



2009

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 _____
Property Tax ID Number _____
Date _____

Name of Business/Subdivision Woodman's Food Market
Address of Property W124N8145 STH 145
Menomonee Falls, WI 53051

Dry Pond		Location of Pond	Northeast corner of Woodman's Food Market site
Wet Pond	X		
Other			

Pond ID: Wet Detention Pond
"Pond 1" 125013

Year Pond Constructed

2009

Year of Last Certification

2009

Compliance Verification	Design	Actual	Compliant Yes	Compliant No	Comments (Condition of Structure)
Primary Outlet Pipe					
Opening Diameter (inches)	18	18	X		* DATA TAKEN FROM 2009 AS-BUILT SURVEY.
Upstream Invert	794.98	794.79*	X		
Downstream Invert	794.80	794.40*	X		
Length (feet)	34.5	32.8*	X		
Slope (%)	0.52	1.19*	X		
Secondary Outlet Pipe (If Applicable)					
Opening Diameter (inches)	10	10	X		TEMPORARY EROSION CONTROL ORIFICE END CAP IS STILL INSTALLED ON SECONDARY OUTLET PIPE.
Upstream Invert	795.00	795.20		X	ENGINEER RECOMMENDS REMOVING ORIFICE END CAP AND RELAYING SECONDARY POND OUTLET PIPE IF OUTLET IS NOT NEAR ELEVATION 795.00.
Downstream Invert	794.98	794.99*	X		
Length (feet)	7.0	8.1*	X		
Slope (%)	0.0	2.5	X		* DATA TAKEN FROM 2009 AS-BUILT SURVEY.
Riser (If Applicable)					
Opening Diameter (inches)	48	48	X		RISER HAS SLAB TOP AND BEEHIVE CASTING INSTALLED WHICH IS NOT PER PLAN. ENGINEER RECOMMENDS REMOVING SLAB TOP AND INSTALLING REBAR TRASH RACK PER PLAN.
Elevation	798.00	798.10	X		
Upper Discharge Control (If Applicable)					
Opening Diameter (inches)	--				
Elevation	--				

Compliance Verification	Design	Actual	Compliant Yes	No	Comments
Lower Discharge Control	(If Applicable)				
Opening Diameter (inches)	12	NOT INSTALLED		X	12-INCH ORIFICE PLATE NOT INSTALLED INSIDE PRIMARY OUTLET STRUCTURE. ENGINEER RECOMMENDS
Elevation	795.00	NOT INSTALLED		X	INSTALLATION OF 12" ORIFICE IN OUTLET STRUCTURE PER PLAN.
Other (Description)					
Opening Type and Size (inches)	--				
Elevation	--				
Emergency Spillway					
Elevation	802.00	802.7	X		
Length of spillway (feet)	14	12	X		
Embankment	Present Yes		Comments/Maintenance Requirements		
Unauthorized Plantings, trees, or woody vegetation		X			
Animal burrows or slope erosion		X			
Storm Sewer Outfalls	Type & Size		Location		Comments
Outfall 1 R-100	RCP 42-INCH		NORTHWEST		
Outfall 2 R-200	RCP 15-INCH		WEST		
Outfall 3 R-300	RCP 42-INCH		SOUTHWEST		
Storage Properties	Design	Actual	Compliant Yes	No	Not Applicable
Normal Water Elevation (Wet Ponds)	795.00	795.75		X	
Design High Water Elevation	802.00	802.7	X		
Area at Normal Water Elevation (Ac) (Wet Ponds)	0.47	0.53	X		
Area at Design High Water Elevation (Ac)	1.22	1.26	X		
Active Storage Available (Ac-Ft)*	6.98	7.25	X		
Lowest Elevation at Top of Embankment (If Applicable)	804.00	803.27	X		
Average Elevation at Top of Embankment (If Applicable)	804.00	804.0	X		
Maximum Bottom Elevation	790.00	789.24	X		
Average Pond Bottom Elevation	790.00	789.3	X		
Pond Bottom Area (Ac)	0.09	0.05	X		
Maximum Pond Depth	5	6.46	X		
Average Pond Depth	4	6.4	X		
Average Permanent Pool Depth (Wet Ponds)	5	6.4	X		

*To Determine Active Storage $V=H/3(A1+A2+(A1xA2)1/2)$

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

Place Photograph of Pond or Attach to Document

SEE ATTACHED PICTURE

SEE ATTACHED PHOTOS

Place Photograph of Pond or Attach to Document

SEE ATTACHED PHOTOS

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 RD.
SUITE 200
BROOKFIELD, WI 53005

Inspector Name : AARON SCHNEIDER
Inspection Date: 8/12/2014

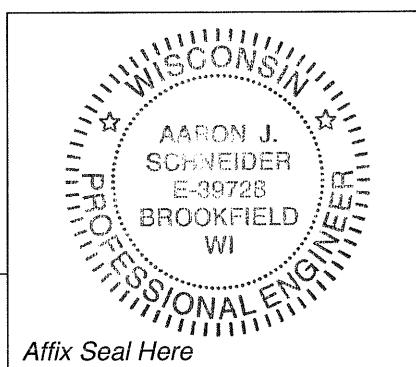
Certifying Professional AARON SCHNEIDER, P.E.

Name: _____
Phone Number: 262-781-1000

Date:
08/14/2014

Signature:

Aaron Schneider

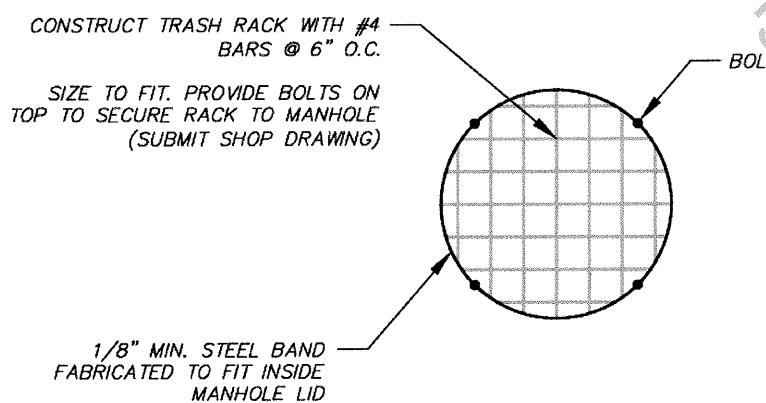
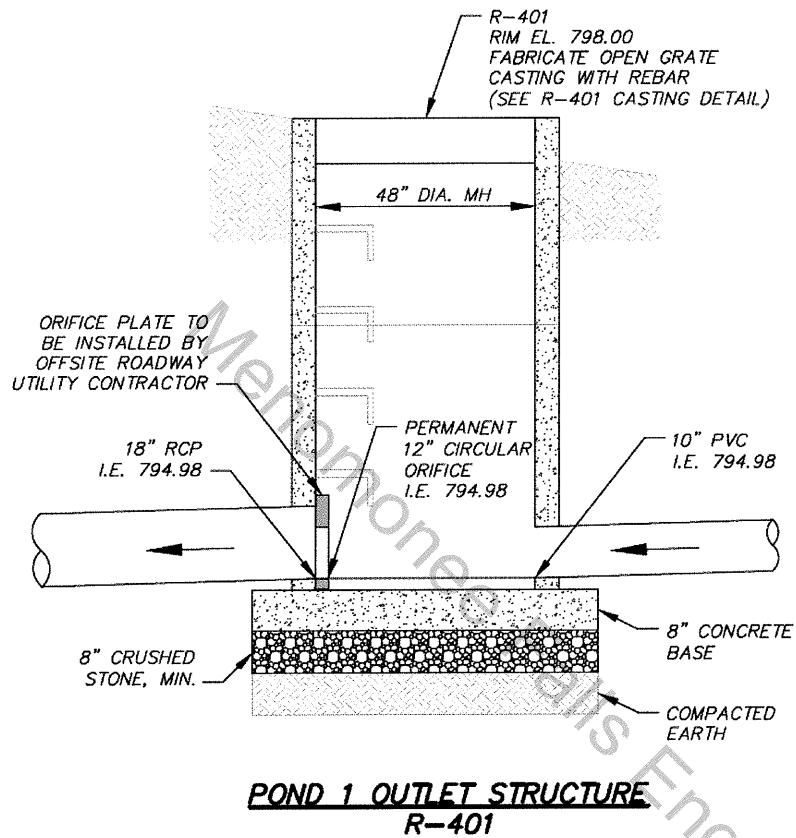


POND 1



Engineering

POND 1 – OUTFALL STRUCTURE DESIGN



R-401 CASTING DETAIL

POND 1 OUTFALL STRUCTURE (MANHOLE R-401 OUTSIDE)



POND 1 OUTFALL STRUCTURE (MANHOLE R-401 INSIDE)





2009

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Name of Business/Subdivision _____
Address of Property _____

Woodman's Food Market
W124N8145 STH 145
Menomonee Falls, WI 53051

Dry Pond		Location of Pond	Southeast corner of Woodman's Food Market site
Wet Pond	X		
Other			

Pond ID: Wet Detention Pond
"Pond 2" 12501

Year Pond Constructed

2009

Year of Last Certification

2009

Compliance Verification	Design	Actual	Compliant Yes	Compliant No	Comments (Condition of Structure)
Primary Outlet Pipe					
Opening Diameter (inches)	12	12*	X		* DATA TAKEN FROM 2009 AS-BUILT SURVEY.
Upstream Invert	781.84	781.89*	X		
Downstream Invert	781.14	781.14*	X		
Length (feet)	23.2	22.7*	X		
Slope (%)	3.02	3.30*	X		
Secondary Outlet Pipe					
Opening Diameter (inches)	6	2.5 / 6		X	TEMPORARY EROSION CONTROL OUTLET STRUCTURE (6" PVC PIPE 2.5" ORIFICE AND 6" PVC RISER) STILL INSTALLED AS SECONDARY OUTFALL. ENGINEER RECOMMENDS REMOVAL OF PVC RISER AND 2.5" ORIFICE FOR COMPLIANCE.
Upstream Invert	783.00	782.92*	X		
Downstream Invert	782.34	782.23*	X		
Length (feet)	27.0	27.2*	X		
Slope (%)	2.44	2.54*	X		
Riser					
Opening Diameter (inches)	--	--			Riser Material
Elevation	--	--			
Upper Discharge Control					
Opening Diameter (inches)	--				
Elevation	--				

Compliance Verification	Design	Actual	Compliant Yes	No	Comments
Lower Discharge Control	(If Applicable)				
Opening Diameter (inches)	--	--			
Elevation	--	--			
Other (Description)					
Opening Type and Size (inches)	--	--			
Elevation	--	--			
Emergency Spillway					
Elevation	789.00	788.95	X		
Length of spillway (feet)	14	18	X		
Embankment	Present Yes no		Comments/Maintenance Requirements		
Unauthorized Plantings, trees, or woody vegetation		X			
Animal burrows or slope erosion		X			
Storm Sewer Outfalls	Type & Size		Location		Comments
Outfall 1 R-550	RCP 30-INCH		NORTHWEST		
Outfall 2 R-500	RCP 18-INCH		SOUTHWEST		
Outfall 3					
Storage Properties	Design	Actual	Compliant Yes	Not Applicable No	Equipment Used
Normal Water Elevation (Wet Ponds)	783.00	783.12	X		
Design High Water Elevation	788.00	788.95	X		
Area at Normal Water Elevation (Ac) (Wet Ponds)	0.71	0.73	X		
Area at Design High Water Elevation (Ac)	1.17	1.23	X		
Active Storage Available (Ac-Ft)*	5.42	6.53	X		
Lowest Elevation at Top of Embankment (If Applicable)	790.00	789.74	X		
Average Elevation at Top of Embankment (If Applicable)	790.00	790.00	X		
Maximum Bottom Elevation	778.00	777.13	X		
Average Pond Bottom Elevation	778.00	777.3	X		
Pond Bottom Area (Ac)	0.29	0.26	X		
Maximum Pond Depth	5	5.99	X		
Average Pond Depth	5	5.82	X		
Average Permanent Pool Depth (Wet Ponds)	5	5.82	X		

*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

Place Photograph of Pond or Attach to Document

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SUITE 200
BROOKFIELD, WI 53005

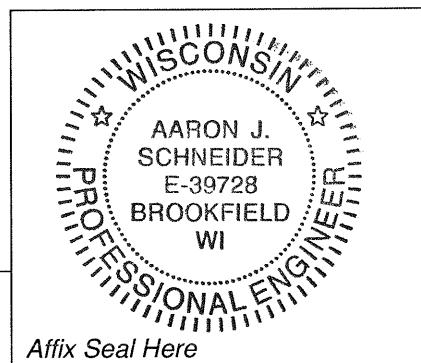
Inspector Name : AARON SCHNEIDER
Inspection Date: 8/12/2014

Certifying Professional AARON SCHNEIDER, P.E.

Name: _____
Phone Number: 262-781-1000

Date: 08/14/2014

Signature: 



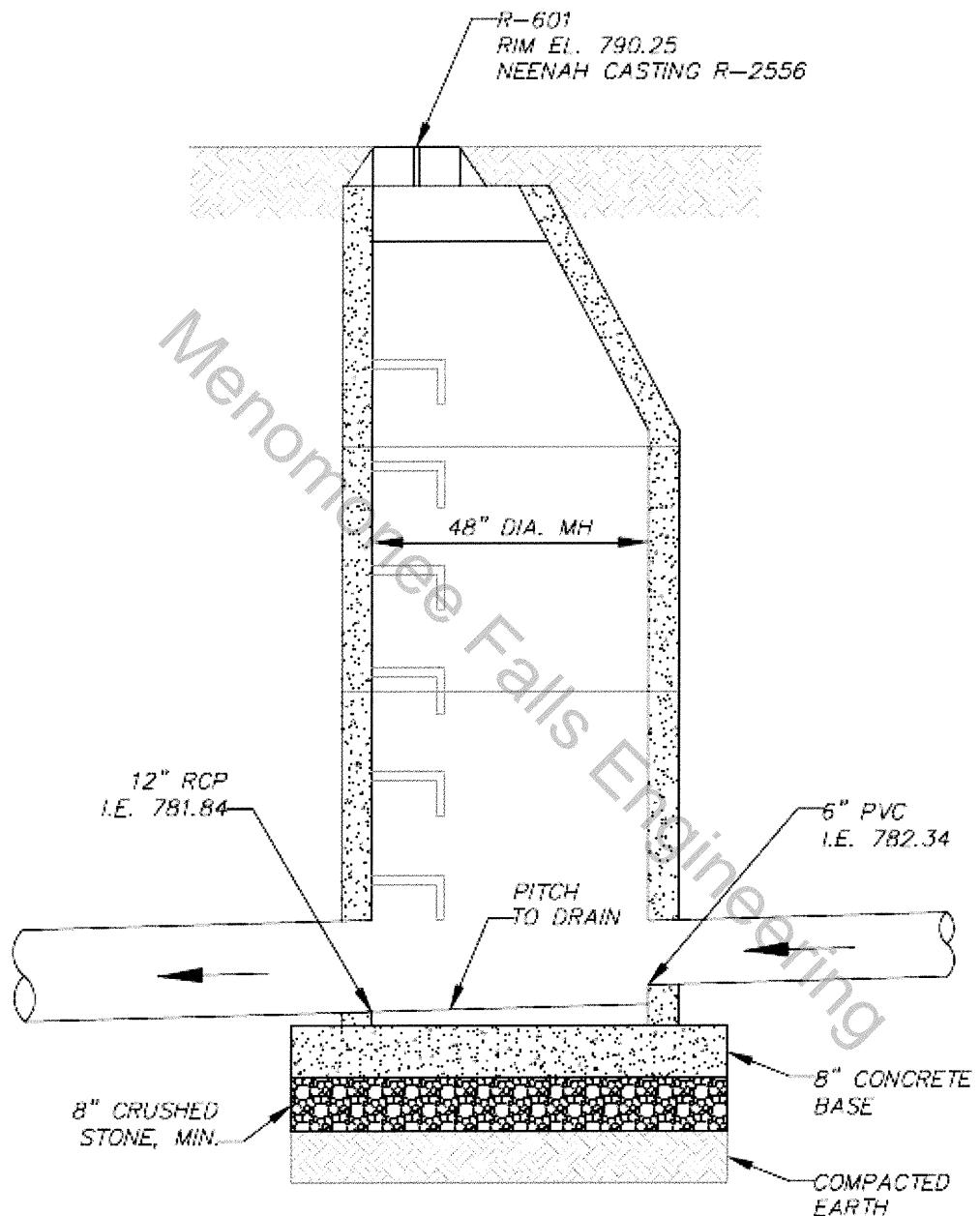
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10-3-2012

POND 2



POND 2 – OUTFALL STRUCTURE DESIGN



POND 2 OUTLET STRUCTURE
R-601

POND 2 OUTLET PIPE (R600)



POND 2 OUTFALL STRUCTURE (MANHOLE R-601 INSIDE)





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Woodman's Food Market
W124N8145 STH 145
Menomonee Falls, WI 53051

Dry Pond	
Wet Pond	X
Other	

Location of Pond _____
Southwest corner of Woodman's Food Market site

Pond ID: Wet Detention Pond
"Pond 3" 125.012

Year Pond Constructed 2009

Year of Last Certification _____

2009

Compliance Verification		Design	Actual	Compliant Yes	Compliant No	Comments (Condition of Structure)
Primary Outlet Pipe						Outlet Pipe Material RCP
Opening Diameter (inches)	12	12*	X			* DATA TAKEN FROM 2009 AS-BUILT SURVEY.
Upstream Invert	798.00	798.05*	X			
Downstream Invert	797.64	797.60*	X			
Length (feet)	34.4	34.4*	X			
Slope (%)	1.05	1.31*	X			
Secondary Outlet Pipe		(If Applicable)				
Opening Diameter (inches)	12	12	X			TEMPORARY EROSION CONTROL OUTLET STRUCTURE (12" PVC PIPE 2" ORIFICE AND 12" PVC RISER) STILL INSTALLED AS SECONDARY OUTFALL. ENGINEER RECOMMENDS REMOVAL OF PVC RISER AND 2" ORIFICE AND VERIFICATION OF SECONDARY PIPE OUTLET INVERT TO BE NEAR ELEV 798.00 FOR COMPLIANCE.
Upstream Invert	798.00	798.11*		X		
Downstream Invert	798.00	798.05*	X			
Length (feet)	40.0	39.9*	X			
Slope (%)	0.0	0.15*	X			
Riser		(If Applicable)		Riser Material		
Opening Diameter (inches)	--	--				
Elevation	--	--				
Upper Discharge Control		(If Applicable)				
Opening Diameter (inches)	--	--				
Elevation	--	--				

Compliance Verification	Design	Actual	Compliant Yes	No	Comments
Lower Discharge Control	(If Applicable)				
Opening Diameter (inches)	4	NOT INSTALLED		X	ENGINEER RECOMMENDS INSTALLATION OF PERMANENT 4" ORIFICE PER PLAN FOR COMPLIANCE.
Elevation	798.00	NOT INSTALLED		X	
Other (Description)					
Opening Type and Size (inches)	--	--			
Elevation	--	--			
Emergency Spillway					
Elevation	802.00	801.80	X		
Length of spillway (feet)	14	17.5	X		
Embankment	Present Yes	no	Comments/Maintenance Requirements		
Unauthorized Plantings, trees, or woody vegetation		X			
Animal burrows or slope erosion		X			
Storm Sewer Outfalls	Type & Size		Location		Comments
Outfall 1 R-700	RCP 15-INCH		NORTHEAST		
Outfall 2 R-800	RCP 12-INCH		NORTHWEST		
Outfall 3					
Storage Properties	Design	Actual	Compliant Yes	Not Applicable	Equipment Used
Normal Water Elevation (Wet Ponds)	798.00	799.57*		X	
Design High Water Elevation	801.00	801.80	X		
Area at Normal Water Elevation (Ac) (Wet Ponds)	0.14	0.15	X		
Area at Design High Water Elevation (Ac)	0.30	0.34	X		
Active Storage Available (Ac-Ft)*	1.10	1.46	X		
Lowest Elevation at Top of Embankment (If Applicable)	803.00	802.86	X		
Average Elevation at Top of Embankment (If Applicable)	803.00	802.95	X		
Maximum Bottom Elevation	793.00	792.24	X		
Average Pond Bottom Elevation	793.00	793.00	X		
Pond Bottom Area (Ac)	0.02	0.01	X		
Maximum Pond Depth	5	7.33	X		
Average Pond Depth	5	5	X		
Average Permanent Pool Depth (Wet Ponds)	5	5	X		

*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

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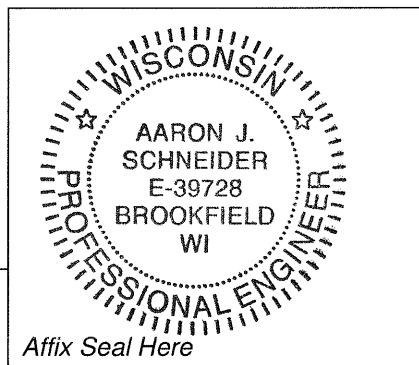
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SUITE 200
BROOKFIELD, WI 53005

Inspector Name : AARON SCHNEIDER
Inspection Date: 8/12/2014

Certifying Professional AARON SCHNEIDER, P.E.

Name:

Phone Number: 262-781-1000



Date:

08/14/2014

Signature:

A handwritten signature of Aaron J. Schneider.

POND 3



Engineering

POND 3 OUTLET PIPE (R900)



Engineering

POND 3 OUTFALL STRUCTURE (MANHOLE R-901 INSIDE)

