



## Grant All-Detail Report Accelerated Implementation Grant 2014

**Grant Title** - Miller Hill Mall Comprehensive Stormwater Management Plan

**Grant ID** - C14-8316

**Organization** - St Louis, South SWCD

<b>Grant Awarded Amount</b>	<b>\$186,475.00</b>	<b>Grant Execution Date</b>	
<b>Required Match Amount</b>	\$46,618.75	<b>Grant End Date</b>	12/31/2016
<b>Required Match %</b>	25%	<b>Grant Day To Day Contact</b>	Kate Kubiak

### Budget Summary

	Budgeted	Spent	Balance Remaining*
Total Grant Amount	\$186,475.00	\$41,598.47	\$144,876.53
Total Match Amount	\$47,000.00	\$14,229.00	\$32,771.00
Total Other Funds	\$0.00	\$0.00	\$0.00
<b>Total</b>	<b>\$233,475.00</b>	<b>\$55,827.47</b>	<b>\$177,647.53</b>

\*Grant balance remaining is the difference between the Awarded Amount and the Spent Amount. Other values compare budgeted and spent amounts.

### Budget Details

Activity Name	Activity Category	Source Type	Source Description	Budgeted	Spent	Last Transaction Date	Matching Fund
Conduct soil borings	Technical/Engineering Assistance	Current State Grant	Miller Hill Mall Comprehensive Stormwater Management Plan	\$15,000.00	\$1,533.00	12/5/2014	N
Data Analysis / Plan Development	Project Development	Current State Grant	Miller Hill Mall Comprehensive Stormwater Management Plan	\$79,985.00	\$23,387.00	12/5/2014	N

Activity Name	Activity Category	Source Type	Source Description	Budgeted	Spent	Last Transaction Date	Matching Fund
Design Public Education Elements	Education/Information	Current State Grant	Miller Hill Mall Comprehensive Stormwater Management Plan	\$24,000.00	\$585.00	12/5/2014	N
Design Team Planning Meetings	Project Development	Current State Grant	Miller Hill Mall Comprehensive Stormwater Management Plan	\$30,635.00	\$3,484.97	12/5/2014	N
Design/Planning Meetings - SWCD and Mall staff	Project Development	Local Fund	Katie and Kate time - meetings	\$1,000.00	\$830.00	1/21/2015	Y
Grant Administration	Administration/Coordination	Local Fund	SWCD staff time	\$6,000.00	\$1,250.00	1/21/2015	Y
Perform topo survey of entire site including the location of all public and private utilities	Technical/Engineering Assistance	Local Fund	SWCD / TSA / City staff time and survey use, CAD design	\$10,000.00	\$9,715.00	10/31/2014	Y
Produce Deliverables	Project Development	Current State Grant	Miller Hill Mall Comprehensive Stormwater Management Plan	\$20,355.00			N
Publicity	Education/Information	Local Fund	staff time - Board and RSPT plan presentation	\$1,000.00			Y
SWCD contribution to design public education elements	Education/Information	Local Fund		\$4,000.00			Y
SWCD contribution to plan development	Planning and Assessment	Local Fund		\$4,000.00			Y
Stormwater Management Plan Data Collection	Monitoring/Data Collection	Current State Grant	Miller Hill Mall Comprehensive Stormwater Management Plan	\$10,500.00	\$10,490.50	6/13/2014	N
Temperature monitoring on existing storm water structures	Monitoring/Data Collection	Local Fund	SWCD staff time - research, monitoring, procedures	\$10,000.00	\$2,434.00	9/30/2014	Y
Temperature monitoring on existing storm water structures - consultant and equipment.	Monitoring/Data Collection	Current State Grant	Miller Hill Mall Comprehensive Stormwater Management Plan	\$6,000.00	\$2,118.00	7/18/2014	N
Update Miller Creek Implementation Plan to include stormwater plan elements	Regulations/Ordinances/Enforcement	Local Fund	SWCD staff time	\$1,000.00			Y
plan development	Planning and Assessment	Local Fund	WALMART SEP funds	\$10,000.00			Y

## Activity Details Summary

Activity Details	Total Action Count	Total Activity Mapped	Size / Unit
------------------	--------------------	-----------------------	-------------

## Indicators Summary

Indicator Name	Total Value	Unit
----------------	-------------	------

## Grant Activity

Grant Activity - Conduct soil borings			
Description	This work will be conducted by a subcontractor hired by a consultant. The subcontractor will conduct soil borings at specific points across the Mall's parking lot in likely project areas. The borings will determine soil types, infiltration potential and depth to bedrock.		
Category	TECHNICAL/ENGINEERING ASSISTANCE		
Start Date	2-Jun-14	End Date	
Rates and Hours			
Actual Results	Aug 1/2014: Initial investigation into Soil borings was started. Feb1 2015: existing available data may eliminate the need for physical soil borings.		

### Grant Activity - Data Analysis / Plan Development

<b>Description</b>	This work will be conducted by a consultant. They will research options to reduce temperature (Lit Review); study existing features (sand filters and ponds) for improvement opportunities; conduct modeling (using HydroCAD); and do cost estimating.		
<b>Category</b>	PROJECT DEVELOPMENT		
<b>Start Date</b>	5-May-14	<b>End Date</b>	
<b>Rates and Hours</b>			
<b>Actual Results</b>	Aug 1/2014: GIS mapping was completed. Survey and temperature monitoring memos and discussions were completed. Drainages for each of the existing BMPs were delineated.		

### Grant Activity - Design Public Education Elements

<b>Description</b>	The consultant will investigate and incorporate recommendations for public education into the comprehensive stormwater management plan. Based on discussions with Mall management, this could include public art relating to watersheds, displays in the mall regarding the proximity and features of Miller Creek and a central water feature (fountain) in the mall that highlights the connection(s) between commercial land uses, human activity, Miller Creek and Lake Superior.		
<b>Category</b>	EDUCATION/INFORMATION		
<b>Start Date</b>	1-Sep-14	<b>End Date</b>	
<b>Rates and Hours</b>			
<b>Actual Results</b>	Feb 1 2015: Consultant started researching possible public education elements that could be incorporated into the mall with an emphasis on Miller Creek and trout habitat.		

**Grant Activity - Design Team Planning Meetings**

<b>Description</b>	This funding will cover time to prepare and hold design team planning meetings that will be coordinated by the consultant.		
<b>Category</b>	PROJECT DEVELOPMENT		
<b>Start Date</b>	15-Apr-14	<b>End Date</b>	
<b>Rates and Hours</b>			
<b>Actual Results</b>	Aug 1/2014: Project was officially launched during this reporting period. Mall Mgmt., Consultants and SWCD/TSA staff met several times to go over the beginning parts of the plan/planning process. Feb 1 2015: Two planning meetings were held during this reporting period, one to discuss the upcoming survey data collection and one to discuss 2015 activities.		

**Grant Activity - Design/Planning Meetings - SWCD and Mall staff**

<b>Description</b>	This funding is the match time provided by SWCD staff and Mall staff for their participation in the design team meetings, and other coordination / plan development meetings between the SWCD, the Mall and a consultant.		
<b>Category</b>	PROJECT DEVELOPMENT		
<b>Start Date</b>	1-May-14	<b>End Date</b>	
<b>Rates and Hours</b>			
<b>Actual Results</b>	Aug 1/2014: SWCD and Mall staff participated in all meetings coordinated by the consultant during this period. Feb 1 2015: SWCD and Mall staff participated in all meetings during this period.		

**Grant Activity - Grant Administration**

<b>Description</b>	SWCD staff time for grant budgeting, invoicing a consultant and grant reporting.		
<b>Category</b>	ADMINISTRATION/COORDINATION		
<b>Start Date</b>	1-May-14	<b>End Date</b>	
<b>Rates and Hours</b>			
<b>Actual Results</b>	Aug 1/2014: Grant admin and reporting began as required during this period.  Feb 1 2015: Grant reporting and budgeting continued as needed.		

**Grant Activity - Perform topo survey of entire site including the location of all public and private utilities**

<b>Description</b>	This funding will cover the engineering tech's time from TSA #3, SWCD staff time assisting and the monetary equivalent for the use of our Trimble R10 survey equipment to acquire detailed topographic survey data on the entire site. Assistance from the City may also be needed to locate underground utilities. This data will inform BMP selections and designs and will help determine drainage pattern(s).		
<b>Category</b>	TECHNICAL/ENGINEERING ASSISTANCE		
<b>Start Date</b>	9-Jun-14	<b>End Date</b>	
<b>Rates and Hours</b>			
<b>Actual Results</b>	<p>Aug 1/2014: SWCD/TSA staff discussed survey approach with consultant and began surveying the site during this period.</p> <p>Feb 1 2015: SWCD staff completed the survey of the mall parking lot, with direction from the consultant, in the late summer of 2014. Photos, sketches, elevations and other relevant data were collected and provided to the consultant, who will use the data to inform the stormwater management plan.</p>		

**Grant Activity - Produce Deliverables**

<b>Description</b>	<p>This task will be completed by a Consultant</p> <p>- It will include the determination of Recommended Features and Recommended Phasing options and writing the plan/report with Figures, Cross Sections and cost estimates.</p>		
<b>Category</b>	PROJECT DEVELOPMENT		
<b>Start Date</b>	2-Mar-15	<b>End Date</b>	
<b>Rates and Hours</b>			
<b>Actual Results</b>			

Grant Activity - Publicity		
Description	This funding will cover SWCD time in preparing presentations (for example to the SWCD board, the Regional Stormwater Protection Team, the MN Erosion Control Association and other interested groups) and write-ups for our website and newsletters regarding the progress of the project.	
Category	EDUCATION/INFORMATION	
Start Date	1-May-15	End Date
Rates and Hours		
Actual Results		

Grant Activity - SWCD contribution to design public education elements		
Description	These funds will cover the SWCD staff time contribution to researching and designing and integrating potential public education displays into the Mall's floor plan and design. This will be done in cooperation with the consultant.	
Category	EDUCATION/INFORMATION	
Start Date	1-May-14	End Date
Rates and Hours		
Actual Results		

Grant Activity - SWCD contribution to plan development		
Description	These funds will cover the SWCD staff time contribution to the development of the stormwater management plan in cooperation with the consultant.	
Category	PLANNING AND ASSESSMENT	
Start Date	30-Apr-14	End Date
Rates and Hours		
Actual Results		

## Grant Activity - Stormwater Management Plan Data Collection

<b>Description</b>	<p>This work will be conducted by a Consultant. Includes the following tasks:</p> <ul style="list-style-type: none"> <li>Review Storm sewer maps;</li> <li>Review Mall blueprints;</li> <li>Examine Roof plans;</li> <li>Locate Utility easements;</li> <li>Review area LiDAR;</li> <li>Review available CAD files;</li> <li>Review Mall utility plans;</li> <li>Compile and review Information on outlot businesses;</li> <li>Review Maintenance records/ monitoring on the sand filters;</li> <li>Examine As-builts for sand filters, pond and outlots;</li> <li>Identify Property lines.</li> </ul>		
<b>Category</b>	MONITORING/DATA COLLECTION		
<b>Start Date</b>	1-May-14	<b>End Date</b>	01-Aug-14
<b>Rates and Hours</b>			
<b>Actual Results</b>	Aug 1/2014: This task is essentially complete and the budgeted amount spent. All available and legible mall and city utility maps, as-builts from the mall's original construction, and aerials and topo maps were collected, analyzed and digitized.		



**Grant Activity - Temperature monitoring on existing storm water structures**

<b>Description</b>	This funding covers SWCD staff time to Monitor the temperature of inflow vs. outflow through existing sand filters and ponds on the site. This task will include researching an appropriate methodology; a trip down to Vermillion river / Dakota County SWCD to learn their methodology from a 2012 study; and general research. The data from this task will let project partners know if the existing BMPs are currently providing any temperature mitigation.		
<b>Category</b>	MONITORING/DATA COLLECTION		
<b>Start Date</b>	1-May-15	<b>End Date</b>	
<b>Rates and Hours</b>			
<b>Actual Results</b>	Aug 1/2014: During this period, SWCD staff purchased temperature loggers and assoc. software, identified deployment method, deployed loggers and conducted first round of data collection. Feb 1/2015: The temperature monitoring was completed by SWCD staff with advice and direction from the consultant during the summer of 2014. The data will be used by the consultant to determine the current temp mitigation capacity of the existing BMPs.		

**Grant Activity - Temperature monitoring on existing storm water structures - consultant and equipment.**

<b>Description</b>	These funds will cover the equipment, (potential) limited excavation work and compensation for an additional consultant to assist SWCD staff with completing the temperature monitoring on the existing sand filters and ponds. We hope to enlist assistance from the Vermillion River Joint Powers Board/Dakota SWCD, as they conducted a similar study in 2012.		
<b>Category</b>	MONITORING/DATA COLLECTION		
<b>Start Date</b>	30-Jun-14	<b>End Date</b>	30-Sep-14
<b>Rates and Hours</b>			
<b>Actual Results</b>	Aug 1/2014: purchased 6 temp loggers and assoc software. worked with consultant to identify correct monitoring procedure.  Feb 1/2015: The temperature monitoring was completed by SWCD staff with advice and direction from the consultant during the summer of 2014. The data will be used by the consultant to determine the current temp mitigation capacity of the existing BMPs.		

### Grant Activity - Update Miller Creek Implementation Plan to include stormwater plan elements

<b>Description</b>	These funds will cover SWCD and MS4 staff time to update the Miller Creek (TMDL) Implementation Plan to include BMPs that are listed in the completed storm water management plan. Implementation plans can be continually updated and since the mall property is located near the stretch that exhibited the highest number of temperature exceedances, it would be important to include the information from the completed plan into the Implementation Plan.		
<b>Category</b>	REGULATIONS/ORDINANCES/ENFORCEMENT		
<b>Start Date</b>	1-Sep-15	<b>End Date</b>	
<b>Rates and Hours</b>			
<b>Actual Results</b>			

### Grant Activity - plan development

<b>Description</b>	This is local cash in the form of Supplemental Environmental Funding that will pay for \$10,000 of consultant costs for plan development.		
<b>Category</b>	PLANNING AND ASSESSMENT		
<b>Start Date</b>	1-May-14	<b>End Date</b>	
<b>Rates and Hours</b>			
<b>Actual Results</b>			

### Grant Attachments

Document Name	Document Type	Description
<b>2014 Competitive Grant</b>	Grant Agreement	2014 Competitive Grant - St Louis, South SWCD
<b>2014 Competitive Grant executed</b>	Grant Agreement	2014 Competitive Grant - St Louis, South SWCD
<b>All Details Report</b>	Workflow Generated	Workflow Generated - All Details Report - 01/20/2015
<b>All Details Report</b>	Workflow Generated	Workflow Generated - All Details Report - 07/29/2014
<b>Application</b>	Workflow Generated	Workflow Generated - Application - 10/04/2013
<b>Consultant_Invoice_1</b>	Grant	Miller Hill Mall Comprehensive Stormwater Management Plan
<b>Consultant_Invoice_2</b>	Grant	Miller Hill Mall Comprehensive Stormwater Management Plan
<b>Consultant_Invoice_3</b>	Grant	Miller Hill Mall Comprehensive Stormwater Management Plan

Document Name	Document Type	Description
<b>Invoice_2_temp_loggers</b>	Grant	Miller Hill Mall Comprehensive Stormwater Management Plan
<b>Miller Hill Mall Survey Notes</b>	Grant	Miller Hill Mall Comprehensive Stormwater Management Plan
<b>MillerHill_SSLSWCD</b>	Grant	Miller Hill Mall Comprehensive Stormwater Management Plan
<b>MillerHill_SSLSWCD</b>	Grant	Miller Hill Mall Comprehensive Stormwater Management Plan
<b>SR_loc_10455.jpg</b>	Grant	Miller Hill Mall Comprehensive Stormwater Management Plan
<b>Work Plan</b>	Workflow Generated	Workflow Generated - Work Plan - 01/23/2014
<b>Work Plan</b>	Workflow Generated	Workflow Generated - Work Plan - 03/19/2014
<b>Work Plan</b>	Workflow Generated	Workflow Generated - Work Plan - 03/31/2014
<b>Work Plan</b>	Workflow Generated	Workflow Generated - Work Plan - 03/31/2014
<b>grantmap_10455_2013-10-03_08-21-10-AM.jpg</b>	Grant	Miller Hill Mall Comprehensive Stormwater Management Plan
<b>invoice_1_temp_loggers</b>	Grant	Miller Hill Mall Comprehensive Stormwater Management Plan