TRAFFIC ENGINEERING 2019 CAPITAL IMPROVEMENT PLAN

YANG TAO, PH.D., P.E., INTERIM CITY TRAFFIC ENGINEER AND PARKING UTILITY MANAGER



SUMMARY

- Criteria in Prioritizing Projects
 - The criteria is based on the agency's goal maintaining public safety as well as upgrading existing facilities where maintenance and repairs have become too costly.
- Major Changes from 2018
 - Converting Mineral Point Lighting fixtures to LED between Grand Canyon Dr. and High Point Rd.
 - Upgrading pedestrian signals by adding countdown timers
 - Upgrade additional Traffic Signal Infrastructure to be compatible with Centracs (software that allows for advanced traffic management, performance measurement and maintenance management).

STREET LIGHT INSTALLATION

- Program Background
 - Goal: This program provides funding to upgrade/replace outdated street lighting systems and related infrastructure. The goal of the program is to provide adequate lighting on streets for motorists, pedestrians, and bicyclists in an efficient manner.

Asset Type: Equipment

Agency Priority: 1

- 2019 Planned Activities
 - LEDs fixtures will be used whenever practical
 - Converting Mineral Point Lighting fixtures to LED between Grand Canyon Dr. and High Point Rd.

	2019	2020	2021	2022	2023	2024
Borrowing	140,000	155,000	170,000	175,000	175,000	175,000
Other	365,000	365,000	365,000	365,000	365,000	365,000
TOTAL	505,000	520,000	535,000	540,000	540,000	540,000

TRAFFIC SIGNALS INSTALLATION

- Program Background
 - Goal: This program funds replacing and modernizing the City's traffic signal network. The goal of the program is to provide energy efficient dynamic traffic signals that are readily adaptable to provide for safe, efficient traffic flow for vehicles, bicycles, and pedestrians.

Asset Type: Equipment

Agency Priority: 2

- 2019 Planned Activities
 - Atlas Ave. and Cottage Grove Rd: traffic signal upgrade
 - Upgrade pedestrian signals: add countdown timers
 - Centracs Traffic signal upgrade

	2019	2020	2021	2022	2023	2024
Borrowing	345,000	350,000	355,000	360,000	360,000	360,000
Other	470,000	470,000	470,000	470,000	470,000	470,000
TOTAL	815,000	820,000	825,000	830,000	830,000	830,000

PUBLIC SAFETY RADIO SYSTEM

Program Background

 Goal: This project provides funding to purchase upgraded digital emergency communication equipment. The goal is to be interoperable with the Dane County Emergency Communication system and reliable coverage to improve the satisfaction of 911 users.

Asset Type: Equipment

Agency Priority: 3

2019 Planned Activities

 Replace conflict monitor and other communication equipment.

	2019	2020	2021	2022	2023	2024
Borrowing	50,000	50,000	50,000	50,000	50,000	50,000
Other						
TOTAL	50,000	50,000	50,000	50,000	50,000	50,000

TRAFFIC SAFETY INFRASTRUCTURE

- Program Background
 - Goal: This program funds traffic control devices, the design and local share of the State Highway Hazard Elimination Program, signs, and traffic safety studies. The goal is to improve traffic safety and accessibility for pedestrians, bicyclists, motorists and transit users.

Asset	Type:	Equipment
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Agency Priority: 4

- 2019 Planned Activities
 - 2019 projects focusing on traffic safety and where city matching funds may be used to leverage a grants.

	2019	2020	2021	2022	2023	2024
Borrowing	50,000	50,000	50,000	50,000	50,000	50,000
Other						
TOTAL	50,000	50,000	50,000	50,000	50,000	50,000

URD/UCD LIGHTING

- Program Background
 - Goal: This program funds the installation of street lighting in newly developed and reconstructed areas where streetlight fiber are buried. The goal of this program is to provide greater safety through adequate lighting in residential and business areas.

Asset Type: Equipment

Agency Priority: 5

2019 Planned Activities

2019 street lighting projects funding by assessments

	2019	2020	2021	2022	2023	2024
Borrowing						
Other	50,000	126,000	126,000	126,000	126,000	126,000
TOTAL	50,000	126,000	126,000	126,000	126,000	126,000

PARKING UTILITY 2019 CAPITAL IMPROVEMENT PLAN

SABRINA TOLLEY



SUMMARY

- Major Changes from 2018
 - Garage Lighting Replacement Project Budget Request of \$366,300 in 2019 to complete Overture Center Garage Lighting Project.
 - New Project: \$625,000 for Fencing/screening installation at Overture Center Garage for suicide prevention efforts
 - New Project: \$210,000 for replacement of windows and frames at Overture Center Garage (Annual Garage Maintenance Repair Program moved to Operating budget in 2018 per City FN; this project is being separated from the 2019 Annual Repair Program & Operating Budget).
 - State Street Campus Lake Garage Replacement Project added to CIP: \$1.2M in 2023 and \$20.8M in 2024

GARAGE LIGHTING REPLACEMENT

Project Background

- Goal: Replacement of overhead fixtures in parking garages with energy efficient LED lights, replace wiring and conduit, and install carbon monoxide detectors with fan controls. Significant improvement in lighting quality and reduced energy consumption and maintenance costs.
- Scope: Lighting projects at Capitol Square North and State Street Capitol Garages are complete, and State Street Campus Frances will finish construction in 2018. Overture Center Garage lighting project to be completed in 2019 (Overture Center Garage project cost estimate is \$775,000 with \$408,700 in prior appropriation).

Project Schedule

 2019: Construction of Overture Center Garage Lighting Project.

Total Budget	\$2,957,000
Prior Appropriation	\$2,590,700

	2019	2020	2021	2022	2023	2024
Borrowing						
Pkg Reserves	\$366,300					
TOTAL	\$366,300					

LAKE STREET GARAGE REPLACEMENT

- Project Background
 - Goal: Replacement of State Street Campus Lake Garage, as it reaches end of life, with an approximately 600 stall parking garage.
 - Scope: Replacement of State Street Campus Lake Parking Garage in addition to potential construction of an intercity bus terminal.
- Project Schedule
 - **2019**:
 - 2020:
 - **2**021:
 - 2022: Planning
 - 2023: Design
 - 2024: Construction

Total Budget	\$22,000,000
Prior Appropriation	\$0

	2019	2020	2021	2022	2023	2024
Borrowing						
Pkg Reserves					\$1,200,000	\$20,800,000
TOTAL					\$1,200,000	\$20,800,000

OVERTURE PARKING GARAGE BARRIERS

- Project Background
 - Goal: Improve safety and suicide prevention efforts by installing fencing/screening on upper levels and rooftop at Overture Center Garage
 - Scope: Design and installation of fencing/screening at Overture Center Garage
- Project Schedule
 - 2019: Design and Construction

Total Budget	\$625,000
Prior Appropriation	\$0

	2019	2020	2021	2022	2023	2024
Borrowing						
Pkg Reserves	\$625,000					
TOTAL	\$625,000					

PARKING GARAGE WINDOW REPLACEMENT

- Project Background
 - Goal: Replace windows and frames at Overture Center Garage and other locations to ensure they are structurally sound and sealed against the elements.
 - Scope: Replacement of windows and frames.
- Project Schedule
 - 2019: Construction

Total Budget	\$210,000
Prior Appropriation	\$0

	2019	2020	2021	2022	2023	2024
Borrowing						
Pkg Reserves	\$210,000					
TOTAL	\$210,000					

SINGLE SPACE METER REPLACEMENT

Project Background

- Goal: Replacement of remaining coin-only meters and aging multi-space meters to improve customer convenience, increase utilization and revenues.
- Scope: Approximately 650 coin-only meters and 115 multi-space machines.

Project Schedule

- 2019: Procurement/selection process for multispace replacement; begin installation of replacement equipment
- 2020: completion of installation

Total Budget	\$2,225,000
Prior Appropriation	\$725,000

	2019	2020	2021	2022	2023	2024
Borrowing						
Pkg Reserves	\$1,500,000					
TOTAL	\$1,500,000					

SAYLE STREET FACILITY IMPROVEMENTS PROGRAM

- Program Background
 - Goal: Maintenance and renovation of shared Traffic Engineering and Parking Utility offices at 1120 Sayle Street. Parking Utility's estimated share of costs for renovation related to the Radio Shop relocation to Nakoosa Trail is included in 2020 and 2021.
 - Asset Type: Building
- 2019 Planned Activities: Funding is for Parking Utility's share of facility maintenance/repairs

	2019	2020	2021	2022	2023	2024
Borrowing						
Pkg Reserves	\$10,000	\$190,500	\$70,500	\$10,000	\$10,000	\$10,000
TOTAL	\$10,000	\$190,500	\$70,500	\$10,000	\$10,000	\$10,000

VEHICLE REPLACEMENT PROGRAM

- Program Background
 - Goal: Replacement of equipment reaching end of life and reduced maintenance and operating costs. Purchase of new sweeper to meet anticipated safety regulations related to dust/particulate exposure. Vehicles are replaced on average, on a 10-year life cycle.
 - Asset Type: Machinery and Equipment
- 2019 Planned Activities: purchase of 1 sweeper, 1 mower and equipment attachments, 1 maintenance worker vehicle, and 1 utility vehicle

	2019	2020	2021	2022	2023	2024
Borrowing						
Pkg Reserves	\$193,000	\$133,000	\$146,000	\$45,500	\$70,000	\$50,000
TOTAL	\$193,000	\$133,000	\$146,000	\$45,500	\$70,000	\$50,000

TRANSPORTATION DEPARTMENT 2019 CAPITAL IMPROVEMENT PLAN



SUMMARY

- 2019 CIP Highlights
 - The 2019 Executive CIP moves projects that focus on transportation analysis into the Transportation budget
 - Projects Impacted:
 - Bus Rapid Transit: Previously shown in Metro
 - Inter-City Bus Terminal: Previously shown in Planning
 - 194 Interchange Study: Previously shown in Major Streets

BUS RAPID TRANSIT

- Project Background
 - Goal: Increase the capacity of the Metro system while decreasing ride times
 - Scope: Construction of the first leg of BRT
 - The recommended budget assumes utilizing construction costs for a Metro facility as a potential grant match for federal funds
- Project Schedule
 - 2019: Project Development
 - 2020: Small Starts Application
 - 2021: Final Design
 - 2022: Final Design
 - 2023: Final Design
 - 2024: Construction

Total Budget \$80,000,000
Prior Appropriation -

	2019	2020	2021	2022	2023	2024
Borrowing						
Other						\$80,000,000
TOTAL						\$80,000,000

INTER-CITY INTERMODAL BUS TERMINAL

- Project Background
 - Goal: Examine the feasibility of constructing an Inter-City bus terminal in conjunction with reconstruction of the Lake Street parking structure
 - Scope: Complete feasibility study and conceptual design of an intercity bus terminal
- Project Schedule
 - **2019**:
 - 2020:
 - **2**021:
 - 2022: Conduct Study
 - 2023: Study Completion
 - 2024:

Total Budget	\$350,000
Prior Appropriation	-

	2019	2020	2021	2022	2023	2024
Borrowing				100,000	250,000	
Other						
TOTAL				100,000	250,000	

194 INTERCHANGE STUDY

- Project Background
 - Goal: Compile data to support construction of an Interchange in the area of Sprecher Road & Milwaukee Street
 - Scope: Execution of a study and analysis in partnership with Wisconsin Dept of Transportation Project Schedule
 - 2019:
 - 2020:
 - 2021: Study Completion
 - **2**022:
 - 2023:
 - 2024:

Total Budget
Prior Appropriation

	2019	2020	2021	2022	2023	2024
Borrowing			250,000			
Other						
TOTAL			250,000			

\$500,000

\$250,000

METRO TRANSIT 2019 CAPITAL IMPROVEMENT PLAN

CHUCK KAMP



SUMMARY

- 2019 CIP Highlights
 - Future expansion to meet service demand
 - Life and safety improvements at 1101 E Washington Avenue operations headquarters
- Major Changes from 2018
 - 1101 E Washington renovations recommended by Mead & Hunt along with Engineering in 6 phases
 - Federal funding drops to less than 50% of transit coach cost with 100% local contribution for remaining budget items
 - Satellite facility postponed until further federal funding is secured
 - BRT has been moved to the new Transportation Department budget

METRO SATELLITE BUS FACILITY

- Project Background
 - Goal: Facility expansion that will accommodate a larger bus fleet to increase capacity. This will allow for service expansion and improve the customer experience by reducing travel time and congestion
 - Scope: Construction of satellite facility to alleviate overcrowding of bus storage and expand fleet capacity with electric vehicles
- Project Schedule
 - **2019**:
 - 2020:
 - **2021**:
 - 2022:
 - 2023:Construction
 - **2024**:

Total Budget	\$30,000,000
Prior Appropriation	\$1,500,000

	2019	2020	2021	2022	2023	2024
Borrowing					\$30,000,000	
Other						
TOTAL					\$30,000,000	

TRANSIT SYSTEM UPGRADES

Program Background

- Goal: Replace vehicles so that relief drivers have the ability to be punctual when relieving mainline drivers. Replacement of Building and Grounds equipment so that it is reliable and safe in order to support the operational infrastructure. Provide reliable vehicle hardware and software that is used for vehicle location and data recording to track vehicles in an emergency situation.
- Asset Type: Machinery and Equipment
- 2019 Planned Activities
 - Support vehicle replacement for drivers traveling to relief points
 - Shelter upgrades

	2019	2020	2021	2022	2023	2024
Borrowing	\$79,019	\$301,000	\$3,851,000	\$53,550	\$56,228	\$59,039
Other	\$116,074					
TOTAL	\$195,093	\$301,000	\$3,851,000	\$53,550	\$56,228	\$59,039

FACILITY (1101 E WASHINGTON RENOVATION)

- Program Background
 - Goal: Facility and transfer points that provide safe environment for fleet maintenance and protection of assets. A return on investment utilizing newer technology and materials is also desired.
 - Asset Type: Building
- 2019 Planned Activities (1101 E. Washington Renovation Phase 1)
 - 2019: Phase 1 Wash Bay, Fire Alarm and Electric Bus Upgrades
 - 2020: Phase 2 HVAC Mechanics and Storage Area
 - 2021: Phase 3 Maintenance/Mechanics Workspace
 - 2022: Phase 4 Operation/Dispatch
 - 2023: Phase 5 Bus Storage
 - 2024: Phase 6 Exterior Upgrades

	2019	2020	2021	2022	2023	2024
Borrowing	\$7,032,586	\$8,212,581	\$12,812,322	\$11,167,811	\$7,828,744	\$9,951,304
Other						
TOTAL	\$7,032,586	\$8,212,581	\$12,812,322	\$11,167,811	\$7,828,744	\$9,951,304

TRANSIT COACHES

- Program Background
 - Goal: Maintain a replacement cycle from 12 to 15 years for 40 foot buses so that an adequate number of safe and reliable vehicles is available for peak service
 - Asset Type: Machinery and Equipment
- 2019 Planned Activities
 - Replacement of fifteen transit coaches

	2019	2020	2021	2022	2023	2024
Borrowing	\$3,534,833	\$4,126,328	\$4,250,115	\$4,635,121	\$5,137,265	\$5,394,131
Other	\$3,534,833	\$3,155,427	\$3,250,088	\$3,090,080	\$2,974,206	\$3,122,918
TOTAL	\$7,069,666	\$7,281,755	\$7,500,203	\$7,725,201	\$8,111,471	\$8,517,049

FLEET SERVICE 2019 CAPITAL IMPROVEMENT PLAN

MAHANTH JOISHY, FLEET SERVICE SUPERINTENDENT



SUMMARY

- Maintain the ability to provide safe and reliable vehicles and equipment to support critical missions of our city agencies.
- Fleet Service provides the necessary equipment and resources to city agencies that directly serve our community.
- Fleet Service is analyzing data and placing assets in the appropriate operations to optimize fuel consumption. We are seeking alternative fuel options and "right sizing" to reduce the city's carbon foot print and reduce maintenance costs.

Categories are as follows for 2019:

- Fire Apparatus / Rescue Vehicles
- Fleet Equipment Replacement
- Fleet Service Relocation
- GPS / AVL



FIRE APPARATUS / RESCUE VEHICLES

- This program provides funding to purchase Fire apparatus and rescue vehicles.
- The goal of the program is to maintain a high quality fleet of fire apparatus and emergency vehicles.
 - Agency Priority: 1
 - 2019 Fire Apparatus Replacements include: Ladder 2, Lake rescue ATV, Utility 1, Ambulance remount, two new ambulances also a community Education electric car.

	2019	2020	2021	2022	2023	2024
Borrowing	2,635,000	2,200,000	4,100,000	3,100,000	3,780,000	1,912,500
Other						
TOTAL	2,635,000	2,200,000	4,100,000	3,100,000	3,780,000	1,912,500



EQUIPMENT REPLACEMENT

- This program provides for the continual replacement of the City's fleet.
 - The goal of this program is to replace vehicles in accordance with the master replacement schedule ensuring city staff have access to safe, reliable vehicles to provide their services.
 - Agency Priority: 2
- The program has 100 planned equipment purchases in 2019.

	2019	2020	2021	2022	2023	2024
Borrowing	7,356,410	6,100,000	6,300,000	6,500,000	6,700,000	6,900,000
Other						
TOTAL	7,356,410	6,100,000	6,300,000	6,500,000	6,700,000	6,900,000



FLEET SERVICE RELOCATION

- Program Background
 - The goal of this capital project is to improve the efficiency of fleet service and vehicle radio shop operations by providing them out of a single, state of the art location in contrast to the current approach that is spread across three aging and outdated facilities.
- Agency Priority: 3
- Construction is anticipated to begin in 2019 and to be completed in 2020.

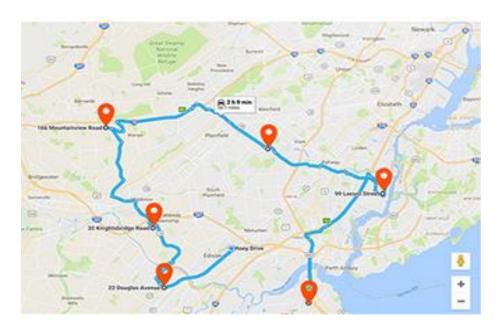
	2019	2020	2021	2022	2023	2024
Borrowing	29,162,030					
Other						
TOTAL	29,162,030					



GPS / AVL

- Program Background
 - The goal of this project is to provide operational efficiencies for Public Works agencies by using the technology to optimize routes for refuse collection, snow plowing operations, and other logistical operations. Project will also include safety, sustainability, and maintenance diagnostics features to be applied.
- Agency Priority: 4
- This project is being implemented over two years.

	2019	2020	2021	2022	2023	2024
Borrowing	275,000					
Other						
TOTAL	275,000					



STREETS DIVISION 2019 CAPITAL IMPROVEMENT PLAN

CHARLIE ROMINES



SUMMARY

- 2019 CIP Highlights
 - \$250,000 for Far West Facility Planning has been added.
 - \$35,000,000 for Far West Facility Design and Construction has been removed.
 - \$285,000 of EAB Project savings in 2019. \$1,425,000 over the remaining 5 years.
- Major Changes from 2018
 - EAB Program reduced by \$285k per year, to \$801,036, thru programs current estimated ending Dec of 2023 saving in excess of \$1.4 million over that time span. This is achieved almost primarily by not bringing on the last 6 positions previously approved in the City's EAB Mitigation program.

STREETS FAR WEST FACILITY

- Project Background
 - Goal: To provide a third location within the City for resident waste drop-off and to allow for more responsive delivery of Streets Division's services to the City.
 - Scope: Full service facility for City of Madison residents to drop of recycling and yard waste materials. A fully functioning Streets facility that will deploy all available services to our residents.
- Project Schedule
 - 2019: Planning
 - 2020:
 - **2**021:
 - 2022:
 - 2023:
 - 2024:

Total Budget	\$250,000
Prior Appropriation	\$0

	2019	2020	2021	2022	2023	2024
Borrowing	250,000					
Other						
TOTAL	250,000					

STREETS SALT STORAGE BARN

- Project Background
 - Goal: Replace an aging salt storage building.
 - Scope: A fully functional salt storage building that will be designed with efficiencies that will allow the Streets Division to receive salt orders as well as deploying salt route equipment simultaneously.
- Project Schedule
 - **2019**:
 - 2020:
 - 2021: Construction
 - 2022: Construction
 - **2**023:
 - 2024:

Total Budget	\$810,000
Prior Appropriation	\$0

	2019	2020	2021	2022	2023	2024
Borrowing			410,000	400,000		
Other						
TOTAL			410,000	400,000		

STREETS EQUIPMENT

- Program Background
 - Goal: To ensure the operations and services provided by the Streets Division are continued by having safe and reliable equipment and machinery.
 - Asset Type: Machinery and Equipment
- 2019 Planned Activities
 - RDS Tandem Dump w/spread and wing

	2019	2020	2021	2022	2023	2024
Borrowing	245,000	615,000	1,030,000	828,000	693,000	818,000
Other						
TOTAL	245,000	615,000	1,030,000	828,000	693,000	818,000

STREETS EMERALD ASH BORER

- Program Background
 - Goal: To grind all brush and logs that are disposed of in the mitigation efforts, and provide stump removal mats to prevent erosion where trees are removed near shorelines.
 - Asset Type: Other
- 2019 Planned Activities
 - EAB Remediation for the entire City

	2019	2020	2021	2022	2023	2024
Borrowing	801,036	801,036	801,036	801,036	801,036	
Other						
TOTAL	801,036	801,036	801,036	801,036	801,036	

STREETS YARD IMPROVEMENTS

- Program Background
 - Goal: Maintain and improve the Streets
 Division's drop-off sites allowing services
 provided by the Streets Division to continue
 effectively.
 - Asset Type: Building / Other
- 2019 Planned Activities
 - Brine storage with loading pump and tank

	2019	2020	2021	2022	2023	2024
Borrowing	20,000	275,000				250,000
Other						
TOTAL	20,000	275,000				250,000

STREETS MINOR BUILDING IMPROVEMENTS AND REPAIRS

- Program Background
 - Goal: To replace and improve components of the buildings that are damaged, aged, or unsafe so that services can continue to be provided at the required level.
 - Asset Type: Other
- 2019 Planned Activities
 - Overhead Doors
 - Gutters
 - Building Maintenance and Repair

	2019	2020	2021	2022	2023	2024
Borrowing	221,000	310,000	120,000	205,000	148,000	120,000
Other						
TOTAL	221,000	310,000	120,000	205,000	148,000	120,000

PARKS DIVISION 2019 CAPITAL IMPROVEMENT PLAN

ERIC KNEPP, PARKS SUPERINTENDENT



SUMMARY

- Criteria in Prioritizing Projects
 - Maintenance of Current Assets
 - Invest in projects that will result in operational efficiencies that will reduce energy and staffing costs
 - Utilization of non-levy resources
- Major Changes from 2018
 - Elver Park Improvements spread out between 2022 and 2023, removal of satellite maintenance facility
 - James Madison Park Improvements removed from the CIP
 - Law Park Improvements includes funding to reconstruct parking lot in conjunction with John Nolen Drive project
 - Hill Creek Park Improvements includes funding for planning in 2019. No funding for construction of park or transportation improvements
 - North-East Park Improvements planning in 2019-2020, no funding for construction in the CIP
 - Odana Hills Clubhouse shifted from 2019/2020 to 2020/2021
 - Vilas Park Improvements Dredging, Annie Stewart Fountain, Shelter Design, and Roadway Planning included. No construction funding for roadways or shelter.
 - Warner Park Community Recreation Center expansion shifted to post 2024

ASSESSABLE TREES

- Program Background
 - Goal: To ensure trees are planted in newly developed areas of the city to provide an adequate tree canopy.
 - Asset Type: Other
- 2019 Planned Activities
 - 640 trees purchased, planted, watered, and pruned in newly developed areas.

	2019	2020	2021	2022	2023	2024
Borrowing	-	-	-	-	-	-
Other	150,000	150,000	150,000	150,000	150,000	150,000
TOTAL	\$150,000	\$150,000	\$150,000	\$150,000	\$150,000	\$150,000

BEACH AND SHORELINE IMPROVEMENTS

- Program Background
 - Goal: To provide boat launches that are safe and useable, minimize shoreline erosion, and ensure piers that are safe, accessible, and usable.
 - Asset Type: Land Improvements
- 2019 Planned Activities
 - Pier Improvements
 - Boat Launch Dredging and Improvements
 - Shoreline Improvements

	2019	2020	2021	2022	2023	2024
Borrowing	200,000	200,000	225,000	215,000	340,000	275,000
Other	50,000	50,000	50,000	50,000	175,000	75,000
TOTAL	\$250,000	\$250,000	\$275,000	\$265,000	\$515,000	\$350,000

BRITTINGHAM PARK IMPROVEMENTS

- Project Background
 - Goal: To provide a facility that meets current needs as well as flexibility to meet ongoing needs for the future.
 - Scope: Renovate or replace the existing beach house which has reached the end of its useful life. Funding in 2024 is for the design of renovations to Brittingham beach house.
- Project Schedule

2023: Concept Planning

2024: Design Completion

2025: Construction

Total Budget	\$1,000,000
Prior Appropriation	\$0

	2019	2020	202	1	2022	2023	2024
Borrowing	-		-	-	-	-	150,000
Other	-		-	-	-	-	50,000
TOTAL	-		-	-	-	-	\$200,000

CONSERVATION PARK IMPROVEMENTS

- Program Background
 - Goal: To create natural landscapes and open spaces that are well maintained and accessible to park visitors and to preserve and protect the natural resources of the Madison area through long term focused land management practices.
 - Asset Type: Land Improvements
- 2019 Planned Activities
 - Owen Park Habitat Restoration
 - Land Management Improvements
 - Knollwood Oak Woodland Restoration

	2019	2020	2021	2022	2023	2024
Borrowing	205,000	195,000	255,000	350,000	300,000	275,000
Other	10,000	25,000	20,000	125,000	30,000	15,000
TOTAL	\$215,000	\$220,000	\$275,000	\$475,000	\$330,000	\$290,000

DISC GOLF IMPROVEMENTS

- Program Background
 - Goal: Provide funding for improvements to existing disc golf courses and meet current standards for safety.
 - Asset Type: Land Improvements
- 2019 Planned Activities
 - Improvements at Elver, Heistand and Yahara Hills

	2019	2020	2021	2022	2023	2024
Borrowing	-	-	-	-	-	-
Other	35,000	35,000	35,000	225,000	40,000	40,000
TOTAL	\$35,000	\$35,000	\$35,000	\$225,000	\$40,000	\$40,000

DOG PARK IMPROVEMENTS

- Program Background
 - Goal: To provide safe and maintainable facilities to meet the needs of the City's growing dog owner population.
 - Asset Type: Land Improvements
- 2019 Planned Activities
 - Improvements and potential expansions of existing dog parks.

	2019	2020	2021	2022	2023	2024
Borrowing	25,000	100,000	75,000	150,000	-	-
Other	50,000	200,000	75,000	175,000	50,000	100,000
TOTAL	\$75,000	\$300,000	\$150,000	\$325,000	\$50,000	\$100,000

ELVER PARK IMPROVEMENTS

Project Background

- Goal: To improve access to park amenities and improve storm water management in the park.
- Scope: Planning for potential expansion in 2020, path repaving in 2022/2023 along with ballfield conversions to meet projected demands. Also in 2023 is the reconstruction of the parking lot near the ballfields. Does not include maintenance facility as originally planned.

Project Schedule

2020: Planning and Schematic Design

2021: Design Completion

2022: Construction

2023: Construction

2024: Construction Completion

Total Budget
Prior Appropriation

\$3,765,000 \$0

	2019	2020	2021	2022	2023	2024
Borrowing	-	100,000	-	245,000	650,000	-
Other	-	50,000	-	370,000	850,000	-
TOTAL	-	\$150,000	-	\$615,000	\$1,500,000	-

EMERALD ASH BORER MITIGATION

- Program Background
 - Goal: The timely removal and replacement of both street and park trees while ensuring other Forestry services are not adversely impacted.
 - Asset Type: Other
- 2019 Planned Activities
 - City-wide Emerald Ash Borer Mitigation which includes the removal and replacement of ash trees throughout the city.

	2019	2020	2021	2022	2023	2024
Borrowing	1,175,000	1,175,000	1,175,000	1,175,000	1,175,000	1,175,000
Other	-	-	-	-	-	-
TOTAL	\$1,175,000	\$1,175,000	\$1,175,000	\$1,175,000	\$1,175,000	\$1,175,000

FIELD IMPROVEMENTS

- Program Background
 - Goal: Accessibility to fields utilized by MUFA and increased utilization by lighting the fields.
 - Asset Type: Land Improvements
- 2019 Planned Activities
 - Lighting for one athletic field at Burr Jones Park.

	2019	2020	2021	2022	2023	2024
Borrowing	70,000	-	-	60,000	-	-
Other	100,000	40,000	40,000	70,000	40,000	40,000
TOTAL	\$170,000	\$40,000	\$40,000	\$130,000	\$40,000	\$40,000

FOREST HILL CEMETERY IMPROVEMENTS

- Project Background
 - Goal: To improve access for visitors, environmental management, and a reduction in flooding incidents.
 - Scope: This is the second phase of the storm sewer improvements and roadway reconstruction in Forest Hill Cemetery. The final phase in 2020 will complete the roadway system in the cemetery.
- Project Schedule

2019: Construction

2020: Construction

Total Budget
Prior Appropriation

	2019	2020	2021	2022	2023	2024
Borrowing	550,000	700,000	-	-	-	-
Other	-	-	-	-	-	-
TOTAL	\$550,000	\$700,000	-	-	-	-

\$2,020,000

\$770,000

HILL CREEK PARK IMPROVEMENTS

- Project Background
 - Goal: To provide a safe and accessible community park with varied amenities and fields that can be reserved by the public.
 - Scope: Park master planning, site grading, drive and path construction, and other community park amenities.
- Project Schedule
 - 2019: Schematic Design
 - Construction TBD, post 2024

Total Budget \$2,850,000
Prior Appropriation \$0

	2019	2020	2021	2022	2023	2024
Borrowing	50,000	-	-	-	-	-
Other	150,000	-	-	-	-	-
TOTAL	\$200,000	-	-	-	-	-

LAND ACQUISITION

- Program Background
 - Goal: To pursue opportunities to add additional land to the City's park inventory by expanding existing parks or purchasing land in parkdeficient areas.
 - Asset Type: Land
- 2019 Planned Activities
 - Acquire additional parkland to maintain current service levels.

	2019	2020	2021	2022	2023	2024
Borrowing	-	-	-	-	-	-
Other	900,000	900,000	900,000	900,000	900,000	900,000
TOTAL	\$900,000	\$900,000	\$900,000	\$900,000	\$900,000	\$900,000

LAW PARK IMPROVEMENTS

- Project Background
 - Goal: Master planning for the park including an evaluation of site constraints and feasibility of multiple options to expand the park footprint.
 - Scope: Master plan development and implementation of the proposed improvements will occur in phases. Funding in 2021 is to replace the parking lot and boat ramp in conjunction with the John Nolen Drive/Williamson/Blair interchange improvements.
- Project Schedule
 - 2019: Planning
 - 2020: Schematic Design
 - 2021: Initial Construction

Total Budget
Prior Appropriation

\$950,000
\$200,000

	2019	2020	2021	2022	2023	2024
Borrowing	200,000	-	200,000	-	-	-
Other	200,000	-	150,000	-	-	-
TOTAL	\$400,000	-	\$350,000	-	-	-

MCPIKE PARK IMPROVEMENTS

- Project Background
 - Goal: To expand McPike Park (formerly Central Park) in accordance with the master plan and provide park amenities and other transportation improvements as identified in the plan.
 - Scope: Demolition of the buildings and restoration of the site in 2020 after tenant relocation process has been completed.
- Project Schedule
 - 2020: Construction

Total Budget	\$350,000
Prior Appropriation	\$0

	2019	2020	2021	2022	2023	2024
Borrowing	-	200,000	-	-	-	-
Other	150,000	-	-	-	-	-
TOTAL	\$150,000	\$200,000	-	-	-	-

NORTH-EAST PARK IMPROVEMENTS

- Project Background
 - Goal: To create multiple fields that can be reserved by the public and recreational spaces with associated supporting amenities for this regional park.
 - Scope: Park master planning, site grading, drive and path construction, athletic fields/courts, restrooms and other supporting amenities.
- Project Schedule

2019: Planning

2020: Master Plan and Schematic Design

Total Budget	\$6,380,000
Prior Appropriation	\$0

	2019	2020	2021	2022	2023	2024
Borrowing	50,000	100,000	-	-	-	-
Other	-	75,000	-	-	-	-
TOTAL	\$50,000	\$175,000	-	-	-	-

ODANA HILLS CLUBHOUSE IMPROVEMENTS

- Project Background
 - Goal: To improve energy efficiency and to provide a multi-purpose facility to meet the needs of the community.
 - Scope: Planning, design and construction of a new clubhouse.
- Project Schedule

2020: Planning

2021: Design Completion

2022: Construction

Total Budget
Prior Appropriation

\$2,200,000
\$0

	2019	2020		2021	2022	2023		2024
Borrowing	-		-	200,000	-		-	-
Other	-		-	-	2,000,000		-	-
TOTAL	-		-	\$200,000	\$2,000,000		-	-

PARK EQUIPMENT

- Program Background
 - Goal: To provide the required equipment to allow staff to adequately maintain a growing number of park and open spaces, athletic fields, ice rinks, medians, and snow removal operations in a timely and responsive manner.
 - Asset Type: Machinery and Equipment
- 2019 Planned Activities
 - 30 items of machines/equipment, including movie screen for NRT Movie Nights, mowers, utility carts and a Bobcat loader.

	2019	2020	2021	2022	2023	2024
Borrowing	350,000	350,000	400,000	350,000	350,000	375,000
Other	25,000	25,000	25,000	25,000	25,000	25,000
TOTAL	\$375,000	\$375,000	\$425,000	\$375,000	\$375,000	\$400,000

PARK LAND IMPROVEMENTS

- Program Background
 - Goal: To provide safe and accessible recreational amenities across the park system.
 - Asset Type: Land Improvements
- 2019 Planned Activities
 - Courts
 - Fencing
 - Paving
 - Paths
 - Land Management
 - Park Landscaping
 - Planning
 - Bike recreation improvements
 - Sun Shelter

	2019	2020	2021	2022	2023	2024
Borrowing	2,065,000	2,590,000	3,325,000	1,605,000	2,140,000	1,900,000
Other	755,000	925,000	865,000	610,000	425,000	550,000
TOTAL	\$2,820,000	\$3,515,000	\$4,190,000	\$2,215,000	\$2,565,000	\$2,450,000

PARK FACILITY IMPROVEMENTS

- Program Background
 - Goal: To maintain facilities that meet the needs of park users and staff maintaining the parks.
 - Asset Type: Land Improvements & Building
- 2019 Planned Activities
 - Building improvements/maintenance
 - Decking improvements/maintenance
 - Lighting
 - Pool improvements
 - Operational facility parking
 - Fitness equipment
 - Benches and tables improvement/maintenance
 - Signage

	2019	2020	2021	2022	2023	2024
Borrowing	669,000	544,000	512,000	492,000	406,350	1,047,000
Other	16,000	166,000	43,000	108,000	93,650	153,000
TOTAL	\$685,000	\$710,000	\$555,000	\$600,000	\$500,000	\$1,200,000

PLAYGROUND ACCESSIBILITY IMPROVEMENTS

- Program Background
 - Goal: To replace and upgrade existing playgrounds to meet industry standards and to ensure recreational amenities are accessible to the greatest extent possible.
 - Asset Type: Land Improvements
- 2019 Planned Activities
 - Playground Replacements
 - Playground Equipment
 - Connecting Children to Nature

	2019	2020	2021	2022	2023	2024
Borrowing	555,000	690,000	780,000	790,000	1,005,000	1,005,000
Other	490,000	565,000	630,000	260,000	125,000	125,000
TOTAL	\$1,045,000	\$1,255,000	\$1,410,000	\$1,050,000	\$1,130,000	\$1,130,000

PUBLIC DRINKING FOUNTAINS

- Program Background
 - Goal: To improve the community's access to public drinking fountains.
 - Asset Type: Other
- 2019 Planned Activities
 - Installing 2 bubblers which includes the fountain, concrete pad, drainage, and water main tapping.

	2019	2020	2021	2022	2023	2024
Borrowing	40,000	40,000	40,000	50,000	50,000	50,000
Other	-	-	-	-	-	-
TOTAL	\$40,000	\$40,000	\$40,000	\$50,000	\$50,000	\$50,000

STREET TREE REPLACEMENTS

- Program Background
 - Goal: To maintain and improve the urban forest tree canopy in the City by providing funding to replace street trees.
 - Asset Type: Other
- 2019 Planned Activities
 - City-wide 800 trees purchased, planted, watered, and pruned.

	2019	2020	2021	2022	2023	2024
Borrowing	175,000	175,000	175,000	175,000	175,000	175,000
Other	15,000	15,000	15,000	15,000	15,000	15,000
TOTAL	\$190,000	\$190,000	\$190,000	\$190,000	\$190,000	\$190,000

VILAS PARK IMPROVEMENTS

Project Background

- Goal: To create a sustainable park that will provide a variety of recreational amenities and protect and enhance natural resources.
- Scope: Master planning, replacement of bridges, playground, and shelter, and paving and other improvements. Funding is for the replacement of the existing playground and dredging the lagoons.

Project Schedule

- 2019: Lagoon Dredging and shoreline stabilization
- 2020: Annie Stewart Fountain area improvements
- 2022: Shelter and Roadway Design

Total Budget	\$2,100,00
Prior Appropriation	\$1,115,00

	2019	2020	2021	2022	2023	2024
Borrowing	200,000	190,000	-	125,000	-	-
Other	100,000	60,000	-	125,000	-	-
TOTAL	\$300,000	\$250,000	-	\$250,000	-	-

WARNER PARK COMMUNITY CENTER

- Project Background
 - Goal: To provide additional space to support programming, classes, and other community building opportunities.
 - Scope: Building expansion to provide additional space to support programming, classes and other community-building opportunities.
- Project Schedule

2020: Planning

2021: Schematic Design

Construction TBD, post 2024

Total Budget
Prior Appropriation

\$4,800,000
\$20,000

	2019	2020	2021	2022	2023	2024
Borrowing	-	200,000	150,000	-	-	-
Other	-	50,000	100,000	-	-	-
TOTAL	-	\$250,000	\$250,000	-	-	-

WATER UTILITY 2019 CAPITAL IMPROVEMENT PLAN

TOM HEIKKINEN



SUMMARY

2019 CIP Highlights

Water is focusing on our main replacement projects in 2019. All other major facility projects have been deferred to future years.

Major Changes from 2018

- 9 projects removed from CIP for a total reduction of \$23.77 m
- Booster Pump Station 109 (Spaanem Ave): Project construction deferred from 2020 to 2024.
- Booster Pump Station 129 Reconstruction: Project construction deferred from 2019 to 2023.
- Booster Pump Station 106 Reconstruction: Project construction deferred from 2020 to 2024.
- Far West Elevated Reservoir (Associated Water Mains): Project construction deferred from 2021 to 2024.
- Lakeview Reservoir (Booster Station): Project construction deferred from 2020 to 2021.
- Unit Well 12 Conversion: Project construction deferred from 2018 to 2022
- Well 19 Iron/Manganese Filter: Planning deferred to 2024

WATER MAINS REPLACE REHAB IMPROVE – RECONSTRUCT STREETS

Program Background

- Goal: This program replaces and upgrades existing water mains. Assessment of an aging infrastructure indicates the Utility must replace or rehabilitate over 400 miles of pipe in over a 40 year period to renew and maintain the system.
- Asset Type: Water Network
- Agency Priority: 1
- 2019 Planned Activities
 - Buckeye Rd (DOT)
 - E Johnson St (DOT)
 - N Ingersoll St/Elizabeth St
 - Campbell St/Vilas Ave
 - S Bryan St/Daley Dr/James St/Thorp St
 - Oak St
 - Koster St/N Rusk Ave
 - Hammersley Ave
 - Davidson St/Park Ct/Dempsey Rd/Drexel Ave/Lake Edge Blvd/Maher Ave
 - Meier Rd Extension (Rural to Urban Reconstruct)

	2019	2020	2021	2022	2023	2024
Borrowing	\$4,887,000	\$5,180,000	\$5,491,000	\$5,820,000	\$6,169,000	\$6,539,000
Other						
TOTAL	\$4,887,000	\$5,180,000	\$5,491,000	\$5,820,000	\$6,169,000	\$6,539,000

WATER MAINS REPLACE REHAB IMPROVE – PAVEMENT MANAGEMENT

Program Background

- Goal: Replace mains on streets identified by City Engineering for resurfacing.
- **Asset Type**: Water Network
- Agency Priority: 2
- 2019 Planned Activities
 - S Stoughton Service Rd (East)
 - Shepard Ter/Mason St/Chamberlain Ave/Van Hise Ave
 - E Dayton St
 - Holly Ave/Euclid Ave/Toepfer Ave/St. Clair St
 - W Dayton St (State/UW)

	2019	2020	2021	2022	2023	2024
Borrowing	\$1,620,000	\$1,717,000	\$1,820,000	\$1,929,000	\$2,045,000	\$2,168,000
Other						
TOTAL	\$1,620,000	\$1,717,000	\$1,820,000	\$1,929,000	\$2,045,000	\$2,168,000

WATER MAINS - NEW

Program Background

- Goal: The Water Utility has a need to construct new water mains to serve undeveloped areas. New water main projects are also implemented to improve hydraulics and water distribution.
- Asset Type: Water Network
- Agency Priority: 3
- 2019 Planned Activities
 - Pleasant View Rd (Cth M)/Mid Town Rd/Raymond Rd/Wellness Way/Meriter Way
 - Cottage Grove Rd Interstate Crossing
 - Cannonball Phase 6

	2019	2020	2021	2022	2023	2024
Borrowing	\$1,382,000	\$1,317,000	\$1,396,000	\$2,261,000	\$2,397,000	\$2,541,000
Other						
TOTAL	\$1,382,000	\$1,317,000	\$1,396,000	\$2,261,000	\$2,397,000	\$2,541,000

WATER UTILITY FACILITY IMPROVEMENTS

Program Background

- Goal: The program goal is less maintenance and a safer work environment. By repairing and maintaining an average of 5 facilities per year the water utility provides consistent reliable service and minimal emergency repairs. This program provides for miscellaneous projects for repair of and improvements to Utility facilities, and security improvements.
- Asset Type: Building Improvements
- Agency Priority: 4
- 2019 Planned Activities
 - SCADA system upgrade and expansion
 - Fiber Optic System Installation and Upgrade
 - Various facility upgrade projects
 - Meter and fixed network program
 - Various Olin and Paterson upgrades & improvements

	2019	2020	2021	2022	2023	2024
Borrowing	\$491,000	\$512,000	\$704,000	\$1,132,000	\$768,000	\$1,158,100
Other						
TOTAL	\$491,000	\$512,000	\$704,000	\$1,132,000	\$768,000	\$1,158,100

LAKEVIEW RESERVOIR (BOOSTER STATION)

Project Background

- Project Goal: Improve fire fighting capacity, emergency reserves, water transmission capacity, and overall system reliability.
- Scope: The Lake View Reservoir provides critical water storage to the north side of Madison. The booster pumping station is undersized and limits the size of Pressure Zone 5. Improving the station will allow the zone to be expanded and fire protection capacity improved. With additional capacity there is a need for improvement to the distribution system hydraulic capacity with new pipelines.

Agency Priority: 5

Project Schedule

2019: Planning

2020: Planning

2021: Construction

2022: Construction

2023: Construction

2024: Construction

Total Budget
Prior Appropriation

	\$4,486,000
	\$8,330,000

	2019	2020	2021	2022	2023	2024
Borrowing			\$2,081,000			\$680,000
Other						
TOTAL			\$2,081,000			\$680,000

UNIT WELL 12 CONVERSION TO A TWO-ZONE WELL

Project Background

- Project Goal: Maximizing the use of existing facilities is critical to system operations.
- Scope: Unit Well 12 is in need of upgrade and its location provides an opportunity to serve both Zone 7 and Zone 8.
- Agency Priority: 6
- Project Schedule

2019: Planning

2020: Schematic Design

2021: Design Completion

2022 : Construction

2023: Construction

2024: Construction

Total Budget
Prior Appropriation

	2019	2020	2021	2022	2023	2024
Borrowing			\$228,960	\$3,816,000	\$804,000	
Other						
TOTAL			\$228,960	\$3,816,000	\$804,000	

\$5,780,960

\$4,751,100

BOOSTER PUMP STATION #129 RECONSTRUCTION

Project Background

- **Project Goal:** Improve hydraulic and additional water supply capacity, improve reliability, increase fire fighting capacity, and additional operational flexibility.
- Scope: Construction of a new and upgraded booster pump station is needed to increase water transfer capacity from Zone 6E to Zone 3. This project will replace the temporary pump station constructed on the Well 29 site in 1990 and provide needed additional water supply to the far east side of Madison.
- Agency Priority: 7
- Project Schedule
 - **2019**:
 - 2020: Planning
 - 2021: Schematic Design
 - 2022: Design Completion
 - 2023: Construction
 - 2024: Construction

Total	Budget
Prior	Appropriation

	\$5,749,240
on	\$334,000

	2019	2020	2021	2022	2023	2024
Borrowing				\$384,240	\$4,330,000	
Other						
TOTAL				\$384,240	\$4,330,000	

BOOSTER PUMP STATION #109

Project Background

- Project Goal: Improve hydraulic and additional water supply capacity, improve reliability, increase fire fighting capacity, and additional operational flexibility.
- **Scope**: Construct a BPS for Madison's east side that will facilitate the movement of water from an area of excess supply to an area of needed supply. The project will improve overall system reliability and increase operational flexibility resulting in a higher level of service to consumers.
- Agency Priority: 8

Project Schedule

2019: Planning

2020: Planning

2021: Planning

2022: Schematic Design

2023: Design Completion

2024: Construction

Total Budget	\$4,055,000
Prior Appropriation	\$81,000

	2019	2020	2021	2022	2023	2024
Borrowing					\$345,000	\$2,873,000
Other						
TOTAL					\$345,000	\$2,873,000

BOOSTER PUMP STATION #106

Project Background

- **Project Goal:** Maximize the use of current infrastructure to meet water demands in all areas of Madison.
- **Scope:** This project improves the piping network at BPS #106 to enhance reliability, fire protection, and improve the hydraulic capacity in the Sunset Hills area of West Madison.
- Agency Priority: 9
- Project Schedule
 - **2019**:
 - **2**020:
 - **2021**:
 - 2022:
 - **2**023:
 - 2024: Construction

Total Budget	\$2,490,000
Prior Appropriation	\$1,266,020

	2019	2020	2021	2022	2023	2024
Borrowing						\$813,000
Other						
TOTAL						\$813,000

FAR WEST ELEVATED RESERVOIR-BLACKHAWK

Project Background

- Project Goal: Improve fire fighting capacity, emergency reserves, water transmission capacity, and overall system reliability.
- Scope: The Blackhawk Reservoir added 1 million gallons of elevated water storage capacity to the far west side of Madison. This allows development to occur, improves system reliability, increases firefighting capacity, and increases emergency reserves to the area. The construction in 2024 is for water main improvements.
- Agency Priority: 10
- Project Schedule
 - **2**019:
 - 2020:
 - 2021:
 - 2022:
 - 2023:
 - 2024: Construction

Total Budget	\$3,013,000
Prior Appropriation	\$5,431,000

	2019	2020	2021	2022	2023	2024
Borrowing						\$1,355,000
Other						
TOTAL						\$1,355,000

WELL 19 IRON AND MANGANESE FILTER

Project Background

- Project Goal: Reduce the amount of iron, manganese, and radium in the water supply system.
- Scope: This project constructs an iron, manganese and radium treatment system at Well 19 to address existing water quality issues. Iron, manganese and radium concentrations meet regulatory levels but do not meet desired MWU levels of service and thereby require treatment. Reduction in iron and manganese will reduce the risk of colored water events in the service area.
- Agency Priority: 11
- Project Schedule

2019: Planning

2020: Planning

2021: Planning

2022 : Planning

2023: Planning

2024: Design Completion

Total Budget	
Prior Appropriation	

	2019	2020	2021	2022	2023	2024
Borrowing						\$665,330
Other						
TOTAL						\$665,330

\$6,668,330

\$966,000

WATER MAINS REPLACE REHAB IMPROVE — PIPE LINING

Program Background

Goal: This program replaces and upgrades existing water mains. Assessment of an aging infrastructure indicates the Utility must replace or rehabilitate over 400 miles of pipe in over a 40 year period to renew and maintain the system. The water main lining program is being developed by Madison Water to extend the impact of the main rehabilitation budget when compared to full replacement. Lining cost is approximately 70% of full replacement which allows approximately 30% to 40% more main to be rehabilitated when compared to full replacement

Asset Type: Water Network

Agency Priority: 12

2019 Planned Activities

There are no planned Pipe Lining projects for 2019

	2019	2020	2021	2022	2023	2024
Borrowing		\$1,040,000	\$1,082,000	\$1,125,000	\$1,170,000	\$1,217,000
Other						
TOTAL		\$1,040,000	\$1,082,000	\$1,125,000	\$1,170,000	\$1,217,000

ENGINEERING – BICYCLE AND PEDESTRIAN 2019 CAPITAL IMPROVEMENT PLAN

ROB PHILLIPS, CITY ENGINEERING



SUMMARY

- 2019 Highlights
 - Begin work on Garver Path, Autumn Ridge Path, Troy Dr Underpass
 - Sidewalk Program
 - Bikeways Program
- Major Changes from 2018
 - Focus on projects where we control land (Garver, Autumn Ridge)

SIDEWALK PROGRAM

- Program Background
 - Goal: The program improves safety and the appearance of our neighborhoods by replacing the deteriorated sidewalk.
 - Asset Type: Street
- Agency Priority: 1
- 2019 Planned Activities
 - District 1, 7, & 9
 - Sawcutting
 - City Wide Requests

	2019	2020	2021	2022	2023	2024
Borrowing	1,825,000	1,915,000	2,015,000	2,115,000	2,215,000	2,326,000
Special						
Assessment	985,000	1,035,000	1,085,000	1,140,000	1,200,000	1,260,000
TOTAL	2,810,000	2,950,000	3,100,000	3,255,000	3,415,000	3,586,000

GARVER PATH

- Project Background
 - Goal: The project completes a path as planned, expanding pedestrian and bicycle mobility in the City.
 - Scope: A new path, along with two bridge crossings of Starkweather Creek and new boardwalk over wetlands in OB Sherry Park.
 - Agency Priority: 2
- Project Schedule
 - 2019: Schematic Design
 - 2020: Design Completion
 - 2021: Construction
 - 2022:
 - 2023:
 - 2024:

Total Budget
Prior Appropriation

\$1,850,000

\$0

	2019	2020	2021	2022	2023	2024
Borrowing	150,000		850,000			
Federal Sources			850,000			
TOTAL	150,000		1,700,000			

WEST TOWNE PATH

- Project Background
 - Goal: Construct a new path, adding to the pedestrian and bike mobility of the City.
 - Scope: Construct a new path, including an underpass of Gammon Rd.
 - Agency Priority: 3
- Project Schedule
 - 2019: Design Completion
 - 2020: Construction
 - 2021: Construction
 - 2022: Construction
 - **2**023:
 - **2**024:

Total Budget
Prior Appropriatio

dget	\$8,235,000
propriation	\$1,690,000

	2019	2020	2021	2022	2023	2024
Borrowing	200,000	2,467,000	635,000	1,670,000		
Federal Sources		1,573,000				
TOTAL	200,000	4,040,000	635,000	1,670,000		

AUTUMN RIDGE PATH

- Project Background
 - Goal: The project completes the path, adding pedestrian and bicycle mobility to the City.
 - Scope: New bike path and overpass over Hwy 30.
 - Agency Priority: 4
- Project Schedule
 - 2019: Schematic Design
 - 2020: Design Completion
 - 2021: Design Completion
 - 2022: Design Completion
 - 2023: Design Completion
 - 2024: Design Completion

Total Budget	\$100,000
Prior Appropriation	\$0

	2019	2020	2021	2022	2023	2024
Borrowing	100,000					
Federal Sources						
TOTAL	100,000					

TROY DRIVE UNDERPASS

- Project Background
 - Goal: This project would provide a safe route for pedestrians and bicyclists along Troy Drive to cross the railroad tracks.
 - Scope: Construct a new concrete box culvert underpass for pedestrian and bike crossing of the railroad tracks.
 - Agency Priority: 5
- Project Schedule
 - 2019: Schematic Design
 - 2020: Design Completion
 - 2021: Design Completion
 - 2022: Design Completion
 - 2023: Design Completion
 - 2024: Construction

Total Budget	\$1,500,000
Prior Appropriation	\$0

	2019	2020	2021	2022	2023	2024
Borrowing						750,000
Federal						
Sources						750,000
TOTAL						1,500,000

BIKEWAYS PROGRAM

- Program Background
 - Goal: The project maintains existing pedestrian/bike facilities and constructs new pedestrian/bike facilities. The bicycle and pedestrian facilities provide an alternate means of transportation as well as recreational opportunities.

Asset Type: Bike Path

Agency Priority: 6

2019 Planned Activities

Portage Rd Bike Path

	2019	2020	2021	2022	2023	2024
Borrowing	900,000	750,000	750,000	750,000	750,000	750,000
TOTAL	900,000	750,000	750,000	750,000	750,000	750,000

SAFE ROUTES GRANTS

- Program Background
 - Goal: This program improves safety of our neighborhoods by adding sidewalk facilities.

Asset Type: Other

Agency Priority: 7

2019 Planned Activities

	2019	2020	2021	2022	2023	2024
Borrowing	100,000	100,000	100,000	100,000	100,000	100,000
TOTAL	100,000	100,000	100,000	100,000	100,000	100,000

SAFE ROUTES TO SCHOOL

- Program Background
 - Goal: This program encourages healthy and active lifestyles from an early age and facilitates the planning, development and implementation of projects and activities that would improve safety and reduce traffic, fuel consumption and air pollution in the vicinity of schools.

Asset Type: Other

Agency Priority: 8

2019 Planned Activities

	2019	2020	2021	2022	2023	2024
Borrowing	100,000	100,000	100,000	100,000	100,000	100,000
TOTAL	100,000	100,000	100,000	100,000	100,000	100,000

PED/BIKE ENHANCEMENT

- Program Background
 - Goal: The project would make bicycling a safer, more efficient, and more user friendly mode of transportation in the City of Madison thereby reducing the traffic congestion, noise and air pollution associated with vehicles.

Asset Type: Bike Path

Agency Priority: 9

2019 Planned Activities

	2019	2020	2021	2022	2023	2024
Borrowing	229,000	230,000	243,000	243,000	243,000	243,000
TOTAL	229,000	230,000	243,000	243,000	243,000	243,000

ENGINEERING – MAJOR STREETS 2019 CAPITAL IMPROVEMENT PLAN

ROB PHILLIPS, CITY ENGINEERING



SUMMARY

- 2019 Highlights
 - Complete CTH M
 - E Johnson St
 - Wilson/Williamson
- Major Changes from 2018
 - Begin planning John Nolen Drive
 - Emphasize Pavement Management

STREET RATINGS – LOCAL STREETS

	Local	2001	2010	2011	2012	2013	2014	2015	2016	2017
	% Miles at or below Cond State 10	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
	% Miles at or below Cond State 9	93.9%	98.6%	98.5%	98.2%	98.3%	98.8%	98.1%	98.1%	96.6%
	% Miles at or below Cond State 8	88.3%	92.6%	90.5%	91.8%	92.9%	93.6%	94.9%	95.2%	94.3%
	% Miles at or below Cond State 7	68.2%	56.0%	51.4%	59.4%	59.0%	70.8%	64.1%	61.6%	61.8%
	% Miles at or below Cond State 6	61.8%	40.7%	38.1%	37.4%	35.8%	39.0%	41.8%	43.7%	45.9%
Goal 30%	% Miles at or below Cond State 5	34.9%	28.5%	27.8%	28.1%	28.1%	27.9%	27.6%	28.4%	27.8%
	% Miles at or below Cond State 4	11.6%	6.7%	9.0%	11.3%	12.4%	16.2%	17.5%	18.8%	18.2%
	% Miles at or below Cond State 3	2.4%	0.6%	0.9%	0.8%	1.1%	2.8%	2.7%	2.9%	3.5%
	% Miles at or below Cond State 2	0.9%	0.0%	0.0%	0.0%	0.0%	0.1%	0.1%	0.2%	0.2%
	% Miles at or below Cond State 1	0.8%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	% Miles at or below Cond State 0	0.4%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

• Goal: less than 30% of total miles of local streets at or below 5

STREET RATINGS – COLLECTOR STREETS

	Collector	2001	2010	2011	2012	2013	2014	2015	2016	2017
	% Miles at or below Cond State 10	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
	% Miles at or below Cond State 9	94.2%	96.9%	95.9%	98.2%	98.8%	98.2%	96.4%	97.1%	96.7%
	% Miles at or below Cond State 8	86.1%	89.0%	87.4%	89.6%	90.9%	92.3%	90.8%	93.1%	93.0%
	% Miles at or below Cond State 7	58.3%	48.5%	44.2%	52.3%	51.4%	64.6%	58.8%	51.7%	61.5%
	% Miles at or below Cond State 6	48.6%	32.4%	30.9%	32.6%	33.1%	39.8%	39.0%	41.4%	44.3%
Goal 20%	% Miles at or below Cond State 5	27.8%	19.3%	20.5%	19.3%	21.1%	21.7%	18.9%	22.7%	23.1%
	% Miles at or below Cond State 4	6.0%	4.7%	6.2%	8.6%	9.1%	10.9%	9.1%	9.5%	10.2%
	% Miles at or below Cond State 3	0.3%	0.8%	1.0%	1.3%	1.0%	4.8%	2.9%	2.8%	3.2%
	% Miles at or below Cond State 2	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	% Miles at or below Cond State 1	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	% Miles at or below Cond State 0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

• Goal: less than 20% of total miles of collector streets at or below 5

STREET RATINGS – ARTERIAL STREETS

	Arterial	2001	2010	2011	2012	2013	2014	2015	2016	2017
	% Miles at or below Cond State 10	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
	% Miles at or below Cond State 9	98.3%	92.0%	87.2%	88.8%	97.3%	97.6%	98.0%	97.9%	97.8%
	% Miles at or below Cond State 8	87.0%	76.6%	69.3%	75.9%	80.0%	84.7%	89.8%	89.7%	93.6%
	% Miles at or below Cond State 7	58.4%	47.0%	36.1%	41.6%	44.7%	60.4%	56.4%	46.1%	53.8%
	% Miles at or below Cond State 6	46.3%	28.2%	17.9%	22.9%	24.4%	32.7%	37.8%	38.9%	37.8%
Goal 15%	% Miles at or below Cond State 5	23.3%	15.8%	10.2%	10.0%	11.8%	16.5%	18.4%	23.0%	26.3%
	% Miles at or below Cond State 4	2.0%	8.1%	3.6%	4.6%	5.0%	6.3%	7.1%	7.5%	8.8%
	% Miles at or below Cond State 3	0.5%	0.8%	1.0%	1.0%	0.2%	1.9%	2.4%	2.3%	2.5%
	% Miles at or below Cond State 2	0.5%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	% Miles at or below Cond State 1	0.5%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	% Miles at or below Cond State 0	0.5%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

Goal: less than 15% of total miles of arterial streets at or below 5

CTH M (MIDTOWN AREA)

Project Background

- Goal: This project contributes to the goal by improving streets that are considered deficient. The project contributes to quality neighborhoods by maintaining and improving the neighborhood through the repair of the street which is in disrepair. The project improves safety and ride by replacing the deteriorated pavement, adding bike facilities and sidewalk.
- Scope: The project is a complete street reconstruction with new pavement curb & gutter, sidewalk, lighting, bike facilities and underground utilities.
- Agency Priority: 1
- Project Schedule
 - 2019: Construction
 - 2020:
 - 2021:
 - 2022:
 - 2023:
 - 2024:

Total Budget	\$17,570,884
Prior Appropriation	\$11,319,134

	2019	2020	2021	2022	2023	2024
Borrowing	1,318,000					
County Sources	2,600,000					
Federal Sources	2,070,000					
Special Assessment	235,000					
Reserves – Sewer	28,750					
TOTAL	6,251,750					

CTH M (CTH PD AREA)

Project Background

- Goal: This project contributes to the goal by improving streets that are considered deficient. The project contributes to quality neighborhoods by maintaining and improving the neighborhood through the repair of the street which is in disrepair. The project improves safety and ride by replacing the deteriorated pavement, adding bike facilities and sidewalk.
- Scope: The project is a complete street reconstruction with new pavement curb & gutter, sidewalk, lighting, bike facilities and underground utilities.
- Agency Priority: 2

Project Schedule

2019: Construction

2020:

2021:

2022:

2023:

2024:

Total Budget	\$22,692,465
Prior Appropriation	\$15,155,715

	2019	2020	2021	2022	2023	2024
Borrowing	53,000					
County Sources	2,323,000					
Federal Sources	2,902,000					
Municipal Participation	1,980,000					
Special Assessment	235,000					
Reserves – Sewer	43,750					
TOTAL	7,536,750					

JOHNSON ST, EAST (BALDWIN TO FIRST PHASE 2)

Project Background

- Goal: This project contributes to the goal by improving streets that are considered deficient. The project contributes to quality neighborhoods by maintaining and improving the neighborhood through the repair of the street which is in disrepair. The project improves safety and ride by replacing the deteriorated pavement, adding bike facilities and sidewalk.
- Scope: The project is a complete street reconstruction with new pavement curb & gutter, sidewalk, lighting, bike facilities and underground utilities.
- Agency Priority: 3
- Project Schedule
 - 2019: Construction
 - 2020:
 - 2021:
 - 2022:
 - 2023:
 - 2024:

Total Budget	\$7,030,000
Prior Appropriation	\$977,000

	2019	2020	2021	2022	2023	2024
Borrowing	2,273,000					
Federal Sources	3,007,000					
Special Assessment	300,000					
Borrowing – Sewer	243,000					
Reserves – Sewer	200,000					
Spec. Asmt. - Sewer	30,000					
TOTAL	6,053,000					

GAMMON ROAD, SOUTH

Project Background

- Goal: This project contributes to the goal by improving streets that are considered deficient. The project contributes to quality neighborhoods by maintaining and improving the neighborhood through the repair of the street which is in disrepair. The project improves safety and ride by replacing the deteriorated pavement, adding bike facilities and sidewalk.
- Scope: The project is a complete street reconstruction with new pavement curb & gutter, sidewalk, lighting, bike facilities and underground utilities.
- Agency Priority: 4

Project Schedule

2019: Design Completion

2020: Construction

2021:

2022:

2023:

2024:

Total Budget
Prior Appropriation

\$7,606,400
\$510,900

	2019	2020	2021	2022	2023	2024
Borrowing	250,000	2,820,000				
Federal Sources		4,014,000				
Reserves – Sewer		11,500				
TOTAL	250,000	6,845,500				

ATWOOD AVENUE (FAIR OAKS TO COTTAGE GROVE)

Project Background

- Goal: This project contributes to the goal by improving streets that are considered deficient. The project contributes to quality neighborhoods by maintaining and improving the neighborhood through the repair of the street which is in disrepair. The project improves safety and ride by replacing the deteriorated pavement, adding bike facilities and sidewalk.
- Scope: The project is a complete street reconstruction with new pavement curb & gutter, sidewalk, lighting, bike facilities and underground utilities. A new ped/bike bridge over the Starkweather creek is included.
- Agency Priority: 5

Project Schedule

2019: Design Completion

2020: Design Completion

2021: Design Completion

2022: Design Completion

2023: Design Completion

2024: Construction

Total Budget	
Prior Appropriation	

Budget	\$11,038,000
appropriation	\$875,000

	2019	2020	2021	2022	2023	2024
Borrowing		500,000				3,480,000
Federal Sources						5,220,000
Borrowing – Sewer						640,000
Reserves – Sewer						227,000
Spec. Asmt. - Sewer						96,000
TOTAL		500,000				9,663,000

BLAIR/JOHN NOLEN INTERSECTION

Project Background

- Goal: The project contributes to the goal by improving streets that are deficient. The project contributes to quality neighborhoods by maintaining and improving the neighborhood through the repair of the street which is in disrepair. The project improves safety and ride quality by replacing deteriorated pavement, adding bike facilities, and sidewalk.
- Scope: The project is a complete street reconstruction with new pavement curb & gutter, sidewalk, lighting, bike facilities and underground utilities.
- Portions of this project would be completed in 2019 under reconstruct streets due to immediate pavement need
- Agency Priority: 6

Project Schedule

2019: Design Completion

2020: Design Completion

2021: Construction

2022:

2023:

2024:

Total Budget
Prior Appropriation

\$3,703,000
\$500,000

	2019	2020	2021	2022	2023	2024
Borrowing			1,040,000			
Federal Sources			1,940,000			
Reserves – Sewer	20,000		203,000			
TOTAL	20,000		3,183,000			

UNIVERSITY AVE (SHOREWOOD TO UNIVERSITY BAY)

Project Background

- Goal: This project contributes to the goal by improving streets that are considered deficient. The project contributes to quality neighborhoods by maintaining and improving the neighborhood through the repair of the street which is in disrepair. The project improves safety and ride by replacing the deteriorated pavement, adding bike facilities and sidewalk.
- Scope: The project is a complete street reconstruction with new pavement curb & gutter, sidewalk, lighting, bike facilities and underground utilities. Project will include major storm sewer component.
- Agency Priority: 7
- Project Schedule
 - 2019: Schematic Design
 - 2020: Design Completion
 - 2021: Construction
 - 2022:
 - 2023:
 - 2024:

Total Budget \$24,530,000
Prior Appropriation \$1,090,000

	2019	2020	2021	2022	2023	2024
Borrowing			2,150,000			
Federal Sources			6,450,000			
Municipal Participation			3,150,000			
Borrowing – Sewer			508,000			
Reserves – Sewer			100,000			
Spec. Asmt. – Sewer			32,000			
Federal Sources – Storm			6,600,000			
Borrowing – Storm			3,900,000			
Reserves – Storm	50,000		500,000			
TOTAL	50,000		23,390,000			

PLEASANT VIEW ROAD

Project Background

- Goal: This project contributes to the goal by improving streets that are considered deficient. The project contributes to quality neighborhoods by maintaining and improving the neighborhood through the repair of the street which is in disrepair. The project improves safety and ride by replacing the deteriorated pavement, adding bike facilities and sidewalk.
- Scope: The project is a complete street reconstruction with new pavement curb & gutter, sidewalk, lighting, bike facilities and underground utilities.
- Joint project with Middleton
- Agency Priority: 8

Project Schedule

2019: Schematic Design

2020: Design Completion

2021: Design Completion

2022: Design Completion

2023: Design Completion

2024: Construction

Total Budget	\$13,079,01
Prior Appropriation	\$2,636,51

	2019	2020	2021	2022	2023	2024
Borrowing	515,000				1,000,000	3,440,000
Federal Sources						5,160,000
Municipal Participation	322,500					
Reserves – Sewer	5,000					
TOTAL	842,500				1,000,000	8,600,000

JOHN NOLEN DRIVE

Project Background

- Goal: This project contributes to the goal by improving streets that are considered deficient. The project contributes to quality neighborhoods by maintaining and improving the neighborhood through the repair of the street which is in disrepair. The project improves safety and ride by replacing the deteriorated pavement, adding bike facilities and sidewalk.
- Scope: The project is a complete street reconstruction with new pavement curb & gutter, lighting, bike facilities and underground utilities.
- Agency Priority: 9

Project Schedule

2019: Schematic Design

2020: Design Completion

2021: Design Completion

2022: Design Completion

2023: Design Completion

2024: Construction

Total Budget	\$33,155,000
Prior Appropriation	\$0

	2019	2020	2021	2022	2023	2024
Borrowing	2,880,000					11,508,000
Federal Sources						17,262,000
Reserves – Sewer						5,000
Borrowing – Storm						1,000,000
Reserves – Storm						500,000
TOTAL	2,880,000					30,275,000

MINERAL POINT RD (BELTLINE TO HIGH POINT)

Project Background

- Goal: This project contributes to the goal by improving streets that are considered deficient. The project contributes to quality neighborhoods by maintaining and improving the neighborhood through the repair of the street which is in disrepair. The project improves safety and ride by replacing the deteriorated pavement, adding bike facilities and sidewalk.
- Scope: The project is a complete street reconstruction with new pavement curb & gutter, sidewalk, lighting, bike facilities and underground utilities.

Agency Priority: 10

Project Schedule

2019: Schematic Design

2020: Design Completion

2021: Design Completion

2022: Design Completion

2023: Design Completion

2024: Design Completion

Total Budget	\$234,685
Prior Appropriation	\$134,685

	2019	2020	2021	2022	2023	2024
Borrowing	100,000					
Federal Sources						
TOTAL	100,000					

BUCKEYE ROAD IMPROVEMENTS

Project Background

- Goal: This project contributes to the goal by improving streets that are considered deficient. The project contributes to quality neighborhoods by maintaining and improving the neighborhood through the repair of the street which is in disrepair. The project improves safety and ride by replacing the deteriorated pavement, adding bike facilities and sidewalk.
- Scope: The project is a complete street reconstruction with new pavement curb & gutter, sidewalk, lighting, bike facilities and underground utilities.

Agency Priority: 11

Project Schedule

2019: Construction

2020:

2021:

2022:

2023:

2024:

Total Budget	\$6,410,000
Prior Appropriation	\$1,072,000

	2019	2020	2021	2022	2023	2024
Borrowing	2,090,000					
County Sources	1,365,000					
Special Assessment	500,000					
Borrowing – Sewer	1,006,000					
Reserves – Sewer	264,000					
Spec. Asmt. – Sewer	113,000					
TOTAL	5,338,000					

COTTAGE GROVE ROAD (139 TO SPRECHER)

Project Background

- Goal: This project contributes to the goal by improving streets that are considered deficient. The project contributes to quality neighborhoods by maintaining and improving the neighborhood through the repair of the street which is in disrepair. The project improves safety and ride by replacing the deteriorated pavement, adding bike facilities and sidewalk.
- Scope: The project is a complete street reconstruction with new pavement curb & gutter, sidewalk, lighting, bike facilities and underground utilities.

Agency Priority: 12

Project Schedule

2019: Design Completion

2020: Construction

2021:

2022:

2023:

2024:

Total Budget
Prior Appropriation

\$7,951,515
\$1,837,515

	2019	2020	2021	2022	2023	2024
Borrowing		1,500,000				
County Sources		900,000				
Federal Sources		3,450,000				
Special Assessment		252,000				
Reserves – Sewer		12,000				
TOTAL		6,114,000				

BLAIR STREET, S.

Project Background

- Goal: This project contributes to the goal by improving streets that are considered deficient. The project contributes to quality neighborhoods by maintaining and improving the neighborhood through the repair of the street which is in disrepair. The project improves safety and ride by replacing the deteriorated pavement and sidewalk.
- Scope: The project is a complete street reconstruction with new pavement curb & gutter, sidewalk, lighting and underground utilities.
- Requires agreement with WisDOT
- Agency Priority: 13

Project Schedule

- **2**019:
- 2020: Schematic Design
- 2021: Design Completion
- 2022: Design Completion
- 2023: Design Completion
- 2024: Construction

Total Budget	\$7,328,000
Prior Appropriation	\$0

	2019	2020	2021	2022	2023	2024
Borrowing		60,000				1,268,000
Federal Sources		240,000				5,072,000
Borrowing – Sewer						555,000
Reserves – Sewer		30,000				43,000
Spec. Asmt. – Sewer						60,000
TOTAL		330,000				6,998,000

PAVEMENT MANAGEMENT

- Program Background
 - Goal: This project contributes to the goal by improving streets that are considered deficient. The project contributes to quality neighborhoods by maintaining and improving the neighborhood through the repair of the street which is in disrepair. The project improves safety and ride by replacing the deteriorated pavement
 - Asset Type: Street, Sanitary Sewer and Stormwater Network
- Agency Priority: 14
- 2019 Planned Activities
 - Chip and Crack Seal
 - Holly, Euclid, Toepfer, St Clair
 - Shepard, Mason, Chamberlain, Van Hise
 - Milwaukee St
 - Pflaum, Vondron
 - Darwin
 - N Yellowstone
 - Various other projects

	2019	2020	2021	2022	2023	2024
Borrowing	11,575,000	10,825,000	11,075,000	11,075,000	11,075,000	11,075,000
Special Assessment	575,000	800,000	817,000	817,000	817,000	817,000
TIF Proceeds	1,300,000					
Borrowing – Sewer	2,188,000	3,400,000	3,564,000	3,800,000	3,900,000	3,236,845
Reserves – Sewer	1,200,000	1,041,350	877,350	1,202,500	1,102,500	1,204,505
Spec. Asmt. – Sewer	426,000	663,650	663,650	747,500	747,500	663,650
Borrowing – Storm	1,263,000	1,448,000	1,253,000	1,227,000	1,237,000	1,130,000
Reserves – Storm	710,000	750,000	725,000	675,000	700,000	600,000
Spec. Asmt. – Storm	17,000	22,000	22,000	23,000	23,000	20,000
TOTAL	19,254,000	18,950,000	18,997,000	19,567,000	19,602,000	18,747,000

RECONSTRUCTION STREETS

- Program Background
 - Goal: This project contributes to the goal by improving streets that are considered deficient. The project contributes to quality neighborhoods by maintaining and improving the neighborhood through the repair of the street which is in disrepair. The project improves safety and ride by replacing the deteriorated pavement, adding bike facilities and sidewalk.
 - Asset Type: Street, Sanitary Sewer and Stormwater Network
- Agency Priority: 15
- 2019 Planned Activities
 - Davidson, Park, Dempsey, Drexel, Lake Edge, Maher
 - City View Dr
 - Hammersley Rd
 - E Wilson, Williamson, Blount
 - Bryan, James, Thorp
 - Ingersoll, Elizabeth
 - Campbell, Vilas
 - South Point
 - Alleys (Adams/Jefferson/Vilas)
 - Belin, Parkway
 - Ohmeda, Femrite, Meier
 - Haywood Dr
 - Oak St

	2019	2020	2021	2022	2023	2024
Borrowing	6,745,000	7,665,000	7,665,000	7,665,000	7,665,000	7,665,000
State Sources	225,000	225,000	225,000	225,000	225,000	225,000
Special Assessment	3,450,000	2,620,000	2,620,000	2,620,000	2,620,000	2,620,000
TIF Proceeds		1,000,000				
Borrowing – Sewer	5,099,700	3,179,000	3,575,500	3,392,500	3,503,500	3,392,500
Reserves – Sewer	1,135,300	1,262,350	865,850	1,048,850	937,850	1,048,850
Spec. Asmt. – Sewer	1,015,000	663,650	663,650	663,650	663,650	663,650
Borrowing – Storm	3,076,000	1,657,000	1,460,000	1,460,000	1,415,000	1,407,500
Reserves – Storm	425,000	500,000	420,000	420,000	465,000	275,000
Spec. Asmt. – Storm	664,000	18,000	20,000	20,000	20,300	17,500
TOTAL	21,835,000	18,790,000	17,515,000	17,515,000	17,515,300	17,315,000

BRIDGE REPAIR

- Program Background
 - Goal: This project contributes toward the City's goal of having safe, convenient bridge structures. Safe bridges are vital to the community. This program provides funds for bridge repair projects that help maintain our bridges in a safe condition.

Asset Type: Bridge

Agency Priority: 16

2019 Planned Activities

Bridge Resurfacing

Railing Replacement

	2019	2020	2021	2022	2023	2024
Borrowing	150,000	160,000	170,000	170,000	170,000	170,000
TOTAL	150,000	160,000	170,000	170,000	170,000	170,000

NEIGHBORHOOD TRAFFIC MANAGEMENT & PEDESTRIAN IMPROVEMENTS

- Program Background
 - Goal: The project contributes toward the City's goal of having safe and convenient streets for pedestrians, bicyclists and motor vehicles. The project contributes to quality neighborhoods by improving pedestrian mobility across major streets.

Asset Type: Street

Agency Priority: 17

2019 Planned Activities

Traffic Calming

	2019	2020	2021	2022	2023	2024
Borrowing	330,000	340,000	350,000	350,000	350,000	350,000
TOTAL	330,000	340,000	350,000	350,000	350,000	350,000

PARK STREET, SOUTH (OLIN TO RAILROAD)

Project Background

- Goal: This project contributes to the goal by improving streets that are considered deficient. The project contributes to quality neighborhoods by maintaining and improving the neighborhood through the repair of the street which is in disrepair. The project improves safety and ride by replacing the deteriorated pavement, adding bike facilities and sidewalk.
- Scope: The project is a complete street reconstruction with new pavement curb & gutter, sidewalk, lighting, bike facilities and underground utilities.
- Requires agreement with WisDOT
- Agency Priority: 18

Project Schedule

- 2019: Schematic Design
- 2020: Design Completion
- 2021: Construction
- 2022:
- 2023:
- 2024:

Total Budget
Prior Appropriation

\$3,739,000
\$0

	2019	2020	2021	2022	2023	2024
Borrowing	150,000		1,505,000			
Federal Sources	150,000		1,505,000			
Reserves – Sewer			214,000			
Spec. Asmt. – Sewer			20,000			
Federal Sources – Storm			105,000			
Borrowing – Storm			70,000			
Reserves – Storm	20,000					
TOTAL	320,000		3,419,000			

PARK STREET, SOUTH (W WASH-OLIN, RAILROAD-BADGER)

- Project Background
 - Goal: This project contributes to the goal by improving streets that are considered deficient. The project contributes to quality neighborhoods by maintaining and improving the neighborhood through the repair of the street which is in disrepair. The project improves safety and ride by replacing the deteriorated pavement, adding bike facilities and sidewalk.
 - Scope: The project is a Street Rehabilitation project, replacing deteriorated concrete joints in the street.
 - Agency Priority: 19
- Project Schedule

2019: Construction

2020: Construction

2021:

2022:

2023:

2024:

Total Budget	\$3,120,000
Prior Appropriation	\$0

	2019	2020	2021	2022	2023	2024
Borrowing	1,650,000	1,470,000				
TOTAL	1,650,000	1,470,000				

MARTIN LUTHER KING JR BLVD

- Project Background
 - Goal: To replace deteriorated sidewalk. Area transportation modes (pedestrian, bicycle, motor vehicle, transit) will be studied with the project.
 - Scope: The project will replace deteriorated sidewalk. A pedestrian plaza will be studied.
 - Agency Priority: 20
- Project Schedule

2019: Schematic Design

2020: Design Completion

2021: Construction

2022:

2023:

2024:

Total Budget
Prior Appropriation

\$2,069,000
\$0

	2019	2020	2021	2022	2023	2024
Borrowing	180,000					
TIF Proceeds			1,820,000			
Reserves – Sewer			14,500			
Spec. Asmt. – Sewer			4,500			
Borrowing – Storm			40,000			
Spec. Asmt. – Storm			10,000			
TOTAL	180,000		1,889,000			

OUTER CAPITOL LOOP SOUTHEAST

Project Background

- Goal: This project contributes to the goal by improving streets that are considered deficient. The project contributes to quality neighborhoods by maintaining and improving the neighborhood through the repair of the street which is in disrepair. The project improves safety and ride by replacing the deteriorated pavement, adding bike facilities and sidewalk.
- Scope: The project is a complete street reconstruction with new pavement curb & gutter, sidewalk, lighting, bike facilities and underground utilities.

Agency Priority: 21

Project Schedule

2019: Schematic Design

2020: Design Completion

2021: Construction

2022:

2023:

2024:

Total Budget **Prior Appro**

et	\$2,133,000
priation	\$0

	2019	2020	2021	2022	2023	2024
TIF Proceeds			1,790,000			
Special Assessment			30,000			
Reserves – Sewer			151,000			
Borrowing – Sewer			93,000			
Spec. Asmt. – Sewer			19,000			
TIF Proceeds – Storm			40,000			
Spec. Asmt. – Storm			10,000			
TOTAL			2,133,000			

WILSON ST (MLK TO KING)

Project Background

- Goal: This project contributes to the goal by improving streets that are considered deficient. The project contributes to quality neighborhoods by maintaining and improving the neighborhood through the repair of the street which is in disrepair. The project improves safety and ride by replacing the deteriorated pavement, adding bike facilities and sidewalk.
- Scope: The project is a complete street reconstruction with new pavement curb & gutter, sidewalk, lighting, bike facilities and underground utilities.

Agency Priority: 22

Project Schedule

2019:

2020: Planning

2021: Design Completion

2022: Construction

2023:

2024:

Total Budget
Prior Appropriation

\$1,841,000 \$0

	2019	2020	2021	2022	2023	2024
TIF Proceeds				1,220,000		
Special Assessment				60,000		
Borrowing – Sewer				266,000		
Reserves – Sewer				97,000		
Spec. Asmt. – Sewer				48,000		
Borrowing – Storm				75,000		
Reserves – Storm			75,000			
TOTAL				1,841,000		

CEDAR STREET

- Project Background
 - Goal: The project includes a new street which allows for better neighborhood connections. It also can spur development in the area.
 - Scope: The project is a new street with sidewalk.
 - Agency Priority: 23
- **Project Schedule**
 - 2019: Schematic Design
 - 2020: Design Completion
 - 2021: Construction
 - 2022:
 - 2023:
 - 2024:

Total Budget	\$1,820,000
Prior Appropriation	\$0

	2019	2020	2021	2022	2023	2024
Special Assessment			1,020,000			
TIF Proceeds			800,000			
TOTAL			1,820,000			

DAIRY DRIVE

- Project Background
 - Goal: The project includes a new street which allows for better neighborhood connections. It also can spur development in the area.
 - Scope: The project is a new street with sidewalk.
 - Agency Priority: 24
- Project Schedule
 - 2019: Construction
 - 2020:
 - **2021**:
 - **2**022:
 - **2**023:
 - **2**024:

Total Budget
Prior Appropriation

\$1,999,000
\$0

	2019	2020	2021	2022	2023	2024
TIF Proceeds	1,180,000					
Special Assessment	570,000					
Spec. Asmt. – Sewer	109,000					
TIF Proceeds – Storm	140,000					
TOTAL	1,999,000					

TREETOPS/FEATHER EDGE DRIVE

- Project Background
 - Goal: This project expands connectivity for the neighborhood to the expanded Hill Creek Park and stormwater management facilities.
 - Scope: New street, sidewalk, sanitary sewer and storm sewer.
 - Agency Priority: 25
- Project Schedule
 - 2019: Design Completion
 - 2020: Construction
 - **2021**:
 - 2022:
 - **2**023:
 - **2**024:

Total Budget
Prior Appropriation

\$2,949,000
\$0

	2019	2020	2021	2022	2023	2024
Special Assessment	1,650,000					
Reserves – Sewer	153,000					
Spec. Asmt. – Sewer	21,000					
Borrowing – Storm	1,000,000					
Reserves – Storm	125,000	_			_	
TOTAL	2,949,000					

RAILROAD CROSSINGS & QUIET ZONES

- Program Background
 - Goal: This project contributes toward the City's goal of having safe railroad crossings for pedestrians, bicyclists and motor vehicles. Safe railroad crossings and quiet zones enhance the adjacent neighborhoods.

Asset Type: Street

Agency Priority: 26

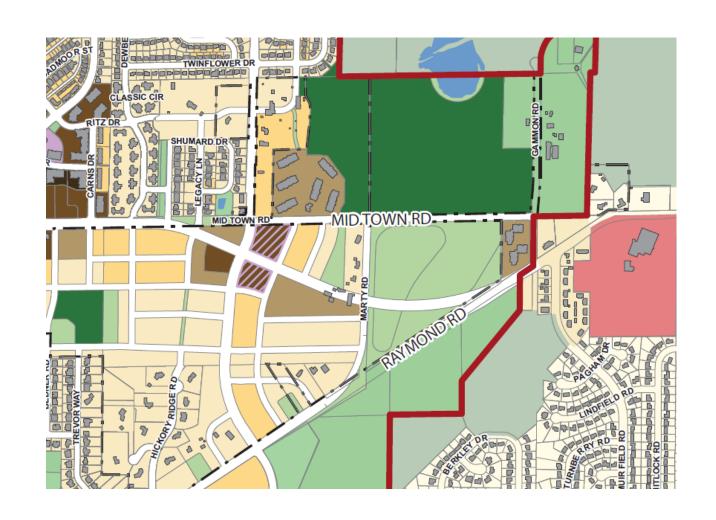
2019 Planned Activities

Corry & Waubesa St

	2019	2020	2021	2022	2023	2024
Borrowing	130,000	140,000	150,000	150,000	150,000	150,000
TIF						
Proceeds	450,000					
TOTAL	580,000	140,000	150,000	150,000	150,000	150,000

MARTY FARM AREA

- Construct High Point Rd, Raymond Rd, Mid Town Rd on new alignment
- Regional Stormwater Facilities
- Expanded Elver Park
- Currently not budgeted



ENGINEERING – OTHER PROJECTS 2019 CAPITAL IMPROVEMENT PLAN

ROB PHILLIPS, CITY ENGINEERING



SUMMARY

2019 Highlights

- Of note in this budget is that we are pursuing a tree cover on aerial flight with infrared coverage to allow us to determine species type of tree. This information will be used to help us in our analysis of our leaf collection program as it relates to credits/reductions in our Total Suspended Solids and Total Phosphorus loads to the WDNR as part of our TMDL calculations.
- Oil collection sites Wheeler Road site is being rebuilt currently and the Glenway site is planned for reconstruction in 2019 after having been closed for several years.

Major Changes from 2018

Only prioritization changes have been made from last year. We chose to move Warning Sirens to our 2nd priority as we have sufficient funding in 2018 to complete two (2) sirens. By choosing to bid the project after the 2019 budget is approved, adding normal funding for one (1) siren, will actually allow us to bid four (4) sirens rather than three (3) with the same amount of funding.

EQUIPMENT AND VEHICLE REPLACEMENT

Program Background

- Goal: This program provides for the scheduled replacement and purchase of vehicles and equipment required to operate and maintain the City's sanitary sewer, stormwater and closed landfill systems. Desired outcomes for our customers include eliminating preventable sewer back ups and sanitary sewer overflows; preventing flooding and water quality improvement; and preventing migration of landfill gas.
- Asset Type: Machinery and Equipment
- Agency Priority: 1
- 2019 Planned Activities
 - Sewer Cleaning Equipment
 - Tri-Axle Dump Truck
 - Mowing Equipment
 - Leadworker Service Vehicle
 - One-Ton Dump Truck w/ Plow
 - Tracked Excavator and Attachments

	2019	2020	2021	2022	2023	2024
Reserves - Landfill	78,320	85,050	85,050	96,530	101,250	105,990
Reserves - Sewer	939,840	1,020,590	1,020,590	1,158,300	1,215,000	1,271,900
Reserves - Storm	548,240	595,340	595,340	675,680	708,750	741,940
TOTAL	1,566,400	1,700,980	1,700,980	1,930,510	2,025,000	2,119,830

WARNING SIRENS

- Program Background
 - Goal: Adequate coverage for City residents to hear emergency warning sirens.
 - Asset Type: Machinery and Equipment
- Agency Priority: 2
- 2019 Planned Activities
 - Installation of one new warning siren.

	2019	2020	2021	2022	2023	2024
Borrowing	30,000			60,000		30,000
TOTAL	30,000			60,000		30,000

SERVICE BUILDING IMPROVEMENTS

- Program Background
 - Goal: Provide a safe, healthy and comfortable work environment that meets both building codes and users needs. Schedule replacement and upgrade of building systems and components to maximize useful life of facility and preserve the City's investment. Reduce reliance on fossil fuels by adding solar collectors where possible.

Asset Type: Building

Agency Priority: 3

2019 Planned Activities

	2019	2020	2021	2022	2023	2024
Reserves - Landfill	13,410	14,040	14,040	15,480	16,250	17,060
Reserves - Sewer	80,460	84,250	84,250	92,890	97,500	102,380
Reserves - Storm	40,230	42,130	42,130	46,440	48,750	51,190
TOTAL	134,100	140,420	140,420	154,810	162,500	170,630

WASTE OIL COLLECTION SITES

- Program Background
 - Goal: Replace existing and add new oil collection sites as the City expands to allow a legal and safe disposal site for City residents. Existing sites are not compatible with current codes and have a single tank for collection. This is not suitable as oil needs to be tested for contamination prior to be mixed with other recycled oils. A split tank allows testing before the oil is collected and mixed with other recycled oils (minimizing potential PCB contamination).

Asset Type: Other

Agency Priority: 4

2019 Planned Activities

 Install replacement oil collection equipment at Glenway Golf Course

	2019	2020	2021	2022	2023	2024
Reserves - Sewer	37,500		62,500		30,000	37,500
Reserves - Storm	37,500		62,500		30,000	37,500
TOTAL	75,000		125,000		60,000	75,000

AERIAL PHOTO / ORTHOPHOTOS

- Program Background
 - Goal: This program provides information/data for many of the City's agencies/staff, including but not limited to the funding agencies (stormwater utility, sanitary sewer utility and water utility), to use in their daily tasks. This information is also available to the public and to both public/private groups involved in the development process use in planning projects.

Asset Type: Other

Agency Priority: 5

- 2019 Planned Activities
 - Project to complete cover on LIDAR to identify tree canopy as a means to justify further reductions in TP associated with WDNR guidance.

	2019	2020	2021	2022	2023	2024
Borrowing		20,000		28,000		20,000
Reserves - Sewer		10,000		14,000		10,000
Reserves - Storm	80,000	10,000		14,000		10,000
Reserves - Water		10,000		14,000		10,000
TOTAL	80,000	50,000		70,000		50,000

RIGHT OF WAY LANDSCAPING AND TREES

- Program Background
 - Goal: The project to landscape public rights of way contributes to the quality of neighborhoods by improving the feel of the neighborhood.
 - Asset Type: Land Improvements
- Agency Priority: 6
- 2019 Planned Activities
 - Landscaping projets in medians throughout the city.

	2019	2020	2021	2022	2023	2024
Borrowing	155,000	160,000	172,240	175,000	175,000	180,000
TOTAL	155,000	160,000	172,240	175,000	175,000	180,000

SEWER UTILITY 2019 CAPITAL IMPROVEMENT PLAN

ROB PHILLIPS, CITY ENGINEERING



SUMMARY

- 2019 Highlights
 - Trenchless Sewer Rehabilitation- 7 miles of sewer main per year- most cost effective approach to upgrade a sewer main
 - Budget includes funding to rehabilitate lift stations including replacement of James Street Lift Station
 - West Elderberry Neighborhood Sanitary Sewer Improvement Impact Fee District- Project allows Development to 323 Acre basin on Madison's west side to develop.
- Major Changes from 2018
 - Funding increased to Lift Station Rehabilitations which is the maintenance program for the City's sanitary sewer Lift Stations
 - Sewer Impact Fees programmed for years but will be development driven.

TRENCHLESS SEWER REHABILITATION

- Program Background
 - Goal: Trenchless Sewer Rehabilitation allows for sewers to be upgraded without needing to excavate and replace the sewer. The goal of the program is to reduce groundwater infiltration and reduce the number of sewer backups from unplanned sewer failures.

Asset Type: Sanitary Sewer

Agency Priority: 1

2019 Planned Activities

Citywide- Approximately 7 miles per year

	2019	2020	2021	2022	2023	2024
Revenue Bonds - Sewer	1,193,300	1,250,000	1,250,000	1,280,000	1,280,000	1,280,000
Reserves – Sewer	330,000	340,000	340,000	380,000	380,000	380,000
TOTAL	1,523,000	1,590,000	1,590,000	1,660,000	1,660,000	1,660,000

CITYWIDE PUMPING STATIONS - EMERGENCY POWER STATIONARY GENERATORS

Program Background

- Goal: The goal of the program is to supply continuous power service to City' 30 pumping stations during emergency events. Continuous power service will prevent sewer backups causing damage to private property or environmental contamination from sanitary sewer overflows(SSO).
- Asset Type: Sanitary Sewer
- Agency Priority: 2
- 2019 Planned Activities
 - Cherokee #2 Pumping Station Backup Generator
 - Commodore Pumping Station Backup Generator

	2019	2020	2021	2022	2023	2024
Reserves – Sewer	57,500	57,500	57,500	57,500	57,500	57,500
TOTAL	57,500	57,500	57,500	57,500	57,500	57,500

LIFT STATION REHABILITATIONS

- Program Background
 - Goal: The goal of this program is to maintain reliable lift stations without failures to reduce the number of back-ups and emergency incidents.
 - Asset Type: Sanitary Sewer
- Agency Priority: 3
- 2019 Planned Activities
 - James Street Lift Station Replacement
 - Cherokee#1 Controls Replacement
 - Commodore Pumping Station- Controls Replacement
 - Debs Telemetry & Controls
 - Regent Street L.S. Telemetry & Controls
 - Lakeview Tower Telemetry (14 Stations)
 - Miscellaneous Repair as Recommended by MMSD

	2019	2020	2021	2022	2023	2024
Reserves – Sewer	450,100	550,000	150,000	150,000	150,000	150,000
TOTAL	450,100	550,000	150,000	150,000	150,000	150,000

SEWER ACCESS IMPROVEMENTS

- Program Background
 - Goal: These improvements provide safe access roads to our sanitary manholes which are often located in wet areas to allow for preventative sewer maintenance. Access roads allow for quicker response time to maintenance and repair work for the City's sewer system. These Access improvements will help minimize the number of backups to our customers.
 - Asset Type: Land Improvements
- Agency Priority: 4
- 2019 Planned Activities
 - World Dairy Access Path
 - Miscellaneous projects as needed

	2019	2020	2021	2022	2023	2024
Reserves – Sewer	123,000	130,000	220,000	130,000	130,000	130,000
TOTAL	123,000	130,000	220,000	130,000	130,000	130,000

SEWER RECONSTRUCTION

- Program Background
 - Goal: The goal of this project is to replace old problematic sewers in the City. The program includes minor projects of collection system additions and sewer reconstructions. The outcome for the customer is a sanitary sewer systems that efficiently carries wastewater with minimal number of backups due to undersized sewer pipes or pipes in disrepair.
 - Asset Type: Sanitary Sewer
- Agency Priority: 5
- 2019 Planned Activities
 - Miscellaneous projects as needed

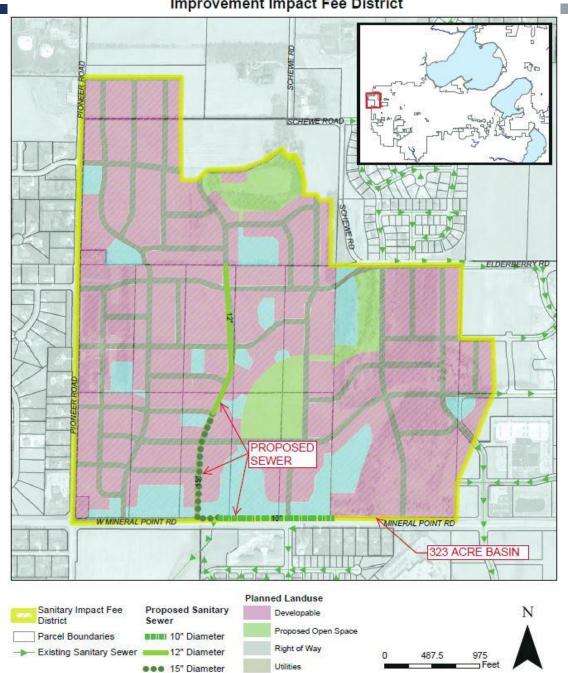
	2019	2020	2021	2022	2023	2024
Revenue Bonds - Sewer	150,000	250,000	250,000	284,850	303,850	320,000
Reserves – Sewer	95,000	95,000	95,000	110,150	91,150	75,000
Special Assessment - Sewer	5,000	5,000	5,000	5,000	5,000	5,000
TOTAL	250,000	350,000	350,000	400,000	400,000	400,000

SEWER IMPACT FEE DISTRICTS

- Program Background
 - Goal: Provide sanitary sewer service to area of the City with pending development. Without the sewer, the development would not occur.
 - Asset Type: Sanitary Sewer
- Agency Priority: 6
- 2019 Planned Activities
 - West Elderberry Neighborhood Sanitary Sewer
 Improvement Impact Fee District

	2019	2020	2021	2022	2023	2024
Impact Fees	2,200,000	1,000,000	1,200,000	3,082,000		
TOTAL	2,200,000	1,000,000	1,200,000	3,082,000		

EXHIBIT B
West Elderberry Neighborhood Sanitary Sewer
Improvement Impact Fee District



STORMWATER UTILITY 2019 CAPITAL IMPROVEMENT PLAN

ROB PHILLIPS, CITY ENGINEERING



SUMMARY

- 2019 Highlights
 - Water Quality improvements Starkweather Coagulant Treatment
 - Flooding Regional and local watershed modeling for planning system improvements
 - Improvements to infrastructure to upgrade capacity of storm sewer system
- Major Changes from 2018
 - Starkweather Coagulant Treatment
 - Project delayed due to land acquisition
 - Originally requesting \$5M for 2019; revised to \$2.7M based on current estimates and timeframes for completion
 - 2018 Budget submittal showed total budget of \$6M; prior appropriations show \$4,542,190; revised budget of \$7,417,190

STORMWATER QUALITY SYSTEM IMPROVEMENTS

- Program Background
 - Goal: Higher stormwater and lake water quality.
 - Asset Type: Stormwater Network
- Agency Priority: 1
- 2019 Planned Activities
 - Starkweather Creek/Daley Drive Section Greenway
 - Excelsior Greenway
 - Rimrock Road Ponds
 - East Towne Pond
 - Lower Badger Mill Creek Ponds
 - Warner Beach Water Quality Exclosure
 - Raingardens
 - Yahara River Parkway Screen Structure

	2019	2020	2021	2022	2023	2024
Borrowing	2,742,000	2,050,000	1,423,000	1,675,000	1,525,000	2,250,000
Reserves – Storm	425,000	300,000	217,000	455,000	475,000	200,000
Impact Fees	1,756,000					
County Sources	150,000					
TOTAL	5,073,000	2,350,000	1,640,000	2,130,000	2,000,000	2,450,000

STARKWEATHER COAGULANT TREATMENT

- Project Background
 - Goal: To improve water quality within the Starkweather Creek watershed and citywide by removing total suspended solids (TSS) and materials mandated by the Rock River TMDL.
 - Scope: Acquire lands and build improvements for a coagulant treatment facility to treat stormwater to meet the total phosphorus (TP) and total suspended solid (TSS) load reductions as part of the City's MS4 Permit. This project will divert stormwater runoff from the East Branch of Starkweather Creek to an existing reconfigured pond on land north of Milwaukee Street and east of the Starkweather Creek in the Town of Blooming Grove. Coagulant will be added to diverted runoff allowing it to dissolve phosphorous preventing it from settling in the pond itself. This goal of this project is to remove approximately 85% of available phosphorous from the water as well as remove total suspended solids and bacteria. After completion, the system is expected to remove approximately 1600 LBS of phosphorous which is 12% of the City's required regulatory reduction of 13,000 LBS. Project construction is planned in 2019.
 - Agency Priority: 2
- Project Schedule
 - 2019: Schematic Design
 - 2020: Construction
 - 2021: Construction Completion
 - 2022
 - 2023
 - 2024

Total Budget
Prior Appropriation

	\$7,417,190
ation	\$4,542,190

	2019	2020	2021	2022	2023	2024
Borrowing	2,450,000		75,000			
Reserves – Storm	250,000	100,000				
TOTAL	2,700,000	100,000	75,000			

STREET CLEANING EQUIPMENT — STREETS

- Program Background
 - Goal: The City attempts to sweep all areas of the City on a 24-day cycle and downtown areas weekly during the spring, summer and fall months. Additionally, street sweepers are used to sweep immediately (within 24 hour period) after leaf collection. Sweeping reduces the total suspended solids (TSS) and total phosphorous (TP) that enters the storm sewer system, lakes and other water bodies.
 - Asset Type: Machinery and Equipment
- Agency Priority: 3
- 2019 Planned Activities
 - Two street sweepers

	2019	2020	2021	2022	2023	2024
Reserves – Storm	400,000	410,000	410,000	420,000	275,000	425,000
Trade In Allowance	40,000	45,000	45,000	45,000	25,000	45,000
TOTAL	440,000	455,000	455,000	465,000	300,000	470,000

STORM SEWER SYSTEM IMPROVEMENTS

- Program Background
 - Goal: The goal of this program is to resolve drainage problems citywide on streets and on other city property and to extend the useful life of the storm sewer network by lining pipes as a preventative maintenance measure.
 - Asset Type: Stormwater Network
- Agency Priority: 4
- 2019 Planned Activities
 - CIPP Lining Storm Sewer
 - Citywide Stormwater Improvements
 - Glenwood Children's Park
 - Stormwater Only Projects

	2019	2020	2021	2022	2023	2024
Borrowing	475,000	275,000	140,000	125,000	150,000	237,500
Reserves –						
Storm	200,000	200,000	235,000	250,000	250,000	150,000
TOTAL	675,000	475,000	375,000	375,000	400,000	387,500

CITYWIDE FLOOD MITIGATION

- Program Background
 - Goal: Provide solutions to storm water flooding during large rain events to prevent street flooding and private property damage.
 - Asset Type: Stormwater Network
- Agency Priority: 5
- 2019 Planned Activities
 - Backyard Drainage Problems
 - Local Flood Mitigation
 - Regional Flood Mitigation: McKenna Blvd and various others

	2019	2020	2021	2022	2023	2024
Borrowing	600,000	350,000	230,000	285,000	305,000	375,000
Reserves - Storm	300,000	250,000	295,000	245,000	370,000	275,000
TIF Proceeds		2,200,000				
TOTAL	900,000	2,800,000	525,000	530,000	675,000	650,000