

## MEMORANDUM

**To:** Minnehaha Creek Board of Managers  
**From:** Renae Clark, Project Manager  
**CC:** James Wisker, Director Planning, Projects and Land Conservation  
**Date:** September 11, 2014  
**Re:** Powell Road Stormwater Diversion Design Update

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### **Purpose:**

The MCWD Board of Managers authorized design of the Powell Road Stormwater Diversion Project April 24, 2014. This project is part of a suite of projects to accomplish approximately 268.3 acres of stormwater management on the District's property at 325 Blake Road in the City of Hopkins (see attached map and further details below). The Powell Road Stormwater Diversion Project will divert drainage from the area south of 325 Blake (216.9 acres) on Powell Road through a new storm sewer that would be tunneled under the existing railroad. The new diversion will remain off-line until the facility at 325 Blake is constructed. With this memorandum staff is providing an update on the Powell Stormwater Diversion Project design plans, related project agreements and project schedule.

At the September 25, 2014 Board of Managers Meeting, District staff will provide a status update and review the planning and implementation efforts for 325 Blake Road. In conjunction with that update, staff will present 90% plans for the Powell Road project, the MCWD project permit, and all Powell project agreements for final approval by the Board of Managers.

On June 30, 2014 the District received a formal decision from the MN Pollution Control Agency (MPCA) that the 325 Blake Stormwater Management Project was granted preliminary approval of the Stormwater Project Plan and will be placed on the Project Priority List. On July 31, 2014 the Board authorized staff to submit a Point Source Implementation Grant (PSIG) application to the Minnesota Public Facilities Authority (PFA). The District's first PSIG funding application for the competitively ranked 325 Blake Road Stormwater project is for the two phases of the 325 Stormwater Management Project anticipated for construction in 2015 (Powell Road and Lake Street stormwater diversions). Final disbursement of funds is contingent on MPCA approval of construction plans and specifications which must be submitted in October 2014 to receive approval in January 2015. The request for bids for construction is scheduled for January – February 2015. The construction bid award by the Board of Managers is expected in March 2015.

### **Background:**

Recognizing the interdependence of the built and natural environments, the MCWD has adopted the Balanced Urban Ecology Policy that underscores the economic and social significance of a healthy natural environment. This framework reinforces the District's commitment to

integrating its water resource implementation efforts with urban planning, through innovation, partnership and a sustained geographic focus.

The District has focused strategically on a portion of the Creek system most in need, between West 34<sup>th</sup> Street and Meadowbrook Lake referred to as the Urban Creek Corridor. The Minnehaha Creek/Lake Hiawatha Total Maximum Daily Load Study identified this area as generating the highest pollutant load per unit area when compared to other reaches of Minnehaha Creek. Through public-private partnerships, collaborative urban planning, innovative engineering and a sustained geographic focus within the most heavily urbanized portion of Minnehaha Creek, the MCWD has established one of the largest urban stream restoration efforts within the Twin Cities.

The 325 Blake Road parcel in the City of Hopkins was purchased by the District in 2011 and is located in the heart this priority project area for the Minnehaha Creek Watershed District. The site is 16.8-acre and currently houses a cold storage warehouse. The parcel was strategically acquired by MCWD for purposes of expanding the riparian greenway around Minnehaha Creek and improving area wide stormwater management. The portion of the parcel not required to fulfill these purposes will be sold for redevelopment, which will allow the District to recover a significant portion of its initial investment.

Approximately 329.8 acres of land surrounding 325 Blake Road currently drains to Minnehaha Creek, most of which goes untreated. The July 2013 Feasibility Study evaluated options to capture as much “first flush” stormwater runoff from the surrounding watersheds as possible. Analysis of the storm sewer networks concluded that that low flow drainage from approximately 268.3 acres could feasibly be diverted to a treatment facility at 325 Blake Road.

Drainage will be diverted to 325 Blake Road through construction of two primary storm sewer diversions. A portion of the drainage of subwatersheds west of 325 Blake Road (30.3 acres) will be intercepted and diverted via a constructed storm sewer under Lake Street NE. This pipe would travel east under Blake Road into 325 Blake Road. This work will be planned and coordinated with a planned Metropolitan Council project scheduled for 2015. Drainage from the area south of 325 Blake (216.9 acres) will be captured and diverted on Powell Road through a new storm sewer that would be tunneled under the existing railroad. The new diversion will remain off-line until the facility at 325 Blake is constructed.

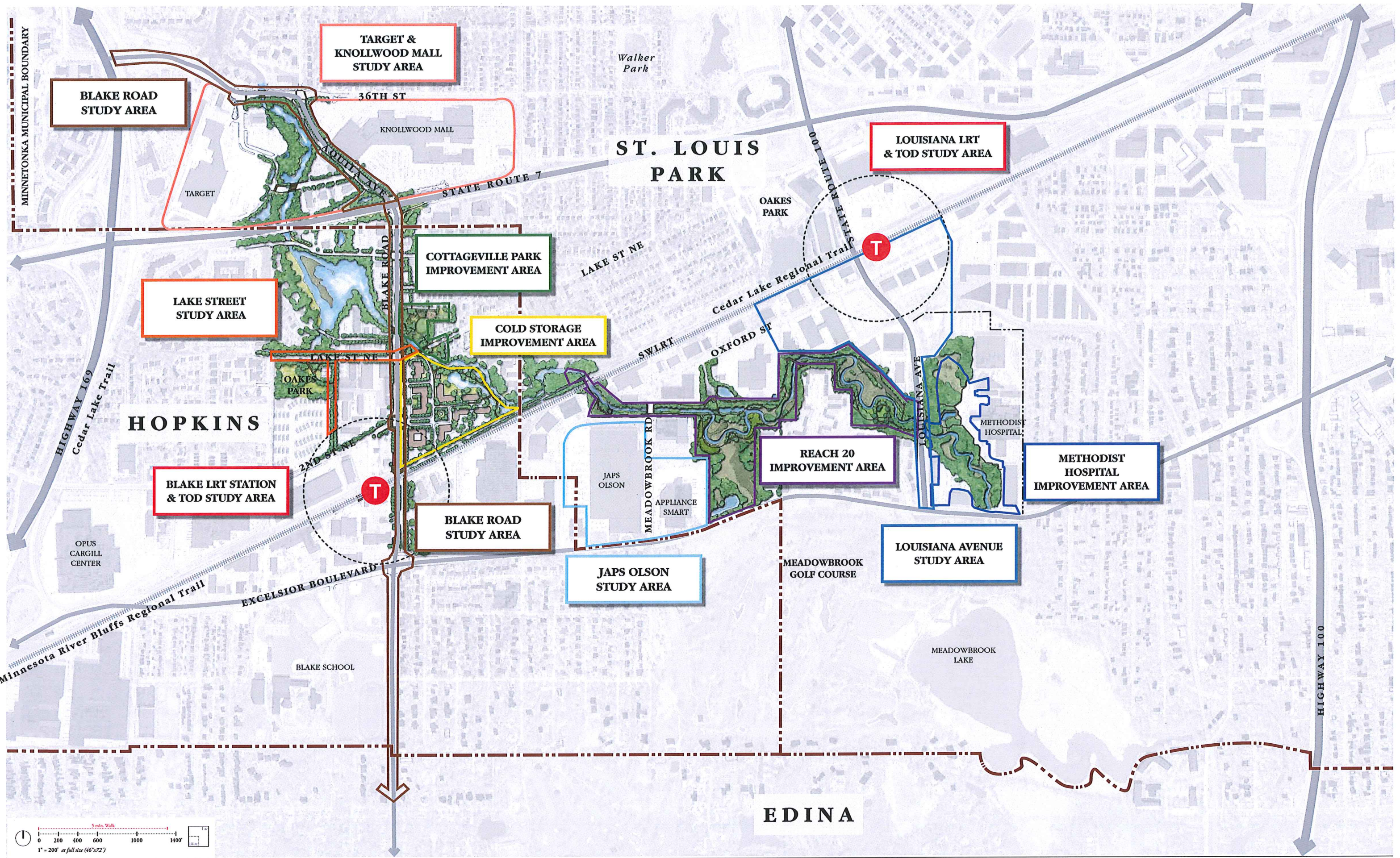
The Powell Diversion connects to City stormsewer and crosses City of Hopkins and St. Louis Park right of way, private property, Rail Road property, and Hennepin County Regional Rail Authority land. An easement agreement has been approved by the MCWD Board and executed with the property owner. Authority to execute the easement was granted upon satisfaction of two contingencies: completion of environmental due diligence and obtaining Rail Road permission to install the conveyance under the rail right of way. The Board of Managers approved the Rail Road License Agreement to install and maintain the project on August 28, 2014. The final soil analysis has been completed and results are pending. A final report on the findings will be provided to the Board on September 25, 2014.

Agreements with the City of St. Louis Park and Hopkins regarding construction rights, operation and maintenance will be presented with the Powell project plans on September 25, 2014. Following Board approvals on September 25<sup>th</sup>, the Powell project plans will be finalized and

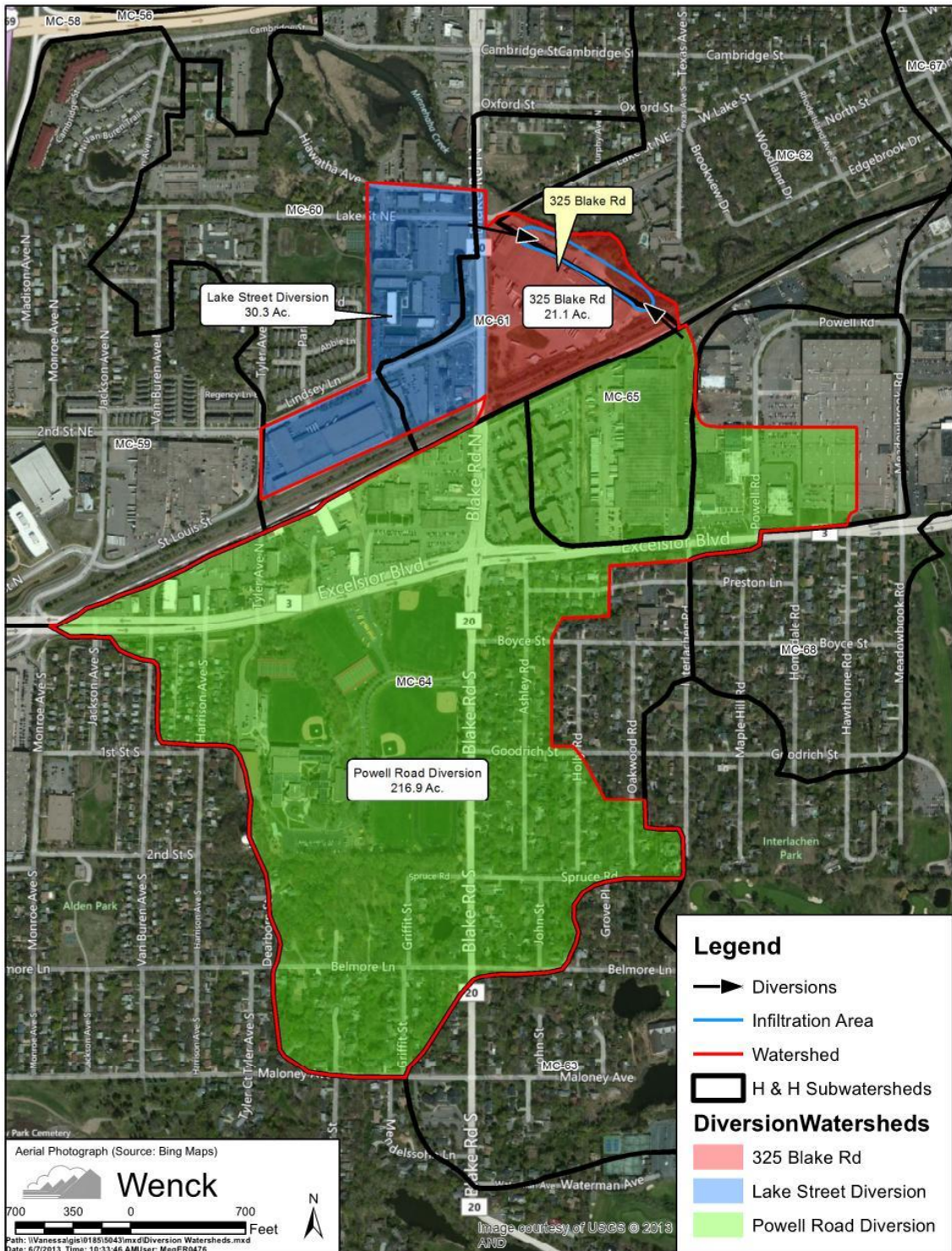
submitted to the PFA for a three month review. The request for bids is scheduled for January – February 2015 with the Board action to award the bid for construction in March 2015.

Attached:

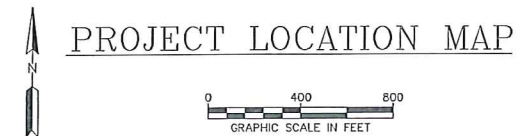
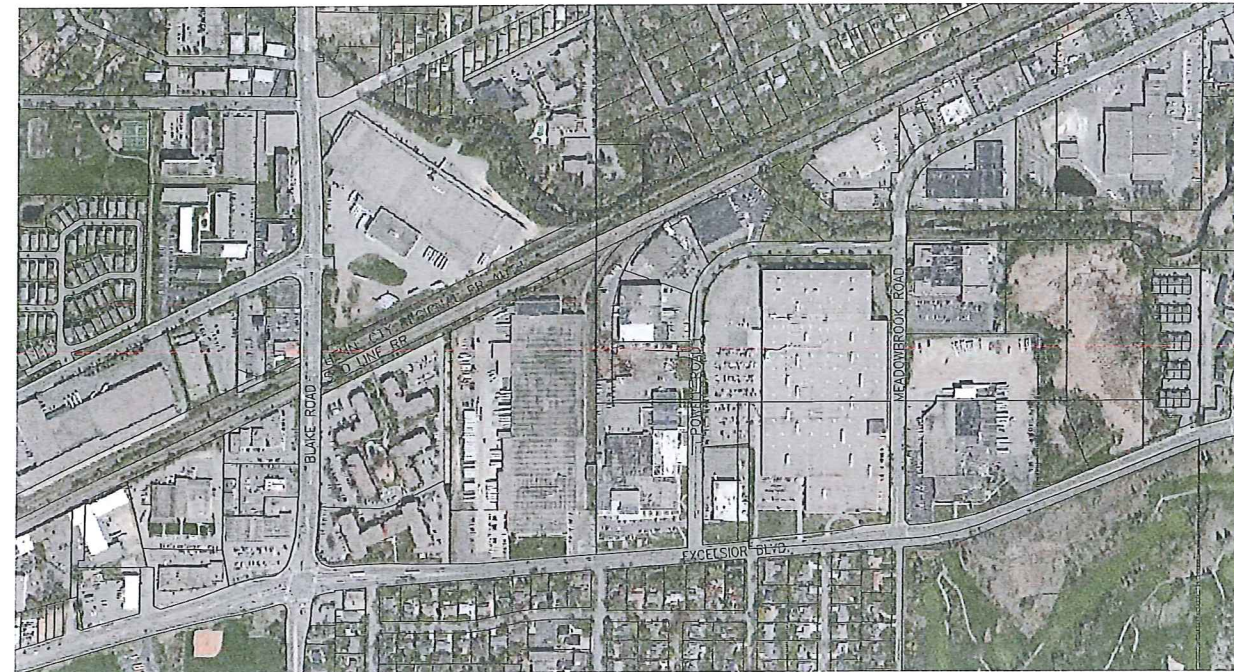
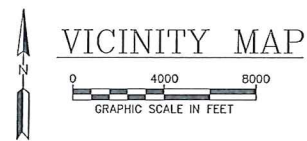
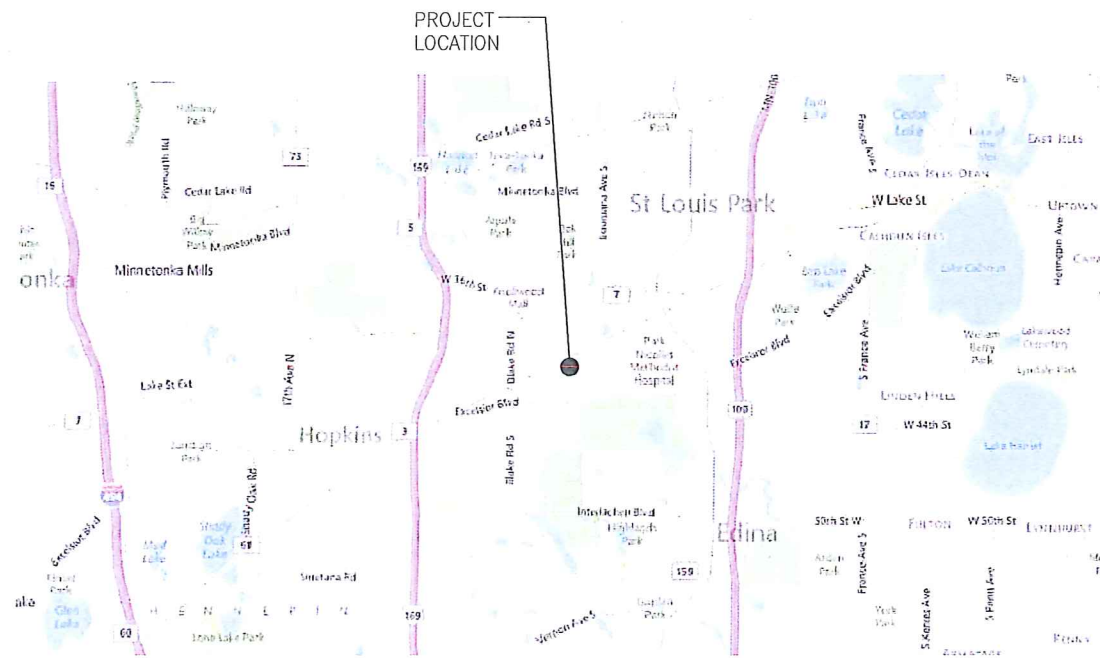
1. Urban Corridor Map
2. Drainage Area Map
3. Preliminary Plan and Layout



# Drainage Area Map



# CONSTRUCTION PLANS FOR: MINNEHAHA CREEK WATERSHED DISTRICT POWELL ROAD STORM WATER DIVERSION PROJECT AUGUST 2014



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**WARNING:**

THE CONTRACTOR SHALL BE RESPONSIBLE FOR CALLING FOR LOCATIONS OF ALL EXISTING UTILITIES. THEY SHALL COOPERATE WITH ALL UTILITY COMPANIES IN MAINTAINING THEIR SERVICE AND/OR RELOCATION OF LINES.

THE CONTRACTOR SHALL CONTACT GOPHER STATE ONE CALL AT 651-454-0002 AT LEAST 48 HOURS IN ADVANCE FOR THE LOCATIONS OF ALL UNDERGROUND WIRES, CABLES, CONDUITS, PIPES, MANHOLES, VALVES OR OTHER BURIED STRUCTURES BEFORE DIGGING. THE CONTRACTOR SHALL REPAIR OR REPLACE THE ABOVE WHEN DAMAGED DURING CONSTRUCTION AT NO COST TO THE OWNER.

CALL BEFORE YOU DIG  
**GOPHER STATE ONE CALL**  
TWIN CITY AREA: 651-454-0002  
TOLL FREE 1-800-252-1166

REV	REVISION DESCRIPTION	DWN	APP	REV DATE
1	PROGRESS SET	JVB	JT	08/15/14

SEAL  
I HEREBY CERTIFY THAT THIS PLAN, SPECIFICATION, OR REPORT WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY REGISTERED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.  
PRINT NAME JOEL TOSD  
SIGNATURE \_\_\_\_\_  
DATE 12/31/2013 REG. NO. \_\_\_\_\_

PRIME CONSULTANT



Wenck Associates, Inc.  
Consulting Engineers  
763-479-4200  
763-479-4200  
WIPLE PLAIN, MN 55159

PROJECT TITLE  
CONSTRUCTION PLANS FOR  
POWELL ROAD STORMWATER  
DIVERSION PROJECT

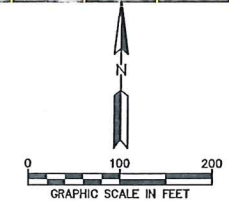


**MINNEHAHA CREEK  
WATERSHED DISTRICT**  
QUALITY OF WATER, QUALITY OF LIFE

SHEET TITLE			
COVER & INDEX SHEET			
DWN BY JVB	CHK'D JT	APP'D JT	DWG DATE AUGUST 2014
PROJECT NO. 0185-5087		SCALE AS SHOWN	SHEET NO. G-101
			REV NO. 1



- LEGEND**
- EXISTING CONTOURS
  - CITY BOUNDARY LINES
  - EXISTING STORM SEWER
  - DIVERSION FOR REGIONAL TREATMENT
  - LOCAL DRAINAGE IMPROVEMENT AND DIVERSION
  - UGORETS PROPERTY LLC



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JOEL TOSO

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PROJECT TITLE

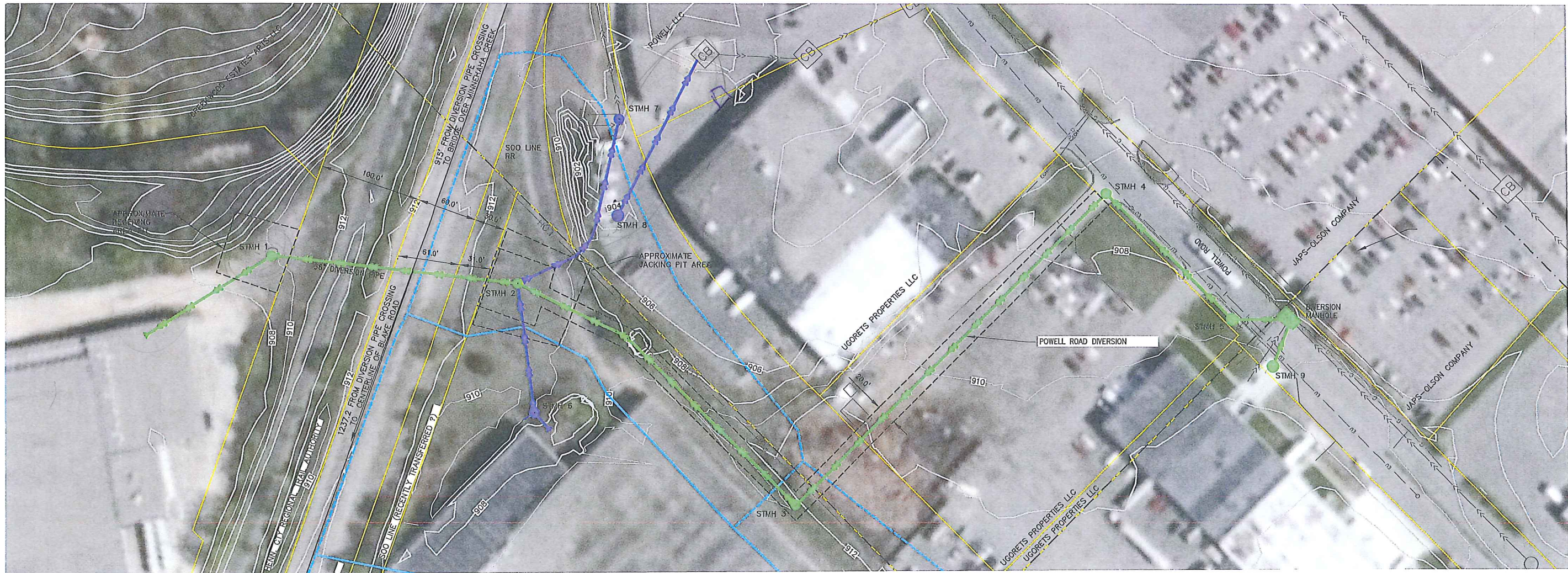
**CONSTRUCTION PLANS FOR  
POWELL ROAD STORMWATER  
DIVERSION PROJECT**

**MINNEHAHA CREEK  
WATERSHED DISTRICT**  
QUALITY OF WATER, QUALITY OF LIFE

SHEET TITLE

**PROPOSED OVERALL SITE LAYOUT**

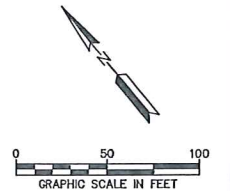
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PROJECT NO. 0185-5087	SHEET NO. C-102	REV NO. 1	SCALE AS SHOWN



NOTE:  
DIVERSION PIPE SHALL BE HDPE SOLID WALL  
SDR 32.5, 1.108 WALL THICKNESS.

**LEGEND**

	EXISTING CONTOURS
	EXISTING STORM SEWER
	PROPOSED STORM SEWER DIVERSION PIPING



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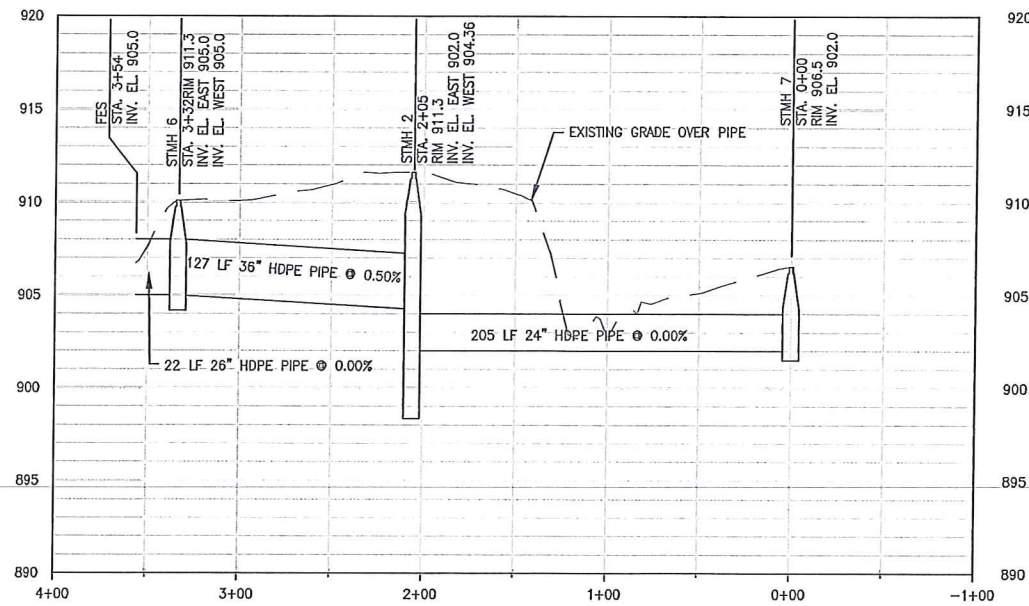
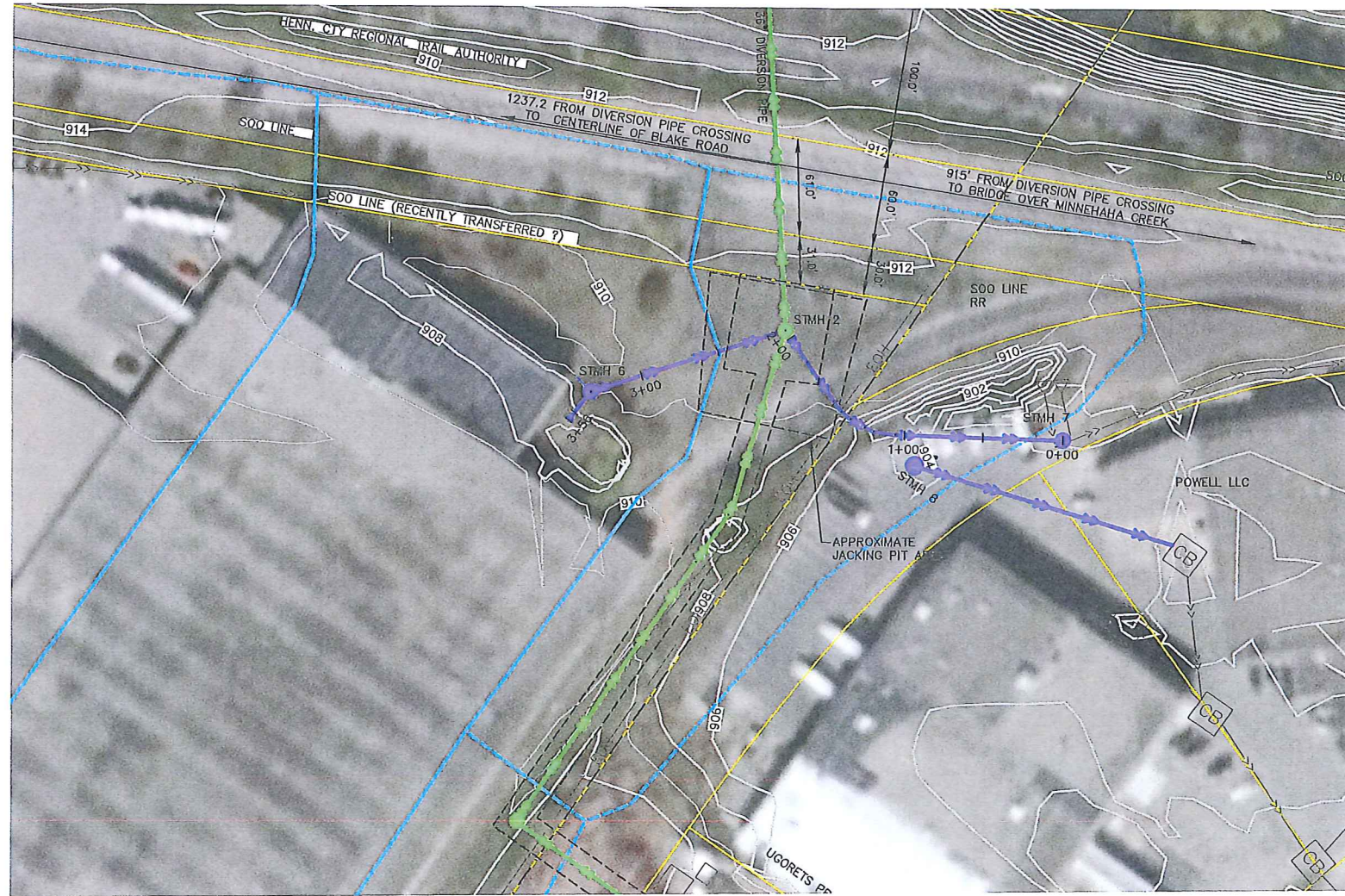
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PERMIT FOR RAILROAD CROSSING  
POWELL ROAD STORMWATER  
DIVERSION PROJECT

MINNEHAHA CREEK  
WATERSHED DISTRICT  
QUALITY OF WATER, QUALITY OF LIFE

SHEET TITLE  
PROPOSED LAYOUT AT  
RAILROAD CROSSING

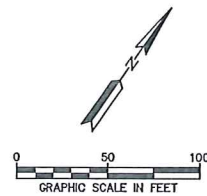
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PROJECT NO. 0185-5087	SHEET NO. C-103	SCALE AS SHOWN	REV NO. 1





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  - EXISTING STORM SEWER
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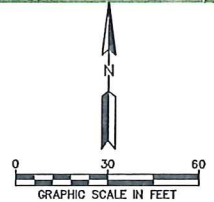
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DIVERSION PROJECT

MINNEHAHA CREEK  
WATERSHED DISTRICT  
QUALITY OF WATER, QUALITY OF LIFE

SHEET TITLE PLAN AND PROFILE			
DWN BY JVB	CHK'D JT	APP'D JT	DWG DATE AUGUST 2014
PROJECT NO. 0185-5087	SHEET NO. C-104	SCALE AS SHOWN	
REV NO. 1			



- LEGEND**
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  - CITY BOUNDARY LINES
  - EXISTING STORM SEWER
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WAPLE PLAIN, MN 55359

PROJECT TITLE

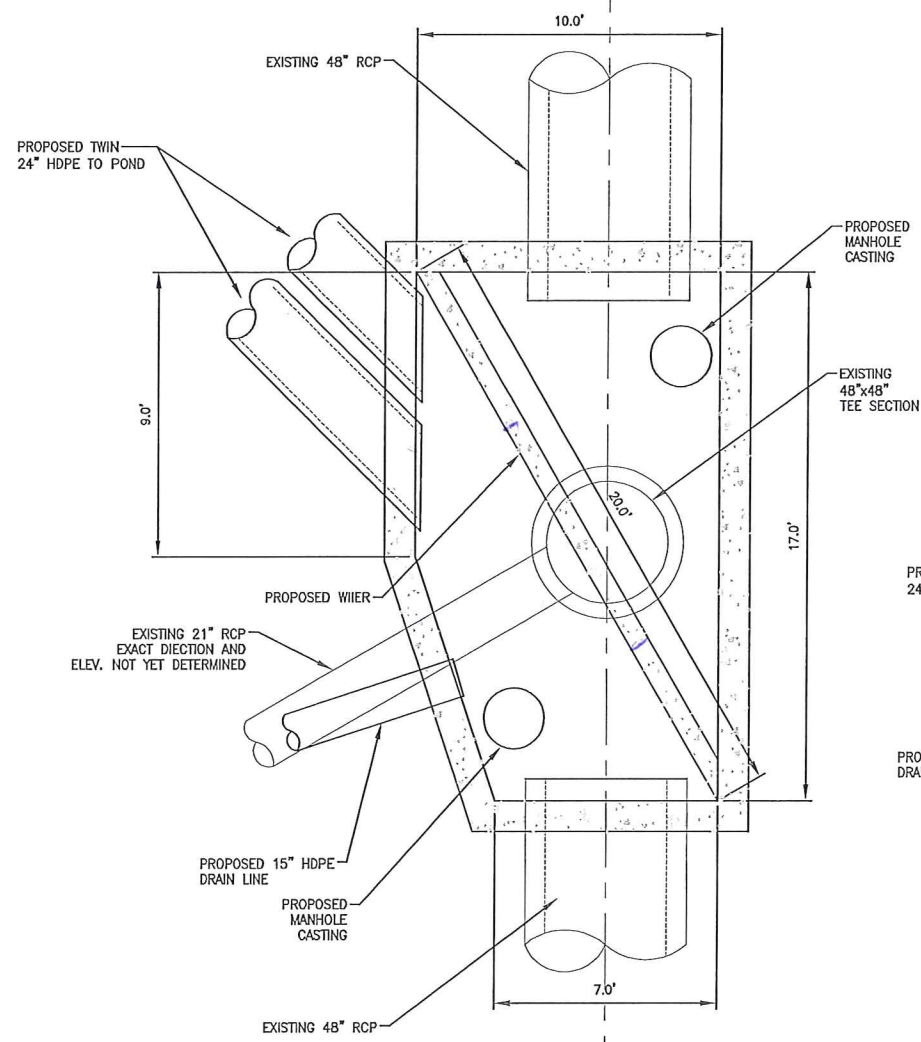
**CONSTRUCTION PLANS FOR  
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**MINNEHAHA CREEK  
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QUALITY OF WATER, QUALITY OF LIFE

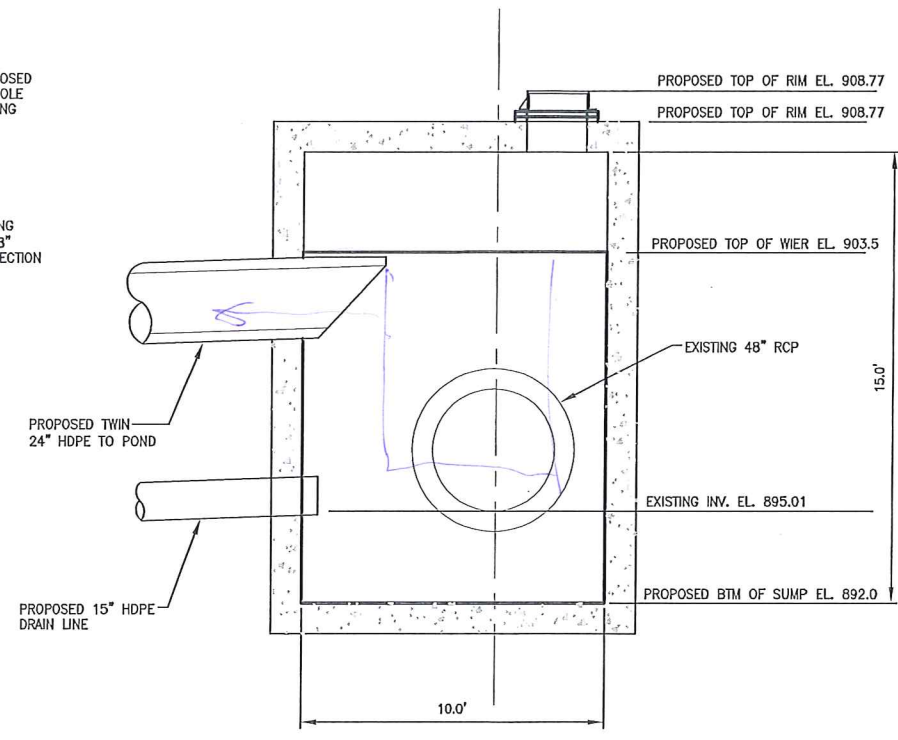
SHEET TITLE

**PROPOSED GRADING PLAN**

DWN BY	CHK'D	APP'D	DWG DATE
JVB	JT	JT	AUGUST 2014
PROJECT NO.	SHEET NO.	SCALE	REV NO.
0185-5087	C-105	AS SHOWN	1



**DIVERSION STRUCTURE TOP VIEW**  
 0 3 6  
 GRAPHIC SCALE IN FEET



**DIVERSION STRUCTURE END VIEW**  
 0 3 6  
 GRAPHIC SCALE IN FEET

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PRIME CONSULTANT



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 18750 PLYMOUTH, MN 55559  
 Web Site: www.wenck.com  
 763-479-4200

PROJECT TITLE  
**POWELL ROAD STORMWATER DIVERSION PROJECT**



**MINNEHAHA CREEK WATERSHED DISTRICT**  
 QUALITY OF WATER, QUALITY OF LIFE

SHEET TITLE			
<b>DIVERSION STRUCTURE DETAIL</b>			
DWN BY JVB	CHK'D JT	APP'D JT	DWG DATE AUGUST 2014
PROJECT NO. 0185-5087		SCALE AS SHOWN	SHEET NO. D-101
			REV NO. 1