CITY OF AMES, IOWA

Capital Improvements Plan
2012 - 2017

City Manager's Office

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Mayor and Ames City Council Members:

While the national economy remains stagnant because of a lack of direction to solve this problem, the Ames City Council members have established a clear vision to improve our local environment with their commitment to promote economic development in our community, with the objective of creating new high-paying jobs. In order to accomplish this goal, a significant commitment must be made to maintain, upgrade, and construct new infrastructure related to our street, electric, sanitary sewer, water, and storm sewer systems. The improvements to these systems will position our city to accommodate our current residents who have chosen Ames as their home as well as future residents who we hope to attract to our community with the new jobs that the City Council will help create.

Enclosed is the Recommended Capital Improvements Plan (CIP) for fiscal years 2012/13 through 2016/17 which reflects expenditures totaling $249,124,023. This five-year plan was designed with an eye towards the development of the infrastructure that needs to be in place to facilitate the City Council's goal to promote economic development.

PUBLIC SAFETY		UTILITIES		TRANSPORTATION		COMMUNITY ENRICHMENT	
Fire	$ 484,070	Resource Recovery	$ 2,806,700	Streets Engineering	$ 53,221,750	Parks and Recreation	$ 4,444,500
Traffic	6,597,000	Water Treatment	67,027,000	Streets Maintenance	4,540,000	Library Services	20,086,494
		Water Distribution	4,857,000	Transit	11,265,409	City Hall Improvements	250,000
		Storm Sewers	7,600,000	Airport	915,000	Neighborhood Improvements	250,000
		Sanitary Sewers	2,625,000			Downtown Façade Improvements	250,000
		WPC Treatment	10,180,000			City Maintenance Facility Improvements	304,100
		Electric	51,260,000			Municipal Cemetery Improvements	160,000
TOTAL	**$ 7,081,070**		**$146,355,700**		**$ 69,942,159**		**$25,745,094**

PUBLIC SAFETY - $ 7,081,070

Over the next five years, almost $6,000,000 will be spent on various roadway and bike path segments to improve safety for our motorists, pedestrians, and bicyclists (**West Lincoln Way Intersection Improvements** – page 14, **Traffic Signal Program** – page 15, **US 69 Intersection Improvements** – page 19, **Shared Path System Expansion** – page 18). Included in this total is a new project, **Multi-modal Roadway Improvements** (page 16). In accordance with our Long-Range Transportation Plan, these improvements will retrofit various existing streets with new markings that will provide for the sharing of the roadways between motorists and bicyclists.

UTILITIES - $146,355,700

Resource Recovery - $2,806,700

Our commitment to our nationally known waste-to-energy system is maintained with the **Resource Recovery System Improvements** (page 24) where numerous preventive maintenance repairs will be made to the rotary disc screens, conveyors, and mills. In addition, our exploration into new technologies to convert our waste product to energy in a more economically viable way for our Electric Utility and the Resource Recovery Plant will continue in 2012/13.

The thirty-six old primary shredder at the plant will be replaced in two phases. It is estimated that this project will yield a 6.5 year payback from this investment. Furthermore, even if the City opts to convert our waste to gas to generate electricity rather than burning RDF in the power plant boilers, the Resource Recovery Plant will still need the primary shredder for this new process (**Resource Recovery Primary Shredder Replacement** – page 25).

Water - $71,884,000

The **New Water Treatment Plant** (page 27) represents the single largest project in the CIP over the next five years for this 15 million gallon per day (mgd) facility. With the successful acquisition of the land for the preferred site along 13th Street in 2011/12, final design will begin in this fiscal year with construction anticipated for completion in 2016/17. This $64,000,000 project is planned to accommodate our customers' needs for the next twenty years with capacity for 1.5 mgd for future industrial growth.

The CIP also satisfies the projected need to expand our water supply by adding four more wells in a new field west of I-35 (**Water Supply Expansion** – page 28) as well as by installing larger distribution lines to improve firefighting capacity in our older neighborhoods and to provide larger supply quantities in accordance with proposed land uses in the LUPP (**Water System Improvements** – page 32).

Storm Sewer - $7,600,000

Following the flood of August 2010, the City Council directed staff to analyze eleven potential projects that would address localized flooding related to storm water runoff. With the completion of engineering solutions for each of these locations, applications were made to FEMA for grant funds (75% FEMA, 10% State, 15% City) to help mitigate future flooding in these areas. At the time of this writing, we have been informed that five of the grant applications have been rejected while six are still being considered.

In keeping with the City Council's goal to strengthen our neighborhoods, the CIP assumes that the City Council would like to proceed with the flood projects in all of these areas, even if the City must pay the total cost. Therefore, a new initiative, **Flood Response and Mitigation Projects** (page 36), totaling $5,075,000 has been added to the CIP. Rather than generating the required local funding for these new projects by increasing the storm sewer fee for customers who already will be impacted by the proposed switch to a new fee structure based on impervious area, it is being recommended that the local funding for these projects come from G.O. Bond revenues totaling $2,600,000, paid for through property taxes.

In addition to this new initiative, $2,850,000 from the existing storm sewer fee receipts is being directed to improve our storm water system (**Low Point Drainage Improvements** – page 35, **Storm Water Facility Rehabilitation Program** – page 37, **Storm Sewer Improvement Program** – page 39, and **Storm Sewer Outlet Erosion Control** – page 38).

Sanitary Sewer - $12,805,000

A major emphasis in the sanitary sewer system continues to be an evaluation to detect defects that are causing infiltration of clean water into our system (**Sanitary Sewer System Evaluation** – page 41). If we hope to accommodate new sanitary sewer flows as the community grows, we need to make the improvements identified in this evaluation.

A companion project involves a comprehensive evaluation of our Water Pollution Control Plant (**Long-Range WPC Facility Plan** – page 46). The results of this study will assist in determining future capital investment priorities. This plan update is mandated in our new NPDES permit with the Iowa Department of Natural Resources. The results of the two studies will be used to prioritize wet-weather flow mitigation projects either in the collection system or at the WPC Plant.

It is hard to believe that the current WPC Plant is over 22 years old. Consequently, a substantial amount of reinvestment is required to keep this critical facility operating properly. In response to these needs, $8,462,000 has been included in the CIP (**WPC Plant Facility Improvements** - page 47, **Digester Improvements** - page 48, **WPC Electrical System Maintenance** - page 49), **WPC Plant Residuals Handling Improvements** - page 50, **Flow Equalization Expansion** – page 51).

This CIP reflects the construction phase of the new disinfection system (**WPC Plant Disinfection** – page 45) in an effort to make that portion of the South Skunk River where the WPC Plant discharges suitable for "primary contact recreation" such as swimming and waterskiing.

The sanitary sewer distribution system receives ongoing attention as well, with $1,500,000 for reconstruction of deficient sewer lines and manholes throughout the city (**Sanitary Sewer Rehabilitation Program** – page 42).

Electric - $51,260,000

It should be noted that because of the uncertainty of the EPA's clean air regulations and implementation dates, we had to make certain assumptions regarding selection of projects to be included in this CIP. However, as the regulations are clarified in the near future, more costly projects might have to be required in future CIPs. Therefore, during the next year, we will work to develop a new list of projects that will be needed to ensure our adherence to these new regulations.

The most important project related to our Electric Utility at this time is the construction of our new transmission line to interconnect to the southeast (**Mid-American Energy Co. Interconnection** – page 54). The completion of this $28,000,000 project will provide improved reliability of our electric service, access to lower cost energy, and availability to long-term capacity alternatives. In order to further ensure service reliability over the life of this plan, we intend to invest $8,270,000 to upgrade our internal distribution system.

In order to maintain a diversified energy portfolio, another focus of the CIP is on projects that help maintain our existing generating facilities which include Unit #8, Unit #7, Gas Turbine #1 and Gas Turbine #2. Approximately $33,990,000 has been designated in the CIP over the next five years to accomplish this priority.

In order to avoid more costly projects to expand our electric production capacity, we continue to promote conservation techniques with customers through the $5,000,000 that has been provided for **Demand Side Management Energy Conservation Programs** (page 60).

TRANSPORTATION - $69,942,159

Streets - $57,761,750

Each year our Resident Satisfaction Survey indicates a strong preference from our citizens to spend more on our street system. In response to this survey, approximately $57,000,000 has been included in the CIP to perform major maintenance on and reconstruction of our existing roadways and bridges as well as construction of new streets.

With the increase in the city population verified by the recent census, we will be recipients of a substantial increase in Road Use Tax receipts from the State. You will note that this additional funding has been reflected in the **Asphalt/Seal Coat Street Rehabilitation Program** (page 99) where $3,250,000 has been added to bolster the maintenance of this largest category of our streets.

CyRide - $11,265,409

The **Vehicle Replacement Program** (page 111) totaling $8,995,809 will allow us to purchase 16 new buses, helping to keep the average age of our fleet at around ten years. As our ridership continues to grow with the expected increase in the City's population, further expansion of the CyRide facilities is being planned so that the bus fleet can be stored indoors **(Building Expansion & Modernization** – page 115).

Airport - $915,000

During the current year some have questioned the amount of funding that has been earmarked for the replacement of the terminal building scheduled in 2012/13. Therefore, the new terminal building has been delayed one year to allow appropriate time to conduct input meetings for the general public and users to determine the preferred size and scope of this important gateway to our community (**Airport Improvements** - page 117).

COMMUNITY ENRICHMENT - $25,745,094

Parks and Recreation - $4,444,500

In order to retain and attract citizens to our community, we must provide more than just adequate utility services. In fact, quality of life features are as effective to achieving the City Council's ultimate vision for our community. Therefore, investments in our parks and recreation facilities are extremely important. Over the next five years we expect to expend $250,000 at our indoor pool (**Municipal Pool Maintenance** – page 123), $205,500 at our ice arena (**Ames/ISU Ice Arena** – page 130), $480,000 for renovations to our tennis courts (**Tennis Court Improvements** – page 127), $165,000 for playground equipment replacements (**Playground/Park Equipment Improvements** – page 129), and $2,244,000 for various renovation projects throughout the park system.

It should be emphasized that the Municipal Pool has exceeded its life expectancy. Our strategy over the past few years has been to make the necessary repairs to allow this community asset to continue to function on a temporary basis. As partners in this facility with the Ames Community School District, we must work together over the next year to develop a viable strategy to replace this indoor pool. This task is very timely since the joint use agreement between the School District and the City for the Municipal Pool expires shortly and the School District is currently developing their long-range facility plan.

A new project has been added to the CIP, the **Sand Volleyball Complex** – page 131), as a result of feedback received from our

customers who have noted that the lack of quality facilities in a single location has influenced them to join leagues in other cities. The $100,000 expenditure will create four lighted sand volleyball courts at Emma McCarthy Lee Park.

Library - $20,086,494

An exciting new project has been added to the CIP with the passage of the recent $18,000,000 bond referendum, the **Ames Public Library Renovation** (page 135). Based on the schedule of work activities for this project, it is projected that the renovation will occur over the next three years.

To improve the management of our material inventory, improve the speed of material turnaround after check-in, and provide for an automated sorting system, two new systems will be installed at the Library: the **Radio Frequency Identification Inventory Management System** (page 136) and the **Automated Materials Handling System** (page 138). The $538,400 (including $125,000 in the current year) commitment to these new systems will prove beneficial to our customers as well as the Library staff.

Our bookmobile serves as a library branch providing an outreach service to various sections of our community. It is our intent to replace this vehicle when it reaches the age of thirteen years, sometime in 2013/14 (**Bookmobile Replacement** – page 137).

Other Community Enrichment Projects - $1,214,100

In a continuing effort to bolster the City Council's goal to strengthen our neighborhoods, the CIP includes the **Neighborhood Improvement Program** (page 140), and the **Downtown Façade Program** (page 142). In addition, the drive lanes at our municipal cemetery will be upgraded with the **Municipal Cemetery Improvements** (page 144), and our City buildings will be maintained with the **City Hall Mechanical and Structural Improvements** (page 146) and the **City Maintenance Facility Improvements** (page 147) projects.

Once again, we need to thank our department heads and staff members for their uncanny ability to anticipate the projects that will be needed to make Ames a great place to live. In addition, Duane Pitcher, Carol Collings, Nancy Masteller, Sharon Hjortshoj, Sheila Lundt, and Bob Kindred deserve recognition for their leadership in preparing this important plan for our community.

Respectfully submitted,

Steve

Steven L. Schainker
City Manager

CITY OF AMES, IOWA

FIVE-YEAR CAPITAL IMPROVEMENT PLAN
2012-2017

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HOW TO USE THE C.I.P. DOCUMENT

The 2012-2017 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

	2010/11 ACTUAL	2011/12 BUDGETED	2012/13 PROJECTED	2013/14 PROJECTED	2014/15 PROJECTED	2015/16 PROJECTED	2016/17 PROJECTED
1. Total Actual Valuation	3,431,600,584	3,453,383,950	3,485,540,534	3,590,106,750	3,697,809,953	3,808,744,252	3,923,006,580
2. State Mandated Debt Limit	171,580,029	172,669,198	174,277,027	179,505,338	184,890,498	190,437,213	196,150,329
3. City Reserve (25% of Limit)	42,895,007	43,167,300	43,569,257	44,876,335	46,222,625	47,609,303	49,037,582
Un-Reserved Debt Capacity	128,685,022	129,501,898	130,707,770	134,629,003	138,667,873	142,827,910	147,112,747
4. Outstanding Debt	46,185,000	45,240,000	38,160,000	31,895,000	26,740,000	21,940,000	16,980,000
5. Proposed Issues	-	-	11,164,500	21,240,000	7,500,250	6,500,000	6,500,000
6. Balance of Proposed Issues	-	-	-	10,171,511	28,249,414	31,948,770	34,070,515
Total Debt Subject to Limit	46,185,000	45,240,000	49,324,500	63,306,511	62,489,664	60,388,770	57,550,515
7. Available Un-Reserved Debt Capacity ($)	82,500,022	84,261,898	81,383,270	71,322,492	76,178,209	82,439,140	89,562,232
8. Available Un-Reserved Debt Capacity (%)	64.11%	65.07%	62.26%	52.98%	54.94%	57.72%	60.88%
9. Total Debt Capacity ($)	125,395,029	127,429,198	124,952,527	116,198,827	122,400,834	130,048,443	138,599,814
10. Total Debt Capacity (%)	73.08%	73.80%	71.70%	64.73%	66.20%	68.29%	70.66%

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.*
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SUMMARY OF MAJOR BOND ISSUES

GENERAL OBLIGATION BONDS	PROJECT TOTAL	CATEGORY TOTAL	% PROJECT G.O. FUNDED	OTHER SOURCES OF FUNDING
2012/13:				
STORM SEWER		820,000		
Flood Response & Mitigation Projects	820,000		26%	Storm Sewer Funds/FEMA
STREETS ENGINEERING		5,987,500		
Collector St Pavement Improvements (Meadowlane Ave)	1,250,000		96%	Electric Utility Fund
Asphalt Street Reconstruction Program (various locations)	928,000		95%	Electric Utility Fund
CyRide Rte Pavement Improvements (Todd Dr/Lincoln Way)	1,420,000		97%	Electric Utility Fund
Arterial Street Pavement Improvements (State Avenue)	219,000		15%	MPO/STP Funds/Story County
Concrete Pavement Improvements (various locations)	600,000		92%	Road Use Tax
Downtown Street Pavement Improvements (Clark/Gilchrist)	950,000		95%	Electric Utility Fund
Asphalt/Seal Coat Street Rehabilitation Program	620,500		49%	Road Use Tax
Arterial Street Pavement Improvements (Dayton Avenue)				
LIBRARY		4,000,000		
Ames Public Library Renovation	4,000,000		86%	Bequests/Contributions
2012/13 SUBTOTAL		**10,807,500**		
WATER & SEWER (ABATED G.O. BONDS)		357,000	100%	Abated by Special Assessments
Woodview Drive Water & Sewer Project	357,000			
2012/13 TOTAL		**11,164,500**		

SUMMARY OF MAJOR BOND ISSUES, continued

GENERAL OBLIGATION BONDS	PROJECT TOTAL	CATEGORY TOTAL	% PROJECT G.O. FUNDED	OTHER SOURCES OF FUNDING
2013/14:				
STORM SEWER		780,000		
Flood Response & Mitigation Projects	780,000		100%	
STREETS ENGINEERING		6,460,000		
Collector Street Pavement Improvements (Sheldon Avenue)	420,000		28%	MPO/STP Funds/Electric
CyRide Route Pavement Improvements (various locations)	2,000,000		98%	Electric Utility Fund
Arterial Street Pavement Improvements (Lincoln Way)	750,000		91%	Electric Utility Fund
Concrete Pavement Improvements (Lynn Ave/Knapp Street)	1,150,000		92%	Road Use Tax/Electric
Downtown Street Pavement Improvements (5th Street)	750,000		100%	
Asphalt/Seal Coat Street Rehabilitation Program	1,090,000		63%	Road Use Tax
Grand Avenue Extension	300,000		20%	Federal/State Grants
LIBRARY		14,000,000		
Ames Public Library Renovation	14,000,000			Bequests/Contributions
2013/14 YEAR TOTAL		**21,240,000**		

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		1,000,000		
Flood Response & Mitigation Projects	1,000,000		100%	
STREETS ENGINEERING		6,400,250		
Collector St Pavement Improvements (Woodland/West St)	1,305,000		96%	Electric Utility Fund
CyRide Rte Pavement Improvements (24th/Bloomington Rd)	893,000		46%	MPO/STP Funds
Arterial Street Pavement Improvements (Lincoln Way)	600,000		89%	Electric Utility Fund
Concrete Pavement Improvements (Ridgewood/9th Street)	1,225,000		94%	Road Use Tax/Electric
Downtown Street Pavement Improvements (5th Street)	750,000		100%	
Asphalt/Seal Coat Street Rehabilitation Program	697,250		52%	Road Use Tax
Grand Avenue Extension	930,000		20%	Federal/State Grants
STREETS MAINTENANCE		100,000		
Bridge Rehabilitation Program (6th Street/Squaw Creek)	100,000		100%	
2014/15 YEAR TOTAL		**7,500,250**		

SUMMARY OF MAJOR BOND ISSUES, continued

GENERAL OBLIGATION BONDS	PROJECT TOTAL	CATEGORY TOTAL	% PROJECT G.O. FUNDED	OTHER SOURCES OF FUNDING
2015/16:				
TRAFFIC		774,000		
West Lincoln Way Intersection Improvements	774,000		43%	Developer/IDOT Grant
STREETS ENGINEERING		4,501,000		
Collector St Pavement Improvements (Meadowlane/E 20th)	420,000		28%	MPO/STP Funds/Electric
Asphalt Street Reconstruction Program (Delaware Avenue)	287,500		100%	
Arterial Street Pavement Improvements (West Lincoln Way)	345,000		100%	
Concrete Pavement Improvements (various locations)	770,500		89%	Road Use Tax/Electric
Downtown Street Pavement Improvements (Clark Avenue)	750,000		94%	Electric Utility Fund
Asphalt/Seal Coat Street Rehabilitation Program	628,000		49%	Road Use Tax
Grand Avenue Extension	1,300,000		20%	Federal/State Grants
STREETS MAINTENANCE		1,225,000		
Bridge Rehabilitation Program (6th Street/Squaw Creek)	1,225,000		55%	Grants
2015/16 YEAR TOTAL		**6,500,000**		

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		5,715,000		
Collector Street Pavement Improvements (Hoover Avenue)	600,000		100%	
Asphalt Street Reconstruction Program (Pierce Ave/Circle)	790,000		94%	Electric Utility Fund
CyRide Route Pavement Improvements (S. 3rd/S. 4th St)	800,000		94%	Electric Utility Fund
Arterial Street Pavement Improvements (East Lincoln Way)	420,000		27%	MPO/STP Funds/ELectric
Concrete Pavement Improvements (Dawes Drive)	1,265,000		93%	Road Use Tax/Electric
Downtown St Pavement Improvements (Market/Sherman)	500,000		100%	
Asphalt/Seal Coat Street Rehabilitation Program	320,000		33%	Road Use Tax
Grand Avenue Extension	1,020,000		20%	Federal/State Grants
STREETS MAINTENANCE		785,000		
Bridge Rehabilitation Program (East Lincoln Way)	785,000		100%	
2016/17 YEAR TOTAL		**6,500,000**		
GRAND TOTAL GENERAL OBLIGATION BONDS		**52,904,750**		

Homewood Golf Course in late summer splendor.

Beautiful flowers welcome visitors to Ames.

CAPITAL IMPROVEMENT PLAN - GRAND TOTALS

PROJECT/REVENUE DESCRIPTION	TOTAL	2012/13	2013/14	2014/15	2015/16	2016/17	PAGE
EXPENDITURES:							
Public Safety	7,081,070	1,183,000	1,621,770	415,650	3,076,650	784,000	7
Utilities	146,355,700	29,761,750	19,448,800	40,184,550	35,483,800	21,476,800	21
Transportation	69,942,159	12,110,700	12,521,000	13,829,880	16,466,359	15,014,220	89
Community Enrichment	25,745,094	6,367,372	16,729,622	1,269,250	890,600	488,250	119
Total Expenditures	**249,124,023**	**49,422,822**	**50,321,192**	**55,699,330**	**55,917,409**	**37,763,270**	
REVENUES:							
Bonds	52,904,750	11,164,500	21,240,000	7,500,250	6,500,000	6,500,000	
City	99,191,192	24,258,843	21,034,573	20,925,297	18,818,761	14,153,718	
Other	97,028,081	13,999,479	8,046,619	27,273,783	30,598,648	17,109,552	
Total Revenues	**249,124,023**	**49,422,822**	**50,321,192**	**55,699,330**	**55,917,409**	**37,763,270**	

CAPITAL IMPROVEMENT PLAN - EXPENDITURE SUMMARY BY PROGRAM

PROJECT/REVENUE DESCRIPTION	TOTAL	2012/13	2013/14	2014/15	2015/16	2016/17	PAGE
EXPENDITURES:							
Public Safety:							
Fire	484,070		62,770	148,650	148,650	124,000	9
Traffic	6,597,000	1,183,000	1,559,000	267,000	2,928,000	660,000	12
Total Public Safety	**7,081,070**	**1,183,000**	**1,621,770**	**415,650**	**3,076,650**	**784,000**	
Utilities:							
Resource Recovery	2,806,700	285,750	475,800	1,302,550	422,800	319,800	23
Water Treatment	67,027,000	4,982,000	1,192,000	22,544,000	22,558,000	15,751,000	26
Water Distribution	4,857,000	1,257,000	900,000	900,000	900,000	900,000	31
Storm Sewer	7,600,000	3,620,000	1,355,000	1,575,000	575,000	475,000	34
Sanitary Sewer	2,625,000	1,325,000	325,000	325,000	325,000	325,000	40
WPC Treatment	10,180,000	2,312,000	3,121,000	2,628,000	1,883,000	236,000	44
Electric	51,260,000	15,980,000	12,080,000	10,910,000	8,820,000	3,470,000	52
Total Utilities	**146,355,700**	**29,761,750**	**19,448,800**	**40,184,550**	**35,483,800**	**21,476,800**	

CAPITAL IMPROVEMENT PLAN - EXPENDITURE SUMMARY BY PROGRAM, continued

PROJECT/REVENUE DESCRIPTION	TOTAL	2012/13	2013/14	2014/15	2015/16	2016/17	PAGE
EXPENDITURES, continued:							
Transportation:							
Streets/Engineering	53,221,750	8,168,500	9,595,000	12,042,250	11,611,000	11,805,000	91
Streets/Maintenance	4,540,000	260,000	605,000	315,000	2,400,000	960,000	101
Transit	11,265,409	3,682,200	1,606,000	1,472,630	2,255,359	2,249,220	110
Airport	915,000		715,000		200,000		116
Total Transportation	**69,942,159**	**12,110,700**	**12,521,000**	**13,829,880**	**16,466,359**	**15,014,220**	
Community Enrichment/Internal Services:							
Parks and Recreation	4,444,500	1,398,000	1,657,500	569,000	610,000	210,000	121
Library	20,086,494	4,779,372	14,882,122	425,000			134
City Manager	250,000	50,000	50,000	50,000	50,000	50,000	139
Planning and Housing	250,000	50,000	50,000	50,000	50,000	50,000	141
Public Works	160,000	40,000	40,000	40,000	40,000		143
Internal Services/Facilities	554,100	50,000	50,000	135,250	140,600	178,250	145
Total Community Enrichment	**25,745,094**	**6,367,372**	**16,729,622**	**1,269,250**	**890,600**	**488,250**	
GRAND TOTAL EXPENDITURES	**249,124,023**	**49,422,822**	**50,321,192**	**55,699,330**	**55,917,409**	**37,763,270**	

CAPITAL IMPROVEMENT PLAN - REVENUE SUMMARY BY TYPE

PROJECT/REVENUE DESCRIPTION	TOTAL	2012/13	2013/14	2014/15	2015/16	2016/17
REVENUES:						
Bonds:						
G.O. Bonds	52,904,750	11,164,500	21,240,000	7,500,250	6,500,000	6,500,000
Total Bonds	**52,904,750**	**11,164,500**	**21,240,000**	**7,500,250**	**6,500,000**	**6,500,000**
City:						
Road Use Tax	5,801,524	1,325,500	1,284,000	1,103,312	1,051,650	1,037,062
Local Option Sales Tax	7,196,470	1,660,900	1,660,270	1,242,650	1,723,650	909,000
Electric Utility Fund	50,530,300	15,248,000	12,050,700	10,819,200	8,791,200	3,621,200
Water Utility Fund	16,896,026	2,009,000	1,125,000	3,518,313	3,533,650	6,710,063
Sewer Utility Fund	9,798,024	2,112,000	2,821,000	2,041,312	2,230,650	593,062
Storm Sewer Utility Fund	2,850,000	650,000	575,000	575,000	575,000	475,000
Resource Recovery Fund	2,806,700	285,750	475,800	1,302,550	422,800	319,800
Transit Fund	2,062,056	453,860	392,570	301,647	457,511	456,468
Airport Construction Fund	45,750		35,750		10,000	
Ice Arena Reserve Funds	205,500	180,500	25,000			
Library Bequest Funds	666,666	333,333	333,333			
Fleet Services Fund	76,026			21,313	22,650	32,063
Fleet Replacement Funds	256,150		256,150			
Total City	**99,191,192**	**24,258,843**	**21,034,573**	**20,925,297**	**18,818,761**	**14,153,718**

CAPITAL IMPROVEMENT PLAN - REVENUE SUMMARY BY TYPE, continued

PROJECT/REVENUE DESCRIPTION	TOTAL	2012/13	2013/14	2014/15	2015/16	2016/17
REVENUES, continued:						
Other:						
MPO/STP Funds	5,704,000	1,062,000	1,220,000	1,062,000	1,220,000	1,140,000
MPO/Planning Funds	320,000		320,000			
Federal/State Grants	16,550,000	540,000	1,390,000	3,760,000	6,740,000	4,120,000
Drinking Water State Revolving Fund	54,707,000	3,873,000	967,000	19,947,000	19,947,000	9,973,000
Hazard Mitigation Grant Program	2,150,000	2,150,000				
Clean Water State Revolving Fund	3,083,000	1,525,000	625,000	933,000		
Federal Transit Administration	9,003,353	3,188,340	1,173,430	1,130,983	1,757,848	1,752,752
FAA Grants	869,250		679,250		190,000	
Iowa State University	1,714,700	932,000	254,300	250,800	178,800	98,800
Story County	269,000	219,000	50,000			
Ames Community School District	175,000	25,000	75,000	25,000	25,000	25,000
Developer	732,500	192,500			540,000	
Private Contributions	1,750,278	292,639	1,292,639	165,000		
Total Other	**97,028,081**	**13,999,479**	**8,046,619**	**27,273,783**	**30,598,648**	**17,109,552**
GRAND TOTAL REVENUES	**249,124,023**	**49,422,822**	**50,321,192**	**55,699,330**	**55,917,409**	**37,763,270**

Winter in Ames includes lots of snow and a phenomenon called hoarfrost or radiation frost.

Two areas of native landscaping around City Hall serve as a rain garden and bioretention cell to catch and hold storm water runoff.

PUBLIC SAFETY - SUMMARY

PROJECT/REVENUE DESCRIPTION	TOTAL	2012/13	2013/14	2014/15	2015/16	2016/17	PAGE
EXPENDITURES:							
Fire	484,070		62,770	148,650	148,650	124,000	9
Traffic	6,597,000	1,183,000	1,559,000	267,000	2,928,000	660,000	12
Total Expenditures	**7,081,070**	**1,183,000**	**1,621,770**	**415,650**	**3,076,650**	**784,000**	
REVENUES:							
Bonds:							
G.O. Bonds	774,000				774,000		
City:							
Road Use Tax	1,620,500	490,500	379,000	267,000	254,000	230,000	
Local Option Sales Tax	2,234,070		762,770	148,650	848,650	474,000	
Sub-Total City Funds	3,854,570	490,500	1,141,770	415,650	1,102,650	704,000	

PUBLIC SAFETY - SUMMARY

PROJECT/REVENUE DESCRIPTION	TOTAL	2012/13	2013/14	2014/15	2015/16	2016/17
REVENUES, continued:						
Other:						
MPO/STP Funds	400,000		160,000		160,000	80,000
MPO/Planning Funds	320,000		320,000			
Iowa D.O.T. Safety Grant	1,000,000	500,000			500,000	
Developer	732,500	192,500			540,000	
Sub-Total Other Funds	2,452,500	692,500	480,000		1,200,000	80,000
Total Revenues	**7,081,070**	**1,183,000**	**1,621,770**	**415,650**	**3,076,650**	**784,000**

PUBLIC SAFETY - FIRE

PROJECT/REVENUE DESCRIPTION	TOTAL	2012/13	2013/14	2014/15	2015/16	2016/17	PAGE
EXPENDITURES:							
1 Fire Station Improvements	186,770		62,770			124,000	10
2 Self-Contained Breathing Apparatus	297,300			148,650	148,650		11
Total Expenditures	**484,070**		**62,770**	**148,650**	**148,650**	**124,000**	
REVENUES:							
City:							
Local Option Sales Tax	484,070		62,770	148,650	148,650	124,000	
Total Revenues	**484,070**		**62,770**	**148,650**	**148,650**	**124,000**	

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

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, and the commercial water storage tank is nearing its life expectancy and is displaying corrosion. 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 43 years old. New fencing is needed along the south side of the building, and copper bulkheads will be replaced with painted sheet metal.

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 #1 water storage tank ($4,500); Fire Station #2 fencing ($11,000); Fire Station #2 bulkhead replacement ($11,000); Fire Station #3 truck room floor repainting ($13,000); Fire Station #3 driveway and sidewalk joint sealing ($2,270)

2015/16: Fire Station #1 driveway replacement ($124,000)

LOCATION

Fire Station #1, 1300 Burnett Avenue – Map 5, location M-9
Fire Station #2, corner of Welch and Chamberlain – Map 5, location H-11
Fire Station #3, 2400 South Duff Avenue – Map 8, location M-15

FISCAL YEAR PRIORITY				1			1
		TOTAL	**2012/13**	**2013/14**	**2014/15**	**2015/16**	**2016/17**
COST:							
Repairs/Maintenance		186,770		62,770			124,000
	TOTAL	**186,770**		**62,770**			**124,000**
FINANCING:							
Local Option Sales Tax		186,770		62,770			124,000
	TOTAL	**186,770**		**62,770**			**124,000**

PROGRAM - ACTIVITY: Public Safety – Fire

DEPARTMENT: Fire

ACCOUNT NO.

SELF-CONTAINED BREATHING APPARATUS **PROJECT STATUS:** New

DESCRIPTION/JUSTIFICATION
Ames firefighters utilize Self-Contained Breathing Apparatus (SCBA) to enter hazardous environments to perform firefighting operations or to operate in areas that are oxygen deficient. The SCBA is an essential piece of personal protective equipment that allows the firefighters to operate safely in dangerous environments. The current SCBAs are reaching their life expectancy and the units need to be replaced or refurbished.

According to the Iowa Department of Transportation (IDOT) regulations, the cylinders must be replaced after 15 years of service.

Staff recommends purchasing one-half of the SCBA equipment in FY 14/15, and the remaining equipment in FY 15/16. The total request is for 39 SCBA units including an additional cylinder, face piece, and regulator.

COMMENTS
2014/15: Purchase one-half of the SCBA units - $148,650
2015/16: Purchase second half of the SCBA units - $148,650

LOCATION
Fire Station #1, 1300 Burnett Avenue – Map 5, location M-9

FISCAL YEAR PRIORITY					1	1	
		TOTAL	**2012/13**	**2013/14**	**2014/15**	**2015/16**	**2016/17**
COST:							
Equipment		297,300			148,650	148,650	
	TOTAL	**297,300**			**148,650**	**148,650**	
FINANCING:							
Local Option Sales Tax		297,300			148,650	148,650	
	TOTAL	**297,300**			**148,650**	**148,650**	

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

PUBLIC SAFETY - TRAFFIC

	PROJECT/REVENUE DESCRIPTION	TOTAL	2012/13	2013/14	2014/15	2015/16	2016/17	PAGE
EXPENDITURES:								
1	West Lincoln Way Intersection Improvements	2,784,000	935,000		35,000	1,814,000		14
2	Traffic Signal Program	875,000	175,000	175,000	175,000	175,000	175,000	15
3	Multi-Modal Roadway Improvements	188,000	23,000	74,000	7,000	29,000	55,000	16
4	Traffic Engineering Studies	550,000	50,000	400,000	50,000	50,000		17
5	Shared Use Path System Expansion	2,150,000		860,000		860,000	430,000	18
6	U.S. 69 Intersection Improvements	50,000		50,000				19
	Total Expenditures	**6,597,000**	**1,183,000**	**1,559,000**	**267,000**	**2,928,000**	**660,000**	
REVENUES:								
Bonds:								
G.O. Bonds		774,000				774,000		

PUBLIC SAFETY - TRAFFIC, continued

PROJECT/REVENUE DESCRIPTION	TOTAL	2012/13	2013/14	2014/15	2015/16	2016/17
REVENUES, continued:						
City:						
Road Use Tax	1,620,500	490,500	379,000	267,000	254,000	230,000
Local Option Sales Tax	1,750,000		700,000		700,000	350,000
Sub-Total City Funds	3,370,500	490,500	1,079,000	267,000	954,000	580,000
Other:						
MPO/STP Funds	400,000		160,000		160,000	80,000
MPO/Planning Funds	320,000		320,000			
Iowa D.O.T. Safety Grant	1,000,000	500,000			500,000	
Developer	732,500	192,500			540,000	
Sub-Total Other Funds	2,452,500	692,500	480,000		1,200,000	80,000
Total Revenues	**6,597,000**	**1,183,000**	**1,559,000**	**267,000**	**2,928,000**	**660,000**

WEST LINCOLN WAY INTERSECTION IMPROVEMENTS **PROJECT STATUS:** No Change

DESCRIPTION/JUSTIFICATION

This project is for constructing turn lanes and installing traffic signals at the Franklin Avenue/Lincoln Way and the Dotson Drive/Lincoln Way intersections. 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. Additional turn lanes are also anticipated for right-turning movements northbound from Franklin Avenue onto Lincoln Way and for left-turning movements northbound from Dotson Avenue onto Lincoln Way. The increased traffic will also warrant replacement of signals at the Franklin Avenue/Lincoln Way intersection and the installation of new traffic signals at the Dotson Drive/Lincoln Way intersection. Turn lanes on Lincoln Way will mitigate left-turning, rear-end, and right-angle traffic accidents at both sites. 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

2012/13	Dotson Drive/Lincoln Way (construction) – Map 4, location F-11
2014/15	Franklin Avenue/Lincoln Way (planning) – Map 4, location G-11
2015/16	Franklin Avenue/Lincoln Way (construction) – Map 4, location G-11

Planning for the Dotson Drive/Lincoln Way project began in 2011/12. Construction is slated for 2012/13.

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

FISCAL YEAR PRIORITY			1		2	1	
		TOTAL	**2012/13**	**2013/14**	**2014/15**	**2015/16**	**2016/17**
COST:							
Land Acquisition		20,000			20,000		
Planning		15,000			15,000		
Engineering		284,000	50,000			234,000	
Construction		2,465,000	885,000			1,580,000	
	TOTAL	**2,784,000**	**935,000**		**35,000**	**1,814,000**	
FINANCING:							
G. O. Bonds		774,000				774,000	
Road Use Tax		277,500	242,500		35,000		
Iowa D.O.T Safety Grant		1,000,000	500,000			500,000	
Developer (50% of Construction) (less 50% Safety Grant)		732,500	192,500			540,000	
	TOTAL	**2,784,000**	**935,000**		**35,000**	**1,814,000**	

PROGRAM – ACTIVITY:	**DEPARTMENT:**	**ACCOUNT NO.**
Public Safety – Traffic	Public Works	060-7535-429
		320-7535-429

TRAFFIC SIGNAL PROGRAM **PROJECT STATUS:** No 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 the vehicles.

COMMENTS

Proposed locations:

2012/13	Lincoln Way/Hayward Avenue signal replacement – Map 5, location H-11
2013/14	Lincoln Way/Hyland Avenue signal replacement – Map 5, location H-11
2014/15	Lincoln Way/Union Drive signal replacement – Map 5, location I-11
2015/16	Dayton Avenue/East Lincoln Way signal replacement – Map 6, location Q-11
2016/17	13th Street/Ridgewood Avenue signal replacement – Map 5, location K-9

FISCAL YEAR PRIORITY			2	2	1	3	2
		TOTAL	**2012/13**	**2013/14**	**2014/15**	**2015/16**	**2016/17**
COST:							
Engineering		75,000	15,000	15,000	15,000	15,000	15,000
Construction		800,000	160,000	160,000	160,000	160,000	160,000
	TOTAL	**875,000**	**175,000**	**175,000**	**175,000**	**175,000**	**175,000**
FINANCING:							
Road Use Tax		875,000	175,000	175,000	175,000	175,000	175,000
	TOTAL	**875,000**	**175,000**	**175,000**	**175,000**	**175,000**	**175,000**

PROGRAM – ACTIVITY:	**DEPARTMENT:**	**ACCOUNT NO.**
Public Safety – Traffic	Public Works	060-7516-429

MULTI-MODAL ROADWAY IMPROVEMENTS **PROJECT STATUS:** New

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

2012/13 **Sharrows:** Duff Avenue (6th Street to 13th Street) – Map 5, location M-10; and 6th Street (Grand Avenue to Duff Avenue) – Map 5, location L-10

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)

FISCAL YEAR PRIORITY			3	3	3	4	3
		TOTAL	**2012/13**	**2013/14**	**2014/15**	**2015/16**	**2016/17**
COST:							
Engineering		18,800	2,300	7,400	700	2,900	5,500
Construction		169,200	20,700	66,600	6,300	26,100	49,500
	TOTAL	**188,000**	**23,000**	**74,000**	**7,000**	**29,000**	**55,000**
FINANCING:							
Road Use Tax Fund		188,000	23,000	74,000	7,000	29,000	55,000
	TOTAL	**188,000**	**23,000**	**74,000**	**7,000**	**29,000**	**55,000**

PROGRAM - ACTIVITY: Public Safety – Traffic

DEPARTMENT: Public Works

ACCOUNT NO. 060-7521-429

TRAFFIC ENGINEERING STUDIES **PROJECT STATUS:** Cost 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:

2012/13	Transportation Funding Study
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
2016/17	No project

The Transportation Funding Study (2012/13) will analyze potential funding sources (grants) for roadway improvements including the Grand Avenue Extension project (page 100). 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 addition of studies in 2012/13 and 2015/16 has resulted in a cost change.

FISCAL YEAR PRIORITY			4	4	4	5	
		TOTAL	**2012/13**	**2013/14**	**2014/15**	**2015/16**	**2016/17**
COST:							
Engineering		550,000	50,000	400,000	50,000	50,000	
	TOTAL	**550,000**	**50,000**	**400,000**	**50,000**	**50,000**	
FINANCING:							
Road Use Tax		230,000	50,000	80,000	50,000	50,000	
MPO/Planning Funds		320,000		320,000			
	TOTAL	**550,000**	**50,000**	**400,000**	**50,000**	**50,000**	

PROGRAM – ACTIVITY:	**DEPARTMENT:**	**ACCOUNT NO.**
Public Safety – Traffic	Public Works	060-7536-429

SHARED USE PATH SYSTEM EXPANSION **PROJECT STATUS:** No 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. In 2011/12, the average per year contribution from local option sales tax was increased from $250,000 to $350,000 placing a higher emphasis on this program.

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

2012/13	No Project
2013/14	Skunk River Trail Extension (East Lincoln Way to South River Valley Park) - Map 6, location O-11
2014/15	No Project
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

FISCAL YEAR PRIORITY				1		2	1
		TOTAL	**2012/13**	**2013/14**	**2014/15**	**2015/16**	**2016/17**
COST:							
Engineering		145,000		55,000		55,000	35,000
Construction		2,005,000		805,000		805,000	395,000
	TOTAL	**2,150,000**		**860,000**		**860,000**	**430,000**
FINANCING:							
Local Option Sales Tax		1,750,000		700,000		700,000	350,000
MPO/STP Funds		400,000		160,000		160,000	80,000
	TOTAL	**2,150,000**		**860,000**		**860,000**	**430,000**

PROGRAM – ACTIVITY: Public Safety – Traffic

DEPARTMENT: Public Works

ACCOUNT NO.

US69 INTERSECTION IMPROVEMENTS **PROJECT STATUS:** No Change

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:
2013/14: 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. The level of service (LOS) of the existing intersection is rated as LOS D/E. 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 2013/14 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	**2012/13**	**2013/14**	**2014/15**	**2015/16**	**2016/17**
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.

Working Landscape – a residential retention pond (left), and the wetlands at Ada Hayden Heritage Park (below)

Spring at the Water Pollution Control Facility includes peonies and flowering trees.

UTILITIES - SUMMARY

PROJECT/REVENUE DESCRIPTION	TOTAL	2012/13	2013/14	2014/15	2015/16	2016/17	PAGE
EXPENDITURES:							
Resource Recovery	2,806,700	285,750	475,800	1,302,550	422,800	319,800	23
Water Treatment	67,027,000	4,982,000	1,192,000	22,544,000	22,558,000	15,751,000	26
Water Distribution	4,857,000	1,257,000	900,000	900,000	900,000	900,000	31
Storm Sewer	7,600,000	3,620,000	1,355,000	1,575,000	575,000	475,000	34
Sanitary Sewer	2,625,000	1,325,000	325,000	325,000	325,000	325,000	40
WPC Treatment	10,180,000	2,312,000	3,121,000	2,628,000	1,883,000	236,000	44
Electric	51,260,000	15,980,000	12,080,000	10,910,000	8,820,000	3,470,000	52
Total Expenditures	**146,355,700**	**29,761,750**	**19,448,800**	**40,184,550**	**35,483,800**	**21,476,800**	

UTILITIES - SUMMARY

PROJECT/REVENUE DESCRIPTION	TOTAL	2012/13	2013/14	2014/15	2015/16	2016/17
REVENUES:						
Bonds:						
G.O. Bonds	2,957,000	1,177,000	780,000	1,000,000		
City:						
Resource Recovery Fund	2,806,700	285,750	475,800	1,302,550	422,800	319,800
Water Utility Fund	16,820,000	2,009,000	1,125,000	3,497,000	3,511,000	6,678,000
Sewer Utility Fund	9,722,000	2,112,000	2,821,000	2,020,000	2,208,000	561,000
Storm Sewer Utility Fund	2,850,000	650,000	575,000	575,000	575,000	475,000
Electric Utility Fund	49,595,300	15,048,000	11,875,700	10,659,200	8,641,200	3,371,200
Sub-Total City Funds	81,794,000	20,104,750	16,872,500	18,053,750	15,358,000	11,405,000
Other:						
Drinking Water State Revolving Fund	54,707,000	3,873,000	967,000	19,947,000	19,947,000	9,973,000
Iowa State University	1,664,700	932,000	204,300	250,800	178,800	98,800
Hazard Mitigation Grant Program	2,150,000	2,150,000				
Clean Water State Revolving Fund	3,083,000	1,525,000	625,000	933,000		
Sub-Total Other Funds	61,604,700	8,480,000	1,796,300	21,130,800	20,125,800	10,071,800
Total Revenues	**146,355,700**	**29,761,750**	**19,448,800**	**40,184,550**	**35,483,800**	**21,476,800**

UTILITIES - RESOURCE RECOVERY

PROJECT/REVENUE DESCRIPTION	TOTAL	2012/13	2013/14	2014/15	2015/16	2016/17	PAGE
EXPENDITURES:							
1 Resource Recovery System Improvements	1,676,700	285,750	345,800	302,550	422,800	319,800	24
2 Primary Shredder Replacement	1,130,000		130,000	1,000,000			25
Total Expenditures	**2,806,700**	**285,750**	**475,800**	**1,302,550**	**422,800**	**319,800**	
REVENUES:							
City:							
Resource Recovery Fund	2,806,700	285,750	475,800	1,302,550	422,800	319,800	
Total Revenues	**2,806,700**	**285,750**	**475,800**	**1,302,550**	**422,800**	**319,800**	

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

DESCRIPTION/JUSTIFICATION

This program is used 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). Funding is provided every three years for sideliners for #1 and #2 mills. Resource Recovery personnel perform the work to complete the preventive maintenance projects.

COMMENTS

Proposed projects:

- 2012/13 Preventive maintenance materials for replacement of #2 RDS rollers and chains ($40,200); replace #1 mill upper housing ($12,000); #1 mill sideliners ($37,000); #1 mill breaker plate liners ($12,000); rebuild 20% of C-1 conveyor ($19,550); dust collection system ductwork replacement ($40,000); vibration analyzer replacement (current unit purchased in 1986) ($15,000); paint roof equipment ($50,000); paint south wall ($10,000); and Conversion Technology Study Phase II ($50,000)
- 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); full set of #2 mill grates ($25,000); power factor correction ($60,000); and HVAC improvement/construction ($85,000)
- 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); and replace tipping floor concrete at C-1 area ($180,000)
- 2015/16 Preventive maintenance materials for the replacement of the #2 RDS rollers and chains ($40,250); replace #1 mill motor ($213,000); 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)

Cost changes in 2012/13, 2013/14, and 2014/15 are due to additional projects that have been identified in the annual evaluation of the 5-year maintenance needs of the plant.

LOCATION

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

FISCAL YEAR PRIORITY			1	1	1	1	1
		TOTAL	**2012/13**	**2013/14**	**2014/15**	**2015/16**	**2016/17**
COST:							
System Improvements		1,676,700	285,750	345,800	302,550	422,800	319,800
	TOTAL	**1,676,700**	**285,750**	**345,800**	**302,550**	**422,800**	**319,800**
FINANCING:							
Resource Recovery Fund		1,676,700	285,750	345,800	302,550	422,800	319,800
	TOTAL	**1,676,700**	**285,750**	**345,800**	**302,550**	**422,800**	**319,800**

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

RESOURCE RECOVERY PRIMARY SHREDDER REPLACEMENT

PROJECT STATUS: New

DESCRIPTION/JUSTIFICATION

This project is for the replacement of the 36-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 will begin with design and engineering work to include removal and/or demolition specifications of existing equipment; layout, prints and bid documents for the installation of the new shredder; associated belts and equipment.

Phase two will include the purchase and installation of the new shredder, associated conveyors and electrical equipment. This equipment will adapt to implementation of any potential alternative conversion system as well as potentially incorporating construction and demolition waste.

COMMENTS

2013/14 Phase 1: #1 mill replacement scope of work / engineering / bid docs for low-speed-high torque shredder

2014/15 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	2		
COST:		**TOTAL**	**2012/13**	**2013/14**	**2014/15**	**2015/16**	**2016/17**
Planning		130,000		130,000			
Engineering		100,000			100,000		
Construction		900,000			900,000		
	TOTAL	**1,130,000**		**130,000**	**1,000,000**		
FINANCING:							
Resource Recovery Fund		1,130,000		130,000	1,000,000		
	TOTAL	**1,130,000**		**130,000**	**1,000,000**		

PROGRAM – ACTIVITY: Utilities - Resource Recovery

DEPARTMENT: Public Works

ACCOUNT NO.

UTILITIES - WATER TREATMENT

PROJECT/REVENUE DESCRIPTION	TOTAL	2012/13	2013/14	2014/15	2015/16	2016/17	PAGE
EXPENDITURES:							
1 New Water Treatment Plant	60,157,000	3,873,000	967,000	22,127,000	22,127,000	11,063,000	27
2 Water Supply Expansion	5,095,000	854,000				4,241,000	28
3 Water Plant Facility Improvements	480,000	255,000	225,000				29
4 Automatic Meter Reading Conversion	1,295,000			417,000	431,000	447,000	30
Total Expenditures	**67,027,000**	**4,982,000**	**1,192,000**	**22,544,000**	**22,558,000**	**15,751,000**	
REVENUES:							
City:							
Water Utility Fund	12,320,000	1,109,000	225,000	2,597,000	2,611,000	5,778,000	
Other:							
Drinking Water State Revolving Fund	54,707,000	3,873,000	967,000	19,947,000	19,947,000	9,973,000	
Total Revenues	**67,027,000**	**4,982,000**	**1,192,000**	**22,544,000**	**22,558,000**	**15,751,000**	

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. Cost changes from last year's CIP reflect updated pricing from likely equipment manufacturers, inflation adjustments based on Engineering News-Record's Construction Cost Index, and additional development of project details. 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 3% interest and will be repaid over 20 years out of water revenues. This fund also allows for a three-year interest-free planning and design loan that can be rolled into the final construction loan. 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 timeline has been delayed due to the lengthy land acquisition process.

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	1,359,000	Pre-design; Land Acquisition
FY 2011/12 – 2013/14	7,020,000	Final Design
FY 2013/14 – 2016/17	54,499,000	Construction Phase (in 2011 dollars)
FY 2014/15 – 2016/17	818,000	Construction Phase Engineering and Inspection
Total	$ 63,940,000	

LOCATION

Water Plant, 300 East 5th Street – Map 5, location N-11

FISCAL YEAR PRIORITY			1	1	1	1	1
		TOTAL	**2012/13**	**2013/14**	**2014/15**	**2015/16**	**2016/17**
COST:							
Engineering/Legal/Administrative		5,658,000	3,873,000	967,000	327,000	327,000	164,000
Construction		54,499,000			21,800,000	21,800,000	10,899,000
	TOTAL	**60,157,000**	**3,873,000**	**967,000**	**22,127,000**	**22,127,000**	**11,063,000**
FINANCING:							
Water Utility Fund		5,450,000			2,180,000	2,180,000	1,090,000
Drinking Water State Revolving Fund		54,707,000	3,873,000	967,000	19,947,000	19,947,000	9,973,000
	TOTAL	**60,157,000**	**3,873,000**	**967,000**	**22,127,000**	**22,127,000**	**11,063,000**

PROGRAM - ACTIVITY: Utilities – Water Treatment

DEPARTMENT: Water & Pollution Control

ACCOUNT NO. 512-3933-489

WATER SUPPLY EXPANSION **PROJECT STATUS:** Cost Change

DESCRIPTION/JUSTIFICATION
The currently developed water supply is adequate to meet estimated municipal demands until approximately 2020. To allow sufficient reserve capacity, development of the next well field is proposed to begin in 2016. This project will expand the capacity of the source water supply in conjunction with the development of additional treatment plant capacity.

COMMENTS
The City currently owns approximately 77 acres of farmland (east of I-35 immediately north of the South Skunk River) that were purchased for use as a future well field. The original intent was to develop approximately 6 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. This will necessitate acquiring additional land for the second well field. The cost to acquire this additional land will initially be offset by the shorter length of piping needed to reach this intermediate well field. This project involves acquiring approximately 80 acres for a new well field site in FY 2012/13. Engineering, construction of a new pipeline, and construction of the first two of four wells in the new I-35 West Well Field will begin in FY 2016/17. The timing for the additional two wells will be driven by the growth in water demand. At some future time, wells can be constructed on the original I-35 east site. These future wells would be built with lower withdrawal rates than the 6 mgd originally envisioned to minimize the potential for interference with other wells.

The value of agricultural land has climbed considerably in the last year. As a result, the cost estimate in the first year for acquisition of land has been increased from the estimate shown in last year's plan. Initial development of the new well field has now moved into the five-year planning period.

FY 12/13	Acquisition of Land/Easements for I-35 West Well Field ($854,000)
FY 16/17	Design and Construct Pipeline and Design Wells in I-35 West Well Field ($4,241,000)
FY 17/18	Construct Two Wells in I-35 West Well Field – Adds 1.5 million gallons per day ($832,000)
FY 20/21 (est.)	Construct Two Wells in I-35 West Well Field – Adds 1.5 million gallons per day ($923,000)
FY 30/31 (est.)	Develop I-35 East Well Field – Adds 3.0 million gallons per day ($4,319,000)

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

FISCAL YEAR PRIORITY			2				2
		TOTAL	**2012/13**	**2013/14**	**2014/15**	**2015/16**	**2016/17**
COST:							
Land/Easements		854,000	854,000				
Design		555,000					555,000
Construction		3,686,000					3,686,000
	TOTAL	**5,095,000**	**854,000**				**4,241,000**
FINANCING:							
Water Utility Fund		5,095,000	854,000				4,241,000
	TOTAL	**5,095,000**	**854,000**				**4,241,000**

PROGRAM - ACTIVITY:	**DEPARTMENT:**	**ACCOUNT NO.**
Utilities - Water Production	Water & Pollution Control	510-3943-489

WATER PLANT FACILITY IMPROVEMENTS **PROJECT STATUS:** 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:

12/13	Extend Security System to Remote Sites (Access Control - $90,000)
12/13	Installation of Variable Speed Drives for Wells ($165,000)
13/14	Extend Security System to Remote Sites (Distribution System Pressure Sensors - $125,000)
13/14	Decommissioning of North Dakota Elevated Water Tank ($100,000)

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.

There are no new projects included this year. The Remote Site Access Control work is authorized in the current year (FY 11/12) but, due to workload considerations, will not be able to proceed until FY 12/13.

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

FISCAL YEAR PRIORITY			3	2			
		TOTAL	**2012/13**	**2013/14**	**2014/15**	**2015/16**	**2016/17**
COST:							
Equipment		480,000	255,000	225,000			
	TOTAL	**480,000**	**255,000**	**225,000**			
FINANCING:							
Water Utility Fund		480,000	255,000	225,000			
	TOTAL	**480,000**	**255,000**	**225,000**			

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

AUTOMATIC METER READING CONVERSION (WTP) **PROJECT STATUS:** Cost 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, with major manufacturers discontinuing production during the past year. 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.

The estimated cost to convert the entire inventory of water meters to the new reading technology is estimated at approximately $3,892,000 (in 2012 dollars) for equipment (18,800 meters @ $181 per meter) plus contracted installation (18,800 meters @ $26 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	2	3
		TOTAL	**2012/13**	**2013/14**	**2014/15**	**2015/16**	**2016/17**
COST:							
Equipment		1,295,000			417,000	431,000	447,000
	TOTAL	**1,295,000**			**417,000**	**431,000**	**447,000**
FINANCING:							
Water Utility Fund		1,295,000			417,000	431,000	447,000
	TOTAL	**1,295,000**			**417,000**	**431,000**	**447,000**

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

UTILITIES - WATER DISTRIBUTION

PROJECT/REVENUE DESCRIPTION	TOTAL	2012/13	2013/14	2014/15	2015/16	2016/17	PAGE
EXPENDITURES:							
1 Water System Improvements	4,500,000	900,000	900,000	900,000	900,000	900,000	32
2 Woodview Drive Water & Sewer Project	357,000	357,000					33
Total Expenditures	**4,857,000**	**1,257,000**	**900,000**	**900,000**	**900,000**	**900,000**	
REVENUES:							
Bonds:							
G.O. Bonds	357,000	357,000					
City:							
Water Utility Fund	4,500,000	900,000	900,000	900,000	900,000	900,000	
Total Revenues	**4,857,000**	**1,257,000**	**900,000**	**900,000**	**900,000**	**900,000**	

WATER SYSTEM IMPROVEMENTS **PROJECT STATUS:** No 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 for 2012/13: S. Wilmoth Avenue, Morningside Street, Hilltop Road, Tripp Street, and South Franklin Avenue – Map 4, location G-12; and East Lincoln Way (addresses are 611 to 729 E. Lincoln Way) – Map 6, location O-11

Water service transfer locations for 2012/13: Lincoln Way (Squaw Creek to Hazel Avenue) – Map 5, location K-11; East Lincoln Way (Center Avenue to Cherry Avenue) – Map 6, location N-11

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

FISCAL YEAR PRIORITY			1	1	1	1	1
		TOTAL	**2012/13**	**2013/14**	**2014/15**	**2015/16**	**2016/17**
COST:							
Engineering		600,000	120,000	120,000	120,000	120,000	120,000
Construction		3,900,000	780,000	780,000	780,000	780,000	780,000
	TOTAL	**4,500,000**	**900,000**	**900,000**	**900,000**	**900,000**	**900,000**
FINANCING:							
Water Utility Fund		4,500,000	900,000	900,000	900,000	900,000	900,000
	TOTAL	**4,500,000**	**900,000**	**900,000**	**900,000**	**900,000**	**900,000**

PROGRAM – ACTIVITY:	**DEPARTMENT:**	**ACCOUNT NO.**
Utilities – Water Distribution	Public Works	510-8458-489

WOODVIEW DRIVE WATER AND SEWER PROJECT **PROJECT STATUS:** New

DESCRIPTION/JUSTIFICATION

This project is for the design and construction of water and sanitary sewer mains along Woodview Drive in accordance with the property assessment agreements that will be established as part of this project. The neighborhood requested this project and staff has continued to meet with the affected property owners throughout the discussions, including providing conceptual cost estimates. All affected property owners are in favor of this project and have indicated that they will sign an assessment agreement for installation of water and sanitary sewer mains.

LOCATION

Woodview Drive (north of Oakwood Road) – Map 8, location I-15

FISCAL YEAR PRIORITY			2				
		TOTAL	**2012/13**	**2013/14**	**2014/15**	**2015/16**	**2016/17**
COST:							
Engineering		42,000	42,000				
Construction		315,000	315,000				
	TOTAL	**357,000**	**357,000**				
FINANCING:							
G.O. Bonds (Assessment Abated)		357,000	357,000				
	TOTAL	**357,000**	**357,000**				

PROGRAM - ACTIVITY:	**DEPARTMENT:**	**ACCOUNT NO.**
Utilities – Water and Sanitary Sewer	Public Works	310-8517-489

UTILITIES - STORM SEWER

PROJECT/REVENUE DESCRIPTION	TOTAL	2012/13	2013/14	2014/15	2015/16	2016/17	PAGE
EXPENDITURES:							
1 Low Point Drainage Improvements	625,000	125,000	125,000	125,000	125,000	125,000	35
2 Flood Response & Mitigation Projects	5,075,000	3,295,000	780,000	1,000,000			36
3 Storm Water Facility Rehabilitation Program	400,000	100,000	100,000	100,000	100,000		37
4 Storm Sewer Outlet Erosion Control	500,000	100,000	100,000	100,000	100,000	100,000	38
5 Storm Sewer Improvement Program	1,000,000		250,000	250,000	250,000	250,000	39
Total Expenditures	**7,600,000**	**3,620,000**	**1,355,000**	**1,575,000**	**575,000**	**475,000**	
REVENUES:							
Bonds:							
G.O. Bonds	2,600,000	820,000	780,000	1,000,000			
City:							
Storm Sewer Utility Fund	2,850,000	650,000	575,000	575,000	575,000	475,000	
Other:							
Hazard Mitigation Grant Program	2,150,000	2,150,000					
Total Revenues	**7,600,000**	**3,620,000**	**1,355,000**	**1,575,000**	**575,000**	**475,000**	

LOW POINT DRAINAGE IMPROVEMENTS **PROJECT STATUS:** 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

2012/13 Oliver Circle – Map 4, location F-10
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

Flood mitigation projects previously shown in this program have been shifted to the Flood Response and Mitigation Project.

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.

FISCAL YEAR PRIORITY		1	2	1	2	3
	TOTAL	**2012/13**	**2013/14**	**2014/15**	**2015/16**	**2016/17**
COST:						
Engineering	75,000	15,000	15,000	15,000	15,000	15,000
Construction	550,000	110,000	110,000	110,000	110,000	110,000
TOTAL	**625,000**	**125,000**	**125,000**	**125,000**	**125,000**	**125,000**
FINANCING:						
Storm Sewer Utility Fund	625,000	125,000	125,000	125,000	125,000	125,000
TOTAL	**625,000**	**125,000**	**125,000**	**125,000**	**125,000**	**125,000**

PROGRAM - ACTIVITY:	**DEPARTMENT:**	**ACCOUNT NO.**
Utilities - Storm Sewer	Public Works	560-8651-489

FLOOD RESPONSE AND MITIGATION PROJECTS **PROJECT STATUS:** New

DESCRIPTION/JUSTIFICATION

In response to the 2010 flooding, staff has diligently been working with Iowa Homeland Security and FEMA to pursue federal funding toward fixing/mitigating further flooding at various locations throughout the Ames community. Recently staff has been notified that the following projects will not receive federal funding. These projects have been prioritized based on the number of people affected and public safety. Other projects are still under consideration by FEMA for federal funding. These projects have been included in the first year of this program as highest priority for Storm Sewer Utility Funds.

LOCATION

2012/13:	(Each if FEMA funded)	Castlewood Place – Map 4, location E-9; Oakwood Road – Map 8, location I-15: Northridge Parkway – Map 2, location I-7; Waterbury Court – Map 2, location J-4; North Park Villa – Map 2, location K-6; and Stuart Smith Park bank stabilization (Squaw Creek/Lincoln Way) – Map 5, location K-11
2012/13:	(G.O. Bond funded)	Clear Creek bank stabilization (behind 235 Trail Ridge Road) – Map 4, location F-11; Clear Creek bank stabilization (behind 4907/4913 Utah Drive) – Map 4, location D-10; W. Lincoln Way (Schubert Street/Todd Circle) – Map 4, location D-11; and Lincoln Way Fraternities (PIKE and PKT) – Map 5, location J-11
2013/14:	(Projects currently under appeal through FEMA)	Squaw Creek Pedestrian Bridge Replacement (granular path between S. 4th Street and S. 16th Street over Squaw Creek) – Map 5, location L-12; and Squaw Creek bank stabilization (N. Riverside Drive at water main) – Map 5, location K-11
2014/15:		S. Skunk River bank stabilization (S.E. 16th Street to E. Lincoln Way) – Map 6, location O-13

FISCAL YEAR PRIORITY		2	1	3		
	TOTAL	**2012/13**	**2013/14**	**2014/15**	**2015/16**	**2016/17**
COST:						
Engineering	965,000	635,000	130,000	200,000		
Construction	4,110,000	2,660,000	650,000	800,000		
TOTAL	**5,075,000**	**3,295,000**	**780,000**	**1,000,000**		
FINANCING:						
G.O. Bonds	2,600,000	820,000	780,000	1,000,000		
Storm Sewer Utility Fund	325,000	325,000				
FEMA Hazard Mitigation Grant Program	2,150,000	2,150,000				
TOTAL	**5,075,000**	**3,295,000**	**780,000**	**1,000,000**		

PROGRAM - ACTIVITY:	**DEPARTMENT:**	**ACCOUNT NO.**
Utilities – Storm Sewer	Public Works	373-8610-489 560-8610-489

STORM WATER FACILITY REHABILITATION PROGRAM **PROJECT STATUS:** Site Change Cost Change

City of Ames, Iowa
Capital Improvements Plan

DESCRIPTION/JUSTIFICATION

In accordance with the Municipal Code, new developments within the community have been required to provide storm water management quantity control. This means regulating storm water runoff discharge to 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:	2012/13	Green Hills Retirement Community – Map 8, location I-14
	2013/14	Somerset Subdivision – Map 2, location I-7
	2014/15	Pete Cooper's Subdivision – Map 6, location N-11
	2015/16	Bloomington Heights Subdivision – Map 2, location J-5

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 site change in this program is due to re-prioritizing facility rehabilitation locations.

FISCAL YEAR PRIORITY			3	5	5	4	
		TOTAL	**2012/13**	**2013/14**	**2014/15**	**2015/16**	**2016/17**
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:	**DEPARTMENT:**	**ACCOUNT NO.**
Utilities – Storm Sewer	Public Works	560-8620-489

STORM SEWER OUTLET EROSION CONTROL **PROJECT STATUS:** Cost Change

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.

An inventory of drainage ways within the City has been established based on National Pollution Discharge Elimination System (NPDES) Phase II requirements. As monitoring activities associated with the NPDES permit requirements continue, locations for future improvements will be further identified.

COMMENTS

Flood mitigation projects previously shown in this program have been shifted to the Flood Response and Mitigation Project.

LOCATION

2012/13 Pinehurst Drive in Green Subdivision, 5th Addition (upon receipt of easement) ($20,000) – Map 5, location I-8; and Windsor Oaks (basin and creek stabilization) – Map 2, location L-5

FISCAL YEAR PRIORITY			4	4	4	3	2
		TOTAL	**2012/13**	**2013/14**	**2014/15**	**2015/16**	**2016/17**
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:							
Storm Sewer Utility Fund		500,000	100,000	100,000	100,000	100,000	100,000
	TOTAL	**500,000**	**100,000**	**100,000**	**100,000**	**100,000**	**100,000**

PROGRAM - ACTIVITY: Utilities - Storm Sewer

DEPARTMENT: Public Works

ACCOUNT NO. 560-8631-489

STORM SEWER IMPROVEMENT PROGRAM **PROJECT STATUS:** No Change

DESCRIPTION/JUSTIFICATION

This annual program is to repair or replace deteriorated storm sewer pipes and intakes. Areas of concentration for storm sewer repairs will be those locations programmed for street improvements and those areas where structural deficiencies are identified. This program was called Storm Sewer Intake Rehabilitation Program in previous Capital Improvement Plans.

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.

Flood mitigation projects previously shown in this program have been shifted to the Flood Response and Mitigation Project.

FISCAL YEAR PRIORITY				3	2	1	1
		TOTAL	**2012/13**	**2013/14**	**2014/15**	**2015/16**	**2016/17**
COST:							
Engineering		140,000		35,000	35,000	35,000	35,000
Construction		860,000		215,000	215,000	215,000	215,000
	TOTAL	**1,000,000**		**250,000**	**250,000**	**250,000**	**250,000**
FINANCING:							
Storm Sewer Utility Fund		1,000,000		250,000	250,000	250,000	250,000
	TOTAL	**1,000,000**		**250,000**	**250,000**	**250,000**	**250,000**

PROGRAM - ACTIVITY: Utilities - Storm Sewer

DEPARTMENT: Public Works

ACCOUNT NO.

UTILITIES - SANITARY SEWER

PROJECT/REVENUE DESCRIPTION	TOTAL	2012/13	2013/14	2014/15	2015/16	2016/17	PAGE
EXPENDITURES:							
1 Sanitary Sewer System Evaluation	1,000,000	1,000,000					41
2 Sanitary Sewer Rehabilitation Program	1,500,000	300,000	300,000	300,000	300,000	300,000	42
3 Clear Water Diversion	125,000	25,000	25,000	25,000	25,000	25,000	43
Total Expenditures	**2,625,000**	**1,325,000**	**325,000**	**325,000**	**325,000**	**325,000**	
REVENUES:							
Sewer Utility Fund	2,625,000	1,325,000	325,000	325,000	325,000	325,000	
Total Revenues	**2,625,000**	**1,325,000**	**325,000**	**325,000**	**325,000**	**325,000**	

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

DESCRIPTION/JUSTIFICATION
The ability of the sewer system to convey wastewater well into the future is dependent on the removal of the current large amount of infiltration and inflow (I/I) in the system that occurs during rain events. In order to convey flows from new development as the City grows, the City must work to reduce the overall I/I in the system. It was recommended in the 2008 Sanitary Sewer System Study to develop a full Sanitary Sewer System Evaluation (SSSE).

COMMENTS
This evaluation is a comprehensive and systematic program for identifying the defects that could contribute I/I in a sanitary sewer system, prioritizing those defects, and establishing rehabilitation costs so that repairs can then be included in the Capital Improvements Plan. The SSSE program typically consists of the following tasks: data collection, sewer televising, smoke testing, manhole inspection, and sump pump inspection. Not only would the SSSE identify and correct sources of I/I, it will also identify areas of aging infrastructure in need of repair to prevent unexpected failures and emergency repairs. Staff has begun Phase 1 for the highest priority areas revealed during the 2008 and 2010 floods.

Additionally, this evaluation will analyze the benefit/cost of the current Footing Drain Grant Program and make a recommendation of whether this suspended program may be beneficial to the community.

This study is occurring concurrent with the Long-Range Facility Plan for WPC. The results of these two studies will be used to prioritize wet weather flow mitigation activities in the collection system and at the treatment plant. Depending on the outcome of these studies, the funds being programmed for the WPC Equalization Basin Expansion project could be diverted to more cost-effective mitigation activities.

Phases of the study as shown will be underway by the spring of 2012 with $1,560,000 budgeted to be spent in 2011/12.

Phase 1: Inflow identification - manhole inspection, smoke testing, and manhole rehabilitation ($500,000)
Phase 2: Flow monitoring ($60,000)
Phase 3: Sewer video inspection of areas with greatest measured infiltration ($2,000,000)

FISCAL YEAR PRIORITY			1				
		TOTAL	**2012/13**	**2013/14**	**2014/15**	**2015/16**	**2016/17**
COST:							
Engineering		1,000,000	1,000,000				
	TOTAL	**1,000,000**	**1,000,000**				
FINANCING:							
Sewer Utility Fund		1,000,000	1,000,000				
	TOTAL	**1,000,000**	**1,000,000**				

PROGRAM - ACTIVITY:	**DEPARTMENT:**	**ACCOUNT NO.**
Utilities – Sanitary Sewer	Public Works	520-8514-489

SANITARY SEWER REHABILITATION PROGRAM **PROJECT STATUS:** No Change

DESCRIPTION/JUSTIFICATION
This is the annual program for rehabilitation/reconstruction of deficient sanitary sewers and deteriorated manholes at various locations throughout the City.

Televising the sewer system has revealed problem areas that could result in future blockages. Most of these problem areas are in sewers that are deeper than 14 feet, and City forces are not equipped to make repairs on sewers of that depth. This program, therefore, provides for those repairs by outside firms.

COMMENTS
System improvement locations have been identified in the Sanitary Sewer System Study which was completed in 2007/08. Additional priorities will be identified through the Sanitary Sewer System Evaluation (page 41) which may substantially increase these costs. Purchased or leased monitoring equipment is also used in determining problem areas. Suggested work activities included rehabilitating manholes, repairing pipe, and similar work. In addition, sewer maintenance crews systematically investigate interceptor and trunk sewers to identify major sources of inflow that could be eliminated as a means of lowering the peak wet weather flow at the treatment plant.

FISCAL YEAR PRIORITY			2	1	1	1	1
		TOTAL	**2012/13**	**2013/14**	**2014/15**	**2015/16**	**2016/17**
COST:							
Engineering		225,000	45,000	45,000	45,000	45,000	45,000
Construction		1,275,000	255,000	255,000	255,000	255,000	255,000
	TOTAL	**1,500,000**	**300,000**	**300,000**	**300,000**	**300,000**	**300,000**
FINANCING:							
Sewer Utility Fund		1,500,000	300,000	300,000	300,000	300,000	300,000
	TOTAL	**1,500,000**	**300,000**	**300,000**	**300,000**	**300,000**	**300,000**

PROGRAM – ACTIVITY:	**DEPARTMENT:**	**ACCOUNT NO.**
Utilities - Sanitary Sewer	Public Works	520-8540-489

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) (page 41) 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			3	2	2	2	2
		TOTAL	**2012/13**	**2013/14**	**2014/15**	**2015/16**	**2016/17**
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:	**DEPARTMENT:**	**ACCOUNT NO.**
Utilities - Sanitary Sewer	Public Works	520-8582-489

UTILITIES - WATER POLLUTION CONTROL

	PROJECT/REVENUE DESCRIPTION	TOTAL	2012/13	2013/14	2014/15	2015/16	2016/17	PAGE
EXPENDITURES:								
1	WPC Plant Disinfection	1,525,000	1,525,000					45
2	Long-Range WPC Facility Plan	193,000	193,000					46
3	WPC Plant Facility Improvements	3,641,000	594,000	1,848,000	750,000	276,000	173,000	47
4	WPC Plant Digester Improvements	1,852,000		565,000	545,000	742,000		48
5	WPC Plant Electrical System Maintenance	336,000		83,000		190,000	63,000	49
6	WPC Plant Residuals Handling Improvements	1,558,000		625,000	933,000			50
7	Flow Equalization Expansion	1,075,000			400,000	675,000		51
	Total Expenditures	**10,180,000**	**2,312,000**	**3,121,000**	**2,628,000**	**1,883,000**	**236,000**	
REVENUES:								
City:								
Sewer Utility Fund		7,097,000	787,000	2,496,000	1,695,000	1,883,000	236,000	
Other:								
Clean Water State Revolving Fund		3,083,000	1,525,000	625,000	933,000			
	Total Revenues	**10,180,000**	**2,312,000**	**3,121,000**	**2,628,000**	**1,883,000**	**236,000**	

WPC PLANT DISINFECTION **PROJECT STATUS:** Cost Decrease

DESCRIPTION/JUSTIFICATION
This project will install an ultraviolet (UV) light disinfection system at the Water Pollution Control Plant. Disinfection became a mandatory requirement when the new National Pollutant Discharge Elimination System (NPDES) permit for the plant was issued by the Iowa Department of Natural Resources (IDNR) in September 2010.

COMMENTS
During the summer of 2007, the IDNR completed a Use Attainability Analysis of the South Skunk River for recreational uses. That analysis determined that the South Skunk River segment, where Ames discharges, can support primary contact recreation, such as swimming and waterskiing. As a result, all NPDES dischargers into this stream segment must meet the bacterial standards outlined in the *Iowa Administrative Code*.

The amended NPDES permit for the Water Pollution Control (WPC) Facility issued by IDNR in September 2011 requires the facility to be in compliance with the bacterial standards by May 2014. Funds for design and the start of construction are authorized in the current year CIP. Construction is now anticipated to begin in the second half of FY 11/12 and will continue into FY 12/13, meeting the permit compliance schedule. The total project cost has been reduced approximately $377,000 from what was shown last year. The schedule reflects a shift of funds from the current year into the first year of the CIP. Funding for the project will come from a Clean Water State Revolving Fund (SRF) loan.

The complete project timeline and budget is as shown below.

FY 09/10	Conceptual Design	$ 63,076
FY 10/11	Preliminary Design	43,481
FY 11/12	Final Design, Construction	1,004,000
FY 12/13	Construction	1,525,000
	Total	$ 2,635,557

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

FISCAL YEAR PRIORITY 1

		TOTAL	2012/13	2013/14	2014/15	2015/16	2016/17
COST:							
Engineering Inspection		25,000	25,000				
Construction		1,500,000	1,500,000				
	TOTAL	**1,525,000**	**1,525,000**				
FINANCING:							
Clean Water State Revolving Fund		1,525,000	1,525,000				
	TOTAL	**1,525,000**	**1,525,000**				

PROGRAM - ACTIVITY: Utilities – WPC Plant
DEPARTMENT: Water & Pollution Control
ACCOUNT NO. 522-3431-489

LONG-RANGE WPC FACILITY PLAN **PROJECT STATUS:** No Change

DESCRIPTION/JUSTIFICATION
This project will consist of a comprehensive evaluation of the current Water Pollution Control (WPC) Facility. It will evaluate the condition of structural and mechanical elements, estimate their remaining useful life, and propose a prioritized schedule of major replacement needs. It will also evaluate the capacity of the existing facility and determine the timing of any necessary capacity expansion needs over a projected 20-year period. Additionally, it will provide a conceptual road map for addressing anticipated regulatory changes.

COMMENTS
The last long-range facility plan was performed in the mid-1980s as part of the initial planning for construction of the existing WPC Facility. That plan used 2010 as the design year. It is now appropriate to perform a new long-range facility plan. The results of the evaluation will play a critical role in establishing future capital investment priorities for the WPC Facility and for establishing long-term rate and fund balance needs.

Conducting a facility plan update became a mandatory activity in the amended NPDES permit issued by the Iowa Department of Natural Resources in September of 2011, as did the Sanitary Sewer System Evaluation Study that will run concurrently with the facility plan development. The results of these two studies will be used to prioritize wet-weather flow mitigation activities in the collection system and at the treatment plant.

Council authorized $193,000 for the initiation of the long-range facility plan in FY 2011/12. The work reflected below will complete the plan's development.

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

FISCAL YEAR PRIORITY			2				
		TOTAL	**2012/13**	**2013/14**	**2014/15**	**2015/16**	**2016/17**
COST:							
Engineering		193,000	193,000				
	TOTAL	**193,000**	**193,000**				
FINANCING:							
Sewer Utility Fund		193,000	193,000				
	TOTAL	**193,000**	**193,000**				

PROGRAM - ACTIVITY:	**DEPARTMENT:**	**ACCOUNT NO.**
Utilities – WPC Plant	Water & Pollution Control	520-3442-489

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

Projects scheduled include:

- FY 12/13 Vertical Turbine Pump Replacement: Year five of a five-year project. ($418,000)
- FY 12/13 Raw Water Pump Station Repainting ($128,000)
- FY 12/13 Replace WAS Pump #1 ($48,000)
- FY 13/14 Rebuild South Dayton Avenue Lift Station: Includes pumps, motors, and chemical dosing system. ($693,000)
- FY 13/14 Replace Orchard Drive Lift Station ($347,000)
- FY 13/14 Grease Receiving Station Upgrade ($275,000)
- FY 13/14 On-site Street Repairs ($450,000)
- FY 13/14 Paint Screw Pumps ($83,000)
- FY 14/15 Install Third Bar Screen w/ Screenings Removal ($750,000)
- FY 15/16 Replace Screw Pump Mechanical Drive ($226,000)
- FY 15/16 Raw Pump Station HVAC ($50,000)
- FY 16/17 Trickling Filter Pump Station Repainting ($59,000)
- FY 16/17 Trickling Filter Pump Station Roof Hatch Alterations ($114,000)

LOCATION

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

FISCAL YEAR PRIORITY			3	1	3	3	2
		TOTAL	**2012/13**	**2013/14**	**2014/15**	**2015/16**	**2016/17**
COST:							
Construction and Equipment		3,641,000	594,000	1,848,000	750,000	276,000	173,000
	TOTAL	**3,641,000**	**594,000**	**1,848,000**	**750,000**	**276,000**	**173,000**
FINANCING:							
Sewer Utility Fund		3,641,000	594,000	1,848,000	750,000	276,000	173,000
	TOTAL	**3,641,000**	**594,000**	**1,848,000**	**750,000**	**276,000**	**173,000**

PROGRAM - ACTIVITY: Utilities - WPC Plant

DEPARTMENT: Water & Pollution Control

ACCOUNT NO. Multiple

DIGESTER IMPROVEMENTS **PROJECT STATUS:** No 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 coating addressed. The Residuals Handling Study, completed in 2009, identified improvements to digester mixing as an important element in ensuring solids handling capacity over the next 20 years. The exterior steel lids on the digesters also have protective paint coating systems that are failing and need to be repainted. This project couples the scheduling of these four maintenance activities (cleaning, repaint interior, install mixing, repaint exterior) to allow for both cost and workload efficiencies. By coordinating the scheduling of these activities, the down-time of the digesters can be minimized.

COMMENTS

The anticipated project schedule and budget are as follows:

FY 2013/14	$ 565,000	Clean 1 Primary Digester ($83,000); Repaint Interior Piping ($249,000); Design and Replace Mixing System ($39,000 + $194,000)
FY 2014/15	545,000	Clean 1 Primary Digester ($86,000); Repaint Interior Piping ($258,000); Replace Mixing System ($201,000)
FY 2015/16	742,000	Clean Secondary Digester ($89,000); Repaint Interior Piping ($267,000); Repaint Exterior Lids on All Three Digesters ($386,000)
Total	$ 1,852,000	

LOCATION

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

FISCAL YEAR PRIORITY				2	2	4	
		TOTAL	**2012/13**	**2013/14**	**2014/15**	**2015/16**	**2016/17**
COST:							
Digester Cleaning		258,000		83,000	86,000	89,000	
Interior Painting		395,000		194,000	201,000		
Mixing System Design		39,000		39,000			
Mixing System Replacement		774,000		249,000	258,000	267,000	
Exterior Lid Painting		386,000				386,000	
	TOTAL	**1,852,000**		**565,000**	**545,000**	**742,000**	
FINANCING:							
Sewer Utility Fund		1,852,000		565,000	545,000	742,000	
	TOTAL	**1,852,000**		**565,000**	**545,000**	**742,000**	

PROGRAM - ACTIVITY: Utilities - WPC Plant

DEPARTMENT: Water & Pollution Control

ACCOUNT NO.

WPC ELECTRICAL SYSTEM MAINTENANCE **PROJECT STATUS:** 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.

COMMENTS
The tasks shown in FY 13/14 and in FY 15/16 are unchanged from what was shown last year. The main switchgear is scheduled for preventive maintenance in the current year. This is an activity that is recommended every five years, and the next round is planned for FY 16/17.

FY 13/14	$ 83,000	Replace Existing Switchgear Relay Logic Controllers with Programmable Logic Controllers (PLCs)
FY 15/16	190,000	Replace Main Circuit Breakers
FY 16/17	63,000	Main Switchgear Preventive Maintenance (every five years)

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

FISCAL YEAR PRIORITY				3		2	1
		TOTAL	**2012/13**	**2013/14**	**2014/15**	**2015/16**	**2016/17**
COST:							
Construction		336,000		83,000		190,000	63,000
	TOTAL	**336,000**		**83,000**		**190,000**	**63,000**
FINANCING:							
Sewer Utility Fund		336,000		83,000		190,000	63,000
	TOTAL	**336,000**		**83,000**		**190,000**	**63,000**

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

WPC PLANT RESIDUALS HANDLING IMPROVEMENTS **PROJECT STATUS:** Delayed

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. Implementation of this project has been delayed to allow the Long-Range Facility Plan to be completed first, ensuring that the solids handling portion of the facility remains in line with the concept for the liquid handling portion.

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

FISCAL YEAR PRIORITY				4	4		
		TOTAL	**2012/13**	**2013/14**	**2014/15**	**2015/16**	**2016/17**
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: Utilities – WPC Plant
DEPARTMENT: Water & Pollution Control
ACCOUNT NO.

FLOW EQUALIZATION EXPANSION **PROJECT STATUS:** No Change

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 basin 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. The proposed project will increase the effective equalization basin storage from 4.4 million gallons to 10.4 million gallons.

COMMENTS

With the new interpretation being imposed by IDNR and U.S. EPA on peak wet-weather flows, this project has become even more important for the WPC Facility. This project is anticipated as a likely wet-weather flow mitigation activity following the Sanitary Sewer System Evaluation Study and the Long-Range Facility Plan for WPC. It is possible that these funds could be diverted to a higher priority mitigation activity, depending on the outcome of the studies.

LOCATION

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

FISCAL YEAR PRIORITY					1	1	
		TOTAL	**2012/13**	**2013/14**	**2014/15**	**2015/16**	**2016/17**
COST:							
Engineering		90,000			60,000	30,000	
Construction		985,000			340,000	645,000	
	TOTAL	**1,075,000**			**400,000**	**675,000**	
FINANCING:							
Sewer Utility Fund		1,075,000			400,000	675,000	
	TOTAL	**1,075,000**			**400,000**	**675,000**	

PROGRAM - ACTIVITY: Utilities - WPC Plant

DEPARTMENT: Water and Pollution Control

ACCOUNT NO.

UTILITIES - ELECTRIC PRODUCTION

	PROJECT/REVENUE DESCRIPTION	TOTAL	2012/13	2013/14	2014/15	2015/16	2016/17	PAGE
EXPENDITURES:								
Electric Services:								
7	Demand Side Management Programs	5,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	60
Transmission/Distribution:								
1	Mid-American Energy Interconnection	4,000,000	4,000,000					54
6	69 kV Switchyard Relay/Control Replacement	600,000	150,000	450,000				59
12	Vet Med Substation Feeders	300,000	300,000					65
13	69 kV Transmission Reconstruction	2,330,000	250,000	520,000	520,000	520,000	520,000	66
16	Mortensen Road Feeder Reconstruction	330,000	30,000	300,000				69
17	Ames Plant Distribution Substation	760,000	110,000	650,000				70
22	Top-O-Hollow Substation Expansion	2,000,000		250,000	1,750,000			75
30	Ontario Substation 69 kV Breaker Addition	1,150,000			150,000	1,000,000		83
32	Dayton Ave Substation Switchgear Upgrades	800,000				100,000	700,000	85
Power Plant:								
2	Unit #8 Boiler Tube Repair	2,500,000	2,500,000					55
3	Feedwater Heater Tube Replacement	1,960,000	980,000		980,000			56
4	EPA - Unit #8 Mercury Reduction	5,100,000	300,000	1,690,000	3,110,000			57
5	Unit #8 Air Heater Basket Replacement	100,000	100,000					58
8	Unit #8 Turbine Generator 5-Year Overhaul	1,500,000	1,500,000					61
9	Unit #8 Blading & Diaphragms/Parts	2,000,000	2,000,000					62
10	Gas Turbine #1 Inspection & Overhaul	1,700,000	850,000	350,000	500,000			63

UTILITIES - ELECTRIC PRODUCTION, continued

	PROJECT/REVENUE DESCRIPTION	TOTAL	2012/13	2013/14	2014/15	2015/16	2016/17	PAGE
EXPENDITURES, continued:								
Power Plant (continued):								
11	Turbine Controls Upgrade	650,000	450,000		200,000			64
14	Units #7 & #8 DCS Upgrade	425,000	425,000					67
15	Continuous Emissions Monitoring System	450,000	450,000					68
18	Power Plant Fire Protection System	1,670,000	570,000	450,000	150,000	250,000	250,000	71
19	Underground Storage Tanks	365,000	15,000	350,000				72
20	EPA - Emissions Improvements	3,820,000		3,820,000				73
21	Gas Turbine #2 Inlet Heating	805,000		805,000				74
23	Cooling Tower Repairs	400,000		400,000				76
24	Unit #8 Precipitator Control	1,150,000		100,000	1,050,000			77
25	Oil Guns and Ignitors	945,000		595,000	350,000			78
26	Combustion Turbine #1 Evaporator Cooler	300,000		300,000				79
27	EPA - Ash Handling & Disposal	1,050,000		50,000			1,000,000	80
28	RDF Bin Work	250,000			250,000			81
29	Unit #7 Boiler Tube Repair	150,000			150,000			82
31	Unit #7 Turbine Generator 5-Year Overhaul	750,000			750,000			84
33	Combustion Turbines Natural Gas Line	5,500,000				5,500,000		86
34	Power Plant Roof Replacement	450,000				450,000		87
	Total Expenditures	**51,260,000**	**15,980,000**	**12,080,000**	**10,910,000**	**8,820,000**	**3,470,000**	
REVENUES:								
City:								
Electric Utility Fund		49,595,300	15,048,000	11,875,700	10,659,200	8,641,200	3,371,200	
Other:								
Iowa State University		1,664,700	932,000	204,300	250,800	178,800	98,800	
	Total Revenues	**51,260,000**	**15,980,000**	**12,080,000**	**10,910,000**	**8,820,000**	**3,470,000**	

MID-AMERICAN ENERGY CO. INTERCONNECTION **PROJECT STATUS:** Cost Change Delayed

DESCRIPTION/JUSTIFICATION

This project is to construct a 161kV line from Ames to Mid-American Energy Company's (MEC) 161kV switching station northeast of Ankeny. This will complete a multi-year project started in FY 2003/04. The in-town portion of this project is complete.

In FY 06/07, Ames converted its 69kV line interconnection with Alliant Utilities at Boone from 69kV operation to 161kV operation. During this time, work was completed to create two 161kV terminations at Stange Substation and Ames Plant Substation. MEC has also completed construction of an additional 161kV terminal at its northeast Ankeny Substation to allow for the interconnection of the Ames Plant/Northeast Ankeny 161kV line. Ames also has a 69kV line interconnection that is with MEC at Ankeny. This line was built in 1958, and over the years has served the Ames system well. It is no longer adequate to serve Ames and ISU's capacity and reliability requirements, so an additional line is needed from Ames to the south. This 161kV interconnection is essential to provide Ames with needed transmission capacity and to satisfy the current and future needs of our customers.

COMMENTS

The total cost estimate for this project is $28,201,253 with $856,000 funding from Iowa State University, and $3,144,000 funding from the Electric Utility Fund for FY 12/13.

FY 03 - 08	Actual	$	14,248,604
FY 08/09	Actual (MEC)		208,245
FY 08/09	Actual (In-Town)		2,334,309
FY 09/10	Actual (MEC)		479,785
FY 09/10	Actual (In-Town)		1,732,388
FY 10/11	Actual (MEC)		187,136
FY 10/11	Actual (In-Town)		786
	Subtotal	$	19,191,253
FY 11/12	(Estimated)		5,010,000
FY 12/13	(Estimated)		4,000,000
	Total	$	28,201,253

LOCATION

A route between Ames Plant Substation and MEC 161kV switch station near Ankeny

FISCAL YEAR PRIORITY 1

	TOTAL	2012/13	2013/14	2014/15	2015/16	2016/17
COST:						
Construction and Professional Services	4,000,000	4,000,000				
TOTAL	**4,000,000**	**4,000,000**				
FINANCING:						
Electric Utility Fund	3,144,000	3,144,000				
Iowa State University	856,000	856,000				
TOTAL	**4,000,000**	**4,000,000**				

PROGRAM - ACTIVITY: Utilities – Electric Production

DEPARTMENT: Electric

ACCOUNT NO. 530-4871-489

UNIT #8 BOILER TUBE REPAIR **PROJECT STATUS:** Delayed

DESCRIPTION/JUSTIFICATION
The Unit #8 boiler is twenty years old and in need of tube repairs. There is a three-year plan for engineering and re-tubing of the boiler that includes materials and labor to install. The plan includes replacing the lower 50 feet of the boiler in 2011 and the superheater in FY 2012/13.

COMMENTS
Staff has done preliminary engineering work with Zachary Engineering Company, a utility engineering company. Approximately $1.8 million was spent in FY 2009/10 to begin acquisition of tube material. Approximately $3.4 million is being spent in FY 2011/12 to complete tube installation in the lower 40 feet of the boiler, and provide for engineering of superheater repair. In FY 2012/13, $2,500,000 will be spent to acquire tube material and complete tube installation in the superheater area.

FY 2007/08	Engineering for wall tubes - actual	$ 31,605
FY 2008/09	Engineering for wall tubes – actual	23,894
FY 2009/10	Materials for wall tube installation - actual	1,768,967
FY 2011/12	Labor for tube installation	3,107,139
FY 2011/12	Engineering for superheater	300,000
FY 2012/13	Materials and labor for superheater installation	2,500,000
	Total	$ 7,731,605

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

FISCAL YEAR PRIORITY			2				
		TOTAL	**2012/13**	**2013/14**	**2014/15**	**2015/16**	**2016/17**
COST:							
Labor and Materials		2,500,000	2,500,000				
	TOTAL	**2,500,000**	**2,500,000**				
FINANCING:							
Electric Utility Fund		2,500,000	2,500,000				
	TOTAL	**2,500,000**	**2,500,000**				

PROGRAM - ACTIVITY:	**DEPARTMENT:**	**ACCOUNT NO.**
Utilities – Electric Production	Electric	530-4898-489

FEEDWATER HEATER TUBE REPLACEMENT **PROJECT STATUS:** Cost Change 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. It's important to consider that the payback on these replacements in Unit #8 is only two years based on fuel savings.

COMMENTS

Replacement of 84 and 85 feedwater heaters will be scheduled for 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	$ 40,000
FY 2012/13	Unit #8 materials and labor	980,000
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			3		12		
	TOTAL	**2012/13**	**2013/14**	**2014/15**	**2015/16**	**2016/17**
COST:							
Labor and Equipment	1,960,000	980,000		980,000		
TOTAL	**1,960,000**	**980,000**		**980,000**		
FINANCING:							
Electric Utility Fund	1,960,000	980,000		980,000		
TOTAL	**1,960,000**	**980,000**		**980,000**		

PROGRAM - ACTIVITY:	**DEPARTMENT:**	**ACCOUNT NO.**
Utilities – Electric Production	Electric	530-4831-489

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, allowances will need to be purchased.

COMMENTS
Staff believes that Unit #8 will require a mercury control, based on anticipated regulations. Engineering for the modifications to Unit #8 are planned for FY 2012/13, in the expectation that regulations will be in place by that time.

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

FISCAL YEAR PRIORITY			4	4	10		
		TOTAL	**2012/13**	**2013/14**	**2014/15**	**2015/16**	**2016/17**
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 AIR HEATER BASKET REPLACEMENT **PROJECT STATUS:** Cost Increase Delayed

DESCRIPTION/JUSTIFICATION

The air heater is a large, rotating set of three stacked metal elements. The flue gas exiting from the boiler passes across the metal elements, heating them. The rotation of the assembly then brings the elements into the cold air forced draft fan side. As the cold air passes through the heated metal elements, the air is heated to 600 degrees Fahrenheit and is used for combustion, drying, and transport of pulverized coal to the boiler. This recovery of the heat from the flue gas increases the efficiency of the boiler. The lower levels of the metal elements have become loose and are falling out, allowing air to pass through without being heated properly.

COMMENTS

This is the second set of baskets that has been installed; each set lasted about twelve years.

FY 2011/12	Material/Parts	$ 75,000
FY 2012/13	Installation	100,000
	Total	$ 175,000

LOCATION

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

FISCAL YEAR PRIORITY			5				
		TOTAL	**2012/13**	**2013/14**	**2014/15**	**2015/16**	**2016/2017**
COST:							
Installation		100,000	100,000				
	TOTAL	**100,000**	**100,000**				
FINANCING:							
Electric Utility Fund		100,000	100,000				
	TOTAL	**100,000**	**100,000**				

PROGRAM - ACTIVITY:	**DEPARTMENT:**	**ACCOUNT NO.**
Utilities – Electric Production	Electric	530-4832-489

AMES PLANT 69KV SWITCHYARD RELAY AND CONTROL REPLACEMENT

PROJECT STATUS: No Change

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 expansion. 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. The relaying and controls for the 69kV switchyard 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, 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 a conservative 19%.

LOCATION

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

FISCAL YEAR PRIORITY			6	2			
		TOTAL	**2012/13**	**2013/14**	**2014/15**	**2015/16**	**2016/17**
COST:							
Engineering		150,000	150,000				
Construction		450,000		450,000			
	TOTAL	**600,000**	**150,000**	**450,000**			
FINANCING:							
Electric Utility Fund		486,000	121,500	364,500			
Iowa State University		114,000	28,500	85,500			
	TOTAL	**600,000**	**150,000**	**450,000**			

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

DEMAND SIDE MANAGEMENT (DSM)
ENERGY CONSERVATION PROGRAMS

PROJECT STATUS: Cost 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
- 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 Large Commercial and Industrial classes
- Off-peak rates

LOCATION

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

FISCAL YEAR PRIORITY		7	7	4	3	2
	TOTAL	**2012/13**	**2013/14**	**2014/15**	**2015/16**	**2016/17**
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

UNIT #8 TURBINE GENERATOR FIVE-YEAR OVERHAUL **PROJECT STATUS:** Delayed Cost Decrease

DESCRIPTION/JUSTIFICATION
The Unit #8 turbine generator will be disassembled and inspected after 20,000 hours of operation. An inspection was done in 2005 and was due again in FY 10/11. Repairs and replacement of worn parts will be completed as the inspection progresses.

COMMENTS
This work is required to replace worn parts and 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. The budget includes the cost of the inspection and normal repairs anticipated after 20,000 hours of operation.

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

FISCAL YEAR PRIORITY			8				
		TOTAL	**2012/13**	**2013/14**	**2014/15**	**2015/16**	**2016/17**
COST:							
Construction		1,500,000	1,500,000				
	TOTAL	**1,500,000**	**1,500,000**				
FINANCING:							
Electric Utility Fund		1,500,000	1,500,000				
	TOTAL	**1,500,000**	**1,500,000**				

PROGRAM - ACTIVITY:	**DEPARTMENT:**	**ACCOUNT NO.**
Utilities – Electric Production	Electric	530-4852-459

UNIT #8 BLADING AND DIAPHRAGMS/PARTS **PROJECT STATUS:** New

DESCRIPTION/JUSTIFICATION
The Unit #8 turbine generator will be disassembled and inspected after 20,000 hours of operation. Prior inspections have indicated that replacement of turbine wheel blades and diaphragms is necessary. This project is for procuring necessary parts for the Unit #8 turbine generator overhaul. This includes first stage nozzle and blading stages 1, 2, 3, 4, 5, 14, 15, 16, and 17, and one diaphragm. Other parts to be procured will include pilot valve and cylinder, main operating valve, shaft and piston, speed relay valve shaft, cylinder and linkage, shaft packing sets, shaft and thrust bearings, and hydrogen seals.

COMMENTS
These parts have long lead delivery times and need to be ordered well in advance of the generator repair process to prevent unnecessary delays in the assembly of the unit. The parts will be installed by the company who is awarded the contract for the Unit #8 turbine and generator five-year overhaul.

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

FISCAL YEAR PRIORITY			9				
		TOTAL	**2012/13**	**2013/14**	**2014/15**	**2015/16**	**2016/17**
COST:							
Material/Parts		2,000,000	2,000,000				
	TOTAL	**2,000,000**	**2,000,000**				
FINANCING:							
Electric Utility Fund		2,000,000	2,000,000				
	TOTAL	**2,000,000**	**2,000,000**				

PROGRAM - ACTIVITY:	**DEPARTMENT:**	**ACCOUNT NO.**
Utilities – Electric Production	Electric	530-4855-489

GAS TURBINE #1 ENGINE, GENERATOR, AND TURBINE INSPECTION AND OVERHAUL **PROJECT STATUS:** Cost Change 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 two outage periods; the first for the engine and free turbine inspection, and the second for the generator.

FY 2012/13	Engine	$ 850,000
FY 2013/14	Generator	350,000
FY 2014/15	Turbine	500,000
		$ 1,700,000

LOCATION

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

FISCAL YEAR PRIORITY		10	3	3		
	TOTAL	**2012/13**	**2013/14**	**2014/15**	**2015/16**	**2016/17**
COST:						
Inspection Labor and Parts - Engine	850,000	850,000				
Inspection Labor and Parts – Generator	350,000		350,000			
Inspection Labor and Parts – Turbine	500,000			500,000		
TOTAL	**1,700,000**	**850,000**	**350,000**	**500,000**		
FINANCING:						
Electric Utility Fund	1,700,000	850,000	350,000	500,000		
TOTAL	**1,700,000**	**850,000**	**350,000**	**500,000**		

PROGRAM - ACTIVITY:	**DEPARTMENT:**	**ACCOUNT NO.**
Utilities – Electric Production	Electric	530-4827-489

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 12/13	Unit #8		$ 450,000
FY 14/15	Unit #7		200,000
		Total	$ 650,000

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

FISCAL YEAR PRIORITY			11		9		
		TOTAL	**2012/13**	**2013/14**	**2014/15**	**2015/16**	**2016/17**
COST:							
Construction		650,000	450,000		200,000		
	TOTAL	**650,000**	**450,000**		**200,000**		
FINANCING:							
Electric Utility Fund		650,000	450,000		200,000		
	TOTAL	**650,000**	**450,000**		**200,000**		

PROGRAM - ACTIVITY:	**DEPARTMENT:**	**ACCOUNT NO.**
Utilities – Electric Production	Electric	530-4842-489

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

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			12				
		TOTAL	**2012/13**	**2013/14**	**2014/15**	**2015/16**	**2016/17**
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

69KV TRANSMISSION RECONSTRUCTION **PROJECT STATUS:** New

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 a conservative 19%.

LOCATION
Various

FISCAL YEAR PRIORITY		13	8	2	2	1
	TOTAL	**2012/13**	**2013/14**	**2014/15**	**2015/16**	**2016/17**
COST:						
Engineering	330,000	50,000	70,000	70,000	70,000	70,000
Construction	2,000,000	200,000	450,000	450,000	450,000	450,000
TOTAL	**2,330,000**	**250,000**	**520,000**	**520,000**	**520,000**	**520,000**
FINANCING:						
Electric Utility Fund	1,887,300	202,500	421,200	421,200	421,200	421,200
Iowa State University	442,700	47,500	98,800	98,800	98,800	98,800
TOTAL	**2,330,000**	**250,000**	**520,000**	**520,000**	**520,000**	**520,000**

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

UNITS #7 AND #8 DISTRIBUTIVE CONTROL SYSTEM (DCS) UPGRADE

PROJECT STATUS: Cost Change Delayed

DESCRIPTION/JUSTIFICATION

The distributive control system's CDDI software and some hardware on Units #7 and #8 boilers have become obsolete. These systems are critical to the operation of the units because they transfer vital information from equipment in the field to the operators' control station. The reliability of the units can be greatly affected by failure of the CDDI system and the inability to find spare parts for these systems.

COMMENTS

It is necessary to upgrade the current systems, especially the communication portion. This upgrade will include software and some hardware. The current system is a Westinghouse ovation system. The estimates used are preliminary. Upgrading the system for Unit #8 must be done before Unit #7.

FY 2008/09	$	14,620
FY 2009/10		531,047
FY 2010/11		182,646
FY 2011/12		187,911
FY 2012/13		425,000
	$	1,341,224

LOCATION

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

FISCAL YEAR PRIORITY			14				
		TOTAL	**2012/13**	**2013/14**	**2014/15**	**2015/16**	**2016/17**
COST:							
Equipment and Installation		425,000	425,000				
	TOTAL	**425,000**	**425,000**				
FINANCING:							
Electric Utility Fund		425,000	425,000				
	TOTAL	**425,000**	**425,000**				

PROGRAM - ACTIVITY:	**DEPARTMENT:**	**ACCOUNT NO.**
Utilities – Electric Production	Electric	530-4820-489

CONTINUOUS EMISSIONS MONITORING SYSTEM REPLACEMENT

PROJECT STATUS: New

DESCRIPTION/JUSTIFICATION

This capital improvement project is for replacement of the continuous emissions monitoring systems on Units #7 and #8 boilers. 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			15				
		TOTAL	**2012/13**	**2013/14**	**2014/15**	**2015/16**	**2016/17**
COST:							
Engineering		50,000	50,000				
Materials and Installation		400,000	400,000				
	TOTAL	**450,000**	**450,000**				
FINANCING:							
Electric Utility Fund		450,000	450,000				
	TOTAL	**450,000**	**450,000**				

PROGRAM - ACTIVITY:	**DEPARTMENT:**	**ACCOUNT NO.**
Utilities – Electric Production	Electric	530-4861-489

MORTENSEN ROAD UNDERGROUND AND OVERHEAD FEEDER RECONSTRUCTION

PROJECT STATUS: New

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			16	9			
		TOTAL	**2012/13**	**2013/14**	**2014/15**	**2015/16**	**2016/17**
COST:							
Engineering		30,000	30,000				
Installation		300,000		300,000			
	TOTAL	**330,000**	**30,000**	**300,000**			
FINANCING:							
Electric Utility Fund		330,000	30,000	300,000			
	TOTAL	**330,000**	**30,000**	**300,000**			

PROGRAM - ACTIVITY:	**DEPARTMENT:**	**ACCOUNT NO.**
Utilities – Electric Extension Improvements	Electric	530-4858-489

AMES PLANT DISTRIBUTION SUBSTATION SWITCHGEAR AND FEEDER EXTENSION

PROJECT STATUS: New

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 DC batteries for this substation are currently inside the Power Plant and the DC cabling runs beneath the Water Plant Administration building in duct runs that are partially collapsed. This substation is the primary source for Mary Greely 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.

LOCATION

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

FISCAL YEAR PRIORITY			17	10			
		TOTAL	**2012/13**	**2013/14**	**2014/15**	**2015/16**	**2016/17**
COST:							
Engineering		110,000	110,000				
Construction		650,000		650,000			
	TOTAL	**760,000**	**110,000**	**650,000**			
FINANCING:							
Electric Utility Fund		760,000	110,000	650,000			
	TOTAL	**760,000**	**110,000**	**650,000**			

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

POWER PLANT FIRE PROTECTION SYSTEM **PROJECT STATUS:** Cost Change Project Change

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	400,000
FY 2012/13	Gas Turbine #1	150,000
FY 2012/13	Coal Handling Sprinkler System – phase 2 (partial) and phase 3	420,000
FY 2013/14	Cooling Tower Sprinkler System	450,000
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
		$ 3,195,000

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		18	13	6	5	5
	TOTAL	**2012/13**	**2013/14**	**2014/15**	**2015/16**	**2016/17**
COST:						
Construction	1,670,000	570,000	450,000	150,000	250,000	250,000
TOTAL	**1,670,000**	**570,000**	**450,000**	**150,000**	**250,000**	**250,000**
FINANCING:						
Electric Utility Fund	1,670,000	570,000	450,000	150,000	250,000	250,000
TOTAL	**1,670,000**	**570,000**	**450,000**	**150,000**	**250,000**	**250,000**

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

UNDERGROUND STORAGE TANKS **PROJECT STATUS:** New

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			19	15			
		TOTAL	**2012/13**	**2013/14**	**2014/15**	**2015/16**	**2016/17**
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:** No Change

DESCRIPTION/JUSTIFICATION

This CIP replaces two CIPs approved in earlier years. They were the **Unit #7 Nitrogen Oxide Control Capital**, and the **Unit #8 Nitrogen Oxide Control Capital**.

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 the end of 2011. Effective January 1, 2012, 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).

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 – actual		$ 25,625	$	51,692
FY 2008/09	Engineering – actual		30,306		17,599
FY 2009/10	Engineering – actual		16,598		9,899
FY 2010/11	Engineering		50,000		30,000
FY 2011/12	Engineering, Materials		1,300,000		200,000
FY 2013/14	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	**2012/13**	**2013/14**	**2014/15**	**2015/16**	**2016/17**
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.

INLET HEATING FOR GAS TURBINE #2 **PROJECT STATUS:** Delayed Cost 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.

COMMENTS

Cost estimates obtained in 2010 ranged between $400,000 and $700,000.

FY 11/12	Engineering	$ 20,000
FY 13/14	Installation	805,000
		$ 825,000

LOCATION

Pullman Street – Map 6, location P-10

FISCAL YEAR PRIORITY				5			
		TOTAL	**2012/13**	**2013/14**	**2014/15**	**2015/16**	**2016/17**
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: Utilities – Electric Production

DEPARTMENT: Electric

ACCOUNT NO.

TOP-O-HOLLOW SUBSTATION EXPANSION AND BREAKER ADDITION

PROJECT STATUS: Advanced

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 has been broadened to include 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 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				6	1		
		TOTAL	**2012/13**	**2013/14**	**2014/15**	**2015/16**	**2016/17**
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		1,840,000		230,000	1,610,000		
Iowa State University		160,000		20,000	140,000		
	TOTAL	**2,000,000**		**250,000**	**1,750,000**		

PROGRAM – ACTIVITY: Utilities – Electric Extension/Improvements

DEPARTMENT: Electric

ACCOUNT NO.

COOLING TOWER REPAIRS **PROJECT STATUS:** Cost Increase

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 2011/12	Unit #8 Cooling Tower – Materials and Labor (estimated)	$ 1,220,000
FY 2011/12	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				11			
	TOTAL	**2012/13**	**2013/14**	**2014/15**	**2015/16**	**2016/17**
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: Utilities – Electric Production

DEPARTMENT: Electric

ACCOUNT NO.

UNIT #8 PRECIPITATOR CONTROL **PROJECT STATUS:** New

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, which have served the City well, 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.

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

FISCAL YEAR PRIORITY				12	11		
		TOTAL	**2012/13**	**2013/14**	**2014/15**	**2015/16**	**2016/17**
COST:							
Engineering		100,000		100,000			
Equipment		750,000			750,000		
Installation		300,000			300,000		
	TOTAL	**1,150,000**		**100,000**	**1,050,000**		
FINANCING:							
Electric Utility Fund		1,150,000		100,000	1,050,000		
	TOTAL	**1,150,000**		**100,000**	**1,050,000**		

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. Unit 8's piping work will now be done at the same time the boiler tube repair will occur on Unit #8 in FY 12/13. This project may be subject to regulatory approval.

FY 2011/12	Engineering	$	30,000
FY 2013/14	Unit #8		595,000
FY 2014/15	Unit #7		350,000
	Total	$	975,000

LOCATION

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

FISCAL YEAR PRIORITY				14	14		
		TOTAL	**2012/13**	**2013/14**	**2014/15**	**2015/16**	**2016/17**
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.

EVAPORATOR COOLER ON COMBUSTION TURBINE #1

PROJECT STATUS: Delayed

DESCRIPTION/JUSTIFICATION
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				16			
		TOTAL	**2012/13**	**2013/14**	**2014/15**	**2015/16**	**2016/17**
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: Utilities – Electric Production

DEPARTMENT: Electric

ACCOUNT NO.

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

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 13/14	Engineering	50,000
FY 16/17	Construction	1,000,000
FY 17/18	Construction	2,000,000
FY 18/19	Construction	2,000,000
	Total	$ 5,050,000

LOCATION

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

FISCAL YEAR PRIORITY				17			3
		TOTAL	**2012/13**	**2013/14**	**2014/15**	**2015/16**	**2016/17**
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.

RDF BIN WORK **PROJECT STATUS:** Delayed

DESCRIPTION/JUSTIFICATION

This project is to repair or replace a number of major components (traverse augers, metering bins, out-feed conveyors, structure steel and receiving bin walls) on the refuse derived (RDF) bin. The entire structure of the RDF bin is composed of Cor-ten steel. This steel is used where there is no protective covering to be applied and it rusts to create a corrosion shield for itself. Because the RDF material sticks to the exposed steel and then stays wet due to the weather or humidity created by the condensation in the bin, the Cor-ten simply continues to rust because it never dries out. The bin is twelve years old and requires almost constant attention now. Past experience with the old RDF bin indicates that after fifteen years, the steel of the bin will require repair or replacement. Heavy corrosion on the firewall, the out-feed conveyors, and the traverse auger rails has already been addressed. Some major work is needed to replace the receiving bin walls and the roof steel. Both of these areas are currently being patched.

COMMENTS

Staff expects the frequency of these repairs to increase throughout the current year. The price estimate was provided by the original equipment manufacturer in 2006. Since it is difficult to coordinate outages when there isn't conflict with the Resource Recovery Plant, staff plans on having materials on hand and scheduling repairs as the opportunity presents itself.

LOCATION

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

FISCAL YEAR PRIORITY					5		
		TOTAL	**2012/13**	**2013/14**	**2014/15**	**2015/16**	**2016/17**
COST:							
Construction		250,000			250,000		
	TOTAL	**250,000**			**250,000**		
FINANCING:							
Electric Utility Fund		250,000			250,000		
	TOTAL	**250,000**			**250,000**		

PROGRAM - ACTIVITY: Utilities - Electric Production

DEPARTMENT: Electric

ACCOUNT NO.

UNIT #7 BOILER TUBE REPAIR **PROJECT STATUS:** Delayed

DESCRIPTION/JUSTIFICATION

The Unit #7 boiler is forty years old and in need of tube repairs. Staff has devised a six-year 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					7		
		TOTAL	**2012/13**	**2013/14**	**2014/15**	**2015/16**	**2016/17**
COST:							
Engineering		150,000			150,000		
	TOTAL	**150,000**			**150,000**		
FINANCING:							
Electric Utility Fund		150,000			150,000		
	TOTAL	**150,000**			**150,000**		

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

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 a conservative 8%.

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

FISCAL YEAR PRIORITY					8	4	
		TOTAL	**2012/13**	**2013/14**	**2014/15**	**2015/16**	**2016/17**
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		1,058,000			138,000	920,000	
Iowa State University		92,000			12,000	80,000	
	TOTAL	**1,150,000**			**150,000**	**1,000,000**	

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

UNIT #7 TURBINE GENERATOR FIVE-YEAR OVERHAUL **PROJECT STATUS:** No Change

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 12/13, 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					13		
		TOTAL	**2012/13**	**2013/14**	**2014/15**	**2015/16**	**2016/17**
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:	**DEPARTMENT:**	**ACCOUNT NO.**
Utilities – Electric Production	Electric	

DAYTON AVE SUBSTATION SWITCHGEAR UPGRADES **PROJECT STATUS:** New

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						1	4
		TOTAL	**2012/13**	**2013/14**	**2014/15**	**2015/16**	**2016/17**
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.

NATURAL GAS LINE TO COMBUSTION TURBINES #1 AND #2

PROJECT STATUS: New

DESCRIPTION/JUSTIFICATION

The City owns two peaking power generating units on the east side of the city. The primary fuel is diesel. These units were designed to run on natural gas also, but there is not adequate volume, or a high enough pressure, to supply these two units. Installing the high pressure natural gas line will allow more economical operation as well as eliminate the need to order multiple loads of fuel oil on a regular basis.

COMMENTS

Both existing peaking power generating units were built to run on natural gas. If a third combustion unit is installed in the future, the natural gas line will be in place.

LOCATION

Pullman Avenue – Map 6, location P-10 to Story City

FISCAL YEAR PRIORITY						6	
		TOTAL	**2012/13**	**2013/14**	**2014/15**	**2015/16**	**2016/17**
COST:							
Equipment and Installation		5,500,000				5,500,000	
	TOTAL	**5,500,000**				**5,500,000**	
FINANCING:							
Electric Utility Fund		5,500,000				5,500,000	
	TOTAL	**5,500,000**				**5,500,000**	

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						7	
		TOTAL	**2012/13**	**2013/14**	**2014/15**	**2015/16**	**2016/17**
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.

Landscaping complements several of the sculptures in the park system.

Adopt a Flower Garden

Each summer, Ames Parks and Recreation sponsors an “Adopt a Flower Garden” program. This program is an effort to get public involvement in ongoing park beautification. In 2011, more than 50 gardens were planted with over 20,000 flowers donated by Holubs Garden and Greenhouses of Ames. The Parks and Recreation Department prepares the beds, and supplies the bedding plants and water. Volunteers design, plant and care for the flower gardens during the entire growing season. We thank Holubs Garden and Greenhouse of Ames for their generous donation of over $7,000 worth of flowers each year to help beautify Ames.

TRANSPORTATION - SUMMARY

PROJECT/REVENUE DESCRIPTION	TOTAL	2012/13	2013/14	2014/15	2015/16	2016/17	PAGE
EXPENDITURES:							
Streets/Engineering	53,221,750	8,168,500	9,595,000	12,042,250	11,611,000	11,805,000	91
Streets/Maintenance	4,540,000	260,000	605,000	315,000	2,400,000	960,000	101
Transit	11,265,409	3,682,200	1,606,000	1,472,630	2,255,359	2,249,220	110
Airport	915,000		715,000		200,000		116
Total Expenditures	**69,942,159**	**12,110,700**	**12,521,000**	**13,829,880**	**16,466,359**	**15,014,220**	
REVENUES:							
Bonds:							
G.O. Bonds	31,173,750	5,987,500	6,460,000	6,500,250	5,726,000	6,500,000	
City:							
Road Use Tax	4,105,000	835,000	905,000	815,000	775,000	775,000	
Local Option Sales Tax	525,000	125,000	100,000	100,000	100,000	100,000	
Electric Utility Fund	935,000	200,000	175,000	160,000	150,000	250,000	
Transit Fund	2,062,056	453,860	392,570	301,647	457,511	456,468	
Airport Construction Fund	45,750		35,750		10,000		
Sub-Total City Funds	7,672,806	1,613,860	1,608,320	1,376,647	1,492,511	1,581,468	

TRANSPORTATION - SUMMARY

PROJECT/REVENUE DESCRIPTION	TOTAL	2012/13	2013/14	2014/15	2015/16	2016/17
REVENUES, continued:						
Other:						
MPO/STP Funds	5,304,000	1,062,000	1,060,000	1,062,000	1,060,000	1,060,000
Federal/State Grants	15,550,000	40,000	1,390,000	3,760,000	6,240,000	4,120,000
Iowa State University	50,000		50,000			
Story County	269,000	219,000	50,000			
Ames Community School District	50,000		50,000			
Federal Transit Administration	9,003,353	3,188,340	1,173,430	1,130,983	1,757,848	1,752,752
FAA Grant Funds	869,250		679,250		190,000	
Sub-Total Other Funds	31,095,603	4,509,340	4,452,680	5,952,983	9,247,848	6,932,752
Total Revenues	**69,942,159**	**12,110,700**	**12,521,000**	**13,829,880**	**16,466,359**	**15,014,220**

TRANSPORTATION - STREET ENGINEERING

	PROJECT/REVENUE DESCRIPTION	TOTAL	2012/13	2013/14	2014/15	2015/16	2016/17	PAGE
EXPENDITURES:								
1	Collector Street Pavement Improvements	6,265,000	1,300,000	1,480,000	1,355,000	1,530,000	600,000	93
2	Asphalt Street Reconstruction Program	2,105,500	978,000			287,500	840,000	94
3	CyRide Route Pavement Improvements	6,325,000	1,470,000	2,050,000	1,955,000		850,000	95
4	Arterial Street Pavement Improvements	4,925,000	1,500,000	825,000	675,000	345,000	1,580,000	96
5	Concrete Pavement Improvements	5,445,500	650,000	1,250,000	1,310,000	870,500	1,365,000	97
6	Downtown Street Pavement Improvements	3,800,000	1,000,000	750,000	750,000	800,000	500,000	98
7	Asphalt/Seal Coat Street Rehabilitation	6,605,750	1,270,500	1,740,000	1,347,250	1,278,000	970,000	99
8	Grand Avenue Extension	17,750,000		1,500,000	4,650,000	6,500,000	5,100,000	100
	Total Expenditures	**53,221,750**	**8,168,500**	**9,595,000**	**12,042,250**	**11,611,000**	**11,805,000**	

TRANSPORTATION - STREET ENGINEERING, continued

PROJECT/REVENUE DESCRIPTION	TOTAL	2012/13	2013/14	2014/15	2015/16	2016/17
REVENUES:						
Bonds:						
G.O. Bonds	29,063,750	5,987,500	6,460,000	6,400,250	4,501,000	5,715,000
City:						
Road Use Tax	3,500,000	700,000	700,000	700,000	700,000	700,000
Electric Utility Fund	935,000	200,000	175,000	160,000	150,000	250,000
Sub-Total City Funds	4,435,000	900,000	875,000	860,000	850,000	950,000
Other:						
MPO/STP Funds	5,304,000	1,062,000	1,060,000	1,062,000	1,060,000	1,060,000
Story County	219,000	219,000				
Federal/State Grants	14,200,000		1,200,000	3,720,000	5,200,000	4,080,000
Sub-Total Other Funds	19,723,000	1,281,000	2,260,000	4,782,000	6,260,000	5,140,000
Total Revenues	**53,221,750**	**8,168,500**	**9,595,000**	**12,042,250**	**11,611,000**	**11,805,000**

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

DESCRIPTION/JUSTIFICATION

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

COMMENTS

2012/13	Meadowlane Avenue (E. 13th to Carr Drive) – Map 5, location N-9
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; and E. 20th Street (Duff Avenue to Meadowlane Avenue) – Map 5, location M-8
2016/17	Hoover Avenue (24th Street to 30th Street) – Map 2, location K-7

Cost change is due to updated estimates and prioritizing projects based on current pavement conditions.

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

FISCAL YEAR PRIORITY			1	1	2	2	2
		TOTAL	**2012/13**	**2013/14**	**2014/15**	**2015/16**	**2016/17**
COST:							
Engineering		690,000	150,000	155,000	155,000	155,000	75,000
Construction		5,425,000	1,100,000	1,325,000	1,150,000	1,325,000	525,000
Street Lighting		150,000	50,000		50,000	50,000	
	TOTAL	**6,265,000**	**1,300,000**	**1,480,000**	**1,355,000**	**1,530,000**	**600,000**
FINANCING:							
G. O. Bonds		3,995,000	1,250,000	420,000	1,305,000	420,000	600,000
Electric Utility Fund		150,000	50,000		50,000	50,000	
MPO/STP Funds		2,120,000		1,060,000		1,060,000	
	TOTAL	**6,265,000**	**1,300,000**	**1,480,000**	**1,355,000**	**1,530,000**	**600,000**

PROGRAM – ACTIVITY:	**DEPARTMENT:**	**ACCOUNT NO.**
Transportation – Streets Engineering	Public Works	373-8122-439 530-8122-439

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

2012/13 Pierce Court – Map 2, location K-7; Westbend Drive – Map 4, location D-11; Southbend Drive – Map 4, location D-11; and Westbend Circle – Map 4, location D-11

2013/14 No project

2014/15 No project

2015/16 Delaware Avenue (Ontario Street to Reliable Street) – Map 4, location E-9

2016/17 Pierce Avenue and Pierce Circle – Map 2, location K-7

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

Reconstructing these streets will reduce maintenance costs.

FISCAL YEAR PRIORITY			2			3	3
		TOTAL	**2012/13**	**2013/14**	**2014/15**	**2015/16**	**2016/17**
COST:							
Engineering		275,500	133,000			37,500	105,000
Construction		1,730,000	795,000			250,000	685,000
Electric Relocation		100,000	50,000				50,000
	TOTAL	**2,105,500**	**978,000**			**287,500**	**840,000**
FINANCING:							
G.O. Bonds		2,005,500	928,000			287,500	790,000
Electric Utility Fund		100,000	50,000				50,000
	TOTAL	**2,105,500**	**978,000**			**287,500**	**840,000**

PROGRAM - ACTIVITY:	**DEPARTMENT:**	**ACCOUNT NO.**
Transportation – Streets Engineering	Public Works	373-8117-439
		530-8117-439

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

2012/13 Todd Drive (South Dakota Avenue to Alcott Avenue) – Map 4, location E-11; and Lincoln Way (Franklin Avenue to Hayward Avenue) – Map 4, location G-11

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; Duluth Street – Map 8, location N-17; and Viola Mae – 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 ft.) – 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

Cost change is due to updated project estimates and re-prioritizing locations within the program.

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		3	2	4		4
	TOTAL	**2012/13**	**2013/14**	**2014/15**	**2015/16**	**2016/17**
COST:						
Engineering	870,000	195,000	300,000	255,000		120,000
Construction	5,305,000	1,225,000	1,700,000	1,700,000		680,000
Electric Relocation	150,000	50,000	50,000			50,000
TOTAL	**6,325,000**	**1,470,000**	**2,050,000**	**1,955,000**		**850,000**
FINANCING:						
G. O. Bonds	5,113,000	1,420,000	2,000,000	893,000		800,000
Electric Utility Fund	150,000	50,000	50,000			50,000
MPO/STP Funds	1,062,000			1,062,000		
TOTAL	**6,325,000**	**1,470,000**	**2,050,000**	**1,955,000**		**850,000**

PROGRAM - ACTIVITY:	**DEPARTMENT:**	**ACCOUNT NO.**
Transportation - Streets Engineering	Public Works	373-8123-439
		530-8123-439

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

2012/13	State Avenue (Oakwood Road to US Highway 30 overpass) – Map 8, location G-15
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	West Lincoln Way (County Line Road to west corporate limits) – Map 4, location B-11
2016/17	East Lincoln Way (South Duff Avenue to Skunk River) – Map 5, location M-11

Cost change is due to updated cost estimates. The site change is the result of prioritizing current pavement conditions.

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

FISCAL YEAR PRIORITY		4	4	3	4	5
	TOTAL	**2012/13**	**2013/14**	**2014/15**	**2015/16**	**2016/17**
COST:						
Engineering	585,000	200,000	100,000	85,000	45,000	155,000
Construction	4,090,000	1,300,000	650,000	515,000	300,000	1,325,000
Street Lighting	250,000		75,000	75,000		100,000
TOTAL	**4,925,000**	**1,500,000**	**825,000**	**675,000**	**345,000**	**1,580,000**
FINANCING:						
G. O. Bonds	2,334,000	219,000	750,000	600,000	345,000	420,000
Electric Utility Fund	250,000		75,000	75,000		100,000
Story County	219,000	219,000				
MPO/STP Funds	2,122,000	1,062,000				1,060,000
TOTAL	**4,925,000**	**1,500,000**	**825,000**	**675,000**	**345,000**	**1,580,000**

PROGRAM – ACTIVITY:	**DEPARTMENT:**	**ACCOUNT NO.**
Transportation - Streets Engineering	Public Works	373-8144-439
		320-8144-439

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

2012/13:

S. E. 5th Street (east of S. Duff Avenue) – Map 5, location N-12; Wheeler Street (Roy Key Avenue to Grand Avenue) – Map 2, location L-6; and Frontage Road at Southbend Drive – Map 4, location D-11

2013/14:

Lynn Avenue (Knapp Street to Storm Street) – Map 5, location I-12; and Knapp Street (Welch Avenue to Lynn Avenue) – Map 5, location H-12

2014/15:

Ridgewood Avenue (9th Street – 13th Street) – Map 5, location K-10; and 9th Street (Ridgewood Avenue to Northwestern Avenue) – Map 5, location K-10

2015/16:

Des Moines Avenue (Lincoln Way to E. 3rd Street) – Map 5, location M-11; Center Avenue (Lincoln Way to E. 2nd Street) – Map 5, location N-11; E. 3rd Street (Duff Avenue to East Avenue) – Map 5, location M-11; E. 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

Cost change is due to updated re-prioritizing of locations based on current pavement condition.

Repair of these streets will reduce maintenance and repairs needed for them.

FISCAL YEAR PRIORITY		5	6	5	5	6
	TOTAL	**2012/13**	**2013/14**	**2014/15**	**2015/16**	**2016/17**
COST:						
Engineering	655,500	80,000	150,000	160,000	100,500	165,000
Street Lighting	85,000		50,000	35,000		
Construction	4,605,000	570,000	1,050,000	1,115,000	720,000	1,150,000
Electric Relocation	100,000				50,000	50,000
TOTAL	**5,445,500**	**650,000**	**1,250,000**	**1,310,000**	**870,500**	**1,365,000**
FINANCING:						
G.O. Bonds	5,010,500	600,000	1,150,000	1,225,000	770,500	1,265,000
Road Use Tax	250,000	50,000	50,000	50,000	50,000	50,000
Electric Utility Fund	185,000		50,000	35,000	50,000	50,000
TOTAL	**5,445,500**	**650,000**	**1,250,000**	**1,310,000**	**870,500**	**1,365,000**

PROGRAM – ACTIVITY:	**DEPARTMENT:**	**ACCOUNT NO.**
Transportation - Streets Engineering	Public Works	373-8168-439 060-8168-439

DOWNTOWN STREET PAVEMENT IMPROVEMENTS **PROJECT STATUS:** Cost Change Site 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). The Downtown Improvements Study (1996/97) recommended several improvement projects in the downtown area. Since that time, Main Street, 5th Street, and 6th Street have all benefited from improvement projects recommended by the Downtown Improvements Study. 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. These streets have not had any improvements in recent years.

COMMENTS

Improvements to the streets in the downtown area will enhance the Main Street Cultural District.

LOCATION

2012/13 Clark Avenue (Main Street to 5th Street) – Map 5, location L-11; and Gilchrist Street (Lincoln Way to Kellogg Avenue) – Map 5, location L-11
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

Cost and site changes are due to prioritizing projects based on current pavement conditions.

Future years of this program will focus on reconstruction of alleys in the downtown area.

FISCAL YEAR PRIORITY		6	5	6	6	7
	TOTAL	**2012/13**	**2013/14**	**2014/15**	**2015/16**	**2016/17**
COST:						
Engineering	570,000	135,000	120,000	120,000	120,000	75,000
Construction	3,130,000	815,000	630,000	630,000	630,000	425,000
Electric (Street Lights)	100,000	50,000			50,000	
TOTAL	**3,800,000**	**1,000,000**	**750,000**	**750,000**	**800,000**	**500,000**
FINANCING:						
G. O. Bonds	3,700,000	950,000	750,000	750,000	750,000	500,000
Electric Utility Fund	100,000	50,000			50,000	
TOTAL	**3,800,000**	**1,000,000**	**750,000**	**750,000**	**800,000**	**500,000**

PROGRAM - ACTIVITY:	**DEPARTMENT:**	**ACCOUNT NO.**
Transportation – Streets Engineering	Public Works	373-8158-439
		530-8158-439

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			7	7	7	7	8
		TOTAL	**2012/13**	**2013/14**	**2014/15**	**2015/16**	**2016/17**
COST:							
Engineering		493,000	90,000	160,000	100,000	95,000	48,000
Construction		6,112,750	1,180,500	1,580,000	1,247,250	1,183,000	922,000
	TOTAL	**6,605,750**	**1,270,500**	**1,740,000**	**1,347,250**	**1,278,000**	**970,000**
FINANCING:							
G. O. Bonds		3,355,750	620,500	1,090,000	697,250	628,000	320,000
Road Use Tax		3,250,000	650,000	650,000	650,000	650,000	650,000
	TOTAL	**6,605,750**	**1,270,500**	**1,740,000**	**1,347,250**	**1,278,000**	**970,000**

PROGRAM – ACTIVITY:
Transportation – Streets Engineering

DEPARTMENT:
Public Works

ACCOUNT NO.
060-8107-439
373-8107-439

GRAND AVENUE EXTENSION **PROJECT STATUS:** Delayed 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 (Grand Avenue to Lincoln Way to South Duff Avenue) corridor 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.

A concept and cost allocation study ($37,500) for this project was completed in 2002/03. Design for the Lincoln Way to South 4th Street segment of the project was funded in 2005/06. Construction and land acquisition for that segment was completed in the fall of 2008.

The addition of this street extension will result in increased snow removal and ice control 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 land acquisition) – Map 5, location L-12

2014/15 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

2015/16 South Grand Avenue (South 5th Street to South 16th Street) (engineering, NEPA, grading and box culvert/golf cart passage) – Map 5, location L-12

2016/17 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 has been delayed as a result of lack of Congressionally directed funding after 2011. A Transportation Funding Study in 2012/13 (page 17) will look at/pursue federal and state grants that may be available for funding this project.

FISCAL YEAR PRIORITY				3	1	1	1
		TOTAL	**2012/13**	**2013/14**	**2014/15**	**2015/16**	**2016/17**
COST:							
Planning		600,000		600,000			
Engineering		2,250,000			650,000	1,000,000	600,000
Land Acquisition		900,000		900,000			
Construction		14,000,000			4,000,000	5,500,000	4,500,000
	TOTAL	**17,750,000**		**1,500,000**	**4,650,000**	**6,500,000**	**5,100,000**
FINANCING:							
G. O. Bonds		3,550,000		300,000	930,000	1,300,000	1,020,000
Federal/State Grants		14,200,000		1,200,000	3,720,000	5,200,000	4,080,000
	TOTAL	**17,750,000**		**1,500,000**	**4,650,000**	**6,500,000**	**5,100,000**

PROGRAM – ACTIVITY: Transportation – Streets Engineering

DEPARTMENT: Public Works

ACCOUNT NO.

TRANSPORTATION - STREET MAINTENANCE

PROJECT/REVENUE DESCRIPTION	TOTAL	2012/13	2013/14	2014/15	2015/16	2016/17	PAGE
EXPENDITURES:							
1 Bridge Rehabilitation Program	3,170,000	20,000	40,000	100,000	2,225,000	785,000	103
2 Lincoln Way Median Improvements	25,000	25,000					104
3 Neighborhood Curb Replacement Program	375,000	75,000	75,000	75,000	75,000	75,000	105
4 Shared Use Path Maintenance	250,000	50,000	50,000	50,000	50,000	50,000	106
5 Sidewalk Safety Program	250,000	50,000	50,000	50,000	50,000	50,000	107
6 Retaining Wall Reconstruction	120,000	40,000	40,000	40,000			108
7 Salt Storage Facility	350,000		350,000				109
Total Expenditures	**4,540,000**	**260,000**	**605,000**	**315,000**	**2,400,000**	**960,000**	
REVENUES:							
Bonds:							
G.O. Bonds	2,110,000			100,000	1,225,000	785,000	

TRANSPORTATION - STREET MAINTENANCE, continued

PROJECT/REVENUE DESCRIPTION	TOTAL	2012/13	2013/14	2014/15	2015/16	2016/17
REVENUES, continued:						
City:						
Road Use Tax	605,000	135,000	205,000	115,000	75,000	75,000
Local Option Sales Tax	525,000	125,000	100,000	100,000	100,000	100,000
Sub-Total City Funds	1,130,000	260,000	305,000	215,000	175,000	175,000
Other:						
Federal/State Grants	1,150,000		150,000		1,000,000	
Iowa State University	50,000		50,000			
Story County	50,000		50,000			
Ames Community School District	50,000		50,000			
Sub-Total Other Funds	1,300,000		300,000			
Total Revenues	**4,540,000**	**260,000**	**605,000**	**315,000**	**1,400,000**	**960,000**

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

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 2010 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 following years allow time for preliminary design and applying for all applicable grants.

The East Lincoln Way bridge repairs were also recommended by the 2010 Bridge Inspection & Maintenance Report. These repairs are programmed for 2015/16 (planning/design) and 2016/17 (construction) to coordinate with the road work that will be done on East Lincoln Way (page 96). The deck replacement, structural repairs, and painting should result in 50-year design life for the bridge.

New cost estimates for each of the projects and the addition of the East Lincoln Way Bridge construction resulted in the cost change. The revenue change is due to the introduction of grants as partial funding for the 6th Street Bridge over Squaw Creek.

LOCATION

2012/13	6th Street bridge over Squaw Creek (Design Alternative Study) – Map 5, location K-10
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
2015/16	6th Street bridge over Squaw Creek (construction) ($2,150,000) – Map 5, location K-10; and East Lincoln Way Bridge (planning/design) ($75,000) – Map 6, location O-11
2016/17	East Lincoln Way Bridge construction – Map 6, location O-11

FISCAL YEAR PRIORITY		1	2	1	1	1
	TOTAL	**2012/13**	**2013/14**	**2014/15**	**2015/16**	**2016/17**
COST:						
Planning	235,000	20,000	40,000	100,000	75,000	
Engineering	175,000				150,000	25,000
Construction	2,760,000				2,000,000	760,000
TOTAL	**3,170,000**	**20,000**	**40,000**	**100,000**	**2,225,000**	**785,000**
FINANCING:						
G.O. Bonds	2,110,000			100,000	1,225,000	785,000
Grants	1,000,000				1,000,000	
Road Use Tax	60,000	20,000	40,000			
TOTAL	**3,170,000**	**20,000**	**40,000**	**100,000**	**2,225,000**	**785,000**

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

LINCOLN WAY MEDIAN IMPROVEMENTS **PROJECT STATUS:** New

DESCRIPTION/JUSTIFICATION
This new program will provide 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 will commence in 2012/13 with the hiring of a design consultant to work with stakeholders to identify improvements to beautify the median. A group of stakeholders will be sought from Iowa State University, the Campustown Action Association, and the Greek Community to assist the City with a design plan. This plan will then be presented to the public for feedback. After determination of an acceptable plan, the actual median work will be programmed from identified funding into the Capital Improvements Plan.

LOCATION
2012/13 Lincoln Way medians (Beach Avenue to Sheldon Avenue) – Map 5, location I-11

FISCAL YEAR PRIORITY			2				
		TOTAL	**2012/13**	**2013/14**	**2014/15**	**2015/16**	**2016/17**
COST:							
Planning		25,000	25,000				
	TOTAL	**25,000**	**25,000**				
FINANCING:							
Local Option Sales Tax		25,000	25,000				
	TOTAL	**25,000**	**25,000**				

PROGRAM - ACTIVITY:	**DEPARTMENT:**	**ACCOUNT NO.**
Transportation – Streets Maintenance	Public Works	030-7774-439

NEIGHBORHOOD CURB REPLACEMENT PROGRAM **PROJECT STATUS:** Site 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.

The 9th Street (Ridgewood Avenue to Brookridge Avenue) location has been added in 2013/14.

Curb and gutter replacement enhances neighborhood aesthetics.

LOCATION
2012/13 Curtiss Avenue (12th Street to 13th Street) – Map 5, location L-9
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

FISCAL YEAR PRIORITY			3	3	2	2	2
		TOTAL	**2012/13**	**2013/14**	**2014/15**	**2015/16**	**2016/17**
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: Transportation – Streets Maintenance
DEPARTMENT: Public Works
ACCOUNT NO. 060-7769-439

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. Some of the identified segments are shared use paths located along Bloomington Road, 24th Street, Lincoln Way, Grand Avenue and at Stuart Smith Park.

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	4	3	3	3
	TOTAL	**2012/13**	**2013/14**	**2014/15**	**2015/16**	**2016/17**
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	030-7717-439

SIDEWALK SAFETY PROGRAM **PROJECT STATUS:** No 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 Disability 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
Staff has completed and analyzed the inventory of all pedestrian crossings in the City of Ames. Pedestrian crossings are usually at the corners of intersections but could also be mid-block crossings and can consist of one or two ramps for crossing the roadway. The inventory found that there are approximately 2,735 pedestrian crossings and that currently 1,733 have no truncated domes. The inventory also identified 18 crossings that still have full curb. The inventory will be used to prioritize this program starting with full curb ramps, then ramps without domes, and then all non-compliant ramps.

This project has no direct impact on the operating budget.

FISCAL YEAR PRIORITY			5	5	4	4	4
		TOTAL	**2012/13**	**2013/14**	**2014/15**	**2015/16**	**2016/17**
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.**
Transportation - Streets Maintenance	Public Works	030-7742-439

RETAINING WALL RECONSTRUCTION **PROJECT STATUS:** No Change

DESCRIPTION/JUSTIFICATION

This annual program is to reconstruct/repair retaining walls located within the 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:

2012/13	South Dayton Avenue – Map 6, location Q-12
2013/14	Airport Road – Map 8, location L-15
2014/15	Hyland Avenue – Map 4, location G-10

This program identifies core locations for each year. In addition, miscellaneous locations are repaired as necessary and within budget constraints.

FISCAL YEAR PRIORITY			6	6	5		
		TOTAL	**2012/13**	**2013/14**	**2014/15**	**2015/16**	**2016/17**
COST:							
Engineering		15,000	5,000	5,000	5,000		
Construction		105,000	35,000	35,000	35,000		
	TOTAL	**120,000**	**40,000**	**40,000**	**40,000**		
FINANCING:							
Road Use Tax		120,000	40,000	40,000	40,000		
	TOTAL	**120,000**	**40,000**	**40,000**	**40,000**		

PROGRAM - ACTIVITY:	**DEPARTMENT:**	**ACCOUNT NO.**
Transportation – Streets Maintenance	Public Works	060-7738-439

SALT STORAGE FACILITY **PROJECT STATUS:** Delayed

DESCRIPTION/JUSTIFICATION
The City of Ames has one facility for the storage of salt for winter snow and ice operations. The salt storage dome is located near the intersection of Edison Street and Carnegie Avenue in east Ames. Growth within the City limits and additional snow routes have made it desirable for another storage facility for salt. Future salt spreader storage is also being considered as a portion of this project. The potential for a shared facility with Story County, the Ames Community School District, and Iowa State University in the west part of Ames has been presented to all those agencies. By strategically locating a new salt storage dome and refining snow routes and operational procedures based on two salt storage domes, customer service during winter operations will be improved.

A hoop building at the Water Plant has been retrofitted and is being used for temporary salt storage capacity. This has provided for salt storage only; throughout the winter, the salt is moved to the storage dome for loading onto snow plows.

COMMENTS
Delay in determining a location and identifying grant opportunities for the salt storage dome has resulted in the delay of this project. Story County, the Ames Community School District, and Iowa State University have all been approached to determine if a shared facility would be a feasible option for all entities. Currently, no entity has declined to be involved, but none have committed resources either. It is the intent to continue the dialogue with the other entities and to continue pursuing grants which may make it more feasible for the other entities.

LOCATION
To be determined

FISCAL YEAR PRIORITY				1			
		TOTAL	**2012/13**	**2013/14**	**2014/15**	**2015/16**	**2016/17**
COST:							
Building		350,000		350,000			
	TOTAL	**350,000**		**350,000**			
FINANCING:							
Road Use Tax Fund		50,000		50,000			
ISU, ACSD, Story County		150,000		150,000			
State Grant		150,000		150,000			
	TOTAL	**350,000**		**350,000**			

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

TRANSPORTATION - TRANSIT

PROJECT/REVENUE DESCRIPTION	TOTAL	2012/13	2013/14	2014/15	2015/16	2016/17	PAGE
EXPENDITURES:							
1 Vehicle Replacement	8,995,809	3,572,600	1,296,000	1,362,630	1,385,359	1,379,220	111
2 CyRide Shop/Office Equipment	299,600	59,600	60,000	60,000	60,000	60,000	112
3 Bus Stop Improvements	250,000	50,000	50,000	50,000	50,000	50,000	113
4 Alternative Route Analysis	200,000		200,000				114
5 Building Expansion and Modernization	1,520,000				760,000	760,000	115
Total Expenditures	**11,265,409**	**3,682,200**	**1,606,000**	**1,472,630**	**2,255,359**	**2,249,220**	
REVENUES:							
City:							
Transit Fund	2,062,056	453,860	392,570	301,647	457,511	456,468	
Other:							
Federal Transit Administration	9,003,353	3,188,340	1,173,430	1,130,983	1,757,848	1,752,752	
Federal Grants	200,000	40,000	40,000	40,000	40,000	40,000	
Sub-Total Other Funds	9,203,353	3,228,340	1,213,430	1,170,983	1,797,848	1,792,752	
Total Revenues	**11,265,409**	**3,682,200**	**1,606,000**	**1,472,630**	**2,255,359**	**2,249,220**	

VEHICLE REPLACEMENT **PROJECT STATUS:** Cost Change Delayed

DESCRIPTION/JUSTIFICATION

The average age of CyRide's large bus fleet is currently 9.5 years after delivery of 15 buses in 2010 and 6 buses in early 2012. This is a reduction from the previous average age of 16 years and compared to the national transit fleet age of seven years. The transit agency will receive six large buses in early spring of 2012. Five additional large buses have been ordered and will be delivered in late 2012 and two articulated buses are scheduled for delivery in 2012/13 (delayed). CyRide has had to increase the number of large buses to 72 from 68 to address an increase of more than 1.3 million riders in the last five years. All vehicles are purchased with 83-90% federal grant funding. Some grants allowed 90% funding for biodiesel operated vehicles; others allow a maximum of 83% (cost change).

After receipt of buses currently in the grant process, CyRide has scheduled three large bus replacements each year to maintain the fleet average age under 11 years.

A majority of CyRide's minibus fleet was replaced in 2008/09 and 2009/10 with federal dollars; the last two vehicles are scheduled for replacement in 2012/13 under federal grants (no change).

CyRide currently operates three vehicles for driver reliefs and for administrative purposes. With the additional buses and drivers, CyRide will need to expand this fleet of small vehicles by one vehicle to meet its needs beginning in 2012/13. This purchase was delayed from the 2011/12 budget year as an expense reduction measure due to budget challenges. CyRide's Prius (vehicle 906) is scheduled for replacement in 2013/14 and Impala (vehicle 905) in 2014/15 (delayed).

CyRide's two maintenance trucks are scheduled for replacement in 2014/15 and 2015/16 (delayed).

CyRide will purchase five video-recording cameras each year beginning in 2013/14 to replace existing equipment on the buses that are more than five years old. The system will include exterior and interior cameras at a total cost for the five systems of $45,000 per year (delayed).

2012/13 – Replace 5 large buses; replace 3 large buses with 2 articulated buses; replace minibuses 978 and 979; purchase 1 administrative vehicle
2013/14 – Replace 3 large buses; replace administrative vehicle 906; purchase 5 video cameras
2014/15 – Replace 3 large buses; replace administrative vehicle 905 and maintenance truck 999; purchase 5 video cameras
2015/16 – Replace 3 large buses; replace maintenance truck 007; purchase 5 video cameras
2016/17 – Replace 3 large buses; purchase 5 video cameras

FISCAL YEAR PRIORITY			1	1	1	1	1
		TOTAL	**2012/13**	**2013/14**	**2014/15**	**2015/16**	**2016/17**
COST:							
Large Buses - 40' New		7,068,209	1,960,000	1,221,000	1,257,630	1,295,359	1,334,220
Large Buses - 60' Articulated		1,396,600	1,396,600				
Minibuses		186,000	186,000				
Cameras		180,000		45,000	45,000	45,000	45,000
Administrative Vehicles		165,000	30,000	30,000	60,000	45,000	
	TOTAL	**8,995,809**	**3,572,600**	**1,296,000**	**1,362,630**	**1,385,359**	**1,379,220**
FINANCING:							
Transit Fund		1,368,456	384,260	282,570	231,647	235,511	234,468
Federal Transit Administration		7,627,353	3,188,340	1,013,430	1,130,983	1,149,848	1,144,752
	TOTAL	**8,995,809**	**3,572,600**	**1,296,000**	**1,362,630**	**1,385,359**	**1,379,220**

PROGRAM - ACTIVITY:	**DEPARTMENT:**	**ACCOUNT NO.**
Transportation – Transit	CyRide	552-1159-439 552-1158-439 552-1156-439

CYRIDE SHOP AND OFFICE EQUIPMENT **PROJECT STATUS:** Cost Change Revenue Change

DESCRIPTION/JUSTIFICATION

The FY 2012/13 expenditures in the shop and office areas will fund the replacement of six computers, sign post installer/remover, floor scrubber/sweeper, and air conditioning refrigerant reclamation system. The purchases scheduled for 2013/2017 are more generally described as follows.

Four-to-seven replacement computers will be funded each year, and approximately $50,000 per year will fund other shop and office items such as forklifts. Because these are smaller items where replacement need is less predictable, they have been generally described in this document and specific needs will be identified annually to efficiently operate CyRide, and address OSHA, Department of Natural Resources, and other federal requirements.

LOCATION

CyRide – Map 5, location J-10

FISCAL YEAR PRIORITY			2	2	2	3	3
		TOTAL	**2012/13**	**2013/14**	**2014/15**	**2015/16**	**2016/17**
COST:							
Computers		49,600	9,600	10,000	10,000	10,000	10,000
Other Shop Equipment		250,000	50,000	50,000	50,000	50,000	50,000
	TOTAL	**299,600**	**59,600**	**60,000**	**60,000**	**60,000**	**60,000**
FINANCING:							
Transit Fund		299,600	59,600	60,000	60,000	60,000	60,000
	TOTAL	**299,600**	**59,600**	**60,000**	**60,000**	**60,000**	**60,000**

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

BUS STOP IMPROVEMENTS **PROJECT STATUS:** Delayed

DESCRIPTION/JUSTIFICATION

One of the most numerous customer suggestions CyRide receives is regarding the condition, or lack, of amenities at its more than 400 bus stop locations throughout the city. In FY 2007/08, CyRide began to systematically identify needs at each stop, with improvements scheduled for implementation on an annual basis. The implementation of the bus stops has been delayed pending a new bus shelter design that improves the image of these structures. This design will be completed in the spring of 2012 with implementation beginning at that time. It is anticipated that five-to-ten bus stop locations will receive improvements each year for a total cost investment of $50,000 per budget year.

FISCAL YEAR PRIORITY			3	3	3	4	4
		TOTAL	**2012/13**	**2013/14**	**2014/15**	**2015/16**	**2016/17**
COST:							
Pads, Benches, Shelters		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:							
Transit Fund		50,000	10,000	10,000	10,000	10,000	10,000
Federal 5310 Grants		200,000	40,000	40,000	40,000	40,000	40,000
	TOTAL	**250,000**	**50,000**	**50,000**	**50,000**	**50,000**	**50,000**

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

ALTERNATIVE ROUTE ANALYSIS **PROJECT STATUS:** Delayed

DESCRIPTION/JUSTIFICATION

In May 2007, CyRide completed a Transit Feasibility Study, which identified a need to implement major service-level changes on its highest ridership route from the Iowa State Center to campus. The study recommended a Bus Rapid Transit (BRT) service on CyRide's Orange Route that would increase capacity and comfort on this route and reduce travel time for customers. Through public input, it has been determined that additional information is needed regarding the route, right-of-way for the bus, and specifics on how this new service would work. Therefore, a federal grant was secured for $160,000 at 80% funding to complete a detailed analysis of the BRT type service concept or enhancements along the route to provide this information to the community. The study is anticipated to bid when the Intermodal Facility project is completed and be conducted in the 2013/14 budget year.

FISCAL YEAR PRIORITY				4			
		TOTAL	**2012/13**	**2013/14**	**2014/15**	**2015/16**	**2016/17**
COST:							
Alternatives Analysis Study		200,000		200,000			
	TOTAL	**200,000**		**200,000**			
FINANCING:							
Transit Fund		40,000		40,000			
Federal Transit Administration		160,000		160,000			
	TOTAL	**200,000**		**200,000**			

PROGRAM - ACTIVITY: Transportation – Transit

DEPARTMENT: CyRide

ACCOUNT NO.

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

DESCRIPTION/JUSTIFICATION

In 2012/13, CyRide will complete work begun in 2011/12 to expand its facilities. The funding for this project is contained in the 2012/16 Capital Improvements Plan, but will partially occur in the 2012/13 year. The following summarizes the four projects consisting of additional bus storage, flood protection, increased ceiling height and structural repairs.

Expansion - CyRide's current building was constructed in 1983 and was originally designed to accommodate 25 vehicles. The building was expanded in 1990, 2002, 2004 and 2008 and can now accommodate 60 large buses, seven minibuses and three support vehicles, leaving nine large buses and two service vehicles without indoor storage space. With CyRide's expansion to 72 large buses in 2010/11 and an estimated fleet size in ten years of 85 large buses, CyRide will need to construct additional bus storage and maintenance facilities. A three-phased expansion project will increase the bus storage portion of the facility by approximately 25,000 square feet, accommodating eleven additional large buses and two service vehicles.

Flood Protection – CyRide will work with the City's insurance company and CyRide's architectural firm to identify construction solutions to reduce or eliminate flood risks for the current facility and its expansion. Suggestions have included additional flood barriers to keep the interior of the facility dry. A flood control expert will be hired to direct CyRide on the efforts that must be taken to reduce this risk.

Ceiling Height – The original portion of CyRide's facility has doors and ductwork at a ceiling height of 10'3". The new hybrid buses are 10'5" in height; therefore, the new buses can be stored in only a portion of the facility. This project would raise the ductwork and replace doors above the height of the hybrid buses so that all buses can travel throughout the facility, thereby reducing the possibility of accidents within the building.

Structural Repairs – CyRide will begin repairing structural damage in several bus lanes and the wash bay area. Several locations are experiencing corrosion and concrete deterioration and need to be rebuilt.

In 2015/16 and 2016/17, CyRide anticipates adequate local share and discretionary federal grants to continue the next phase of its expansion plan to accommodate growth in its services over the next several years. Federal dollars would fund 80% of the construction costs or $608,000. This project is delayed as a result of diverting local dollars to CyRide's operating budget to address funding shortfalls.

LOCATION

CyRide – Map 5, location J-10

FISCAL YEAR PRIORITY						2	2
		TOTAL	**2012/13**	**2013/14**	**2014/15**	**2015/16**	**2016/17**
COST:							
Architect/Engineering		20,000				10,000	10,000
Repairs/Modifications		1,500,000				750,000	750,000
	TOTAL	**1,520,000**				**760,000**	**760,000**
FINANCING:							
Transit Fund		304,000				152,000	152,000
Federal Transit Administration		1,216,000				608,000	608,000
	TOTAL	**1,520,000**				**760,000**	**760,000**

PROGRAM - ACTIVITY: Transportation – Transit

DEPARTMENT: CyRide

ACCOUNT NO.

TRANSPORTATION - AIRPORT

PROJECT/REVENUE DESCRIPTION	TOTAL	2012/13	2013/14	2014/15	2015/16	2016/17	PAGE
EXPENDITURES:							
1 Airport Improvements	915,000		715,000		200,000		117
Total Expenditures	**915,000**		**715,000**		**200,000**		
REVENUES:							
City:							
Airport Construction Fund	45,750		35,750		10,000		
Other:							
FAA Grant Funds	869,250		679,250		190,000		
Total Revenues	**915,000**		**715,000**		**200,000**		

AIRPORT IMPROVEMENTS **PROJECT STATUS:** Delayed

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. (FAA funding provides for 95% of the cost of identified projects.) These projects have been prioritized and included in this 2012 – 2017 Capital Improvements Plan:

2012/13	No project
2013/14	Replace terminal building
2014/15	No project
2015/16	Airport Master Plan update
2016/17	To be determined

The FY 2013/14 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. This is acknowledging the Ames Airport as one of the gateways to the community.

The terminal building replacement project has been delayed until FY 2013/14 in order to hold public/user meetings before FY 2013/14 to further define the scope of the building project.

In accordance with the Airport Master Plan, there will be no projects from 2013/14 until 2016/17 when an update of the Master Plan is scheduled. The Master Plan Update in 2015/16 will identify future needs for the Airport, including all paved surfaces, navigation aids, and airplane facilities.

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

FISCAL YEAR PRIORITY			1			1	
		TOTAL	**2012/13**	**2013/14**	**2014/15**	**2015/16**	**2016/17**
COST:							
Engineering		319,250		119,250		200,000	
Construction		595,750		595,750			
	TOTAL	**915,000**		**715,000**		**200,000**	
FINANCING:							
Airport Construction Fund		45,750		35,750		10,000	
FAA Grant (AIP) Funds		869,250		679,250		190,000	
	TOTAL	**915,000**		**715,000**		**200,000**	

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

Wildlife also enjoys the park system.

Stunning wildflowers border the shared use path around the lake at Ada Hayden Heritage Park.

COMMUNITY ENRICHMENT/INTERNAL SERVICES - SUMMARY

PROJECT/REVENUE DESCRIPTION	TOTAL	2012/13	2013/14	2014/15	2015/16	2016/17	PAGE
EXPENDITURES:							
Parks and Recreation	4,444,500	1,398,000	1,657,500	569,000	610,000	210,000	121
Library	20,086,494	4,779,372	14,882,122	425,000			134
City Manager	250,000	50,000	50,000	50,000	50,000	50,000	139
Planning and Housing	250,000	50,000	50,000	50,000	50,000	50,000	141
Public Works	160,000	40,000	40,000	40,000	40,000		143
Internal Services/Facilities	554,100	50,000	50,000	135,250	140,600	178,250	145
Total Expenditures	**25,745,094**	**6,367,372**	**16,729,622**	**1,269,250**	**890,600**	**488,250**	
REVENUES:							
Bonds:							
G.O. Bonds	18,000,000	4,000,000	14,000,000				
City:							
Local Option Sales Tax	4,437,400	1,535,900	797,500	994,000	775,000	335,000	
Ice Arena Capital Reserve Funds	205,500	180,500	25,000				
Library Bequest Funds	666,666	333,333	333,333				
Fleet Replacement Funds	256,150		256,150				
Road Use Tax	76,024			21,312	22,650	32,062	
Water Utility Fund	76,026			21,313	22,650	32,063	
Sewer Utility Fund	76,024			21,312	22,650	32,062	
Fleet Services Fund	76,026			21,313	22,650	32,063	
Sub-Total City Funds	5,869,816	2,049,733	1,411,983	1,079,250	865,600	463,250	

COMMUNITY ENRICHMENT/INTERNAL SERVICES - SUMMARY

PROJECT/REVENUE DESCRIPTION	TOTAL	2012/13	2013/14	2014/15	2015/16	2016/17
REVENUES, continued:						
Other:						
Ames Community School District	125,000	25,000	25,000	25,000	25,000	25,000
Private Contributions	1,750,278	292,639	1,292,639	165,000		
Sub-Total Other Funds	1,875,278	317,639	1,317,639	190,000	25,000	25,000
Total Revenues	**25,745,094**	**6,367,372**	**16,729,622**	**1,269,250**	**890,600**	**488,250**

COMMUNITY ENRICHMENT - PARKS AND RECREATION

	PROJECT/REVENUE DESCRIPTION	TOTAL	2012/13	2013/14	2014/15	2015/16	2016/17	PAGE
EXPENDITURES:								
1	Municipal Pool Maintenance	250,000	50,000	50,000	50,000	50,000	50,000	123
2	Parks and Recreation Facility Improvements	1,016,500	360,000	416,500	85,000	30,000	125,000	124
3	Northridge Heights Park	245,000	245,000					125
4	Brookside Park Improvements	197,500	127,500		70,000			126
5	Tennis Court Improvements	480,000	380,000		50,000	50,000		127
6	Ada Hayden Heritage Park	535,000	25,000	26,000	284,000	200,000		128
7	Playground/Park Equipment Improvements	165,000	30,000	40,000	30,000	30,000	35,000	129
8	Ames/ISU Ice Arena	205,500	180,500	25,000				130
9	Sand Volleyball Complex	100,000		100,000				131
10	Community Gathering Venue	1,000,000		1,000,000				132
11	Inis Grove Park Restroom Replacement	250,000				250,000		133
	Total Expenditures	**4,444,500**	**1,398,000**	**1,657,500**	**569,000**	**610,000**	**210,000**	

COMMUNITY ENRICHMENT - PARKS AND RECREATION, continued

PROJECT/REVENUE DESCRIPTION	TOTAL	2012/13	2013/14	2014/15	2015/16	2016/17
REVENUES:						
City:						
Local Option Sales Tax	3,114,000	1,192,500	607,500	544,000	585,000	185,000
Ice Arena Capital Reserve Funds	205,500	180,500	25,000			
Sub-Total City Funds	3,319,500	1,373,000	632,500	544,000	585,000	185,000
Other:						
Ames Community School District	125,000	25,000	25,000	25,000	25,000	25,000
Private Contributions	1,000,000		1,000,000			
Sub-Total Other Funds	1,125,000	25,000	1,025,000	25,000	25,000	25,000
Total Revenues	**4,444,500**	**1,398,000**	**1,657,500**	**569,000**	**610,000**	**210,000**

MUNICIPAL POOL MAINTENANCE **PROJECT STATUS:** Cost 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.

Due to the age of the **outdoor wading pool**, significant mechanical issues are mounting (difficult to maintain acceptable chlorine levels and filter pool water appropriately). City and District staff members are in agreement that **the wading pool should be demolished in the fall of 2012**, and not replaced (estimated cost $100,000). During the summer of 2012, staff would inform users that this will be the last season of operation for the wading pool.

In the fall of 2011, the boilers were evaluated and it was determined that they could be repaired at a cost of $25,000 in lieu of total replacement at a cost of $150,000.

COMMENTS

2012/13: Total $50,000 – Repair boilers ($25,000); in the fall of 2012, demolish the outdoor wading pool and transition area to grass ($25,000)
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

LOCATION

Ames High School – Map 5, location J-8

FISCAL YEAR PRIORITY		1	1	1	1	1
	TOTAL	**2012/13**	**2013/14**	**2014/15**	**2015/16**	**2016/17**
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:** New Advanced Cost Change Delayed

DESCRIPTION/JUSTIFICATION

To maintain City facilities in a safe and quality manner, the FY 2012 to 2017 projects listed below address maintenance issues at various facilities within the Parks and Recreation Department.

COMMENTS

2012/13: Total = $360,000

Carr Pool: Demolition of pool basin / mechanical system will coincide with the reconstruction of Meadowlane Drive ($80,000) – Map 5, location N-8

South River Valley Softball Fields: Replace fencing on two diamonds ($60,000 total) and install new lights on both diamonds ($200,000 total) – Map 6, location O-9

Community Center: Replace adjustable basketball standards ($20,000) – Map 5, location L-11

2013/14: Total = $416,500

Administrative Office, Homewood Golf Course, and Park Maintenance Facility: Replace existing air conditioners and furnaces ($48,500) at Gateway Administrative offices – 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 ($30,000) and construct a small storage building ($20,000) – Map 5, location M-8

Bandshell: Replace stage lighting ($50,000) – Map 5, location M-11

Franklin Park: Asphalt overlay on existing crushed rock pathway through the park ($20,000) – Map 4, location F-12

Community Center: Replace metal lockers with plastic lockers ($25,000); renovate west gym wall ($20,000); Gymnastics room re-flooring ($20,000) – Map 5, location L-11

Brookside Park: Renovate the restroom ($48,000) – Map 5, location K-10

Skate Park: Replace metal coping ($75,000) – Map 5, location K-10

North River Valley Softball Complex: Renovate the concession stand ($25,000) – Map 6, location O-9

North River Valley Park: Renovate the restroom ($35,000) – Map 6, location O-9

2014/15: Total = $85,000

Auditorium: Replace carpet, install new ceiling in restrooms, new sound shell unit ($30,000) – Map 5, location L-11

Bandshell at Bandshell Park: Weatherproof the domed roof ($55,000) – Map 5, location M-11

2015/16: Total = $30,000

Inis Grove Park: Renovate restroom adjacent Duff Avenue ($30,000) – Map 2, location M-7

2016/17: Total = $125,000

13 Shelters: Replace shingles $125,000 – various locations throughout the park system

FISCAL YEAR PRIORITY			2	2	2	2	2
		TOTAL	**2012/13**	**2013/14**	**2014/15**	**2015/16**	**2016/17**
COST:							
Construction		948,500	334,000	401,500	77,000	26,000	110,000
Engineering		68,000	26,000	15,000	8,000	4,000	15,000
	TOTAL	**1,016,500**	**360,000**	**416,500**	**85,000**	**30,000**	**125,000**
FINANCING:							
Local Option Sales Tax		1,016,500	360,000	416,500	85,000	30,000	125,000
	TOTAL	**1,016,500**	**360,000**	**416,500**	**85,000**	**30,000**	**125,000**

PROGRAM – ACTIVITY: Community Enrichment

DEPARTMENT: Parks and Recreation

ACCOUNT NO: 030-4902-459

NORTHRIDGE HEIGHTS PARK **PROJECT STATUS:** New

DESCRIPTION/JUSTIFICATION

The Subdivision Platting and Development of Land Agreement for Northridge Heights calls for the developer to convey, at no cost to the City, a four-acre parcel of land located at the intersection of Stange and Harrison Roads. The City cannot construct the park until the development of the addition in which the park area is to be located proceeds, the final plat is approved, and the deed for the land is transferred to the City by the developer. It is anticipated that these steps will have been completed by the spring of 2012. In addition to the land, the developer also contributed $80,000 toward park development. The agreement calls for the developer to make all street improvements at no cost to the City. These improvements include installing the sidewalk and planting trees between the sidewalk and the curb.

COMMENTS

The City did not incur any land acquisition costs for this parcel (donated by the developer); however, now that adjacent streets have been installed, the park land is at a significantly lower elevation in comparison to the streets. An additional $120,000 in funding is now required to address this issue. Significant quantities of dirt are needed to ensure proper drainage and park appearance. Park staff will construct this parcel in the summer of 2012 with an anticipated opening in the spring of 2013.

Prior Years:

Play structure / park design ($26,500)

2012/13:

Shelter house for neighborhood use
Basketball pad (30' x 60') with two goals
Tables, grills, benches, trash receptacles
Utilities – electric for shelter; water for drinking fountain; no sewer
Seeding, planting materials and trees
Sidewalks

LOCATION

Northridge Heights Subdivision – corner of Stange Road and Harrison Road – Map 2, location I-5

FISCAL YEAR PRIORITY			3				
		TOTAL	**2012/13**	**2013/14**	**2014/15**	**2015/16**	**2016/17**
COST:							
Engineering Fees		15,000	15,000				
Construction		230,000	230,000				
	TOTAL	**245,000**	**245,000**				
FINANCING:							
Local Option Sales Tax (Park Development Reserve)		245,000	245,000				
	TOTAL	**245,000**	**245,000**				

PROGRAM - ACTIVITY:	**DEPARTMENT:**	**ACCOUNT NO.**
Community Enrichment	Parks and Recreation	030-4991-459

BROOKSIDE PARK IMPROVEMENTS **PROJECT STATUS:** Delayed

DESCRIPTION/JUSTIFICATION
The limestone steps and walls leading from Brookridge Avenue west into Brookside Park are failing structurally and need to be rebuilt.

The existing gravel parking lot needs to be removed and replaced with a code-compliant hard surfaced parking lot. At a public meeting held to discuss long-range plans for Brookside Park, residents in attendance voiced support for removing the gravel driveway / parking lot and replacing it with an approximate ten-stall parking lot adjacent to 6th Street.

COMMENTS
2012/13: Rebuild the limestone steps and walls at Brookside Park ($127,500)

2014/15: Remove the existing gravel driveway / parking lot and install an approximate ten stall hard surfaced parking lot adjacent to 6th Street ($70,000)

LOCATION
Brookside Park – Map 5, location K-10

FISCAL YEAR PRIORITY			4		6		
		TOTAL	**2012/13**	**2013/14**	**2014/15**	**2015/16**	**2016/17**
COST:							
Engineering / Design		14,500	7,500		7,000		
Construction		183,000	120,000		63,000		
	TOTAL	**197,500**	**127,500**		**70,000**		
FINANCING:							
Local Option Sales Tax		197,500	127,500		70,000		
	TOTAL	**197,500**	**127,500**		**70,000**		

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

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

DESCRIPTION/JUSTIFICATION:
In 1997, the decision was made to shift $100,000 in funding that would have been used to renovate the tennis courts at Brookside Park to partner with the Ames Community School District and Friends of Ames Tennis to construct a new 8-court facility at Ames High. At that time, the City Council decided that the four courts at Brookside would be maintained at a "recreational level" until a decision was made regarding the future existence of these courts. The Brookside courts have been maintained during the last fourteen years (1997-2011); however, the courts' current condition will make it difficult to maintain them at a "recreational level" in future years.

In October 2011, staff hosted a public meeting to gain insight on the role that these courts play within the neighborhood and overall community. Resident and park user input indicates the need to replace the existing four courts and lights at Brookside Park.

COMMENTS
2012/13: Reconstruct the four tennis courts at Brookside Park ($380,000)

2014/15: Resurface the courts at Inis Grove Park ($50,000)

2015/16: Resurface the courts at Emma McCarthy Lee Park ($50,000)

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			5		4	4	
		TOTAL	**2012/13**	**2013/14**	**2014/15**	**2015/16**	**2016/17**
COST:							
Engineering / Design		35,000	25,000		5,000	5,000	
Reconstruction / Resurfacing		445,000	355,000		45,000	45,000	
	TOTAL	**480,000**	**380,000**		**50,000**	**50,000**	
FINANCING:							
Local Option Sales Tax		480,000	380,000		50,000	50,000	
	TOTAL	**480,000**	**380,000**		**50,000**	**50,000**	

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

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

DESCRIPTION/JUSTIFICATION

The edges of the wetlands 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. After the trees are removed, annual maintenance will be performed to restrict the re-growth of undesirable tree species.

High lake levels during the past few years have caused erosion under the pedestrian bridge. Measures need to be taken to repair this damage and to protect the area from future high water levels.

The Ada Hayden Heritage Park Master Plan, developed in 2004, includes constructing a hard surfaced parking lot at the northwest corner of the park after Grant Road is paved. Construction of the parking lot will coincide with City Council action to support the development of 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

2012/13:	$ 25,000	Repair erosion damage due to high lake water under bridge
2013/14:	$ 26,000	Removal of invasive plant species on shore line
2014/15:	$ 284,000	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:	$ 200,000	Resurface the south loop trail adjacent to the lake (1.6 miles)

LOCATION

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

FISCAL YEAR PRIORITY			6	3	3	3	
		TOTAL	**2012/13**	**2013/14**	**2014/15**	**2015/16**	**2016/17**
COST:							
Engineering		50,900	2,500		28,400	20,000	
Contracted Work		26,000		26,000			
Construction		458,100	22,500		255,600	180,000	
	TOTAL	**535,000**	**25,000**	**26,000**	**284,000**	**200,000**	
FINANCING:							
Local Option Sales Tax		535,000	25,000	26,000	284,000	200,000	
	TOTAL	**535,000**	**25,000**	**26,000**	**284,000**	**200,000**	

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

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

DESCRIPTION/JUSTIFICATION

During the past 20 years, the City replaced its old and unsafe 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 program.

COMMENTS

2012/13: Brookside Park ($30,000) replace tot piece – Map 5, location K-10
2013/14: Christopher Gartner Park ($25,000) – Map 4, location E-12; Teagarden Park ($15,000) – Map 9, location N-17
2014/15: Duff Avenue Park ($15,000) – Map 5, location M-9; Hutchison Park ($15,000) – Map 4, location D-9
2015/16: Daley Park ($30,000) – Map 4, location C-11
2016/17: Inis Grove Park ($35,000) – Map 2, location M-7

FISCAL YEAR PRIORITY			7	4	5	5	3
		TOTAL	**2012/13**	**2013/14**	**2014/15**	**2015/16**	**2016/17**
COST:							
Construction		165,000	30,000	40,000	30,000	30,000	35,000
	TOTAL	**165,000**	**30,000**	**40,000**	**30,000**	**30,000**	**35,000**
FINANCING:							
Local Option Sales Tax		165,000	30,000	40,000	30,000	30,000	35,000
	TOTAL	**165,000**	**30,000**	**40,000**	**30,000**	**30,000**	**35,000**

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

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

DESCRIPTION/JUSTIFICATION
The Ames/ISU Ice Arena is ten years old (opened in April 2001). With the goal of maintaining a quality facility, numerous items need to be replaced as listed below. Additionally, to ensure a long-term quality operation, an equipment life expectancy study will be conducted in FY 12/13. This study will provide a detailed assessment of major building components and include replacement costs and replacement schedules. To support the City Council's environmental sustainability goals, an energy efficiency study will also be conducted. This study will assess the lighting system above the ice, heat exchange units, etc.

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, 2011, this fund totaled $422,943.

COMMENTS
2012/13: Replace rubber flooring in the lobby ($100,000); air condition four locker rooms ($50,000); conduct two studies – energy efficiency ($25,000) and equipment life expectancy ($5,500)

2013/14: Replace water heaters ($25,000)

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

FISCAL YEAR PRIORITY		8	6			
	TOTAL	**2012/13**	**2013/14**	**2014/15**	**2015/16**	**2016/17**
COST:						
Outside Professional Services (studies)	30,500	30,500				
Construction	165,000	140,000	25,000			
Engineering/Design	10,000	10,000				
TOTAL	**205,500**	**180,500**	**25,000**			
FINANCING:						
Ice Arena Capital Reserve	205,500	180,500	25,000			
TOTAL	**205,500**	**180,500**	**25,000**			

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

SAND VOLLEYBALL COMPLEX **PROJECT STATUS:** New

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.

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

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	**2012/13**	**2013/14**	**2014/15**	**2015/16**	**2016/17**
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: Community Enrichment
DEPARTMENT: Parks and Recreation
ACCOUNT NO.

COMMUNITY GATHERING VENUE **PROJECT STATUS:** No Change

DESCRIPTION/JUSTIFICATION
In 2009 and 2010, conversations were held between City staff and members of the Ames Foundation and Main Street Cultural District. The Ames Foundation is supportive of raising significant funds with the goal of constructing a community gathering place in the parking lot east of City Hall. The conceptual plan for this space includes a pavilion where special events could be held and a small water feature.

COMMENTS
2013/14: Water feature, pavilion and open space ($1,000,000)

The 2009 Citizen Satisfaction Survey showed that 64% of the respondents view this project as "somewhat important" or "very important."

LOCATION
Parking lot east of City Hall (5th and Clark) – Map 5, location M-11

FISCAL YEAR PRIORITY				7			
		TOTAL	**2012/13**	**2013/14**	**2014/15**	**2015/16**	**2016/17**
COST:							
Construction		900,000		900,000			
Engineering / Design		100,000		100,000			
	TOTAL	**1,000,000**		**1,000,000**			
FINANCING:							
Private Contributions		1,000,000		1,000,000			
	TOTAL	**1,000,000**		**1,000,000**			

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

INIS GROVE PARK: RESTROOM REPLACEMENT **PROJECT STATUS:** New

DESCRIPTION/JUSTIFICATION
The existing restroom, adjacent to the Shagbark shelter in the east portion of the park, is over fifty years old. The water service has experienced recent problems and a sanitary sewer installation will soon be required to replace the aging septic system. The location of the existing restroom is not convenient for a majority of park users. The new restroom will be constructed in a more convenient location: 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	**2012/13**	**2013/14**	**2014/15**	**2015/16**	**2016/17**
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.

COMMUNITY ENRICHMENT - LIBRARY

PROJECT/REVENUE DESCRIPTION	TOTAL	2012/13	2013/14	2014/15	2015/16	2016/17	PAGE
EXPENDITURES:							
1 Ames Public Library Renovation	19,416,944	4,625,972	14,625,972	165,000			135
2 Radio Frequency Identification System	153,400	153,400					136
3 Bookmobile Replacement	256,150		256,150				137
4 Automated Materials Handling System	260,000			260,000			138
Total Expenditures	**20,086,494**	**4,779,372**	**14,882,122**	**425,000**			
REVENUES:							
Bonds:							
G.O. Bonds	18,000,000	4,000,000	14,000,000				
City:							
Local Option Sales Tax	413,400	153,400		260,000			
Library Bequest Funds	666,666	333,333	333,333				
Fleet Replacement Funds	256,150		256,150				
Sub-Total City Funds	1,336,216	486,733	589,483	260,000			
Other:							
Private Contributions	750,278	292,639	292,639	165,000			
Total Revenues	**20,086,494**	**4,779,372**	**14,882,122**	**425,000**			

AMES PUBLIC LIBRARY RENOVATION **PROJECT STATUS:** New

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. It is the intent of the Library Board to complete a $20,000,000 expansion/renovation of the existing public library building, and the Ames Public Library Friends Foundation has been enlisted to assist in a fund raising effort to provide the additional funds necessary for the project. The final building design is not yet complete, but it has been determined that the library will remain in its present location. Expansion of the footprint will include the 5th Street lot acquired in 2005 which presently features a rain garden. A second story will be added or expanded on the west portion of the most recent (1984) addition. The architectural firm of Meyer, Scherer & Rockcastle LTD, has advised that the library should expect to operate from a temporary, off-site location during construction; the costs projected for the project include the expenses of moving and rent for the off-site location. It is anticipated that the "renewed" library will open to the public in fiscal year 2014/15. The debt service cost for this project is anticipated to increase the property tax rate by approximately $0.61/thousand dollars of taxable valuation.

COMMENTS

2011/12:	Architectural/design fees	$ 583,056
2012/13:	Architectural fees/construction of Library	4,625,972
2013/14:	Library construction	14,625,972
2014/15:	Construction completion	165,000
	Total	$ 20,000,000

Additionally, $603,930 was spent from 2005/06 through 2010/11 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	1		
		TOTAL	**2012/13**	**2013/14**	**2014/15**	**2015/16**	**2016/17**
COST:							
Library Expansion/Renovation		19,416,944	4,625,972	14,625,972	165,000		
	TOTAL	**19,416,944**	**4,625,972**	**14,625,972**	**165,000**		
FINANCING:							
G.O. Bonds		18,000,000	4,000,000	14,000,000			
Library Bequest Funds		666,666	333,333	333,333			
Private Contributions		750,278	292,639	292,639	165,000		
	TOTAL	**19,416,944**	**4,625,972**	**14,625,972**	**165,000**		

PROGRAM - ACTIVITY:	**DEPARTMENT:**	**ACCOUNT NO.**
Community Enrichment	Library	373-2679-459
		237-2679-459
		239-2679-459

RADIO FREQUENCY IDENTIFICATION (RFID) INVENTORY MANAGEMENT SYSTEM – PHASE II

PROJECT STATUS: No Change

DESCRIPTION/JUSTIFICATION

The RFID (radio frequency identification) project provides an efficient method for management of library inventory, speeds up check-out and check-in, and will prepare the library for the use of automated sorting equipment to handle return of library materials. The RFID system offers a more secure system to help deter theft, which has been an increasing problem over the past years. The project is divided into two parts. The first phase is the tagging of the collection with RFID targets and the second is the acquisition of the equipment for circulation, security, and inventory management.

The circulation of library materials in Ames continues to be very strong. In order to maintain the current level of service and prepare the library to adequately serve projected increases in the future, a more efficient materials management system should be implemented.

Phase II Cost: $153,400 (six staff circulation workstations; four patron self-check-out stations; eight staff reader units; security gate; software and licensing)

COMMENTS

An RFID system replaces barcode technology for inventory management. RFID holds several advantages over barcoding. RFID-tagged books may be checked out by simply passing them over a field that senses the imbedded unique radio frequency identifier of each item, and an entire pile of books may be scanned at once, instead of one at a time. At the point of check in, batches of materials can be processed back into the collection faster. RFID systems are essential for automated return and sorting, a process that is planned in library expansion. Inventorying a library collection, currently prohibitive under the bar code system, is facilitated by hand held devices that can scan the shelves for items that are in and those that may be missing or misplaced. The RFID supplemental security system is also more reliable than the magnetic field method of the current system and will aid staff in identifying possible theft.

FY 11/12: Phase I – Software, equipment, tagging - $125,000
FY 12/13: Phase II – Equipment acquisition and implementation - $153,400

LOCATION

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

FISCAL YEAR PRIORITY		2				
	TOTAL	**2012/13**	**2013/14**	**2014/15**	**2015/16**	**2016/17**
COST:						
Equipment Acquisition & Implementation	153,400	153,400				
TOTAL	**153,400**	**153,400**				
FINANCING:						
Local Option Sales Tax	153,400	153,400				
TOTAL	**153,400**	**153,400**				

PROGRAM - ACTIVITY:	**DEPARTMENT:**	**ACCOUNT NO.**
Community Enrichment	Library	030-2662-459

BOOKMOBILE REPLACEMENT **PROJECT STATUS:** No Change

DESCRIPTION/JUSTIFICATION

This project provides for the replacement of the existing bookmobile which was purchased in 2001. The bookmobile has withstood heavy general use, including city and rural driving conditions with numerous stops and starts. The bookmobile functions as a library branch and provides outreach service for the library throughout the year during daytime and evening hours. It presently makes seven scheduled stops each week. In addition, the vehicle travels to kindergarten classes and daycare facilities in conjunction with Project Smyles and makes numerous appearances at community events around the city.

COMMENTS

The Library is seeking another walk-in, bus-type vehicle equipped with interior and exterior lighting, display areas for patron browsing, computer workstations for staff and customers, standardized material shelving systems, and storage space for use by library personnel only. A lift for wheelchairs will be included among the bidders' options.

Along with design features for ease of browsing, safety, and handicap accessibility, the Library will seek durability, strength, water-tight construction, ease of operation and maintenance, and maximum energy efficiency in this vehicle. Improvements in fuel efficiency and alternate fuel vehicles over the next few years will provide information on possible savings on the cost of fuel, and reduction of the carbon footprint may be realized with a vehicle having developing technology.

The Library's operating budget includes payments of $1,923 per month ($23,076/year) into the bookmobile depreciation fund. The account will have a balance of $256,149 by the end of FY 2012/13.

LOCATION

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

FISCAL YEAR PRIORITY				2			
		TOTAL	**2012/13**	**2013/14**	**2014/15**	**2015/16**	**2016/17**
COST:							
Vehicle Purchase		256,150		256,150			
	TOTAL	**256,150**		**256,150**			
FINANCING:							
Fleet Replacement Funds		256,150		256,150			
	TOTAL	**256,150**		**256,150**			

PROGRAM - ACTIVITY: Community Enrichment

DEPARTMENT: Library

ACCOUNT NO.

AUTOMATED MATERIALS HANDLING SYSTEM **PROJECT STATUS:** New

DESCRIPTION/JUSTIFICATION:
An automated materials handling system (AMHS) is a system by which library materials returned to the book drop are automatically checked in from patron circulation and then automatically sorted into bins in preparation for shelving by staff. An AMHS works best in conjunction with an RFID inventory management system, which will have been implemented in two phases in FY 2011/12 and FY 2012/13. A savings of staff labor is realized by eliminating the need to manually scan items returned to the library. An AMHS will automatically sort returned materials into major categories so that staff only has to conduct a final sort to facilitate re-shelving. In Ames Public Library's environment of high circulation, an AMHS will greatly reduce the amount of labor required for sorting and allow staff to be re-deployed to functions that cannot be automated.

COMMENTS:
A comprehensive study was conducted for the King County (WA) Library System on actual staff time savings between a library using AMHS and a comparable library manually sorting and managing returns. The finding was a 39% savings in staff hours at the library with AMHS. Anecdotally, libraries adopting this technology have reported similar results. Assuming a 39% savings in staff time spent on checking in and sorting, the library should be able to realize a savings in staff costs of about $52,000, which translates into a return on investment of about five years. It is the library's intention to redirect staff to other functions, such as shelving, to optimize the benefit of these savings. Libraries with equipment ten years old report that their equipment is still in use.

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

FISCAL YEAR PRIORITY					2		
	TOTAL	**2012/13**	**2013/14**	**2014/15**	**2015/16**	**2016/17**
COST:						
Equipment Acquisition & Installation	260,000			260,000		
TOTAL	**260,000**			**260,000**		
FINANCING:						
Local Option Sales Tax	260,000			260,000		
TOTAL	**260,000**			**260,000**		

PROGRAM - ACTIVITY: Community Enrichment
DEPARTMENT: Library
ACCOUNT NO.

COMMUNITY ENRICHMENT - CITY MANAGER

PROJECT/REVENUE DESCRIPTION	TOTAL	2012/13	2013/14	2014/15	2015/16	2016/17	PAGE
EXPENDITURES:							
1 Neighborhood Improvement Program	250,000	50,000	50,000	50,000	50,000	50,000	140
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, 111 neighborhood projects have been funded by the City, totaling $325,802. 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	**2012/13**	**2013/14**	**2014/15**	**2015/16**	**2016/17**
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	2012/13	2013/14	2014/15	2015/16	2016/17	PAGE
EXPENDITURES:							
1 Downtown Facade Program	250,000	50,000	50,000	50,000	50,000	50,000	142
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 Downtown Cultural District, excitement in this commercial area has 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 and established a scoring process to be used during the application review 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. To date, the program has awarded 21 grants to 20 property owners for a total amount of $229,054, of which some funding will come from the 2010/11 roll-over balance.

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 may be expanded.

LOCATION
Downtown Ames – Map 5, location M-11

FISCAL YEAR PRIORITY			1	1	1	1	1
		TOTAL	**2012/13**	**2013/14**	**2014/15**	**2015/16**	**2016/17**
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	2012/13	2013/14	2014/15	2015/16	2016/17	PAGE
EXPENDITURES:							
1 Municipal Cemetery Improvements	160,000	40,000	40,000	40,000	40,000		144
Total Expenditures	**160,000**	**40,000**	**40,000**	**40,000**	**40,000**		
REVENUES:							
City:							
Local Option Sales Tax	160,000	40,000	40,000	40,000	40,000		
Total Revenues	**160,000**	**40,000**	**40,000**	**40,000**	**40,000**		

AMES MUNICIPAL CEMETERY IMPROVEMENTS **PROJECT STATUS:** No 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.

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. Endowed care funds were being used for surface maintenance of the cemetery lanes until 2008/09 when new state regulations 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 has now 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.

LOCATION
Ames Municipal Cemetery, 9th Street and Maxwell Avenue – Map 5, location H-10

FISCAL YEAR PRIORITY			1	1	1	1	
		TOTAL	**2012/13**	**2013/14**	**2014/15**	**2015/16**	**2016/17**
COST:							
Lane Construction/Maintenance		160,000	40,000	40,000	40,000	40,000	
	TOTAL	**160,000**	**40,000**	**40,000**	**40,000**	**40,000**	
FINANCING:							
Local Option Sales Tax		160,000	40,000	40,000	40,000	40,000	
	TOTAL	**160,000**	**40,000**	**40,000**	**40,000**	**40,000**	

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

INTERNAL SERVICES - FACILITIES/FLEET SERVICES

PROJECT/REVENUE DESCRIPTION	TOTAL	2012/13	2013/14	2014/15	2015/16	2016/17	PAGE
EXPENDITURES:							
1 City Hall Mechanical/Structural Improvements	250,000	50,000	50,000	50,000	50,000	50,000	146
2 City Maintenance Facility Improvements	304,100			85,250	90,600	128,250	147
Total Expenditures	**554,100**	**50,000**	**50,000**	**135,250**	**140,600**	**178,250**	
REVENUES:							
City:							
Local Option Sales Tax	250,000	50,000	50,000	50,000	50,000	50,000	
Road Use Tax	76,024			21,312	22,650	32,062	
Water Utility Fund	76,026			21,313	22,650	32,063	
Sewer Utility Fund	76,024			21,312	22,650	32,062	
Fleet Services Fund	76,026			21,313	22,650	32,063	
Total Revenues	**554,100**	**50,000**	**50,000**	**135,250**	**140,600**	**178,250**	

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:

2012/13	Major maintenance as needed	$ 50,000
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

LOCATION

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

FISCAL YEAR PRIORITY		1	1	1	1	1
	TOTAL	**2012/13**	**2013/14**	**2014/15**	**2015/16**	**2016/17**
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:** Delayed Cost Change

DESCRIPTION/JUSTIFICATION

This building was built in four phases from 1967 to 1993, and provides shop and office space for Fleet Services and Public Works' divisions of Street Maintenance, Traffic Sign & Signal, Parking Meter, Utility Maintenance, and Engineering Construction Inspection. The most recent flat roof membrane was installed in 1993 and is no longer covered by factory warranty. Flat roofs usually begin to fail at 20 years.

2014/15	Roof replacement – Phase I – 10,700 sq. ft. @ $7.50/sq. ft. ($80,250)
2015/16	Roof replacement – Phase II – 10,700 sq. ft. @ $8.00 sq. ft. ($85,600)
2016/17	Roof replacement – Phase III + the addition - 14,500 sq. ft. @ $8.50/sq. ft. ($123,250)

COMMENTS

The cost of flat roof systems increases 2-5% annually. The cost of each phase has been adjusted by 5% per year based on 2011 dollars.

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	**2012/13**	**2013/14**	**2014/15**	**2015/16**	**2016/17**
COST:							
Design		15,000			5,000	5,000	5,000
Construction		289,100			80,250	85,600	123,250
	TOTAL	**304,100**			**85,250**	**90,600**	**128,250**
FINANCING:							
Road Use Tax		76,024			21,312	22,650	32,062
Water Utility Fund		76,026			21,313	22,650	32,063
Sewer Utility Fund		76,024			21,312	22,650	32,062
Fleet Services Fund		76,026			21,313	22,650	32,063
	TOTAL	**304,100**			**85,250**	**90,600**	**128,250**

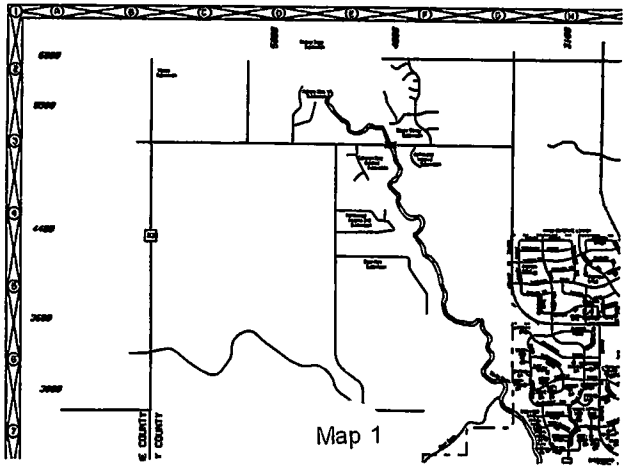
PROGRAM - ACTIVITY: Internal Services

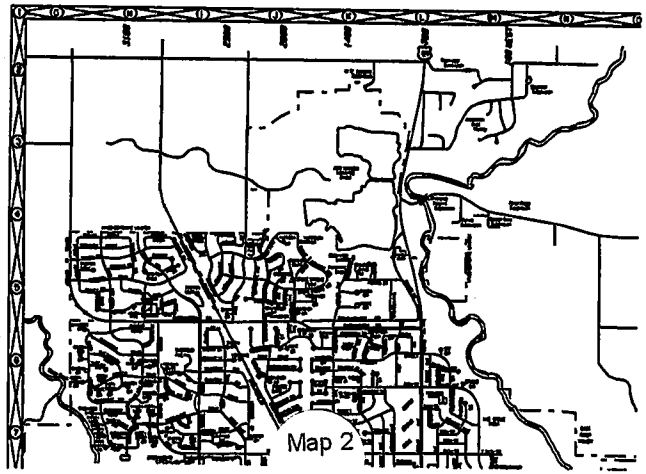
DEPARTMENT: Fleet Services

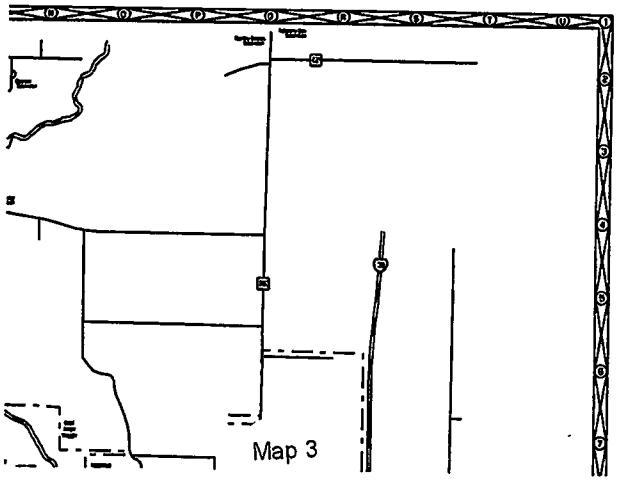
ACCOUNT NO.

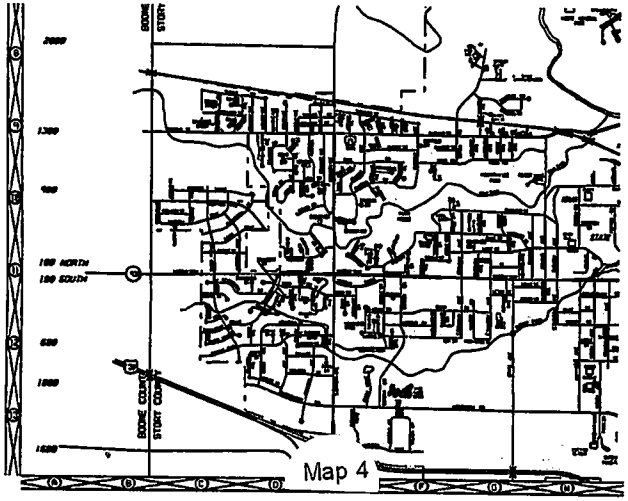
Fall in Ames includes beautiful autumn leaf colors.

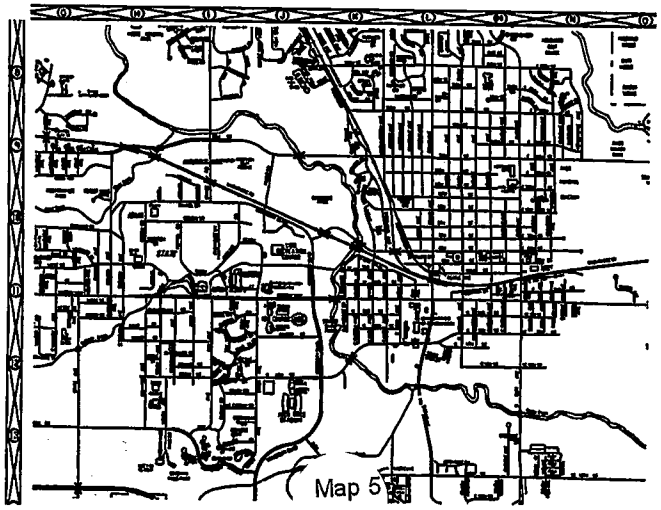
A hillside of trees is just starting to show its fall colors behind Moore Memorial Park’s barn and silo.

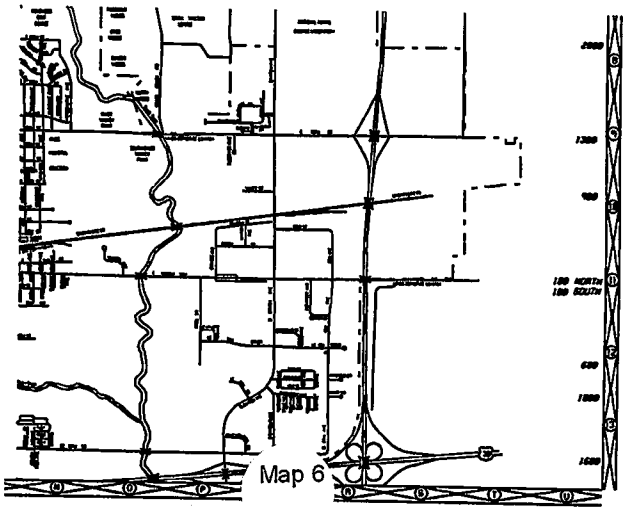

Map 1


Map 2


Map 3


Map 4


Map 5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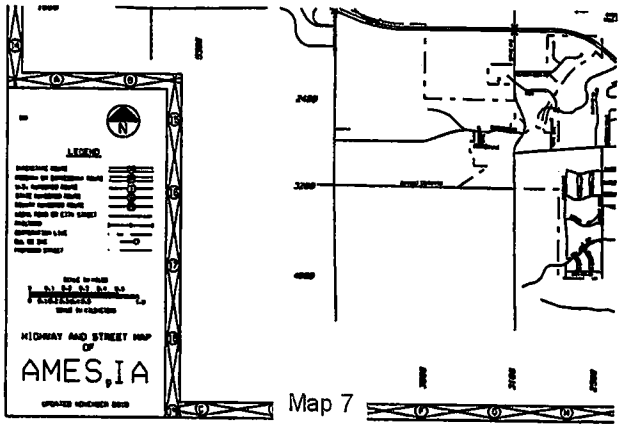

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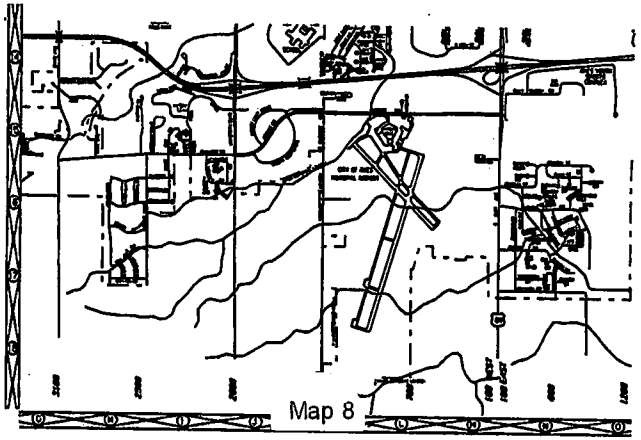
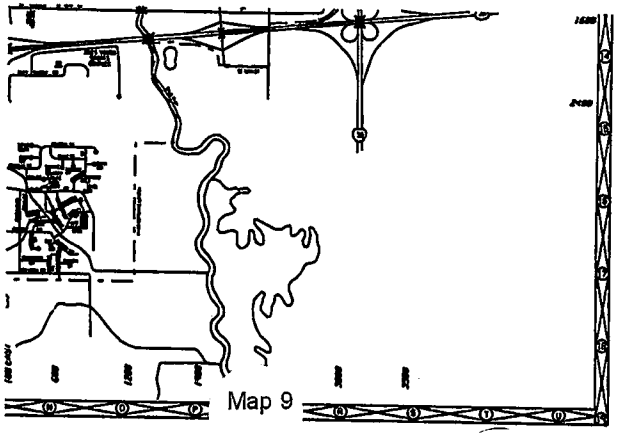
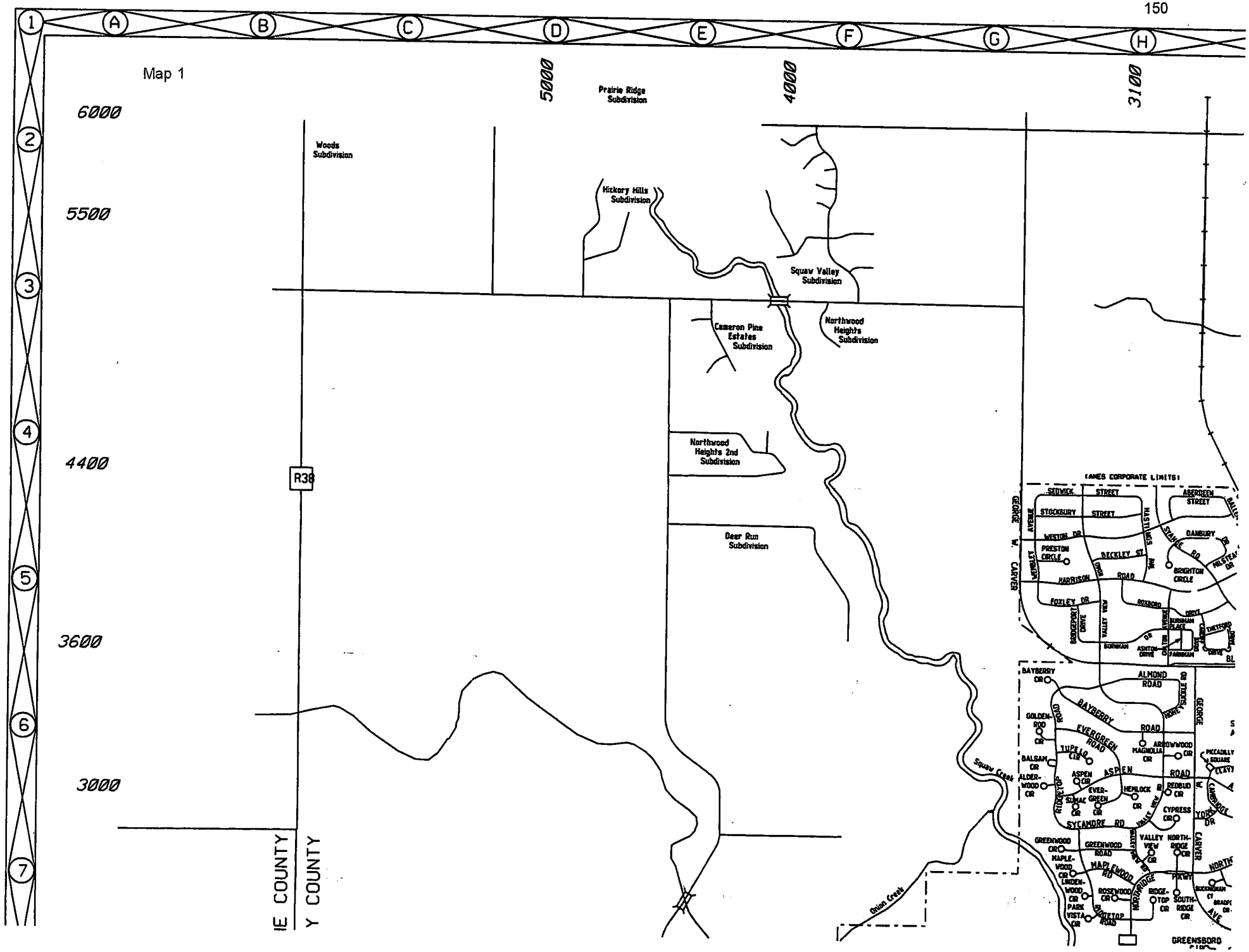

Map 8


Map 9


Map 1
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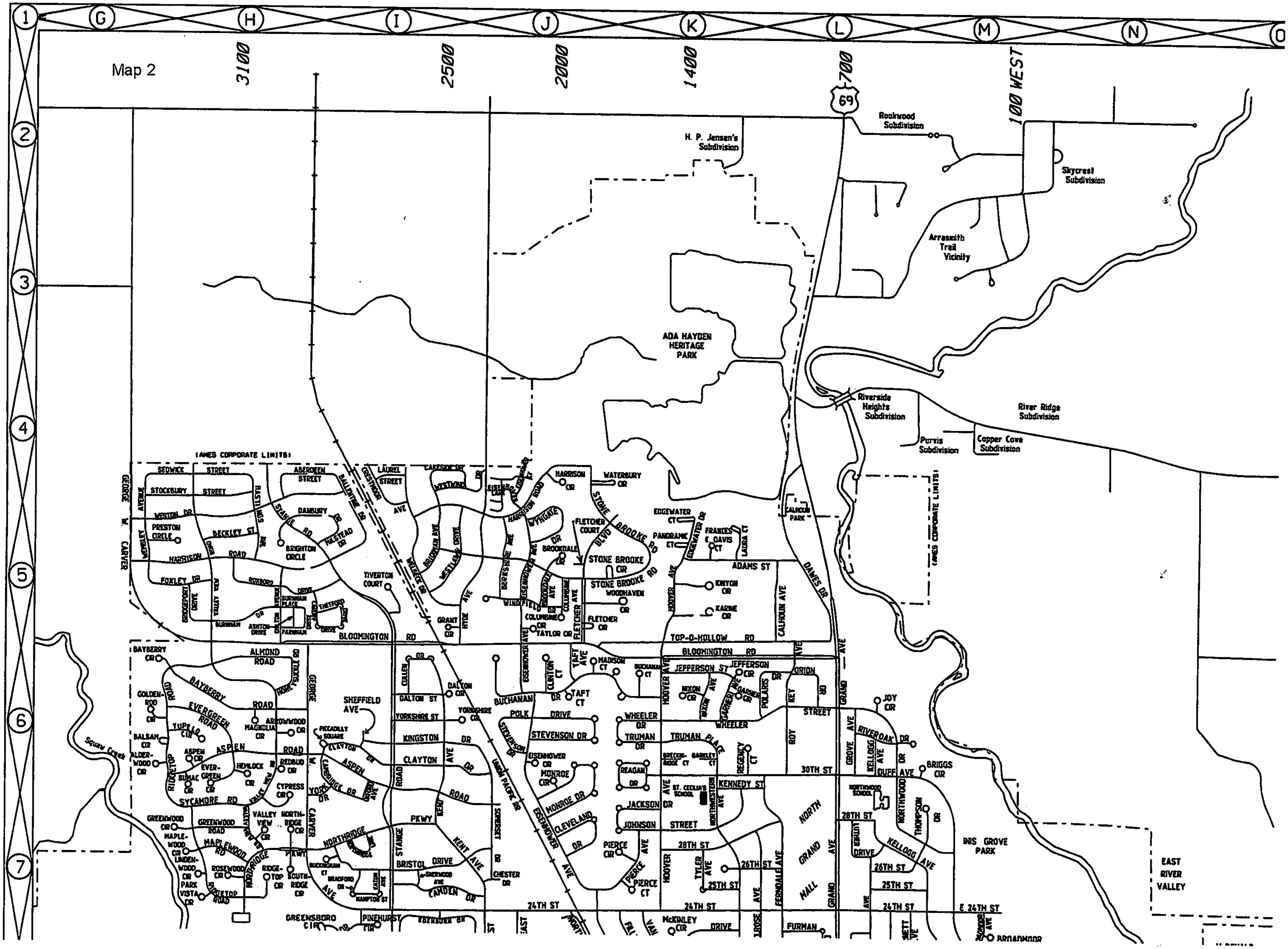
3000
5000
4000
3100
Prairie Ridge Subdivision
Woods Subdivision
Hickory Hills Subdivision
Squaw Valley Subdivision
Cameron Pine Estates Subdivision
Northwood Heights Subdivision
Northwood Heights 2nd Subdivision
Deer Run Subdivision
R38
Squaw Creek
Orion Creek
IE COUNTY
Y COUNTY
AMES CORPORATE LIMITS
GREENSBORO


Map 2
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2000
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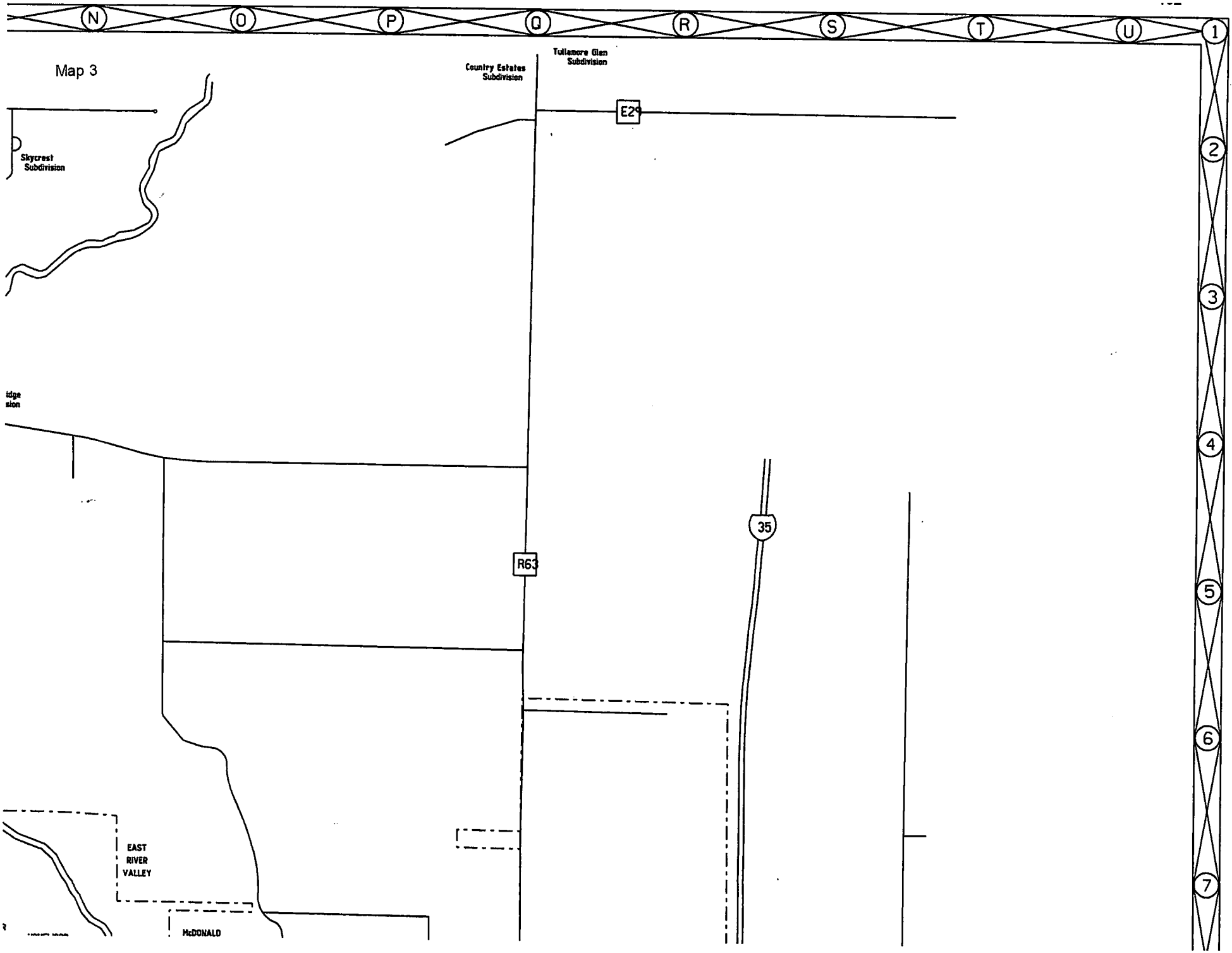
700
100 WEST
69
Rookwood Subdivision
H. P. Jensen's Subdivision
Skycrest Subdivision
Arrasmith Trail Vicinity
ADA HAYDEN HERITAGE PARK
Riverside Heights Subdivision
River Ridge Subdivision
Purvis Subdivision
Copper Cove Subdivision
AMES CORPORATE LIMITS
Squaw Creek
BLOOMINGTON RD
TOP-O-HOLLOW RD
STANGE RD
GEORGE W. CARVER AVE
HOOVER AVE
DAYTON AVE
GRAND AVE
UNION PACIFIC RR
EISENHOWER AVE
STONE BROOKE RD
ADAMS ST
CALHOUN AVE
CALHOUN PARK
JEFFERSON ST
WHEELER ST
TRUMAN PLACE
30TH ST
KENNEDY ST
JACKSON DR
JOHNSON STREET
28TH ST
26TH ST
25TH ST
24TH ST
E 24TH ST
NORTH GRAND MALL
NORTHWOOD SCHOOL
ST. CECILIA'S SCHOOL
INIS GROVE PARK
EAST RIVER VALLEY
KELLOGG AVE
DUFF AVE
RIVEROAK DR
THOMPSON DR
ROY KEY DR
ASPEN ROAD
EVERGREEN ROAD
BAYBERRY ROAD
ALMOND ROAD
SYCAMORE RD
MAPLEWOOD RD
RIDGETOP ROAD
NORTHRIDGE PKWY
KINGSTON DR
CLAYTON DR
YORKSHIRE ST
DALTON ST
KENT AVE
BRISTOL DRIVE
CAMDEN DR
CHESTER DR
POLK DRIVE
STEVENSON DR
MONROE DR
CLEVELAND DR
PIERCE AVE
HARRISON ROAD
FOXLEY DR
STOCKBURY STREET
SEDWICK STREET
WESTON DR
BECKLEY ST
ABERDEEN STREET
LAUREL STREET
WINDFIELD DR
HYDE AVE
FLETCHER AVE
TAFT AVE
CLINTON AVE
BUCHANAN DR
SHEFFIELD AVE
GREENSBORO CIR
PINEHURST CIR
McKINLEY CIR
FURMAN
FERNDALE AVE
TYLER AVE
JOY CIR
BRIGGS CIR


Map 3
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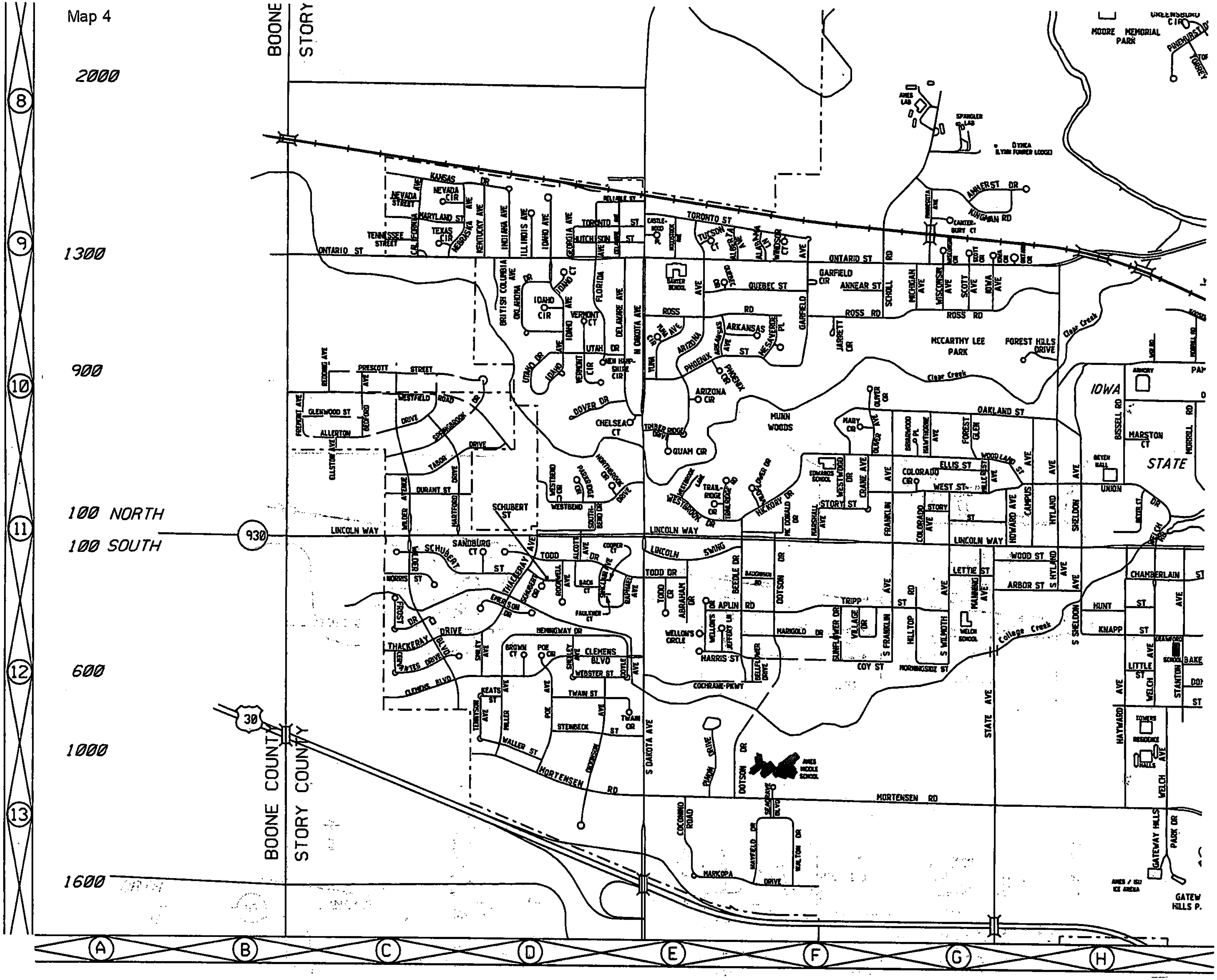
Country Estates Subdivision
Tullamore Glen Subdivision
E29
Skycrest Subdivision
R63
35
EAST RIVER VALLEY
McDONALD

Map 4


BOONE
STORY
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900
100 NORTH
100 SOUTH
600
1000
1600
930
30
BOONE COUNTY
STORY COUNTY
LINCOLN WAY
ONTARIO ST
MORTENSEN RD
S DAKOTA AVE
STATE AVE
IOWA
STATE
MCCARTHY LEE PARK
MUNN WOODS
Clear Creek
College Creek
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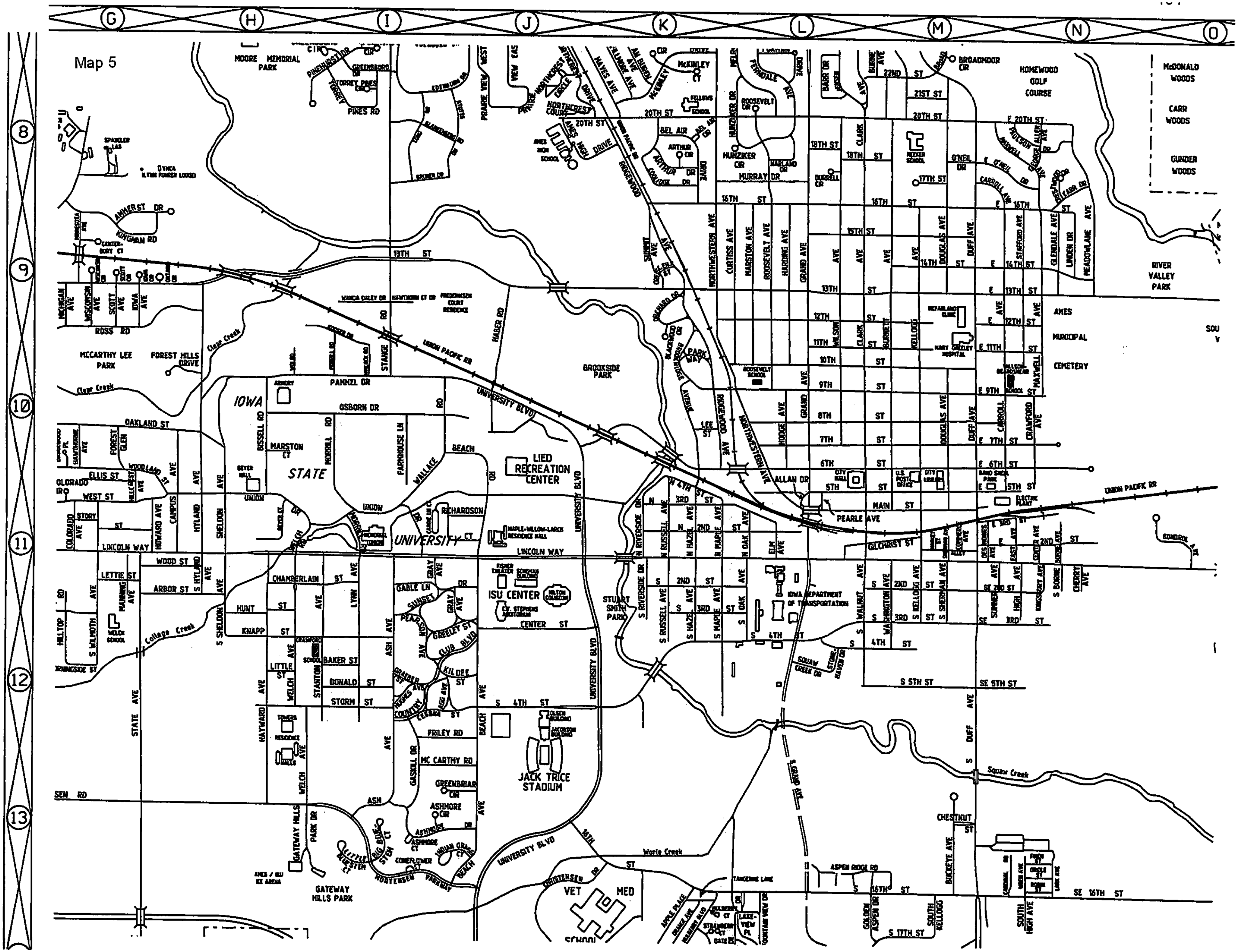

Map 5
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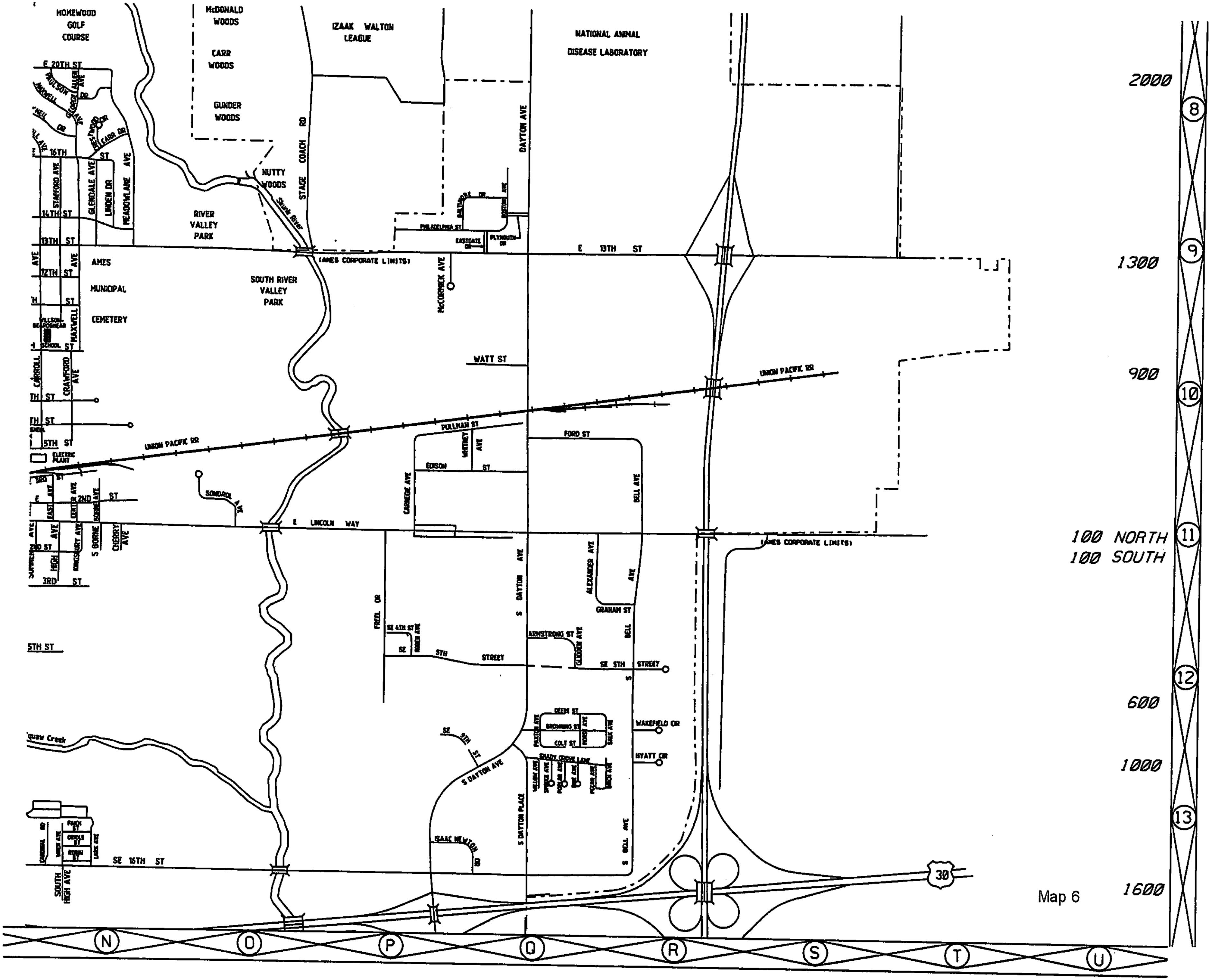
MOORE MEMORIAL PARK
PINES RD
HOMEWOOD GOLF COURSE
McDONALD WOODS
CARR WOODS
GUNDER WOODS
RIVER VALLEY PARK
AMES MUNICIPAL CEMETERY
McCARTHY LEE PARK
FOREST HILLS DRIVE
Clear Creek
BROOKSIDE PARK
IOWA
STATE
UNIVERSITY
LIED RECREATION CENTER
ISU CENTER
JACK TRICE STADIUM
STUART SMITH PARK
IOWA DEPARTMENT OF TRANSPORTATION
UNION PACIFIC RR
UNIVERSITY BLVD
LINCOLN WAY
13TH ST
20TH ST
16TH ST
S 4TH ST
S 5TH ST
SE 16TH ST
STATE AVE
DUFF AVE
GRAND AVE
Squaw Creek
College Creek
Worle Creek
GATEWAY HILLS PARK
VET MED
CHESTNUT ST



HOMEWOOD GOLF COURSE
McDONALD WOODS
CARR WOODS
GUNDER WOODS
IZAAK WALTON LEAGUE
NATIONAL ANIMAL DISEASE LABORATORY
NUTTY WOODS
Skunk River
STAGE COACH RD
DAYTON AVE
RIVER VALLEY PARK
SOUTH RIVER VALLEY PARK
AMES MUNICIPAL CEMETERY
(AMES CORPORATE LIMITS)
E 13TH ST
McCORMICK AVE
PHILADELPHIA ST
E 20TH ST
16TH
14TH ST
13TH ST
12TH ST
STAFFORD AVE
GLENDALE AVE
LINDEN DR
MEADOWLANE AVE
MAXWELL
CARROLL
CRAWFORD AVE
WATT ST
UNION PACIFIC RR
PULLMAN ST
FORD ST
EDISON ST
CARNEGIE AVE
BELL AVE
SONDROL AVE
E LINCOLN WAY
(AMES CORPORATE LIMITS)
5TH ST
3RD ST
S DUFF AVE
HIGH AVE
S BORNE AVE
CHERRY AVE
ELECTRIC PLANT
S DAYTON AVE
ALEXANDER AVE
GRAHAM ST
FREEL DR
SE 4TH ST
ARMSTRONG ST
SE 5TH STREET
SE 5TH STREET
S BELL
BEEDE ST
BROWNING ST
COLT ST
WAKEFIELD CIR
HYATT CIR
SHADY GROVE LANE
SE 9TH ST
S DAYTON AVE
S DAYTON PLACE
ISAAC NEWTON DR
S BELL AVE
Squaw Creek
SE 16TH ST
SOUTH HIGH AVE
30
2000
1300
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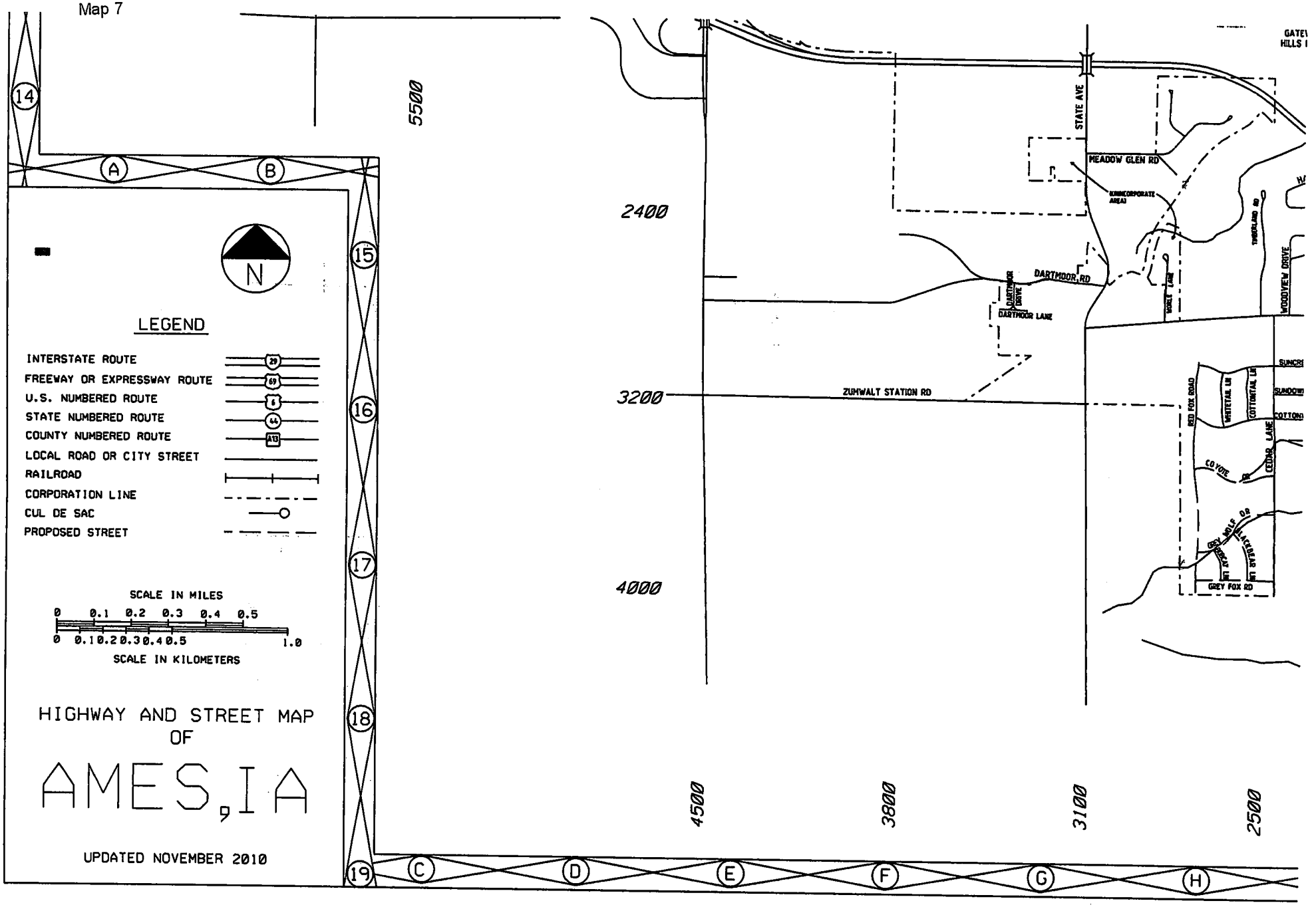
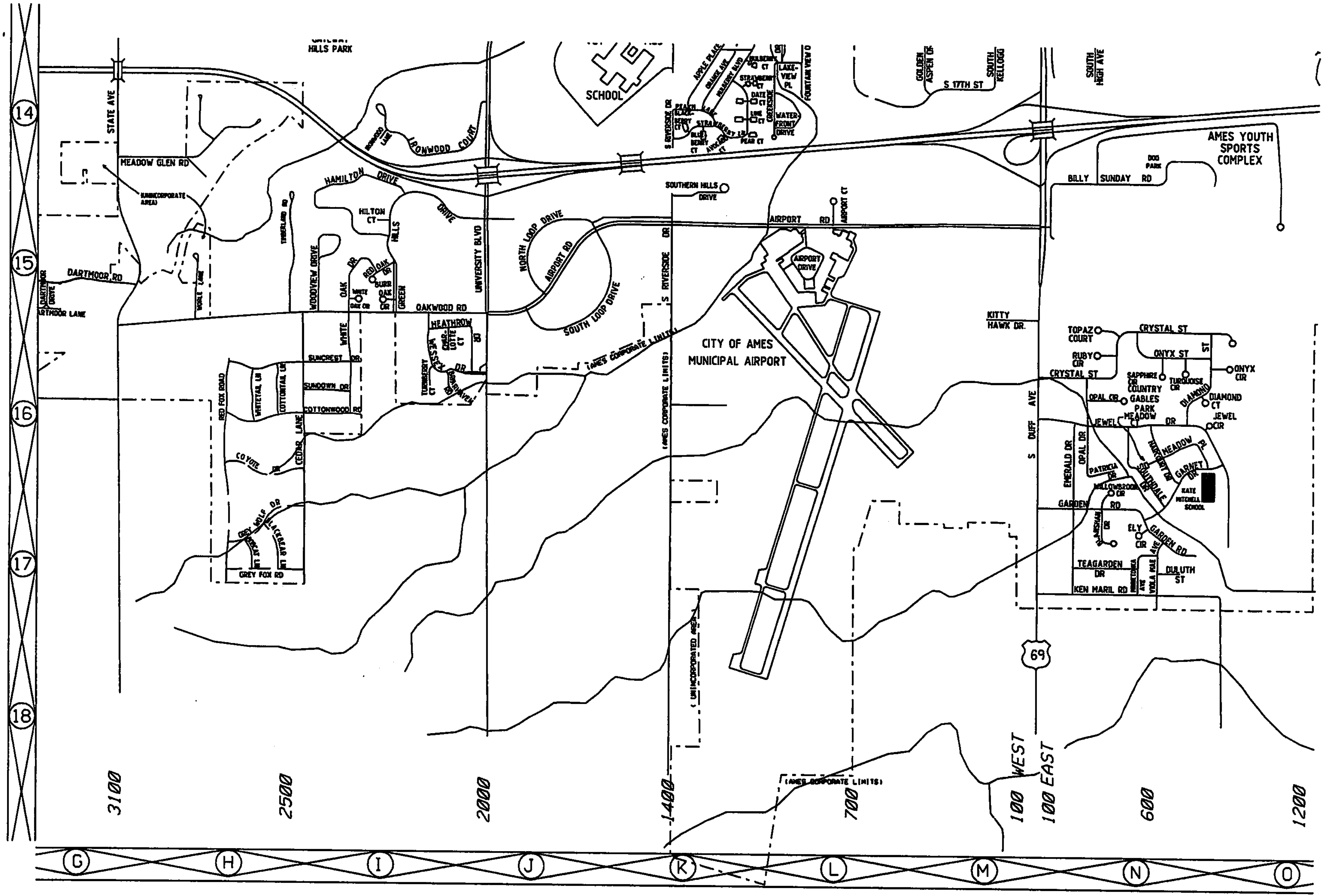
Map 6

Map 7


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
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 2010
5500
2400
3200
4000
4500
3800
3100
2500
STATE AVE
MEADOW GLEN RD
DARTMOOR RD
DARTMOOR DRIVE
DARTMOOR LANE
ZUMWALT STATION RD
WOODVIEW DRIVE
RED FOX ROAD
COTTONTAIL LN
WHITETAIL LN
CEDAR LANE
COYOTE DR
GREY WOLF DR
GREY FOX RD


HILLS PARK
SCHOOL
APPLE PLACE
LAKE-VIEW PL
WATER-FRONT DRIVE
S RIVERSIDE DR
PEAR CT
GOLDEN ASPEN DR
S 17TH ST
SOUTH KELLOGG
SOUTH HIGH AVE
AMES YOUTH SPORTS COMPLEX
DOG PARK
BILLY SUNDAY RD
STATE AVE
MEADOW GLEN RD
IRONWOOD COURT
HAMILTON DRIVE
HILTON CT
HILLS
UNIVERSITY BLVD
NORTH LOOP DRIVE
AIRPORT RD
SOUTH LOOP DRIVE
SOUTHERN HILLS DRIVE
AIRPORT RD
AIRPORT CT
AIRPORT DRIVE
DARTMOOR RD
DARTMOOR LANE
WOODVIEW DRIVE
OAK DR
RED OAK DR
BURR OAK CIR
GREEN
OAKWOOD RD
WHITE
HEATHROW
SUNCREST DR
SUNDOWN DR
COTTONWOOD RD
RED FOX ROAD
WHITETAIL LN
COTTONTAIL LN
COYOTE DR
CEDAR LANE
GREY WOLF DR
BLACKBEAR LN
GREY FOX RD
AMES CORPORATE LIMITS
CITY OF AMES MUNICIPAL AIRPORT
UNINCORPORATED AREA
KITTY HAWK DR.
TOPAZ COURT
CRYSTAL ST
RUBY CIR
ONYX ST
ONYX CIR
CRYSTAL ST
SAPPHIRE CIR
TURQUOISE CIR
COUNTRY GABLES PARK
DIAMOND CT
OPAL CIR
JEWEL DR
JEWEL CIR
MEADOW PL
S DUFF AVE
EMERALD DR
OPAL DR
PATRICIA DR
GARNET DR
KATE MITCHELL SCHOOL
GARDEN RD
ELY CIR
GARDEN RD
TEAGARDEN DR
KEN MARIL RD
VIOLA RAE AVE
DULUTH ST
69
3100
2500
2000
1400
700
100 WEST
100 EAST
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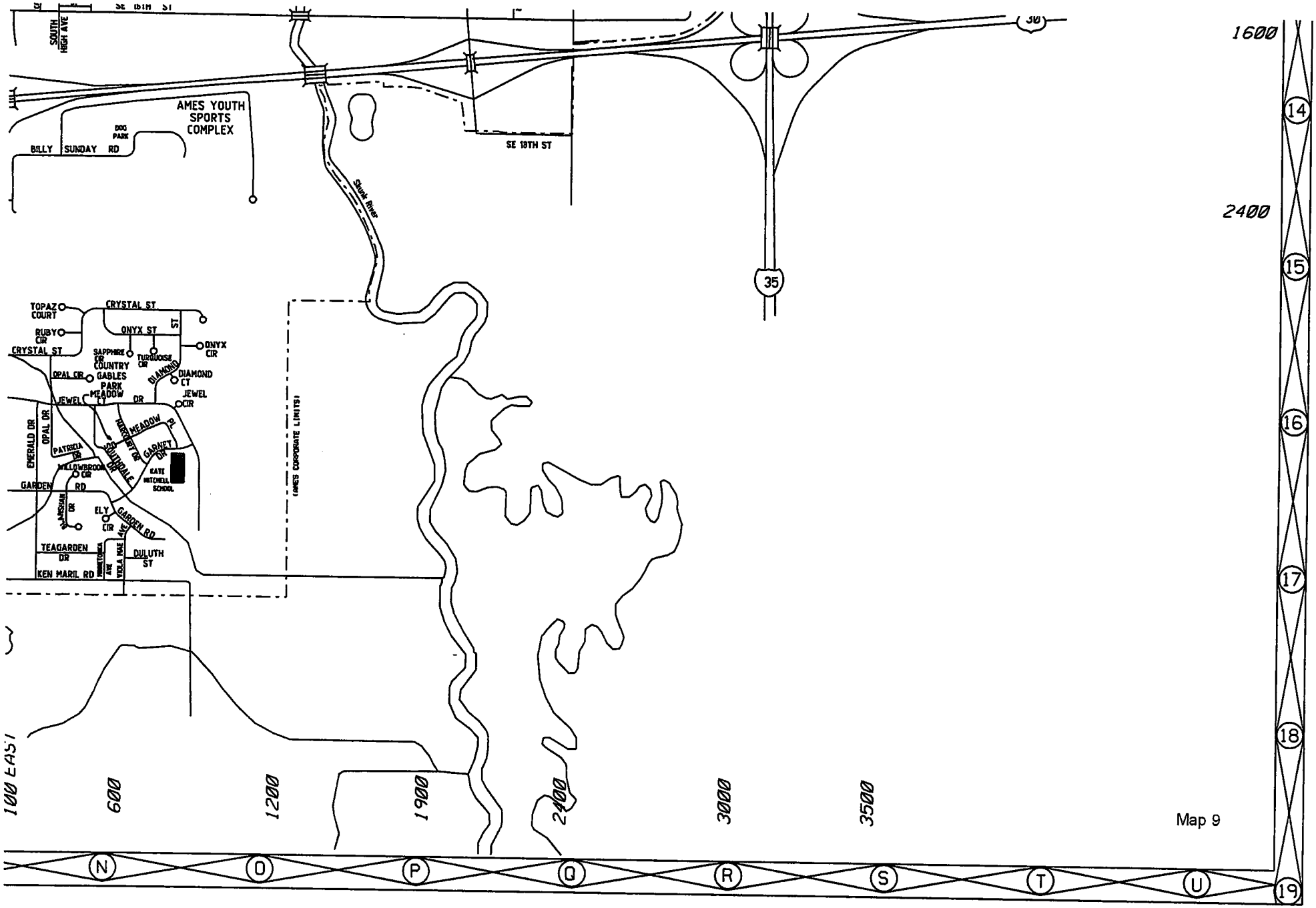
SE 16TH ST
SOUTH HIGH AVE
AMES YOUTH SPORTS COMPLEX
DOG PARK
BILLY SUNDAY RD
SE 18TH ST
Skunk River
30
35
1600
2400
14
15
16
17
18
19
TOPAZ COURT
CRYSTAL ST
RUBY CIR
ONYX ST
ONYX CIR
SAPPHIRE CIR
COUNTRY GABLES PARK
TURQUOISE CIR
DIAMOND
DIAMOND CT
OPAL CIR
JEWEL CT
MEADOW DR
JEWEL CIR
EMERALD DR
OPAL DR
PATRICIA DR
SOUTHDALE DR
MEADOW PL
GARNET CIR
WILLOWBROOK CIR
KATE MITCHELL SCHOOL
GARDEN RD
HANSHAM DR
ELY CIR
GARDEN RD
TEAGARDEN DR
DULUTH ST
KEN MARIL RD
(AMES CORPORATE LIMITS)
100 EAST
600
1200
1900
2400
3000
3500
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Map 9