



CITY OF AMES, IOWA
Capital Improvements Plan
2009-2014



EcoSmart is the City of Ames' comprehensive strategy to reduce energy consumption and conserve natural resources. While many of these efforts are new, others have been around for decades. Under the EcoSmart umbrella are Smart City, Smart Water, Smart Trash, Smart Energy, Smart Watersheds, and Smart Ride programs.

For decades, the City of Ames has actively engaged in saving resources, reducing energy demand, and promoting recycling. From a financial perspective, conservation of resources is good fiscal policy. In recent years, the push to reduce, reuse, and recycle has reached beyond its budget impact. There is a growing movement in the Ames community to promote conservation of limited resources as a means to achieving a greater global good --- a more sustainable future.



City Manager's Office

515 Clark Avenue
 P.O. Box 811
 Ames, IA 50010
 Phone: 515.239.5101
 Fax: 515.239.5142

January 13, 2009

Mayor and Ames City Council Members:

Attached for your review is the recommended Capital Improvements Plan (CIP) for fiscal years 2009-10 through 2013-14. This Plan reflects total expenditures of \$240,717,901 over the next five years in an effort to meet the service needs of our customers, improve the quality of life for our citizens, and support the goals of the City Council. Listed below is a summary of the expenditures reflected in the CIP.

PUBLIC SAFETY		UTILITIES		TRANSPORTATION		COMMUNITY ENRICHMENT	
Law Enforcement	\$684,005	Resource Recovery	\$1,093,950	Streets Engineering	\$44,375,000	Parks & Recreation	\$3,573,100
Fire Suppression	\$763,877	Water Treatment	\$30,940,000	Streets Maintenance	\$1,455,000	Library Services	\$491,700
Traffic	\$6,720,000	Water Distribution	\$4,500,000	Transit	\$12,725,995	City Hall Improvements	\$1,645,000
						City Hall Space Re-Use Project	\$1,186,228
		Storm Sewers	\$3,053,650	Airport	\$4,085,000	Neighborhood Improvements	\$250,000
		Sanitary Sewers	\$2,500,000			Downtown Facade Improvements	\$250,000
		WPC Treatment	\$8,440,000			Cool Cities Initiatives	\$400,000
		Electric	\$110,791,396			City Maintenance Facility	\$794,000
TOTAL	\$8,167,882		\$161,318,996		\$62,640,995		\$8,590,028

This CIP anticipates the following City revenues to support the various projects: \$34,368,000 from G.O. Bond proceeds; \$84,000,000 from Utility Revenue Bond revenues; \$5,593,113 from Local Option Sales Tax receipts; \$7,318,500 from Road Use Tax receipts; \$7,188,500 from Water Utility user fees; \$8,058,500 from Sanitary Sewer Utility user fees; \$2,375,000 from Storm Sewer Utility user fees; \$51,113,296 from Electric Utility user fees; \$1,093,950 from Resource Recovery Utility revenues; \$2,147,059 from CyRide revenues; and \$2,316,116 from various other City funding sources.

PUBLIC SAFETY - \$8,167,882

The **Police Communications Center Computer-Aided Dispatch System** (page 10) will allow us to update our dispatch and records management system so that we can continue our unique partnership with the Story County Sheriff's Office and Iowa State University.

Our **Firearms Training Range** (page 11) will receive a significant renovation to improve security and safety for surrounding properties. The close proximity of this range makes the site an ideal location to hold down personnel and travel costs associated with this type of training.

In the Fire Department, we will explore the cost/benefits of installing **Mobile Data Terminals** in our apparatus (page 13), replace Engine #2 and refurbish this unit to serve as a reserve as reflected in **Fire Apparatus Replacement** (page 14), install an **Emergency Generator** (page 15) at Station #2, and improve **the Fire Station #1 Driveway** (page 16).

The CIP continues to promote the safe movement throughout the City for various modes of transportation. Towards this end, the **Shared Use Path System Expansion** (page 20) will allow us to complete the Skunk River Trail extension and South Dayton Avenue connection and the **Shared Use Path Pavement Improvements** (page 107) result in ongoing maintenance of the existing paths in our system. Under this Plan, we will continue our commitment to upgrading our **Traffic Signals** (page 19) throughout the City as well as a major intersection improvement at 20th and Grand Avenue included in **US 69 Intersection Improvements** (page 23).

UTILITIES - \$161,318,996

Resource Recovery - \$1,093,950

In addition to the **Resource Recovery System Improvements** (page 28) to upgrade our mechanical systems in the plant, we are preparing to expand our site to the east to accommodate the construction of a **Resource Recovery Recyclables Building** (page 29) that will serve as a staging area for rejected and ferrous materials.

Water - \$35,440,000

The highlight of the Water Utility over the next five years will be the **Water Plant Expansion** project (page 31). During 2008-09, Fox Engineering will be assisting the City staff in preparing options for meeting our customers' water demand over the next 20 years. The cost estimate shown in the CIP, \$28,900,000, assumes a new water treatment facility with a 15 million gallon per day capacity at the existing site. The project cost will be adjusted once the preferred option is selected by the City Council. In our continuing effort to eliminate duplicate water mains, improve water flow, and eliminate rusty water, the **Water System Improvements** (page 38) remain a priority in the Plan.

Storm Sewer – \$3,053,650

This CIP continues the City's commitment to mitigate the negative impact of storm water runoff. The annual funding for **Storm Sewer Outlet Erosion Control** (page 40) has been increased substantially in the first two years of the Plan due to the expected receipt of a Watershed Improvement Review Board Grant. The cleaning out of the retention/detention ponds to ensure their effectiveness will be accomplished by the **Storm Sewer Facility Rehabilitation Program** (page 41). Our five-year cycle for replacing deteriorated intakes will be maintained with our **Storm Sewer Intake Rehabilitation Program** (page 43). Due to rising construction costs and an expanding list of identified projects, you will note that funding for the **Low Point Drainage Improvements** (page 42) has been increased. Finally, in response to a recent directive from the Council, new **Southwest Ames Storm Water Management Improvements** (page 44) have been added to the CIP to protect Greenbriar Park and the nearby golf course.

Sanitary Sewer - \$10,940,000

The CIP reflects the installation of a **WPC Plant Disinfection** system (page 49) even though we are still awaiting our State discharge permit and are not yet required to install such a system. The **WPC Plant Residuals Handling Improvements** (page 50) should help us meet the challenge to improve our sludge disposal responsibilities. In order to meet our Cool Cities Initiative, we hope to identify strategies in the **WPC Plant Energy Management** program (page 53) that will reduce the carbon emissions in this utility by 20%. As was the case with previous CIPs, we will continue to invest in repairing deteriorated sewer lines to eliminate blockages and clean water infiltration through the **Sanitary Sewer Rehabilitation Program** (page 46) and the **Clear Water Diversion Program** (page 47).

Electric - \$110,791,396

The CIP reflects the implementation of our long-term strategy to meet our customers' electric needs for the next twenty years. To meet this challenge, we are looking first to our customers to reduce their consumption influenced by a comprehensive incentive package provided by our **Demand Side Management Programs** (page 65). Next, we are committed to refurbishing our two generating units with the **Unit #8 Boiler Tube Repair** (page 58), **Unit #7 Boiler Tube Repair** (page 77), **Cooling Tower Repairs** (page 83), **Units #7 & #8 Oil Gun Upgrade** (page 61), **Feedwater Heater Tube Replacement** (page 68), and **Unit #8 Air Heater Element Replacement** (page 70).

In accordance with current and anticipated environmental standards, we plan to install additional equipment over the next five years with the **Unit #7 Nitrogen Oxide Control Capital** (page 57), **Unit #8 Nitrogen Oxide Control Capital** (page 75), **Unit #7 Mercury Capital** (page 79), and **Unit #8 Mercury Capital** (page 76).

Our transmission/distribution systems also receive attention in this Plan with the completion of our **Mid-American Energy Interconnection** (page 59) and **Ames Stange In-Town Line** (page 60). The completion of these projects is crucial in providing access to energy from the national electric grid to serve our customers during emergencies or at times when the cost to purchase electricity is less than the cost for us to produce it.

The final year of the Plan highlights a significant expenditure for **Future Generation** (page 89). This investment will be needed only if our demand continues to grow to a point where our installed capacity is no longer sufficient to meet the needs of our customers.

TRANSPORTATION - \$62,640,995

Streets - \$45,830,000

Once again, the CIP places an emphasis on expanding our major transportation routes - **Grand Avenue Extension** (page 102) and **South Dakota Widening** (page 103) - to alleviate traffic congestion as well as reconstructing existing routes, **Arterial Street** (page 95), **Collector Street** (page 96), **CyRide Route**, (page 97), and **Concrete Pavement Improvements** (page 98) to restore structural integrity, serviceability, and rideability.

The CIP reflects a commitment to the City Council's goal of strengthening our neighborhoods with the following programs that will enhance these residential areas: **Neighborhood Curb Replacement** (page 105), **Asphalt Pavement Improvement** (page 99), **Asphalt Resurfacing & Seal Coat Removal/Asphalt Reconstruction** (page 101), and **Sidewalk Safety** (page 108).

A new program, **Bridge Replacement** (page 109), has been introduced in this CIP. The good news is that only one bridge in the City, 6th Street over Squaw Creek, has been identified by the Iowa Department of Transportation for repairs because of packed rust on the girders. A study in 2009-10 will identify the precise amount of work that is needed to alleviate the situation.

Airport - \$4,085,000

We hope to take advantage of 90% federal matching funds to accomplish numerous **Airport Improvements** (page 119) over the next four years. The CIP reflects taxiway rehabilitation, apron reconstruction, redesign of the parking lot and vehicle circulation, and replacement of the main terminal building.

CyRide - \$12,725,995

The funds earmarked in this CIP for CyRide will assist us in accomplishing the Council’s goal of reducing carbon emissions. Towards this end, in the first two years of the Plan we will replace 15 of our oldest vehicles with newer used vehicles and purchase three new buses in each of the final three years of the Plan - **Vehicle Replacement** (page 112). This purchasing strategy should reduce the average age of our fleet and bring it more in line with the national average.

The other emphasis in this Plan is to improve the building space to administer and maintain this operation. The **Building Expansion and Modernization** (page 113) and the **CyRide Shop and Office Equipment** (page 114) projects will access 80% federal matching funds to accomplish this goal.

COMMUNITY ENRICHMENT - \$8,590,028

Parks and Recreation - \$3,573,100

Our continuing commitment to our park system is demonstrated by the investment in our **Parks and Recreation Facility Improvements** (page 126) and support for our **Playground/Park Equipment Improvements** (page 128). Through our partnership with the Ames School District, our indoor pool - **Municipal Pool Maintenance** (page 127) - will receive needed renovations to prolong the life of this facility until 2015. In accordance with a recent directive by the City Council, an existing park property will receive a major facelift with the **Development Of Greenbriar Park** (page 130).

In the latter years of the CIP, three projects (**Tennis Court Improvements** (page 129), **Bike Park** (page 131), and **Interactive Fountain** (page 132), have been earmarked for additional community input through public meetings and city-wide surveying before any final decisions are made to proceed with implementation.

Library - \$491,700

Not having the benefit of the final recommendation from the Library Board regarding a strategy for expanding the Library, the CIP reflects projects that assume the existing building will continue to be utilized. Hence, projects needed over the next five years include masonry restoration, window re-glazing, skylight replacement, air conditioning replacement, and floor covering replacement. Once a final recommendation is made and accepted by the City Council, this list of projects might have to be revised.

City Hall and City Maintenance Facility Improvements - \$4,025,228

Much has changed since we renovated Central Junior High School to become our City Hall. Over the last 18 years, additional positions that are housed in the building have been added and the roof and mechanical systems are reaching their maximum life expectancy. To optimize the existing space in the City Hall to accommodate this growth in the workforce, the **City Hall Space Re-Use Project** (page

145) will allow us to utilize vacant jail space, create usable basement office space, and improve our inadequate Emergency Operations Center. **The City Hall Mechanical/Structural Improvements** (page 144) will result in the change-out of our 180 heat pumps, the replacement of the roof membrane, and the study of the viability of converting to a geo-thermal HVAC system. **The City Maintenance Facility Improvements** (page 146) will not only focus on a three-phased approach to replacing the roof, but will also call for the installation of solar heat panels on each side of the building to reduce CO₂ emissions by three tons per year.

The CIP also reflects an exciting new project, **Cool Cities: City Facility Energy Improvements** (page 143). This new endeavor will provide a funding mechanism to accomplish energy reduction projects for non-utility buildings in an effort to accomplish the City Council's goal of reducing our carbon emissions by 15% for non-utility operations by 2014. Funding for utility buildings will be included in their respective budgets for capital or capital improvements initiatives.

Neighborhood and Commercial Revitalization - \$3,750,000

Two important goals of the City Council over the years involve strong support for neighborhood and commercial revitalization. Towards this end, the **Neighborhood Improvement Program** (page 139) and the **Downtown Façade Program** (page 141) included in the CIP will maintain this commitment. In addition, the **Downtown Street Pavement Improvements** (page 100) will result in the north/south streets in the Downtown Business District being renovated as was accomplished along Main Street some time ago.

We are well aware of the economic uncertainty that we found ourselves in as we prepared this five-year Plan. Consequently, our department heads were forced to balance their responsibility to identify improvements to those elements of our public infrastructure that have deteriorated, become outmoded, or will not be sufficient to meet the demands of our customers with the responsibility to mitigate the associated cost to our citizens for the property taxes or utility fees required to finance these improvements. We should thank our department heads for striving to meet this delicate balance! If we hope to maintain Ames as one of the premiere cities in this country, the investments in our infrastructure should be continued.

I also would like to thank Duane Pitcher, Carol Collings, Nancy Masteller, Sharon Hjortshoj, Sheila Lundt, and Bob Kindred for their leadership in developing this critical planning document.

Respectfully submitted,

Steven L. Schainker
City Manager

CITY OF AMES, IOWA
FIVE-YEAR CAPITAL IMPROVEMENT PLAN
2009-2014

TABLE OF CONTENTS

How to Use the C.I.P. Document	II
Project Index	III
Projection of Debt Capacity	VIII
Summary of Major Bond Issues	IX
City-Wide Summary	1
Capital Improvements – By Category	
Public Safety	7
Utilities	25
Transportation.....	91
Community Enrichment / Internal Services	121
Map Information	147

HOW TO USE THE C.I.P. DOCUMENT

The 2009-2014 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 147-156.

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.

**INDEX TO 2009 – 2014 CAPITAL IMPROVEMENTS PLAN
CITY OF AMES, IOWA**

PUBLIC SAFETY SUMMARY	PAGE
Police	
Communications Center Computer Aided Dispatch.....	10
Firearms Training Range	11
Fire	
Mobile Data Terminals – Phase 2.....	13
Fire Apparatus Replacement	14
Emergency Generator.....	15
Fire Station #1 Driveway Renovation.....	16
Traffic	
Traffic Signal Program	19
Shared Use Path System Expansion.....	20
Traffic Engineering Studies.....	21
Railroad Crossing Safety Improvements.....	22
U. S. 69 Intersection Improvements.....	23
West Lincoln Way Intersection Improvements	24
 UTILITIES – SUMMARY	
Resource Recovery	
Resource Recovery System Improvements.....	28
Resource Recovery Recyclables Building	29
Water Treatment	
Water Plant Expansion	31
Raw Well Water Loop Line	32
Bloomington Road Tank Improvements.....	33
Water Supply Expansion.....	34
Water Plant Facility Improvements	35
NADC Pump Station Improvements	36
Water Distribution	
Water System Improvements.....	38

Storm Sewer	
Storm Sewer Outlet Erosion Control.....	40
Storm Water Facility Rehabilitation Program	41
Low Point Drainage Improvements.....	42
Intake Rehabilitation Program.....	43
Southwest Ames Stormwater Management.....	44
Sanitary Sewer	
Sanitary Sewer Rehabilitation Program	46
Clear Water Diversion.....	47
Water Pollution Control	
WPC Plant Disinfection.....	49
WPC Plant Residuals Handling Improvements.....	50
WPC Plant Facility Improvements	51
WPC Plant Automation Upgrade – Phase II	52
WPC Plant Energy Management.....	53
WPC Plant Digester Cleaning & Painting.....	54
Electric	
Unit #7 Nitrogen Oxide Control Capital.....	57
Unit #8 Boiler Tube Repair.....	58
Mid-American Energy Interconnection.....	59
Ames Stange In-Town 161 kV Line	60
Units #7 and #8 Oil Gun Upgrade.....	61
Downtown Network 13.8 kV Conversion.....	62
Gas Turbine #1 Inspection & Overhaul.....	63
69 kV Switchyard Relay/Control Replacement	64
Demand Side Management Programs.....	65
Automated Metering Infrastructure	66
Units #7 & #8 DSC Upgrade	67
Feedwater Heater Tube Replacement.....	68
Top-O-Hollow Substation Expansion	69
Unit #8 Air Heater Basket Replacement	70
Ames Plant Substation Expansion.....	71
Power Plant Fire Protection System	72
Cyber Security Risk Assessment.....	73
Street Light and Line Relocations	74

Electric, continued:

Unit #8 Nitrogen Oxide Control Capital	75
Unit #8 Mercury Capital	76
Unit #7 Boiler Tube Repair.....	77
Inlet Heating for CT2.....	78
Unit #7 Mercury Capital	79
RDF Bin Work.....	80
Vet Med Substation Expansion.....	81
Unit #8 Turbine Generator 5-Year Overhaul.....	82
Cooling Tower Repairs	83
Unit #7 Cooling Water System and Piping.....	84
Diesel Building Demolition	85
Unit #7 Turbine Generator 5-Year Overhaul.....	86
Ontario Substation 69 kV Breaker Addition.....	87
Remove #5 and #6 Turbine Generators	88
Capacity Generation for Future Years	89
Unit #8 Controls Upgrade	90

TRANSPORTATION SUMMARY

Street Engineering

Arterial Street Pavement Improvements	95
Collector Street Pavement Improvements	96
CyRide Route Pavement Improvements.....	97
Concrete Pavement Improvements	98
Asphalt Pavement Improvement Program	99
Downtown Street Pavement Improvements.....	100
Asphalt Resurfacing/Seal Coat Removal	101
Grand Avenue Extension	102
South Dakota Widening (Lincoln Way to Mortensen)	103

Street Maintenance

Neighborhood Curb Replacement Program.....	105
Retaining Wall Reconstruction.....	106
Shared Use Path Pavement Improvements.....	107
Sidewalk Safety Program.....	108

Street Maintenance, continued	
Bridge Rehabilitation Program	109
Salt Storage Facility	110
Transit	
Vehicle Replacement.....	112
CyRide Building Expansion and Modernization	113
CyRide Shop/Office Equipment	114
Bus Stop Improvements.....	115
AVL Technology	116
Iowa State Center Commuter Lot Resurfacing	117
Airport	
Airport Improvements.....	119

COMMUNITY ENRICHMENT / INTERNAL SERVICES – SUMMARY

Parks and Recreation	
Ice Resurfacers	125
Parks and Recreation Facility Improvements.....	126
Municipal Pool Maintenance	127
Playground/Park Equipment Improvements.....	128
Tennis Court Improvements.....	129
Greenbriar Park Improvements.....	130
Bike Park	131
Interactive Fountain	132
Library	
Library Exterior Building Repair	134
Library Skylight Replacement	135
Library Air Conditioning System Replacement.....	136
Library Floor Covering Replacement	137
City Manager	
Neighborhood Improvement Program.....	139
Planning and Housing	
Downtown Façade Program	141
Facilities/Fleet Services	
Cool Cities: Facility Energy Improvements	143
City Hall Mechanical/Structural Improvements	144

Facilities/Fleet Services, continued	
City Hall Space Re-Use Project	145
City Maintenance Facility Improvements	146

CITY MAP – ALL NINE SECTIONS

Map Section 1	148
Map Section 2	149
Map Section 3	150
Map Section 4	151
Map Section 5	152
Map Section 6	153
Map Section 7	154
Map Section 8	155
Map Section 9	156

PROJECTION OF DEBT CAPACITY

	2007/08 ACTUAL	2008/09 BUDGETED	2009/10 PROJECTED	2010/11 PROJECTED	2011/12 PROJECTED	2012/13 PROJECTED	2013/14 PROJECTED
1. Total Actual Valuation	3,120,176,952	3,224,629,664	3,327,852,693	3,427,688,274	3,530,518,922	3,636,434,490	3,745,527,525
2. State Mandated Debt Limit	156,008,848	161,231,483	166,392,635	171,384,414	176,525,946	181,821,725	187,276,376
3. City Reserve (25% of Limit)	39,002,212	40,307,871	41,598,159	42,846,104	44,131,487	45,455,431	46,819,094
Un-Reserved Debt Capacity	<u>117,006,636</u>	<u>120,923,612</u>	<u>124,794,476</u>	<u>128,538,310</u>	<u>132,394,459</u>	<u>136,366,294</u>	<u>140,457,282</u>
4. Outstanding Debt	41,195,000	42,855,000	36,235,000	30,260,000	24,540,000	19,275,000	14,930,000
5. Proposed Issues	-	-	12,732,573	8,910,000	6,310,000	6,082,000	7,298,000
6. Balance of Proposed Issues	-	-	-	11,885,193	19,320,938	23,677,769	27,323,703
Total Debt Subject to Limit	<u>41,195,000</u>	<u>42,855,000</u>	<u>48,967,573</u>	<u>51,055,193</u>	<u>50,170,938</u>	<u>49,034,769</u>	<u>49,551,703</u>
7. Available Un-Reserved Debt Capacity (\$)	75,811,636	78,068,612	75,826,903	77,483,117	82,223,521	87,331,525	90,905,579
8. Available Un-Reserved Debt Capacity (%)	64.79%	64.56%	60.76%	60.28%	62.10%	64.04%	64.72%
9. Total Debt Capacity (\$)	114,813,848	118,376,483	117,425,062	120,329,221	126,355,008	132,786,956	137,724,673
10. Total Debt Capacity (%)	73.59%	73.42%	70.57%	70.21%	71.58%	73.03%	73.54%

Notes:

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

SUMMARY OF MAJOR BOND ISSUES

GENERAL OBLIGATION BONDS	PROJECT TOTAL	CATEGORY TOTAL	% PROJECT G.O. FUNDED	OTHER SOURCES OF FUNDING
2009/10:				
STORM SEWER		475,000		
SW Ames Stormwater Management	475,000		100%	
STREETS ENGINEERING		4,893,000		
Arterial Street Pavement Improvements (13th Street)	468,000		31%	MPO/STP Funds
Collector Street Pavement Improvements	1,000,000		100%	
CyRide Rte Pavement Improvements (Ash Ave & Knapp)	800,000		100%	
Concrete Pavement Improvements	1,625,000		100%	
Asphalt Pavement Improvement Program (Northwood Dr)	500,000		100%	
Downtown Street Pavement Improvements (Kellogg Ave)	500,000		100%	
2009/10 SUBTOTAL		5,368,000		
WATER (ABATED G.O. BONDS)		400,000		
Raw Well Water Loop Line	400,000		100%	Abated by Water Revenues
2009/10 YEAR TOTAL		5,768,000		

SUMMARY OF MAJOR BOND ISSUES, continued

GENERAL OBLIGATION BONDS	PROJECT TOTAL	CATEGORY TOTAL	% PROJECT G.O. FUNDED	OTHER SOURCES OF FUNDING
2010/11:				
FIRE		568,000		
Fire Apparatus Replacement	568,000		100%	
STREETS ENGINEERING		5,187,000		
Arterial St Pavement Improvements (Duff Ave & 6th St)	750,000		43%	MPO/STP Funds
Collector Street Pavement Improvements	1,000,000		100%	
CyRide Rte Pavement Improvements (Lincoln Way))	162,000		19%	MPO/STP Funds
Concrete Pavement Improvements	625,000		63%	Road Use Tax
Asphalt Pavement Improvement Prgm (various locations)	800,000		100%	
Downtown Street Pavement Improvements (Kellogg Ave)	500,000		100%	
Grand Avenue Extension	1,350,000		100%	
STREETS MAINTENANCE		165,000		
Bridge Rehabilitation Program (6th Street/Squaw Creek)	165,000		100%	
INTERNAL SERVICES/FACILITIES		540,000		
City Hall Mechanical/Structural Improvements	540,000		92%	Local Option Tax
2010/11 SUBTOTAL		6,460,000		
SEWER (ABATED G.O. BONDS)		2,450,000		
WPC Plant Disinfection	2,450,000		100%	Abated by Sewer Revenues
2010/11 YEAR TOTAL		8,910,000		

SUMMARY OF MAJOR BOND ISSUES, continued

GENERAL OBLIGATION BONDS	PROJECT TOTAL	CATEGORY TOTAL	% PROJECT G.O. FUNDED	OTHER SOURCES OF FUNDING
2011/12:				
TRAFFIC		235,000		
U.S. 69 Intersection Improvements	235,000		100%	
STREETS ENGINEERING		6,075,000		
Arterial St Pavement Improvements (Lincoln Way)	750,000		100%	
Collector Street Pavement Improvements	1,000,000		100%	
CyRide Rte Pavement Improvements (Lincoln Way)	700,000		100%	
Concrete Pavement Improvements	625,000		63%	Road Use Tax
Asphalt Pavement Improvement Prgm (Southdale Drive)	450,000		100%	
Downtown Street Pavement Improvements (Main Street)	750,000		100%	
Grand Avenue Extension	1,800,000		16%	MPO/STP/Federal Earmark
2011/12 YEAR TOTAL		6,310,000		

SUMMARY OF MAJOR BOND ISSUES, continued

GENERAL OBLIGATION BONDS	PROJECT	CATEGORY	% PROJECT G.O. FUNDED	OTHER SOURCES OF FUNDING
	TOTAL	TOTAL		
2012/13:				
TRAFFIC		2,070,000		
U.S. 69 Intersection Improvements	1,600,000		100%	
West Lincoln Way Intersection Improvements	470,000		43%	Road Use Tax/Grant/Developer
STREETS ENGINEERING		4,012,000		
Arterial St Pavement Improvements (State Avenue)	162,000		19%	MPO/STP Funds
Collector Street Pavement Improvements	1,000,000		100%	
CyRide Route Pavement Improvements (Emerald Drive)	700,000		100%	
Concrete Pavement Improvements	800,000		100%	
Asphalt Pavement Improvement Program (Jewel Drive)	400,000		100%	
Downtown Street Pavement Improvements (Douglas Ave)	750,000		100%	
South Dakota Avenue Widening	200,000		100%	
2012/13 YEAR TOTAL		6,082,000		

SUMMARY OF MAJOR BOND ISSUES, continued

GENERAL OBLIGATION BONDS	PROJECT TOTAL	CATEGORY TOTAL	% PROJECT G.O. FUNDED	OTHER SOURCES OF FUNDING
2013/14:				
TRAFFIC		400,000		
West Lincoln Way Intersection Improvements	400,000		57%	Developer
STREETS ENGINEERING		6,043,000		
Arterial Street Pavement Improvements (Lincoln Way)	468,000		31%	MPO/STP Funds
Collector Street Pavement Improvements	1,000,000		100%	
CyRide Rte Pavement Improvements (Todd Drive)	700,000		100%	
Concrete Pavement Improvements	625,000		100%	
Asphalt Pavement Improvement Pgm (Hickory/Trail Ridge)	500,000		100%	
Downtown Street Pavement Improvements (Clark Ave)	750,000		100%	
South Dakota Avenue Widening	2,000,000		100%	
INTERNAL SERVICES/FACILITIES		855,000		
City Hall Mechanical/Structural Improvements	855,000		94%	Local Option Tax
2013/14 YEAR TOTAL		7,298,000		
GRAND TOTAL GENERAL OBLIGATION BONDS		34,368,000		

SUMMARY OF MAJOR BOND ISSUES, continued

REVENUE BONDS	PROJECT TOTAL	CATEGORY TOTAL	% PROJECT BOND FUNDED	OTHER SOURCES OF FUNDING
2010/11:				
WATER				
Water Plant Expansion	10,150,000	10,150,000	100%	
2010/11 YEAR TOTAL		10,150,000		
2011/12:				
WATER				
Water Plant Expansion	15,150,000	15,150,000	100%	
ELECTRIC				
Unit #8 Mercury Capital	4,000,000	6,000,000	100%	
Unit #7 Mercury Capital	2,000,000		100%	
2011/12 YEAR TOTAL		21,150,000		

SUMMARY OF MAJOR BOND ISSUES, continued

REVENUE BONDS	PROJECT TOTAL	CATEGORY TOTAL	% PROJECT BOND FUNDED	OTHER SOURCES OF FUNDING
2012/13:				
WATER				
Water Plant Expansion	2,700,000	2,700,000	100%	
2012/13 YEAR TOTAL		2,700,000		
2013/14:				
ELECTRIC				
Capacity Generation for Future Years	50,000,000	50,000,000	100%	
2013/14 YEAR TOTAL		50,000,000		
GRAND TOTAL REVENUE BONDS		84,000,000		

The City Council's Goal:

“to commit to making Ames a more environmentally sustainable community”





The City of Ames has developed the EcoSmart program to bring together all of its conservation efforts.

The EcoSmart program consists of Smart City, Smart Water, Smart Trash, Smart Energy, Smart Watersheds, and Smart Ride efforts.

The City has installed rain gardens in multiple locations, including the Library, City Hall, and the Water Plant.



Water and Pollution Control Department employees plant a rain garden in front of the Water Plant at 300 East 5th Street.

CAPITAL IMPROVEMENT PLAN - GRAND TOTALS

PROJECT/REVENUE DESCRIPTION	TOTAL	2009/10	2010/11	2011/12	2012/13	2013/14	PAGE
EXPENDITURES:							
Public Safety	8,167,882	1,259,005	1,208,877	920,000	3,150,000	1,630,000	7
Utilities	161,318,996	20,419,895	35,255,305	37,636,196	12,587,800	55,419,800	25
Transportation	62,640,995	8,734,000	12,601,995	20,040,000	10,295,000	10,970,000	91
Community Enrichment	8,590,028	2,299,128	1,938,100	990,800	1,134,000	2,228,000	121
Total Expenditures	240,717,901	32,712,028	51,004,277	59,586,996	27,166,800	70,247,800	
REVENUES:							
Bonds	118,368,000	5,768,000	19,060,000	27,460,000	8,782,000	57,298,000	
City	87,204,034	22,621,179	25,208,609	18,238,746	12,721,350	8,414,150	
Other	35,145,867	4,322,849	6,735,668	13,888,250	5,663,450	4,535,650	
Total Revenues	240,717,901	32,712,028	51,004,277	59,586,996	27,166,800	70,247,800	

CAPITAL IMPROVEMENT PLAN - EXPENDITURE SUMMARY BY PROGRAM

PROJECT/REVENUE DESCRIPTION	TOTAL	2009/10	2010/11	2011/12	2012/13	2013/14	PAGE
EXPENDITURES:							
Public Safety:							
Police	684,005	684,005					9
Fire	763,877		683,877	80,000			12
Traffic	6,720,000	575,000	525,000	840,000	3,150,000	1,630,000	17
Total Public Safety	8,167,882	1,259,005	1,208,877	920,000	3,150,000	1,630,000	
Utilities:							
Resource Recovery	1,093,950	413,150	448,400	89,800	82,800	59,800	27
Water Treatment	30,940,000	1,775,000	11,190,000	15,150,000	2,825,000		30
Water Distribution	4,500,000	900,000	900,000	900,000	900,000	900,000	37
Storm Sewer	3,053,650	1,051,745	576,905	475,000	475,000	475,000	39
Sanitary Sewer	2,500,000	500,000	500,000	500,000	500,000	500,000	45
WPC Treatment	8,440,000	2,225,000	3,990,000	1,355,000	555,000	315,000	48
Electric	110,791,396	13,555,000	17,650,000	19,166,396	7,250,000	53,170,000	55
Total Utilities	161,318,996	20,419,895	35,255,305	37,636,196	12,587,800	55,419,800	

CAPITAL IMPROVEMENT PLAN - EXPENDITURE SUMMARY BY PROGRAM, continued

PROJECT/REVENUE DESCRIPTION	TOTAL	2009/10	2010/11	2011/12	2012/13	2013/14	PAGE
EXPENDITURES, continued:							
Transportation:							
Streets/Engineering	44,375,000	6,950,000	7,000,000	16,400,000	5,825,000	8,200,000	93
Streets/Maintenance	1,455,000	230,000	580,000	215,000	215,000	215,000	104
Transit	12,725,995	429,000	3,676,995	2,525,000	3,540,000	2,555,000	111
Airport	4,085,000	1,125,000	1,345,000	900,000	715,000		118
Total Transportation	62,640,995	8,734,000	12,601,995	20,040,000	10,295,000	10,970,000	
Community Enrichment/Internal Services:							
Parks and Recreation	3,573,100	475,000	810,100	480,000	590,000	1,218,000	123
Library	491,700	82,900	48,000	180,800	180,000		133
City Manager	250,000	50,000	50,000	50,000	50,000	50,000	138
Planning and Housing	250,000	50,000	50,000	50,000	50,000	50,000	140
Internal Services/Facilities	4,025,228	1,641,228	980,000	230,000	264,000	910,000	142
Total Community Enrichment	8,590,028	2,299,128	1,938,100	990,800	1,134,000	2,228,000	
GRAND TOTAL EXPENDITURES	240,717,901	32,712,028	51,004,277	59,586,996	27,166,800	70,247,800	

CAPITAL IMPROVEMENT PLAN - REVENUE SUMMARY BY TYPE

PROJECT/REVENUE DESCRIPTION	TOTAL	2009/10	2010/11	2011/12	2012/13	2013/14
REVENUES:						
Bonds:						
G.O. Bonds	34,368,000	5,768,000	8,910,000	6,310,000	6,082,000	7,298,000
Water Revenue Bonds	28,000,000		10,150,000	15,150,000	2,700,000	
Electric Revenue Bonds	56,000,000			6,000,000		50,000,000
Total Bonds	118,368,000	5,768,000	19,060,000	27,460,000	8,782,000	57,298,000
City:						
General Fund	600,000	600,000				
Road Use Tax	7,318,500	1,281,250	1,662,500	1,410,000	1,443,500	1,521,250
Local Option Sales Tax	5,593,113	1,286,313	1,295,500	1,148,300	920,000	943,000
CAD Computer Replacement Funds	155,266	155,266				
Resource Recovery Fund	1,093,950	413,150	448,400	89,800	82,800	59,800
Water Utility Fund	7,188,500	2,326,250	1,937,500	945,000	1,078,500	901,250
Sewer Utility Fund	8,058,500	2,776,250	1,457,500	1,900,000	1,108,500	816,250
Storm Sewer Utility Fund	2,375,000	475,000	475,000	475,000	475,000	475,000
Fleet Services Fund	878,500	51,250	727,500	45,000	53,500	1,250
Electric Utility Fund	51,113,296	12,964,400	16,269,500	11,709,396	7,000,000	3,170,000
Transit Fund	2,147,059	85,800	689,859	421,250	473,800	476,350
Airport Construction Fund	204,250	56,250	67,250	45,000	35,750	
Ice Arena Capital Reserve Fund	100,000	100,000				
Park Development Fund	128,100		128,100			
Hotel/Motel Tax	250,000	50,000	50,000	50,000	50,000	50,000
Total City	87,204,034	22,621,179	25,208,609	18,238,746	12,721,350	8,414,150

CAPITAL IMPROVEMENT PLAN - REVENUE SUMMARY BY TYPE, continued

PROJECT/REVENUE DESCRIPTION	TOTAL	2009/10	2010/11	2011/12	2012/13	2013/14
REVENUES, continued:						
Other:						
E911 Grant Funds	117,575	100,000	17,575			
Consolidated CAD Partners	217,826	217,826				
Federal Grants	856,530	626,228	110,302	40,000	40,000	40,000
MPO/STP Funds	4,872,000	1,112,000	768,000	1,112,000	768,000	1,112,000
Recreation Trail Grant	225,000	50,000	25,000	150,000		
MPO/Planning Funds	320,000					320,000
Iowa D.O.T. Grant Funds	250,000	50,000			200,000	
Developer	700,000				400,000	300,000
Iowa State University	3,993,100	595,600	1,390,500	1,457,000	550,000	
Watershed Improvement Review Board Grant	188,650	96,745	91,905			
Federal Earmark Funds	8,168,000			8,168,000		
Federal Transit Administration	10,028,936	303,200	2,947,136	2,013,750	2,726,200	2,038,650
FAA Grants	3,880,750	1,068,750	1,277,750	855,000	679,250	
Ames Community School District	302,500	102,500	107,500	42,500	25,000	25,000
State Grants	175,000				175,000	
Private Contributions	850,000			50,000	100,000	700,000
Total Other	35,145,867	4,322,849	6,735,668	13,888,250	5,663,450	4,535,650
GRAND TOTAL REVENUES	240,717,901	32,712,028	51,004,277	59,586,996	27,166,800	70,247,800



U.S. Mayors' Climate Protection Agreement

With support from the Ames City Council, Mayor Ann Campbell joined mayors from across the country in signing the U.S. Mayors' Climate Protection Agreement.

Cool Cities Committee (City Staff)

Data Collection, Benchmarking

Part of signing the agreement involves creating a baseline inventory of carbon emissions, collecting data about energy management, recycling, waste reduction, transportation, and land use.

PUBLIC SAFETY - SUMMARY

PROJECT/REVENUE DESCRIPTION	TOTAL	2009/10	2010/11	2011/12	2012/13	2013/14	PAGE
EXPENDITURES:							
Police	684,005	684,005					9
Fire	763,877		683,877	80,000			12
Traffic	6,720,000	575,000	525,000	840,000	3,150,000	1,630,000	17
Total Expenditures	8,167,882	1,259,005	1,208,877	920,000	3,150,000	1,630,000	
REVENUES:							
Bonds:							
G.O. Bonds	3,273,000		568,000	235,000	2,070,000	400,000	
City:							
Road Use Tax	1,305,000	175,000	275,000	225,000	250,000	380,000	
Local Option Sales Tax	1,133,913	430,913	173,000	230,000	150,000	150,000	
CAD Computer Replacement Funds	155,266	155,266					
Sub-Total City Funds	2,594,179	761,179	448,000	455,000	400,000	530,000	

PUBLIC SAFETY – SUMMARY, continued

PROJECT/REVENUE DESCRIPTION	TOTAL	2009/10	2010/11	2011/12	2012/13	2013/14
REVENUES, continued:						
Other:						
E911 Grant Funds	117,575	100,000	17,575			
Consolidated CAD Partners	217,826	217,826				
Federal Grant	70,302		70,302			
MPO/STP Funds	400,000	80,000	80,000	80,000	80,000	80,000
Recreation Trail Grant	225,000	50,000	25,000	150,000		
MPO/Planning Funds	320,000					320,000
Iowa D.O.T. Grant Funds	250,000	50,000			200,000	
Developer	700,000				400,000	300,000
Sub-Total Other Funds	2,300,703	497,826	192,877	230,000	680,000	700,000
Total Revenues	8,167,882	1,259,005	1,208,877	920,000	3,150,000	1,630,000

PUBLIC SAFETY - POLICE

PROJECT/REVENUE DESCRIPTION	TOTAL	2009/10	2010/11	2011/12	2012/13	2013/14	PAGE
EXPENDITURES:							
1 Communications Center CAD System	582,005	582,005					10
2 Firearms Training Range	102,000	102,000					11
Total Expenditures	684,005	684,005					
REVENUES:							
City:							
Local Option Sales Tax	210,913	210,913					
CAD Computer Replacement Funds	155,266	155,266					
Sub-Total City Funds	366,179	366,179					
Other:							
E911 Grant Funds	100,000	100,000					
Consolidated CAD Partners	217,826	217,826					
Sub-Total Other Funds	317,826	317,826					
Total Revenues	684,005	684,005					

**POLICE COMMUNICATIONS CENTER - COMPUTER
AIDED DISPATCH SYSTEM
DESCRIPTION/JUSTIFICATION**

PROJECT STATUS: New

City of Ames, Iowa
Capital Improvements Plan

The Police Department Communications Center operates its emergency 911 call center and emergency response dispatching system in conjunction with Iowa State University and the Story County Sheriff's Office. The three groups work from a common computer platform, providing a level of interoperability and coordination that provides a very high degree of protection to the citizens of Ames and Story County. A failure in one location allows operations to continue in another with little or no interruption in service, while still minimizing costs by sharing software and hardware systems.

In January of 2008, the vendor for the computer aided dispatching and records management system currently used by the three groups and known as CAD6, announced that they would be discontinuing CAD6. All three groups will be required to migrate to a new computer system within three years. A thorough review of competing products will be conducted and a suitable replacement system will be identified. Replacement of the software will also include enhancements that will improve the overall efficiency of the system as well as replacement of some hardware.

COMMENTS

The reliable backup function provided by the cooperative agreement with Iowa State University and the Story County Sheriff's Office has proven itself in past years. There are specific examples where functions and even personnel have been transferred from one dispatch center to another in emergency situations, providing highly reliable 911 and emergency response dispatching with little or no interruption.

The options available in new software vary widely from vendor to vendor, but it is likely that a new system will incorporate elements of document imaging and mobile data that have been funded for capital in the current year. Both document imaging and mobile data were enhancements to CAD6 and were scheduled for purchase during the FY 09/10 fiscal year. Should the new system include these functions, all of the document imaging and half of the mobile data funds will be available for reallocation to this CIP project. The remaining \$20,000 of the mobile data funds are being used for infrastructure development in the current year.

LOCATION

Ames Police Department Communications Center – Map 5, location L-11

FISCAL YEAR PRIORITY						
	TOTAL	2009/10	2010/11	2011/12	2012/13	2013/14
COST:						
Software/Installation/Training	423,769	423,769				
Computer Hardware	158,236	158,236				
TOTAL	582,005	582,005				
FINANCING:						
Local Option Sales Tax	108,913	108,913				
E911 Grant Funds	100,000	100,000				
Consolidated CAD computer depreciation fund	155,266	155,266				
Consolidated CAD partners	217,826	217,826				
TOTAL	582,005	582,005				

PROGRAM - ACTIVITY:
Public Safety – Law Enforcement

DEPARTMENT:
Police

ACCOUNT NO.
030-2580-429
245-2580-429

FIREARMS TRAINING RANGE

PROJECT STATUS: New

City of Ames, Iowa
Capital Improvements Plan

DESCRIPTION/JUSTIFICATION

For many years the Police Department has operated and maintained a shooting range for police officer training and required firearms certification. The range is located off Dayton Road, just north of the railroad tracks. The proximity of the firing range has allowed officers to maintain skills in this critical area for minimal expense. For the last year, the range has been closed as the Department evaluated enhancements that would be necessary to ensure safety and security for those on or near the range. Although the review continues, renovation will include re-orientation of the line of fire, new earthen berms, concrete walks, and safety walls.

COMMENTS

While the range has been closed, Ames officers have traveled to a site in rural Story County for firearms training. The additional travel has reduced the time available for training and increased both personnel and travel costs. In addition, the rural site has a number of use restrictions, reducing the opportunities for training.

LOCATION

Dayton Road – Map 6, location Q-10

FISCAL YEAR PRIORITY		2				
	TOTAL	2009/10	2010/11	2011/12	2012/13	2013/14
COST:						
Construction	102,000	102,000				
TOTAL	102,000	102,000				
FINANCING:						
Local Option Sales Tax	102,000	102,000				
TOTAL	102,000	102,000				

PROGRAM - ACTIVITY:
Public Safety – Law Enforcement

DEPARTMENT:
Police

ACCOUNT NO.
030-2597-429

PUBLIC SAFETY - FIRE

PROJECT/REVENUE DESCRIPTION	TOTAL	2009/10	2010/11	2011/12	2012/13	2013/14	PAGE
EXPENDITURES:							
1 Mobile Data Terminals - Phase 2	87,877		87,877				13
2 Fire Apparatus Replacement	568,000		568,000				14
3 Emergency Generator	28,000		28,000				15
4 Fire Station #1 Driveway Renovation	80,000			80,000			16
Total Expenditures	763,877		683,877	80,000			
REVENUES:							
Bonds:							
G.O. Bonds	568,000		568,000				
City:							
Local Option Sales Tax	108,000		28,000	80,000			
Other:							
E911 Grant Funds	17,575		17,575				
Federal Grant	70,302		70,302				
Sub-Total Other Funds	87,877		87,877				
Total Revenues	763,877		683,877	80,000			

**MOBILE DATA TERMINALS – PHASE 2
FIRE DEPARTMENT**

PROJECT STATUS: Delayed

Cost Change

City of Ames, Iowa
Capital Improvements Plan

DESCRIPTION/JUSTIFICATION

This project will provide field access to Fire Department records, state GIS databases, and direct connections to computer aided dispatch information for fire vehicles. The system is designed to decrease the time spent repeating information over the radio and provide more information to responders in the field. As emergency call volume grows, it is increasingly important to increase the efficiency of information flow to fire units. The system will provide timely and accurate information that can be used to more efficiently obtain records and exchange information among vehicles in the field. Firefighters can obtain more detailed information about emergencies to which they are responding or gain direct access to database information such as known hazards of a specific location.

The 2008/09 CIP moved Ames Police into the system first, facilitating Ames Fire in the following year. To ensure that the project would function effectively on the county-wide shared public safety network, it was delayed in the 2006-2011 CIP. In 2008/09, the Police Department implemented the infrastructure and installed mobile data terminals in police vehicles. Ongoing operating costs of this system will be \$18,780 annually.

LOCATION

Fire – 4 fire vehicles

FISCAL YEAR PRIORITY		TOTAL	2009/10	2010/11	2011/12	2012/13	2013/14
COST:							
Mobil Data Terminals		87,877		87,877			
	TOTAL	87,877		87,877			
FINANCING:							
E911 Grant Funds		17,575		17,575			
Federal Grant		70,302		70,302			
	TOTAL	87,877		87,877			

PROGRAM - ACTIVITY:
Public Safety – Fire

DEPARTMENT:
Fire

ACCOUNT NO.

FIRE APPARATUS REPLACEMENT

PROJECT STATUS: Cost Change

Delayed

City of Ames, Iowa
Capital Improvements Plan

DESCRIPTION/JUSTIFICATION

The Fire Apparatus Replacement Program ensures replacement of fire apparatus at the end of their operational life. The fire engines are essential structural firefighting apparatus. The City maintains one reserve and two frontline engines. Engine 1 is located at Station #1, engine 2 is located at Station #2, and one reserve engine is located at Station #3. Fire apparatus serve as frontline vehicles for 15 years, after which one is retained as a reserve unit for up to an additional 15 years. Before being placed in reserve status, fire apparatus are refurbished. Sometimes parts availability, metal fatigue, and corrosion will take apparatus out of service, making continued use impractical.

COMMENTS

FY 2010/11

Replace Engine 2 (806) at a cost of \$473,000.

Reserve Engine 3 will be disposed of and Engine 2 will be refurbished to serve as a reserve engine. Estimated cost is \$95,000.

LOCATION

Fire Station #2, Corner of Welch and Chamberlain – Map 5, location H-11

FISCAL YEAR PRIORITY		TOTAL	2009/10	2010/11	2011/12	2012/13	2013/14
COST:							
Replace Engine 2		473,000		473,000			
Refurbish Engine 2 for Reserve Status		95,000		95,000			
	TOTAL	568,000		568,000			
FINANCING:							
G. O. Bonds		568,000		568,000			
	TOTAL	568,000		568,000			

PROGRAM - ACTIVITY:

Public Safety – Fire

DEPARTMENT:

Fire

ACCOUNT NO.

EMERGENCY GENERATOR

PROJECT STATUS: New

City of Ames, Iowa
Capital Improvements Plan

DESCRIPTION/JUSTIFICATION

Fire station #2 was constructed in 1967 during a time period when the electrical demands were not as high as current technologies require. Since this station was constructed, backup electrical power has been provided by a portable generator. The new fire station control system, fire alarm notification system, and computer network power requirements now exceed those demands that can be met by a portable generator. A small fixed base generator fueled by natural gas would provide the necessary power to keep vital systems operational during power outages.

COMMENTS

This is a new project that has come to the forefront after difficulties were encountered with sustaining operations during a 2008 power outage in the Campustown area.

LOCATION

Fire Station #2, Corner of Welch and Chamberlain – Map 5, location H-11

FISCAL YEAR PRIORITY		TOTAL	2009/10	2010/11	2011/12	2012/13	2013/14
COST:				3			
Fixed Position Natural Gas Generator		28,000		28,000			
	TOTAL	28,000		28,000			
FINANCING:							
Local Option Sales Tax		28,000		28,000			
	TOTAL	28,000		28,000			

PROGRAM - ACTIVITY:
Public Safety – Fire

DEPARTMENT:
Fire

ACCOUNT NO.

FIRE STATION #1 DRIVEWAY RENOVATION

PROJECT STATUS: No Change

City of Ames, Iowa
Capital Improvements Plan

DESCRIPTION/JUSTIFICATION

Fire Station #1 was constructed in 1979 and the rear driveway has deteriorated due to heavy vehicle traffic.

COMMENTS

Some repair of the rear drive will be necessary before total replacement.

LOCATION

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

FISCAL YEAR PRIORITY		TOTAL	2009/10	2010/11	2011/12	2012/13	2013/14
COST:					1		
Rear Drive Replacement/Structural Repair		80,000			80,000		
	TOTAL	80,000			80,000		
FINANCING:							
Local Option Sales Tax		80,000			80,000		
	TOTAL	80,000			80,000		

PROGRAM - ACTIVITY:
Public Safety – Fire

DEPARTMENT:
Fire

ACCOUNT NO.

PUBLIC SAFETY - TRAFFIC

PROJECT/REVENUE DESCRIPTION	TOTAL	2009/10	2010/11	2011/12	2012/13	2013/14	PAGE
EXPENDITURES:							
1 Traffic Signal Program	1,000,000	175,000	175,000	175,000	175,000	300,000	19
2 Shared Use Path System Expansion	1,340,000	250,000	250,000	380,000	230,000	230,000	20
3 Traffic Engineering Studies	600,000	50,000	50,000	50,000	50,000	400,000	21
4 Railroad Crossing Safety Improvements	100,000	100,000					22
5 U.S. 69 Intersection Improvements West Lincoln Way Intersection	1,885,000		50,000	235,000	1,600,000		23
6 Improvements	1,795,000				1,095,000	700,000	24
Total Expenditures	6,720,000	575,000	525,000	840,000	3,150,000	1,630,000	
REVENUES:							
Bonds:							
G.O. Bonds	2,705,000			235,000	2,070,000	400,000	

PUBLIC SAFETY - TRAFFIC, continued

PROJECT/REVENUE DESCRIPTION	TOTAL	2009/10	2010/11	2011/12	2012/13	2013/14
REVENUES, continued:						
City:						
Road Use Tax	1,305,000	175,000	275,000	225,000	250,000	380,000
Local Option Sales Tax	815,000	220,000	145,000	150,000	150,000	150,000
Sub-Total City Funds	2,120,000	395,000	420,000	375,000	400,000	530,000
Other:						
MPO/STP Funds	400,000	80,000	80,000	80,000	80,000	80,000
Recreation Trail Grant	225,000	50,000	25,000	150,000		
MPO/Planning Funds	320,000					320,000
Iowa D.O.T. Grant Funds	250,000	50,000			200,000	
Developer	700,000				400,000	300,000
Sub-Total Other Funds	1,895,000	180,000	105,000	230,000	680,000	700,000
Total Revenues	6,720,000	575,000	525,000	840,000	3,150,000	1,630,000

TRAFFIC SIGNAL PROGRAM

PROJECT STATUS: Site Change
Revenue Change

Cost Change

City of Ames, Iowa
Capital Improvements Plan

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.

COMMENTS

Proposed locations:

- 2009/10 Lincoln Way/Ash Avenue signal replacement – Map 5, location I-11
- 2010/11 28th Street/Grand Avenue signal replacement – Map 2, location L-6
- 2011/12 Lincoln Way/Hayward Avenue signal replacement – Map 5, location H-11
- 2012/13 Lincoln Way/Hyland Avenue signal replacement – Map 5, location H-11
- 2013/14 Lincoln Way/Union Avenue signal replacement – Map 5, location I-11 ; and Dayton Avenue/East Lincoln Way signal replacement – Map 6, location Q-11

Proposed funding will typically cover one signal upgrade per year. Beginning in 2013/14, two signals per year will be replaced.

Traffic signals proposed to be modified or added are evaluated and prioritized annually. The site change is due to reprioritizing signals for 2009/10 and 2010/11. The revenue change is due to receiving a grant from the Iowa Department of Transportation's Traffic Safety Improvement Program (TSIP) in 2009/10.

FISCAL YEAR PRIORITY	TOTAL	1	2	1	2	1
		2009/10	2010/11	2011/12	2012/13	2013/14
COST:						
Engineering	85,000	15,000	15,000	15,000	15,000	25,000
Construction	915,000	160,000	160,000	160,000	160,000	275,000
TOTAL	1,000,000	175,000	175,000	175,000	175,000	300,000
FINANCING:						
Road Use Tax	950,000	125,000	175,000	175,000	175,000	300,000
Iowa D.O.T. TSIP Grant	50,000	50,000				
TOTAL	1,000,000	175,000	175,000	175,000	175,000	300,000

PROGRAM – ACTIVITY:
Public Safety – Traffic

DEPARTMENT:
Public Works

ACCOUNT NO.
060-7519-429
320-7519-429

SHARED USE PATH SYSTEM EXPANSION

PROJECT STATUS: Cost Change

Revenue Change

City of Ames, Iowa
Capital Improvements Plan

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 project supports one of the City Council’s priorities for the year, connecting our community.

COMMENTS

- 2009/10 Skunk River Trail Extension (Hunziker Youth Sports Complex to Southeast 16th Street) (\$250,000: Local Option Sales Tax, \$120,000; MPO/STP funds, \$80,000; and Recreational Trail Grant, \$50,000) – Map 9, location O-14
- 2010/11 Skunk River Trail Extension (13th Street to Carr Park) (\$250,000: Local Option Sales Tax, \$145,000; MPO/STP funds, \$80,000; and Recreational Trail Grant, \$25,000) – Map 6, location N-8
- 2011/12 Skunk River Trail Extension (East Lincoln Way to 13th Street) (\$380,000: Local Option Sales Tax, \$150,000; MPO/STP funds, \$80,000; and Recreation Trail Grant, \$150,000) – Map 6, location O-9
- 2012/13 Skunk River Trail Extension (Inis Grove Park to Bloomington Road) (\$230,000: Local Option Sales Tax, \$150,000; and MPO/STP funds, \$80,000) – Map 2, location M-7
- 2013/14 South Dayton Avenue (South Gateway Development to East Lincoln Way) and Southeast 16th Street (at South Dayton Avenue) (\$230,000: Local Option Sales Tax, \$150,000; and MPO/STP funds, \$80,000) – Map 9, location Q-13

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.

Cost and revenue changes are due to updated estimates.

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

FISCAL YEAR PRIORITY	TOTAL	2	1	3	3	2
		2009/10	2010/11	2011/12	2012/13	2013/14
COST:						
Engineering	170,000	50,000	25,000	35,000	30,000	30,000
Construction	1,170,000	200,000	225,000	345,000	200,000	200,000
TOTAL	1,340,000	250,000	250,000	380,000	230,000	230,000
FINANCING:						
Local Option Sales Tax	715,000	120,000	145,000	150,000	150,000	150,000
MPO/STP Funds	400,000	80,000	80,000	80,000	80,000	80,000
Recreational Trail Grant	225,000	50,000	25,000	150,000		
TOTAL	1,340,000	250,000	250,000	380,000	230,000	230,000

PROGRAM – ACTIVITY:

Public Safety – Traffic

DEPARTMENT:

Public Works

ACCOUNT NO.

030-7563-429

320-7563-429

TRAFFIC ENGINEERING STUDIES

PROJECT STATUS: Cost Change

Revenue Change

City of Ames, Iowa
Capital Improvements Plan

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 efficiency, effectiveness, and safety of those systems.

COMMENTS

Proposed studies:

- 2009/10 Multi-Modal Safety Study
- 2010/11 Accident Study
- 2011/12 Traffic Calming Study
- 2012/13 Traffic Signage Study on CyRide Routes
- 2013/14 Origin Destination Study and Long-Range Transportation Plan Update

The Multi-Modal Safety Study (2009/10) will look at the interaction of multiple transportation modes as well as update the safe routes to school plans and establish a Master Plan for crosswalks. The accident study (2010/11) will examine high accident locations and propose potential solutions to these accident concerns with future capital improvement projects. The Traffic Calming Study (2011/12) will explore and analyze measures to establish a Traffic Calming Informational Guide and Policy to be implemented in residential neighborhoods. 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. The Traffic Signage Study on CyRide Routes in 2012/13 will analyze routes for fuel efficiency and Cool Cities initiatives.

Cost change is due to updated estimates; MPO/Planning Funds are not available in 2009/10.

FISCAL YEAR PRIORITY		3	4	4	4	3
	TOTAL	2009/10	2010/11	2011/12	2012/13	2013/14
COST:						
Engineering	600,000	50,000	50,000	50,000	50,000	400,000
TOTAL	600,000	50,000	50,000	50,000	50,000	400,000
FINANCING:						
Road Use Tax	280,000	50,000	50,000	50,000	50,000	80,000
MPO/Planning Funds	320,000					320,000
TOTAL	600,000	50,000	50,000	50,000	50,000	400,000

PROGRAM – ACTIVITY:
Public Safety – Traffic

DEPARTMENT:
Public Works

ACCOUNT NO.
060-7522-429

RAILROAD CROSSING SAFETY IMPROVEMENTS

PROJECT STATUS: No Change

City of Ames, Iowa
Capital Improvements Plan

DESCRIPTION/JUSTIFICATION

This program will provide for safety and surface improvements at railroad crossings along the north-south railroad corridor. Basic safety features desired at each crossing include two-quadrant vehicle gates, mounted flashing lights, and constant warning time detection. Union Pacific Railroad (UPRR) has confirmed that these features are in place at the 13th Street, 20th Street, and 24th Street crossings. The first two years of this program provided for installation of these improvements at 16th Street (completed in 2007/08) and 9th Street (completed in 2008/09). Raised barrier medians are also a valuable safety feature. The 2009/10 program includes median installation at 13th Street, 20th Street, and 24th Street. These are the locations where medians may be placed without negatively affecting existing access.

COMMENTS

The primary goal of this program is to enhance safety along the north-south UPRR corridor. It is anticipated that Railroad Safety Grant funds may be available for many of these projects. The base safety features for the Bloomington Road crossing were included in the Bloomington Road widening project (2007/08).

LOCATION

2009/10 Median installation at 13th Street – Map 5, location K-9; 20th Street – Map 5, location J-8; and 24th Street – Map 5, location J-8

FISCAL YEAR PRIORITY						
	TOTAL	2009/10	2010/11	2011/12	2012/13	2013/14
COST:						
Engineering	10,000	10,000				
Construction	90,000	90,000				
	TOTAL	100,000				
FINANCING:						
Local Option Sales Tax	100,000	100,000				
	TOTAL	100,000				

PROGRAM – ACTIVITY:
Public Safety – Traffic

DEPARTMENT:
Public Works

ACCOUNT NO.
030-7547-429

US69 INTERSECTION IMPROVEMENTS

PROJECT STATUS: No Change

City of Ames, Iowa
Capital Improvements Plan

DESCRIPTION/JUSTIFICATION

Intersection improvement projects along US69 within and just outside the City limits will alleviate congestion and reduce accidents.

COMMENTS

Proposed schedule:

- 2010/11 20th Street/Grand Avenue intersection improvements (planning) – Map 5, location L-8
- 2011/12 20th Street/Grand Avenue intersection improvements (land acquisition and engineering) – Map 5, location L-8
- 2012/13 20th Street/Grand Avenue intersection improvements (construction) – Map 5, location L-8

The Long Range Transportation Plan identifies future projects and serves as a guide to scheduling those projects.

In 2010/11, planning for the 20th Street/Grand Avenue intersection improvements will begin, with construction planned for 2012/13.

The traffic signal replacement at the 13th Street/Grand Avenue intersection was completed in 2008/09.

FISCAL YEAR PRIORITY	TOTAL	2009/10	2010/11 ³	2011/12 ²	2012/13 ¹	2013/14
COST:						
Planning	50,000		50,000			
Land Acquisition & Easements	100,000			100,000		
Engineering	135,000			135,000		
Construction	1,600,000				1,600,000	
TOTAL	1,885,000		50,000	235,000	1,600,000	
FINANCING:						
G. O. Bonds	1,835,000			235,000	1,600,000	
Road Use Tax	50,000		50,000			
TOTAL	1,885,000		50,000	235,000	1,600,000	

PROGRAM – ACTIVITY:
Public Safety – Traffic

DEPARTMENT:
Public Works

ACCOUNT NO.

WEST LINCOLN WAY INTERSECTION IMPROVEMENTS

PROJECT STATUS: Delayed

City of Ames, Iowa
Capital Improvements Plan

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 Franklin Avenue/Lincoln Way (construction) – Map 4, location G-11; Dotson Drive/Lincoln Way (planning) – Map 4, location F-11
2013/14 Dotson Drive/Lincoln Way (construction) – Map 4, location F-11

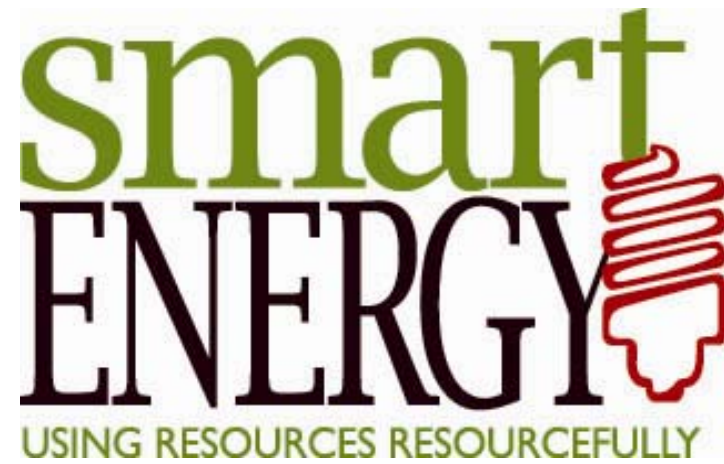
These projects continue to be delayed. The Franklin Avenue/Lincoln Way intersection improvement project had been anticipated to occur in 2006/07. However, the subdivision did not move forward as planned. This delayed the Franklin Avenue/Lincoln Way construction; it is now planned for 2012/13.

The Dotson Drive/Lincoln Way project, previously scheduled for 2007/08 and 2008/09, has been delayed until the warrants included in the developer’s agreement for South Fork Subdivision have been met.

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

FISCAL YEAR PRIORITY		TOTAL	2009/10	2010/11	2011/12	2012/13	2013/14
COST:							
Land Acquisition		120,000				120,000	
Planning		25,000				25,000	
Engineering		250,000				150,000	100,000
Construction		1,400,000				800,000	600,000
	TOTAL	1,795,000				1,095,000	700,000
FINANCING:							
G. O. Bonds		870,000				470,000	400,000
Road Use Tax		25,000				25,000	
Iowa D.O.T Safety Grant		200,000				200,000	
Developer		700,000				400,000	300,000
	TOTAL	1,795,000				1,095,000	700,000

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



Demand Side Management Program

- Incentives for Reducing Consumption
- Educational Components

UTILITIES - SUMMARY

PROJECT/REVENUE DESCRIPTION	TOTAL	2009/10	2010/11	2011/12	2012/13	2013/14	PAGE
EXPENDITURES:							
Resource Recovery	1,093,950	413,150	448,400	89,800	82,800	59,800	27
Water Treatment	30,940,000	1,775,000	11,190,000	15,150,000	2,825,000		30
Water Distribution	4,500,000	900,000	900,000	900,000	900,000	900,000	37
Storm Sewer	3,053,650	1,051,745	576,905	475,000	475,000	475,000	39
Sanitary Sewer	2,500,000	500,000	500,000	500,000	500,000	500,000	45
WPC Treatment	8,440,000	2,225,000	3,990,000	1,355,000	555,000	315,000	48
Electric	110,791,396	13,555,000	17,650,000	19,166,396	7,250,000	53,170,000	55
Total Expenditures	161,318,996	20,419,895	35,255,305	37,636,196	12,587,800	55,419,800	
REVENUES:							
Bonds:							
G.O. Bonds	3,325,000	875,000	2,450,000				
Water Revenue Bonds	28,000,000		10,150,000	15,150,000	2,700,000		
Electric Revenue Bonds	56,000,000			6,000,000		50,000,000	
Sub-Total Bonds	87,325,000	875,000	12,600,000	21,150,000	2,700,000	50,000,000	

UTILITIES – SUMMARY, continued

PROJECT/REVENUE DESCRIPTION	TOTAL	2009/10	2010/11	2011/12	2012/13	2013/14
REVENUES, continued:						
City:						
Resource Recovery Fund	1,093,950	413,150	448,400	89,800	82,800	59,800
Water Utility Fund	6,990,000	2,275,000	1,890,000	900,000	1,025,000	900,000
Sewer Utility Fund	7,860,000	2,725,000	1,410,000	1,855,000	1,055,000	815,000
Fleet Replacement Fund	680,000		680,000			
Storm Sewer Utility Fund	2,375,000	475,000	475,000	475,000	475,000	475,000
Electric Utility Fund	51,113,296	12,964,400	16,269,500	11,709,396	7,000,000	3,170,000
Sub-Total City Funds	70,112,246	18,852,550	21,172,900	15,029,196	9,637,800	5,419,800
Other:						
Iowa State University	3,693,100	595,600	1,390,500	1,457,000	250,000	
Watershed Improvement Review Board Grant	188,650	96,745	91,905			
Sub-Total Other Funds	3,881,750	692,345	1,482,405	1,457,000		
Total Revenues	161,318,996	20,419,895	35,255,305	37,636,196	12,337,800	55,419,800

UTILITIES - RESOURCE RECOVERY

PROJECT/REVENUE DESCRIPTION	TOTAL	2009/10	2010/11	2011/12	2012/13	2013/14	PAGE
EXPENDITURES:							
1 Resource Recovery System Improvements	683,950	243,150	208,400	89,800	82,800	59,800	28
2 Resource Recovery Recyclables Building	410,000	170,000	240,000				29
	1,093,950						
Total Expenditures	0	413,150	448,400	89,800	82,800	59,800	
REVENUES:							
City:							
	1,093,950						
Resource Recovery Fund	0	413,150	448,400	89,800	82,800	59,800	
	1,093,950						
Total Revenues	0	413,150	448,400	89,800	82,800	59,800	

RESOURCE RECOVERY SYSTEM IMPROVEMENTS

PROJECT STATUS: Cost Change

City of Ames, Iowa
Capital Improvements Plan

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 a 20% rebuild of the C-1 conveyor) and funding for sideliners #1 and #2 mills every three years. Resource Recovery personnel perform the work to complete the preventive maintenance projects.

COMMENTS

Proposed projects:

- 2009/10 Process area sprinkler system replacement (\$46,000); HVAC improvements (\$69,000); #1 mill housing replacement (\$37,950); preventive maintenance materials for replacement of the #2 RDS rollers and chains (\$40,250); purchase 1/3 of pipe for PSI pipe replacement (\$30,000); and a 20% rebuild of the C-1 conveyor (\$19,950)
- 2010/11 #1 mill sideliners (\$37,000); #1 mill breaker plate liners (\$12,600); rebuild old-style shredder rotor (\$69,000); preventive maintenance materials for replacement of the #2 RDS rollers and chains (\$40,250); purchase 1/3 of pipe for PSI pipe replacement (\$30,000); and a 20% rebuild of the C-1 conveyor (\$19,550)
- 2011/12 Preventive maintenance materials for replacement of #2 RDS rollers and chains (\$40,250); purchase 1/3 of pipe for PSI pipe replacement \$30,000; and a 20% rebuild of the C-1 conveyor (\$19,550)
- 2012/13 4160V switch gear back-up batteries (\$23,000); preventive maintenance materials for replacement of the #2 RDS rollers and chains (\$40,250); and a 20% rebuild of the C-1 conveyor (\$19,550)
- 2013/14 Preventive maintenance materials for replacement of the #2 RDS rollers and chains (\$40,250); 20% rebuild of the C-1 conveyor (\$19,550)

Cost change is due to updated estimates and the addition of projects for 2009/10 and 2010/11.

LOCATION

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

FISCAL YEAR PRIORITY	TOTAL	1	1	1	1	1
		2009/10	2010/11	2011/12	2012/13	2013/14
COST:						
System Improvements	683,950	243,150	208,400	89,800	82,800	59,800
TOTAL	683,950	243,150	208,400	89,800	82,800	59,800
FINANCING:						
Resource Recovery Fund	683,950	243,150	208,400	89,800	82,800	59,800
TOTAL	683,950	243,150	208,400	89,800	82,800	59,800

PROGRAM – ACTIVITY:
Utilities - Resource Recovery

DEPARTMENT:
Public Works

ACCOUNT NO.
590-8903-489

RESOURCE RECOVERY RECYCLABLES BUILDING AND STAGING AREA

PROJECT STATUS: New

City of Ames, Iowa
Capital Improvements Plan

DESCRIPTION/JUSTIFICATION

The building will be for items (equipment and/or recyclables) currently stored in the Electric Department's coal yard storage buildings. The area immediately to the east of the processing area is planned to become a staging area for hauling equipment used for ferrous materials and rejects.

COMMENTS

In 2008/09, the properties east of Borne Avenue between Lincoln Way and 2nd Street were purchased in anticipation of the erection of a recycling building on the site. In addition, the Master Plan and the Phase I site plan were developed.

Proposed schedule:	2008/09	Land Purchase (\$283,000)
	2009/10	Engineering – Master Plan, Phase I Site Plan
		Construction – Phase I (Parking Lot)
	2010/11	Construction – Phase II (Building, Parking)
		Alternative Market Analysis Study

LOCATION

Borne Avenue (Lincoln Way to 2nd Street) – Map 5, location N-11

FISCAL YEAR PRIORITY	TOTAL	2 2009/10	2 2010/11	2011/12	2012/13	2013/14
COST:						
Demolition of Existing Building	50,000	50,000				
Staging Parking Area Construction	120,000	120,000				
Building Construction	200,000		200,000			
Study	40,000		40,000			
TOTAL	410,000	170,000	240,000			
FINANCING:						
Resource Recovery Fund	410,000	170,000	240,000			
TOTAL	410,000	170,000	240,000			

PROGRAM - ACTIVITY:
Utilities - Resource Recovery

DEPARTMENT:
Public Works

ACCOUNT NO.
590-8908-489

UTILITIES - WATER TREATMENT

PROJECT/REVENUE DESCRIPTION	TOTAL	2009/10	2010/11	2011/12	2012/13	2013/14	PAGE
EXPENDITURES:							
1 Water Plant Expansion	28,900,000	900,000	10,150,000	15,150,000	2,700,000		31
2 Raw Well Water Loop Line	400,000	400,000					32
3 Bloomington Road Tank Improvements	475,000	475,000					33
4 Water Supply Expansion	575,000		575,000				34
5 Water Plant Facility Improvements	415,000		290,000		125,000		35
6 NADC Pump Station Improvements	175,000		175,000				36
Total Expenditures	30,940,000	1,775,000	11,190,000	15,150,000	2,825,000		
REVENUES:							
Bonds:							
G.O. Bonds	400,000	400,000					
Water Revenue Bonds	28,000,000		10,150,000	15,150,000	2,700,000		
Sub-Total Bonds	28,400,000	400,000	10,150,000	15,150,000	2,700,000		
City:							
Water Utility Fund	2,490,000	1,375,000	990,000		125,000		
Sewer Utility Fund	50,000		50,000				
Sub-Total City Funds	2,540,000	1,375,000	1,040,000		125,000		
Total Revenues	30,940,000	1,775,000	11,190,000	15,150,000	2,825,000		

WATER PLANT EXPANSION

PROJECT STATUS: No Change

City of Ames, Iowa
Capital Improvements Plan

DESCRIPTION/JUSTIFICATION

The existing facility has numerous components dating back to the 1920s and 1930s. Many of these components are reaching the end of their useful life. That projected time is less than ten years away.

The first step in preparing for a plant expansion began in FY 08/09 with the hiring of a consultant to perform an evaluation of the existing plant's condition and to determine the timing and size of future capacity expansions. The final report from this evaluation is expected to be complete in March 2009. The report will provide a recommendation to either expand and modernize the existing treatment plant, construct a new treatment plant, or some appropriate combination of these two options.

The cost estimates shown below assume the construction of a new 15 MGD plant at the existing plant site. The cost estimates are based on recent actual construction costs at similar sized water facilities in Iowa. **The ultimate construction costs will depend on the actual option determined to be most cost-effective during the alternatives analysis.** There was a slight shift of funds between years, but the overall project cost is unchanged from last year's CIP.

COMMENTS

The anticipated project schedule and budget is as follows:

FY 2008/09	\$ 350,000	Alternative Analysis and Conceptual Design
FY 2009/10	900,000	Final Design and Bidding
FY 2010/11 – 2012/13	28,000,000	Construction
Total	\$ 29,250,000	

The current operating budget request includes marketing funds aimed at encouraging water conservation. **It will be critical to maintain the marketing efforts in order to ensure a sufficient reserve capacity while the project is being carried out.**

LOCATION

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

FISCAL YEAR PRIORITY						
	TOTAL	2009/10	2010/11	2011/12	2012/13	2013/14
COST:						
Engineering	1,250,000	900,000	150,000	150,000	50,000	
Construction	27,650,000		10,000,000	15,000,000	2,650,000	
TOTAL	28,900,000	900,000	10,150,000	15,150,000	2,700,000	
FINANCING:						
Water Utility Fund	900,000	900,000				
Water Revenue Bonds	28,000,000		10,150,000	15,150,000	2,700,000	
TOTAL	28,900,000	900,000	10,150,000	15,150,000	2,700,000	

PROGRAM - ACTIVITY:
Utilities – Water Treatment

DEPARTMENT:
Water & Pollution Control

ACCOUNT NO.
510-3933-489

RAW WELL WATER LOOP LINE

PROJECT STATUS: Cost Decrease

City of Ames, Iowa
Capital Improvements Plan

DESCRIPTION/JUSTIFICATION

This project will loop the existing raw well water line extending from the Water Plant to the Southeast (SE) Well Field and the Youth Sports Complex (YSC) Well Field to increase carrying capacity and reliability.

COMMENTS

Currently, a single 24-inch water line delivers water from the 10 wells in the SE Well Field and YSC Well Field. This line has one rail crossing, one stream crossing, and three major street/road crossings which present the most likely locations for main breaks or service interruptions. These 10 wells represent approximately 65 percent of the City's current water supply capacity. This well line was designed in the early 1980s before the full amount of the future well capacity was known. It is now undersized for current full production capability of the existing wells and will be further restricted as new wells are constructed. This project covers the final year of a three-year project with a total project cost of \$3,400,000. Because of the anticipated timing of construction events, \$1,000,000 was accelerated from FY 09/10 into FY 08/09. The overall budget was reduced from last year's CIP by \$600,000, due in part to very competitive bids.

Project schedule:

FY 07/08	Engineering, easements, permits	\$ 500,000
FY 08/09	Engineering, construction	2,500,000
FY 09/10	Construction	400,000
	Total	\$ 3,400,000

IMPACT ON OPERATIONS

The reduction in friction losses should result in a slight reduction in the cost of energy to pump water from the wells to the Water Treatment Plant.

LOCATION

From Hunziker Youth Sports Complex east across the South Skunk River, then north across the Union Pacific Railroad, then west to the Water Treatment Plant – Map 9, location P-14

FISCAL YEAR PRIORITY		2				
	TOTAL	2009/10	2010/11	2011/12	2012/13	2013/14
COST:						
Engineering	50,000	50,000				
Construction	350,000	350,000				
TOTAL	400,000	400,000				
FINANCING:						
G. O. Bonds (Abated by Water Revenues)	400,000	400,000				
TOTAL	400,000	400,000				

PROGRAM - ACTIVITY:
Utilities – Water Production

DEPARTMENT:
Water & Pollution Control

ACCOUNT NO.
370-3931-489

BLOOMINGTON ROAD ELEVATED TANK IMPROVEMENTS

PROJECT STATUS: Scope Change Cost Change

City of Ames, Iowa
Capital Improvements Plan

DESCRIPTION/JUSTIFICATION

This project provides for repainting of the Bloomington Road Elevated Tank (BRET). It now also includes the addition of a mixing system to the tank.

COMMENTS

The elevated water tank on Bloomington Road was placed in service in 1989. Internal and external paint systems usually last for 15 to 20 years before repainting is necessary to protect the steel from corrosion and maintain the appearance. The original coating system is beginning to fail, and the tank needs to be repainted. The cost estimate includes approximately \$200,000 to pay for enclosing the sandblasting and painting operation to minimize dust and paint splatter complaints and \$200,000 for the actual sandblasting and painting.

The Bloomington Road tank has a 70-foot operating range, larger than most tanks. During the past summer, staff conducted an assessment of the mixing within the tank. It was discovered that because of the larger operating range, the tank tends to stratify toward the top. While the water quality still meets all requirements of the Safe Drinking Water Act, staff recommend that an internal mixing system be installed to prevent stratification. The cost of the project has been increased by \$75,000 for this purpose.

LOCATION

2521 Bloomington Road – Map 2, location I-5

FISCAL YEAR PRIORITY						
	TOTAL	2009/10	2010/11	2011/12	2012/13	2013/14
COST:						
Engineering	100,000	100,000				
Construction	375,000	375,000				
	TOTAL	475,000	475,000			
FINANCING:						
Water Utility Fund	475,000	475,000				
	TOTAL	475,000	475,000			

PROGRAM - ACTIVITY:
Utilities – Water Pumping

DEPARTMENT:
Water and Pollution Control

ACCOUNT NO.
510-3937-489

WATER SUPPLY EXPANSION

PROJECT STATUS: Scope Change Delayed

City of Ames, Iowa
Capital Improvements Plan

DESCRIPTION/JUSTIFICATION

This project will expand the capacity of the source water supply in conjunction with the development of additional treatment plant capacity. The final three wells at the Hunziker Youth Sports Complex were completed during the summer of 2007. 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 2014.

COMMENTS

The project shown last year was for the development of four new wells on land owned by the City of Ames northeast of the I-35 crossing over the South Skunk River. Over the last year, the City of Nevada has expanded its water withdrawal in the immediate area. To minimize the potential for interference between wells, staff are now proposing to acquire additional land upgradient of Nevada's wells. The cost to acquire this additional land will 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 2010/11. 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 14/15. The timing for the additional two wells will be driven by the growth in water demand. At a future time, wells can be constructed on the original I-35 East site. These future wells would likely be built with lower withdrawal rates than the 6 mgd originally envisioned, again to minimize the potential for interference with Nevada's wells.

- FY 10/11 Acquisition of land/easements for I-35 West Well Field (\$575,000)
- FY 14/15 Design and construct pipeline and design wells (\$2,100,000)
- FY 15/16 Construct two new wells – adds 2 million gallons per day under drought conditions (\$600,000)

LOCATION

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

FISCAL YEAR PRIORITY		TOTAL	2009/10	2010/11	2011/12	2012/13	2013/14
COST:							
Land/Easements		575,000		575,000			
TOTAL		575,000		575,000			
FINANCING:							
Water Utility Fund		575,000		575,000			
TOTAL		575,000		575,000			

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

WATER PLANT FACILITY IMPROVEMENTS

PROJECT STATUS: Cost Change

City of Ames, Iowa
Capital Improvements Plan

DESCRIPTION/JUSTIFICATION

This project involves annual equipment repairs, major maintenance activities, replacement, and upgrades at the Water Treatment Plant.

COMMENTS

The schedule for these improvements is as follows:

- 10/11 Ammonia Feed System Construction (\$75,000)
- 10/11 Extend Security System to Remote Sites (Access Control - \$90,000)
- 10/11 Replace Meter Test Bench (\$125,000)
- 12/13 Extend Security System to Remote Sites (Distribution System Water Quality Monitoring - \$125,000)

Additional improvements will be identified for future years. The schedule may change in response to impending failure, regulatory agency requirements, etc. The only new activity is the addition of the meter test bench replacement in the second year.

Activities shown in this project are independent of the outcome of the Water Plant Expansion Project recommendations. If the Water Plant Expansion Project results in a recommendation to renovate and modernize the existing facility, some of the funds projected for the expansion project may be diverted to this project. Examples of activities that may be added include removal of the ¾-million gallon reservoir, replacement of the middle slaker, lime lagoon improvements, on-site standby power, additional office and conference space, new maintenance facilities, and a plant controls upgrade.

LOCATION

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

FISCAL YEAR PRIORITY		TOTAL	2009/10	2010/11	2011/12	2012/13	2013/14
COST:							
Equipment		415,000		290,000		125,000	
	TOTAL	415,000		290,000		125,000	
FINANCING:							
Water Utility Fund		415,000		290,000		125,000	
	TOTAL	415,000		290,000		125,000	

PROGRAM - ACTIVITY:
Utilities - Water Treatment

DEPARTMENT:
Water & Pollution Control

ACCOUNT NO.

NADC PUMP STATION IMPROVEMENTS

PROJECT STATUS: New

City of Ames, Iowa
Capital Improvements Plan

DESCRIPTION/JUSTIFICATION

City water and sewer services are provided to the National Animal Disease Center (NADC) on North Dayton Avenue. At the time the NADC campus was constructed in 1959, a water metering and booster pumping facility was constructed, as was a wastewater metering and sampling facility. The facilities were initially paid for by the City, and NADC reimbursed the cost over a period of years. The facilities are nearly 50 years old and have a number of components that need to be repaired or replaced. Additionally, there are a number of code issues that need to be addressed.

COMMENTS

Over the life of the facilities, there have been minor maintenance needs that have been performed and paid for by the City. However, the needs that are becoming high priorities are more than routine maintenance. These priorities include things such as completely renovating the electrical systems; replacing large valves, pumps, and motors; replacing the wastewater meter; and other worker safety issues such as handrails, arc flash protections, and confined space safety. Staff have had preliminary discussions with staff from the NADC who concur that the facility needs attention.

Ownership of the facilities and the financial responsibilities for maintenance needs has become “fuzzy” over the years. During the current fiscal year, City staff and NADC staff will work to define the specific scope of repairs necessary and negotiate an understanding for the responsibilities of each party for the facilities in accordance with the original 1959 contract. It is anticipated that City and NADC staff members will reach a shared responsibility for both the maintenance tasks and expenses for these facilities that will result in revenues to at least partially offset the project expense.

LOCATION

NADC Campus, N. Dayton Avenue – Map 6, location Q-8

FISCAL YEAR PRIORITY						
	TOTAL	2009/10	2010/11	2011/12	2012/13	2013/14
COST:						
Water Facility Improvements	125,000		125,000			
Wastewater Facility Improvements	50,000		50,000			
TOTAL	175,000		175,000			
FINANCING:						
Water Fund	125,000		125,000			
Sewer Fund	50,000		50,000			
TOTAL	175,000		175,000			

PROGRAM - ACTIVITY:
Utilities – Water Production

DEPARTMENT:
Water & Pollution Control

ACCOUNT NO.

UTILITIES - WATER DISTRIBUTION

PROJECT/REVENUE DESCRIPTION	TOTAL	2009/10	2010/11	2011/12	2012/13	2013/14	PAGE
EXPENDITURES:							
1 Water System Improvements	4,500,000	900,000	900,000	900,000	900,000	900,000	38
Total Expenditures	4,500,000	900,000	900,000	900,000	900,000	900,000	
REVENUES:							
Water Utility Fund	4,500,000	900,000	900,000	900,000	900,000	900,000	
Total Revenues	4,500,000	900,000	900,000	900,000	900,000	900,000	

WATER SYSTEM IMPROVEMENTS

PROJECT STATUS: No Change

City of Ames, Iowa
Capital Improvements Plan

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

Identified water system improvements for 2009/10:

- Duff Avenue (5th Street to 6th Street) – Map 5, location M-11
- Oakland Street – Map 4, location G-10

Water service transfer locations identified for 2009/10:

- Duff Avenue (Main Street to 5th Street) – Map 5, location M-11
- 6th Street (Grand Avenue to Northwestern Avenue) – Map 5, location L-11
- Campus Avenue (Lincoln Way to Oakland Street) – Map 4, location G-11

Planning costs for each yearly project are shown in the year prior to anticipated construction; engineering/inspection costs appear during the year of construction.

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

FISCAL YEAR PRIORITY	TOTAL	1 2009/10	1 2010/11	1 2011/12	1 2012/13	1 2013/14
COST:						
Planning	150,000	30,000	30,000	30,000	30,000	30,000
Engineering	150,000	30,000	30,000	30,000	30,000	30,000
Construction	4,200,000	840,000	840,000	840,000	840,000	840,000
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:
Utilities – Water Distribution

DEPARTMENT:
Public Works

ACCOUNT NO.
510-8455-489

UTILITIES - STORM SEWER

PROJECT/REVENUE DESCRIPTION	TOTAL	2009/10	2010/11	2011/12	2012/13	2013/14	PAGE
EXPENDITURES:							
1 Storm Sewer Outlet Erosion Control	703,650	201,745	201,905	100,000	100,000	100,000	40
2 Storm Water Facility Rehabilitation Program	500,000	100,000	100,000	100,000	100,000	100,000	41
3 Low Point Drainage Improvements	625,000	125,000	125,000	125,000	125,000	125,000	42
4 Intake Rehabilitation Program	750,000	150,000	150,000	150,000	150,000	150,000	43
5 SW Ames Stormwater Management	475,000	475,000					44
Total Expenditures	3,053,650	1,051,745	576,905	475,000	475,000	475,000	
REVENUES:							
Bonds:							
G.O. Bonds	475,000	475,000					
City:							
Storm Sewer Utility Fund	2,375,000	475,000	475,000	475,000	475,000	475,000	
Other:							
Iowa State University (in-kind)	15,000	5,000	10,000				
Watershed Improvement Review Board Grant	188,650	96,745	91,905				
Sub-Total Other Funds	203,650	101,745	101,905				
Total Revenues	3,053,650	1,051,745	576,905	475,000	475,000	475,000	

STORM SEWER OUTLET EROSION CONTROL

PROJECT STATUS: No Change

City of Ames, Iowa
Capital Improvements Plan

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

A watershed assessment completed by scientists at Iowa State University has identified more than 4,000 tons/year of sediment delivered from within the Ames corporate limits due to degraded stream conditions. Water quality along College Creek caused from unstable stream banks and degrading stream channels will be improved through installation of engineered systems, stream channel and bank stabilization, and neighborhood learning circle techniques. The City of Ames, in partnership with Iowa State University, was awarded a 3-year Watershed Improvement Review Board (WIRB) Grant in the amount of \$115,695 in 2008/09, \$96,745 in 2009/10, and \$91,905 in 2010/11 for improvements to College Creek.

LOCATION

College Creek (west corporate limits to South Dakota Avenue) – Map 4, location C-11

FISCAL YEAR PRIORITY		1	1	3	1	3
	TOTAL	2009/10	2010/11	2011/12	2012/13	2013/14
COST:						
Public Education/Outreach	14,000	7,000	7,000			
Engineering	90,000	30,000	30,000	10,000	10,000	10,000
Construction	589,650	160,345	159,305	90,000	90,000	90,000
Monitoring and Maintenance	10,000	4,400	5,600			
TOTAL	703,650	201,745	201,905	100,000	100,000	100,000
FINANCING:						
Storm Sewer Utility Fund	500,000	100,000	100,000	100,000	100,000	100,000
Iowa State University (In-Kind)	15,000	5,000	10,000			
Watershed Improvement Review Board Grant	188,650	96,745	91,905			
TOTAL	703,650	201,745	201,905	100,000	100,000	100,000

PROGRAM - ACTIVITY:
Utilities - Storm Sewer

DEPARTMENT:
Public Works

ACCOUNT NO.
560-8687-489

STORM WATER FACILITY REHABILITATION PROGRAM

PROJECT STATUS: Site 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:	2009/10	Moore Memorial Park – Map 5, location H-8
	2010/11	Spring Valley Subdivision (Utah Drive/Oklahoma Drive) – Map 4, location D-10
	2011/12	Ames Municipal Airport – Map 8, location L-16
	2012/13	Bloomington Heights West Subdivision – Map 2, location I-5
	2013/14	Somerset Subdivision – Map 2, location I-7

FISCAL YEAR PRIORITY	TOTAL	2009/10	2010/11	2011/12	2012/13	2013/14
COST:						
Engineering	75,000	15,000	15,000	15,000	15,000	15,000
Construction	425,000	85,000	85,000	85,000	85,000	85,000
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.
560-8691-489

LOW POINT DRAINAGE IMPROVEMENTS

PROJECT STATUS: Cost Change

City of Ames, Iowa
Capital Improvements Plan

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

2009/10	Crystal Street (along east corporate limits) – Map 9, location N-15
2010/11	Ironwood Court – Map 8, location I-14
2011/12	Little Bluestem Court – Map 5, location I-13
2012/13	South 2 nd Street/Oak Avenue area – Map 5, location L-11
2013/14	Southdale Subdivision – Map 9, location N-16

Addressing these drainage problems will reduce flooding problems on both public and private property. The amount of time spent on duty calls to set out barricades in areas that flood during heavy rains will also be reduced.

The cost change is due to updated construction estimates and an increasing amount of identified projects.

FISCAL YEAR PRIORITY		3		2		1	
	TOTAL	2009/10	2010/11	2011/12	2012/13	2013/14	
COST:							
Planning	25,000	5,000	5,000	5,000	5,000	5,000	
Engineering	50,000	10,000	10,000	10,000	10,000	10,000	
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:
Utilities - Storm Sewer

DEPARTMENT:
Public Works

ACCOUNT NO.
560-8692-489

STORM SEWER INTAKE REHABILITATION PROGRAM

PROJECT STATUS: No Change

City of Ames, Iowa
Capital Improvements Plan

DESCRIPTION/JUSTIFICATION

This annual program is to repair or replace deteriorated storm sewer intakes. Areas of concentration for storm sewer intake repairs will be those locations programmed for street improvements.

Except for cleaning and inspecting storm sewer intakes on a five-year rotation, the storm sewer system has had little maintenance since its installation 80 to 100 years ago. The 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. It will result in an upgrading of all substandard intakes within twenty years. 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

Delay of this program will lead to unsafe drainage structures in the gutter sections of many streets.

FISCAL YEAR PRIORITY		4	4	4	4	4
	TOTAL	2009/10	2010/11	2011/12	2012/13	2013/14
COST:						
Planning	25,000	5,000	5,000	5,000	5,000	5,000
Engineering	25,000	5,000	5,000	5,000	5,000	5,000
Construction	700,000	140,000	140,000	140,000	140,000	140,000
	TOTAL	750,000	150,000	150,000	150,000	150,000
FINANCING:						
Storm Sewer Utility Fund	750,000	150,000	150,000	150,000	150,000	150,000
	TOTAL	750,000	150,000	150,000	150,000	150,000

PROGRAM - ACTIVITY:

Utilities - Storm Sewer

DEPARTMENT:

Public Works

ACCOUNT NO.

560-8693-489

SOUTHWEST AMES STORMWATER MANAGEMENT IMPROVEMENTS (NEAR GREENBRIAR PARK)

PROJECT STATUS: New

City of Ames, Iowa
Capital Improvements Plan

DESCRIPTION/JUSTIFICATION

This project is to provide a permanent solution to the storm water drainage issue created by the undersized culverts under the bike path west of Greenbriar Park.

COMMENTS

The undersized culverts currently in place under the bike path west of Greenbriar Park restrict the flow of the unnamed creek so significantly that, during high water events, water is forced through Greenbriar Park and onto the nearby golf course. This project will redirect the unnamed creek so that storm water will be released into Worle Creek and flooding in Greenbriar Park and the golf course will be minimized. Improvements to Greenbriar Park in 2010/11 (page 130) will create a trail head for the overall Shared Use Path from south Ames and allow the park to become a nice addition to the park system.

LOCATION

West of Greenbriar Park – Map 8, location K-13

FISCAL YEAR PRIORITY		5				
	TOTAL	2009/10	2010/11	2011/12	2012/13	2013/14
COST:						
Engineering	60,000	60,000				
Construction	415,000	415,000				
	TOTAL	475,000	475,000			
FINANCING:						
G. O. Bonds	475,000	475,000				
	TOTAL	475,000	475,000			

PROGRAM - ACTIVITY:
Utilities – Storm Sewer

DEPARTMENT:
Public Works

ACCOUNT NO.
370-8689-489

UTILITIES - SANITARY SEWER

PROJECT/REVENUE DESCRIPTION	TOTAL	2009/10	2010/11	2011/12	2012/13	2013/14	PAGE
EXPENDITURES:							
1 Sanitary Sewer Rehabilitation Program	1,500,000	300,000	300,000	300,000	300,000	300,000	46
2 Clear Water Diversion	1,000,000	200,000	200,000	200,000	200,000	200,000	47
Total Expenditures	2,500,000	500,000	500,000	500,000	500,000	500,000	
REVENUES:							
Sewer Utility Fund	2,500,000	500,000	500,000	500,000	500,000	500,000	
Total Revenues	2,500,000	500,000	500,000	500,000	500,000	500,000	

SANITARY SEWER REHABILITATION PROGRAM

PROJECT STATUS: No Change

City of Ames, Iowa
Capital Improvements Plan

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 for future years have been further identified from the Sanitary Sewer System Study which was completed in 2007/08. 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		1	1	1	1	1
	TOTAL	2009/10	2010/11	2011/12	2012/13	2013/14
COST:						
Planning	50,000	10,000	10,000	10,000	10,000	10,000
Engineering	50,000	10,000	10,000	10,000	10,000	10,000
Construction	1,400,000	280,000	280,000	280,000	280,000	280,000
	TOTAL	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	300,000	300,000	300,000	300,000	300,000

PROGRAM – ACTIVITY:
Utilities - Sanitary Sewer

DEPARTMENT:
Public Works

ACCOUNT NO.
520-8536-489

CLEAR WATER DIVERSION

PROJECT STATUS: No Change

City of Ames, Iowa
Capital Improvements Plan

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 involves 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 grant program, City Council has authorized a grant to each participating property owner of either \$1,800 or \$2,200 depending upon the type of work involved on the property. Funding of these grants is provided on an annual basis, and the conversion work for qualified properties must be completed in the year for which the grants are given. 2,192 footing drain grants have been issued to property owners under this program as of October 1, 2008, and approximately 1,354 property owners are still eligible to participate in the grant program.

In addition to funding grants, this program also includes construction of collector lines as needed along city streets. Available funding for this program has always been split evenly between footing drain grants and construction. This would allow for funding approximately 50 grants per year. In recent years, however, the number of requests for grants has been declining, allowing additional money to become available for construction.

FISCAL YEAR PRIORITY		2	2	2	2	2
	TOTAL	2009/10	2010/11	2011/12	2012/13	2013/14
COST:						
Planning	50,000	10,000	10,000	10,000	10,000	10,000
Engineering	100,000	20,000	20,000	20,000	20,000	20,000
Construction	850,000	170,000	170,000	170,000	170,000	170,000
	TOTAL	1,000,000	200,000	200,000	200,000	200,000
FINANCING:						
Sewer Utility Fund	1,000,000	200,000	200,000	200,000	200,000	200,000
	TOTAL	1,000,000	200,000	200,000	200,000	200,000

PROGRAM - ACTIVITY:
Utilities - Sanitary Sewer

DEPARTMENT:
Public Works

ACCOUNT NO.
520-8579-489

UTILITIES - WATER POLLUTION CONTROL

PROJECT/REVENUE DESCRIPTION	TOTAL	2009/10	2010/11	2011/12	2012/13	2013/14	PAGE
EXPENDITURES:							
	2,970,00						
1 WPC Plant Disinfection	0	520,000	2,450,000				49
	1,280,00						
2 WPC Plant Residuals Handling Improvements	0	600,000	680,000				50
	2,940,00						
3 WPC Plant Facility Improvements	0	655,000	830,000	1,215,000	240,000		51
4 WPC Plant Automation Upgrade - Phase II	450,000	450,000					52
5 WPC Plant Energy Management	450,000		30,000	140,000	140,000	140,000	53
6 WPC Plant Digester Cleaning & Painting	350,000				175,000	175,000	54
	8,440,00	2,225,00					
Total Expenditures	0	0	3,990,000	1,355,000	555,000	315,000	
REVENUES:							
Bonds:							
	2,450,00						
G.O. Bonds	0		2,450,000				
City:							
	5,310,00	2,225,00					
Sewer Utility Fund	0	0	860,000	1,355,000	555,000	315,000	
Fleet Replacement Fund	680,000		680,000				
	5,990,00	2,225,00					
Sub-Total City Funds	0	0	1,540,000	1,355,000	555,000	315,000	
	8,440,00	2,225,00					
Total Revenues	0	0	3,990,000	1,355,000	555,000	315,000	

WPC PLANT DISINFECTION**PROJECT STATUS:** DelayedCity of Ames, Iowa
Capital Improvements Plan**DESCRIPTION/JUSTIFICATION**

This project will install a disinfection system at the Water Pollution Control Plant. Disinfection will become a mandatory requirement when a new National Pollutant Discharge Elimination System (NPDES) permit for the plant is issued by the Iowa Department of Natural Resources (IDNR).

COMMENTS

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

Staff had anticipated that the IDNR would have issued a new discharge permit by now. Even though there has been no action yet by the IDNR, staff believe that providing disinfection is an important obligation and is proposing to proceed with the installation of disinfection before the permit is issued. In the absence of actual permit limits, the disinfection facility will be designed using the requirements contained in the Iowa Administrative Code. It is possible that when a discharge permit is ultimately issued by the IDNR, a second disinfection unit may be required for the equalization overflow line. A conceptual study will begin in the current fiscal year. Monitoring equipment has already been purchased to gather the necessary design parameters. This will be followed by a conceptual engineering study that will confirm the most appropriate disinfection technology (ultra-violet light, ozone, chlorine, etc.) and a period of pilot testing to allow the new system to be properly sized.

Depending on the type of disinfection system installed, the plant may experience a significant increase in electrical demand. For example, the addition of an ultra-violet system could result in a seasonal increase in electricity needs on the order of 25 percent. While not an immediate operational concern, replacement of components such as UV lamps could cause future increases of \$150,000 annually in parts and labor. Because of the engineering staff workload, the project is approximately six months behind schedule. The timing of expenses shown below has been adjusted accordingly.

LOCATION

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

FISCAL YEAR PRIORITY			1	1		
	TOTAL		2009/10	2010/11	2011/12	2012/13
COST:						
Engineering	170,000		120,000	50,000		
Construction	2,800,000		400,000	2,400,000		
	TOTAL	2,970,000	520,000	2,450,000		
FINANCING:						
G. O. Bonds	2,450,000			2,450,000		
Sewer Utility Fund	520,000		520,000			
	TOTAL	2,970,000	520,000	2,450,000		

PROGRAM - ACTIVITY:

Utilities – WPC Plant

DEPARTMENT:

Water & Pollution Control

ACCOUNT NO.

520-3431-489

DESCRIPTION/JUSTIFICATION

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

COMMENTS

A number of factors are putting pressure on the solids handling portion of the plant operation. The land application equipment is approaching the end of its expected useful life (estimated at 22 years), and replacement costs are significant. Future regulatory changes will require the facility to achieve a higher level of nutrient removal efficiency from the liquid phase, with a resulting 25 percent increase in the volume of solids generated. It is also anticipated that restrictions in land application rates could lead to the need for as much as five times the number of acres used for land application.

In FY 08/09, an evaluation phase (\$100,000) will study the impact of upcoming nutrient standards, evaluate continued city operation of the land application program versus contracting with a private firm, the benefits of additional farm ground purchase versus long-term lease contracts, the cost-effectiveness of continuing to haul large quantities of wet sludge versus the fuel savings of dewatering and hauling dry sludge, and ultimately the advisability of spending \$680,000 to replace the aging land application equipment.

The FY 09/10 expense envisions some form of sludge storage and handling improvements and is increased slightly from what was shown in last year's CIP to account for additional engineering expenses that are likely to be needed. The FY 10/11 expense anticipates replacing the AgChem Terragators. **The decision to move forward with any specific future project will depend on the outcome of the evaluation phase to be conducted in the current year.**

LOCATION

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

FISCAL YEAR PRIORITY		2		2		
	TOTAL	2009/10	2010/11	2011/12	2012/13	2013/14
COST:						
Engineering	100,000	100,000				
Construction	500,000	500,000				
Equipment – Terragators	680,000		680,000			
TOTAL	1,280,000	600,000	680,000			
FINANCING:						
Sewer Utility Fund	600,000	600,000				
Fleet Replacement Fund – Terragators	680,000		680,000			
TOTAL	1,280,000	600,000	680,000			

PROGRAM - ACTIVITY:

Utilities – WPC Plant

DEPARTMENT:

Water & Pollution Control

ACCOUNT NO.

520-3434-489

WPC PLANT FACILITY IMPROVEMENTS

PROJECT STATUS: Cost Change

Scope Change

City of Ames, Iowa
Capital Improvements Plan

DESCRIPTION/JUSTIFICATION

This project involves annual equipment repairs, maintenance, replacement, and upgrades at the plant. This plant became operational in May 1989, and the entire plant became fully operational in November 1989. Life expectancies for plant equipment vary from five to six years to more than 10 years. 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.

COMMENTS

Projects scheduled include:

- 09/10-10/11 Clarifier Painting: Years three and four of a four-year project. Each year includes painting two clarifiers at an estimated cost of \$145,000 per clarifier.
- 09/10-12/13 Vertical Turbine Pump Replacement: Years two through five of a five-year project. Each year includes replacing three of the 14 vertical turbine pumps and motors in the Raw Water and Trickling Filter Pump Stations at an estimated cost of \$80,000 per pump.
- 09/10 Lagoon Liners: Repairs to the 20-year-old liners in the sludge storage and flow equalization basins, \$125,000
- 10/11 Rebuild South Dayton Avenue Lift Station: Includes pumps, motors, and chemical dosing system, \$300,000
- 11/12 Digester Lid Painting: Repaint the covers on two Primary Digesters and one Secondary Digester, \$325,000
- 11/12 Bar Screen/Grinder: Replace the "pilot test" equipment in the center channel, \$400,000
- 11/12 Grease Receiving Station Upgrade, \$250,000

As the WPC Plant continues to mature, the size of this equipment repair, maintenance, and replacement project continues to grow. Additional repairs will be identified in future years. The schedule may change in response to impending failure, regulatory agency requirements, etc.

LOCATION

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

FISCAL YEAR PRIORITY		3	3	1	1	
	TOTAL	2009/10	2010/11	2011/12	2012/13	2013/14
COST:						
Equipment – Pumps	960,000	240,000	240,000	240,000	240,000	
Equipment – Lagoon Liners	125,000	125,000				
Equipment – Bar Screen	400,000			400,000		
Equipment – Pump Station	300,000		300,000			
Equipment – Grease Receiving Station	250,000			250,000		
Construction – Painting	905,000	290,000	290,000	325,000		
TOTAL	2,940,000	655,000	830,000	1,215,000	240,000	
FINANCING:						
Sewer Utility Fund	2,940,000	655,000	830,000	1,215,000	240,000	
TOTAL	2,940,000	655,000	830,000	1,215,000	240,000	

PROGRAM - ACTIVITY:

Utilities - WPC Plant

DEPARTMENT:

Water & Pollution Control

ACCOUNT NO.

Multiple

DESCRIPTION/JUSTIFICATION

This project is phase two of a planned upgrade of the WPC Plant supervisory control and data acquisition (SCADA) system originally installed in 1989.

COMMENTS

Beginning in 2003, a team of plant personnel and an engineering consultant recommended a phased transition to a new programmable logic controller-based system. Phase I, replacement of the main control system, was completed in 2007. The focus of this second phase moves out of the operator's control room and into the treatment portions of the plant with new field sensors and controllers.

The original plant monitoring system was a sole-source proprietary system that provided mostly data-logging, with very limited report generation or plant control and operation functionality. Maintenance and support of the old system had become difficult to obtain and increasingly expensive as the controls industry had migrated to substantially newer technology.

A team of plant personnel and an engineering consultant reviewed the original system in 2003-04 and determined that complete replacement and phased transition to a new PLC- (programmable logic controller) based system was the best option offering the most flexibility, greater operational control capability, and the most cost-effective approach to upgrade and enhance the plant's SCADA system. Phase I, replacement of the main control system, was completed in 2007. Phase II will begin in the first year of CIP.

FY 05/06 to 07/08	Phase I	\$ 402,476
FY 09/10	Phase II Engineering & Construction	\$ 450,000

LOCATION

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

FISCAL YEAR PRIORITY		4				
	TOTAL	2009/10	2010/11	2011/12	2012/13	2013/14
COST:						
Engineering	75,000	75,000				
Construction	375,000	375,000				
	TOTAL	450,000	450,000			
FINANCING:						
Sewer Utility Fund	450,000	450,000				
	TOTAL	450,000	450,000			

PROGRAM - ACTIVITY:

Utilities – WPC Plant

DEPARTMENT:

Water & Pollution Control

ACCOUNT NO.

520-3416-489

WPC PLANT ENERGY MANAGEMENT

PROJECT STATUS: Cost Change
Scope Change

Revenue Change

City of Ames, Iowa
Capital Improvements Plan

DESCRIPTION/JUSTIFICATION

This project provides for an evaluation of alternative energy options for the Water Pollution Control Plant. It includes evaluating options to both reduce the current energy needs and/or provide additional renewable energy sources for the facility.

COMMENTS

An engineering evaluation was performed in 1999 to review the energy efficiency of the WPC Plant and to explore options for using alternative energy sources. The study evaluated the feasibility and cost-effectiveness of providing wind, solar, and hydro-electric power, as well as retrofitting lighting and upgrading to premium efficiency motors. At that time, it was determined to not be cost-effective to move forward with any of those alternatives. A couple of changes prompt staff to now revisit this project. First, electrical rates from the rural electric co-op have increased in recent years, possibly improving the cost feasibility of alternative sources. Second, the pending installation of disinfection may result in a substantial increase in the electrical power needs of the facility.

When this project was originally conceived in the mid-1990s, a wind turbine was envisioned. The market for this equipment has shifted significantly in recent years, and at \$3.6 million is no longer deemed practical for the wastewater utility. A conceptual study is planned for FY 10/11 to evaluate the feasibility of a wide range of options. The expenses shown in FY 11/12 through FY 13/14 do not presume any particular course of action. The amounts shown were calculated assuming that projects would be implemented that had a payback period of seven years or less and that would result in a 20% reduction in the facility's overall electrical demand. **The ultimate recommendation on whether or not to proceed with any specific option will depend on the outcome of the financial feasibility study and on its fiscal priority relative to other projects.**

LOCATION

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

FISCAL YEAR PRIORITY			4	2	3	2
	TOTAL	2009/10	2010/11	2011/12	2012/13	2013/14
COST:						
Engineering	75,000		30,000	15,000	15,000	15,000
Construction	375,000			125,000	125,000	125,000
TOTAL	450,000		30,000	140,000	140,000	140,000
FINANCING:						
Sewer Utility Fund	450,000		30,000	140,000	140,000	140,000
TOTAL	450,000		30,000	140,000	140,000	140,000

PROGRAM - ACTIVITY:

Utilities - WPC Plant

DEPARTMENT:

Water and Pollution Control

ACCOUNT NO.

WPC PLANT DIGESTER CLEANING AND PAINTING

PROJECT STATUS: New

City of Ames, Iowa
Capital Improvements Plan

DESCRIPTION/JUSTIFICATION

This project includes cleaning the interior of the sludge digestion tanks (two primary digesters and one secondary digester) and repainting the interior piping.

COMMENTS

The digesters provide treatment and storage of the solids removed during the treatment process. Inorganic materials, such as fine sand, silt, grit, plastics, and other non-biodegradable materials, accumulate in these storage units and build up over time. Additionally, some organic materials, such as grease, can solidify and accumulate in the digesters. This results in lowered treatment efficiency of the digesters as well as a reduction in the effective storage capacity of the units. Periodically, the units need to be taken out of service and have the accumulated materials removed. This should generally be performed about every 10 years.

When the digesters were last cleaned in 2004, staff noted that much of the interior pipes inside the digesters were in need of repainting to protect them against the corrosive environment of the digesters. During the next round of cleaning, staff propose that additional funds be allocated to repainting the interior piping. The work will require the coordination of two separate contractors, resulting in extended periods with a digester held out of service. To accommodate this while still maintaining the required level of treatment, one digester is proposed to be cleaned and its piping repainted in each of three fiscal years. The first and second years are shown, with the third year coming outside the CIP planning timeline.

LOCATION

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

FISCAL YEAR PRIORITY		TOTAL	2009/10	2010/11	2011/12	2012/13	2013/14
COST:							
Cleaning		200,000				100,000	100,000
Painting		150,000				75,000	75,000
	TOTAL	350,000				175,000	175,000
FINANCING:							
Sewer Utility Fund		350,000				175,000	175,000
	TOTAL	350,000				175,000	175,000

PROGRAM - ACTIVITY:

Utilities - WPC Plant

DEPARTMENT:

Water and Pollution Control

ACCOUNT NO.

UTILITIES - ELECTRIC PRODUCTION

PROJECT/REVENUE DESCRIPTION	TOTAL	2009/10	2010/11	2011/12	2012/13	2013/14	PAGE
EXPENDITURES:							
Electric Services:							
9 Demand Side Management Programs	4,800,000	800,000	800,000	1,000,000	1,000,000	1,200,000	65
10 Automated Metering Infrastructure	350,000	350,000					66
Transmission:							
3 Mid-American Energy Interconnection	10,621,396	1,000,000	5,500,000	4,121,396			59
4 Ames Stange In-Town 161 kV Line 69 kV Switchyard Relay/Control	830,000	830,000					60
8 Replacement	330,000	80,000	250,000				64
13 Top-O-Hollow Substation Expansion	800,000	800,000					69
17 Cyber Security Risk Assessment	100,000	100,000					73
31 Ontario Substation 69 kV Breaker Addition	350,000				75,000	275,000	87
Distribution/Relocates:							
6 Downtown Network 13.8 kV Conversion	300,000	150,000	150,000				62
15 Ames Plant Substation Expansion	2,150,000	150,000		500,000	1,500,000		71
18 Street Light and Line Relocations	1,315,000	470,000	250,000	395,000	125,000	75,000	74
25 Vet Med Substation Expansion	2,800,000		300,000	2,000,000	500,000		81
Power Plant:							
1 Unit #7 Nitrogen Oxide Control Capital	2,000,000	2,000,000					57
2 Unit #8 Boiler Tube Repair	8,900,000	4,500,000	4,400,000				58
5 Units #7 & #8 Oil Gun Upgrade	850,000	350,000	500,000				61
7 Gas Turbine #1 Inspection & Overhaul	1,100,000	650,000	450,000				63
11 Units #7 & #8 DCS Upgrade	450,000	450,000					67
12 Feedwater Heater Tube Replacement	1,000,000	500,000		500,000			68
14 Unit #8 Air Heater Basket Replacement	175,000	75,000	100,000				70
16 Power Plant Fire Protection System	1,270,000	300,000	300,000	350,000		320,000	72

UTILITIES - ELECTRIC PRODUCTION, continued

PROJECT/REVENUE DESCRIPTION	TOTAL	2009/10	2010/11	2011/12	2012/13	2013/14	PAGE
EXPENDITURES, continued:							
Power Plant (continued):							
19 Unit #8 Nitrogen Oxide Control Capital	3,400,000		3,400,000				75
20 Unit #8 Mercury Capital	4,200,000		200,000	4,000,000			76
21 Unit #7 Boiler Tube Repair	4,000,000		150,000	1,850,000	1,000,000	1,000,000	77
22 Inlet Heating for CT2	550,000		550,000				78
23 Unit #7 Mercury Capital	3,600,000		100,000	2,000,000	1,500,000		79
24 RDF Bin Work	250,000		250,000				80
26 Unit #8 Turbine Generator 5-Year Overhaul	1,000,000			1,000,000			82
27 Cooling Tower Repairs	1,050,000			750,000	300,000		83
28 Unit #7 Cooling Water System & Piping	500,000			500,000			84
29 Diesel Building Demolition	200,000			200,000			85
30 Unit #7 Turbine Generator 5-Year Overhaul	750,000				750,000		86
32 Remove #5 & #6 Turbine Generators	500,000				500,000		88
33 Capacity Generation for Future Years	50,000,000					50,000,000	89
34 Unit #8 Turbine Controls Upgrade	300,000					300,000	90
Total Expenditures	110,791,396	13,555,000	17,650,000	19,166,396	7,250,000	53,170,000	
REVENUES:							
Bonds:							
Electric Revenue Bonds	56,000,000			6,000,000		50,000,000	
City:							
Electric Utility Fund	51,113,296	12,964,400	16,269,500	11,709,396	7,000,000	3,170,000	
Other:							
Iowa State University	3,678,100	590,600	1,380,500	1,457,000	250,000		
Total Revenues	110,791,396	13,555,000	17,650,000	19,166,396	7,250,000	53,170,000	

UNIT #7 NITROGEN OXIDE CONTROL CAPITAL**PROJECT STATUS:** Delayed

Cost Change

City of Ames, Iowa
Capital Improvements Plan**DESCRIPTION/JUSTIFICATION**

Future Environmental Protection Agency (EPA) rules may require lower NO_x (nitrogen oxide) emissions on boiler #7. Nitrogen oxides form when fuel is burned at high temperatures as in an internal combustion engine or a coal fired power plant. Reducing emissions of NO_x is a component of the EPA's strategy for cleaner air. Plans by the EPA to reduce NO_x emissions are being finalized. The NO_x from Ames' Unit #7 can be lowered by reducing the combustion temperature by means of modified burners and added fans. Detailed equipment cost and specific design engineering work must be completed before the plan is begun for Ames along with equipment purchases to follow. The \$2,000,000 estimate is a preliminary estimate.

COMMENTS

In FY 2008/09, \$60,000 will be spent on engineering services for this project.

LOCATION

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

FISCAL YEAR PRIORITY						
	TOTAL	2009/10	2010/11	2011/12	2012/13	2013/14
COST:						
Engineering	100,000	100,000				
Materials and Installation	1,900,000	1,900,000				
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:
Utilities – Electric Production

DEPARTMENT:
Electric

ACCOUNT NO.
530-4887-489

UNIT #8 BOILER TUBE REPAIR

PROJECT STATUS: Delayed

City of Ames, Iowa
Capital Improvements Plan

DESCRIPTION/JUSTIFICATION

Unit #8 boiler is twenty years old and in need of tube repairs. Staff has put together a three-year plan for engineering and re-tubing sections of the boiler. The cost estimates include labor and materials. The bottom 50 feet of boiler tubes and the super-heater tubes need to be replaced. Approximately 300 wall tubes and 960 tubes in the super-heater will be replaced over the three years of the project.

COMMENTS

Staff has done preliminary engineering with Zachary Engineering Company.

FY 2008/09	Engineering/Specifications	\$	400,000
FY 2009/10	Material and labor for installation		4,500,000
FY 2010/11	Material and labor for installation		4,400,000
	Total	\$	9,300,000

LOCATION

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

FISCAL YEAR PRIORITY		TOTAL	2009/10	2010/11	2011/12	2012/13	2013/14
COST:							
Materials and Labor		8,900,000	4,500,000	4,400,000			
	TOTAL	8,900,000	4,500,000	4,400,000			
FINANCING:							
Electric Utility Fund		8,900,000	4,500,000	4,400,000			
	TOTAL	8,900,000	4,500,000	4,400,000			

PROGRAM - ACTIVITY:
Utility – Electric Production

DEPARTMENT:
Electric

ACCOUNT NO.
530-4898-489

DESCRIPTION/JUSTIFICATION

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

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 161 kV 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. Because of the age of this line and its limited capacity, an additional line is needed from Ames to the south. This 161 kV interconnection is essential to provide Ames with needed transmission capacity and to satisfy the current and future needs of our customers.

The total cost of this project is now estimated at \$29,600,000 with \$ 6,334,400 in funding from Iowa State University, and \$23,176,800 from Electric Utility funding.

A total project increase of about \$1.6 M is estimated due to re-examination of the route.

This project assumes the in-town line is complete in FY09/10 under a separate CIP (Ames Stange In-Town 161 kV Line Project, page 60) This project primarily represents the remaining Ankeny line work; this is just a preliminary estimate pending review of materials and professional services actuals to-date.

FY 03/04	Actual	\$ 14,572
FY 04/05	Actual	741,086
FY 05/06	Actual	6,663,462
FY 06/07	Actual	7,064,210
FY 07/08	Actual	(234,726)
	Total	\$ 14,248,604
FY 08/09	Amended	300,000
FY 09/10 -	FY 11/12	10,621,396
	In-Town Project	4,430,000
	Total	\$ 29,600,000

LOCATION

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

FISCAL YEAR PRIORITY		3		4	3	2012/13	2013/14
		TOTAL	2009/10	2010/11	2011/12		
COST:							
Professional Service		750,000	750,000				
Construction		9,871,396	250,000	5,500,000	4,121,396		
	TOTAL	10,621,396	1,000,000	5,500,000	4,121,396		
FINANCING:							
Electric Utility Fund		8,348,396	786,000	4,323,000	3,239,396		
Iowa State University		2,273,000	214,000	1,177,000	882,000		
	TOTAL	10,621,396	1,000,000	5,500,000	4,121,396		

PROGRAM - ACTIVITY:
Utilities – Electric Production

DEPARTMENT:
Electric

ACCOUNT NO.
530-4871-489

AMES STANGE IN-TOWN 161 KV LINE

PROJECT STATUS: New

City of Ames, Iowa
Capital Improvements Plan

DESCRIPTION/JUSTIFICATION

This project is to construct a 161kV transmission line with 13.8 kV underbuilt distribution from the Stange Road 161/69 kV substation to the Ames Plant 161/69 kV substation. This project will complete the portion of the line located within the City of Ames.

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.

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. Because of the age of this line and its limited capacity, an additional line is needed from Ames to the south. This 161 kV interconnection is essential to provide Ames with needed transmission capacity and to satisfy the current and future needs of our customers.

The total cost of the entire 161 kV project is now estimated at \$29,600,000 with \$ 6,334,400 in funding from Iowa State University, and \$23,176,800 from Electric Utility funding. This CIP is for the portion of line from Ames Plant to Stange substations, and is now being separated from the project for that portion of the line being built from the Ames plant to the Mid-American connection at Ankeny.

FY 08/09	Amended	\$ 3,600,000
FY 09/10	Proposed	830,000
Total		<u>\$ 4,430,000</u>

LOCATION

A route between Stange Road Substation (Map 5, location H-8) and Ames Plant Substation (Map 5, location N-11) substantially following the route of the existing 69kV line between these substations

FISCAL YEAR PRIORITY		4				
	TOTAL	2009/10	2010/11	2011/12	2012/13	2013/14
COST:						
Construction	830,000	830,000				
TOTAL	830,000	830,000				
FINANCING:						
Electric Utility Fund	652,400	652,400				
Iowa State University	177,600	177,600				
TOTAL	830,000	830,000				

PROGRAM - ACTIVITY:
Utilities – Electric Production

DEPARTMENT:
Electric

ACCOUNT NO.
530-4872-489

UNITS #7 & #8 OIL GUN UPGRADE

PROJECT STATUS: New

City of Ames, Iowa
Capital Improvements Plan

DESCRIPTION/JUSTIFICATION

The oil guns and igniters on #7 unit are 42 years old and those on Unit #8 are over 25 years old. They require constant attention, still proving to be less than reliable. The system needs to be replaced so reliable and better Plant operation can be obtained. Over the years, many system changes have been made in an attempt to keep these guns and igniters in operation. This includes tying # 7 unit to #8 unit's fuel oil supply system because the oil tanks for #7 were removed from service. Unit #8 MPO lighters are becoming obsolete and not compatible with the new systems. Replacement parts for the existing equipment are harder to find. Although both systems have had some minor upgrades, neither is acceptable under their current operating conditions and both require a lot of maintenance. Operations have many problems during light off and the starting and stopping of the coal mills. It is common to have three additional persons available during light off.

COMMENTS

We planned to replace the oil guns with the new low-NO_x burner upgrade but since that has been delayed due to court and environmental issues, we still need to replace this equipment. The oil gun is the first fire in the boiler during start up. The oil fire takes the boiler up to the temperature and pressure that would allow for the coal mills to be brought on safely, and they also stabilize the coal flame until there is enough heat in the furnace for the coal mills to operate safely and reliably. Once the boiler is up and running, the oil guns are used to safely start and stop mills and to safely allow the fire-worker to stabilize the unit during possible times of unstable conditions such as soot blowing, water lance usage, pulling ash and burning refuse derived fuel (RDF). The oil guns are also used to bring the unit down during a controlled shut down.

LOCATION

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

FISCAL YEAR PRIORITY		5		5	2011/12	2012/13	2013/14
	TOTAL	2009/10	2010/11				
COST:							
#7 unit oil gun and igniter upgrade	350,000	350,000					
#8 unit oil gun and igniter upgrade	500,000		500,000				
	TOTAL	850,000	350,000	500,000			
FINANCING:							
Electric Utility Fund	850,000	350,000	500,000				
	TOTAL	850,000	350,000	500,000			

PROGRAM - ACTIVITY:
Utilities- Electric Production

DEPARTMENT:
Electric

ACCOUNT NO.
530-4826-489

DOWNTOWN NETWORK 4KV TO 13.8 KV CONVERSION

PROJECT STATUS: No Change

City of Ames, Iowa
Capital Improvements Plan

DESCRIPTION/JUSTIFICATION

This is a multi-year project to replace failing 4kV transformers and cable in the downtown 4kV network. The downtown area is within the boundaries of the railroad, 6th Street, Duff Avenue and Grand Avenue. The area is served by an underground 4kV network, a highly specialized system with obsolete components which can no longer be purchased through typical transformer and switchgear suppliers. This is the only area where network system components exist in the Ames electric system. While this system has served the City well, inspections have revealed significant corrosion of the network transformers. In recent years, there have been several cable and transformer failures which have been very difficult to repair.

In 2006, an effort was made to selectively replace failing transformers under normal operating and maintenance budgets. However, it has become apparent that a more comprehensive approach is needed to ensure continuity of service to downtown residents and businesses. Therefore, a multi-year project is proposed to replace all downtown network transformers and 4kV cables with standard 13.8kV cables and padmounted 13.8kV transformers. The first phase of work will replace four 4kV network transformers between 5th Street and 6th Street with conventional 13.8 kV padmounted transformers, and will replace the existing 4kV cables along those sections with standard 1/o aluminum 13.8 kV underground cables. As part of this work, deteriorated vault lids will also be replaced.

LOCATION

The downtown area encompassed by the railroad, 6th Street, Duff Avenue and Grand Avenue - Map 5, location M-11

FISCAL YEAR PRIORITY		TOTAL	6 2009/10	7 2010/11	2011/12	2012/13	2013/14
COST:							
Construction		300,000	150,000	150,000			
	TOTAL	300,000	150,000	150,000			
FINANCING:							
Electric Utility Fund		300,000	150,000	150,000			
	TOTAL	300,000	150,000	150,000			

PROGRAM - ACTIVITY:
Utilities – Electric Extension/Improvements

DEPARTMENT:
Electric

ACCOUNT NO.
530-4821-489

GAS TURBINE #1 INSPECTION AND OVERHAUL

PROJECT STATUS: Cost Change

City of Ames, Iowa
Capital Improvements Plan

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 this type of equipment inspection is 5-year overhauls.

COMMENTS

There are several reasons that these inspections have not been done. The 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 2009/10	Engine and Free Turbine	\$ 650,000
FY 2010/11	Generator	450,000
		<u>\$ 1,100,000</u>

LOCATION

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

FISCAL YEAR PRIORITY	TOTAL	7	8	2011/12	2012/13	2013/14
		2009/10	2010/11			
COST:						
Inspection labor and parts engine/turbine	650,000	650,000				
Inspection labor and parts generator	450,000		450,000			
TOTAL	1,100,000	650,000	450,000			
FINANCING:						
Electric Utility Fund	1,100,000	650,000	450,000			
TOTAL	1,100,000	650,000	450,000			

PROGRAM - ACTIVITY:
Utilities – Electric Production

DEPARTMENT:
Electric

ACCOUNT NO.
530-4827-489

AMES PLANT 69KV SWITCHYARD RELAY AND CONTROL REPLACEMENT

PROJECT STATUS: No Change

City of Ames, Iowa
Capital Improvements Plan

DESCRIPTION/JUSTIFICATION

The 69kV switchyard relaying and controls are currently located inside the Power Plant. This requires long runs of old control cable between the Power Plant and switchyard, running beneath portions of the W&PC's newer office expansion. The existing relays are obsolete electro-mechanical devices which are becoming difficult to maintain/repair and will need replacement with modern relays. The relaying and controls for the 69kV switchyard are critical components that play a significant role in overall electric system reliability. Properly applied protective relaying initiates the disconnection of the trouble area while operation and service in the rest of the system continues. With the installation of the Ames Plant 161kV/69 kV substation, a relay and control enclosure was installed adjacent to the 69 kV switchyard with sufficient room to house the relays and controls needed for the 69 kV 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

This work is proposed to be performed in advance of and in coordination with the proposed expansion of the Ames Plant Distribution Substation, since there will be some common relaying and control design issues between these two projects. Both are located adjacent to the 69 kV switchyard.

LOCATION

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

FISCAL YEAR PRIORITY	TOTAL	8	10	2011/12	2012/13	2013/14
		2009/10	2010/11			
COST:						
Engineering	80,000	80,000				
Construction	250,000		250,000			
TOTAL	330,000	80,000	250,000			
FINANCING:						
Electric Utility Fund	259,400	62,900	196,500			
Iowa State University	70,600	17,100	53,500			
TOTAL	330,000	80,000	250,000			

PROGRAM - ACTIVITY:
Utilities – Electric Extension/Improvements

DEPARTMENT:
Electric

ACCOUNT NO.
530-4828-489

**DEMAND SIDE MANAGEMENT (DSM)
ENERGY CONSERVATION PROGRAMS**

PROJECT STATUS: Cost Change

City of Ames, Iowa
Capital Improvements Plan

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 weatherization
- Residential high efficiency lighting rebates
- Residential efficient appliance rebates
- Residential new construction rebates
- Commercial high efficiency lighting rebates
- Commercial audits
- Power Watch education
- Green Choices alternative energy contribution

New Demand Side Management programs under consideration are:

- Commercial custom 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
- Commercial/industrial power factor correction rebates

New Load Management programs under consideration are:

- Upgrade of digital control unit (DCU) signal control and transmission equipment
- Upgrade of digital control unit (DCU) circuit boards
- Time-of-day rate design

LOCATION

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

FISCAL YEAR PRIORITY	TOTAL	2009/10	2010/11	2011/12	2012/13	2013/14
COST:						
Program Development and Administration	4,800,000	800,000	800,000	1,000,000	1,000,000	1,200,000
TOTAL	4,800,000	800,000	800,000	1,000,000	1,000,000	1,200,000
FINANCING:						
Electric Utility Fund	4,800,000	800,000	800,000	1,000,000	1,000,000	1,200,000
TOTAL	4,800,000	800,000	800,000	1,000,000	1,000,000	1,200,000

PROGRAM – ACTIVITY:
Utilities – Electric Administration

DEPARTMENT:
Electric

ACCOUNT NO.
530-4815-489

AUTOMATED METERING PILOT PROGRAM

PROJECT STATUS: New

City of Ames, Iowa
Capital Improvements Plan

DESCRIPTION/JUSTIFICATION

The development and installation of advance metering infrastructure could be critical in the areas of time-of-use metering, monitoring, billing and customer service. A more state-of-the-art system will allow the following:

1. Better long-term distribution facility planning at the feeder and transformer level
2. More accurate and quicker power outage management
3. Remote meter disconnects and reconnects
4. Instantaneous mid-month meter readings
5. Creation of time-of-use rates; a key feature needed in the next level of Demand Side Management programs
6. Connectivity with Prime Time Power
7. Two way communication between the utility and the meter

COMMENTS

A study and pilot program will be conducted to determine the costs and benefits of an automated metering system. If it is determined to be beneficial, the utility will begin a multi-year effort to change out meters throughout the system.

FISCAL YEAR PRIORITY		10				
	TOTAL	2009/10	2010/11	2011/12	2012/13	2013/14
COST:						
Equipment and Installation	350,000	350,000				
TOTAL	350,000	350,000				
FINANCING:						
Electric Utility Fund	350,000	350,000				
TOTAL	350,000	350,000				

PROGRAM - ACTIVITY:
Utilities – Electric Production

DEPARTMENT:
Electric

ACCOUNT NO.
530-4829-489

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

PROJECT STATUS: Delayed

City of Ames, Iowa
Capital Improvements Plan

DESCRIPTION/JUSTIFICATION

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

COMMENTS

Staff believes that it is necessary to upgrade the current systems, especially the communication portion which will include software and some hardware. The current system is a Westinghouse ovation system and the estimates used are preliminary. The proposal is to complete Unit #8 first followed by Unit #7.

FY 2008/09	Engineering	\$ 50,000
FY 2009/10	Equipment and Installation	450,000
	Total	\$ 500,000

LOCATION

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

FISCAL YEAR PRIORITY		11				
	TOTAL	2009/10	2010/11	2011/12	2012/13	2013/14
COST:						
Equipment and Installation	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.
530-4820-489

FEEDWATER HEATER TUBE REPLACEMENT

PROJECT STATUS: Cost Change

City of Ames, Iowa
Capital Improvements Plan

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. These two units were installed on Units #7 and #8 in 1982 and have copper tubes. The need for replacement of these units is due to the copper found in deposit weight density (DWD) testing of boiler tubes. Testing programs will be employed to analyze the copper loss and subsequent thinning of feedwater heater tubes.

COMMENTS

Due to copper loss on the units, staff recommends re-tubing. The re-tube estimate is \$500,000 for each unit.

FY 2009/2010	\$ 500,000
FY 2011/2012	<u>500,000</u>
	\$1,000,000

LOCATION

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

FISCAL YEAR PRIORITY	TOTAL	2009/10	2010/11	2011/12	2012/13	2013/14
COST:						
Equipment and Labor	1,000,000	500,000		500,000		
TOTAL	1,000,000	500,000		500,000		
FINANCING:						
Electric Utility Fund	1,000,000	500,000		500,000		
TOTAL	1,000,000	500,000		500,000		

PROGRAM - ACTIVITY:
Utilities – Electric Production

DEPARTMENT:
Electric

ACCOUNT NO.
530-4831-489

TOP-O-HOLLOW SUBSTATION EXPANSION & BREAKER ADDITION PROJECT STATUS: Delayed

Cost Change

City of Ames, Iowa
Capital Improvements Plan

DESCRIPTION/JUSTIFICATION

This project has been changed to purchase adjacent property, expand the existing substation, convert the existing underground tap to a looped overhead transmission connect. The work will also add breakers for line and transformer protection and related equipment to the Top-O-Hollow substation. The addition of these breakers at the Top-O-Hollow substation will improve reliability of the 69 kV transmission system and will improve service for customers served by this substation.

Use of breakers for transmission line and transformer protection is consistent with good engineering practices in the electric utility industry. Expanding the existing substation requires land purchase, substation design, and construction.

COMMENTS

FY 2008/09	Land/Engineering	\$	175,000
FY 2009/10	Construction		800,000
	Total	\$	<u>975,000</u>

LOCATION

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

FISCAL YEAR PRIORITY		TOTAL	13 2009/10	2010/11	2011/12	2012/13	2013/14
COST:							
Construction		800,000	800,000				
	TOTAL	800,000	800,000				
FINANCING:							
Electric Utility Fund		628,800	628,800				
Iowa State University		171,200	171,200				
	TOTAL	800,000	800,000				

PROGRAM – ACTIVITY:
Utilities – Electric Extension/Improvements

DEPARTMENT:
Electric

ACCOUNT NO.
530-4882-489

UNIT #8 AIR HEATER ELEMENT REPLACEMENT

PROJECT STATUS: New

City of Ames, Iowa
Capital Improvements Plan

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 them into the cold forced draft fan side. As the cold air passes through the heated metal elements, the air is heated to 600 degrees Fahrenheit and 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 elements have become loose and are falling out, allowing air to pass through without heating it properly.

COMMENTS

This is the second set of baskets that has been installed. The first and second sets each lasted about twelve years.

LOCATION

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

FISCAL YEAR PRIORITY		TOTAL	14	17	2011/12	2012/13	2013/14
COST:			2009/10	2010/11			
Material and Parts		75,000	75,000				
Installation		100,000		100,000			
	TOTAL	175,000	75,000	100,000			
FINANCING:							
Electric Utility Fund		175,000	75,000	100,000			
	TOTAL	175,000	75,000	100,000			

PROGRAM - ACTIVITY:
Utility – Electric Production

DEPARTMENT:
Electric

ACCOUNT NO.
530-4832-489

DESCRIPTION/JUSTIFICATION

This will add a second distribution transformer and metal clad switchgear next to the existing substation. Related work includes the conversion of existing 69 kV bus structures and the addition of 69 kV breakers and related equipment for transformer protection.

This budget item also includes the necessary feeder extensions and provides additional system reliability and service to growing commercial areas near Dayton and 13th Avenue and South Duff Avenue—growing areas that require additional substation capacity. A portion of the engineering work for this project has been advanced to recognize that this project will be coordinated with another related project that shares common relay and control design, the 69 kV Switchyard Relay/Control Replacement Project, page 64. The need for the construction portion of the project will be determined later based on energy and load demand.

LOCATION

Adjacent to the existing Ames Plant distribution substation within the utility campus - Map 5, location N-11

FISCAL YEAR PRIORITY		TOTAL	15	2010/11	9	8	2013/14
			2009/10		2011/12	2012/13	
COST:							
Engineering		150,000	150,000				
Construction		2,000,000			500,000	1,500,000	
	TOTAL	2,150,000	150,000		500,000	1,500,000	
FINANCING:							
Electric Utility Fund		2,150,000	150,000		500,000	1,500,000	
	TOTAL	2,150,000	150,000		500,000	1,500,000	

PROGRAM - ACTIVITY:
Utilities – Electric Extension/Improvements

DEPARTMENT:
Electric

ACCOUNT NO.
530-4833-489

POWER PLANT FIRE PROTECTION SYSTEM

PROJECT STATUS: Cost Change

City of Ames, Iowa
Capital Improvements Plan

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, turbine-generators, coal pulverizers, and cooling towers. The cost and schedule for installation of the recommendations is as follows:

FY 2004/05	Upgrading City Water Service (in plant)	\$ 475,000
FY 2006/07	Coal Handling Sprinkler System (delayed)	
FY 2007/08	Coal Handling Sprinkler System Phase 1	650,000
FY 2009/10	Coal Handling Sprinkler System Phase 2	300,000
FY 2010/11	Coal Handling Sprinkler System Phase 3	300,000
FY 2011/12	Cooling Tower Sprinkler System	350,000
FY 2013/14	Turbine Generator Sprinkler System	320,000
		\$ 2,395,000

COMMENTS

A serious fire in any one of the systems can force the outage of either Unit #7 or #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	TOTAL	16	13	13	2012/13	7
		2009/10	2010/11	2011/12		2013/14
COST:						
Construction	1,270,000	300,000	300,000	350,000		320,000
TOTAL	1,270,000	300,000	300,000	350,000		320,000
FINANCING:						
Electric Utility Fund	1,270,000	300,000	300,000	350,000		320,000
TOTAL	1,270,000	300,000	300,000	350,000		320,000

PROGRAM - ACTIVITY:
Utilities – Electric Production

DEPARTMENT:
Electric

ACCOUNT NO.
530-4876-489

**CYBER SECURITY RISK ASSESSMENT & MRO
AUDIT PREPAREDNESS STUDY**

PROJECT STATUS: No Change

City of Ames, Iowa
Capital Improvements Plan

DESCRIPTION/JUSTIFICATION

This project is for outside engineering services to perform a cyber security risk assessment, perform a NERC (North-American Electric Reliability Corporation) compliance gap analysis, and an MRO (Midwest Reliability Organization) audit-preparedness assessment.

These studies are to help the City of Ames Electric Department prepare for an on-site audit by the MRO, currently scheduled for 2010. Outside services will be employed to help identify our readiness for compliance with applicable NERC standards that are approved by FERC (Federal Energy Regulatory Commission) and enforced by the MRO.

It is anticipated that outside help will also be needed to augment staff resources in the performance of certain administrative functions and in the development of new guidelines, procedures and mitigation measures needed to demonstrate compliance with the many new NERC regulations that were approved by FERC in 2007.

COMMENTS

The additional workload that will be placed on staff is not yet known, but it is anticipated that this effort will require assistance from City departments/divisions outside of Electric Administration, including Information Services, Finance Administration/Accounting, and Human Resources. New policies and procedures will need to be created along with new guidelines on how computer and information systems are interfaced and accessed (including aspects of network, Internet, communication, and computer systems) as well as human interfaces and aspects of security management that have an impact on Power Plant and substation/transmission operation and control.

FISCAL YEAR PRIORITY							17
	TOTAL	2009/10	2010/11	2011/12	2012/13	2013/14	
COST:							
Engineering	100,000	100,000					
TOTAL	100,000	100,000					
FINANCING:							
Electric Utility Fund	89,300	89,300					
Iowa State University	10,700	10,700					
TOTAL	100,000	100,000					

PROGRAM - ACTIVITY:
Utilities – Electric Administration

DEPARTMENT:
Electric

ACCOUNT NO.
530-4822-489

STREET LIGHT AND LINE RELOCATIONS

PROJECT STATUS: Cost Increase

Site Change

City of Ames, Iowa
Capital Improvements Plan

DESCRIPTION/JUSTIFICATION

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

LOCATION

- 2009/10: Street light relocations – Kellogg Avenue (Lincoln Way to Main Street) (\$35,000) – Map 5, location M-11
 CyRide route improvements 13.8 kV line relocations (\$50,000) – various locations
 16th Street (Burnett Avenue to Duff Avenue) 13.8 kV line relocation (\$200,000) – Map 5, location M-9
 Collector street improvements - 13.8kV line relocations, Garfield – (Phoenix to Ross) (\$50,000) – Map 4, location F-10
 Concrete pavement improvements - 13.8kV line relocations, S. Hyland – (Lincoln Way to Arbor) (\$50,000) – Map 4, location G-11
 Bloomington Road (east of tracks) (\$35,000) – Map 2, location J-5
 South Duff Avenue (S. 16th to Squaw Creek Bridge) (\$50,000) – Map 5, location M-13
- 2010/11: Street light relocations – Kellogg Avenue (Main Street to 7th Street) (\$35,000) – Map 5, location M-11; Duff Avenue (Lincoln Way to 10th Street) (\$40,000) – Map 5, location M-11
 CyRide route improvements 13.8 kV line relocations (\$25,000) – various locations
 Street light installations-South Dakota (Lincoln Way to Mortensen) (\$150,000) – Map 4, location E-11
- 2011/12: Street light relocations - Main Street (Allan to Clark) (\$35,000) – Map 5, location L-11; Lincoln Way (Squaw Creek to Oak Avenue) (\$75,000) – Map 5, location L-11; Storm Street (Ash Avenue to Hayward Avenue) (\$40,000) – Map 5, location I-12
 CyRide route improvements 13.8 kV line relocations (\$50,000) – various locations
 Woodland Street (West Street to Hickory Drive) 13.8 kV line relocation (\$195,000) – Map 4, location G-11
- 2012/13: CyRide route improvements 13.8 kV line relocations (\$50,000) – various locations
 Ash Avenue (Country Club Boulevard to Knapp) (\$75,000) – Map 5, location I-12
- 2013/14: Undetermined street light additions (\$75,000) – various locations

FISCAL YEAR PRIORITY	TOTAL	18	14	10	7	6
COST:		2009/10	2010/11	2011/12	2012/13	2013/14
Construction	1,315,000	470,000	250,000	395,000	125,000	75,000
TOTAL	1,315,000	470,000	250,000	395,000	125,000	75,000
FINANCING:						
Electric Utility Fund	1,315,000	470,000	250,000	395,000	125,000	75,000
TOTAL	1,315,000	470,000	250,000	395,000	125,000	75,000

PROGRAM - ACTIVITY:
Utilities – Electric Extension/Improvements

DEPARTMENT:
Electric

ACCOUNT NO.
530-4823-489

DESCRIPTION/JUSTIFICATION

Future Environmental Protection Agency (EPA) rules will likely require lower NO_x (nitrogen oxide) emissions on boiler #8. Nitrogen oxides form when fuel is burned at high temperatures as in an internal combustion engine or a coal fired power plant. Reducing emissions of NO_x is a component of the EPA's strategy for cleaner air. Plans by the EPA to reduce NO_x emissions by 2009 are being finalized. The NO_x from Ames' Unit #8 can be lowered by reducing the combustion temperature by means of modified burners and added fans, which are part of this project. Detailed equipment cost and specific design engineering work must be completed before the plan is begun for Unit #8 including equipment purchases to follow. The \$3,400,000 estimate is a preliminary estimate for the work on Unit #8 boiler.

COMMENTS

In FY 2008/09, \$190,000 will be spent for engineering services for this project.

LOCATION

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

FISCAL YEAR PRIORITY		TOTAL	2009/10	2010/11	2011/12	2012/13	2013/2014
COST:							
Materials and Installation		3,400,000		3,400,000			
	TOTAL	3,400,000		3,400,000			
FINANCING:							
Electric Utility Fund		3,400,000		3,400,000			
	TOTAL	3,400,000		3,400,000			

PROGRAM - ACTIVITY:
Utilities – Electric Production

DEPARTMENT:
Electric

ACCOUNT NO.

UNIT #8 MERCURY CAPITAL

PROJECT STATUS: Delayed

Cost Change

City of Ames, Iowa
Capital Improvements Plan

DESCRIPTION/JUSTIFICATION

Future Environmental Protection Agency (EPA) rules most likely will require mercury reduction. If mercury reduction equipment is not in place, allowances will need to be purchased. Allowances are likely to be quite expensive and availability may be an issue. Mercury control appears to be the most cost-effective option.

COMMENTS

Unit #8 will require a mercury control.

LOCATION

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

FISCAL YEAR PRIORITY		TOTAL	2009/10	2010/11	2011/12	2012/13	2013/14
COST:							
Engineering		200,000		200,000			
Equipment and Installation		4,000,000			4,000,000		
	TOTAL	4,200,000		200,000	4,000,000		
FINANCING:							
Electric Revenue Bonds		4,000,000			4,000,000		
Electric Utility Fund		200,000		200,000			
	TOTAL	4,200,000		200,000	4,000,000		

PROGRAM - ACTIVITY:
Utilities – Electric Production

DEPARTMENT:
Electric

ACCOUNT NO.

UNIT #7 BOILER TUBE REPAIR

PROJECT STATUS: Advanced

Cost Change

City of Ames, Iowa
Capital Improvements Plan

DESCRIPTION/JUSTIFICATION

The #7 boiler is forty years old and in need of tube repairs. Staff has put together a six-year plan to maintain the operation through maintenance, engineering, and re-tubing of the boiler. The cost estimates include labor and materials. The bottom throat of the boiler needs to be enlarged to allow for an increased rate area for refuse derived fuel (RDF) burning. The project will proceed with work on walls and/or sections of the boiler at a time.

COMMENTS

FY 2010/11	Engineering	\$ 150,000
FY 2011/12	Material and labor for installation - grate	1,850,000
FY 2012/13	Material and labor for installation	1,000,000
FY 2013/14	Material and labor for installation	1,000,000
	Total	\$ 4,000,000

LOCATION

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

FISCAL YEAR PRIORITY		TOTAL	2009/10	2010/11	2011/12	2012/13	2013/14
COST:				6	6	1	1
Materials & Labor	3,850,000				1,850,000	1,000,000	1,000,000
Engineering	150,000			150,000			
TOTAL	4,000,000			150,000	1,850,000	1,000,000	1,000,000
FINANCING:							
Electric Utility Fund	4,000,000			150,000	1,850,000	1,000,000	1,000,000
TOTAL	4,000,000			150,000	1,850,000	1,000,000	1,000,000

PROGRAM - ACTIVITY:
Utilities – Electric Production

DEPARTMENT:
Electric

ACCOUNT NO.

INLET HEATING FOR CT2

PROJECT STATUS: New

City of Ames, Iowa
Capital Improvements Plan

DESCRIPTION/JUSTIFICATION

Gas turbine CT2 is only able to be run for about five months out of the year because we have no pre-heater for cold weather operation. This causes issues with having our reserve and generating capacity available if there is an outage with unit #8 during the winter months. This project will involve the installation of a pre-heater which will heat air going into the unit to prevent it from icing up.

COMMENTS

Cost estimates a year ago ranged from \$400,000 to \$700,000.

LOCATION

Pullman Street – Map 6, location P-10

FISCAL YEAR PRIORITY		TOTAL	2009/10	2010/11	2011/12	2012/13	2013/14
COST:				11			
Equipment		550,000		550,000			
	TOTAL	550,000		550,000			
FINANCING:							
Electric Utility Fund		550,000		550,000			
	TOTAL	550,000		550,000			

PROGRAM - ACTIVITY:
Utilities – Electric Production

DEPARTMENT:
Electric

ACCOUNT NO.
530-4830-489

UNIT #7 MERCURY CAPITAL

PROJECT STATUS: Cost Change

Delayed

City of Ames, Iowa
Capital Improvements Plan

DESCRIPTION/JUSTIFICATION

Future Environmental Protection Agency (EPA) rules are anticipated to require mercury reduction from Unit #7. If mercury reduction equipment is not in place, allowances will need to be purchased. The actual project will be designed as rules are known. Monitoring is currently underway. Monitoring and measurement will determine the extent to which reduction will need to be undertaken.

COMMENTS

Unit #7 may require a mercury control.

LOCATION

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

FISCAL YEAR PRIORITY			12	2	2	
	TOTAL	2009/10	2010/11	2011/12	2012/13	2013/14
COST:						
Equipment and Installation	3,600,000		100,000	2,000,000	1,500,000	
TOTAL	3,600,000		100,000	2,000,000	1,500,000	
FINANCING:						
Electric Revenue Bonds	2,000,000			2,000,000		
Electric Utility Fund	1,600,000		100,000		1,500,000	
TOTAL	3,600,000		100,000	2,000,000	1,500,000	

PROGRAM - ACTIVITY:
Utilities – Electric Production

DEPARTMENT:
Electric

ACCOUNT NO.

RDF BIN WORK

PROJECT STATUS: No Change

City of Ames, Iowa
Capital Improvements Plan

DESCRIPTION/JUSTIFICATION

This project is to repair/replace a number of major components on the refuse derived fuel (RDF) bin: traverse augers, metering bins, out feed conveyors, structure steel and receiving bin walls. 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. The problem is that 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. Past experience with the old RDF bin indicates that after fifteen years (in 2010) we would expect to see the need for repair or replacement of steel on the bin. We have already had to address the areas of heavy corrosion on the firewall, the out feed conveyors and the traverse auger rails. Some major work needed now is the replacement of the receiving bin walls and the roof steel. Both of these are currently being patched.

COMMENTS

Staff expects the frequency of these repairs to increase through the current year and more major repairs will be needed in 2009/10. The price estimate is a 2006 estimate from the original equipment manufacturer. Since it is difficult to coordinate outages where there isn't conflict with the RDF plant, staff plans on having materials on hand and scheduling repairs as opportunity presents itself.

LOCATION

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

FISCAL YEAR PRIORITY		TOTAL	2009/10	2010/11	2011/12	2012/13	2013/14
COST:				15			
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.

VET MED SUBSTATION EXPANSION

PROJECT STATUS: New

City of Ames, Iowa
Capital Improvements Plan

DESCRIPTION/JUSTIFICATION

This budget item is for the expansion of the Vet Med Substation to add a 15 MVA (base-rating) distribution load tap-changing transformer and associated 13.8kV switchgear, feeders, 69kV bus expansion, transformer breaker protection, and controls.

ISU is anticipating the expansion of the Veterinary Medicine Campus causing it to outgrow its existing substation capacity. Currently, the Vet Med Substation is a jointly owned 69kV/13.8 kV substation with two transformers, one that serves City of Ames' load and one that serves ISU Veterinary Medicine's load. This budget item assumes that the City of Ames will provide distribution service to the entire Vet Med campus (existing and future expansion). It is anticipated that ISU will share in the cost of this project as it does in other major transmission/distribution projects providing for its needs. This CIP includes the additional feeders necessary to serve the added Vet Med load growth and will extend additional feeders to benefit City of Ames electric customers by serving additional load growth south of Highway 30 and improving system reliability to areas surrounding the Vet Med Substation.

COMMENTS

It has not yet been determined whether ISU will take transmission service and expand this substation, continuing to be the distribution provider for the Vet Med Campus, or whether the City of Ames will serve this load at the distribution level.

LOCATION

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

FISCAL YEAR PRIORITY			16	11	4	
	TOTAL	2009/10	2010/11	2011/12	2012/13	2013/14
COST:						
Engineering	300,000		300,000			
Construction	2,500,000			2,000,000	500,000	
	TOTAL	2,800,000	300,000	2,000,000	500,000	
FINANCING:						
Electric Utility Fund	1,825,000		150,000	1,425,000	250,000	
Iowa State University	975,000		150,000	575,000	250,000	
	TOTAL	2,800,000	300,000	2,000,000	500,000	

PROGRAM - ACTIVITY:
Utilities – Electric Extension/Improvements

DEPARTMENT:
Electric

ACCOUNT NO.

UNIT #8 TURBINE GENERATOR 5-YEAR OVERHAUL

PROJECT STATUS: Cost Change

City of Ames, Iowa
Capital Improvements Plan

DESCRIPTION/JUSTIFICATION

Unit #8 turbine generator will be disassembled and necessary repairs made after 20,000 hours of operation. An inspection was done in 2005 and will be due again in 2011/2012. This work will be similar in nature to what was recently done on Unit #7.

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.

LOCATION

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

FISCAL YEAR PRIORITY		TOTAL	2009/10	2010/11	2011/12 ⁷	2012/13	2013/14
COST:							
Construction		1,000,000			1,000,000		
	TOTAL	1,000,000			1,000,000		
FINANCING:							
Electric Utility Fund		1,000,000			1,000,000		
	TOTAL	1,000,000			1,000,000		

PROGRAM - ACTIVITY:
Utilities – Electric Production

DEPARTMENT:
Electric

ACCOUNT NO.

COOLING TOWER REPAIRS

PROJECT STATUS: New

City of Ames, Iowa
Capital Improvements Plan

DESCRIPTION/JUSTIFICATION

Units #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. Unit #7 tower had a major rework in the late 1980s. Most of the structure, fill, louvers and drift eliminators were replaced. Unit #8 tower has had minor repairs on several occasions during the last ten years to extend the life of the tower which included limited structure repairs, fill and drift eliminator replacements.

COMMENTS

Unit #8 louvers are currently in bad condition and need replacement. They are made of pressed asbestos which adds greatly to 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 operate without them. Normally these repairs are made during scheduled five year turbine generator overhauls, but it is now apparent that the #8 tower needs some repairs before that. The louvers and some structure repairs on #8 will be done during the planned outage in 2011/2012. The #7 tower needs major structural repair in the areas of the fan mounting and also replacement of the fan drive shafts. The fan hubs, blades and shrouds are forty-two years old and need replacement. The fan deck, hot water basin and its support also need replacement.

LOCATION

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

FISCAL YEAR PRIORITY			8	9		
	TOTAL	2009/10	2010/11	2011/12	2012/13	2013/14
COST:						
Material and Labor - #8 Tower	750,000			750,000		
Material and Labor - #7 Tower	300,000				300,000	
	TOTAL	1,050,000		750,000	300,000	
FINANCING:						
Electric Utility Fund	1,050,000			750,000	300,000	
	TOTAL	1,050,000		750,000	300,000	

PROGRAM - ACTIVITY:
Utilities – Electric Production

DEPARTMENT:
Electric

ACCOUNT NO.

UNIT #7 CLOSED COOLING WATER SYSTEM AND PIPING PROJECT STATUS: New

City of Ames, Iowa
Capital Improvements Plan

DESCRIPTION/JUSTIFICATION

This project will involve a change from an open cooling water system to a closed cooling system and repair of all associated piping. The old system is in bad shape and a new closed system will allow much better control and equipment cooling. In a closed system, there will be water circulating through a heat recovery system (as in Unit #8) rather than in the atmosphere. Chemical control will be improved and there will be reduced water loss.

LOCATION

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

FISCAL YEAR PRIORITY		TOTAL	2009/10	2010/11	2011/12	2012/13	2013/14
COST:							
Equipment and Installation		500,000			500,000		
	TOTAL	500,000			500,000		
FINANCING:							
Electric Utility Fund		500,000			500,000		
	TOTAL	500,000			500,000		

PROGRAM - ACTIVITY:
Utilities – Electric Production

DEPARTMENT:
Electric

ACCOUNT NO.

DIESEL BUILDING DEMOLITION

PROJECT STATUS: New

City of Ames, Iowa
Capital Improvements Plan

DESCRIPTION/JUSTIFICATION

This project will demolish the old diesel building and clear the site near the Power Plant. The building is no longer in use and will not be used in the future, so should be demolished to reduce further liability.

LOCATION

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

FISCAL YEAR PRIORITY		TOTAL	2009/10	2010/11	2011/12	2012/13	2013/14
COST:					14		
Demolition		200,000			200,000		
	TOTAL	200,000			200,000		
FINANCING:							
Electric Utility Fund		200,000			200,000		
	TOTAL	200,000			200,000		

PROGRAM - ACTIVITY:
Utilities – Electric Production

DEPARTMENT:
Electric

ACCOUNT NO.

UNIT #7 TURBINE GENERATOR OVERHAUL

PROJECT STATUS: New

City of Ames, Iowa
Capital Improvements Plan

DESCRIPTION/JUSTIFICATION

The #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 2012/2013.

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.

LOCATION

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

FISCAL YEAR PRIORITY		TOTAL	2009/10	2010/11	2011/12	2012/13	2013/14
COST:						5	
Construction		750,000				750,000	
	TOTAL	750,000				750,000	
FINANCING:							
Electric Utility Fund		750,000				750,000	
	TOTAL	750,000				750,000	

PROGRAM - ACTIVITY:
Utilities – Electric Production

DEPARTMENT:
Electric

ACCOUNT NO.

ONTARIO SUBSTATION 69 KV BREAKER ADDITION

PROJECT STATUS: New

City of Ames, Iowa
Capital Improvements Plan

DESCRIPTION/JUSTIFICATION

Add 69 kV breakers and related equipment to Ontario Substation.

The addition of 69 kV breakers at Ontario Substation will improve reliability of 69 kV transmission service to the substation. This will improve service for customers served out of this substation.

Use of breakers for 69 kV transmission service to distribution substations is consistent with good engineering practice in the electric utility industry.

LOCATION

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

FISCAL YEAR PRIORITY		TOTAL	2009/10	2010/11	2011/12	2012/13	2013/14
COST:							
Engineering		75,000				75,000	
Construction		275,000					275,000
	TOTAL	350,000				75,000	275,000
FINANCING:							
Electric Utility Fund		275,000				58,900	216,100
Iowa State University		75,000				16,100	58,900
	TOTAL	350,000				75,000	275,000

PROGRAM – ACTIVITY:
Utilities – Electric Extension Improvements

DEPARTMENT:
Electric

ACCOUNT NO.

REMOVE #5 AND #6 TURBINE GENERATORS

PROJECT STATUS: New

City of Ames, Iowa
Capital Improvements Plan

DESCRIPTION/JUSTIFICATION

This project will remove #5 and #6 turbine generators to make room for expansion of plant offices and a conference room. These units have been retired for over 20 years, and have been determined to be of no further use to the utility.

COMMENTS

All plant offices are in need of improvements.

LOCATION

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

FISCAL YEAR PRIORITY		TOTAL	2009/10	2010/11	2011/12	2012/13	2013/14
COST:						10	
Equipment Removal		500,000				500,000	
	TOTAL	500,000				500,000	
FINANCING:							
Electric Utility Fund		500,000				500,000	
	TOTAL	500,000				500,000	

PROGRAM - ACTIVITY:
Utilities – Electric Production

DEPARTMENT:
Electric

ACCOUNT NO.

**CAPACITY GENERATION FOR FUTURE YEARS
CT OR DISTRIBUTIVE**

PROJECT STATUS: New

City of Ames, Iowa
Capital Improvements Plan

DESCRIPTION/JUSTIFICATION

Capacity will be needed to maintain an adequate reserve in future years. Burns and MacDonnell indicated a need for generation by the year 2015 but we may be ahead of the projected load peaks and need to move this to 2014. If we would install a combustion turbine, it would be approximately a 30 MW unit. If we use distributive generation, we could install multiple natural gas units.

COMMENTS

Projected estimates would range from \$1,500 per KW to \$2,500 per KW.

LOCATION

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

FISCAL YEAR PRIORITY		TOTAL	2009/10	2010/11	2011/12	2012/13	2013/14
COST:							2
Equipment		50,000,000					50,000,000
	TOTAL	50,000,000					50,000,000
FINANCING:							
Electric Revenue Bonds		50,000,000					50,000,000
	TOTAL	50,000,000					50,000,000

PROGRAM - ACTIVITY:
Utilities – Electric Production

DEPARTMENT:
Electric

ACCOUNT NO.

UNIT #8 TURBINE CONTROLS UPGRADE

PROJECT STATUS: New

City of Ames, Iowa
Capital Improvements Plan

DESCRIPTION/JUSTIFICATION

This project will involve a conversion from electric-mechanical controls to electronic controls for the supervisory controls on #8 turbine generator.

COMMENTS

This conversion will enable much tighter control of the unit in the operation needed to keep on schedule. The electric mechanical system is worn and in need of much repair. A new system will not cost much more than completing an upgrade.

LOCATION

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

FISCAL YEAR PRIORITY		TOTAL	2009/10	2010/11	2011/12	2012/13	2013/14
COST:							5
Construction		300,000					300,000
	TOTAL	300,000					300,000
FINANCING:							
Electric Utility Fund		300,000					300,000
	TOTAL	300,000					300,000
PROGRAM - ACTIVITY:		DEPARTMENT:		ACCOUNT NO.			
Utilities – Electric Production		Electric					



CyRide Saves

- **4.3 million rides last year saved an estimated half-million gallons of gas**
- **Two solar-powered bus shelters**
- **Recycled plastic bus benches**

CyRide's new 10,000 sq. ft. office building was designed to qualify for a silver Leadership in Energy and Environmental Design (LEED) certification, making it one of a handful of buildings in the state that meets these stringent new "green" building standards.

Just a few of the features that make it a green facility include:

- **a white, reflective roof**
- **a rainwater storage tank used to irrigate the landscaping**
- **large north-facing windows that allow for lower light energy usage**

TRANSPORTATION - SUMMARY

PROJECT/REVENUE DESCRIPTION	TOTAL	2009/10	2010/11	2011/12	2012/13	2013/14	PAGE
EXPENDITURES:							
Streets/Engineering	44,375,000	6,950,000	7,000,000	16,400,000	5,825,000	8,200,000	93
Streets/Maintenance	1,455,000	230,000	580,000	215,000	215,000	215,000	104
Transit	12,725,995	429,000	3,676,995	2,525,000	3,540,000	2,555,000	111
Airport	4,085,000	1,125,000	1,345,000	900,000	715,000		118
Total Expenditures	62,640,995	8,734,000	12,601,995	20,040,000	10,295,000	10,970,000	
REVENUES:							
Bonds:							
G.O. Bonds	26,375,000	4,893,000	5,352,000	6,075,000	4,012,000	6,043,000	
City:							
Road Use Tax	5,815,000	1,055,000	1,340,000	1,140,000	1,140,000	1,140,000	
Local Option Sales Tax	1,000,000	200,000	200,000	200,000	200,000	200,000	
Transit Fund	2,147,059	85,800	689,859	421,250	473,800	476,350	
Airport Construction Fund	204,250	56,250	67,250	45,000	35,750		
Sub-Total City Funds	9,166,309	1,397,050	2,297,109	1,806,250	1,849,550	1,816,350	

TRANSPORTATION – SUMMARY, continued

PROJECT/REVENUE DESCRIPTION	TOTAL	2009/10	2010/11	2011/12	2012/13	2013/14
REVENUES, continued:						
Other:						
MPO/STP Funds	4,472,000	1,032,000	688,000	1,032,000	688,000	1,032,000
Federal Earmark Funds	8,168,000			8,168,000		
Federal Transit Administration	10,028,936	303,200	2,947,136	2,013,750	2,726,200	2,038,650
Federal Grants	200,000	40,000	40,000	40,000	40,000	40,000
Private Contributions	50,000			50,000		
Iowa State University	300,000				300,000	
FAA Grant Funds	3,880,750	1,068,750	1,277,750	855,000	679,250	
Sub-Total Other Funds	27,099,686	2,443,950	4,952,886	12,158,750	4,433,450	3,110,650
Total Revenues	62,640,995	8,734,000	12,601,995	20,040,000	10,295,000	10,970,000

TRANSPORTATION - STREET ENGINEERING

PROJECT/REVENUE DESCRIPTION	TOTAL	2009/10	2010/11	2011/12	2012/13	2013/14	PAGE
EXPENDITURES:							
1 Arterial Street Pavement Improvements	5,350,000	1,500,000	750,000	750,000	850,000	1,500,000	95
2 Collector Street Pavement Improvements	5,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	96
3 CyRide Route Pavement Improvements	3,750,000	800,000	850,000	700,000	700,000	700,000	97
4 Concrete Pavement Improvements	5,425,000	1,625,000	1,000,000	1,000,000	800,000	1,000,000	98
5 Asphalt Pavement Improvement Program	2,650,000	500,000	800,000	450,000	400,000	500,000	99
6 Downtown Street Pavement Improvements	3,250,000	500,000	500,000	750,000	750,000	750,000	100
7 Asphalt Resurfacing/Seal Coat Removal	4,400,000	1,025,000	750,000	750,000	1,125,000	750,000	101
8 Grand Avenue Extension	12,350,000		1,350,000	11,000,000			102
9 South Dakota Widening (L'Way to Mortensen)	2,200,000				200,000	2,000,000	103
Total Expenditures	44,375,000	6,950,000	7,000,000	16,400,000	5,825,000	8,200,000	

TRANSPORTATION - STREET ENGINEERING, continued

PROJECT/REVENUE DESCRIPTION	TOTAL	2009/10	2010/11	2011/12	2012/13	2013/14
REVENUES:						
Bonds:						
G.O. Bonds	26,210,000	4,893,000	5,187,000	6,075,000	4,012,000	6,043,000
City:						
Road Use Tax	5,025,000	925,000	1,025,000	1,025,000	1,025,000	1,025,000
Local Option Sales Tax	500,000	100,000	100,000	100,000	100,000	100,000
Sub-Total City Funds	5,525,000	1,025,000	1,125,000	1,125,000	1,125,000	1,125,000
Other:						
MPO/STP Funds	4,472,000	1,032,000	688,000	1,032,000	688,000	1,032,000
Federal Earmark Funds	8,168,000			8,168,000		
Sub-Total Other Funds	12,640,000	1,032,000	688,000	9,200,000	688,000	1,032,000
Total Revenues	44,375,000	6,950,000	7,000,000	16,400,000	5,825,000	8,200,000

ARTERIAL STREET PAVEMENT IMPROVEMENTS

PROJECT STATUS: Cost Change

Site Change

City of Ames, Iowa
Capital Improvements Plan

DESCRIPTION/JUSTIFICATION

This annual program utilizes current repair 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 by 10 to 15 years.

COMMENTS

- 2009/10 13th Street (Stange Road to the UPRR overpass) - Map 5, location I-9
- 2010/11 Duff Avenue (Lincoln Way to 10th Street) - Map 5, location M-11; and 6th Street (Grand Avenue to Northwestern Avenue), Map 5, location L-10
- 2011/12 Lincoln Way (Squaw Creek to Oak Avenue) - Map 5, location K-11
- 2012/13 State Avenue (Oakwood Road to US Highway 30 overpass) – Map 8, location G-15
- 2013/14 Lincoln Way (South Duff Avenue to Skunk River) – Map 5, location M-11

Site change is due to re-prioritization of locations and addition of the State Avenue (Oakwood Road to US Highway 30 overpass) location in 2012/13.

Cost change is due to updated cost estimates.

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

FISCAL YEAR PRIORITY			1	2	2	1	1
	TOTAL		2009/10	2010/11	2011/12	2012/13	2013/14
COST:							
Planning	120,000		30,000	30,000	15,000	15,000	30,000
Engineering	530,000		170,000	80,000	55,000	55,000	170,000
Construction	4,700,000		1,300,000	640,000	680,000	780,000	1,300,000
	TOTAL	5,350,000	1,500,000	750,000	750,000	850,000	1,500,000
FINANCING:							
G. O. Bonds	2,598,000		468,000	750,000	750,000	162,000	468,000
MPO/STP Funds	2,752,000		1,032,000			688,000	1,032,000
	TOTAL	5,350,000	1,500,000	750,000	750,000	850,000	1,500,000

PROGRAM – ACTIVITY:
Transportation - Streets Engineering

DEPARTMENT:
Public Works

ACCOUNT NO.
370-8160-439
320-8160-439

COLLECTOR STREET PAVEMENT IMPROVEMENTS

PROJECT STATUS: Revenue Change Site Change

City of Ames, Iowa
Capital Improvements Plan

DESCRIPTION/JUSTIFICATION

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

COMMENTS

2009/10 16th Street (Burnett Avenue to Duff Avenue) – Map 5, location M-9; Garfield Avenue (Phoenix Street to Ross Road) – Map 4, location F-10; and Ross Road (Garfield Avenue to Jarrett Circle) – Map 4, location F-10

2010/11 Storm Street (Ash Avenue to Hayward Avenue) – Map 5, location I-12; Woodland Avenue (West Street to Forest Glen) – Map 4, location G-11; and Woodland Avenue (Westwood Drive to Hickory Drive) – Map 4, location F-11

2011/12 George W. Carver Avenue (Stange Road to Bloomington Road) – Map 2, location H-7

2012/13 Ridgewood Avenue (13th Street to 16th Street) – Map 5, location K-9

2013/14 Ash Avenue (South of Country Club Boulevard to Knapp Street) – Map 5, location I-12 and Hayes Avenue (20th Street to 24th Street) – Map 5, location K-8

Locations in the program have been added (Ross Road in 2009/10 and Ridgewood Avenue in 2012/13) and re-prioritized due to pavement conditions of the locations. MPO/STP revenue funding will not be used in 2010/11 as originally programmed.

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

FISCAL YEAR PRIORITY	TOTAL	2 2009/10	3 2010/11	3 2011/12	2 2012/13	2 2013/14
COST:						
Planning	110,000	30,000	20,000	20,000	20,000	20,000
Engineering	550,000	70,000	120,000	120,000	120,000	120,000
Construction	4,340,000	900,000	860,000	860,000	860,000	860,000
TOTAL	5,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000
FINANCING:						
G. O. Bonds	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:
Transportation – Streets Engineering

DEPARTMENT:
Public Works

ACCOUNT NO.
370-8128-439

CYRIDE ROUTE PAVEMENT IMPROVEMENTS

PROJECT STATUS: Cost Change
Revenue Change

Site Change

City of Ames, Iowa
Capital Improvements Plan

DESCRIPTION/JUSTIFICATION

This is the annual program for pavement improvements to streets that are bus routes.

These streets were designed and built for light, residential traffic. With these streets 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

2009/10 Ash Avenue (Lincoln Way to Knapp Street) – Map 5, location I-11 and Knapp Street (Lynn Avenue to Ash Avenue) – Map 5, location I-12
 2010/11 Lincoln Way (Hickory Drive to Franklin Avenue) – Map 4, location F-11
 2011/12 Lincoln Way (Franklin Avenue to Hayward Avenue) – Map 5, location G-11
 2012/13 Emerald Drive (Ken Maril Road to Jewel Drive) – Map 9, location N-17
 2013/14 Todd Drive (South Dakota Avenue to Thackeray Avenue) – Map 4, location E-11

Rapid deterioration of pavement on Lincoln Way has re-prioritized the locations identified in this program, with the Lincoln Way (Hickory Drive to Franklin Avenue) location in 2010/11 becoming an additional priority location.

The cost change is due to updated project estimates reflecting anticipated material costs. The revenue change is due to adding MPO/STP funding in 2010/11.

Reconstructing these streets will reduce maintenance budget needs for them. This reduction will allow for additional and earlier maintenance of other streets, prolonging their useful life.

FISCAL YEAR PRIORITY	TOTAL	3	1	4	3	3
		2009/10	2010/11	2011/12	2012/13	2013/14
COST:						
Planning	70,000	10,000	30,000	10,000	10,000	10,000
Engineering	260,000	50,000	60,000	50,000	50,000	50,000
Construction	3,420,000	740,000	760,000	640,000	640,000	640,000
TOTAL	3,750,000	800,000	850,000	700,000	700,000	700,000
FINANCING:						
G. O. Bonds	3,062,000	800,000	162,000	700,000	700,000	700,000
MPO/STP Funds	688,000		688,000			
TOTAL	3,750,000	800,000	850,000	700,000	700,000	700,000

PROGRAM - ACTIVITY:
Transportation - Streets Engineering

DEPARTMENT:
Public Works

ACCOUNT NO.
370-8177-439

CONCRETE PAVEMENT IMPROVEMENTS

PROJECT STATUS: No Change

City of Ames, Iowa
Capital Improvements Plan

DESCRIPTION/JUSTIFICATION

This annual program is to remove and replace concrete street sections that have deteriorated. Removal and replacement of concrete street sections provide enhanced rideability to residents and visitors.

COMMENTS

This program includes both arterial and non-arterial concrete streets. Increased funding for this program in 2009/10 will allow for addressing priority needs in the repair of concrete streets; funding will decrease by 2010/11 as priority needs in this program are met. Road use tax funds for 2009/10 and 2012/13 will be used to meet priority project needs in the Asphalt Resurfacing & Seal Coat Reconstruction Program (page 101.)

LOCATION

2009/10:

South Hyland Avenue (Arbor Street to Lincoln Way) – Map 5, location H-11; Edison Street (Whitney Avenue to Dayton Avenue) – Map 6, location Q-10; Alexander Avenue (Lincoln Way to 350’ south) – Map 6, location R-11; and Stanton Avenue (Knapp Street to Storm Street) – Map 5, location I-11

2010/11:

Oakland Street (Hawthorne Avenue to North Franklin Avenue) – Map 4, location G-10; Oakland Street (Hawthorne Avenue to Hyland Avenue) – Map 4, location G-10; and Lincoln Swing (South Dakota Avenue to Beedle Drive) – Map 4, location E-11

2011/12:

Southeast 16th Street (Duff Avenue to 600’ east) – Map 8, location M-14; and South Kellogg Avenue (South 16th Street to South 17th Street) – Map 8, location M-14

2012/13:

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

2013/14:

South 16th Street (Golden Aspen Drive to Duff Avenue) – Map 8, location L-14; and Duff Avenue (10th Street to 13th Street) – Map 5, location M-10

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

FISCAL YEAR PRIORITY		4	4	6	4	4
	TOTAL	2009/10	2010/11	2011/12	2012/13	2013/14
COST:						
Engineering	600,000	200,000	100,000	100,000	100,000	100,000
Construction	4,825,000	1,425,000	900,000	900,000	700,000	900,000
TOTAL	5,425,000	1,625,000	1,000,000	1,000,000	800,000	1,000,000
FINANCING:						
G.O. Bonds	4,300,000	1,625,000	625,000	625,000	800,000	625,000
Road Use Tax	1,125,000		375,000	375,000		375,000
TOTAL	5,425,000	1,625,000	1,000,000	1,000,000	800,000	1,000,000

PROGRAM – ACTIVITY:
Transportation - Streets Engineering

DEPARTMENT:
Public Works

ACCOUNT NO.
370-8161-439

ASPHALT PAVEMENT IMPROVEMENT PROGRAM

PROJECT STATUS: Cost Change

City of Ames, Iowa
Capital Improvements Plan

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 new program has been created in accordance with City Council's goal of strengthening our neighborhoods.

COMMENTS

- 2009/10 Northwood Drive (Grand Avenue to Duff Avenue) – Map 5, location L-6
- 2010/11 Grove Avenue (Duff Avenue to Northwood Drive) – Map 2, location L-6; River Oak Drive (Grove Avenue east through cul-de-sac) – Map 5, location M-6; and Kellogg Avenue (River Oak Drive to Duff Avenue) – Map 5, location L-6
- 2011/12 Southdale Drive (Garnet Drive to Jewel Drive) – Map 9, location N-16
- 2012/13 Jewel Drive (Garnet Drive south to end) – Map 9, location O-16
- 2013/14 Hickory Drive (Lincoln Way to Westbrook Drive) – Map 4, location E-11; and Trail Ridge Road/Trail Ridge Circle – Map 4, location E-11

Cost changes are the result of updated estimates.

Reconstructing these streets will reduce maintenance costs.

FISCAL YEAR PRIORITY	TOTAL	5 2009/10	5 2010/11	7 2011/12	5 2012/13	5 2013/14
COST:						
Engineering	275,000	50,000	75,000	50,000	50,000	50,000
Construction	2,375,000	450,000	725,000	400,000	350,000	450,000
TOTAL	2,650,000	500,000	800,000	450,000	400,000	500,000
FINANCING:						
G.O. Bonds	2,650,000	500,000	800,000	450,000	400,000	500,000
TOTAL	2,650,000	500,000	800,000	450,000	400,000	500,000

PROGRAM - ACTIVITY:
Transportation – Streets Engineering

DEPARTMENT:
Public Works

ACCOUNT NO.
370-8113-439

DOWNTOWN STREET PAVEMENT IMPROVEMENTS

PROJECT STATUS: No Change

City of Ames, Iowa
Capital Improvements Plan

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 Cultural District.

LOCATION

2009/10	Kellogg Avenue (Lincoln Way to Main Street) – Map 5, location M-11
2010/11	Kellogg Avenue (Main Street to 7 th Street) – Map 5, location M-11
2011/12	Main Street (Allan Drive to Clark Avenue) – Map 5, location L-11
2012/13	Douglas Avenue (Main Street to 7 th Street) – Map 5, location M-11
2013/14	Clark Avenue (Lincoln Way to Main Street) – Map 5, location L-11

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

FISCAL YEAR PRIORITY	TOTAL	6	6	5	6	6
		2009/10	2010/11	2011/12	2012/13	2013/14
COST:						
Engineering	250,000	50,000	50,000	50,000	50,000	50,000
Construction	3,000,000	450,000	450,000	700,000	700,000	700,000
TOTAL	3,250,000	500,000	500,000	750,000	750,000	750,000
FINANCING:						
G. O. Bonds	3,250,000	500,000	500,000	750,000	750,000	750,000
TOTAL	3,250,000	500,000	500,000	750,000	750,000	750,000

PROGRAM - ACTIVITY:
Transportation – Streets Engineering

DEPARTMENT:
Public Works

ACCOUNT NO.
370-8150-439

**ASPHALT RESURFACING & SEAL COAT REMOVAL/
ASPHALT RECONSTRUCTION PROGRAM**

PROJECT STATUS: Cost Change

City of Ames, Iowa
Capital Improvements Plan

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. It is now combined with the Seal Coat Removal/Asphalt Reconstruction Program that appeared as a separate program in prior years.

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 that 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. Cost estimates include funding for concrete curb and gutter repairs that need to be made prior to asphaltting the street. Typically, curb and gutter repairs are between 20- and 25-percent of the total cost.

Combining the Asphalt Resurfacing and the Seal Coat Removal/Asphalt Reconstruction programs resulted in a cost change to this Asphalt Resurfacing Program. The two programs have been combined due to the similarity in the programs; the programs have been awarded as one program for the past ten years.

Road Use Tax funds generally obligated for the Slurry Seal Program (\$100,000) have been shifted to this program, and Road Use Tax funds for the Concrete Pavement Improvements Program (\$375,000) (page 98) in 2009/10 and 2012/13 have been shifted to this program due to the high number of seal coat streets requiring reconstruction based on current pavement conditions.

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	TOTAL	7 2009/10	7 2010/11	8 2011/12	7 2012/13	7 2013/14
COST:						
Planning	95,000	25,000	15,000	15,000	25,000	15,000
Engineering	180,000	45,000	30,000	30,000	45,000	30,000
Construction	4,125,000	955,000	705,000	705,000	1,055,000	705,000
TOTAL	4,400,000	1,025,000	750,000	750,000	1,125,000	750,000
FINANCING:						
Road Use Tax	3,900,000	925,000	650,000	650,000	1,025,000	650,000
Local Option Sales Tax	500,000	100,000	100,000	100,000	100,000	100,000
TOTAL	4,400,000	1,025,000	750,000	750,000	1,125,000	750,000

PROGRAM – ACTIVITY:
Transportation – Streets Engineering

DEPARTMENT:
Public Works

ACCOUNT NO.
030-8105-439
060-8105-439

GRAND AVENUE EXTENSION

PROJECT STATUS: Cost Change

Revenue Change

City of Ames, Iowa
Capital Improvements Plan

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).

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. In addition, through-traffic on the Grand Avenue extension will also encounter less traffic congestion.

COMMENTS

Design and land acquisition will occur in 2010/11 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. Construction of those segments is projected to occur in 2011/12. 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.

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

- 2010/11 Grand Avenue (Squaw Creek Drive to South 16th Street) and South 5th Street (Grand Avenue to South Duff Avenue) (engineering and land acquisition) – Map 5, location L-12
- 2011/12 Grand Avenue (Squaw Creek Drive to South 16th Street) and South 5th Street (Grand Avenue to South Duff Avenue) (construction) – Map 5, location L-12

The cost change is due to updated acquisition and construction costs reflecting market conditions. Street lighting has also been included in the project costs.

Revenue change is due to the availability of MPO/STP funds in 2011/12.

FISCAL YEAR PRIORITY				8	1		
	TOTAL	2009/10	2010/11	2011/12	2012/13	2013/14	
COST:							
Engineering	1,100,000		600,000	500,000			
Land Acquisition	750,000		750,000				
Construction	10,500,000			10,500,000			
TOTAL	12,350,000		1,350,000	11,000,000			
FINANCING:							
G. O. Bonds	3,150,000		1,350,000	1,800,000			
MPO/STP Funds	1,032,000			1,032,000			
Federal Earmark Funds	8,168,000			8,168,000			
TOTAL	12,350,000		1,350,000	11,000,000			
PROGRAM – ACTIVITY:		DEPARTMENT:	ACCOUNT NO.				
Transportation – Streets Engineering		Public Works					

**SOUTH DAKOTA AVENUE WIDENING
(LINCOLN WAY TO MORTENSEN ROAD)**

PROJECT STATUS: Delayed

City of Ames, Iowa
Capital Improvements Plan

DESCRIPTION/JUSTIFICATION

This project is for widening South Dakota Avenue to a five-lane roadway south of Lincoln Way. Continued growth has resulted in an increase in traffic volumes on South Dakota Avenue. A widened roadway is necessary to increase capacity and improve safety.

COMMENTS

Widening the highway will increase traffic volume capacity and will improve safety in the area.

This project has been delayed until traffic volume requirements are met and due to funding constraints in earlier years.

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

LOCATION

South Dakota Avenue (Lincoln Way to Mortensen Road) – Map 4, location E-11

FISCAL YEAR PRIORITY		TOTAL	2009/10	2010/11	2011/12	2012/13	2013/14
COST:							
Engineering		200,000				200,000	
Construction		2,000,000					2,000,000
	TOTAL	2,200,000				200,000	2,000,000
FINANCING:							
G. O. Bonds		2,200,000				200,000	2,000,000
	TOTAL	2,200,000				200,000	2,000,000

PROGRAM – ACTIVITY:
Transportation – Streets Engineering

DEPARTMENT:
Public Works

ACCOUNT NO.

TRANSPORTATION - STREET MAINTENANCE

PROJECT/REVENUE DESCRIPTION	TOTAL	2009/10	2010/11	2011/12	2012/13	2013/14	PAGE
EXPENDITURES:							
1 Neighborhood Curb Replacement Program	375,000	75,000	75,000	75,000	75,000	75,000	105
2 Retaining Wall Reconstruction	200,000	40,000	40,000	40,000	40,000	40,000	106
3 Shared Use Path Pavement Improvements	250,000	50,000	50,000	50,000	50,000	50,000	107
4 Sidewalk Safety Program	250,000	50,000	50,000	50,000	50,000	50,000	108
5 Bridge Rehabilitation Program	180,000	15,000	165,000				109
6 Salt Storage Facility	200,000		200,000				110
Total Expenditures	1,455,000	230,000	580,000	215,000	215,000	215,000	
REVENUES:							
Bonds:							
G.O. Bonds	165,000		165,000				
City:							
Road Use Tax	790,000	130,000	315,000	115,000	115,000	115,000	
Local Option Sales Tax	500,000	100,000	100,000	100,000	100,000	100,000	
Sub-Total City Funds	1,290,000	230,000	415,000	215,000	215,000	215,000	
Total Revenues	1,455,000	230,000	580,000	215,000	215,000	215,000	

NEIGHBORHOOD CURB REPLACEMENT PROGRAM

PROJECT STATUS: Site Change

City of Ames, Iowa
Capital Improvements Plan

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 comparing and prioritizing applications received from neighborhoods using evaluation criteria that have been approved by Council.

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. In keeping with City Council's goal to strengthen neighborhoods, funding for this program was increased in 2008/09 to \$75,000 per year (from \$50,000 per year).

Curb and gutter replacement enhances neighborhood aesthetics.

Site change is due to the modification to Maxwell Avenue in 2011/12 and the addition of the two new locations in 2012/13 and 2013/14.

LOCATION

- 2009/10 Marston Avenue (10th Street – 13th Street) – Map 5, location L-10
- 2010/11 Curtiss Avenue (10th Street – 13th Street) – Map 5, location L-10
- 2011/12 Maxwell Avenue (16th Street to George Allen Avenue) – Map 5, location N-8
- 2012/13 Ridgewood Avenue (9th Street to 13th Street) – Map 5, location K-10
- 2013/14 Brookridge Avenue (9th Street to Ridgewood Avenue) – Map 5, location K-10

FISCAL YEAR PRIORITY	TOTAL	¹ 2009/10	² 2010/11	¹ 2011/12	¹ 2012/13	¹ 2013/14
COST:						
Engineering	25,000	5,000	5,000	5,000	5,000	5,000
Construction	350,000	70,000	70,000	70,000	70,000	70,000
TOTAL	375,000	75,000	75,000	75,000	75,000	75,000
FINANCING:						
Road Use Tax	375,000	75,000	75,000	75,000	75,000	75,000
TOTAL	375,000	75,000	75,000	75,000	75,000	75,000

PROGRAM – ACTIVITY:
Transportation – Streets Maintenance

DEPARTMENT:
Public Works

ACCOUNT NO.
060-7770-439

RETAINING WALL RECONSTRUCTION

PROJECT STATUS: Cost Change

Site Change

City of Ames, Iowa
Capital Improvements Plan

DESCRIPTION/JUSTIFICATION

This annual program is to reconstruct/repair retaining walls located within the right-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.

COMMENTS

Proposed locations:

- 2009/10 South Dayton Avenue – Map 6, location R-12
- 2010/11 12th Street/Maxwell Avenue – Map 5, location N-9
- 2011/12 Airport Road – Map 8, location L-15
- 2012/13 North Dakota Avenue – Map 4, location E-10
- 2013/14 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.

The cost change is due to adding funding in 2009/10 and 2012/13 (an additional \$15,000 each year) due to updating cost estimates. The site change is due to prioritization of location based on current conditions.

FISCAL YEAR PRIORITY	TOTAL	² 2009/10	³ 2010/11	² 2011/12	² 2012/13	² 2013/14
COST:						
Engineering	25,000	5,000	5,000	5,000	5,000	5,000
Construction	175,000	35,000	35,000	35,000	35,000	35,000
TOTAL	200,000	40,000	40,000	40,000	40,000	40,000
FINANCING:						
Road Use Tax	200,000	40,000	40,000	40,000	40,000	40,000
TOTAL	200,000	40,000	40,000	40,000	40,000	40,000

PROGRAM - ACTIVITY:
Transportation – Streets Maintenance

DEPARTMENT:
Public Works

ACCOUNT NO.
060-7736-439

SHARED USE PATH PAVEMENT IMPROVEMENTS

PROJECT STATUS: No Change

City of Ames, Iowa
Capital Improvements Plan

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.

This program was new in 2008/09, and system analysis is being performed to prioritize locations.

COMMENTS

Improvement to the shared use path pavement will enhance the safety and usability of the transportation/recreational system.

FISCAL YEAR PRIORITY	TOTAL	2009/10	2010/11	2011/12	2012/13	2013/14
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:
Transportation – Streets Maintenance

DEPARTMENT:
Public Works

ACCOUNT NO.
030-7721-439

SIDEWALK SAFETY PROGRAM

PROJECT STATUS: No Change

City of Ames, Iowa
Capital Improvements Plan

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.

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

An Americans with Disability Act (ADA) requirement to install truncated dome warning panels at crosswalks has increased the cost of these crosswalks. This reduces the number of locations that will be improved under this program each year.

This project has no direct impact on the operating budget.

FISCAL YEAR PRIORITY	TOTAL	2009/10	2010/11	2011/12	2012/13	2013/14
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:
Transportation - Streets Maintenance

DEPARTMENT:
Public Works

ACCOUNT NO.
030-7744-439

BRIDGE REHABILITATION PROGRAM

PROJECT STATUS: New

City of Ames, Iowa
Capital Improvements Plan

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 2008 Bridge Inspection and Maintenance Report highlights the recommended maintenance/improvements to the bridges in Ames at this time.

The steel girder bridge on Sixth Street over Squaw Creek has developed pack rust between the bottom flange cover plates on both girders. The ends of the girders and bearings are also rusty. Shown in 2009/10 is a Feasibility Study to analyze the improvements at this location, including the option to repaint the bridge as shown in 2010/11.

LOCATION

2009/10 6th Street bridge over Squaw Creek - Map 5, location K-10

2010/11 6th Street bridge over Squaw Creek – Map 5, location K-10

FISCAL YEAR PRIORITY		TOTAL	5 2009/10	6 2010/11	2011/12	2012/13	2013/14
COST:							
Engineering		30,000	15,000	15,000			
Construction		150,000		150,000			
	TOTAL	180,000	15,000	165,000			
FINANCING:							
G.O. Bonds		165,000		165,000			
Road Use Tax		15,000	15,000				
	TOTAL	180,000	15,000	165,000			

PROGRAM - ACTIVITY:
Transportation – Streets Maintenance

DEPARTMENT:
Public Works

ACCOUNT NO.
060-7750-439

SALT STORAGE FACILITY

PROJECT STATUS: New

City of Ames, Iowa
Capital Improvements Plan

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 necessary for another storage facility for salt, with the potential for a shared facility with Story County, in the west part of Ames. It will also be necessary to analyze the condition and future needs for salt spreader storage.

COMMENTS

The salt dome on Edison Street/Carnegie Avenue has for many years met the salt storage needs for the City of Ames. With growth, however, an additional storage facility is needed to enhance the snow and ice control efforts of City crews to every part of the City. 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 was retrofitted and used for temporary salt storage capacity for the winter of 2008/09. This provided for salt storage only; the salt was moved to the storage dome in east Ames for loading onto snow plows.

The location of the salt storage dome will be determined by 2009/10. Story County will be approached to determine if a shared facility would be a feasible option for both entities.

LOCATION

To be determined.

FISCAL YEAR PRIORITY		TOTAL	2009/10	2010/11	2011/12	2012/13	2013/14
COST:							
Building		200,000		200,000			
	TOTAL	200,000		200,000			
FINANCING:							
Road Use Tax Fund		200,000		200,000			
	TOTAL	200,000		200,000			

PROGRAM - ACTIVITY:
Transportation – Streets Maintenance

DEPARTMENT:
Public Works

ACCOUNT NO.

TRANSPORTATION - TRANSIT

PROJECT/REVENUE DESCRIPTION	TOTAL	2009/10	2010/11	2011/12	2012/13	2013/14	PAGE
EXPENDITURES:							
1 Vehicle Replacement	5,206,000	268,000	1,518,000	1,125,000	1,140,000	1,155,000	112
2 Building Expansion and Modernization	4,858,995	100,000	1,758,995	1,000,000	1,000,000	1,000,000	113
3 CyRide Shop/Office Equipment	411,000	11,000	100,000	100,000	100,000	100,000	114
4 Bus Stop Improvements	250,000	50,000	50,000	50,000	50,000	50,000	115
5 AVL Technology	1,000,000		250,000	250,000	250,000	250,000	116
6 Resurfacing	1,000,000				1,000,000		117
Total Expenditures	12,725,995	429,000	3,676,995	2,525,000	3,540,000	2,555,000	
REVENUES:							
City:							
Transit Fund	2,147,059	85,800	689,859	421,250	473,800	476,350	
Other:							
Federal Transit Administration	10,028,936	303,200	2,947,136	2,013,750	2,726,200	2,038,650	
Federal Grants	200,000	40,000	40,000	40,000	40,000	40,000	
Private Contributions	50,000			50,000			
Iowa State University	300,000				300,000		
Sub-Total Other Funds	10,578,936	343,200	2,987,136	2,103,750	3,066,200	2,078,650	
Total Revenues	12,725,995	429,000	3,676,995	2,525,000	3,540,000	2,555,000	

VEHICLE REPLACEMENT

PROJECT STATUS: Cost Change

Revenue Change

City of Ames, Iowa
Capital Improvements Plan

DESCRIPTION/JUSTIFICATION

CyRide’s average large bus fleet age is 14 years. Replacement buses are subject to federal funding levels and statewide distribution of federal funds, therefore the predictability of adequate financial support for vehicle replacements varies each year. With a 7% ridership increase in the 2007/08 year and currently a 12% increase in the 2008/09 year, CyRide has been forced to continue operating buses that were scheduled to be replaced. The end result is an increase in the average fleet age this last year with CyRide operating the 13th oldest bus fleet in the nation.

Therefore for the next two-year period (2008/09 and 2009/10), CyRide has abandoned its previous capital planning strategy of purchasing three new buses each year and, instead, committed to the purchase of 14-15 used buses in those years in an effort to reduce the average fleet age closer to the national level of seven years. Beginning again in 2010/11, CyRide would return to the purchase of three new buses each year.

CyRide’s small bus fleet is anticipated to be eligible for replacement under the statewide distribution of federal funds in 2009/10 and 2010/11.

One administrative support vehicle used by CyRide drivers to relieve other bus drivers on route and for administrative purposes will be scheduled for replacement in 2009/10.

- 2009/10 – Replace large buses 964, 966, 967, 985, 990, 991, administrative vehicle 968
- 2010/11 – Replace large buses 942, 943, 952, minibuses 960, 961, 978, 979, administrative vehicle 969
- 2011/12 – Replace large buses 933, 934, 8917
- 2012/13 – Replace large buses 8918, 898, 900
- 2013/14 – Replace large buses 909, 910, 912

FISCAL YEAR PRIORITY		1	1	1	1	1
	TOTAL	2009/10	2010/11	2011/12	2012/13	2013/14
COST:						
Large Buses - New	4,530,000		1,110,000	1,125,000	1,140,000	1,155,000
Large Buses - Used	240,000	240,000				
Minibuses	380,000		380,000			
Administrative Vehicles	56,000	28,000	28,000			
TOTAL	5,206,000	268,000	1,518,000	1,125,000	1,140,000	1,155,000
FINANCING:						
Transit Fund	843,060	53,600	258,060	141,250	193,800	196,350
Federal Transit Administration	4,312,940	214,400	1,259,940	933,750	946,200	958,650
Private Contributions	50,000			50,000		
TOTAL	5,206,000	268,000	1,518,000	1,125,000	1,140,000	1,155,000
PROGRAM - ACTIVITY:		DEPARTMENT:	ACCOUNT NO.			
Transportation – Transit		CyRide	552-1159-439			

BUILDING EXPANSION & MODERNIZATION

PROJECT STATUS: Cost Change

City of Ames, Iowa
Capital Improvements Plan

DESCRIPTION/JUSTIFICATION

The current CyRide building was constructed in 1983 and was originally designed to accommodate 25 vehicles. The building was expanded in 1990, 2002, and 2004 and can now accommodate 77 vehicles.

CyRide has identified more than \$2.5 million dollars in building repairs and modernization which include major projects such as rehabilitation of the old wash bay, upgrading of the bus storage ventilation system, steam cleaning and repainting of walls, replacing the shop air-conditioning system, replacing the shop exhaust removal system, replacing lights with energy efficient T8 fluorescent lights, rehabilitating the maintenance office, relocating the parts room, replacing shop hoists, replacing overhead doors with energy efficient doors, replacing or repairing exterior walls, installing an independent backup power supply, relocating the fluids room, and adding a building security system. The FY 2009/10 projects identified and funded with State and Federal dollars are rehabilitation of the wash bay and replacing the shop exhaust removal system. A majority of the remaining projects will be scheduled for completion from FY10/11 through FY13/14 after a Facilities Study is completed in the Spring of 2009.

LOCATION

CyRide – Map 5, location J-10

FISCAL YEAR PRIORITY		2	2	2	2	2
	TOTAL	2009/10	2010/11	2011/12	2012/13	2013/14
COST:						
Architect/Engineering	100,000	50,000	20,000	10,000	10,000	10,000
Repairs/Modifications	4,758,995	50,000	1,738,995	990,000	990,000	990,000
TOTAL	4,858,995	100,000	1,758,995	1,000,000	1,000,000	1,000,000
FINANCING:						
Transit Fund	971,799	20,000	351,799	200,000	200,000	200,000
Federal Transit Administration	3,887,196	80,000	1,407,196	800,000	800,000	800,000
TOTAL	4,858,995	100,000	1,758,995	1,000,000	1,000,000	1,000,000

PROGRAM - ACTIVITY:
Transportation – Transit

DEPARTMENT:
CyRide

ACCOUNT NO.
552-1167-439

CYRIDE SHOP AND OFFICE EQUIPMENT

PROJECT STATUS: Cost Change

City of Ames, Iowa
Capital Improvements Plan

DESCRIPTION/JUSTIFICATION

CyRide receives approximately \$625,000 per year in Small Transit Intensive Cities (STIC) funds from the Federal Transit Administration (FTA). Most of the grant is spent on large items such as buses, Automatic Vehicle Location (AVL), and shelters, but some is used every year to pay for smaller capital items for the shop and office. These items are either too minor or too far down the eligibility list to be funded under the Iowa Department of Transportation (IDOT) grant process.

Three to four replacement computers will be funded each year, and approximately \$100,000 per year, beginning in 2010/11, will fund other shop and office items (\$50,000 each for fiscal years 2010/11 – 2013/14). 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 to address OSHA, Department of Natural Resources and other federal requirements.

LOCATION

CyRide – Map 5, location J-10

FISCAL YEAR PRIORITY		3	3	3	3	3
	TOTAL	2009/10	2010/11	2011/12	2012/13	2013/14
COST:						
Computers	51,000	11,000	10,000	10,000	10,000	10,000
Other Shop Equipment	200,000		50,000	50,000	50,000	50,000
Other Office Equipment	160,000		40,000	40,000	40,000	40,000
TOTAL	411,000	11,000	100,000	100,000	100,000	100,000
FINANCING:						
Transit Fund	82,200	2,200	20,000	20,000	20,000	20,000
FTA - Small Transit Intensive Cities	328,800	8,800	80,000	80,000	80,000	80,000
TOTAL	411,000	11,000	100,000	100,000	100,000	100,000

PROGRAM - ACTIVITY:
Transportation – Transit

DEPARTMENT:
CyRide

ACCOUNT NO.
552-1159-439

BUS STOP IMPROVEMENTS

PROJECT STATUS: No Change

City of Ames, Iowa
Capital Improvements Plan

DESCRIPTION/JUSTIFICATION

One of the most numerous customer suggestions CyRide receives regards 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 improvement scheduled to begin in FY 2008/09 and continue each year thereafter. It is anticipated that five to ten bus stop locations will receive improvements each year.

FISCAL YEAR PRIORITY		4	4	4	4	4
	TOTAL	2009/10	2010/11	2011/12	2012/13	2013/14
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:
Transportation – Transit

DEPARTMENT:
CyRide

ACCOUNT NO.
552-1174-439

AVL TECHNOLOGY

PROJECT STATUS: Delayed

City of Ames, Iowa
Capital Improvements Plan

DESCRIPTION/JUSTIFICATION

The purchase of Automatic Vehicle Location (AVL) technology will enable CyRide to track the exact location of buses to give better service on both Fixed Route and Moonlight Express. It will also improve overall security on buses.

Moonlight Express scheduling will be improved, resulting in fewer scheduling errors and the possibility of slightly lower operating costs per passenger.

This AVL technology is the first step toward enabling customer-friendly bus information to be relayed through CyRide’s website, at kiosks, and at shelters throughout the transit system. This second step in technology advancement will be scheduled beyond FY13/14.

FISCAL YEAR PRIORITY			5	5	5	5
	TOTAL	2009/10	2010/11	2011/12	2012/13	2013/14
COST:						
Global Positioning/Design Installation	1,000,000		250,000	250,000	250,000	250,000
TOTAL	1,000,000		250,000	250,000	250,000	250,000
FINANCING:						
Transit Fund	200,000		50,000	50,000	50,000	50,000
Federal Transit Administration	800,000		200,000	200,000	200,000	200,000
TOTAL	1,000,000		250,000	250,000	250,000	250,000

PROGRAM - ACTIVITY:
Transportation – Transit

DEPARTMENT:
CyRide

ACCOUNT NO.

IOWA STATE CENTER COMMUTER LOT RESURFACING PROJECT STATUS: Delayed

City of Ames, Iowa
Capital Improvements Plan

DESCRIPTION/JUSTIFICATION

This project is to resurface commuter lots at Iowa State Center.

COMMENTS

In 2000, commuter parking lots A-2, 3, 4, and B-4, 5, 6 were resurfaced. Federal Transit Administration (FTA) funds provided 70% of the cost. CyRide passengers occupy the spaces 88% of the time they are used.

Currently, commuter parking has spilled over into lots C-5 and C-6 and these areas also need repair. Lot D-3 is used as a staging area for buses between scheduled trips. FTA funds will provide up to 70% of the cost and Iowa State University will provide the remainder.

This project was delayed one year in light of vehicle and facility capital needs in the next three to four years.

LOCATION

Iowa State Center – Map 5, location J-12

FISCAL YEAR PRIORITY							6
	TOTAL	2009/10	2010/11	2011/12	2012/13	2013/14	
COST:							
Engineering	100,000				100,000		
Construction	900,000				900,000		
	TOTAL	1,000,000			1,000,000		
FINANCING:							
Federal Transit Administration	700,000				700,000		
Iowa State University	300,000				300,000		
	TOTAL	1,000,000			1,000,000		

PROGRAM - ACTIVITY:
Transportation – Transit

DEPARTMENT:
CyRide

ACCOUNT NO.

TRANSPORTATION - AIRPORT

PROJECT/REVENUE DESCRIPTION	TOTAL	2009/10	2010/11	2011/12	2012/13	2013/14	PAGE
EXPENDITURES:							
1 Airport Improvements	4,085,000	1,125,000	1,345,000	900,000	715,000		119
Total Expenditures	4,085,000	1,125,000	1,345,000	900,000	715,000		
REVENUES:							
City:							
Airport Construction Fund	204,250	56,250	67,250	45,000	35,750		
Other:							
FAA Grant Funds	3,880,750	1,068,750	1,277,750	855,000	679,250		
Total Revenues	4,085,000	1,125,000	1,345,000	900,000	715,000		

AIRPORT IMPROVEMENTS

PROJECT STATUS: No Change

City of Ames, Iowa
Capital Improvements Plan

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 2009 – 2014 Capital Improvements Plan:

- 2009/10 Rehabilitate Taxiway A-1, PAPI, and Taxiway A-1 flood control
- 2010/11 West apron rehabilitation
- 2011/12 Reconstruct internal vehicle circulation and parking lot
- 2012/13 Replace terminal building

In accordance with the Airport Master Plan, the next improvement program is anticipated in 2016/17.

LOCATION

Ames Municipal Airport - Map 8, location L-16

FISCAL YEAR PRIORITY	TOTAL	1	1	1	1	2013/14
		2009/10	2010/11	2011/12	2012/13	
COST:						
Engineering	678,253	187,793	221,415	149,795	119,250	
Construction	3,406,747	937,207	1,123,585	750,205	595,750	
TOTAL	4,085,000	1,125,000	1,345,000	900,000	715,000	
FINANCING:						
Airport Construction Fund	204,250	56,250	67,250	45,000	35,750	
FAA Grant (AIP) Funds	3,880,750	1,068,750	1,277,750	855,000	679,250	
TOTAL	4,085,000	1,125,000	1,345,000	900,000	715,000	

PROGRAM – ACTIVITY:
Transportation – Airport

DEPARTMENT:
Public Works

ACCOUNT NO.
330-7073-439



The City of Ames purchased a ZENN (Zero Emission No Noise) car. The fully featured electric vehicle is used by City staff for in-town trips. The electric car has reduced fuel costs by 75% when compared to a gas compact car.

The City has also purchased several fuel-efficient vehicles as well as hybrid vehicles. Most City vehicles use gasohol, a 10% ethanol blend, some an 85% ethanol blend, and some diesel-powered vehicles use a blended soy-diesel fuel when available.



Educational Campaign

Water As A Limited Resource
Voluntary Reduction of Water Usage
Delaying Costly Expansion of Water Treatment Facilities

COMMUNITY ENRICHMENT/INTERNAL SERVICES - SUMMARY

PROJECT/REVENUE DESCRIPTION	TOTAL	2009/10	2010/11	2011/12	2012/13	2013/14	PAGE
EXPENDITURES:							
Parks and Recreation	3,573,100	475,000	810,100	480,000	590,000	1,218,000	123
Library	491,700	82,900	48,000	180,800	180,000		133
City Manager	250,000	50,000	50,000	50,000	50,000	50,000	138
Planning and Housing	250,000	50,000	50,000	50,000	50,000	50,000	140
Internal Services/Facilities	4,025,228	1,641,228	980,000	230,000	264,000	910,000	142
Total Expenditures	8,590,028	2,299,128	1,938,100	990,800	1,134,000	2,228,000	
REVENUES:							
Bonds:							
G.O. Bonds	1,395,000		540,000			855,000	
City:							
General Fund	600,000	600,000					
Local Option Sales Tax	3,459,200	655,400	922,500	718,300	570,000	593,000	
Ice Arena Capital Reserve Fund	100,000	100,000					
Park Development Fund	128,100		128,100				
Hotel/Motel Tax	250,000	50,000	50,000	50,000	50,000	50,000	
Road Use Tax	198,500	51,250	47,500	45,000	53,500	1,250	
Water Utility Fund	198,500	51,250	47,500	45,000	53,500	1,250	
Sewer Utility Fund	198,500	51,250	47,500	45,000	53,500	1,250	
Fleet Services Fund	198,500	51,250	47,500	45,000	53,500	1,250	
Sub-Total City Funds	5,331,300	1,610,400	1,290,600	948,300	834,000	648,000	

COMMUNITY ENRICHMENT/INTERNAL SERVICES - SUMMARY

PROJECT/REVENUE DESCRIPTION	TOTAL	2009/10	2010/11	2011/12	2012/13	2013/14
REVENUES, continued:						
Other:						
Ames Community School District	302,500	102,500	107,500	42,500	25,000	25,000
Federal Grants	586,228	586,228				
State Grants	175,000				175,000	
Private Contributions	800,000				100,000	700,000
Sub-Total Other Funds	1,863,728	688,728	107,500	42,500	300,000	725,000
Total Revenues	8,590,028	2,299,128	1,938,100	990,800	1,134,000	2,228,000

COMMUNITY ENRICHMENT - PARKS AND RECREATION

PROJECT/REVENUE DESCRIPTION	TOTAL	2009/10	2010/11	2011/12	2012/13	2013/14	PAGE
EXPENDITURES:							
1 Ice Resurfacers	100,000	100,000					125
2 Parks and Recreation Facility Improvements	760,000	135,000	387,000	60,000	55,000	123,000	126
3 Municipal Pool Maintenance	605,000	205,000	215,000	85,000	50,000	50,000	127
4 Playground/Park Equipment Improvements	205,000	30,000	75,000	30,000	30,000	40,000	128
5 Tennis Court Improvements	325,000	5,000	5,000	305,000	5,000	5,000	129
6 Greenbriar Park Development	128,100		128,100				130
7 Bike Park	450,000				450,000		131
8 Interactive Fountain	1,000,000					1,000,000	132
Total Expenditures	3,573,100	475,000	810,100	480,000	590,000	1,218,000	

COMMUNITY ENRICHMENT - PARKS AND RECREATION, continued

PROJECT/REVENUE DESCRIPTION	TOTAL	2009/10	2010/11	2011/12	2012/13	2013/14
REVENUES:						
City:						
Local Option Sales Tax	2,067,500	272,500	574,500	437,500	290,000	493,000
Ice Arena Capital Reserve Fund	100,000	100,000				
Park Development Fund	128,100		128,100			
Sub-Total City Funds	2,295,600	372,500	702,600	437,500	290,000	493,000
Other:						
Ames Community School District	302,500	102,500	107,500	42,500	25,000	25,000
State Grants	175,000				175,000	
Private Contributions	800,000				100,000	700,000
Sub-Total Other Funds	1,277,500	102,500	107,500	42,500	300,000	725,000
Total Revenues	3,573,100	475,000	810,100	480,000	590,000	1,218,000

ICE RESURFACER

PROJECT STATUS: New

City of Ames, Iowa
Capital Improvements Plan

DESCRIPTION/JUSTIFICATION

The existing ice resurfacer for the Ames/ISU Ice Arena was purchased in April 2001. The manufacturer recommends replacement of this type of machine between 4,500 to 5,000 hours of use. The current resurfacer has accumulated 4,000 hours of use. Therefore, a new ice resurfacer is warranted to ensure that quality ice is provided at this facility.

The funding source for this replacement is the Ames/ISU Ice Arena Capital Reserve Fund (\$20,000 City / \$20,000 ISU per year). This fund as of 6/30/09 is estimated to total \$398,428. Iowa State University administration fully supports this equipment replacement.

COMMENTS

2009/10: Replacement of Ice Resurfacer (\$100,000)

LOCATION

Ames/ISU Ice Arena – Map 8, location H-14

FISCAL YEAR PRIORITY						
	TOTAL	2009/10	2010/11	2011/12	2012/13	2013/14
COST:						
Equipment Replacement	100,000	100,000				
	TOTAL	100,000	100,000			
FINANCING:						
Ice Arena Capital Reserve Fund	100,000	100,000				
	TOTAL	100,000	100,000			

PROGRAM - ACTIVITY:
Community Enrichment

DEPARTMENT:
Parks and Recreation

ACCOUNT NO.
571-4970-459
572-4970-459

PARKS AND RECREATION FACILITY IMPROVEMENTS

PROJECT STATUS: Cost Change

City of Ames, Iowa
Capital Improvements Plan

DESCRIPTION/JUSTIFICATION

To maintain City facilities in a safe and quality manner, the FY2009 to 2014 projects listed below address maintenance issues at various facilities within the Parks and Recreation Department.

COMMENTS

2009/10: Total = \$185,000

Softball Complex: Hardwire the remote controlled scoreboards (\$20,000) – Map 6, location O-8

Forest Management of Brookside Park: The age and condition of the trees in this park require comprehensive tree trimming, removal, and reforestation (\$75,000) – Map 5, location K-10

Brookside Park: Rejuvenation of limestone walls leading to the bridge (\$40,000) – Map 5, location K-10

2010/11: Total = \$337,000

Homewood Golf Course: Replace green #1 (\$60,000) and tee renovations (\$30,000) – Map 5, location M-8

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

Auditorium: Replace stage curtains (\$37,000) – Map 5, location L-11

Community Center Multi-Purpose Room: Replace the carpeting with a wood floor (\$25,000) – Map 5, location L-11

South River Valley Softball Fields: Replace fencing and lights on two diamonds (\$165,000) – Map 6, location O-9

Carr Pool: Anticipated demolition of the pool basin and pool mechanical system (\$50,000) – Map 6, location N-8

2011/12: Total = \$60,000

Inis Grove: Sanitary sewer installation (\$60,000) – Map 2, location M-7

2012/13: Total = \$55,000

Bandshell: Weatherproof the domed roof (\$55,000) – Map 5, location M-10

2013/14: Total = \$123,000

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

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

FISCAL YEAR PRIORITY			2	2	2	1	1
		TOTAL	2009/10	2010/11	2011/12	2012/13	2013/14
COST:							
Construction		692,500	125,000	352,000	54,500	50,000	111,000
Engineering		67,500	10,000	35,000	5,500	5,000	12,000
	TOTAL	760,000	135,000	387,000	60,000	55,000	123,000
FINANCING:							
Local Option Sales Tax		760,000	135,000	387,000	60,000	55,000	123,000
	TOTAL	760,000	135,000	387,000	60,000	55,000	123,000

PROGRAM – ACTIVITY:

Community Enrichment

DEPARTMENT:

Parks and Recreation

ACCOUNT NO.

030-4902-459

MUNICIPAL POOL MAINTENANCE

PROJECT STATUS: Cost Change

City of Ames, Iowa
Capital Improvements Plan

DESCRIPTION/JUSTIFICATION

In 2006, consultants were retained to provide recommendations regarding mechanical, electrical, structural, and any other needed improvements for the Municipal Pool. With the goal of keeping this 42-year old facility operational a minimum of 8 to 10 additional years, the 2006 study indicated that substantial improvements, totaling \$815,000, were needed between 2007/08 and 2011/12. All costs are shared equally by the City and Ames Community School District.

The projects included in 2010/11 will require the pool to be **closed for approximately 8 weeks during the summer of 2010.**

The consultants have warned that following approximately 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 the pool expires on **April 30, 2015.** Therefore, it appears that the City and School District will need to address the need for a new indoor aquatics facility prior to 2015.

COMMENTS

2009/10: Total \$205,000

Replace balance of steel pipe, install a dehumidifier in the equipment room, interconnect Desert Air with roof exhaust, place acoustical panels in the pool area, and other miscellaneous and unknown projects.

2010/11: Total \$215,000

Install a fire sprinkler system to meet City code (\$50,000), replace boiler / pumps (\$150,000), replace electrical panels (**closed summer of 2010**), roof patching allowance (\$10,000), replace plywood veneer and flashing at arch bases, and other miscellaneous and unknown projects (\$5,000).

2011/12: Total \$85,000

Replace lighting in pool, temperature controls integration with District NOVAR system, roof patching allowance (\$10,000), and other miscellaneous and unknown projects (\$75,000).

2012/13: Total \$50,000

To be determined

2013/14: Total \$50,000

To be determined

Over an 18-year period (FY95/96 and continuing through FY13/14), the City and School District will have invested approximately \$2,122,589 (\$118,000 per year average) in capital improvements at this facility.

LOCATION

Ames High School – Map 5, location J-8

FISCAL YEAR PRIORITY	TOTAL	3	1	1	4	4
COST:						
Construction	544,500	184,500	193,500	76,500	45,000	45,000
Architects/Engineering	60,500	20,500	21,500	8,500	5,000	5,000
TOTAL	605,000	205,000	215,000	85,000	50,000	50,000
FINANCING:						
Local Option Sales Tax	302,500	102,500	107,500	42,500	25,000	25,000
Ames School District	302,500	102,500	107,500	42,500	25,000	25,000
TOTAL	605,000	205,000	215,000	85,000	50,000	50,000

PROGRAM – ACTIVITY:

Community Enrichment

DEPARTMENT:

Parks and Recreation

ACCOUNT NO.

030-4917-459

PLAYGROUND/PARK EQUIPMENT IMPROVEMENTS

PROJECT STATUS: No Change

City of Ames, Iowa
Capital Improvements Plan

DESCRIPTION/JUSTIFICATION

With the emergence of the U.S. Consumer Products Safety Commission’s recommendations for public playground safety, questionable, antiquated metal playground equipment in the park system was removed and replaced with equipment that complies with recognized safety standards. That phase of the program was completed in 1996/97.

The second phase of the equipment replacement program was to replace all wood structures. This effort began in FY97/98 and was completed in FY07/08.

The next phase of this program calls for the installation of independent/unique pieces of play equipment (swings, boulders, large slides, etc.) in both neighborhood and community parks.

COMMENTS

2009/10: Inis Grove (\$30,000: Rope Climber) – Map 2, location M-7

2010/11: Brookside Park (\$75,000: Play equipment - dual tube slides) – Map 5, location K-10

2011/12: Emma McCarthy Lee Park (\$30,000 rock climber) – Map 4, location G-10

2012/13: Brookside Park (\$30,000: Replace tot piece) – Map 5, location K-10

2013/14: Christopher Gartner Park – Map 4, location E-12 / Teagarden Park – Map 9, location N-17 (\$40,000 total)

FISCAL YEAR PRIORITY	TOTAL	4	3	3	2	2
		2009/10	2010/11	2011/12	2012/13	2013/14
COST:						
Construction	205,000	30,000	75,000	30,000	30,000	40,000
TOTAL	205,000	30,000	75,000	30,000	30,000	40,000
FINANCING:						
Local Option Sales Tax	205,000	30,000	75,000	30,000	30,000	40,000
TOTAL	205,000	30,000	75,000	30,000	30,000	40,000

PROGRAM - ACTIVITY:
Community Enrichment

DEPARTMENT:
Parks and Recreation

ACCOUNT NO.
030-4967-459

TENNIS COURT IMPROVEMENTS

PROJECT STATUS: Cost Change

City of Ames, Iowa
Capital Improvements Plan

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 partnering with the Ames Community School District and Friends of Ames Tennis to construct a new 8-court facility at Ames High. In addition, the School District agreed to pay the City \$2,500 annually for a period of ten years (through FY07/08) to help pay for the ongoing maintenance costs of the tennis courts at Brookside. At that time, the City Council decided that the four courts at Brookside would be maintained at a “recreational level” until the City made a final decision regarding the future existence of these courts.

The Brookside courts have been successfully maintained during the past eleven years (1997 – 2008). Staff anticipates that they will continue to serve the public a minimum of four more years (2012) at the recreational level. During 2011, staff will host a public input session to gain insight on the role that these courts play within the neighborhood and the overall community. Additionally, staff will analyze the condition of these courts and determine if reconstruction is needed or if the project can be delayed.

COMMENTS

2009–2014: Total = \$5,000 each year

City will contribute \$5,000/year for tennis court maintenance for the City’s courts located at Ames High / Brookside / Inis Grove / McCarthy Lee

2011/12: If an analysis at the time indicates the project is warranted, the Brookside courts will be totally reconstructed (\$300,000)

LOCATION

Ames High – Map 5, location J-8; 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	TOTAL	5	4	4	3	3
		2009/10	2010/11	2011/12	2012/13	2013/14
COST:						
Engineering / Design	30,000			30,000		
Maintenance	25,000	5,000	5,000	5,000	5,000	5,000
Total Reconstruction of Courts	270,000			270,000		
TOTAL	325,000	5,000	5,000	305,000	5,000	5,000
FINANCING:						
Local Options Sales Tax	325,000	5,000	5,000	305,000	5,000	5,000
TOTAL	325,000	5,000	5,000	305,000	5,000	5,000

PROGRAM - ACTIVITY:

Community Enrichment

DEPARTMENT:

Parks and Recreation

ACCOUNT NO.

030-4902-459

GREENBRIAR PARK DEVELOPMENT

PROJECT STATUS: New

City of Ames, Iowa
Capital Improvements Plan

DESCRIPTION/JUSTIFICATION

This site, located on South 16th Street, is undeveloped except for a dirt bike course located in the southwest corner of the site. Historically, this parcel has been utilized for snow and brush storage during community wide storm events. Additionally, an unnamed stream flows through this site and enters Worley Creek west of the adjacent bike path. This stream transports stormwater run-off from a 1.9 square mile area in southwest Ames. As the water flows north, it is restricted by small culverts currently in place under the bike path, west of Greenbriar Park. These culverts restrict the flow so significantly that during high rain events, storm water is forced out of the channel onto Cold Water Golf Links.

Public Works will address the stormwater management issue in FY 09/10 by replacing the culverts under the bike path with a 50' x 12' bridge, re-channeling the stream, and constructing a berm on the eastern side of Greenbriar Park. City Council requested that the site be developed into a park with the following features included:

- Relocate the dirt BMX course to the center of the park (\$10,000)
- Bring in fill dirt and seed the entire area with native plant material (\$46,000)
- Install a 6-stall parking lot (\$25,300)
- Construct a mini-shelter with a trail map kiosk so the park can serve as a trail head for the overall Shared Use Path system from south to north Ames (\$2,600)
- Install a bike trail adjacent to South 16th Street (\$44,200)

The park improvements cannot be accomplished until the needed storm water management issues are addressed in FY 09/10. Therefore, staff recommends the development of the park in FY 10/11.

COMMENTS

2010/11: Development of Greenbriar Park: \$128,100

LOCATION

Map 8, location K-13

FISCAL YEAR PRIORITY						
	TOTAL	2009/10	2010/11	2011/12	2012/13	2013/14
COST:						
Engineering	12,210		12,210			
Construction	115,890		115,890			
	TOTAL	128,100	128,100			
FINANCING:						
Park Development Fund	128,100		128,100			
	TOTAL	128,100	128,100			

PROGRAM - ACTIVITY:
Community Enrichment

DEPARTMENT:
Parks and Recreation

ACCOUNT NO.

BIKE PARK

PROJECT STATUS: No Change

City of Ames, Iowa
Capital Improvements Plan

DESCRIPTION/JUSTIFICATION

The Skate Park has been a successful facility for a specific population within our community – males between the ages of 10 and 25. State regulations, related to liability issues, do not allow bikes to utilize this facility. Staff believes that if a comparable Bike Park were constructed, significant usage would occur within this same age group. A Bike Park, also constructed with concrete, would be approximately 15,000 square feet versus 10,200 for the City’s Skate Park.

The State of Iowa passed legislation in early 2000 providing exceptions to municipal tort liability for Bike Parks if they are built with “generally recognized engineering or safety standards”.

During the next few years, staff will research engineering firms to determine who has significant experience in designing bike parks and evaluate potential locations where such a facility could be located.

Due to the anticipated popularity of this activity with young adults, staff would recommend that State of Iowa grant options be researched to determine if additional fiscal resources can be obtained to assist with this project.

COMMENTS

2012/13: Bike Park construction (\$450,000)

LOCATION

To be determined

FISCAL YEAR PRIORITY		TOTAL	2009/10	2010/11	2011/12	2012/13	2013/14
COST:							
Construction		410,000				410,000	
Engineering/Design		40,000				40,000	
	TOTAL	450,000				450,000	
FINANCING:							
Local Option Sales Tax		175,000				175,000	
State Grants		175,000				175,000	
Private Contributions (Bike Park Users)		100,000				100,000	
	TOTAL	450,000				450,000	

PROGRAM - ACTIVITY:

Community Enrichment

DEPARTMENT:

Parks and Recreation

ACCOUNT NO.

INTERACTIVE FOUNTAIN / COMMUNITY GATHERING VENUE

PROJECT STATUS: Delayed Revenue Change

Cost Change

City of Ames, Iowa
Capital Improvements Plan

DESCRIPTION/JUSTIFICATION

Throughout the country, a popular facility that has been emerging for the past several years is the installation of interactive fountains. These facilities are not fenced, nor staffed, and no admission fee is collected. No water accumulates at grade. During the daytime, spray features allow children to direct water at others and themselves. In the evening, the fountain will convert into an appealing visual feature for viewing only.

Due to the cost of constructing a facility that has water as its main attraction, staff recommends one large, centralized facility in the Downtown area. During the next few years, staff will assess possible business district locations and research the level of interest in raising private funds to expand the project.

During recent public input sessions related to the development of the CIP, members of the Ames Foundation expressed interest in expanding this project to include green open space and a community gathering space/pavilion to host special events in the Downtown area. As a demonstration of their support in expanding this project, they will privately raise the needed balance of \$700,000 during the next four years while a site to accommodate the facilities is identified.

COMMENTS

2013/14: Interactive fountain, pavilion and green open space (\$1,000,000)

LOCATION

To be determined

FISCAL YEAR PRIORITY		TOTAL	2009/10	2010/11	2011/12	2012/13	2013/14
COST:							5
Construction		900,000					900,000
Engineering / Design		100,000					100,000
	TOTAL	1,000,000					1,000,000
FINANCING:							
Local Option Sales Tax		300,000					300,000
Private Contributions		700,000					700,000
	TOTAL	1,000,000					1,000,000

PROGRAM - ACTIVITY:
Community Enrichment

DEPARTMENT:
Parks and Recreation

ACCOUNT NO.

COMMUNITY ENRICHMENT - LIBRARY

PROJECT/REVENUE DESCRIPTION	TOTAL	2009/10	2010/11	2011/12	2012/13	2013/14	PAGE
EXPENDITURES:							
1 Exterior Building Repair	82,900	82,900					134
2 Skylight Replacement	48,000		48,000				135
3 Air Conditioning System Replacement	180,800			180,800			136
4 Floor Covering Replacement	180,000				180,000		137
Total Expenditures	491,700	82,900	48,000	180,800	180,000		
REVENUES:							
CITY:							
Local Option Sales Tax	491,700	82,900	48,000	180,800	180,000		
Total Revenues	491,700	82,900	48,000	180,800	180,000		

EXTERIOR BUILDING REPAIR

PROJECT STATUS: No Change

City of Ames, Iowa
Capital Improvements Plan

DESCRIPTION/JUSTIFICATION

This project makes maintenance repairs to the roof and windows. The roof will be twenty-five years old by the end of this fiscal year. It is a ballasted rubber membrane flat roof, requiring 10 lbs. per square foot to hold it in place. Over the past twenty-five years, weathering has affected the rubber membrane by seasonal shrinking. The membrane, upon inspection by a qualified engineer, is showing signs of such shrinking that will lead to cracks that cause leakage into the building. This project calls for slicing and patching the membrane, the recommended repair for such roofs.

The project also calls for re-caulking masonry work, particularly on the EIFS (external insulation finished system) joints on the walls that rise above the roof, especially on the west wall of the addition built in 1985. The EIFS sills at 38 of the upper windows will be removed and reworked. Fifty-six windows will be re-caulked, 150 stone joints re-caulked, and 100 masonry control joints re-caulked. This is to repair deterioration due to seasonal conditions.

Finally, the project will spot re-glaze and repaint five metal windows.

Roof repairs	\$ 6,000
Masonry restoration	71,700
Window re-glaze, paint	5,200
Project Total	<u>\$ 82,900</u>

COMMENTS

This project has been prepared under the assumption that the long-term solution to the Library facility's needs continues to use the existing building. However, an analysis of the long-term facility needs is currently underway. If a decision is made not to renovate or re-use the existing building, then this project may be eliminated or modified.

LOCATION

Ames Public Library - Map 5, location M-10

FISCAL YEAR PRIORITY		1				
	TOTAL	2009/10	2010/11	2011/12	2012/13	2013/14
COST:						
Construction	82,900	82,900				
TOTAL	82,900	82,900				
FINANCING:						
Local Option Sales Tax	82,900	82,900				
TOTAL	82,900	82,900				

PROGRAM - ACTIVITY:
Community Enrichment

DEPARTMENT:
Library

ACCOUNT NO.
030-2661-459

SKYLIGHT REPLACEMENT

PROJECT STATUS: No Change

City of Ames, Iowa
Capital Improvements Plan

DESCRIPTION/JUSTIFICATION

This project is to replace six pyramid shaped skylights on the roof of the library. Twenty-six years of weathering has deteriorated the fiberglass composition of these skylights. The glazing is drying out. The combined weathering problems over time risk leakage into the building.

COMMENTS

Replacement of six, 8-ft. square pyramid skylights: \$48,000.

This project has been prepared under the assumption that the long-term solution to the Library facility's needs continues to use the existing building. However, an analysis of the long-term facility needs is currently underway. If a decision is made not to renovate or re-use the existing building, then this project may be eliminated or modified.

LOCATION

Ames Public Library – Map 5, location M-10

FISCAL YEAR PRIORITY		TOTAL	2009/10	2010/11	2011/12	2012/13	2013/14
COST:				1			
Construction		48,000		48,000			
	TOTAL	48,000		48,000			
FINANCING:							
Local Option Sales Tax		48,000		48,000			
	TOTAL	48,000		48,000			

PROGRAM - ACTIVITY:
Community Enrichment

DEPARTMENT:
Library

ACCOUNT NO.

AIR-CONDITIONING SYSTEM REPLACEMENT

PROJECT STATUS: Delayed

City of Ames, Iowa
Capital Improvements Plan

DESCRIPTION/JUSTIFICATION

This project provides replacement of the 130-ton air chilling unit with a contemporary model. The old unit, installed during the expansion of the Library in 1985, has served beyond its service capability which is typically about 15 years. The current model failed in the summers of 2005, 2006, 2007, and 2008. This past year, two of the four compressors had to be replaced. Fan blades, replaced in 2006, had to be fabricated as this model is no longer in production and some replacement parts are no longer available.

COMMENTS

This replacement unit will provide energy efficiency. The existing unit has an EER (energy efficiency rating) of 6.0. The recommended model has an EER of 10.0 at full load or 14.5 EER at half-load. Savings in energy costs with the newer, more efficient model are estimated to be about \$2,900 each cooling season if the unit operates at full load. The unit is also expected to save on costly service calls and repair bills.

This project has been prepared under the assumption that the long-term solution to the Library facility's needs continues to use the existing building. However, an analysis of the long-term facility needs is currently underway. If a decision is made not to renovate or re-use the existing building, then this project may be eliminated or modified.

LOCATION

Ames Public Library, 515 Douglas – Map 5, location M-10

FISCAL YEAR PRIORITY		TOTAL	2009/10	2010/11	2011/12	2012/13	2013/14
COST:					1		
Equipment		180,800			180,800		
	TOTAL	180,800			180,800		
FINANCING:							
Local Option Sales Tax		180,800			180,800		
	TOTAL	180,800			180,800		

PROGRAM - ACTIVITY:
Community Enrichment

DEPARTMENT:
Library

ACCOUNT NO.

FLOOR COVERING REPLACEMENT

PROJECT STATUS: Delayed

City of Ames, Iowa
Capital Improvements Plan

DESCRIPTION/JUSTIFICATION

The current carpeting in the Library is 10-12 years old and is showing serious wear damage in high-traffic areas. Because 400,000 to 500,000 visitors come to the Library annually, the carpeting will continue to deteriorate in the next few years.

COMMENTS

Prior carpet replacement occurred after only 9-11 years of usage and annual foot traffic has greatly increased since that time.

This project has been prepared under the assumption that the long-term solution to the Library facility's needs continues to use the existing building. However, an analysis of the long-term facility needs is currently underway. If a decision is made not to renovate or re-use the existing building, then this project may be eliminated or modified.

LOCATION

Ames Public Library, 515 Douglas – Map 5, location M-10

FISCAL YEAR PRIORITY		TOTAL	2009/10	2010/11	2011/12	2012/13 ¹	2013/14
COST:							
Carpeting		180,000				180,000	
	TOTAL	180,000				180,000	
FINANCING:							
Local Option Sales Tax		180,000				180,000	
	TOTAL	180,000				180,000	

PROGRAM - ACTIVITY:
Community Enrichment

DEPARTMENT:
Library

ACCOUNT NO.

COMMUNITY ENRICHMENT - CITY MANAGER

PROJECT/REVENUE DESCRIPTION	TOTAL	2009/10	2010/11	2011/12	2012/13	2013/14	PAGE
EXPENDITURES:							
1 Neighborhood Improvement Program	250,000	50,000	50,000	50,000	50,000	50,000	139
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

City of Ames, Iowa
Capital Improvements Plan

DESCRIPTION/JUSTIFICATION

This program was originally designed to enhance the appearance of our 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 according to the following criteria approved by the City Council: public impact, neighborhood participation, safety, environment, housing, and public space. Residents were 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, 104 neighborhood projects have been funded by the City, totaling \$297,671. Projects have included cul-de-sac, right-of-way and median landscaping; playground restoration and/or purchase; alleyway beautification; street trees; pond renovation; historic house plaques and house medallions; prairie restoration; construction of a neighborhood message center; construction of a shelter house in a neighborhood City park, park sidewalks and basketball courts; landscaping of neighborhood entryways; installation of neighborhood barbecue grills; and a neighborhood clean-up day.

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 or other support programs for neighborhood associations that are identified to bolster the development of strong, vibrant neighborhoods.

FISCAL YEAR PRIORITY	TOTAL	1	1	1	1	1
		2009/10	2010/11	2011/12	2012/13	2013/14
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:
Community Enrichment

DEPARTMENT:
City Manager’s Office

ACCOUNT NO.
030-0420-459

COMMUNITY ENRICHMENT - PLANNING & HOUSING

PROJECT/REVENUE DESCRIPTION	TOTAL	2009/10	2010/11	2011/12	2012/13	2013/14	PAGE
EXPENDITURES:							
1 Downtown Facade Program	250,000	50,000	50,000	50,000	50,000	50,000	141
Total Expenditures	250,000	50,000	50,000	50,000	50,000	50,000	
REVENUES:							
City:							
Hotel/Motel 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 ChangeCity of Ames, Iowa
Capital Improvements Plan**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.

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 nine (9) grants for a total amount of \$61,923.

COMMENTS

This program supports one of the City Council's six priorities for the year, the commercial revitalization of the Downtown. If interest continues in this program, funding can be expanded.

LOCATION

Downtown Ames – Map 5, location M-11

FISCAL YEAR PRIORITY		1	1	1	1	1
	TOTAL	2009/10	2010/11	2011/12	2012/13	2013/14
COST:						
Incentives (Loans or Grants)	250,000	50,000	50,000	50,000	50,000	50,000
	TOTAL	50,000	50,000	50,000	50,000	50,000
FINANCING:						
Hotel/Motel Tax	250,000	50,000	50,000	50,000	50,000	50,000
	TOTAL	50,000	50,000	50,000	50,000	50,000

PROGRAM - ACTIVITY:
Community Enrichment

DEPARTMENT:
Planning & Housing

ACCOUNT NO.
040-1030-459

INTERNAL SERVICES - FACILITIES/FLEET SERVICES

PROJECT/REVENUE DESCRIPTION	TOTAL	2009/10	2010/11	2011/12	2012/13	2013/14	PAGE
EXPENDITURES:							
1 Cool Cities: Facility Energy Improvements	400,000	200,000	200,000				143
2 City Hall Mechanical/Structural Improvements	1,645,000	50,000	590,000	50,000	50,000	905,000	144
3 City Hall Space Re-Use Project	1,186,228	1,186,228					145
4 City Maintenance Facility Improvements	794,000	205,000	190,000	180,000	214,000	5,000	146
Total Expenditures	4,025,228	1,641,228	980,000	230,000	264,000	910,000	
REVENUES:							
Bonds:							
G.O. Bonds	1,395,000		540,000			855,000	
City:							
General Fund	600,000	600,000					
Local Option Sales Tax	650,000	250,000	250,000	50,000	50,000	50,000	
Road Use Tax	198,500	51,250	47,500	45,000	53,500	1,250	
Water Utility Fund	198,500	51,250	47,500	45,000	53,500	1,250	
Sewer Utility Fund	198,500	51,250	47,500	45,000	53,500	1,250	
Fleet Services Fund	198,500	51,250	47,500	45,000	53,500	1,250	
Sub-Total City Funds	2,044,000	1,055,000	440,000	230,000	264,000	55,000	
Other:							
Federal Grants	586,228	586,228					
Total Revenues	4,025,228	1,641,228	980,000	230,000	264,000	910,000	

COOL CITIES: CITY FACILITY ENERGY IMPROVEMENTS

PROJECT STATUS: New

City of Ames, Iowa
Capital Improvements Plan

DESCRIPTION/JUSTIFICATION

In response to the City Council's environmental sustainability goal to reduce by 15% the carbon emissions generated from non-utility City operations, energy reduction projects involving lighting, heating, and electronic controls have been identified for various City buildings. These improvements and upgrades for non-utility operations will be installed over a five-year period and will be funded from this program.

COMMENTS

Rather than each department being responsible for supervising these projects, a third party project manager will be hired to develop plans and specifications as well as oversee the installation at each location. Although the Power Plant, Water Plant, WPC Plant, and Resource Recovery Plant will not be included in this program, energy reduction projects will be included in their budgets over the next five years.

LOCATION

Non-utility, City buildings will be eligible to receive benefit from this program.

FISCAL YEAR PRIORITY			1	1			
	TOTAL		2009/10	2010/11	2011/12	2012/13	2013/14
COST:							
Engineering	100,000		50,000	50,000			
Construction	300,000		150,000	150,000			
	TOTAL	400,000	200,000	200,000			
FINANCING:							
Local Option Sales Tax	400,000		200,000	200,000			
	TOTAL	400,000	200,000	200,000			

PROGRAM - ACTIVITY:
Internal Services

DEPARTMENT:
Facilities

ACCOUNT NO.
030-2950-419

CITY HALL MECHANICAL AND STRUCTURAL IMPROVEMENTS

PROJECT STATUS: Cost Change

City of Ames, Iowa
Capital Improvements Plan

DESCRIPTION/JUSTIFICATION

This City Hall improvements program is focused on major maintenance items for the building, including the replacement of mechanical systems and the roof.

The City Hall's mechanical and electrical systems were installed in 1990. Heat pumps have a 12-15 year life expectancy and roof membranes have a 15-20 year life. Since the systems are almost 20 years old, they are requiring higher maintenance or are failing. The projects listed below will replace the existing components and upgrade them to be reliable, more efficient, and environmentally friendly.

COMMENTS

Proposed schedule:

2009/10	Study to determine feasibility of converting the City Hall to a Geo-Thermal HVAC system	\$ 15,000
	Major maintenance as needed	10,000
	Replace front walk with pavers	25,000
2010/11	Replace all heat pumps (180 x \$3,000)	540,000
	Major maintenance as needed	50,000
2011/12	Major maintenance as needed	50,000
2012/13	Major maintenance as needed	50,000
2013/14	Major maintenance as needed	50,000
	Replace roof (\$15/sq ft x 57,000 sq ft)	855,000

LOCATION

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

FISCAL YEAR PRIORITY	TOTAL	2 2009/10	2 2010/11	1 2011/12	1 2012/13	1 2013/14
COST:						
Study	15,000	15,000				
Construction	1,630,000	35,000	590,000	50,000	50,000	905,000
TOTAL	1,645,000	50,000	590,000	50,000	50,000	905,000
FINANCING:						
G.O. Bonds	1,395,000		540,000			855,000
Local Option Sales Tax	250,000	50,000	50,000	50,000	50,000	50,000
TOTAL	1,645,000	50,000	590,000	50,000	50,000	905,000

PROGRAM - ACTIVITY:

Internal Services

DEPARTMENT:

Facilities

ACCOUNT NO.

030-2930-419

CITY HALL SPACE RE-USE PROJECT

PROJECT STATUS: New

City of Ames, Iowa
Capital Improvements Plan

DESCRIPTION/JUSTIFICATION

It has been nearly 20 years since the dedication of the Ames City Hall. No major renovations to the building have occurred during that time even though the structure and the employee space needs have changed significantly. This project will remodel the jail cells for new uses while consolidating the space allocated to the Police Department in the north and east wings of the first floor. This will allow basement space currently occupied by the Police Department to be allocated to Information Technology staff. This will bring the Information Technology function out of rented space and into City Hall.

COMMENTS

Several years ago, the Police Department closed its jail facility and the space formerly allocated to prisoner cells is now unoccupied. In 2008, an architectural review (cost of \$10,395) of that space determined that remodeling would allow consolidation of police functions, improved customer service, and reallocation of basement space to other City Hall users. Flooding during the summer of 2008 resulted in the activation of the City's Emergency Operations Center (EOC). The current EOC is located in the Police Squad Room and occupies 517 square feet. The EOC proved to be wholly inadequate for management of a local emergency event that involved only City staff. A larger event involving additional agencies would not be possible. This project proposes an EOC that could utilize flexible space of up to 1,149 square feet. This portion is proposed for federal funding. In addition to the EOC remodeling costs, this project includes \$50,000 for communications technology in the EOC.

LOCATION

City Hall – Map 5, location L-11

FISCAL YEAR PRIORITY		3				
	TOTAL	2009/10	2010/11	2011/12	2012/13	2013/14
COST:						
Design and Engineering Costs	131,711	131,711				
Construction Costs	1,054,517	1,054,517				
TOTAL	1,186,228	1,186,228				
FINANCING:						
General Fund	600,000	600,000				
Federal Grant for EOC	586,228	586,228				
TOTAL	1,186,228	1,186,228				

PROGRAM - ACTIVITY:	DEPARTMENT:	ACCOUNT NO.
Internal Services	Facilities	010-2940-419 245-2940-419

CITY MAINTENANCE FACILITY IMPROVEMENTS

PROJECT STATUS: Cost Change Delayed

City of Ames, Iowa
Capital Improvements Plan

DESCRIPTION/JUSTIFICATION

These projects are for major maintenance and improvements at the City Maintenance Facility. All new projects are targeted at air quality issues and carbon footprint reduction in accordance with the City's Cool Cities initiative. This building (built in four phases from 1967 to 1997) 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.

2009/10	Roof replacement – Phase I (\$165,000) Install HVAC system in Public Works mezzanine offices - \$40,000
2010/11	Roof replacement– Phase II (\$170,000) Replace shop floor drainage grates (\$15,000) Install solar heat panel on south wall – (\$5,000)
2011/12	Roof replacement – Phase III (\$175,000) Install solar heat panel on south wall – (\$5,000)
2012/13	Shared shop addition (\$205,000) Install backflow valve on sprinkler system (\$4,000) Install solar heat panel on south wall – (\$5,000)
2013/14	Install solar heat panel on south wall – (\$5,000)

COMMENTS

The cost of flat roof systems has increased significantly since first estimated. Phase I, budgeted in FY 08/09 at \$45,000, has been moved to FY 09/10 while Phase II has been moved from FY 09/10 to FY 10/11. Phase III, which wasn't scheduled, has now been added in FY 11/12 due to its aging and condition. The HVAC system in FY 09/10 will provide improved air quality in some offices where no central heat or AC system is available and unacceptable levels of carbon monoxide are present. Three solar heat panels will be installed on the south facing wall in order to reduce carbon dioxide emissions by ¾ ton per year per panel. A shop addition in FY 12/13 will provide a shared shop for all divisions, plus provide a separate ventilated space for welding and grinding, now done in a shop with other shop employees.

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	TOTAL	4	3	2	2	2
COST:						
Construction	794,000	205,000	190,000	180,000	214,000	5,000
TOTAL	794,000	205,000	190,000	180,000	214,000	5,000
FINANCING:						
Road Use Tax	198,500	51,250	47,500	45,000	53,500	1,250
Water Utility Fund	198,500	51,250	47,500	45,000	53,500	1,250
Sewer Utility Fund	198,500	51,250	47,500	45,000	53,500	1,250
Fleet Services Fund	198,500	51,250	47,500	45,000	53,500	1,250
TOTAL	794,000	205,000	190,000	180,000	214,000	5,000

PROGRAM - ACTIVITY:

Internal Services

DEPARTMENT:

Fleet Services

ACCOUNT NO.

810-2770-529

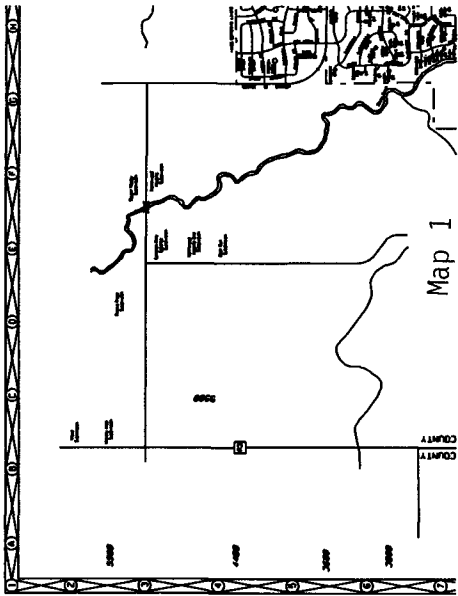


Ames Residents DO Have Recycling

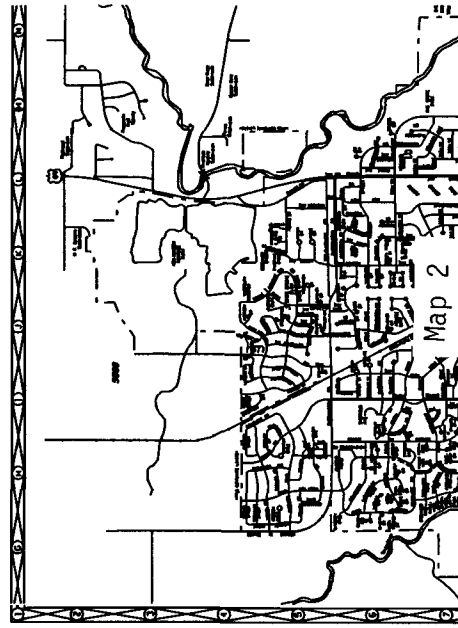
Not a Traditional Curbside Program

Glass Recycling At Area Grocery Stores

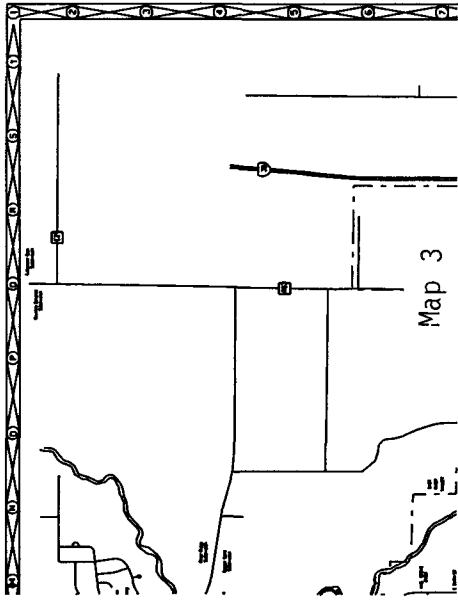
Since 1975, Ames has been converting garbage into energy. That is Smart Trash! The Arnold O. Chantland Resource Recovery Plant (RRP) was the first municipally operated waste-to-energy facility in the nation. The plant receives garbage, recovers reusable metals, and creates refuse-derived fuel to burn in the Power Plant. Since glass doesn't burn, Ames residents are encouraged to drop glass at yellow recycling bins located in the parking lots of area grocery stores.



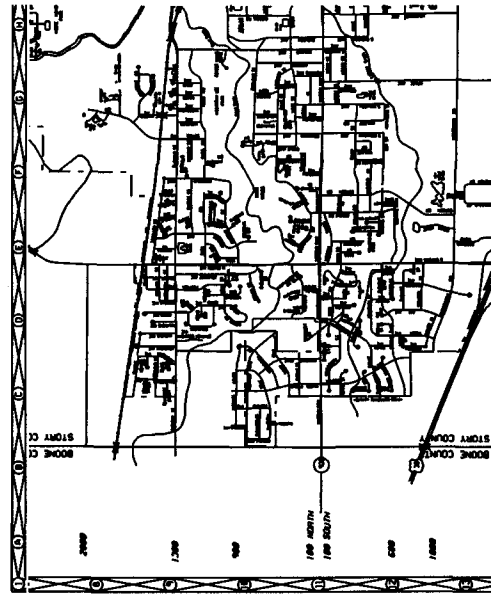
Map 1



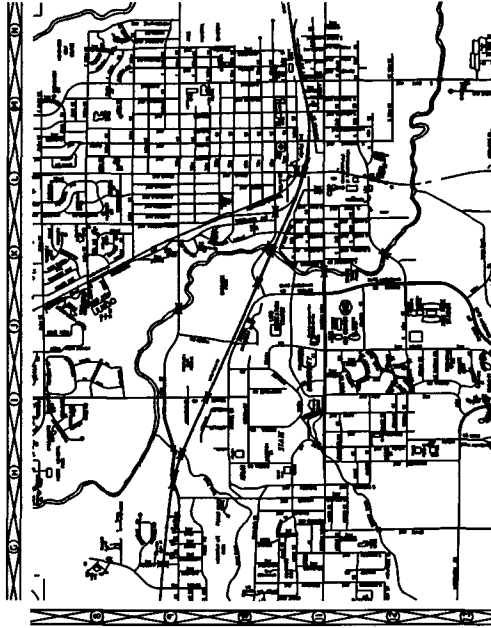
Map 2



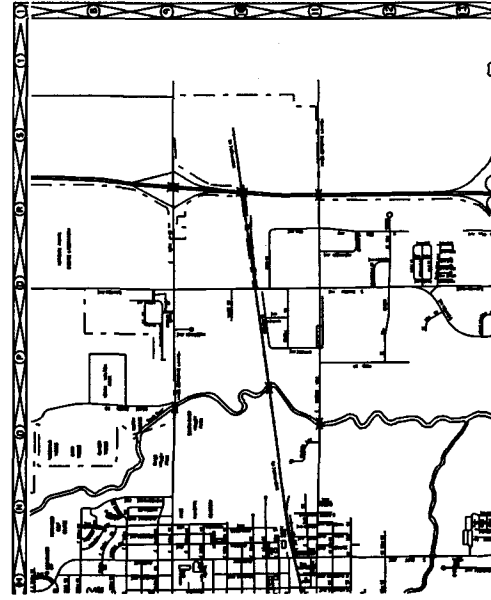
Map 3



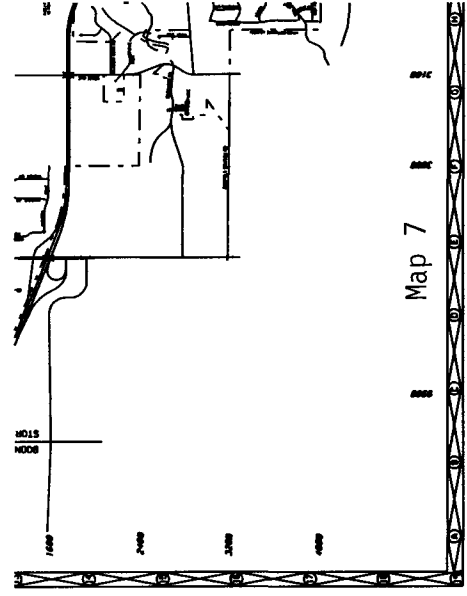
Map 4



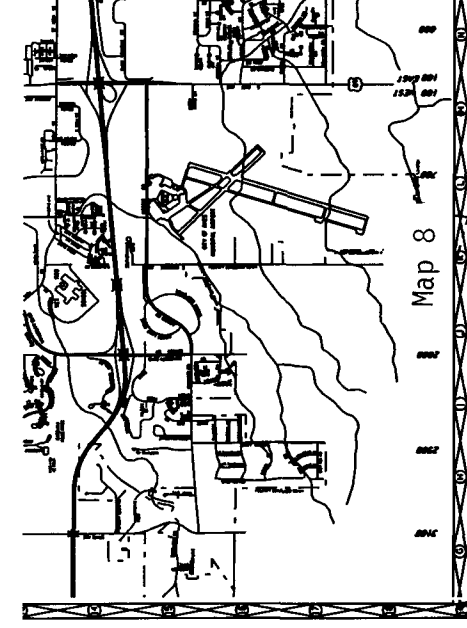
Map 5



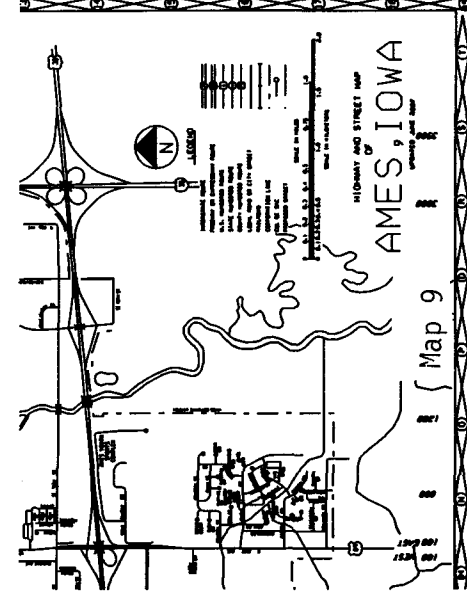
Map 6



Map 7



Map 8

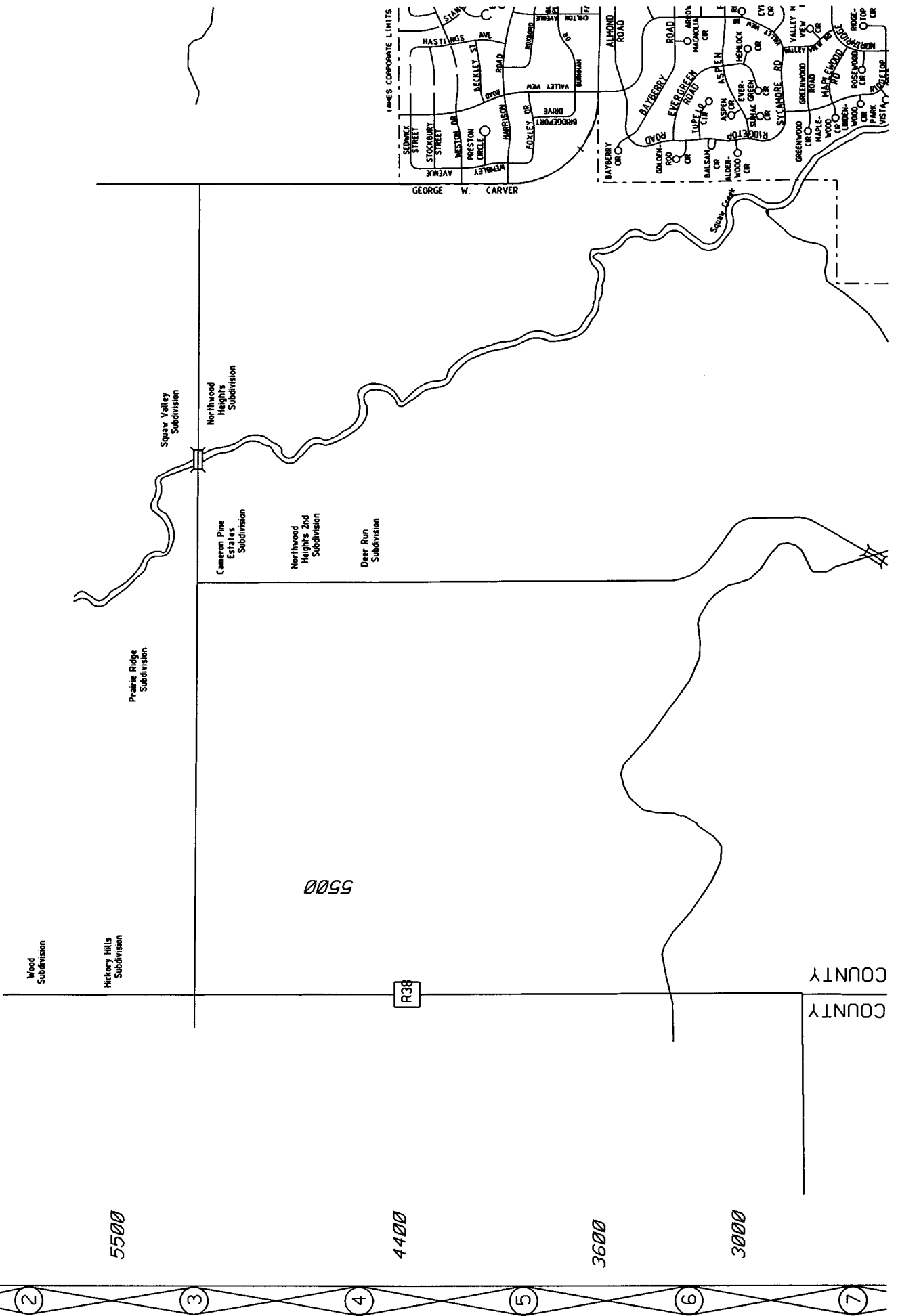


Map 9

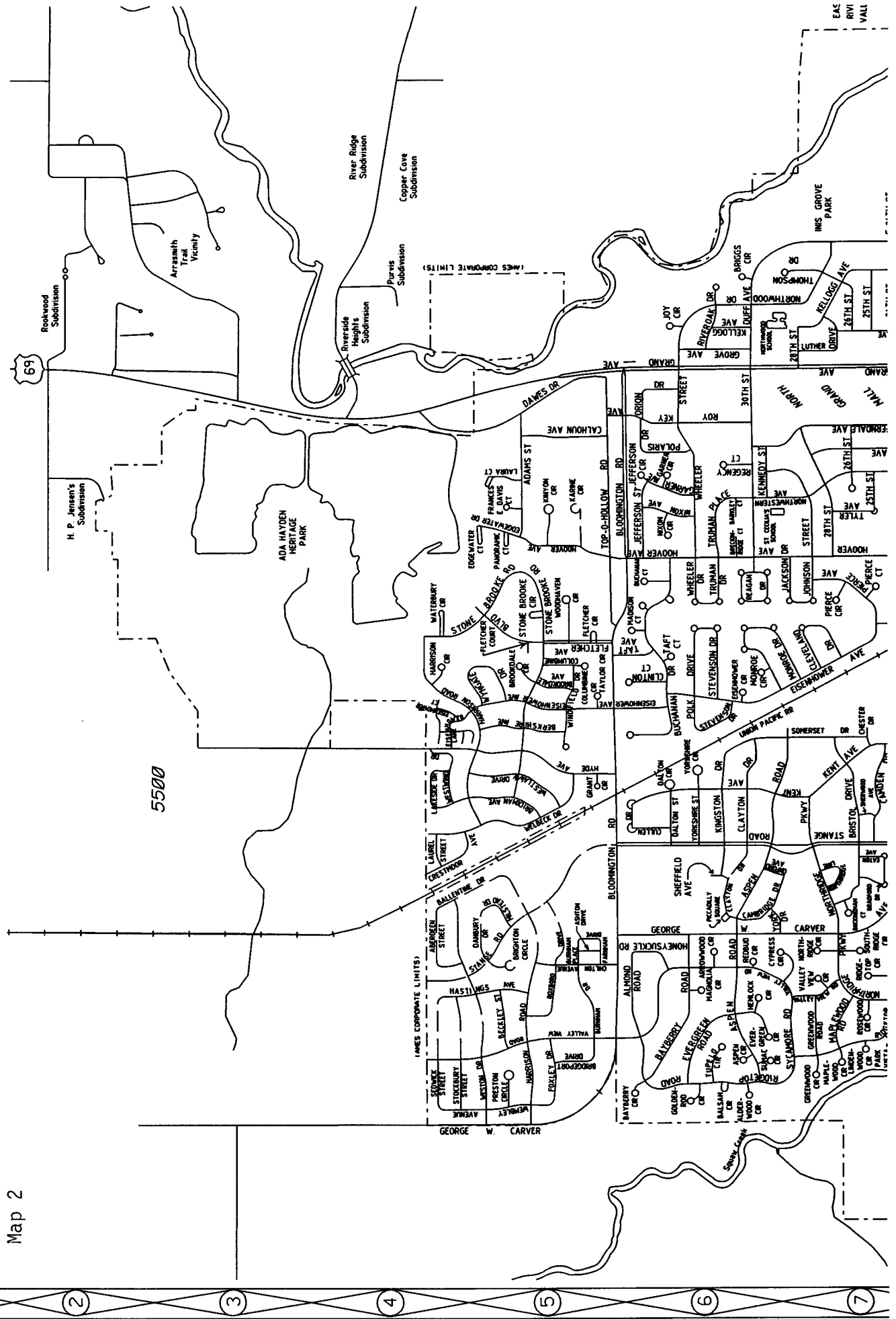
HIGHWAY AND STREET MAP
AMES, IOWA



Map 1



Map 2

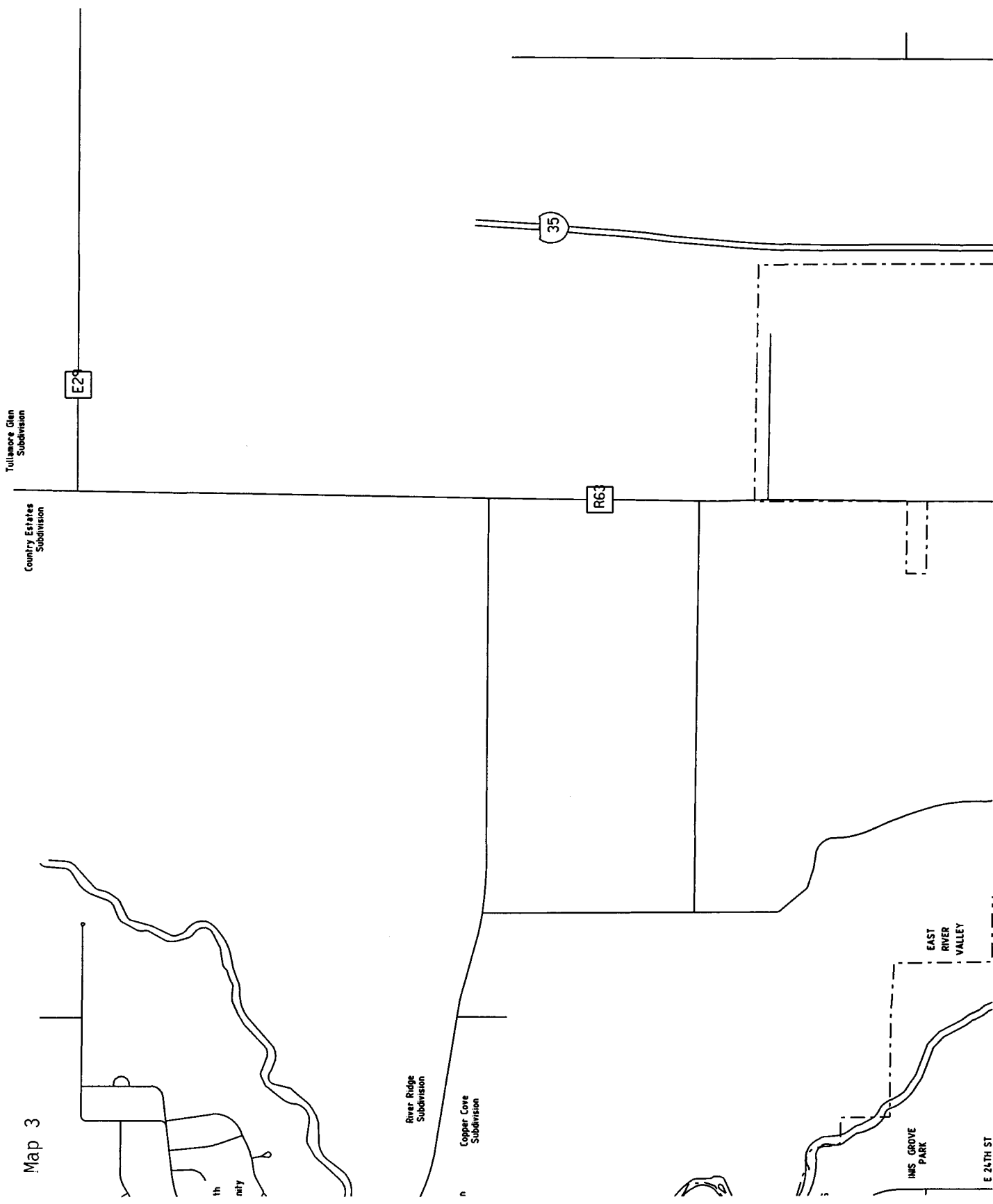


5500

1 2 3 4 5 6 7

G H I J K L M N

Map 3



E29

Tullamore Glen Subdivision

Country Estates Subdivision

River Ridge Subdivision

Copper Cove Subdivision

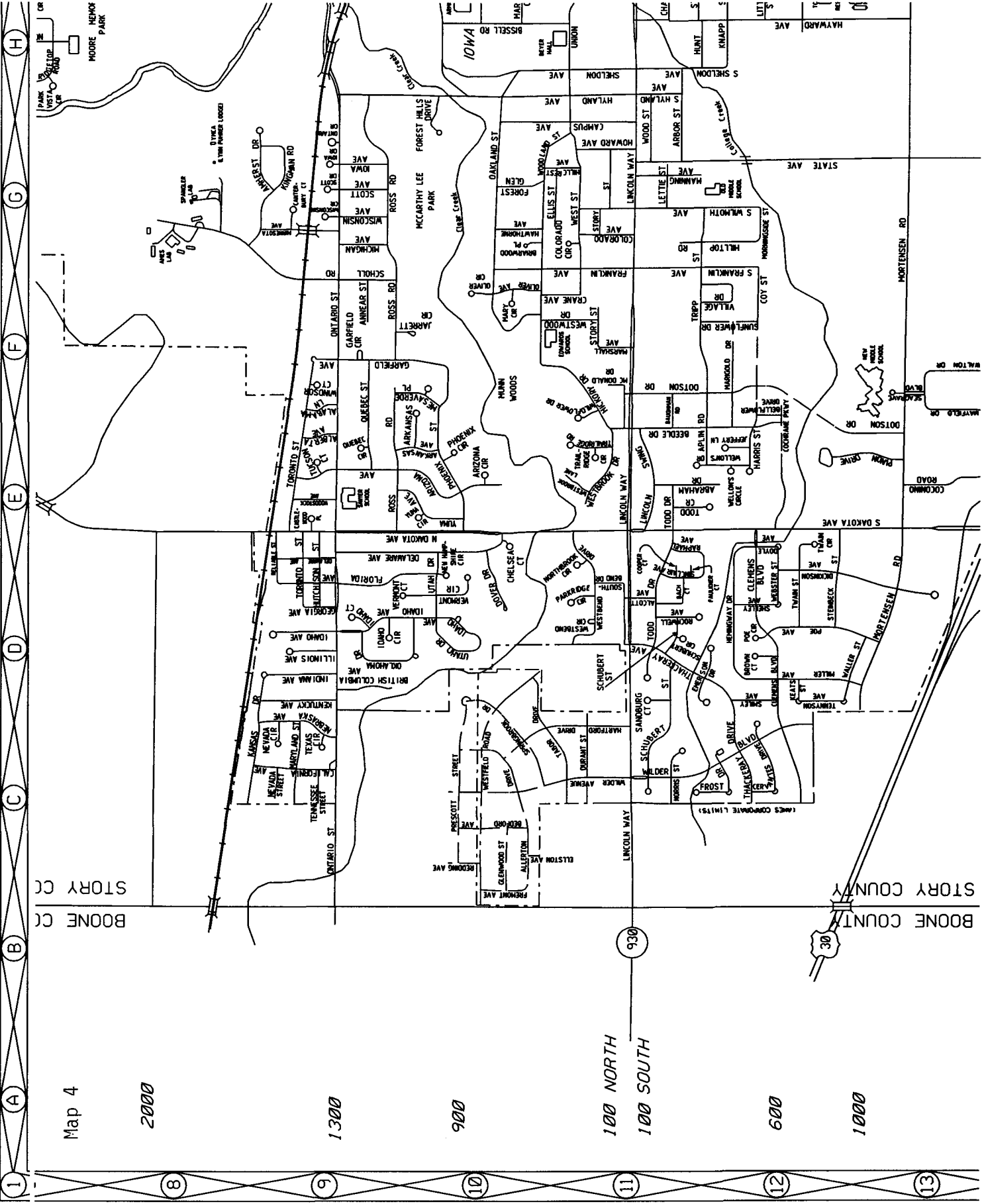
R6.3

35

EAST RIVER VALLEY

IMS GROVE PARK

E 24TH ST



STORY CC
BOONE CC

STORY COUNTY
BOONE COUNTY

Map 4

2000

1300

900

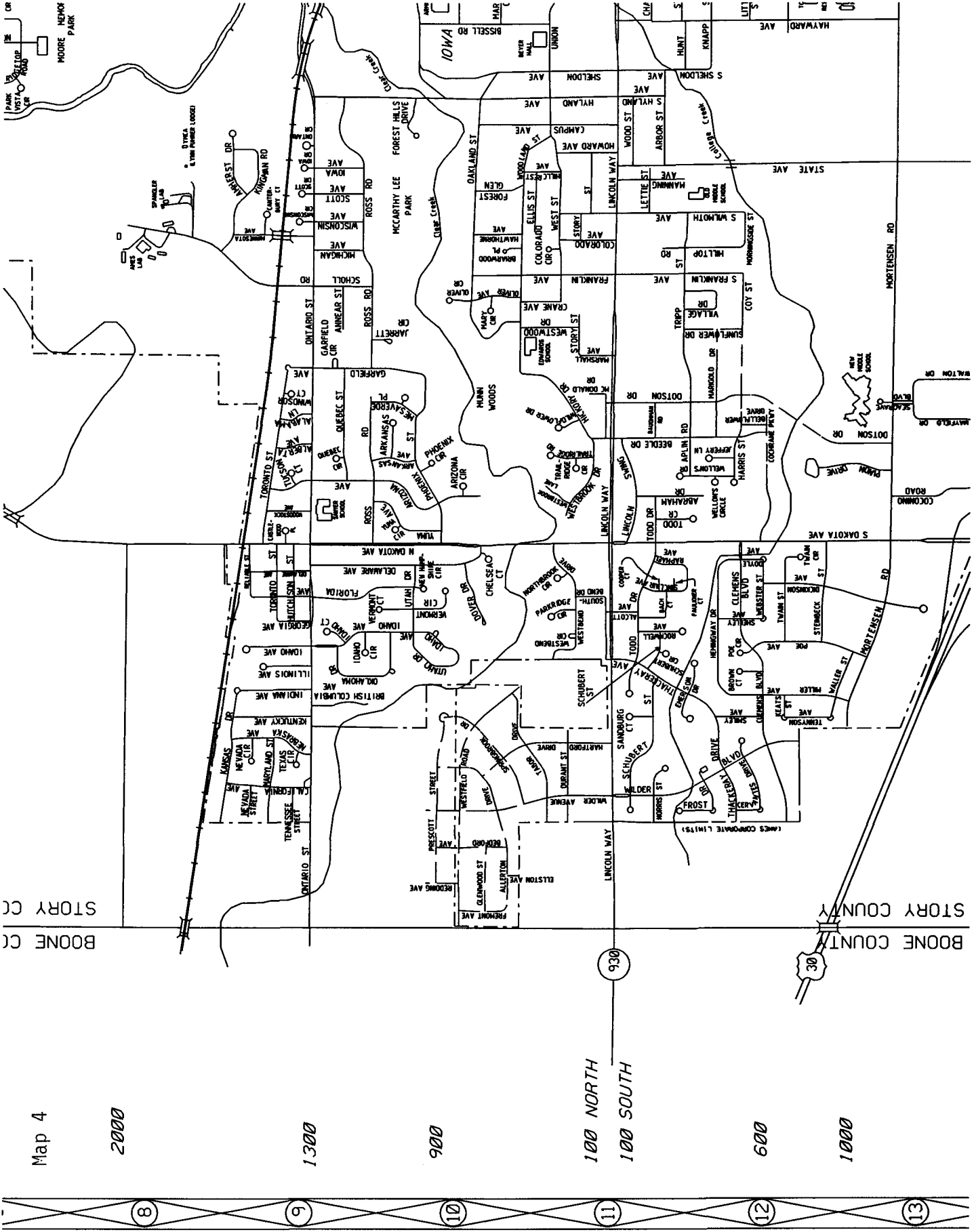
100 NORTH

100 SOUTH

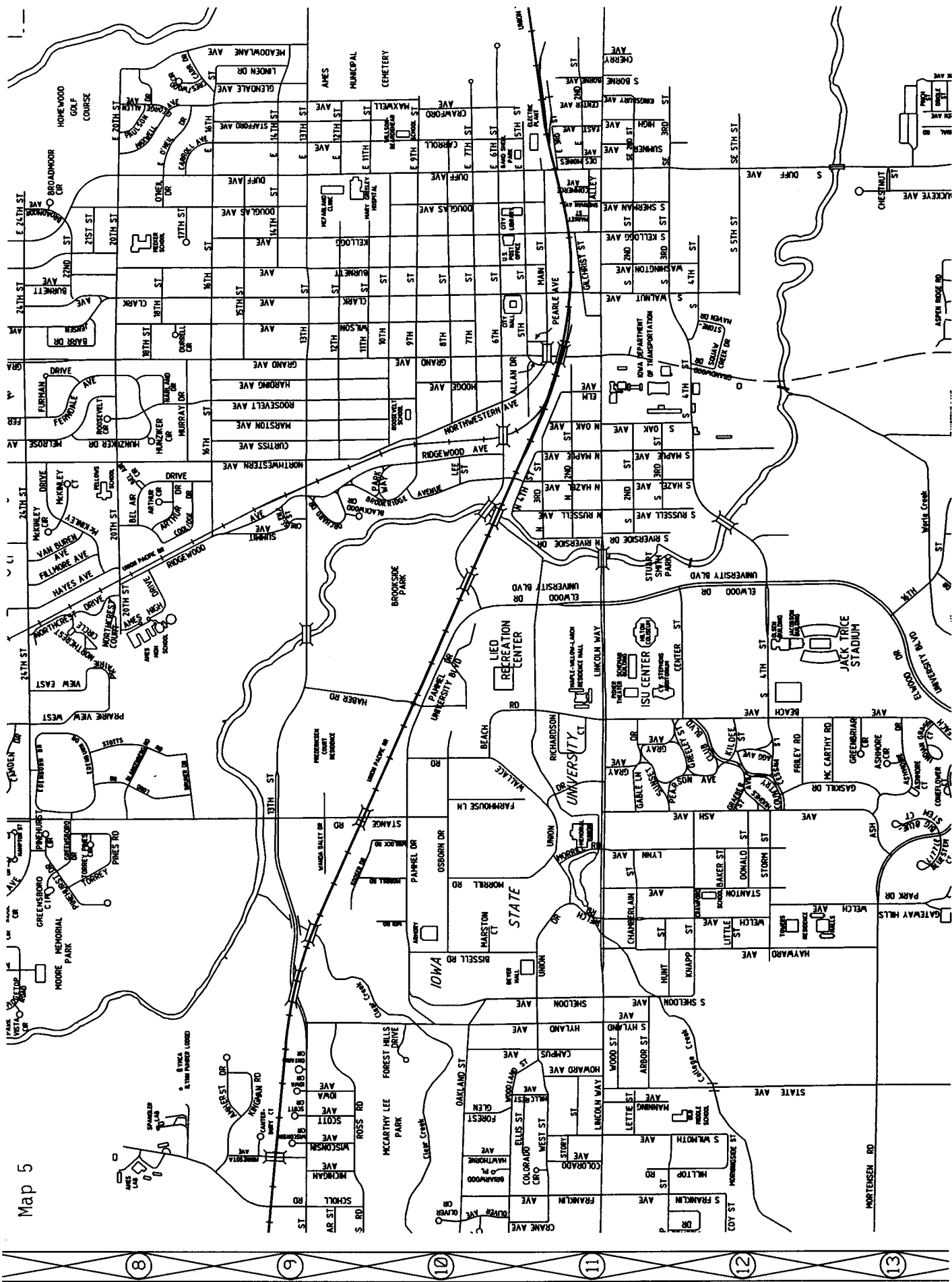
600

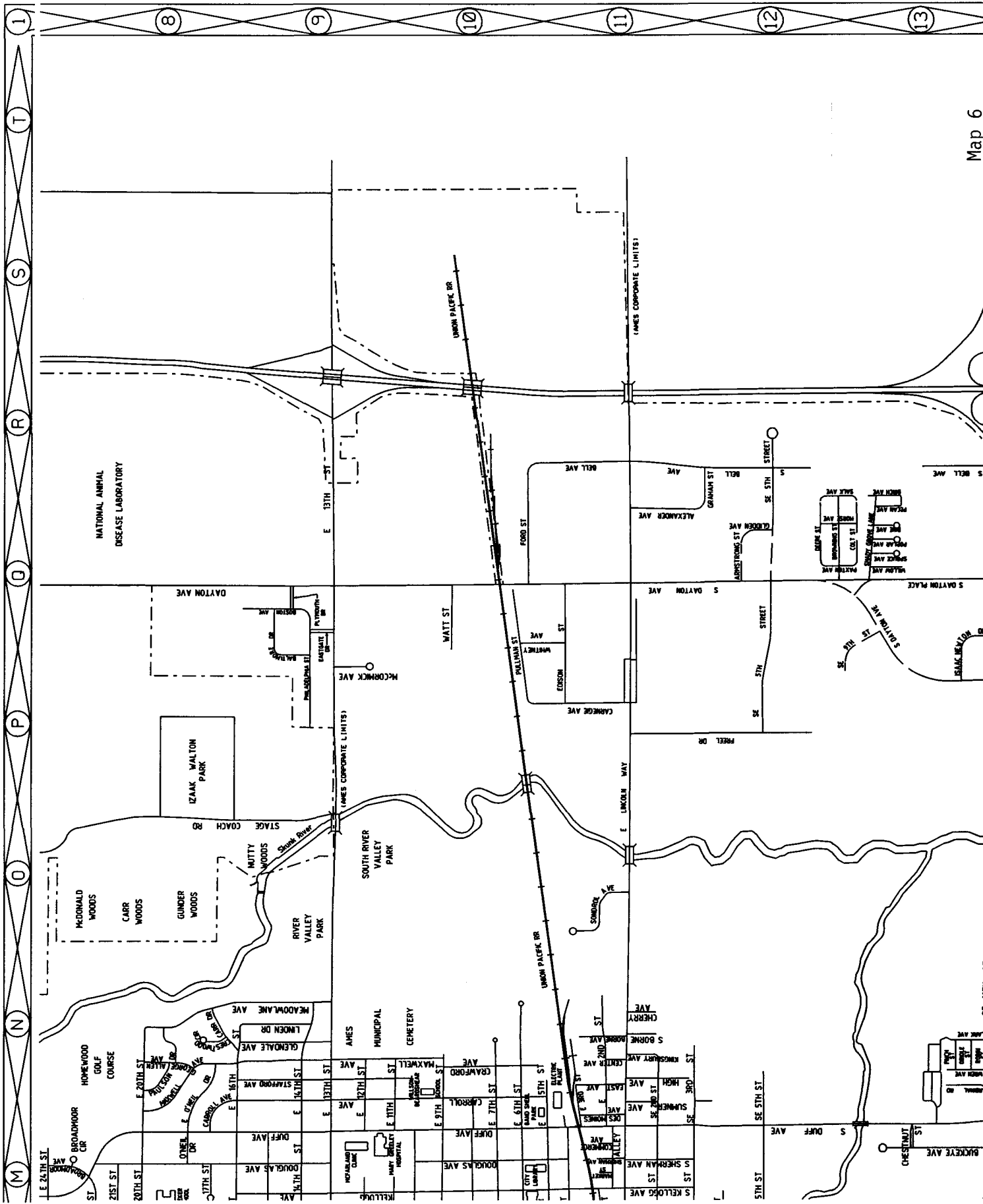
1000

(1) (A) (B) (C) (D) (E) (F) (G) (H)

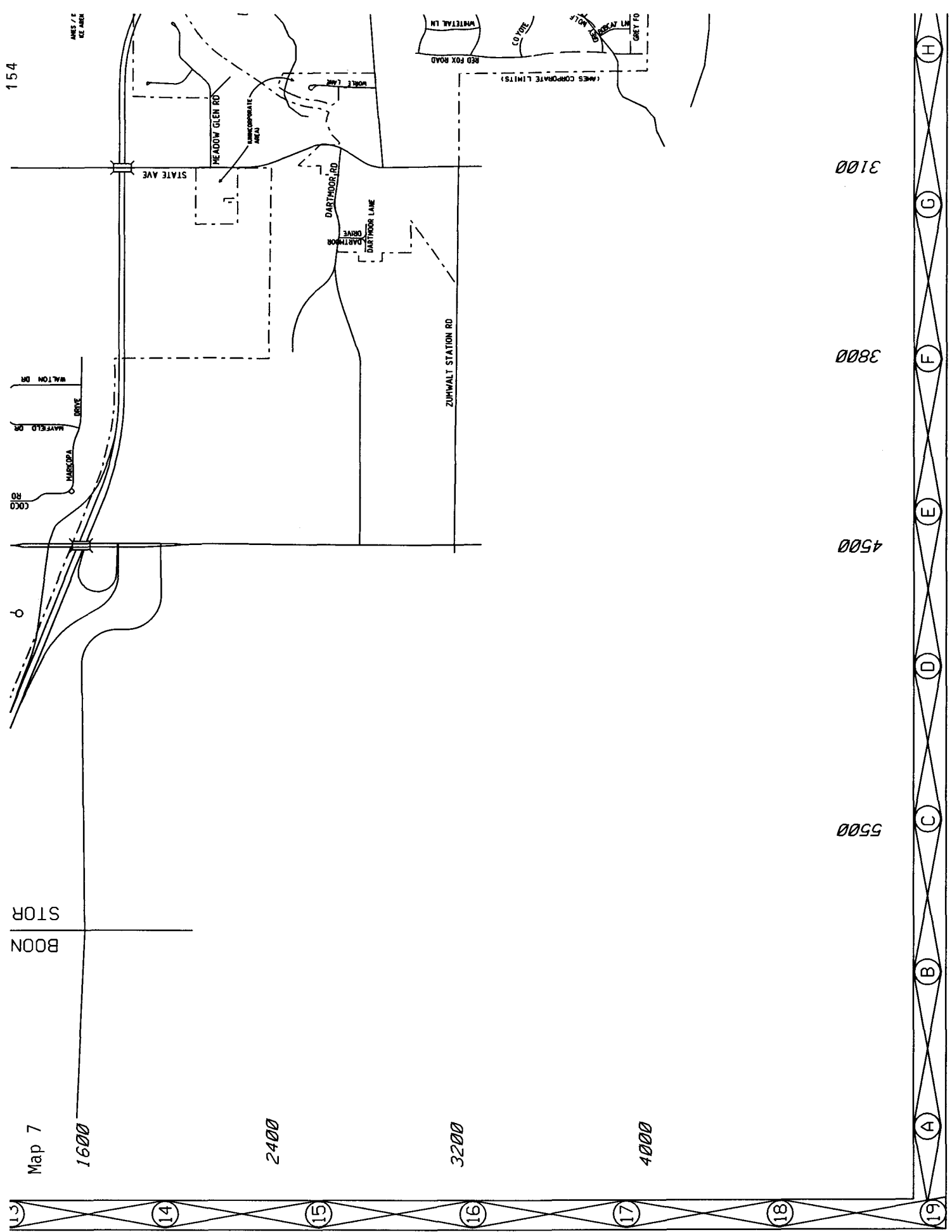


Map 5

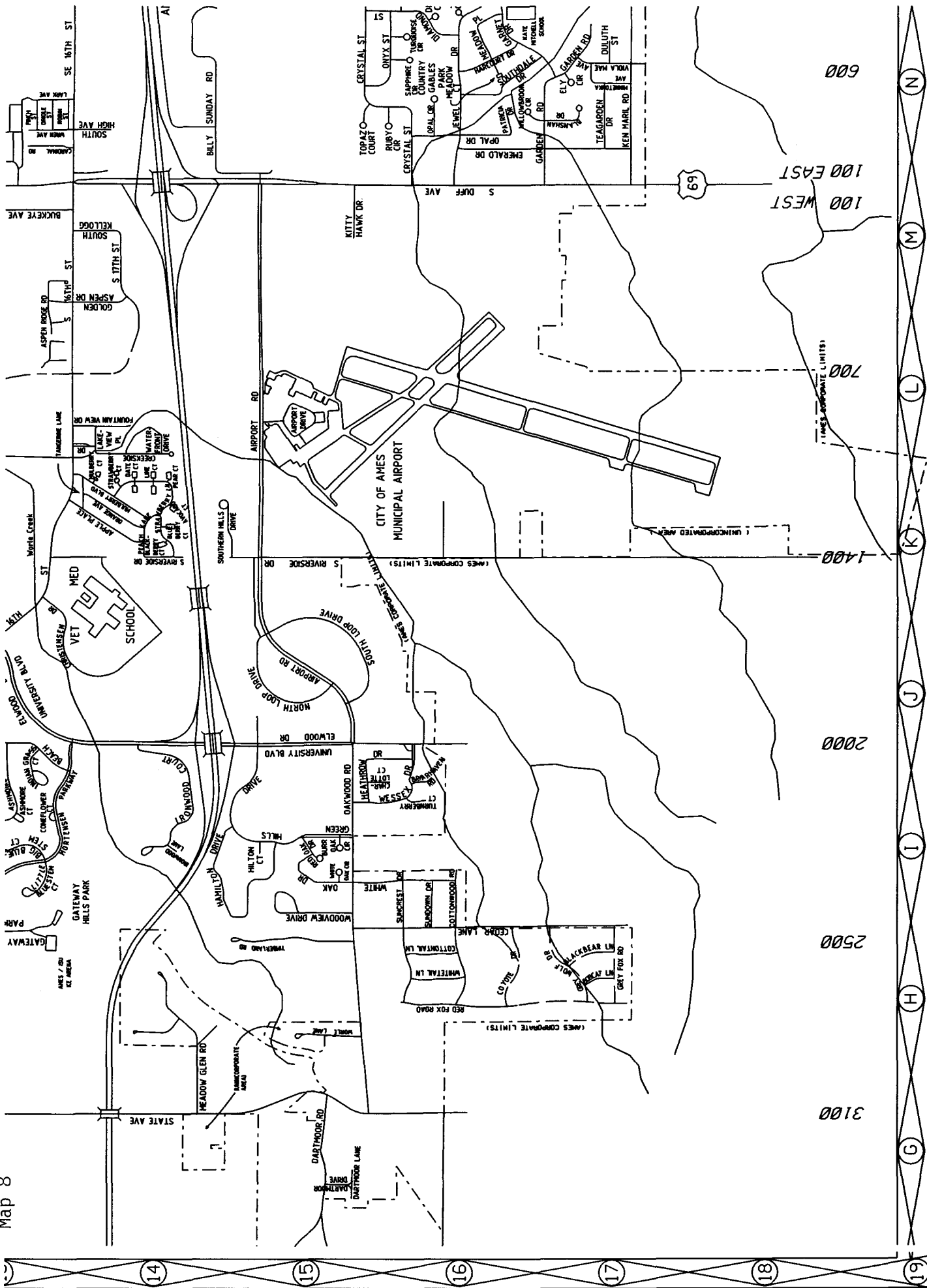




Map 6



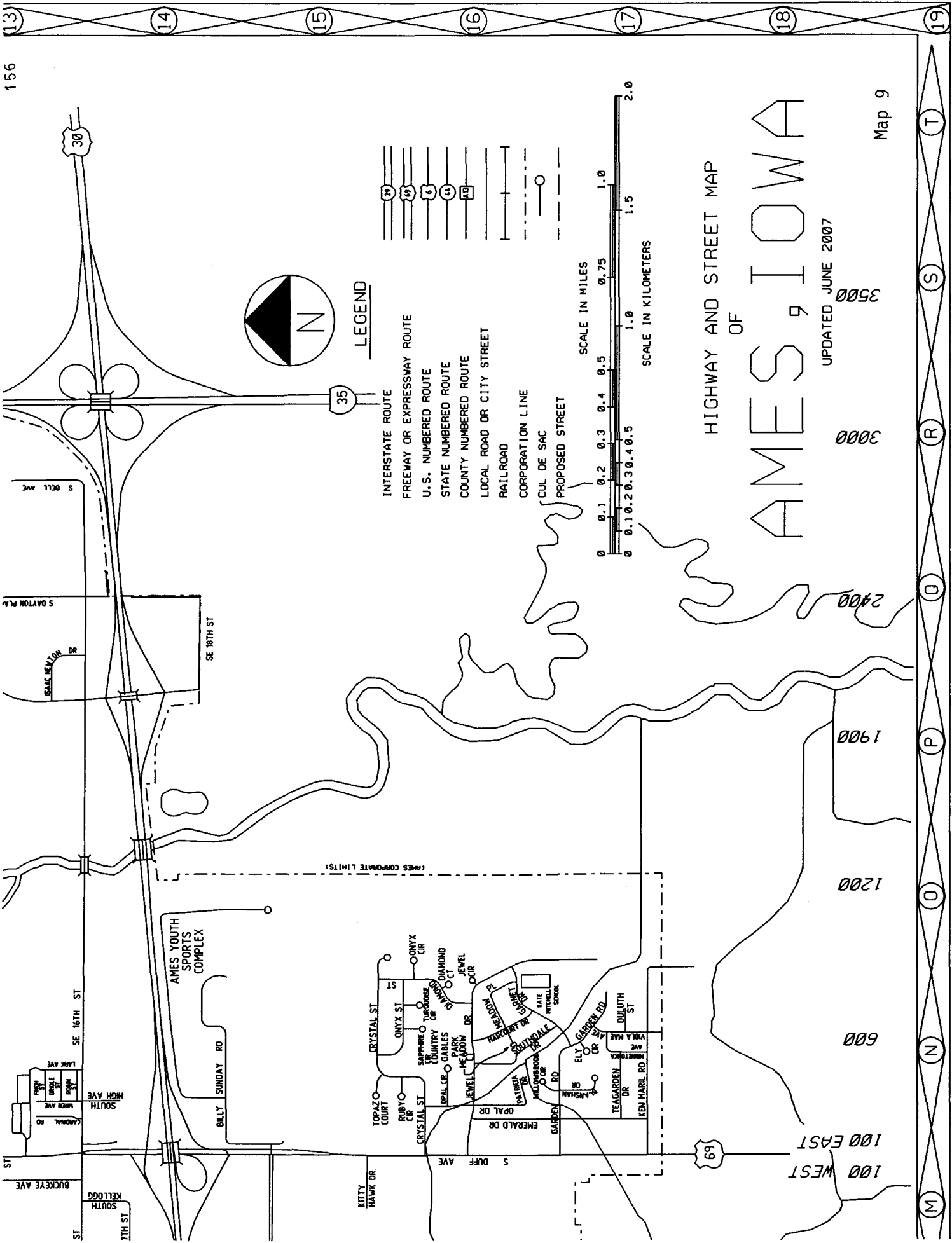
Map 8



600
100 WEST
100 EAST
700
1400
2000
2500
3100

G H I J K L M N

14 15 16 17 18 19



HIGHWAY AND STREET MAP OF AMES, IOWA

UPDATED JUNE 2007

3500

3000

Map 9

M N O P Q R S T