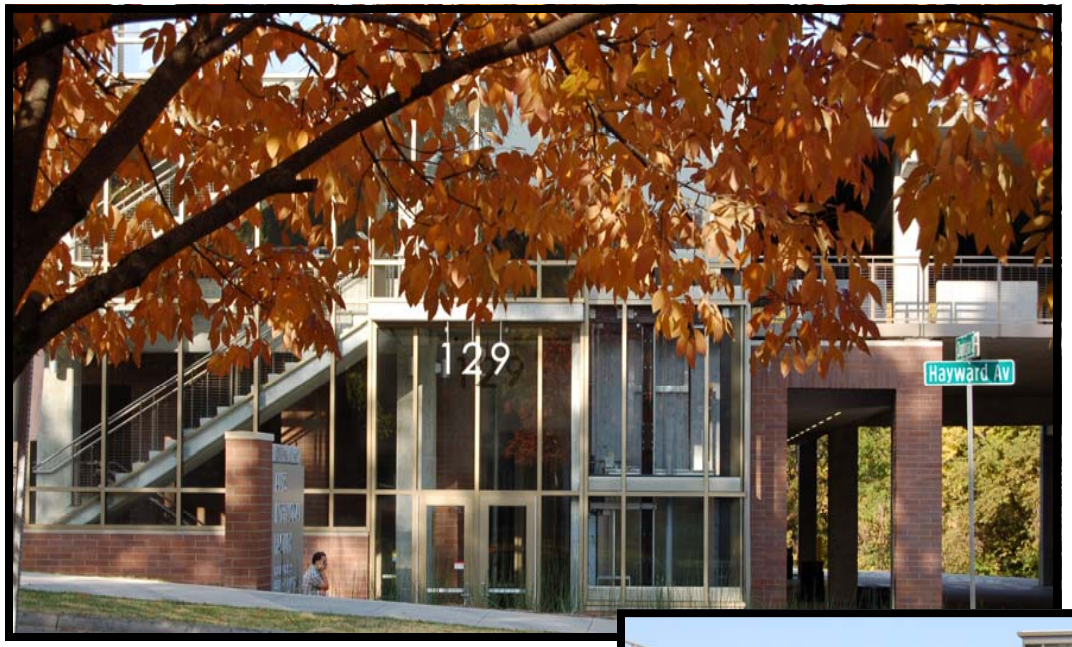

CITY OF AMES, IOWA

CAPITAL IMPROVEMENTS PLAN

2013 - 2018

Ames Intermodal Facility

CONNECTIONS TO CYRIDE, JEFFERSON, BURLINGTON, EXECUTIVE EXPRESS, HIRTA

The theme for this year's Capital Improvements Plan document is the Ames Intermodal Facility, opened to the public in the summer of 2012.

Photographs of the building and grounds are spread throughout the pages with each tab providing information about the project.

Thanks to the following for sharing their photography talents:

Duane Pitcher, Finance Director
Susan Gwiasda, Public Relations Officer
Jenny Bethurem, Assistant Transit Operator

January 2013

Mayor and Ames City Council:

I do not recall a time when the City has been engaged in so many important studies that will impact the Capital Improvements Plan (CIP). The studies include: the Long-Term Facilities Study for the Water Pollution Control Plant, the Power Resource Option Study for the Electric Utility, the Gasification Study for the Resource Recovery Plant, the Sanitary Sewer System Evaluation for the collection system, and the Flood Mitigation Study as it relates to river and overland flooding. Unfortunately, these studies will not be completed in time to incorporate the recommendations chosen by Council into the CIP. Therefore, you will notice that many of the projects that are included in the CIP represent prior Plans and may need to be modified in future years when the City Council makes decisions based on recommendations from the above mentioned studies.

The enclosed Capital Improvements Plan for fiscal years 2013/14 through 2017/18 reflects expenditures totaling $253,106,184. While a failure to make the necessary decisions to maintain our country's financial stability is pushing us towards the fiscal cliff, this CIP is designed so that the City Council can make the tough decisions that will ensure the maintenance of the City's valuable infrastructure. It is this infrastructure that provides the quality of life that makes our community such a great place to live and work. I have attempted to provide highlights of the CIP below.

PUBLIC SAFETY		**UTILTIES**		**TRANSPORTATION**		**COMMUNITY ENRICHMENT**	
Fire	$ 492,955	Resource Recovery	$ 2,980,120	Streets Engineering	$ 53,877,500	Parks & Recreation	$ 4,072,000
Traffic	5,972,000	Water Treatment	72,758,000	Streets Maintenance	4,745,000	Library Services	14,300,000
		Water Distribution	4,875,000	Transit	9,434,609	City Hall Improvements	250,000
		Storm Sewers	6,463,000	Airport	3,470,000	Neighborhood Improvements	250,000
		Sanitary Sewers	17,475,000			Downtown Façade Improvements	250,000
		WPC Treatment	14,238,000			City Maintenance Facility Improvements	243,000
		Electric	36,695,000			Municipal Cemetery Improvements	265,000
TOTAL	**$ 6,464,955**		**$ 155,484,120**		**$ 71,527,109**		**$ 19,630,000**

PUBLIC SAFETY - $6,464,955

In addition to continuing our commitment to the **Traffic Signal Program** (page 14) which allows us to replace older equipment and to add new devices, where warranted, to improve safety for motorists at our intersections, the CIP also includes projects that will protect pedestrians and bicyclists as they travel throughout the community. **The Multi-Modal Roadway Improvements** (page 18) will allow us to install on-street bike paths and sharrows along Duff Avenue, Clark Avenue, Hoover Avenue, and Lincoln Way. The **Shared Use Path System Expansion** (page 16) will facilitate the construction of off-street bike paths adjacent to streets and through our greenbelts. An exciting new initiative, the **Traffic Calming Program** (page 15), is reflected in this CIP. Based on the recent Council-approved Traffic Calming Handbook, this program calls for the installation of speed humps in the Ridgewood/Summit/Crescent neighborhood and dynamic feedback signs in the Jewel Drive and Hayes Avenue neighborhoods.

UTILITIES - $155,484,120

Resource Recovery - $2,980,120

Since 1977, the City has been an innovative leader in protecting our environment by recycling our garbage the "Ames way." While we are currently exploring new methods for converting our garbage to electricity, there appears to be other projects needed in this utility regardless of which approach we choose. The **Resource Recovery System Improvements** (page 24) will ensure much needed preventive maintenance on the mechanical systems in the plant. The **Primary Shredder Replacement** (page 25) will upgrade our 37-year-old-unit with a system that will accept furniture, mattresses, and carpet which heretofore had to be diverted to the Boone County Landfill and will utilize more efficient motors that reduce electric consumption. Finally, in accordance with our property insurance carrier's recommendation, the **Process Area Sprinkler System Replacement** (page 26) will result in an upgraded fire protection system in the plant.

Sanitary Sewer - $31,713,000

Preliminary results from our Sanitary Sewer System Evaluation (SSSE) indicate that over $17 million of improvements will be needed over the next five years in our collection system to repair the most serious structural defects. Rather than issuing revenue bonds to finance the **Sanitary Sewer Rehabilitation Program** (page 45), we are planning to take advantage of the low interest State Revolving Fund (SRF). As expected, this new obligation, which requires a $3,470,000 annual commitment, is significantly greater than the $300,000 we were devoting annually to this effort over the past years. These totals will need to be adjusted once the final recommendations are received for our SSSE.

In addition to taking care of our collection system, the Long-term Facilities Study for the WPC Plant indicates a $14 million need for improvements at our twenty-two year old facility over the next five years. To satisfy these needs, **Clarifier Maintenance** (page 51), **Lift Station Improvements** (page 50), **Co-Generation System Maintenance** (page 49), **Bar Screen Improvements** (page 58), **Mechanical and HVAC Replacements** (page 55), **Secondary Treatment Improvements** (page 54), and **Structural Rehabilitation** (page 57) projects have been introduced into this CIP.

You will recall, the much anticipated NPDES discharge permit from the Iowa Department of Natural Resources required the City to perform a study to justify the scope of our future wet-weather flow mitigation project. The results of the study will allow us to determine how to most cost-effectively meet this obligation either in the collection system or at the WPC Plant. It should be emphasized that as a result of the recommendations from this study, our sanitary sewer rates will need to be increased more than we had originally planned.

Water - $77,633,000

The **New Water Treatment Plant** (page 28) continues to represent the City's largest capital improvement to date, with construction costs alone totaling approximately $61 million. In an effort to ensure quality water and appropriate pressure to our customers, the **Water System Improvements** (page 36) will allow us to focus on our distribution system as well. We also continue to plan for future water capacity as our city grows. The **Water Supply Expansion** project (page 32) will allow us to gain an additional three million gallons per day in well capacity.

Storm Sewer - $6,463,000

One of the long-term goals of the City Council is to mitigate flooding throughout our community both from river flooding as well as overland flooding. Since our Flood Mitigation Study has not been completed, this CIP focuses attention first to the Teagarden Drainage Area. A study of this area, commissioned by the City Council, has now been completed with specific recommendations. Approximately $836,937 will be needed in the **Flood Response and Mitigation Projects** (page 38) over the next five years to mitigate flooding in this area through a combination of the addition of detention ponds and channel improvements. However, once our comprehensive flood mitigation study is completed, the City Council will no doubt want to prioritize this work with other projects that are identified.

Regardless of what transpires with the Flood Mitigation Study, the CIP continues to support isolated storm water improvements through the **Low Point Drainage** (page 39), **Storm Sewer Improvement** (page 40), **Outlet Erosion Control** (page 41), and **Facility Rehabilitation** (page 42) programs.

As we begin to correct the infiltration caused by structural deficiencies in our Sanitary Sewer collection system, we should expect more water being passed through our storm sewer system. In order to better predict the impact from future projects, new hydraulic modeling should be performed for our storm sewer system. Therefore, a new project, **Storm Sewer System Analysis** (page 43), has been inserted into the CIP for the later years of the Plan.

Electric - $36,695,000

Lacking the final report from our consultants regarding the Power Resource Option Study, this five-year plan basically reflects the list of projects included in the previous CIP, some of which are identified to meet EPA rules if implemented. However, realizing that adjustments will need to be made to the CIP once future direction is approved, the staff has attempted to reprioritize, delay, and eliminate some of the projects included in the previous CIP so that if additional projects are needed to accomplish the future direction approved by the City Council, any needed rate increase can be mitigated.

A reliable distribution system throughout our service territory and a robust transmission system connecting our distribution to the electric "grid" are imperative for our electric customers. To ensure the quality of both, the CIP includes $9.8 million of projects to upgrade our transmission system and improve our distribution system.

Regardless of which power option is ultimately selected, it will take a number of years to accomplish this plan. In the meantime, $7.7 million of projects are needed to maintain our existing Power Plant. However, it should be emphasized that major portions of these expenditures could be changed in future CIPs, depending on which power option is selected. In addition, this CIP reflects approximately $14.2 million for a variety of projects over the next five years that assumes the status quo is maintained at our Power Plant.

TRANSPORTATION - $71,527,109

In response to our Citizen Satisfaction Survey results, transportation needs receive a very high priority in the CIP.

Streets - $58,622,500

One of our first priorities is to maintain the existing street system. Towards this end, the CIP calls for approximately $33 million to be spent over the next five years to replace our worn out concrete and asphalt residential, collector, and arterial roadways. In addition to our street system, the **Bridge Rehabilitation Program** (page 105), **Shared Use Path Maintenance Program** (page 108)**, Retaining Wall Reconstruction Program** (page 110), and **Lincoln Way Median Improvements** (page 111) receive attention in the CIP.

A second priority is to install roadway improvements that better accommodate our ever increasing traffic demand. Therefore, the **Mortensen Road Improvements** (page 99), **Grand Avenue Extension Project** (page 100), and **Cherry Avenue Extension** (page 102) have been included in the CIP.

CyRide - $9,434,609

CyRide has always been one of our city services that is most impacted by the decisions made in Washington, D.C. Previously, we have relied heavily on federal dollars to help upgrade our aging bus fleet. Unfortunately, we have been notified that after 2014/15, there will be no available federal funding for bus purchases. As a result of this news, CyRide has scaled back the planned purchases to 10 buses over the next five years in the **Vehicle Replacement Project** (page 115), with local funding absorbing approximately $3.6 million of this cost.

As ridership on CyRide continues to climb, it is important that our ever increasing fleet be stored inside away from the elements when not in operation. The **Building Expansion & Modernization** project (page 114) will ensure the readiness of our fleet with the anticipated $3.2 million dollar improvements. The good news regarding this project is that federal funds will pay approximately 63% of this project.

Airport - $3,470,000

The previous CIP included an airport terminal project. However, this project which reflected a $2 million improvement was viewed as a place holder until more relevant data could be collected. During the past year airport user meetings were held to determine the desire for improvements and a consulting firm completed cost estimates for various approaches for meeting these expectations. As a result of this new information, the City Council chose to insert a new $3.2 million airport terminal with an associated hangar in the **Airport Improvements Program** (page 119). The improvements are being projected in FY 2015/16 to allow time to determine if ISU and other major private users of the Airport would be willing to share equally in the local match for these improvements.

COMMUNITY ENRICHMENT – $19,630,000

Parks - $4,072,000

We continue our focus on replacing deteriorating equipment, paths, parking areas, restrooms, and tennis courts in our park system by investing in our **Playground/Park Equipment Improvements** program (page 127), **Ada Hayden Heritage Park** project (page 128), **Brookside Park Improvements** (page 133), and **Inis Grove Restroom Replacement** (page 135).

Our existing facilities receive attention in this CIP with yet-to-be-determined projects in the **Municipal Pool Maintenance** (page 125), various projects in the **Parks and Recreation Facility Improvements** (page 126), resurfacing of the Inis Grove and Emma McCarthy Lee tennis courts in **Tennis Court Improvements** (page 134), and replacement of dasher boards, rubber flooring, and water heaters in **Ames/ISU Ice Arena Improvements** (page 132).

Exciting new additions to the park system include a new **Sand Volleyball Complex** (page 129) at Emma McCarthy Lee Park, a new bridge and trail system to connect **Moore Memorial Park** (page 136) with the existing greenbelt, two new speed slides at **Furman Aquatic Center** (page 131), and a new **Ames/School Partnership** (page 130) where the City will provide competitive grade basketball and volleyball standards for the elementary school gyms that are constructed to meet the needs of the City's recreation programs.

Library - $14,300,000

The recently approved **Library Renovation** project (page 138) is reflected in the CIP. This important quality of life project, which is projected to cost $20,145,000, will be financed by $18,000,000 of G.O. Bond debt along with private donations and grants. A new project reflected in the CIP, the **Integrated Library System** (page 139), will provide an upgraded comprehensive software to manage the Library.

Cemetery - $265,000

Recent meetings with family members who frequently visit the City's cemetery have yielded input ranging from rather minor suggestions (replacing trash receptacles and benches) to more significant projects (improving the lane surfaces and water service to the graves). As a result of this input, funding for the **Ames Municipal Cemetery Improvements** (page 145) has been increased to accomplish the upgrading of the lanes and water service.

NEIGHBORHOOD IMPROVEMENTS - $1,375,000

A continuing goal of the City Council is to strengthen our neighborhoods. Because of this emphasis, the CIP includes the following projects that are devoted to accomplishing this goal: the **Neighborhood Improvement Program** (page 141), the **Neighborhood Curb Replacement Program (**page 107), the **Sidewalk Safety Program** (page 109), and the **Downtown Façade Program** (page 143).

A document as important as the Capital Improvements Plan requires the vision of exceptional leaders to identify the projects that are needed, even when the citizens have not yet realized the importance for such expenditures. Fortunately, we have an excellent group of Department Heads who, along with their staff members, have brought forth their recommended projects. In addition, it is critical that the projects reflected in this document are based on a solid financial plan to ensure their implementation. Therefore, we also owe our thanks to Duane Pitcher, Director of Finance, Nancy Masteller, Budget Officer, Sharon Hjortshoj, Finance Department Secretary, Bob Kindred, Assistant City Manager, and Melissa Mundt, Assistant City Manager for their contribution to the CIP.

Sincerely,

Steven L. Schainker
City Manager

CITY OF AMES, IOWA

FIVE-YEAR CAPITAL IMPROVEMENT PLAN
2013-2018

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HOW TO USE THE C.I.P. DOCUMENT

The 2013-2018 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 will list a street location or various locations and a map location is listed which refers to the sectioned City map on pages 149-158.

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 C.I.P. Below that is shown the source of financing for the project in each year.

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CITY OF AMES, IOWA

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PROJECTION OF DEBT CAPACITY

	2011/12 ACTUAL	2012/13 BUDGETED	2013/14 PROJECTED	2014/15 PROJECTED	2015/16 PROJECTED	2016/17 PROJECTED	2017/18 PROJECTED
1. Total Actual Valuation	3,453,383,950	3,485,540,534	3,536,735,367	3,642,837,428	3,752,122,551	3,864,686,228	3,980,626,815
2. State Mandated Debt Limit	172,669,198	174,277,027	176,836,768	182,141,871	187,606,128	193,234,311	199,031,341
3. City Reserve (25% of Limit)	43,167,300	43,569,257	44,209,192	45,535,468	46,901,532	48,308,578	49,757,835
Un-Reserved Debt Capacity	129,501,898	130,707,770	132,627,576	136,606,403	140,704,596	144,925,733	149,273,506
4. Outstanding Debt	45,240,000	49,975,000	42,940,000	37,000,000	31,405,000	25,625,000	20,045,000
5. Proposed Issues	-	-	19,679,000	6,916,000	8,687,500	6,590,000	6,290,000
6. Balance of Proposed Issues	-	-	-	18,958,647	24,611,041	31,348,406	35,444,061
Total Debt Subject to Limit	45,240,000	49,975,000	62,619,000	62,874,647	64,703,541	63,563,406	61,779,061
7. Available Un-Reserved Debt Capacity ($)	84,261,898	80,732,770	70,008,576	73,731,756	76,001,055	81,362,327	87,494,445
8. Available Un-Reserved Debt Capacity (%)	65.07%	61.77%	52.79%	53.97%	54.01%	56.14%	58.61%
9. Total Debt Capacity ($)	127,429,198	124,302,027	114,217,768	119,267,224	122,902,587	129,670,905	137,252,280
10. Total Debt Capacity (%)	73.80%	71.32%	64.59%	65.48%	65.51%	67.11%	68.96%

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.*
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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
2013/14:				
STREETS ENGINEERING		6,200,000		
Collector Street Pavement Improvements (Sheldon Avenue)	420,000		28%	MPO/STP Funds
CyRide Rte Pavement Improvements (Jewel Drive/Ken Maril)	2,000,000		98%	Electric Utility Fund
Downtown Street Pavement Improvements (5th Street)	1,000,000		100%	
Concrete Pavement Improvements	1,185,000		92%	Road Use Tax/Electric
Asphalt/Seal Coat Street Rehabilitation Program	470,000		42%	Road Use Tax
Arterial Street Pavement Improvements (Lincoln Way)	825,000		100%	
Grand Avenue Extension	300,000		71%	Federal/State Grants
LIBRARY		13,479,000		
Ames Public Library Renovation	13,479,000		96%	Private Funding/Grants
2013/14 TOTAL		**19,679,000**		

SUMMARY OF MAJOR BOND ISSUES, continued

GENERAL OBLIGATION BONDS	PROJECT TOTAL	CATEGORY TOTAL	% PROJECT G.O. FUNDED	OTHER SOURCES OF FUNDING
2014/15:				
STORM SEWER		300,000		
Flood Response & Mitigation Projects	300,000		100%	
STREETS ENGINEERING		6,420,000		
Collector St Pavement Improvements (Woodland/West St)	1,305,000		96%	Electric Utility Fund
CyRide Rte Pavement Improvements (24th/Bloomington Rd)	525,000		28%	MPO/STP Funds/Electric
Downtown Street Pavement Improvements (5th Street)	780,000		100%	
Concrete Pavement Improvements	1,660,000		94%	Road Use Tax/Electric
Arterial Street Pavement Improvements (Lincoln Way)	600,000		100%	
Grand Avenue Extension	300,000		30%	Federal/State Grants
Asphalt Street Reconstruction Program (Ferndale Avenue)	1,250,000		100%	
STREETS MAINTENANCE		175,000		
Bridge Rehabilitation Program	175,000		100%	
LIBRARY		21,000		
Ames Public Library Renovation	21,000		78%	Private Funding
2014/15 TOTAL		**6,916,000**		

SUMMARY OF MAJOR BOND ISSUES, continued

GENERAL OBLIGATION BONDS	PROJECT TOTAL	CATEGORY TOTAL	% PROJECT G.O. FUNDED	OTHER SOURCES OF FUNDING
2015/16:				
TRAFFIC		450,000		
West Lincoln Way Intersection Improvements	450,000		38%	Developer/Grant
STORM SEWER		1,000,000		
Flood Response & Mitigation Projects	1,000,000		100%	
STREETS ENGINEERING		4,670,500		
Collector Street Pavement Improvements (Meadowlane Ave)	750,000		94%	Electric Utility Fund
Downtown Street Pavement Improvements (Clark Avenue)	750,000		94%	Electric Utility Fund
Concrete Pavement Improvements	770,500		89%	Road Use Tax/Electric
Asphalt/Seal Coat Street Rehabilitation Program	350,000		35%	Road Use Tax
Arterial Street Pavement Improvements (East Lincoln Way)	420,000		27%	MPO/STP Funds/Electric
Grand Avenue Extension	1,530,000		33%	MPO/STP Funds/Grants
Cherry Avenue Extension	100,000		100%	
STREETS MAINTENANCE		1,700,000		
Bridge Rehabilitation Program	1,700,000		63%	Grants
AIRPORT		867,000		
Airport Improvements	867,000		27%	FAA/Grant/ISU/Private
2015/16 TOTAL		**8,687,500**		

SUMMARY OF MAJOR BOND ISSUES, continued

GENERAL OBLIGATION BONDS	PROJECT TOTAL	CATEGORY TOTAL	% PROJECT G.O. FUNDED	OTHER SOURCES OF FUNDING
2016/17:				
STREETS ENGINEERING		6,590,000		
Collector Street Pavement Improvements (Hoover Avenue)	950,000		100%	
CyRide Route Pavement Improvements (S. 3rd/S 4th Sts)	525,000		28%	MPO/STP Funds/Electric
Downtown St Pavement Improvements (Market/Sherman)	500,000		100%	
Concrete Pavement Improvements	985,000		91%	Road Use Tax/Electric
Asphalt/Seal Coat Street Rehabilitation Program	905,000		58%	Road Use Tax
Arterial Street Pavement Improvements (West Lincoln Way)	345,000		100%	
Grand Avenue Extension	1,500,000		23%	MPO/STP Funds/Grants
Asphalt Street Reconstruction Program (Pierce Ave/Circle)	790,000		94%	Electric Utility Fund
Cherry Avenue Extension	90,000		30%	Federal/State Grants
2016/17 TOTAL		**6,590,000**		

SUMMARY OF MAJOR BOND ISSUES, continued

GENERAL OBLIGATION BONDS	PROJECT TOTAL	CATEGORY TOTAL	% PROJECT G.O. FUNDED	OTHER SOURCES OF FUNDING
2017/18:				
STREETS ENGINEERING		6,290,000		
Collector Street Pavement Improvements (East 20th Street)	575,000		92%	Electric Utility Fund
Downtown St Pavement Improvements (Main Street Alley)	235,000		82%	Electric Utility Fund
Concrete Pavement Improvements	815,000		94%	Road Use Tax
Asphalt/Seal Coat Street Rehabilitation Program	255,000		28%	Road Use Tax
Arterial Street Pavement Improvements (North Dakota)	700,000		100%	
Grand Avenue Extension	2,000,000		38%	MPO/STP Funds/Grants
Asphalt Street Reconstruction Program (various locations)	1,200,000		100%	
Cherry Avenue Extension	510,000		20%	Grants/Electric
2017/18 TOTAL		**6,290,000**		
GRAND TOTAL GENERAL OBLIGATION BONDS		**48,162,500**		

INTERMODAL FACILITY SERVICES

Cars

- Parking for 384 vehicles for short and long-term use

Car and Van Pools

- 20 free parking spaces for qualified participants

Bikes

- Bike path connections, shower, and bike locker facilities

Buses

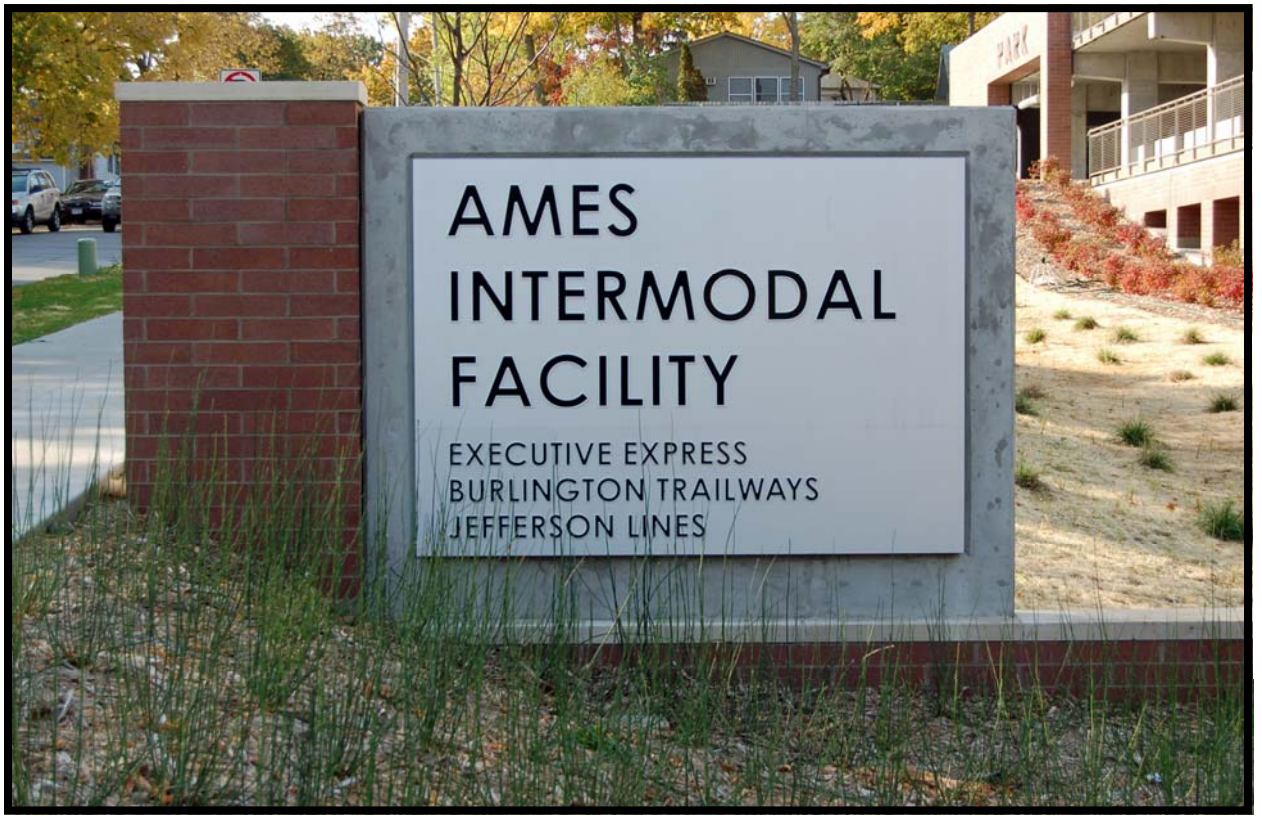
- Jefferson Lines and Burlington Trailways
  - Service to Des Moines, Cedar Rapids, Chicago, Denver, Omaha, Indianapolis, St. Louis, and other cities
- Executive Express
  - 13-14 daily departures to Des Moines International Airport
- HIRTA (Heart of Iowa Regional Transit Agency)
  - Door-to-door service in central Iowa
- CyRide
  - Stops one block away for public transportation within Ames

Taxis

- Taxi stand for transportation within Ames

On Foot

- Public restrooms for Campustown visitors



The $9.2 million Ames Intermodal Facility Transportation Hub was funded through the U.S. Department of Transportation's American Recovery and Reinvestment Act of 2009 and Iowa's intercity bus program. The facility includes 384 parking spaces for short and long-term use, bike path connections to the community with shower and bike locker facilities, bus terminal for intercity and regional carriers, connections to CyRide one block away, 20 free parking spaces for qualified car and vanpool participants, taxi stand for transportation within the community, and public restrooms for the Campustown Business District.

CAPITAL IMPROVEMENT PLAN - GRAND TOTALS

PROJECT/REVENUE DESCRIPTION	TOTAL	2013/14	2014/15	2015/16	2016/17	2017/18	PAGE
EXPENDITURES:							
Public Safety	6,464,955	1,613,270	677,175	2,479,175	801,335	894,000	7
Utilities	155,484,120	23,471,170	48,479,550	43,554,800	24,650,800	15,327,800	21
Transportation	71,527,109	12,463,976	11,702,630	17,773,859	15,629,480	13,957,164	89
Community Enrichment	19,630,000	14,922,000	1,335,500	1,289,500	1,138,000	945,000	121
Total Expenditures	**253,106,184**	**52,470,416**	**62,194,855**	**65,097,334**	**42,219,615**	**31,123,964**	
REVENUES:							
Bonds	48,365,563	19,882,063	6,916,000	8,687,500	6,590,000	6,290,000	
City	92,348,977	16,639,182	22,205,262	23,339,274	15,061,055	15,104,204	
Other	112,391,644	15,949,171	33,073,593	33,070,560	20,568,560	9,729,760	
Total Revenues	**253,106,184**	**52,470,416**	**62,194,855**	**65,097,334**	**42,219,615**	**31,123,964**	

CAPITAL IMPROVEMENT PLAN - EXPENDITURE SUMMARY BY PROGRAM

PROJECT/REVENUE DESCRIPTION	TOTAL	2013/14	2014/15	2015/16	2016/17	2017/18	PAGE
EXPENDITURES:							
Public Safety:							
Fire	492,955	53,270	145,175	145,175	25,335	124,000	9
Traffic	5,972,000	1,560,000	532,000	2,334,000	776,000	770,000	12
Total Public Safety	**6,464,955**	**1,613,270**	**677,175**	**2,479,175**	**801,335**	**894,000**	
Utilities:							
Resource Recovery	2,980,120	1,701,170	624,550	209,800	319,800	124,800	23
Water Treatment	72,758,000	4,546,000	26,803,000	26,437,000	13,183,000	1,789,000	27
Water Distribution	4,875,000	975,000	975,000	975,000	975,000	975,000	35
Storm Sewer	6,463,000	955,000	1,127,000	2,127,000	1,127,000	1,127,000	37
Sanitary Sewer	17,475,000	3,495,000	3,495,000	3,495,000	3,495,000	3,495,000	44
WPC Treatment	14,238,000	4,529,000	3,350,000	3,481,000	1,881,000	997,000	47
Electric	36,695,000	7,270,000	12,105,000	6,830,000	3,670,000	6,820,000	60
Total Utilities	**155,484,120**	**23,471,170**	**48,479,550**	**43,554,800**	**24,650,800**	**15,327,800**	

CAPITAL IMPROVEMENT PLAN - EXPENDITURE SUMMARY BY PROGRAM, continued

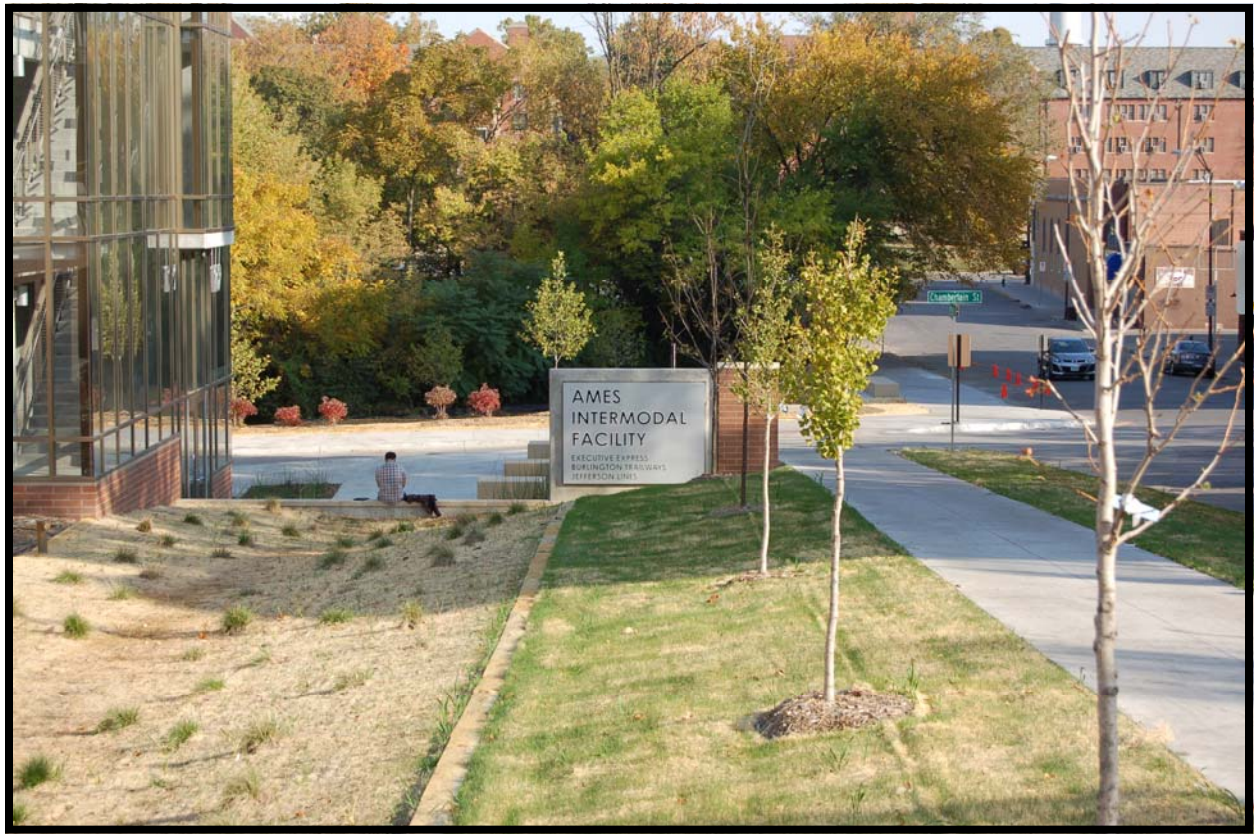
PROJECT/REVENUE DESCRIPTION	TOTAL	2013/14	2014/15	2015/16	2016/17	2017/18	PAGE
EXPENDITURES, continued:							
Transportation:							
Streets/Engineering	53,877,500	8,193,000	9,562,000	9,800,500	13,942,000	12,380,000	91
Streets/Maintenance	4,745,000	380,000	585,000	3,180,000	300,000	300,000	103
Transit	9,434,609	3,890,976	1,555,630	1,593,359	1,217,480	1,177,164	113
Airport	3,470,000			3,200,000	170,000	100,000	118
Total Transportation	**71,527,109**	**12,463,976**	**11,702,630**	**17,773,859**	**15,629,480**	**13,957,164**	
Community Enrichment/Internal Services:							
Parks and Recreation	4,072,000	554,000	1,027,500	777,500	918,000	795,000	123
Library	14,300,000	14,073,000	27,000	200,000			137
City Manager	250,000	50,000	50,000	50,000	50,000	50,000	140
Planning and Housing	250,000	50,000	50,000	50,000	50,000	50,000	142
Public Works	265,000	65,000	65,000	65,000	70,000		144
Internal Services/Facilities	493,000	130,000	116,000	147,000	50,000	50,000	146
Total Community Enrichment	**19,630,000**	**14,922,000**	**1,335,500**	**1,289,500**	**1,138,000**	**945,000**	
GRAND TOTAL EXPENDITURES	**253,106,184**	**52,470,416**	**62,194,855**	**65,097,334**	**42,219,615**	**31,123,964**	

CAPITAL IMPROVEMENT PLAN - REVENUE SUMMARY BY TYPE

PROJECT/REVENUE DESCRIPTION	TOTAL	2013/14	2014/15	2015/16	2016/17	2017/18
REVENUES:						
Bonds:						
G.O. Bonds	48,162,500	19,679,000	6,916,000	8,687,500	6,590,000	6,290,000
G.O. Bonds (prior issuance)	203,063	203,063				
Total Bonds	**48,365,563**	**19,882,063**	**6,916,000**	**8,687,500**	**6,590,000**	**6,290,000**
City:						
Road Use Tax	6,576,750	1,460,000	1,448,500	1,353,250	1,155,000	1,160,000
Local Option Sales Tax	7,570,955	1,237,270	1,312,675	2,087,675	1,539,335	1,394,000
Electric Utility Fund	36,144,400	6,905,640	11,800,040	6,794,240	3,722,240	6,922,240
Water Utility Fund	19,592,750	1,478,000	3,904,500	7,858,250	4,158,000	2,194,000
Sewer Utility Fund	10,300,750	2,409,000	1,908,500	2,655,250	2,106,000	1,222,000
Storm Sewer Utility Fund	3,466,937	566,937	500,000	800,000	800,000	800,000
Resource Recovery Fund	2,980,120	1,701,170	624,550	209,800	319,800	124,800
Transit Fund	5,180,565	791,165	474,997	1,556,559	1,180,680	1,177,164
Airport Construction Fund	30,000				20,000	10,000
Furman Trust Fund	100,000					100,000
Ice Arena Reserve Funds	345,000	70,000	215,000		60,000	
Fleet Services Fund	60,750	20,000	16,500	24,250		
Total City	**92,348,977**	**16,639,182**	**22,205,262**	**23,339,274**	**15,061,055**	**15,104,204**

CAPITAL IMPROVEMENT PLAN - REVENUE SUMMARY BY TYPE, continued

PROJECT/REVENUE DESCRIPTION	TOTAL	2013/14	2014/15	2015/16	2016/17	2017/18
REVENUES, continued:						
Other:						
MPO/STP Funds	8,914,000	1,420,000	1,362,000	1,920,000	2,752,000	1,460,000
MPO/Planning Funds	320,000	320,000				
Federal/State Grants	13,265,200	344,800	976,800	4,106,800	3,946,800	3,890,000
State Revolving Fund	74,508,000	9,548,000	29,170,000	24,250,000	7,373,000	4,167,000
DWSRF Forgivable Loan	6,224,000				6,224,000	
Federal Transit Administration	4,106,844	3,063,011	1,043,833			
Federal Aviation Administration	690,000			450,000	150,000	90,000
Iowa State University	2,292,600	464,360	454,960	1,177,760	97,760	97,760
Ames Community School District	150,000	25,000	25,000	50,000	25,000	25,000
Developer Funds	435,000	185,000		250,000		
Private Funds	1,441,000	534,000	41,000	866,000		
In-Kind Donations	25,000	25,000				
Wellmark 3-Point Play Funds	20,000	20,000				
Total Other	**112,391,644**	**15,949,171**	**33,073,593**	**33,070,560**	**20,568,560**	**9,729,760**
GRAND TOTAL REVENUES	**253,106,184**	**52,470,416**	**62,194,855**	**65,097,334**	**42,219,615**	**31,123,964**



The Ames Intermodal Facility is managed by Iowa State University's Parking Division on behalf of CyRide, the transit agency responsible for public transportation within Ames.

The Federal Transit Administration, the Iowa Department of Transportation, Iowa State University, and the City of Ames cooperated financially to bring this project to completion.

The Jefferson Lines and Burlington Trailways buses provide service to Des Moines, Cedar Rapids, Chicago, Denver, Omaha, Indianapolis, St. Louis, and other cities. These transportation companies provide drop off/pick-up at the Intermodal Facility, but do not house any vehicles there.

Burlington Trailways

PUBLIC SAFETY - SUMMARY

PROJECT/REVENUE DESCRIPTION	TOTAL	2013/14	2014/15	2015/16	2016/17	2017/18	PAGE
EXPENDITURES:							
Fire	492,955	53,270	145,175	145,175	25,335	124,000	9
Traffic	5,972,000	1,560,000	532,000	2,334,000	776,000	770,000	12
Total Expenditures	**6,464,955**	**1,613,270**	**677,175**	**2,479,175**	**801,335**	**894,000**	
REVENUES:							
Bonds:							
G.O. Bonds	450,000			450,000			
City:							
Road Use Tax	1,696,000	450,000	432,000	299,000	255,000	260,000	
Local Option Sales Tax	2,338,955	483,270	175,175	820,175	386,335	474,000	
Sub-Total City Funds	4,034,955	933,270	607,175	1,119,175	641,335	734,000	

PUBLIC SAFETY - SUMMARY

PROJECT/REVENUE DESCRIPTION	TOTAL	2013/14	2014/15	2015/16	2016/17	2017/18
REVENUES, continued:						
Other:						
MPO/STP Funds	910,000	360,000	70,000	160,000	160,000	160,000
MPO/Planning Funds	320,000	320,000				
Iowa D.O.T. Safety Grant	500,000			500,000		
Developer	250,000			250,000		
Sub-Total Other Funds	1,980,000	680,000	70,000	910,000	160,000	160,000
Total Revenues	**6,464,955**	**1,613,270**	**677,175**	**2,479,175**	**801,335**	**894,000**

PUBLIC SAFETY - FIRE

PROJECT/REVENUE DESCRIPTION	TOTAL	2013/14	2014/15	2015/16	2016/17	2017/18	PAGE
EXPENDITURES:							
1 Fire Station Improvements	202,605	53,270			25,335	124,000	10
2 Self-Contained Breathing Apparatus	290,350		145,175	145,175			11
Total Expenditures	**492,955**	**53,270**	**145,175**	**145,175**	**25,335**	**124,000**	
REVENUES:							
City:							
Local Option Sales Tax	492,955	53,270	145,175	145,175	25,335	124,000	
Total Revenues	**492,955**	**53,270**	**145,175**	**145,175**	**25,335**	**124,000**	

FIRE STATION IMPROVEMENTS **PROJECT STATUS:** Cost Change Scope Change Delayed

City of Ames, Iowa
Capital Improvements Plan

DESCRIPTION/JUSTIFICATION

Fire Station #1 was constructed in 1979 and is in need of repairs and renovations. Kitchen cabinets, flooring, appliances, and storage cabinets need to be updated as well as the communications room and lieutenants' office. Additionally, the rear drive was originally constructed with gas tanks underneath. The tanks were removed and the void filled, but settling has occurred, causing accelerated damage.

Fire Station #2 is 44 years old. New fencing is needed along the south side of the building and the front apparatus apron needs to be replaced due to extreme cracking. Also, to better accommodate female firefighters and conform to ADA requirements, an additional ¾ restroom is recommended.

Fire Station #3 was constructed in 2002, but problems were encountered with the apparatus truck room floor during construction. An agreement for a financial settlement was reached with the builder, and the budget for this repair has been carried forward.

COMMENTS

2013/14: Fire Station #1 kitchen cabinets, appliances, and flooring ($15,000); Fire Station #1 communications room and lieutenants' office cabinets, countertops, and storage ($6,000); Fire Station #2 fencing ($11,000); Fire Station #2 front apparatus apron replacement ($6,000); Fire Station #3 truck room floor repainting ($13,000); Fire Station #3 driveway and sidewalk joint sealing ($2,270)

2015/16: Fire Station #2 restroom addition ($25,335)

2016/17: Fire Station #1 driveway replacement ($124,000)

LOCATION

Fire Station #1, 1300 Burnett Avenue – Map 5, location M-9
Fire Station #2, 132 Welch Avenue – Map 5, location H-11
Fire Station #3, 2400 S. Duff Avenue – Map 8, location M-15

FISCAL YEAR PRIORITY			1		1		1
	TOTAL	**2013/14**	**2014/15**	**2015/16**	**2016/17**	**2017/18**
COST:						
Repairs/Maintenance	202,605	53,270		25,335	124,000	
TOTAL	**202,605**	**53,270**		**25,335**	**124,000**	
FINANCING:						
Local Option Sales Tax	202,605	53,270		25,335	124,000	
TOTAL	**202,605**	**53,270**		**25,335**	**124,000**	

PROGRAM - ACTIVITY: Public Safety – Fire
DEPARTMENT: Fire
ACCOUNT NO. 030-2252-429

SELF-CONTAINED BREATHING APPARATUS **PROJECT STATUS:** Cost Change

DESCRIPTION/JUSTIFICATION
Ames firefighters utilize Self-Contained Breathing Apparatus (SCBA) to enter hazardous environments while performing firefighting operations or to operate in areas that are oxygen deficient. The SCBA is an essential piece of personal protective equipment that may be used with little or no advance warning, so they must always be kept in ideal working order.

The current SCBAs are reaching their life expectancy and the units need to be replaced or refurbished. The cost to replace the SCBAs and equipment is estimated at $290,350, which includes: 41 SCBA units with face piece with voice amplifier, regulators, and spare cylinders.

This project includes the hardware and software needed to support the maintenance of the equipment. In addition, the supplied air units used in confined space operations and four rapid intervention kits will be replaced.

Cost change is due to an update in the number of units to be purchased and revised estimates on the unit costs.

COMMENTS
Federal regulations state the life of the cylinder is 15 years. The City of Ames purchased the cylinders in May 2001, and they expire May of 2016.

2014/15: Purchase one-half of the SCBA units - $145,175
2015/16: Purchase second half of the SCBA units - $145,175

FISCAL YEAR PRIORITY				1	1		
		TOTAL	**2013/14**	**2014/15**	**2015/16**	**2016/17**	**2017/18**
COST:							
Equipment		290,350		145,175	145,175		
	TOTAL	**290,350**		**145,175**	**145,175**		
FINANCING:							
Local Option Sales Tax		290,350		145,175	145,175		
	TOTAL	**290,350**		**145,175**	**145,175**		

PROGRAM - ACTIVITY: Public Safety – Fire
DEPARTMENT: Fire
ACCOUNT NO.

PUBLIC SAFETY - TRAFFIC

	PROJECT/REVENUE DESCRIPTION	TOTAL	2013/14	2014/15	2015/16	2016/17	2017/18	PAGE
EXPENDITURES:								
1	Traffic Signal Program	1,060,000	260,000	200,000	200,000	200,000	200,000	14
2	Traffic Calming Program	56,000	36,000		20,000			15
3	Shared Use Path System Expansion	2,756,000	790,000	100,000	835,000	521,000	510,000	16
4	Traffic Engineering Studies	550,000	400,000	50,000	50,000		50,000	17
5	Multi-Modal Roadway Improvements	175,000	74,000	7,000	29,000	55,000	10,000	18
6	U.S. 69 Intersection Improvements	50,000		50,000				19
7	West Lincoln Way Intersection Improvements	1,325,000		125,000	1,200,000			20
	Total Expenditures	**5,972,000**	**1,560,000**	**532,000**	**2,334,000**	**776,000**	**770,000**	
REVENUES:								
Bonds:								
G.O. Bonds		450,000			450,000			

PUBLIC SAFETY - TRAFFIC, continued

PROJECT/REVENUE DESCRIPTION	TOTAL	2013/14	2014/15	2015/16	2016/17	2017/18
REVENUES, continued:						
City:						
Road Use Tax	1,696,000	450,000	432,000	299,000	255,000	260,000
Local Option Sales Tax	1,846,000	430,000	30,000	675,000	361,000	350,000
Sub-Total City Funds	3,542,000	880,000	462,000	974,000	616,000	610,000
Other:						
MPO/STP Funds	910,000	360,000	70,000	160,000	160,000	160,000
MPO/Planning Funds	320,000	320,000				
Iowa D.O.T. Safety Grant	500,000			500,000		
Developer	250,000			250,000		
Sub-Total Other Funds	1,980,000	680,000	70,000		160,000	160,000
Total Revenues	**5,972,000**	**1,560,000**	**532,000**	**1,424,000**	**776,000**	**770,000**

TRAFFIC SIGNAL PROGRAM **PROJECT STATUS:** Site Change 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 provides funding for those maintenance needs. In addition, this program provides for the necessary upgrading of the traffic signal system as technology continues to change. In recent years, the traffic signal replacements have included radar detection systems instead of the typically used in-pavement loop detection system that frequently was the point of vehicle detection failure. Another advantage of the radar detection system is that it detects bicycles in addition to vehicles.

A new addition to this program in the first year is to retrofit existing video camera detection equipment at three locations. All three intersections use equipment that is obsolete and replacement parts are no longer available. This project will replace the current equipment with new standard radar detection. All three locations are along arterial street locations where traffic flow efficiency is critical.

COMMENTS

Proposed locations:

2013/14	20th Street/Grand Avenue signal replacement ($200,000) – Map 5, location L-8; Dakota Avenue/Lincoln Way (camera detection retrofit) ($20,000) – Map 4, location E-11; South Dakota Avenue/Mortensen Road (camera detection retrofit) ($20,000) – Map 4, location E-13; and University Boulevard/Lincoln Way (camera detection retrofit) ($20,000) – Map 5, location J-11
2014/15	Lincoln Way/Union Drive signal replacement – Map 5, location I-11
2015/16	Maintenance/Equipment upgrades at various locations (includes $50,000 for one leg of 13th/Stange signal replacement in partnership with ISU)
2016/17	Lincoln Way/Hyland Avenue signal replacement – Map 5, location H-11
2017/18	Dayton Avenue/East Lincoln Way signal replacement – Map 6, location Q-11

The site change is due to reprioritization of locations considering the condition of the 20th Street/Grand Avenue location, the addition of three camera detection retrofit projects due to obsolete equipment, and inclusion of maintenance/equipment upgrades at various locations in 2015/16. The cost change is due to cost increases of copper and steel that are part of the system and the addition of retrofitting existing video camera detection equipment at three locations in 2013/14.

FISCAL YEAR PRIORITY			1	1	1	1	1
		TOTAL	**2013/14**	**2014/15**	**2015/16**	**2016/17**	**2017/18**
COST:							
Engineering		150,000	30,000	30,000	30,000	30,000	30,000
Construction		910,000	230,000	170,000	170,000	170,000	170,000
	TOTAL	**1,060,000**	**260,000**	**200,000**	**200,000**	**200,000**	**200,000**
FINANCING:							
Road Use Tax		1,060,000	260,000	200,000	200,000	200,000	200,000
	TOTAL	**1,060,000**	**260,000**	**200,000**	**200,000**	**200,000**	**200,000**

PROGRAM – ACTIVITY:	**DEPARTMENT:**	**ACCOUNT NO.**
Public Safety – Traffic	Public Works	060-7517-429 060-7524-429

TRAFFIC CALMING PROGRAM **PROJECT STATUS:** New

DESCRIPTION/JUSTIFICATION

This new program is the result of completing the Neighborhood Traffic Calming Handbook. This handbook is meant to serve as a technical guide compiling nationally recognized best practices in the field of traffic calming, and then modifying those methods and their application to fit the context of the Ames community.

On October 9, 2012, City Council programmed installation of traffic calming measures at three locations in the community. These locations, all near schools, warranted some means of traffic calming devices to be installed. The measures to be installed include Speed Humps (Ridgewood Avenue/Summit Avenue/Crescent Street) and Dynamic Feedback Speed Limit Signs (Hayes Avenue and Jewel Drive) as designated in the staff report.

The 2015/16 location has been identified as Hyde Avenue to be coordinated with the paving of Grant Avenue. Some residents on Hyde Avenue have been concerned about speeding in their area and with the paving of Grant Avenue; this route to the Gilbert Schools is anticipated to still be an issue. Specific measures to be used are still to be determined.

LOCATION

2013/14 Hayes Avenue (24th Street to 20th Street) ($8,000) – Map 5, location J-8; Ridgewood Avenue/Summit Avenue/Crescent Street (16th Street to 13th Street) ($12,000) – Map 5, location K-9; and Jewel Drive (South Duff Avenue to end near Kate Mitchell Elementary School) ($16,000) – Map 9, location O-17

2015/16 Hyde Avenue (Grant Avenue to Bloomington Road) ($20,000) – Map 2, location I-5

FISCAL YEAR PRIORITY			2		6		
		TOTAL	**2013/14**	**2014/15**	**2015/16**	**2016/17**	**2017/18**
COST:							
Construction		56,000	36,000		20,000		
	TOTAL	**56,000**	**36,000**		**20,000**		
FINANCING:							
Road Use Tax		56,000	36,000		20,000		
	TOTAL	**56,000**	**36,000**		**20,000**		

PROGRAM - ACTIVITY:	**DEPARTMENT:**	**ACCOUNT NO.**
Public Safety – Traffic	Public Works	060-7512-429

SHARED USE PATH SYSTEM EXPANSION **PROJECT STATUS:** Cost Change Revenue Change 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 Transportation Plan identifies those paths that separate bicycle traffic from higher-speed automobile traffic. This program supports one of the City Council's priorities for the year, connecting our community.

COMMENTS

Scheduling the Skunk River Trail Extension segments as proposed will allow the South Ames Business Group to assist in right-of-way connections to those segments and will build from the Southeast Entry Plan. The projects included in this program are subject to acquiring voluntary easements from property owners.

Shared use path maintenance costs will increase due to new shared use path construction.

2013/14	Skunk River Trail Extension (East Lincoln Way to South River Valley Park) - Map 6, location O-11
2014/15	S Duff Avenue (Squaw Creek to S 5th Street) – Map 5, location M-12
2015/16	Skunk River Trail (Southeast 16th Street to East Lincoln Way) (bridge construction and bank stabilization at Squaw Creek) – Map 6, location O-13
2016/17	Skunk River Trail (Southeast 16th Street to East Lincoln Way) (trail paving) – Map 6, location O-13
2017/18	Skunk River Trail (River Valley Park north) - Map 5, location O-8

The site change is due to the addition of the shared use path along S. Duff Avenue in 2014/15. Revenue changes are the result of the addition of MPO/STP funding in 2014/15 and additional MPO/STP funding in 2016/17.

The Skunk River Trail (Southeast 16th Street to East Lincoln Way) project will be coordinated with the Flood Response and Mitigation Program (page 38) in year 2015/16.

FISCAL YEAR PRIORITY			3	2	3	2	2
		TOTAL	**2013/14**	**2014/15**	**2015/16**	**2016/17**	**2017/18**
COST:							
Engineering		397,000	105,000	20,000	95,000	75,000	102,000
Land Acquisition		80,000	33,000		47,000		
Construction		2,279,000	652,000	80,000	693,000	446,000	408,000
	TOTAL	**2,756,000**	**790,000**	**100,000**	**835,000**	**521,000**	**510,000**
FINANCING:							
Local Option Sales Tax		1,846,000	430,000	30,000	675,000	361,000	350,000
MPO/STP Funds		910,000	360,000	70,000	160,000	160,000	160,000
	TOTAL	**2,756,000**	**790,000**	**100,000**	**835,000**	**521,000**	**510,000**

PROGRAM – ACTIVITY: Public Safety – Traffic

DEPARTMENT: Public Works

ACCOUNT NO. 030-7502-429
320-7502-429

TRAFFIC ENGINEERING STUDIES **PROJECT STATUS:** Scope Change

DESCRIPTION/JUSTIFICATION

The studies planned for this annual program will focus on examining the traffic signal system, the bicycle path (shared use path) system, and accident data to provide traffic information used for planning future capital improvement projects. These studies will identify those projects that will improve the efficiency, effectiveness, and safety of those systems.

COMMENTS

Proposed studies:

2013/14	Origin Destination Study and Long-Range Transportation Plan Update
2014/15	Hourly Model Development
2015/16	Turning Movement Count & Traffic Signal Progression Study
2017/18	Shared Use Path Utilization Study

The Origin Destination Study and Long-Range Transportation Plan Update (2013/14) will collect data for enhancement of the Travel Demand Model and will update the Long-Range Transportation Plan which is to be adopted in 2015. Through Hourly Model Development in 2014/15, data will be collected and analyzed in order to transition the AAMPO model from a daily (24-hour) to a per-hour model. The Turning Movement Count & Traffic Signal Progression Study in 2015/16 will serve two purposes: to identify traffic patterns along signalized corridors to enhance the efficiency of traffic flows and to assess the potential use of adaptive traffic signal control in Ames. The Shared Use Path Utilization Study (2017/18) will gather traffic volumes of bicycles/pedestrians on the City's shared use path system by time of day and facility type to prioritize maintenance and winter maintenance activities. This will also aid in prioritizing alternative funding source pursuits.

The scope change for this project is due to adding the Shared Use Path Utilization Study in 2017/18.

FISCAL YEAR PRIORITY			4	4	4		4
		TOTAL	**2013/14**	**2014/15**	**2015/16**	**2016/17**	**2017/18**
COST:							
Engineering		550,000	400,000	50,000	50,000		50,000
	TOTAL	**550,000**	**400,000**	**50,000**	**50,000**		**50,000**
FINANCING:							
Road Use Tax		230,000	80,000	50,000	50,000		50,000
MPO/Planning Funds		320,000	320,000				
	TOTAL	**550,000**	**400,000**	**50,000**	**50,000**		**50,000**

PROGRAM – ACTIVITY:	**DEPARTMENT:**	**ACCOUNT NO.**
Public Safety – Traffic	Public Works	060-7504-429
		320-7504-429

MULTI-MODAL ROADWAY IMPROVEMENTS **PROJECT STATUS:** Site Change Cost Change

DESCRIPTION/JUSTIFICATION

Multi-modal transportation refers to the various modes used by Ames residents to travel around 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 on-street bike lanes and 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. 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 are identified in the Long-Range Transportation Plan.

LOCATIONS

2013/14 **On-Street Bike Lanes/Lane Reductions:** Duff Avenue and 30th Street – 13th Street/Duff Avenue to 30th Street/Hoover Avenue (lane reductions and addition of on-street bike lanes, see Projects 17 and BL1 in the Long-Range Transportation Plan) – Map 5, location M-9

2014/15 **Sharrows:** East Lincoln Way frontage road (Freel Drive to Dayton Avenue) – Map 6, location P-11

2015/16 **Sharrows:** Clark Avenue (6th Street to 24th Street) – Map 5, location L-10

2016/17 **Sharrows:** Hoover Avenue (30th Street to Bloomington Road) – Map 2 , location K-6; and Northwestern Avenue (6th Street to 30th Street) – Map 5, location L-10 (will coordinate with roadway surfacing projects)

2017/18 **Sharrows:** Duff Avenue (6th Street to Lincoln Way) – Map 5, location M-11

The cost change for this program is due to updated cost estimates for the included projects.

The site change is due to the addition of Duff Avenue in 2017/18.

FISCAL YEAR PRIORITY			5	3	5	3	3
		TOTAL	**2013/14**	**2014/15**	**2015/16**	**2016/17**	**2017/18**
COST:							
Engineering		17,500	7,400	700	2,900	5,500	1,000
Construction		157,500	66,600	6,300	26,100	49,500	9,000
	TOTAL	**175,000**	**74,000**	**7,000**	**29,000**	**55,000**	**10,000**
FINANCING:							
Road Use Tax Fund		175,000	74,000	7,000	29,000	55,000	10,000
	TOTAL	**175,000**	**74,000**	**7,000**	**29,000**	**55,000**	**10,000**

PROGRAM - ACTIVITY: Public Safety – Traffic

DEPARTMENT: Public Works

ACCOUNT NO. 060-7521-429

US69 INTERSECTION IMPROVEMENTS **PROJECT STATUS:** Delayed

DESCRIPTION/JUSTIFICATION
Intersection improvement projects along US69 within and just outside the City limits are targeted to alleviate congestion and reduce accidents.

COMMENTS
Proposed schedule:
2014/15: 13th Street/Grand Avenue (planning/public participation) – Map 5, location L-9

The Long-Range Transportation Plan (LRTP) adopted in September 2010 included this project as a high (short-term) priority. Responses from the public input survey during the LRTP update showed this intersection as the clear highest priority for further study.

This project will commence during 2014/15 with a public participation process that will continue through the design of improvements. A design consultant will be selected to apply context-sensitive solutions as they develop intersection improvement plans. Public involvement will continue as design alternatives are developed. Following the planning phase, construction and land acquisition costs will be programmed into the CIP.

FISCAL YEAR PRIORITY				5			
		TOTAL	**2013/14**	**2014/15**	**2015/16**	**2016/17**	**2017/18**
COST:							
Planning		50,000		50,000			
	TOTAL	**50,000**		**50,000**			
FINANCING:							
Road Use Tax		50,000		50,000			
	TOTAL	**50,000**		**50,000**			

PROGRAM – ACTIVITY: Public Safety – Traffic
DEPARTMENT: Public Works
ACCOUNT NO.

WEST LINCOLN WAY INTERSECTION IMPROVEMENTS **PROJECT STATUS:** Cost Change

DESCRIPTION/JUSTIFICATION

This project is for constructing turn lanes and installing traffic signals at the Franklin Avenue/Lincoln Way intersection. A traffic impact report for South Fork Subdivision justified these improvements.

Increased traffic flow from South Fork Subdivision necessitates left-turn lanes at the Lincoln Way approaches to both the Franklin Avenue and the Dotson Drive intersections to accommodate heavy turning movements. Turn lanes and a new traffic signal system were added at the Dotson Drive/Lincoln Way intersection in 2012. Additional turn lanes are also anticipated for right-turning movements northbound from Franklin Avenue onto Lincoln Way. The increased traffic will also warrant replacement of signals at the Franklin Avenue/Lincoln Way intersection.

Turn lanes on Lincoln Way will mitigate left-turning, rear-end, and right-angle traffic accidents. Improvements will also support traffic coordination along Lincoln Way. An existing agreement requires the developer and the City to share equally in the construction cost of these improvements.

COMMENTS

2014/15 Franklin Avenue/Lincoln Way (planning and land acquisition) – Map 4, location G-11
2015/16 Franklin Avenue/Lincoln Way (engineering and construction) – Map 4, location G-11

The Franklin Avenue/Lincoln Way intersection improvement project is anticipated to meet the terms of the development agreement in 2015/16; therefore, planning for the project will occur in 2014/15 with construction planned for 2015/16.

The cost change is due to updated cost estimates associated with this project.

The street widening for turn lanes will increase street maintenance and snow removal activities.

FISCAL YEAR PRIORITY			6	2		
	TOTAL	**2013/14**	**2014/15**	**2015/16**	**2016/17**	**2017/18**
COST:						
Land Acquisition	100,000		100,000			
Planning	25,000		25,000			
Engineering	200,000			200,000		
Construction	1,000,000			1,000,000		
TOTAL	**1,325,000**		**125,000**	**1,200,000**		
FINANCING:						
G. O. Bonds	450,000			450,000		
Road Use Tax	125,000		125,000			
Iowa D.O.T Safety Grant	500,000			500,000		
Developer (50% of construction less 50% of Safety Grant)	250,000			250,000		
TOTAL	**1,325,000**		**125,000**	**1,200,000**		

PROGRAM – ACTIVITY: Public Safety – Traffic
DEPARTMENT: Public Works
ACCOUNT NO.

Executive Express, the Des Moines Airport shuttle, makes 13-14 daily departures to the Des Moines International Airport. Storage for four vehicles is provided in a separate garage on the Intermodal Facility site Executive Express offices are located in the terminal.

UTILITIES - SUMMARY

PROJECT/REVENUE DESCRIPTION	TOTAL	2013/14	2014/15	2015/16	2016/17	2017/18	PAGE
EXPENDITURES:							
Resource Recovery	2,980,120	1,701,170	624,550	209,800	319,800	124,800	23
Water Treatment	72,758,000	4,546,000	26,803,000	26,437,000	13,183,000	1,789,000	27
Water Distribution	4,875,000	975,000	975,000	975,000	975,000	975,000	35
Storm Sewer	6,463,000	955,000	1,127,000	2,127,000	1,127,000	1,127,000	37
Sanitary Sewer	17,475,000	3,495,000	3,495,000	3,495,000	3,495,000	3,495,000	44
WPC Treatment	14,238,000	4,529,000	3,350,000	3,481,000	1,881,000	997,000	47
Electric	36,695,000	7,270,000	12,105,000	6,830,000	3,670,000	6,820,000	60
Total Expenditures	**155,484,120**	**23,471,170**	**48,479,550**	**43,554,800**	**24,650,800**	**15,327,800**	

UTILITIES - SUMMARY

PROJECT/REVENUE DESCRIPTION	TOTAL	2013/14	2014/15	2015/16	2016/17	2017/18
REVENUES:						
Bonds:						
G.O. Bonds	1,300,000		300,000	1,000,000		
G.O. Bonds (prior issuance)	203,063	203,063				
Sub-Total Bonds	1,503,063	203,063	300,000	1,000,000		
City:						
Resource Recovery Fund	2,980,120	1,701,170	624,550	209,800	319,800	124,800
Water Utility Fund	19,532,000	1,458,000	3,888,000	7,834,000	4,158,000	2,194,000
Sewer Utility Fund	10,240,000	2,389,000	1,892,000	2,631,000	2,106,000	1,222,000
Storm Sewer Utility Fund	3,466,937	566,937	500,000	800,000	800,000	800,000
Electric Utility Fund	35,294,400	6,805,640	11,650,040	6,544,240	3,572,240	6,722,240
Sub-Total City Funds	71,513,457	12,920,747	18,554,590	18,019,040	10,956,040	11,063,040
Other:						
State Revolving Fund	74,508,000	9,548,000	29,170,000	24,250,000	7,373,000	4,167,000
Iowa State University	1,400,600	464,360	454,960	285,760	97,760	97,760
DWSRF Forgivable Loan	6,224,000				6,224,000	
Grant Funds	125,000	125,000				
In-Kind Donations	25,000	25,000				
Developer Funds	185,000	185,000				
Sub-Total Other Funds	82,467,600	10,347,360	29,624,960	24,535,760	13,694,760	4,264,760
Total Revenues	**155,484,120**	**23,471,170**	**48,479,550**	**43,554,800**	**24,650,800**	**15,327,800**

UTILITIES - RESOURCE RECOVERY

	PROJECT/REVENUE DESCRIPTION	TOTAL	2013/14	2014/15	2015/16	2016/17	2017/18	PAGE
EXPENDITURES:								
1	Resource Recovery System Improvements	1,474,750	495,800	324,550	209,800	319,800	124,800	24
2	Primary Shredder Replacement	1,000,000	1,000,000					25
3	Process Area Sprinkler System Replacement	505,370	205,370	300,000				26
	Total Expenditures	**2,980,120**	**1,701,170**	**624,550**	**209,800**	**319,800**	**124,800**	
REVENUES:								
City:								
Resource Recovery Fund		2,980,120	1,701,170	624,550	209,800	319,800	124,800	
	Total Revenues	**2,980,120**	**1,701,170**	**624,550**	**209,800**	**319,800**	**124,800**	

RESOURCE RECOVERY SYSTEM IMPROVEMENTS **PROJECT STATUS:** Cost Change Scope 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 #2 rotary disc screen rollers (RDS) and chains and rebuilding 20% of the C-1 conveyor). Resource Recovery personnel perform the work to complete the preventive maintenance projects.

COMMENTS

Proposed projects:

- 2013/14 Preventive maintenance materials for replacement of #2 RDS rollers and chains ($40,250); complete rebuild of #2 mill motor ($94,000); rebuild 20% of C-1 conveyor ($19,550); tipping floor ventilation louvers ($22,000); mill grates ($25,000); power factor correction ($60,000); HVAC improvement/construction ($85,000); and purchase/install PDS cyclone ($150,000)
- 2014/15 Preventive maintenance materials for replacement of the #2 RDS rollers and chains ($46,000); replace #2 mill sideliners ($41,000); replace glass crusher rotor ($16,000); rebuild 20% of the C-1 conveyor ($19,550); replace tipping floor concrete at C-1 area ($180,000); and HVAC for electric room ($22,000)
- 2015/16 Preventive maintenance materials for the replacement of the #2 RDS rollers and chains ($40,250); replace ADS vessel ($150,000); and rebuild 20% of the C-1 conveyor ($19,550)
- 2016/17 Preventive maintenance materials for the replacement of the #2 RDS rollers and chains ($40,250); rebuild 20% of C-1 conveyor ($19,550); dust collection vessel ($160,000); and install two dust collection vessels ($100,000)
- 2017/18 Preventive maintenance materials for the replacement of the #2 RDS rollers and chains ($40,250); rebuild 20% of C-1 conveyor ($19,550); fire system air compressor ($15,000); new shredder (2014) replacement parts ($50,000)

The cost changes in 2013/14 and 2014/15 are due to two additional projects that have been identified in the annual evaluation of the 5-year maintenance needs of the plant: purchase/install PDS cyclone in 2013/14 ($150,000) and HVAC for electric room ($22,000) in 2014/15.

LOCATION

Arnold O. Chantland Resource Recovery Plant, 110 Center Avenue - Map 5, location N-11

FISCAL YEAR PRIORITY			1	1	1	1	1
		TOTAL	**2013/14**	**2014/15**	**2015/16**	**2016/17**	**2017/18**
COST:							
System Improvements		1,474,750	495,800	324,550	209,800	319,800	124,800
	TOTAL	**1,474,750**	**495,800**	**324,550**	**209,800**	**319,800**	**124,800**
FINANCING:							
Resource Recovery Fund		1,474,750	495,800	324,550	209,800	319,800	124,800
	TOTAL	**1,474,750**	**495,800**	**324,550**	**209,800**	**319,800**	**124,800**

PROGRAM – ACTIVITY:	**DEPARTMENT:**	**ACCOUNT NO.**
Utilities - Resource Recovery	Public Works	590-8903-489

RESOURCE RECOVERY PRIMARY SHREDDER REPLACEMENT

PROJECT STATUS: Advanced Cost Change

DESCRIPTION/JUSTIFICATION

This project is for the replacement of the 37-year-old, 1000 horsepower, high-speed primary shredder with an 850 horsepower hydraulic drive unit. The replacement unit will accept and process material that has previously been diverted directly to the landfill (feedstock such as furniture, mattresses, carpet, and "stringy" material). This new machine will have a higher through put capacity than the current machine and will also provide a safer operating environment by reducing explosion hazards. The estimated payback period for this equipment, based on reduced rejects, additional metal revenue, additional refuse-derived fuel (RDF) sales, and reduced operation and maintenance expenses, is 6.5 years.

This project will be completed in two phases: Phase One, which was originally scheduled for 2013/14, will be completed in 2012/13 and will consist of design and engineering work including removal and/or demolition specifications of existing equipment; layout, prints and bid documents for the installation of the new shredder; and associated belts and equipment ($130,000).

Phase Two has been advanced to take earlier advantage of the energy savings with the new shredder. This phase will include the purchase and installation of the new shredder, associated conveyors, and electrical equipment. This equipment is intended to be flexible enough to receive alternative feedstocks or be incorporated in a potential gasification system if such a system is pursued.

COMMENTS

2013/14 Phase 2: #1 mill, feed and discharge conveyors purchase/install

LOCATION

Arnold O. Chantland Resource Recovery Plant, 110 Center Avenue - Map 5, location N-11

FISCAL YEAR PRIORITY			2				
		TOTAL	**2013/14**	**2014/15**	**2015/16**	**2016/17**	**2017/18**
COST:							
Construction/Installation		1,000,000	1,000,000				
	TOTAL	**1,000,000**	**1,000,000**				
FINANCING:							
Resource Recovery Fund		1,000,000	1,000,000				
	TOTAL	**1,000,000**	**1,000,000**				

PROGRAM – ACTIVITY:	**DEPARTMENT:**	**ACCOUNT NO.**
Utilities - Resource Recovery	Public Works	590-8914-489

RESOURCE RECOVERY PROCESS AREA SPRINKLER SYSTEM REPLACEMENT **PROJECT STATUS:** New

DESCRIPTION/JUSTIFICATION

The fire sprinkler system at the Resource Recovery Plant does not currently meet City code because it lacks backflow prevention. The system also has had component failures due to its age and cannot be accessed outside the building. The City's insurance carrier recommended installation of additional sprinkler heads in the facility, which would necessitate installation of a larger service line to maintain flow.

Engineering for a fire system upgrade was originally planned for 2011/12 in the 2011-2016 CIP. This current project encompasses that engineering work and the broader scope outlined above.

COMMENTS

2013/14 Phase I: Engineering and construction of a new building to house backflow prevention and new system valves with access for emergency services personnel without having to enter the main building

2014/15 Phase II: Design, engineering and installation of replacement for existing 38-year-old process area sprinkler system

LOCATION

Arnold O. Chantland Resource Recovery Plant, 110 Center Avenue – Map 5, location N-11

FISCAL YEAR PRIORITY			3	2			
		TOTAL	**2013/14**	**2014/15**	**2015/16**	**2016/17**	**2017/18**
COST:							
Engineering		64,700	24,700	40,000			
Construction		440,670	180,670	260,000			
	TOTAL	**505,370**	**205,370**	**300,000**			
FINANCING:							
Resource Recovery Fund		505,370	205,370	300,000			
	TOTAL	**505,370**	**205,370**	**300,000**			

PROGRAM - ACTIVITY:	**DEPARTMENT:**	**ACCOUNT NO.**
Utilities – Resource Recovery	Public Works	590-8911-489

UTILITIES - WATER TREATMENT

	PROJECT/REVENUE DESCRIPTION	TOTAL	2013/14	2014/15	2015/16	2016/17	2017/18	PAGE
EXPENDITURES:								
1	New Water Treatment Plant	63,109,000	4,096,000	26,386,000	21,595,000	11,032,000		28
2	Water Plant Facility Improvements	325,000	225,000		100,000			29
3	Low-head Dam Modifications	225,000	225,000					30
4	Automatic Meter Reading Conversion	1,757,000		417,000	431,000	447,000	462,000	31
5	Water Supply Expansion	6,015,000			4,311,000	1,704,000		32
6	HYSC Well Field Standby Power	570,000					570,000	33
7	Old Water Treatment Plant Demolition	757,000					757,000	34
	Total Expenditures	**72,758,000**	**4,546,000**	**26,803,000**	**26,437,000**	**13,183,000**	**1,789,000**	
REVENUES:								
City:								
Water Utility Fund		14,657,000	483,000	2,913,000	6,859,000	3,183,000	1,219,000	
Other:								
Drinking Water State Revolving Fund		51,727,000	3,913,000	23,890,000	19,578,000	3,776,000	570,000	
DWSRF Forgivable Loan		6,224,000				6,224,000		
Grant Funds		125,000	125,000					
In-Kind Donations		25,000	25,000					
	Sub-Total Other Funds	58,101,000	4,063,000	23,890,000	19,578,000	10,000,000		
	Total Revenues	**72,758,000**	**4,546,000**	**26,803,000**	**26,437,000**	**13,183,000**	**1,219,000**	

NEW WATER TREATMENT PLANT **PROJECT STATUS:** Delayed Cost Change

DESCRIPTION/JUSTIFICATION

The first step in preparing for a plant replacement began in FY 08/09 with the hiring of a consultant to perform an assessment of the existing plant's condition and to determine the timing and size of future capacity requirements. The results of the assessment, presented to Council in July 2009, recommended construction of a new 15-million-gallon per day (mgd) lime softening facility on a new site.

The cost estimates shown below are based on the conceptual plan developed during the pre-design phase. Because of the delay in securing the property, no significant work was undertaken to further the conceptual design during the past year. Cost changes from last year's CIP include inflation adjustments to 2012 dollars based on Engineering News-Record's Construction Cost Index. (Note that any future inflation is not factored in at this time.) The proposed funding source for the majority of the project will be loans from the Iowa Drinking Water State Revolving Fund (DWSRF). These loans are currently offered at 1.75% interest and will be repaid over 20 years out of water revenues. These interest rates have declined from 3% in the last year. The design capacity includes a 1.5 mgd reserve capacity for future industrial growth. The DWSRF will not fund "speculative" capacity, so 10% of the construction costs is shown as coming from the Water Fund. The project has been awarded a loan forgiveness of approximately $6,224,000 for constructing the facility to a LEED (Leadership in Energy and Environmental Design) certified standard.

COMMENTS

The anticipated project schedule and budget are as follows:

FY 2008/09	$ 244,000	Alternative Analysis and Conceptual Design
FY 2009/10 – 2011/12	1,363,000	Pre-design; Land Acquisition
FY 2012/13 – 2013/14	8,240,000	Final Design and Construction Inspection
FY 2012/13 – 2016/17	57,119,000	Construction Phase (in 2012 dollars)
FY 2014/15 – 2016/17	1,152,000	Value Engineering, LEED Registration, LEED Commissioning, IDNR Permits, Materials Testing, Furniture & Office Equipment Allowance, Building Permits
Total	$ 68,118,000	

LOCATION

New Water Plant, 1800 E. 13th Street – Map 6, location U-9

FISCAL YEAR PRIORITY			1	1	1	1	
		TOTAL	**2013/14**	**2014/15**	**2015/16**	**2016/17**	**2017/18**
COST:							
Engineering/Legal/Administrative		5,841,000	2,266,000	1,430,000	1,430,000	715,000	
Construction		57,268,000	1,830,000	24,956,000	20,165,000	10,317,000	
	TOTAL	**63,109,000**	**4,096,000**	**26,386,000**	**21,595,000**	**11,032,000**	
FINANCING:							
Water Utility Fund		5,728,000	183,000	2,496,000	2,017,000	1,032,000	
Drinking Water State Revolving Fund		51,157,000	3,913,000	23,890,000	19,578,000	3,776,000	
DWSRF Forgivable Loan		6,224,000				6,224,000	
	TOTAL	**63,109,000**	**4,096,000**	**26,386,000**	**21,595,000**	**11,032,000**	

PROGRAM - ACTIVITY:	**DEPARTMENT:**	**ACCOUNT NO.**
Utilities – Water Treatment	Water & Pollution Control	510-3933-489
		512-3933-489

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

DESCRIPTION/JUSTIFICATION
This project involves annual equipment repairs, major maintenance activities, replacement, and upgrades at the Water Treatment Plant and associated remote facilities such as wells, elevated tanks, and booster pump stations.

COMMENTS
The schedule for these improvements is as follows:

FY 13/14	$ 125,000	Lime Pond Security Improvements
FY 13/14	100,000	Decommissioning of North Dakota Elevated Water Tank
FY 15/16	100,000	Remote Site Access Control

Because of the planned replacement of the Water Treatment Plant, no major facility improvements are planned for the existing plant. The only maintenance and repairs being performed are those necessary to keep the facility operational until the new plant comes online in four years. The projects identified are stand-alone improvements separate from the treatment plant. Additional improvements may be identified for future years. The schedule may change in response to impending failure, regulatory agency requirements, etc.

The remote site access control project is being delayed until FY 15/16 to ensure it is compatible with the security system to be installed at the new Water Treatment Plant. The security improvements to the lime and ash pond area proposed for FY 13/14 replace a planned pilot test of a distribution system pressure sensor network.

LOCATION
Water Plant, 300 East 5th Street, Building 1 - Map 5, location N-11

FISCAL YEAR PRIORITY			2		4		
	TOTAL	**2013/14**	**2014/15**	**2015/16**	**2016/17**	**2017/18**
COST:						
Equipment	225,000	125,000		100,000		
Construction	100,000	100,000				
TOTAL	**325,000**	**225,000**		**100,000**		
FINANCING:						
Water Utility Fund	325,000	225,000		100,000		
TOTAL	**325,000**	**225,000**		**100,000**		

PROGRAM - ACTIVITY:	**DEPARTMENT:**	**ACCOUNT NO.**
Utilities - Water Treatment	Water & Pollution Control	510-3941-489 510-3946-489

LOW-HEAD DAM MODIFICATIONS **PROJECT STATUS:** Scope Change Cost Change Delayed

DESCRIPTION/JUSTIFICATION
This project will modify the low-head dam in North River Valley Park. The primary purpose is to reduce the risk of drowning due to a hydraulic recirculation downstream of the dam. Additional benefits of the improvements include increasing the recreational opportunities for paddlers and kayakers, and creating an opportunity for fish to migrate upstream past the dam.

COMMENTS
The low-head dam in River Valley Park serves an essential function during periods of sustained drought by pooling water in the primary recharge zone for the Water Plant's Downtown Well Field. This type of dam has the potential to create a dangerous hydraulic recirculation downstream of the dam. The recirculation can trap a person below the surface and can lead to drowning in just a few feet of water. A conceptual proposal has been developed jointly between the City of Ames and the Iowa Department of Natural Resources that will achieve the primary goal of improved safety, while also providing additional recreational opportunities for paddlers and kayakers. The design would also facilitate the movement of fish upstream past the dam, helping to increase the upstream fish population diversity.

The project was originally shown in the FY 10/11 CIP at an estimated cost of $150,000. The City received a grant award of $75,000 from the state's Low-Head Dam Public Hazard Grant program. Over the past two years, staff has been unsuccessful in receiving permit clearance for the original design concept. Work with the Iowa Department of Natural Resources and the Iowa Institute for Hydraulic Research has resulted in a design that should be able to receive permits from the necessary agencies but at a higher cost estimate of $225,000. Staff is pursuing additional grant opportunities to help absorb the cost increase, although an additional $25,000 has been added to the Water Fund's contribution compared to the FY 12/13 CIP carryover. Should the City be unsuccessful in securing the additional grant funds, Council would need to decide whether to pursue the project by allocating additional local funds. Construction is now anticipated in fall 2013, but will be highly dependent on river levels.

LOCATION
North River Valley Park, E 13th Street – Map 6, location O-9

FISCAL YEAR PRIORITY			3				
		TOTAL	**2013/14**	**2014/15**	**2015/16**	**2016/17**	**2017/18**
COST:							
Construction		225,000	225,000				
	TOTAL	**225,000**	**225,000**				
FINANCING:							
Water Utility Fund		75,000	75,000				
Low-Head Dam Public Hazard Grant		75,000	75,000				
Other Grant Funding		50,000	50,000				
In-Kind Donations		25,000	25,000				
	TOTAL	**225,000**	**225,000**				

PROGRAM - ACTIVITY:	**DEPARTMENT:**	**ACCOUNT NO.**
Utilities – Water	Water & Pollution Control	510-3938-489

AUTOMATIC METER READING CONVERSION (WTP) **PROJECT STATUS:** No Change

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 automatic meter reading (AMR).

COMMENTS
The water meter reading system currently in place is a mechanical system that transmits the reading from the water meter (located inside the property) to a remote register on the outside of a property using a low-voltage wire. This technology is rapidly falling out of use across the country. There are currently two brands of water meters in the City's inventory; Badger and Elster. Badger Meter discontinued taking new orders for generator/remote products on July 31, 2011. The City transitioned to Elster AMCO meters three years ago because Elster was the only remaining manufacturer of generator/remote systems. Staff has now received written confirmation from Elster that they will discontinue production of their generator/remote systems in late 2013 or early 2014.

The new standard for meter reading is the use of automated meter reading technology. There are multiple technology platforms available, using various combinations of "drive-by" reads, radio reads, cellular reads, and other methods of obtaining meter readings. Staff is currently examining which technology platform is preferred. The estimated cost to convert the entire inventory of water meters to the new reading technology is estimated at approximately $4,023,200 (in 2013 dollars) for equipment (18,800 meters @ $187 per meter), plus contracted installation (18,800 meters @ $27 per meter). The implementation would be spread out over 10 years, with new equipment being installed in discrete areas each year in coordination with the Utility Customer Service Division of the Finance Department. As existing equipment is taken out of service, it can be retained as spare parts to maintain the old inventory until the entire system is replaced.

LOCATION
Throughout the City of Ames

FISCAL YEAR PRIORITY				2	3	3	2
		TOTAL	**2013/14**	**2014/15**	**2015/16**	**2016/17**	**2017/18**
COST:							
Equipment		1,757,000		417,000	431,000	447,000	462,000
	TOTAL	**1,757,000**		**417,000**	**431,000**	**447,000**	**462,000**
FINANCING:							
Water Utility Fund		1,757,000		417,000	431,000	447,000	462,000
	TOTAL	**1,757,000**		**417,000**	**431,000**	**447,000**	**462,000**

PROGRAM - ACTIVITY: Utilities – Water Meter
DEPARTMENT: Water & Pollution Control
ACCOUNT NO.

WATER SUPPLY EXPANSION **PROJECT STATUS:** Advanced Scope Change City of Ames, Iowa
Cost Change Capital Improvements Plan

DESCRIPTION/JUSTIFICATION
As old wells fail and need to be replaced and as demand for treated water increases, additional wells must be drilled. This project will provide new and replacement source water capacity. The currently developed water supply is adequate to meet normal demands until at least 2020. Under drought conditions, however, the yield of the aquifer is reduced, requiring additional wells to achieve the same source water capacity. **The schedule for bringing new wells online has been accelerated by one year due to the peak demands revealed by the drought of 2012. Full development of the I-35 West Well Field is now included in the five-year CIP.**

COMMENTS
The City currently owns approximately 77 acres of farmland east of I-35 for use as a future well field. The original intent was to develop approximately 6 million gallons per day (MGD) of groundwater supply from this well field. Because of expanding withdrawals by others in this portion of the aquifer, staff recommended to Council in 2008 a plan to scale back the anticipated withdrawal in this area and spread the 6 MGD withdrawal between two smaller well fields. Acquisition of land for the new well field west of I-35 is included in the current year (FY 12/13, $854,000).

Staff is currently evaluating an option of moving north for the next well field instead of south along I-35; a series of test wells north of E. 13th Street and east of the river are being constructed in the current year. If this area turns out to be a viable well field, it could be developed faster should the drought continue to worsen.

FY 2015/16	$ 4,311,000	Design and Construct Pipeline and Design Wells in I-35 West Well Field
FY 2016/17	1,704,000	Construct Four Wells in I-35 West Well Field – Adds 3.0 million gallons per day
FY 2026/27 est.)	4,116,000	Design and Construct Pipeline and Four Wells in I-35 East Well Field – Adds 3.0 million gallons per day

LOCATION
Future wells will be located west of I-35 and south of Highway 30.

FISCAL YEAR PRIORITY					2	2	
		TOTAL	**2013/14**	**2014/15**	**2015/16**	**2016/17**	**2017/18**
COST:							
Engineering / Admin		846,000			750,000	96,000	
Construction		5,169,000			3,561,000	1,608,000	
	TOTAL	**6,015,000**			**4,311,000**	**1,704,000**	
FINANCING:							
Water Utility Fund		6,015,000			4,311,000	1,704,000	
	TOTAL	**6,015,000**			**4,311,000**	**1,704,000**	

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

WELL FIELD STANDBY POWER **PROJECT STATUS:** New

DESCRIPTION/JUSTIFICATION
This project will provide standby electrical power to select wells located in the Hunziker Youth Sports Complex.

COMMENTS
Iowa's Water Supply Design Standards require that a water system have redundant electrical power available. Redundancy may be provided either through "connection to at least two independent public power sources" or by "portable or in-place internal-combustion engines." Redundant power is provided at the Water Treatment Plant and in the High Service Pump Station. Currently, however, none of the city wells are connected to a redundant power supply. Installing standby power was one of the recommendations contained in the utility's 2005 Vulnerability Assessment and Emergency Response Plan. Now that immediate priority recommendations in those documents have been addressed, standby power is now being proposed.

The wells located in the Hunziker Youth Sports Complex are among the highest capacity wells in the City's inventory. Installing standby power to at least some of these wells would allow the water utility to continue to produce treated water, at a reduced capacity, in the event of a prolonged power outage. As future well fields are developed, standby power will become a standard design element.

LOCATION
300 E 5th Street, Map 5, location N-11

FISCAL YEAR PRIORITY 1

		TOTAL	2013/14	2014/15	2015/16	2016/17	2017/18
COST:							
Engineering		70,000					70,000
Construction		500,000					500,000
	TOTAL	**570,000**					**570,000**
FINANCING:							
Drinking Water State Revolving Fund		570,000					570,000
	TOTAL	**570,000**					**570,000**

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

DEMOLITION OF OLD WATER TREATMENT PLANT **PROJECT STATUS:** New

DESCRIPTION/JUSTIFICATION
This project will demolish the treatment structures at the old Water Treatment Plant site.

COMMENTS
The timeline for the new Water Treatment Plant anticipates the facility beginning operation in late 2016. Once the facility has been fully commissioned and is performing reliably, the old treatment structures will be torn down. This project will demolish the filter building, chemical feed building, external treatment basins, administrative offices, and ¾-million-gallon ground storage reservoir. Demolition will take place over a period of three years beginning in FY 2017/2018.

FY 2017/18	$ 757,000	Demolish ¾-Million-Gallon Reservoir
FY 2018/19	819,000	Demolish Maintenance Building, Clarifiers, Admin Building
FY 2019/20	1,135,000	Demolish East Tankage, Mix Tanks, Filter Building

The two-story Technical Services Complex at the old plant site will remain and will continue to be utilized by the Water and Pollution Control Department. The structure, which houses the Water Meter Division and the Laboratory Services Division, was constructed in 1993 and is still in very good condition.

LOCATION
300 E. 5th Street – Map 5, location N-11

FISCAL YEAR PRIORITY							3
		TOTAL	**2013/14**	**2014/15**	**2015/16**	**2016/17**	**2017/18**
COST:							
Engineering		95,000					95,000
Construction		662,000					662,000
	TOTAL	**757,000**					**757,000**
FINANCING:							
Water Utility Fund		757,000					757,000
	TOTAL	**757,000**					**757,000**

PROGRAM - ACTIVITY: Utilities - Water Treatment
DEPARTMENT: Water & Pollution Control
ACCOUNT NO.

UTILITIES - WATER DISTRIBUTION

PROJECT/REVENUE DESCRIPTION	TOTAL	2013/14	2014/15	2015/16	2016/17	2017/18	PAGE
EXPENDITURES:							
1 Water System Improvements	4,875,000	975,000	975,000	975,000	975,000	975,000	36
Total Expenditures	**4,875,000**	**975,000**	**975,000**	**975,000**	**975,000**	**975,000**	
REVENUES:							
City:							
Water Utility Fund	4,875,000	975,000	975,000	975,000	975,000	975,000	
Total Revenues	**4,875,000**	**975,000**	**975,000**	**975,000**	**975,000**	**975,000**	

WATER SYSTEM IMPROVEMENTS **PROJECT STATUS:** Cost Change

DESCRIPTION/JUSTIFICATION

This program provides for replacing water mains in areas that are experiencing rusty water problems. It also provides for installing larger distribution mains in areas that have a high concentration of 4" supply lines, transferring water services from 4" water mains in streets where larger water mains exist, and abandoning 4" 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" supply lines and less than desirable fire-fighting 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.

COMMENTS

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.

Cost change from the previous annual amount of $900,000 is due to updated estimates. The system currently has 13.6 miles of active 4" water main.

Improvements to these water mains will result in reduced maintenance costs.

FISCAL YEAR PRIORITY			1	1	1	1	1
		TOTAL	**2013/14**	**2014/15**	**2015/16**	**2016/17**	**2017/18**
COST:							
Engineering		725,000	145,000	145,000	145,000	145,000	145,000
Construction		4,150,000	830,000	830,000	830,000	830,000	830,000
	TOTAL	**4,875,000**	**975,000**	**975,000**	**975,000**	**975,000**	**975,000**
FINANCING:							
Water Utility Fund		4,875,000	975,000	975,000	975,000	975,000	975,000
	TOTAL	**4,875,000**	**975,000**	**975,000**	**975,000**	**975,000**	**975,000**

PROGRAM – ACTIVITY:	**DEPARTMENT:**	**ACCOUNT NO.**
Utilities – Water Distribution	Public Works	510-8459-489

UTILITIES - STORM SEWER

PROJECT/REVENUE DESCRIPTION	TOTAL	2013/14	2014/15	2015/16	2016/17	2017/18	PAGE
EXPENDITURES:							
1 Flood Response & Mitigation Projects	1,855,000	555,000	300,000	1,000,000			38
2 Low Point Drainage Improvements	750,000	150,000	150,000	150,000	150,000	150,000	39
3 Storm Sewer Improvement Program	1,250,000	250,000	250,000	250,000	250,000	250,000	40
4 Storm Sewer Outlet Erosion Control	1,308,000		327,000	327,000	327,000	327,000	41
5 Storm Water Facility Rehabilitation Program	400,000		100,000	100,000	100,000	100,000	42
6 Storm Sewer System Analysis	900,000			300,000	300,000	300,000	43
Total Expenditures	**6,463,000**	**955,000**	**1,127,000**	**2,127,000**	**1,127,000**	**1,127,000**	
REVENUES:							
Bonds:							
G.O. Bonds	1,300,000		300,000	1,000,000			
G.O. Bonds (prior issuance)	203,063	203,063					
Sub-Total Bonds	1,503,063	203,063	300,000	1,000,000			
City:							
Storm Sewer Utility Fund	3,466,937	566,937	500,000	800,000	800,000	800,000	
Other:							
State Revolving Funds	1,308,000		327,000	327,000	327,000	327,000	
Developer Funds	185,000	185,000					
Sub-Total Other Funds	1,493,000	185,000	327,000	327,000	327,000	327,000	
Total Revenues	**6,463,000**	**955,000**	**1,127,000**	**2,127,000**	**1,127,000**	**1,127,000**	

FLOOD RESPONSE AND MITIGATION PROJECTS **PROJECT STATUS:** Cost Change Site Change

DESCRIPTION/JUSTIFICATION

In response to the 2008 and 2010 flood events in the community, staff has identified projects to mitigate future localized flooding. Future years may include project locations as a result of the current Flood Mitigation Study.

COMMENTS

The Teagarden Drainage Study identified three potential detention basins that could be constructed to prevent further impacts of water rising along South Duff Avenue (US Highway 69) south of Airport Road. The drainage area is broken between three branches of streams: north, south, and middle. The detention basins for the middle and north branches would primarily be located on private property, so working with the land owners will be a critical part of the design. The detention basin for the south branch would be located on the property of the Ames Municipal Airport. The bank stabilization is scheduled in 2015/16 to best coordinate with construction of a segment of the Skunk River Trail. This bank stabilization is important in protecting public infrastructure from future damage.

The site changes and cost change are the result of the identification of the location of projects and the cost estimates for those projects.

LOCATION

2013/14: Teagarden Drainage Improvements (Middle Branch drainage improvements) – Map 8, location N-17
2014/15: Teagarden Drainage Improvements (South Branch detention improvements) – Map 8, location N-17
2015/16: South Skunk River bank stabilization (Southeast 16th Street to East Lincoln Way) – Map 6, location O-13

The Flood Mitigation Study is anticipated to be complete in March 2013 and may identify future projects for this program.

FISCAL YEAR PRIORITY			1	1	5		
		TOTAL	**2013/14**	**2014/15**	**2015/16**	**2016/17**	**2017/18**
COST:							
Engineering		375,000	115,000	60,000	200,000		
Construction		1,480,000	440,000	240,000	800,000		
	TOTAL	**1,855,000**	**555,000**	**300,000**	**1,000,000**		
FINANCING:							
G.O. Bonds		1,300,000		300,000	1,000,000		
G.O. Bonds (previously issued)		203,063	203,063				
Storm Sewer Utility Fund		166,937	166,937				
Developer Funds		185,000	185,000				
	TOTAL	**1,855,000**	**555,000**	**300,000**	**1,000,000**		

PROGRAM - ACTIVITY:	**DEPARTMENT:**	**ACCOUNT NO.**
Utilities – Storm Sewer	Public Works	370-8690-489
		560-8690-489

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 focused on residential street locations, but rather on those locations most in need of the improvements as affected by standing water, flooding, and insufficient pipe capacity. The program identifies core locations for improvements each year. In addition, improvements are made at miscellaneous locations identified throughout the year.

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. In 1994, the following criteria were established for evaluating and prioritizing drainage situations: 1) Potential damage from storm runoff; 2) Emergency vehicle access limitations created by runoff; 3) Number of people affected; 4) Number of structures affected; 5) Street classification; 6) Land use; and 7) Benefits of a project to adjacent areas. Based on these criteria, target areas for improvements are established. These improvements may include construction of detention areas, new pipe systems, and replacement systems for increasing the ability to control the runoff so that it can be carried by downstream systems.

COMMENTS

2013/14 Southdale Subdivision – Map 9, location N-16 (This project will be for maintenance of the cunette.)
2014/15 Northwood Drive (2800 block) – Map 2, location M-6
2015/16 Westwood Drive (400 block) – Map 4, location F-11
2016/17 Little Bluestem Court – Map 5, location I-13
2017/18 Crystal Street (200 block) Map 8, location N-15

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. The new program, Storm Sewer System Analysis (page 43), will identify future projects to be included in this program.

The cost change for this program is due to updated cost estimates for the included projects.

The site change is due to the addition of Crystal Street in 2017/18.

FISCAL YEAR PRIORITY		2	3	3	3	2
	TOTAL	**2013/14**	**2014/15**	**2015/16**	**2016/17**	**2017/18**
COST:						
Engineering	150,000	30,000	30,000	30,000	30,000	30,000
Construction	600,000	120,000	120,000	120,000	120,000	120,000
TOTAL	**750,000**	**150,000**	**150,000**	**150,000**	**150,000**	**150,000**
FINANCING:						
Storm Sewer Utility Fund	750,000	150,000	150,000	150,000	150,000	150,000
TOTAL	**750,000**	**150,000**	**150,000**	**150,000**	**150,000**	**150,000**

PROGRAM - ACTIVITY: Utilities - Storm Sewer
DEPARTMENT: Public Works
ACCOUNT NO. 560-8652-489

STORM SEWER IMPROVEMENT PROGRAM **PROJECT STATUS:** Site 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 has caused the 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 to 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/pieces of pipe. This program will provide funding to correct these deficiencies.

Completion of the Storm Sewer System Analysis (page 43) may identify the need for additional improvements as part of the program.

LOCATIONS
2013/14: South 2nd Street/South Hazel Avenue area and North 2nd Street/North Russell Avenue area – Map 5, location K-11; and other locations as determined

2014/15: Hayward Avenue (culvert replacement south of Lincoln Way) ($150,000) – Map 5, location H-11; and other locations as determined

2015/16 – 2017/18: Locations to be determined

FISCAL YEAR PRIORITY			3	2	2	1	1
		TOTAL	**2013/14**	**2014/15**	**2015/16**	**2016/17**	**2017/18**
COST:							
Engineering		175,000	35,000	35,000	35,000	35,000	35,000
Construction		1,075,000	215,000	215,000	215,000	215,000	215,000
	TOTAL	**1,250,000**	**250,000**	**250,000**	**250,000**	**250,000**	**250,000**
FINANCING:							
Storm Sewer Utility Fund		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.**
Utilities - Storm Sewer	Public Works	560-8641-489

STORM SEWER OUTLET EROSION CONTROL **PROJECT STATUS:** Delayed

DESCRIPTION/JUSTIFICATION
This annual program provides for stabilization of areas that have become eroded due to discharges of the storm sewer system into streams, channels, swales, gullies, or drainage ways in residential areas. This program will provide a more permanent control of the erosion and will reduce recurring maintenance costs in these areas.

COMMENTS
An inventory of drainage ways within the City has been established based on National Pollution Discharge Elimination System (NPDES) Phase II requirements. 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, Squaw Creek, and the South Skunk River. This assessment identified areas where stabilization is a priority. As monitoring activities associated with the NPDES permit requirements continue, locations for future improvements will be further identified.

LOCATION
2014/15: Teagarden Drainage Improvements (South Branch drainage channel improvements) – Map 8, location N-17

Various locations throughout the community as identified and prioritized in the Urban Stream Assessment and NPDES inspections.

The delay in this program is due to re-prioritizing Storm Sewer Utility Fund projects.

FISCAL YEAR PRIORITY				4	1	2	3
		TOTAL	**2013/14**	**2014/15**	**2015/16**	**2016/17**	**2017/18**
COST:							
Engineering		268,000		67,000	67,000	67,000	67,000
Construction		1,040,000		260,000	260,000	260,000	260,000
	TOTAL	**1,308,000**		**327,000**	**327,000**	**327,000**	**327,000**
FINANCING:							
State Revolving Funds (SRF)		1,308,000		327,000	327,000	327,000	327,000
	TOTAL	**1,308,000**		**327,000**	**327,000**	**327,000**	**327,000**

PROGRAM - ACTIVITY: Utilities - Storm Sewer
DEPARTMENT: Public Works
ACCOUNT NO.

STORM WATER FACILITY REHABILITATION PROGRAM **PROJECT STATUS:** Delayed

DESCRIPTION/JUSTIFICATION

In accordance with the Municipal Code, new developments within the community are required to provide storm water management quantity control. This means maintaining storm water runoff discharge at pre-developed conditions through 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. As these facilities age, sediment accumulates, vegetation becomes more prevalent, and structures need to be improved. This annual program addresses those concerns.

COMMENTS

Proposed locations:

2014/15	Somerset Subdivision – Map 2, location I-7
2015/16	Pete Cooper's Subdivision – Map 6, location N-11
2016/17	Bloomington Heights Subdivision – Map 2, location J-5
2017/18	Northridge Heights near GW Carver – Map 1, location G-3

City staff will be recommending, as part of a post-construction stormwater management ordinance, a new model agreement which would require an association/owner to maintain the facilities within their property.

The delay in this program is due to re-prioritizing Storm Sewer Utility Fund projects.

FISCAL YEAR PRIORITY				5	6	4	4
		TOTAL	**2013/14**	**2014/15**	**2015/16**	**2016/17**	**2017/18**
COST:							
Engineering		80,000		20,000	20,000	20,000	20,000
Construction		320,000		80,000	80,000	80,000	80,000
	TOTAL	**400,000**		**100,000**	**100,000**	**100,000**	**100,000**
FINANCING:							
Storm Sewer Utility Fund		400,000		100,000	100,000	100,000	100,000
	TOTAL	**400,000**		**100,000**	**100,000**	**100,000**	**100,000**

PROGRAM - ACTIVITY: Utilities – Storm Sewer

DEPARTMENT: Public Works

ACCOUNT NO.

STORM SEWER SYSTEM ANALYSIS **PROJECT STATUS:** New

DESCRIPTION/JUSTIFICATION

In recent years, localized flash flooding has occurred at various locations around the City of Ames during high rainfall events. The City does not currently have as accurate a method of mapping the storm sewer system within the Geographic Information System (GIS) as it does with other utility systems. As the Sanitary Sewer System Evaluation continues to progress and rehabilitation of the sanitary sewer system is completed to remove Infiltration/Inflow, additional pressure is being added to the storm sewer system. Localized flooding could potentially increase; therefore, this project includes establishment of an accurate GIS storm sewer system and hydraulic modeling of the network.

COMMENTS

This analysis will aid in identifying deficient storm sewer capacity and future storm sewer improvements.

FISCAL YEAR PRIORITY				4	5	5
	TOTAL	**2013/14**	**2014/15**	**2015/16**	**2016/17**	**2017/18**
COST:						
Engineering	540,000			180,000	180,000	180,000
TOTAL	**540,000**			**180,000**	**180,000**	**180,000**
FINANCING:						
Storm Sewer Utility Fund	540,000			180,000	180,000	180,000
TOTAL	**540,000**			**180,000**	**180,000**	**180,000**

PROGRAM - ACTIVITY: Utilities – Storm Sewer

DEPARTMENT: Public Works

ACCOUNT NO.

UTILITIES - SANITARY SEWER

PROJECT/REVENUE DESCRIPTION	TOTAL	2013/14	2014/15	2015/16	2016/17	2017/18	PAGE
EXPENDITURES:							
1 Sanitary Sewer Rehabilitation Program	17,350,000	3,470,000	3,470,000	3,470,000	3,470,000	3,470,000	45
2 Clear Water Diversion	125,000	25,000	25,000	25,000	25,000	25,000	46
Total Expenditures	**17,475,000**	**3,495,000**	**3,495,000**	**3,495,000**	**3,495,000**	**3,495,000**	
REVENUES:							
City:							
Sewer Utility Fund	1,125,000	225,000	225,000	225,000	225,000	225,000	
Other:							
State Revolving Fund	16,350,000	3,270,000	3,270,000	3,270,000	3,270,000	3,270,000	
Total Revenues	**17,475,000**	**3,495,000**	**3,495,000**	**3,495,000**	**3,495,000**	**3,495,000**	

SANITARY SEWER REHABILITATION PROGRAM **PROJECT STATUS:** Cost Change Revenue 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.

COMMENTS

System improvement locations are starting to be identified through the Sanitary Sewer System Evaluation (SSSE), which is approximately 40 percent complete. Through manhole inspections, smoke testing, and televising, severe structural defects (ratings of 4 or 5) have been identified as priorities within this program. Structural defects with ratings of 5 are necessary to fix within 12 months. Structural defects with ratings of 4 are necessary to fix within 5 years. This program does not yet reflect any capacity issues that may be identified during modeling efforts associated with the SSSE. Suggested work activities included 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 enables. The goal of the SSSE is to identify and remove major sources of inflow/infiltration as a means of lowering the peak wet weather flow at the treatment plant. Projections through completion of the next 60 percent of the SSSE to identify additional structural defects have been included to be fixed using State Revolving Funds (SRF). Capacity deficiencies will be identified as the SSSE progresses, as weather permits.

The addition of SRF funding to address the structural defects being identified by the SSSE has resulted in the revenue change to this program.

FISCAL YEAR PRIORITY			1	1	1	1	1
		TOTAL	**2013/14**	**2014/15**	**2015/16**	**2016/17**	**2017/18**
COST:							
Engineering		3,420,000	684,000	684,000	684,000	684,000	684,000
Construction		13,930,000	2,786,000	2,786,000	2,786,000	2,786,000	2,786,000
	TOTAL	**17,350,000**	**3,470,000**	**3,470,000**	**3,470,000**	**3,470,000**	**3,470,000**
FINANCING:							
State Revolving Fund (SRF)		16,350,000	3,270,000	3,270,000	3,270,000	3,270,000	3,270,000
Sewer Utility Fund		1,000,000	200,000	200,000	200,000	200,000	200,000
	TOTAL	**17,350,000**	**3,470,000**	**3,470,000**	**3,470,000**	**3,470,000**	**3,470,000**

PROGRAM – ACTIVITY: Utilities - Sanitary Sewer

DEPARTMENT: Public Works

ACCOUNT NO. 520-8541-489
522-8541-489

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.

After 2010/11 and continuing until the Sanitary Sewer System Evaluation (SSSE) is complete, **the footing drain grant portion of this program has been suspended and construction of collector lines to eliminate icing on streets is reduced**. Through completion of the SSSE, the future need of the footing drain grant program will be determined.

FISCAL YEAR PRIORITY			2	2	2	2	2
		TOTAL	**2013/14**	**2014/15**	**2015/16**	**2016/17**	**2017/18**
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:							
Sewer Utility Fund		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: Utilities - Sanitary Sewer
DEPARTMENT: Public Works
ACCOUNT NO. 520-8583-489

UTILITIES - WATER POLLUTION CONTROL

	PROJECT/REVENUE DESCRIPTION	TOTAL	2013/14	2014/15	2015/16	2016/17	2017/18	PAGE
EXPENDITURES:								
1	WPC Plant Residuals Handling Improvements	1,558,000	625,000	933,000				48
2	Cogeneration System Maintenance	725,000	200,000			290,000	235,000	49
3	Lift Station Improvements	1,252,000	1,040,000		212,000			50
4	Clarifier Maintenance	710,000	100,000	200,000		200,000	210,000	51
5	WPC Plant Electrical System Maintenance	656,000	163,000	96,000	116,000	281,000		52
6	WPC Plant Digester Improvements	2,965,000	889,000	880,000	1,089,000		107,000	53
7	Secondary Treatment Improvements	1,115,000	790,000		250,000	75,000		54
8	Mechanical & HVAC Replacements	578,000	93,000	418,000	67,000			55
9	WPC Plant Facility Improvements	1,233,000	598,000	73,000	89,000	473,000		56
10	WPC Plant Structural Rehabilitation	1,621,000	31,000		583,000	562,000	445,000	57
11	Bar Screen Improvements	750,000		750,000				58
12	Flow Equalization Expansion	1,075,000			1,075,000			59
	Total Expenditures	**14,238,000**	**4,529,000**	**3,350,000**	**3,481,000**	**1,881,000**	**997,000**	
REVENUES:								
City:								
Sewer Utility Fund		9,115,000	2,164,000	1,667,000	2,406,000	1,881,000	997,000	
Other:								
Clean Water State Revolving Fund		5,123,000	2,365,000	1,683,000	1,075,000			
	Total Revenues	**14,238,000**	**4,529,000**	**3,350,000**	**3,481,000**	**1,881,000**	**997,000**	

WPC PLANT RESIDUALS HANDLING IMPROVEMENTS **PROJECT STATUS:** No Change

DESCRIPTION/JUSTIFICATION
This project provides for improvements to the solids handling component of the WPC Plant operation. This project began with a comprehensive review of the solids handling operations in FY 08/09, with recommended modifications being implemented in subsequent fiscal years.

COMMENTS
A study completed in FY 09/10 identified that contract land application is more cost-effective than continued City application, based primarily on the high capital cost to replace the land application equipment. The contracted application is now in its second year and is the recommended approach into the future.

In addition to evaluating contracted application of biosolids, the study also evaluated ways of increasing process efficiencies to remove solids from the existing storage lagoon. The study identified a deficiency in the storage capacity of treated biosolids that will become more severe as the community grows. This project will construct an additional 1.6 million gallons of storage capacity, with associated improvements in the biosolids load-out facilities. The decant water return line from the biosolids storage lagoon will also be replaced.

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

FISCAL YEAR PRIORITY			1	1			
		TOTAL	**2013/14**	**2014/15**	**2015/16**	**2016/17**	**2017/18**
COST:							
Engineering/Inspection		228,000	182,000	46,000			
Construction		1,330,000	443,000	887,000			
	TOTAL	**1,558,000**	**625,000**	**933,000**			
FINANCING:							
Clean Water State Revolving Fund		1,558,000	625,000	933,000			
	TOTAL	**1,558,000**	**625,000**	**933,000**			

PROGRAM - ACTIVITY:	**DEPARTMENT:**	**ACCOUNT NO.**
Utilities – WPC Plant	Water & Pollution Control	522-3446-489

COGENERATION SYSTEM MAINTENANCE **PROJECT STATUS:** New

DESCRIPTION/JUSTIFICATION
The WPC Facility uses anaerobic digestion as a core treatment process for wastewater solids. The digestion process stabilizes the waste, reduces the volume of the 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 on-site electrical generation. The facility has three 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.

COMMENTS
This project plans for the regular repair and replacement of the cogeneration system. The engines need regular overhauls approximately every 25,000 hours of run time. MG #1 is too small to be used by itself for electrical generation. Staff has therefore decided to replace this engine with a boiler system, which will be less maintenance intensive. The boiler would be used as a standby method to warm the digesters while the remaining engines would provide electrical generation.

The anticipated schedule of activities is as shown below.

FY 13/14	$	200,000	Overhaul MG #2 (Engine is currently inoperable.)
FY 16/17		290,000	Replace MG #1 with boiler system
FY 17/18		235,000	Overhaul MG #3

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

FISCAL YEAR PRIORITY			2			1	2
		TOTAL	**2013/14**	**2014/15**	**2015/16**	**2016/17**	**2017/18**
COST:							
Contracted Repair/Replace		725,000	200,000			290,000	235,000
	TOTAL	**725,000**	**200,000**			**290,000**	**235,000**
FINANCING:							
Sewer Utility Fund		725,000	200,000			290,000	235,000
	TOTAL	**725,000**	**200,000**			**290,000**	**235,000**

PROGRAM - ACTIVITY:	**DEPARTMENT:**	**ACCOUNT NO.**
Utilities – WPC Plant	Water & Pollution Control	520-3447-489

LIFT STATION IMPROVEMENTS **PROJECT STATUS:** New

DESCRIPTION/JUSTIFICATION
This project includes a series of upgrades to the wastewater lift stations used to pump sewage from low-lying areas that cannot flow by gravity to the Water Pollution Control Facility.

COMMENTS
The projects shown in the first year are not new; they were previously shown as a part of the WPC Facility Improvements. The timing and cost of these two first-year projects are unchanged from what was shown in last year's CIP page. The project to rebuild the Northwood Lift Station is being shown for the first time.

FY 13/14 Rebuild South Dayton Avenue Lift Station: Includes pumps, motors, and chemical dosing system ($693,000), and replace Orchard Drive Lift Station ($347,000)
FY 15/16 Rebuild Northwood Lift Station ($212,000)

LOCATION
Various Locations

FISCAL YEAR PRIORITY			3		6		
		TOTAL	**2013/14**	**2014/15**	**2015/16**	**2016/17**	**2017/18**
COST:							
Engineering		144,000	125,000		19,000		
Construction		1,108,000	915,000		193,000		
	TOTAL	**1,252,000**	**1,040,000**		**212,000**		
FINANCING:							
Sewer Fund		212,000			212,000		
Clean Water State Revolving Fund		1,040,000	1,040,000				
	TOTAL	**1,252,000**	**1,040,000**		**212,000**		

PROGRAM - ACTIVITY:	**DEPARTMENT:**	**ACCOUNT NO.**
Utilities – WPC Plant	Water & Pollution Control	522-3448-489 522-3449-489

WPC CLARIFIER MAINTENANCE **PROJECT STATUS:** New

DESCRIPTION/JUSTIFICATION
This project includes major structural and mechanical maintenance activities for the eight clarifiers at the WPC facility.

COMMENTS
Because of the harsh environment they are exposed to, the structural and mechanical components of the facility's eight clarifiers need regular maintenance. Periodic recoating of the protective paint systems prolongs the life of the units. Recent coatings of the concrete walls have failed. Consultation with engineering and coating experts have indicated that the most cost-effective maintenance scheme would be to no longer paint the concrete and address any concrete deterioration on an as-needed basis. Funds are shown in the first two years of the CIP to take the clarifiers down and remove any poorly adhered coatings on the concrete.

The clarifier drives and mechanisms were inspected during 2012. Replacement of the drives is recommended beginning in FY 16/17, with priority given to the intermediate and final clarifiers. No significant structural concerns were identified with the metal mechanisms, and replacement is not believed to be needed at this time. When the drives are replaced, the mechanisms will be re-evaluated and a replacement schedule prepared if appropriate.

FY 13/14	Remove Failed Coatings on Primary Clarifiers
FY 14/15	Remove Failed Coatings on Intermediate/Final Clarifiers
FY 16/17	Replace Intermediate Clarifier Drives
FY 17/18	Replace Final Clarifier Drives

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

FISCAL YEAR PRIORITY		4	3		3	3
	TOTAL	**2013/14**	**2014/15**	**2015/16**	**2016/17**	**2017/18**
COST:						
Clarifier Coatings	300,000	100,000	200,000			
Replace Intermediate Clarifier Drives	200,000				200,000	
Replace Final Clarifier Drives	210,000					210,000
TOTAL	**710,000**	**100,000**	**200,000**		**200,000**	**210,000**
FINANCING:						
Sewer Utility Fund	710,000	100,000	200,000		200,000	210,000
TOTAL	**710,000**	**100,000**	**200,000**		**200,000**	**210,000**

PROGRAM - ACTIVITY:	**DEPARTMENT:**	**ACCOUNT NO.**
Utilities – WPC Plant	Water & Pollution Control	520-3429-489

WPC ELECTRICAL SYSTEM MAINTENANCE **PROJECT STATUS:** Scope Change Cost Change

DESCRIPTION/JUSTIFICATION

A dependable method of receiving and distributing power throughout the Water Pollution Control Facility campus is essential to provide necessary protection of the environment and public health. A planned program of major preventive maintenance is recommended to ensure the electrical system is reliable. This project also includes planned repair or replacement of electrical components.

COMMENTS

The list of projects is intended to implement a proactive Preventive Maintenance Program. Several of these projects were identified as part of the long-range facility program completed in 2012. Additional projects may be added in future years as equipment ages and additional work becomes necessary.

FY 13/14	$ 83,000	Replace Existing Switchgear Relay Logic Controllers with Programmable Logic Controllers (PLCs)
	80,000	Replace Main Plant Transformer
FY 14/15	96,000	Replace Old Lamps/Fixtures (Eliminate T12 Fluorescent and Mercury Vapor Lamps)
FY 15/16	116,000	Replace Exterior-mounted Safety Switches
FY 16/17	63,000	Main Switchgear Preventive Maintenance (every five years)
	218,000	Replace Main Circuit Breakers

LOCATION

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

FISCAL YEAR PRIORITY			5	7	5	4	
		TOTAL	**2013/14**	**2014/15**	**2015/16**	**2016/17**	**2017/18**
COST:							
Construction & Equipment		656,000	163,000	96,000	116,000	281,000	
	TOTAL	**656,000**	**163,000**	**96,000**	**116,000**	**281,000**	
FINANCING:							
Sewer Utility Fund		656,000	163,000	96,000	116,000	281,000	
	TOTAL	**656,000**	**163,000**	**96,000**	**116,000**	**281,000**	

PROGRAM - ACTIVITY:	**DEPARTMENT:**	**ACCOUNT NO.**
Utilities – WPC Plant	Water & Pollution Control	520-3438-489

DIGESTER IMPROVEMENTS **PROJECT STATUS:** Scope Change Cost Change

DESCRIPTION/JUSTIFICATION

The WPC Facility uses anaerobic digestion as a core treatment process for wastewater solids. The digestion process stabilizes the waste, reduces the volume of the solids, and provides a measure of pathogen destruction. The process also generates methane gas as a by-product. This gas is captured and used as a fuel source for on-site electrical generation.

Cleaning of the digesters is a major routine maintenance task necessary to ensure that adequate storage volume remains available for the treatment process to be effective. During the previous round of digester cleaning work, it was revealed that the interior piping is in need of having its protective paint coat addressed. Recent process evaluation (Residuals Handling Study, 2010; Long-Range Facility Plan, 2012) identified a series of maintenance and improvements to the digesters to maintain the facility's solids handling capacity over the next 20 years. These activities include designing and replacing digester mixing systems, repainting the failing protective paint coatings on the exterior steel digester lids, and replacing piping and valves associated with digester pumping. This project couples the schedules of these five maintenance activities (cleaning, repaint interior, install mixing, repaint exterior, replace piping and valves) to allow for both cost and operational efficiencies.

COMMENTS

The anticipated project schedule and budget are as follows:

FY 13/14	$ 889,000	Clean 1 Primary Digester ($83,000); Repaint Interior Piping ($249,000); Design and Replace Mixing System ($39,000 + $194,000); Replace Associated Pump Room Piping and Valves ($324,000)
FY 14/15	880,000	Clean 1 Primary Digester ($86,000); Repaint Interior Piping ($258,000); Replace Mixing System ($201,000); Replace Associated Pump Room Piping and Valves ($335,000)
FY 15/16	1,089,000	Clean Secondary Digester ($89,000); Repaint Interior Piping ($267,000); Repaint Exterior Lids on All Three Digesters ($386,000); Replace Associated Pump Room Piping and Valves ($347,000)
FY 17/18	107,000	Replace Waste Pumps #1, 2, 3, and Associated Piping

LOCATION

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

FISCAL YEAR PRIORITY			6	4	4		4
		TOTAL	**2013/14**	**2014/15**	**2015/16**	**2016/17**	**2017/18**
COST:							
Construction & Equipment		2,965,000	889,000	880,000	1,089,000		107,000
	TOTAL	**2,965,000**	**889,000**	**880,000**	**1,089,000**		**107,000**
FINANCING:							
Sewer Utility Fund		2,965,000	889,000	880,000	1,089,000		107,000
	TOTAL	**2,965,000**	**889,000**	**880,000**	**1,089,000**		**107,000**

PROGRAM - ACTIVITY:	**DEPARTMENT:**	**ACCOUNT NO.**
Utilities – WPC Plant	Water & Pollution Control	520-3450-489

SECONDARY TREATMENT IMPROVEMENTS **PROJECT STATUS:** New

DESCRIPTION/JUSTIFICATION

The secondary treatment unit processes used at the Ames Water Pollution Control Facility are biological systems that reduce contaminants left in the wastewater following primary treatment. The Ames WPC Facility uses two different secondary processes; namely, an attached growth process (trickling filters) and a suspended growth process (solids contact). This project provides ongoing major maintenance to these two secondary treatment processes.

COMMENTS

The current configuration of the secondary treatment processes allows the Ames WPC Facility to meet all existing discharge limitations. Currently, consideration is being given, both at the state and national levels, to increasing the limitation on wastewater treatment facilities to further reduce the discharge of nutrients. Once those regulations are finalized, an extensive upgrade to the secondary treatment scheme will be required at an estimated cost of $25 million (in 2012 dollars). That upgrade is believed to be ten or more years into the future. Until that time, continuing maintenance of the existing infrastructure is required. The anticipated project schedule and budget are as follows:

FY 13/14	$	700,000	Replace Solids Contact Blowers
		90,000	Repaint (3) Screw Pumps
FY 15/16		250,000	Rehabilitation of Solids Contact Screw Pumps
FY 16/17		75,000	Replace Solids Contact Gate Valves and Diffusers

LOCATION

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

FISCAL YEAR PRIORITY			7		3	6	
		TOTAL	**2013/14**	**2014/15**	**2015/16**	**2016/17**	**2017/18**
COST:							
Construction & Equipment		1,115,000	790,000		250,000	75,000	
	TOTAL	**1,115,000**	**790,000**		**250,000**	**75,000**	
FINANCING:							
Sewer Utility Fund		415,000	90,000		250,000	75,000	
Clean Water State Revolving Fund		700,000	700,000				
	TOTAL	**1,115,000**	**790,000**		**250,000**	**75,000**	

PROGRAM - ACTIVITY:	**DEPARTMENT:**	**ACCOUNT NO.**
Utilities – WPC Plant	Water & Pollution Control	520-3451-489 522-3451-489

MECHANICAL AND HVAC REPLACEMENTS **PROJECT STATUS:** New

DESCRIPTION/JUSTIFICATION
Mechanical air handling systems are critical in a wastewater treatment facility both for life safety of building occupants and for extending the life of equipment. This project replaces the equipment described below with like-kind equipment. Many of the components have already been replaced once during the life of the treatment plant.

COMMENTS
The WPC Facility's raw water pump station grit room make-up air unit has already failed. Portions of the Administration Building's HVAC system have failed. The raw water pump station grit alley make-up air unit, solids contact building make-up air unit, and digester heat recovery unit have been recommended for replacement in the WPC Long-Range Facility Plan completed in 2012.

FY 13/14	$ 93,000	Raw Water Pump Station Grit Room Make-up Air Unit
FY 14/15	300,000	Administration Building HVAC Replacement
	75,000	Raw Water Pump Station Grit Alley Make-up Air Unit
	43,000	Solids Contact Building Make-up Air Unit
FY 15/16	67,000	Digester Heat Recovery Unit

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

FISCAL YEAR PRIORITY			8	6	8		
		TOTAL	**2013/14**	**2014/15**	**2015/16**	**2016/17**	**2017/18**
COST:							
Engineering		68,000	11,000	50,000	7,000		
Construction/Equipment		510,000	82,000	368,000	60,000		
	TOTAL	**578,000**	**93,000**	**418,000**	**67,000**		
FINANCING:							
Sewer Utility Fund		578,000	93,000	418,000	67,000		
	TOTAL	**578,000**	**93,000**	**418,000**	**67,000**		

PROGRAM - ACTIVITY:	**DEPARTMENT:**	**ACCOUNT NO.**
Utilities – WPC Plant	Water & Pollution Control	520-3452-489

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

DESCRIPTION/JUSTIFICATION

It is necessary to plan for the orderly repair, replacement, and upgrade of the plant and 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 ten years. As the facility ages, this project continues to increase in scope and expense.

COMMENTS

The scope of this project has been updated following the completion of the Long-Range Facility Plan in late 2012. Individual projects have been prioritized to gradually increase to the level of re-investment recommended by the study. Projects scheduled include the following:

FY 13/14	On-site Street Repairs ($450,000) Trickling Filter Pump Station Air Dryer ($78,000) Replace Four 2nd Stage Trickling Filter Pump Check Valves ($70,000)
FY 14/15	Replace Four 1st Stage Trickling Filter Pump Check Valves ($73,000)
FY 15/16	Replace Two Raw Water Pump Check Valves ($38,000) Replace Waste Activated Sludge Pump No. 1 ($51,000)
FY 16/17	Trickling Filter Pump Station Repainting ($59,000) Trickling Filter Pump Station Roof Hatch Alterations ($114,000) Grease Receiving Station Upgrade ($300,000)

LOCATION

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

FISCAL YEAR PRIORITY			9	5	7	5	
		TOTAL	**2013/14**	**2014/15**	**2015/16**	**2016/17**	**2017/18**
COST:							
Construction and Equipment		1,233,000	598,000	73,000	89,000	473,000	
	TOTAL	**1,233,000**	**598,000**	**73,000**	**89,000**	**473,000**	
FINANCING:							
Sewer Utility Fund		1,233,000	598,000	73,000	89,000	473,000	
	TOTAL	**1,233,000**	**598,000**	**73,000**	**89,000**	**473,000**	

PROGRAM - ACTIVITY: Utilities - WPC Plant

DEPARTMENT: Water & Pollution Control

ACCOUNT NO. 520-3453-489
520-3454-489

STRUCTURAL REHABILITATION **PROJECT STATUS:** New

DESCRIPTION/JUSTIFICATION
In order to preserve the significant investment in infrastructure at the Water Pollution Control Facility, periodic structural rehabilitation of buildings and structures is necessary. Because of the value and significance of the structures identified below, it is essential that rehabilitation be made prior to a structural failure.

COMMENTS
The structural rehabilitations included in this project were identified during a plant-wide condition assessment performed in 2012 as a part of the Long-Range Facility Plan. Activities have been prioritized to address the most significant needs first. An additional $1.969 million is planned in Years 6-10 (not included in the cost estimates below).

FY 13/14	$ 31,000	Address Settlement at Raw Wastewater Pump Station ($31,000)
FY 15/16	583,000	Repair Precast and Cast-In-Place Concrete Deterioration (All Except Trickling Filters) ($250,000); Repair Solids Contact Splitter Box Slabs & Sidewalks ($333,000)
FY 16/17	562,000	Joint Repairs at Sludge Pumping Building ($46,000); Repair Perimeter Curb at Base of Digesters ($172,000); Clean and Seal Precast and Cast In Place Concrete ($344,000)
FY 17/18	445,000	Repair Drainage and Moisture Issues Around Multiple Structures ($445,000)

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

FISCAL YEAR PRIORITY			10		2	2	1
		TOTAL	**2013/14**	**2014/15**	**2015/16**	**2016/17**	**2017/18**
COST:							
Engineering		196,000	5,000		70,000	68,000	53,000
Construction		1,425,000	26,000		513,000	494,000	392,000
	TOTAL	**1,621,000**	**31,000**		**583,000**	**562,000**	**445,000**
FINANCING:							
Sewer Utility Fund		1,621,000	31,000		583,000	562,000	445,000
	TOTAL	**1,621,000**	**31,000**		**583,000**	**562,000**	**445,000**

PROGRAM - ACTIVITY:	**DEPARTMENT:**	**ACCOUNT NO.**
Utilities – WPC Plant	Water & Pollution Control	520-3455-489

BAR SCREEN IMPROVEMENTS **PROJECT STATUS:** New

DESCRIPTION/JUSTIFICATION
This project installs a third bar screen and a screenings washer/compactor/conveyor system at the WPC Facility. The bar screens provide physical removal of large debris such as rags, boards, and other large items that can plug downstream treatment units.

COMMENTS
The original treatment plant design included two mechanical bar screens and one manual screen. Approximately ten years ago, the manual screen was replaced with a trial of an in-channel grinder screen. The trial was not successful, and the non-operable in-channel grinder will be replaced with a third mechanical bar screen.

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

FISCAL YEAR PRIORITY				2			
		TOTAL	**2013/14**	**2014/15**	**2015/16**	**2016/17**	**2017/18**
COST:							
Engineering		90,000		90,000			
Equipment		660,000		660,000			
	TOTAL	**750,000**		**750,000**			
FINANCING:							
Clean Water State Revolving Fund		750,000		750,000			
	TOTAL	**750,000**		**750,000**			

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

FLOW EQUALIZATION EXPANSION **PROJECT STATUS:** Delayed

DESCRIPTION/JUSTIFICATION

The Ames WPC Facility uses an advanced secondary (i.e. biological) treatment process. The biological processes are designed to operate within a range of flow rates. If the flows increase too high or too rapidly, the biomass can be washed out of the treatment basins, negatively impacting the treatment effectiveness for several days or weeks to follow. Facilities like Ames' are commonly constructed with flow equalization basins. Ames currently has an effective flow equalization storage capacity of 4.4 million gallons.

When flows coming in to the plant exceed the hydraulic capacity of the biological process, the excess flow is diverted to the equalization basins and is later brought back through the treatment process once the incoming flow rate drops below the capacity of the plant. On those rare occasions when the basins are completely filled and the influent flow rate has not yet dropped below capacity, the equalization basins begin a controlled overflow. The overflow is recombined with the treated plant effluent prior to discharge to the receiving stream, with the combined flow meeting all numeric discharge limits in the NPDES permit. From 1999 through 2006, this type of blending only occurred for a total of a few hours. With the heavy rainfall and flooding that took place in 2007 and 2008, the overflow was used for at least a portion of 12 different days. In the record flooding of August 2010, blending occurred for portions of six days.

COMMENTS

Based on a capacity evaluation conducted by the City's consultant as a part of the Long-Range Facility Plan, it has been determined that peak wet-weather flows can be adequately accomplished through a combination of:

1. Operational modifications at the treatment plant,
2. Removal of 25% of the Inflow and Infiltration (I/I) reaching the WPC Facility through the Sanitary Sewer Rehabilitation Project, and
3. An expansion to the equalization basin capacity.

The proposed project would add an additional 6.0 million gallons, increasing the plant's effective storage capacity to 10.4 million gallons. The timing of expenses shown has been delayed approximately six months to allow final estimates of effective I/I removal to be incorporated into the sizing of the new basin.

LOCATION

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

FISCAL YEAR PRIORITY					1		
	TOTAL	**2013/14**	**2014/15**	**2015/16**	**2016/17**	**2017/18**
COST:						
Engineering	90,000			90,000		
Construction	985,000			985,000		
TOTAL	**1,075,000**			**1,075,000**		
FINANCING:						
Clean Water State Revolving Fund	1,075,000			1,075,000		
TOTAL	**1,075,000**			**1,075,000**		

PROGRAM - ACTIVITY: Utilities - WPC Plant

DEPARTMENT: Water and Pollution Control

ACCOUNT NO.

UTILITIES - ELECTRIC PRODUCTION

	PROJECT/REVENUE DESCRIPTION	TOTAL	2013/14	2014/15	2015/16	2016/17	2017/18	PAGE
EXPENDITURES:								
Electric Services:								
9	Demand Side Management Programs	5,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	70
Transmission/Distribution:								
4	69 kV Switchyard Relay/Control Replacement	1,700,000	1,700,000					65
7	Ames Plant Distribution Substation	950,000	950,000					68
8	Mortensen Road Feeder Reconstruction	300,000	300,000					69
10	Vet Med Substation Feeders	300,000	300,000					71
11	Top-O-Hollow Substation Expansion	2,000,000	250,000	1,750,000				72
12	69 kV Transmission Reconstruction	2,600,000	520,000	520,000	520,000	520,000	520,000	73
20	Ontario Substation 69 kV Breaker Addition	1,150,000		150,000	1,000,000			81
24	Dayton Ave Substation Switchgear Upgrades	800,000			100,000	700,000		85
Power Plant:								
1	Gas Turbine #2 Inlet Heating	805,000	805,000					62
2	Combustion Turbine #1 Evaporator Cooler	300,000	300,000					63
3	Unit #7 Crane Repair	230,000	230,000					64
5	EPA - Unit #8 Mercury Reduction	5,100,000	300,000	1,690,000	3,110,000			66
6	Unit #8 Precipitator Control	200,000	200,000					67
13	Cooling Tower Repairs	400,000	400,000					74
14	Underground Storage Tanks	365,000	15,000	350,000				75

UTILITIES - ELECTRIC PRODUCTION, continued

	PROJECT/REVENUE DESCRIPTION	TOTAL	2013/14	2014/15	2015/16	2016/17	2017/18	PAGE
EXPENDITURES, continued:								
Power Plant (continued):								
15	EPA - Emissions Improvements	3,820,000		3,820,000				76
16	Continuous Emissions Monitoring System	550,000		550,000				77
17	Gas Turbine #1 Inspection & Overhaul	850,000		350,000	500,000			78
18	Feedwater Heater Tube Replacement	980,000		980,000				79
19	Power Plant Fire Protection System	650,000		150,000	250,000	250,000		80
21	Unit #7 Boiler Tube Repair	4,000,000		150,000			3,850,000	82
22	EPA - Ash Handling & Disposal	1,050,000		50,000			1,000,000	83
23	Oil Guns and Ignitors	945,000		595,000	350,000			84
25	Unit #7 Turbine Generator 5-Year Overhaul	750,000				750,000		86
26	Power Plant Roof Replacement	450,000				450,000		87
27	Turbine Controls Upgrade	450,000					450,000	88
	Total Expenditures	**36,695,000**	**7,270,000**	**12,105,000**	**6,830,000**	**3,670,000**	**6,820,000**	
REVENUES:								
City:								
Electric Utility Fund		35,294,400	6,805,640	11,650,040	6,544,240	3,572,240	6,722,240	
Other:								
Iowa State University		1,400,600	464,360	454,960	285,760	97,760	97,760	
	Total Revenues	**36,695,000**	**7,270,000**	**12,105,000**	**6,830,000**	**3,670,000**	**6,820,000**	

INLET HEATING FOR GAS TURBINE #2 **PROJECT STATUS:** No Change

DESCRIPTION/JUSTIFICATION
Gas Turbine #2 (GT2) can only be run for about five months of the year because there is no pre-heater for cold weather operation. This project will involve the installation of a pre-heater which will heat air going into the unit to prevent it from icing up. Completion of this installation will provide reserve generating capacity during cold weather if there is a problem with Unit #8. This project may require a permit.

COMMENTS
Cost estimates obtained in 2010 ranged between $400,000 and $700,000. Engineering in FY 10/11 and FY 11/12 totaled $33,300.

Engineering	$ 33,300
Installation	805,000
	$ 838,000

LOCATION
Pullman Street – Map 6, location P-10

FISCAL YEAR PRIORITY			1				
		TOTAL	**2013/14**	**2014/15**	**2015/16**	**2016/17**	**2017/18**
COST:							
Equipment		805,000	805,000				
	TOTAL	**805,000**	**805,000**				
FINANCING:							
Electric Utility Fund		805,000	805,000				
	TOTAL	**805,000**	**805,000**				

PROGRAM - ACTIVITY:	**DEPARTMENT:**	**ACCOUNT NO.**
Utilities – Electric Production	Electric	530-4830-489

EVAPORATOR COOLER ON COMBUSTION TURBINE #1

PROJECT STATUS: No Change

DESCRIPTION/JUSTIFICATION
Combustion turbine #1 has an evaporator cooler, which is equipment that cools the waste heat and removes moisture during operation.

The evaporator cooler on combustion turbine #1 has been patched and repaired many times. It is no longer cost effective to make additional repairs and replacement of the cooler is advised.

COMMENTS
Estimated cost for a replacement - $300,000

LOCATION
Turbine site, 2200 Pullman Street – Map 6, location P-10

FISCAL YEAR PRIORITY			2				
		TOTAL	**2013/14**	**2014/15**	**2015/16**	**2016/17**	**2017/18**
COST:							
Equipment and Labor		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	530-4899-489

UNIT #7 CRANE REPAIR **PROJECT STATUS:** New

DESCRIPTION/JUSTIFICATION

The #7 crane is original equipment from the construction of Unit #7 which was built in 1967 and is used to do overhauls and repairs on the #7 turbine/generator and to hoist other plant material and equipment from sub-basement and basement into the plant.

The crane has reached a point where it is in need of a major overhaul. The controls no longer meet the safety standards for operation. It has been recommended to install either radio control or a pendant control for the operation and controls to be up-to-date. All the hoisting motors are recommended to be replaced with VFDs (variable frequency drives) for better control. All brake systems need to be replaced on the carriage and on the rails.

The last estimate given to plant staff was for $200,000 plus $30,000 for engineering. The crane is critical plant equipment used in completing major work on the turbine/generators.

LOCATION

Power Plant, 200 East 5th Street – Map 5, location N-11

FISCAL YEAR PRIORITY			3				
		TOTAL	**2013/14**	**2014/15**	**2015/16**	**2016/17**	**2017/18**
COST:							
Engineering		30,000	30,000				
Materials and Installation		200,000	200,000				
	TOTAL	**230,000**	**230,000**				
FINANCING:							
Electric Utility Fund		230,000	230,000				
	TOTAL	**230,000**	**230,000**				

PROGRAM - ACTIVITY:	**DEPARTMENT:**	**ACCOUNT NO.**
Utilities – Electric Production	Electric	530-4801-489

AMES PLANT 69KV SWITCHYARD RELAY AND CONTROL REPLACEMENT

PROJECT STATUS: Cost Increase

DESCRIPTION/JUSTIFICATION

The 69kV switchyard relaying and controls are currently located inside the Power Plant. This requires long runs of aged control cable between the Power Plant and switchyard, running beneath portions of the Water and Pollution Control's newer office. Some of the control cables are no longer operational and some conduits have collapsed and are not accessible for repair. The existing relays are obsolete electro-mechanical devices which are becoming difficult to maintain/repair as replacement parts are no longer manufactured. Additionally, some of the existing relays at Stange Rd Substation, Dayton Avenue Substation and Haber Road substation are also obsolete electro-mechanical devices that need to be replaced as part of this project to complete a coordinated 69kV looped scheme using the available fiber-optic communications previously installed. The relaying and controls for the 69kV switchyard and other listed substations are critical components that play a significant role in overall electric system reliability. With the installation of the Ames Plant 161kV / 69kV substation, a relay and control enclosure was installed adjacent to the 69kV switchyard with sufficient room to house the relays and controls needed for the 69kV switchyard. By installing modern, programmable relays and updated controls in this location and using the previously-installed fiber-optic communications, long-term reliability can be improved by eliminating the obsolete and maintenance-intensive electro-mechanical relays and aged, lengthy control circuits that are no longer accessible for repair.

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 18.8%.

LOCATION

Power Plant, 200 East 5th Street – Map 5, location N-11
Dayton Avenue Substation, 2316 Pullman Street – Map 6, location Q-10
Haber Road Substation, 601 Haber Road – Map 5, location J-10
Stange Road 69kV Substation, 2851 24th Street – Map 2, location I-7

FISCAL YEAR PRIORITY			4				
		TOTAL	**2013/14**	**2014/15**	**2015/16**	**2016/17**	**2017/18**
COST:							
Engineering		150,000	150,000				
Construction		1,550,000	1,550,000				
	TOTAL	**1,700,000**	**1,700,000**				
FINANCING:							
Electric Utility Fund		1,380,400	1,380,400				
Iowa State University		319,600	319,600				
	TOTAL	**1,700,000**	**1,700,000**				

PROGRAM - ACTIVITY:	**DEPARTMENT:**	**ACCOUNT NO.**
Utilities – Electric Extension/Improvements	Electric	530-4853-489

EPA – UNIT #8 MERCURY REDUCTION **PROJECT STATUS:** Delayed

DESCRIPTION/JUSTIFICATION
Future Environmental Protection Agency (EPA) regulations likely will require reduction of mercury emissions. If mercury reduction equipment is not in place, Unit #8 may not meet EPA regulation, and the plant will not be able to operate.

COMMENTS
Staff believes that Unit #8 will require a mercury control, based on pending regulations. Engineering for the modifications to Unit #8 are planned for FY 2013/14.

Staff needs to evaluate options for mercury reduction technology, so a specific technology has yet to be selected and costed.

LOCATION
Power Plant, 200 East 5th Street – Map 5, location N-11

FISCAL YEAR PRIORITY			5	2	2		
		TOTAL	**2013/14**	**2014/15**	**2015/16**	**2016/17**	**2017/18**
COST:							
Engineering		300,000	300,000				
Equipment and Installation		4,800,000		1,690,000	3,110,000		
	TOTAL	**5,100,000**	**300,000**	**1,690,000**	**3,110,000**		
FINANCING:							
Electric Utility Fund		5,100,000	300,000	1,690,000	3,110,000		
	TOTAL	**5,100,000**	**300,000**	**1,690,000**	**3,110,000**		

PROGRAM - ACTIVITY:	**DEPARTMENT:**	**ACCOUNT NO.**
Utilities – Electric Production	Electric	530-4841-489

UNIT #8 PRECIPITATOR CONTROL **PROJECT STATUS:** Cost Decrease

DESCRIPTION/JUSTIFICATION
The Unit #8 electrostatic precipitator has controls that were built in 1980. They are of the old outdated analog type. These types of controls are basically obsolete. Since the electrostatic precipitator is the main equipment for collecting particulate emissions at the plant, it is critical to have a control system that not only can be maintained, but also can operate efficiently and adjust automatically on computer control.

COMMENTS
Upgrade of many old control systems is needed to attain the required emission level goals and follow other environmental regulations.

The cost decrease is due to the discovery of a lower cost alternative.

LOCATION
Power Plant, 200 East 5th Street - Map 5, location N-11

FISCAL YEAR PRIORITY		6				
	TOTAL	**2013/14**	**2014/15**	**2015/16**	**2016/17**	**2017/18**
COST:						
Engineering, Equipment and Installation	200,000	200,000				
TOTAL	**200,000**	**200,000**				
FINANCING:						
Electric Utility Fund	200,000	200,000				
TOTAL	**200,000**	**200,000**				

PROGRAM - ACTIVITY:	**DEPARTMENT:**	**ACCOUNT NO.**
Utilities - Electric Production	Electric	530-4803-489

AMES PLANT DISTRIBUTION SUBSTATION SWITCHGEAR AND FEEDER EXTENSION

PROJECT STATUS: Cost Increase

DESCRIPTION/JUSTIFICATION

The Ames Plant Distribution Substation is one of the older substations having electro-mechanical relays, air blast 13.8kV breakers, and no main breaker. The batteries for this substation are currently inside the Power Plant and the cabling runs beneath the Water Plant Administration building in duct runs that are partially collapsed. This substation is the primary source for Mary Greeley Medical Center. This budget item is to replace the existing 13.8kV metal clad switchgear with an expanded, modern switchgear with vacuum breakers and including a main breaker and an additional feeder. The additional feeder breaker will be used to serve a new 6th Street downtown feeder. This new switchgear housing will include batteries and a battery charger for local emergency trip power to discontinue use of Power Plant batteries and aging cables. Relaying will also be upgraded from electro-mechanical relays to modern microprocessor controlled relays. This project includes the extension of a new feeder north from the substation and west along 6th Street to carry portions of the downtown load currently served by the 4kV network provided by the Power Plant 13.8kV bus. This will help to limit exposure of the Power Plant bus to distribution faults, thereby improving Power Plant reliability.

COMMENTS

FY 2011/12	Engineering (actual)	$ 10,230
FY 2012/13	Engineering	199,770
FY 2013/14	Construction	950,000
	Total	$1,160,000

LOCATION

Power Plant, 200 East 5th Street – Map 5, location N-11

FISCAL YEAR PRIORITY			7				
		TOTAL	**2013/14**	**2014/15**	**2015/16**	**2016/17**	**2017/18**
COST:							
Construction		950,000	950,000				
	TOTAL	**950,000**	**950,000**				
FINANCING:							
Electric Utility Fund		950,000	950,000				
	TOTAL	**950,000**	**950,000**				

PROGRAM - ACTIVITY:	**DEPARTMENT:**	**ACCOUNT NO.**
Utilities – Electric Extension/Improvements	Electric	530-4859-489

MORTENSEN ROAD UNDERGROUND AND OVERHEAD FEEDER RECONSTRUCTION

PROJECT STATUS: No change

DESCRIPTION/JUSTIFICATION

This project will replace direct-buried 500 kcmil aluminum feeder cables with 750 kcmil copper feeder cables in duct for added capacity and reliability to areas served by Mortensen Road substation along Mortensen Road, South Dakota, and State Avenue. This project will also reconstruct approximately one-half mile of deteriorated overhead 13.8kV distribution line between State Avenue and Welch Avenue.

LOCATION

3040 Mortensen – Map 4, location G-13

FISCAL YEAR PRIORITY			8				
		TOTAL	**2013/14**	**2014/15**	**2015/16**	**2016/17**	**2017/18**
COST:							
Installation		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 Extension Improvements	Electric	530-4858-489

DEMAND SIDE MANAGEMENT (DSM)
ENERGY CONSERVATION PROGRAMS

PROJECT STATUS: No Change

DESCRIPTION/JUSTIFICATION
This project is to develop and administer programs aimed at reducing demand for electricity. Reductions in the demand for electricity positively impact future energy production/supply costs.

Demand side management (DSM) programs are utility programs aimed at reducing consumer use of energy through conservation or efficiency measures. Ongoing programs are:

- Residential energy audits
- Residential high efficiency air conditioner rebates
- Residential low income weatherization
- Residential high efficiency lighting rebates
- Residential efficient appliance rebates
- Commercial custom rebates
- Solar installation rebates
- Residential new construction rebates
- Commercial high efficiency lighting rebates
- Commercial audits
- Power Watch education
- Green Choices alternative energy contribution
- Commercial/industrial power factor correction rebates

Load Management (LM) programs control energy consumption at any instant through the use of mechanical or electronic devices. Ongoing programs are:

- Prime Time Power air conditioner load control

New Demand Side Management (DSM) program changes under consideration are:

- Commercial and residential lighting loans

New Load Management programs under consideration are:

- Interruptible rates for industrial customers

LOCATION
Electric Administration, 502 Carroll Avenue – Map 5, location M-11

FISCAL YEAR PRIORITY		9	7	7	4	1
	TOTAL	**2013/14**	**2014/15**	**2015/16**	**2016/17**	**2017/18**
COST:						
Program Development and Administration	5,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000
TOTAL	**5,000,000**	**1,000,000**	**1,000,000**	**1,000,000**	**1,000,000**	**1,000,000**
FINANCING:						
Electric Utility Fund	5,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000
TOTAL	**5,000,000**	**1,000,000**	**1,000,000**	**1,000,000**	**1,000,000**	**1,000,000**

PROGRAM – ACTIVITY:	**DEPARTMENT:**	**ACCOUNT NO.**
Utilities – Electric Administration	Electric	530-4815-489

VET MED SUBSTATION FEEDERS **PROJECT STATUS:** Delayed

DESCRIPTION/JUSTIFICATION

The expansion of the Vet Med Substation was completed in FY 2010/2011, providing additional substation capacity for growth in the Research Park south of Highway 30 and along South 16th Street. In order to provide capacity to these growing areas and to improve system reliability, feeder extensions are needed to fully utilize the added substation capacity. This project will add a new underground feeder south to the Research Park area and a new overhead feeder north to provide capacity for new load growth along South 16th Street, South Duff, and for ISU stadium expansion. This will also allow for the downtown Ames load to be significantly carried by Vet Med Substation, thereby allowing reduced usage of the Power Plant 13.8kV bus for service to outside feeders, which improves the reliability of the Power Plant by limiting its exposure to outside distribution feeder faults. Related work will include the replacement of some of the older underground substation feeder outlets for increased capacity to existing feeders and the addition of padmounted and overhead switches to facilitate emergency switching.

LOCATION

Vet Med Substation, north of Highway 30, east of University Drive – Map 8, location K-14

FISCAL YEAR PRIORITY			10				
		TOTAL	**2013/14**	**2014/15**	**2015/16**	**2016/17**	**2017/18**
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 Extension/Improvements	Electric	530-4854-489

TOP-O-HOLLOW SUBSTATION EXPANSION AND BREAKER ADDITION

PROJECT STATUS: No Change

DESCRIPTION/JUSTIFICATION

This project will convert the existing direct-buried underground 69kV transmission tap connection at the Top-O-Hollow substation to a more reliable dual-source overhead transmission connection, including the necessary relaying and breakers for high-speed/selective line and transformer protection. The scope of this project includes the replacement and expansion of the existing 13.8kV metalclad switchgear to provide the addition of a main breaker, upgrade obsolete air-blast breakers and electromechanical relays with vacuum interrupter breakers and microprocessor based relaying equipment, and expand the battery and charger system to replace undersized batteries. The addition of the dual 69 KV transmission source and upgraded 69kV and 13.8 kV relay protection will improve reliability of the 69kV transmission system, improve service to the customers served by this substation, and lower the arc energy levels for improved worker safety. It will also better protect electrical assets from faults. The land for this project has been previously purchased to allow for the expansion of the existing substation.

Use of breakers for transmission line, transformer, and 13.8kV main breaker protection is consistent with recommended engineering practices in the electric utility industry.

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 a conservative 18.8%.

FY 2008/09	Land Purchase	$ 24,883
FY 2013/14	Engineering	250,000
FY 2014/15	Construction	1,750,000
	Total	$ 2,024,883

LOCATION

Top-O-Hollow Road west of Calhoun Avenue - Map 2, location L-5

FISCAL YEAR PRIORITY			11	6			
		TOTAL	**2013/14**	**2014/15**	**2015/16**	**2016/17**	**2017/18**
COST:							
Engineering		250,000	250,000				
Construction		1,750,000		1,750,000			
	TOTAL	**2,000,000**	**250,000**	**1,750,000**			
FINANCING:							
Electric Utility Fund		1,624,000	203,000	1,421,000			
Iowa State University		376,000	47,000	329,000			
	TOTAL	**2,000,000**	**250,000**	**1,750,000**			

PROGRAM – ACTIVITY:	**DEPARTMENT:**	**ACCOUNT NO.**
Utilities – Electric Extension/Improvements	Electric	530-4882-489

69KV TRANSMISSION RECONSTRUCTION **PROJECT STATUS:** Cost Change

DESCRIPTION/JUSTIFICATION

This is a multi-year project which will reconstruct the older, deteriorated portions of 69kV pole lines at the rate of one to two miles of 69kV transmission line per year. The actual length and cost per mile will vary by terrain, accessibility, and attachments. Candidate portions of line include the original MidAmerican 69kV tie line that connects the Ames Plant Switchyard to MidAmerican's 69kV source point south of Ames on Highway 69. Other priority lines include the Ames Plant to Top-O-Hollow line, the Top-O-Hollow to Stange Road Substation Line, and the Vet Med to Mortensen Road Substation line. The total project will require at least five years and will reconstruct approximately 11 miles of deteriorated 69kV line. Related work will include the reconstruction of those portions of distribution line that are underbuilt on existing transmission lines and may include distribution underbuild extensions that are needed for capacity and/or reliability improvements.

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 18.8%.

LOCATION

Various

FISCAL YEAR PRIORITY		12	8	6	6	2
	TOTAL	**2013/14**	**2014/15**	**2015/16**	**2016/17**	**2017/18**
COST:						
Engineering	100,000	20,000	20,000	20,000	20,000	20,000
Construction	2,500,000	500,000	500,000	500,000	500,000	500,000
TOTAL	**2,600,000**	**520,000**	**520,000**	**520,000**	**520,000**	**520,000**
FINANCING:						
Electric Utility Fund	2,111,200	422,240	422,240	422,240	422,240	422,240
Iowa State University	488,800	97,760	97,760	97,760	97,760	97,760
TOTAL	**2,600,000**	**520,000**	**520,000**	**520,000**	**520,000**	**520,000**

PROGRAM – ACTIVITY:	**DEPARTMENT:**	**ACCOUNT NO.**
Utilities – Electric Extension Improvements	Electric	530-4856-489

COOLING TOWER REPAIRS **PROJECT STATUS:** No Change

DESCRIPTION/JUSTIFICATION

The #7 and #8 cooling towers are in need of repair. Their proper operation is critical to the efficiency of the Power Plant. These towers are outdoor evaporative cross flow towers that are subject to severe environmental operating conditions. The #7 tower had a major rework in the late 1980s when most of the structure, fill, louvers and drift eliminators were replaced. The #8 tower has had minor repairs on several occasions during the last ten years, including limited structure repairs and fill and drift eliminator replacements.

FY 2012/13	Unit #8 Cooling Tower – Materials and Labor (estimated)	$ 1,220,000
FY 2012/13	Unit #7 – Engineering (estimated)	50,000
FY 2013/14	Unit #7 – Materials and Labor	400,000
		$ 1,670,000

COMMENTS

The #8 louvers have deteriorated and need to be replaced. They are made of pressed asbestos which increases the cost of construction and disposal. Due to operating requirements of the Power Plant, it is difficult to schedule these units for repairs because the plant can't be operated without them. Normally these repairs are made during the scheduled five-year turbine generator overhauls, but the #8 tower needs some repairs before that. The louvers will be replaced and some structural repairs on #8 will be made during the planned outage. The #7 tower needs major structural repair in the fan mounting areas and replacement of the fan drive shafts. The fan hubs, blades and shrouds are 42 years old and need to be replaced. The fan deck, hot water basin and its support also need to be replaced.

LOCATION

Power Plant, 200 East 5th Street - Map 5, location N-11

FISCAL YEAR PRIORITY		13					
		TOTAL	**2013/14**	**2014/15**	**2015/16**	**2016/17**	**2017/18**
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	530-4840-489

UNDERGROUND STORAGE TANKS **PROJECT STATUS:** Delayed

DESCRIPTION/JUSTIFICATION
There are two 42,000 gallon underground tanks in service that store #2 fuel oil for units #7 and #8. These are original tanks 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 current problems. However, due to the age of these tanks (30 years is the expected safe life), it is very possible that an oil leak could occur, causing expensive cleanup.

COMMENTS
It is prudent to plan for replacing these tanks with above-ground containment tanks.

LOCATION
Power Plant, 200 East 5th Street – Map 5, location N-11

FISCAL YEAR PRIORITY			14	9			
		TOTAL	**2013/14**	**2014/15**	**2015/16**	**2016/17**	**2017/18**
COST:							
Engineering		15,000	15,000				
Equipment and Labor		350,000		350,000			
	TOTAL	**365,000**	**15,000**	**350,000**			
FINANCING:							
Electric Utility Fund		365,000	15,000	350,000			
	TOTAL	**365,000**	**15,000**	**350,000**			

PROGRAM - ACTIVITY:	**DEPARTMENT:**	**ACCOUNT NO.**
Utilities – Electric Production	Electric	530-4860-489

EPA – EMISSIONS IMPROVEMENTS **PROJECT STATUS:** Delayed

DESCRIPTION/JUSTIFICATION

The United States Environmental Protection Agency (EPA) currently regulates nitrogen oxide (NO_x) and sulfur dioxide (SO_2) air emissions by placing allowance limits on boilers, and by establishing a "cap and trade" system where allowances can be bought or sold to allow power plants the flexibility to serve the needs of their customers, while at the same time creating an economic incentive for plants to install control equipment to reduce emissions. The current regulation is known as the Clean Air Interstate Rule (CAIR), and is in effect until further notice. The EPA has said CAIR will be replaced by the Cross State Air Pollution Rule (CSAPR), which will regulate SO_2, NO_x, and ozone season NO_x (five months - May through September), but the effective date is not yet known.

SO_2 is formed during the combustion process and is a function of the sulfur content of the fuel. The City, years ago, switched to an "ultra-low sulfur" coal and presently meets the EPA's proposed SO_2 standard.

NO_X forms during the combustion process when fuel is burned at high temperatures. NO_x formation can be reduced effectively by lowering the temperature of the combustion process, primarily by reducing the amount of combustion air directly available to the fire. Air necessary to balance out the combustion requirements of the fire is then typically added to the boiler above the fireball to complete the combustion process without raising NO_x emissions. The equipment required to reduce NO_X emissions as described above are the installation of low NO_x burners combined with an over-fire air system (known as LNB-OFA).

COMMENTS

			Unit #8		Unit #7
FY 2007/08	Engineering	$	25,625	$	51,692
FY 2008/09	Engineering		30,306		17,599
FY 2009/10	Engineering		16,598		9,899
FY 2010/11	Engineering		50,000		30,000
FY 2011/12	Engineering, Materials		1,300,000		200,000
FY 2014/15	Materials & Labor for installation		2,000,000		1,820,000
		Total $	3,422,529	$	2,129,190

LOCATION

Power Plant, 200 East 5th Street – Map 5, location N-11

FISCAL YEAR PRIORITY				1			
		TOTAL	**2013/14**	**2014/15**	**2015/16**	**2016/17**	**2017/18**
COST:							
Materials and Labor		3,820,000		3,820,000			
	TOTAL	**3,820,000**		**3,820,000**			
FINANCING:							
Electric Utility Fund		3,820,000		3,820,000			
	TOTAL	**3,820,000**		**3,820,000**			

PROGRAM - ACTIVITY: Utilities – Electric Production

DEPARTMENT: Electric

ACCOUNT NO.

CONTINUOUS EMISSIONS MONITORING SYSTEM REPLACEMENT

PROJECT STATUS: Cost Change Delayed

DESCRIPTION/JUSTIFICATION

This capital improvement project is for replacement of the continuous emissions monitoring systems on Units #7 and #8 boilers. Continuous emissions monitoring systems provide relative data on the makeup of the plant's emissions. Both systems have key components that are 20+ years old and are no longer supported by the manufacturer. Having a very limited supply of parts and support available will create reliability issues in the future. Due to a battery of testing required, replacement of key components individually can present many logistical issues as well as considerable cost increase due to testing needing to be repeated with each component replacement. With this in mind as well as a need for room to add analytical instrumentation to meet new EPA monitoring requirements in the future, a complete system change out is recommended.

LOCATION

Power Plant, 200 East 5th Street – Map 5, location N-11

FISCAL YEAR PRIORITY 3

	TOTAL	2013/14	2014/15	2015/16	2016/17	2017/18
COST:						
Engineering, Materials and Installation	550,000		550,000			
TOTAL	**550,000**		**550,000**			
FINANCING:						
Electric Utility Fund	550,000		550,000			
TOTAL	**550,000**		**550,000**			

PROGRAM - ACTIVITY: Utilities – Electric Production

DEPARTMENT: Electric

ACCOUNT NO.

GAS TURBINE #1 ENGINE, GENERATOR, AND TURBINE INSPECTION AND OVERHAUL **PROJECT STATUS:** Delayed

DESCRIPTION/JUSTIFICATION

Gas Turbine #1 (GT-1) was built in 1972. The unit consists of three separate pieces of equipment: an engine, a free turbine, and a generator. The engine has had one major hot section inspection in the last thirty-five years. The free turbine has had only external work done on it in the last twenty-five years. The generator has had inspections performed on the bearings and diodes, but has never been completely disassembled. The industry standard for inspection of each of these pieces of equipment is an inspection/overhaul every five years.

COMMENTS

There are several reasons that these inspections have not been done according to standard schedules. The GT-1 unit runs very little and there are very few hours on the unit. The work involved in disassembling the generator and free turbine is considerable. Staff believes this work should be split into three outage periods; the first for the engine, the second for the generator, and the third for the free turbine.

FY 2012/13	Engine	$ 850,000
FY 2014/15	Generator	350,000
FY 2015/16	Turbine	500,000
		$ 1,700,000

LOCATION

Turbine site, 2200 Pullman Street – Map 6, location P-10

FISCAL YEAR PRIORITY			4	1		
	TOTAL	**2013/14**	**2014/15**	**2015/16**	**2016/17**	**2017/18**
COST:						
Inspection Labor and Parts – Generator	350,000		350,000			
Inspection Labor and Parts – Turbine	500,000			500,000		
TOTAL	**850,000**		**350,000**	**500,000**		
FINANCING:						
Electric Utility Fund	850,000		350,000	500,000		
TOTAL	**850,000**		**350,000**	**500,000**		

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

FEEDWATER HEATER TUBE REPLACEMENT **PROJECT STATUS:** Delayed

DESCRIPTION/JUSTIFICATION

Feedwater heaters are devices that use extraction steam from the turbine to preheat the feedwater prior to returning to the boiler. This increases the efficiency of the entire steam generating system. Two high pressure units were installed in 1982 on Unit #8 (Numbers 84 and 85), and in 1967 on Unit #7 (Numbers 74 and 75). Generally, feedwater heaters can lose up to twenty percent of their tubes and maintain an adequate thermal transfer capability for normal operations. All the feedwater heaters have surpassed this number of plugged tubes requiring their replacement. The payback on these replacements in Unit #8 is only two years based on fuel savings.

COMMENTS

Replacement of 84 and 85 feedwater heaters is scheduled by the end of FY 12/13. The feedwater heater replacement for Unit #8 falls under the regulatory guidelines that our current construction permit allows. The replacement of Unit #7's feedwater heaters will be subject to regulatory approval.

FY 2011/12	Engineering	$ 23,006
FY 2012/13	Unit #8 materials and labor	996,994
FY 2014/15	Unit #7 materials and labor	980,000
	Total	$ 2,000,000

LOCATION

Power Plant, 200 East 5th Street - Map 5, location N-11

FISCAL YEAR PRIORITY				5			
		TOTAL	**2013/14**	**2014/15**	**2015/16**	**2016/17**	**2017/18**
COST:							
Labor and Equipment		980,000		980,000			
	TOTAL	**980,000**		**980,000**			
FINANCING:							
Electric Utility Fund		980,000		980,000			
	TOTAL	**980,000**		**980,000**			

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

POWER PLANT FIRE PROTECTION SYSTEM **PROJECT STATUS:** Cost Decrease

DESCRIPTION/JUSTIFICATION

The City's insurance carrier has made several loss prevention recommendations for the Power Plant. These recommendations are for fire suppression systems for the coal conveying equipment, coal pulverizers, and related coal processing and conveyor equipment. The cost and schedule for installation of the recommendations are as follows:

FY 2004/05	Upgrading City Water Service (in plant)	$ 475,000
FY 2008/09	Coal Handling Sprinkler System – phase 1	650,000
FY 2011/12	Engineering/Phase 2/ mill inerting	16,031
FY 2012/13	Gas Turbine #1; Coal Handling Sprinkler System – phase 2 (partial) and phase 3	953,969
FY 2014/15	Gas Turbine #2/Maintenance Shop	150,000
FY 2015/16	#8 Turbine/Generator Sprinkler System	250,000
FY 2016/17	#7 Turbine/Generator Sprinkler System	250,000
		$ 2,745,000

COMMENTS

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

LOCATION

Power Plant, 200 East 5th Street – Map 5, location N-11

FISCAL YEAR PRIORITY				10	4	3	
		TOTAL	**2013/14**	**2014/15**	**2015/16**	**2016/17**	**2017/18**
COST:							
Construction		650,000		150,000	250,000	250,000	
	TOTAL	**650,000**		**150,000**	**250,000**	**250,000**	
FINANCING:							
Electric Utility Fund		650,000		150,000	250,000	250,000	
	TOTAL	**650,000**		**150,000**	**250,000**	**250,000**	

PROGRAM - ACTIVITY: Utilities – Electric Production

DEPARTMENT: Electric

ACCOUNT NO.

ONTARIO SUBSTATION 69KV BREAKER ADDITION **PROJECT STATUS:** No Change

DESCRIPTION/JUSTIFICATION
This project will add 69kV breakers, a main breaker upgrade to the 13.8kV switchgear, and related relaying equipment to Ontario Substation.

The addition of 69kV line and transformer breakers, 13.8kV main breaker, and relaying equipment at Ontario Substation will improve the reliability of transmission service to the substation. This will also improve service provided to customers served by this substation by shortening the duration of outages which may occur.

The use of breakers for 69kV transmission service and for switchgear main breakers for distribution substations is consistent with recommended electric utility industry engineering practices.

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 18.8%.

LOCATION
Delaware Avenue and Utah Drive – Map 4, location E-10

FISCAL YEAR PRIORITY				11	5		
		TOTAL	**2013/14**	**2014/15**	**2015/16**	**2016/17**	**2017/18**
COST:							
Engineering		150,000		150,000			
Construction		1,000,000			1,000,000		
	TOTAL	**1,150,000**		**150,000**	**1,000,000**		
FINANCING:							
Electric Utility Fund		933,800		121,800	812,000		
Iowa State University		216,200		28,200	188,000		
	TOTAL	**1,150,000**		**150,000**	**1,000,000**		

PROGRAM – ACTIVITY: Utilities – Electric Extension Improvements
DEPARTMENT: Electric
ACCOUNT NO.

UNIT #7 BOILER TUBE REPAIR **PROJECT STATUS:** No Change

DESCRIPTION/JUSTIFICATION

The Unit #7 boiler is forty years old and in need of tube repairs. Staff has devised a long-term plan to maintain the operation of the unit through maintenance, engineering, and re-tubing of the boiler. The cost estimates include labor and materials. The bottom throat of the boiler also needs to be enlarged to allow for an increased rate of refuse derived fuel (RDF) for burning.

COMMENTS

FY 2014/15	Engineering	$ 150,000
FY 2017/18	Material and labor for installation	3,850,000
		$ 4,000,000

LOCATION

Power Plant, 200 East 5th Street - Map 5, location N-11

FISCAL YEAR PRIORITY				12			5
		TOTAL	**2013/14**	**2014/15**	**2015/16**	**2016/17**	**2017/18**
COST:							
Engineering		150,000		150,000			
Materials and Installation		3,850,000					3,850,000
	TOTAL	**4,000,000**		**150,000**			**3,850,000**
FINANCING:							
Electric Utility Fund		4,000,000		150,000			3,850,000
	TOTAL	**4,000,000**		**150,000**			**3,850,000**

PROGRAM - ACTIVITY: Utilities – Electric Production

DEPARTMENT: Electric

ACCOUNT NO.

EPA – ASH HANDLING AND DISPOSAL **PROJECT STATUS:** Delayed

DESCRIPTION/JUSTIFICATION

On June 21, 2010, the U. S. Environmental Protection Agency (EPA) published in the *Federal Register* a proposed rule changing the regulation of coal ash, referred to by the U.S. EPA as coal combustion residuals (CCR). As of October 4, 2011, the U.S. EPA has not issued and published the final rule.

Under the proposed rule, the U.S. EPA is considering two options: 1) to regulate CCRs as hazardous waste; or 2) to regulate ash as non-hazardous waste.

Both options, however, will impact the City's current ash handling and disposal operations. If CCRs are ruled as hazardous waste, the City would have to remove the accumulated ash from the ash impoundment and landfill, retrofit the site with a liner, and abandon the site. The Power Plant would have to somehow retrofit Units 7 and 8 to remove dry bottom ash from the boiler. A new, dry ash disposal site would have to be obtained and developed or the ash would have to be hauled to another entity's landfill. Dry ash, sometimes called fly ash, accounts for approximately two-thirds to three-fourths of the total ash produced. The City currently sells this fly ash, but would lose this income if the fly ash is hauled to a non-City location.

If CCRs are ruled as non-hazardous, the existing ash impoundment would still have to be excavated to remove the accumulated ash, allowing for the site to be lined.

COMMENTS

FY 14/15	Engineering	$ 50,000
FY 17/18	Construction	1,000,000
FY 18/19	Construction	2,000,000
FY 19/20	Construction	2,000,000
	Total	$ 5,050,000

LOCATION

Power Plant, 200 East 5th Street – Map 5, location N-11

FISCAL YEAR PRIORITY				13			3
		TOTAL	**2013/14**	**2014/15**	**2015/16**	**2016/17**	**2017/18**
COST:							
Engineering		50,000		50,000			
Construction		1,000,000					1,000,000
	TOTAL	**1,050,000**		**50,000**			**1,000,000**
FINANCING:							
Electric Utility Fund		1,050,000		50,000			1,000,000
	TOTAL	**1,050,000**		**50,000**			**1,000,000**

PROGRAM - ACTIVITY: Utilities – Electric Production

DEPARTMENT: Electric

ACCOUNT NO.

OIL GUNS AND IGNITORS **PROJECT STATUS:** Delayed

DESCRIPTION/JUSTIFICATION
Start-up fuel oil ignitors and oil guns are needed in both Units #7 and #8 to achieve reliable operation. The oil igniters are used for start up and flame stabilization for the coal units. Conditions of wet coal and fuel stoppage require that igniters or guns be in service to maintain a strong, reliable flame in order to prevent flameouts.

COMMENTS
This project was previously included in the nitrogen oxide reduction projects for each respective unit. The nitrogen oxide reduction projects were postponed due to the Federal Court vacating the regulation. However, new regulations are anticipated. The present engineering being done is to evaluate the recommended piping changes for the supply piping of the fuel oil system. This project may be subject to regulatory approval.

FY 2011/12	Engineering	$	30,000
FY 2014/15	Unit #8		595,000
FY 2015/16	Unit #7		350,000
	Total	$	975,000

LOCATION
Power Plant, 200 East 5th Street – Map 5, location N-11

FISCAL YEAR PRIORITY				14	3		
		TOTAL	**2013/14**	**2014/15**	**2015/16**	**2016/17**	**2017/18**
COST:							
Materials and Installation		945,000		595,000	350,000		
	TOTAL	**945,000**		**595,000**	**350,000**		
FINANCING:							
Electric Utility Fund		945,000		595,000	350,000		
	TOTAL	**945,000**		**595,000**	**350,000**		

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

DAYTON AVE SUBSTATION SWITCHGEAR UPGRADES **PROJECT STATUS:** No Change

DESCRIPTION/JUSTIFICATION

This project will upgrade two existing 13.8 kV distribution metal clad switchgear lineups at Dayton Avenue Substation. The switchgear has obsolete air blast breakers, no main breaker and electro-mechanical relays. This switchgear needs to be replaced with a new switchgear having vacuum interrupter breakers, a main breaker, and microprocessor relays. The 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 Ave Substation, Pullman Street – Map 6, location P-10

FISCAL YEAR PRIORITY					8	1	
		TOTAL	**2013/14**	**2014/15**	**2015/16**	**2016/17**	**2017/18**
COST:							
Engineering		100,000			100,000		
Construction		700,000				700,000	
	TOTAL	**800,000**			**100,000**	**700,000**	
FINANCING:							
Electric Utility Fund		800,000			100,000	700,000	
	TOTAL	**800,000**			**100,000**	**700,000**	

PROGRAM – ACTIVITY: Utilities – Electric Extension Improvements

DEPARTMENT: Electric

ACCOUNT NO.

UNIT #7 TURBINE GENERATOR FIVE-YEAR OVERHAUL **PROJECT STATUS:** Delayed

DESCRIPTION/JUSTIFICATION
The Unit #7 turbine generator will be disassembled and necessary repairs made after 20,000 hours of operation. An inspection was done in 2007 and will be due again in FY 16/17, based on current levels of operation of the unit.

COMMENTS
This work is required to inspect the turbine and generator for repairs that may be needed to avoid catastrophic failure of equipment. This overhaul is recommended by boiler and machinery insurance carriers and follows accepted industry standards. Repairs and replacement of worn parts will be done as problems are located during the inspection. The budget covers the inspection process and normal repair/replacement work that should be expected after 20,000 hours of operation.

LOCATION
Power Plant, 200 East 5th Street - Map 5, location N-11

FISCAL YEAR PRIORITY						2	
		TOTAL	**2013/14**	**2014/15**	**2015/16**	**2016/17**	**2017/18**
COST:							
Construction		750,000				750,000	
	TOTAL	**750,000**				**750,000**	
FINANCING:							
Electric Utility Fund		750,000				750,000	
	TOTAL	**750,000**				**750,000**	

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

POWER PLANT ROOF REPLACEMENT PHASE III **PROJECT STATUS:** Delayed

DESCRIPTION/JUSTIFICATION
The Power Plant is executing a multi-year roof replacement and repair plan to address roof maintenance. Phases I and II of the plan were completed in FY 08/09 and FY 09/10 and addressed the roof sections over the turbine room and auxiliary bay. These phases were included in the operating budget of the Power Plant. This project is Phase III of the plan and will replace the roof sections over the boiler equipment. Leaking roofs can cause equipment failure if water penetrates electrical cabinet enclosures.

LOCATION
Power Plant, 200 East 5th Street - Map 5, location N-11

FISCAL YEAR PRIORITY						5	
		TOTAL	**2013/14**	**2014/15**	**2015/16**	**2016/17**	**2017/18**
COST:							
Materials and Labor		450,000				450,000	
	TOTAL	**450,000**				**450,000**	
FINANCING:							
Electric Utility Fund		450,000				450,000	
	TOTAL	**450,000**				**450,000**	

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

TURBINE CONTROLS UPGRADE **PROJECT STATUS:** Delayed

DESCRIPTION/JUSTIFICATION
This project converts the supervisory controls on Units #7 and #8 turbine generators from electric-mechanical to electronic.

COMMENTS
This conversion will enable more effective scheduling of the units. The electric-mechanical systems are worn and in need of repair. Replacement of these components is more cost-effective than attempting to repair them, and will result in more effective operation of the units.

FY 17/18	Unit #8		$ 450,000
FY 18/19	Unit #7		200,000
		Total	$ 650,000

This project has been delayed as staff evaluates generation alternatives.

LOCATION
Power Plant, 200 East 5th Street – Map 5, location N-11

FISCAL YEAR PRIORITY 4

		TOTAL	2013/14	2014/15	2015/16	2016/17	2017/18
COST:							
Construction		450,000					450,000
	TOTAL	**450,000**					**450,000**
FINANCING:							
Electric Utility Fund		450,000					450,000
	TOTAL	**450,000**					**450,000**

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

This facility was designed with safety in mind for travelers. The stairway is fully open to view with glass all around, and night lighting provides even more security.

TRANSPORTATION - SUMMARY

PROJECT/REVENUE DESCRIPTION	TOTAL	2013/14	2014/15	2015/16	2016/17	2017/18	PAGE
EXPENDITURES:							
Streets/Engineering	53,877,500	8,193,000	9,562,000	9,800,500	13,942,000	12,380,000	91
Streets/Maintenance	4,745,000	380,000	585,000	3,180,000	300,000	300,000	103
Transit	9,434,609	3,890,976	1,555,630	1,593,359	1,217,480	1,177,164	113
Airport	3,470,000			3,200,000	170,000	100,000	118
Total Expenditures	**71,527,109**	**12,463,976**	**11,702,630**	**17,773,859**	**15,629,480**	**13,957,164**	
REVENUES:							
Bonds:							
G.O. Bonds	32,912,500	6,200,000	6,595,000	7,237,500	6,590,000	6,290,000	
City:							
Road Use Tax	4,820,000	990,000	1,000,000	1,030,000	900,000	900,000	
Local Option Sales Tax	535,000	100,000	135,000	100,000	100,000	100,000	
Electric Utility Fund	850,000	100,000	150,000	250,000	150,000	200,000	
Transit Fund	5,180,565	791,165	474,997	1,556,559	1,180,680	1,177,164	
Airport Construction Fund	30,000				20,000	10,000	
Sub-Total City Funds	11,415,565	1,981,165	1,759,997	2,936,559	2,350,680	2,387,164	

TRANSPORTATION - SUMMARY

PROJECT/REVENUE DESCRIPTION	TOTAL	2013/14	2014/15	2015/16	2016/17	2017/18
REVENUES, continued:						
Other:						
MPO/STP Funds	8,004,000	1,060,000	1,292,000	1,760,000	2,592,000	1,300,000
Federal/State Grants	12,580,200	159,800	976,800	3,606,800	3,946,800	3,890,000
Iowa State University	892,000			892,000		
Ames Community School District	25,000			25,000		
Private Funds	901,000		35,000	866,000		
Federal Transit Administration	4,106,844	3,063,011	1,043,833			
Federal Aviation Administration	690,000			450,000	150,000	90,000
Sub-Total Other Funds	27,199,044	4,282,811	3,347,633	7,599,800	6,688,800	5,280,000
Total Revenues	**71,527,109**	**12,463,976**	**11,702,630**	**17,773,859**	**15,629,480**	**13,957,164**

TRANSPORTATION - STREET ENGINEERING

	PROJECT/REVENUE DESCRIPTION	TOTAL	2013/14	2014/15	2015/16	2016/17	2017/18	PAGE
EXPENDITURES:								
1	Collector Street Pavement Improvements	5,210,000	1,480,000	1,355,000	800,000	950,000	625,000	93
2	CyRide Route Pavement Improvements	5,784,000	2,050,000	1,867,000		1,867,000		94
3	Downtown Street Pavement Improvements	3,365,000	1,000,000	780,000	800,000	500,000	285,000	95
4	Concrete Pavement Improvements	5,865,500	1,285,000	1,760,000	870,500	1,085,000	865,000	96
5	Asphalt/Seal Coat Street Rehabilitation	5,230,000	1,120,000	650,000	1,000,000	1,555,000	905,000	97
6	Arterial Street Pavement Improvements	4,050,000	825,000	600,000	1,580,000	345,000	700,000	98
7	Mortensen Road Improvements	310,000	10,000	300,000				99
8	Grand Avenue Extension	17,873,000	423,000	1,000,000	4,650,000	6,500,000	5,300,000	100
9	Asphalt Street Reconstruction Program	3,290,000		1,250,000		840,000	1,200,000	101
10	Cherry Avenue Extension	2,900,000			100,000	300,000	2,500,000	102
	Total Expenditures	**53,877,500**	**8,193,000**	**9,562,000**	**9,800,500**	**13,942,000**	**12,380,000**	

TRANSPORTATION - STREET ENGINEERING, continued

PROJECT/REVENUE DESCRIPTION	TOTAL	2013/14	2014/15	2015/16	2016/17	2017/18
REVENUES:						
Bonds:						
G.O. Bonds	30,170,500	6,200,000	6,420,000	4,670,500	6,590,000	6,290,000
City:						
Road Use Tax	3,570,000	710,000	760,000	700,000	700,000	700,000
Electric Utility Fund	850,000	100,000	150,000	250,000	150,000	200,000
Sub-Total City Funds	4,420,000	810,000	910,000	950,000	850,000	900,000
Other:						
MPO/STP Funds	8,004,000	1,060,000	1,292,000	1,760,000	2,592,000	1,300,000
Federal/State Grants	11,283,000	123,000	940,000	2,420,000	3,910,000	3,890,000
Sub-Total Other Funds	19,287,000	1,183,000	2,232,000	4,180,000	6,502,000	5,190,000
Total Revenues	**53,877,500**	**8,193,000**	**9,562,000**	**9,800,500**	**13,942,000**	**12,380,000**

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

City of Ames, Iowa
Capital Improvements Plan

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

2013/14	Sheldon Avenue (Lincoln Way to Hyland Avenue) – Map 4, location H-11
2014/15	Woodland Street (West Street to Forest Glen) – Map 4, location G-11; and West Street (Hillcrest Avenue to Sheldon Avenue) – Map 4, location G-11
2015/16	Meadowlane Avenue (Carr Drive to E. 20th Street) – Map 5, location N-9
2016/17	Hoover Avenue (24th Street to 30th Street) – Map 2, location K-7
2017/18	East 20th Street (Duff Avenue to Meadowlane Avenue) – Map 5, location M-8

Cost and revenue changes are due to the 2015/16 MPO/STP project location being moved from this program to East Lincoln Way as part of Arterial Street Pavement Improvements.

Site change is due to the delay of the East 20th Street (Duff Avenue to Meadowlane Avenue) location until 2017/18.

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

FISCAL YEAR PRIORITY		1	2	4	3	3
	TOTAL	**2013/14**	**2014/15**	**2015/16**	**2016/17**	**2017/18**
COST:						
Engineering	637,000	155,000	155,000	112,000	140,000	75,000
Construction	4,423,000	1,325,000	1,150,000	638,000	810,000	500,000
Street Lighting	150,000		50,000	50,000		50,000
TOTAL	**5,210,000**	**1,480,000**	**1,355,000**	**800,000**	**950,000**	**625,000**
FINANCING:						
G. O. Bonds	4,000,000	420,000	1,305,000	750,000	950,000	575,000
Electric Utility Fund	150,000		50,000	50,000		50,000
MPO/STP Funds	1,060,000	1,060,000				
TOTAL	**5,210,000**	**1,480,000**	**1,355,000**	**800,000**	**950,000**	**625,000**

PROGRAM – ACTIVITY: Transportation – Streets Engineering

DEPARTMENT: Public Works

ACCOUNT NO. 320-8127-439
374-8127-439

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

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

These streets were designed and built for light residential traffic. 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 projected traffic volumes.

COMMENTS

2013/14 Jewel Drive (Kate Mitchell School to Garnet Drive) – Map 8, location N-17; Emerald Drive (Ken Maril Road to Jewel Drive) – Map 8, location N-17; Ken Maril Road (South Duff Avenue to end) – Map 8, location M-17; Garnet Drive (Garden Road to Jewel Drive) – Map 8, location N-17; Garden Road – Map 8, location N-17; Duluth Street – Map 8, location N-17; and Viola Mae Avenue – Map 8, location N-17

2014/15 24th Street (Union Pacific Railroad (UPRR) tracks to Northwestern Avenue) – Map 2, location J-7; and Bloomington Road (Eisenhower Avenue to west 500 feet) – Map 2, location J-5

2015/16 No project

2016/17 South 3rd Street (Grand Avenue to South Duff Avenue) – Map 5, location L-12; and South 4th Street (Squaw Creek to Grand Avenue) – Map 5, location K-12

2017/18 No project

Cost change is due to updated project estimates within the program. The revenue change is due to an increase in projected MPO/STP funds. Site change is the addition of Garden Road in 2013/14.

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

FISCAL YEAR PRIORITY			2	1		1	
		TOTAL	**2013/14**	**2014/15**	**2015/16**	**2016/17**	**2017/18**
COST:							
Engineering		1,030,000	300,000	365,000		365,000	
Construction		4,604,000	1,700,000	1,452,000		1,452,000	
Electric		150,000	50,000	50,000		50,000	
	TOTAL	**5,784,000**	**2,050,000**	**1,867,000**		**1,867,000**	
FINANCING:							
G. O. Bonds		3,050,000	2,000,000	525,000		525,000	
Electric Utility Fund		150,000	50,000	50,000		50,000	
MPO/STP Funds		2,584,000		1,292,000		1,292,000	
	TOTAL	**5,784,000**	**2,050,000**	**1,867,000**		**1,867,000**	

PROGRAM - ACTIVITY: Transportation - Streets Engineering

DEPARTMENT: Public Works

ACCOUNT NO. 374-8128-439
530-8128-439

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

DESCRIPTION/JUSTIFICATION
This annual program is for the rehabilitation/reconstruction of streets within the downtown area (Lincoln Way to 7th Street and Grand Avenue to Duff Avenue). These projects involved pavement reconstruction, rehabilitation of storm and sanitary sewers, and streetscapes. This project 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 Main Street Cultural District.

LOCATION
2013/14 5th Street (Duff Avenue to Burnett Avenue) – Map 5, location M-11
2014/15 5th Street (Grand Avenue to Burnett Avenue) – Map 5, location L-11
2015/16 Clark Avenue (Lincoln Way to Main Street) – Map 5, location L-11
2016/17 Market Avenue – Map 5, location M-11; and Sherman Avenue – Map 5, location M-11
2017/18 Main Street Alley (Duff Avenue to Douglas Avenue) – Map 5, location M-11; and Main Street Alley (Kellogg Avenue to Burnett Avenue) – Map 5, location M-11

The cost change is due to updated construction cost estimates for the pavement improvement projects.

FISCAL YEAR PRIORITY			3	4	6	5	5
		TOTAL	**2013/14**	**2014/15**	**2015/16**	**2016/17**	**2017/18**
COST:							
Engineering		560,000	200,000	130,000	120,000	75,000	35,000
Construction		2,705,000	800,000	650,000	630,000	425,000	200,000
Electric		100,000			50,000		50,000
	TOTAL	**3,365,000**	**1,000,000**	**780,000**	**800,000**	**500,000**	**285,000**
FINANCING:							
G. O. Bonds		3,265,000	1,000,000	780,000	750,000	500,000	235,000
Electric Utility Funds		100,000			50,000		50,000
	TOTAL	**3,365,000**	**1,000,000**	**780,000**	**800,000**	**500,000**	**285,000**

PROGRAM - ACTIVITY:	**DEPARTMENT:**	**ACCOUNT NO.**
Transportation – Streets Engineering	Public Works	374-8162-439

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

DESCRIPTION/JUSTIFICATION

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

COMMENTS

2013/14:

Lynn Avenue (Knapp Street to Storm Street) – Map 5, location I-12; Knapp Street (Welch Avenue to Lynn Avenue) – Map 5, location H-12, and North 2nd Street (North Elm Avenue east to end) – Map 5, location L-11

2014/15:

Ridgewood Avenue (9th Street to 13th Street) – Map 5, location K-10; 9th Street (Ridgewood Avenue to Northwestern Avenue) – Map 5, location K-10; and Hayward Avenue (Lincoln Way to Hunt Street) – Map 5, location H-11

2015/16:

Des Moines Avenue (Lincoln Way to East 3rd Street) – Map 5, location M-11; Center Avenue (Lincoln Way to East 2nd Street) – Map 5, location N-11; East 3rd Street (Duff Avenue to East Avenue) – Map 5, location M-11; East 2nd Street (Duff Avenue to Center Avenue) – Map 5, location M-11; and 5th Street (Northwestern Avenue to Allan Drive) – Map 5, location L-11

2016/17:

Dawes Drive – Map 2, location L-5

2017/18:

Airport Road (University Avenue to South Riverside Drive) – Map 8, location J-15; University Avenue (Airport Road to US Highway 30) – Map 8, location J-15; Ford Street (South Dayton Avenue to Bell Avenue) – Map 6, location Q-10; and Bell Avenue (East Lincoln Way to Ford Street) – Map 6, location R-11

Cost change is due to updated construction cost estimates for locations based on current pavement condition. The site change is the result of the addition of the North 2nd Street location in 2013/14, Hayward Avenue (Lincoln Way to Hunt Street) in 2014/15, and the addition of locations in 2017/18. Repair of these streets will reduce maintenance and repairs needed for them.

FISCAL YEAR PRIORITY		4	3	3	4	4
	TOTAL	**2013/14**	**2014/15**	**2015/16**	**2016/17**	**2017/18**
COST:						
Engineering	750,500	175,000	225,000	100,500	135,000	115,000
Street Lighting	85,000	50,000	35,000			
Construction	4,930,000	1,060,000	1,500,000	720,000	900,000	750,000
Electric Relocation	100,000			50,000	50,000	
TOTAL	**5,865,500**	**1,285,000**	**1,760,000**	**870,500**	**1,085,000**	**865,000**
FINANCING:						
G.O. Bonds	5,415,500	1,185,000	1,660,000	770,500	985,000	815,000
Road Use Tax	250,000	50,000	50,000	50,000	50,000	50,000
Electric Utility Fund	200,000	50,000	50,000	50,000	50,000	
TOTAL	**5,865,500**	**1,285,000**	**1,760,000**	**870,500**	**1,085,000**	**865,000**

PROGRAM – ACTIVITY: Transportation - Streets Engineering

DEPARTMENT: Public Works

ACCOUNT NO.
374-8169-439
060-8169-439
530-8169-439

ASPHALT/SEAL COAT STREET REHABILITATION PROGRAM **PROJECT STATUS:** Cost Change

DESCRIPTION/JUSTIFICATION
This is the annual program for removal of built-up seal coat from streets with asphalt surface as well as asphalt resurfacing of various streets and joint repair on asphalt streets.

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 3" of asphalt surface.

COMMENTS
The areas to be resurfaced are chosen each spring based on the current street condition inventory and on G. O. Bond funding availability that results in a consistent bond issue each year over five years. Cost estimates include funding for concrete curb and gutter repairs that need to be made prior to asphalting the street. Typically, curb and gutter repairs are between 20- and 25-percent of the total cost.

Evenly distributing G.O. Bond funding consistently over five years resulted in the cost change.

This program supports the City Council's goal of strengthening our neighborhoods. Street maintenance operation costs for patching will be reduced for the streets involved in this program.

FISCAL YEAR PRIORITY			5	9	5	6	6
		TOTAL	**2013/14**	**2014/15**	**2015/16**	**2016/17**	**2017/18**
COST:							
Engineering		780,000	165,000	95,000	150,000	235,000	135,000
Construction		4,450,000	955,000	555,000	850,000	1,320,000	770,000
	TOTAL	**5,230,000**	**1,120,000**	**650,000**	**1,000,000**	**1,555,000**	**905,000**
FINANCING:							
G. O. Bonds		1,980,000	470,000		350,000	905,000	255,000
Road Use Tax		3,250,000	650,000	650,000	650,000	650,000	650,000
	TOTAL	**5,230,000**	**1,120,000**	**650,000**	**1,000,000**	**1,555,000**	**905,000**

PROGRAM – ACTIVITY: Transportation – Streets Engineering

DEPARTMENT: Public Works

ACCOUNT NO. 374-8108-439
060-8108-439

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

2013/14	Lincoln Way (South Dakota Avenue to Hickory Drive) – Map 4, location E-11; and West Lincoln Way (Thackeray Avenue to South Dakota Avenue) – Map 4, location D-11
2014/15	Lincoln Way (Squaw Creek to Oak Avenue) – Map 5, location K-11
2015/16	East Lincoln Way (South Duff Avenue to Skunk River) – Map 5, location M-11
2016/17	West Lincoln Way (County Line Road to west corporate limits) – Map 4, location B-11
2017/18	North Dakota Avenue (UPRR to Ontario Street) – Map 4, location E-9

Cost change is due to updated cost estimates. The site change is the result of prioritizing current pavement conditions (2015/16 and 2016/17) and to better coordinate with the Bridge Rehabilitation Program schedule.

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

FISCAL YEAR PRIORITY		6	7	1	9	7
	TOTAL	**2013/14**	**2014/15**	**2015/16**	**2016/17**	**2017/18**
COST:						
Engineering	509,000	125,000	90,000	155,000	45,000	94,000
Construction	3,441,000	700,000	510,000	1,325,000	300,000	606,000
Street Lighting	100,000			100,000		
TOTAL	**4,050,000**	**825,000**	**600,000**	**1,580,000**	**345,000**	**700,000**
FINANCING:						
G. O. Bonds	2,890,000	825,000	600,000	420,000	345,000	700,000
Electric Utility Fund	100,000			100,000		
MPO/STP Funds	1,060,000			1,060,000		
TOTAL	**4,050,000**	**825,000**	**600,000**	**1,580,000**	**345,000**	**700,000**

PROGRAM – ACTIVITY:	**DEPARTMENT:**	**ACCOUNT NO.**
Transportation - Streets Engineering	Public Works	374-8145-439

MORTENSEN ROAD IMPROVEMENTS **PROJECT STATUS:** New

DESCRIPTION/JUSTIFICATION

This project includes the widening of Mortensen Road between South Dakota Avenue and Dotson Drive into a three-lane roadway section. The roadway has experienced more consistent traffic congestion due to on-street Cy-Ride stops in the area. Congestion will continue to worsen as Dotson Drive is eventually extended through toward Lincoln Way. Developer Agreements specify that the Dotson Drive extension will be completed by the South Fork Subdivision developer and the Ames Community School District. This widening project is included in the Long Range Transportation Plan.

COMMENTS

This project also includes improvements of the existing pavement and adding curb and gutter within the same area. Improving this street will reduce the maintenance budget. This reduction will allow for additional and earlier maintenance of other streets which will prolong their useful life.

FISCAL YEAR PRIORITY			7	6			
		TOTAL	**2013/14**	**2014/15**	**2015/16**	**2016/17**	**2017/18**
COST:							
Engineering		70,000	10,000	60,000			
Construction		240,000		240,000			
	TOTAL	**310,000**	**10,000**	**300,000**			
FINANCING:							
Road Use Tax		70,000	10,000	60,000			
Federal/State Grants		240,000		240,000			
	TOTAL	**310,000**	**10,000**	**300,000**			

PROGRAM - ACTIVITY:	**DEPARTMENT:**	**ACCOUNT NO.**
Transportation - Streets Engineering	Public Works	060-8188-439

GRAND AVENUE EXTENSION **PROJECT STATUS:** Cost Change Revenue Change

DESCRIPTION/JUSTIFICATION

This project is for the extension of Grand Avenue from Lincoln Way to South 16th Street. Included is a segment of South 5th Street (Grand Avenue to South Duff Avenue) as well as improvement to the South Duff Avenue (US 69)/South 16th Street intersection. Extending Grand Avenue to South 16th Street will divert traffic from the US Highway 69 corridor (Grand Avenue to Lincoln Way to South Duff Avenue) to the new extension. It will help to alleviate the existing congestion and allow for easier access to area businesses along that portion of Lincoln Way and South Duff Avenue. In addition, through-traffic on the Grand Avenue extension will also encounter less traffic congestion.

COMMENTS

Planning and land acquisition is projected to occur in 2013/14 for the Grand Avenue (Squaw Creek Drive to South 16th Street) and the South 5th Street (Grand Avenue to South Duff Avenue) segments of the project. Engineering design and construction is projected to commence in 2014/15 and continue through 2016/17. This four-lane roadway will include turn lanes at South 16th Street, a bridge over Squaw Creek, a golf cart underpass at Coldwater Creek Golf Course, and a bike path along the west side of the roadway. Street lighting has also been included in the project costs.

LOCATION

- 2013/14 South Grand Avenue (Squaw Creek Drive to South 16th Street) and South 5th Street (Grand Avenue to South Duff Avenue) (planning and NEPA) – Map 5, location L-12
- 2014/15 South Grand Avenue (Squaw Creek Drive to South 16th Street) and South 5th Street (Grand Avenue to South Duff Avenue) (planning and land acquisition) – Map 5, location L-12
- 2015/16 South Grand Avenue (Squaw Creek Drive to South 5th Street) and South 5th Street (Grand Avenue to South Duff Avenue) (engineering and construction) – Map 5, location L-12
- 2016/17 South Grand Avenue (South 5th Street to South 16th Street) (engineering, grading, and box culvert/golf cart passage) – Map 5, location L-12
- 2017/18 Grand Avenue (South 5th Street to South 16th Street) (engineering, bridge, paving) – Map 5, location L-12; and South Duff Avenue (South 16th Street intersection improvements) – Map 5, location M-14

This project was delayed from 2012/13 as a result of lack of Congressionally directed funding after 2011. A Transportation Funding Study in 2012/13 identified federal and state grants that may be available for funding this project. The cost change is due to update of estimates. The revenue change is due to the addition of MPO/STP funding in 2015/16, 2016/17, and 2017/18.

FISCAL YEAR PRIORITY			8	8	2	2	1
		TOTAL	**2013/14**	**2014/15**	**2015/16**	**2016/17**	**2017/18**
COST:							
Planning		723,000	423,000	300,000			
Engineering		2,450,000			650,000	1,000,000	800,000
Land Acquisition		700,000		700,000			
Construction		14,000,000			4,000,000	5,500,000	4,500,000
	TOTAL	**17,873,000**	**423,000**	**1,000,000**	**4,650,000**	**6,500,000**	**5,300,000**
FINANCING:							
G. O. Bonds		5,630,000	300,000	300,000	1,530,000	1,500,000	2,000,000
Federal/State Grants		8,943,000	123,000	700,000	2,420,000	3,700,000	2,000,000
MPO/STP Funds		3,300,000			700,000	1,300,000	1,300,000
	TOTAL	**17,873,000**	**423,000**	**1,000,000**	**4,650,000**	**6,500,000**	**5,300,000**

PROGRAM – ACTIVITY: Transportation – Streets Engineering

DEPARTMENT: Public Works

ACCOUNT NO. 374-8181-439
320-8181-439

ASPHALT STREET RECONSTRUCTION PROGRAM **PROJECT STATUS:** Cost Change Site Change

DESCRIPTION/JUSTIFICATION

This is the annual program for reconstruction of full-depth 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. This program was created in accordance with City Council's goal of strengthening our neighborhoods.

COMMENTS

2014/15 Ferndale Avenue (24th Street to 30th Street) – Map 2, location L-7
2016/17 Pierce Avenue and Pierce Circle – Map 2, location K-7
2017/18 Reliable Street (Florida Avenue to North Dakota Avenue) – Map 4, location D-9; Florida Avenue (Ontario Street to Reliable Street) – Map 4, location D-9; Delaware Avenue (Ontario Street to Reliable Street) – Map 4, location E-9; and Hutchison Street (Georgia Avenue to Florida Avenue) – Map 4, location D-9

Cost and site changes are due to prioritization of current pavement conditions.

Reconstructing these streets will reduce maintenance costs.

FISCAL YEAR PRIORITY				5		7	2
		TOTAL	**2013/14**	**2014/15**	**2015/16**	**2016/17**	**2017/18**
COST:							
Engineering		470,000		185,000		105,000	180,000
Construction		2,770,000		1,065,000		685,000	1,020,000
Electric Relocation		50,000				50,000	
	TOTAL	**3,290,000**		**1,250,000**		**840,000**	**1,200,000**
FINANCING:							
G.O. Bonds		3,240,000		1,250,000		790,000	1,200,000
Electric Utility Fund		50,000				50,000	
	TOTAL	**3,290,000**		**1,250,000**		**840,000**	**1,200,000**

PROGRAM - ACTIVITY: Transportation – Streets Engineering
DEPARTMENT: Public Works
ACCOUNT NO.

CHERRY AVENUE EXTENSION **PROJECT STATUS:** New

DESCRIPTION/JUSTIFICATION

The Long Range Transportation Plan identifies the extension of Cherry Avenue south of East Lincoln Way as a smart transportation connection for the community. By extending Cherry Avenue south and connecting both South East 3rd Street and South East 5th Street, traffic congestion is further relieved from the South Duff Avenue corridor. This project may open opportunities for multi-modal transportation connections to the South Duff Avenue commercial district. Planning in 2015/16 will include roadway alignment and traffic signal analysis.

COMMENTS

A Transportation Funding Study in 2012/13 identified federal and state grants that may be available for funding this project.

The addition of this street extension will result in increased snow removal and ice control costs.

2015/16	Cherry Avenue (South East 5th Street to East Lincoln Way) and South East 3rd Street and South East 5th Street (Cherry Avenue west to end) (planning and environmental analysis)
2016/17	Cherry Avenue (South East 5th Street to East Lincoln Way) and South East 3rd Street and South East 5th Street (Cherry Avenue west to end) (land acquisition and engineering)
2017/18	Cherry Avenue (South East 5th Street to East Lincoln Way) and South East 3rd Street and South East 5th Street (Cherry Avenue west to end) (engineering and construction)

LOCATION

Map 6, location N-12

FISCAL YEAR PRIORITY					7	8	8
		TOTAL	**2013/14**	**2014/15**	**2015/16**	**2016/17**	**2017/18**
COST:							
Planning		100,000			100,000		
Land Acquisition		150,000				150,000	
Engineering		350,000				150,000	200,000
Construction		2,200,000					2,200,000
Electric		100,000					100,000
	TOTAL	**2,900,000**			**100,000**	**300,000**	**2,500,000**
FINANCING:							
G.O. Bonds		700,000			100,000	90,000	510,000
Electric Utility Fund		100,000					100,000
Federal/State Grants		2,100,000				210,000	1,890,000
	TOTAL	**2,900,000**			**100,000**	**300,000**	**2,500,000**

PROGRAM - ACTIVITY: Transportation - Streets Engineering

DEPARTMENT: Public Works

ACCOUNT NO.

TRANSPORTATION - STREET MAINTENANCE

	PROJECT/REVENUE DESCRIPTION	TOTAL	2013/14	2014/15	2015/16	2016/17	2017/18	PAGE
EXPENDITURES:								
1	Bridge Rehabilitation Program	2,915,000	40,000	175,000	2,700,000			105
2	Pavement Restoration	375,000	75,000	75,000	75,000	75,000	75,000	106
3	Neighborhood Curb Replacement Program	375,000	75,000	75,000	75,000	75,000	75,000	107
4	Shared Use Path Maintenance	250,000	50,000	50,000	50,000	50,000	50,000	108
5	Sidewalk Safety Program	500,000	100,000	100,000	100,000	100,000	100,000	109
6	Retaining Wall Reconstruction	110,000	40,000	40,000	30,000			110
7	Lincoln Way Median Improvements	70,000		70,000				111
8	Salt Brine Facility	150,000			150,000			112
	Total Expenditures	**4,745,000**	**380,000**	**585,000**	**3,180,000**	**300,000**	**300,000**	
REVENUES:								
Bonds:								
G.O. Bonds		1,875,000		175,000	1,700,000			

TRANSPORTATION - STREET MAINTENANCE, continued

PROJECT/REVENUE DESCRIPTION	TOTAL	2013/14	2014/15	2015/16	2016/17	2017/18
REVENUES, continued:						
City:						
Road Use Tax	1,250,000	280,000	240,000	330,000	200,000	200,000
Local Option Sales Tax	535,000	100,000	135,000	100,000	100,000	100,000
Sub-Total City Funds	1,785,000	380,000	375,000	430,000	300,000	300,000
Other:						
Federal/State Grants	1,000,000			1,000,000		
Iowa State University	25,000			25,000		
Ames Community School District	25,000			25,000		
Private Contributions	35,000		35,000			
Sub-Total Other Funds	1,085,000		35,000	1,050,000		
Total Revenues	**4,745,000**	**380,000**	**585,000**	**3,180,000**	**300,000**	**300,000**

BRIDGE REHABILITATION PROGRAM **PROJECT STATUS:** Cost Change Advanced

DESCRIPTION/JUSTIFICATION

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

COMMENTS

The 2012 Bridge Inspection and Maintenance Report highlights the recommended maintenance/improvements to the bridges in Ames at this time.

The inspection report conducted on the 6th Street bridge over Squaw Creek recommended replacing the bridge due to its current condition (as identified in the feasibility study). The project has been configured to allow for the application of grants and permitting before construction. The first phase proposed will be a detailed design alternative study that will focus on choosing the type of bridge, preferred aesthetics, and studying ADA issues. The construction cost as shown does not include the additional cost of all options related to aesthetics. The following years allow time for preliminary design and applying for all applicable grants.

The East Lincoln Way bridge repairs were also recommended by the 2012 Bridge Inspection & Maintenance Report. With the most recent inspection, it was recommended to move up repairs to the East Lincoln Way bridge. These repairs are programmed for 2014/15 (planning/design) and 2015/16 (construction) to coordinate with the road work that will be done on East Lincoln Way (page 98). The deck replacement, structural repairs, and painting should result in 50-year design life for the bridge.

Cost changes are the result of new project estimates.

LOCATION

2013/14 6th Street bridge over Squaw Creek (preliminary design, grant applications) – Map 5, location K-10

2014/15 6th Street bridge over Squaw Creek (final design) – Map 5, location K-10; and East Lincoln Way Bridge (planning/design) ($75,000) – Map 6, location O-11

2015/16 6th Street bridge over Squaw Creek (construction) ($2,150,000) – Map 5, location K-10; and East Lincoln Way Bridge construction – Map 6, location O-11

FISCAL YEAR PRIORITY			1	1	2		
		TOTAL	**2013/14**	**2014/15**	**2015/16**	**2016/17**	**2017/18**
COST:							
Planning		40,000	40,000				
Engineering		355,000		175,000	180,000		
Construction		2,520,000			2,520,000		
	TOTAL	**2,915,000**	**40,000**	**175,000**	**2,700,000**		
FINANCING:							
G.O. Bonds		1,875,000		175,000	1,700,000		
Road Use Tax		40,000	40,000				
Grants		1,000,000			1,000,000		
	TOTAL	**2,915,000**	**40,000**	**175,000**	**2,700,000**		

PROGRAM - ACTIVITY:	**DEPARTMENT:**	**ACCOUNT NO.**
Transportation – Streets Maintenance	Public Works	060-7751-439

PAVEMENT RESTORATION **PROJECT STATUS:** New

DESCRIPTION/JUSTIFICATION

This annual program is for preventative and proactive maintenance of the streets. This would allow 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. Locations will be coordinated with street construction to gain the best possible life cycle of streets.

COMMENTS

This program would allocate $75,000 annually to maintenance activities.

FISCAL YEAR PRIORITY			2	2	2	1	1
		TOTAL	**2013/14**	**2014/15**	**2015/16**	**2016/17**	**2017/18**
COST:							
Construction		375,000	75,000	75,000	75,000	75,000	75,000
	TOTAL	**375,000**	**75,000**	**75,000**	**75,000**	**75,000**	**75,000**
FINANCING:							
Road Use Tax		375,000	75,000	75,000	75,000	75,000	75,000
	TOTAL	**375,000**	**75,000**	**75,000**	**75,000**	**75,000**	**75,000**

PROGRAM - ACTIVITY: Transportation – Streets Maintenance

DEPARTMENT: Public Works

ACCOUNT NO. 060-7722-439

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.

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

COMMENTS
Neighborhood Curb Replacement Program decision criteria approved by Council includes extent of curb deterioration, number of residential structures in the block, and longitudinal grade. This project supports Council's goal to strengthen neighborhoods.

Curb and gutter replacement enhances neighborhood aesthetics.

LOCATION
2013/14 Brookridge Avenue (9th Street to Park Way) – Map 5, location K-10; and 9th Street (Ridgewood Avenue to Brookridge Avenue) – Map 5, location K-10
2014/15 Brookridge Avenue (Park Way to Ridgewood Avenue) – Map 5, location K-10
2015/16 South Maple Avenue (South 3rd Street to Lincoln Way) – Map 5, location K-12
2016/17 South 2nd Street (South Maple Avenue to South Oak Avenue) – Map 5, location K-11
2017/18 South 2nd Street (South Maple Avenue to South Hazel Avenue) – Map 5, location K-11

FISCAL YEAR PRIORITY			3	3	2	2	2
		TOTAL	**2013/14**	**2014/15**	**2015/16**	**2016/17**	**2017/18**
COST:							
Engineering		62,500	12,500	12,500	12,500	12,500	12,500
Construction		312,500	62,500	62,500	62,500	62,500	62,500
	TOTAL	**375,000**	**75,000**	**75,000**	**75,000**	**75,000**	**75,000**
FINANCING:							
Road Use Tax		375,000	75,000	75,000	75,000	75,000	75,000
	TOTAL	**375,000**	**75,000**	**75,000**	**75,000**	**75,000**	**75,000**

PROGRAM – ACTIVITY:	**DEPARTMENT:**	**ACCOUNT NO.**
Transportation – Streets Maintenance	Public Works	060-7772-439

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

DESCRIPTION/JUSTIFICATION
The shared use path 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 of the causes for the need to improve the pavement. This annual program provides for those improvements.

COMMENTS
A completed pavement management system for shared use paths will provide information to identify segments of the shared use path system that are in need of repair and will prioritize those segments accordingly.

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.

FISCAL YEAR PRIORITY			4	5	5	3	3
		TOTAL	**2013/14**	**2014/15**	**2015/16**	**2016/17**	**2017/18**
COST:							
Engineering		32,500	6,500	6,500	6,500	6,500	6,500
Construction		217,500	43,500	43,500	43,500	43,500	43,500
	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.**
Transportation – Streets Maintenance	Public Works	060-7720-439

SIDEWALK SAFETY PROGRAM **PROJECT STATUS:** Cost Change Revenue Change

DESCRIPTION/JUSTIFICATION

This is the annual program to remove and replace sidewalk intersection crosswalk panels and handicap ramps at locations that fail to meet the City Sidewalk Improvement Program requirements or are required by the Americans with Disabilities Act (ADA) to have truncated dome warning panels installed at crosswalks.

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

COMMENTS

During the last year, there have been several changes in how pedestrian ramps must be designed and constructed. This has caused an exponential increase in the amount of survey, design, and inspection for pedestrian ramps. This program cost has been increased to deal with this change and to still allow the City to make pedestrian ramps ADA compliant. This money may be used in conjunction with roadway or shared use path improvement projects for the pedestrian ramp reconstruction. In 2013/14, the inventory of the ramps will also be modified to align with the new changes and to establish a priority system based on the ramp location and impacts to pedestrian traffic. Road Use Tax funding has been introduced to help cover the increase in cost of this program.

This project has no direct impact on the operating budget.

FISCAL YEAR PRIORITY			5	6	6	4	4
		TOTAL	**2013/14**	**2014/15**	**2015/16**	**2016/17**	**2017/18**
COST:							
Engineering		100,000	20,000	20,000	20,000	20,000	20,000
Construction		400,000	80,000	80,000	80,000	80,000	80,000
	TOTAL	**500,000**	**100,000**	**100,000**	**100,000**	**100,000**	**100,000**
FINANCING:							
Local Option Sales Tax		250,000	50,000	50,000	50,000	50,000	50,000
Road Use Tax		250,000	50,000	50,000	50,000	50,000	50,000
	TOTAL	**500,000**	**100,000**	**100,000**	**100,000**	**100,000**	**100,000**

PROGRAM - ACTIVITY:	**DEPARTMENT:**	**ACCOUNT NO.**
Transportation - Streets Maintenance	Public Works	030-7743-439 060-7743-439

RETAINING WALL RECONSTRUCTION **PROJECT STATUS:** Cost Change Site Change

City of Ames, Iowa
Capital Improvements Plan

DESCRIPTION/JUSTIFICATION

This annual program is to reconstruct/repair retaining walls located within rights-of-way that have been identified as structurally failing. These retaining walls have become priorities for reconstruction and/or repair due to safety concerns. Drainage improvements and structural changes to the retaining walls will be included with this program.

LOCATION

Proposed locations:

2013/14	Hyland Avenue – Map 4, location G-10
2014/15	Airport Road – Map 8, location L-15
2015/16	Maxwell Avenue – Map 5, location N-10

This program identifies core locations for each year. In addition, miscellaneous locations are repaired as necessary and within budget constraints. The cost and revenue changes are due to the addition of the Maxwell Avenue location in 2015/16.

FISCAL YEAR PRIORITY			6	7	7		
		TOTAL	**2013/14**	**2014/15**	**2015/16**	**2016/17**	**2017/18**
COST:							
Engineering		15,000	5,000	5,000	5,000		
Construction		95,000	35,000	35,000	25,000		
	TOTAL	**110,000**	**40,000**	**40,000**	**30,000**		
FINANCING:							
Road Use Tax		110,000	40,000	40,000	30,000		
	TOTAL	**110,000**	**40,000**	**40,000**	**30,000**		

PROGRAM - ACTIVITY:	**DEPARTMENT:**	**ACCOUNT NO.**
Transportation – Streets Maintenance	Public Works	060-7736-439

LINCOLN WAY MEDIAN IMPROVEMENTS **PROJECT STATUS:** Cost Change Revenue Change

DESCRIPTION/JUSTIFICATION
This project provides funding for the enhancement of the medians on Lincoln Way from Beach Avenue to Sheldon Avenue.

COMMENTS
Planning for improvements to the Lincoln Way median between Beach Avenue and Sheldon Avenue began in 2012/13 with the hiring of a design consultant, budgeted at $25,000, to work with stakeholders to identify improvements to beautify the median. A group of stakeholders was established from the Ames Foundation, Iowa State University, the Campustown Action Association, Greek Community, and adjacent property owners to assist the City with a master plan for median improvements. The stakeholder group assisted with the development of the master plan by offering comments on the existing condition seen in the corridor and providing feedback on how improvements could tie into a vision for the unique characteristics for the corridor. In order for the project to move forward with engineering and construction, staff will work to develop funding partnerships.

The cost change is the result of adding the actual construction of the median improvements to this project. The addition of private funding to the financing of this project created a revenue change.

LOCATION
2014/15 Lincoln Way medians (Beach Avenue to Sheldon Avenue) – Map 5, location I-11

FISCAL YEAR PRIORITY				4			
		TOTAL	**2013/14**	**2014/15**	**2015/16**	**2016/17**	**2017/18**
COST:							
Engineering		70,000		70,000			
	TOTAL	**70,000**		**70,000**			
FINANCING:							
Local Option Sales Tax		35,000		35,000			
Private Funding		35,000		35,000			
	TOTAL	**70,000**		**70,000**			

PROGRAM - ACTIVITY: Transportation – Streets Maintenance
DEPARTMENT: Public Works
ACCOUNT NO.

SALT BRINE FACILITY **PROJECT STATUS:** New

DESCRIPTION/JUSTIFICATION

The 2012-2017 CIP included construction of a salt storage facility in 2013/14. As the City discussed this project with potential partners, it was determined that none of the other entities felt the need for a salt storage facility. Instead, a discussion of the necessity for the City to make brine was met with willingness from Iowa State University (ISU) and the Ames Community School District (ACSD) to perhaps partner in that endeavor.

Currently, the City works in partnership with the Iowa Department of Transportation (Iowa DOT) for brine. The City's increasing demand for salt brine may eventually outpace Iowa DOT's ability to provide it. Through a partnership with ISU and the ACSD, the alternative will be to build and use a salt brine facility.

LOCATION

To be determined

FISCAL YEAR PRIORITY					4		
		TOTAL	**2013/14**	**2014/15**	**2015/16**	**2016/17**	**2017/18**
COST:							
Building		150,000			150,000		
	TOTAL	**150,000**			**150,000**		
FINANCING:							
Road Use Tax Fund		100,000			100,000		
ISU & ACSD		50,000			50,000		
	TOTAL	**150,000**			**150,000**		

PROGRAM – ACTIVITY: Transportation – Streets Maintenance

DEPARTMENT: Public Works

ACCOUNT NO.

TRANSPORTATION - TRANSIT

PROJECT/REVENUE DESCRIPTION	TOTAL	2013/14	2014/15	2015/16	2016/17	2017/18	PAGE
EXPENDITURES:							
1 Building Expansion and Modernization	3,241,976	2,561,976	170,000	170,000	170,000	170,000	114
2 Vehicle Replacement	5,738,633	1,221,000	1,287,630	1,325,359	949,480	955,164	115
3 CyRide Shop/Office Equipment	270,000	62,000	52,000	52,000	52,000	52,000	116
4 Bus Stop Improvements	184,000	46,000	46,000	46,000	46,000		117
Total Expenditures	**9,434,609**	**3,890,976**	**1,555,630**	**1,593,359**	**1,217,480**	**1,177,164**	
REVENUES:							
City:							
Transit Fund	5,180,565	791,165	474,997	1,556,559	1,180,680	1,177,164	
Other:							
Federal Transit Administration	4,106,844	3,063,011	1,043,833				
Federal Grants	147,200	36,800	36,800	36,800	36,800		
Sub-Total Other Funds	4,254,044	3,099,811	1,080,633	36,800	36,800		
Total Revenues	**9,434,609**	**3,890,976**	**1,555,630**	**1,593,359**	**1,217,480**	**1,177,164**	

BUILDING EXPANSION & MODERNIZATION **PROJECT STATUS:** Delayed Scope Change

DESCRIPTION/JUSTIFICATION
In 2013/14, CyRide will complete work begun in 2012/13 to expand its facilities. This expansion consists of building additional bus storage (eleven more bus bays), flood protection (wall and gates), and increased ceiling height to accommodate the height of the hybrid buses and structural repairs. Currently, nine buses are parked outside each night, flood protection is only available on the east and a portion of the north side of the facility, hybrid buses cannot travel in parts of the original building, and portions of the facility are corroding as a result of the wet environment in the wash bay area. Each of these facility deficiencies will be addressed with this two-year construction process. In 2012/13, $3,198,500 will be expended and $2,525,976 will be expended in 2013/14. This project is funded with 80% federal/state grants and 20% local funding accumulated over several previous budgets.

An actuated fuel shut-off system will also be installed in 2013/14 to disengage the vehicle fueling system if a fire is detected anywhere in the building ($36,000).

In years 2014/15, 2015/16 and 2017/18, $170,000 per year in facility needs will be addressed. These funds could be used as local match to future federal/state grants or paid with 100% local dollars if grants are not available at that time for facility needs such as roof replacement or the next phase of CyRide's Facility Master Plan expansion. The use of these funds will be determined in future capital budgets.

COMMENTS
Originally, the facility construction project was to occur over the 2011/12 and 2012/13 budget years, but was delayed one year due to additional federal requirements as well as additional time that was needed to complete the design drawings and to coordinate these drawings with nearby ISU facilities.

The actuated fuel shut-off system is a new project recommended through a facility safety audit conducted by the City of Ames' previous property insurance carrier.

LOCATION
1700 University Boulevard – Map 5, location J-10

FISCAL YEAR PRIORITY		1	1	1	1	1
	TOTAL	**2013/14**	**2014/15**	**2015/16**	**2016/17**	**2017/18**
COST:						
Architect/Engineering	140,000	100,000	10,000	10,000	10,000	10,000
Repairs/Modifications	3,101,976	2,461,976	160,000	160,000	160,000	160,000
TOTAL	**3,241,976**	**2,561,976**	**170,000**	**170,000**	**170,000**	**170,000**
FINANCING:						
Transit Fund	1,192,395	512,395	170,000	170,000	170,000	170,000
Federal Transit Administration	2,049,581	2,049,581				
TOTAL	**3,241,976**	**2,561,976**	**170,000**	**170,000**	**170,000**	**170,000**

PROGRAM - ACTIVITY:	**DEPARTMENT:**	**ACCOUNT NO.**
Transportation – Transit	CyRide	552-1175-439

VEHICLE REPLACEMENT **PROJECT STATUS:** Cost Change Scope Change Delay

DESCRIPTION/JUSTIFICATION

CyRide has scheduled two to three bus replacements each year in this five-year Capital Improvements Plan. The number of vehicles is reduced from previous Capital Improvements Plans as CyRide will receive no federal capital funds for bus replacements after the 2014/15 budget year. Purchases after this date will be funded with 100% local dollars. All administrative vehicles and maintenance trucks will also be funded with 100% local dollars. These purchases are programmed as follows:

2013/14 – Replace 3 large buses ($1,221,000)
2014/15 – Replace 3 large buses ($1,257,630); replace administrative vehicle 906 - Prius ($30,000) - delayed
2015/16 – Replace 3 large buses ($1,295,359); replace administrative vehicle 905 - Impala ($30,000) - delayed
2016/17 – Replace 2 large buses ($889,480); replace maintenance truck 999 ($60,000) - delayed
2017/18 – Replace 2 large buses ($916,164); replace maintenance truck 007 ($39,000) - delayed

COMMENTS

As a result of a change in federal transportation funding, CyRide will receive no federal capital grants after the purchase of three buses in 2013/14 and three buses in 2014/2015. Over the last five years, CyRide has received an average of $2.5 million dollars per year in federal capital assistance. The impact of this reduction in funding on the Capital Improvements Plan is that several vehicle purchases have been delayed and the number of vehicles to be purchased has been reduced. As a result, CyRide's average fleet age will increase in the future as five to six new vehicles per year are needed annually to maintain the current average fleet age of 9.5 years.

FISCAL YEAR PRIORITY		2	2	2	2	2
	TOTAL	**2013/14**	**2014/15**	**2015/16**	**2016/17**	**2017/18**
COST:						
Large Buses - 40' New	5,579,633	1,221,000	1,257,630	1,295,359	889,480	916,164
Administrative Vehicles	159,000		30,000	30,000	60,000	39,000
TOTAL	**5,738,633**	**1,221,000**	**1,287,630**	**1,325,359**	**949,480**	**955,164**
FINANCING:						
Transit Fund	3,681,370	207,570	243,797	1,325,359	949,480	955,164
Federal Transit Administration	2,057,263	1,013,430	1,043,833			
TOTAL	**5,738,633**	**1,221,000**	**1,287,630**	**1,325,359**	**949,480**	**955,164**

PROGRAM - ACTIVITY:	**DEPARTMENT:**	**ACCOUNT NO.**
Transportation – Transit	CyRide	552-1165-439

CYRIDE SHOP AND OFFICE EQUIPMENT **PROJECT STATUS:** Scope Change

DESCRIPTION/JUSTIFICATION

This project is to address replacement of shop and office equipment used for CyRide operations. Because 2014/15 – 2017/18 capital purchases in this category are smaller items where replacement need is less predictable, they have been generally described in this document. Specific needs will be identified annually to efficiently operate CyRide, and address OSHA, Department of Natural Resources, and other federal requirements as they are implemented.

COMMENTS

The 2013/14 expenditures in the shop and office areas will fund the replacement of six computers ($12,000) and the following shop equipment:

- Custom E-Motor Mount - $1,000
- Wheel-Barrel Hoist - $1,200
- 2-Stage Snow Blower - $1,500
- Portable Steam Cleaner - $3,000
- Sign Post Installer/Remover - $4,300
- Hot Water Parts Washer - $8,500
- AC Refrigerant Reclamation System - $7,000
- Walk Behind Scrubber - $10,000
- Trailer Pressure Washer - $12,000

The purchases scheduled for 2014/15 – 2017/18 are more generally described as: four-to-seven replacement computers to be funded each year, and approximately $40,000 per year to fund other shop and office items identified to efficiently operate CyRide in the next five year period.

FISCAL YEAR PRIORITY		3	3	3	3	3
	TOTAL	**2013/14**	**2014/15**	**2015/16**	**2016/17**	**2017/18**
COST:						
Computers	60,000	12,000	12,000	12,000	12,000	12,000
Other Shop Equipment	210,000	50,000	40,000	40,000	40,000	40,000
TOTAL	**270,000**	**62,000**	**52,000**	**52,000**	**52,000**	**52,000**
FINANCING:						
Transit Fund	270,000	62,000	52,000	52,000	52,000	52,000
TOTAL	**270,000**	**62,000**	**52,000**	**52,000**	**52,000**	**52,000**

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

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

City of Ames, Iowa
Capital Improvements Plan

DESCRIPTION/JUSTIFICATION

One of the most frequently received customer suggestions CyRide receives is regarding the condition or lack of amenities at its more than 425 bus stop locations throughout the city. Therefore, over the next four-year period (2013/14 through 2016/17), CyRide will install three new bus shelters ($36,000 per year) and move two existing bus shelters to new locations each year ($10,000 per year) thereby increasing the total number of bus shelters for CyRide's customers. The specific locations will be identified each year based on CyRide's ability to complete installation at sites that year and the bus stop priority list based on a previous shelter study. Funding for these shelter replacements and new locations will be funded with 80% federal dollars administered by the State of Iowa and 20% local funding from CyRide's budget.

COMMENTS

An earlier project developed a new prototype shelter (located at Dickinson and Mortensen) that will be implemented in new locations with this project.

With the reduction in federal funding, CyRide will no longer be able to continue this improvement program past 2016/17. In absence of federal funding, CyRide will install three new shelters per year instead of five, move current shelters in better condition to new locations to expand its shelter program, and will need to reduce the annual amount to $46,000 per year.

FISCAL YEAR PRIORITY			4	4	4	4	
		TOTAL	**2013/14**	**2014/15**	**2015/16**	**2016/17**	**2017/18**
COST:							
Pads, Benches, Shelters		184,000	46,000	46,000	46,000	46,000	
	TOTAL	**184,000**	**46,000**	**46,000**	**46,000**	**46,000**	
FINANCING:							
Transit Fund		36,800	9,200	9,200	9,200	9,200	
Federal 5310 Grants		147,200	36,800	36,800	36,800	36,800	
	TOTAL	**184,000**	**46,000**	**46,000**	**46,000**	**46,000**	

PROGRAM - ACTIVITY:	**DEPARTMENT:**	**ACCOUNT NO.**
Transportation – Transit	CyRide	552-1163-439

TRANSPORTATION - AIRPORT

PROJECT/REVENUE DESCRIPTION	TOTAL	2013/14	2014/15	2015/16	2016/17	2017/18	PAGE
EXPENDITURES:							
1 Airport Improvements	3,470,000			3,200,000	170,000	100,000	119
Total Expenditures	**3,470,000**			**3,200,000**	**170,000**	**100,000**	
REVENUES:							
Bonds:							
G.O. Bonds	867,000			867,000			
City:							
Airport Construction Fund	30,000				20,000	10,000	
Other:							
Federal Aviation Administration	690,000			450,000	150,000	90,000	
State Grant Funds	150,000			150,000			
Iowa State University	867,000			867,000			
Private Funds	866,000			866,000			
Sub-Total Other Funds	2,573,000			2,333,000	150,000	90,000	
Total Revenues	**3,470,000**			**3,200,000**	**170,000**	**100,000**	

AIRPORT IMPROVEMENTS **PROJECT STATUS:** Cost Change Revenue Change Scope 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 which details Airport development needs for a ten-year period. The Master Plan Update that was completed in 2007 identifies projects that qualify for Federal Aviation Administration (FAA) funding.

2015/16	Replace terminal building
2016/17	Master Plan partial update and runway extension justification
2017/18	Runway extension (environment assessment)

The FY 2015/16 terminal building replacement project will update the currently aged facility. After receiving initial input from airport users, the new facility is anticipated to have an attached hangar space that will improve the economic viability of the Ames Airport. The initial input from the airport users indicates that a larger and more user friendly terminal building is needed to meet customer requirements.

Cost change is due to updated estimates of the terminal building project. State grants, ISU funds, and private funds have been added as additional funding sources for replacing the terminal building in 2015/16.

LOCATION
Ames Municipal Airport - Map 8, location L-16

FISCAL YEAR PRIORITY					1	1	1
COST:		**TOTAL**	**2013/14**	**2014/15**	**2015/16**	**2016/17**	**2017/18**
Engineering		798,000			528,000	170,000	100,000
Construction		2,672,000			2,672,000		
	TOTAL	**3,470,000**			**3,200,000**	**170,000**	**100,000**
FINANCING:							
G.O. Bonds		867,000			867,000		
Airport Construction Fund		30,000				20,000	10,000
FAA Funding		690,000			450,000	150,000	90,000
State Grant Funds		150,000			150,000		
Iowa State University		867,000			867,000		
Private Funds		866,000			866,000		
	TOTAL	**3,470,000**			**3,200,000**	**170,000**	**100,000**

PROGRAM – ACTIVITY: Transportation – Airport
DEPARTMENT: Public Works
ACCOUNT NO.


AMES
INTERMODAL
FACILITY
EXECUTIVE EXPRESS
BURLINGTON TRAILWAYS

Night Views

The Intermodal Facility has 384 parking spaces for short and long-term parking. Parking permits are required for reserved spaces, and an hourly meter rate of 75 cents or daily rate of $10 was implemented in August.

COMMUNITY ENRICHMENT/INTERNAL SERVICES - SUMMARY

PROJECT/REVENUE DESCRIPTION	TOTAL	2013/14	2014/15	2015/16	2016/17	2017/18	PAGE
EXPENDITURES:							
Parks and Recreation	4,072,000	554,000	1,027,500	777,500	918,000	795,000	123
Library	14,300,000	14,073,000	27,000	200,000			137
City Manager	250,000	50,000	50,000	50,000	50,000	50,000	140
Planning and Housing	250,000	50,000	50,000	50,000	50,000	50,000	142
Public Works	265,000	65,000	65,000	65,000	70,000		144
Internal Services/Facilities	493,000	130,000	116,000	147,000	50,000	50,000	146
Total Expenditures	**19,630,000**	**14,922,000**	**1,335,500**	**1,289,500**	**1,138,000**	**945,000**	
REVENUES:							
Bonds:							
G.O. Bonds	13,500,000	13,479,000	21,000				
City:							
Local Option Sales Tax	4,697,000	654,000	1,002,500	1,167,500	1,053,000	820,000	
Ice Arena Capital Reserve Funds	345,000	70,000	215,000		60,000		
Furman Trust Fund	100,000					100,000	
Road Use Tax	60,750	20,000	16,500	24,250			
Water Utility Fund	60,750	20,000	16,500	24,250			
Sewer Utility Fund	60,750	20,000	16,500	24,250			
Fleet Services Fund	60,750	20,000	16,500	24,250			
Sub-Total City Funds	5,385,000	804,000	1,283,500	1,264,500	1,113,000	920,000	

COMMUNITY ENRICHMENT/INTERNAL SERVICES - SUMMARY

PROJECT/REVENUE DESCRIPTION	TOTAL	2013/14	2014/15	2015/16	2016/17	2017/18
REVENUES, continued:						
Other:						
Ames Community School District	125,000	25,000	25,000	25,000	25,000	25,000
Private Contributions	540,000	534,000	6,000			
Wellmark 3-Point Play Funds	20,000	20,000				
Grants	60,000	60,000				
Sub-Total Other Funds	745,000	639,000	31,000	25,000	25,000	25,000
Total Revenues	**19,630,000**	**14,922,000**	**1,335,500**	**1,289,500**	**1,138,000**	**945,000**

COMMUNITY ENRICHMENT - PARKS AND RECREATION

	PROJECT/REVENUE DESCRIPTION	TOTAL	2013/14	2014/15	2015/16	2016/17	2017/18	PAGE
EXPENDITURES:								
1	Municipal Pool Maintenance	250,000	50,000	50,000	50,000	50,000	50,000	125
2	Parks and Recreation Facility Improvements	831,500	172,500	178,500	177,500	153,000	150,000	126
3	Playground/Park Equipment Improvements	210,000	50,000	40,000	45,000	35,000	40,000	127
4	Ada Hayden Heritage Park	585,000	26,000	284,000	200,000	75,000		128
5	Sand Volleyball Complex	100,000	100,000					129
6	Community Gymnasiums	275,000	55,000	55,000	55,000	55,000	55,000	130
7	Furman Aquatic Center	595,500	30,500	55,000		10,000	500,000	131
8	Ames/ISU Ice Arena	345,000	70,000	215,000		60,000		132
9	Brookside Park Improvements	175,000		100,000		75,000		133
10	Tennis Court Improvements	105,000		50,000		55,000		134
11	Inis Grove Park Restroom Replacement	250,000			250,000			135
12	Moore Memorial Park	350,000				350,000		136
	Total Expenditures	**4,072,000**	**554,000**	**1,027,500**	**777,500**	**918,000**	**795,000**	

COMMUNITY ENRICHMENT - PARKS AND RECREATION, continued

PROJECT/REVENUE DESCRIPTION	TOTAL	2013/14	2014/15	2015/16	2016/17	2017/18
REVENUES:						
City:						
Local Option Sales Tax	3,482,000	439,000	787,500	752,500	833,000	670,000
Ice Arena Capital Reserve Funds	345,000	70,000	215,000		60,000	
Furman Trust Fund	100,000					100,000
Sub-Total City Funds	3,927,000	509,000	1,002,500	752,500	893,000	770,000
Other:						
Ames Community School District	125,000	25,000	25,000	25,000	25,000	25,000
Wellmark 3-Point Play Funds	20,000	20,000				
Sub-Total Other Funds	145,000	45,000	25,000	25,000	25,000	25,000
Total Revenues	**4,072,000**	**554,000**	**1,027,500**	**777,500**	**918,000**	**795,000**

MUNICIPAL POOL MAINTENANCE **PROJECT STATUS:** No Change

DESCRIPTION/JUSTIFICATION

In 2006, engineering consultants were retained to provide recommendations regarding mechanical, electrical, structural, and any other needed improvements for Municipal Pool. With the goal of keeping this facility operational until approximately 2015, their 2006 study indicated that substantial improvements, totaling $815,000, were needed between 2007/08 and 2011/12. They also stated in their report that following **2015**, the cost of further repairs to this facility could be cost prohibitive.

It should be noted that the City and Ames Community School District's joint use agreement for Municipal Pool expires on **April 30, 2015.** Therefore, the **City and School District must address the need for new indoor aquatic facilities in the near future.** All capital costs are shared equally by the City and Ames Community School District. Over a 19-year period (FY 95/96 and continuing through FY 14/15), the City and School District will have invested approximately $1,900,000 ($100,000 per year average) in capital improvements at this facility.

COMMENTS

2013/14: Total $50,000 – To be determined
2014/15: Total $50,000 – To be determined
2015/16: Total $50,000 – To be determined
2016/17: Total $50,000 – To be determined
2017/18: Total $50,000 – To be determined

LOCATION

Ames High School – Map 5, location J-8

FISCAL YEAR PRIORITY			1	1	1	1	1
		TOTAL	**2013/14**	**2014/15**	**2015/16**	**2016/17**	**2017/18**
COST:							
Construction		225,000	45,000	45,000	45,000	45,000	45,000
Architects/Engineering		25,000	5,000	5,000	5,000	5,000	5,000
	TOTAL	**250,000**	**50,000**	**50,000**	**50,000**	**50,000**	**50,000**
FINANCING:							
Local Option Sales Tax		125,000	25,000	25,000	25,000	25,000	25,000
Ames School District		125,000	25,000	25,000	25,000	25,000	25,000
	TOTAL	**250,000**	**50,000**	**50,000**	**50,000**	**50,000**	**50,000**

PROGRAM – ACTIVITY: Community Enrichment

DEPARTMENT: Parks and Recreation

ACCOUNT NO. 030-4916-459

PARKS AND RECREATION FACILITY IMPROVEMENTS **PROJECT STATUS:** Scope Change Cost Change

DESCRIPTION/JUSTIFICATION

To maintain City facilities in a safe and quality manner, the FY 2013 to 2018 projects listed below address maintenance issues at various facilities within the Parks and Recreation Department.

COMMENTS

2013/14: Total = $172,500

Community Center: Replace metal lockers with plastic lockers ($20,000); replace the carpet in the gymnastics room ($10,000); replace two scoreboards in gymnasium ($10,000 total); installation of in-floor badminton standards ($7,500) – Map 5, location L-11
North River Valley Park: Renovate the restroom adjacent Horseshoe Courts ($25,000) – Map 6, location O-9
River Valley Softball Complex: Renovate the concession stand ($25,000) – Map 6, location O-9
Skate Park: Replace concrete sections as deemed necessary ($75,000) – Map 5, location K-10

2014/15: Total = $178,500

Administrative Office, Homewood Golf Course, and Park Maintenance Facility: Replace air conditioners and furnaces ($48,500) at three locations; Gateway Administrative Office – Map 4, location G-10; Homewood Golf Course – Map 5, location M-8; and Park Maintenance Facility – Map 5, location N-9
Homewood Golf Course: Install asphalt cart paths ($20,000) and construct a small storage building ($20,000) – Map 5, location M-8
River Valley Softball Complex: Replace the field irrigation system ($90,000) – Map 6, location O-9

2015/16: Total = $177,500

Community Center: Installation of new volleyball standards ($25,000); replace gymnasium separation curtain ($7,500) – Map 5, location L-11
Auditorium: Replace carpet in the aisles; install new ceiling in restrooms on the second floor; replace the sound shell ($30,000) – Map 5, location L-11
Bandshell at Bandshell Park: Weatherproof the domed roof ($55,000) – Map 5, location M-11
Franklin Park: Asphalt overlay on existing crushed rock pathway through the park ($10,000) – Map 4, location F-12
Inis Grove Park: Replace stair system ($25,000) – Map 2, location M-7
North River Valley Park: Install irrigation on youth sport field ($25,000) – Map 6, location O-9

2016/17: Total = 153,000

Administrative Office: Exterior building improvements/repairs ($35,000) – Map 4, location G-10
Bandshell: Replace stage lighting ($50,000) – Map 5, location M-11
Brookside Park: Renovate the restroom ($48,000) – Map 5, location K-10
Inis Grove Park: Renovate restroom adjacent to Duff Avenue ($20,000) – Map 2, location M-7

2017/18: Total = $150,000

Community Center: Refinish wood gymnasium floor ($25,000) – Map 5, location L-11
13 Shelters: Replace shingles ($125,000) – various locations throughout the park system

FISCAL YEAR PRIORITY			2	2	2	8	2
		TOTAL	**2013/14**	**2014/15**	**2015/16**	**2016/17**	**2017/18**
COST:							
Construction		800,500	172,500	178,500	170,000	145,500	134,000
Engineering		31,000			7,500	7,500	16,000
	TOTAL	**831,500**	**172,500**	**178,500**	**177,500**	**153,000**	**150,000**
FINANCING:							
Local Option Sales Tax		831,500	172,500	178,500	177,500	153,000	150,000
	TOTAL	**831,500**	**172,500**	**178,500**	**177,500**	**153,000**	**150,000**

PROGRAM – ACTIVITY:	**DEPARTMENT:**	**ACCOUNT NO:**
Community Enrichment	Parks and Recreation	030-4902-459

PLAYGROUND/PARK EQUIPMENT IMPROVEMENTS **PROJECT STATUS:** Cost Change Site 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.

Outdoor exercise equipment, similar to the equipment located in the Community Center weight room, will be placed at Moore Memorial Park. Approximately six to eight pieces of equipment will be grouped together on a concrete pad adjacent the walkway. This equipment will provide fitness benefits to residents in a natural setting.

COMMENTS

2013/14: Brookside Park ($30,000) replacement of tot piece adjacent to Maple Shelter – Map 5, location K-10, Moore Memorial Park Outdoor Exercise Equipment ($20,000 - Wellmark 3 Point Play funding)
2014/15: Duff Avenue Park ($20,000) replacement – Map 5, location M-9; Teagarden Park ($20,000) new installation – Map 9, location N-17
2015/16: Christopher Gartner Park ($25,000) replacement – Map 4, location E-12; Hutchison Park ($20,000) replacement – Map 4, location D-9
2016/17: Daley Park ($35,000) replacement – Map 4, location C-11
2017/18: Inis Grove Park ($40,000) replacement adjacent to Shagbark Shelter – Map 2, location M-7

FISCAL YEAR PRIORITY		3	3	3	2	3
	TOTAL	**2013/14**	**2014/15**	**2015/16**	**2016/17**	**2017/18**
COST:						
Construction	210,000	50,000	40,000	45,000	35,000	40,000
TOTAL	**210,000**	**50,000**	**40,000**	**45,000**	**35,000**	**40,000**
FINANCING:						
Local Option Sales Tax	190,000	30,000	40,000	45,000	35,000	40,000
Wellmark 3 Point Play Funding (April 2014)	20,000	20,000				
TOTAL	**210,000**	**50,000**	**40,000**	**45,000**	**35,000**	**40,000**

PROGRAM - ACTIVITY:	**DEPARTMENT:**	**ACCOUNT NO.**
Community Enrichment	Parks and Recreation	030-4967-459 113-4964-459

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

DESCRIPTION/JUSTIFICATION

The edges of the wetlands at Ada Hayden Heritage Park are becoming inundated with volunteer trees. These trees will create a negative visual impact at the park and, if not removed, will impact the long-term function of the wetland cells. Once removed, annual maintenance will be performed to restrict the re-growth of undesirable tree species.

Currently, 25 acres on the north portion of the park is pasture vegetation and is cut for hay every year. The property adjacent to this section of the park (to the north) will be developed in the near future. It is important to establish this area of the park with prairie. Due to its deep root system, prairie will minimize storm water runoff from this housing development, thus reducing potential pollution to the lake. Prairie will also increase wildlife habitat.

The Master Plan for this park, developed in 2004, includes a hard surfaced parking lot at the northwest corner after Grant Road is paved. Construction of the parking lot will coincide with City Council action to support development in north Ames. Park visitors who want to use the northwest part of the park currently have to walk a mile to enjoy the overlook features that have been installed by three civic organizations. A parking lot in the northwest area would also provide residents having mobility issues the opportunity to access one of the best vistas of this 437-acre parcel.

COMMENTS

2013/14: Remove invasive plant species adjacent to the wetland shore line ($26,000)
2014/15: Resurface the north loop trail adjacent to the lake (1.6 miles / $200,000); dependent upon private development going north, construct a small parking lot in the northwest corner of this park ($84,000)
2015/16: Resurface the south loop trail adjacent to the lake (1.6 miles / $200,000)
2016/17: Establish prairie on north portion of the park ($75,000)

LOCATION

Ada Hayden Heritage Park – Map 2, location K-3

FISCAL YEAR PRIORITY			4	4	4	3	
		TOTAL	**2013/14**	**2014/15**	**2015/16**	**2016/17**	**2017/18**
COST:							
Engineering		53,400		28,400	20,000	5,000	
Contracted Work		96,000	26,000			70,000	
Construction		435,600		255,600	180,000		
	TOTAL	**585,000**	**26,000**	**284,000**	**200,000**	**75,000**	
FINANCING:							
Local Option Sales Tax		501,000	26,000	200,000	200,000	75,000	
Local Option Sales Tax (Park Development Reserve)		84,000		84,000			
	TOTAL	**585,000**	**26,000**	**284,000**	**200,000**	**75,000**	

PROGRAM - ACTIVITY: Community Enrichment
DEPARTMENT: Parks and Recreation
ACCOUNT NO. 030-4925-459

SAND VOLLEYBALL COMPLEX **PROJECT STATUS:** No Change

DESCRIPTION/JUSTIFICATION
Currently three sand volleyball courts, without lights, exist at Gateway Park. Participation in sand volleyball play/leagues has grown to a level that requires additional facilities to be developed to accommodate both the current demand as well as to accommodate program expansion.

McCarthy Lee Park, adjacent to the existing tennis courts, possesses the necessary open space and an existing parking lot to accommodate the construction of four sand volleyball courts.

COMMENTS
2013/14: Construct four sand volleyball courts with lights ($100,000)

LOCATION
East of Emma McCarthy Lee Park tennis courts - Map 4, location G-10

FISCAL YEAR PRIORITY			5				
		TOTAL	**2013/14**	**2014/15**	**2015/16**	**2016/17**	**2017/18**
COST:							
Engineering/Design		5,000	5,000				
Construction		95,000	95,000				
	TOTAL	**100,000**	**100,000**				
FINANCING:							
Local Option Sales Tax (Park Development Reserve)		100,000	100,000				
	TOTAL	**100,000**	**100,000**				

PROGRAM - ACTIVITY:	**DEPARTMENT:**	**ACCOUNT NO.**
Community Enrichment	Parks and Recreation	030-4903-459

CITY/SCHOOL DISTRICT PARTNERSHIP: GYMNASIUMS **PROJECT STATUS:** New

DESCRIPTION/JUSTIFICATION

In April 2012, residents approved a $55 million bond issue to construct three new elementary schools (Miller, Fellows, and Meeker) and to refurbish two others (Mitchell and Sawyer). Each school will include a high school regulation-size basketball court within its gymnasium. In anticipation of the City sharing these facilities, the School Board increased each gymnasium's footprint by 10' in depth. This will allow portable bleachers to be used by spectators during Parks and Recreation league play.

An agreement will be prepared for School Board and City Council approval to allow Parks and Recreation to coordinate activities when school is not in session. However, for the overall community to utilize these facilities to full potential (Parks and Recreation youth and adult sport leagues, open gym) competitive grade basketball and volleyball standards are required. The District's usage for elementary school children does not warrant this level of standards to be installed. The cost of this equipment per site is estimated at $55,000.

COMMENTS

Staff anticipates installing equipment at one site per year over a five-year period.

2013/14: $55,000 – Miller Elementary – Map 4, location D-12
2014/15: $55,000 – Meeker Elementary – Map 5, location M-8
2015/16: $55,000 – Mitchell Elementary – Map 8, location N-16
2016/17: $55,000 – Fellows Elementary – Map 5, location K-8
2017/18: $55,000 – Sawyer Elementary – Map 4, location K-9

FISCAL YEAR PRIORITY		6	5	5	4	4
	TOTAL	**2013/14**	**2014/15**	**2015/16**	**2016/17**	**2017/18**
COST:						
Construction	275,000	55,000	55,000	55,000	55,000	55,000
TOTAL	**275,000**	**55,000**	**55,000**	**55,000**	**55,000**	**55,000**
FINANCING:						
Local Option Sales Tax	275,000	55,000	55,000	55,000	55,000	55,000
TOTAL	**275,000**	**55,000**	**55,000**	**55,000**	**55,000**	**55,000**

PROGRAM - ACTIVITY:	**DEPARTMENT:**	**ACCOUNT NO.**
Community Enrichment	Parks and Recreation	030-4904-459

FURMAN AQUATIC CENTER **PROJECT STATUS:** New

DESCRIPTION/JUSTIFICATION

This facility opened in May 2010. It has been operational for three seasons with over 100,000 visitors per summer. To ensure it remains a quality facility, structural and mechanical items have been identified and will be addressed in a systematic manner.

Pool consultants have stated that a new major feature should be installed every five years to ensure admissions remain high. This will reduce the need to subsidize the operation. To date, the facility has generated approximately $75,000 annually in net revenue. The Master Plan for the site allows for three major features to be added: speed slides adjacent to the Lazy River, and a family slide and water bowl adjacent to the 50-meter pool. When the project was bid in 2007, the speed slides were identified as the first of the three features to be installed and it was included as a bid alternate. Funding at that time did not allow for this alternate to be included.

COMMENTS

2013/14: Replace all canopies - spring of 2014 ($15,500); purchase/install electronic information display sign ($15,000)
2014/15: Paint the black and white areas of the three basins - fall of 2014 ($48,000); paint the interior walls of the locker rooms ($7,000)
2016/17: Paint the black areas of each basin - fall of 2017 ($10,000)
2017/18: Install speed slides adjacent the Lazy River ($500,000)

LOCATION

1365 13th Street – Map 5 – location K-9

FISCAL YEAR PRIORITY			7	6		5	5
		TOTAL	**2013/14**	**2014/15**	**2015/16**	**2016/17**	**2017/18**
COST:							
Engineering/Design		30,000		5,000			25,000
Construction		565,500	30,500	50,000		10,000	475,000
	TOTAL	**595,500**	**30,500**	**55,000**		**10,000**	**500,000**
FINANCING:							
Local Option Sales Tax		495,500	30,500	55,000		10,000	400,000
Furman Trust Fund		100,000					100,000
	TOTAL	**595,500**	**30,500**	**55,000**		**10,000**	**500,000**

PROGRAM - ACTIVITY: Community Enrichment
DEPARTMENT: Parks and Recreation
ACCOUNT NO. 030-4907-459

AMES/ISU ICE ARENA **PROJECT STATUS:** Cost Change Scope Change

DESCRIPTION/JUSTIFICATION

The Ames/ISU Ice Arena is eleven years old (opened in April 2001). With the goal of maintaining a quality facility, numerous items need to be replaced as listed below.

To support the City Council's environmental sustainability goals, an energy efficiency study was conducted 2012. The assessment identified energy conservation enhancements that have been incorporated into the 5-year plan.

Funding for capital improvement projects is provided through the Ice Arena Capital Reserve Fund. Each year, the City and Iowa State University each contribute $20,000 to this fund to ensure that the facility is well-maintained. As of June 30, 2012, this fund totaled $362,673.

COMMENTS

2013/14: Replace water heaters ($25,000); add variable speed drives to three motors ($30,000); replace ice skate sharpening machine ($15,000)
2014/15: Replace rubber flooring in hallway and locker rooms ($175,000); replace lighting above the ice and throughout the building ($40,000)
2016/17: Replace dasher board system ($60,000)

LOCATION

Ames/ISU Ice Arena, 1505 Gateway Hills Park Drive – Map 4, location H-13

FISCAL YEAR PRIORITY			8	9		10	
		TOTAL	**2013/14**	**2014/15**	**2015/16**	**2016/17**	**2017/18**
COST:							
Equipment		75,000	15,000			60,000	
Construction		255,000	50,000	205,000			
Engineering/Design		15,000	5,000	10,000			
	TOTAL	**345,000**	**70,000**	**215,000**		**60,000**	
FINANCING:							
Ice Arena Capital Reserve Funds		345,000	70,000	215,000		60,000	
	TOTAL	**345,000**	**70,000**	**215,000**		**60,000**	

PROGRAM - ACTIVITY:	**DEPARTMENT:**	**ACCOUNT NO.**
Community Enrichment	Parks and Recreation	571-4928-459 572-4928-459

BROOKSIDE PARK IMPROVEMENTS **PROJECT STATUS:** New

DESCRIPTION/JUSTIFICATION
At a public meeting held to discuss long-term plans for Brookside Park, residents voiced support for removing the gravel driveway/parking lot (east of Squaw Creek). Further, they supported replacing it with an approximate 15 stall parking lot adjacent to 6th Street. The drive and parking lot were removed in the summer of 2012.

Park security lighting needs to be replaced due to age. It is anticipated that an additional six to eight poles with lighting will be required because hard surface trails have been increased within the park.

COMMENTS
2014/15: Install an approximate 15 stall hard surfaced parking lot adjacent to 6th Street and a walkway leading to the tennis courts ($100,000)
2016/17: Replace light fixtures and add additional poles with fixtures ($75,000)

LOCATION
Brookside Park – Map 5, location K-10

FISCAL YEAR PRIORITY				7		6	
		TOTAL	**2013/14**	**2014/15**	**2015/16**	**2016/17**	**2017/18**
COST:							
Engineering / Design		10,000		5,000		5,000	
Construction		165,000		95,000		70,000	
	TOTAL	**175,000**		**100,000**		**75,000**	
FINANCING:							
Local Option Sales Tax (Park Development Reserve)		100,000		100,000			
Local Option Sales Tax		75,000				75,000	
	TOTAL	**175,000**		**100,000**		**75,000**	

PROGRAM – ACTIVITY:	**DEPARTMENT:**	**ACCOUNT NO.**
Community Enrichment	Parks and Recreation	030-4941-459

TENNIS COURT IMPROVEMENTS **PROJECT STATUS:** Cost Change

DESCRIPTION/JUSTIFICATION:
This project is to maintain and improve existing tennis courts throughout the city.

Inis Grove: The tennis courts were resurfaced in 2000 and crack filling and resurfacing will be required in FY14/15.

Emma McCarthy Lee: These courts were reconstructed in 2004. It is estimated that they will need to be resurfaced in FY16/17.

COMMENTS
2014/15: Resurface the courts at Inis Grove Park ($50,000)
2016/17: Resurface the courts at Emma McCarthy Lee Park ($55,000)

LOCATION
Brookside Park – Map 5, location K-10; Inis Grove Park – Map 2, location M-7; and Emma McCarthy Lee Park – Map 4, location G-10

FISCAL YEAR PRIORITY				8		7	
		TOTAL	**2013/14**	**2014/15**	**2015/16**	**2016/17**	**2017/18**
COST:							
Engineering / Design		10,000		5,000		5,000	
Reconstruction / Resurfacing		95,000		45,000		50,000	
	TOTAL	**105,000**		**50,000**		**55,000**	
FINANCING:							
Local Option Sales Tax		105,000		50,000		55,000	
	TOTAL	**105,000**		**50,000**		**55,000**	

PROGRAM - ACTIVITY:	**DEPARTMENT:**	**ACCOUNT NO.**
Community Enrichment	Parks and Recreation	030-4940-459

INIS GROVE PARK: RESTROOM REPLACEMENT **PROJECT STATUS:** No Change

DESCRIPTION/JUSTIFICATION
The existing restroom, adjacent to Shagbark Shelter in the northeast portion of the park, is over 50 years old. The water service has experienced problems and a sanitary sewer installation will soon be required to replace the aging septic system. The location of this facility is not convenient for tennis and basketball court players. The new restroom will be constructed in a more convenient location for all park users (north of the tennis courts, adjacent to the parking lot, and south of Shagbark Shelter).

COMMENTS
2015/16: Inis Grove Park – Construct a new restroom (north of tennis courts) to replace the existing restroom (west of Shagbark Shelter) - $250,000

LOCATION
Inis Grove Park – Map 2, location M-7

FISCAL YEAR PRIORITY					6		
		TOTAL	**2013/14**	**2014/15**	**2015/16**	**2016/17**	**2017/18**
COST:							
Engineering/Design		20,000			20,000		
Construction		230,000			230,000		
	TOTAL	**250,000**			**250,000**		
FINANCING:							
Local Option Sales Tax		250,000			250,000		
	TOTAL	**250,000**			**250,000**		

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

MOORE MEMORIAL PARK **PROJECT STATUS:** New

DESCRIPTION/JUSTIFICATION
Moore Memorial Park is 90 acres; 50 acres are located east of Squaw 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 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. This improvement has become viable because ISU recently acquired the YMCA grounds located adjacent the City's 40-acre parcel. In the event ISU allows public access through their parcel, several miles of recreational trails would be linked together. The attached map highlights this expanded connectivity. Staff will meet with ISU officials to determine if public access will be allowed through this parcel of land in the future.

COMMENTS
2016/17: Install a pedestrian bridge across Squaw Creek at Moore Memorial Park ($350,000)

LOCATION
Moore Memorial Park – Map 2, location H-7

FISCAL YEAR PRIORITY						9	
		TOTAL	**2013/14**	**2014/15**	**2015/16**	**2016/17**	**2017/18**
COST:							
Engineering/Design		40,000				40,000	
Construction		310,000				310,000	
	TOTAL	**350,000**				**350,000**	
FINANCING:							
Local Option Sales Tax		350,000				350,000	
	TOTAL	**350,000**				**350,000**	

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

COMMUNITY ENRICHMENT - LIBRARY

PROJECT/REVENUE DESCRIPTION	TOTAL	2013/14	2014/15	2015/16	2016/17	2017/18	PAGE
EXPENDITURES:							
1 Ames Public Library Renovation	14,100,000	14,073,000	27,000				138
2 Integrated Library System	200,000			200,000			139
Total Expenditures	**14,300,000**	**14,073,000**	**27,000**	**200,000**			
REVENUES:							
Bonds:							
G.O. Bonds	13,500,000	13,479,000	21,000				
City:							
Local Option Sales Tax	200,000			200,000			
Other:							
Private Contributions	540,000	534,000	6,000				
Grants	60,000	60,000					
Sub-Total Other Funds	600,000	594,000	6,000				
Total Revenues	**14,300,000**	**14,073,000**	**27,000**	**200,000**			

AMES PUBLIC LIBRARY RENOVATION **PROJECT STATUS:** Cost Change

DESCRIPTION/JUSTIFICATION

On November 8, 2011, Ames residents approved a ballot measure authorizing the City to issue $18,000,000 in bonds to expand and renovate the Ames Public Library. Private donations and Library bequest funds will be used to cover the remaining $2,000,000 needed for the construction project, and the Library Board has committed another $85,000 for the services of a construction advisor to assist the library staff. In April 2012, the Library received a $60,000 grant from the Roy J. Carver Charitable Trust of Muscatine, Iowa. The expansion of the library's footprint will include the 5th Street lot acquired in 2005 and the addition of a second story over the west portion of the 1984 addition. During the construction period, the public is being served from a temporary facility located in Lincoln Center. Most staff offices are located in an adjacent storefront in Lincoln Center, while the graphics and network services offices, a storage area, and indoor space for parking the Bookmobile are located at 809 E. Lincoln Way. Abatement of asbestos-containing materials and lead-based paint began in December, in preparation for major construction work to begin in January. It is anticipated that the "renewed" library will open to the public early in fiscal year 2014/15. The debt service cost for this project was anticipated to increase the property tax rate by approximately $0.61/thousand dollars of taxable valuation.

COMMENTS

2011/12:	Architectural, design, pre-construction fees	$ 652,452
2012/13:	Architectural fees, moving and rental costs, abatement work, construction	5,392,548
2013/14:	Construction, equipment, furnishing	14,073,000
2014/15:	Project completion, LEED certification	27,000
	Total	$ 20,145,000

From 2005/06 through 2010/11, $603,930 was also spent to acquire the lot on 5th Street and to conduct space needs, expansion feasibility, and fundraising feasibility studies to plan for the Library's future expansion.

LOCATION

Ames Public Library, 515 Douglas – Map 5, location M-11

FISCAL YEAR PRIORITY			1	1			
		TOTAL	**2013/14**	**2014/15**	**2015/16**	**2016/17**	**2017/18**
COST:							
Library Expansion/Renovation		14,100,000	14,073,000	27,000			
	TOTAL	**14,100,000**	**14,073,000**	**27,000**			
FINANCING:							
G. O. Bonds		13,500,000	13,479,000	21,000			
Private Contributions		540,000	534,000	6,000			
Grants		60,000	60,000				
	TOTAL	**14,100,000**	**14,073,000**	**27,000**			

PROGRAM - ACTIVITY:	**DEPARTMENT:**	**ACCOUNT NO.**
Community Enrichment	Library	374-2679-459
		239-2679-459
		241-2679-459

INTEGRATED LIBRARY SYSTEM **PROJECT STATUS:** New

DESCRIPTION/JUSTIFICATION

An integrated library system (ILS) is used to automate basic processes required for library management. The database is used to acquire, receive, and catalog new items for the collection. It is also used to circulate and track those items, handle borrower records, and allow for special requests. One of its modules includes the online catalog. Ames Public Library presently uses an ILS called Horizon, which is being phased out by the developer in favor of newer technology. Newer products are offered by multiple companies and feature improved programming, a new generation of search tools, and free mobile apps which are now in demand by an increasing number of users.

COMMENTS

Library users expect to receive quick, comprehensive results from Google-style searches. Increasingly, they also expect to have access to interactive visual results similar to those that regularly appear on commercial websites such as Amazon or Netflix. An up-to-date ILS will allow the Library to offer Ames citizens the high level of efficiency and opportunities for discovery they have come to expect. It will also increase visibility and stimulate the use of electronic resources that are costly for the library to provide, but in high demand by members of this highly educated and technology-oriented community.

LOCATION

Ames Public Library, 515 Douglas – Map 5, location M-11

FISCAL YEAR PRIORITY				1		
	TOTAL	**2013/14**	**2014/15**	**2015/16**	**2016/17**	**2017/18**
COST:						
ILS Purchase, Installation, and Training	200,000			200,000		
TOTAL	**200,000**			**200,000**		
FINANCING:						
Local Option Sales Tax	200,000			200,000		
TOTAL	**200,000**			**200,000**		

PROGRAM - ACTIVITY: Community Enrichment

DEPARTMENT: Library

ACCOUNT NO.

COMMUNITY ENRICHMENT - CITY MANAGER

PROJECT/REVENUE DESCRIPTION	TOTAL	2013/14	2014/15	2015/16	2016/17	2017/18	PAGE
EXPENDITURES:							
1 Neighborhood Improvement Program	250,000	50,000	50,000	50,000	50,000	50,000	141
Total Expenditures	**250,000**	**50,000**	**50,000**	**50,000**	**50,000**	**50,000**	
REVENUES:							
CITY:							
Local Option Sales Tax	250,000	50,000	50,000	50,000	50,000	50,000	
Total Revenues	**250,000**	**50,000**	**50,000**	**50,000**	**50,000**	**50,000**	

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 1996/97, 114 neighborhood projects have been funded by the City, totaling $337,752. 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 neighborhood City park; park sidewalks; neighborhood basketball courts; landscaping of neighborhood entryways; installation of neighborhood barbecue grills; renovating "DZ Triangle," and neighborhood clean-up days.

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.

FISCAL YEAR PRIORITY			1	1	1	1	1
		TOTAL	**2013/14**	**2014/15**	**2015/16**	**2016/17**	**2017/18**
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	City Manager's Office	030-0420-459

COMMUNITY ENRICHMENT - PLANNING & HOUSING

PROJECT/REVENUE DESCRIPTION	TOTAL	2013/14	2014/15	2015/16	2016/17	2017/18	PAGE
EXPENDITURES:							
1 Downtown Facade Program	250,000	50,000	50,000	50,000	50,000	50,000	143
Total Expenditures	**250,000**	**50,000**	**50,000**	**50,000**	**50,000**	**50,000**	
REVENUES:							
City:							
Local Option Sales Tax	250,000	50,000	50,000	50,000	50,000	50,000	
Total Revenues	**250,000**	**50,000**	**50,000**	**50,000**	**50,000**	**50,000**	

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

DESCRIPTION/JUSTIFICATION
This project was introduced in 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. However, with the establishment of the Main Street Cultural District, excitement in this commercial area increased along with requests for façade improvement 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 fiscal year 2011/12, the City Council expanded the program guidelines, where applications will be reviewed and awarded in the 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 November 2012, the program has awarded 28 grants to 25 property owners for a total amount of $388,275. All funding has been currently committed, and 2013/14 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. As interest in this program continues, funding can be expanded.

LOCATION
Downtown Ames – Map 5, location M-11

FISCAL YEAR PRIORITY			1	1	1	1	1
		TOTAL	**2013/14**	**2014/15**	**2015/16**	**2016/17**	**2017/18**
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	Planning & Housing	030-1030-459

COMMUNITY ENRICHMENT - PUBLIC WORKS

PROJECT/REVENUE DESCRIPTION	TOTAL	2013/14	2014/15	2015/16	2016/17	2017/18	PAGE
EXPENDITURES:							
1 Municipal Cemetery Improvements	265,000	65,000	65,000	65,000	70,000		145
Total Expenditures	**265,000**	**65,000**	**65,000**	**65,000**	**70,000**		
REVENUES:							
City:							
Local Option Sales Tax	265,000	65,000	65,000	65,000	70,000		
Total Revenues	**265,000**	**65,000**	**65,000**	**65,000**	**70,000**		

AMES MUNICIPAL CEMETERY IMPROVEMENTS **PROJECT STATUS:** Cost Change Scope Change

DESCRIPTION/JUSTIFICATION

This project provides funding to restore and improve lanes at the Cemetery. This five-year program for restoration and improvement maintenance, which began in 2011/12, will enhance the rideability and appearance of all paved lanes within the cemetery for at least ten years. Funding has been added in 2016/17 to replace water lines in the Cemetery. The water lines are currently galvanized pipe that experience several breaks per year. New piping will allow for consistent water service to Cemetery visitors.

COMMENTS

There are nearly two miles of paved lanes north of 9th Street within the Ames Municipal Cemetery boundaries. These lanes provide public access for visitors to gravesites and for funerals as well as for access for crews and equipment for funeral preparations and maintenance of the sites and grounds. Prior to 2008/09, endowed care funds were used for surface maintenance of the cemetery lanes. Beginning in 2008/09, state regulations were put into place that prohibited the use of these funds for all cemetery costs. As a result of these new regulations and loss of funding created by them, maintenance of the lanes was stopped. Continued use created structural and surface deterioration of the lanes. Bumpy rides and messy appearance of the lanes detract from the tranquility and value of this City-owned asset. In meeting with a Cemetery Focus Group, the condition of the lanes and access to water were mentioned as needed improvements, along with the need to upgrade benches and trash cans which were placed in the operating budget.

After reviewing the lanes in the Cemetery, it was determined that they need more maintenance than originally anticipated (funding was originally $40,000/year). This additional maintenance cost and the cost of replacement water lines in the Cemetery in 2016/17 are reflected in the updated additional cost per year. This work will include slurry of asphalt lanes in fair condition, overlaying seal coat lanes with asphalt, and the milling and replacement of most of the main north loop which is in too poor of condition for preservation techniques.

2013/14	Lane Construction/Maintenance
2014/15	Lane Construction/Maintenance
2015/16	Lane Construction/Maintenance
2016/17	Water Line Replacement

FISCAL YEAR PRIORITY			1	1	1	1	
		TOTAL	**2013/14**	**2014/15**	**2015/16**	**2016/17**	**2017/18**
COST:							
Construction		265,000	65,000	65,000	65,000	70,000	
	TOTAL	**265,000**	**65,000**	**65,000**	**65,000**	**70,000**	
FINANCING:							
Local Option Sales Tax		265,000	65,000	65,000	65,000	70,000	
	TOTAL	**265,000**	**65,000**	**65,000**	**65,000**	**70,000**	

PROGRAM - ACTIVITY:	**DEPARTMENT:**	**ACCOUNT NO.**
Community Enrichment	Public Works	030-9524-469

INTERNAL SERVICES - FACILITIES/FLEET SERVICES

PROJECT/REVENUE DESCRIPTION	TOTAL	2013/14	2014/15	2015/16	2016/17	2017/18	PAGE
EXPENDITURES:							
1 City Hall Mechanical/Structural Improvements	250,000	50,000	50,000	50,000	50,000	50,000	147
2 City Maintenance Facility Improvements	243,000	80,000	66,000	97,000			148
Total Expenditures	**493,000**	**130,000**	**116,000**	**147,000**	**50,000**	**50,000**	
REVENUES:							
City:							
Local Option Sales Tax	250,000	50,000	50,000	50,000	50,000	50,000	
Road Use Tax	60,750	20,000	16,500	24,250			
Water Utility Fund	60,750	20,000	16,500	24,250			
Sewer Utility Fund	60,750	20,000	16,500	24,250			
Fleet Services Fund	60,750	20,000	16,500	24,250			
Total Revenues	**493,000**	**130,000**	**116,000**	**147,000**	**50,000**	**50,000**	

CITY HALL MECHANICAL AND STRUCTURAL IMPROVEMENTS

PROJECT STATUS: No Change

DESCRIPTION/JUSTIFICATION

This City Hall improvements program is focused on major maintenance or replacement of items for the building, Veterans Memorial, and parking lots on the west side of the building and across the street to the east.

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

COMMENTS

Proposed Schedule:

2013/14	Major maintenance as needed	$ 50,000
2014/15	Major maintenance as needed	50,000
2015/16	Major maintenance as needed	50,000
2016/17	Major maintenance as needed	50,000
2017/18	Major maintenance as needed	50,000

LOCATION

City Hall, 515 Clark Avenue – Map 5, location L-11

FISCAL YEAR PRIORITY			1	1	1	1	1
		TOTAL	**2013/14**	**2014/15**	**2015/16**	**2016/17**	**2017/18**
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.**
Internal Services	Facilities	030-2930-419

EDISON MAINTENANCE FACILITY IMPROVEMENTS **PROJECT STATUS:** Advanced Scope Change Cost Change

City of Ames, Iowa
Capital Improvements Plan

DESCRIPTION/JUSTIFICATION
This project encompasses several improvements to the Maintenance Facility shared by Public Works and Fleet Services.

Roof Replacement
The current roof membrane was installed in 1993. Flat roofs have a 20-year life cycle, and major holes and rips are now being repaired as leaks occur. Cost estimates for flat roof replacements have decreased significantly in 2012.

Space Utilization Study
The fleet housed at the Maintenance Facility has outgrown the capacity of the building, yet the facility has not been changed to accommodate fleet storage or maintenance activities for 20 years. Welding and fabricating activities need to be separated and vented to meet safety requirements. A space utilization study would provide a conceptual design and cost opinion for a more efficient floor plan, work stations, fleet storage, and an improved working environment for employees.

2013/14	Roof Replacement Plans & Specs for Phase I, II, & III ($10,000)
	Roof Replacement Construction – Phase I ($60,000)
	Space Utilization Study ($10,000)
2014/15	Roof Replacement Plans & Specs; Update for Phase II ($1,000)
	Roof Replacement Construction – Phase II ($65,000)
2015/16	Roof Replacement Plans & Specs; Update for Phase III ($1,000)
	Roof Replacement Construction – Phase III ($96,000)

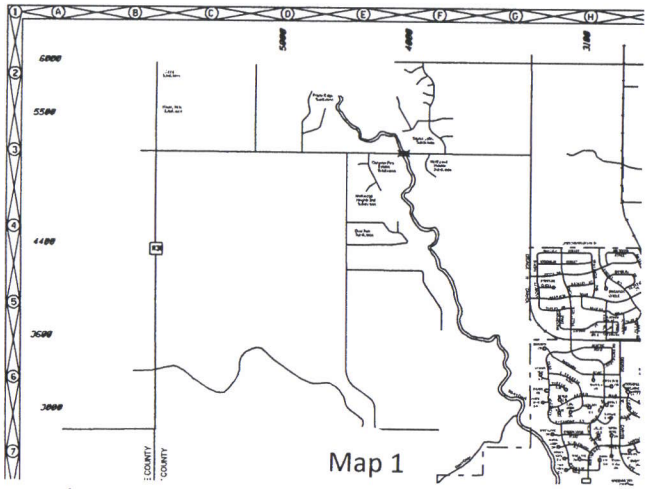
LOCATION
City Maintenance Facility, 2207 Edison Street - East Ames, north of Lincoln Way, just west of Dayton Ave – Map 6, location P-11

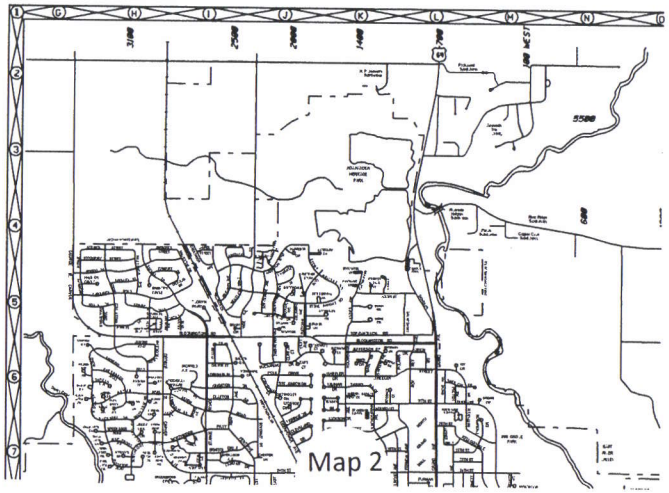
FISCAL YEAR PRIORITY			2		2	2		
		TOTAL	**2013/14**		**2014/15**	**2015/16**	**2016/17**	**2017/18**
COST:								
Design		22,000	20,000		1,000	1,000		
Construction		221,000	60,000		65,000	96,000		
	TOTAL	**243,000**	**80,000**		**66,000**	**97,000**		
FINANCING:								
Road Use Tax		60,750	20,000		16,500	24,250		
Water Utility Fund		60,750	20,000			24,250		
				16,500				
Sewer Utility Fund		60,750	20,000		16,500	24,250		
Fleet Services Fund		60,750	20,000		16,500	24,250		
	TOTAL	**243,000**	**80,000**		**66,000**	**97,000**		

PROGRAM - ACTIVITY:	**DEPARTMENT:**	**ACCOUNT NO.**
Internal Services	Fleet Services	810-2970-529

The open house for the Ames Intermodal Facility, held on June 9, 2012, was attended by approximately 150 people. Several dignitaries, including Senator Tom Harkin, Federal Transit Administrator Peter Rogoff, and Iowa State University President Steven Leath, were present to share in the festivities.

MAP INFORMATION


Map 1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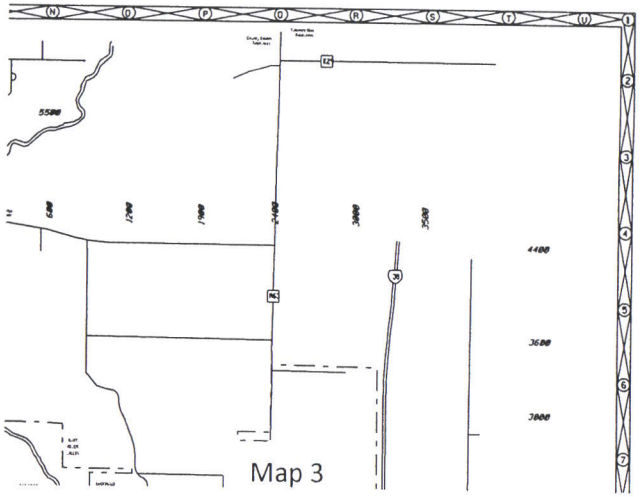
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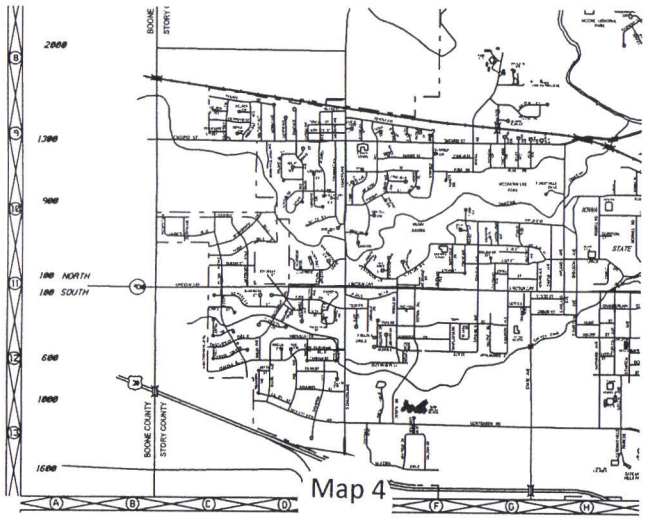
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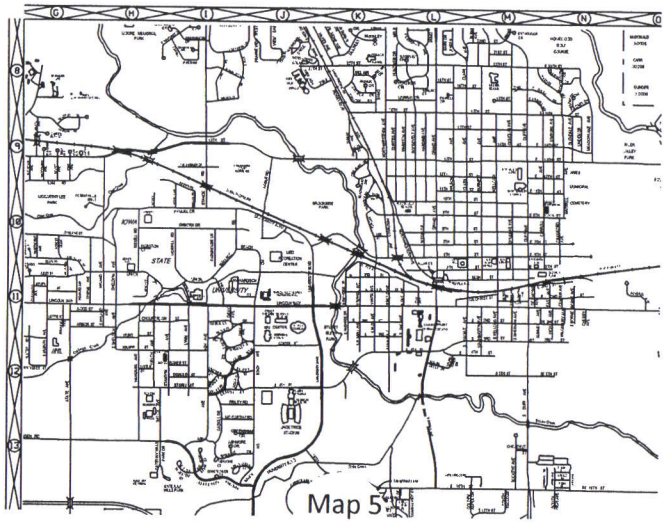
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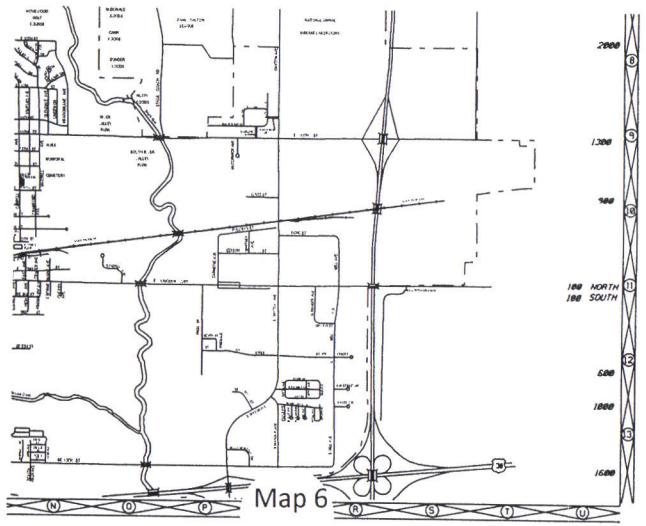
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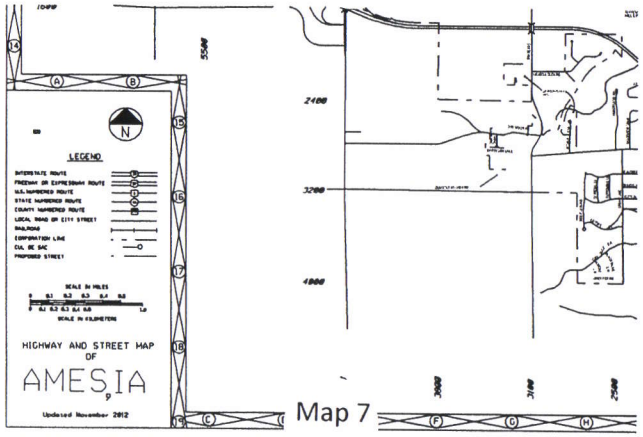

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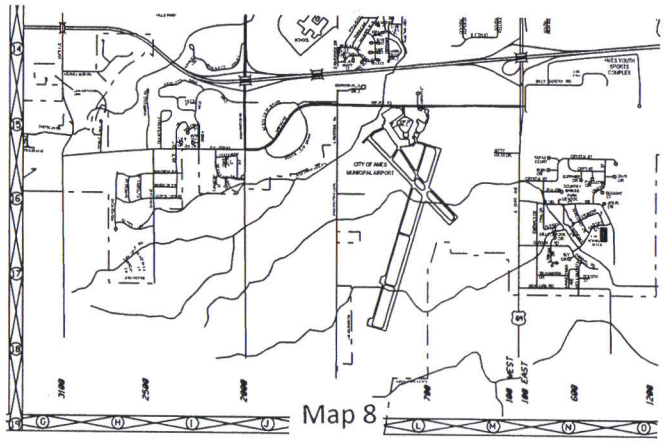
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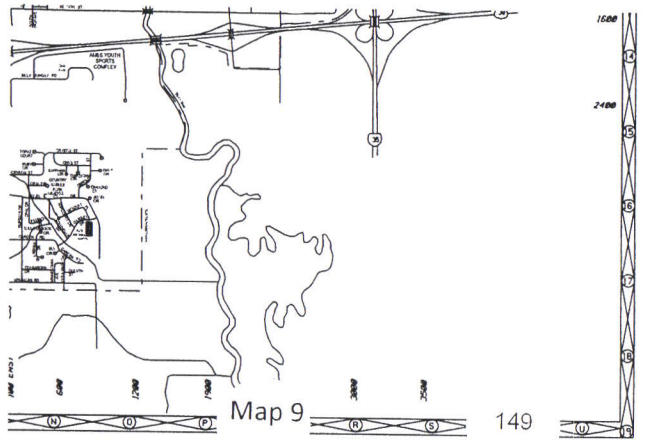
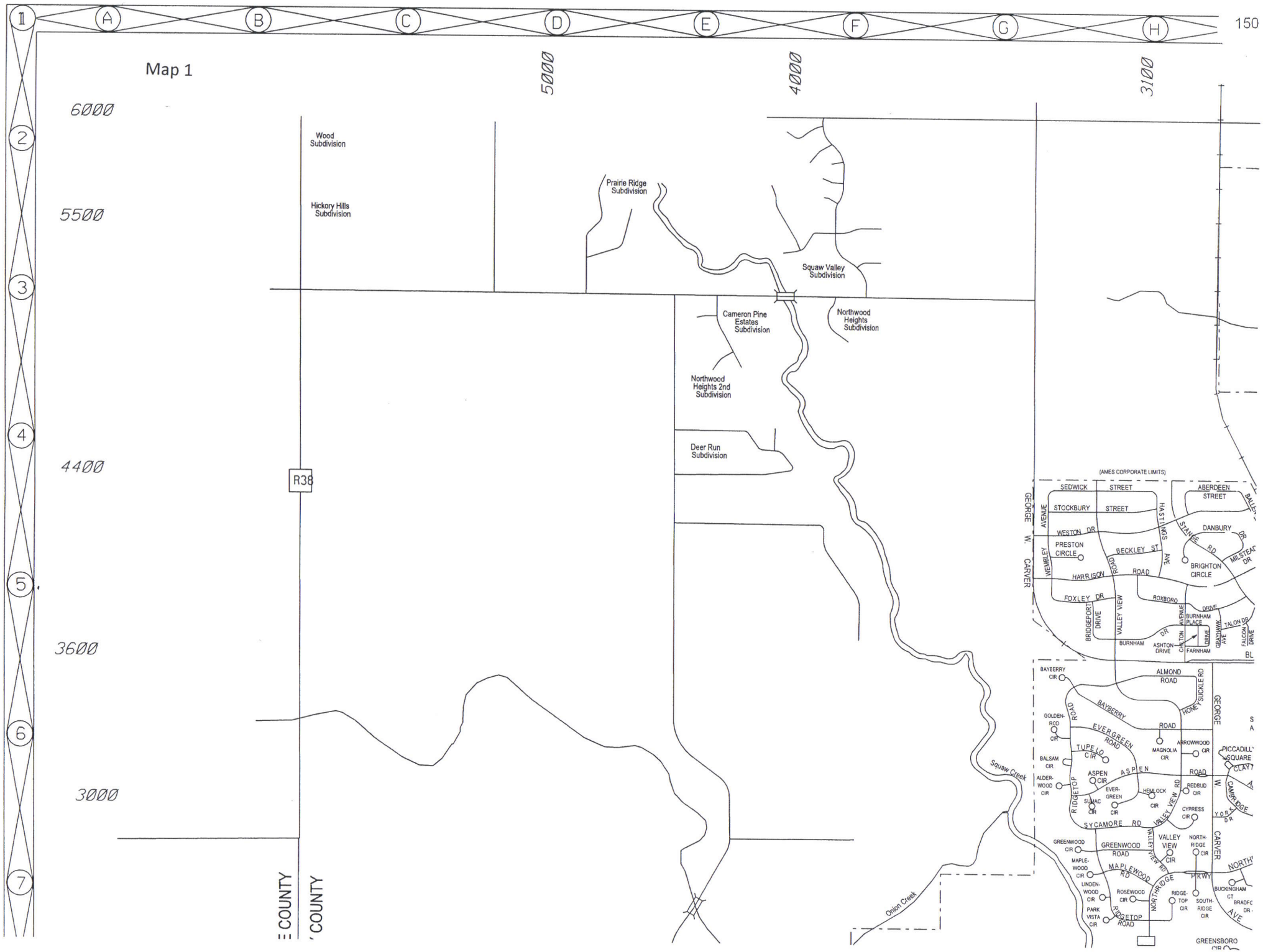
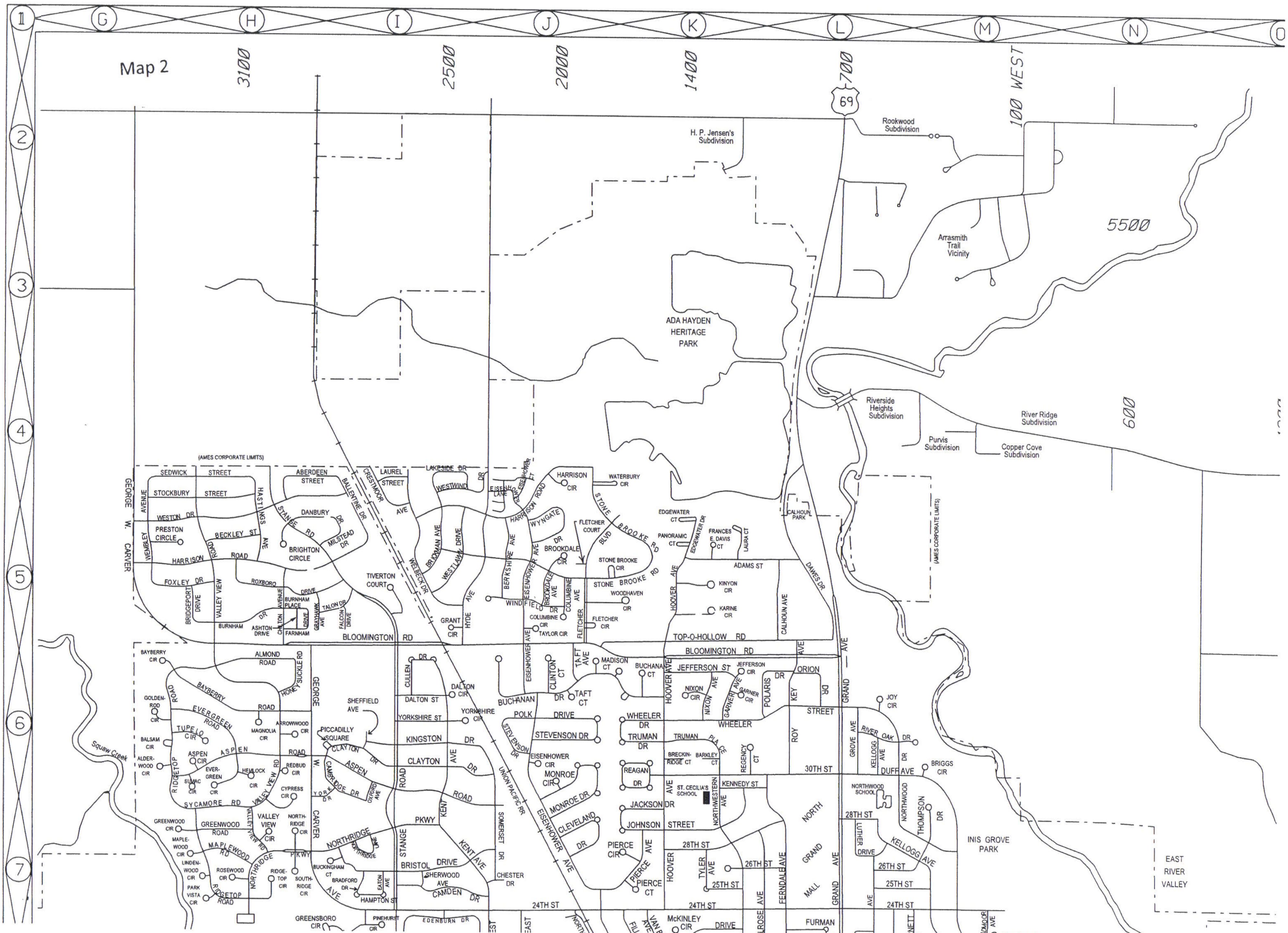

Map 9


Map 1
A
B
C
D
E
F
G
H
1
2
3
4
5
6
7
6000
5500
4400
3600
3000
5000
4000
3100
Wood Subdivision
Hickory Hills Subdivision
Prairie Ridge Subdivision
Squaw Valley Subdivision
Cameron Pine Estates Subdivision
Northwood Heights Subdivision
Northwood Heights 2nd Subdivision
Deer Run Subdivision
R38
Squaw Creek
Onion Creek
(AMES CORPORATE LIMITS)
GEORGE W. CARVER AVENUE
SEDWICK STREET
STOCKBURY STREET
ABERDEEN STREET
WESTON DR
PRESTON CIRCLE
BECKLEY ST
HASTINGS AVE
STANGE RD
DANBURY DR
MILSTEAD DR
BRIGHTON CIRCLE
WEMBLEY DR
HARRISON ROAD
FOXLEY DR
ROXBORO DRIVE
BRIDGEPORT DRIVE
VALLEY VIEW DR
BURNHAM PLACE
GRAYHAWK AVE
TALON DR
FALCON DRIVE
BURNHAM DR
ASHTON DRIVE
CHALTON DRIVE
FARNHAM
BAYBERRY CIR
ALMOND ROAD
HONEYSUCKLE RD
GEORGE
BAYBERRY ROAD
GOLDEN-ROD CIR
EVERGREEN ROAD
ARROWWOOD CIR
MAGNOLIA CIR
PICCADILLY SQUARE
TUPELO CIR
BALSAM CIR
ASPEN CIR
ASPEN ROAD
ALDER-WOOD CIR
RIDGETOP RD
EVER-GREEN CIR
HEMLOCK CIR
REDBUD CIR
SUMAC CIR
CYPRESS CIR
CAMBRIDGE
YORK DR
SYCAMORE RD
VALLEY VIEW RD
GREENWOOD CIR
GREENWOOD ROAD
VALLEY VIEW CIR
NORTH-RIDGE CIR
CARVER
MAPLE-WOOD CIR
MAPLEWOOD RD
NORTHRIDGE PKWY
LINDEN-WOOD CIR
ROSEWOOD CIR
RIDGE-TOP CIR
SOUTH-RIDGE CIR
BUCKINGHAM CT
BRADFORD DR
PARK VISTA CIR
RIDGETOP ROAD
AVE
GREENSBORO CIR
E COUNTY
COUNTY


Map 2
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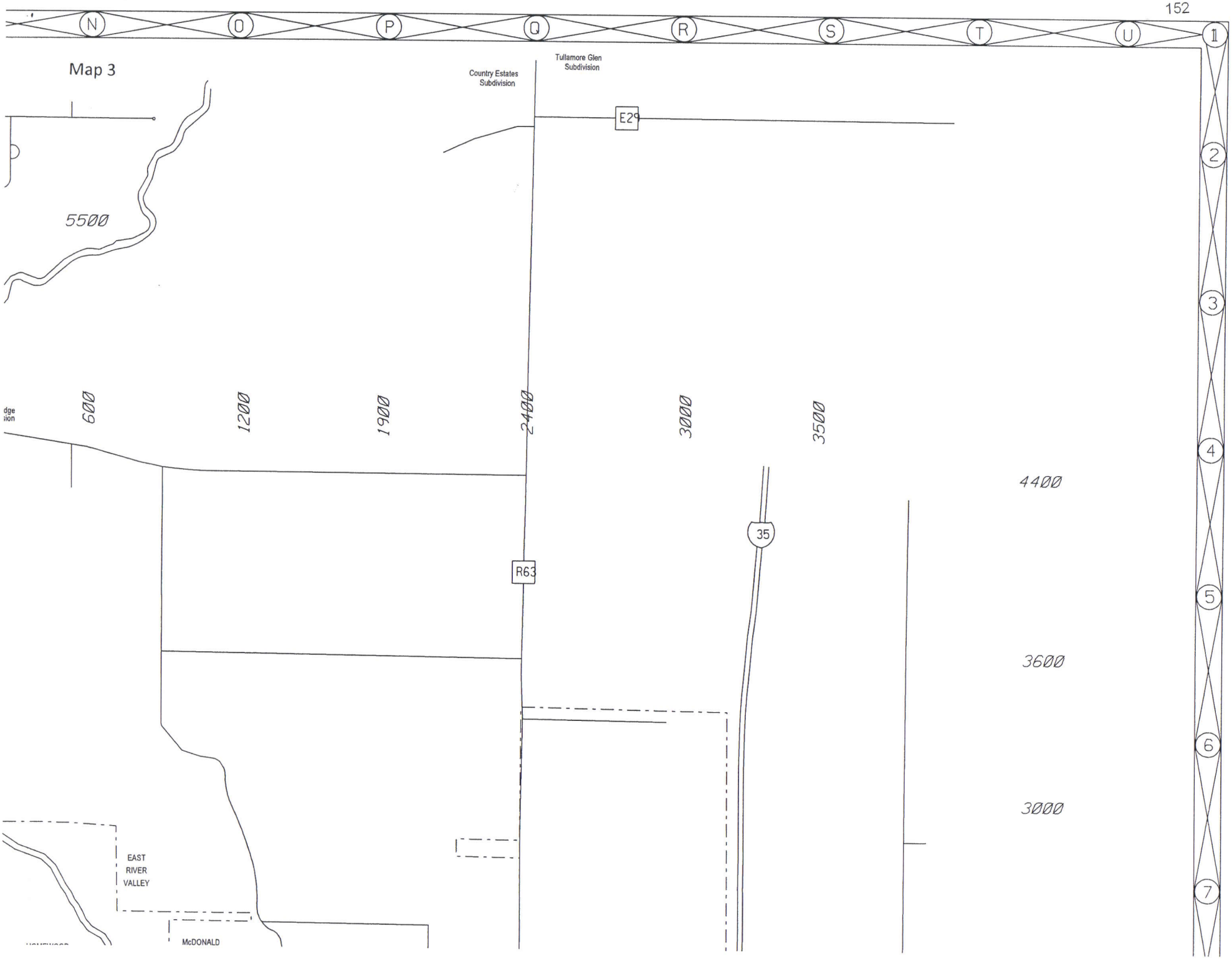
600
H. P. Jensen's Subdivision
Rookwood Subdivision
Arrasmith Trail Vicinity
ADA HAYDEN HERITAGE PARK
Riverside Heights Subdivision
River Ridge Subdivision
Purvis Subdivision
Copper Cove Subdivision
(AMES CORPORATE LIMITS)
CALHOUN PARK
Squaw Creek
SEDWICK STREET
STOCKBURY STREET
WESTON DR
PRESTON CIRCLE
BECKLEY ST
HARRISON ROAD
FOXLEY DR
ABERDEEN STREET
DANBURY DR
BRIGHTON CIRCLE
MILSTEAD DR
BALLENTINE DR
CRESTMOOR AVE
LAUREL STREET
LAKESIDE DR
WESTWIND DR
TIVERTON COURT
GRANT CIR
HYDE AVE
BRUGMAN AVE
WESTLAWN DRIVE
BERKSHIRE AVE
EISENHOWER AVE
HARRISON ROAD
WYNGATE DR
BROOKDALE CIR
HARRISON CIR
WATERBURY CIR
STONE BROOKE BLVD
STONE BROOKE RD
FLETCHER COURT
EDGEWATER CT
PANORAMIC CT
EDGEWATER DR
FRANCES E. DAVIS CT
LAURA CT
ADAMS ST
KINYON CIR
KARINE CIR
WOODHAVEN CIR
FLETCHER CIR
HOOVER AVE
CALHOUN AVE
DAWES DR
TOP-O-HOLLOW RD
BLOOMINGTON RD
GEORGE W. CARVER AVENUE
BAYBERRY CIR
ALMOND ROAD
HONEYSUCKLE RD
BAYBERRY ROAD
EVERGREEN ROAD
TUPELO CIR
ASPEN CIR
ASPEN ROAD
RIDGETOP ROAD
SYCAMORE RD
VALLEY VIEW RD
GREENWOOD ROAD
MAPLEWOOD RD
NORTHRIDGE PKWY
SHEFFIELD AVE
PICCADILLY SQUARE
CLAYTON DR
CAMBRIDGE DR
STANGE ROAD
CULLEN DR
DALTON ST
YORKSHIRE ST
KINGSTON DR
CLAYTON DR
KENT AVE
BRISTOL DRIVE
SHERWOOD AVE
CAMDEN DR
HAMPTON ST
UNION PACIFIC RR
SOMERSET DR
CHESTER DR
BUCHANAN DR
POLK DRIVE
STEVENSON DR
EISENHOWER CIR
MONROE CIR
MONROE DR
CLEVELAND DR
TAFT AVE
TAFT CT
MADISON CT
JEFFERSON ST
NIXON CIR
GARNER CIR
POLARIS DR
KEY DR
ORION
WHEELER DR
TRUMAN DR
TRUMAN PLACE
REAGAN DR
JACKSON DR
JOHNSON STREET
PIERCE CIR
PIERCE CT
ST. CECILIA'S SCHOOL
KENNEDY ST
NORTHWESTERN AVE
28TH ST
26TH ST
25TH ST
24TH ST
30TH ST
GRAND AVE
NORTH GRAND MALL
JOY CIR
RIVER OAK DR
KELLOGG AVE
DUFF AVE
BRIGGS CIR
NORTHWOOD SCHOOL
THOMPSON DR
LUTHER DRIVE
INIS GROVE PARK
EAST RIVER VALLEY
McKINLEY CIR
FURMAN
GREENSBORO CIR
EDENBURN DR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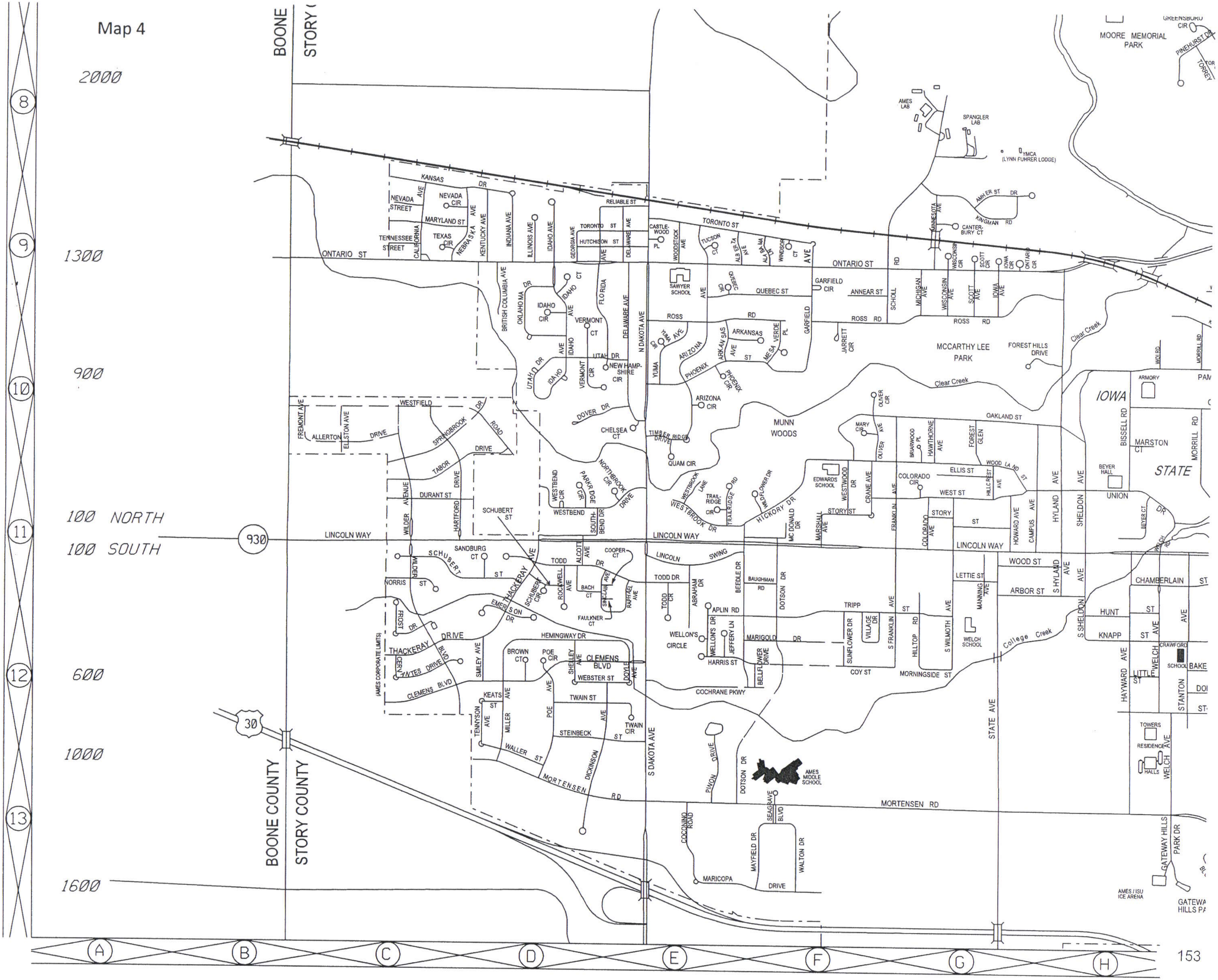
Map 3
Country Estates Subdivision
Tullamore Glen Subdivision
E29
5500
600
1200
1900
2400
3000
3500
4400
3600
3000
R63
35
EAST RIVER VALLEY
McDONALD

Map 4


BOONE
STORY
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100 NORTH
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G
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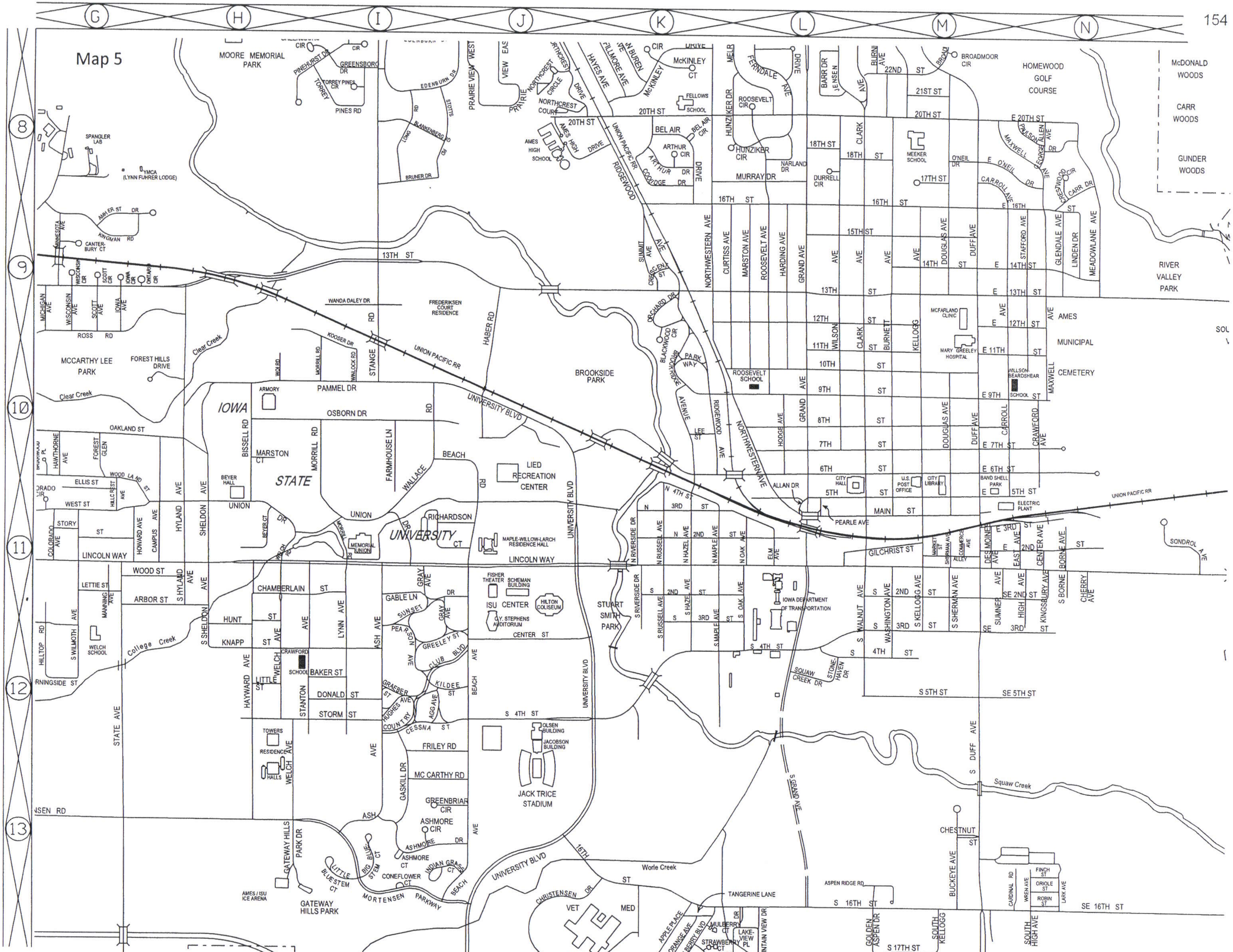
930
30
BOONE COUNTY
STORY COUNTY
ONTARIO ST
LINCOLN WAY
MORTENSEN RD
S DAKOTA AVE
N DAKOTA AVE
STATE AVE
KANSAS DR
NEVADA STREET
NEVADA CIR
MARYLAND ST
TENNESSEE STREET
CALIFORNIA AVE
TEXAS CIR
NEBRASKA AVE
KENTUCKY AVE
INDIANA AVE
ILLINOIS AVE
IDAHO AVE
GEORGIA AVE
TORONTO ST
HUTCHISON ST
DELAWARE AVE
RELIABLE ST
CASTLE-WOOD PL
WOODSTOCK AVE
TUCSON CT
ALBERTA AVE
ALABAMA
WINDSOR CT
SAWYER SCHOOL
QUEBEC CIR
QUEBEC ST
GARFIELD CIR
GARFIELD
ANNEAR ST
ROSS RD
BRITISH COLUMBIA AVE
OKLAHOMA DR
IDAHO CIR
IDAHO CT
VERMONT CT
VERMONT CIR
FLORIDA
DELAWARE AVE
UTAH DR
NEW HAMP-SHIRE CIR
YUMA
ARIZONA
ARIZONA CIR
ARKANSAS
MESA VERDE PL
PHOENIX
PHOENIX CIR
JARRETT CIR
SCHOLL RD
MICHIGAN AVE
WISCONSIN AVE
SCOTT AVE
IOWA AVE
MINNESOTA AVE
CANTER-BURY CT
KINGMAN RD
AMHERST DR
AMES LAB
SPANGLER LAB
YMCA (LYNN FUHRER LODGE)
MOORE MEMORIAL PARK
GREENSBORO CIR
PINEHURST DR
TORREY
MCCARTHY LEE PARK
FOREST HILLS DRIVE
Clear Creek
MUNN WOODS
DOVER DR
CHELSEA CT
TIMBER RIDGE DRIVE
QUAM CIR
OLIVER CIR
OLIVER AVE
MARY CIR
OAKLAND ST
BRIARWOOD PL
HAWTHORNE AVE
FOREST GLEN
EDWARDS SCHOOL
WESTWOOD DR
CRANE AVE
COLORADO CIR
ELLIS ST
WEST ST
WOODLAND ST
HILLCREST AVE
HYLAND AVE
SHELDON AVE
IOWA
STATE
ARMORY
BISSELL RD
MARSTON CT
MORRILL RD
BEYER HALL
UNION
FREMONT AVE
ALLERTON DRIVE
ELLSTON AVE
WESTFIELD
SPRINGBROOK ROAD
TABOR DRIVE
DURANT ST
HARTFORD DRIVE
WILDER AVENUE
SCHUBERT ST
WESTBEND CIR
WESTBEND
PARKRIDGE CIR
NORTHBROOK CIR
SOUTH-BEND DR
WESTBROOK LANE
WESTBROOK DR
TRAIL-RIDGE CIR
TRAILRIDGE RD
WILDFLOWER DR
HICKORY DR
MC DONALD DR
MARSHALL AVE
STORY ST
FRANKLIN AVE
COLORADO AVE
HOWARD AVE
CAMPUS AVE
SANDBURG CT
SCHUBERT ST
TODD DR
ALCOTT AVE
COOPER CT
LINCOLN SWING
NORRIS ST
THACKERAY AVE
ROCKWELL AVE
BACH CT
SINCLAIR AVE
RAPHAEL AVE
FAULKNER CT
EMERSON DR
FROST DR
THACKERAY DRIVE
CERVANTES DRIVE
CLEMENS BLVD
SMILEY AVE
HEMINGWAY DR
BROWN CT
POE CIR
SHELLEY AVE
WEBSTER ST
DOYLE AVE
KEATS ST
TENNYSON AVE
MILLER AVE
TWAIN ST
TWAIN CIR
STEINBECK ST
WALLER ST
DICKINSON AVE
TODD CIR
ABRAHAM DR
BEEDLE DR
BAUGHMAN RD
DOTSON DR
APLIN RD
WELLON'S CIRCLE
WELLON'S DR
JEFFERY LN
MARIGOLD DR
HARRIS ST
BELLFLOWER DRIVE
COCHRANE PKWY
TRIPP ST
SUNFLOWER DR
VILLAGE DR
S FRANKLIN AVE
HILLTOP RD
S WILMOTH AVE
WELCH SCHOOL
COY ST
MORNINGSIDE ST
College Creek
WOOD ST
LETTIE ST
MANNING AVE
ARBOR ST
S HYLAND AVE
S SHELDON AVE
CHAMBERLAIN ST
HUNT ST
KNAPP ST
HAYWARD AVE
WELCH AVE
LITTLE ST
CRAWFORD SCHOOL
BAKE
STANTON AVE
TOWERS RESIDENCE HALLS
PINON DRIVE
DOTSON DR
AMES MIDDLE SCHOOL
SEAGRAVE BLVD
COCONINO ROAD
MAYFIELD DR
WALTON DR
MARICOPA DRIVE
GATEWAY HILLS PARK DR
AMES / ISU ICE ARENA
GATEWAY HILLS PARK
(AMES CORPORATE LIMITS)


Map 5
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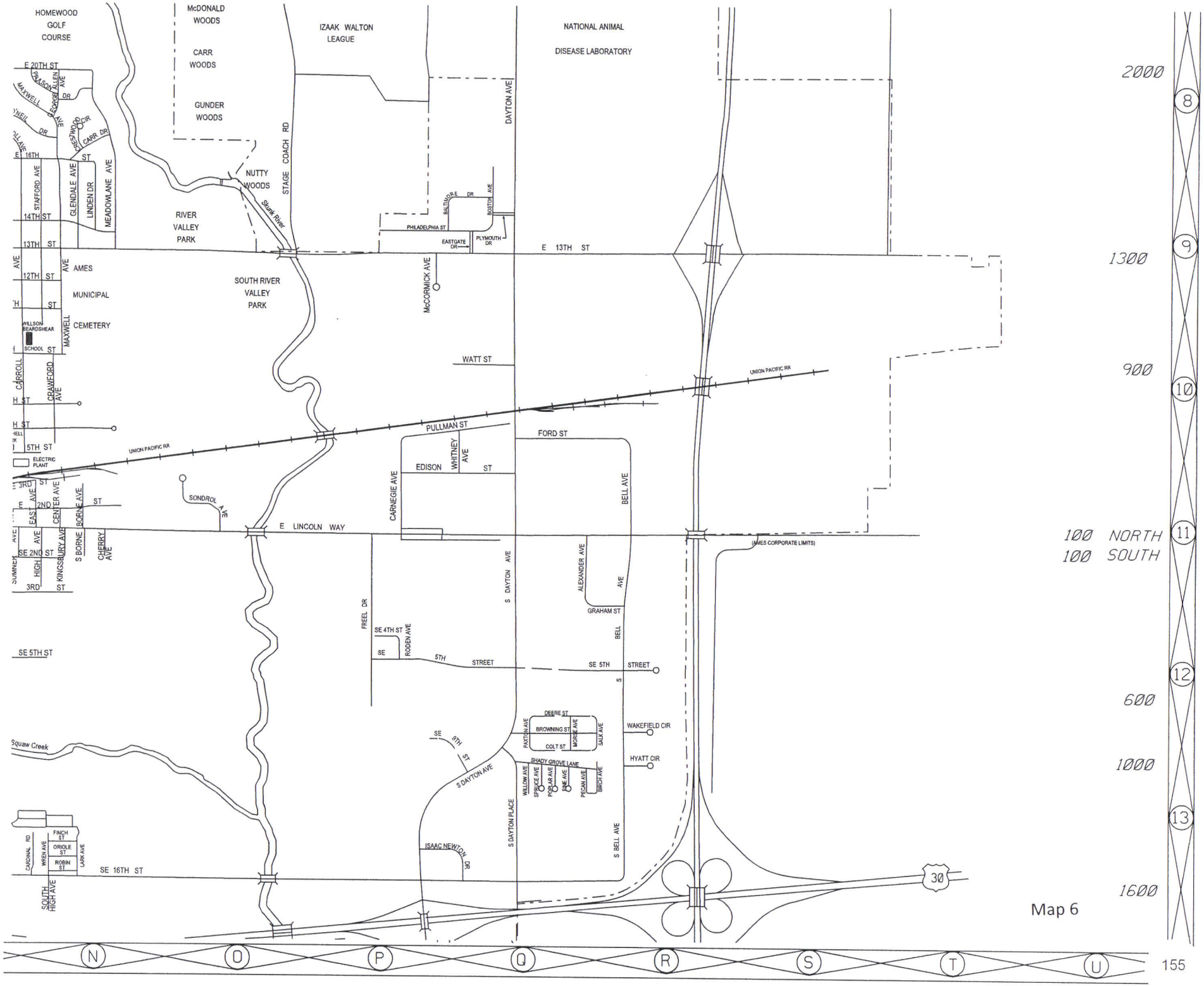
MOORE MEMORIAL PARK
PINEHURST DR
GREENSBORO DR
TORREY PINES CIR
TORREY
PINES RD
EDENBURN DR
STOTTS
BLANKENBERG RD
LONG RD
BRUNER DR
PRAIRIE VIEW WEST
VIEW EAST
PRAIRIE
NORTHCREST CIRCLE
NORTHCREST COURT
AMES HIGH SCHOOL
AMES HIGH DRIVE
20TH ST
HAYES AVE
FILLMORE AVE
VAN BUREN
McKINLEY
McKINLEY CT
FELLOWS SCHOOL
BEL AIR
BEL AIR CIR
ARTHUR CIR
ARTHUR DR
COOLIDGE DR
DRIVE
UNION PACIFIC RR
RIDGEWOOD
HUNZIKER DR
HUNZIKER CIR
ROOSEVELT CIR
FERNDALE AVE
DRIVE
MELROSE
NARLAND DR
MURRAY DR
BARR DR
JENSEN
DURRELL CIR
18TH ST
CLARK
BURNETT AVE
22ND ST
21ST ST
20TH ST
MEEKER SCHOOL
17TH ST
O'NEIL DR
E O'NEIL DR
BROADMOOR CIR
HOMEWOOD GOLF COURSE
E 20TH ST
PAULSON
MAXWELL
ALLEN AVE
FORGE DR
CARROLL AVE
CRESTWOOD CIR
CARR DR
McDONALD WOODS
CARR WOODS
GUNDER WOODS
SPANGLER LAB
YMCA (LYNN FUHRER LODGE)
AMHERST DR
KINGMAN RD
MINNESOTA AVE
CANTERBURY CT
WISCONSIN DR
SCOTT DR
IOWA DR
ONTARIO DR
MICHIGAN AVE
WISCONSIN AVE
SCOTT AVE
IOWA AVE
ROSS RD
MCCARTHY LEE PARK
FOREST HILLS DRIVE
Clear Creek
13TH ST
WANDA DALEY DR
FREDERIKSEN COURT RESIDENCE
HABER RD
KOOSER DR
STANGE RD
UNION PACIFIC RR
WOLF RD
MORRILL RD
WHITLOCK RD
BROOKSIDE PARK
SUMMIT AVE
CRESCENT ST
ORCHARD DR
BLACKWOOD CIR
BROOKRIDGE
PARK WAY
NORTHWESTERN AVE
CURTISS AVE
MARSTON AVE
ROOSEVELT AVE
HARDING AVE
GRAND AVE
16TH ST
15TH ST
14TH ST
13TH
12TH
11TH
10TH
WILSON
DOUGLAS AVE
DUFF AVE
KELLOGG
STAFFORD AVE
GLENDALE AVE
LINDEN DR
MEADOWLANE AVE
RIVER VALLEY PARK
MCFARLAND CLINIC
MARY GREELEY HOSPITAL
E 11TH
AMES MUNICIPAL CEMETERY
WILLSON-BEARDSHEAR SCHOOL
MAXWELL
ROOSEVELT SCHOOL
ARMORY
PAMMEL DR
OSBORN DR
IOWA STATE UNIVERSITY
BISSELL RD
MARSTON CT
MORRILL RD
FARMHOUSE LN
WALLACE
BEACH
UNIVERSITY BLVD
LIED RECREATION CENTER
BEYER HALL
UNION DR
RICHARDSON CT
MEMORIAL UNION
MAPLE-WILLOW-LARCH RESIDENCE HALL
OAKLAND ST
HAWTHORNE AVE
FOREST GLEN
WOOD LAND ST
ELLIS ST
HILLCREST AVE
WEST ST
STORY ST
COLORADO AVE
HOWARD AVE
CAMPUS AVE
HYLAND AVE
SHELDON AVE
LINCOLN WAY
RIDGEWOOD AVE
AVENUE
LEE ST
HODGE AVE
9TH
8TH
7TH
6TH
5TH
ST
CITY HALL
U.S. POST OFFICE
CITY LIBRARY
E 9TH
E 7TH ST
E 6TH ST
BAND SHELL PARK
CRAWFORD AVE
ALLAN DR
N 4TH ST
3RD
2ND
N RIVERSIDE DR
N RUSSELL AVE
N HAZEL AVE
N MAPLE AVE
N OAK AVE
ELM AVE
MAIN ST
PEARLE AVE
ELECTRIC PLANT
UNION PACIFIC RR
GILCHRIST ST
MARKET ST
SHERMAN AVE
COMMERCE AVE
ALLEY
DES MOINES AVE
EAST AVE
CENTER AVE
BORNE AVE
E 3RD ST
E 2ND ST
SONDROL AVE
WOOD ST
LETTIE ST
MANNING AVE
ARBOR ST
S HYLAND AVE
CHAMBERLAIN ST
HUNT ST
KNAPP ST
S SHELDON AVE
S WILMOTH AVE
WELCH SCHOOL
College Creek
HILLTOP RD
MORNINGSIDE ST
STATE AVE
WELCH AVE
CRAWFORD SCHOOL
BAKER ST
LYNN AVE
ASH AVE
GRAY AVE
GABLE LN
SUNSET DR
PEARSON AVE
GREELEY ST
CLUB BLVD
KILDEE ST
GRAEBER ST
HUGHES AVE
AGG AVE
COUNTRY
CESSNA ST
FISHER THEATER
SCHEMAN BUILDING
ISU CENTER
HILTON COLISEUM
C.Y. STEPHENS AUDITORIUM
CENTER ST
STUART SMITH PARK
S RIVERSIDE DR
S RUSSELL AVE
S HAZEL AVE
S MAPLE AVE
S OAK AVE
IOWA DEPARTMENT OF TRANSPORTATION
S 4TH ST
SQUAW CREEK DR
STONEHAVEN DR
S WALNUT AVE
WASHINGTON AVE
S KELLOGG AVE
S SHERMAN AVE
SUMNER AVE
HIGH AVE
KINGSBURY AVE
S BORNE AVE
CHERRY AVE
SE 2ND ST
SE 3RD ST
S 5TH ST
SE 5TH ST
HAYWARD AVE
LITTLE ST
STANTON AVE
DONALD ST
STORM ST
S 4TH ST
OLSEN BUILDING
JACOBSON BUILDING
JACK TRICE STADIUM
TOWERS RESIDENCE HALLS
FRILEY RD
GASKILL DR
MC CARTHY RD
GREENBRIAR CIR
ASHMORE CIR
ASHMORE DR
ASHMORE CT
UNIVERSITY BLVD
S GRAND AVE
Squaw Creek
S DUFF AVE
CHESTNUT ST
ENSEN RD
GATEWAY HILLS PARK DR
AMES / ISU ICE ARENA
GATEWAY HILLS PARK
LITTLE BLUESTEM CT
BIG BLUESTEM CT
CONEFLOWER CT
INDIAN GRASS CT
MORTENSEN PARKWAY
BEACH AVE
16TH ST
Worle Creek
CHRISTENSEN DR
VET MED
SCHOOL
APPLE PLACE
ORANGE AVE
MULBERRY BLVD
MULBERRY CT
STRAWBERRY CT
DATE
LAKEVIEW PL
FOUNTAIN VIEW DR
TANGERINE LANE
ASPEN RIDGE RD
GOLDEN ASPEN DR
S 16TH ST
S 17TH ST
SOUTH KELLOGG
BUCKEYE AVE
CARDINAL RD
WREN AVE
FINCH ST
ORIOLE ST
ROBIN ST
LARK AVE
SOUTH HIGH AVE
SE 16TH ST


HOMEWOOD GOLF COURSE
McDONALD WOODS
CARR WOODS
GUNDER WOODS
IZAAK WALTON LEAGUE
NATIONAL ANIMAL DISEASE LABORATORY
NUTTY WOODS
RIVER VALLEY PARK
SOUTH RIVER VALLEY PARK
AMES MUNICIPAL CEMETERY
WILLSON-BEARDSHEAR SCHOOL
ELECTRIC PLANT
Skunk River
Squaw Creek
STAGE COACH RD
DAYTON AVE
E 20TH ST
E 16TH ST
14TH ST
13TH ST
12TH ST
5TH ST
3RD ST
2ND ST
SE 2ND ST
SE 4TH ST
SE 5TH ST
SE 16TH ST
E 13TH ST
E LINCOLN WAY
WATT ST
PULLMAN ST
FORD ST
EDISON ST
GRAHAM ST
PHILADELPHIA ST
EASTGATE DR
PLYMOUTH DR
BALTIMORE DR
BOSTON AVE
McCORMICK AVE
UNION PACIFIC RR
(AMES CORPORATE LIMITS)
MAXWELL AVE
STAFFORD AVE
GLENDALE AVE
LINDEN DR
MEADOWLANE AVE
CARROLL AVE
CRAWFORD AVE
CENTER AVE
BORNE AVE
CHERRY AVE
KINGSBURY AVE
HIGH AVE
SUMNER AVE
SONDROL AVE
WHITNEY AVE
CARNEGIE AVE
BELL AVE
ALEXANDER AVE
FREEL DR
ROBEN AVE
S DAYTON AVE
S DAYTON PLACE
S BELL AVE
ISAAC NEWTON DR
DEERE ST
BROWNING ST
COLT ST
MORSE AVE
SAUK AVE
PAXTON AVE
WAKEFIELD CIR
HYATT CIR
SHADY GROVE LANE
WILLOW AVE
SPRUCE AVE
POPLAR AVE
ELM AVE
PECAN AVE
BIRCH AVE
CARDINAL RD
FINCH ST
WREN AVE
ORIOLE ST
ROBIN ST
LARK AVE
SOUTH HIGH AVE
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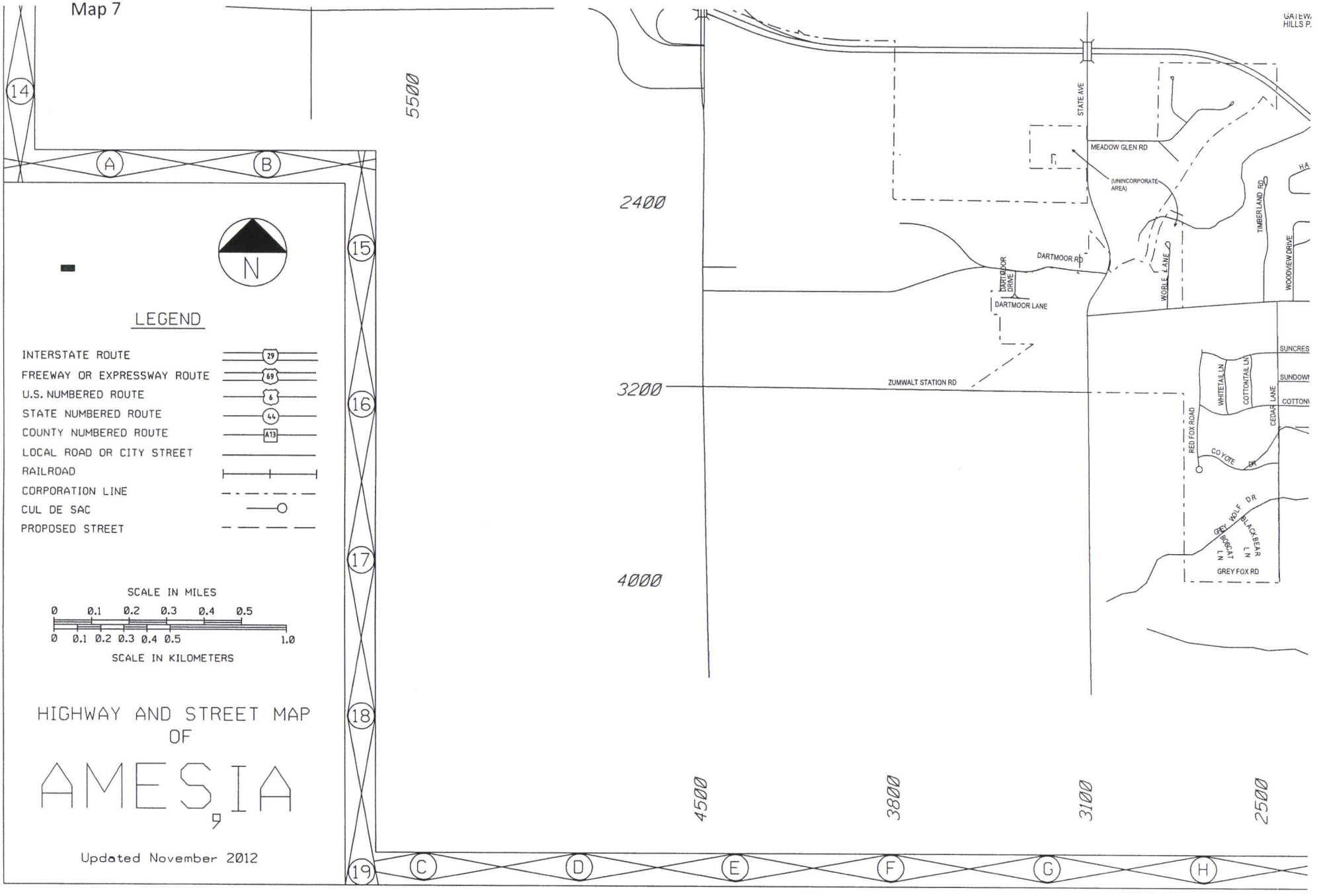
Map 6

Map 7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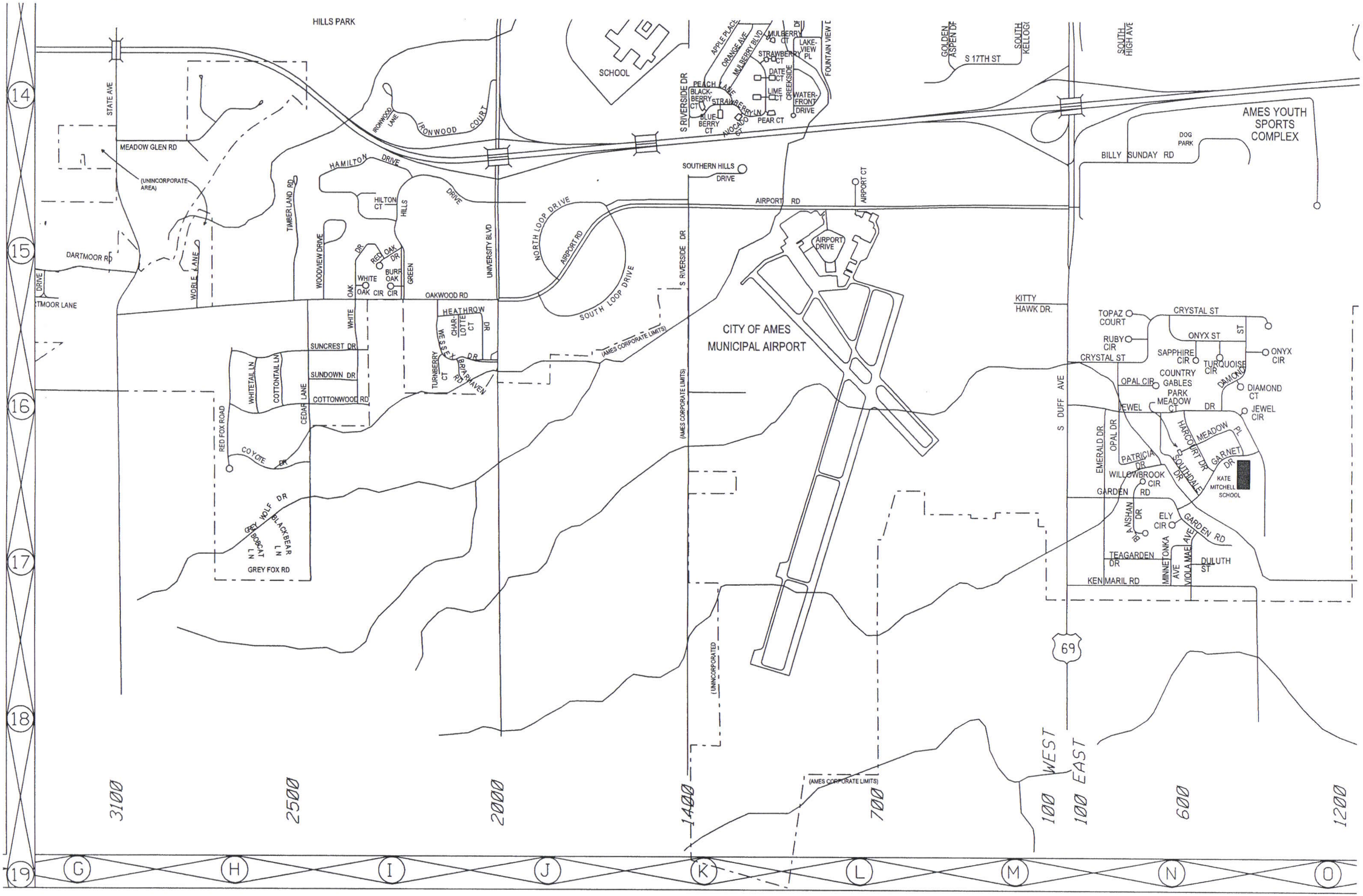
LEGEND
INTERSTATE ROUTE
FREEWAY OR EXPRESSWAY ROUTE
U.S. NUMBERED ROUTE
STATE NUMBERED ROUTE
COUNTY NUMBERED ROUTE
LOCAL ROAD OR CITY STREET
RAILROAD
CORPORATION LINE
CUL DE SAC
PROPOSED STREET
29
69
6
44
A13
SCALE IN MILES
0 0.1 0.2 0.3 0.4 0.5
0 0.1 0.2 0.3 0.4 0.5 1.0
SCALE IN KILOMETERS
HIGHWAY AND STREET MAP
OF
AMES, IA
Updated November 2012
STATE AVE
MEADOW GLEN RD
(UNINCORPORATE AREA)
TIMBERLAND RD
WOODVIEW DRIVE
DARTMOOR RD
DARTMOOR DRIVE
DARTMOOR LANE
WORLE LANE
ZUMWALT STATION RD
WHITETAIL LN
COTTONTAIL LN
CEDAR LANE
RED FOX ROAD
COYOTE DR
GREY WOLF DR
BOBCAT LN
BLACKBEAR LN
GREY FOX RD

Map 8


HILLS PARK
SCHOOL
STATE AVE
MEADOW GLEN RD
(UNINCORPORATE AREA)
DARTMOOR RD
WORLE LANE
TIMBERLAND RD
WOODVIEW DRIVE
HAMILTON DRIVE
HILTON CT
HILLS
RED OAK DR
BURR OAK CIR
WHITE OAK CIR
GREEN
OAKWOOD RD
UNIVERSITY BLVD
IRONWOOD LANE
IRONWOOD COURT
NORTH LOOP DRIVE
AIRPORT RD
SOUTH LOOP DRIVE
HEATHROW
CHARLOTTE CT
WESSEX DR
TURNBERRY CT
BRIARHAVEN RD
SUNCREST DR
SUNDOWN DR
COTTONWOOD RD
WHITETAIL LN
COTTONTAIL LN
CEDAR LANE
RED FOX ROAD
COYOTE DR
GREY WOLF DR
BLACKBEAR LN
BOBCAT LN
GREY FOX RD
S RIVERSIDE DR
APPLE PLACE
ORANGE AVE
MULBERRY BLVD
MULBERRY CT
STRAWBERRY CT
LAKEVIEW PL
DATE CT
LIME CT
CREEKSIDE
WATERFRONT DRIVE
PEACH LANE
BLACKBERRY CT
BLUEBERRY CT
STRAWBERRY LN
AVOCADO ST
PEAR CT
FOUNTAIN VIEW
SOUTHERN HILLS DRIVE
AIRPORT CT
AIRPORT RD
AIRPORT DRIVE
(AMES CORPORATE LIMITS)
CITY OF AMES MUNICIPAL AIRPORT
(UNINCORPORATED)
GOLDEN ASPEN DR
S 17TH ST
SOUTH KELLOGG
SOUTH HIGH AVE
AMES YOUTH SPORTS COMPLEX
DOG PARK
BILLY SUNDAY RD
KITTY HAWK DR.
TOPAZ COURT
CRYSTAL ST
RUBY CIR
ONYX ST
ONYX CIR
SAPPHIRE CIR
TURQUOISE CIR
DIAMOND CT
COUNTRY GABLES PARK
OPAL CIR
MEADOW CT
JEWEL DR
JEWEL CIR
S DUFF AVE
EMERALD DR
OPAL DR
PATRICIA DR
HARCOURT DR
MEADOW PL
GARNET DR
SOUTHDALE DR
KATE MITCHELL SCHOOL
WILLOWBROOK CIR
GARDEN RD
BRANSHAN DR
ELY CIR
GARDEN RD
TEAGARDEN DR
MINNETONKA AVE
VIOLA MAE AVE
DULUTH ST
KEN MARIL RD
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WEST
EAST
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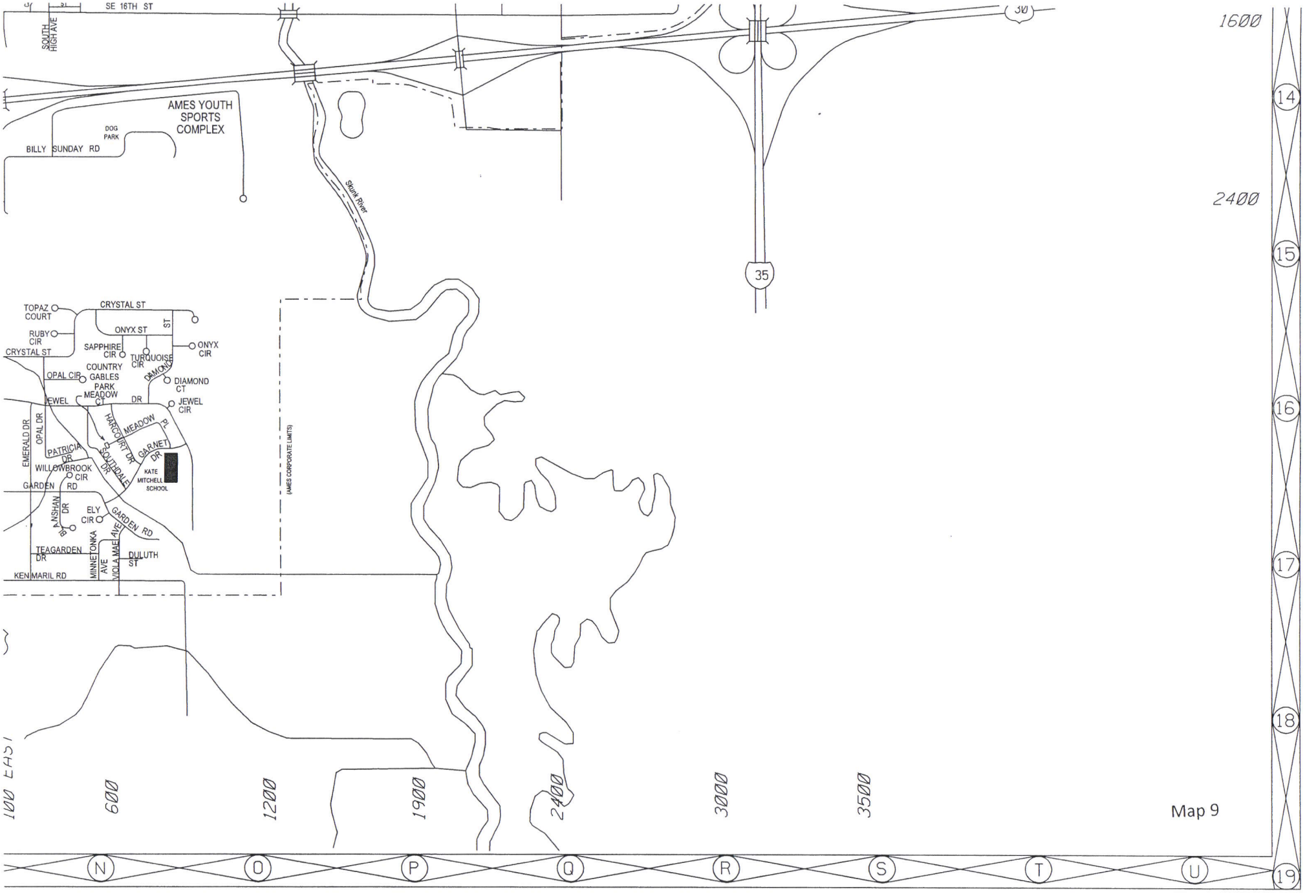
SE 16TH ST
SOUTH HIGH AVE
AMES YOUTH SPORTS COMPLEX
DOG PARK
BILLY SUNDAY RD
SKUNK River
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18
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TOPAZ COURT
CRYSTAL ST
RUBY CIR
ONYX ST
SAPPHIRE CIR
TURQUOISE CIR
ONYX CIR
COUNTRY GABLES
OPAL CIR
DIAMOND CT
PARK MEADOW CT
DR
JEWEL CIR
HARCOURT DR
MEADOW PL
EMERALD DR
OPAL DR
PATRICIA DR
SOUTHDALE DR
GARNET DR
WILLOWBROOK CIR
KATE MITCHELL SCHOOL
GARDEN RD
BANSHAN DR
ELY CIR
TEAGARDEN DR
MINNETONKA AVE
VIOLA MAE AVE
DULUTH ST
KENMARIL RD
(AMES CORPORATE LIMITS)
100 EAST
600
1200
1900
2400
3000
3500
N
O
P
Q
R
S
T
U

Map 9