CAPITAL IMPROVEMENTS PLAN

CITY OF AMES, IOWA
2021-2026

CITY OF
Ames™

A YEAR LIKE NO OTHER

From a global pandemic to a rare midwestern derecho, the year 2020 proved itself to be one of the most unpredictable, exhausting, isolating, and challenging in memory. Despite the year's battering, Ames citizens showed their resilience again and again.

When COVID-19, a new strain of a contagious coronavirus, emerged as a local threat, the City of Ames began collaborating with community partners to develop strategies to respond. Residents have masked up, physically distanced, and kept hand sanitizer nearby.

When a derecho with 90 miles per hour straight-line winds downed trees and snapped electric transmission poles, City employees and mutual aid crews jumped into action to repower the community. At the same time, neighbors checked on neighbors and helped clear debris.

In the face of significant obstacles, the City of Ames ended the year with several major accomplishments including opening new parks, renovating public restrooms, energizing a community solar farm, offering online programs, services, and classes, and celebrating with virtual events.

This year's Capital Improvements Plan looks beyond the recent difficulties and identifies future investments to improve our community and the quality of life for our citizens.

CAPITAL IMPROVEMENTS PLAN

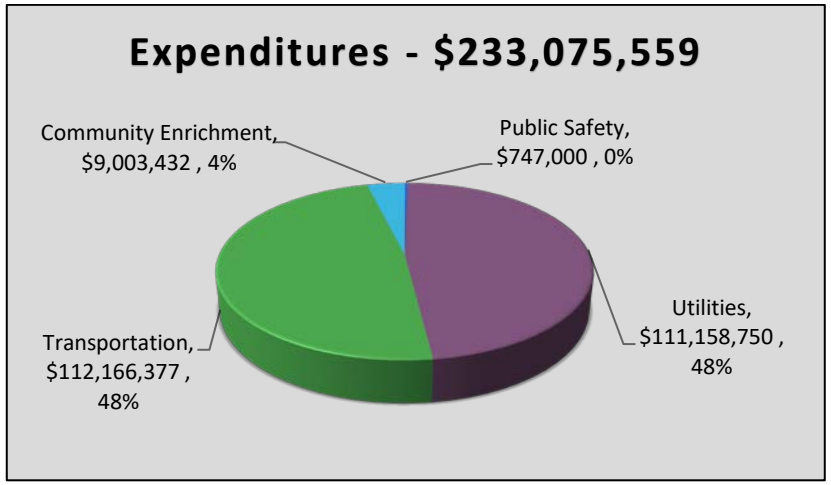
CITY OF AMES, IOWA
2021-2026

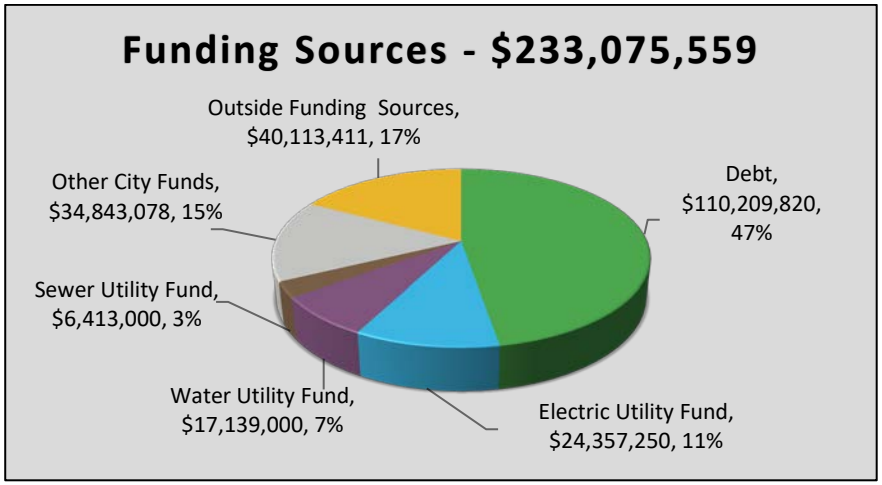
CITY OF
Ames™

July 1, 2021

To: Mayor and Ames City Council Members:

Attached is the approved City of Ames Capital Improvements Plan (CIP) for FY 2021/22 through FY 2025/26. This document represents expenditures for major “bricks and mortar” improvements to our city totaling $233,075,559 over the next five years. The Plan calls for these projects to be financed by the various revenue sources reflected below.





The formulation of this five-year plan was quite challenging due to the uncertainty as to when COVID-19 would be eradicated, and normalcy restored to our lives. While there remain many projects worthy of inclusion in this planning document, City staff is well aware of the negative financial impact the pandemic has wrought upon every segment of our community. Therefore, at this time, we have made a conscious effort to hold the line in adding many new projects in the first years of the plan in order to mitigate increases in property taxes and utility fees to our residents.

Along with the challenges of dealing with the impact of COVID-19, we have had to respond to the devastation caused by the August derecho and the 100 mile per winds that swept through Ames. Because of lessons learned from this experience, you will note that a few projects have been accelerated in the CIP. These projects will allow us to better respond in the future to the impacts of this type of emergency.

The following is a summary of the major highlights of the proposed CIP.

PUBLIC SAFETY - $747,000

Having exceeded its projected life of fifteen years, one of our three front-line fire apparatus will be replaced under this Plan (page 9). Engine #1 is experiencing corrosion as well as metal fatigue and the manufacturer is no longer in business, making it difficult to obtain replacement parts.

UTILITIES - $111,158,750

Electric Utility - $25,066,000

The projects reflected for the Electric Utility were selected to 1) meet the Environmental Protection Agency and Iowa Department of Natural Resources requirements, 2) assure reliability of our production and transmission systems so we can eliminate outages and meet our customer demand, and 3) improve safety for our customers and employees. In order to meet these goals, over the next five years $3,975,000 are earmarked for transmission line improvements, $4,361,000 for distribution line improvements, and $16,730,000 for Power Plant improvements.

As a result of our recent experience dealing with the aftermath of the derecho in August, a new project has been added to the CIP. The **Critical Electric System Generators** project (page 33) will improve upon our current battery-operated backup system and involve the installation of a diesel generator to maintain critical operating systems if we lose electric service to our Power Plant. The second phase of the project will involve the installation of a diesel generator at the Combustion Turbine Number 2 site and will be large enough to start this unit during a blackout condition.

Water Utility - $21,265,000

The list of projects identified for the Water Utility are meant to ensure increased source water capacity that can accommodate growth in customer demand, improve resiliency and redundancy, and continue infrastructure upgrades.

In response to our experience with the derecho, the **Well Field Standby Power** project (page 50) has been accelerated. This project will result in a dedicated emergency generator for the Hunziker Youth Sports Complex wells and quick connects for portable generators for the Southeast Well Field pumps. In addition, new emergency power capabilities will be included in the **State & Mortensen Pump Station** project (page 53), as well as in the new North River Valley Well Field and improvements to the Technical Services Complex projects currently underway in FY 2020/21.

A new project, **Remote Sites Fiber Installation** (page 52), will take advantage of the new fiber system being planned for the Smart Transportation Grid and provide greater security for the communications, increased communications reliability, and security surveillance to various facilities in the water system.

The **Ada Hayden Water Quality Study** (page 55) will help protect this critical water source by monitoring for parameters such as dissolved oxygen, nitrogen and phosphorus, algae and microcystins, suspended solids and turbidity, and bacteria.

The five-year plan calls for a continued commitment to **Water System Improvements** (page 68) which will replace 4-inch pipes with larger distribution lines in our older neighborhoods to improve firefighting capabilities as well as water quality and reduce maintenance costs.

Sanitary Sewer Utility - $51,086,000

Projects scheduled for the Sanitary Sewer Utility will upgrade our infrastructure to assure service reliability for our customers and to protect our environment by accomplishing significant nutrient reduction in the effluent that is passed downstream at the conclusion of our treatment process.

In order to accomplish this latter goal, the following two projects are reflected in the CIP. First, the **Watershed-Based Nutrient Reduction** project (page 61) supports off-site reduction techniques up stream that offer the additional benefits of flood reduction, increased recreational opportunities, improved wildlife habitat, and drinking water source protection. The second project, **Nutrient Reduction Modifications** (page 62), represents a twenty-year plan to install modifications to the treatment process at the WPC Plant to accomplish Iowa Department of Natural Resources permit requirements.

Similar to the Water Utility, the **Lift Stations Fiber Installation** project (page 66) will result in the same benefits highlighted previously.

The Resident Satisfaction Survey indicates that a growing number of our residents are experiencing sewer backups. Therefore, the **Sanitary Sewer System Improvements** program (page 70) continues to devote substantial funding to reduce the infiltration of clean rainwater that overloads our sewer system and rehabilitating or replacing deteriorated sewer lines and manholes.

Stormwater Utility - $11,667,000

We have experienced river flooding in Ames many times over the years. As a result of these experiences, the previous CIP allocated funds to help mitigate the impact these “100-year floods” will have on properties along South Duff Avenue through channel reshaping. However, as we continue to experience development and its associated increase in impervious areas, more of our residents are experiencing overland flooding due to storm water runoff. In fact, this is the topic for which City staff receive the most resident requests for improvements.

In response to this input, the CIP reflects a significant emphasis on this important topic with the inclusion of the **Stormwater Erosion Control** program (page 74), the **Low Point Drainage Improvements** program (page 75), the **Stormwater Improvement** program (page 76), the **Stormwater Detention/Retention Maintenance** program (page 77), and the **Stormwater Quality Improvements** program (page 78).

A new project introduced in this year's CIP is the **South Skunk River Improvements** project (page 79). This project will study the options for the Southeast 16th Street bridge to mitigate the flooding impact downstream when the Iowa Department of Transportation widens the U.S. Highway 30 bridge.

Resource Recovery - $2,074,750

The City staff will be engaging in a study to determine the next generation for our waste-to-energy operation. Until this path forward is identified, the **Resource Recovery System Improvements** project (page 81) calls for maintaining the existing system by replacing components and equipment over the next five years at the Plant, including preventive maintenance on the rotary disc screen rollers and rebuilding of Conveyor C-1.

TRANSPORTATION - $112,166,377

Once again, feedback from our annual Resident Satisfaction Survey indicates that our residents place their highest priority on transportation-related CIP projects. Given the condition of our existing street system, you will note that this five-year plan focuses more on improvements to our deteriorating existing local streets than constructing new ones.

Street/Shared-Use Path Improvements - $88,746,550

In an effort to support its commitment to multi-modal forms of transportation, the City Council has established a goal of allocating an annual average of $1,200,000 over the five years of the CIP toward street/shared-use path improvements. A review of this CIP reveals that an annual average of $1,527,910 has been earmarked over the next five years to incorporate on-street bike lanes in our street projects, expand off-street shared-use paths, and perform maintenance on the existing path system.

Another priority emphasized by our residents is for improvements to better coordinate the flow of traffic through our community. In response to this feedback, the **Intelligent Transportation System** program (page 105) was introduced with its traffic adaptive systems that will conduct real-time optimization of traffic and pedestrian flow at signalized intersections.

Two new projects are reflected in this document: 1) the **Alley Pavement Improvements** program (page 95) will reconstruct deteriorated public alleys primarily in the residential area north of Downtown, and 2) the **Traffic System Capacity Improvements** program (page 108) will address various intersection improvements identified in the 2045 Long Range Transportation Plan.

City Council members have stated their commitment to make Ames a welcoming and inclusive community. Toward this end, the **Accessibility Enhancement** program (page 107) will result in accessibility upgrades to sidewalks, ADA ramps, traffic signals, and parking facilities.

CyRide - $21,936,493

Keeping our bus fleet up to date is very important to the continued reliability of CyRide. In accordance with this need we plan to replace 25 40-foot buses, three mini-buses, one van, and five administrative vehicles over the next five years as reflected in the **Vehicle Replacement & Rehabilitation** program (page 118). By taking advantage of state and federal funding opportunities, these purchases can be accomplished with a local match of 18% from our local Transit Fund.

Since the CyRide facility is now 37 years old, the HVAC system, fueling system, and water mains will be replaced, and a new addition will be constructed as part the **Building Improvements & Expansion** program (page 119). Finally, **Technology Improvements** (page 120) related to safety software, bus technology, and facility technology, as well as **Bus Stop Improvements** (page 121) and **CyRide Shop/Office Equipment** (page 122) receive attention in this CIP.

Airport - $1,483,334

Airport Improvements (page 124) earmarked in the CIP include runway and taxiway electric lighting replacements along with the rehabilitation of the south apron.

COMMUNITY ENRICHMENT - $9,003,432

Funds are earmarked in the CIP to replace floor covering at the Ames Public Library (page 140). Funds are also included to construct a pavilion and retaining wall at the Ames Municipal Cemetery, as well as to replace fencing and install landscaping at the Ontario Cemetery (page 142).

Our quality of life will be further enhanced by numerous **Facility Improvements** (page 128) made in our park system. The City Council goal to construct a **Downtown Plaza** (page 129) will be realized with the completion of this new gathering space east of City Hall. Over the next five years at **Ada Hayden Heritage Park** (page 130), a new accessible canoe/kayak launch will be installed, a new wetland overlook will be constructed, and the paths will be resurfaced. The CIP also includes a project to replace the bridge on Hole #9 at **Homewood Golf Course** (page 135), to continue **Playground Equipment Improvements** (page 131) throughout the park system, and to make our parks more accessible to all of our users with the **ADA Transition Plan Improvements** (page 134).

While most of the projects reflected in the CIP deal with improvements that have a city-wide impact, this CIP also supports the City Council's priority to strengthen our individual neighborhoods by appropriating funds for the **Neighborhood Improvement** program (page

146), **Campustown Façade** program (page 145), and **Downtown Façade** program (page 144). In addition, the **Neighborhood Curb Replacement** program (page 116), and **Right-of Way Restoration** program (page 93) reflected in the Transportation section will serve to benefit our neighborhoods.

PROJECTS NOT YET INCLUDED IN THE CIP

As in the past, I am highlighting a few projects that will be needed in the near future. However, because of a need for additional information or other funding priorities at this time, they have not yet been included in the CIP.

- As the Ames School District moves ahead with their plans to demolish the City's Municipal Pool, the community will need **a new indoor aquatics center**. While the previous strategy was to include this facility in the Healthy Life Center concept, a failed bond referendum has caused us to explore other funding strategies. Currently, the City is pursuing funding for this new facility through private donations and the State's Reinvestment District incentive program.

- With increased densities in Campustown, it has become more dangerous for pedestrians when fire trucks exit and enter Fire Station No. 2 on Welch Avenue. Because of this, the **relocation of Fire Station No. 2** needs to be considered by the City Council. City staff have been working with Iowa State University administrators to identify alternate sites on University property along State Avenue to maintain adequate response times to the ISU campus as well as other parts of the city.

- Because of inadequate space to 1) provide a healthy environment for the animals, 2) allow the staff to accomplish their work, and 3) accommodate the customers who wish to adopt animals, the construction of a **new Animal Control facility** is needed.

- After we finalize our new Comprehensive Plan that will highlight where the City will grow over the next 20 years, it will be time to formulate a new fire station location plan which could include a **fourth fire station**.

++

Needless to say, it has been very difficult to think about the next five years as we develop a new CIP because of the uncertainty of a world still in disarray over the effects of the COVID-19 pandemic. Fortunately, our Executive Leadership Team members were still able to envision a time when our lives will return to normal and, as a result, are presenting projects that will improve the City of Ames for years to come!

Special thanks go out to Duane Pitcher, Finance Director; Nancy Masteller, Budget Manager; Amy Crabbs, Budget Analyst; Shannon Andersen, Finance Secretary; Deb Schildroth, Assistant City Manager; and Brian Phillips, Assistant City Manager, for their hard work in coordinating the development of the CIP.

Respectfully submitted,

Steven L. Schainker
City Manager

This page intentionally left blank

CITY OF AMES, IOWA

FIVE-YEAR CAPITAL IMPROVEMENTS PLAN
2021-2026

TABLE OF CONTENTS

HOW TO USE THE CIP DOCUMENT

The 2021-2026 Capital Improvements Plan for the City of Ames is organized according to the City's program structure of services. This format allows decision makers to consider proposed improvements in much the same manner as the annual operating budget. First-year portions of these projects can also be identified in the annual operating program budget.

1. The **Description/Justification** section outlines the basic work to be done and the intended outcome or result of the project, outlines the reasons behind the proposal of the project, and also the advantages to the City of undertaking the project. The section may also describe the disadvantages to the City of either waiting to do the project, or of disapproving it altogether.

2. The **Comments** section outlines any additional information related to the project, including status changes from a previous year, its relationship to other projects or future developments, impacts on operating budgets and others.

3. The **Location** section lists a street location or various locations for each project. Specific locations for Public Works projects can also be found on the City of Ames website at www.cityofamesgis.maps.arcgis.com

In addition to the above information, the bottom of each page lists the types of costs (planning, construction, etc.) which will be associated with the project for each year of the present CIP. Below that is shown the source of financing for the project in each year.

INDEX TO 2021-2026 CAPITAL IMPROVEMENTS PLAN

CITY OF AMES, IOWA

INDEX TO 2021-2026 CAPITAL IMPROVEMENTS PLAN

CITY OF AMES, IOWA

UTILITIES - continued

INDEX TO 2021-2026 CAPITAL IMPROVEMENTS PLAN

CITY OF AMES, IOWA

INDEX TO 2021-2026 CAPITAL IMPROVEMENTS PLAN

CITY OF AMES, IOWA

TRANSPORTATION - continued

INDEX TO 2021-2026 CAPITAL IMPROVEMENTS PLAN

CITY OF AMES, IOWA

PROJECTION OF DEBT CAPACITY

	2019/20 ACTUAL	2020/21 BUDGETED	2021/22 PROJECTED	2022/23 PROJECTED	2023/24 PROJECTED	2024/25 PROJECTED	2025/26 PROJECTED
1. Total Actual Valuation	4,837,411,018	5,022,730,334	5,187,510,467	5,343,135,781	5,503,429,854	5,668,532,750	5,838,588,733
2. State Mandated Debt Limit	241,870,551	251,136,517	259,375,523	267,156,789	275,171,493	283,426,638	291,929,437
3. City Reserve (25% of Limit)	60,467,638	62,784,129	64,843,881	66,789,197	68,792,873	70,856,660	72,982,359
Un-Reserved Debt Capacity	181,402,913	188,352,388	194,531,642	200,367,592	206,378,620	212,569,978	218,947,078
4. Outstanding Debt	63,495,000	63,235,000	54,695,000	46,480,000	38,620,000	31,410,000	24,700,000
5. Proposed Issues	-	-	13,755,400	13,781,200	11,075,700	11,397,600	13,563,920
6. Balance of Proposed Issues	-	-	-	12,786,166	24,598,003	32,864,842	40,566,216
Total Debt Subject to Limit	63,495,000	63,235,000	68,450,400	73,047,366	74,293,703	75,672,442	78,830,136
7. Available Un-Reserved Debt Capacity ($)	117,907,913	125,117,388	126,081,242	127,320,226	132,084,917	136,897,536	140,116,942
8. Available Un-Reserved Debt Capacity (%)	65.00%	66.43%	64.81%	63.54%	64.00%	64.40%	64.00%
9. Total Debt Capacity ($)	178,375,551	187,901,517	190,925,123	194,109,423	200,877,790	207,754,196	213,099,301
10. Total Debt Capacity (%)	73.75%	74.82%	73.61%	72.66%	73.00%	73.30%	73.00%

Notes:

1. *Total assessed valuation plus utility valuation growth assumption is 3.0% per year.*
2. *State of Iowa statutory debt limit is 5% of total actual valuation.*
3. *City Policy reserves 25% percent of available debt capacity.*
4. *Current outstanding debt subject to limit at Fiscal Year End includes all debt in which property taxes are pledged.*
5. *Debt issues subject to limit proposed are part of Capital Improvement Plan.*
6. *Debt Balance on Issues in Capital Improvement Plan.*
7. *Debt capacity available after deducting the reserved capacity.*
8. *Percentage of debt capacity available after deducting the reserved capacity.*
9. *Debt capacity available prior to deducting the reserved capacity.*
10. *Percentage of Debt capacity available prior to deducting the reserved capacity.*

SUMMARY OF MAJOR BOND ISSUES

GENERAL OBLIGATION BONDS	PROJECT TOTAL	CATEGORY TOTAL	% PROJECT G.O. FUNDED	OTHER SOURCES OF FUNDING
2021/22:				
STREET IMPROVEMENTS		10,195,000		
Arterial Street Pavement Improvements (N Dakota/Ontario)	800,000		47%	MPO/STP Funds
Collector Street Pavement Improvements (Hoover Avenue)	2,400,000		100%	
Concrete Pavement Improvements	3,500,000		68%	MPO/STP Funds/Road Use Tax
Asphalt Street Pavement Improvements	2,500,000		100%	
Seal Coat Pavement Improvements	750,000		100%	
Downtown Pavement Improvements (Duff to Sherman Alley)	245,000		100%	
TRAFFIC IMPROVEMENTS		160,400		
Intelligent Transportation System	160,400		9%	Road Use Tax/Grants
PARKS AND RECREATION		700,000		
Downtown Plaza	700,000		100%	
2021/22 TOTAL		**11,055,400**		

SUMMARY OF MAJOR BOND ISSUES, continued

2022/23:				
FIRE		747,000		
Fire Apparatus Replacement	747,000		100%	
STREET IMPROVEMENTS		10,925,000		
Arterial Street Pavement Improvements (Airport Road)	750,000		100%	
Collector Street Pavement Improvements (Woodland Street)	1,500,000		100%	
Concrete Pavement Improvements	3,300,000		100%	
Asphalt Street Pavement Improvements	3,000,000		100%	
Seal Coat Pavement Improvements	750,000		100%	
Downtown Street Improvements (alley between Duff/Douglas)	250,000		100%	
CyRide Route Pavement Improvements (Lincoln Way)	1,225,000		42%	Grants
Alley Pavement Improvements	150,000		100%	
TRAFFIC IMPROVEMENTS		209,200		
Intelligent Transportation System	209,200		11%	Road Use Tax/Grants
STREET REHABILITATION		700,000		
Bridge Rehabilitation Program (South 4th St/Ioway Creek)	700,000		92%	Iowa State University
PARKS AND RECREATION		1,200,000		
Downtown Plaza	700,000		100%	
Park Maintenance Facilities Consolidation	500,000		72%	Local Option Sales Tax
2022/23 TOTAL		**13,781,200**		

SUMMARY OF MAJOR BOND ISSUES, continued

GENERAL OBLIGATION BONDS	PROJECT TOTAL	CATEGORY TOTAL	% PROJECT G.O. FUNDED	OTHER SOURCES OF FUNDING
2023/24:				
STREET IMPROVEMENTS		10,600,000		
Arterial Street Pavement Improvements (24th Street)	1,125,000		100%	
Collector Street Pavement Improvements (6th Street)	1,200,000		94%	Road Use Tax
Concrete Pavement Improvements	950,000		100%	
Asphalt Street Pavement Improvements	2,700,000		100%	
Seal Coat Pavement Improvements	1,750,000		100%	
CyRide Rte Pavement Improvements (Dickinson/Steinbeck)	1,200,000		100%	
Alley Pavement Improvements	150,000		100%	
Campustown Public Improvements	1,200,000		70%	Water/Sewer Utility Funds
South 16th Street Roadway Widening	325,000		100%	
TRAFFIC IMPROVEMENTS		175,700		
Intelligent Transportation System	175,700		9%	Road Use Tax/Grants
STREET REHABILITATION		300,000		
Bridge Rehabilitation Program (East 13th St/Skunk River)	300,000		100%	
2023/24 TOTAL		**11,075,700**		

SUMMARY OF MAJOR BOND ISSUES, continued

GENERAL OBLIGATION BONDS	PROJECT TOTAL	CATEGORY TOTAL	% PROJECT G.O. FUNDED	OTHER SOURCES OF FUNDING
2024/25:				
STREET IMPROVEMENTS		10,641,000		
Collector Street Pavement Improvements (Oakland Street)	750,000		100%	
Concrete Pavement Improvements	3,390,000		99%	Road Use Tax
Asphalt Street Pavement Improvements	2,900,000		100%	
Seal Coat Pavement Improvements	2,750,000		100%	
Downtown Street Improvements (Sherman to Kellogg alley)	250,000		100%	
Alley Pavement Improvements	150,000		100%	
South 16th Street Roadway Widening	451,000		13%	MPO/STP Funds
TRAFFIC IMPROVEMENTS		256,600		
Intelligent Transportation System	256,600		13%	Road Use Tax/Grants
PARKS AND RECREATION		500,000		
Ada Hayden South Lake Path Replacement	500,000		100%	
2024/25 TOTAL		**11,397,600**		

SUMMARY OF MAJOR BOND ISSUES, continued

GENERAL OBLIGATION BONDS	PROJECT TOTAL	CATEGORY TOTAL	% PROJECT G.O. FUNDED	OTHER SOURCES OF FUNDING
2025/26:				
STREET IMPROVEMENTS		11,300,000		
Collector Street Pavement Improvements (West Street)	1,500,000		100%	
Concrete Pavement Improvements	3,400,000		100%	
Asphalt Street Pavement Improvements	3,500,000		100%	
Seal Coat Pavement Improvements	2,750,000		100%	
Alley Pavement Improvements	150,000		100%	
TRAFFIC IMPROVEMENTS		1,763,920		
Intelligent Transportation System	243,920		21%	Road Use Tax/Grants
Traffic System Capacity (13th/Grand Intersection)	1,520,000		50%	Road Use Tax/Grants
PARKS AND RECREATION		500,000		
Ada Hayden North Lake Path Replacement	500,000		100%	
2025/26 TOTAL		**13,563,920**		
TOTAL GENERAL OBLIGATION BONDS		**60,873,820**		

SUMMARY OF MAJOR BOND ISSUES, continued

ABATED GENERAL OBLIGATION BONDS	PROJECT TOTAL	CATEGORY TOTAL	% PROJECT G.O. FUNDED	OTHER SOURCES OF FUNDING
2021/22:				
UTILITIES		2,700,000	100%	TIF Abated G.O. Bonds
East 13th Street Sanitary Sewer Extension	2,700,000			
2020/21 TOTAL		**2,700,000**		

CITY-WIDE PROGRAM SUMMARY

CITY OF
Ames™

TOTAL CAPITAL IMPROVEMENTS PLAN EXPENDITURES AND FUNDING SOURCES

	TOTAL	2021/22	2022/23	2023/24	2024/25	2025/26	Page
EXPENDITURES BY PROGRAM:							
Public Safety	747,000	-	747,000	-	-	-	7
Utilities	111,158,750	20,033,650	19,866,100	26,791,700	28,075,300	16,392,000	11
Transportation	112,166,377	21,357,411	25,621,069	20,008,425	22,956,454	22,223,018	83
Community Enrichment	9,003,432	1,700,000	2,305,628	1,154,804	1,800,000	2,043,000	125
TOTAL EXPENDITURES	**233,075,559**	**43,091,061**	**48,539,797**	**47,954,929**	**52,831,754**	**40,658,018**	
FUNDING SOURCES:							
Debt	110,209,820	17,677,400	19,091,200	24,210,700	31,072,600	18,157,920	
City	82,752,328	17,152,131	19,313,113	16,398,689	13,059,791	16,828,604	
Other	40,113,411	8,261,530	10,135,484	7,345,540	8,699,363	5,671,494	
TOTAL FUNDING SOURCES	**233,075,559**	**43,091,061**	**48,539,797**	**47,954,929**	**52,831,754**	**40,658,018**	

CAPITAL IMPROVEMENTS PLAN EXPENDITURE SUMMARY BY PROGRAM

	TOTAL	2020/21	2021/22	2022/23	2023/24	2024/25	Page
EXPENDITURES BY PROGRAM:							
Public Safety:							
Fire Safety	747,000	-	747,000	-	-	-	8
Total Public Safety	**747,000**	**-**	**747,000**	**-**	**-**	**-**	
Utilities:							
Electric Services	25,066,000	6,951,000	6,520,000	5,580,000	2,845,000	3,170,000	13
Water Production/Treatment	11,915,000	2,268,000	1,545,000	805,000	4,522,000	2,775,000	46
Water Pollution Control	25,231,000	281,000	3,777,000	8,973,000	11,621,000	579,000	59
Water Distribution	9,350,000	1,600,000	1,750,000	1,900,000	2,050,000	2,050,000	67
Sanitary Sewer System	25,855,000	7,022,000	4,450,000	4,598,000	4,791,000	4,994,000	69
Stormwater Management	11,667,000	1,467,000	1,450,000	4,150,000	2,000,000	2,600,000	73
Resource Recovery	2,074,750	444,650	374,100	785,700	246,300	224,000	80
Total Utilities	**111,158,750**	**20,033,650**	**19,866,100**	**26,791,700**	**28,075,300**	**16,392,000**	

CAPITAL IMPROVEMENTS PLAN EXPENDITURE SUMMARY BY PROGRAM, continued

	TOTAL	2021/22	2022/23	2023/24	2024/25	2025/26	Page
EXPENDITURES, continued:							
Transportation:							
Streets Improvements	63,176,000	13,020,000	12,936,000	11,525,000	14,070,000	11,625,000	85
Shared Use Path System	4,838,800	1,233,800	905,000	950,000	600,000	1,150,000	98
Traffic Improvements	17,330,750	2,489,900	2,588,000	3,903,500	3,426,600	4,922,750	103
Street Rehabilitation	3,401,000	471,000	1,340,000	580,000	580,000	430,000	111
Transit System	21,936,493	3,801,044	6,985,402	3,049,925	4,004,854	4,095,268	117
Airport	1,483,334	341,667	866,667	-	275,000	-	123
Total Transportation	**112,166,377**	**21,357,411**	**25,621,069**	**20,008,425**	**22,956,454**	**22,223,018**	
Community Enrichment:							
Parks and Recreation	7,631,000	1,425,000	1,930,500	907,500	1,600,000	1,768,000	126
Library	147,432	-	100,128	47,304	-	-	139
Cemetery	225,000	75,000	75,000	-	-	75,000	141
Neighborhood Improvements	750,000	150,000	150,000	150,000	150,000	150,000	143
Facilities	250,000	50,000	50,000	50,000	50,000	50,000	147
Total Community Enrichment	**9,003,432**	**1,700,000**	**2,305,628**	**1,154,804**	**1,800,000**	**2,043,000**	
TOTAL EXPENDITURES	**233,075,559**	**43,091,061**	**48,539,797**	**47,954,929**	**52,831,754**	**40,658,018**	

CAPITAL IMPROVEMENTS PLAN FUNDING SOURCE SUMMARY

	TOTAL	2021/22	2022/23	2023/24	2024/25	2025/26
Debt:						
G.O. Bonds	60,873,820	11,055,400	13,781,200	11,075,700	11,397,600	13,563,920
G.O. Bonds (TIF Abated)	2,700,000	2,700,000	-	-	-	-
State Revolving Fund Loans	46,636,000	3,922,000	5,310,000	13,135,000	19,675,000	4,594,000
Total Debt Funding	**110,209,820**	**17,677,400**	**19,091,200**	**24,210,700**	**31,072,600**	**18,157,920**
City:						
Local Option Sales Tax	9,450,232	1,976,800	1,980,628	1,854,804	1,735,000	1,903,000
Road Use Tax	9,808,530	1,556,600	1,599,400	1,951,800	2,309,100	2,391,630
Electric Utility Fund	24,357,250	6,850,650	6,309,400	5,459,400	2,661,400	3,076,400
Water Utility Fund	17,139,000	3,205,000	3,370,000	3,016,000	2,648,000	4,900,000
Sewer Utility Fund	6,413,000	756,000	2,992,000	800,000	811,000	1,054,000
Stormwater Utility Fund	7,800,000	1,100,000	1,100,000	1,700,000	1,650,000	2,250,000
Resource Recovery Fund	2,074,750	444,650	374,100	785,700	246,300	224,000
Transit Capital Reserve Fund	5,212,482	1,219,514	1,500,918	830,985	831,491	829,574
Airport Construction Fund	157,084	42,917	86,667	-	27,500	-
Park Development Fund	200,000	-	-	-	-	200,000
Ice Arena Capital Reserve	140,000	-	-	-	140,000	-
Total City Funding	**82,752,328**	**17,152,131**	**19,313,113**	**16,398,689**	**13,059,791**	**16,828,604**

CAPITAL IMPROVEMENTS PLAN FUNDING SOURCE SUMMARY, continued

	TOTAL	2021/22	2022/23	2023/24	2024/25	2025/26
Other:						
MPO/STP Funds	6,153,000	2,659,000	-	-	3,104,000	390,000
Federal/State Grants	31,805,411	5,143,430	9,084,884	7,224,940	5,164,263	5,187,894
Federal Aviation Administration	1,326,250	298,750	780,000	-	247,500	-
Iowa State University	768,750	100,350	270,600	120,600	183,600	93,600
Ames Community School District	25,000	25,000	-	-	-	-
Private Donations	35,000	35,000	-	-	-	-
Total Other Funding	**40,113,411**	**8,261,530**	**10,135,484**	**7,345,540**	**8,699,363**	**5,671,494**
TOTAL FUNDING SOURCES	**233,075,559**	**43,091,061**	**48,539,797**	**47,954,929**	**52,831,754**	**40,658,018**

This page intentionally left blank

PUBLIC SAFETY

CITY OF Ames™

PUBLIC SAFETY

	TOTAL	2021/22	2022/23	2023/24	2024/25	2025/26	Page
EXPENDITURES:							
Fire Safety	747,000	-	747,000	-	-	-	8
TOTAL EXPENDITURES	**747,000**	**-**	**747,000**	**-**	**-**	**-**	
FUNDING SOURCES:							
Debt:							
G.O. Bonds	747,000	-	747,000	-	-	-	
TOTAL FUNDING SOURCES	**747,000**	**-**	**747,000**	**-**	**-**	**-**	

PUBLIC SAFETY - FIRE

PROJECT/FUNDING SOURCE	TOTAL	2021/22	2022/23	2023/24	2024/25	2025/26	Page
PROJECT:							
Fire Apparatus Replacement	747,000	-	747,000	-	-	-	9
TOTAL PROJECT EXPENDITURES	**747,000**	**-**	**747,000**	**-**	**-**	**-**	
FUNDING SOURCES							
Debt:							
G.O. Bonds	747,000	-	747,000	-	-	-	
TOTAL FUNDING SOURCES	**747,000**	**-**	**747,000**	**-**	**-**	**-**	

FIRE APPARATUS REPLACEMENT **PROJECT STATUS:** No Change

DESCRIPTION/JUSTIFICATION
Fire apparatus are essential for structural firefighting. The Fire Apparatus Replacement Program ensures replacement of fire apparatus at the end of their operational life. The City maintains two frontline engines (Engine 1 and Engine 2) and one ladder truck (Truck 3). The City maintains its current fleet very well, which facilitates keeping front line fire apparatus for a maximum of 15 years. Our goal is to then retain one engine and one truck as reserve apparatus for an additional 10-15 years each. However, sometimes parts availability, metal fatigue, and corrosion will take an apparatus out of service sooner than expected, making continued use impractical. Before being placed in reserve status, fire apparatus are typically refurbished.

Engine 1 (purchased new in 2005) is not aging well and needs to be replaced. Replacement cost (including new equipment) is $747,000.

COMMENTS
Engine 1 is experiencing heavy corrosion and metal fatigue. The manufacturer of Engine 1 went out of business in 2014, making parts nearly impossible to find. Engine 1 will not be eligible for reserve status since refurbishment costs and limited parts availability are not economically feasible.

LOCATION
Fire Station #1, 1300 Burnett Ave. (Engine 1)

		TOTAL	2021/22	2022/23	2023/24	2024/25	2025/26
COST:							
Replace Engine 1		747,000		747,000			
	TOTAL	**747,000**		**747,000**			
FINANCING:							
G.O. Bonds		747,000		747,000			
	TOTAL	**747,000**		**747,000**			

PROGRAM - ACTIVITY: **DEPARTMENT:** **ACCOUNT NO.**

Public Safety - Fire Fire

This page intentionally left blank

UTILITIES

CITY OF Ames™

UTILITIES

EXPENDITURES:	TOTAL	2021/22	2022/23	2023/24	2024/25	2025/26	Page
Electric Services	25,066,000	6,951,000	6,520,000	5,580,000	2,845,000	3,170,000	13
Water Production/Treatment	11,915,000	2,268,000	1,545,000	805,000	4,522,000	2,775,000	46
Water Pollution Control	25,231,000	281,000	3,777,000	8,973,000	11,621,000	579,000	59
Water Distribution	9,350,000	1,600,000	1,750,000	1,900,000	2,050,000	2,050,000	67
Sanitary Sewer System	25,855,000	7,022,000	4,450,000	4,598,000	4,791,000	4,994,000	69
Stormwater Management	11,667,000	1,467,000	1,450,000	4,150,000	2,000,000	2,600,000	73
Resource Recovery	2,074,750	444,650	374,100	785,700	246,300	224,000	80
TOTAL EXPENDITURES	**111,158,750**	**20,033,650**	**19,866,100**	**26,791,700**	**28,075,300**	**16,392,000**	

FUNDING SOURCES:

Debt:						
G.O. Bonds (TIF Abated)	2,700,000	2,700,000	-	-	-	-
State Revolving Fund Loans	46,636,000	3,922,000	5,310,000	13,135,000	19,675,000	4,594,000
Total Debt Funding	49,336,000	6,622,000	5,310,000	13,135,000	19,675,000	4,594,000

UTILITIES, CONTINUED

PROJECT/FUNDING SOURCE	TOTAL	2021/22	2022/23	2023/24	2024/25	2025/26
FUNDING SOURCES, continued:						
City:						
Electric Utility Fund	24,357,250	6,850,650	6,309,400	5,459,400	2,661,400	3,076,400
Water Utility Fund	16,364,000	3,130,000	3,295,000	2,541,000	2,573,000	4,825,000
Sewer Utility Fund	5,913,000	681,000	2,917,000	600,000	736,000	979,000
Stormwater Utility Fund	7,550,000	1,050,000	1,050,000	1,650,000	1,600,000	2,200,000
Resource Recovery Fund	2,074,750	444,650	374,100	785,700	246,300	224,000
Road Use Tax	25,000	25,000	-	-	-	-
Total City Funding	56,284,000	12,181,300	13,945,500	11,036,100	7,816,700	11,304,400
Other:						
Iowa State University	708,750	100,350	210,600	120,600	183,600	93,600
Federal/State Grants	4,830,000	1,130,000	400,000	2,500,000	400,000	400,000
Total Other Funding	5,538,750	1,230,350	610,600	2,620,600	583,600	493,600
Total Funding Sources	**111,158,750**	**20,033,650**	**19,866,100**	**26,791,700**	**28,075,300**	**16,392,000**

UTILITIES - ELECTRIC SERVICES

PROJECT/FUNDING SOURCE	TOTAL	2021/22	2022/23	2023/24	2024/25	2025/26	Page
PROJECT:							
Transmission:							
69 kV Transmission Reconstruction	2,600,000	520,000	520,000	520,000	520,000	520,000	15
Ontario Substation 69 kV Breaker Addition	1,375,000	75,000	1,300,000	-	-	-	16
Distribution:							
Street Light and Line Relocations	725,000	125,000	150,000	150,000	150,000	150,000	17
Street Light LED Retrofits	150,000	150,000	-	-	-	-	18
Electric Equipment Storage Expansion	86,000	86,000	-	-	-	-	19
Dayton Ave. Substation Switchgear Upgrades	1,350,000	-	250,000	1,100,000	-	-	20
Mortensen Road Transformer Protection	650,000	-	-	150,000	500,000	-	21
Vet Med Substation Switchgear Replacement	1,100,000	-	-	-	200,000	900,000	22
Haber Road Substation Expansion	300,000	-	-	-	-	300,000	23
Power Plant Capital:							
Ash Pond Modifications	2,000,000	2,000,000	-	-	-	-	24
Power Plant Building Modifications	2,150,000	400,000	300,000	650,000	150,000	650,000	25
Combustion Turbine Generation Improvements	1,640,000	750,000	140,000	750,000	-	-	26
Unit 7 Exciter & Cooling Water System	950,000	500,000	450,000	-	-	-	27
Unit 7 Surface Condenser Tube Replacement	400,000	400,000	-	-	-	-	28
Waste Water Treatment	300,000	300,000	-	-	-	-	29
Unit 7 Electrostatic Precipitator Enclosure	110,000	110,000	-	-	-	-	30
Power Plant Fire Protection System	485,000	235,000	250,000	-	-	-	31
Power Plant Load Centers/Breaker Repl.	1,850,000	-	500,000	500,000	850,000	-	32
Critical Electric System Generators	700,000	-	200,000	500,000	-	-	33

UTILITIES - ELECTRIC SERVICES, continued

PROJECT/FUNDING SOURCE	TOTAL	2021/22	2022/23	2023/24	2024/25	2025/26	Page
Power Plant Capital Continued:							
Unit 7 Main Steam Line Insulation	210,000	-	210,000	-	-	-	34
Unit 8 Tube Corrosion Injection	250,000	-	-	250,000	-	-	35
Power Plant Relay/Control Replacement	425,000	-	-	125,000	125,000	175,000	36
Variable Frequency Drive Installation	350,000	-	-	-	350,000	-	37
Plant Controls Wi-Fi Network	175,000	-	-	-	-	175,000	38
Power Plant Maintenance:							
RDF Bin Renovation	1,600,000	1,300,000	-	-	-	300,000	39
Unit 8 Precipitator Insulation and Siding	1,000,000	-	1,000,000	-	-	-	40
Units 5 and 6 Boiler Removal	750,000	-	750,000	-	-	-	41
Unit 7 Air Heater Basket Replacement	350,000	-	350,000	-	-	-	42
Turbine/Generator Minor Overhauls	300,000	-	150,000	150,000	-	-	43
Coal Yard Reclamation	500,000	-	-	500,000	-	-	44
Underground Storage Tank Removal	235,000	-	-	235,000	-	-	45
TOTAL PROJECT EXPENDITURES	**25,066,000**	**6,951,000**	**6,520,000**	**5,580,000**	**2,845,000**	**3,170,000**	
FUNDING SOURCES:							
City:							
Electric Utility Fund	24,357,250	6,850,650	6,309,400	5,459,400	2,661,400	3,076,400	
Resource Recovery	-	-	-	-	-	-	
Total City Funding	24,357,250	6,850,650	6,309,400	5,459,400	2,661,400	3,076,400	
Other:							
Iowa State University	708,750	100,350	210,600	120,600	183,600	93,600	
TOTAL FUNDING SOURCES	**25,066,000**	**6,951,000**	**6,520,000**	**5,580,000**	**2,845,000**	**3,170,000**	

69KV TRANSMISSION RECONSTRUCTION **PROJECT STATUS:** No Change

DESCRIPTION/JUSTIFICATION
This is a multi-year project that will reconstruct the deteriorated portions of 69kV transmission pole lines. This project will replace between one and two line-miles of 69kV transmission line per year. The actual length and cost per mile will vary by terrain, accessibility, and attachments. Line replacement candidates include the original MidAmerican 69kV tie line that connects the Ames Plant switchyard to the MidAmerican 69kV source point located south of Ames on Highway 69, the Ames Plant to the Top-O-Hollow line, the Top-O-Hollow line to the Stange Road Substation line, and the Vet Med line to the Mortensen Road Substation line. The total project will require at least five years and will reconstruct approximately 11 miles of deteriorated 69kV line. Capacity and reliability improvements will include the reconstruction of distribution lines which are underbuilt on existing transmission lines and/or adding new distribution underbuild along the same construction route line.

COMMENTS
Iowa State University's (ISU) share of the project is based on a load-ratio-share at the time of implementation. For budgetary purposes, staff is assuming the ISU load-ratio-share to be 18%.

LOCATION
Various locations

	TOTAL	2021/22	2022/23	2023/24	2024/25	2025/26
COST:						
Engineering	350,000	70,000	70,000	70,000	70,000	70,000
Construction	2,250,000	450,000	450,000	450,000	450,000	450,000
TOTAL	**2,600,000**	**520,000**	**520,000**	**520,000**	**520,000**	**520,000**
FINANCING:						
Electric Utility Fund	2,132,000	426,400	426,400	426,400	426,400	426,400
Iowa State University	468,000	93,600	93,600	93,600	93,600	93,600
TOTAL	**2,600,000**	**520,000**	**520,000**	**520,000**	**520,000**	**520,000**

PROGRAM - ACTIVITY:	**DEPARTMENT:**	**ACCOUNT NO.**
Utilities - Electric Transmission	Electric Services	530-4856-489

ONTARIO SUBSTATION 69KV BREAKER ADDITION **PROJECT STATUS:** Delayed Cost Increase

DESCRIPTION/JUSTIFICATION

This project will add a 69kV line, replace the existing 13.8kV switchgear, add transformer breakers, replace all 13.8kV and 69kV relays and controls, upgrade the station service and feeders, replace fuses, upgrade the obsolete 69kV bus potential transformers, replace the lightning arresters, and upgrade the grounding and shielding to the Ontario Road Substation.

This project will improve the reliability of transmission service to the Ontario distribution substation. This will also improve service for customers served by this substation by shortening the duration of unexpected outages.

Electric utility engineering practices recommend the use of 69kV transmission breakers and the use of switchgear main breakers at distribution substations.

COMMENTS

Iowa State University's (ISU) share of the project is based on a load-ratio-share at the time of implementation. For budgetary purposes, staff is assuming the ISU load-ratio-share to be 9%. This estimate is based on an 18% load-ratio-share (estimated 50% of the project cost) of the 69kV facilities.

2020/21	Engineering	200,000
2021/22	Engineering	75,000
2022/23	Construction	1,300,000
Total		$1,575,000

LOCATION

Ontario Substation, Delaware Avenue and Utah Drive

	TOTAL	2021/22	2022/23	2023/24	2024/25	2025/26
COST:						
Engineering	75,000	75,000				
Construction	1,300,000		1,300,000			
TOTAL	**1,375,000**	**75,000**	**1,300,000**			
FINANCING:						
Electric Utility Fund	1,251,250	68,250	1,183,000			
Iowa State University	123,750	6,750	117,000			
TOTAL	**1,375,000**	**75,000**	**1,300,000**			

PROGRAM - ACTIVITY:	**DEPARTMENT:**	**ACCOUNT NO.**
Utilities - Electric Transmission	Electric Services	530-4821-489

STREET LIGHT AND LINE RELOCATIONS **PROJECT STATUS:** No Change

DESCRIPTION/JUSTIFICATION
This work is being coordinated with Public Works' road improvement projects and will require the relocation of various electric facilities, including street lights, services, and distribution lines.

COMMENTS
Locations for street line and line relocations will be coordinated each year with Public Works street improvement projects.

	TOTAL	2021/22	2022/23	2023/24	2024/25	2025/26
COST:						
Construction	725,000	125,000	150,000	150,000	150,000	150,000
TOTAL	**725,000**	**125,000**	**150,000**	**150,000**	**150,000**	**150,000**
FINANCING:						
Electric Utility Fund	725,000	125,000	150,000	150,000	150,000	150,000
TOTAL	**725,000**	**125,000**	**150,000**	**150,000**	**150,000**	**150,000**

PROGRAM - ACTIVITY:	DEPARTMENT:	ACCOUNT NO.
Utilities - Electric Distribution	Electric Services	530-4823-489

STREET LIGHT LED RETROFITS **PROJECT STATUS:** Cost Decrease

DESCRIPTION/JUSTIFICATION

This project will transition nearly all existing high pressure sodium (HPS) and mercury vapor (MV) street light fixtures to light emitting diode (LED) fixtures. This transition will take place over a 6-year period while performing routine maintenance activities. This project is expected to replace all lights within the City of Ames electric system and approximately 7,500 roadway and security lights. In comparison to HPS and MV fixtures, LED lights have a longer life expectancy and consume significantly less energy. LED fixtures have a life expectancy of at least 20 years whereas the HPS fixtures only have a life expectancy of 5-10 years. LED fixtures will contribute to a more sustainable Ames by decreasing the City's carbon footprint, lowering maintenance costs, and are predicted to generate a return on investment within 10 years. LED lights provide instant illumination, reduce light glare distraction for nighttime drivers, and the downward directed light will reduce night sky light contamination.

COMMENTS

The purpose of this project is to allow the street light maintenance workers to retrofit LED lights during routine maintenance on HPS and MV lights in order to minimize labor costs. Since this effort will be based on routine maintenance, specific streets or areas will not be targeted. Beginning in FY 2022/23, street light replacement will move to the Operations & Maintenance budget, because a majority of the street lights will have been changed out. As of January 1, 2020, 3,835 street lights have been converted to LED.

2016/17	Material—Actual	169,429
2017/18	Material—Actual	234,136
2018/19	Material—Actual	137,416
2019/20	Material—Actual	76,649
2020/21	Material	150,000
2021/22	Material	150,000
Total		$917,630

LOCATION

City of Ames & Ames electric service territory

	TOTAL	2021/22	2022/23	2023/24	2024/25	2025/26
COST:						
Materials	150,000	150,000				
TOTAL	**150,000**	**150,000**				
FINANCING:						
Electric Utility Fund	150,000	150,000				
TOTAL	**150,000**	**150,000**				

PROGRAM - ACTIVITY:	DEPARTMENT:	ACCOUNT NO.
Utilities - Electric Distribution	Electric Services	530-4844-489

ELECTRIC EQUIPMENT STORAGE EXPANSION **PROJECT STATUS:** New

DESCRIPTION/JUSTIFICATION

This project will add an addition to the existing building where substation equipment and trailers are stored. The existing structure is currently a 16' wide x 120' long x 20' tall pole building. This building is currently full, and the addition will provide more space to store equipment and parts for repairs. This addition would add 20' x 120' to the west side to increase the footprint to 36' x 120'. The existing fencing will be replaced, and fencing will be added to the entire length of the building on the east side to make it more secure. Floodlights and moving the doors to the west side for added security will also be included.

COMMENTS

Delivery times to receive critical parts and equipment to repair substations have seen a substantial increase in lead times, because COVID-19 and other natural disasters have halted production and drained available national stockpiles. These parts and equipment are crucial for reliability of electric service to the customers of Ames. These parts and equipment cannot be stored outside in the weather without accelerated deterioration and degradation of the parts. The current building is full and cannot accommodate any additional equipment, thus putting the utility at risk for longer delays in restoration of a substation down due to failed equipment.

LOCATION

This shed is located in the northeast corner of the coal yard property.

	TOTAL	2021/22	2022/23	2023/24	2024/25	2025/26
COST:						
Engineering	8,000	8,000				
Construction	78,000	78,000				
TOTAL	**86,000**	**86,000**				
FINANCING:						
Electric Utility Fund	86,000	86,000				
TOTAL	**86,000**	**86,000**				

PROGRAM - ACTIVITY:	DEPARTMENT:	ACCOUNT NO.
Utilities - Electric Services/Technical Services	Electric Services	530-4848-489

DAYTON AVE SUBSTATION SWITCHGEAR UPGRADES **PROJECT STATUS:** Cost Increase

DESCRIPTION/JUSTIFICATION

This project will upgrade two existing 13.8kV distribution metal clad switchgear lineups at the Dayton Avenue Substation. The oldest switchgear has obsolete air blast breakers, no main breaker, and electro-mechanical relays. This switchgear needs to be replaced with all new switchgear with vacuum interrupter breakers, a main breaker, and microprocessor relays. The second switchgear has vacuum interrupter feeder breakers, which do not need to be replaced, but it has no main breaker and uses older style relays. This project will provide for the addition of a main breaker and replacement of existing distribution relays with modern microprocessor-based relays.

The addition of a main breaker will improve safety for workers and improve system reliability through the use of low maintenance breakers and relays.

These upgrades are consistent with recommended electric utility industry engineering practices.

LOCATION

Dayton Avenue Substation, Pullman Street

		TOTAL	2021/22	2022/23	2023/24	2024/25	2025/26
COST:							
Engineering		250,000		250,000			
Construction		1,100,000			1,100,000		
	TOTAL	**1,350,000**		**250,000**	**1,100,000**		
FINANCING:							
Electric Utility Fund		1,350,000		250,000	1,100,000		
	TOTAL	**1,350,000**		**250,000**	**1,100,000**		

PROGRAM - ACTIVITY:	**DEPARTMENT:**	**ACCOUNT NO.**
Utilities - Electric Distribution	Electric Services	

MORTENSEN ROAD SUBSTATION 69KV TRANSFORMER PROTECTION

PROJECT STATUS: No Change

DESCRIPTION/JUSTIFICATION

This project is for the addition of a 69kV breaker, relays, and controls to replace the fuse protection on the distribution transformer. This project also includes replacement of two obsolete oil circuit breakers with low-maintenance SF6 gas breakers.

COMMENTS

The use of breakers for transformer protection is consistent with recommended engineering practice in the electric utility industry and will minimize damage to the transformer and surrounding facilities while providing better worker safety in the event of a fault. Oil circuit breakers are obsolete and require increased maintenance. The use of SF6 gas breakers represents best current practices for utility substations for reduced maintenance and fast, reliable operation.

Iowa State University's (ISU) share of the project is based on a load-ratio-share at the time of implementation. For budgetary purposes, staff is assuming the ISU load-ratio-share to be 18%.

LOCATION

Mortensen Road Substation, 3040 Mortensen Road

		TOTAL	2021/22	2022/23	2023/24	2024/25	2025/26
COST:							
Engineering		150,000			150,000		
Construction		500,000				500,000	
	TOTAL	**650,000**			**150,000**	**500,000**	
FINANCING:							
Electric Utility Fund		533,000			123,000	410,000	
Iowa State University		117,000			27,000	90,000	
	TOTAL	**650,000**			**150,000**	**500,000**	

PROGRAM - ACTIVITY:	**DEPARTMENT:**	**ACCOUNT NO.**
Utilities - Electric Distribution	Electric Services	

VET MED SUBSTATION SWITCHGEAR REPLACEMENT **PROJECT STATUS:** Cost Increase

DESCRIPTION/JUSTIFICATION

This project will replace the original 13.8kV metal clad distribution switchgear at the Vet Med Substation. This is a change from a previous CIP project where staff was considering the upgrade of existing equipment. The Vet Med expansion in 2011 installed two new transformers and switchgear but the metal clad switchgear was not upgraded at that time. This project will replace the metal clad switchgear to add a main breaker and update older existing relays to current standards. The original "stacked" formation switchgear will be replaced with a much safer "single-row" formation. The addition of a main breaker will improve safety for workers and improve system reliability. The use of low maintenance breakers and relays will provide protection that operates quickly and selectively.

These upgrades are consistent with electric utility industry engineering practices.

LOCATION

Vet Med Substation, South Riverside Drive

		TOTAL	2021/22	2022/23	2023/24	2024/25	2025/26
COST:							
Engineering		200,000				200,000	
Construction		900,000					900,000
	TOTAL	**1,100,000**				**200,000**	**900,000**
FINANCING:							
Electric Utility Fund		1,100,000				200,000	900,000
	TOTAL	**1,100,000**				**200,000**	**900,000**

PROGRAM - ACTIVITY: Utilities - Electric Distribution

DEPARTMENT: Electric Services

ACCOUNT NO.

HABER ROAD SUBSTATION EXPANSION **PROJECT STATUS:** New

DESCRIPTION/JUSTIFICATION

Currently, Haber Road Substation serves as a source for Iowa State University's (ISU) power plant and campus loads and provides no distribution feeder sources to Ames' electric distribution system. This project will expand the existing substation yard at Haber Road Substation to add a distribution transformer and associated 69kV transformer protection/switching along with 13.8kV switchgear and associated 69kV/13.8kV relays and controls. This project also includes the extension of one or more 13.8kV feeder extensions to provide a 13.8kV distribution feeder source for Ames' electric system out of Haber Road Substation.

This project will improve the reliability of Ames' distribution system by providing a new 13.8kV feeder source which will normally serve a portion of Ames electric load in the vicinity of Haber Rd Substation and will also provide a central alternate/emergency source to other existing Ames customers currently served by Stange Road, Ontario Road and Mortensen Road Substations. This will improve service for Ames customers served by this substation by shortening the duration of unexpected outages and increasing normal and alternate/emergency distribution capacity to Ames's electric service territory.

2025/26	Engineering & Materials	300,000
2026/27	Construction	1,500,000
Total		$1,800,000

LOCATION

601 Haber Rd.

		TOTAL	2021/22	2022/23	2023/24	2024/25	2025/26
COST:							
Engineering/Materials		300,000					300,000
	TOTAL	**300,000**					**300,000**
FINANCING:							
Electric Utility Fund		300,000					300,000
	TOTAL	**300,000**					**300,000**

PROGRAM - ACTIVITY:	**DEPARTMENT:**	**ACCOUNT NO.**
Utilities - Electric Production	Electric Services	

ASH POND MODIFICATIONS **PROJECT STATUS:** Cost Decrease Delayed

DESCRIPTION/JUSTIFICATION

In response to the United States Environment Protection Agency's (EPA) Coal Combustion Residuals (CCR) regulation and the ash handling requirements of the City of Ames Steam Electric Plant (COA-SEP), the ash site impoundment will be undergoing significant changes and modifications, especially in FY 2020/21 and FY 2021/22. The CCR regulation was officially published in the *Federal Register* in April 2015 and included a series of compliance milestones, several of which have passed and been met. Some of the compliance milestones, especially the initial ones, are primarily documentation of engineering assessments of various features and aspects of the ash site. The delay in this project is a result of changes to the EPA's CCR regulation and the City's development of a plan to meet the regulation.

The current ash site impoundment has been in service since Unit 8 became operational back in 1982. From 1982 to 2016, the impoundment received ash from burning coal and co-firing refuse derived fuel (RDF). In 2016, the City's Steam Electric Plant (Units 7 & 8) was converted to burn natural gas (and co-fire RDF). Currently, the ash site impoundment contains ash from both coal and RDF. This site has filled up to the point that under certain conditions the usable volume and surface area of the impoundment are marginally adequate. The current usable volume and surface area of the ash impoundment is estimated to be 1/3 (1/2 of the original design).

By October 2022, the City plans to reclaim and restore as much of the original ash site impoundment's configuration as possible. Staff plans on doing this by dewatering, excavating, and moving the ash material from approximately 2/3 of impoundment before filling in the remaining 1/3 of the impoundment. This 1/3 area will contain CCR and RDF ash that will be permanently closed-in-place. The 2/3 area, cleaned of all ash, will be re-lined with clay and/or a composite material so that it can hold RDF ash in the future.

The cost, schedule for work, and recent history of the project are as follows:

2017/18	Engineering—Actual	68,598
2018/19	Engineering—Actual	231,402
2019/20	Engineering	200,000
2019/20	Excavation & Re-lining	2,000,000
2020/21	Excavation & Re-lining	2,000,000
2021/22	Excavation & Re-lining	2,000,000
Total		$6,500,000

LOCATION

Ash Pond, 13th Street

		TOTAL	2021/22	2022/23	2023/24	2024/25	2025/26
COST:							
Construction		2,000,000	2,000,000				
	TOTAL	**2,000,000**	**2,000,000**				
FINANCING:							
Electric Utility Fund		2,000,000	2,000,000				
	TOTAL	**2,000,000**	**2,000,000**				

PROGRAM - ACTIVITY:	**DEPARTMENT:**	**ACCOUNT NO.**
Utilities - Electric Production	Electric Services	530-4879-489

POWER PLANT BUILDING MODIFICATIONS **PROJECT STATUS:** Cost Increase Scope Change

DESCRIPTION/JUSTIFICATION

This project will bring much needed improvements to the Power Plant. The Power Plant is a City building that has gone through several changes over the last 50 years. In addition, several of the power plant roofs are in bad repair and need to be replaced. This project is a multi-year effort to make the building more energy efficient, meet current building requirements, and install security features.

A scope change is requested to this Capital Improvement Project to incorporate unisex showers into the locker rooms. This project would allow for the construction of a new locker room with private, individual facilities that will accommodate all employees.

2020/21	200,000	Install card reader security system
2021/22	400,000	Incorporate unisex locker rooms & showers in the Power Plant
2022/23	300,000	Turbine deck improvements: clean and paint walls, replace south windows, and epoxy the floor
2023/24	500,000	Office: design and build new ADA compliant entrance
	150,000	Roof replacement phase I
2024/25	150,000	Roof replacement phase II
2025/26	500,000	Replace siding on exterior portion of north and west sides and replace windows on the first floor of the west side
	150,000	Roof replacement phase III
Total	$2,350,000	

LOCATION

Power Plant, 200 E. Fifth St.

		TOTAL	2021/22	2022/23	2023/24	2024/25	2025/26
COST:							
Engineering		200,000	50,000		75,000	25,000	50,000
Construction		1,950,000	350,000	300,000	575,000	125,000	600,000
	TOTAL	**2,150,000**	**400,000**	**300,000**	**650,000**	**150,000**	**650,000**
FINANCING:							
Electric Utility Fund		2,150,000	400,000	300,000	650,000	150,000	650,000
	TOTAL	**2,150,000**	**400,000**	**300,000**	**650,000**	**150,000**	**650,000**

PROGRAM - ACTIVITY:	DEPARTMENT:	ACCOUNT NO.
Utilities - Electric Production	Electric Services	530-4872-489

COMBUSTION TURBINE GENERATION IMPROVEMENTS **PROJECT STATUS:** Cost Increase Scope Change

DESCRIPTION/JUSTIFICATION

FY 2021/22 Combustion Turbine #2 Controls Upgrade - This project is to replace the current outdated controls on Combustion Turbine 2 (CT2) with updated controls. The current control hardware and software is over 15 years old and is no longer supported by GE. This project will also integrate the Balance of Plant (BOP) control system that is currently run on a separate system. The BOP control system is a unique system that was created specifically for the Ames site when CT2 was built. It is used to operate the BOP equipment and remotely run the combustion turbine by allowing the operator to control it from the Power Plant control room. The BOP system does not allow the operator to see all of the combustion turbine controls and is supported by a system that is not able to be run on new computers.

FY 2022/23 New Remote Terminal Unit, Meters and Relays - The current remote terminal unit, meters, and protective relays are original to the 1972 unit and need to be updated to more modern equipment.

FY 2023/24 Combustion Turbine #1 Controls Upgrade - This project is to replace the current outdated controls on Combustion Turbine 1 (CT1) with updated controls ($600,000). The original controls were upgraded in 2007 and now have a number of components that are obsolete and no longer supported by the control's OEM, suffering from the same limitations as CT2 above.

FY 2023/24 Combustion Turbine Weather Protection - There are multiple small enclosures housing different auxiliary equipment. The enclosures are outfitted with individual unit heaters to keep equipment from reaching freezing temperatures. There is also piping between the enclosures that are heat traced to keep from freezing. If one of the enclosure heaters malfunctions and the temperature drops below freezing, equipment will be damaged and require costly repairs or replacement. Keeping all of the individual heating systems maintained and constantly monitoring the climate status has proved to be a difficult task, especially since the unit is located at a remote site from the main power plant. In order to remove most of this risk, an insulated building will be erected that will enclose this equipment and be heated to maintain a proper climate ($150,000).

LOCATION

Combustion Turbine Site, 2300 Pullman St.

	TOTAL	2021/22	2022/23	2023/24	2024/25	2025/26
COST:						
Engineering/Design/Construction	1,640,000	750,000	140,000	750,000		
TOTAL	**1,640,000**	**750,000**	**140,000**	**750,000**		
FINANCING:						
Electric Utility Fund	1,640,000	750,000	140,000	750,000		
TOTAL	**1,640,000**	**750,000**	**140,000**	**750,000**		

PROGRAM - ACTIVITY:	**DEPARTMENT:**	**ACCOUNT NO.**
Utilities - Electric Production	Electric Services	530-4890-489

UNIT 7 EXCITER AND COOLING WATER SYSTEM **PROJECT STATUS:** Scope Change

DESCRIPTION/JUSTIFICATION

FY 2021/22 - This project is to install a new closed loop glycol cooling system on Unit 7. Currently all of the equipment on Unit 7 that needs to be cooled (boiler feed pumps, hydrogen coolers, air heater, force draft fan bearings, and the exciter) are cooled with open loop systems from well water, cooling tower water, or City water. These waters are difficult to treat and cause equipment to get dirty quickly. This prevents a good heat exchange and higher running temperatures. A closed loop glycol system will be more economical and allow for better cooling efficiency.

FY 2022/23 - This project is to replace the Unit 7 exciter. The main purpose of an exciter in a steam turbine is to provide a magnetic field. The current exciter is water-cooled by copper tubes that run through the electronics. These tubes are fouled and plugged; efforts to clear the tubes have not been successful. To reduce the temperature, the exciter must constantly have the cabinet doors open with a large fan blowing air across the hardware. The replacement will install new updated controls and a new cooling system. This will allow for better cooling, more control, and better exciter monitoring.

LOCATION
Power Plant, 200 E. Fifth St.

	TOTAL	2021/22	2022/23	2023/24	2024/25	2025/26
COST:						
Engineering	100,000	50,000	50,000			
Construction	850,000	450,000	400,000			
TOTAL	**950,000**	**500,000**	**450,000**			
FINANCING:						
Electric Utility Fund	950,000	500,000	450,000			
TOTAL	**950,000**	**500,000**	**450,000**			

PROGRAM - ACTIVITY:	DEPARTMENT:	ACCOUNT NO.
Utilities - Electric Production	Electric Services	530-4866-489

UNIT 7 SURFACE CONDENSER TUBE REPLACEMENT **PROJECT STATUS:** Cost Increase

DESCRIPTION/JUSTIFICATION

Unit 7 surface condenser tubes were replaced in 2007 with original equipment manufacturer materials of admiralty brass. The main alloys in admiralty brass are copper and zinc, both of which are now regulated metals on our National Pollutant Discharge Elimination System permit that was issued by the Iowa Department of Natural Resources in July 2017. These tubes need to be replaced with stainless steel to maintain compliance with the permit by April 2022.

COMMENTS

2020/21	Engineering	50,000
2020/21	Materials and Labor	750,000
2021/22	Materials and Labor	400,000
Total		$1,200,000

LOCATION

Power Plant, 200 E. Fifth St.

		TOTAL	2021/22	2022/23	2023/24	2024/25	2025/26
COST:							
Materials and Labor		400,000	400,000				
	TOTAL	**400,000**	**400,000**				
FINANCING:							
Electric Utility Fund		400,000	400,000				
	TOTAL	**400,000**	**400,000**				

PROGRAM - ACTIVITY:	DEPARTMENT:	ACCOUNT NO.
Utilities - Electric Production	Electric Services	530-4886-489

WASTE WATER TREATMENT **PROJECT STATUS:** No Change

DESCRIPTION/JUSTIFICATION

The recent National Pollutant Discharge Elimination System (NPDES) permit requires the Power Plant to perform a greater degree of treatment to the water discharged to the storm sewer from the cooling towers. The Power Plant is currently performing an effluent monitoring study as a part of the permit as well as exploring options for treatment. The likely solution will be to redirect the discharge currently going in the storm sewer, into the sanitary sewer.

COMMENTS

2020/21	Engineering	100,000
2020/21	Materials and Labor	100,000
2021/22	Materials and Labor	300,000
Total		$500,000

LOCATION

Power Plant, 200 E. Fifth St.

		TOTAL	2021/22	2022/23	2023/24	2024/25	2025/26
COST:							
Construction		300,000	300,000				
	TOTAL	**300,000**	**300,000**				
FINANCING:							
Electric Utility Fund		300,000	300,000				
	TOTAL	**300,000**	**300,000**				

PROGRAM - ACTIVITY:	**DEPARTMENT:**	**ACCOUNT NO.**
Utilities - Electric Production	Electric Services	530-4850-489

UNIT 7 ELECTROSTATIC PRECIPITATOR ENCLOSURE **PROJECT STATUS:** No Change

DESCRIPTION/JUSTIFICATION

The bottom of the unit 7 precipitator is open to the outside. During cold weather this causes the fly ash in the hoppers and transport lines to fall below the dew point temperature and create plugging. Operators must manually rod the plugs free to get the material to move again. The bottom section will be enclosed and heated and make it so the fly ash material will constantly flow.

LOCATION

Power Plant, 200 E. Fifth St.

		TOTAL	2021/22	2022/23	2023/24	2024/25	2025/26
COST:							
Engineering/Construction		110,000	110,000				
	TOTAL	**110,000**	**110,000**				
FINANCING:							
Electric Utility Fund		110,000	110,000				
	TOTAL	**110,000**	**110,000**				

PROGRAM - ACTIVITY:	DEPARTMENT:	ACCOUNT NO.
Utilities - Electric Production	Electric Services	530-4891-489

POWER PLANT FIRE PROTECTION SYSTEM **PROJECT STATUS:** No Change

DESCRIPTION/JUSTIFICATION

The City's insurance carrier has made several loss prevention recommendations for the Power Plant. The following projects are in response to these recommendations:

2021/22 Installing smoke alarms in different areas of the power plant. There are a number of areas in the plant that present a higher risk of fires. Having smoke alarms in these higher risk areas will alert plant personnel at the earliest detection of a fire.

2021/22 Engineering for a quick hydrogen purge system on both Unit 7 and Unit 8 generators. In the event of any fire around a generator, it would be very important to remove the hydrogen from the generator as quickly as possible to avoid the hydrogen being a large fuel source. Currently, it takes a minimum of 4 hours to purge the generators. Engineering will assess the current system and design modifications to decrease purge time.

2022/23 Installing containment and protection under both turbine generators at the power plant. In the event of a bearing or turbine oil leak, the oil will be restricted to an area just below the turbine and generator and any fire extinguished by an automatic foam discharge system.

COMMENTS

A serious fire in any one of the systems can force the outage of Unit 7, Unit 8, or the entire Power Plant. Replacement power during an extended period of time can be very expensive.

LOCATION

Power Plant, 200 E. Fifth St.

		TOTAL	2021/22	2022/23	2023/24	2024/25	2025/26
COST:							
Construction		485,000	235,000	250,000			
	TOTAL	**485,000**	**235,000**	**250,000**			
FINANCING:							
Electric Utility Fund		485,000	235,000	250,000			
	TOTAL	**485,000**	**235,000**	**250,000**			

PROGRAM - ACTIVITY:	**DEPARTMENT:**	**ACCOUNT NO.**
Utilities - Electric Production	Electric Services	530-4876-489

POWER PLANT LOAD CENTERS AND BREAKER REPLACEMENT

PROJECT STATUS: New

DESCRIPTION/JUSTIFICATION

The six load centers in the Power Plant are used to take power off the generator bus bar and distribute it out to the different equipment in the plant. The active load centers are original and are built for old, outdated breakers. The load centers do not currently have up-to-date equipment built in that would allow them to be operated safely and more efficiently. This project involves replacing the six load centers over a three-year period.

In FY 2024/25, staff will also be replacing breakers in the Power Plant. The existing 4160-volt breakers are old and outdated, making it very difficult to find replacement parts and maintain a reliable electric source.

LOCATION

Power Plant, 200 E. Fifth St.

		TOTAL	2021/22	2022/23	2023/24	2024/25	2025/26
COST:							
Materials/Parts		1,850,000		500,000	500,000	850,000	
	TOTAL	**1,850,000**		**500,000**	**500,000**	**850,000**	
FINANCING:							
Electric Utility Fund		1,850,000		500,000	500,000	850,000	
	TOTAL	**1,850,000**		**500,000**	**500,000**	**850,000**	

PROGRAM - ACTIVITY:	**DEPARTMENT:**	**ACCOUNT NO.**
Utilities - Electric Production	Electric Services	

CRITICAL ELECTRIC SYSTEM GENERATORS **PROJECT STATUS:** New

DESCRIPTION/JUSTIFICATION
After the derecho event that occurred in August 2020, two limitations were uncovered concerning the operation of the City's electrical generating units during prolonged outages.

Although battery systems are in place at the Power Plant, a more robust backup system supporting critical systems in the power plant is required. This project will involve installing a diesel generator that, under blackout conditions, will continually support the DCS control system, SCADA system, and the emergency oil pumps on both steam turbine generators.

At the combustion turbine site, the "black start" system restoration plan requires that at least one combustion turbine be capable of starting without any power from the surrounding grid. This portion of the project will involve installing a diesel generator large enough to start Combustion Turbine #2 in a blackout condition. This will reduce the length of long-duration, city-wide electrical outages.

LOCATION
Power Plant, 200 E. Fifth St.

	TOTAL	2021/22	2022/23	2023/24	2024/25	2025/26
COST:						
Materials/Parts	200,000		200,000			
Construction	300,000			300,000		
Engineering	200,000			200,000		
TOTAL	**700,000**		**200,000**	**500,000**		
FINANCING:						
Electric Utility Fund	700,000		200,000	500,000		
TOTAL	**700,000**		**200,000**	**500,000**		

PROGRAM - ACTIVITY:	**DEPARTMENT:**	**ACCOUNT NO.**
Utilities - Electric Production	Electric Services	

UNIT 7 MAIN STEAM LINE INSULATION REPLACEMENT **PROJECT STATUS:** Delayed

DESCRIPTION/JUSTIFICATION

The main steam line on Unit 7, from the boiler to the turbine, is insulated with asbestos insulation. The asbestos has caused issues with performing repairs around the line as well as performing high energy pipe testing. The asbestos will be entirely removed prior to the installation of new insulation and lagging.

LOCATION

Power Plant, 200 E. Fifth St.

		TOTAL	2021/22	2022/23	2023/24	2024/25	2025/26
COST:							
Engineering		10,000		10,000			
Construction		200,000		200,000			
	TOTAL	**210,000**		**210,000**			
FINANCING:							
Electric Utility Fund		210,000		210,000			
	TOTAL	**210,000**		**210,000**			

PROGRAM - ACTIVITY:	**DEPARTMENT:**	**ACCOUNT NO.**
Utilities - Electric Production	Electric Services	

UNIT 8 TUBE CORROSION INJECTION **PROJECT STATUS:** New

DESCRIPTION/JUSTIFICATION

Plant staff is currently in the process of performing a project to replace the superheater tubes that have suffered from severe corrosion caused by the combustion environment created when burning RDF and natural gas. The new tubes will have an Inconel coating on them to protect them from this corrosive environment. Staff expects this coating to greatly increase the life span of these tubes. However, this harsh environment will still exist and continuing to reduce this corrosive environment will only increase the tube life span further.

This project involves the engineering, materials, and labor to install a chemical injection into the gas stream of the boiler. This will modify the chemical reaction occurring in the boiler, further preventing the corrosion of the boiler tubes.

LOCATION

Power Plant, 200 E. Fifth St.

		TOTAL	2021/22	2022/23	2023/24	2024/25	2025/26
COST:							
Materials/Parts		250,000			250,000		
	TOTAL	**250,000**			**250,000**		
FINANCING:							
Electric Utility Fund		250,000			250,000		
	TOTAL	**250,000**			**250,000**		

PROGRAM - ACTIVITY:	**DEPARTMENT:**	**ACCOUNT NO.**
Utilities - Electric Production	Electric Services	

POWER PLANT RELAY/CONTROL REPLACEMENT **PROJECT STATUS:** Delayed

DESCRIPTION/JUSTIFICATION

This project will replace existing electro-mechanical 13.8kV feeders and 4.160kV bus differential relays in the Power Plant. The existing relays are obsolete electro-mechanical devices which are becoming difficult to maintain and repair since the replacement parts are no longer manufactured. By installing modern programmable relays and updated controls in this location, long-term reliability can be improved by eliminating the obsolete, maintenance-intensive, electro-mechanical relays. This project will likely take three years to complete.

These upgrades are consistent with recommended electric utility industry engineering practices.

LOCATION

Power Plant, 200 E. Fifth St.

		TOTAL	2021/22	2022/23	2023/24	2024/25	2025/26
COST:							
Engineering		50,000			50,000		
Construction		375,000			75,000	125,000	175,000
	TOTAL	**425,000**			**125,000**	**125,000**	**175,000**
FINANCING:							
Electric Utility Fund		425,000			125,000	125,000	175,000
	TOTAL	**425,000**			**125,000**	**125,000**	**175,000**

PROGRAM - ACTIVITY:	**DEPARTMENT:**	**ACCOUNT NO.**
Utilities - Electric Production	Electric Services	

VARIABLE FREQUENCY DRIVE INSTALLATION **PROJECT STATUS:** No Change

DESCRIPTION/JUSTIFICATION
The Power Plant operates many large fans and pumps in order to accomplish the electricity production. These fans and pumps include a force draft fan and induced draft fan, two boiler feed pumps, cooling tower circulating water pumps, and cooling tower fans. Each of these are driven by very large horse-power electric motors. Installing a variable frequency drive (VFD) on each motor would allow for precision control and would provide much greater efficiency, therefor lowering electricity demand.

COMMENTS
This project would improve efficiency of each system, provide for better control, and help reduce wear and tear on the motors. The project would last for a couple years, starting in FY 2024/25.

LOCATION
Power Plant, 200 E. Fifth St.

		TOTAL	2021/22	2022/23	2023/24	2024/25	2025/26
COST:							
Construction		350,000				350,000	
	TOTAL	**350,000**				**350,000**	
FINANCING:							
Electric Utility Fund		350,000				350,000	
	TOTAL	**350,000**				**350,000**	

PROGRAM - ACTIVITY:	**DEPARTMENT:**	**ACCOUNT NO.**
Utilities - Electric Production	Electric Services	

PLANT CONTROLS WI-FI NETWORK **PROJECT STATUS:** New

DESCRIPTION/JUSTIFICATION

Each time a component is installed in the field and it needs to be connected to the DCS, conduit and wiring must be installed and connected. This takes a tremendous amount of time and space when considering adding additional components in the field. This project will install a secured wireless network that will only be used to retrieve operational data from the field and brought into the DCS without having to run conduit or wiring. The network will also be capable of quickly adding additional components in the future. This wireless network will only be used for retrieving data and will not be used to output any control commands.

LOCATION

Power Plant, 200 E. Fifth St.

		TOTAL	2021/22	2022/23	2023/24	2024/25	2025/26
COST:							
Materials/Parts		175,000					175,000
	TOTAL	**175,000**					**175,000**
FINANCING:							
Electric Utility Fund		175,000					175,000
	TOTAL	**175,000**					**175,000**

PROGRAM - ACTIVITY:	**DEPARTMENT:**	**ACCOUNT NO.**
Utilities - Electric Production	Electric Services	

RDF BIN RENOVATION **PROJECT STATUS:** Delayed Scope Change

DESCRIPTION/JUSTIFICATION

This project is to repair and/or replace the entire "skin" of the RDF bin and replace or protect a majority of the structural beams that provide support to the structure of the RDF bin. The entire RDF bin is composed of Cor-ten steel. The Cor-ten steel was used as a cheaper steel option that would be able to stand up to harsh environments. It does this by rusting on the surface, drying out, and then essentially using the rust layer to protect the remaining good steel. This has proven to be a poor choice in the RDF bin. The bin is continually subject to a very harsh, moist environment. This environment has caused the Cor-ten steel to remain wet for long periods, continually rust, and never stop. The steel that is exposed to the RDF has degraded to the point where the walls and roof are very thin and are even showing holes in numerous places ranging from a pin hole to a square foot in size. The structure beams have shown significant deterioration and need to be protected, or in some cases, replaced. These areas are currently being patched but now require almost constant attention.

In addition, there are several drives at the RDF bin that are DC (direct current). The DC drives have limitations for control and are expensive to maintain. This is a scope change to the project as staff replaces the DC drives used within the RDF process to an AC (alternating current) drive.

COMMENTS

Staff expects the frequency of these repairs to increase throughout the current year. Since it is difficult to coordinate outages where there isn't conflict with the Resource Recovery Plant, staff plans to perform the work in such a way that will allow for one side of the bin to be in operation while the other is being repaired and have minimum downtime of both bins.

The City is currently studying Waste-to-Energy alternatives, which could impact how the RDF bin will be utilized over the next ten to twenty years. As additional information is learned through the Waste-to-Energy study, adjustments may be made to the RDF Bin Renovation project which could impact the cost if the bin is not needed long-term.

LOCATION

Power Plant, 200 E. Fifth St.

		TOTAL	2021/22	2022/23	2023/24	2024/25	2025/26
COST:							
Construction		1,600,000	1,300,000				300,000
	TOTAL	**1,600,000**	**1,300,000**				**300,000**
FINANCING:							
Electric Utility Fund		1,600,000	1,300,000				300,000
	TOTAL	**1,600,000**	**1,300,000**				**300,000**

PROGRAM - ACTIVITY:	**DEPARTMENT:**	**ACCOUNT NO.**
Utilities - Electric Production	Electric Services	530-4809-489

UNIT 8 PRECIPITATOR INSULATION AND SIDING **PROJECT STATUS:** Cost Increase

DESCRIPTION/JUSTIFICATION

This project will provide for the replacement of the lagging, insulation and support steel of a 33-year-old precipitator. There have been numerous repairs done over the years, but the outer lagging and insulation are now in need of a complete replacement. Over time, the support steel has failed due to rusting and fatigue with the breaking of attachment tabs. Due to the precipitator's height of approximately 155 to 210 feet in the air and approximately 20,000 square feet, it will require scaffolding and be difficult to repair. Failure to repair all four sides from top to bottom could result in a catastrophic failure. If the lagging were to let go, the "skin" and insulation could fall on people, equipment, or the railroad track. The entire lagging, insulation, and some support steel need to be replaced for the safe, continued operation of the precipitator.

COMMENTS

The cost increase is a result from an updated engineer's estimate that increased by $1,000,000.

2020/21	Engineering	45,000
2020/21	Materials and Labor	955,000
2022/23	Materials and Labor	1,000,000
Total		$2,000,000

LOCATION

Power Plant, 200 E. Fifth St.

		TOTAL	2021/22	2022/23	2023/24	2024/25	2025/26
COST:							
Materials & Labor		1,000,000		1,000,000			
	TOTAL	**1,000,000**		**1,000,000**			
FINANCING:							
Electric Utility Fund		1,000,000		1,000,000			
	TOTAL	**1,000,000**		**1,000,000**			

PROGRAM - ACTIVITY: Utilities - Electric Production

DEPARTMENT: Electric Services

ACCOUNT NO.

UNITS 5 AND 6 BOILER REMOVAL **PROJECT STATUS:** No Change

DESCRIPTION/JUSTIFICATION

The Power Plant houses two operational generating units (7 and 8). Units 5 and 6 were decommissioned in 1986. This project is to remove the Unit 5 boiler and turbine/generator, and remove the Unit 6 boiler. This equipment is outdated and unusable in its current condition. The area that will be cleared through this project can be used to provide expanded maintenance shop space.

The Unit 6 turbine/generator will not be removed as part of this project. The City is currently studying Waste-to-Energy alternatives, one of which may be to develop a dedicated unit to dispose of refuse-derived fuel. As part of that study, the Unit 6 turbine-generator could be evaluated for rehabilitation. Until the possibility of repurposing the Unit 6 turbine/generator is ruled out, it will remain in place.

LOCATION

Power Plant, 200 E. Fifth St.

		TOTAL	2021/22	2022/23	2023/24	2024/25	2025/26
COST:							
Engineering		50,000		50,000			
Demolition and Removal		700,000		700,000			
	TOTAL	**750,000**		**750,000**			
FINANCING:							
Electric Utility Fund		750,000		750,000			
	TOTAL	**750,000**		**750,000**			

PROGRAM - ACTIVITY:	**DEPARTMENT:**	**ACCOUNT NO.**
Utilities - Electric Production	Electric Services	

UNIT 7 AIR HEATER BASKET REPLACEMENT **PROJECT STATUS:** New

DESCRIPTION/JUSTIFICATION

The Unit 7 air heater baskets are showing a large amount of corrosion. These baskets transfer heat from the boiler exhaust gas to heat the incoming combustion air. Poor or corroded baskets cause operating efficiency to drop, and negatively impact heat transfer. This in turn restricts the air path through the air heater causing the induced draft fan to work harder and limit our unit capacity. This project involves all three layers of the baskets to be replaced with new baskets.

LOCATION

Power Plant, 200 E. Fifth St.

		TOTAL	2021/22	2022/23	2023/24	2024/25	2025/26
COST:							
Construction		350,000		350,000			
	TOTAL	**350,000**		**350,000**			
FINANCING:							
Electric Utility Fund		350,000		350,000			
	TOTAL	**350,000**		**350,000**			

PROGRAM - ACTIVITY:	**DEPARTMENT:**	**ACCOUNT NO.**
Utilities - Electric Production	Electric Services	

TURBINE/GENERATOR MINOR OVERHAULS **PROJECT STATUS:** No Change

DESCRIPTION/JUSTIFICATION
It is standard in the industry to perform a major overhaul every 7-8 years on the turbine and generator. In order to perform well within these 7-8 years, a minor overhaul is performed every 3-4 years. The minor overhaul consists of inspecting and cleaning the main stop valve, control valves, and bearings. This inspection insures proper operation of these critical components.

COMMENTS
Traditionally, the City of Ames Power Plant has not performed a minor inspection on either Unit 7 or Unit 8, but that is because the time between major inspections has been about 5 years. We would like to increase this time between major inspections to 7-8 years.

2022/23	Unit 7 minor overhaul	150,000
2023/24	Unit 8 minor overhaul	150,000
	Total	$300,000

LOCATION
Power Plant, 200 E. Fifth St.

	TOTAL	2021/22	2022/23	2023/24	2024/25	2025/26
COST:						
Turbine Overhaul	200,000		100,000	100,000		
GE Tech Support	100,000		50,000	50,000		
TOTAL	**300,000**		**150,000**	**150,000**		
FINANCING:						
Electric Utility Fund	300,000		150,000	150,000		
TOTAL	**300,000**		**150,000**	**150,000**		

PROGRAM - ACTIVITY:	**DEPARTMENT:**	**ACCOUNT NO.**
Utilities - Electric Production	Electric Services	

COAL YARD RECLAMATION **PROJECT STATUS:** Delayed

DESCRIPTION/JUSTIFICATION
In spring 2016, the Power Plant was converted from coal-fired to natural gas-fired. This project is to reclaim the area used for coal storage by transforming it into a green space.

LOCATION
Power Plant, 200 E. Fifth St.

		TOTAL	2021/22	2022/23	2023/24	2024/25	2025/26
COST:							
Engineering		50,000			50,000		
Construction		450,000			450,000		
	TOTAL	**500,000**			**500,000**		
FINANCING:							
Electric Utility Fund		500,000			500,000		
	TOTAL	**500,000**			**500,000**		

PROGRAM - ACTIVITY: **DEPARTMENT:** **ACCOUNT NO.**

Utilities - Electric Production Electric Services

UNDERGROUND STORAGE TANK REMOVAL **PROJECT STATUS:** Delayed

DESCRIPTION/JUSTIFICATION
There are two 42,000-gallon underground tanks in service that store #2 fuel oil for Unit 7 and Unit 8. These original tanks were installed during the construction of Unit #8. They have been in the ground for 30 years and are functional with no operational issues at this time. Testing completed in 2011 indicated that there are no problems. However, due to the age of these tanks (30 years is the expected safe life) it is possible that an oil leak could occur, causing an expensive cleanup. Now that the plant has been converted to natural gas, these tanks are no longer needed and should be removed from the ground.

COMMENTS
It is prudent to plan to remove these tanks rather than leave them in the ground.

LOCATION
Power Plant, 200 E. Fifth St.

		TOTAL	2021/22	2022/23	2023/24	2024/25	2025/26
COST:							
Equipment and Labor		235,000			235,000		
	TOTAL	**235,000**			**235,000**		
FINANCING:							
Electric Utility Fund		235,000			235,000		
	TOTAL	**235,000**			**235,000**		

PROGRAM - ACTIVITY: Utilities - Electric Production
DEPARTMENT: Electric Services
ACCOUNT NO.

UTILITIES - WATER PRODUCTION/TREATMENT

PROJECT/FUNDING SOURCE	TOTAL	2021/22	2022/23	2023/24	2024/25	2025/26	Page
PROJECT:							
Water Plant Facility Improvements	1,841,000	200,000	783,000	212,000	-	646,000	48
Distribution System Monitoring Network	985,000	985,000	-	-	-	-	49
Well Field Standby Power	984,000	984,000	-	-	-	-	50
Advanced Metering Infrastructure	308,000	99,000	103,000	106,000	-	-	51
Remote Sites Fiber Installation	994,000	-	659,000	-	335,000	-	52
SAM Pump Station Improvements	300,000	-	-	300,000	-	-	53
East Industrial Elevated Tank	4,163,000	-	-	164,000	3,999,000	-	54
Ada Hayden Water Quality Study	46,000	-	-	23,000	23,000	-	55
Lime Lagoon Improvements	1,564,000	-	-	-	165,000	1,399,000	56
Well Controls Rehabilitation	605,000	-	-	-	-	605,000	57
Ioway Creek Pump Station Demolition	125,000	-	-	-	-	125,000	58
TOTAL PROJECT EXPENDITURES	**11,915,000**	**2,268,000**	**1,545,000**	**805,000**	**4,522,000**	**2,775,000**	
FUNDING SOURCES:							
Debt:							
State Revolving Fund Loans	4,163,000	-	-	164,000	3,999,000	-	

UTILITIES - WATER PRODUCTION/TREATMENT, continued

	TOTAL	2021/22	2022/23	2023/24	2024/25	2025/26
FUNDING SOURCES, continued						
City:						
Water Utility Fund	7,014,000	1,530,000	1,545,000	641,000	523,000	2,775,000
Other:						
FEMA Hazard Mitigation Grant	738,000	738,000	-	-	-	-
TOTAL FUNDING SOURCES	**11,915,000**	**2,268,000**	**1,545,000**	**805,000**	**4,522,000**	**2,775,000**

WATER PLANT FACILITY IMPROVEMENTS **PROJECT STATUS:** Cost Change Scope Change

DESCRIPTION/JUSTIFICATION
This project involves annual equipment repairs, major maintenance activities, replacement, and upgrades at the Water Treatment Plant, Technical Services Complex (TSC), and associated remote facilities such as wells, elevated tanks, and booster pump stations. Each of the identified items are stand-alone projects.

COMMENTS
The schedule for these improvements is as follows:

2021/22	SCADA/security modifications ($100,000); split-treatment modifications ($100,000)
2022/23	Add 2 high service pumps at East 13th Street Pump Station ($370,000); yard piping improvements ($107,000); switchgear preventative maintenance ($81,000); SCADA server replacement ($200,000); remote site solar conversion feasibility ($25,000)
2023/24	Lime slaking building dehumidification ($212,000)
2025/26	Add third lime slaker ($646,000)

The cost and scope change are a result of adding the split-treatment modifications in FY 2021/22, adding the solar feasibility study in FY 2022/23, delaying the lime slaking building dehumidification work by two years, and the planned third lime slaker moving into year five of the CIP.

LOCATION
Technical Services Complex, 300 E. Fifth St. and Water Treatment Plant, 1800 E. 13th St.

	TOTAL	2021/22	2022/23	2023/24	2024/25	2025/26
COST:						
Engineering	150,000	18,000	46,000	21,000		65,000
Construction	1,491,000	182,000	537,000	191,000		581,000
Equipment	200,000		200,000			
TOTAL	**1,841,000**	**200,000**	**783,000**	**212,000**		**646,000**
FINANCING:						
Water Utility Fund	1,841,000	200,000	783,000	212,000		646,000
TOTAL	**1,841,000**	**200,000**	**783,000**	**212,000**		**646,000**

PROGRAM - ACTIVITY:	DEPARTMENT:	ACCOUNT NO.
Utilities - Water Treatment	Water and Pollution Control	510-3915-489
		510-3917-489

DISTRIBUTION SYSTEM MONITORING NETWORK **PROJECT STATUS:** No Change

DESCRIPTION/JUSTIFICATION
This project will install a network of sensors in the drinking water distribution system to monitor pressure fluctuations in real time. The sensors will be connected to the Water Plant's Supervisory Control and Data Acquisition (SCADA) network, allowing both treatment plant staff and distribution system staff access to the information.

COMMENTS
Pressure management in distribution systems is fundamental to providing safe drinking water. The loss of pressure can potentially allow ground water to contaminate the system. Pressure fluctuations can negatively impact the physical integrity of the pipes and result in water main breaks. When a water main breaks, it causes a pressure wave that is carried through the pipe network by the water. These sudden pressure changes, or transients, can be detected by pressure sensing instruments inserted into a water main. By installing and continuously monitoring a network of sensors, treatment plant operators and field crews can pinpoint the location of a water main break much more easily and quickly, improving the response time to isolate and repair a break. It also will provide real-time data to better determine if a boil water advisory is needed and to better delineate the areas that should be covered by a boil advisory.

Currently, pressure monitoring is done only at a very small number of locations that are connected to the Water Plant's SCADA system, such as pump stations and elevated tanks. This project includes the addition of up to 25 monitoring nodes installed at key locations in the distribution system. The data would be monitored by the SCADA system, serving as an extension of the control system into the distribution system.

LOCATION
Various locations

		TOTAL	2021/22	2022/23	2023/24	2024/25	2025/26
COST:							
Design		105,000	105,000				
Equipment/Installation		880,000	880,000				
	TOTAL	**985,000**	**985,000**				
FINANCING:							
Water Utility Fund		985,000	985,000				
	TOTAL	**985,000**	**985,000**				

PROGRAM - ACTIVITY:	**DEPARTMENT:**	**ACCOUNT NO.**
Utilities - Water Production	Water and Pollution Control	510-3952-489

WELL FIELD STANDBY POWER **PROJECT STATUS:** Scope Change Advanced

DESCRIPTION/JUSTIFICATION
This project will provide standby electrical power to select well locations. Iowa's Water Supply Design Standards require that a water system have redundant electrical power available. Installing standby power for critical remote sites was one of the recommendations contained in the utility's 2020 Physical Security Assessment conducted by the U.S. Department of Homeland Security. As a result of the 2020 derecho storm event, the scope of this project has been expanded beyond what was shown last year.

COMMENTS
In addition to the dedicated emergency generator for the Hunziker Youth Sports Complex shown last year, the project now also includes the addition of quick connects for portable generators in the Southeast Well Field. Additional emergency power improvements are included in the following separate CIP projects: the SAM Pump Station Improvements Project (which will provide emergency power for both the pump station and the elevated tank); the North River Valley Well Field Project (which will add three new wells protected by a dedicated emergency generator); and the Old Water Plant Demolition/TSC Improvements project (which will now include an emergency generator that will protect the TSC building and the old High Service Pump Station).

The most recent update to the Story County Hazard Mitigation Plan specifically included the need for standby power for existing wells. This makes the project eligible for Pre-Hazard Mitigation Grants. The funding source is shown as a FEMA Hazard Mitigation Grant with a 25% local match from the Water Utility Fund. It is anticipated that Pre-Hazard Mitigation Grants will become available as a result of the derecho disaster declarations.

LOCATION
Hunziker Youth Sports Complex & Southeast Well Field

		TOTAL	2021/22	2022/23	2023/24	2024/25	2025/26
COST:							
Engineering		122,000	122,000				
Construction		862,000	862,000				
	TOTAL	**984,000**	**984,000**				
FINANCING:							
Water Utility Fund		246,000	246,000				
FEMA Hazard Mitigation Grant		738,000	738,000				
	TOTAL	**984,000**	**984,000**				

PROGRAM - ACTIVITY:	**DEPARTMENT:**	**ACCOUNT NO.**
Utilities - Water Production	Water and Pollution Control	510-3953-489

ADVANCED METERING INFRASTRUCTURE **PROJECT STATUS:** Cost Decrease

DESCRIPTION/JUSTIFICATION
This is a multi-year project to convert the water meter reading system from the existing generator/remote technology to the current industry standard of Automated Meter Reading/Advanced Metering Infrastructure (AMR/AMI). While the project includes water meter reading only, the system being implemented can be expanded to accommodate electric meters as well, should that be desired in the future.

COMMENTS
The water meter reading system installed prior to 2014 was a mechanical system that transmits the meter reading from the water meter (located inside the property) to a remote register on the outside of the property using a low-voltage cable. This technology is obsolete and is no longer available. A cross-departmental team evaluated multiple technology platforms utilizing various combinations of "walk-by" or "drive-by" reads, radio reads, cellular reads, and other methods of obtaining meter readings. The team concluded that an AMR walk-by or drive-by system would be the most cost-effective short-term solution to replace the old technology. The City has entered into a contract with Itron, Inc. to provide the radio read system, reading equipment, and software; and Badger Meter, Inc. to provide water meters for this project. This system is capable of being upgraded to a more sophisticated AMI system in the future that could provide more detailed data collection and could allow meter reading from the office without the need to send a meter reader out into the field.

The replacement program began in FY 2014/15, focusing initially on meter locations that were problematic for the Meter Readers to access. Much of the next two years focused on replacing meters in areas that are not served by the Ames Municipal Electric System, which, as a result, are locations that are more expensive to read on a per-meter basis. The final years will pick up the balance of the meter inventory. The cost to replace 1,900 meters per year is budgeted in the Water Meter Division's operating budget (300 meters for new construction and 1,600 for routine meter replacement). The cost for an additional 500 replacements is included annually as a part of this CIP project. The total number of meters replaced as a part of the Automated Meter Reading program remains unchanged; the cost decrease reflects a shift to budgeting more meters in the operating budget, and a correspondingly fewer number of meters in the CIP.

IMPACT ON OPERATING BUDGET
The reduction in the number of meters budgeted in the CIP is offset by a corresponding increase in the number of meters included in the operating budget.

LOCATION
City-wide

		TOTAL	2021/22	2022/23	2023/24	2024/25	2025/26
COST:							
Equipment		308,000	99,000	103,000	106,000		
	TOTAL	**308,000**	**99,000**	**103,000**	**106,000**		
FINANCING:							
Water Utility Fund		308,000	99,000	103,000	106,000		
	TOTAL	**308,000**	**99,000**	**103,000**	**106,000**		

PROGRAM - ACTIVITY:	**DEPARTMENT:**	**ACCOUNT NO.**
Utilities - Water Meter	Water and Pollution Control	510-3947-489

REMOTE SITES FIBER INSTALLATION **PROJECT STATUS:** New

DESCRIPTION/JUSTIFICATION
This project will connect multiple remote sites back to the Water Plant using fiber optic cables. This will provide greater security of the communications, increased communications reliability, and the ability to bring back security video of these unstaffed remote facilities.

COMMENTS
The installation of the fiber network planned as a part of the deployment of the smart transportation grid can be leveraged to allow fiber connections to a significant number of remote Water Plant facilities such as wells, water towers, and booster pump stations. The timing of the projects shown below coincide with the planned schedule for installing the transportation network. The installation of fiber to serve the planned North River Valley Well Field is included separately in the construction budget for that project.

2022/23 Connections to the Southeast Well Field (5 wells) and the Youth Sports Complex Well Field (5 wells)
2024/25 Connections to the Bloomington Road Elevated Tank (BRET), Mortensen and County Line Tank (MAC), and the Elevated Tank and Booster Pump Station at State and Mortensen (SAM)

LOCATION
Various remote sites

		TOTAL	2021/22	2022/23	2023/24	2024/25	2025/26
COST:							
Engineering		130,000		86,000		44,000	
Construction		864,000		573,000		291,000	
	TOTAL	**994,000**		**659,000**		**335,000**	
FINANCING:							
Water Utility Fund		994,000		659,000		335,000	
	TOTAL	**994,000**		**659,000**		**335,000**	

PROGRAM - ACTIVITY: **DEPARTMENT:** **ACCOUNT NO.**

Utilities - Water Production Water and Pollution Control

SAM PUMP STATION IMPROVEMENTS **PROJECT STATUS:** No Change

DESCRIPTION/JUSTIFICATION
This project will add a fourth pump ($155,000) to the pump station located at State Avenue and Mortensen Road (SAM). It will also add standby power ($145,000) to the SAM pump station.

COMMENTS
In 2003, the water distribution system was split into two separate pressure zones to accommodate growth in the west and southwest portions of the city. To provide the increased pressure to the new western pressure zone, a booster pump station was built at the intersection of State Avenue and Mortensen Road. Initially only three pumps were installed in the station, with accommodations for a fourth future pump. As growth in that area continues to increase, it now seems prudent to add the fourth pump.

Iowa's Water Supply Design Standards require that a water system have redundant electrical power available. This project will add a standby generator to the facility.

LOCATION
Intersection of State Avenue and Mortensen Road

	TOTAL	2021/22	2022/23	2023/24	2024/25	2025/26
COST:						
Engineering	25,000			25,000		
Construction	275,000			275,000		
TOTAL	**300,000**			**300,000**		
FINANCING:						
Water Utility Fund	300,000			300,000		
TOTAL	**300,000**			**300,000**		

PROGRAM - ACTIVITY:	**DEPARTMENT:**	**ACCOUNT NO.**
Utilities - Water Production	Water and Pollution Control	

EAST INDUSTRIAL ELEVATED TANK **PROJECT STATUS:** Delayed Cost Decrease

DESCRIPTION/JUSTIFICATION
This project involves the construction of a new one-million-gallon elevated tank ("water tower") to serve the newly annexed industrial area along Lincoln Way east of Interstate 35.

COMMENTS
In order to meet the anticipated water demands in this new area in east Ames, a new elevated tank is required. The tank will help stabilize pressures at the far eastern edge of the city limits, as well as provide the necessary volume for firefighting purposes in what is envisioned as a moderate to heavy industrial neighborhood.

The project is shown being delayed one year. The schedule can be adjusted as needed to meet the pace of development in the industrial park. Updated cost estimates have reduced the anticipated cost of this project by $608,000.

LOCATION
Intersection of East Lincoln Way and 580th Avenue

	TOTAL	2021/22	2022/23	2023/24	2024/25	2025/26
COST:						
Engineering	264,000			164,000	100,000	
Construction	3,899,000				3,899,000	
TOTAL	**4,163,000**			**164,000**	**3,999,000**	
FINANCING:						
Drinking Water State Revolving Fund	4,163,000			164,000	3,999,000	
TOTAL	**4,163,000**			**164,000**	**3,999,000**	

PROGRAM - ACTIVITY: **DEPARTMENT:** **ACCOUNT NO.**
Utilities - Water Production Water and Pollution Control

ADA HAYDEN WATER QUALITY STUDY **PROJECT STATUS:** No Change

DESCRIPTION/JUSTIFICATION
Since the mid-1970's, the lakes at Ada Hayden Park have been used by the Ames Water Plant as a source for augmenting alluvial groundwater recharge during periods of low flows in the South Skunk River. In addition to the drinking water use, the lakes are a defining feature of Ada Hayden Heritage Park, providing a wide array of water-based recreational opportunities for the community. This project is part of an on-going effort to monitor the health of the lakes as development occurs in and around the lake's watershed. In addition to being a valuable tool for City staff, the continued monitoring of the lakes is of interest to many members of the community.

COMMENTS
A preliminary water quality evaluation was made in 2000 as part of the City's "due diligence" effort prior to purchasing the former Hallet's Quarry property. This evaluation focused primarily on potential contamination of the lakes that could have resulted from the former industrial use of the property. Follow-up investigations were performed in FY 2004/05, FY 2009/10, and again in FY 2017/18. These latter investigations were focused on the overall "health" and water quality in the lakes, looking at parameters such as dissolved oxygen, nitrogen and phosphorus, algae and microcystins, suspended solids and turbidity, and bacteria.

As the watershed has developed, the City has made efforts to encourage land use practices that will not have a negative impact on the water quality in the lakes. The long-term intent behind the monitoring effort has been to periodically recheck the lakes (on a five to seven year interval) to determine if the existing land practices have been effective in preserving the in-lake water quality.

The intent of this project is to conduct a new monitoring event every five years. The next round would take place during the summers of 2023 and 2024 at an estimated cost of $23,000 per summer.

LOCATION
Ada Hayden Heritage Park

		TOTAL	2021/22	2022/23	2023/24	2024/25	2025/26
COST:							
Contracted Monitoring		46,000			23,000	23,000	
	TOTAL	**46,000**			**23,000**	**23,000**	
FINANCING:							
Water Utility Fund		46,000			23,000	23,000	
	TOTAL	**46,000**			**23,000**	**23,000**	

PROGRAM - ACTIVITY: **DEPARTMENT:** **ACCOUNT NO.**

Utilities - Water Production Water and Pollution Control

LIME LAGOON IMPROVEMENTS **PROJECT STATUS:** Delayed Scope Change

DESCRIPTION/JUSTIFICATION
This project includes the ongoing major maintenance to the lime lagoons, as well as periodic improvements to increase available working capacity. The timing for constructing additional cells is staggered over time to match growth in demand.

COMMENTS
Lime residuals from the water softening process are stored and dewatered in large storage lagoons. The material is removed annually in the fall and recycled by applying it to farm fields as an agricultural liming agent. The cost of the annual removal and application is budgeted in the operating budget.

A project is underway in FY 2020/21 to rebuild the trench drain in the bottoms of one of the oldest cells. These drains aid in the dewatering process. Over time, they have plugged with fine lime particles and have been damaged due to the excavation of lime from the cells using a back hoe. The same modifications have now been added in FY 2025/26 to make the same modifications to the other two oldest cells.

The project that will partially subdivide the large north cell has been delayed two years, based on both the timing of the anticipated capacity need and the reprioritization of other projects. An inflationary cost increase was made due to the delay.

LOCATION
Water Plant lime lagoons, south of East 13th Street, west of the Skunk River

		TOTAL	2021/22	2022/23	2023/24	2024/25	2025/26
COST:							
Engineering		165,000				165,000	
Construction		1,399,000					1,399,000
	TOTAL	**1,564,000**				**165,000**	**1,399,000**
FINANCING:							
Water Utility Fund		1,564,000				165,000	1,399,000
	TOTAL	**1,564,000**				**165,000**	**1,399,000**

PROGRAM - ACTIVITY:	**DEPARTMENT:**	**ACCOUNT NO.**
Utilities - Water Production	Water and Pollution Control	

WELL CONTROLS REHABILITATION **PROJECT STATUS:** New

DESCRIPTION/JUSTIFICATION
This project involved routine upgrades to the programmable logic controllers (PLCs) located at each well.

COMMENTS
A project was completed in FY 2019/20 that, among other things, replaced the PLCs in 10 wells. This project will replace the PLCs in the remaining 15 wells. Ongoing replacements are scheduled every ten years; the schedule may be adjusted depending on replacement parts availability and technology advancements.

LOCATION
Wells located in multiple well fields

		TOTAL	2021/22	2022/23	2023/24	2024/25	2025/26
COST:							
Engineering		90,000					90,000
Construction		515,000					515,000
	TOTAL	**605,000**					**605,000**
FINANCING:							
Water Utility Fund		605,000					605,000
	TOTAL	**605,000**					**605,000**

PROGRAM - ACTIVITY: **DEPARTMENT:** **ACCOUNT NO.**

Utilities - Water Production Water and Pollution Control

IOWAY CREEK BOOSTER PUMP STATION DEMOLITION

PROJECT STATUS: New

DESCRIPTION/JUSTIFICATION
This project will demolish the abandoned booster pump station located at 1420 Lincoln Way (immediately east of Ioway Creek).

COMMENTS
The property located at 1420 Lincoln Way was acquired by the City in 1924. Prior to that date, residents in the Fourth Ward were supplied water purchased from Iowa State College. In that year, the City erected a 200,000 gallon elevated tank on Hunt Street and a booster pump station at 1420 Lincoln Way, allowing the Fourth Ward to be served by the City's water utility. The booster pump station remained in use until 1990, when the distribution system was altered to function as a single pressure zone. With that change, the pump station was no longer needed. The building served for several years as a storage building for the Water & Pollution Control Department. Currently, it sits vacant and unused, and there are no identified future uses for the structure. This project will demolish the existing structure and leave the property as open green space.

This project was dropped from the CIP a year ago when it appeared the property may be sold "as is." Since that sale did not proceed, the project has been returned to the CIP.

LOCATION
1420 Lincoln Way

		TOTAL	2021/22	2022/23	2023/24	2024/25	2025/26
COST:							
Engineering		15,000					15,000
Demolition		110,000					110,000
	TOTAL	**125,000**					**125,000**
FINANCING:							
Water Utility Fund		125,000					125,000
	TOTAL	**125,000**					**125,000**

PROGRAM - ACTIVITY:	**DEPARTMENT:**	**ACCOUNT NO.**
Utilities - Water Production	Water and Pollution Control	

UTILITIES - WATER POLLUTION CONTROL

PROJECT/FUNDING SOURCE	TOTAL	2021/22	2022/23	2023/24	2024/25	2025/26	Page
PROJECT:							
WPC Plant Facility Improvements	1,062,000	81,000	695,000	-	136,000	150,000	60
Watershed-Based Nutrient Reduction	1,000,000	200,000	200,000	200,000	200,000	200,000	61
Nutrient Reduction Modifications	10,700,000	-	1,260,000	4,640,000	4,800,000	-	62
Cogeneration System Maintenance	1,525,000	-	1,525,000	-	-	-	63
WPC Electrical System Maintenance	97,000	-	97,000	-	-	-	64
WPC Headworks Modifications	10,618,000	-	-	4,133,000	6,485,000	-	65
Lift Stations Fiber Installation	229,000	-	-	-	-	229,000	66
TOTAL PROJECT EXPENDITURES	**25,231,000**	**281,000**	**3,777,000**	**8,973,000**	**11,621,000**	**579,000**	
FUNDING SOURCES:							
Debt:							
State Revolving Fund Loans	21,318,000	-	1,260,000	8,773,000	11,285,000	-	
City:							
Sewer Utility Fund	3,913,000	281,000	2,517,000	200,000	336,000	579,000	
TOTAL FUNDING SOURCES	**25,231,000**	**281,000**	**3,777,000**	**8,973,000**	**11,621,000**	**579,000**	

WPC PLANT FACILITY IMPROVEMENTS **PROJECT STATUS:** Scope Change

DESCRIPTION/JUSTIFICATION

It is necessary to plan for the orderly repair, replacement, and upgrade of the Water Pollution Control Facility equipment in order to continue high-quality treatment and comply with environmental regulations. This project involves annual equipment repairs, maintenance, replacement, and upgrades at the plant. This facility became fully operational in November 1989. Life expectancies for plant equipment vary from five to six years to more than thirty years.

COMMENTS

The utility mapping project will update the original site utility maps to include improvements made over the past 30 years. Having a current map will be critical heading in to the major reconstruction projects planned. Hydrogen sulfide corrosion of concrete manhole structures will be addressed by the E30 lift station corrosion control project. Replacement of the facility's programmable logic controllers (PLCs) is recommended due to their age. Replacement of the Supervisory Control and Data Acquisition (SCADA) servers is scheduled for every five years. The atomic absorption spectrophotometer is used to detect heavy metals in the wastewater and biosolids. The components planned to be replaced were originally purchased as part of the plant construction in 1989.

The schedule for these improvements is as follows:

2021/22 Site utility mapping ($31,000); E30 lift station corrosion control ($50,000)
2022/23 SCADA servers ($60,000); replace PLCs ($635,000)
2024/25 Replace fire alarm system ($136,000)
2025/26 Replace atomic absorption spectrophotometer ($150,000)

LOCATION

WPC Plant; four miles south of Highway 30, east of I-35

	TOTAL	2021/22	2022/23	2023/24	2024/25	2025/26
COST:						
Engineering & Administration	90,000		75,000		15,000	
Construction & Equipment	972,000	81,000	620,000		121,000	150,000
TOTAL	**1,062,000**	**81,000**	**695,000**		**136,000**	**150,000**
FINANCING:						
Sewer Utility Fund	1,062,000	81,000	695,000		136,000	150,000
TOTAL	**1,062,000**	**81,000**	**695,000**		**136,000**	**150,000**

PROGRAM - ACTIVITY:	**DEPARTMENT:**	**ACCOUNT NO.**
Utilities - WPC Plant	Water and Pollution Control	520-3408-489
		520-3410-489

WATERSHED-BASED NUTRIENT REDUCTION **PROJECT STATUS:** No Change

DESCRIPTION/JUSTIFICATION

The Water Pollution Control Facility is being converted to a nutrient removal treatment technology over a period of 20 years. Separate from the work that will occur inside the treatment plant, watershed-based improvements performed by the City can be included in the Iowa Nutrient Reduction Exchange. Staff is currently working with the Iowa League of Cities and other large utilities to encourage the Iowa Department of Natural Resources to allow these off-site nutrient reductions to be "banked" as credit toward any future, more stringent nutrient reduction requirements imposed on the WPC Facility. This project sets aside $200,000 per year that can be put toward urban watershed improvements that have a nutrient reduction component.

COMMENTS

Projects undertaken will not only have a nutrient reduction element, but will also be projects that provide additional, ancillary benefits such as flood risk reduction, increased recreational opportunities, improved wildlife habitat, urban storm water management, and drinking water source protection. It is possible that a project may not be undertaken every year. Funds may be allowed to accumulate to enable a larger-scale project to be undertaken. It is likely that at least some projects will involve partnerships with other City departments as well as with other governmental agencies and non-profit entities.

LOCATION

Throughout the community; specific locations will vary by year

	TOTAL	2021/22	2022/23	2023/24	2024/25	2025/26
COST:						
Engineering	150,000	30,000	30,000	30,000	30,000	30,000
Construction	850,000	170,000	170,000	170,000	170,000	170,000
TOTAL	**1,000,000**	**200,000**	**200,000**	**200,000**	**200,000**	**200,000**
FINANCING:						
Sewer Utility Fund	1,000,000	200,000	200,000	200,000	200,000	200,000
TOTAL	**1,000,000**	**200,000**	**200,000**	**200,000**	**200,000**	**200,000**

PROGRAM - ACTIVITY:	DEPARTMENT:	ACCOUNT NO.
Utilities - WPC Plant	Water and Pollution Control	520-3422-489

NUTRIENT REDUCTION MODIFICATIONS **PROJECT STATUS:** No Change

DESCRIPTION/JUSTIFICATION

In early 2013, the Iowa Department of Natural Resources (IDNR) released the Iowa Nutrient Reduction Strategy. This strategy will require the State's 102 largest municipal wastewater facilities to install "technically and economically feasible process changes for nutrient removal." A feasibility study was completed in early 2019 that identified the City's desired approach to meet the nutrient standards. The cost estimates shown below are built around a "Conventional Activated Sludge – Biological Nutrient Removal" treatment scheme, implemented over a 20-year period. The actual treatment scheme will need to be confirmed closer to construction of the first phase so that advances in technology and state-of-the-art practices can be incorporated.

COMMENTS

The Iowa Nutrient Reduction Strategy lays out a schedule for point source discharges based on the National Pollutant Discharge Elimination System (NPDES) permit renewal cycle for each facility. When the next permit is issued, the City will be required to submit a plan to the Iowa Department of Natural Resources that evaluates the cost and feasibility of installing nutrient reduction at the facility. The facility will then receive a compliance schedule requiring the construction of nutrient reduction facilities during subsequent NPDES permits.

The schedule would construct back-up capacity for the trickling filters in Phase 1, with engineering beginning in FY 2022/23 and construction occurring over the following two years. The second phase would begin in approximately FY 2027/28 and would remove the trickling filters and construct additional nutrient removal capacity. The third and final phase would begin in approximately FY 2037/38, bringing on-line the full nutrient reduction capacity.

2017/18	Preliminary Engineering Report	285,000
2022/23-2024/25	Phase 1 Engineering and Construction	10,700,000
2027/28-2028/29	Phase 2 Engineering and Construction	14,260,000
2037/38-2038/39	Phase 3 Engineering and Construction	15,170,000
	Total	$40,415,000

LOCATION

WPC Facility; four miles south of Highway 30, east of I-35

	TOTAL	2021/22	2022/23	2023/24	2024/25	2025/26
COST:						
Engineering	1,760,000		1,260,000	250,000	250,000	
Construction	8,940,000			4,390,000	4,550,000	
TOTAL	**10,700,000**		**1,260,000**	**4,640,000**	**4,800,000**	
FINANCING:						
Clean Water State Revolving Fund	10,700,000		1,260,000	4,640,000	4,800,000	
TOTAL	**10,700,000**		**1,260,000**	**4,640,000**	**4,800,000**	

PROGRAM - ACTIVITY: **DEPARTMENT:** **ACCOUNT NO.**

Utilities - WPC Plant Water and Pollution Control

COGENERATION SYSTEM MAINTENANCE **PROJECT STATUS:** Scope Change Cost Decrease

DESCRIPTION/JUSTIFICATION
This project includes the ongoing major maintenance needs of the Water Pollution Control Facility's (WPCF) cogeneration system and hauled waste receiving infrastructure. Specific projects included in the next five years include a major overhaul of Methane Engine #2 (MG2) and the construction of a fats, oils, and grease (FOG) receiving station.

COMMENTS
The WPC Facility uses anaerobic digestion as a core treatment process for wastewater solids. The digestion process stabilizes waste, reduces the volume of solids, and provides a measure of pathogen destruction. The process also generates methane "bio-gas" as a by-product. This gas is captured and used as a fuel source for the on-site electrical generation of approximately 20% of the facility's total electricity needs. The facility has two gas-fired engines capable of operating on either the bio-gas or natural gas. Each engine drives a dedicated electric generator. A heat recovery system on the engines uses the waste heat to warm the digesters, further reducing the energy demand of the facility. The facility also has a direct-fired boiler that operates as a back-up to the engine-generator units.

FY 2022/23 includes the following projects:

Overhaul/rebuild of MG2	250,000
New FOG receiving station	1,275,000
Total	$1,525,000

The scope change comes from the decision to delay the replacement of MG2 in favor of a complete rebuild. The replacement is now scheduled for FY 2027/28 ($3.94 million).

LOCATION
WPC Facility; four miles south of Highway 30, east of I-35

	TOTAL	2021/22	2022/23	2023/24	2024/25	2025/26
COST:						
Engineering	190,000		190,000			
Construction	1,335,000		1,335,000			
TOTAL	**1,525,000**		**1,525,000**			
FINANCING:						
Sewer Utility Fund	1,525,000		1,525,000			
TOTAL	**1,525,000**		**1,525,000**			

PROGRAM - ACTIVITY: Utilities - WPC Plant
DEPARTMENT: Water and Pollution Control
ACCOUNT NO.

WPC ELECTRICAL SYSTEM MAINTENANCE **PROJECT STATUS:** No Change

DESCRIPTION/JUSTIFICATION

This project covers the periodic maintenance of the overall electrical system for the facility. It includes routine preventative maintenance projects intended to sustain the safety and functionality of the electrical components at a high level. It also may include periodic major repair or replacement projects not directly associated with other CIP projects.

COMMENTS

A main component of the facility's electrical system is the switchgear, which is a series of electrical cabinets that contain the disconnect switches and circuit breakers used to protect and isolate electrical equipment. Over time, the equipment can build up dust, insects, and other debris. The connections can become loose over time, and the insulation can degrade. These issues can create a reliability problem, and can also pose a serious fire hazard. To help ensure that the equipment performs as needed, a routine schedule of preventative maintenance has been used, with the main switchgear and the Total Energy Building switchgear being cleaned every five years. Both sets of switchgear are planned for routine maintenance in FY 2022/23.

LOCATION

WPC Plant; four miles south of Highway 30, east of I-35

		TOTAL	2021/22	2022/23	2023/24	2024/25	2025/26
COST:							
Construction		97,000		97,000			
	TOTAL	**97,000**		**97,000**			
FINANCING:							
Sewer Utility Fund		97,000		97,000			
	TOTAL	**97,000**		**97,000**			

PROGRAM - ACTIVITY:	**DEPARTMENT:**	**ACCOUNT NO.**
Utilities - WPC Plant	Water and Pollution Control	

WPC HEADWORKS MODIFICATIONS **PROJECT STATUS:** No Change

DESCRIPTION/JUSTIFICATION
This project includes a complete replacement of the entire headworks system beginning in FY 2023/24.

COMMENTS
The headworks of the Water Pollution Control (WPC) Facility is where the very first treatment steps take place, including the capture and removal of rags and large debris, as well as the removal of heavy sand and grit. These materials can plug downstream valves and equipment, and are extremely abrasive to pumps and piping. A long-range facility needs assessment completed in 2012 provided a prioritized schedule of structural and equipment replacement needs. This work was identified in that assessment.

The cost break down for individual elements of the project is as follows:

		Engineering	Construction	Total
2023/24 – 2024/25	Replace grit conveyor	346,000	1,689,000	2,035,000
	Bar screen improvements	599,000	2,926,000	3,525,000
	Grit wash clarifier	74,000	359,000	433,000
	Replace GRUs with new head cells	545,000	2,660,000	3,205,000
	RWPS piping and supports	241,000	1,179,000	1,420,000
	Total	$1,805,000	$8,813,000	$10,618,000

LOCATION
WPC Facility; four miles south of Highway 30, east of I-35

	TOTAL	2021/22	2022/23	2023/24	2024/25	2025/26
COST:						
Engineering	1,805,000			1,104,000	701,000	
Construction	8,813,000			3,029,000	5,784,000	
TOTAL	**10,618,000**			**4,133,000**	**6,485,000**	
FINANCING:						
Clean Water State Revolving Fund	10,618,000			4,133,000	6,485,000	
TOTAL	**10,618,000**			**4,133,000**	**6,485,000**	

PROGRAM - ACTIVITY: **DEPARTMENT:** **ACCOUNT NO.**
Utilities - WPC Plant Water and Pollution Control

LIFT STATIONS FIBER INSTALLATION **PROJECT STATUS:** New

DESCRIPTION/JUSTIFICATION
This project will connect three wastewater lift stations (Orchard Drive, Dayton Avenue, and Freel Drive) to the Water Pollution Control Facility using fiber optic cables. This will provide greater security of the communications, increased communications reliability, and the ability to bring back security video of these unstaffed, remote facilities.

COMMENTS
The installation of the fiber network planned as a part of the deployment of the smart transportation grid can be leveraged to allow fiber connections to three of the sewer lift stations. The timing of the work shown below coincides with the planned schedule for installing the transportation network. It does not include a connection to the Northwood Lift Station on Duff Avenue, as that lift station is planned to be eliminated in FY 2028/29.

LOCATION
Orchard Drive, Dayton Avenue, and Freel Drive Lift Stations

		TOTAL	2021/22	2022/23	2023/24	2024/25	2025/26
COST:							
Engineering		30,000					30,000
Construction		199,000					199,000
	TOTAL	**229,000**					**229,000**
FINANCING:							
Sewer Fund		229,000					229,000
	TOTAL	**229,000**					**229,000**

PROGRAM - ACTIVITY:	**DEPARTMENT:**	**ACCOUNT NO.**
Utilities - WPC Plant	Water and Pollution Control	

UTILITIES - WATER DISTRIBUTION

PROJECT/FUNDING SOURCE	TOTAL	2021/22	2022/23	2023/24	2024/25	2025/26	Page
PROJECT:							
Water System Improvements	9,350,000	1,600,000	1,750,000	1,900,000	2,050,000	2,050,000	68
TOTAL PROJECT EXPENDITURES	**9,350,000**	**1,600,000**	**1,750,000**	**1,900,000**	**2,050,000**	**2,050,000**	
FUNDING SOURCES:							
City:							
Water Utility Fund	9,350,000	1,600,000	1,750,000	1,900,000	2,050,000	2,050,000	
TOTAL FUNDING SOURCES	**9,350,000**	**1,600,000**	**1,750,000**	**1,900,000**	**2,050,000**	**2,050,000**	

WATER SYSTEM IMPROVEMENTS **PROJECT STATUS:** No Change

DESCRIPTION/JUSTIFICATION

This program provides for replacing water mains in areas that experience rusty water problems, generally caused by aged cast iron pipe (most often 4-inch and 6-inch but also some larger mains such as 12-inch). It also provides for installing larger distribution mains in areas that have 4-inch supply lines, transferring water services from 4-inch water mains in streets where larger water mains exist, and abandoning 4-inch water mains. Eliminating duplicate water mains, where possible, improves water flow and helps reduce rusty water. Installing larger distribution lines in areas that have a high concentration of 4-inch supply lines and less than desirable firefighting capacity (predominantly in the older areas of the community) provides larger supply quantities in relation to the current and proposed land uses, in accordance with the Land Use Policy Plan. This program also includes projects to loop the water system to provide improved pressures, circulation, and redundancy to the community. This program may also include maintenance issue areas, such as those that experience a large number of water main breaks, or the replacement of leaking valves on larger water mains along major roadways where the complexity of the project encourages replacement by a contractor.

COMMENTS

Rusty water complaints highlight the continuing need to replace the aged 4-inch and 6-inch cast iron water mains in order to provide firefighting capacity and improved water quality in the system. The system currently has 10.4 miles of active 4-inch water main (estimated $15 million) and 34.6 miles of active, aged 6-inch cast iron water main (estimated $11 million). Improvements to these water mains will result in reduced maintenance costs. Replacing these mains will also result in improved fire safety and water quality. Annual funding continues to be increased in this program to accelerate replacement of utilities.

The cost of these public infrastructure projects is a high priority need to continue to improve the public water system to provide water quality and firefighting capacity to the community.

LOCATION

Water system improvements and water service transfers will be completed at various locations in the community. Project locations will be coordinated with upcoming roadway improvement projects to minimize construction impacts to neighborhoods.

		TOTAL	2021/22	2022/23	2023/24	2024/25	2025/26
COST:							
Engineering		1,315,000	240,000	250,000	265,000	280,000	280,000
Construction		8,035,000	1,360,000	1,500,000	1,635,000	1,770,000	1,770,000
	TOTAL	**9,350,000**	**1,600,000**	**1,750,000**	**1,900,000**	**2,050,000**	**2,050,000**
FINANCING:							
Water Utility Fund		9,350,000	1,600,000	1,750,000	1,900,000	2,050,000	2,050,000
	TOTAL	**9,350,000**	**1,600,000**	**1,750,000**	**1,900,000**	**2,050,000**	**2,050,000**

PROGRAM - ACTIVITY:	**DEPARTMENT:**	**ACCOUNT NO.**
Utilities - Water Distribution	Public Works	510-8461-489

UTILITIES - SANITARY SEWER SYSTEM

PROJECT/FUNDING SOURCE	TOTAL	2021/22	2022/23	2023/24	2024/25	2025/26	Page
PROJECT:							
Sanitary Sewer System Improvements	22,905,000	4,272,000	4,400,000	4,548,000	4,741,000	4,944,000	70
East 13th Street Sanitary Sewer Extension	2,700,000	2,700,000	-	-	-	-	71
Clear Water Diversion	250,000	50,000	50,000	50,000	50,000	50,000	72
TOTAL PROJECT EXPENDITURES	**25,855,000**	**7,022,000**	**4,450,000**	**4,598,000**	**4,791,000**	**4,994,000**	
FUNDING SOURCES:							
Debt:							
G.O. Bonds (TIF Abated)	2,700,000	2,700,000	-	-	-	-	
State Revolving Fund Loans	21,155,000	3,922,000	4,050,000	4,198,000	4,391,000	4,594,000	
Total Debt Funding	23,855,000	6,622,000	4,050,000	4,198,000	4,391,000	4,594,000	
City:							
Sewer Utility Fund	2,000,000	400,000	400,000	400,000	400,000	400,000	
TOTAL FUNDING SOURCES	**25,855,000**	**7,022,000**	**4,450,000**	**4,598,000**	**4,791,000**	**4,994,000**	

SANITARY SEWER SYSTEM IMPROVEMENTS **PROJECT STATUS:** No Change

DESCRIPTION/JUSTIFICATION

This is the annual program for rehabilitation/reconstruction of deficient sanitary sewers and deteriorated manholes at various locations throughout the city. Most of the problem areas are in sewers that can be bundled into a construction package for cost efficiency, or in problem areas deeper than City crews are equipped to handle. This program, therefore, provides for those repairs by outside firms. The goal of this program is to identify and remove major sources of inflow/infiltration as a means of lowering the peak wet weather flow at the treatment plant.

COMMENTS

System improvement locations have been identified through the Sanitary Sewer System Evaluation (SSSE) field investigation completed over the last several years. Through manhole inspections, smoke testing, and televising, severe structural defects (ratings of “4” or “5”) have been identified as priorities within this program. It is highly recommended by national standards to fix structural defects with ratings of “5” within 12 months. According to national standards, structural defects with ratings of “4” are necessary to be fixed within five years. It was originally estimated that the system would need $25.7 million in improvements over 10 years to improve the infrastructure with ratings of “4” or “5”. The program commenced in FY 2015/16, however construction costs have inflated at a higher rate than anticipated causing extensions to the timeframe. To date, $14,133,862 of improvements have taken place. This program does not reflect any capacity issues that may be identified. Suggested work activities include rehabilitating or replacing manholes, repairing or lining pipe, and similar work. City maintenance crews are continuing to also complete projects identified by the SSSE, as equipment and staffing allows.

This program continues to make improvements to the sanitary sewer system to remove inflow/infiltration, thereby reducing the peak wet weather flows to enter the system and cause back-ups, similar to what is reported in the survey. These rehabilitation improvements will improve the capacity of the sanitary sewer system.

	TOTAL	2021/22	2022/23	2023/24	2024/25	2025/26
COST:						
Engineering	3,420,000	684,000	684,000	684,000	684,000	684,000
Construction	19,485,000	3,588,000	3,716,000	3,864,000	4,057,000	4,260,000
TOTAL	**22,905,000**	**4,272,000**	**4,400,000**	**4,548,000**	**4,741,000**	**4,944,000**
FINANCING:						
State Revolving Fund (SRF)	21,155,000	3,922,000	4,050,000	4,198,000	4,391,000	4,594,000
Sewer Utility Fund	1,750,000	350,000	350,000	350,000	350,000	350,000
TOTAL	**22,905,000**	**4,272,000**	**4,400,000**	**4,548,000**	**4,741,000**	**4,944,000**

PROGRAM - ACTIVITY:	**DEPARTMENT:**	**ACCOUNT NO.**
Utilities - Sanitary Sewer	Public Works	520-8542-489
		522-8542-489

EAST 13TH STREET SANITARY SEWER EXTENSION **PROJECT STATUS:** Delayed

DESCRIPTION/JUSTIFICATION
Currently, the Regional Commercial-zoned properties just east of I-35 along 13th Street are served only by a City of Ames water main. In order to facilitate the development of this area as envisioned in the City's Land Use Policy Plan, a sanitary sewer main will be extended from the intersection of South Dayton Avenue and East 13th Street to the east under I-35. (Note: TIF abated G.O. Bonds were not sold in FY 2020/21 due to development delay.)

COMMENTS
The City staff is currently engaged in negotiations with a developer to construct the first buildings in this regional area. The plan to finance this sanitary sewer extension project is to utilize a Tax Increment Financing strategy applied to the first large building constructed on the property. In this way neither property taxes nor sewer utility rates will be impacted by this project.

LOCATION
Along East 13th Street (South Dayton Avenue to east of I-35)

		TOTAL	2021/22	2022/23	2023/24	2024/25	2025/26
COST:							
Engineering		450,000	450,000				
Construction		2,250,000	2,250,000				
	TOTAL	**2,700,000**	**2,700,000**				
FINANCING:							
G.O. Bonds (TIF Abated)		2,700,000	2,700,000				
	TOTAL	**2,700,000**	**2,700,000**				

PROGRAM - ACTIVITY:	**DEPARTMENT:**	**ACCOUNT NO.**
Utilities - Sanitary Sewer	Public Works	382-8520-489

CLEAR WATER DIVERSION **PROJECT STATUS:** No Change

DESCRIPTION/JUSTIFICATION
This is the annual program providing for diversion of footing drain discharge from sanitary sewers to storm sewers.

Clear water from footing drains causes overloading and backups in the sanitary sewer as well as increases in the volume of clean water that is treated at the sewage treatment facility. The Clear Water Diversion program historically involved diverting footing drain discharge from sanitary sewers to storm sewers. This diversion results in lower volumes of clean water needing treatment at the sewage treatment facility, thereby decreasing operating and maintenance costs of that facility. In addition, customers should experience fewer, less severe sewer backups.

COMMENTS
The Inflow and Infiltration Study, undertaken in 1995, showed that in order for clear water diversion to be cost effective, an individual sump pump must discharge in excess of 1,000 gallons per day. To encourage participation in the footing drain grant program, City Council authorized grants to participating property owners. In all, 2,334 footing drain grants were paid to property owners under this program through July 1, 2011, when the grant program was suspended.

		TOTAL	2021/22	2022/23	2023/24	2024/25	2025/26
COST:							
Construction		250,000	50,000	50,000	50,000	50,000	50,000
	TOTAL	**250,000**	**50,000**	**50,000**	**50,000**	**50,000**	**50,000**
FINANCING:							
Sewer Utility Fund		250,000	50,000	50,000	50,000	50,000	50,000
	TOTAL	**250,000**	**50,000**	**50,000**	**50,000**	**50,000**	**50,000**

PROGRAM - ACTIVITY:	**DEPARTMENT:**	**ACCOUNT NO.**
Utilities - Sanitary Sewer	Public Works	520-8585-489

UTILITIES - STORMWATER

PROJECT/FUNDING SOURCE	TOTAL	2021/22	2022/23	2023/24	2024/25	2025/26	Page
PROJECT:							
Stormwater Erosion Control Program	4,642,000	642,000	750,000	1,250,000	750,000	1,250,000	74
Low Point Drainage Improvements	1,700,000	300,000	200,000	200,000	500,000	500,000	75
Stormwater Improvement Program	2,450,000	250,000	400,000	500,000	650,000	650,000	76
Stormwater Detention/Retention Maint.	150,000	150,000	-	-	-	-	77
Stormwater Quality Improvements	600,000	100,000	100,000	100,000	100,000	200,000	78
South Skunk River Improvements	2,125,000	25,000	-	2,100,000	-	-	79
TOTAL PROJECT EXPENDITURES	**11,667,000**	**1,467,000**	**1,450,000**	**4,150,000**	**2,000,000**	**2,600,000**	
FUNDING SOURCES:							
City:							
Road Use Tax	25,000	25,000	-	-	-	-	
Stormwater Utility Fund	7,550,000	1,050,000	1,050,000	1,650,000	1,600,000	2,200,000	
Total City Funding	7,575,000	1,075,000	1,050,000	1,650,000	1,600,000	2,200,000	
Other:							
Grant Funds	4,092,000	392,000	400,000	2,500,000	400,000	400,000	
TOTAL FUNDING SOURCES	**11,667,000**	**1,467,000**	**1,450,000**	**4,150,000**	**2,000,000**	**2,600,000**	

STORMWATER EROSION CONTROL PROGRAM **PROJECT STATUS:** No Change

DESCRIPTION/JUSTIFICATION

This annual program provides for stabilization of areas that have become eroded in streams, channels, swales, gullies, or drainage ways that are part of the stormwater system. This program provides a more permanent control of the erosion and will reduce recurring maintenance costs in these areas.

COMMENTS

Following the floods of 2010, an Urban Stream Assessment was updated, which rated the stream banks of each tributary of Ada Hayden, College Creek, Clear Creek, Onion Creek, Worle Creek, Ioway Creek, and the South Skunk River. This assessment identified areas where stabilization is a priority. As monitoring activities associated with the National Pollutant Discharge Elimination System (NPDES) permit requirements continue, further locations for future improvements will be identified.

The State Revolving Fund (SRF) Sponsored Project funding for this program is a grant connected with SRF funding for the Sanitary Sewer Rehabilitation Program and not guaranteed to be awarded.

Staff receives numerous communications from residents requesting these projects and asking for updates on the status. This is a high priority program.

LOCATION

2021/22	Waterway north of Bloomington Townhomes (Eisenhower Lane)
2022/23	Clear Creek bank stabilization (near 4921 Utah Dr.) and Clear Creek bank stabilization (west of British Columbia Avenue)
2023/24	Inis Grove Park (Duff Avenue restroom facilities), unnamed tributary east of 4415 Lincoln Way, and College Creek (Hemingway Drive area)
2024/25	Clear Creek bank stabilization (west of North Dakota Avenue)
2025/26	Canterbury Court waterway and Mortensen Pkwy/University Blvd (Gateway Hill Park)

Locations identified for inclusion in future Capital Improvement Plans: Clear Creek (Stange Rd/Veenker Golf Course), Stuart Smith Park, Ioway Creek (west of South Duff Avenue).

	TOTAL	2021/22	2022/23	2023/24	2024/25	2025/26
COST:						
Engineering	920,000	120,000	150,000	250,000	150,000	250,000
Construction	3,722,000	522,000	600,000	1,000,000	600,000	1,000,000
TOTAL	**4,642,000**	**642,000**	**750,000**	**1,250,000**	**750,000**	**1,250,000**
FINANCING:						
Stormwater Utility Fund	2,650,000	250,000	350,000	850,000	350,000	850,000
State Revolving Fund (SRF) Grant Program	1,992,000	392,000	400,000	400,000	400,000	400,000
TOTAL	**4,642,000**	**642,000**	**750,000**	**1,250,000**	**750,000**	**1,250,000**

PROGRAM - ACTIVITY:	DEPARTMENT:	ACCOUNT NO.
Utilities - Stormwater	Public Works	560-8637-489, 561-8637-489

LOW POINT DRAINAGE IMPROVEMENTS **PROJECT STATUS:** Cost Change Site Change

DESCRIPTION/JUSTIFICATION

This is the annual program for drainage improvements to decrease flooding at low points. Low point drainage improvements are not only focused on residential street locations, but specifically on those locations most in need of the improvements as affected by standing water, flooding, and insufficient pipe capacity. During heavy rain, some areas become flooded, and damage to private property occasionally occurs. This program provides for installation of drainage improvements to decrease this flooding at low points. These improvements may include construction of detention areas, new pipe systems, and replacement systems to increase the ability to control the runoff so it can be carried by downstream systems.

COMMENTS

Addressing these drainage issues will reduce flooding problems on both public and private property. The amount of time spent setting out barricades in areas that flood during heavy rains will also be reduced. Locations already identified for improvements as part of this program, in addition to new complaints received over the past year, have been prioritized as shown below. Staff receives numerous communications from residents requesting these projects and asking for updates on the status. Stormwater and flooding continue to receive significant feedback as part of the Residential Satisfaction Survey.

The site change is due to eliminating duplicate and completed projects. Additional priority projects have replaced those eliminated. Christofferson Park has been eliminated from this program since Domani Subdivision is making drainage improvements in the area. Cost change is due to the increase in FY 2021/22.

LOCATION

2021/22	McKinley Drive (1400/1500 block), Barr Drive, Jensen Avenue (2100/2200 block), Stonebrook Road/Harrison Road, Hoover Avenue/Adams Street, alley east of Pearle Avenue, and 2017 East Lincoln Way
2022/23	Ferndale Avenue/Hunziker Drive area and Northridge Lane
2023/24	Garnet Drive/Meadow Place and Idaho Avenue/Idaho Court
2024/25	South of Ken Maril Road (extend earthen berm behind 300/400 blocks), South Dayton Avenue/Isaac Newton Drive intersection, and Crystal drainage ditch (east of Crystal Street cul-de-sac)
2025/26	Sixth Street/Duff Avenue, 20th Street/Northwestern Avenue, South Bell Avenue/SE 16th Street, and Grove Avenue/River Oak Drive

		TOTAL	2021/22	2022/23	2023/24	2024/25	2025/26
COST:							
Engineering		320,000	40,000	40,000	40,000	100,000	100,000
Construction		1,380,000	260,000	160,000	160,000	400,000	400,000
	TOTAL	**1,700,000**	**300,000**	**200,000**	**200,000**	**500,000**	**500,000**
FINANCING:							
Stormwater Utility Fund		1,700,000	300,000	200,000	200,000	500,000	500,000
	TOTAL	**1,700,000**	**300,000**	**200,000**	**200,000**	**500,000**	**500,000**

PROGRAM - ACTIVITY:	DEPARTMENT:	ACCOUNT NO.
Utilities - Stormwater	Public Works	560-8659-489

STORMWATER IMPROVEMENT PROGRAM **PROJECT STATUS:** No Change

DESCRIPTION/JUSTIFICATION

This annual program is to repair or replace deteriorated storm sewer pipes and intakes. Areas of concentration for storm sewer repairs will be those locations programmed for street improvements and those areas where structural deficiencies are identified.

Many intakes are brick or concrete and have experienced repeated “freeze/thaw” conditions during winters and springs. This repeated freeze/thaw action causes bricks and mortar to deteriorate, resulting in collapsed intakes. This program provides for a proactive response by contractually repairing/replacing intakes on a scheduled basis. In addition to the contractual work provided in this program, City crews provide immediate repair of those intakes that pose an immediate concern for life, health, or safety.

COMMENTS

Maintenance crews, through citizen inquiries and/or storm sewer inspections, have identified storm sewer structural deficiencies within the system. These include areas where the pipe has cracked or is missing sections or pieces of pipe. This program will provide funding to correct these deficiencies.

Completion of the Stormwater System Analysis may identify the need for additional improvements as part of the program.

The results of the 2019 Residential Satisfaction Survey showed stormwater drainage improvements being at a level of 80% important (the highest level over the past five years of survey results and within the top three priorities) of capital improvement priorities.

	TOTAL	2021/22	2022/23	2023/24	2024/25	2025/26
COST:						
Engineering	360,000	35,000	50,000	75,000	100,000	100,000
Construction	2,090,000	215,000	350,000	425,000	550,000	550,000
TOTAL	**2,450,000**	**250,000**	**400,000**	**500,000**	**650,000**	**650,000**
FINANCING:						
Stormwater Utility Fund	2,450,000	250,000	400,000	500,000	650,000	650,000
TOTAL	**2,450,000**	**250,000**	**400,000**	**500,000**	**650,000**	**650,000**

PROGRAM - ACTIVITY:	DEPARTMENT:	ACCOUNT NO.
Utilities - Stormwater	Public Works	560-8642-489

STORMWATER DETENTION/RETENTION MAINTENANCE PROGRAM

PROJECT STATUS: No Change

DESCRIPTION/JUSTIFICATION

In accordance with the *Municipal Code*, new developments within the community are required to provide stormwater management quantity control. This means maintaining stormwater runoff discharge at pre-developed conditions through use of extended detention and/or retention. Through establishment of developers' agreements, the City of Ames has accepted responsibility for the long-term maintenance of many of these facilities in residential areas. As these facilities age, sediment accumulates, volunteer vegetation becomes more prevalent, erosion occurs, and structures need to be improved. This annual program addresses those concerns.

COMMENTS

As part of the new post-construction storm water management ordinance adopted in April 2014, commercial and industrial land owners are responsible to maintain their own stormwater facilities. This ordinance also outlines that the homeowner's association/owner for residential development will maintain all water quality features. However, the City is responsible for long-term maintenance of the regional detention facilities providing water quantity control.

LOCATION

Northridge Heights Subdivision (near George Washington Carver Avenue)

		TOTAL	2021/22	2022/23	2023/24	2024/25	2025/26
COST:							
Engineering		30,000	30,000				
Construction		120,000	120,000				
	TOTAL	**150,000**	**150,000**				
FINANCING:							
Stormwater Utility Fund		150,000	150,000				
	TOTAL	**150,000**	**150,000**				

PROGRAM - ACTIVITY:	**DEPARTMENT:**	**ACCOUNT NO.**
Utilities - Stormwater	Public Works	560-8626-489

STORMWATER QUALITY IMPROVEMENTS **PROJECT STATUS:** No Change

DESCRIPTION/JUSTIFICATION

Improvement/treatment of water quality for new development and re-development in the Ames community has been incorporated into the newly adopted Post Construction Stormwater Management Ordinance. This addresses removal of sediment and nutrients before they enter waterways such as Ioway Creek and South Skunk River. This program includes treatment of the water quality volume from public impervious areas (e.g. streets and parking lots).

COMMENTS

This program includes installation of bioretention cells, vegetated swales, native landscape, and rain gardens, soil quality restoration, and other approved best management practices at various locations in the community. These best management practices may be combined with a street improvement project, where the neighborhood/adjacent land owners agree to help with day-to-day maintenance.

	TOTAL	2021/22	2022/23	2023/24	2024/25	2025/26
COST:						
Engineering	90,000	15,000	15,000	15,000	15,000	30,000
Construction	510,000	85,000	85,000	85,000	85,000	170,000
TOTAL	**600,000**	**100,000**	**100,000**	**100,000**	**100,000**	**200,000**
FINANCING:						
Stormwater Utility Fund	600,000	100,000	100,000	100,000	100,000	200,000
TOTAL	**600,000**	**100,000**	**100,000**	**100,000**	**100,000**	**200,000**

PROGRAM - ACTIVITY:	DEPARTMENT:	ACCOUNT NO.
Utilities - Stormwater	Public Works	560-8601-489

SOUTH SKUNK RIVER IMPROVEMENTS **PROJECT STATUS:** New

DESCRIPTION/JUSTIFICATION
Following the floods of 2010, a comprehensive Flood Mitigation Study was completed. On December 10, 2013, the City Council approved a series of flood mitigation measures. These included discrete elements targeted at undertaking a "stream restoration" of Ioway Creek, working with IDOT to improve the conveyance capacity of the U.S. Highway 30 bridge, working through the Ioway Creek Watershed Management Authority to pursue flood mitigation alternatives in the upper reaches of the watershed, and conducting a workshop to review and discuss the range of possible floodplain regulatory approaches.

COMMENTS
The Iowa DOT has programmed improvements to the U.S. Highway 30 bridge in the coming years, with a fall 2024 bid letting and construction in 2025 and 2026.

Due to river capacity constraints with the U.S. Highway 30 bridges, the design of the SE 16th Street bridge was established to overtop with a 100-year flood event. Considering the Iowa DOT's plans to move forward with capacity changes, a project to analyze capacity increase options for the SE 16th Street bridge is included in this program for FY 2021/22 with a project to be incorporated in a future year's CIP.

For the increased bridge capacity to not negatively impact landowners downstream, flood reduction improvements with improved water quality benefits have been identified along the South Skunk River between East 13th Street and SE 16th Street as shown in FY 2023/24 in this CIP. An analysis indicates that a stormwater management facility (e.g. wetland, basin) south of East 13th Street could take the storm water from the existing pipes and disconnect 266 acres of drainage area that currently discharges directly into South Skunk River. Planned improvements at the Water Pollution Control facility utilizing State Revolving Fund (SRF) financing would facilitate leveraging the $2.1 million in SRF grant funding show in FY 2023/24.

LOCATION
South Skunk River (SE 16th Street to East 13th Street)

	TOTAL	2021/22	2022/23	2023/24	2024/25	2025/26
COST:						
Land Acquisition	2,100,000			2,100,000		
Engineering	25,000	25,000				
TOTAL	**2,125,000**	**25,000**		**2,100,000**		
FINANCING:						
Road Use Tax	25,000	25,000				
State Revolving Fund (SRF) Grant Program	2,100,000			2,100,000		
TOTAL	**2,125,000**	**25,000**		**2,100,000**		

PROGRAM - ACTIVITY:	**DEPARTMENT:**	**ACCOUNT NO.**
Utilities - Stormwater	Public Works	060-8670-489

UTILITIES - RESOURCE RECOVERY

PROJECT/FUNDING SOURCE	TOTAL	2021/22	2022/23	2023/24	2024/25	2025/26	Page
PROJECT:							
Resource Recovery System Improvements	2,074,750	444,650	374,100	785,700	246,300	224,000	81
TOTAL PROJECT EXPENDITURES	**2,074,750**	**444,650**	**374,100**	**785,700**	**246,300**	**224,000**	
FUNDING SOURCES:							
City:							
Resource Recovery Fund	2,074,750	444,650	374,100	785,700	246,300	224,000	
TOTAL FUNDING SOURCES	**2,074,750**	**444,650**	**374,100**	**785,700**	**246,300**	**224,000**	

RESOURCE RECOVERY SYSTEM IMPROVEMENTS **PROJECT STATUS:** Cost Change

DESCRIPTION/JUSTIFICATION

This program is to purchase new and replacement components and equipment at the Resource Recovery Plant. Also included is funding for materials for two annual preventive maintenance projects (replacement of the rotary disc screen rollers (RDS) and chains, and rebuilding the C-1 conveyor). Resource Recovery personnel perform the work to complete the preventive maintenance projects.

COMMENTS

2021/22 Preventive maintenance materials for the replacement of the RDS rollers and chains ($48,000); conveyor upgrades ($19,550); #1 mill armored teeth and combs ($41,100); DPH circuit breaker to starter conversion ($78,000); #1 mill planetary ($50,000); kiln ($8,000); roof replacement/remove skylights over processing area ($200,000)

2022/23 Preventive maintenance materials for the replacement of the RDS rollers and chains ($46,250); conveyor upgrades ($19,550); #1 mill armored teeth and combs ($39,300); electrical breaker upgrade ($20,000); replacement conveyor belts ($7,000); #1 mill planetary ($50,000); 40-yard roll off container ($6,000); overhead crane upgrade ($150,000); customer convenience center/HHM ($30,000); north office/control room remodel ($6,000)

2023/24 Preventive maintenance materials for the replacement of the RDS rollers and chains ($48,250); conveyor upgrades ($21,500); #1 mill armored teeth and combs ($40,250); replace C-2 belt ($28,000); replace in-plant air knives ($10,000); replacement conveyor belts ($3,500); #1 mill hydraulic pump ($50,000); electric trolley for chain hoist ($6,000); tipping floor booth ($25,000); #1 mill planetary motor/drum motor ($30,000); fire system air compressor ($15,000); 40-yard roll off container ($6,200); replace east truck bay approach concrete ($40,000); remodel locker room ($12,000); cold storage building ($450,000)

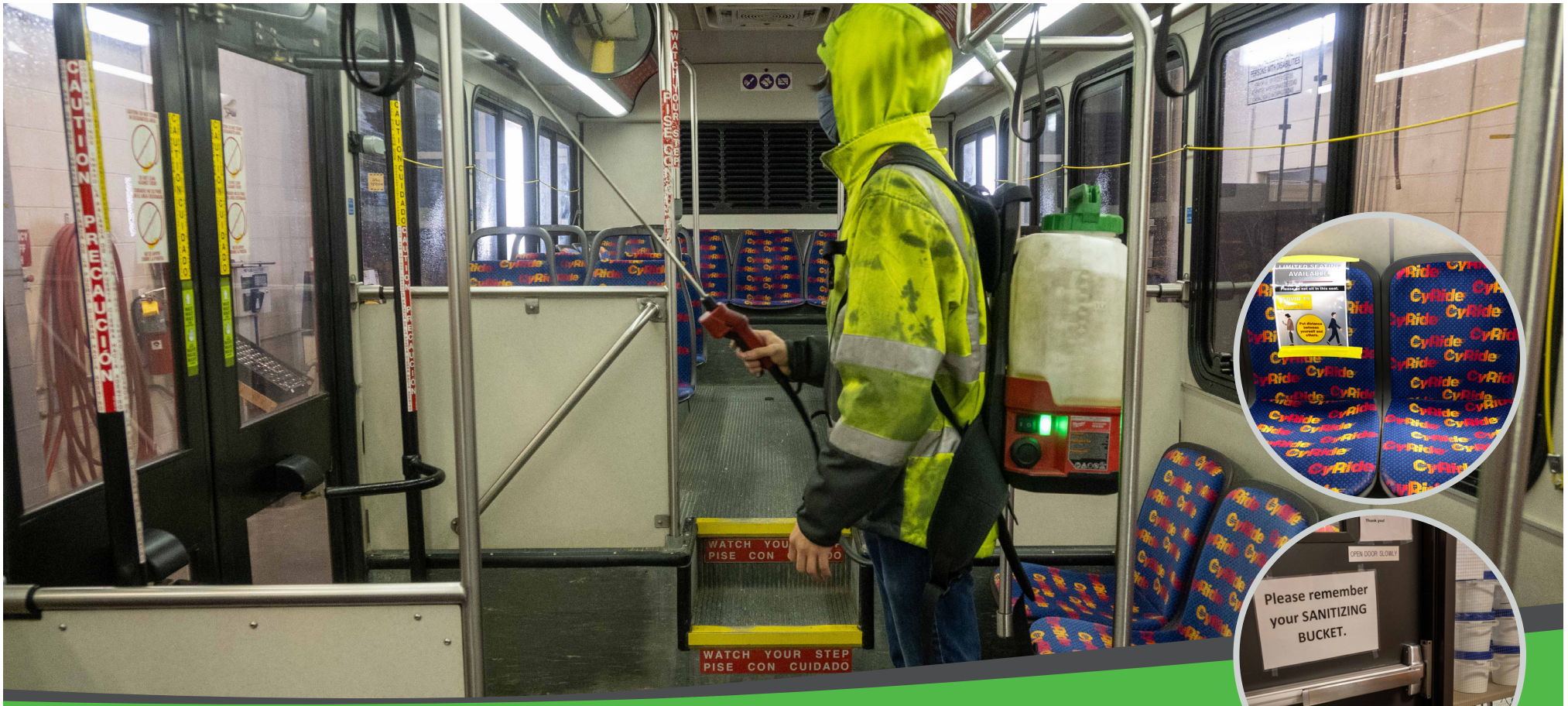
2024/25 Preventive maintenance materials for the replacement of the RDS rollers and chains ($48,250); conveyor upgrades ($21,500); #1 mill armored teeth and combs ($40,250); conveyor chutes ($15,000); one 40-yard roll off container ($6,300); dust pipe replacement ($60,000); #1 mill rotor replacement ($55,000)

2025/26 Preventive maintenance materials for the replacement of the RDS rollers and chains ($49,000); conveyor upgrades ($22,000); #1 mill armored teeth and combs ($41,000); replace C-7 belt ($32,000); #1 mill counter comb door ($50,000); #1 mill planetary motor/drum motor ($30,000)

		TOTAL	2021/22	2022/23	2023/24	2024/25	2025/26
COST:							
System Improvements		2,074,750	444,650	374,100	785,700	246,300	224,000
	TOTAL	**2,074,750**	**444,650**	**374,100**	**785,700**	**246,300**	**224,000**
FINANCING:							
Resource Recovery Fund		2,074,750	444,650	374,100	785,700	246,300	224,000
	TOTAL	**2,074,750**	**444,650**	**374,100**	**785,700**	**246,300**	**224,000**

PROGRAM - ACTIVITY:	**DEPARTMENT:**	**ACCOUNT NO.**
Utilities - Resource Recovery	Public Works	590-9003-489

This page intentionally left blank



TRANSPORTATION

CITY OF Ames™

TRANSPORTATION

	TOTAL	2021/22	2022/23	2023/24	2024/25	2025/26	Page
EXPENDITURES:							
Street Improvements	63,176,000	13,020,000	12,936,000	11,525,000	14,070,000	11,625,000	85
Shared Use Path System	4,838,800	1,233,800	905,000	950,000	600,000	1,150,000	98
Traffic Improvements	17,330,750	2,489,900	2,588,000	3,903,500	3,426,600	4,922,750	103
Street Rehabilitation	3,401,000	471,000	1,340,000	580,000	580,000	430,000	111
Transit System	21,936,493	3,801,044	6,985,402	3,049,925	4,004,854	4,095,268	117
Airport	1,483,334	341,667	866,667	-	275,000	-	123
TOTAL EXPENDITURES	**112,166,377**	**21,357,411**	**25,621,069**	**20,008,425**	**22,956,454**	**22,223,018**	
FUNDING SOURCES:							
Debt:							
G.O. Bonds	57,226,820	10,355,400	11,834,200	11,075,700	10,897,600	13,063,920	

TRANSPORTATION, continued

	TOTAL	2021/22	2022/23	2023/24	2024/25	2025/26
FUNDING SOURCES, continued						
City:						
Road Use Tax	9,783,530	1,531,600	1,599,400	1,951,800	2,309,100	2,391,630
Local Option Sales Tax	3,746,800	1,036,800	875,000	700,000	575,000	560,000
Water Utility Fund	775,000	75,000	75,000	475,000	75,000	75,000
Sewer Utility Fund	500,000	75,000	75,000	200,000	75,000	75,000
Stormwater Utility Fund	250,000	50,000	50,000	50,000	50,000	50,000
Transit Fund	5,212,482	1,219,514	1,500,918	830,985	831,491	829,574
Parking Reserve Fund	-	-	-	-	-	-
Airport Construction Fund	157,084	42,917	86,667	-	27,500	-
Total City Funding	20,424,896	4,030,831	4,261,985	4,207,785	3,943,091	3,981,204
Other:						
MPO/STP Funds	6,153,000	2,659,000	-	-	3,104,000	390,000
Federal/State Grants	26,975,411	4,013,430	8,684,884	4,724,940	4,764,263	4,787,894
Iowa State University	60,000	-	60,000	-	-	-
Federal Aviation Administration	1,326,250	298,750	780,000	-	247,500	-
Total Other Funding	34,514,661	6,971,180	9,524,884	4,724,940	8,115,763	5,177,894
TOTAL FUNDING SOURCES	**112,166,377**	**21,357,411**	**25,621,069**	**20,008,425**	**22,956,454**	**22,223,018**

TRANSPORTATION - STREET IMPROVEMENTS

PROJECT/FUNDING SOURCE	TOTAL	2021/22	2022/23	2023/24	2024/25	2025/26	Page
PROJECT:							
Arterial Street Pavement Improvements	3,575,000	1,700,000	750,000	1,125,000	-	-	87
Collector Street Pavement Improvements	7,425,000	2,400,000	1,500,000	1,275,000	750,000	1,500,000	88
Concrete Pavement Improvements	16,140,000	5,100,000	3,300,000	950,000	3,390,000	3,400,000	89
Asphalt Street Pavement Improvements	14,600,000	2,500,000	3,000,000	2,700,000	2,900,000	3,500,000	90
Seal Coat Street Pavement Improvements	8,750,000	750,000	750,000	1,750,000	2,750,000	2,750,000	91
Downtown Street Pavement Improvements	745,000	245,000	250,000	-	250,000	-	92
Right-of-Way Restoration	1,625,000	325,000	325,000	325,000	325,000	325,000	93
CyRide Route Pavement Improvements	4,111,000	-	2,911,000	1,200,000	-	-	94
Alley Pavement Improvements Program	600,000	-	150,000	150,000	150,000	150,000	95
Campustown Public Improvements	1,725,000	-	-	1,725,000	-	-	96
South 16th Street Roadway Widening	3,880,000	-	-	325,000	3,555,000	-	97
TOTAL PROJECT EXPENDITURES	**63,176,000**	**13,020,000**	**12,936,000**	**11,525,000**	**14,070,000**	**11,625,000**	

TRANSPORTATION - STREET IMPROVEMENTS, continued

PROJECT/FUNDING SOURCE	TOTAL	2021/22	2022/23	2023/24	2024/25	2025/26
FUNDING SOURCES:						
Debt:						
G.O. Bonds	53,661,000	10,195,000	10,925,000	10,600,000	10,641,000	11,300,000
City:						
Road Use Tax	700,000	125,000	125,000	200,000	125,000	125,000
Water Utility Fund	775,000	75,000	75,000	475,000	75,000	75,000
Sewer Utility Fund	500,000	75,000	75,000	200,000	75,000	75,000
Stormwater Utility Fund	250,000	50,000	50,000	50,000	50,000	50,000
Total City Funding	2,225,000	325,000	325,000	925,000	325,000	325,000
Other:						
MPO/STP Funds	5,604,000	2,500,000	-	-	3,104,000	-
Federal/State Grants	1,686,000	-	1,686,000	-	-	-
Total Other Funding	7,290,000	2,500,000	1,686,000	-	3,104,000	-
TOTAL FUNDING SOURCES	**63,176,000**	**13,020,000**	**12,936,000**	**11,525,000**	**14,070,000**	**11,625,000**

ARTERIAL STREET PAVEMENT IMPROVEMENTS **PROJECT STATUS:** Site Change

DESCRIPTION/JUSTIFICATION
This annual program utilizes current repair and reconstruction techniques to improve arterial streets with asphalt or concrete. These pavement improvements are needed to restore structural integrity, serviceability, and rideability. Targeted streets are reaching a point of accelerated deterioration. By improving these streets prior to excessive problems, the service life will be extended.

COMMENTS
Improving these streets will reduce maintenance costs. This reduction will allow for additional and earlier maintenance of other streets.

The site change is due to adding rehabilitation of Hyland Avenue in FY 2023/24.

LOCATION

2021/22	North Dakota Avenue (UPRR to Ontario Street) and Ontario Street (North Dakota Avenue to Woodstock Avenue)
2022/23	Airport Road (University Boulevard to South Riverside Drive)
2023/24	24th Street (Grand Avenue east and west, approximately 300 feet each) and Hyland Avenue (Lincoln Way to Ontario Street)

	TOTAL	2021/22	2022/23	2023/24	2024/25	2025/26
COST:						
Engineering	575,000	200,000	150,000	225,000		
Construction	3,000,000	1,500,000	600,000	900,000		
TOTAL	**3,575,000**	**1,700,000**	**750,000**	**1,125,000**		
FINANCING:						
G.O. Bonds	2,675,000	800,000	750,000	1,125,000		
MPO/STP Funds	900,000	900,000				
TOTAL	**3,575,000**	**1,700,000**	**750,000**	**1,125,000**		

PROGRAM - ACTIVITY:	DEPARTMENT:	ACCOUNT NO.
Transportation - Street Improvements	Public Works	320-8142-439
		382-8142-439

COLLECTOR STREET PAVEMENT IMPROVEMENTS **PROJECT STATUS:** Cost Change

DESCRIPTION/JUSTIFICATION
This is the annual program for reconstruction or rehabilitation of collector streets. Locations are chosen in accordance with the most current street condition inventory.

COMMENTS
The Hoover Avenue project in FY 2021/22 will include Long Range Transportation Plan bicycle projects “ON 4” and “OFF 23” ($10,000).

The Woodland Street project in FY 2022/23 will include the City’s portion of Long Range Transportation Plan bicycle project “ON 21” ($10,000)

The cost change is due to the above bike facilities shifting from on-street pavements markings to post-mounted signs, as included in the updated Long Range Transportation Plan.

The Sixth Street project in FY 2023/24 will include on-street bike facilities to continue existing bike lanes, with an estimated cost of $75,000.

Collector street pavement improvements should result in lower street maintenance costs.

LOCATION

2021/22 Hoover Avenue (24th Street to Top-O-Hollow Road)
2022/23 Woodland Street (Hickory Drive to Forest Glen)
2023/24 Sixth Street (Brookridge Avenue to Northwestern Avenue)
2024/25 Oakland Street (Hawthorne Avenue to Franklin Avenue)
2025/26 West Street (Crane Avenue to Hillcrest Avenue)

	TOTAL	2021/22	2022/23	2023/24	2024/25	2025/26
COST:						
Engineering	1,325,000	400,000	300,000	200,000	125,000	300,000
Construction	6,100,000	2,000,000	1,200,000	1,075,000	625,000	1,200,000
TOTAL	**7,425,000**	**2,400,000**	**1,500,000**	**1,275,000**	**750,000**	**1,500,000**
FINANCING:						
G.O. Bonds	7,350,000	2,400,000	1,500,000	1,200,000	750,000	1,500,000
Road Use Tax	75,000			75,000		
TOTAL	**7,425,000**	**2,400,000**	**1,500,000**	**1,275,000**	**750,000**	**1,500,000**

PROGRAM - ACTIVITY:	**DEPARTMENT:**	**ACCOUNT NO.**
Transportation - Street Improvements	Public Works	382-8130-439

CONCRETE PAVEMENT IMPROVEMENTS **PROJECT STATUS:** Cost Change Revenue Change

DESCRIPTION/JUSTIFICATION
This annual program is to rehabilitate or reconstruct concrete street sections that have deteriorated in order to prevent premature breakdown of the pavement. This work will provide enhanced rideability to residents and visitors.

COMMENTS
Repair of these streets will reduce maintenance and repairs needed for them. The Clark Avenue project in FY 2024/25 will include a portion of the Long Range Transportation Plan project "SH 10" which will be accomplished using post-mounted signs.

The cost and revenue changes are due to the FY 2021/22 project (South Kellogg Avenue) on-street bike treatment no longer being included in the long-range transportation plan and the FY 2024/25 project (Clark Avenue) on-street bike facilities now being post-mounted signs. The FY 2023/24 construction estimate has been updated resulting in a higher estimated cost. The FY 2024/25 (Campus Avenue) project limits have been changed to extend to Oakland Street, through community prioritization of pavement conditions.

LOCATION

2021/22	North Second Street (Maple Avenue to Elm Avenue) ($650,000 G.O. Bonds); South Kellogg Avenue (South Second Street to South Third Street) ($250,000 G.O. Bonds); and 24th Street (Stange Road to UPRR) and Stange Road (Blankenburg Drive to 24th Street) ($2,600,000 G.O. Bonds and $1,600,000 MPO/STP Funds)
2022/23	Ridgewood Avenue/Brookridge Avenue/Lee Street/Ninth Street area and North Loop Drive
2023/24	Prairie View West
2024/25	Campus Avenue (Lincoln Way to Oakland Street), Sunset Drive (Ash Avenue to Beach Avenue), and Clark Avenue (Ninth Street to 13th Street)
2025/26	Seventh Street (Grand Avenue to Burnett Avenue) and 10th Street (Grand Avenue to Duff Avenue)

	TOTAL	2021/22	2022/23	2023/24	2024/25	2025/26
COST:						
Engineering	3,160,000	1,000,000	660,000	140,000	680,000	680,000
Construction	13,000,000	4,110,000	2,640,000	810,000	2,720,000	2,720,000
TOTAL	**16,160,000**	**5,110,000**	**3,300,000**	**950,000**	**3,400,000**	**3,400,000**
FINANCING:						
G.O. Bonds	14,540,000	3,500,000	3,300,000	950,000	3,390,000	3,400,000
MPO/STP Funds	1,600,000	1,600,000				
TOTAL	**16,140,000**	**5,100,000**	**3,300,000**	**950,000**	**3,390,000**	**3,400,000**

PROGRAM - ACTIVITY:	DEPARTMENT:	ACCOUNT NO.
Transportation - Street Improvements	Public Works	320-8167-439, 382-8167-439

ASPHALT STREET PAVEMENT IMPROVEMENTS **PROJECT STATUS:** Cost Change Site Change

DESCRIPTION/JUSTIFICATION

This is the annual program for reconstruction and resurfacing (rehabilitation) of asphalt streets, typically located within residential neighborhoods. Streets within residential subdivisions have been installed using full-depth asphalt pavement since mid-1970. Full-depth replacement of these streets has become necessary due to structural pavement failure. Rehabilitation of existing asphalt streets is possible where the base asphalt layer is solid, but the surface course has failed. This program was created in accordance with City Council's goal of strengthening our neighborhoods.

COMMENTS

Reconstructing these streets will reduce maintenance costs.

The cost and site change are a result of updated cost estimates for the FY 2022/23 projects, adding Roosevelt Avenue in FY 2023/24, and adding Garfield Avenue, Woodstock Avenue, and Windsor Court in FY 2024/25. Illinois Avenue and Oklahoma Drive have been delayed to FY 2025/26 when other streets in the neighborhood are also included to maximize cost efficiency.

LOCATION

2021/22	Opal Drive (Jewel Drive to Crystal Street); Opal Circle; Harcourt Drive (Garnet Drive to Jewel Drive); Turquoise Circle; and Top-O-Hollow Road (Bloomington Road to Dawes Drive)
2022/23	Oakwood Road (State Avenue to University Boulevard), and 28th Street (Hoover Avenue to Ferndale Avenue)
2023/24	Phoenix Circle, Curtiss Avenue (13th Street to 16th Street), Marston Avenue (13th Street to 16th Street), Roosevelt Avenue (13th Street to 16th Street), Prairie View East, North Riverside Drive, and East Seventh Street (Crawford Avenue east to end)
2024/25	Toronto Street (North Dakota Avenue to Garfield Avenue), Garfield Avenue (north and south of Ontario Street), Woodstock Avenue, and Windsor Court
2025/26	Hillcrest Avenue, Ellis Street, Kentucky Avenue, Illinois Avenue, Indiana Avenue, Oklahoma Drive and Delaware Avenue (North Dakota Avenue to Ontario Street)

	TOTAL	2021/22	2022/23	2023/24	2024/25	2025/26
COST:						
Engineering	2,460,000	375,000	600,000	525,000	435,000	525,000
Construction	12,140,000	2,125,000	2,400,000	2,175,000	2,465,000	2,975,000
TOTAL	**14,600,000**	**2,500,000**	**3,000,000**	**2,700,000**	**2,900,000**	**3,500,000**
FINANCING:						
G.O. Bonds	14,600,000	2,500,000	3,000,000	2,700,000	2,900,000	3,500,000
TOTAL	**14,600,000**	**2,500,000**	**3,000,000**	**2,700,000**	**2,900,000**	**3,500,000**

PROGRAM - ACTIVITY:	DEPARTMENT:	ACCOUNT NO.
Transportation - Street Improvements	Public Works	382-8115-439

SEAL COAT STREET PAVEMENT IMPROVEMENTS **PROJECT STATUS:** No Change

DESCRIPTION/JUSTIFICATION

This is the annual program for removal of built-up seal coat from streets with asphalt surface. This program restores surface texture, corrects structural deficiencies, removes built-up seal coat, and prevents deterioration of various streets. This resurfacing process results in better riding surfaces, increased safety with improved surface texture, and increased life expectancy of streets. Built-up seal coat on streets causes excess crown which results in vehicles dragging at driveway entrances. Complete removal of this built-up seal coat allows for repair to curb and gutter and placement of four inches of asphalt surface.

COMMENTS

The areas to be resurfaced are chosen each spring based on the current street condition inventory and funding availability. Funding for this program may vary from year to year in order to maintain a consistent overall bond issue each year over five years. Cost estimates include funding for concrete curb and gutter repairs that need to be made prior to street asphalt being placed, and also include pedestrian improvements to meet the most recent state and federal accessibility requirements.

Street maintenance operation costs for patching will be reduced for the streets involved in this program.

The 2020 Residential Satisfaction Survey respondents indicated that reconstructing existing streets is the top capital improvement priority with 83% responding as somewhat or very important. A majority of local streets with poorer than average pavement conditions were constructed in seal coat and are now in need of reconstruction. The fourth and fifth years of this program have been increased to fund a focus of seal coat reconstruction projects in response to these survey results.

	TOTAL	2021/22	2022/23	2023/24	2024/25	2025/26
COST:						
Engineering	1,285,000	112,500	112,500	260,000	400,000	400,000
Construction	7,465,000	637,500	637,500	1,490,000	2,350,000	2,350,000
TOTAL	**8,750,000**	**750,000**	**750,000**	**1,750,000**	**2,750,000**	**2,750,000**
FINANCING:						
G.O. Bonds	8,750,000	750,000	750,000	1,750,000	2,750,000	2,750,000
TOTAL	**8,750,000**	**750,000**	**750,000**	**1,750,000**	**2,750,000**	**2,750,000**

PROGRAM - ACTIVITY:	DEPARTMENT:	ACCOUNT NO.
Transportation - Street Improvements	Public Works	382-8101-439

DOWNTOWN STREET PAVEMENT IMPROVEMENTS **PROJECT STATUS:** No Change

DESCRIPTION/JUSTIFICATION

This annual program is for the rehabilitation/reconstruction of streets and alleys within the downtown area (Lincoln Way to Seventh Street and Grand Avenue to Duff Avenue). These projects involve pavement reconstruction, rehabilitation of storm and sanitary sewers, and streetscapes. This program will meet the recommendations of the Downtown Improvements Study for the side streets in the downtown area.

COMMENTS

Improvements to the streets in the downtown area will enhance the downtown business district.

LOCATION

2021/22 East/west alley north of Lincoln Way (Duff Avenue to Sherman Avenue)
2022/23 North/south alley (between Duff Avenue and Douglas Avenue, by Adams Funeral Home)
2024/25 East/west alley north of Lincoln Way (Sherman Avenue to Kellogg Avenue)

	TOTAL	2021/22	2022/23	2023/24	2024/25	2025/26
COST:						
Engineering	105,000	35,000	35,000		35,000	
Construction	640,000	210,000	215,000		215,000	
TOTAL	**745,000**	**245,000**	**250,000**		**250,000**	
FINANCING:						
G.O. Bonds	745,000	245,000	250,000		250,000	
TOTAL	**745,000**	**245,000**	**250,000**		**250,000**	

PROGRAM - ACTIVITY:	DEPARTMENT:	ACCOUNT NO.
Transportation - Street Improvements	Public Works	382-8153-439

RIGHT-OF-WAY RESTORATION **PROJECT STATUS:** No Change

DESCRIPTION/JUSTIFICATION
In recent years, staff has continued to observe and analyze restoration of the right-of-way areas associated with CIP projects. Some areas have been restored with sod, while other areas have been restored using seed or dormant seed. Restoration appears to depend on the weather at the time of installation. In areas where vegetation is not anticipated to be successful, other forms of restoration have been used, such as pervious pavement or standard concrete. This program will enable better restoration through a separate contract with a contractor specializing in vegetation establishment (instead of having this as a subcontract in each CIP contract as has been past practice).

COMMENTS
Conditions for each restoration area will be considered independently to select the appropriate and sustainable alternative. Restoration examples include sod, native turf, and pervious and standard colored/stained concrete.

LOCATION
Various locations (coordinated with Public Works streets and utility projects)

	TOTAL	2021/22	2022/23	2023/24	2024/25	2025/26
COST:						
Engineering	200,000	40,000	40,000	40,000	40,000	40,000
Construction	1,425,000	285,000	285,000	285,000	285,000	285,000
TOTAL	**1,625,000**	**325,000**	**325,000**	**325,000**	**325,000**	**325,000**
FINANCING:						
Road Use Tax	625,000	125,000	125,000	125,000	125,000	125,000
Water Utility Fund	375,000	75,000	75,000	75,000	75,000	75,000
Sewer Utility Fund	375,000	75,000	75,000	75,000	75,000	75,000
Storm Water Utility Fund	250,000	50,000	50,000	50,000	50,000	50,000
TOTAL	**1,625,000**	**325,000**	**325,000**	**325,000**	**325,000**	**325,000**

PROGRAM - ACTIVITY:	**DEPARTMENT:**	**ACCOUNT NO.**
Transportation - Street Improvements	Public Works	Various

CYRIDE ROUTE PAVEMENT IMPROVEMENTS **PROJECT STATUS:** Cost Change Revenue Change

DESCRIPTION/JUSTIFICATION
This is the annual program for pavement improvements to streets that are or were bus routes.

These streets were not designed or built for continuous bus loading. With these streets now designated as bus routes, accelerated deterioration of the street surface has occurred. Pavement improvements will restore street sections that will carry higher traffic volumes.

COMMENTS
Improving these streets will reduce maintenance needs for them. This reduction will allow for additional and earlier maintenance of other streets, which will prolong their useful life.

Bike facilities will be included in the FY 2022/23 project on Lincoln Way from Marshall Avenue to Franklin Avenue. The bike facilities will consist of off-street improvements with an estimated cost of $172,500.

The cost change is due to the project limits in FY 2022/23 (Lincoln Way) being extended from Marshall Avenue in prior CIPs to Beedle Drive/Hickory Drive as a result of extended pavement failure. The revenue change is due to the FY 2022/23 project award of State Transportation Block Grant (STBG) funds through the Ames Area MPO.

LOCATION

2022/23 Lincoln Way (Beedle Drive/Hickory Drive to Franklin Avenue)
2023/24 Dickinson Avenue (Mortensen Road to Steinbeck Street) and Steinbeck Street (Dickinson Avenue to South Dakota Avenue)

	TOTAL	2021/22	2022/23	2023/24	2024/25	2025/26
COST:						
Engineering	730,000		580,000	150,000		
Construction	3,381,000		2,331,000	1,050,000		
TOTAL	**4,111,000**		**2,911,000**	**1,200,000**		
FINANCING:						
G.O. Bonds	2,425,000		1,225,000	1,200,000		
STBG Funds	1,686,000		1,686,000			
TOTAL	**4,111,000**		**2,911,000**	**1,200,000**		

PROGRAM - ACTIVITY: **DEPARTMENT:** **ACCOUNT NO.**

Transportation - Street Improvements Public Works

ALLEY PAVEMENT IMPROVEMENTS PROGRAM **PROJECT STATUS:** New

DESCRIPTION/JUSTIFICATION
This new program is to reconstruct existing paved alleys were the structural integrity of the existing pavement has diminished beyond repair. These alleys are primarily in the area north of Downtown, however projects as part of this CIP program can be community-wide if the adjacent properties (or the City) have paid for the prior pavement placement.

COMMENTS
The alleys will be evaluated during FY 2021/22 for starting this new program in FY 2022/23.

LOCATION
To be determined. Priority locations will be included in the next CIP update, following the evaluation.

	TOTAL	2021/22	2022/23	2023/24	2024/25	2025/26
COST:						
Engineering	100,000		25,000	25,000	25,000	25,000
Construction	500,000		125,000	125,000	125,000	125,000
TOTAL	**600,000**		**150,000**	**150,000**	**150,000**	**150,000**
FINANCING:						
G.O. Bonds	600,000		150,000	150,000	150,000	150,000
TOTAL	**600,000**		**150,000**	**150,000**	**150,000**	**150,000**

PROGRAM - ACTIVITY:	**DEPARTMENT:**	**ACCOUNT NO.**
Transportation - Street Improvements	Public Works	

CAMPUSTOWN PUBLIC IMPROVEMENTS **PROJECT STATUS:** Revenue Change Cost Change

DESCRIPTION/JUSTIFICATION

This project includes public infrastructure improvements that complement the project being constructed in 2020 in Campustown. The 200-block of Welch Avenue project included in this program will involve sanitary sewer, storm sewer, and roadway pavement improvements. Multi-modal improvements in the form of bike lanes in each direction are included in the 2020 construction project and would be continued into the 200-block improvements.

COMMENTS

The sanitary sewers and water mains along a portion of Welch Avenue (Chamberlain Street to Hunt Street) date back to the early 1900s. Storm sewer capacity and water quality also will be analyzed as part of this project. Due to its age, multi-modal improvements, and well as the increased demand from redevelopment, the infrastructure will need to be reconstructed. These improvements will be coupled with new pavement improvements on Welch Avenue.

Bicycle facilities as part of this project ("ON 16"—Welch Avenue on-street treatment from Mortensen Road to Union Drive) are estimated to cost $120,000, were part of the FY 2019/20 project, and will be incorporated into the FY 2023/24 projects.

The cost change is due to adding in the water system improvements that were not awarded during the previous phase of construction on Welch Avenue.

LOCATION

Sanitary sewers: Welch Avenue (Chamberlain Street to Hunt Street) and Chamberlain Place
Water main: Welch Avenue (Chamberlain Street to Knapp Street)
Bicycle facilities: Welch Avenue (Mortensen Road to Union Drive)

	TOTAL	2021/22	2022/23	2023/24	2024/25	2025/26
COST:						
Engineering	260,000			260,000		
Construction	1,465,000			1,465,000		
TOTAL	**1,725,000**			**1,725,000**		
FINANCING:						
G.O. Bonds	1,200,000			1,200,000		
Sewer Utility Fund	125,000			125,000		
Water Utility Fund	400,000			400,000		
TOTAL	**1,725,000**			**1,725,000**		

PROGRAM - ACTIVITY:	**DEPARTMENT:**	**ACCOUNT NO.**
Transportation - Street Improvements	Public Works	

SOUTH 16TH STREET ROADWAY WIDENING **PROJECT STATUS:** Cost Change

DESCRIPTION/JUSTIFICATION

This project includes widening South 16th Street to four lanes from University Boulevard to Apple Place with auxiliary lanes and traffic control improvements at Christensen Drive & South Riverside Drive (both into Vet Med), culvert extension at Worrell Creek, and an improved multi-use path along the corridor.

COMMENTS

The proposed project would include:

- Reconstruction of the existing roadway and multi-use trail segment from University Boulevard to the Vet Med trail
- Evaluate raising South 16th Street above the 100-year flood elevation
- Widen the segment of South 16th Street to four lanes consistent with South 16th Street east to South Duff Avenue
- Bike facilities in this project will include the extension of the shared use path along north side of S. 16th Street to University Boulevard ($378,250)
- Add traffic control signals at South Riverside Drive

Identified benefits of the project include:

- Completes the minor arterial linkage from University Boulevard to South Duff Avenue with consistent lane configuration, adequate capacity, and improved safety
- Improves route resiliency during flood events
- Removes bottlenecks at Christensen Drive and South Riverside Drive, improving safety for turning traffic and corridor progression
- Improves efficiency of CyRide bus routes with improved corridor progression and possible bus turnouts at high ridership locations
- Improves pedestrian capacity & safety by separating the multi-use trail from the roadway edge.

The cost change is due to updated cost estimates.

The reconstruction segment lies within Iowa State University boundaries and active coordination with major stakeholders including the College of Veterinary Medicine and the Department of Athletics has been underway through internal university processes.

	TOTAL	2021/22	2022/23	2023/24	2024/25	2024/25
COST:						
Engineering	650,000			325,000	325,000	
Construction	3,230,000				3,230,000	
TOTAL	**3,880,000**			**325,000**	**3,555,000**	
FINANCING:						
G.O. Bonds	776,000			325,000	451,000	
MPO/STBG Funds	3,104,000				3,104,000	
TOTAL	**3,880,000**			**325,000**	**3,555,000**	

PROGRAM - ACTIVITY: Transportation - Street Improvements

DEPARTMENT: Public Works

ACCOUNT NO.

TRANSPORTATION - SHARED USE PATH SYSTEM

PROJECT/FUNDING SOURCE	TOTAL	2021/22	2022/23	2023/24	2024/25	2025/26	Page
PROJECT:							
Shared Use Path System Expansion	3,170,800	970,800	650,000	475,000	350,000	725,000	100
Multi-Modal Roadway Improvements	1,043,000	138,000	130,000	350,000	125,000	300,000	101
Shared Use Path Maintenance	625,000	125,000	125,000	125,000	125,000	125,000	102
TOTAL PROJECT EXPENDITURES	**4,838,800**	**1,233,800**	**905,000**	**950,000**	**600,000**	**1,150,000**	
FUNDING SOURCES:							
City:							
Local Option Sales Tax	3,246,800	936,800	775,000	600,000	475,000	460,000	
Road Use Tax	1,043,000	138,000	130,000	350,000	125,000	300,000	
Total City Funding	4,289,800	1,074,800	905,000	950,000	600,000	760,000	
Other:							
MPO/STP Funds	549,000	159,000	-	-	-	390,000	
TOTAL FUNDING SOURCES	**4,838,800**	**1,233,800**	**905,000**	**950,000**	**600,000**	**1,150,000**	

TRANSPORTATION - SHARED USE PATH SUMMARY

PROJECT BY ACTIVITY	TOTAL	2021/22	2022/23	2023/24	2024/25	2025/26	Page
STREET IMPROVEMENTS:							
Traffic Signal Program	125,000	25,000	25,000	25,000	25,000	25,000	106
Accessibility Enhancement	1,000,000	200,000	200,000	200,000	200,000	200,000	107
Collector Street Improvements	95,000	10,000	10,000	75,000	-	-	88
CyRide Route Pavement Improvements	172,500	-	172,500	-	-	-	94
Campustown Public Improvements	120,000	-	-	120,000	-	-	96
South 16th Street Roadway Widening	378,250	-	-	-	378,250	-	97
Traffic System Capacity Improvements	150,000	-	-	-	-	150,000	108
Total Street Engineering Projects	2,040,750	235,000	407,500	420,000	603,250	375,000	
SHARED USE PATH SYSTEM:							
Shared Use Path System Expansion	3,170,800	970,800	650,000	475,000	350,000	725,000	100
Multi-Modal Roadway Improvements	1,043,000	138,000	130,000	350,000	125,000	300,000	101
Shared Use Path Maintenance	625,000	125,000	125,000	125,000	125,000	125,000	102
Total Shared Use Path Projects	4,838,800	1,233,800	905,000	950,000	600,000	1,150,000	
STREET REHABILITATION:							
Bridge Rehabilitation Program	760,000	-	760,000	-	-	-	115
TOTAL SHARED USE PATH PROJECTS	**7,639,550**	**1,468,800**	**2,072,500**	**1,370,000**	**1,203,250**	**1,525,000**	
AVERAGE EXPENDITURE/FISCAL YEAR	**1,527,910**						

SHARED USE PATH SYSTEM EXPANSION **PROJECT STATUS:** Site Change

DESCRIPTION/JUSTIFICATION

This program provides for construction of shared use paths on street rights-of-way, adjacent to streets, and through greenbelts. The Long Range Transportation Plan (LRTP) identifies those paths that separate bicycle traffic from higher-speed automobile traffic.

COMMENTS

The projects included in this program are subject to acquiring voluntary easements from property owners. Construction of certain segments are contingent upon acquisition of land. Shared use path maintenance costs will increase due to new shared use path construction. The Bike and Pedestrian Master Plan will provide a systemwide conceptual design specific to local community needs in order to create a detailed and consistent non-motorized transportation network, which will ensure that Ames has a transparent and comprehensive plan for bikes and pedestrians. Whereas the MPO's Long Range Transportation Plan provides information on regional connectivity but is prohibited under federal requirements from doing design and working through those local community issues.

LOCATION

2021/22	Ioway Creek (South Skunk River to South Duff Avenue-$680,800); South of Lincoln Way path expansion (Franklin Park to Wilmoth Avenue-$290,000)
2022/23	Grand Avenue path (Lincoln Way to Sixth Street)
2023/24	East Lincoln Way path (Carnegie Avenue to Dayton Avenue-$300,000); Bike & Pedestrian Master Plan ($175,000)
2024/25	Skunk River (South Duff trail connection along Billy Sunday Road)
2025/26	South Dayton Avenue (East Lincoln Way to SE 16th Street)

	TOTAL	2021/22	2022/23	2023/24	2024/25	2025/26
COST:						
Engineering	713,000	168,000	75,000	235,000	90,000	145,000
Land Acquisition	88,800	88,800				
Construction	2,369,000	714,000	575,000	240,000	260,000	580,000
TOTAL	**3,170,800**	**970,800**	**650,000**	**475,000**	**350,000**	**725,000**
FINANCING:						
Local Option Sales Tax	2,621,800	811,800	650,000	475,000	350,000	335,000
MPO/STP Funds	549,000	159,000				390,000
TOTAL	**3,170,800**	**970,800**	**650,000**	**475,000**	**350,000**	**725,000**

PROGRAM - ACTIVITY:	DEPARTMENT:	ACCOUNT NO.
Transportation - Shared Use Paths	Public Works	030-8830-439, 320-8830-439, 030-8831-439

MULTI-MODAL ROADWAY IMPROVEMENTS **PROJECT STATUS:** No Change

DESCRIPTION/JUSTIFICATION

Multi-modal transportation refers to the various modes used by Ames residents to travel the transport system. The modes specifically addressed in this program include bicycling and automobiles. This program is aimed at improving the roadway to create a safer interaction between these modes using alternatives such as improved crossing visibility at intersections, bike detection, and on-street facilities (e.g. bike lanes, sharrows). Bike lanes consist of a portion of the roadway designated by striping, signing, and pavement markings for the preferential or exclusive use of bicyclists. Sharrows, also known as shared lane markings, are markings used in lanes shared by bicycles and motor vehicles when a travel lane is too narrow to provide a standard width bike lane. Bike detection improvements include retrofitting signalized intersections to radar detection to facilitate the movement of bicycles. These improvements retrofit the existing street to provide a useful and appropriate route of travel for these popular modes used by Ames residents. The proposed locations and treatments that are identified in the 2040 Long Range Transportation Plan (LRTP) will be noted by project numbers (e.g. “ON 15”) from the LRTP.

LOCATIONS

2021/22 On-street: South Walnut Avenue (“ON 15”: South Third Street to Lincoln Way)
2022/23 Enhanced intersection crossing: intersection of Grand Avenue and Sixth Street (“CR 5”: improve crossing visibility)
2023/24 Enhanced intersection crossing: “CR 24”, 16th Street and Grand Avenue
2024/25 Enhanced intersection crossing: various locations requiring bicycle and pedestrian detection at arterial street crossings
2025/26 University Boulevard and Lincoln Way (protected intersection improvements)

The locations for this program have been coordinated with the Shared Use Path System Expansion program.

	TOTAL	2021/22	2022/23	2023/24	2024/25	2025/26
COST:						
Engineering	145,000	20,000	30,000	50,000		45,000
Construction	898,000	118,000	100,000	300,000	125,000	255,000
TOTAL	**1,043,000**	**138,000**	**130,000**	**350,000**	**125,000**	**300,000**
FINANCING:						
Road Use Tax	1,043,000	138,000	130,000	350,000	125,000	300,000
TOTAL	**1,043,000**	**138,000**	**130,000**	**350,000**	**125,000**	**300,000**

PROGRAM - ACTIVITY:	DEPARTMENT:	ACCOUNT NO.
Transportation - Shared Use Paths	Public Works	060-8821-439

SHARED USE PATH MAINTENANCE **PROJECT STATUS:** No Change

DESCRIPTION/JUSTIFICATION
The shared use path recreational and transportation system has continued to expand throughout the community. The shared use paths have typically been constructed with five inches of asphalt or concrete pavement. Structural failure, drainage problems, and vegetation infringement are several causes for the need to improve the pavement. This annual program provides for those improvements.

COMMENTS
The pavement management system for shared use paths is used to guide maintenance activities to segments of the shared use path system that are in need of repair. This inventory aids in prioritizing those segments throughout the community.

Spot repairs that are identified will be prioritized by severity of the repair that is needed and then addressed in the operations budget.

Improvement to the shared use path pavement will enhance the safety and usability of the transportation/recreational system and improve the aesthetics of the right-of-way.

Newer rehabilitation techniques such as mastic joint repair and micro-surface treatments are being utilized as a part of this program.

LOCATIONS
Various locations throughout Ames will be identified using pavement management data and user feedback.

	TOTAL	2021/22	2022/23	2023/24	2024/25	2025/26
COST:						
Engineering	90,000	18,000	18,000	18,000	18,000	18,000
Construction	535,000	107,000	107,000	107,000	107,000	107,000
TOTAL	**625,000**	**125,000**	**125,000**	**125,000**	**125,000**	**125,000**
FINANCING:						
Local Option Sales Tax	625,000	125,000	125,000	125,000	125,000	125,000
TOTAL	**625,000**	**125,000**	**125,000**	**125,000**	**125,000**	**125,000**

PROGRAM - ACTIVITY:	DEPARTMENT:	ACCOUNT NO.
Transportation - Shared Use Paths	Public Works	030-8811-439

TRANSPORTATION - TRAFFIC IMPROVEMENTS

PROJECT/FUNDING SOURCE	TOTAL	2021/22	2022/23	2023/24	2024/25	2025/26	Page
PROJECT:							
Intelligent Transportation System Program	8,831,750	1,789,900	1,893,000	2,007,500	1,988,600	1,152,750	105
Traffic Signal Program	1,969,000	400,000	255,000	426,000	438,000	450,000	106
Accessibility Enhancement Program	1,000,000	200,000	200,000	200,000	200,000	200,000	107
Traffic System Capacity Improvements	4,815,000	85,000	190,000	720,000	750,000	3,070,000	108
Regional Transportation Count Program	215,000	15,000	50,000	50,000	50,000	50,000	109
Long Range Transportation Plan Update	500,000	-	-	500,000	-	-	110
TOTAL PROJECT EXPENDITURES	**17,330,750**	**2,489,900**	**2,588,000**	**3,903,500**	**3,426,600**	**4,922,750**	
FUNDING SOURCES:							
Debt:							
G.O. Bonds	2,565,820	160,400	209,200	175,700	256,600	1,763,920	
City:							
Road Use Tax	5,699,530	797,600	764,400	1,121,800	1,479,100	1,536,630	
Local Option Sales Tax	500,000	100,000	100,000	100,000	100,000	100,000	
Total City Funding	6,199,530	897,600	864,400	1,221,800	1,579,100	1,636,630	

TRANSPORTATION - TRAFFIC IMPROVEMENTS, continued

PROJECT/FUNDING SOURCE	TOTAL	2021/22	2022/23	2023/24	2024/25	2025/26
FUNDING SOURCES, continued:						
Other:						
Federal/State Grants	8,565,400	1,431,900	1,514,400	2,506,000	1,590,900	1,522,200
TOTAL FUNDING SOURCES	**17,330,750**	**2,489,900**	**2,588,000**	**3,903,500**	**3,426,600**	**4,922,750**

INTELLIGENT TRANSPORTATION SYSTEM PROGRAM **PROJECT STATUS:** No Change

DESCRIPTION/JUSTIFICATION

The 2040 Ames Area Long Range Transportation Plan (LRTP), which became effective on October 12, 2015, identified a wide range of transportation improvements including those projects that utilize technology referred to as Intelligent Transportation Systems (ITS). The 2045 LRTP shows the completion of the program with Phase 6 implementation. Traffic signal improvements rank as one of the highest priority areas from the Ames Resident Satisfaction Survey.

COMMENTS

In FY 2016/17, staff began the development of a Traffic Network Master Plan that created a detailed inventory and evaluation of the communication network used along the City's signalized corridors. The master plan identified the upgrades necessary to support the modern technologies used to manage transportation. Implementation of the respective phases has been proposed following recommended areas shown in the Traffic Network Master Plan.

Traffic adaptive systems are a form of Intelligent Transportation System infrastructure that conduct real-time optimization of traffic and pedestrian flow at signalized intersections. Traffic adaptive systems provide a significant improvement in efficiency and will provide reliable travel times during all times of the day. Projects in this program have been delayed a year to allow application for congestion mitigation funds.

Phase 1 of this program was Duff Avenue and South Duff Avenue, East 13th Street to Dayton Avenue, and connecting to the Public Works Warehouse.

LOCATION

2021/22 Phase 2: Grand Avenue from Lincoln Way to Bloomington Road (with various network looping)
2022/23 Phase 3: University Boulevard from Lincoln Way to Airport Road (network looping along South 16th Street and South Third/Fourth Streets)
2023/24 Phase 4: Lincoln Way (west Ames), South Dakota Avenue, Mortensen Road
2024/25 Phase 5: Bloomington Road, 24th Street, Stange Road, 13th Street, and North Dakota Avenue (NW Ames)
2025/26 Phase 6: South 16th Street; South Grand Avenue; South Dayton Avenue (network extensions/looping)

	TOTAL	2021/22	2022/23	2023/24	2024/25	2025/26
COST:						
Engineering	693,800	132,600	140,200	148,700	147,300	125,000
Construction	8,137,950	1,657,300	1,752,800	1,858,800	1,841,300	1,027,750
TOTAL	**8,831,750**	**1,789,900**	**1,893,000**	**2,007,500**	**1,988,600**	**1,152,750**
FINANCING:						
G.O. Bonds	1,045,820	160,400	209,200	175,700	256,600	243,920
Road Use Tax	820,530	197,600	169,400	225,800	141,100	86,630
ICAAP Grant Funds	6,965,400	1,431,900	1,514,400	1,606,000	1,590,900	822,200
TOTAL	**8,831,750**	**1,789,900**	**1,893,000**	**2,007,500**	**1,988,600**	**1,152,750**

PROGRAM - ACTIVITY:	DEPARTMENT:	ACCOUNT NO.
Transportation - Traffic Improvements	Public Works	060-7513-439, 320-7513-439, 382-7513-439

TRAFFIC SIGNAL PROGRAM **PROJECT STATUS:** Cost Change

DESCRIPTION/JUSTIFICATION

The Traffic Signal Program is the annual program that provides for replacing older traffic signals and for constructing new traffic signals in the City. This program will result in improved visibility, reliability, and appearance of signals. Although recent advances in technology have elongated the normal, useful life for traffic signal installations well past the previously expected 25 years, some of the older-generation traffic signals still in use exceed their functional age. Components at those installations (including conduits, wiring, signal heads, and poles) need to be completely replaced. This program also provides funding for those maintenance needs as well as the necessary upgrading of the traffic signal system as technology continues to change. In recent years, traffic signal replacements have included radar detection systems instead of in-pavement loop detection systems that had previously been used and frequently failed. Another advantage of the radar detection system is that it detects bicycles in addition to vehicles.

COMMENTS

A continued trend in increasing material costs (specifically for copper wiring and steel for the poles and mast arms) and additional federal design requirements (such as additional ADA facilities) have resulted in an increased cost of a standard traffic signal. The cost for signalized intersection replacements has been increasing by approximately 3% per year based upon historical bid pricing. Staff tracks this trend and will adjust projected funding for this program each annual CIP cycle. When a full replacement is not necessary, staff will identify equipment within existing signal locations that can be replaced to achieve similar operational improvements to a major reconstruction. Bike facilities are included in each signal replacement with an annual cost of $25,000. This funding incorporates multi-modal traffic detection at signals which includes bikes and vehicles.

LOCATIONS

2021/22	University Boulevard & South Fourth Street signal replacement
2022/23	Various equipment upgrades (modernization) at existing signal locations
2023/24	South Duff Avenue/Chestnut Street signal replacement
2024/25	South Duff Avenue/South Third Street
2025/26	University Boulevard and Lincoln Way signal replacement

	TOTAL	2021/22	2022/23	2023/24	2024/25	2025/26
COST:						
Engineering	219,000	45,000	30,000	46,000	48,000	50,000
Construction	1,750,000	355,000	225,000	380,000	390,000	400,000
TOTAL	**1,969,000**	**400,000**	**255,000**	**426,000**	**438,000**	**450,000**
FINANCING:						
Road Use Tax	1,969,000	400,000	255,000	426,000	438,000	450,000
TOTAL	**1,969,000**	**400,000**	**255,000**	**426,000**	**438,000**	**450,000**

PROGRAM - ACTIVITY:	DEPARTMENT:	ACCOUNT NO.
Transportation - Traffic Improvements	Public Works	060-7551-439

ACCESSIBILITY ENHANCEMENT PROGRAM **PROJECT STATUS:** No Change

DESCRIPTION/JUSTIFICATION

This annual program combines sidewalk and ADA ramp improvements with additional accessibility upgrades at traffic signals and other publicly owned parking facilities. This program will provide for removing and replacing sidewalk intersection crosswalk panels and handicap ramps at locations that fail to meet the Americans with Disabilities Act (ADA) requirement to have truncated dome warning panels installed. It also includes retrofitting existing signalized traffic control devices with audible and vibrotactile push-buttons, and upgrading parking stalls to current accessible standards in any on-street location or parking lot owned by the City of Ames. This program may be combined with and used in conjunction with roadway, traffic signal replacement, or shared use path improvement projects for pedestrian ramp reconstruction.

This program provides safer pedestrian facilities and limits the City's liability for injury to residents using public sidewalks that are in a deteriorated condition. The program also improves ADA accessibility at municipal facilities.

COMMENTS

The City Manager's office facilitated a survey of stakeholders to help prioritize the retrofitting of existing traffic signals that currently do not have audible and vibrotactile operation. These locations will be prioritized along with other ADA improvement needs that are identified throughout the year. The annual funding for this program ($200,000) is dedicated to building ADA compliant ramps for both sidewalks and bike paths. These funds are also used to upgrade signalized crossings with accessible push-buttons for both pedestrians and bicycle facilities.

	TOTAL	2021/22	2022/23	2023/24	2024/25	2025/26
COST:						
Engineering	150,000	30,000	30,000	30,000	30,000	30,000
Construction	850,000	170,000	170,000	170,000	170,000	170,000
TOTAL	**1,000,000**	**200,000**	**200,000**	**200,000**	**200,000**	**200,000**
FINANCING:						
Road Use Tax	500,000	100,000	100,000	100,000	100,000	100,000
Local Option Sales Tax	500,000	100,000	100,000	100,000	100,000	100,000
TOTAL	**1,000,000**	**200,000**	**200,000**	**200,000**	**200,000**	**200,000**

PROGRAM - ACTIVITY:	DEPARTMENT:	ACCOUNT NO.
Transportation - Traffic Improvements	Public Works	030-7510-439
		060-7510-439

TRAFFIC SYSTEM CAPACITY IMPROVEMENTS **PROJECT STATUS:** New

DESCRIPTION/JUSTIFICATION

The System Capacity Improvements will address several issues identified in the 2045 Long Range Transportation Plan (LRTP). The 2045 LRTP had several critical intersections that were at or nearing capacity such that improvements we needed. This program will provide for the planning, design, and construction of those improvements.

LOCATION

2021/22 Grand Avenue corridor study (Ninth Street to 24th Street)
2022/23 North growth intersection studies (conceptual design and cost estimation $65,000); U.S. Highway 30 and South Duff interchange study (South 16th Street to Airport Road $125,000)
2023/24 Airport Road improvements (Sam's Club/Danfoss intersection to connection with U.S. Highway 69)
2024/25 13th Street and Grand Avenue intersection improvement (conceptual design and ROW)
2025/26 13th Street and Grand Avenue intersection improvement (construction) (shared use path portion $150,000)

	TOTAL	2021/22	2022/23	2023/24	2024/25	2025/26
COST:						
Engineering	878,000	85,000	190,000	120,000	250,000	233,000
Land/ROW	500,000				500,000	
Construction	3,437,000			600,000		2,837,000
TOTAL	**4,815,000**	**85,000**	**190,000**	**720,000**	**750,000**	**3,070,000**
FINANCING:						
G.O. Bonds	1,520,000					1,520,000
Road Use Tax	2,095,000	85,000	190,000	220,000	750,000	850,000
State Grants	1,200,000			500,000		700,000
TOTAL	**4,815,000**	**85,000**	**190,000**	**720,000**	**750,000**	**3,070,000**

PROGRAM - ACTIVITY:	DEPARTMENT:	ACCOUNT NO.
Transportation - Traffic Improvements	Public Works	060-7521-439

REGIONAL TRANSPORTATION COUNT PROGRAM **PROJECT STATUS:** Cost Change

DESCRIPTION/JUSTIFICATION
This program is the result of an ongoing need for transportation-related data in the Ames regional area. This program will be for the collection and management of travel demand data from all transportation modes including walking, biking, and various forms of motorized travel. Data from this program will be used to track critical transportation system performance measures which are used to analyze and forecast transportation system needs and priorities. Each year consists of an annual base for data collections services.

COMMENTS
The data collectors continuously record traffic volume, speed, and classification on arterial and collector streets throughout the network. This data supports long-range transportation planning and modeling efforts, as well as pavement management, safety analysis, and other system performance measures as needed.

Each year, traffic signal improvements rank as one of the highest priority areas from the Ames Resident Satisfaction Survey.

	TOTAL	2021/22	2022/23	2023/24	2024/25	2025/26
COST:						
Engineering	215,000	15,000	50,000	50,000	50,000	50,000
TOTAL	**215,000**	**15,000**	**50,000**	**50,000**	**50,000**	**50,000**
FINANCING:						
Road Use Tax	215,000	15,000	50,000	50,000	50,000	50,000
TOTAL	**215,000**	**15,000**	**50,000**	**50,000**	**50,000**	**50,000**

PROGRAM - ACTIVITY:	DEPARTMENT:	ACCOUNT NO.
Transportation - Traffic Improvements	Public Works	060-7515-439

LONG RANGE TRANSPORTATION PLAN UPDATE **PROJECT STATUS:** New

DESCRIPTION/JUSTIFICATION

The project shown in FY 2023/24 will be an update to the Long Range Transportation Plan (LRTP) for the Ames region. Typically, an update to the LRTP takes approximately 24 months to complete. The LRTP is federally required to be updated every five years, and therefore the latest date for approving this update is October 27, 2025.

	TOTAL	2021/22	2022/23	2023/24	2024/25	2025/26
COST:						
Engineering	500,000			500,000		
TOTAL	**500,000**			**500,000**		
FINANCING:						
Road Use Tax	100,000			100,000		
MPO Planning Funds	400,000			400,000		
TOTAL	**500,000**			**500,000**		

PROGRAM - ACTIVITY:	**DEPARTMENT:**	**ACCOUNT NO.**
Transportation - Traffic Improvements	Public Works	

TRANSPORTATION - STREET REHABILITATION

	TOTAL	2021/22	2022/23	2023/24	2024/25	2025/26	Page
PROJECT:							
Pavement Restoration	1,250,000	250,000	250,000	250,000	250,000	250,000	112
Main Street Sidewalk Paver Replacement	191,000	191,000	-	-	-	-	113
Right-of-Way Appearance Enhancements	150,000	30,000	30,000	30,000	30,000	30,000	114
Bridge Rehabilitation Program	1,060,000	-	760,000	300,000	-	-	115
Neighborhood Curb Replacement Program	750,000	-	300,000	-	300,000	150,000	116
TOTAL PROJECT EXPENDITURES	**3,401,000**	**471,000**	**1,340,000**	**580,000**	**580,000**	**430,000**	
FUNDING SOURCES:							
Debt:							
G.O. Bonds	1,000,000	-	700,000	300,000	-	-	
City:							
Road Use Tax	2,341,000	471,000	580,000	280,000	580,000	430,000	
Other:							
Iowa State University	60,000	-	60,000	-	-	-	
TOTAL FUNDING SOURCES	**3,401,000**	**471,000**	**1,340,000**	**580,000**	**580,000**	**430,000**	

PAVEMENT RESTORATION **PROJECT STATUS:** No Change

DESCRIPTION/JUSTIFICATION
This annual program is for preventive and proactive maintenance of the streets. This allows for a large variety of possible maintenance activities including, but not limited to, slurry seal, full-depth concrete paving, milling and patching of asphalt, joint sealing, diamond grinding, partial depth patching, and new maintenance techniques to preserve and enhance City streets.

COMMENTS
This program is funded at $250,000 annually to help extend the longevity of the pavement system and supplement the current pavement restoration activities. Priorities for this program are identified using information from the pavement management system and input from citizens and maintenance crews.

LOCATION
Locations will be coordinated with street construction to gain the best possible life cycle of streets.

	TOTAL	2021/22	2022/23	2023/24	2024/25	2025/26
COST:						
Construction	1,250,000	250,000	250,000	250,000	250,000	250,000
TOTAL	**1,250,000**	**250,000**	**250,000**	**250,000**	**250,000**	**250,000**
FINANCING:						
Road Use Tax	1,250,000	250,000	250,000	250,000	250,000	250,000
TOTAL	**1,250,000**	**250,000**	**250,000**	**250,000**	**250,000**	**250,000**

PROGRAM - ACTIVITY:	**DEPARTMENT:**	**ACCOUNT NO.**
Transportation - Street Rehabilitation	Public Works	060-7723-439

MAIN STREET SIDEWALK PAVER REPLACEMENT **PROJECT STATUS:** Cost Change

DESCRIPTION/JUSTIFICATION

This project provides for the replacement of the pavers in the Main Street corridor. These pavers were installed with the Main Street reconstruction project in 1999. At that time, the pavers were an aesthetic upgrade to traditional concrete sidewalks. Over time, the pavers have proven to be a difficult maintenance item. Uneven pavers appear every year, and Public Works Operations crews spend a considerable amount of time to level or replace pavers. Additional pavers are now in short supply as the pavers are not produced anymore. Winter ice control chemicals applied by adjacent business owners have led to accelerated deterioration of the pavers, especially on the southern side of Main Street where the building provides continuous shade in the winter and no sunlight reaches the sidewalk to aid in melting the snow and ice. The replacement technique will be to use a new paver type with much better durability.

COMMENTS

In response to the anticipated COVID-19 related shortfall in Road Use Tax revenues in FY 2019/20, approximately $166,000 in funding allocated to this project was returned to the Road Use Tax fund balance during final amendments to the FY 2019/20 budget. As a result, the funding is being added back in the CIP in FY 2021/22 to restore the funding to complete the project.

The deaccession and removal of the wall at Tom Evans was approved by City Council in the first phase of the project at a cost of approximately $25,000.

Total Project Funding:

2017/18	171,000
2018/19	171,000
2019/20	190,000
2019/20	(166,000) COVID-19 Adjustment
2020/21	88,000
2021/22	191,000
Total	$645,000

LOCATION

Main Street corridor from Douglas Avenue to Duff Avenue (north side and south side sidewalks and crosswalks)

	TOTAL	2021/22	2022/23	2023/24	2024/25	2025/26
COST:						
Construction	191,000	191,000				
TOTAL	**191,000**	**191,000**				
FINANCING:						
Road Use Tax	191,000	191,000				
TOTAL	**191,000**	**191,000**				

PROGRAM - ACTIVITY:	**DEPARTMENT:**	**ACCOUNT NO.**
Transportation - Street Rehabilitation	Public Works	060-7707-439

RIGHT-OF-WAY APPEARANCE ENHANCEMENTS **PROJECT STATUS:** No Change

DESCRIPTION/JUSTIFICATION
This project provides for the enhancement of the rights-of-way in the City of Ames. The funding may be used for a number of elements including retaining walls, entryway enhancements, and median enhancements.

COMMENTS
In addition to retaining wall repairs, the entryway enhancement portion could be used to enhance or repair other right-of-way elements such as decorative signs or monuments.

LOCATION
Various locations

	TOTAL	2021/22	2022/23	2023/24	2024/25	2025/26
COST:						
Right-of-Way Enhancements	150,000	30,000	30,000	30,000	30,000	30,000
TOTAL	**150,000**	**30,000**	**30,000**	**30,000**	**30,000**	**30,000**
FINANCING:						
Road Use Tax	150,000	30,000	30,000	30,000	30,000	30,000
TOTAL	**150,000**	**30,000**	**30,000**	**30,000**	**30,000**	**30,000**

PROGRAM - ACTIVITY:	DEPARTMENT:	ACCOUNT NO.
Transportation - Street Rehabilitation	Public Works	060-7731-439

BRIDGE REHABILITATION PROGRAM **PROJECT STATUS:** Delayed

DESCRIPTION/JUSTIFICATION
This program provides funding for necessary repairs recommended by the Iowa Department of Transportation (IDOT) biennial bridge inspections. The IDOT requires inspections for bridges within the city of Ames.

COMMENTS
The South Fourth Street bridge over Ioway Creek project is delayed one year to FY 2022/23 to help balance Road Use Tax funding shortfalls from the COVID-19 pandemic.

The South Fourth Street bridge over Ioway Creek includes upgrades to allow pedestrian crossing along the south side of the bridge. This is a heavily trafficked pedestrian and bicycle corridor. The project also includes additional trail paving to close the gap between existing infrastructure and the new bridge structure. The revenue change is from Iowa State funding for the connection of the trail on the west side of the Skunk River across Iowa State's property along the south side of South Fourth Street.

The East 13th Street bridge over Skunk River includes concrete repairs to the bridge substructure to extend the life of the structure.

Bicycle facilities will be included in the FY 2022/23 project on the South Fourth Street Bridge Rehabilitation project. The project will widen the bridge to include an off-street, 10-foot wide shared use path.

LOCATION

2022/23 South Fourth Street bridge over Ioway Creek
2023/24 East 13th Street bridge over Skunk River

	TOTAL	2021/22	2022/23	2023/24	2024/25	2025/26
COST:						
Engineering	150,000		100,000	50,000		
Construction	910,000		660,000	250,000		
TOTAL	**1,060,000**		**760,000**	**300,000**		
FINANCING:						
G.O. Bonds	1,000,000		700,000	300,000		
ISU Funding	60,000		60,000			
TOTAL	**1,060,000**		**760,000**	**300,000**		

PROGRAM - ACTIVITY: Transportation - Street Rehabilitation
DEPARTMENT: Public Works
ACCOUNT NO.

NEIGHBORHOOD CURB REPLACEMENT PROGRAM **PROJECT STATUS:** No Change

DESCRIPTION/JUSTIFICATION
This is the annual program for replacement of deteriorated curb and gutter in selected neighborhood areas. Curb and gutter replacement enhances neighborhood and right-of-way aesthetics.

Areas to receive curb and gutter replacement are selected by staff using input of neighborhoods, the condition of the curb, and the extent of needed repairs.

COMMENTS
The Neighborhood Curb Replacement Program decision criteria approved by City Council includes the extent of curb deterioration, the number of residential structures on the block, and the longitudinal grade. Locations are coordinated with other pavement improvement locations in the CIP.

The cost change and delay are due to updated cost estimates for each project location.

LOCATION

2022/23 Murray Drive (Northwestern Avenue to Grand Avenue)
2024/25 East 16th Street (Duff Avenue to Maxwell Avenue)
2025/26 Ferndale Avenue (20th Street to 24th Street)

	TOTAL	2021/22	2022/23	2023/24	2024/25	2025/26
COST:						
Engineering	80,000		30,000		30,000	20,000
Construction	670,000		270,000		270,000	130,000
TOTAL	**750,000**		**300,000**		**300,000**	**150,000**
FINANCING:						
Road Use Tax	750,000		300,000		300,000	150,000
TOTAL	**750,000**		**300,000**		**300,000**	**150,000**

PROGRAM - ACTIVITY: **DEPARTMENT:** **ACCOUNT NO.**

Transportation - Street Rehabilitation Public Works

TRANSPORTATION - TRANSIT

PROJECT/FUNDING SOURCE	TOTAL	2021/22	2022/23	2023/24	2024/25	2025/26	Page
PROJECT:							
Vehicle Replacement & Rehabilitation	16,867,873	2,755,024	6,031,002	2,035,525	2,965,454	3,080,868	118
Building Improvement & Expansion	4,068,920	708,920	840,000	840,000	840,000	840,000	119
Technology Improvements	441,700	241,700	50,000	50,000	50,000	50,000	120
Bus Stop Improvements	230,000	25,000	-	60,000	85,000	60,000	121
CyRide Shop/Office Equipment	328,000	70,400	64,400	64,400	64,400	64,400	122
TOTAL PROJECT EXPENDITURES	**21,936,493**	**3,801,044**	**6,985,402**	**3,049,925**	**4,004,854**	**4,095,268**	
FUNDING SOURCES:							
City:							
Transit Fund	5,212,482	1,219,514	1,500,918	830,985	831,491	829,574	
Other:							
Federal/State Grants	16,724,011	2,581,530	5,484,484	2,218,940	3,173,363	3,265,694	
TOTAL FUNDING SOURCES	**21,936,493**	**3,801,044**	**6,985,402**	**3,049,925**	**4,004,854**	**4,095,268**	

CYRIDE VEHICLE REPLACEMENT & REHABILITATION **PROJECT STATUS:** Cost Change, Revenue Change

DESCRIPTION/JUSTIFICATION

CyRide will replace buses in the fleet as grant funding opportunities arise to ensure vehicles are in a state of good repair, as required by the Federal Transit Administration. CyRide anticipates future state funding for new buses through the state's capital funding allocation process. CyRide has five vehicles used for administrative support in the operations division for drivers to switch shifts. These vehicles are on a four to six-year replacement schedule. Dial-A-Ride vehicles are programmed to be replaced every four to six years. Additionally, $30,000 to $50,000 per year is being programmed for mid-life bus rehabilitation, corrosion repair, and painting.

In total, these purchases are programmed as follows:

2021/22 Replace three 40’ buses ($1,532,628); replace one 40’ bus with a new articulated 60’ bus ($850,000); replace two minibuses ($312,396); mid-life rehabilitation; replace one administrative vehicle
2022/23 Replace three 40’ buses with battery electric buses; replace four 40’ buses; replace one 40’ bus with a new articulated 60’ bus; replace one administrative vehicle; replace the Dial-A-Ride minibus
2023/24 Replace two 40’ buses; replace one 40’ bus with a new articulated 60’ bus; mid-life rehabilitation; replace one administrative vehicle; replace the Dial-A-Ride van
2024/25 Replace five 40’ buses; mid-life rehabilitation; replace one administrative vehicle
2025/26 Replace five 40’ buses; mid-life rehabilitation; replace one administrative vehicle

COMMENTS

The new buses will be funded with 80-85% federal funding, including the State of Iowa’s Iowa Clean Air Attainment Program (ICAAP) funds that are a distribution of federal dollars. For FY 2022/23, a one-time transfer of annual 5307 funding will be used to support the purchase of three new battery electric buses. For FY 2021/22 to FY 2023/24, the Ames Area MPO approved $225,000 each year to assist in funding the purchase of new articulated buses.

	TOTAL	2021/22	2022/23	2023/24	2024/25	2025/26
COST:						
Large Buses - 40' New	13,538,185	1,532,628	5,052,128	1,067,107	2,885,454	3,000,868
Large Buses - 60' New	2,550,000	850,000	850,000	850,000		
Mini Buses - New	312,396	312,396				
Bus Mid-life Rehabilitation	160,000	30,000		30,000	50,000	50,000
Administrative Vehicles	150,000	30,000	30,000	30,000	30,000	30,000
Dial-A-Ride Bus/Van	157,292		98,874	58,418		
TOTAL	**16,867,873**	**2,755,024**	**6,031,002**	**2,035,525**	**2,965,454**	**3,080,868**
FINANCING:						
Transit Fund	3,057,315	566,947	1,146,518	456,585	432,091	455,174
PTMS Funds	12,685,558	1,963,077	4,659,484	1,353,940	2,308,363	2,400,694
STP Funds	1,125,000	225,000	225,000	225,000	225,000	225,000
TOTAL	**16,867,873**	**2,755,024**	**6,031,002**	**2,035,525**	**2,965,454**	**3,080,868**

PROGRAM - ACTIVITY:	DEPARTMENT:	ACCOUNT NO.
Transportation - Transit	CyRide	552-1159-439, 552-1169-439

DESCRIPTION/JUSTIFICATION

CyRide's facility is 37 years old and major components of the building are at the end of their useful life. Additionally, the facility is housing more vehicles than it was originally designed for, creating higher wear and tear on the facility and a need to explore expansion options in the future. As a result, this plan has been developed to keep the current facility in a state of good repair, as required by the Federal Transit Administration.

2021/22 Replace HVAC system phase II ($468,920); exterior facility improvements ($75,000); protection rails for articulated buses ($75,000); concrete replacement ($40,000); A & E services
2022/23 Replace HVAC system phase III; ($487,500); replace fueling system with spill-free fueling ($262,500); concrete replacement; A & E services
2023/24 Water main replacement ($750,000); concrete replacement ($40,000); A & E services
2024/25 Construct an addition onto existing or new facility ($750,000); concrete replacement ($40,000); A & E services
2025/26 Construct an addition onto existing or new facility ($750,000); concrete replacement ($40,000); A & E services

COMMENTS

HVAC projects (phases II and III) will replace units that are 15 to 37 years old in two consecutive fiscal years. Fall protection rails provide additional safety for personnel maintaining the articulated buses. Concrete replacement is budgeted each fiscal year to replace concrete around the facility as it fails. Spill-free fueling replaces the existing system with one that is faster and has less waste. Exterior facility improvements include paint, caulk, and EIFS repair. CyRide has a water main failing under the parking lot that is to be replaced in FY 2023/24. The A & E services would provide technical expertise during the various construction projects, as well as assisting with the preparation of bid documents. This CIP assumes a plan to expand CyRide's facility is developed and that the facility will be built in pieces as funding is identified. To date, CyRide has reserved $715,166 in local match dollars for a grant to begin constructing more facility space.

LOCATION

CyRide, 601 N. University Blvd.

	TOTAL	2021/22	2022/23	2023/24	2024/25	2025/26
COST:						
Architectural/Engineering	250,000	50,000	50,000	50,000	50,000	50,000
Equipment	1,293,920	543,920	750,000			
Construction	2,525,000	115,000	40,000	790000	790000	790000
TOTAL	**4,068,920**	**708,920**	**840,000**	**840,000**	**840,000**	**840,000**
FINANCING:						
Transit Fund	1,376,827	416,827	240,000	240,000	240,000	240,000
State of Iowa - PTIG	2,692,093	292,093	600,000	600,000	600,000	600,000
TOTAL	**4,068,920**	**708,920**	**840,000**	**840,000**	**840,000**	**840,000**

PROGRAM - ACTIVITY:	**DEPARTMENT:**	**ACCOUNT NO.**
Transportation - Transit	CyRide	552-1159-439, 552-1169-439

CYRIDE TECHNOLOGY IMPROVEMENTS **PROJECT STATUS:** Revenue Change Cost Change

DESCRIPTION/JUSTIFICATION

Advancements in technology have grown significantly over the past several years. As a result, CyRide will incorporate the following:

- **Bus Technology:** CyRide will be investing in bus technology that will improve system efficiency and the riding experience for passengers with disabilities. This will be accomplished by adding network capabilities to buses so that load counts per stop can be captured live with automatic passenger counters. This will allow for a faster response to changes in riding patterns. The same network capabilities will also permit bus video to be live-streamed to dispatchers and the police in the event of an incident on a bus. CyRide submitted a new Federal grant application to deploy this technology across the entire large bus fleet. If successful, the goal of full deployment could be accomplished much sooner than anticipated. There will also be an investment in bus display monitors for newly purchased vehicles that will show the next stops along a route to help passengers with disabilities. The same monitors may also be used for advertising.
- **Safety Software:** CyRide has regulatory requirement to develop and certify a Public Transportation Agency Safety Plan (PTASP). Safety is CyRide's number one priority and is of the utmost importance. CyRide developed a robust safety and security program by educating, encouraging, and endorsing a strong culture of safety at all levels. CyRide will invest in safety software to help manage PTASP compliance. This software will improve operating performance, simplify reporting, automate administrative tasks, and provide analytic reporting to help mitigate risks and support safety and continuous improvement.
- **Facility Technology:** Upgrades to facility technology encompasses two main areas, equipment and connectivity. Monitors, computers, and projectors used throughout the facility are over 10 years old and have become obsolete. CyRide is planning to invest $20,000 in FY 2021/22 to replace aging equipment. Planned expenditures also include enhancing the facility Wi-Fi system with additional receivers.

LOCATION

CyRide, 601 N. University Blvd.

	TOTAL	2021/22	2022/23	2023/24	2024/25	2025/26
COST:						
Bus Technology	401,700	201,700	50,000	50,000	50,000	50,000
Safety Software	20,000	20,000				
Facility Technology	20,000	20,000				
TOTAL	**441,700**	**241,700**	**50,000**	**50,000**	**50,000**	**50,000**
FINANCING:						
Transit Fund	340,340	140,340	50,000	50,000	50,000	50,000
5310 Funds	101,360	101,360				
TOTAL	**441,700**	**241,700**	**50,000**	**50,000**	**50,000**	**50,000**

PROGRAM - ACTIVITY:	DEPARTMENT:	ACCOUNT NO.
Transportation - Transit	CyRide	552-1159-439, 552-1169-439

BUS STOP IMPROVEMENTS **PROJECT STATUS:** Cost Change Scope Change

DESCRIPTION/JUSTIFICATION
CyRide 2.0 and COVID-19 have created a significant shift in riding patterns leading to a reduction in the amount budgeted for bus stop improvements. CyRide will be updating the bus stop improvement plan in a more stable environment to determine ridership patterns and ensure bus stop upgrades are being implemented where they will enhance the passenger experience for the greatest number of riders. CyRide will budget dollars for smaller projects in the CIP while the plan is updated.

CyRide will use the number of passengers boarding and alighting from the bus to determine the level of amenities at each stop. Additionally, the Iowa DOT has recently issued a report with recommended bus stop improvements along their roadways. Recommendations from the report will be incorporated into the updated bus stop improvement plan. After the plan has been updated, an increase in funding will be requested for subsequent years.

COMMENTS
Funding for the improvements in FY 2021/22 will be 100% local funding from CyRide's budget. Shelter improvements will resume in FY 2022/23 through FY 2024/25 with three shelters being added or replaced each year.

LOCATION
Various locations throughout Ames.

	TOTAL	2021/22	2022/23	2023/24	2024/25	2025/26
COST:						
Pads, Benches, Shelters	180,000			60,000	60,000	60,000
Concrete	50,000	25,000			25,000	
TOTAL	**230,000**	**25,000**		**60,000**	**85,000**	**60,000**
FINANCING:						
Transit Fund	110,000	25,000		20,000	45,000	20,000
Federal 5310 Grants	120,000			40,000	40,000	40,000
TOTAL	**230,000**	**25,000**		**60,000**	**85,000**	**60,000**

PROGRAM - ACTIVITY:	**DEPARTMENT:**	**ACCOUNT NO.**
Transportation - Transit	CyRide	552-1159-439
		552-1169-439

CYRIDE SHOP AND OFFICE EQUIPMENT **PROJECT STATUS:** No Change

DESCRIPTION/JUSTIFICATION
The FY 2021/22 office equipment expenditures include the replacement of computers, laptops and printers, as well as the replacement of office chairs and stand-up style desks at an estimated cost between $14,400 to $20,400. With the exception of stand-up desks, these expenditures are used for replacing old and obsolete equipment.

The CyRide Maintenance Division owns several pieces of specialized equipment that are used to maintain buses so that CyRide stays in compliance with Federal Transit Administration regulations regarding vehicle maintenance. The specialized equipment includes parts washers, refrigerant recovery machines, lifts, and electronic diagnostic equipment. Expenditures in this category are difficult to predict as some of the equipment is up to 36 years old and still reliable. Historically, CyRide has spent between $45,000 and $50,000 during a fiscal year for shop equipment.

COMMENTS
In addition to computers and related equipment, CyRide will invest in more stand-up desks as an element of employee wellness. Employees that have received these desks like the ability to alternately stand and sit throughout the workday.

CyRide Maintenance is planning to replace a tire balancing machine during FY 2021/22 at an estimated cost of $15,000.

LOCATION
CyRide, 601 N. University Blvd.

	TOTAL	2021/22	2022/23	2023/24	2024/25	2025/26
COST:						
Computers/Office Equipment	78,000	20,400	14,400	14,400	14,400	14,400
Shop Equipment	250,000	50,000	50,000	50,000	50,000	50,000
TOTAL	**328,000**	**70,400**	**64,400**	**64,400**	**64,400**	**64,400**
FINANCING:						
Transit Fund	328,000	70,400	64,400	64,400	64,400	64,400
TOTAL	**328,000**	**70,400**	**64,400**	**64,400**	**64,400**	**64,400**

PROGRAM - ACTIVITY:	DEPARTMENT:	ACCOUNT NO.
Transportation - Transit	CyRide	552-1159-439

TRANSPORTATION - AIRPORT

PROJECT/FUNDING SOURCE	TOTAL	2021/22	2022/23	2023/24	2024/25	2025/26	Page
PROJECT:							
Airport Improvements	1,483,334	341,667	866,667	-	275,000	-	124
TOTAL PROJECT EXPENDITURES	**1,483,334**	**341,667**	**866,667**	**-**	**275,000**	**-**	
FUNDING SOURCES:							
City:							
Airport Construction Fund	157,084	42,917	86,667	-	27,500	-	
Other:							
Federal Aviation Administration	1,326,250	298,750	780,000	-	247,500	-	
TOTAL FUNDING SOURCES	**1,483,334**	**341,667**	**866,667**	**-**	**275,000**	**-**	

AIRPORT IMPROVEMENTS **PROJECT STATUS:** Site Change Cost Change

DESCRIPTION/JUSTIFICATION
Airport improvement projects are accomplished through this program.

COMMENTS
The projects included in this program are determined by the Airport Master Plan, as well as staff evaluation of airport facilities. The Master Plan update that was completed in 2020 determines Federal Aviation Administration (FAA) funding eligibility.

2021/22 Taxiway “A” electrical lighting replacement (north-south taxiway)
2022/23 South apron rehabilitation
2024/25 Runway 13-31 electrical lighting replacement (east-west runway)

Projects beginning in FY 2021/22 through FY 2024/25 are high priority safety projects for the airport. The lighting at the Ames airport was initially built in the early 1970s and is starting to experience significant failures. Also, the oldest pavement on the airport property is the south apron area directly in front of the new terminal building.

		TOTAL	2021/22	2022/23	2023/24	2024/25	2025/26
COST:							
Engineering		296,663	68,330	173,333		55,000	
Construction		1,186,671	273,337	693,334		220,000	
	TOTAL	**1,483,334**	**341,667**	**866,667**		**275,000**	
FINANCING:							
FAA		1,326,250	298,750	780,000		247,500	
Airport Construction Fund		157,084	42,917	86,667		27,500	
	TOTAL	**1,483,334**	**341,667**	**866,667**		**275,000**	

PROGRAM - ACTIVITY:	**DEPARTMENT:**	**ACCOUNT NO.**
Transportation - Airport	Public Works	330-7074-439

COMMUNITY ENRICHMENT

CITY OF Ames™

COMMUNITY ENRICHMENT

	TOTAL	2021/22	2022/23	2023/24	2024/25	2025/26	Page
EXPENDITURES:							
Parks and Recreation	7,631,000	1,425,000	1,930,500	907,500	1,600,000	1,768,000	126
Library	147,432	-	100,128	47,304	-	-	139
Cemetery	225,000	75,000	75,000	-	-	75,000	141
Neighborhood Improvements	750,000	150,000	150,000	150,000	150,000	150,000	143
Facilities	250,000	50,000	50,000	50,000	50,000	50,000	147
TOTAL EXPENDITURES	**9,003,432**	**1,700,000**	**2,305,628**	**1,154,804**	**1,800,000**	**2,043,000**	
FUNDING SOURCES:							
Debt:							
G.O. Bonds	2,900,000	700,000	1,200,000	-	500,000	500,000	
City:							
Local Option Sales Tax	5,703,432	940,000	1,105,628	1,154,804	1,160,000	1,343,000	
Park Development Fund	200,000	-	-	-	-	200,000	
Ice Arena Capital Reserve	140,000	-	-	-	140,000	-	
Total City Funding	6,043,432	940,000	1,105,628	1,154,804	1,300,000	1,543,000	
Other:							
Ames Community School District	25,000	25,000	-	-	-	-	
Private Donations	35,000	35,000	-	-	-	-	
Total Other Funding	60,000	60,000	-	-	-	-	
TOTAL FUNDING SOURCES	**9,003,432**	**1,700,000**	**2,305,628**	**1,154,804**	**1,800,000**	**2,043,000**	

COMMUNITY ENRICHMENT - PARKS AND RECREATION

PROJECT/FUNDING SOURCE	TOTAL	2021/22	2022/23	2023/24	2024/25	2025/26	Page
PROJECT:							
Park System/Facility Improvements	2,425,000	155,000	690,000	580,000	450,000	550,000	128
Downtown Plaza	1,400,000	700,000	700,000	-	-	-	129
Ada Hayden Heritage Park	1,340,000	270,000	10,000	60,000	500,000	500,000	130
Playground Equipment Improvements	906,000	150,000	225,500	212,500	175,000	143,000	131
Furman Aquatic Center	385,000	75,000	250,000	-	60,000	-	132
Municipal Pool	50,000	50,000	-	-	-	-	133
ADA Transition Plan Improvements	125,000	25,000	25,000	25,000	25,000	25,000	134
Homewood Golf Course	260,000	-	30,000	30,000	200,000	-	135
Ames/ISU Ice Arena	140,000	-	-	-	140,000	-	136
Moore Memorial Park Pedestrian Bridge	400,000	-	-	-	50,000	350,000	137
Rose Prairie Park Development	200,000	-	-	-	-	200,000	138
TOTAL PROJECT EXPENDITURES	**7,631,000**	**1,425,000**	**1,930,500**	**907,500**	**1,600,000**	**1,768,000**	

COMMUNITY ENRICHMENT - PARKS AND RECREATION, continued

PROJECT/FUNDING SOURCE	TOTAL	2021/22	2022/23	2023/24	2024/25	2025/26
FUNDING SOURCES:						
Debt:						
G.O. Bonds	2,900,000	700,000	1,200,000	-	500,000	500,000
City:						
Local Option Sales Tax	4,331,000	665,000	730,500	907,500	960,000	1,068,000
Ice Arena Capital Reserve	140,000	-	-	-	140,000	-
Park Development Fund	200,000	-	-	-	-	200,000
Total City Funding	4,671,000	665,000	730,500	907,500	1,100,000	1,268,000
Other:						
Ames Community School District	25,000	25,000	-	-	-	-
Private Donations	35,000	35,000	-	-	-	-
Total Other Funding	60,000	60,000	-	-	-	-
TOTAL FUNDING SOURCES	**7,631,000**	**1,425,000**	**1,930,500**	**907,500**	**1,600,000**	**1,768,000**

PARK SYSTEM/FACILITY IMPROVEMENTS **PROJECT STATUS:** Schedule Change Cost Change

DESCRIPTION/JUSTIFICATION

To maintain City parks in a safe and quality manner, the projects listed below address maintenance issues and improvements at various locations.

COMMENTS

2021/22 Inis Grove Park: replace tennis court fencing ($30,000)
McCarthy Lee Park: transition two of four tennis courts to six pickle ball courts (75,000)
Park Maintenance: engineer/design maintenance facility consolidation ($50,000)

2022/23 Bandshell: renovate changing rooms ($80,000)
Community Center: replace flooring in aerobics room ($20,000)
Carr Park: engineer/design bath house removal and plan new shelter with restroom ($35,000)
McCarthy Lee Park: install irrigation system at McCarthy Lee sports fields ($55,000)
Park Maintenance: consolidate maintenance facilities ($500,000)

2023/24 Carr Park: remove bath house and construct new shelter with restroom ($350,000)
Community Center: refinish gymnasium wood floor ($30,000); replace weight room weight equipment ($75,000)
Gateway Hills Park: engineer/design restroom addition ($25,000)
River Valley Park: install additional parking by Cottonwood Shelter ($100,000)

2024/25 Auditorium: replace stage lights with LEDs (50,000)
Brookside Park: resurface tennis courts ($40,000)
Emma McCarthy Lee Park: add gutters to the hill drive ($40,000)
Gateway Hills Park: construct restroom ($150,000); install new standards, drainage, and borders on sand volleyball courts ($50,000)
Inis Grove Park: replace basketball court ($45,000)
River Valley Park: replace Cottonwood Shelter ($75,000)

2025/26 River Valley Park: add parking near soccer fields ($250,000); renovate restroom ($125,000)
Location TBD: add climbing boulder ($100,000); add parkour equipment ($75,000)

	TOTAL	2021/22	2022/23	2023/24	2024/25	2025/26
COST:						
Engineering	110,000	50,000	35,000	25,000		
Construction	2,315,000	105,000	655,000	555,000	450,000	550,000
TOTAL	**2,425,000**	**155,000**	**690,000**	**580,000**	**450,000**	**550,000**
FINANCING:						
G.O. Bonds	500,000		500,000			
Local Option Sales Tax	1,925,000	155,000	190,000	580,000	450,000	550,000
TOTAL	**2,425,000**	**155,000**	**690,000**	**580,000**	**450,000**	**550,000**

PROGRAM - ACTIVITY:	DEPARTMENT:	ACCOUNT NO.
Community Enrichment - Parks and Recreation	Parks and Recreation	030-5374-459, 030-5376-459, 030-5356-459

DOWNTOWN PLAZA **PROJECT STATUS:** No Change

DESCRIPTION/JUSTIFICATION
In accordance with previous planning studies, City staff first introduced the idea of developing a gathering place in the Downtown Business District back in 2009. Most recently, the City Council has expressed interest in bringing this type of amenity to reality. The plaza could contain a main feature area that would be a spray pad in the summer and convert to an ice-skating rink in the winter. The area could also include such amenities as a shelter, public restrooms, irrigated green space, picnic areas, benches, a live wall, and landscaping.

COMMENTS
The total project funding is as follows:

2019/20	General Fund	1,100,000
2020/21	Design (Local Option Sales Tax)	200,000
2021/22	Construction (G.O. Bonds)	700,000
2022/23	Construction (G.O. Bonds)	700.000
Total		2,700,000

LOCATION
To be determined-The final determination by the City Council of a preferred site and the features to be included in the plaza would come after public input is received and cost estimates are developed.

		TOTAL	2021/22	2022/23	2023/24	2024/25	2025/26
COST:							
Construction		1,400,000	700,000	700,000			
	TOTAL	**1,400,000**	**700,000**	**700,000**			
FINANCING:							
G.O. Bonds		1,400,000	700,000	700,000			
	TOTAL	**1,400,000**	**700,000**	**700,000**			

PROGRAM - ACTIVITY	DEPARTMENT:	ACCOUNT NO.
Community Enrichment - Parks & Recreation	Parks and Recreation	382-5397-459

ADA HAYDEN HERITAGE PARK **PROJECT STATUS:** Scope Change Cost Change

DESCRIPTION/JUSTIFICATION

The addition of an accessible canoe/kayak launch would enable individuals, with or without disabilities, to get in and out of their vessels much easier. It will also allow some individuals to experience the park in ways they have not been able to before. There is a core group of individuals, Access Ada Hayden, who brought this idea forward and are willing to fundraise to make this launch a reality. The Friends of Ada Hayden Heritage Park is supporting this project as well.

The accessible fishing pier located at the north end of the north lake has experienced some heaving of the support piles due to ice jacking. This in turn has caused the pier to become very uneven. To correct the problem, the piles will need to be reset, the decking and posts replaced, and rip rap added to prevent this from happening in the future. Of the $185,000 needed for this project, $40,000 will be moved from FY 2020/21 to FY 2021/22.

By adding a wetland overlook to view wildlife, these portions of the park will be enhanced and able to be enjoyed more fully by park visitors.

COMMENTS

2021/22	Install accessible canoe/kayak launch ($85,000); repair accessible fishing pier ($185,000)
2022/23	Engineer/design a wetland overlook
2023/24	Construct a wetland overlook
2024/25	Replace path around south lake
2025/26	Replace path around north lake

LOCATION

Ada Hayden Heritage Park, 5205 Grand Ave.

	TOTAL	2021/22	2022/23	2023/24	2024/25	2025/26
COST:						
Engineering	10,000		10,000			
Construction	1,330,000	270,000		60,000	500,000	500,000
TOTAL	**1,340,000**	**270,000**	**10,000**	**60,000**	**500,000**	**500,000**
FINANCING:						
G.O. Bonds	1,000,000				500,000	500,000
Local Option Sales Tax	305,000	235,000	10,000	60,000		
Donations	35,000	35,000				
TOTAL	**1,340,000**	**270,000**	**10,000**	**60,000**	**500,000**	**500,000**

PROGRAM - ACTIVITY:	DEPARTMENT:	ACCOUNT NO.
Community Enrichment - Parks and Recreation	Parks and Recreation	030-5385-459, 030-4386-459, 113-5386-459

PLAYGROUND EQUIPMENT IMPROVEMENTS **PROJECT STATUS:** No Change

DESCRIPTION/JUSTIFICATION

During the past 25 years, the City has replaced old play equipment throughout the park system. The life expectancy of play equipment is 20–25 years. Therefore, it is necessary to begin replacement of playground equipment that was installed at the beginning of this cycle.

COMMENTS

2021/22 Replace equipment in Country Gables Park ($50,000); replace equipment in Christopher Gartner Park ($50,000); replace equipment in Lloyd Kurtz Park ($50,000)

2022/23 Replace equipment in Christofferson Park ($50,000); replace equipment in Bandshell Park ($63,000); replace equipment adjacent to Cottonwood Shelter in River Valley Park ($62,500); install new equipment in Carr Park ($50,000)

2023/24 Replace equipment in Stuart Smith Park ($50,000); replace equipment adjacent to Hickory Shelter in Brookside Park ($50,000); replace ages 2-5 equipment ($50,000) and ages 5-12 equipment ($62,500) in Moore Memorial Park

2024/25 Replace equipment in Parkview North Park ($56,250); replace equipment in Patio Homes West Park ($56,250); replace equipment in North River Valley Park ($62,500)

2025/26 Replace equipment in Old Town Park ($44,500); replace ages 2-5 equipment in O'Neil Park ($41,500), replace ages 5-12 equipment in O'Neil Park ($57,000)

	TOTAL	2021/22	2022/23	2023/24	2024/25	2025/26
COST:						
Construction	906,000	150,000	225,500	212,500	175,000	143,000
TOTAL	**906,000**	**150,000**	**225,500**	**212,500**	**175,000**	**143,000**
FINANCING:						
Local Option Sales Tax	906,000	150,000	225,500	212,500	175,000	143,000
TOTAL	**906,000**	**150,000**	**225,500**	**212,500**	**175,000**	**143,000**

PROGRAM - ACTIVITY:	DEPARTMENT:	ACCOUNT NO.
Community Enrichment - Parks and Recreation	Parks and Recreation	030-5356-439
		030-5357-439
		030-5358-439

FURMAN AQUATIC CENTER **PROJECT STATUS:** Schedule Change

DESCRIPTION/JUSTIFICATION

This facility opened in May 2010. It has been operational for ten seasons with an average of 90,960 visitors per summer. To ensure it remains a quality facility, structural and electrical issues have been identified and will be addressed in a systematic manner.

The play structure in the Splash Pool is becoming faded and needs to be refurbished and new parts installed as needed. The current light fixtures allow water to accumulate inside the fixture which must be drained annually. Replacing with an LED lamp and better fixture will reduce maintenance and energy consumption. In addition, the pool basins need to be repainted every seven years.

Requests for a gathering space outside of the aquatic center have been received from users of the facility. Daycare providers would like a space to gather children for snack time and check-in. Potential renters of the facility have asked about a place to gather and picnic prior to their rental time. Adding a shelter will address these requests and potentially increase rental revenue.

COMMENTS

2021/22 Refurbish the play structure in the Splash Pool
2022/23 Replace the light fixtures on the pool deck ($100,000); repaint pool basins ($150,000)
2024/25 Install a shelter adjacent the parking lot

LOCATION

Furman Aquatic Center, 1365 13th St.

	TOTAL	2021/22	2022/23	2023/24	2024/25	2025/26
COST:						
Construction	385,000	75,000	250,000		60,000	
TOTAL	**385,000**	**75,000**	**250,000**		**60,000**	
FINANCING:						
Local Option Sales Tax	385,000	75,000	250,000		60,000	
TOTAL	**385,000**	**75,000**	**250,000**		**60,000**	

PROGRAM - ACTIVITY:	DEPARTMENT:	ACCOUNT NO.
Community Enrichment - Parks and Recreation	Parks and Recreation	030-5317-459

MUNICIPAL POOL **PROJECT STATUS:** No Change

DESCRIPTION/JUSTIFICATION
Engineering consultants were retained in 2006, 2009, and 2012 to provide recommendations regarding mechanical, electrical, structural, and any other needed improvements for the Municipal Pool. In 2012, consultants were given the goal of keeping this facility operational until approximately 2017. Their 2012 study indicated substantial improvements were needed between 2013 and 2017 (totaling $450,000). It was also suggested that these improvements be made as soon as possible. The consultants also stated in their 2017 report that further repairs to this facility could be cost prohibitive.

All capital costs are shared equally by the City and Ames Community School District. The Municipal Pool is scheduled to be closed in spring 2022.

COMMENTS
Funding is allocated in case projects are needed at the Municipal Pool. As of June 30, 2021, the balance is forecast to be $197,380.

LOCATION
Municipal Pool, 1925 Ames High Dr.

	TOTAL	2021/22	2022/23	2023/24	2024/25	2025/26
COST:						
Architects/Engineering	5,000	5,000				
Construction	45,000	45,000				
TOTAL	**50,000**	**50,000**				
FINANCING:						
Local Option Sales Tax	25,000	25,000				
Ames School District	25,000	25,000				
TOTAL	**50,000**	**50,000**				

PROGRAM - ACTIVITY:	DEPARTMENT:	ACCOUNT NO.
Community Enrichment - Parks and Recreation	Parks and Recreation	030-5310-459

ADA TRANSITION PLAN IMPROVEMENTS **PROJECT STATUS:** Delayed

DESCRIPTION/JUSTIFICATION

To better understand where Parks and Recreation does not comply with the 2010 Americans with Disabilities Act Standards for Accessible Design, an inventory and assessment of the park system and facilities is being conducted in FY 2020/21. Upon conclusion of the inventory and assessment, a transition plan will be developed in order to become compliant. In anticipation of items needing to be corrected, money is being put into each year of the CIP. This is an estimate; cost will not be known until the transition plan is finalized.

COMMENTS

Actual transition plan items will be determined based upon the assessment to be completed in FY 2020/21. Funding for this program from prior Capital Improvement Plans has been returned to the Local Option Sales Tax fund and will be reprogrammed to complete the improvements determined by the assessment.

	TOTAL	2021/22	2022/23	2023/24	2024/25	2025/26
COST:						
Construction	125,000	25,000	25,000	25,000	25,000	25,000
TOTAL	**125,000**	**25,000**	**25,000**	**25,000**	**25,000**	**25,000**
FINANCING:						
Local Option Sales Tax	125,000	25,000	25,000	25,000	25,000	25,000
TOTAL	**125,000**	**25,000**	**25,000**	**25,000**	**25,000**	**25,000**

PROGRAM - ACTIVITY:	**DEPARTMENT:**	**ACCOUNT NO.**
Community Enrichment - Parks and Recreation	Parks and Recreation	030-5351-459

HOMEWOOD GOLF COURSE **PROJECT STATUS:** Cost Increase

DESCRIPTION/JUSTIFICATION
The projects listed below will address facility needs and enhance provided services. To help provide a secure environment, security cameras will be installed in the newly constructed clubhouse.

The current bridge on Hole #9 was designed for walking golfers. Since the demand for motorized carts at Homewood has increased, replacing this bridge with one designed for motorized carts will speed up play and reduce safety concerns for golfers having to drive along Hole #8 to get to the 9th green.

COMMENTS

2022/23 Install security cameras in the clubhouse
2023/24 Engineer/design bridge replacement on Hole #9 for cart accommodation
2024/25 Replace the bridge on Hole #9 so it can accommodate carts

LOCATION
Homewood Golf Course, 401 E. 20th St.

	TOTAL	2021/22	2022/23	2023/24	2024/25	2025/26
COST:						
Engineering	60,000		30,000	30,000		
Construction	200,000				200,000	
TOTAL	**260,000**		**30,000**	**30,000**	**200,000**	
FINANCING:						
Local Option Sales Tax	260,000		30,000	30,000	200,000	
TOTAL	**260,000**		**30,000**	**30,000**	**200,000**	

PROGRAM - ACTIVITY: Community Enrichment - Parks and Recreation
DEPARTMENT: Parks and Recreation
ACCOUNT NO.

AMES/ISU ICE ARENA **PROJECT STATUS:** No Change

DESCRIPTION/JUSTIFICATION
The Ames/ISU Ice Arena is over 18 years old. The following item needs to be reconstructed, replaced, or repaired to maintain a quality facility:

2024/25 Replace water heaters ($15,000); replace lobby flooring ($125,000)

COMMENTS
Funding for capital improvement projects is provided through the Ice Arena Capital Reserve Fund. Every year, the City and Iowa State University each contribute $20,000 to this fund to ensure the facility is well-maintained. As of June 30, 2020, this fund totaled $205,888.

LOCATION
Ames/ISU Ice Arena, 1505 Gateway Hills Park Dr.

	TOTAL	2021/22	2022/23	2023/24	2024/25	2025/26
COST:						
Construction	140,000				140,000	
TOTAL	**140,000**				**140,000**	
FINANCING:						
Ice Arena Capital Reserve Funds	140,000				140,000	
TOTAL	**140,000**				**140,000**	

PROGRAM - ACTIVITY: **DEPARTMENT:** **ACCOUNT NO.**

Community Enrichment - Parks and Recreation Parks and Recreation

MOORE MEMORIAL PARK PEDESTRIAN BRIDGE **PROJECT STATUS:** Delayed Cost Change

DESCRIPTION/JUSTIFICATION

Moore Memorial Park is 90 acres; 50 acres are located east of Ioway Creek and 40 acres are west of the creek. The 50-acre parcel was developed into a community park in 1991. The 40-acre parcel has been leased to Iowa State University (ISU) as an agricultural research plot for $3,000 per year.

In response to community input to connect parks via hard surface trails, a pedestrian bridge will link these two parcels of City property. The plan is to then have a trail from Moore Memorial Park along Scholl Road to Ontario Street. This improvement is viable because ISU owns the land adjacent the City's 40-acre parcel. In the event ISU allows public access through its parcel, several miles of recreational trails would be linked together. Staff will meet with ISU officials to determine if public access will be allowed through this parcel of land in the future.

COMMENTS

2024/25 Engineer/design a pedestrian bridge to cross Ioway Creek at Moore Memorial Park
2025/26 Install a pedestrian bridge across Ioway Creek at Moore Memorial Park

LOCATION

Moore Memorial Park, 3050 Northridge Pkwy.

	TOTAL	2021/22	2022/23	2023/24	2024/25	2025/26
COST:						
Engineering/Design	50,000				50,000	
Construction	350,000					350,000
TOTAL	**400,000**				**50,000**	**350,000**
FINANCING:						
Local Option Sales Tax	400,000				50,000	350,000
TOTAL	**400,000**				**50,000**	**350,000**

PROGRAM - ACTIVITY: Community Enrichment - Parks and Recreation

DEPARTMENT: Parks and Recreation

ACCOUNT NO.

ROSE PRAIRIE PARK DEVELOPMENT **PROJECT STATUS:** Delayed

DESCRIPTION/JUSTIFICATION
The Parks and Recreation Master Plan identifies neighborhood park service areas to cover a 1/4 to 1/2-mile radius. As the North Growth development occurs, this plan indicated a need for a neighborhood park to serve residents in this area. Standard amenities in neighborhood parks include a basketball pad with goals, a small shelter, a play structure and swings, and utilities. In addition, this park may require paths and sidewalks. The estimated costs to develop the Rose Prairie Neighborhood Park will total $200,000.

COMMENTS
This project is delayed because the private development is not moving as quickly as originally planned.

LOCATION
Rose Prairie Development

	TOTAL	2021/22	2022/23	2023/24	2024/25	2025/26
COST:						
Park Development	200,000					200,000
TOTAL	**200,000**					**200,000**
FINANCING:						
Park Development Fund	200,000					200,000
TOTAL	**200,000**					**200,000**

PROGRAM - ACTIVITY **DEPARTMENT:** **ACCOUNT NO.**

Community Enrichment - Parks and Recreation Parks and Recreation

COMMUNITY ENRICHMENT - LIBRARY

PROJECT/FUNDING SOURCE	TOTAL	2021/22	2022/23	2023/24	2024/25	2025/26	Page
PROJECT:							
Library Carpet Replacement	147,432	-	100,128	47,304	-	-	140
TOTAL PROJECT EXPENDITURES	**147,432**	**-**	**100,128**	**47,304**	**-**	**-**	
FUNDING SOURCES:							
City:							
Local Option Sales Tax	147,432	-	100,128	47,304	-	-	
Other:							
Private Contributions	-	-	-	-	-	-	
TOTAL FUNDING SOURCES	**147,432**	**-**	**100,128**	**47,304**	**-**	**-**	

LIBRARY CARPET REPLACEMENT **PROJECT STATUS:** New

DESCRIPTION/JUSTIFICATION
The Ames Public Library building was expanded and completely renovated between 2012 and 2014 and was re-opened to the public on September 14, 2014. The library sees an average of 1,300 people per day. By the time the renovated building has been in use for 10 years, the flooring will most likely have been traversed over 4 million times and show considerable wear.

The first-floor carpet replacement includes replacing approximately 9,450 square feet of flooring in the youth services area ($62,087), 2,640 square feet of flooring in the auditorium ($17,345), and approximately 610 square feet of flooring in the entryway ($4,008). Carpet tile will need to be torn out and flooring laid. Estimated pricing includes 2,540 square feet of extra material for fitting and making minor future repairs ($16,688).

The second-floor carpet replacement includes replacing approximately 6,000 square feet of flooring in the adult service area ($39,420). Carpet tile will need to be torn out and flooring laid; estimated pricing includes 2,418 square feet of extra material for fitting and making minor future repairs ($7,884).

COMMENTS
Pricing includes the estimated cost of materials, adhesive, and professional tear-out and installation.

LOCATION
515 Douglas Ave.

		TOTAL	2021/22	2022/23	2023/24	2024/25	2025/26
COST:							
Materials/Labor		147,432		100,128	47,304		
	TOTAL	**147,432**		**100,128**	**47,304**		
FINANCING:							
Local Option Sales Tax		147,432		100,128	47,304		
	TOTAL	**147,432**		**100,128**	**47,304**		

PROGRAM - ACTIVITY:	**DEPARTMENT:**	**ACCOUNT NO.**
Community Enrichment - Library	Library/Youth Services	

COMMUNITY ENRICHMENT - CEMETERY

PROJECT/FUNDING SOURCE	TOTAL	2021/22	2022/23	2023/24	2024/25	2025/26	Page
PROJECT:							
Cemetery Improvements	225,000	75,000	75,000	-	-	75,000	142
TOTAL PROJECT EXPENDITURES	**225,000**	**75,000**	**75,000**	**-**	**-**	**75,000**	
FUNDING SOURCES:							
City:							
Local Option Sales Tax	225,000	75,000	75,000	-	-	75,000	
TOTAL FUNDING SOURCES	**225,000**	**75,000**	**75,000**	**-**	**-**	**75,000**	

CEMETERY IMPROVEMENTS **PROJECT STATUS:** Scope Change

DESCRIPTION/JUSTIFICATION
This program provides funding to enhance user experience at the three Ames cemeteries.

The Funeral Pavilion will be added to give people a place to conduct a ceremony in the Ames Municipal Cemetery when weather conditions make it difficult to get to the grave site. It can also be used for the Memorial Day and other celebrations that take place at the cemetery.

There are several areas at the Ames Municipal Cemetery where hillsides are being eroded to the point where graves could be exposed in the near future. Retaining walls will be added to these areas to prevent further erosion.

The fencing at the Ontario Cemetery is galvanized chain link and needs replacing. A more decorative style fence like that at the Ames Municipal Cemetery will be installed.

COMMENTS

2021/22 Funeral Pavilion
2022/23 Retaining walls at Ames Municipal Cemetery ($50,000); Landscaping above the retaining wall at Ontario Cemetery ($25,000)
2025/26 Replace fencing at Ontario Cemetery

LOCATION
Ames Municipal Cemetery and Ontario Cemetery

	TOTAL	2021/22	2022/23	2023/24	2024/25	2025/26
COST:						
Construction	225,000	75,000	75,000			75,000
TOTAL	**225,000**	**75,000**	**75,000**			**75,000**
FINANCING:						
Local Option Sales Tax	225,000	75,000	75,000			75,000
TOTAL	**225,000**	**75,000**	**75,000**			**75,000**

PROGRAM - ACTIVITY:	**DEPARTMENT:**	**ACCOUNT NO.**
Community Enrichment - Cemetery	Parks and Recreation	030-5029-459

COMMUNITY ENRICHMENT - NEIGHBORHOOD IMPROVEMENTS

PROJECT/FUNDING SOURCE	TOTAL	2021/22	2022/23	2023/24	2024/25	2025/26	Page
PROJECT:							
Downtown Façade Improvement Program	250,000	50,000	50,000	50,000	50,000	50,000	144
Campustown Façade Improvement Program	250,000	50,000	50,000	50,000	50,000	50,000	145
Neighborhood Improvement Program	250,000	50,000	50,000	50,000	50,000	50,000	146
TOTAL PROJECT EXPENDITURES	**750,000**	**150,000**	**150,000**	**150,000**	**150,000**	**150,000**	
FUNDING SOURCES:							
City:							
Local Option Sales Tax	750,000	150,000	150,000	150,000	150,000	150,000	
TOTAL FUNDING SOURCES	**750,000**	**150,000**	**150,000**	**150,000**	**150,000**	**150,000**	

DOWNTOWN FAÇADE IMPROVEMENT PROGRAM **PROJECT STATUS:** No Change

DESCRIPTION/JUSTIFICATION
This project was introduced in FY 2001/02 to facilitate private improvements to the façades of the buildings in the Downtown area. For three years, the City did not receive any requests for these funds.

Downtown Design Guidelines were approved by the City Council in 2001 to ensure that financial assistance for façade improvements is consistent with the historical character of Downtown. In order to qualify for these funds, improvements must be made to at least one of the following exterior elements: upper façades, storefronts, transoms, display windows, kick plates, entrances, signs, or awnings/canopies. Beginning in FY 2011/12, the City Council expanded the program guidelines, and implemented a review and award period in spring of each year. Additionally, to aid in comparing applications, the City Council also established a scoring process.

Under this program, the City provides up to $15,000 in grant funds to be matched dollar for dollar. In addition, a $1,000 grant is available to subsidize the cost of an architect. Through June 2020, five grants were expensed in the amount of $75,849. To date the program has awarded 49 grants to downtown businesses and has expensed a total of approximately $625,809. FY 2021/22 will begin with a new $50,000 allocation.

COMMENTS
This program continues to support the City Council's previous goals for the commercial revitalization of the Downtown. If interest in this program continues, funding can be expanded or the City Council may consider appropriating funds to priority projects.

LOCATION
Downtown Ames

	TOTAL	2021/22	2022/23	2023/24	2024/25	2025/26
COST:						
Incentives (Loans or Grants)	250,000	50,000	50,000	50,000	50,000	50,000
TOTAL	**250,000**	**50,000**	**50,000**	**50,000**	**50,000**	**50,000**
FINANCING:						
Local Option Sales Tax	250,000	50,000	50,000	50,000	50,000	50,000
TOTAL	**250,000**	**50,000**	**50,000**	**50,000**	**50,000**	**50,000**

PROGRAM - ACTIVITY:	**DEPARTMENT:**	**ACCOUNT NO.**
Community Enrichment - Neighborhood Improvements	Planning & Housing	030-1030-459

CAMPUSTOWN FAÇADE IMPROVEMENT PROGRAM **PROJECT STATUS:** No Change

DESCRIPTION/JUSTIFICATION

This purpose of the Campustown Facade Improvement Program is to improve the Campustown commercial district by providing financial incentives to enhance the appearance and use of existing buildings with commercial uses. The program design is to encourage and maintain the eclectic culture and 'uniqueness' of Campustown, to increase safety, security, and investments by property and business owners and to add to the vitality of Campustown.

The Campustown Facade Improvement Program seeks to encourage the creation of a place that is walkable, transparent, eclectic, sustainable, social, and historic. Beginning in FY 2014/15, the first step in the process was to hire a consultant to assist the City in the development of a "Vision Statement," prepare an "Idea Book," review design ideas and guidelines, provide assistance to applicants wanting to apply for the program, determine costs and feasibility, and conduct workshops and working meetings with applicants and City staff. The second step was to implement two pilot projects to include construction and evaluation.

In FY 2015/16, $32,000 was awarded for two pilot projects. Under this program, the City would provide up to $15,000 in grant funds to be matched dollar for dollar. In addition, a $1,000 grant is available to subsidize the cost of an architect. Through June 2020, the program awarded one grant to a Campustown business and has expensed a total of $111,980 on seven projects. FY 2021/22 will begin with a new $50,000 allocation.

COMMENTS

This program will address the City Council's goal to revitalize of the Campustown. If interest in this program continues, funding can be expanded, or City Council may consider appropriating funds to priority projects.

LOCATION

Campustown Ames

	TOTAL	2021/22	2022/23	2023/24	2024/25	2025/26
COST:						
Incentives (Loans or Grants)	250,000	50,000	50,000	50,000	50,000	50,000
TOTAL	**250,000**	**50,000**	**50,000**	**50,000**	**50,000**	**50,000**
FINANCING:						
Local Option Sales Tax	250,000	50,000	50,000	50,000	50,000	50,000
TOTAL	**250,000**	**50,000**	**50,000**	**50,000**	**50,000**	**50,000**

PROGRAM - ACTIVITY:	**DEPARTMENT:**	**ACCOUNT NO.**
Community Enrichment - Neighborhood Improvements	Planning & Housing	030-1031-459

NEIGHBORHOOD IMPROVEMENT PROGRAM **PROJECT STATUS:** No Change

DESCRIPTION/JUSTIFICATION

The Neighborhood Improvement Program was originally designed to enhance the appearance of City neighborhoods with the addition of permanent physical improvements and to promote a greater sense of community through resident participation in neighborhood projects. The program focused solely on providing City grants to help residents accomplish those projects that they have identified as top priorities for their neighborhoods. Competitive proposals are solicited from neighborhood groups and are rated by a review panel, which consists of City staff and citizens, according to the following criteria approved by the City Council: public impact, neighborhood participation, safety, environment, housing, and public space. Neighborhood residents are expected to provide a local match to these grants on a dollar-for-dollar basis in the form of labor, materials, and/or cash.

Since the program was initiated in FY 1996/97, 125 neighborhood projects have been funded by the City, totaling $378,920.61. Projects have included cul-de-sac, right-of-way and median landscaping; playground construction and/or restoration; alleyway beautification; street trees; pond renovation; installation of rain gardens, historic house plaques and medallions; prairie restoration; construction of a neighborhood message center; construction of a shelter house in a City park; park sidewalks; neighborhood basketball courts; landscaping of neighborhood entryways; installation of neighborhood barbecue grills; renovating “DZ Triangle;” Monarch butterfly habitat restoration; concrete ping pong tables in a City park, neighborhood clean-up days, and playground equipment in a new neighborhood park.

With the implementation of the Neighborhood Liaison Program, the City is committed to creating great neighborhoods with a sense of community. To complement this initiative, eligibility for these funds has been expanded beyond the original intent of the Neighborhood Improvement Grant Program to include such projects as sub-area planning elements and other support programs for neighborhood associations. In addition, the application period is now open-ended with the requirement that the funds be expended one year from date of Council approval.

	TOTAL	2021/22	2022/23	2023/24	2024/25	2025/26
COST:						
Construction	250,000	50,000	50,000	50,000	50,000	50,000
TOTAL	**250,000**	**50,000**	**50,000**	**50,000**	**50,000**	**50,000**
FINANCING:						
Local Option Sales Tax	250,000	50,000	50,000	50,000	50,000	50,000
TOTAL	**250,000**	**50,000**	**50,000**	**50,000**	**50,000**	**50,000**

PROGRAM - ACTIVITY:	DEPARTMENT:	ACCOUNT NO.
Community Enrichment - Neighborhood Improvements	City Manager's Office	030-0420-459

GENERAL GOVERNMENT - FACILITIES

PROJECT/FUNDING SOURCE	TOTAL	2021/22	2022/23	2023/24	2024/25	2025/26	Page
PROJECT:							
City Hall Improvements	250,000	50,000	50,000	50,000	50,000	50,000	148
TOTAL PROJECT EXPENDITURES	**250,000**	**50,000**	**50,000**	**50,000**	**50,000**	**50,000**	
FUNDING SOURCE:							
City:							
Local Option Sales Tax	250,000	50,000	50,000	50,000	50,000	50,000	
TOTAL FUNDING SOURCES	**250,000**	**50,000**	**50,000**	**50,000**	**50,000**	**50,000**	

CITY HALL IMPROVEMENTS **PROJECT STATUS:** No Change

DESCRIPTION/JUSTIFICATION
The City Hall Improvements program is focused on major maintenance or replacement of needed items for the City Hall building, the Veterans Memorial, and both east and west City Hall parking lots.

City Hall's mechanical, electrical, plumbing, sprinkler, and numerous other support systems were installed in 1990. Funds have been allocated yearly for equipment or system failures that may occur beyond the City Hall operating budget funding levels.

LOCATION
City Hall, 515 Clark Ave.

	TOTAL	2021/22	2022/23	2023/24	2024/25	2025/26
COST:						
Maintenance	250,000	50,000	50,000	50,000	50,000	50,000
TOTAL	**250,000**	**50,000**	**50,000**	**50,000**	**50,000**	**50,000**
FINANCING:						
Local Option Sales Tax	250,000	50,000	50,000	50,000	50,000	50,000
TOTAL	**250,000**	**50,000**	**50,000**	**50,000**	**50,000**	**50,000**

PROGRAM - ACTIVITY:	DEPARTMENT:	ACCOUNT NO.
General Government - Facilities	Fleet Services/Facilities	030-2930-419