



Village of Menomonee Falls
 W156 N8480 Pilgrim Road
 Menomonee Falls, WI 53051-3140
 Telephone: (262) 532-4200

STORMWATER MANAGEMENT FACILITIES OPERATION AND INSPECTION REPORT

Quarter Section SW ¼ Sec 33 Name of Business/Subdivision Cranes Crossing
 Property Tax ID Number 0131038 Address of Property N48 W18200 Lisbon Road
 Date 11/14/2016

Dry Pond	
Wet Pond	X
Other	

Location of Pond SW corner of Green Crane Drive & Cranes Crossing Blvd.
 Pond ID: SWP 33s004
Pond P2E

Year Pond Constructed 2005 Year of Last Certification 2010

Compliance Verification	Design	Actual	Compliant Yes No		Comments (Condition of Structure)
Primary Outlet Pipe					Outlet Pipe Material
Opening Diameter (inches)	18"	18"	X		RCP
Upstream Invert	876.75	876.86	X		
Downstream Invert	876.45	876.17	X		
Length (feet)	193.63	167.7	X		
Slope (%)	0.284	0.411	X		
Secondary Outlet Pipe (If Applicable)					
Opening Diameter (inches)					Not Applicable (NA)
Upstream Invert					
Downstream Invert					
Length (feet)					
Slope (%)					
Riser (If Applicable)					
Opening Diameter (inches)	48"	48"	X		Precast Reinforced concrete
Elevation	878.70	879.06	X		
Upper Discharge Control (If Applicable)					NA
Opening Diameter (inches)					NA
Elevation					

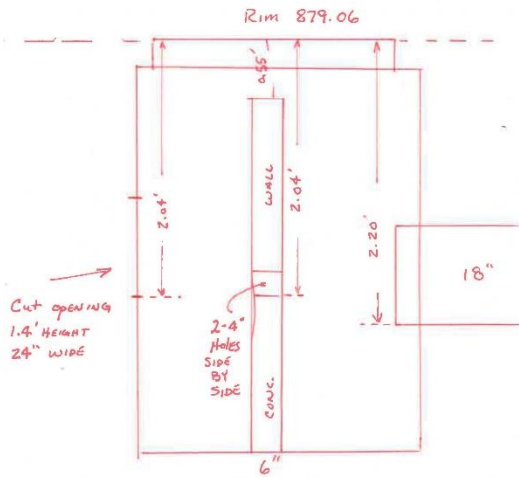
Compliance Verification	Design	Actual	Compliant Yes No		Comments	
Lower Discharge Control	(If Applicable)					
Opening Diameter (inches)	24"x15"	24"x17"	X		Debris screen over rectangular opening	
Elevation	877.00	877.02	X			
Other (Description)						
Opening Type and Size (inches)	2-4" dia.	2-4" dia.	X		Two orifices	
Elevation	877.00	877.02	X			
Emergency Spillway						
Elevation	884.29	883.4±		X		
Length of spillway (feet)	10.0	4±		X		
Embankment	Present Yes no		Comments/Maintenance Requirements			
Unauthorized Plantings, trees, or woody vegetation		X	Mowed lawn			
Animal burrows or slope erosion		X				
Storm Sewer Outfalls	Type & Size		Location		Comments	
Outfall 1	30" RCP		East side		From Pond P2E	
Outfall 2	12" RCP		North side			
Outfall 3	24" RCP		Northwest corner			
Outfall 4	21" CMP		Northeast corner			
Storage Properties	Design	Actual	Compliant Yes No		Not Applicable	Equipment Used
Normal Water Elevation (Wet Ponds)	877.00	877.02	X			Total station & GPS Low area at east side, over inlet and outlet pipes
Design High Water Elevation	884.29	883.4	X			
Area at Normal Water Elevation (Ac) (Wet Ponds)	0.4316	0.514	X			
Area at Design High Water Elevation (Ac)	1.0560	0.921	X			
Active Storage Available (Ac-Ft)*	3.9856	3.56	X			
Lowest Elevation at Top of Embankment (If Applicable)	885.2	883.3		X		
Average Elevation at Top of Embankment (If Applicable)	885.22	884.5		X		
Maximum Bottom Elevation	870.0	870.0	X			
Average Pond Bottom Elevation	870.7	872.0	X			
Pond Bottom Area (Ac)	0.0361	0.303	X			
Maximum Pond Depth	7.00	7.0	X			
Average Pond Depth	6.3	5.0	X			
Average Permanent Pool Depth (Wet Ponds)	6.3	5.0	X			HyDrone-Remote Control Survey Boat Platform

*To Determine Active Storage $V=H/3(A1+A2+(A1 \times A2)^{1/2})$

Wet Ponds Use H = Height of Section , $A1$ = area at normal water elevation, $A2$ =area at top section

Dry Ponds Use H = Height of Section, $A1$ = pond bottom area, $A2$ =area at top section

Sketch Outlet or Attach to Document

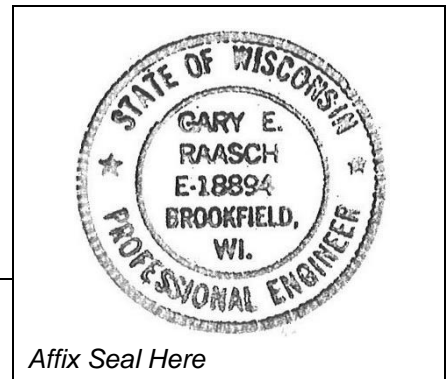


Attach As-built Survey to the Document for the first report submission

Inspection Firm: R.A. Smith National, Inc.
 Phone Number: 262-781-1000
 Address: 16745 W. Bluemound Road
Brookfield, WI 53005

Inspector Name : Gary E. Raasch
 Inspection Date: September 20, 2016

Certifying Professional
 Name: Gary E. Raasch
 Phone Number: 262-317-3369



Date:
 November 14, 2016

Signature: *Gary E Raasch*