M	\$0	\$106,869	\$0	\$0	\$0	\$0	\$0	\$106,869	\$106,869	\$0
1193-20-CIP	Sidewalk construction on the north side of Hill St	V	\$0	\$0	\$0	\$896,000	\$0	\$0	\$0	\$896,000	\$896,000	\$0
1069-20-CIP	Wellington Plaza Erosion Stabilization Project	M	\$0	\$50,000	\$0	\$0	\$0	\$0	\$0	\$50,000	\$50,000	\$0
Total Walkways				\$8,058,683	\$456,483	\$1,551,221	\$440,210	\$1,116,811	\$569,652	\$16,340,374	\$5,036,693	\$9,490,252



Six Year Capital Improvement Program

WALK-20-CIP

Walkways

570-20-CIP Boardman Lake Trail-West (14th to S. Airport)

Project Information

Submitted By:	Russ Soyring	Department:	Planning and Zoning
Category:	Visionary	Department Head:	Russ Soyring
Fund Group:	General	Staff Priority:	Important (Could Do)
Fund Detail:	Walkways/Bike Paths	Council Priority:	

The City of Traverse City is working with TART Trails, Garfield Township and Grand Traverse County to complete the final segment of the Boardman Lake Trail. The proposed two and a half mile segment along the west side of the lake is needed to complete the five mile trail encircling Boardman Lake which was first conceptualized more than 25 years ago with a trail master plan funded by the Coastal Zone Management Program.

The expenses below demonstrate the revenues that will pay back the bond. Bond payments will be made over a 10-year period with the final bond payment scheduled for 6/30/2029. Multiple funding sources are being used to pay for the project: TAP, MDNRTF, L&WCF, TART, County, Garfield Township, and Brownfield.

The "Study" cost detail represents the interest that will be paid on the bond.

**The Brownfield allocation includes anticipated additional revenues in addition to the amount currently authorized.

Boardman Lake Trail- Boardman Lake Trail-West (14th to S. Airpo - Cost

Funding Sources:

		Previous	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	2025/2026	Total
BR	Brownfield	\$142,988	\$4,654,237	\$81,132	\$71,503	\$61,551	\$51,200	\$193,729	\$5,256,340
FSG	Federal / State Grant	\$0	\$1,724,362	\$0	\$0	\$0	\$0	\$0	\$1,724,362
P	Private	\$509,550	\$0	\$0	\$0	\$0	\$0	\$0	\$509,550
Project Total:									\$7,490,252

COST DETAIL:

Study:	\$622,931
Land Acquisition / ROW:	\$0
Engineering / Design:	\$594,441
Construction:	\$6,272,880
Annual Maint. Cost:	\$12,000
Maint. Year Start:	1905

Cost Total:	\$7,490,252
Project Difference:	\$0

Service Impact:

Operations and Maintenance Agreement is necessary among project partners

Project Justification:

Parks and Recreation Element of Master Plan



City of
TRAVERSE CITY

Six Year Capital Improvement Program

WALK-20-CIP

Walkways

Location Description:

West side of Boardman Lake



Six Year Capital Improvement Program

WALK-20-CIP

Walkways

316-20-CIP

Boardman River Walk south of 8th Street Bridge

Project Information

Submitted By:	Rob Baciagalupi	Department:	Downtown Development	River Boardwalk from the 8th Street bridge to the Boardman Lake Trail. The project includes a 840 linear feet of elevated boardwalk, low-level lighting, fishing and resting platforms and landscaping.
Category:	Visionary	Department Head:	Russ Soyring	
Fund Group:	General	Staff Priority:	Important (Could Do)	
Fund Detail:	Walkways/Bike Paths	Council Priority:		

Boardman River Wall Boardman River Walk south of 8th Street Br - Cost

Funding Sources:

		Previous	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	2025/2026	Total
TIFOT	TIF Old Town	\$0	\$0	\$0	\$0	\$0	\$690,700	\$0	\$690,700
Project Total:									\$690,700

COST DETAIL:

Study:	\$0	
Land Acquisition / ROW:	\$0	
Engineering / Design:	\$81,800	
Construction:	\$608,900	Cost Total: \$690,700
Annual Maint. Cost:	\$2,000	Project Difference: \$0
Maint. Year Start:		

Service Impact:

Increased service and maintenance.

Project Justification:

Boardman River Enhancement

Location Description:

Boardman River bank between 8th Street bridge and Boardman Lake Trail



Six Year Capital Improvement Program

WALK-20-CIP

Walkways

946-20-CIP

Expand Sidewalk System/Infill Gaps

Project Information

Submitted By:	Tim Lodge	Department:	Engineering
Category:	Visionary	Department Head:	Tim Lodge
Fund Group:	General	Staff Priority:	Essential (Should Do)
Fund Detail:	Walkways/Bike Paths	Council Priority:	Imperitive (Must Do)

Enhance public service and access through improved walkability throughout the City. Ongoing expansion of City's sidewalk infrastructures. Infill existing gaps in sidewalk system according to map on file in Engineering. Maintenance of existing sidewalks. Targeted areas are major street corridors and locations in proximity to public facilities. Current estimates call for \$3.4 million for infill/gaps and \$600,000 in sidewalk repair. \$500,000 is allotted for design/engineering and bond costs.

This project will be financed via bond over a 15-year bond payment at approximately \$366,500 a year. The current CIP report only demonstrates the bond payments through fiscal year 25/26. Bond payments will be made until fiscal year 33/34, thus offsetting the project difference.

Expand Sidewalk System/Infill Gaps (+SID + - Cost

Funding Sources:

		Previous	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	2025/2026	Total
GEN	General Fund	\$431,347	\$373,215	\$375,351	\$377,165	\$378,659	\$374,911	\$375,923	\$2,686,571
								Project Total:	\$2,686,571

COST DETAIL:

Study:	\$0		
Land Acquisition / ROW:	\$0		
Engineering / Design:	\$500,000		
Construction:	\$4,000,000		
Annual Maint. Cost:			
Maint. Year Start:			
		Cost Total:	\$4,500,000
		Project Difference:	\$-1,813,429

Service Impact:

Additional infrastructure requiring operation, maintenance, and replacement. Enhance public service and access through improved walkability through the City.

Project Justification:

Enhance public service and access through improved walkability through the City.

Location Description:

City-wide with an initial focus on Traverse Heights Neighborhood.

**Six Year Capital Improvement Program****WALK-20-CIP****Walkways****1023-20-CIP****Expand Sidewalk System/Infill Gaps (SR2S)****Project Information**

Submitted By:	Missy Luick	Department:	Engineering
Category:	Capital	Department Head:	Tim Lodge
Fund Group:	General	Staff Priority:	Essential (Should Do)
Fund Detail:	Walkways/Bike Paths	Council Priority:	Imperitive (Must Do)

In July 2018, the City of Traverse City received notification from the Michigan Department of Transportation that our multi-school \$2M Safe Routes to School (SRTS) infrastructure grant received conditional commitment for 4.9 miles of linear trail/sidewalk expansion, bike lanes, traffic calming, crosswalk improvements and signage upgrades. The project will enhance public service and access through improved infrastructure near schools. The project will be designed by the Engineering Department (In-kind contribution). It is anticipated that professional services will need to be allocated for project implementation. Additionally, there are several non-participating improvements and in-eligible costs that the city will need to provide match for.

Expand Sidewalk System/Infill Gaps (SR2S) - C

Funding Sources:

		Previous	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	2025/2026	Total
FSG	Federal / State Grant	\$1,000,000	\$1,000,000	\$0	\$0	\$0	\$0	\$0	\$2,000,000
GEN	General Fund	\$50,000	\$50,000	\$0	\$0	\$0	\$0	\$0	\$100,000
IN	Inkind	\$200,000	\$100,000	\$0	\$0	\$0	\$0	\$0	\$300,000
Project Total:									\$2,400,000

COST DETAIL:

Study:	\$0	
Land Acquisition / ROW:	\$0	
Engineering / Design:	\$400,000	
Construction:	\$2,000,000	
Annual Maint. Cost:		
Maint. Year Start:		
Cost Total:		\$2,400,000
Project Difference:		\$0

Service Impact:

Additional infrastructure will increase operations and maintenance.

Project Justification:

Transportation Element and Parks and Recreation Element call for non-motorized connections.

Location Description:

City-wide



Six Year Capital Improvement Program

WALK-20-CIP

Walkways

1191-20-CIP

M-72 Sidewalk New Construction

Project Information

Submitted By:	Russ Soyring	Department:	Planning and Zoning	New sidewalk construction on the north side of M-72 from Old Morgan Trail to the corner of M-72 (East Traverse Highway) and Southwest Bayshore Drive/Grandview Parkway.
Category:	Visionary	Department Head:	Russ Soyring	
Fund Group:	Other	Staff Priority:	Essential (Should Do)	
Fund Detail:	Available Capital Projects Fund	Council Priority:		

M-72 Sidewalk (New M-72 Sidewalk (New construction)

Funding Sources:

		Previous	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	2025/2026	Total
GEN	General Fund	\$0	\$0	\$0	\$206,553	\$0	\$0	\$0	\$206,553
Project Total:									\$206,553

COST DETAIL:

Study:	\$0	
Land Acquisition / ROW:	\$0	
Engineering / Design:	\$12,910	
Construction:	\$193,644	
Annual Maint. Cost:		
Maint. Year Start:		
Cost Total:		\$206,553
Project Difference:		\$0

Service Impact:

TBD

Project Justification:

TBD

Location Description:

Old Morgan Trail extending to Southwest Bayshore Drive.



Six Year Capital Improvement Program

WALK-20-CIP

Walkways

1025-20-CIP

Rivers Edge Riverwalk Decking Replacement

Project Information

Submitted By:	Rob Baciagalupi	Department:	Downtown Development	Replacement of decking on River's Edge Riverwalk
Category:	Maintenance	Department Head:	Jean Derenzy	
Fund Group:	Tax Increment Financing	Staff Priority:		
Fund Detail:	Walkways/Bike Paths	Council Priority:		

Rivers Edge Riverwa Rivers Edge Riverwalk Decking Replacement - Cost

Funding Sources:

		Previous	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	2025/2026	Total
TIFOT	TIF Old Town	\$0	\$106,869	\$0	\$0	\$0	\$0	\$0	\$106,869
Project Total:									\$106,869

COST DETAIL:

Study:	\$0	
Land Acquisition / ROW:	\$0	
Engineering / Design:	\$0	
Construction:	\$106,869	Cost Total: \$106,869
Annual Maint. Cost:		Project Difference: \$0
Maint. Year Start:		

Service Impact:

None foreseen

Project Justification:

Replacement of old decking

Location Description:

River's Edge



Six Year Capital Improvement Program

WALK-20-CIP

Walkways

1193-20-CIP

Sidewalk construction on the north side of Hill St

Project Information

Submitted By: Russ Soyring
Category: Visionary
Fund Group: General
Fund Detail: General Government

Department: Planning and Zoning
Department Head: Russ Soyring
Staff Priority: Essential (Should Do)
Council Priority:

Construction on the north side of Hill Street, west of Elmwood to Willow Hill Elementary School. This sidewalk section was originally part of the Safe Routes to School plan; however, due to grading and ADA complexities the SRTS grant could not fund the necessary construction for the project. Consideration of road narrowing and a traffic circle at Monroe and Hill Street will also be implemented in this project. This project will connect the pathways indicated by the SRTS heat index maps to be vital to promote a safer, more walkable pathway to and from school.

Funding Sources:

		Previous	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	2025/2026	Total
GEN	General Fund	\$0	\$0	\$0	\$896,000	\$0	\$0	\$0	\$896,000
Project Total:									\$896,000

COST DETAIL:

Study:	\$0		
Land Acquisition / ROW:	\$0		
Engineering / Design:	\$96,000		
Construction:	\$800,000	Cost Total:	\$896,000
Annual Maint. Cost:		Project Difference:	\$0
Maint. Year Start:			

Service Impact:

2022/23 CIP year, TBD.

Project Justification:

This section of sidewalk was charted to be of substantial impact by Safe Routes to School for a safer, and more walkable pathway for local school children to travel to and from school.

Location Description:

North section of Hill Street, west of Elmwood to Willow Hill Elementary School.



Six Year Capital Improvement Program

WALK-20-CIP

Walkways

1069-20-CIP

Wellington Plaza Erosion Stabilization Project

Project Information

Submitted By:	Rob Baciagalupi	Department:	Downtown Development	Corrective measures to stabilize erosion damage beneath the walkway platform at Wellington Plaza on the Boardman River.
Category:	Maintenance	Department Head:	Jean Derenzy	
Fund Group:	Tax Increment Financing	Staff Priority:	Important (Could Do)	
Fund Detail:	TIF 97	Council Priority:		

Wellington Plaza Ero: Wellington Plaza Erosion

Funding Sources:

		Previous	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	2025/2026	Total
TIF97	TIF 97	\$0	\$50,000	\$0	\$0	\$0	\$0	\$0	\$50,000
Project Total:									\$50,000

COST DETAIL:

Study:	\$0	
Land Acquisition / ROW:	\$0	
Engineering / Design:	\$0	
Construction:	\$50,000	Cost Total: \$50,000
Annual Maint. Cost:	\$500	Project Difference: \$0
Maint. Year Start:	1905	

Service Impact:

None

Project Justification:

Maintenance

Location Description:

501 E Front Street

Six Year Capital Improvement Plan

All Projects Submitted for 2020-2021

Budget Year 2020-2021 by Program Name

Bold - Indicates projects occurring in the first FY of the plan . + - Indicates projects with multiple funding										Overall Programming Cost		
Project ID	Cat	Previous	Fiscal Year 2020-2021	Fiscal Year 2021-2022	Fiscal Year 2022-2023	Fiscal Year 2023-2024	Fiscal Year 2024-2025	Fiscal Year 2025-2026		Project Cost	City Funds	Non-City Funds
Wastewater												
+ 912-20-CIP	Condition Assessment of Digesters 1 and 2	M	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$80,000	\$0	\$0
1052-20-CIP	16" San. Forcemain East Front L.S. To Wellington	M	\$0	\$0	\$0	\$0	\$100,000	\$0	\$0	\$100,000	\$100,000	\$0
+ 1044-20-CIP	2nd Membrane Replacement	M	\$0	\$0	\$0	\$0	\$0	\$0	\$1,000,000	\$6,000,000	\$500,000	\$500,000
+ 1171-20-CIP	Aeration Basin /Aerating Equipment Upgrade	C	\$0	\$0	\$0	\$0	\$2,000,000	\$0	\$0	\$2,000,000	\$2,000,000	\$0
366-20-CIP	Annual Sewer Rehab/Replace	V	\$450,000	\$450,000	\$450,000	\$450,000	\$450,000	\$450,000	\$450,000	\$3,150,000	\$3,150,000	\$0
13-20-CIP	Annual Storm Water Mngt Program	M	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000	\$350,000	\$350,000	\$0
+ 1175-20-CIP	Digester 4 and 5 Condition Assessment	V	\$0	\$0	\$190,000	\$0	\$0	\$0	\$0	\$190,000	\$190,000	\$0
+ 1036-20-CIP	Digester 5 Cleaning and Reconditioning Equipment	M	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$590,000	\$0	\$0
+ 1037-20-CIP	Digester Gas Metering	V	\$0	\$0	\$70,000	\$0	\$0	\$0	\$0	\$70,000	\$35,000	\$35,000
+ 971-20-CIP	Enclose Membrane Trains	C	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$500,000	\$0	\$0
967-20-CIP	Engineering Evaluation of Clinch -Coast Guard LS	V	\$0	\$0	\$0	\$30,000	\$0	\$0	\$0	\$30,000	\$30,000	\$0
1031-20-CIP	Engineering Evaluation-Woodmere&Riverine Lift St.	V	\$0	\$0	\$30,000	\$0	\$0	\$0	\$0	\$30,000	\$30,000	\$0
+ 1019-20-CIP	Engineering Study Pertaining to Facility Plan	V	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$30,000	\$0	\$0
1002-20-CIP	Front St LS- Engineering Evaluation/Capacity Study	V	\$0	\$50,000	\$0	\$0	\$0	\$0	\$0	\$50,000	\$50,000	\$0
1001-20-CIP	Front ST. LS- Upgrade	C	\$0	\$0	\$0	\$0	\$0	\$0	\$550,000	\$550,000	\$550,000	\$0
+ 900-20-CIP	Membrane Distribution & RAS Channel Aeration Line	M	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$95,400	\$0	\$0
+ 1172-20-CIP	Membrane Tank Covers or Enclosure Eng. Eval	V	\$0	\$0	\$0	\$0	\$0	\$0	\$30,000	\$30,000	\$30,000	\$0
1032-20-CIP	New Portable Generator for Lift Stations	C	\$0	\$0	\$0	\$0	\$150,000	\$0	\$0	\$150,000	\$150,000	\$0
+ 890-20-CIP	Plant-Membrane Replacement	M	\$860,000	\$860,000	\$0	\$0	\$0	\$0	\$0	\$1,720,000	\$860,000	\$860,000
+ 902-20-CIP	Primary Header Replacement	C	\$0	\$1,500,000	\$0	\$0	\$0	\$0	\$0	\$1,500,000	\$750,000	\$750,000
+ 1176-20-CIP	RTWWTP-Digester 4 Reconditioning	C	\$0	\$0	\$0	\$0	\$1,100,000	\$0	\$0	\$1,100,000	\$1,100,000	\$0
+ 1075-20-CIP	RWWTP-ADMINISTRATION BLDG HVAC UPGRADE	M	\$0	\$45,000	\$0	\$0	\$0	\$0	\$0	\$45,000	\$22,500	\$22,500
+ 1079-20-CIP	RWWTP-Aeration Basin/Aerating Equipment Evaluation	V	\$0	\$0	\$30,000	\$0	\$0	\$0	\$0	\$30,000	\$15,000	\$15,000

Six Year Capital Improvement Plan

All Projects Submitted for 2020-2021

Budget Year 2020-2021 by Program Name

Bold - Indicates projects occurring in the first FY of the plan . + - Indicates projects with multiple funding										Overall Programming Cost		
Project ID	Cat	Previous	Fiscal Year 2020-2021	Fiscal Year 2021-2022	Fiscal Year 2022-2023	Fiscal Year 2023-2024	Fiscal Year 2024-2025	Fiscal Year 2025-2026		Project Cost	City Funds	Non-City Funds
Wastewater												
+ 1174-20-CIP	RWWTP-Annual Equipment Rehab/Replace (> or = \$9K)	M	\$0	\$200,000	\$200,000	\$200,000	\$200,000	\$200,000	\$200,000	\$0	\$1,200,000	\$0
+ 1077-20-CIP	RWWTP-BOILER CONTROLS UPGRADE	M	\$0	\$56,000	\$0	\$0	\$0	\$0	\$0	\$56,000	\$28,000	\$28,000
+ 1076-20-CIP	RWWTP-CRANE AND HOIST PAINTING	M	\$0	\$52,500	\$0	\$0	\$0	\$0	\$0	\$52,500	\$26,250	\$26,250
+ 1078-20-CIP	RWWTP-UPGRADE DIGESTED SOLIDS THICKENING EQUIPMENT	C	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,500,000	\$0	\$0
+ 1173-20-CIP	RWWTP-Yard Piping Engineering Evaluation	V	\$0	\$0	\$0	\$0	\$0	\$0	\$60,000	\$60,000	\$60,000	\$0
+ 795-20-CIP	SCADA Upgrade	M	\$0	\$0	\$155,000	\$0	\$0	\$0	\$0	\$155,000	\$77,500	\$77,500
+ 1073-20-CIP	Scour Air Blower Overhaul-5 blowers at TCRWWTP	M	\$45,000	\$47,250	\$47,250	\$48,250	\$48,250	\$0	\$0	\$236,000	\$118,000	\$118,000
+ 1167-20-CIP	Screw Pump 2 and 3 Engineering Study	V	\$0	\$20,000	\$0	\$0	\$0	\$0	\$0	\$20,000	\$20,000	\$0
+ 893-20-CIP	Screw Pump 2 and 3 Replacement	C	\$0	\$0	\$1,160,000	\$0	\$0	\$0	\$0	\$1,160,000	\$580,000	\$580,000
+ 970-20-CIP	TCRWWTP- PLC Upgrade	M	\$0	\$0	\$300,000	\$0	\$0	\$0	\$0	\$300,000	\$150,000	\$150,000
+ 1168-20-CIP	TRWWTP-Plant Electrical Engineering Evaluation	V	\$0	\$0	\$50,000	\$0	\$0	\$0	\$0	\$50,000	\$50,000	\$0
+ 1169-20-CIP	TRWWTP-Structural Condition Assessment	V	\$0	\$0	\$50,000	\$0	\$0	\$0	\$0	\$50,000	\$50,000	\$0
+ 1033-20-CIP	UV System and Related Structures Upgrade	C	\$0	\$0	\$0	\$0	\$0	\$3,000,000	\$0	\$3,000,000	\$1,500,000	\$1,500,000
+ 1170-20-CIP	UV System Upgrade Engineering	V	\$0	\$0	\$50,000	\$0	\$0	\$0	\$0	\$50,000	\$50,000	\$0
+ 764-20-CIP	Window Replacement 503 Hannah Ave.	V	\$0	\$60,000	\$0	\$0	\$0	\$0	\$0	\$60,000	\$60,000	\$0
1058-20-CIP	WW Gravity Main Rehab\Repair and PACP Inspections	M	\$0	\$0	\$0	\$385,000	\$385,000	\$385,000	\$385,000	\$1,540,000	\$1,540,000	\$0
1057-20-CIP	WW Manholes Rehab\Repair and MACP Inspections	M	\$0	\$0	\$0	\$50,000	\$50,000	\$50,000	\$50,000	\$200,000	\$200,000	\$0
+ 904-20-CIP	WW-Primary Clarification Upgrade	C	\$0	\$0	\$0	\$3,000,000	\$0	\$0	\$0	\$3,000,000	\$1,500,000	\$1,500,000
Total Wastewater			\$3,390,750	\$2,832,250	\$4,213,250	\$4,533,250	\$4,135,000	\$2,775,000		\$30,773,900	\$17,569,250	\$6,609,250



Six Year Capital Improvement Program

WW-20-CIP

Wastewater

912-20-CIP Condition Assessment of Digesters 1 and 2

Project Information

Submitted By:	Elizabeth Hart	Department:	Department of Municipal Utilities	Future Project for FY2030-31, so negative "Project Difference"; Condition Assessment and Engineering Study of Digesters 1 and 2. The project will identify the best use of the vessels and thus the necessary related upgrades and reconditioning.
Category:	Maintenance	Department Head:	Art Krueger	
Fund Group:	Waste Water	Staff Priority:	Important (Could Do)	
Fund Detail:	Sewer Plant and Buildings	Council Priority:		

Reconditioning Diges Reconditioning Digesters 1 and 2 - Cost

Funding Sources:

		Previous	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	2025/2026	Total
P	Private	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
S	Sewer Fund	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Project Total:									\$0

COST DETAIL:

Study:	\$0	
Land Acquisition / ROW:	\$0	
Engineering / Design:	\$0	
Construction:	\$80,000	Cost Total: \$80,000
Annual Maint. Cost:		Project Difference: \$-80,000
Maint. Year Start:		

Service Impact:

Digesters 1 and 2 are out of service because they aren't in proper condition to be used for sludge stabilization. An overall evaluation of how best to optimize their use and an assessment of their condition is needed.

Project Justification:

Optimize the use of equipment and available space at the WWTP.

Location Description:

606 Hannah Ave



Six Year Capital Improvement Program

WW-20-CIP

Wastewater

1052-20-CIP

16" San. Forcemain East Front L.S. To Wellington

Project Information

Submitted By:	Art Krueger	Department:	Department of Municipal Utilities	Replace approx. 300 lineal feet of aging 16" forcemain from the Front Street Lift Station along E. Front Street to Wellington Street. This project would be part of the East Front St. Reconstruction Project.
Category:	Maintenance	Department Head:	Art Krueger	
Fund Group:	Waste Water	Staff Priority:	Essential (Should Do)	
Fund Detail:	Sewer Collection System	Council Priority:		

16" San. Forcemain E 16" San. Forcemain East Front L.S. To Wellington

Funding Sources:

		Previous	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	2025/2026	Total
S	Sewer Fund	\$0	\$0	\$0	\$0	\$100,000	\$0	\$0	\$100,000
Project Total:									\$100,000

COST DETAIL:

Study:	\$0	
Land Acquisition / ROW:	\$0	
Engineering / Design:	\$0	
Construction:	\$100,000	Cost Total: \$100,000
Annual Maint. Cost:		Project Difference: \$0
Maint. Year Start:		

Service Impact:

The pipe condition could not be assessed during the 2015 SAW Grant project since it is always under pressure and full flow. This project provides an opportunity to assess the pipe condition and make informed decisions regarding this and other forcemains in the City.

Project Justification:

2015 SAW Grant recommended replacing this forcemain due to it's age.

Location Description:

Front St. Lift Station along E. Front Street to Wellington Street.



Six Year Capital Improvement Program

WW-20-CIP

Wastewater

1044-20-CIP

2nd Membrane Replacement

Project Information

Submitted By:	Elizabeth Hart	Department:	Department of Municipal Utilities	Future Project for FY2025-26 through FY2030-31, so negative "Project Difference"; Replace 1 train of membranes each year until all 8 trains of membranes are replaced.
Category:	Maintenance	Department Head:	Art Krueger	
Fund Group:	Waste Water	Staff Priority:	Essential (Should Do)	
Fund Detail:	Sewer Plant and Buildings	Council Priority:		

2nd Membrane Repl: 2nd Membrane Replacement

Funding Sources:

		Previous	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	2025/2026	Total
P	Private	\$0	\$0	\$0	\$0	\$0	\$0	\$500,000	\$500,000
S	Sewer Fund	\$0	\$0	\$0	\$0	\$0	\$0	\$500,000	\$500,000
Project Total:									\$1,000,000

COST DETAIL:

Study:	\$0	
Land Acquisition / ROW:	\$0	
Engineering / Design:	\$0	
Construction:	\$6,000,000	Cost Total: \$6,000,000
Annual Maint. Cost:		Project Difference: \$-5,000,000
Maint. Year Start:		

Service Impact:

This project will allow the waste water treatment facility to maintain plant capacity, ensuring we can permeate at a rate that meets influent flow demands. Outside the initial purchase of the replacement membrane, there is very little future anticipated maintenance costs. It is recommended that the City budget to replace this train of membranes 8 years after its installation, however, they membranes are expected to last 10 years. This approach will ensure funds are available if something unforeseen occurs that effects the membrane life.

Project Justification:

This project will allow the waste water treatment facility to maintain plant capacity, ensuring we can permeate at a rate that meets influent flow demands and meet the requirement of the facility's NPDES permit.

Location Description:

606 Hannah Avenue



Six Year Capital Improvement Program

WW-20-CIP

Wastewater

1171-20-CIP

Aeration Basin /Aerating Equipment Upgrade

Project Information

Submitted By:	Elizabeth Hart	Department:	Department of Municipal Utilities	Aeration Basin /Aerating Equipment Upgrade per Evaluation of Tasks 6 and portions of task 3 of the 2018-2019 Facility Plan-to include Ammonia Monitoring for Aeration Control and New Aeration Equipment-Condition Assessment Rated Secondary Treatment process 9th highest risk however blowers have no redundancy are inefficient, and are reaching the end of their useful life-Cost to be updated after 2021-2022 evaluation
Category:	Capital	Department Head:	Art Krueger	
Fund Group:	Waste Water	Staff Priority:	Imperative (Must Do)	
Fund Detail:	Sewer Plant and Buildings	Council Priority:		

Aeration Basin /Aerating Equipment Upgrade

Funding Sources:

		Previous	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	2025/2026	Total
P	Private	\$0	\$0	\$0	\$0	\$1,000,000	\$0	\$0	\$1,000,000
S	Sewer Fund	\$0	\$0	\$0	\$0	\$1,000,000	\$0	\$0	\$1,000,000
Project Total:									\$2,000,000

COST DETAIL:

Study:	\$0		
Land Acquisition / ROW:	\$0		
Engineering / Design:	\$0		
Construction:	\$2,000,000	Cost Total:	\$2,000,000
Annual Maint. Cost:		Project Difference:	\$0
Maint. Year Start:			

Service Impact:

This project will address any structural issues identified in the 2021-2022 evaluation, upgrade aerating equipment (including blowers) and add redundancy.

Project Justification:

The blowers currently in service will need to be overhauled/replaced in the near future. These blowers are not as efficient in their energy use as newer blowers. We believe we could save a great deal of energy by upgrading the blowers, the aeration grid or distribution system, and the way we control aeration output. There is also new mixing technologies that would benefit the secondary treatment process by reducing maintenance cost and providing efficiency in electrical usage. In addition, portions of the tank walls have repair exposed and need to be address, and the portion of the tank that the weirs are located is very degraded.

Location Description:

606 Hannah Ave.



Six Year Capital Improvement Program

WW-20-CIP

Wastewater

366-20-CIP

Annual Sewer Rehab/Replace

Project Information

Submitted By:	Justin Roy	Department:	Department of Municipal Utilities	Provide \$450,000 annually in both the water and wastewater funds to continue systematic improvements (repair and replacement) of our underground infrastructure.
Category:	Visionary	Department Head:	Art Krueger	
Fund Group:	Waste Water	Staff Priority:	Imperative (Must Do)	
Fund Detail:	Sewer Collection System	Council Priority:		

Annual Sewer Rehab Annual Sewer Rehab/Replace - Cost

Funding Sources:

		Previous	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	2025/2026	Total
S	Sewer Fund	\$450,000	\$450,000	\$450,000	\$450,000	\$450,000	\$450,000	\$450,000	\$3,150,000
Project Total:									\$3,150,000

COST DETAIL:

Study:	\$0		
Land Acquisition / ROW:	\$0		
Engineering / Design:	\$0		
Construction:	\$3,150,000	Cost Total:	\$3,150,000
Annual Maint. Cost:		Project Difference:	\$0
Maint. Year Start:			

Service Impact:

Replacing sewer mains with historical maintenance issues that cause sewer backups will increase collection system reliability and minimize risk to property damage.

Project Justification:

This money gets programmed into larger street replacement projects to pay for the sewer portion of the street project.

Location Description:

City wide.



Six Year Capital Improvement Program

WW-20-CIP

Wastewater

13-20-CIP

Annual Storm Water Mngt Program

Project Information

Submitted By:	Tim Lodge	Department:	Department of Municipal Utilities	This line item will guarantee funds to construct and repair city storm sewer lines. Funds may be used to disconnect sanitary sewers as well as construct water quality related infrastructure.
Category:	Maintenance	Department Head:	Art Krueger	
Fund Group:	Waste Water	Staff Priority:	Essential (Should Do)	
Fund Detail:	Sewer Collection System	Council Priority:		

Annual Storm Water | Annual Storm Water Management Program - Cost

Funding Sources:

		Previous	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	2025/2026	Total
S	Sewer Fund	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000	\$350,000
Project Total:									\$350,000

COST DETAIL:

Study:	\$0	
Land Acquisition / ROW:	\$0	
Engineering / Design:	\$0	
Construction:	\$350,000	Cost Total: \$350,000
Annual Maint. Cost:		Project Difference: \$0
Maint. Year Start:		

Service Impact:

Will require operation, maintenance, and replacement as additional infrastructure is installed.

Project Justification:

To maintain and improve water quality.

Location Description:

Various locations city-wide. Refer to the Stormwater Management Plan prepared in 2017.



Six Year Capital Improvement Program

WW-20-CIP

Wastewater

948-20-CIP

Digester 3 Reconditioning

Project Information

Submitted By:	Elizabeth Hart	Department:	Department of Municipal Utilities	WW-Digester 3 Reconditioning -This project is prioritized in accordance with the Asset Management Plan for the Facility and Lift Stations -Condition Assessment Rated Digestion as highest risk
Category:	Maintenance	Department Head:	Art Krueger	
Fund Group:	Waste Water	Staff Priority:	Imperative (Must Do)	
Fund Detail:	Sewer Plant and Buildings	Council Priority:		

Digester 3 Reconditioning

Funding Sources:

		Previous	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	2025/2026	Total
P	Private	\$447,000	\$0	\$0	\$0	\$0	\$0	\$0	\$447,000
S	Sewer Fund	\$447,000	\$0	\$0	\$0	\$0	\$0	\$0	\$447,000
Project Total:									\$894,000

COST DETAIL:

Study:	\$0	
Land Acquisition / ROW:	\$0	
Engineering / Design:	\$0	
Construction:	\$894,000	Cost Total: \$894,000
Annual Maint. Cost:		Project Difference: \$0
Maint. Year Start:		

Service Impact:

Digester 3 is currently out of service, this limits the facility's capacity to treat biosolids. Digester 4 is the same age and is in need of a condition assessment and related upgrade to ensure full capacity of the solids treatment process is restored and maintained.

Project Justification:

Maintains suitable solids treatment capabilities to meet regulations for biosolids land application per federal code of regulations 503.

Location Description:

606 Hannah Ave

**Six Year Capital Improvement Program****WW-20-CIP****Wastewater****1175-20-CIP****Digester 4 and 5 Condition Assessment****Project Information**

Submitted By:	Elizabeth Hart	Department:	Department of Municipal Utilities	Digester 4 and 5 Condition Assessment plus other items detailed in Task 7, Task 9, and related portions of Tasks 3 and 5 of the 2018-2019 Facility's Priority Improvements Plan-Includes cost of cleaning vessels-This project is prioritized in accordance with the Asset Management Plan for the Facility and Lift Stations -Condition Assessment Rated Digestion as highest risk
Category:	Visionary	Department Head:	Art Krueger	
Fund Group:	Waste Water	Staff Priority:	Imperative (Must Do)	
Fund Detail:	Sewer Plant and Buildings	Council Priority:		

Digester 4 and 5 Cor Digester 4 and 5 Condition Assessment

Funding Sources:

		Previous	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	2025/2026	Total
P	Private	\$0	\$0	\$95,000	\$0	\$0	\$0	\$0	\$95,000
S	Sewer Fund	\$0	\$0	\$95,000	\$0	\$0	\$0	\$0	\$95,000
Project Total:									\$190,000

COST DETAIL:

Study:	\$0	
Land Acquisition / ROW:	\$0	
Engineering / Design:	\$190,000	
Construction:	\$0	
Annual Maint. Cost:		
Maint. Year Start:		
	Cost Total:	\$190,000
	Project Difference:	\$0

Service Impact:

This project ensures the treatment facility is able to properly treat solids created in the process of treating waste water. If we don't treat to a certain quality of solids the biosolids would be unable to be land applied and disposal costs then more than double. This project would add a spare pump its anticipated that quarterly the shaft will have to be rotated and other minor tasks perform to maintain its operability. The cost related to this activity is estimated to be less than \$300/yr.

Project Justification:

Maintain class B biosolids so the facility can utilize land application for disposal which is far less expensive than other means of disposal.

Location Description:

606 Hannah Ave.



Six Year Capital Improvement Program

WW-20-CIP

Wastewater

1036-20-CIP

Digester 5 Cleaning and Reconditioning Equipment

Project Information

Submitted By:	Elizabeth Hart	Department:	Department of Municipal Utilities	Future Project for FY2026-27, so negative "Project Difference"; Digester 5 Cleaning and Reconditioning-Per Facility's Priority Improvements Plan Task 7 and Task 9 Evaluation performed 2021-2022-Update Cost per evaluation-This project is prioritized in accordance with the Asset Management Plan for the Facility and Lift Stations -Condition Assessment Rated Digestion as highest risk
Category:	Maintenance	Department Head:	Art Krueger	
Fund Group:	Waste Water	Staff Priority:	Essential (Should Do)	
Fund Detail:	Sewer Plant and Buildings	Council Priority:		

Digester 5 Cleaning & Digester 5 Cleaning and Reconditioning Equipment

Funding Sources:

		Previous	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	2025/2026	Total
P	Private	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
S	Sewer Fund	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Project Total:									\$0

COST DETAIL:

Study:	\$0		
Land Acquisition / ROW:	\$0		
Engineering / Design:	\$0		
Construction:	\$590,000	Cost Total:	\$590,000
Annual Maint. Cost:		Project Difference:	\$-590,000
Maint. Year Start:			

Service Impact:

This project ensures the treatment facility is able to properly treat solids created in the process of treating waste water. If we don't treat to a certain quality of solids the biosolids would be unable to be land applied and disposal costs then more than double. This project would add a spare pump its anticipated that quarterly the shaft will have to be rotated and other minor tasks perform to maintain its operability. The cost related to this activity is estimated to be less than \$300/yr.

Project Justification:

Digester 5 has been in service for 15 years and has not been cleaned or inspected since commissioned. Digesters accumulate grit and other debris in them that reduces their capacity, and causes pumping and mixing issues. We need to clean this debris out of the digester to maintain adequate treatment conditions for the solids byproduct created when treating waste water. We need to ensure the pumps are in conditions that will allow them to mix the digester properly to avoid foaming issues and treatment short falls. Recoating the digester and inner piping prevents degradation of the digester concrete and the increased cost to of related restoration.

Location Description:

606 Hannah Ave



Six Year Capital Improvement Program

WW-20-CIP

Wastewater

1037-20-CIP

Digester Gas Metering

Project Information

Submitted By:	Elizabeth Hart	Department:	Department of Municipal Utilities	WW-Add metering and monitoring capabilities to the digester gas system.
Category:	Visionary	Department Head:	Art Krueger	
Fund Group:	Waste Water	Staff Priority:	Important (Could Do)	
Fund Detail:	Sewer Plant and Buildings	Council Priority:		

Digester Gas Meterin Digester Gas Metering

Funding Sources:

		Previous	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	2025/2026	Total
P	Private	\$0	\$0	\$35,000	\$0	\$0	\$0	\$0	\$35,000
S	Sewer Fund	\$0	\$0	\$35,000	\$0	\$0	\$0	\$0	\$35,000
Project Total:									\$70,000

COST DETAIL:

Study:	\$0		
Land Acquisition / ROW:	\$0		
Engineering / Design:	\$0		
Construction:	\$70,000	Cost Total:	\$70,000
Annual Maint. Cost:		Project Difference:	\$0
Maint. Year Start:			

Service Impact:

This project could help us expand the use of digester gas, and reduce the use of natural gas at the Waste Water Treatment Plant. The monitor will require sensor replacement at a minimum every year, and the device measuring the volume of gas produced will require annual verification/calibration to maintain accuracy of measurements. We have not yet ID the particular devices to be used so the cost involved in this ongoing maintenance is an estimate, and is estimated to be \$5,000/yr

Project Justification:

Having the ability to monitor the makeup of the digester gas will better help us identify the current "health" of the digester in real time. Having the ability to measure the volume of digester gas produced will help to understand the limitations to our expansion of its use in an effort to meet green team objectives of reducing the City's Carbon foot print.

Location Description:

606 Hannah Ave



Six Year Capital Improvement Program

WW-20-CIP

Wastewater

971-20-CIP

Enclose Membrane Trains

Project Information

Submitted By:	Elizabeth Hart	Department:	Department of Municipal Utilities	Future Project for FY2029-30, so negative "Project Difference"; Membrane Tank Covers or Enclosure Upgrade per 2025-2026 Engineering Study
Category:	Capital	Department Head:	Art Krueger	
Fund Group:	Waste Water	Staff Priority:	Important (Could Do)	
Fund Detail:	Sewer Plant and Buildings	Council Priority:		

Enclose Membrane T Enclose Membrane Trains - Cost

Funding Sources:

		Previous	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	2025/2026	Total
P	Private	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
S	Sewer Fund	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Project Total:									\$0

COST DETAIL:

Study:	\$0		
Land Acquisition / ROW:	\$0		
Engineering / Design:	\$0		
Construction:	\$500,000	Cost Total:	\$500,000
Annual Maint. Cost:		Project Difference:	\$-500,000
Maint. Year Start:			

Service Impact:

The membranes can not be exposed to ambient temperature below 45 degrees. Currently, there is not a structure around the membrane tanks. Having a structure in place would shelter the membranes from the outside elements, greatly reducing the risk of the membranes freezing, and allowing for maintenance activities year round.

Project Justification:

Improves the ability of the facility to maintain needed equipment vital to meeting the requirements of the facility's NPDES permit.

Location Description:

606 Hannah Ave



Six Year Capital Improvement Program

WW-20-CIP

Wastewater

967-20-CIP

Engineering Evaluation of Clinch -Coast Guard LS

Project Information

Submitted By:	Elizabeth Hart	Department:	Department of Municipal Utilities	WW-Engineering Evaluation of Clinch Park and Coast Guard Lift Stations- Capacity and Condition Assessment, including controls upgrade and telemetry-Upgrade per evaluation to be added to CIP in Accordance with AMP prioritization-Upgrade per evaluation to be added to CIP in Accordance with AMP prioritization
Category:	Visionary	Department Head:	Art Krueger	
Fund Group:	Waste Water	Staff Priority:	Essential (Should Do)	
Fund Detail:	Sewer Collection System	Council Priority:		

Engineering Evaluation of Clinch -Coast Guard LS

Funding Sources:

		Previous	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	2025/2026	Total
S	Sewer Fund	\$0	\$0	\$0	\$30,000	\$0	\$0	\$0	\$30,000
Project Total:									\$30,000

COST DETAIL:

Study:	\$0	
Land Acquisition / ROW:	\$0	
Engineering / Design:	\$30,000	
Construction:	\$0	
Annual Maint. Cost:		
Maint. Year Start:		
Cost Total:		\$30,000
Project Difference:		\$0

Service Impact:

This project would evaluate if the lift stations' structures and equipment are sized appropriately to meet the demands of future growth, and would identify station maintenance needs and related costs.

Project Justification:

These lift stations are 2 of 8 major lift stations in Traverse City, it is imperative that they are in good operable condition and properly sized in order to ensure waste water is successfully pumped to the treatment plant at all times from the areas they serve.

Location Description:

Clinch Park Lift Station-111 E. Grandview Parkway
Coast Guard-911 Airport Access Rd.



Six Year Capital Improvement Program

WW-20-CIP

Wastewater

1031-20-CIP

Engineering Evaluation-Woodmere&Riverine Lift St.

Project Information

Submitted By:	Elizabeth Hart	Department:	Department of Municipal Utilities	Engineering Evaluation/Condition Assessment Woodmere and Riverine
Category:	Visionary	Department Head:	Art Krueger	Lift Stations, including controls upgrade and Telemetry-Upgrade per
Fund Group:	Waste Water	Staff Priority:	Essential (Should Do)	evaluation to be added to CIP in Accordance with AMP prioritization
Fund Detail:	Sewer Collection System	Council Priority:		

Engineering Evaluation Woodmere and Riverine LS

Funding Sources:

		Previous	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	2025/2026	Total
S	Sewer Fund	\$0	\$0	\$30,000	\$0	\$0	\$0	\$0	\$30,000
Project Total:									\$30,000

COST DETAIL:

Study:	\$0		
Land Acquisition / ROW:	\$0		
Engineering / Design:	\$30,000		
Construction:	\$0	Cost Total:	\$30,000
Annual Maint. Cost:		Project Difference:	\$0
Maint. Year Start:			

Service Impact:

This project would evaluate if the lift station structures and equipment are sized appropriately to meet the demands of future growth, and would identify station maintenance needs and related costs.

Project Justification:

Woodmere and Riverine lift stations are one of 8 major lift stations in Traverse City, it is imperative that it is in good operable condition and properly sized in order to ensure waste water is successfully pumped to the treatment plant at all times from the area it serves.

Location Description:

645 Woodmere Ave.



Six Year Capital Improvement Program

WW-20-CIP

Wastewater

1019-20-CIP

Engineering Study Pertaining to Facility Plan

Project Information

Submitted By:	Elizabeth Hart	Department:	Department of Municipal Utilities	Future Project for FY2026-27, so negative "Project Difference"; This study will encompass tasks 10, 11, and 13 of the Facility's Priority Improvement Plan.
Category:	Visionary	Department Head:	Art Krueger	
Fund Group:	Waste Water	Staff Priority:	Essential (Should Do)	
Fund Detail:	Sewer Plant and Buildings	Council Priority:		

Engineering Study Pertaining to Facility Plan

Funding Sources:

		Previous	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	2025/2026	Total
P	Private	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
S	Sewer Fund	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Project Total:									\$0

COST DETAIL:

Study:	\$0		
Land Acquisition / ROW:	\$0		
Engineering / Design:	\$30,000		
Construction:	\$0	Cost Total:	\$30,000
Annual Maint. Cost:		Project Difference:	\$-30,000
Maint. Year Start:			

Service Impact:

Evaluate the facility's HVAC systems for condition and offer more energy efficient options for replacement. In addition, The valving and piping in the biosolids storage buildings will be evaluated and options for valve automation, and piping repair recommendations will result. Lastly, the windows at the facility will be evaluated for upgrade and to add energy efficiency to the buildings.

Project Justification:

HVAC systems at the facility are a source of repeated repairs and are not efficient. Upgrading the systems could reduce repair costs and add efficiency. The piping in the biosolids storage building has not been assessed in decades, and the valving system is antiquated. Evaluating the piping can ensure we do not experience unforeseen failures and that we are able to better plan fiscally for any repairs needed. Updating the valving could make operations safer and reduce the time needed to make valving changes. Several of the windows at the facility are very old, replacement will add energy efficiencies and improve security.

Location Description:

606 Hannah Ave



Six Year Capital Improvement Program

WW-20-CIP

Wastewater

1002-20-CIP

Front St LS- Engineering Evaluation/Capacity Study

Project Information

Submitted By:	Elizabeth Hart	Department:	Department of Municipal Utilities	Front Street Lift Station Engineering Evaluation-To look at Capacity and options for upgrade-including VFDs and telemetry (PLC updated 2018-2019)-This project is prioritized in accordance with the Asset Management Plan for the Facility and Lift Stations -Condition Assessment Rated Front St. Lift Station as 3rd highest risk
Category:	Visionary	Department Head:	Art Krueger	
Fund Group:	Waste Water	Staff Priority:	Essential (Should Do)	
Fund Detail:	Sewer Collection System	Council Priority:		

Front St LS- Engineer Front St LS- Engineering Evaluation

Funding Sources:

		Previous	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	2025/2026	Total
S	Sewer Fund	\$0	\$50,000	\$0	\$0	\$0	\$0	\$0	\$50,000
Project Total:									\$50,000

COST DETAIL:

Study:	\$0	
Land Acquisition / ROW:	\$0	
Engineering / Design:	\$50,000	
Construction:	\$0	
Annual Maint. Cost:		
Maint. Year Start:		
Cost Total:		\$50,000
Project Difference:		\$0

Service Impact:

This project would evaluate if the lift station structures and equipment are sized appropriately to meet the demands of future growth, and would identify station maintenance needs and related costs.

Project Justification:

This lift station is the biggest of 8 major lift stations in Traverse City and most crucial to the downtown area, it is imperative that it is in good operable condition and properly sized in order to ensure waste water is successfully pumped to the treatment plant at all times from the area it serves.

Location Description:

Front St.



Six Year Capital Improvement Program

WW-20-CIP

Wastewater

1001-20-CIP

Front ST. LS- Upgrade

Project Information

Submitted By: Elizabeth Hart

Category: Capital

Fund Group: Waste Water

Fund Detail: Sewer Collection System

Department:

Department of Municipal Utilitie

Department Head:

Art Krueger

Staff Priority:

Essential (Should Do)

Council Priority:

WW-Front Street Lift Station Upgrade in relation to 2020-2021

Engineering Study-This project is prioritized in accordance with the Asset Management Plan for the Facility and Lift Stations -Condition Assessment Rated Front St. Lift Station as 3rd highest risk

Front ST. Lift Station Front ST. Lift Station Upgrade

Funding Sources:

		Previous	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	2025/2026	Total
S	Sewer Fund	\$0	\$0	\$0	\$0	\$0	\$0	\$550,000	\$550,000
Project Total:									\$550,000

COST DETAIL:

Study: \$0

Land Acquisition / ROW: \$0

Engineering / Design: \$0

Construction: \$550,000

Annual Maint. Cost:

Maint. Year Start:

Cost Total: \$550,000

Project Difference: \$0

Service Impact:

Lift station's wet well, piping, metering, and pumps should be upgraded to add dependability and functionality. This cost is an estimate and will be subject to change once the 2020-2021 engineering study has been performed.

Project Justification:

Ensures wastewater can be properly conducted to the treatment plant for treatment. Helps to plan and budgeted any needed upgrades.

Location Description:

Front St.



Six Year Capital Improvement Program

WW-20-CIP

Wastewater

900-20-CIP

Membrane Distribution & RAS Channel Aeration Line

Project Information

Submitted By:	Elizabeth Hart	Department:	Department of Municipal Utilities	Future Project for FY2029-30, so negative "Project Difference"; Remove and replace aging aeration line in the membrane distribution and RAS channel with SCH 80 PVC.
Category:	Maintenance	Department Head:	Art Krueger	
Fund Group:	Waste Water	Staff Priority:	Essential (Should Do)	
Fund Detail:	Sewer Plant and Buildings	Council Priority:		

Membrane Distributic Membrane Distribution and RAS Channel Aera - Cost

Funding Sources:

		Previous	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	2025/2026	Total
P	Private	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
S	Sewer Fund	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Project Total:									\$0

COST DETAIL:

Study:	\$0		
Land Acquisition / ROW:	\$0		
Engineering / Design:	\$0		
Construction:	\$95,400	Cost Total:	\$95,400
Annual Maint. Cost:		Project Difference:	\$-95,400
Maint. Year Start:			

Service Impact:

The aeration in the distribution channel to the membranes and the return activated sludge channel is need to keep the solids from settling in the channels causing decreased capacity and short circuiting.

Project Justification:

Some portions of the current aeration grid in these channels has failed and been patched, and other areas are in poor conditions. Replacing the line with schedule 80 PVC will provide a robust aeration grid for the 2 channels far into the future and ensure plant effluent is of a quality that meets the facility's NPDES permit.

Location Description:

606 Hannah Ave



Six Year Capital Improvement Program

WW-20-CIP

Wastewater

1172-20-CIP

Membrane Tank Covers or Enclosure Eng. Eval

Project Information

Submitted By:	Elizabeth Hart	Department:	Department of Municipal Utilities	WW-Membrane Tank Covers or Enclosure Engineering Evaluation per Task 8 of the Facility's Priority Plan
Category:	Visionary	Department Head:	Art Krueger	
Fund Group:	Waste Water	Staff Priority:	Important (Could Do)	
Fund Detail:	Sewer Plant and Buildings	Council Priority:		

Membrane Tank Covers or Enclosure Eng. Eval

Funding Sources:

		Previous	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	2025/2026	Total
P	Private	\$0	\$0	\$0	\$0	\$0	\$0	\$15,000	\$15,000
S	Sewer Fund	\$0	\$0	\$0	\$0	\$0	\$0	\$15,000	\$15,000
Project Total:									\$30,000

COST DETAIL:

Study:	\$0		
Land Acquisition / ROW:	\$0		
Engineering / Design:	\$30,000		
Construction:	\$0		
Annual Maint. Cost:			
Maint. Year Start:			
Cost Total:			\$30,000
Project Difference:			\$0

Service Impact:

This study will evaluate options for covering or enclosing the membrane tanks, and includes a cost comparison of options provided.

Project Justification:

Currently, we can not perform recovery cleans or maintenance tasks on the membranes when ambient air temperatures fall below 40 degrees, because they are not covered and exposure to cold temperatures will damage the membrane fibers.

Location Description:

606 Hannah Ave

**Six Year Capital Improvement Program****WW-20-CIP****Wastewater****1032-20-CIP****New Portable Generator for Lift Stations****Project Information****Submitted By:** Elizabeth Hart**Department:**

Department of Municipal Utilities

WW-Current generator is obsolete as of 2017. Parts are difficult to obtain and repairs are difficult to complete. This generator would be used to prevent sewer overflows at lift stations in the event of power outages.

Category: Capital**Department Head:**

Art Krueger

Fund Group: Waste Water**Staff Priority:**

Imperative (Must Do)

Fund Detail: Sewer Collection System**Council Priority:**

New Portable Generator New Portable Generator for Lift Stations

Funding Sources:

		Previous	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	2025/2026	Total
S	Sewer Fund	\$0	\$0	\$0	\$0	\$150,000	\$0	\$0	\$150,000
Project Total:									\$150,000

COST DETAIL:**Study:** \$0**Land Acquisition / ROW:** \$0**Engineering / Design:** \$0**Construction:** \$150,000**Annual Maint. Cost:****Maint. Year Start:****Cost Total:** \$150,000**Project Difference:** \$0**Service Impact:**

Allows critical lift stations to stay in operation when line power is unavailable preventing sewer backups, and overflows.

Project Justification:

Prevents sewer backups and overflows that could occur at lift stations when line power is unavailable. When overflows occur waste water spills onto the ground around the lift station and this is a violation of regulatory requirements. When sewer backups occur at businesses or residents the public health is at risk.

Location Description:

606 Hannah Ave



Six Year Capital Improvement Program

WW-20-CIP

Wastewater

890-20-CIP

Plant-Membrane Replacement

Project Information

Submitted By:	Elizabeth Hart	Department:	Department of Municipal Utilities	Replace 1 Train of Membranes each year until remaining 4 trains of 500C membrane cassettes are replaced.
Category:	Maintenance	Department Head:	Art Krueger	
Fund Group:	Waste Water	Staff Priority:	Imperitive (Must Do)	
Fund Detail:	Sewer Plant and Buildings	Council Priority:		

Plant-Membrane Rep Plant-Membrane Replacement - Cost

Funding Sources:

		Previous	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	2025/2026	Total
P	Private	\$430,000	\$430,000	\$0	\$0	\$0	\$0	\$0	\$860,000
S	Sewer Fund	\$430,000	\$430,000	\$0	\$0	\$0	\$0	\$0	\$860,000
Project Total:									\$1,720,000

COST DETAIL:

Study:	\$0		
Land Acquisition / ROW:	\$0		
Engineering / Design:	\$0		
Construction:	\$1,720,000	Cost Total:	\$1,720,000
Annual Maint. Cost:		Project Difference:	\$0
Maint. Year Start:			

Service Impact:

This project will allow the waste water treatment facility to maintain plant capacity, ensuring we can permeate at a rate that meets influent flow demands. Outside the initial purchase of the replacement membrane, there is very little future anticipated maintenance costs. It is recommended that the City budget to replace this train of membranes 8 years after its installation, however, the membranes are expected to last 10 years. This approach will ensure funds are available if something unforeseen occurs that effects the membrane life.

Project Justification:

This project will allow the waste water treatment facility to maintain plant capacity, ensuring we can permeate at a rate that meets influent flow demands and meet the requirement of the facility's NPDES permit.

Location Description:

606 Hannah



Six Year Capital Improvement Program

WW-20-CIP

Wastewater

902-20-CIP

Primary Header Replacement

Project Information

Submitted By:	Elizabeth Hart	Department:	Department of Municipal Utilities	WW-Primary Header Replacement per HRC Evaluation performed in 2019-2020-This project is prioritized in accordance with the Asset Management Plan for the Facility and Lift Stations -Condition Assessment Rated Primary Treatment as 2nd highest risk prior to primary header failing and after digester 3 being taken out of service
Category:	Capital	Department Head:	Art Krueger	
Fund Group:	Waste Water	Staff Priority:	Imperitive (Must Do)	
Fund Detail:	Sewer Plant and Buildings	Council Priority:		

Primary Header Repl Primary Header Replacement - Cost

Funding Sources:

		Previous	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	2025/2026	Total
P	Private	\$0	\$750,000	\$0	\$0	\$0	\$0	\$0	\$750,000
S	Sewer Fund	\$0	\$750,000	\$0	\$0	\$0	\$0	\$0	\$750,000
Project Total:									\$1,500,000

COST DETAIL:

Study:	\$0		
Land Acquisition / ROW:	\$0		
Engineering / Design:	\$0		
Construction:	\$1,500,000	Cost Total:	\$1,500,000
Annual Maint. Cost:		Project Difference:	\$0
Maint. Year Start:			

Service Impact:

If the primary header fails the waste coming into the facility will have to be pumped to upstream processes with a temporary distribution grid and multiple portable pumps this will be costly. The failure of this line could lead to permit noncompliance, and the flooding and damaging of many plant assets.

Project Justification:

The facility is required to be maintained adequately in order to meet standards of the facility's NPDES permit. The use of auxillary equipment to meet influent flow demands and properly treat the waste stream would only be allowed on a temporary basis.

Location Description:

606 Hannah Ave



Six Year Capital Improvement Program

WW-20-CIP

Wastewater

1176-20-CIP

RTWWTP-Digester 4 Reconditioning

Project Information

Submitted By:	Elizabeth Hart	Department:	Department of Municipal Utilities	Digester 4 Reconditioning per Facility's Priority Improvements Plan Task 7 Evaluation performed 2021-2022 -Update Digester 4 Rehab after condition assessment is complete in 2021-2022-This project is prioritized in accordance with the Asset Management Plan for the Facility and Lift Stations -Condition Assessment Rated Digestion as highest risk-Note: For digester 4 cost includes cleaning of vessel
Category:	Capital	Department Head:	Art Krueger	
Fund Group:	Waste Water	Staff Priority:	Imperative (Must Do)	
Fund Detail:	Sewer Plant and Buildings	Council Priority:		

Digester 4 Reconditic Digester 4 Reconditioning

Funding Sources:

		Previous	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	2025/2026	Total
P	Private	\$0	\$0	\$0	\$0	\$550,000	\$0	\$0	\$550,000
S	Sewer Fund	\$0	\$0	\$0	\$0	\$550,000	\$0	\$0	\$550,000
Project Total:									\$1,100,000

COST DETAIL:

Study:	\$0	
Land Acquisition / ROW:	\$0	
Engineering / Design:	\$0	
Construction:	\$1,100,000	Cost Total: \$1,100,000
Annual Maint. Cost:		Project Difference: \$0
Maint. Year Start:		

Service Impact:

This project ensures the treatment facility is able to properly treat solids created in the process of treating waste water. If we don't treat to a certain quality of solids the biosolids would be unable to be land applied and disposal costs then more than double. In addition, digester 4 has a floating cover the purpose of which is to store digester gas for use in the boilers. If this digester is inoperable we will not have a way to utilize digester gas for heating and will have to solely use natural gas.

Project Justification:

Maintain class B biosolids so the facility can utilize land application for disposal which is far less expensive than other means of disposal.

Location Description:

606 Hannah Ave



Six Year Capital Improvement Program

WW-20-CIP

Wastewater

1075-20-CIP

RWWTP-ADMINISTRATION BLDG HVAC UPGRADE

Project Information

Submitted By:	Elizabeth Hart	Department:	Department of Municipal Utilities	The HVAC system in the administration building at the facility does not work properly. This project would upgrade the system so that temperature, particularly in the laboratory, can be controlled adequately.
Category:	Maintenance	Department Head:	Art Krueger	
Fund Group:	Waste Water	Staff Priority:	Essential (Should Do)	
Fund Detail:	Sewer Plant and Buildings	Council Priority:		

RWWTP-ADMINISTRATION BLDG HVAC SYSTEM UPGRADE

Funding Sources:

		Previous	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	2025/2026	Total
P	Private	\$0	\$22,500	\$0	\$0	\$0	\$0	\$0	\$22,500
S	Sewer Fund	\$0	\$22,500	\$0	\$0	\$0	\$0	\$0	\$22,500
Project Total:									\$45,000

COST DETAIL:

Study:	\$0	
Land Acquisition / ROW:	\$0	
Engineering / Design:	\$0	
Construction:	\$45,000	Cost Total: \$45,000
Annual Maint. Cost:		Project Difference: \$0
Maint. Year Start:		

Service Impact:

We believe that an upgrade will reduce current maintenance expenses.

Project Justification:

Upgrading the HVAC system in the administration bldg will allow us to control the temperature in the building, particularly in the laboratory where temperature variation affects the equipment we use to analyze samples for the purpose of obtaining data we report to the regulators to prove plant compliance.

Location Description:

606 Hannah Avenue

**Six Year Capital Improvement Program****WW-20-CIP****Wastewater****1079-20-CIP****RWWTP-Aeration Basin/Aerating Equipment Evaluation****Project Information**

Submitted By:	Elizabeth Hart	Department:	Department of Municipal Utilities	Aeration Basin /Aerating Equipment Evaluation per Tasks 6 and
Category:	Visionary	Department Head:	Art Krueger	portions of task 3 of the 2018-2019 Facility Plan-to include Ammonia
Fund Group:	Waste Water	Staff Priority:	Imperitive (Must Do)	Monitoring for Aeration Control and New Aeration Equipment-Condition
Fund Detail:	Sewer Plant and Buildings	Council Priority:		Assessment Rated Secondary Treatment process 9th highest risk
				however blowers have no redundancy are inefficient, and are reaching
				the end of their useful life

RWWTP-AERATION RWWTP-AERATION BASIN/AERATING EQUIP ENG. EVAL

Funding Sources:

		Previous	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	2025/2026	Total
P	Private	\$0	\$0	\$15,000	\$0	\$0	\$0	\$0	\$15,000
S	Sewer Fund	\$0	\$0	\$15,000	\$0	\$0	\$0	\$0	\$15,000
Project Total:									\$30,000

COST DETAIL:

Study:	\$0		
Land Acquisition / ROW:	\$0		
Engineering / Design:	\$30,000		
Construction:	\$0	Cost Total:	\$30,000
Annual Maint. Cost:		Project Difference:	\$0
Maint. Year Start:			

Service Impact:

This project will identify the most cost effective approach to upgrading aeration basin equipment, and help plan for the cost of addressing any structural issues that are present. Currently, there are two blowers in place, this leaves no redundancy in aeration during the summer months.

Project Justification:

The blowers currently in service will need to be overhauled in the near future. These blowers are not as efficient in their energy use as newer blowers. We believe we could save a great deal of energy by upgrading the blowers, the aeration grid or distribution system, and the way we control aeration output.

Location Description:

606 Hannah Avenue



Six Year Capital Improvement Program

WW-20-CIP

Wastewater

1174-20-CIP

RWWTP-Annual Equipment Rehab/Replace (> or = \$9K)

Project Information

Submitted By:	Elizabeth Hart	Department:	Department of Municipal Utilities	Annual Equipment Rehab/Replace (Items over \$9,000)-all items subject to prior City Commission Approval-Funds maintenance of 1,954 assets to ensure they can be properly maintained per state regulator approved asset management plan.
Category:	Maintenance	Department Head:	Art Krueger	
Fund Group:	Waste Water	Staff Priority:	Important (Could Do)	
Fund Detail:	Sewer Plant and Buildings	Council Priority:		

Annual Equipment Rehab/Replace

Funding Sources:

		Previous	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	2025/2026	Total
P	Private	\$0	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$600,000
S	Sewer Fund	\$0	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$600,000
Project Total:									\$1,200,000

COST DETAIL:

Study: \$0

Land Acquisition / ROW: \$0

Engineering / Design: \$0

Construction: \$0

Annual Maint. Cost: \$2,200,000

Maint. Year Start:

Cost Total: **\$0**

Project Difference: **\$1,200,000**

Service Impact:

The facility and lift stations utilize a total of 1,954 assets. This line item is meant to ensure these assets are maintained in a fashion that reduces vulnerabilities and optimizes process/lift station operations in order to meet regulatory requirements.

Project Justification:

This line item is meant to ensure there are funds available to properly maintain facility and lift station assets per the Asset Management Plan approved by state regulators.

Location Description:

606 Hannah Ave and 9 City Lift Stations



Six Year Capital Improvement Program

WW-20-CIP

Wastewater

1077-20-CIP

RWWTP-BOILER CONTROLS UPGRADE

Project Information

Submitted By:	Elizabeth Hart	Department:	Department of Municipal Utilities	The boiler controls at the Regional Waste Water Treatment Plant are obsolete and unsupported. Currently, the controls are bypassed to allow for boiler operation. This project would update the controls with a supported technology.
Category:	Maintenance	Department Head:	Art Krueger	
Fund Group:	Waste Water	Staff Priority:	Essential (Should Do)	
Fund Detail:	Sewer Plant and Buildings	Council Priority:		

RWWTP-BOILER CC RWWTP-BOILER CONTROLS UPGRADE

Funding Sources:

		Previous	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	2025/2026	Total
P	Private	\$0	\$28,000	\$0	\$0	\$0	\$0	\$0	\$28,000
S	Sewer Fund	\$0	\$28,000	\$0	\$0	\$0	\$0	\$0	\$28,000
Project Total:									\$56,000

COST DETAIL:

Study:	\$0		
Land Acquisition / ROW:	\$0		
Engineering / Design:	\$0		
Construction:	\$56,000	Cost Total:	\$56,000
Annual Maint. Cost:		Project Difference:	\$0
Maint. Year Start:			

Service Impact:

Maintenance costs are not anticipated to be substantial.

Project Justification:

Proper control of the dual fuel boilers at the facility will ensure that the boilers operate as efficiently as possible, using digester gas whenever it is available which will reduce the use of natural gas.

Location Description:

606 Hannah Avenue



Six Year Capital Improvement Program

WW-20-CIP

Wastewater

1076-20-CIP

RWWTP-CRANE AND HOIST PAINTING

Project Information

Submitted By:	Elizabeth Hart	Department:	Department of Municipal Utilities	The crane and hoist painting projects includes all the cranes and hoists at the RWWTP. Painting the cranes and hoists will prevent premature deterioration of these assets. They will be painted with commercial grade paint.
Category:	Maintenance	Department Head:	Art Krueger	
Fund Group:	Waste Water	Staff Priority:	Essential (Should Do)	
Fund Detail:	Sewer Plant and Buildings	Council Priority:		

RWWTP-CRANE AN RWWTP-CRANE AND HOIST PAINTING

Funding Sources:

		Previous	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	2025/2026	Total
P	Private	\$0	\$26,250	\$0	\$0	\$0	\$0	\$0	\$26,250
S	Sewer Fund	\$0	\$26,250	\$0	\$0	\$0	\$0	\$0	\$26,250
Project Total:									\$52,500

COST DETAIL:

Study:	\$0		
Land Acquisition / ROW:	\$0		
Engineering / Design:	\$0		
Construction:	\$52,500	Cost Total:	\$52,500
Annual Maint. Cost:		Project Difference:	\$0
Maint. Year Start:			

Service Impact:

The cranes and hoist should be painted every 10 years at a minimum. This is the only ongoing expense we anticipate until they are replaced. They also have to be rated and inspected annually, this requirement will not change when they are painted.

Project Justification:

Painting the hoists and cranes at the facility will help prevent the untimely deterioration of these assets.

Location Description:

606 Hannah Avenue



Six Year Capital Improvement Program

WW-20-CIP

Wastewater

1078-20-CIP

RWWTP-UPGRADE DIGESTED SOLIDS THICKENING EQUIPMENT

Project Information

Submitted By:	Elizabeth Hart	Department:	Department of Municipal Utilities	Future Project for FY2027-28, so negative "Project Difference"; Upgrade Digested Solids Thickening Equipment per 2018-2019 Facility Plan Tasks 7 and 9 Engineering Study Performed in 2021-2022-This project is prioritized in accordance with the Asset Management Plan for the Facility and Lift Stations-Condition Assessment Rated Solids Handling as the 7th highest risk t Plan for the Facility and Lift Stations-Condition Assessment Rated Solids Handling as the 7th highest risk
Category:	Capital	Department Head:	Art Krueger	
Fund Group:	Waste Water	Staff Priority:	Essential (Should Do)	
Fund Detail:	Sewer Plant and Buildings	Council Priority:		

RWWTP-Upgrade Digested Solids Thickening Equipment

Funding Sources:

		Previous	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	2025/2026	Total
P	Private	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
S	Sewer Fund	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Project Total:									\$0

COST DETAIL:

Study:	\$0		
Land Acquisition / ROW:	\$0		
Engineering / Design:	\$0		
Construction:	\$1,500,000	Cost Total:	\$1,500,000
Annual Maint. Cost:		Project Difference:	\$-1,500,000
Maint. Year Start:			

Service Impact:

This upgrade is not well defined at this point, but we do not anticipate maintenance expenses outside that of the prescribed preventive maintenance.

Project Justification:

The upgrade of the digested solids thickening equipment will result in the ability to better thicken solids sent to the biosolids storage tanks, reducing the volume sent to the storage tanks, and the volume needing to be hauled. With will save in biosolids hauling expenses.

Location Description:

606 Hannah Avenue



Six Year Capital Improvement Program

WW-20-CIP

Wastewater

1173-20-CIP

RWWTP-Yard Piping Engineering Evaluation

Project Information

Submitted By:	Elizabeth Hart	Department:	Department of Municipal Utilities	Yard Piping Engineering Evaluation per Task 12 for the Facility's Priority
Category:	Visionary	Department Head:	Art Krueger	Plan-Upgrade per evaluation to be added to CIP per AMP prioritization
Fund Group:	Waste Water	Staff Priority:	Essential (Should Do)	
Fund Detail:	Sewer Plant and Buildings	Council Priority:		

Yard Piping Engineer Yard Piping Engineering Evaluation

Funding Sources:

		Previous	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	2025/2026	Total
P	Private	\$0	\$0	\$0	\$0	\$0	\$0	\$30,000	\$30,000
S	Sewer Fund	\$0	\$0	\$0	\$0	\$0	\$0	\$30,000	\$30,000
Project Total:									\$60,000

COST DETAIL:

Study:	\$0		
Land Acquisition / ROW:	\$0		
Engineering / Design:	\$60,000		
Construction:	\$0		
Annual Maint. Cost:			
Maint. Year Start:			
Cost Total:		\$60,000	
Project Difference:			\$0

Service Impact:

Evaluation of yard piping will identify the condition of the underground pipes at the facility, most of which are several decades old, and provide cost for any related refurbishing/replacement recommendations that result.

Project Justification:

The piping at the facility has not been evaluated for many years and if it fails it will cause a permit violation, and obviously interfere with proper treatment of wastewater that is flowing through the pipes. This proactive approach to evaluating the condition of the piping will hopefully prevent a very expensive emergency response to a pipe failure.

Location Description:

606 Hannah Ave



Six Year Capital Improvement Program

WW-20-CIP

Wastewater

795-20-CIP

SCADA Upgrade

Project Information

Submitted By:	Elizabeth Hart	Department:	Department of Municipal Utilities	Upgrade SCADA system that controls the plant.
Category:	Maintenance	Department Head:	Art Krueger	
Fund Group:	Waste Water	Staff Priority:	Essential (Should Do)	
Fund Detail:	Sewer Plant and Buildings	Council Priority:		

SCADA Upgrade - Cx SCADA Upgrade - Cost

Funding Sources:

		Previous	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	2025/2026	Total
P	Private	\$0	\$0	\$77,500	\$0	\$0	\$0	\$0	\$77,500
S	Sewer Fund	\$0	\$0	\$77,500	\$0	\$0	\$0	\$0	\$77,500
Project Total:									\$155,000

COST DETAIL:

Study:	\$0		
Land Acquisition / ROW:	\$0		
Engineering / Design:	\$0		
Construction:	\$155,000	Cost Total:	\$155,000
Annual Maint. Cost:		Project Difference:	\$0
Maint. Year Start:			

Service Impact:

There is very little if any on going maintenance cost related to the upgrade of the SCADA system.

Project Justification:

The SCADA system is the brains of the automated operations components at the facility if it fails or has issues it creates many vulnerabilities related to compliance, safety, and could result in costly ramifications. The SCADA was last upgraded in 2014.

Location Description:

606 Hannah Ave

**Six Year Capital Improvement Program****WW-20-CIP****Wastewater****1073-20-CIP****Scour Air Blower Overhaul-5 blowers at TCRWWTP****Project Information****Submitted By:** Elizabeth Hart**Category:** Maintenance**Fund Group:** Waste Water**Fund Detail:** Sewer Plant and Buildings**Department:** Department of Municipal Utilities**Department Head:** Art Krueger**Staff Priority:** Imperitive (Must Do)**Council Priority:**

The Scour Air Blowers at the TCRWWTP are used in the membrane process to periodically clear solids from the membrane surface in order to maintain permeability. The blowers have been in service since 2004 and based on the run times, and recent inspection by Aerzen, they are in need of an overhaul. Aerzen, the blower manufacturer, has an exchange program that will allow us to keep 5 scour air blowers in services while the inspect and overhaul the blower that was in service at the facility. The service Aerzen provides removal and install of the blowers which are very heavy. We will only be charge for the actual items needing overhauled once the blower has been inspected in the shop. We will need to front the cost of the exchange unit and also bay for install and removal. Once the system is assessed, we will be reimbursed for the actual cost of the overhaul. The exchange cost is the maximum cost of the Overhaul.

Scour Air Blower Ove Scour Air Blower Overhaul

Funding Sources:

		Previous	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	2025/2026	Total
P	Private	\$22,500	\$23,625	\$23,625	\$24,125	\$24,125	\$0	\$0	\$118,000
S	Sewer Fund	\$22,500	\$23,625	\$23,625	\$24,125	\$24,125	\$0	\$0	\$118,000

Project Total: **\$236,000****COST DETAIL:****Study:** \$0**Land Acquisition / ROW:** \$0**Engineering / Design:** \$0**Construction:** \$236,000**Annual Maint. Cost:****Maint. Year Start:****Cost Total:** **\$236,000****Project Difference:** **\$0****Service Impact:**

These blowers provide scour air to the blowers. The air scouring is necessary to remove solids buildup from the membrane fibers that occurs during the process of permeating through the fibers, allowing the permeating process to continue and preventing plant backups.

Project Justification:

Scour Air is needed for the proper operation of the membranes which are vital to the facility's treatment process, and to meeting NPDES permit requirements.

Location Description:

606 Hannah Ave



Six Year Capital Improvement Program

WW-20-CIP

Wastewater

1167-20-CIP

Screw Pump 2 and 3 Engineering Study

Project Information

Submitted By:	Elizabeth Hart	Department:	Department of Municipal Utilities	Screw Pump 2 and 3 Engineering Study including related portions of Tasks 3 and 5 of the 2018-2019 Facility's Priority Plan-This project is prioritized in accordance with the Asset Management Plan for the Facility and Lift Stations -Condition Assessment Rated Primary Treatment, which screw pumps are apart of, as 2nd highest risk prior to primary header failing and after digester 3 being taken out of service
Category:	Visionary	Department Head:	Art Krueger	
Fund Group:	Waste Water	Staff Priority:	Imperative (Must Do)	
Fund Detail:	Sewer Plant and Buildings	Council Priority:		

Screw Pump 2 and 3 Screw Pump 2 and 3 Engineering Study

Funding Sources:

		Previous	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	2025/2026	Total
P	Private	\$0	\$10,000	\$0	\$0	\$0	\$0	\$0	\$10,000
S	Sewer Fund	\$0	\$10,000	\$0	\$0	\$0	\$0	\$0	\$10,000
Project Total:									\$20,000

COST DETAIL:

Study:	\$0	
Land Acquisition / ROW:	\$0	
Engineering / Design:	\$20,000	
Construction:	\$0	
Annual Maint. Cost:		
Maint. Year Start:		
Cost Total:		\$20,000
Project Difference:		\$0

Service Impact:

These pumps lift the waste water from the primary treatment process to the secondary treatment process for additional treatment necessary to meet the facility's NPDES permit.

Project Justification:

Pumps are needed to keep the waste stream moving through the facility for proper treatment and compliance with the facility's NPDES permit.

Location Description:

606 Hannah Ave



Six Year Capital Improvement Program

WW-20-CIP

Wastewater

893-20-CIP

Screw Pump 2 and 3 Replacement

Project Information

Submitted By:	Elizabeth Hart	Department:	Department of Municipal Utilities	WW-Screw Pump 2 and 3 Upgrade per 2020-2021 Engineering Study-Update Cost After Study-This project is prioritized in accordance with the Asset Management Plan for the Facility and Lift Stations -Condition Assessment Rated Primary Treatment, which screw pumps are apart of, as 2nd highest risk prior to primary header failing and after digester 3 being taken out of service
Category:	Capital	Department Head:	Art Krueger	
Fund Group:	Waste Water	Staff Priority:	Imperative (Must Do)	
Fund Detail:	Sewer Plant and Buildings	Council Priority:		

Screw Pump Replacement - Cost

Funding Sources:

		Previous	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	2025/2026	Total
P	Private	\$0	\$0	\$580,000	\$0	\$0	\$0	\$0	\$580,000
S	Sewer Fund	\$0	\$0	\$580,000	\$0	\$0	\$0	\$0	\$580,000
Project Total:									\$1,160,000

COST DETAIL:

Study:	\$0	
Land Acquisition / ROW:	\$0	
Engineering / Design:	\$0	
Construction:	\$1,160,000	Cost Total: \$1,160,000
Annual Maint. Cost:		Project Difference: \$0
Maint. Year Start:		

Service Impact:

These pumps lift the waste water from the primary treatment process to the secondary treatment process for additional treatment necessary to meet the facility's NPDES permit.

Project Justification:

Pumps are needed to keep the waste stream moving through the facility for proper treatment and compliance with the facility's NPDES permit.

Location Description:

606 Hannah Ave



Six Year Capital Improvement Program

WW-20-CIP

Wastewater

970-20-CIP

TCRWWTP- PLC Upgrade

Project Information

Submitted By:	Elizabeth Hart	Department:	Department of Municipal Utilities	Upgrade PLC (Programmable Logic Controls) to maintain current plant functionality. Contains 12 PLCs and includes adding additional processors to allow membrane trains to operate on their own processor.
Category:	Maintenance	Department Head:	Art Krueger	
Fund Group:	Waste Water	Staff Priority:	Imperative (Must Do)	
Fund Detail:	Sewer Plant and Buildings	Council Priority:		

Plant PLC Upgrade - Plant PLC Upgrade - Cost

Funding Sources:

		Previous	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	2025/2026	Total
P	Private	\$0	\$0	\$150,000	\$0	\$0	\$0	\$0	\$150,000
S	Sewer Fund	\$0	\$0	\$150,000	\$0	\$0	\$0	\$0	\$150,000
Project Total:									\$300,000

COST DETAIL:

Study:	\$0		
Land Acquisition / ROW:	\$0		
Engineering / Design:	\$0		
Construction:	\$300,000	Cost Total:	\$300,000
Annual Maint. Cost:		Project Difference:	\$0
Maint. Year Start:			

Service Impact:

Many of the PLCs at the treatment facility were commissioned in 2005, they are or are becoming obsolete, which means they aren't going to be supported in the near future. The PLCs are the nerves of the treatment plant, they take in data from different monitoring devices (nerve endings) and communicate it to the SCADA (the brain of the plant) so that automated functions are modified to meet the current plant conditions, and initiates alarms to be triggered notifying staff there is an abnormal condition present. This project would ensure that the PLCs in the plant are well supported and thus able to be maintained.

Project Justification:

Maintain treatment capabilities to meet the requirements of the facility's NPDES permit.

Location Description:

606 Hannah



Six Year Capital Improvement Program

WW-20-CIP

Wastewater

1168-20-CIP

TRWWTP-Plant Electrical Engineering Evaluation

Project Information

Submitted By:	Elizabeth Hart	Department:	Department of Municipal Utilities	Plant Electrical Engineering Evaluation per Task 4 of 2018-2019
Category:	Visionary	Department Head:	Art Krueger	Facility's Priority Plan-Upgrade per evaluation to be added to CIP in
Fund Group:	Waste Water	Staff Priority:	Essential (Should Do)	Accordance with AMP prioritization
Fund Detail:	Sewer Plant and Buildings	Council Priority:		

Plant Electrical Engin Plant Electrical Engineering Evaluation

Funding Sources:

		Previous	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	2025/2026	Total
P	Private	\$0	\$0	\$25,000	\$0	\$0	\$0	\$0	\$25,000
S	Sewer Fund	\$0	\$0	\$25,000	\$0	\$0	\$0	\$0	\$25,000
Project Total:									\$50,000

COST DETAIL:

Study:	\$0		
Land Acquisition / ROW:	\$0		
Engineering / Design:	\$50,000		
Construction:	\$0	Cost Total:	\$50,000
Annual Maint. Cost:		Project Difference:	\$0
Maint. Year Start:			

Service Impact:

This project will identify electrical inefficiencies and safety vulnerabilities, and make recommendations for addressing these issues complete with cost projections.

Project Justification:

The old plant or aeration plant is served by 13.8 kV switchgear. The switchgear feeds two transformers that step the 13.8 kV down to 480 V in the Blower Room. The transformers are connected to the 480 V substation that provides power to the plant motor control centers (MCCs). The existing plant switchgear, transformers, and substation were originally installed in the early 1970s. The membrane building is supplied by a separate 13.8 kV feed and 480 V stepdown transformer installed in 2004.

Membrane process generator transfer switch is not provided with a removable tie-breaker that can be serviced. Upgrading the transfer switch will increase safety and reduce vulnerabilities present by not being able to properly isolate.

The Administration Building generator only has capacity to run one screw pump, the UV system and Administration Building lighting. Increasing the capacity of the generator would benefit the facility by allowing for more equipment to operate if line power is lost.

Location Description:

606 Hannah Ave.



Six Year Capital Improvement Program

WW-20-CIP

Wastewater

1169-20-CIP

TRWWTP-Structural Condition Assessment

Project Information

Submitted By:	Elizabeth Hart	Department:	Department of Municipal Utilities	Structural Condition Assessment (Task 3 of Facility Plan) and Sludge Storage Tank Engineering Evaluation (Task 10 of Facility Plan): Structures included=East and West Biosolids Storage Tanks, Hallway between the heat exchange room and primary pumping room, Maintenance Shop inside and out, maintenance shop basement, adjacent room, and loading dock per Facility's Priority Plan Task 3-Upgrade per evaluation to be added to CIP in Accordance with AMP prioritization
Category:	Visionary	Department Head:	Art Krueger	
Fund Group:	Waste Water	Staff Priority:	Essential (Should Do)	
Fund Detail:	Sewer Plant and Buildings	Council Priority:		

Structural Condition / Structural Condition Assessment

Funding Sources:

		Previous	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	2025/2026	Total
P	Private	\$0	\$0	\$25,000	\$0	\$0	\$0	\$0	\$25,000
S	Sewer Fund	\$0	\$0	\$25,000	\$0	\$0	\$0	\$0	\$25,000
Project Total:									\$50,000

COST DETAIL:

Study:	\$0		
Land Acquisition / ROW:	\$0		
Engineering / Design:	\$50,000		
Construction:	\$0	Cost Total:	\$50,000
Annual Maint. Cost:		Project Difference:	\$0
Maint. Year Start:			

Service Impact:

There are many aging structures at the TCRWWTP. Their structural evaluation will help plan and prioritize their reconditioning schedule.

Project Justification:

The tanks/ structures being evaluated are showing significant signs of degradation.

Location Description:

606 Hannah Ave



Six Year Capital Improvement Program

WW-20-CIP

Wastewater

1033-20-CIP

UV System and Related Structures Upgrade

Project Information

Submitted By:	Elizabeth Hart	Department:	Department of Municipal Utilities	WW-UV System Upgrade-To be completed by July 1, 2026 per July 3rd, 2019 ACO and is in accordance with the AMP prioritization-Condition Assessment rated the UV process the 4th highest risk prior to UV limited capacity being ID'd
Category:	Capital	Department Head:	Art Krueger	
Fund Group:	Waste Water	Staff Priority:	Imperative (Must Do)	
Fund Detail:	Sewer Plant and Buildings	Council Priority:		

UV System and Related Structures Upgrade

Funding Sources:

		Previous	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	2025/2026	Total
P	Private	\$0	\$0	\$0	\$0	\$0	\$1,500,000	\$0	\$1,500,000
S	Sewer Fund	\$0	\$0	\$0	\$0	\$0	\$1,500,000	\$0	\$1,500,000
Project Total:									\$3,000,000

COST DETAIL:

Study:	\$0	
Land Acquisition / ROW:	\$0	
Engineering / Design:	\$0	
Construction:	\$3,000,000	Cost Total: \$3,000,000
Annual Maint. Cost:		Project Difference: \$0
Maint. Year Start:		

Service Impact:

It has been found that the UV system was not designed to handle current design peak flow for the plant. This project would upgrade the system to meet peak flow demands, and to meet the MDEQ's current requirement of meeting 10 state standards as it relates to waste water treatment plant design criteria, it also allows the facility to meet the permit requirement of disinfecting 100% of the facility effluent at peak flows.

Project Justification:

This project is necessary for the facility to remain in compliance with its discharge permit issued by the MDEQ.

Location Description:

606 Hannah Ave



Six Year Capital Improvement Program

WW-20-CIP

Wastewater

1170-20-CIP

UV System Upgrade Engineering

Project Information

Submitted By:	Elizabeth Hart	Department:	Department of Municipal Utilities	UV System Upgrade Engineering Including Part 41 Submission to
Category:	Visionary	Department Head:	Art Krueger	EGLLE by December 31st, 2024 per July 3rd, 2019 ACO and is
Fund Group:	Waste Water	Staff Priority:	Imperative (Must Do)	inaccordance with the AMP prioritization-Condition Assessment rated
Fund Detail:	Sewer Plant and Buildings	Council Priority:		the UV process the 4th highest risk prior to UV limited capacity being
				ID'd

UV System Upgrade UV System Upgrade Engineering

Funding Sources:

		Previous	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	2025/2026	Total
P	Private	\$0	\$0	\$25,000	\$0	\$0	\$0	\$0	\$25,000
S	Sewer Fund	\$0	\$0	\$25,000	\$0	\$0	\$0	\$0	\$25,000
Project Total:									\$50,000

COST DETAIL:

Study:	\$0		
Land Acquisition / ROW:	\$0		
Engineering / Design:	\$50,000		
Construction:	\$0	Cost Total:	\$50,000
Annual Maint. Cost:		Project Difference:	\$0
Maint. Year Start:			

Service Impact:

This project will increase capacity of the UV system, and upgrade obsolete technology currently in place. Upgrade is mandated by the state regulators to be complete by July 1, 2026.

Project Justification:

This project was mandated through a consent order issued by the state of Michigan, because the UV system is not properly sized to meet peak flow demands. This under capacity has/could result in portions of the plant effluent not being disinfected. It is a permit requirement that 100% of the effluent be disinfected 100% of the time.

Location Description:

606 Hannah Ave.



Six Year Capital Improvement Program

WW-20-CIP

Wastewater

764-20-CIP

Window Replacement 503 Hannah Ave.

Project Information

Submitted By:	Justin Roy	Department:	Department of Municipal Utilities	Replace original single pane windows and doors with new energy efficient windows and doors.
Category:	Visionary	Department Head:	Art Krueger	
Fund Group:	Waste Water	Staff Priority:	Essential (Should Do)	
Fund Detail:	Sewer Plant and Buildings	Council Priority:		

Window Replacement Window Replacement 503 Hannah Ave. - Cost

Funding Sources:

		Previous	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	2025/2026	Total
S	Sewer Fund	\$0	\$30,000	\$0	\$0	\$0	\$0	\$0	\$30,000
WAT	Water Fund	\$0	\$30,000	\$0	\$0	\$0	\$0	\$0	\$30,000
Project Total:									\$60,000

COST DETAIL:

Study:	\$0		
Land Acquisition / ROW:	\$0		
Engineering / Design:	\$0		
Construction:	\$60,000	Cost Total:	\$60,000
Annual Maint. Cost:		Project Difference:	\$0
Maint. Year Start:			

Service Impact:

Increase energy efficiency and reduce heating costs.

Project Justification:

Windows need to be replaced - good stewardship.

Location Description:

Water / Sewer Maintenance Building at 507 Hannah.



Six Year Capital Improvement Program

WW-20-CIP

Wastewater

1058-20-CIP

WW Gravity Main Rehab\Repair and PACP Inspections

Project Information

Submitted By:	Art Krueger	Department:	Department of Municipal Utilities	Rehabilitate and Repair Wastewater Gravity Mains that were recommended in the 2015 SAW Grant Asset Management Plan. Also, continue to clean and perform PACP inspections for the entire system within a seven year cycle.
Category:	Maintenance	Department Head:	Art Krueger	
Fund Group:	Waste Water	Staff Priority:	Essential (Should Do)	
Fund Detail:	Sewer Collection System	Council Priority:		

PACP Sanitary Sewer Video Inspections

Funding Sources:

		Previous	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	2025/2026	Total
S	Sewer Fund	\$0	\$0	\$0	\$385,000	\$385,000	\$385,000	\$385,000	\$1,540,000
Project Total:									\$1,540,000

COST DETAIL:

Study:	\$0	
Land Acquisition / ROW:	\$0	
Engineering / Design:	\$0	
Construction:	\$1,540,000	Cost Total: \$1,540,000
Annual Maint. Cost:		Project Difference: \$0
Maint. Year Start:		

Service Impact:

Repairs to gravity sewer mains will increase reliability and reduce sewer back ups and City's liability to customers property damage claims.

Project Justification:

Repair portions of gravity sewer mains already noted as needing repair in the 2015 SAW Grant and continue to clean, televise and inspect remaining portion (+/-50%) of the City's collection system that was not evaluated during the SAW Grant.

Location Description:

City wide.



Six Year Capital Improvement Program

WW-20-CIP

Wastewater

1057-20-CIP

WW Manholes Rehab\Repair and MACP Inspections

Project Information

Submitted By:	Art Krueger	Department:	Department of Municipal Utilities	Rehabilitate and Repair Wastewater Manholes that were recommended in the 2015 SAW Grant Asset Management Plan. Also, continue to MACP inspect on all remaining Wastewater Manholes that were not inspected during the 2015 SAW Grant Project.
Category:	Maintenance	Department Head:	Art Krueger	
Fund Group:	Waste Water	Staff Priority:	Essential (Should Do)	
Fund Detail:	Sewer Collection System	Council Priority:		

MACP Manhole Insp: MACP Manhole Inspections

Funding Sources:

		Previous	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	2025/2026	Total
S	Sewer Fund	\$0	\$0	\$0	\$50,000	\$50,000	\$50,000	\$50,000	\$200,000
Project Total:									\$200,000

COST DETAIL:

Study:	\$0	
Land Acquisition / ROW:	\$0	
Engineering / Design:	\$0	
Construction:	\$200,000	Cost Total: \$200,000
Annual Maint. Cost:		Project Difference: \$0
Maint. Year Start:		

Service Impact:

Repair manhole structure covers before they fail (sink down) which negatively impacts our streets and increases maintenance cost.

Project Justification:

Recommended in the 2015 SAW Grant Project.

Location Description:

City-wide.



Six Year Capital Improvement Program

WW-20-CIP

Wastewater

904-20-CIP

WW-Primary Clarification Upgrade

Project Information

Submitted By:	Elizabeth Hart	Department:	Department of Municipal Utilities	WW-Primary Clarification Upgrade per HRC Engineering Study Performed 2019-2020-This project is prioritized in accordance with the Asset Management Plan for the Facility and Lift Stations -Condition Assessment Rated Primary Treatment as 2nd highest risk prior to primary header failing and after digester 3 being taken out of service-Cost to be updated after completion of 2019-2020 evaluation
Category:	Capital	Department Head:	Art Krueger	
Fund Group:	Waste Water	Staff Priority:	Imperative (Must Do)	
Fund Detail:	Sewer Plant and Buildings	Council Priority:		

Primary Clarification | Primary Clarification Upgrade

Funding Sources:

		Previous	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	2025/2026	Total
P	Private	\$0	\$0	\$0	\$1,500,000	\$0	\$0	\$0	\$1,500,000
S	Sewer Fund	\$0	\$0	\$0	\$1,500,000	\$0	\$0	\$0	\$1,500,000
Project Total:									\$3,000,000

COST DETAIL:

Study:	\$0	
Land Acquisition / ROW:	\$0	
Engineering / Design:	\$0	
Construction:	\$3,000,000	Cost Total: \$3,000,000
Annual Maint. Cost:		Project Difference: \$0
Maint. Year Start:		

Service Impact:

This project will upgrade the primary treatment process by way of reconditioning and/or replacement equipment and structures.

Project Justification:

Primary treatment is an essential process in treating wastewater. If not operating effectively, it can compromise treatment and lead to additional costs.

Location Description:

606 Hannah Ave

Six Year Capital Improvement Plan

All Projects Submitted for 2020-2021

Budget Year 2020-2021 by Program Name

Bold - Indicates projects occurring in the first FY of the plan . + - Indicates projects with multiple funding										Overall Programming Cost		
Project ID	Cat	Previous	Fiscal Year 2020-2021	Fiscal Year 2021-2022	Fiscal Year 2022-2023	Fiscal Year 2023-2024	Fiscal Year 2024-2025	Fiscal Year 2025-2026		Project Cost	City Funds	Non-City Funds
Water												
367-20-CIP	Annual Water Rehab/Replace	V	\$0	\$450,000	\$450,000	\$450,000	\$450,000	\$450,000	\$450,000	\$2,700,000	\$2,700,000	\$0
933-20-CIP	Chemical System Upgrades-Ferric, Chlorine&Fluoride	V	\$0	\$250,000	\$0	\$0	\$0	\$0	\$0	\$250,000	\$250,000	\$0
935-20-CIP	East - West Transmission Main Upgrade	C	\$2,273,000	\$1,024,000	\$0	\$1,280,000	\$1,180,000	\$1,470,000	\$1,250,000	\$8,477,000	\$8,477,000	\$0
1053-20-CIP	East Front Street 16" Watermain	C	\$0	\$0	\$0	\$0	\$420,000	\$0	\$0	\$420,000	\$420,000	\$0
930-20-CIP	Electrical Gear Upgrades at WTP & Low Service	V	\$0	\$0	\$850,000	\$0	\$0	\$0	\$0	\$850,000	\$850,000	\$0
932-20-CIP	Hannah Ave Water Main Upgrade	V	\$0	\$0	\$0	\$0	\$0	\$0	\$360,000	\$360,000	\$360,000	\$0
770-20-CIP	High & Low Service Pump Repairs	C	\$320,000	\$80,000	\$80,000	\$0	\$0	\$0	\$0	\$480,000	\$480,000	\$0
1028-20-CIP	Lagoon Maintenance	M	\$60,000	\$0	\$60,000	\$0	\$60,000	\$0	\$0	\$180,000	\$180,000	\$0
1186-20-CIP	Low Service Pump Station - Standby Generator	C	\$0	\$0	\$0	\$100,000	\$0	\$0	\$0	\$100,000	\$100,000	\$0
+ 1027-20-CIP	Park Place Area Infrastructure Improvements	C	\$0	\$0	\$1,225,000	\$0	\$0	\$0	\$0	\$1,225,000	\$1,225,000	\$0
1086-20-CIP	Phase 2 Security Barrier @ Water Treatment Plant	C	\$0	\$100,000	\$0	\$0	\$0	\$0	\$0	\$100,000	\$100,000	\$0
121-20-CIP	Plant - Freight Elevator Compliance	V	\$0	\$0	\$0	\$100,000	\$0	\$0	\$0	\$100,000	\$100,000	\$0
1092-20-CIP	Remove and Replace Galvanized Water Services	M	\$0	\$0	\$500,000	\$500,000	\$500,000	\$500,000	\$500,000	\$2,500,000	\$2,500,000	\$0
1181-20-CIP	Replace 16" Water Main Valves along Wash& Front St	M	\$0	\$100,000	\$0	\$0	\$0	\$0	\$0	\$100,000	\$100,000	\$0
1054-20-CIP	Union St. 12" Watermain	C	\$100,000	\$185,000	\$0	\$0	\$0	\$0	\$0	\$285,000	\$285,000	\$0
1016-20-CIP	Veterans Drive Water Main Replacement Project.	C	\$0	\$0	\$0	\$0	\$0	\$0	\$450,000	\$450,000	\$450,000	\$0
1049-20-CIP	Wayne Hill Fire Pump	C	\$0	\$100,000	\$0	\$0	\$0	\$0	\$0	\$100,000	\$100,000	\$0
1183-20-CIP	WTP Backwash & Surface Wash Pumps	M	\$0	\$0	\$0	\$150,000	\$0	\$0	\$0	\$150,000	\$150,000	\$0
1182-20-CIP	WTP High Service - Cone Valve Replacement	M	\$0	\$0	\$0	\$100,000	\$0	\$0	\$0	\$100,000	\$100,000	\$0
1017-20-CIP	WTP Standby Generator Replacement Project	M	\$0	\$0	\$0	\$0	\$0	\$300,000	\$0	\$300,000	\$300,000	\$0
1065-20-CIP	WTP Sump Pump Discharge Flow Meter	C	\$0	\$20,000	\$0	\$0	\$0	\$0	\$0	\$20,000	\$20,000	\$0
1047-20-CIP	WTP Turbidimeters Replacement	M	\$0	\$0	\$0	\$15,000	\$10,000	\$0	\$0	\$25,000	\$25,000	\$0
1045-20-CIP	WTP Water Quality In-Line Instrumentation	C	\$0	\$25,000	\$0	\$0	\$0	\$0	\$0	\$25,000	\$25,000	\$0

Six Year Capital Improvement Plan

All Projects Submitted for 2020-2021

Budget Year 2020-2021 by Program Name

Bold - Indicates projects occurring in the first FY of the plan . + - Indicates projects with multiple funding										<u>Overall Programming Cost</u>		
Project ID	Cat	Previous	Fiscal Year 2020-2021	Fiscal Year 2021-2022	Fiscal Year 2022-2023	Fiscal Year 2023-2024	Fiscal Year 2024-2025	Fiscal Year 2025-2026		Project Cost	City Funds	Non-City Funds
Water												
1184-20-CIP	WTP Windows Replacement Project	M	\$0	\$0	\$0	\$0	\$0	\$0	\$90,000	\$90,000	\$90,000	\$0
Total Water			\$2,334,000	\$3,165,000	\$2,695,000	\$2,620,000	\$2,720,000	\$3,100,000		\$19,797,000	\$19,797,000	\$0



Six Year Capital Improvement Program

WATER-20-CIP

Water

1084-20-CIP Abandon 12" Water Main Under River at Pine & Front

Project Information

Submitted By:	Art Krueger	Department:	Department of Municipal Utilities	This project will be completed after Project 535-19-CIP West Front St Bridge Replacement is complete. The bridge project includes a new 12" water main along Front St between Pine and Hall St. This will improve hydraulics to the service areas west and south of Hall St.
Category:	Maintenance	Department Head:	Art Krueger	
Fund Group:	Water	Staff Priority:	Imperative (Must Do)	
Fund Detail:	Water Distribution System	Council Priority:		

Abandon 12" Water Main Under River at Pine & Front

Funding Sources:

		Previous	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	2025/2026	Total
WAT	Water Fund	\$10,000	\$0	\$0	\$0	\$0	\$0	\$0	\$10,000
Project Total:									\$10,000

COST DETAIL:

Study:	\$0	
Land Acquisition / ROW:	\$0	
Engineering / Design:	\$0	
Construction:	\$10,000	Cost Total: \$10,000
Annual Maint. Cost:		Project Difference: \$0
Maint. Year Start:		

Service Impact:

Improve water system hydraulics to west side and decrease water loss.

Project Justification:

Abandoning this segment of water main after constructing a new water main with the West Front St Bridge project is more cost effective and beneficial than repairing it.

Location Description:

North of Pine and Front St under Boardman River



Six Year Capital Improvement Program

WATER-20-CIP

Water

367-20-CIP Annual Water Rehab/Replace

Project Information

Submitted By:	Justin Roy	Department:	Department of Municipal Utilities	Provide \$450,000 annually in the water fund to continue systematic improvements (repair and replacement) of the underground infrastructure. The Public Improvement Plan will also contain more detailed descriptions of proposed near-term projects.
Category:	Visionary	Department Head:	Art Krueger	
Fund Group:	Water	Staff Priority:	Essential (Should Do)	
Fund Detail:	Water Distribution System	Council Priority:		

Annual Water Rehab/ Annual Water Rehab/Replace - Cost

Funding Sources:

		Previous	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	2025/2026	Total
WAT	Water Fund	\$0	\$450,000	\$450,000	\$450,000	\$450,000	\$450,000	\$450,000	\$2,700,000
Project Total:									\$2,700,000

COST DETAIL:

Study:	\$0	
Land Acquisition / ROW:	\$0	
Engineering / Design:	\$0	
Construction:	\$2,700,000	Cost Total: \$2,700,000
Annual Maint. Cost:		Project Difference: \$0
Maint. Year Start:		

Service Impact:

Replacing old water mains will reduce emergency repairs and long-term maintenance costs.

Project Justification:

2014 Water System Reliability Study recommends replacing aging water mains where more frequent breaks are known to occur. This cost will be applied to the water main portion of an annual full street reconstruction project.

Location Description:

City wide.



Six Year Capital Improvement Program

WATER-20-CIP

Water

933-20-CIP Chemical System Upgrades-Ferric, Chlorine&Fluoride

Project Information

Submitted By: Art Krueger
Category: Visionary
Fund Group: Water
Fund Detail: Water Treatment

Department: Department of Municipal Utilities
Department Head: Art Krueger
Staff Priority: Essential (Should Do)
Council Priority:

Of these three (3) chemical systems, the Fluoride and Ferric chemical systems have already been completely upgraded as of 2017. The Chlorine system's chemical feed portion was also upgraded in 2012, so the two (2) 8,000 gal. chlorine bulk storage tanks (installed 1994) are the only remaining items needing to be upgraded since they are reaching the end of their useful life.

Chemical System Up Chemical System Upgrades (Alum, Chlorine & - Cost
Funding Sources:

		Previous	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	2025/2026	Total
WAT	Water Fund	\$0	\$250,000	\$0	\$0	\$0	\$0	\$0	\$250,000
Project Total:									\$250,000

COST DETAIL:

Study: \$0

Land Acquisition / ROW: \$0

Engineering / Design: \$10,000

Construction: \$240,000

Annual Maint. Cost:

Maint. Year Start:

Cost Total: **\$250,000**

Project Difference: **\$0**

Service Impact:

Restore reliability of Chlorine bulk storage. One tank currently is leaking, leaving only one aging tank available for storage. Chlorine is critical for disinfection in the water treatment process.

Project Justification:

Project recommended in the 2014 Water System Reliability Study.

Location Description:

WTP - 2010 Eastern Ave.



Six Year Capital Improvement Program

WATER-20-CIP

Water

935-20-CIP East - West Transmission Main Upgrade

Project Information

Submitted By:	Art Krueger	Department:	Department of Municipal Utilities	<p>Projects recommended in the 2014 Water System Reliability Study Table 23, Projects P-3 and P-9. Costs/phases updated in 2017 by Wade Trim & DMU 2019. Replace aged smaller diameter mains with new 12,135 lineal feet (LF) of 24-inch main and 3,125 LF of new 16-inch main.</p> <p>FY18-19: Phase 3A: 24" main - Lake Ave from 8th to Cass (Completed)</p> <p>FY19-20: Phase 2: 24" main - 8th from Boardman Ave to Railroad Ave. & 16" main - Franklin, 8th to Wash. (Completed)</p> <p>FY20-21: Phase 1: 20" & 24" main with 8th St Bridge Project (Water main cost included in Project 58-20-CIP); Phase 3B: 24" main - Lake Ave from Cass to Union & Phase 4: 24" main; 7th from Union to Wadsworth</p> <p>FY21-22: Park Place Area Infrastructure Improvements - Project 1027-20-CIP</p> <p>FY22-23: Phase 5B: 24" main - Railroad Ave from 8th to Webster & Webster from Railroad Ave to Rose St.</p> <p>FY23-24: Phase 5A: 24" main - Garfield from Washington to Webster & Webster to Rose St.</p> <p>FY24-25: Phase 6: 24" main - 7th from Wadsworth to Spruce</p> <p>FY25-26: Phase 7: 16" main - Spruce from 7th to Wayne St.</p>
Category:	Capital	Department Head:	Art Krueger	
Fund Group:	Water	Staff Priority:	Essential (Should Do)	
Fund Detail:	Water System Reliability Project	Council Priority:		

East - West Transmis East - West Transmission Main Upgrade - Cost

Funding Sources:

		Previous	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	2025/2026	Total
WAT	Water Fund	\$2,273,000	\$1,024,000	\$0	\$1,280,000	\$1,180,000	\$1,470,000	\$1,250,000	\$8,477,000
Project Total:									\$8,477,000

COST DETAIL:

Study:	\$0		
Land Acquisition / ROW:	\$0		
Engineering / Design:	\$1,874,265		
Construction:	\$6,602,735		
Annual Maint. Cost:			
Maint. Year Start:			
		Cost Total:	\$8,477,000
		Project Difference:	\$0

Service Impact:

Increase transmission capacity to west side of City and provide redundancy to the aging 16" water main along Front St. and Wayne St. to the Wayne Hill reservoir.

Project Justification:



City of
TRAVERSE CITY

Six Year Capital Improvement Program

WATER-20-CIP

Water

Projects recommended in the 2014 Water System Reliability Study based upon water model.

Location Description:

Various locations as noted in project description.



Six Year Capital Improvement Program

WATER-20-CIP

Water

1053-20-CIP

East Front Street 16" Watermain

Project Information

Submitted By:	Art Krueger	Department:	Department of Municipal Utilities	Replace approx. 1230 lineal feet of existing 16" pit cast main from the early 1900's in E. Front Street between Railroad and Boardman Avenues.
Category:	Capital	Department Head:	Art Krueger	
Fund Group:	Water	Staff Priority:	Essential (Should Do)	
Fund Detail:	Water Distribution System	Council Priority:		

East Front Street 16" East Front Street 16" Watermain

Funding Sources:

		Previous	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	2025/2026	Total
WAT	Water Fund	\$0	\$0	\$0	\$0	\$420,000	\$0	\$0	\$420,000
Project Total:									\$420,000

COST DETAIL:

Study:	\$0	
Land Acquisition / ROW:	\$0	
Engineering / Design:	\$0	
Construction:	\$420,000	Cost Total: \$420,000
Annual Maint. Cost:		Project Difference: \$0
Maint. Year Start:		

Service Impact:

Increase reliability of a significant portion of aging 16" water main and will decrease overall maintenance costs by reducing emergency repairs on E Front St.

Project Justification:

2014 Water System Reliability Study references concerns for this segment of water main due to it's age.

Location Description:

E. Front Street between Railroad and Boardman Avenues.



Six Year Capital Improvement Program

WATER-20-CIP

Water

930-20-CIP

Electrical Gear Upgrades at WTP & Low Service

Project Information

Submitted By:	Art Krueger	Department:	Department of Municipal Utilities	Project recommended in the 2014 Water System Reliability Study Table 23, Project P-5. Update original (1965 and 1972) electrical equipment for both High Service and Low Service pumps. Project will also increase electric efficiency and reliability.
Category:	Visionary	Department Head:	Art Krueger	
Fund Group:	Water	Staff Priority:	Essential (Should Do)	
Fund Detail:	Water System Reliability Project	Council Priority:		

Electrical Gear Upgrades at WTP & Low Serv - Cost

Funding Sources:

		Previous	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	2025/2026	Total
WAT	Water Fund	\$0	\$0	\$850,000	\$0	\$0	\$0	\$0	\$850,000
Project Total:									\$850,000

COST DETAIL:

Study:	\$0	
Land Acquisition / ROW:	\$0	
Engineering / Design:	\$0	
Construction:	\$850,000	Cost Total: \$850,000
Annual Maint. Cost:		Project Difference: \$0
Maint. Year Start:		

Service Impact:

Project Justification:

Location Description:



Six Year Capital Improvement Program

WATER-20-CIP

Water

934-20-CIP Filters 1, 2 & 3 Valve Replacement

Project Information

Submitted By:	Art Krueger	Department:	Department of Municipal Utilities	Replace 8 of 9 valves per filter; 24 valves total in the three oldest filters that were originally built in 1965 (Filters 1 & 2) and 1972 (Filter 3). These valves are at the end of their useful life. The main effluent control valve in these three filters was replaced with the SCADA Project ID#103 in 2015-2016.
Category:	Visionary	Department Head:	Art Krueger	
Fund Group:	Water	Staff Priority:	Essential (Should Do)	
Fund Detail:	Water Treatment	Council Priority:		

Filters 1, 2 & 3 Valve Replacement - Cost

Funding Sources:

		Previous	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	2025/2026	Total
WAT	Water Fund	\$400,000	\$0	\$0	\$0	\$0	\$0	\$0	\$400,000
Project Total:									\$400,000

COST DETAIL:

Study:	\$0	
Land Acquisition / ROW:	\$0	
Engineering / Design:	\$25,000	
Construction:	\$375,000	
Annual Maint. Cost:		
Maint. Year Start:		
Cost Total:		\$400,000
Project Difference:		\$0

Service Impact:

Restore reliability in 3 of the 5 filters at the WTP. Valves are critical to filter operations and must be in operable condition at all times. Will decrease long term maintenance costs.

Project Justification:

Project recommended in the 2014 Water System Reliability Study.

Location Description:

WTP - 2010 Eastern Ave.



Six Year Capital Improvement Program

WATER-20-CIP

Water

932-20-CIP

Hannah Ave Water Main Upgrade

Project Information

Submitted By:	Art Krueger	Department:	Department of Municipal Utilities	Replace 1,900 lineal feet of aging 6-inch main on Hannah Ave. with 12-inch main from Bates Street to S. Garfield Ave.
Category:	Visionary	Department Head:	Art Krueger	
Fund Group:	Water	Staff Priority:	Essential (Should Do)	
Fund Detail:	Water Distribution System	Council Priority:		

Hannah Ave Water M Hannah Ave Water Main Upgrade - Cost

Funding Sources:

		Previous	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	2025/2026	Total
WAT	Water Fund	\$0	\$0	\$0	\$0	\$0	\$0	\$360,000	\$360,000
Project Total:									\$360,000

COST DETAIL:

Study:	\$0	
Land Acquisition / ROW:	\$0	
Engineering / Design:	\$0	
Construction:	\$360,000	Cost Total: \$360,000
Annual Maint. Cost:		Project Difference: \$0
Maint. Year Start:		

Service Impact:

Increase system reliability and flows to immediate service area.

Project Justification:

Project recommended in the 2014 Water System Reliability Study

Location Description:

Hannah Ave. from Bates Street to S. Garfield Ave.



Six Year Capital Improvement Program

WATER-20-CIP

Water

770-20-CIP High & Low Service Pump Repairs

Project Information

Submitted By:	Art Krueger	Department:	Department of Municipal Utilities	4 High Service and 3 Low Service pumps and motors need to be pulled and rebuilt by a pump service company. The motor windings need to be replaced so that a variable frequency drive (VFD) can be installed on the pumps. VFD's allow significant energy savings and assist in overall WTP operations.
Category:	Capital	Department Head:	Art Krueger	
Fund Group:	Water	Staff Priority:	Imperative (Must Do)	
Fund Detail:	Water System Reliability Project	Council Priority:		

High & Low Service F High & Low Service Pump Repairs - Cost

Funding Sources:

		Previous	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	2025/2026	Total
WAT	Water Fund	\$320,000	\$80,000	\$80,000	\$0	\$0	\$0	\$0	\$480,000
Project Total:									\$480,000

COST DETAIL:

Study:	\$0	
Land Acquisition / ROW:	\$0	
Engineering / Design:	\$0	
Construction:	\$480,000	Cost Total: \$480,000
Annual Maint. Cost:		Project Difference: \$0
Maint. Year Start:		

Service Impact:

Increase pump reliability, reduce energy consumption and reduce overall maintenance / emergency costs.

Project Justification:

Pumps are critical to WTP operations and need to be service regularly.

Location Description:

WTP - 2010 Eastern Ave.



Six Year Capital Improvement Program

WATER-20-CIP

Water

1028-20-CIP

Lagoon Maintenance

Project Information

Submitted By: Art Krueger

Category: Maintenance

Fund Group: Water

Fund Detail: Water Treatment

Department:

Department of Municipal Utilities

Department Head:

Art Krueger

Staff Priority:

Imperative (Must Do)

Council Priority:

There are 2 washwater lagoons behind the water treatment plant facility and the sludge from the filter backwashing process must be removed and hauled to the landfill.

Lagoon Maintenance Lagoon Maintenance- Cost

Funding Sources:

		Previous	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	2025/2026	Total
WAT	Water Fund	\$60,000	\$0	\$60,000	\$0	\$60,000	\$0	\$0	\$180,000
Project Total:									\$180,000

COST DETAIL:

Study: \$0

Land Acquisition / ROW: \$0

Engineering / Design: \$0

Construction: \$180,000

Annual Maint. Cost:

Maint. Year Start:

Cost Total: \$180,000

Project Difference: \$0

Service Impact:

Backwashing filters is critical to water treatment. Solids must be settled out of filter backwash water before releasing the clean water back to East Bay as allowed in the NPDES permit.

Project Justification:

Required by suspended solids limits set in NPDES permit.

Location Description:

WTP - 2010 Eastern Ave.



Six Year Capital Improvement Program

WATER-20-CIP

Water

1186-20-CIP

Low Service Pump Station - Standby Generator

Project Information

Submitted By: Art Krueger
Category: Capital
Fund Group: Water
Fund Detail: Water Treatment

Department: Department of Municipal Utilities
Department Head: Art Krueger
Staff Priority: Essential (Should Do)
Council Priority:

Currently, the standby generator at the Water Treatment Plant (WTP) is used to provide back up power to both the Low Service Pump Station and the WTP. This divides the available back up power between the two locations and limits the overall capacity that the plant can produce when running on generator power. Therefore, if a separate generator was installed at the Low Service Pump Station to serve that facility, the main plant generator could be dedicated to serve the WTP, thereby increasing capacity during a potential extended power outage.

Low Service Pump Station - Standby Generator

Funding Sources:

		Previous	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	2025/2026	Total
WAT	Water Fund	\$0	\$0	\$0	\$100,000	\$0	\$0	\$0	\$100,000
Project Total:									\$100,000

COST DETAIL:

Study:	\$0		
Land Acquisition / ROW:	\$0		
Engineering / Design:	\$0		
Construction:	\$100,000	Cost Total:	\$100,000
Annual Maint. Cost:		Project Difference:	\$0
Maint. Year Start:			

Service Impact:

Project would boost resiliency and reliability of the WTP increasing capacity when operating under back up power, which occurs at times.

Project Justification:

Need to increase WTP's available capacity when running under standby generator power, especially if during high demand summer months.

Location Description:

Low Service Pump Station



Six Year Capital Improvement Program

WATER-20-CIP

Water

1027-20-CIP

Park Place Area Infrastructure Improvements

Project Information

Submitted By: Missy Luick

Department: Engineering

Category: Capital

Department Head: Tim Lodge

Fund Group: Water

Staff Priority:

Fund Detail: Water System Reliability Project

Council Priority:

The Park Place Brownfield Plan identifies water main and storm sewer water quality improvements. Watermain- An upgraded 12" watermain will be installed from Boardman to Cass and will go down a portion of State Street and Washington Streets. Storm Sewer Water Quality- This improvement will include a combination of infiltration and filtration to improve water quality for a significant portion of the downtown area. Both projects will be reimbursed using Brownfield funds.

Park Place Area Infra Park Place Area Infrastructure Improvements- Cost

Funding Sources:

		Previous	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	2025/2026	Total
BR	Brownfield	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
S	Sewer Fund	\$0	\$0	\$250,000	\$0	\$0	\$0	\$0	\$250,000
WAT	Water Fund	\$0	\$0	\$975,000	\$0	\$0	\$0	\$0	\$975,000

Project Total: **\$1,225,000**

COST DETAIL:

Study: \$0

Land Acquisition / ROW: \$0

Engineering / Design: \$0

Construction: \$1,225,000

Annual Maint. Cost:

Maint. Year Start:

Cost Total: **\$1,225,000**

Project Difference: **\$0**

Service Impact:

The improvement will upgrade the city's water distribution system to current standards for fire protection and will implement best practices for storm water management. there could be an increase in maintenance costs

Project Justification:

Park Place Brownfield Plan, Water Reliability Study, Improve Water Quality.

Location Description:

Park Place vicinity



Six Year Capital Improvement Program

WATER-20-CIP

Water

1086-20-CIP

Phase 2 Security Barrier @ Water Treatment Plant

Project Information

Submitted By: Art Krueger

Department: Department of Municipal Utilities

This project adds Phase 2 to the completed security gate project to increase the level of security by installing a physical vehicular barrier along Eastern Ave.

Category: Capital

Department Head: Art Krueger

Fund Group: Water

Staff Priority: Imperitive (Must Do)

Fund Detail: Water Treatment

Council Priority:

Phase 2 Security Bar Phase 2 Security Barrier @ Water Treatment Plant

Funding Sources:

		Previous	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	2025/2026	Total
WAT	Water Fund	\$0	\$100,000	\$0	\$0	\$0	\$0	\$0	\$100,000
Project Total:									\$100,000

COST DETAIL:

Study: \$0

Land Acquisition / ROW: \$0

Engineering / Design: \$0

Construction: \$100,000

Annual Maint. Cost:

Maint. Year Start:

Cost Total: \$100,000

Project Difference: \$0

Service Impact:

Increase security level at Water Treatment Plant

Project Justification:

Homeland Security Recommendations

Location Description:

2010 Eastern Ave



Six Year Capital Improvement Program

WATER-20-CIP

Water

121-20-CIP

Plant - Freight Elevator Compliance

Project Information

Submitted By:	Art Krueger	Department:	Department of Municipal Utilities	Replacement of elevator's original steel single wall casing hydraulic cylinder (1965) with double wall casing cylinder.
Category:	Visionary	Department Head:	Art Krueger	
Fund Group:	Water	Staff Priority:	Essential (Should Do)	
Fund Detail:	Water Treatment	Council Priority:		

Plant - Freight Elevat Plant - Freight Elevator Compliance - Cost

Funding Sources:

		Previous	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	2025/2026	Total
WAT	Water Fund	\$0	\$0	\$0	\$100,000	\$0	\$0	\$0	\$100,000
Project Total:									\$100,000

COST DETAIL:

Study:	\$0		
Land Acquisition / ROW:	\$0		
Engineering / Design:	\$0		
Construction:	\$100,000	Cost Total:	\$100,000
Annual Maint. Cost:		Project Difference:	\$0
Maint. Year Start:			

Service Impact:

Project would protect ground water from contamination if the single wall cylinder were to fail and leak hydraulic fluid which would be an environmental liability for the City.

Project Justification:

Elevator inspections have not revealed any issues but due to the age of the elevator, the single wall hydraulic cylinder should be replaced to provide secondary containment.

Location Description:

WTP - 2010 Eastern Ave.



Six Year Capital Improvement Program

WATER-20-CIP

Water

1092-20-CIP

Remove and Replace Galvanized Water Services

Project Information

Submitted By:	Art Krueger	Department:	Department of Municipal Utilities	Michigan's new Lead and Copper Rule (LCR passed June 2018) requires that water utilities must pay for replacement of up to 5% per year of privately owned galvanized water services from the curb stop to inside the building if the service "is" or "was" connected to a lead pipe (gooseneck). An updated estimate based upon the AMI meter project is that 25% of all private City water services may be galvanized, which is approximately 1,850 services. 5% per year is 90 to 100 services at cost of \$5,000 each or \$500,000 per year for 20 years with the first year planned to begin in FY2021.
Category:	Maintenance	Department Head:	Art Krueger	
Fund Group:	Water	Staff Priority:	Essential (Should Do)	
Fund Detail:	Water Distribution System	Council Priority:		

Remove and Replace Galvanized Water Services

Funding Sources:

		Previous	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	2025/2026	Total
WAT	Water Fund	\$0	\$0	\$500,000	\$500,000	\$500,000	\$500,000	\$500,000	\$2,500,000
Project Total:									\$2,500,000

COST DETAIL:

Study:	\$0		
Land Acquisition / ROW:	\$0		
Engineering / Design:	\$0		
Construction:	\$2,500,000	Cost Total:	\$2,500,000
Annual Maint. Cost:		Project Difference:	\$0
Maint. Year Start:			

Service Impact:

Minimal service impact since private water services are maintained by owner. Overall, could reduce long term water loss (leaks) due to old galvanized services being replaced with new copper over a 20 year period.

Project Justification:

Required by State law.

Location Description:

City-wide



Six Year Capital Improvement Program

WATER-20-CIP

Water

1181-20-CIP

Replace 16" Water Main Valves along Wash& Front St

Project Information

Submitted By:	Art Krueger	Department:	Department of Municipal Utilities	The older segment of 16" Water Main on Washington, Franklin and Front St. has several inoperable valves that need replacing to restore reliability in order to isolate smaller service areas in a water main break emergency. This work may also require installing line stops to allow existing valves to be excavated, removed and replaced.
Category:	Maintenance	Department Head:	Art Krueger	
Fund Group:	Water	Staff Priority:	Essential (Should Do)	
Fund Detail:	Water Distribution System	Council Priority:		

Funding Sources:

		Previous	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	2025/2026	Total
WAT	Water Fund	\$0	\$100,000	\$0	\$0	\$0	\$0	\$0	\$100,000
Project Total:									\$100,000

COST DETAIL:

Study:	\$0	
Land Acquisition / ROW:	\$0	
Engineering / Design:	\$0	
Construction:	\$100,000	Cost Total: \$100,000
Annual Maint. Cost:		Project Difference: \$0
Maint. Year Start:		

Service Impact:

Project will help to minimize property damage and limit area of disrupted water service in the event of a water main break emergency.

Project Justification:

Need to improve water system reliability through main downtown commercial corridor (Front St & Washington St).

Location Description:

Washington St from Hope St west to Franklin; Franklin north to E. Front St; E. Front St west to Union St.



Six Year Capital Improvement Program

WATER-20-CIP

Water

1054-20-CIP

Union St. 12" Watermain

Project Information

Submitted By: Art Krueger

Department: Department of Municipal Utilities

Install approx. 300 lineal feet of 12" main under Boardman River near Union Street bridge from south side of river to alley north of river to replace existing 12" main across the Union Street Dam. This project will be included in the 2020 Fish Pass (Union St. Dam) Project.

Category: Capital

Department Head: Art Krueger

Fund Group: Water

Staff Priority: Imperitive (Must Do)

Fund Detail: Water Distribution System

Council Priority:

Union St. 12" Watermain

Funding Sources:

		Previous	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	2025/2026	Total
WAT	Water Fund	\$100,000	\$185,000	\$0	\$0	\$0	\$0	\$0	\$285,000
Project Total:									\$285,000

COST DETAIL:

Study: \$0

Land Acquisition / ROW: \$0

Engineering / Design: \$0

Construction: \$285,000

Annual Maint. Cost:

Maint. Year Start:

Cost Total: \$285,000

Project Difference: \$0

Service Impact:

Replacement will reduce overall maintenance costs and increase reliability since it will be directionally drilled under the river vs. currently laying across the dam exposed to the elements, i.e. no bury on pipe.

Project Justification:

Needs to be replaced due to removal of existing 12" water main over Union St. dam with the 2020 Fish Pass project.

Location Description:

Between existing Union St. dam and Union Street bridge.



Six Year Capital Improvement Program

WATER-20-CIP

Water

1016-20-CIP

Veterans Drive Water Main Replacement Project.

Project Information

Submitted By:	Justin Roy	Department:	Department of Municipal Utilities	Replace 6" and 8" diameter water main with 12" between 14th Street and Georgetown Place.
Category:	Capital	Department Head:	Art Krueger	
Fund Group:	Water	Staff Priority:	Essential (Should Do)	
Fund Detail:	Water Distribution System	Council Priority:		

Veterans Drive Water Veterans Drive Water Main Replacement Project.

Funding Sources:

		Previous	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	2025/2026	Total
WAT	Water Fund	\$0	\$0	\$0	\$0	\$0	\$0	\$450,000	\$450,000
Project Total:									\$450,000

COST DETAIL:

Study:	\$0	
Land Acquisition / ROW:	\$0	
Engineering / Design:	\$0	
Construction:	\$450,000	Cost Total: \$450,000
Annual Maint. Cost:		Project Difference: \$0
Maint. Year Start:		

Service Impact:

Decrease overall maintenance costs and improve water supply / fire flows in this area.

Project Justification:

Project recommended in 2014 Water System Reliability Study.

Location Description:

Veterans Drive between 14th St. and Georgetown Place.



Six Year Capital Improvement Program

WATER-20-CIP

Water

1049-20-CIP

Wayne Hill Fire Pump

Project Information

Submitted By:	Art Krueger	Department:	Department of Municipal Utilities	Need to improve fire protection in the Wayne Hill, Incochee and Morgan Farms area pressure districts which are fed from the Wayne Hill Booster Station.
Category:	Capital	Department Head:	Art Krueger	
Fund Group:	Water	Staff Priority:	Imperitive (Must Do)	
Fund Detail:	Water Distribution System	Council Priority:		

Wayne Hill Fire Pump; Wayne Hill Fire Pump

Funding Sources:

		Previous	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	2025/2026	Total
WAT	Water Fund	\$0	\$100,000	\$0	\$0	\$0	\$0	\$0	\$100,000
Project Total:									\$100,000

COST DETAIL:

Study:	\$0	
Land Acquisition / ROW:	\$0	
Engineering / Design:	\$0	
Construction:	\$100,000	Cost Total: \$100,000
Annual Maint. Cost:		Project Difference: \$0
Maint. Year Start:		

Service Impact:

Improved fire flow and increased high pressure loop system reliability

Project Justification:

Need to improve fire protection in this service area.

Location Description:

Wayne Hill Booster Station - Wayne St. and Incochee Rd.



Six Year Capital Improvement Program

WATER-20-CIP

Water

1183-20-CIP

WTP Backwash & Surface Wash Pumps

Project Information

Submitted By:	Art Krueger	Department:	Department of Municipal Utilities	The Water Treatment Plant has original filter backwash and surface wash pumps from 1965. These pumps need to be rebuilt or replaced in the near future.
Category:	Maintenance	Department Head:	Art Krueger	
Fund Group:	Water	Staff Priority:	Essential (Should Do)	
Fund Detail:	Water Treatment	Council Priority:		

WTP Backwash & Su WTP Backwash & Surface Wash Pumps

Funding Sources:

		Previous	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	2025/2026	Total
WAT	Water Fund	\$0	\$0	\$0	\$150,000	\$0	\$0	\$0	\$150,000
Project Total:									\$150,000

COST DETAIL:

Study:	\$0	
Land Acquisition / ROW:	\$0	
Engineering / Design:	\$0	
Construction:	\$150,000	Cost Total: \$150,000
Annual Maint. Cost:		Project Difference: \$0
Maint. Year Start:		

Service Impact:

The proper function of these pumps is essential to filter washing operations. If the backwash pump were to fail, an alternative operation does exist via the high service pumps, but if the surface wash pump were to fail, there is no back up alternative.

Project Justification:

Need to improve reliability of filter washing operation at the WTP.

Location Description:

WTP basement.



Six Year Capital Improvement Program

WATER-20-CIP

Water

1182-20-CIP

WTP High Service - Cone Valve Replacement

Project Information

Submitted By:	Art Krueger	Department:	Department of Municipal Utilities	The Water Treatment Plant has 4 old cone valves (original from 1965) that operate with High Service Pump #'s 1, 2, 3 & 4 which need to be replaced with new electric plug valves. Currently High Service Pump #5 has a newer electric plug valve which was installed in 2012.
Category:	Maintenance	Department Head:	Art Krueger	
Fund Group:	Water	Staff Priority:	Essential (Should Do)	
Fund Detail:	Water Treatment	Council Priority:		

Funding Sources:

		Previous	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	2025/2026	Total
WAT	Water Fund	\$0	\$0	\$0	\$100,000	\$0	\$0	\$0	\$100,000
Project Total:									\$100,000

COST DETAIL:

Study:	\$0	
Land Acquisition / ROW:	\$0	
Engineering / Design:	\$0	
Construction:	\$100,000	Cost Total: \$100,000
Annual Maint. Cost:		Project Difference: \$0
Maint. Year Start:		

Service Impact:

Proper cone / plug valve operation is essential to water supply pumping operations.

Project Justification:

Need to improve reliability of 4 High Service pump valves.

Location Description:

Water Treatment Plant - High Service Pump Room (Basement)



Six Year Capital Improvement Program

WATER-20-CIP

Water

1017-20-CIP

WTP Standby Generator Replacement Project

Project Information

Submitted By:	Art Krueger	Department:	Department of Municipal Utilities	Existing generator is over 20 years old and is nearing the end of its useful life. This project will replace it with a new, more efficient model.
Category:	Maintenance	Department Head:	Art Krueger	
Fund Group:	Water	Staff Priority:	Essential (Should Do)	
Fund Detail:	Water System Reliability Project	Council Priority:		

WTP Standby Generator Replacement Project

Funding Sources:

		Previous	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	2025/2026	Total
WAT	Water Fund	\$0	\$0	\$0	\$0	\$0	\$300,000	\$0	\$300,000
Project Total:									\$300,000

COST DETAIL:

Study:	\$0	
Land Acquisition / ROW:	\$0	
Engineering / Design:	\$0	
Construction:	\$300,000	Cost Total: \$300,000
Annual Maint. Cost:		Project Difference: \$0
Maint. Year Start:		

Service Impact:

Increase reliability and efficiency by replacing the plant generator when it is at the end of its useful life.

Project Justification:

Recommended in the 2014 Water System Reliability Study.

Location Description:

WTP - 2010 Eastern Ave.



Six Year Capital Improvement Program

WATER-20-CIP

Water

1065-20-CIP

WTP Sump Pump Discharge Flow Meter

Project Information

Submitted By:	Art Krueger	Department:	Department of Municipal Utilities	Install flow meter to accurately measure lagoon discharge (from filter backwash) to East Bay as required per the NPDES permit.
Category:	Capital	Department Head:	Art Krueger	
Fund Group:	Water	Staff Priority:	Essential (Should Do)	
Fund Detail:	Water Treatment	Council Priority:		

WTP Sump Pump Discharge Flow Meter

Funding Sources:

		Previous	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	2025/2026	Total
WAT	Water Fund	\$0	\$20,000	\$0	\$0	\$0	\$0	\$0	\$20,000
Project Total:									\$20,000

COST DETAIL:

Study:	\$0		
Land Acquisition / ROW:	\$0		
Engineering / Design:	\$0		
Construction:	\$20,000	Cost Total:	\$20,000
Annual Maint. Cost:		Project Difference:	\$0
Maint. Year Start:			

Service Impact:

Currently, flows are estimated and inaccurate due to the variables of incoming flow to the Sump Pump station and one or two pumps in operation. Over estimating flow requires notices to the MDEQ which could be eliminated if an accurate flow meter was installed.

Project Justification:

Increased compliance with NPDES permit requirements to report accurate flows discharged to East Bay.

Location Description:

Water Treatment Plant, 2010 Eastern Ave.



Six Year Capital Improvement Program

WATER-20-CIP

Water

1047-20-CIP

WTP Turbidimeters Replacement

Project Information

Submitted By:	Art Krueger	Department:	Department of Municipal Utilities	Turbidity meters at the WTP will need to be replaced as they reach the end of their useful life. Reliable equipment and accurate readings are required by the MDEQ for water quality monitoring / compliance.
Category:	Maintenance	Department Head:	Art Krueger	
Fund Group:	Water	Staff Priority:	Imperitive (Must Do)	
Fund Detail:	Water Treatment	Council Priority:		

WTP Turbidimeters R WTP Turbidimeters Replacement

Funding Sources:

		Previous	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	2025/2026	Total
WAT	Water Fund	\$0	\$0	\$0	\$15,000	\$10,000	\$0	\$0	\$25,000
Project Total:									\$25,000

COST DETAIL:

Study:	\$0		
Land Acquisition / ROW:	\$0		
Engineering / Design:	\$0		
Construction:	\$25,000	Cost Total:	\$25,000
Annual Maint. Cost:		Project Difference:	\$0
Maint. Year Start:			

Service Impact:

Restore reliability of instruments required for water quality as mandated by MDEQ.

Project Justification:

Replace critical instruments when they reach end of useful life.

Location Description:

Water Treatment Plant - 2010 Eastern Ave.



Six Year Capital Improvement Program

WATER-20-CIP

Water

1045-20-CIP

WTP Water Quality In-Line Instrumentation

Project Information

Submitted By:	Art Krueger	Department:	Department of Municipal Utilities	Install a streaming current monitor instrument to monitor water chemistry in order to optimize daily coagulant dosing.
Category:	Capital	Department Head:	Art Krueger	
Fund Group:	Water	Staff Priority:	Essential (Should Do)	
Fund Detail:	Water Treatment	Council Priority:		

WTP Water Quality In-Line Instrumentation

Funding Sources:

		Previous	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	2025/2026	Total
WAT	Water Fund	\$0	\$25,000	\$0	\$0	\$0	\$0	\$0	\$25,000
Project Total:									\$25,000

COST DETAIL:

Study:	\$0		
Land Acquisition / ROW:	\$0		
Engineering / Design:	\$0		
Construction:	\$25,000	Cost Total:	\$25,000
Annual Maint. Cost:		Project Difference:	\$0
Maint. Year Start:			

Service Impact:

Installing this instrument will help optimize chemical dosing (reduce costs) and ensure proper water treatment.

Project Justification:

MDEQ District Engineer has recommended installing this equipment at the WTP.

Location Description:

WTP - 2010 Eastern Ave.



Six Year Capital Improvement Program

WATER-20-CIP

Water

1184-20-CIP

WTP Windows Replacement Project

Project Information

Submitted By:	Art Krueger	Department:	Department of Municipal Utilities	Water Treatment Plant has 35 original windows from 1965 that need to be replaced to conserve energy (heat loss in winter).
Category:	Maintenance	Department Head:	Art Krueger	
Fund Group:	Water	Staff Priority:	Important (Could Do)	
Fund Detail:	Water Treatment	Council Priority:		

WTP Windows Repla WTP Windows Replacement Project

Funding Sources:

		Previous	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	2025/2026	Total
WAT	Water Fund	\$0	\$0	\$0	\$0	\$0	\$0	\$90,000	\$90,000
Project Total:									\$90,000

COST DETAIL:

Study:	\$0		
Land Acquisition / ROW:	\$0		
Engineering / Design:	\$0		
Construction:	\$90,000	Cost Total:	\$90,000
Annual Maint. Cost:		Project Difference:	\$0
Maint. Year Start:			

Service Impact:

Improve overall operational efficiency at the WTP.

Project Justification:

This project would conserve energy at the WTP and would help the City toward reaching it's Green Energy goal.

Location Description:

Water Treatment Plant



Six Year Capital Improvement Program

	Previous	Fiscal Year 2020-2021	Fiscal Year 2021-2022	Fiscal Year 2022-2023	Fiscal Year 2023-2024	Fiscal Year 2024-2025	Fiscal Year 2025-2026	Project Cost	City Funds	Non-City Funds
GRAND TOTAL:	\$27,401,223	\$45,294,511	\$36,256,403	\$20,883,204	\$24,181,145	\$16,035,618	\$13,785,663	\$182,561,207	\$129,832,122	\$54,005,645

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