



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	11 NW	Name of Business/Subdivision	VMF COMMUNITY CENTER
Property Tax ID Number	0042973005	Address of Property	W153 N8681 MARGARET RD
			MENOMONEE FALLS, WI 53051

Dry Pond	X
Wet Pond	
Other	

Description: SWP11N003

Location Of Pond EAST OF ENTRANCE TO
COMMUNITY CENTER OFF OF
MENO RVR PKWY

Year Pond Constructed 1995 Year of Last Certification 2013

Compliance Verification	Design (Non-AsBuilt)	Actual (GPS)	Compliant Yes No		Comments (Condition of Structure)
Primary Outlet Pipe (ST011224)					Outlet Pipe Material
Opening Diameter (inches)	24"	24"	Y	-	24" RCP IN GOOD CONDITION, RIP RAP IN END SECTION
Upstream Invert	759.40	759.16	Y	-	24" RCP IN GOOD CONDITION, RIP RAP IN END SECTION
Downstream Invert	758.60	758.68	Y	-	24" RCP IN GOOD CONDITION, RIP RAP IN END SECTION
Length (feet)	75.0 FT	70.2 FT	Y	-	FROM: COMPLETELY ENCLOSED RCP TO: COMPLETELY ENCLOSED RCP
Slope (%)	0.0080%	0.0068%	Y	-	ELEVATIONS TO VARY SLIGHTLY FROM YEAR TO YEAR DUE TO GPS TECHNOLOGY
Secondary Outlet Pipe	N/A				Outlet Pipe Material
Opening Diameter (inches)			-	-	
Upstream Invert			-	-	
Downstream Invert			-	-	
Length (feet)			-	-	
Slope (%)			-	-	
Riser	N/A				Riser Material
Opening Diameter (inches)			-	-	
Elevation			-	-	
Upper Discharge Control	N/A				
Opening Diameter (inches)			-	-	
Elevation			-	-	

Compliance Verification	Design	Actual	Compliant Yes No		Comments	
Lower Discharge Control	N/A					
Opening Diameter (inches)			-	-		
Elevation			-	-		
Other (Description)	N/A					
Opening Type and Size (inches)			-	-		
Elevation			-	-		
Emergency Spillway						
Elevation	-	-	-	-	NO SPILLWAY DETAILED IN ORIGINAL PLANS	
Length of spillway (feet)	-	-	-	-		
Embankment	Present Yes No		Comments/Maintenance Requirements			
Unauthorized Plantings, trees, or woody vegetation	-	N				
Animal burrows or slope erosion or hole	-	N				
Storm Sewer Outfalls	Type & Size		Location		Comments	
Outfall 1 (ST011223)	RCP - 24"		NORTH EMBANKMENT		RCP IN GOOD CONDITION, RIPRAP IN END SECTION	
Outfall 2						
Outfall 3						
Storage Properties	Design	Actual	Compliant Yes No		Not Applicable	Equipment Used
Normal Water Elevation (Wet Ponds)	-	-	-	-	N/A	GPS EQUIPMENT: GEOMAX ZENITH 35 & CARLSON SURVEYOR2 WITH SURV CE v5.04 ELEVATIONS TO VARY SLIGHTLY FROM YEAR TO YEAR DUE TO GPS TECHNOLOGY
Design High Water Elevation	763.00	763.00	Y	-		
Area at Normal Water Elevation (Ac) (Wet Ponds)	-	-	-	-	N/A	
Area at Design High Water Elevation (Ac)	-	0.164 AC	Y	-		
Active Storage Available (Ac-Ft)*	-	0.713 ACFT	Y	-		
Lowest Elevation at Top of Embankment (If Applicable)	763.00	762.98	Y	-		
Average Elevation at Top of Embankment (If Applicable)	-	763.30	Y	-		
Maximum Bottom Elevation	760.00	759.19	Y	-		
Average Pond Bottom Elevation	760.00	759.90	Y	-		
Pond Bottom Area (Ac)	-	0.044 AC	Y	-		
Maximum Pond Depth	3.0 FT	3.81 FT	Y	-		
Average Pond Depth	3.0 FT	3.10 FT	Y	-		
Average Permanent Pool Depth (Wet Ponds)	-	-	-	-	N/A	

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

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

Margaret Rd Retention Pond (East) – SWP11N003

Overview



Catch Basin ST011222
Repair catch basin structure.
Repair sink hole.



Outlet ST011223
Remove debris in outlet ST011223.
Remove mounded debris in basin.



Margaret Rd Retention Pond (East) – SWP11N003

Inlet ST011224



Margaret Rd Retention Pond (East) – SWP11N003

Repairs Needed (11/2023)

- 1) Catch basin structure ST011222 needs repair.
- 2) Repair sink hole at catch basin structure ST011222.
- 3) Remove sediment from outlet ST011223.
- 4) Remove accumulated sediment from pond at outlet ST011223 and replace with rip rap as appropriate.

Sketch Outlet

Place Photograph of Pond

Place Photograph of Pond

Inspection Firm: VILLAGE OF
MENOMONEE FALLS
Phone Number: 262-532-4411
Address: W156N8480 PILGRIM RD
MENOMONEE FALLS, WI
53051

Inspector Name : CHRISTOPHER M GARIEPY

Inspection Date: 11/14/2023

Certifying Professional Name: THOMAS M. HOFFMAN, P.E.
Phone Number: (262) 532-4415

Date:

2/26/2024

Signature:

[Handwritten Signature]



Affix Seal Here

Acre Feet pond storage volume calculations for:

Margaret Rd Basin (E)
SWP11N003

Entered Value
Calculated Value
Description of Elevations Calculated

Year of Inspection: **2023**

Example: $H = H2 - H1$, where $H2 > H1$

H1 =	759.90	Lower Height Elevation in Feet (Pond Bottom for Dry Pond OR Top of Observed Water Level)		
H2 =	763.00	Height at Bottom of Spillway (Wet or Dry)		
H3 =	763.00	Higher Height Elevation in Feet (Top of Bank Around Pond - Wet or Dry)		
H4 =	0.00	Bottom of Wet Pond Elevation in Feet (Wet Ponds Only)		
	Sq.Ft.	Acres		
Area 1 =	1,927.27	0.0442	Area of H1	Area 1 = Area at Pond Bottom for Dry Pond OR Top of Observed Water Level
Area 2 =	7,666.27	0.1760	Area of H2	Area 2 = Area at Bottom of Spillway
Area 3 =	7,666.27	0.1760	Area of H2	Area 3 = Area at Top of Bank
Area 4 =	-	0.0000	Area of H3	Area 4 = Area at Bottom of Pond (Wet Ponds Only)

Equation to determine Volume (AcFt) of pond storage capacity from
Bottom of Dry Pond to Bottom of Spillway:

$$V = (((H2-H1)/3)(A1+A2 + (\sqrt{A1+A2})))$$

	Feet		Acres		Acres
V=	$((H2-H1)/3)$	x	$(A1+A2)$	+	$\sqrt{A1+A2}$
V=	1.0333	x	0.2202	+	0.4693
V=	1.0333	x	0.6895		
V=	0.7125	AcFt			

Equation to determine Volume (AcFt) of pond storage capacity from
Bottom of Dry Pond to Top of Bank at Spillway:

$$V = (((H3-H1)/3)(A1+A3 + (\sqrt{A1+A3})))$$

	Feet		Acres		Acres
V=	$((H3-H1)/3)$	x	$(A1+A3)$	+	$\sqrt{A1+A3}$
V=	1.0333	x	0.2202	+	0.4693
V=	1.0333	x	0.6895		
V=	0.7125	AcFt			

Equation to determine Volume (AcFt) of pond storage capacity from
Bottom of Pond to Top of Water:

$$V = (((H1-H4)/3)(A1+A4 + (\sqrt{A1+A4})))$$

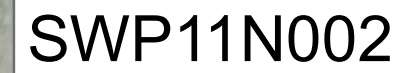
	Feet		Acres		Acres
V=	$((H1-H4)/3)$	x	$(A1+A4)$	+	$\sqrt{A1+A4}$
V=	253.3000	x	0.0442	+	0.2103
V=	253.3000	x	0.2546		
V=	64.4868	AcFt			

Equation to determine Volume (AcFt) of pond storage capacity from
Bottom of Pond to Top of Bank at Spillway:

$$V = (((H3-H4)/3)(A3+A4 + (\sqrt{A3+A4})))$$

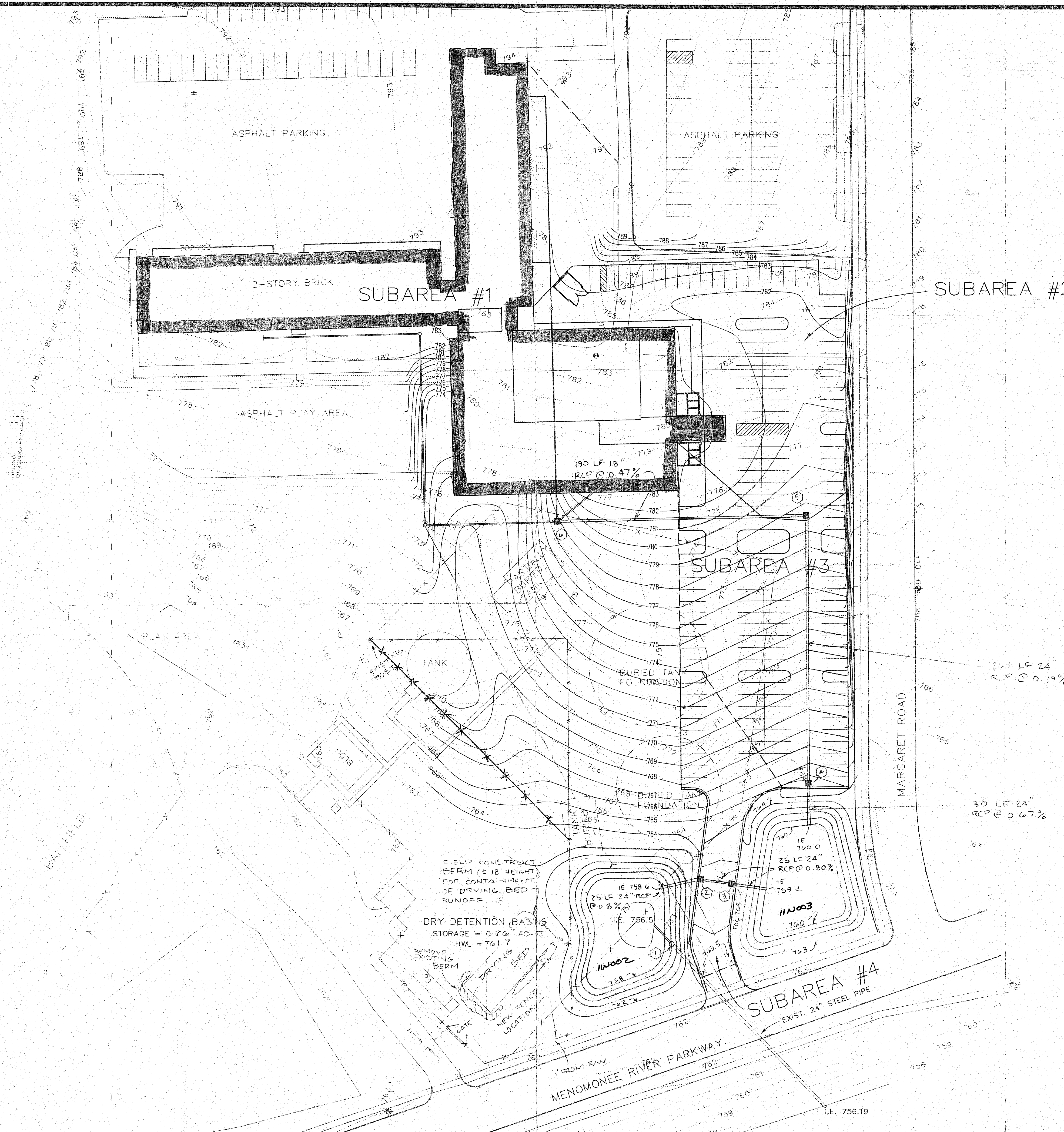
	Feet		Acres		Acres
V=	$((H3-H4)/3)$	x	$(A3+A4)$	+	$\sqrt{A3+A4}$
V=	254.3333	x	0.1760	+	0.4195
V=	254.3333	x	0.5955		
V=	151.4578	AcFt			

SWP11N002-SWP11N003
Margaret Ave - MF School Dist
MNFV0042973005
Pond Inspection 11/14/2023 CMG



SWP11N002
P-0147

SWP11N003



N
SCALE: 1" = 40'

PROPOSED STORM DRAINAGE

STRUCTURE	RIM T/G	N	E	S	W
1	760.0	756.41		756.4	
2	762.5		758.9		758.8
3	762.5		759.2		759.1
4	764.8	760.0		760.2	761.4
5	778.5			761.2	761.4
6	777.5	773.5 *	762.3		764.33

* 774.56 NE

11N002 0042.973.005
11N003 0042.973.005
MARGARET AVE PONDS / COMMUNITY CENTER PONDS