

Wisconsin Department of Natural Resources
 Bureau of Watershed Management (WT/3)
 101 S. Webster St.
 Madison, WI 53703
 PO Box 7921
 Madison, WI 53707-7921

MAY 10 2010

Final Report Form 3400-189 (rev. 7/30/09)

- Targeted Runoff Management Grant Program (ch. NR 153)
- Notice of Discharge Program (ch. NR 153)
- Urban Nonpoint Source & Storm Water Management Grant Program (ch. NR 155)

NOTICE: This Final Report is authorized under ss. 281.65 and 281.66., Wis. Stats., and chs. NR 153 and NR 155, Wis. Admin. Code. Personally identified information collected will be used for program administration and may be made available to requesters as required under Wisconsin Open Records Law [ss. 19.31-19.39, Wis. Stats.].

INSTRUCTIONS: Your grant agreement requires you to submit a Final Report with your final reimbursement request. This Final Report form must be used in conjunction with the "FINAL REPORT INSTRUCTIONS." The instructions detail how to complete and submit the report to DNR as described in the instructions.

1. GRANT TYPE. Check the one that applies.

<input type="checkbox"/> Targeted Runoff Management Grant – Agricultural	<input type="checkbox"/> Targeted Runoff Management Grant – Urban
<input checked="" type="checkbox"/> Urban Nonpoint Source & Storm Water Management Grant – Construction	<input type="checkbox"/> Urban Nonpoint Source & Storm Water Management Grant – Planning
<input type="checkbox"/> Notice of Discharge Grant	

2. PROJECT NAME & LOCATION.

2.1. Project Name: Falls Road Detention Pond	2.2. Grant Number: USC-MI02-45131-08	
2.3. Governmental Unit Name: Village of Grafton, WI	2.4. Primary Watershed Name: Milwaukee River	2.5. Watershed Code: MI02

NOTE FOR SECTION 2.6 (which follows):
 Section 2.6. includes five (5) columns (A. through E.) for recording data about five (5) discrete site locations. If your grant has more than five (5) discrete project locations, attach additional columns for Section 2.6 as described in the instructions. If your project occurs in more than one 12-digit Hydrologic Unit Code (HUC), use the space in adjacent columns to record other HUC numbers.

2.6 Site Location(s) →	A.	B.	C.	D.	E.
Name of Cost-Share Recipient or Governmental Unit	Grafton, Village				
Cost-Share Agreement Number (Agricultural only)					
12-Digit Hydrologic Unit Code(s) (HUC) Where Work Was Completed	040400030603				
Nearest Surface Receiving Water Affected					
Name:	Milwaukee River				
Waterbody Identification Code(s) (WBIC):	15000				
Nearest Impaired Water Affected					
Name:	Milwaukee River				
Waterbody Identification Code(s) (WBIC):	15000				
Pollutants Reduced	sediment				
Impairments/Impacts Addressed					

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Project Locallon(s) (cont.) ->	A.	B.	C.	D.	E.
Project Coordinates:					
Town	10N				
Range	21E				
Section	25				
Quarter	NW				
Quarter-Quarter	NE				
Latitude (degrees, minutes, seconds North of Equator; use the DNR's Surface Water Data Viewer (SWDV))	43°18'23"N				
Longitude (degrees, minutes, seconds W of Prime Meridian, use the SWDV)	87°57'21"W				

3. SUMMARY OF RESULTS.			
Table A. Agricultural Projects - Ch. NR 151 Performance Standards and Prohibitions and Other Water Resources Management Priorities			
A-1. Management Measures	Units of Measure	Quantity	Measurement Method Used
Sheet, rill and wind erosion	Acres meeting "T"	acres	
Manure Storage Facilities: New Construction/Alterations	Number of facilities	facilities	
	Number of animal units	animal units	
Manure Storage Facilities: Closure	Number of facilities	facilities	
Manure Storage Facilities: Falling/Leaking Facilities	Number of facilities	facilities	
	Number of animal units	animal units	
Clean Water Diversions in WQMA	Pollutant load reduction	lbs.	
	Number of farms with diversions	farms	
	Number animal units	animal units	
Nutrient Management on Agricultural Land	Acres planned	acres	
Prohibition: Manure Storage Overflow	Number of farms	farms	
	Number of animal units	animal units	
Prohibition: Unconfined Manure Pile in WQMA	Number of farms	farms	
Prohibition: Direct Runoff From Feedlot/Stored Manure	Pollutant load reduction	lbs.	
	Number of facilities	facilities	
	Number of animal units	animal units	
Prohibition: Unlimited Livestock Access	Feet of bank protected	feet	
	Number of farms	farms	

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Table A. Agricultural Projects (continued)			
A.2. Other Management Measures	Units of Measure	Quantity	Measurement Method Used
Streambank & Shoreline Protection	Units (use feet, acres or number as applicable)		
	Pollutant load reduction (if method available)		
Other:	Units (use feet, acres or number as applicable)		
	Pollutant load reduction (if method available)		
Other:	Units (use feet, acres or number as applicable)		
	Pollutant load reduction (if method available)		
Other:	Units (use feet, acres or number as applicable)		
	Pollutant load reduction (if method available)		

Table B. Urban Construction Projects Serving Developed Areas			
B.1. Required Management Measures	Units of Measure	Quantity	Measurement Method Used
20-40% Total Suspended Solids (TSS) Reduction for NR 216 communities	TSS reduced	lbs.	(no SLAMM analysis performed)
	TSS reduction	70 %	DETPOND for Windows v. 8.4.2 (attached)
B.2. Other Management Measures			
20-40% Reduction in TSS for non-NR 216 communities	TSS reduced	lbs.	
	TSS reduction	%	
Infiltration	Pre-development stay-on volume	%	
	Stay-on volume	ft ³ /year	
Peak flow discharge for 2 year/24 hour design storm	Change in cubic feet per second for design year	ft ³ /sec	
Protective areas	Bank protected	feet	
Fueling & maintenance areas	Oily sheen presence reduced	<input type="checkbox"/> Yes <input type="checkbox"/> No	
Streambank & Shoreline Protection	Bank erosion reduced	tons	
	Bank protected	feet	
Other:	Pollutant load reduction (if method available)		
	Units (use feet, acres or number as applicable)		

Table C. Urban Planning Projects			
C.1. Governmental unit(s) involved (list by name):			
C.2. Estimate total acres covered by the	Existing Developed Urban Areas	New Development	Total Acres

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planning product:	acres	acres	acres
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C.3. Products developed (check all below that apply)	Identify Documents by Name (If applicable)
<input type="checkbox"/> Storm Water Plan	
<input type="checkbox"/> Construction or Erosion Ordinances	
<input type="checkbox"/> Post-construction Storm Water Ordinances	
<input type="checkbox"/> Other Types of Storm Water Quality Ordinances	
<input type="checkbox"/> Financing Methods: Identified and evaluated	
<input type="checkbox"/> Financing Methods: developed or implemented	
<input type="checkbox"/> I & E Plan	
<input type="checkbox"/> I & E Implementation Activities	
<input type="checkbox"/> Other:	
C.4. Identify the Storm Water goals addressed (check all that apply)	
<input type="checkbox"/> Reduce TSS	Comments:
<input type="checkbox"/> Maintain infiltration	
<input type="checkbox"/> Control Peak Flow	
<input type="checkbox"/> Protective Areas	
<input type="checkbox"/> Control of Fueling & Maintenance Areas	
<input type="checkbox"/> Remove Illicit Discharges	
<input type="checkbox"/> Other:	

4. Satisfaction of Notice Requirements. If cost sharing for this project was offered under a formal notice pursuant to chs. NR 161 or 243, provide information for each notice in the table below.

Notice Information				Notice Satisfaction Information		
Chs. NR 161 or 243 Notice Type	Issue Date	From (Name)	To (Name)	Satisfied?		Date Letter Sent
				Yes	No	
				<input type="checkbox"/>	<input type="checkbox"/>	
				<input type="checkbox"/>	<input type="checkbox"/>	
				<input type="checkbox"/>	<input type="checkbox"/>	
				<input type="checkbox"/>	<input type="checkbox"/>	

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5. Additional Information. (Space will expand to fit your text.)

At approx. 9:50am on 6-24-09 Susan Eichelkraut visited the site and took pictures of the area. She found no problems on site. The majority of the project was constructed and restored by 7-2-09, with only minor seeding done at points during the summer and watering to aid the survival of native seeding. Additional fencing was removed 9-24-09 and an interpretive information sign was installed on 10-23-09.

6. Summary of Project Challenges. (Space will expand to fit your text.)

60mil HDPE liner was used to prevent infiltration. Installation of the pond liner was complicated by drainage issues, the existence of bedrock, and a subgrade too rough for the placement of the liner. Extra effort was required to drain the area and geotextile fabric was placed on the subgrade so that the liner could be placed. Bedrock also slowed the excavation of the pond and the installation of storm sewer lines.

7. Grantee Certification.

Checking here certifies that, to the best of your knowledge, the information contained in this report is correct.

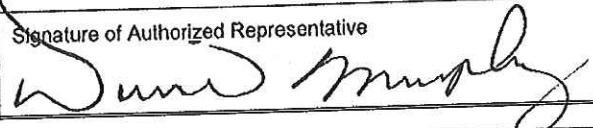
Name of Authorized Representative (type or print) ↓

Dave Murphy, P.E.

Title of Authorized Representative (type or print) ↓

Village Engineer

Signature of Authorized Representative



Date

5-4-10

8. For Departmental Use Only.

Regional NPS Coordinator - Please complete the following:

8.A. Check here if you have received the following from the project sponsor:

- one (1) printed, signed, original Final Report + attachments
- one (1) electronic version of Final Report.

Send the printed, signed original Final Report with attachments + electronic version to the Community Financial Assistance Grants Manager. Community Financial Assistance will forward to Runoff Management Section Grants Coordinator.

8.B. Comments about this project:

8.C. Type or print Name of Regional NPS Coordinator →

8.D. Signature of Regional NPS Coordinator

8.E. Date

FINAL INSPECTION CHECKLIST



PROJECT NO RO8-0356-104
 PROJECT NAME Falls Road Detention Basin CLIENT Village of Crafton

FINAL INSPECTION - UTILITIES

Manholes (San. & Stm.):

- | | | |
|---|-------------------------------------|---------------------------|
| Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> | Clean |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | Correct Castings & Covers |
| <input type="checkbox"/> | <input type="checkbox"/> | Chimney Seal <u>N/A</u> |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | Correct Elevation |
| <input type="checkbox"/> | <input checked="" type="checkbox"/> | Leaks |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | Castling & Ring Alignment |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | Alignment of Steps |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | Bench Poured |

Laterals:

- | | | |
|--------------------------|--------------------------|------------------------|
| <input type="checkbox"/> | <input type="checkbox"/> | Marker Stakes Visible |
| <input type="checkbox"/> | <input type="checkbox"/> | Water Shut Off Visible |
| <input type="checkbox"/> | <input type="checkbox"/> | Clean Outs at Grade |
- N/A

Hydrants:

- | | | |
|--------------------------|--------------------------|---|
| <input type="checkbox"/> | <input type="checkbox"/> | Correct Colors |
| <input type="checkbox"/> | <input type="checkbox"/> | Correct Threads |
| <input type="checkbox"/> | <input type="checkbox"/> | Correct Elevation (Flange @ Ground Level) |
| <input type="checkbox"/> | <input type="checkbox"/> | Tracer Wire Boxes at Grade |
| <input type="checkbox"/> | <input type="checkbox"/> | Tracer Wire Accessible In Boxes |
| <input type="checkbox"/> | <input type="checkbox"/> | Flush |
| <input type="checkbox"/> | <input type="checkbox"/> | Drain After Use |
| <input type="checkbox"/> | <input type="checkbox"/> | Plumb |
- N/A

Valves:

- | | | |
|--------------------------|--------------------------|----------------------------------|
| <input type="checkbox"/> | <input type="checkbox"/> | Box at Correct Elevation (Grade) |
| <input type="checkbox"/> | <input type="checkbox"/> | Clean |
| <input type="checkbox"/> | <input type="checkbox"/> | Box Alignment Plumb |
| <input type="checkbox"/> | <input type="checkbox"/> | Open |
- N/A

Catch Basins:

- | | | |
|------------------------------|-----------------------------|-------------------------|
| Yes <input type="checkbox"/> | No <input type="checkbox"/> | Clean |
| <input type="checkbox"/> | <input type="checkbox"/> | Correct Casting |
| <input type="checkbox"/> | <input type="checkbox"/> | Castling Ring Alignment |
| <input type="checkbox"/> | <input type="checkbox"/> | Tuck Pointed |
- N/A

Storm Sewer:

- | | | |
|-------------------------------------|--------------------------|------------------------|
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | Grates On End Sections |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | Riprap at Outlets |

Restoration:

- | | | |
|-------------------------------------|--------------------------|--------------------------|
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | Pavement |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | Shoulders |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | Ditches |
| <input type="checkbox"/> | <input type="checkbox"/> | Driveways <u>N/A</u> |
| <input type="checkbox"/> | <input type="checkbox"/> | Culverts <u>N/A</u> |
| <input type="checkbox"/> | <input type="checkbox"/> | Signs <u>N/A</u> |
| <input type="checkbox"/> | <input type="checkbox"/> | Mailboxes <u>N/A</u> |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | Erosion Mat |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | Grass |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | Seed |
| <input type="checkbox"/> | <input type="checkbox"/> | Tree Trimming <u>N/A</u> |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | No Garbage |

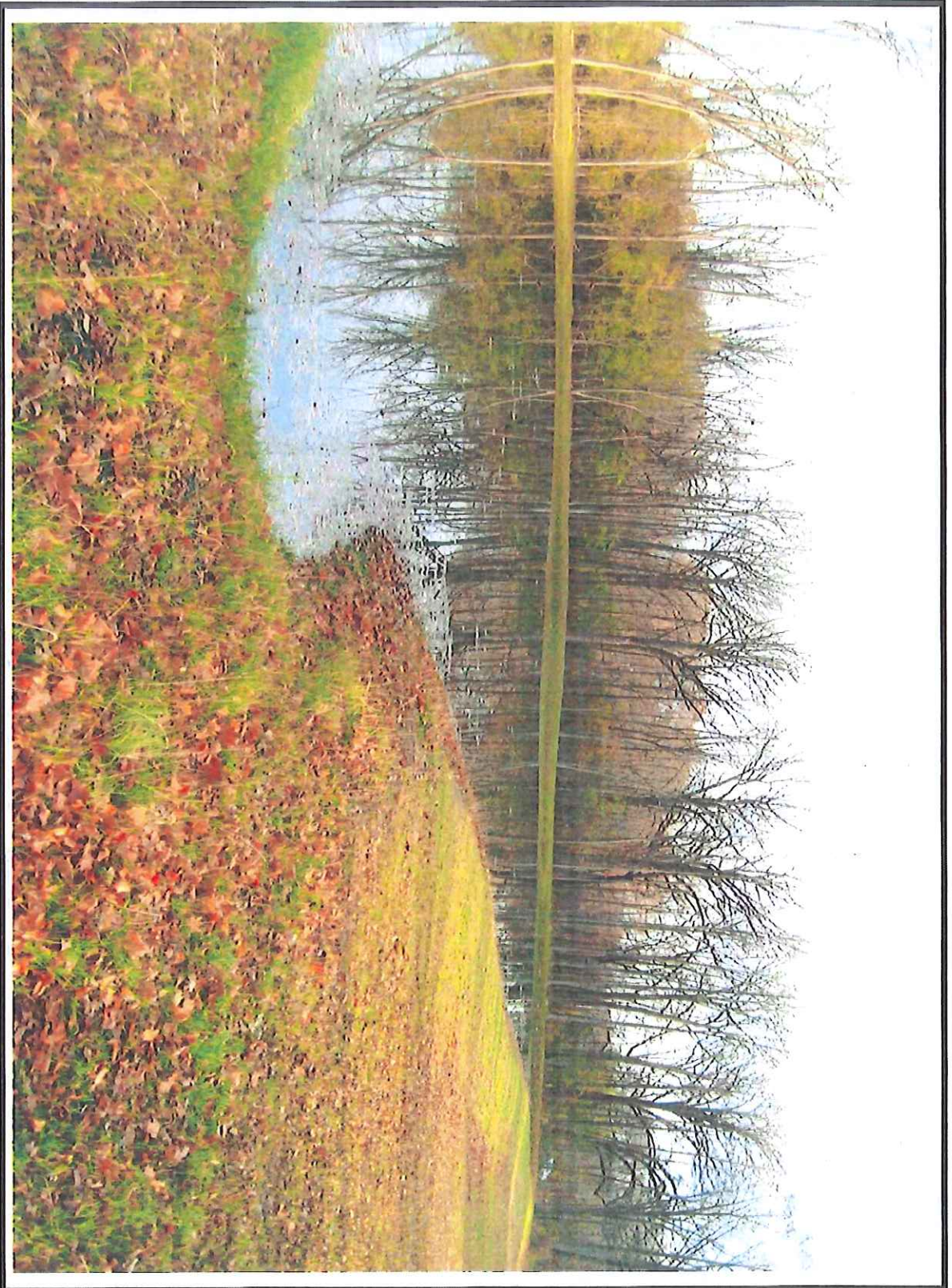
Comments:

As of November 10, 2009 the only remaining items on the project include the backfilling of 10 post holes from fence removal and the restoration of foot-trodden ground near the information sign due to disturbance during sign installation.

AS of December 17, 2009 all work was completed on the project.

Final Inspection By: Matthew J. Jankowski

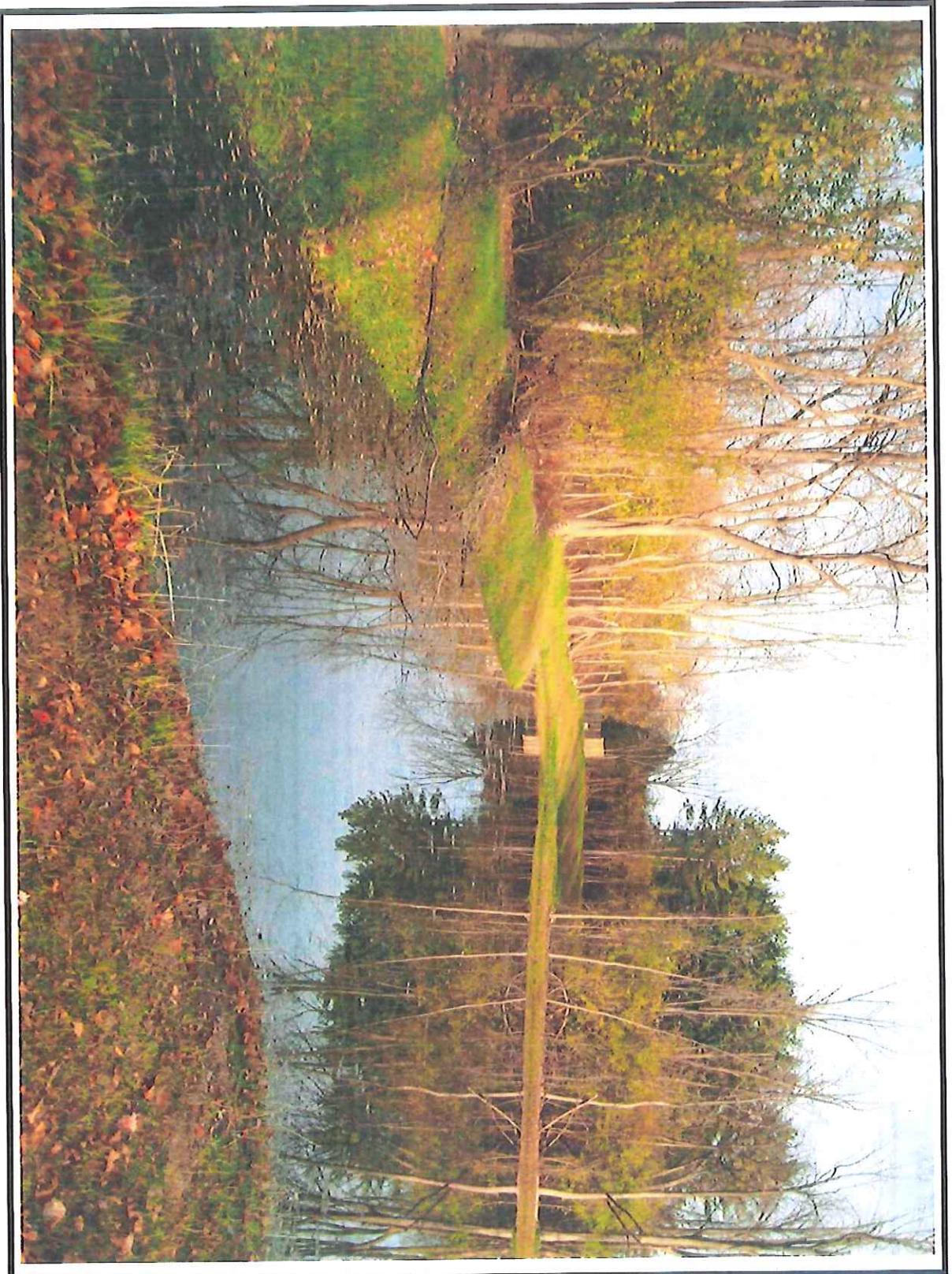
Date: 11-10-09



On southeast side of pond near S Green Bay Rd, facing north

Village of Grafton
Falls Road Detention Pond

11-10-09



Village of Grafton
Falls Road Detention Pond



On southeast side of pond near S Green Bay Rd, facing northwest



On eastern side of pond near wood chip path, facing south

Village of Grafton
Falls Road Detention Pond

11-10-09



On northern side of grassy swale, facing southward towards pre-treatment basin at 36" outfall

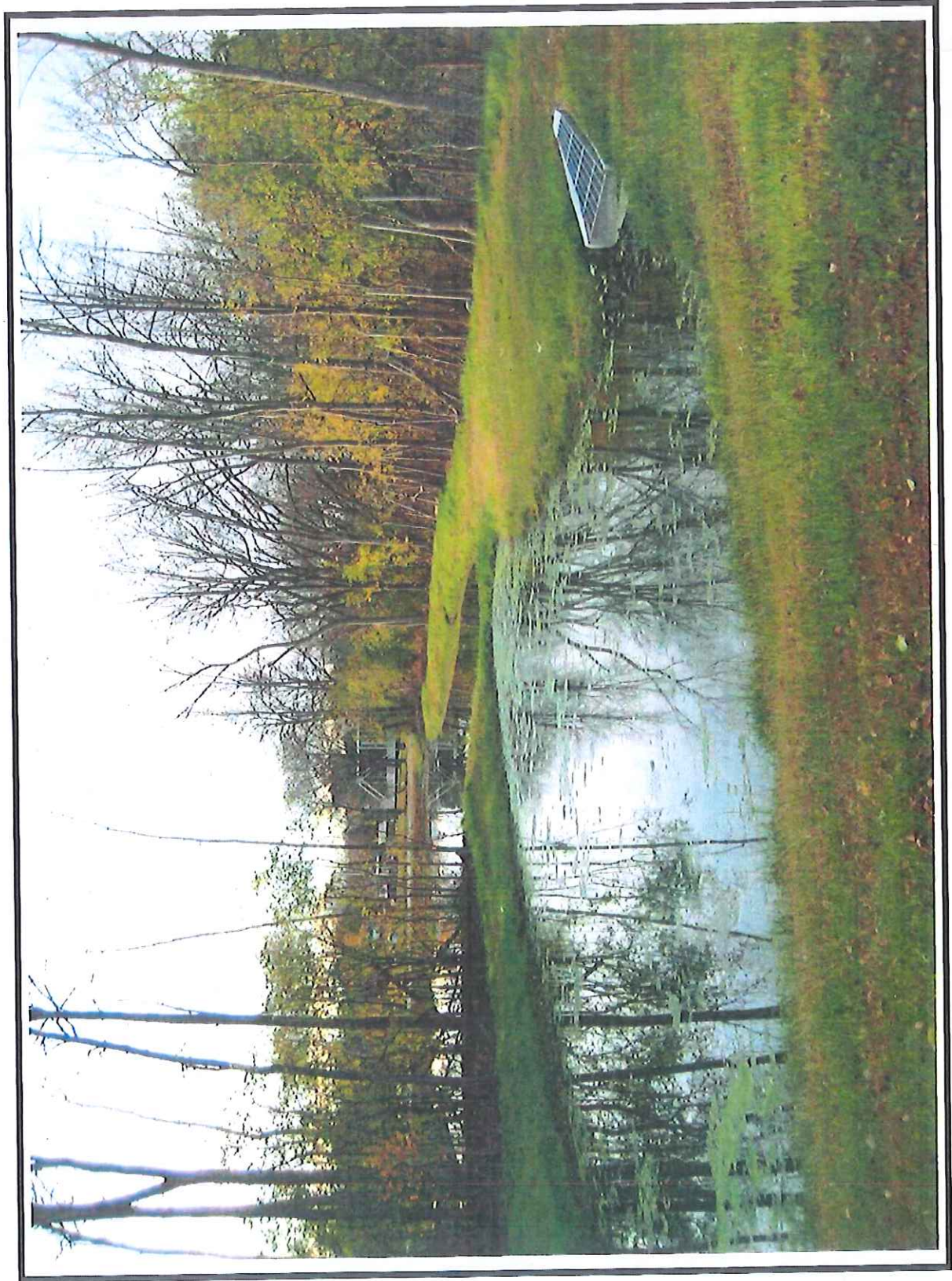
Village of Graton
Falls Road Detention Pond



Village of Grafton
Falls Road Detention Pond

S On northeast side of grassy swale, by Falls Rd and 15" outfall, facing southwest toward 36" outfall

11-10-09



On northern side of pre-treatment basin, facing southeast toward S. Green Bay Rd

Village of Grafton
Falls Road Detention Pond



Revised 102908

Pond file name: L:\projects\GraftonVg\R08-0356-100\CALCULATIONS\Revised 102908.pnd
 Pond file description: FALLS ROAD DETENTION BASIN-VILLAGE OF GRAFTON
 Particle Size file name: C:\PROGRAM FILES\WINDETPOND\NURP.CPZ
 Output Format Option: Water Quality Summary: One Line per Event
 Output device: Print output to File (extension .DPO)
 Date: 10-29-2008

Drainage Basin Runoff Procedure:
 SCS Curve Number procedure
 1. Basin area (acres): 80.35
 2. Curve number (CN): 88

Outlet Characteristics:
 Outlet number 1
 . Outlet type: Orifice
 1. Orifice diameter (ft): 1
 2. Invert elevation above datum (ft): 4
 3. Number of orifices at the invert elevation: 1

Initial stage elevation (ft): 0
 User defined pond efficiency factor (n): 5
 Depth of Pond that is Rock Filled (ft): 0
 Fraction of Rock Filled Volume as Voids (0-1): 0
 Rock Fill Minimum Stone Size: 0
 Sediment Accumulation Mass that Shuts off Pond Infiltration (kg/sm): 20

Pond Entry Number	Stage (ft)	Surface Area (acres)	Area (sq ft)	Natural Seepage (in/hr)	COV	Natural Seepage	Other Outflow (cfs)
0	0.00	0.0000	0.00	0.00	0.00	0.00	0.00
1	1.00	0.6542	0.00	0.00	0.00	0.00	0.00
2	2.00	0.7390	0.00	0.00	0.00	0.00	0.00
3	3.00	0.9941	0.00	0.00	0.00	0.00	0.00
4	4.00	1.1125	0.00	0.00	0.00	0.00	0.00
5	5.00	1.2503	0.00	0.00	0.00	0.00	0.00
6	6.00	1.3184	0.00	0.00	0.00	0.00	0.00

Rain Information
 Peak to average flow ratio: 4
 Maximum flow allowed into pond (cfs): No maximum value entered
 Runoff duration to rainfall duration ratio: 1.2
 Rain file name: C:\PROGRAM FILES\WINDETPOND\Rain Files\MKE1969.RAN
 Rain starting date: 03/28/69
 Rain ending date: 12/06/69

Temperature and Specific Gravity Information:
 Average Annual Water Temperature (degrees F): 50.
 Particle Specific Gravity: 2.5

Groundwater Mounding Data
 1. Seepage field infiltration rate (ft/day): 0
 Page 1

Revised 102908 - Output Summary

DETPOND for Windows Version 8.4.2
(C) Copyright Robert Pitt and John Voorhees 1996
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Pond file name: L:\PROJECTS\GRAFTONVG\R08-0356-100\CALCULATIONS\REVISED 102908.PND
Pond file description: FALLS ROAD DETENTION BASIN-VILLAGE OF GRAFTON
Rain file name: C:\Program Files\Windetpond\Rain Files\MKEI1969.RAN
Critical Particle Size File name: C:\PROGRAM FILES\WINDETPOND\NURP.CPZ
Model Run Start Date: 03/28/69 Model Run End Date: 12/06/69
Date of run: 10-29-2008 Time of run: 10:38:21

Percent Particulate Solids Removed (Flow Weighted): 70.2
Flow Weighted Average Ideal Particle Size Trapped in Pond: 4.3
Number of Times Top of Pond Elevation Exceeded: 2