

Storm Drainage

The 2010-2014 Capital Improvements Program for the Storm Drainage Division of Public Works includes projects that correct existing drainage problems and address storm water quality and quantity in newly developing areas in Sioux Falls.

Improving the storm water quality for the City of Sioux Falls is a requirement of the City's Department of Natural Resources Storm Water Permit. The projects that are aimed at improving the storm water quality are the ongoing implementation of best management practices (BMPs) to retrofit existing storm water detention ponds, the Drainage in Developing Areas project which purchases land for new regional BMPs, and also pays for the construction of those BMPs.

Improving storm water capacity and reconstructing existing drainage facilities are another important aspect of the Storm Drainage Program. Projects, including 24th Street and Garfield Avenue drainage improvements, will provide for increased capacity in the drainage systems as well as rehabilitate aged infrastructure. The continuation of sump pump collection system project will help reduce icing, ponding, and soil saturation conditions, hence preserving the integrity of street surfacing.

City of Sioux Falls
 2010-2014 Capital Program

10/07/09 CAPITAL IMPROVEMENT PROGRAM 2010 - 2014

CITY PROJECT NUMBER: 241072

DEPARTMENT: 72- DRAINAGE & STORM SEWER
 DEPARTMENT PROJECT PRIORITY: 1

PROJECT DESCRIPTION:
 DRAINAGE IMPROVEMENTS IN DEVELOPING AREAS

TOTAL 5 YEAR PROJECT COST: \$20,000,000

PROJECT TITLE: DRAINAGE IMPROVEMENTS IN DEVELOPING AREAS

PROJECT JUSTIFICATION AND RELATIONSHIP TO OTHER PROJECTS:
 This project is intended to provide funding for the purchase of real estate, engineering, and construction of future stormwater management facilities and developer/owner reimbursement for construction of new drainage infrastructure.

CONFORM TO COMPREHENSIVE PLAN: In Conformance with the Plan
 STATUS OF PLANS: Nothing Done Except This Report
 CONFORMANCE TO AMERICAN DISABILITIES ACT: Y
 PROJECT CATEGORY: Storm Sewer
 ESTIMATED IMPACT ON THE ANNUAL OPERATING BUDGET:
 \$511 PER INCH DIA MILE/\$840/ACRE

PROGRAMMED EXPENDITURES:	-----				
YEAR:	2010	2011	2012	2013	2014

SD STORM DRAINAGE FEES A ENGINEERING 272-7201-430.35-21	200,000	200,000	200,000	200,000	200,000
SD STORM DRAINAGE FEES D STORM SEWER 272-7201-430.35-39	3,800,000	3,800,000	3,800,000	3,800,000	3,800,000

City of Sioux Falls
 2010-2014 Capital Program

10/07/09 CAPITAL IMPROVEMENT PROGRAM 2010 - 2014

CITY PROJECT NUMBER: 177072

DEPARTMENT: 72- DRAINAGE & STORM SEWER
 DEPARTMENT PROJECT PRIORITY: 2

PROJECT DESCRIPTION:

DETENTION POND RETROFITS FOR WATER QUALITY ENHANCEMENT; 34TH ST NORTH & FIERO PL, 30TH ST & WEST AVE, 36TH ST & SYCAMORE AVE, 41ST ST & BAHNSON AVE, 38TH ST & SHIRLEY AVE, AND 55TH ST & JANDL DR, DESIGN & CONSTRUCT (10)

TOTAL 5 YEAR PROJECT COST: \$166,000

PROJECT TITLE: UPDATE EXISTING FLOOD CONTROL STRUCTURES FOR WATER QUALITY

PROJECT JUSTIFICATION AND RELATIONSHIP TO OTHER PROJECTS:

This project will be used to design and construct structural and non-structural devices to be retrofitted into existing storm water control structures to enhance water quality as necessary to meet the City's Storm Water Permit.

CONFORM TO COMPREHENSIVE PLAN: Generally Conforms with the Plan

STATUS OF PLANS: Nothing Done Except This Report

CONFORMANCE TO AMERICAN DISABILITIES ACT: Y

PROJECT CATEGORY: Storm Sewer

ESTIMATED IMPACT ON THE ANNUAL OPERATING BUDGET:
 NO EFFECT

 PROGRAMMED EXPENDITURES:

YEAR:	2010	2011	2012	2013	2014
SL STATE LOANS A ENGINEERING 272-7245-430.35-21	15,000				
SL STATE LOANS D STORM SEWER 272-7245-430.35-39	150,000				
SL STATE LOANS M GEOTECHNICAL SERVICES 272-7245-430.35-23	1,000				

City of Sioux Falls
 2010-2014 Capital Program

10/07/09 CAPITAL IMPROVEMENT PROGRAM 2010 - 2014

CITY PROJECT NUMBER: 242072

DEPARTMENT: 72- DRAINAGE & STORM SEWER
 DEPARTMENT PROJECT PRIORITY: 3

PROJECT DESCRIPTION:

SUMP PUMP COLLECTION SYSTEMS AT VARIOUS LOCATIONS

TOTAL 5 YEAR PROJECT COST: \$1,500,000

PROJECT TITLE: SUMP PUMP COLLECTION SYSTEMS

PROJECT JUSTIFICATION AND RELATIONSHIP TO OTHER PROJECTS:

This project is to retrofit existing urbanized areas with sump pump collection systems to reduce icing, ponding and soil saturation conditions resulting from surface discharge of groundwater collection from foundations.

CONFORM TO COMPREHENSIVE PLAN: In Conformance with the Plan

STATUS OF PLANS: Nothing Done Except This Report

CONFORMANCE TO AMERICAN DISABILITIES ACT: Y

PROJECT CATEGORY: Storm Sewer

ESTIMATED IMPACT ON THE ANNUAL OPERATING BUDGET:

\$511 PER INCH DIA MILE/\$840/ACRE

 PROGRAMMED EXPENDITURES:

YEAR:	2010	2011	2012	2013	2014
SD STORM DRAINAGE FEES	300,000	300,000	300,000	300,000	300,000
D STORM SEWER					
272-7201-430.35-39					

City of Sioux Falls
 2010-2014 Capital Program

10/07/09 CAPITAL IMPROVEMENT PROGRAM 2010 - 2014

CITY PROJECT NUMBER: 246072

DEPARTMENT: 72- DRAINAGE & STORM SEWER
 DEPARTMENT PROJECT PRIORITY: 4

PROJECT DESCRIPTION:
 UNFORESEEN DRAINAGE IMPROVEMENT FOR DRAINAGE FACILITIES

TOTAL 5 YEAR PROJECT COST: \$1,000,000

PROJECT TITLE: UNFORESEEN DRAINAGE IMPROVEMENTS

PROJECT JUSTIFICATION AND RELATIONSHIP TO OTHER PROJECTS:
 This project is to cover costs of unforeseen drainage improvements that need immediate attention.

CONFORM TO COMPREHENSIVE PLAN: In Conformance with the Plan
 STATUS OF PLANS: Nothing Done Except This Report
 CONFORMANCE TO AMERICAN DISABILITIES ACT: Y
 PROJECT CATEGORY: Storm Sewer
 ESTIMATED IMPACT ON THE ANNUAL OPERATING BUDGET:
 \$511 PER INCH DIA MILE/\$840/ACRE

PROGRAMMED EXPENDITURES: YEAR:	2010	2011	2012	2013	2014
SD STORM DRAINAGE FEES A ENGINEERING 272-7201-430.35-21	50,000	50,000	50,000	50,000	50,000
SD STORM DRAINAGE FEES D STORM SEWER 272-7201-430.35-39	150,000	150,000	150,000	150,000	150,000

City of Sioux Falls
 2010-2014 Capital Program

10/07/09 CAPITAL IMPROVEMENT PROGRAM 2010 - 2014

CITY PROJECT NUMBER: 249072

DEPARTMENT: 72- DRAINAGE & STORM SEWER
 DEPARTMENT PROJECT PRIORITY: 5

PROJECT DESCRIPTION:

CONSTRUCT WETLANDS FOR MITIGATION FOR CITY CONSTRUCTION PROJECTS

TOTAL 5 YEAR PROJECT COST: \$250,000

PROJECT TITLE: WETLAND BANKING

PROJECT JUSTIFICATION AND RELATIONSHIP TO OTHER PROJECTS:

This project is intended to use existing city collection well property to construct mitigated wetland from various City construction projects instead of buying mitigated land from an outside source.

CONFORM TO COMPREHENSIVE PLAN: In Conformance with the Plan

STATUS OF PLANS: Nothing Done Except This Report

CONFORMANCE TO AMERICAN DISABILITIES ACT: Y

PROJECT CATEGORY: Storm Sewer

ESTIMATED IMPACT ON THE ANNUAL OPERATING BUDGET:

\$840 PER ACE FOR SURFACE TREATMENTS

 PROGRAMMED EXPENDITURES:

YEAR:	2010	2011	2012	2013	2014
SD STORM DRAINAGE FEES A ENGINEERING 272-7201-430.35-21	50,000				
SD STORM DRAINAGE FEES D STORM SEWER 272-7201-430.35-39	200,000				

City of Sioux Falls
 2010-2014 Capital Program

10/07/09 CAPITAL IMPROVEMENT PROGRAM 2010 - 2014

CITY PROJECT NUMBER: 237072

DEPARTMENT: 72- DRAINAGE & STORM SEWER
 DEPARTMENT PROJECT PRIORITY: 6

PROJECT DESCRIPTION:

REMOVE EXISTING CONCRETE CHANNEL, INSTALL LOW FLOW PIPE, RECONSTRUCT
 OUTLET FROM JANDL POND, REGRADE A GRASS CHANNEL THROUGH SCHOOL YARD, CONSTRUCT
 (10)

TOTAL 5 YEAR PROJECT COST: \$230,000

PROJECT TITLE: JFK DRAINAGE IMPROVEMENTS

PROJECT JUSTIFICATION AND RELATIONSHIP TO OTHER PROJECTS:

Concrete channel is deteriorated and needs to be removed, and in its place a
 low flow pipe is needed to improve the drainage issues.

CONFORM TO COMPREHENSIVE PLAN: In Conformance with the Plan

STATUS OF PLANS: Nothing Done Except This Report

CONFORMANCE TO AMERICAN DISABILITIES ACT: Y

PROJECT CATEGORY: Storm Sewer

ESTIMATED IMPACT ON THE ANNUAL OPERATING BUDGET:

\$511 PER INCH DIA MILE/\$840/ACRE

 PROGRAMMED EXPENDITURES:

YEAR:	2010	2011	2012	2013	2014
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SD STORM DRAINAGE FEES	230,000				
D STORM SEWER					
272-7201-430.35-39					

City of Sioux Falls
2010-2014 Capital Program

10/07/09 CAPITAL IMPROVEMENT PROGRAM 2010 - 2014

CITY PROJECT NUMBER: 239072

DEPARTMENT: 72- DRAINAGE & STORM SEWER
DEPARTMENT PROJECT PRIORITY: 7

PROJECT DESCRIPTION:

INSTALL NEW STORM PIPE ALONG GARFIELD AVE, 24TH ST, WILLIAMS AVE, DESIGN & CONSTRUCT (11)

TOTAL 5 YEAR PROJECT COST: \$275,000

PROJECT TITLE: 24TH STREET & GARFIELD AVENUE DRAINAGE IMPROVEMENTS

PROJECT JUSTIFICATION AND RELATIONSHIP TO OTHER PROJECTS:

This project is needed to reroute storm sewer drainage from under garages to reduce backyard ponding and drainage issues.

CONFORM TO COMPREHENSIVE PLAN: In Conformance with the Plan

STATUS OF PLANS: Nothing Done Except This Report

CONFORMANCE TO AMERICAN DISABILITIES ACT: Y

PROJECT CATEGORY: Storm Sewer

ESTIMATED IMPACT ON THE ANNUAL OPERATING BUDGET:

\$511 PER INCH DIA MILE/\$840/ACRE

PROGRAMMED EXPENDITURES:

YEAR:	2010	2011	2012	2013	2014
SD STORM DRAINAGE FEES A ENGINEERING 272-7201-430.35-21		45,000			
SD STORM DRAINAGE FEES D STORM SEWER 272-7201-430.35-39		200,000			
UF USER FEES E WATER 675-7501-480.35-41		30,000			

City of Sioux Falls
 2010-2014 Capital Program

10/07/09 CAPITAL IMPROVEMENT PROGRAM 2010 - 2014

CITY PROJECT NUMBER: 247072

DEPARTMENT: 72- DRAINAGE & STORM SEWER
 DEPARTMENT PROJECT PRIORITY: 8

PROJECT DESCRIPTION:

CLEAN OUT CHANNEL AND INSTALL BANK STABILIZATION, DESIGN (10), CONSTRUCT (11)

TOTAL 5 YEAR PROJECT COST: \$540,000

PROJECT TITLE: ROOSEVELT CHANNEL DRAINAGE IMPROVEMENTS

PROJECT JUSTIFICATION AND RELATIONSHIP TO OTHER PROJECTS:

Channel has been silted in over time and needs cleaning out.

CONFORM TO COMPREHENSIVE PLAN: In Conformance with the Plan

STATUS OF PLANS: Nothing Done Except This Report

CONFORMANCE TO AMERICAN DISABILITIES ACT: Y

PROJECT CATEGORY: Storm Sewer

ESTIMATED IMPACT ON THE ANNUAL OPERATING BUDGET:

\$511 PER INCH DIA MILE/\$840/ACRE

 PROGRAMMED EXPENDITURES:

YEAR:	2010	2011	2012	2013	2014
SD STORM DRAINAGE FEES A ENGINEERING 272-7201-430.35-21	20,000	20,000			
SD STORM DRAINAGE FEES D STORM SEWER 272-7201-430.35-39		500,000			

City of Sioux Falls
 2010-2014 Capital Program

10/07/09 CAPITAL IMPROVEMENT PROGRAM 2010 - 2014

CITY PROJECT NUMBER: 223072

DEPARTMENT: 72- DRAINAGE & STORM SEWER
 DEPARTMENT PROJECT PRIORITY: 9

PROJECT DESCRIPTION:

SOLBERG AVENUE IMPROVEMENTS BETWEEN 49TH ST TO 57TH ST, CUSTER LANE RUNNING TO
 DETENTION POND ON 49TH ST, DESIGN (11), CONSTRUCT (12)

TOTAL 5 YEAR PROJECT COST: \$898,000

PROJECT TITLE: SOLBERG AVENUE DRAINAGE IMPROVEMENTS

PROJECT JUSTIFICATION AND RELATIONSHIP TO OTHER PROJECTS:

Larger pipe needed to convey 5 year flows from future upstream development.

CONFORM TO COMPREHENSIVE PLAN: In Conformance with the Plan

STATUS OF PLANS: Nothing Done Except This Report

CONFORMANCE TO AMERICAN DISABILITIES ACT: Y

PROJECT CATEGORY: Storm Sewer

ESTIMATED IMPACT ON THE ANNUAL OPERATING BUDGET:

\$511 PER INCH DIA MILE/\$840/ACRE

PROGRAMMED EXPENDITURES:	2010	2011	2012	2013	2014
YEAR:					
SD STORM DRAINAGE FEES A ENGINEERING 272-7201-430.35-21		74,000	40,000		
SD STORM DRAINAGE FEES D STORM SEWER 272-7201-430.35-39			550,000		
UF USER FEES E WATER 675-7501-480.35-41			200,000		
UF USER FEES F WATER RECLAMATION 677-7711-480.35-51			34,000		

City of Sioux Falls
2010-2014 Capital Program

10/07/09 CAPITAL IMPROVEMENT PROGRAM 2010 - 2014

CITY PROJECT NUMBER: 240072

DEPARTMENT: 72- DRAINAGE & STORM SEWER
DEPARTMENT PROJECT PRIORITY: 10

PROJECT DESCRIPTION:

CONSTRUCT A LARGER GRASS LINED CHANNEL WITH STEP WEIRS, DESIGN (12), CONSTRUCT (13)

TOTAL 5 YEAR PROJECT COST: \$247,500

PROJECT TITLE: EMERALD ACRES DRAINAGE CHANNEL

PROJECT JUSTIFICATION AND RELATIONSHIP TO OTHER PROJECTS:

Existing channel is eroding and needs to be reconstructed with a larger grass lined open channel and step weirs to improve the drainage in the area.

CONFORM TO COMPREHENSIVE PLAN: In Conformance with the Plan

STATUS OF PLANS: Nothing Done Except This Report

CONFORMANCE TO AMERICAN DISABILITIES ACT: Y

PROJECT CATEGORY: Storm Sewer

ESTIMATED IMPACT ON THE ANNUAL OPERATING BUDGET:

\$511 PER INCH DIA MILE/\$840/ACRE

PROGRAMMED EXPENDITURES:

YEAR:	2010	2011	2012	2013	2014
SD STORM DRAINAGE FEES A ENGINEERING 272-7201-430.35-21			20,000	20,000	
SD STORM DRAINAGE FEES D STORM SEWER 272-7201-430.35-39				200,000	
UF USER FEES E WATER 675-7501-480.35-41				7,500	

City of Sioux Falls
 2010-2014 Capital Program

10/07/09 CAPITAL IMPROVEMENT PROGRAM 2010 - 2014

CITY PROJECT NUMBER: 248072

DEPARTMENT: 72- DRAINAGE & STORM SEWER
 DEPARTMENT PROJECT PRIORITY: 11

PROJECT DESCRIPTION:

INSTALL LOW FLOW PIPE AND CHANNEL EROSION PROTECTION, DESIGN (12),
 CONSTRUCT (13)

TOTAL 5 YEAR PROJECT COST: \$260,000

PROJECT TITLE: O'TONKA TRAIL CHANNEL DRAINAGE IMPROVEMENTS

PROJECT JUSTIFICATION AND RELATIONSHIP TO OTHER PROJECTS:

The existing channel has major erosion issues and a new low flow pipe system with channel erosion protection will help convey flows.

CONFORM TO COMPREHENSIVE PLAN: In Conformance with the Plan

STATUS OF PLANS: Nothing Done Except This Report

CONFORMANCE TO AMERICAN DISABILITIES ACT: Y

PROJECT CATEGORY: Storm Sewer

ESTIMATED IMPACT ON THE ANNUAL OPERATING BUDGET:

\$511 PER INCH DIA MILE/\$840/ACRE

 PROGRAMMED EXPENDITURES:

YEAR:	2010	2011	2012	2013	2014
SD STORM DRAINAGE FEES A ENGINEERING 272-7201-430.35-21			40,000	20,000	
SD STORM DRAINAGE FEES D STORM SEWER 272-7201-430.35-39				200,000	

City of Sioux Falls
 2010-2014 Capital Program

10/07/09 CAPITAL IMPROVEMENT PROGRAM 2010 - 2014

CITY PROJECT NUMBER: 244072

DEPARTMENT: 72- DRAINAGE & STORM SEWER
 DEPARTMENT PROJECT PRIORITY: 12

PROJECT DESCRIPTION:

REDIRECT PUBLIC STORMWATER TO CITY STORM SEWER SYSTEM, DESIGN (13),
 CONSTRUCT (14)

TOTAL 5 YEAR PROJECT COST: \$185,000

PROJECT TITLE: MORNINGSIDE PARK DRAINAGE IMPROVEMENTS

PROJECT JUSTIFICATION AND RELATIONSHIP TO OTHER PROJECTS:

This project will redirect public stormwater from private property to a public storm sewer system in the street thus reducing citizen complaints.

CONFORM TO COMPREHENSIVE PLAN: In Conformance with the Plan

STATUS OF PLANS: Nothing Done Except This Report

CONFORMANCE TO AMERICAN DISABILITIES ACT: Y

PROJECT CATEGORY: Storm Sewer

ESTIMATED IMPACT ON THE ANNUAL OPERATING BUDGET:

\$511 PER INCH DIA MILE/\$840/ACRE

 PROGRAMMED EXPENDITURES:

YEAR:	2010	2011	2012	2013	2014
SD STORM DRAINAGE FEES A ENGINEERING 272-7201-430.35-21				20,000	20,000
SD STORM DRAINAGE FEES D STORM SEWER 272-7201-430.35-39					140,000
UF USER FEES E WATER 675-7501-480.35-41					5,000

City of Sioux Falls
 2010-2014 Capital Program

10/07/09 CAPITAL IMPROVEMENT PROGRAM 2010 - 2014

CITY PROJECT NUMBER: 245072

DEPARTMENT: 72- DRAINAGE & STORM SEWER
 DEPARTMENT PROJECT PRIORITY: 13

PROJECT DESCRIPTION:

REPLACEMENT OF EXISTING CONCRETE CHANNEL ALONG RIVERDALE ROAD FROM 24TH STREET TO 26TH STREET, DESIGN (13), CONSTRUCT (14)

TOTAL 5 YEAR PROJECT COST: \$240,000

PROJECT TITLE: RIVERDALE ROAD CONCRETE CHANNEL

PROJECT JUSTIFICATION AND RELATIONSHIP TO OTHER PROJECTS:

Existing channel is deteriorating and needs to be reconstructed.

CONFORM TO COMPREHENSIVE PLAN: In Conformance with the Plan

STATUS OF PLANS: Nothing Done Except This Report

CONFORMANCE TO AMERICAN DISABILITIES ACT: Y

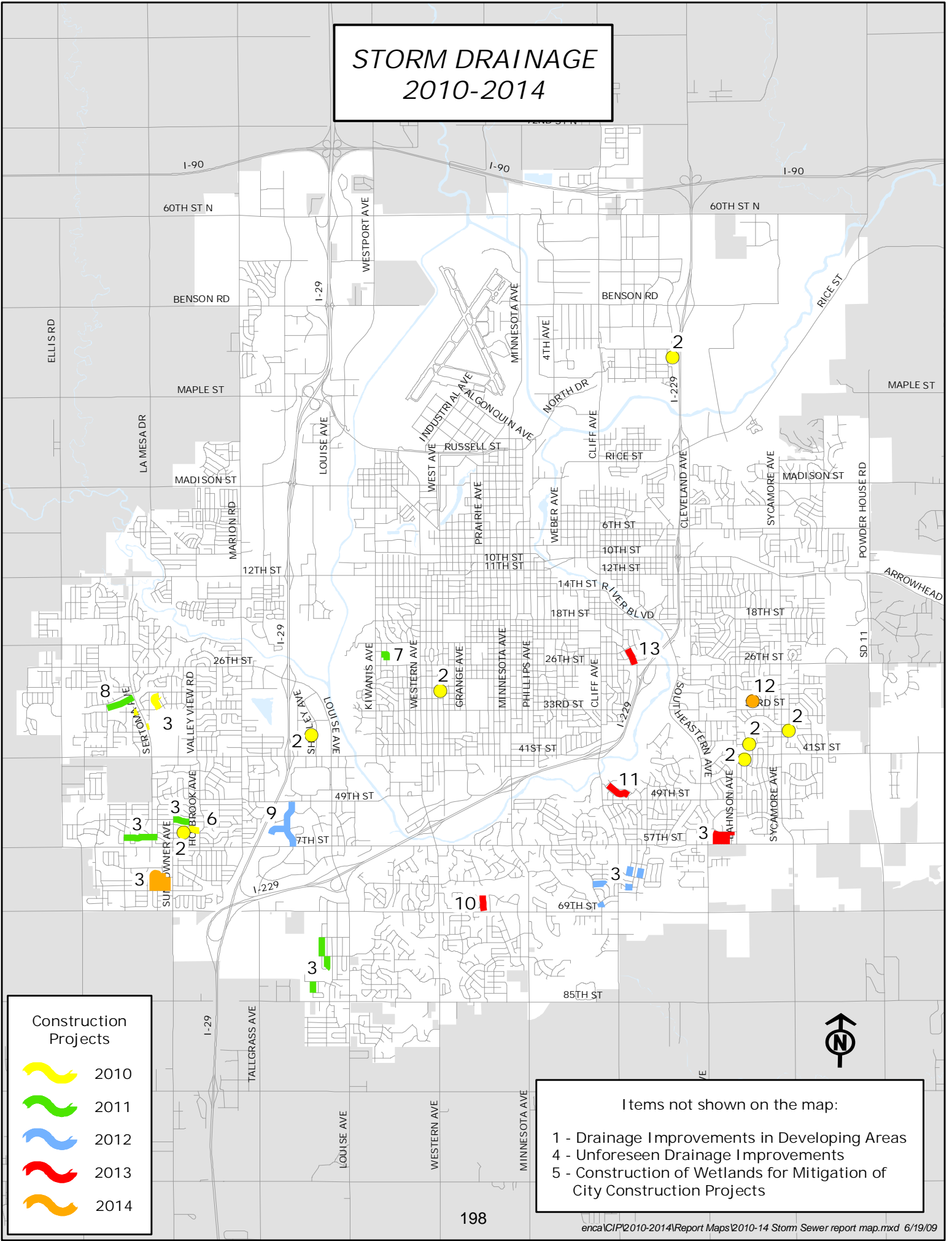
PROJECT CATEGORY: Storm Sewer

ESTIMATED IMPACT ON THE ANNUAL OPERATING BUDGET:

\$511 PER INCH DIA MILE/\$840/ACRE

PROGRAMMED EXPENDITURES:	2010	2011	2012	2013	2014
SD STORM DRAINAGE FEES				20,000	20,000
A ENGINEERING					
272-7201-430.35-21					
SD STORM DRAINAGE FEES					200,000
D STORM SEWER					
272-7201-430.35-39					

STORM DRAINAGE 2010-2014



Construction Projects

-  2010
-  2011
-  2012
-  2013
-  2014

Items not shown on the map:

- 1 - Drainage Improvements in Developing Areas
- 4 - Unforeseen Drainage Improvements
- 5 - Construction of Wetlands for Mitigation of City Construction Projects

OCEP Detail by Department

Storm Drainage

Asset #	Description	2010	2011	2012	2013	2014	
2190240	Pump, 12"	\$ -	\$ -	\$ -	\$ 8,006	\$ -	272-7201-430-3401
	Storm Drainage Total	\$ -	\$ -	\$ -	\$ 8,006	\$ -	