

STORMWATER MANAGEMENT FACILITIES OPERATION AND INSPECTION REPORT

Quarter Section	23 SW	Name of Business/Subdivision	LITTLE LEAGUE FIELDS
Property Tax ID Number	0091999	Address of Property	N64W15020 MILL RD
			MENOMONEE FALLS, WI 53051

Dry Pond	X	Location Of Pond	LARGER PROPERTY N OF MILLRD
Wet Pond			N OF PAPOOSE DR
Other			N OF 4 SOUTH-MOST BALL DIAMONDS

Description: SWP23S004

Year Pond Constructed 2006 Year of Last Certification 2011

Compliance Verification	Design (Non-AsBuilt)	Actual (GPS)	Compliant Yes No		Comments (Condition of Structure)
Primary Outlet Pipe					Outlet Pipe Material
Opening Diameter (inches)	15"	15"	X	-	RCP, GOOD CONDITION 2020 ELEVATIONS DIFFER BY 0.50' DUE TO NAD_83 MONUMENTATION USED. RCP, END PIPE MOVED OFF CULVERT PIPE ELEVATIONS TO VARY SLIGHTLY FROM YEAR TO YEAR DUE TO GPS TECHNOLOGY
Upstream Invert (ST021159)	811.50	811.56	X	-	
Downstream Invert (ST021160)	811.00	810.87	X	-	
Length (feet)	98.0	105.1	X	-	
Slope (%)	0.50	0.66	X	-	
Secondary Outlet Pipe					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						
Opening Diameter (inches)			-	-		
Elevation			-	-		
Other (Description)	N/A					
Opening Type and Size (inches)			-	-		
Elevation			-	-		
Emergency Spillway						
Elevation	815.00	814.19	-	X	LOWER THAN DESIGN	
Length of spillway (feet)	18.0	41.4	-	X	NE CORNER OF POND, S OF ST014022	
Embankment	Present Yes No		Comments/Maintenance Requirements			
Unauthorized Plantings, trees, or woody vegetation	-	X	TALL GRASSES PRESENT SLOPE EROSION SE, S, & SW AREAS OF RETENTION BASIN			
Animal burrows or slope erosion or hole	X	-				
Storm Sewer Outfalls	Type & Size		Location		Comments	
Outfall 1	-					
Outfall 2	-					
Outfall 3	-					
Outfall 4	-					
Outfall 5	-					
Storage Properties	Design (NON-ASBUILT)	Actual (GPS)	Compliant Yes No		Not Applicable	Equipment Used
Normal Water Elevation (Wet Ponds)			-	-	X	GPS EQUIPMENT: GEOMAX ZENITH35 & CARLSON SURVEYOR2 WITH SURV CE v5.04 NAD_83 MONUMENTATION USED.
Design High Water Elevation	815.00	814.19	-	X		
Area at Normal Water Elevation (Ac) (Wet Ponds)			-	-	X	
Area at Design High Water Elevation (Ac)	?	0.285 AC	-	X		
Active Storage Available (Ac-Ft)*	1.100	0.478	-	X		
Lowest Elevation at Top of Embankment (If Applicable)	815.00	814.13	-	X		
Average Elevation at Top of Embankment (If Applicable)	815.00	814.75	X	-		
Maximum Bottom Elevation	812.00	811.51	-	X		
Average Pond Bottom Elevation	813.75	812.90	-	X		
Pond Bottom Area (Ac)	?	0.006 AC	-	X		
Maximum Pond Depth	3.50	3.00	-	X		
Average Pond Depth	1.25	1.85	-	-		
Average Permanent Pool Depth (Wet Ponds)			-	-	X	

*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

Little League Fields – SWP23S004

Overview



Spillway ST021161 & Inlet ST021159



Little League Fields – SWP23S004

Storm Sewer Outlet ST021160



Storm Sewer Outlets ST021162 (North) and ST021163 (South)



Little League Fields – SWP23S004

Repairs Needed (10/24/2022)

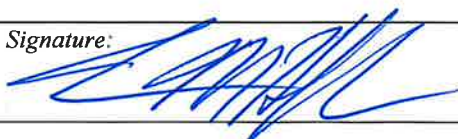
6” black corrugated PVC drain tile causing erosion at ST021162 & ST021163.
Consider repairing gully.

ST021160 end section disconnected from storm sewer pipe east of driveway.
Reconnect end section to main storm sewer pipe in ditch.

<i>Sketch Outlet</i>	<i>Place Photograph of Pond</i>
	<i>Place Photograph of Pond</i>

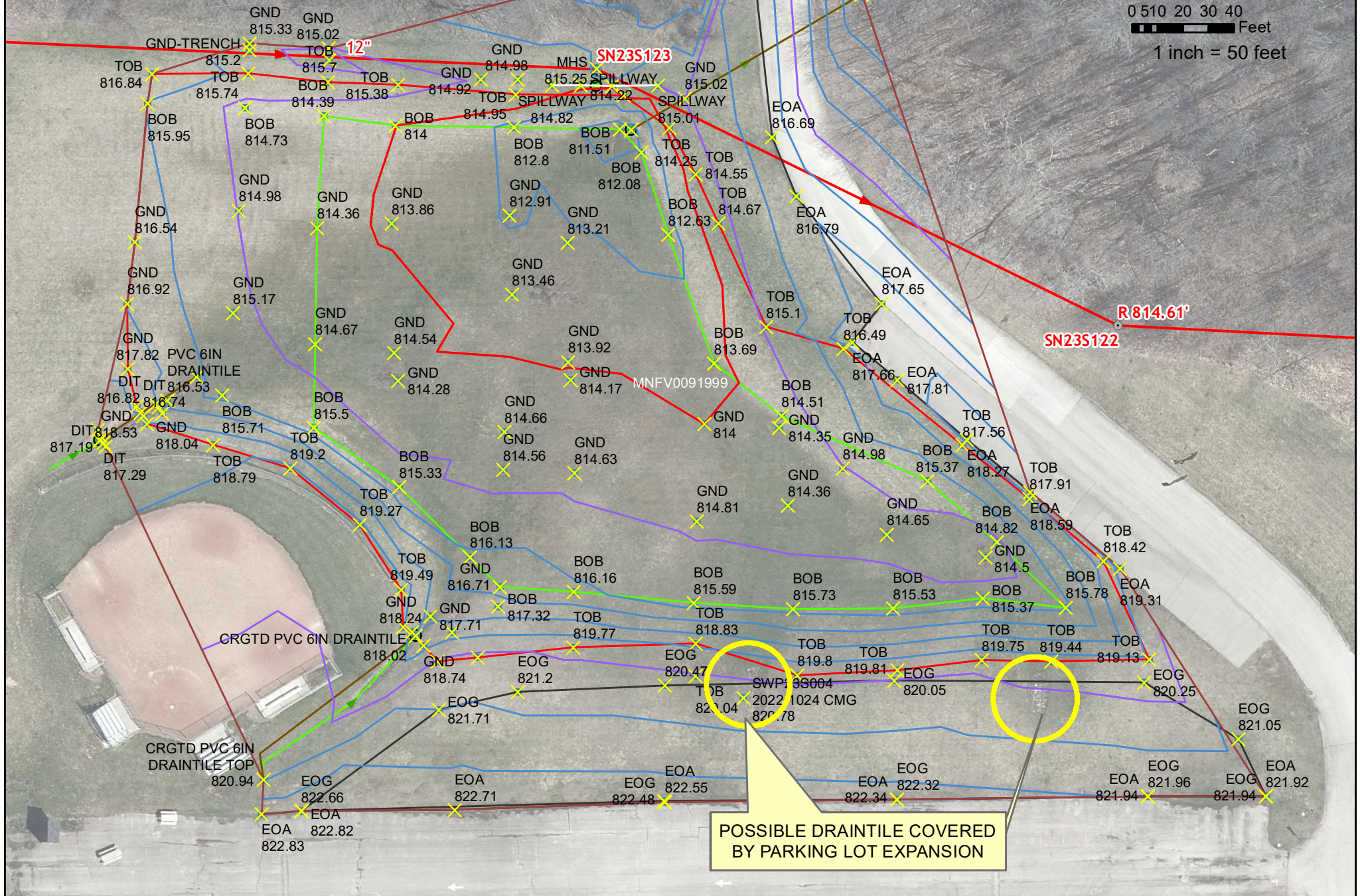
Inspection Firm:	VILLAGE OF MENOMONEE FALLS	Inspector Name:	CHRISTOPHER M GARIEPY
Phone Number:	262-532-4411	Inspection Date:	OCTOBER 24, 2022
Address:	W156N8480 PILGRIM RD MENOMONEE FALLS, WI 53051		

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

Date: <u>2/9/2023</u>	Signature: <u></u>	 Affix Seal Here
-----------------------	---	--



0 10 20 30 40
Feet
1 inch = 50 feet



$$H = H_1 - H_2 = 819.22 - 811.56 = 2.66 \text{ Ft}$$

$$A_1 = 12,405.45 \text{ F} = 0.285 \text{ AC}$$

$$A_2 = 242.85 \text{ F} = 0.006 \text{ AC}$$

SWP235004 Little League Field

2022
SWP235004

$$V = \left(\frac{H}{3} \right) (A_1 + A_2 + \sqrt{A_1 A_2})$$

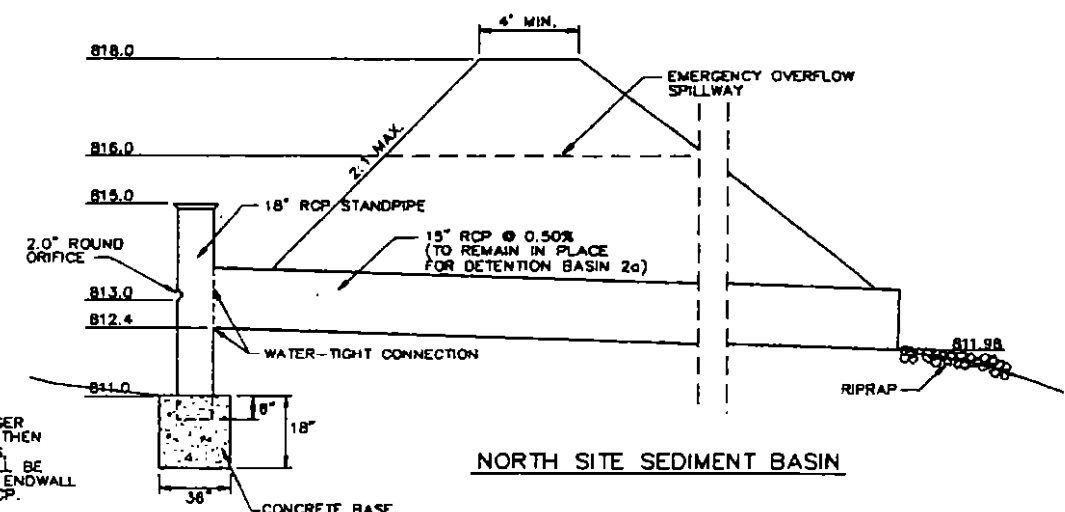
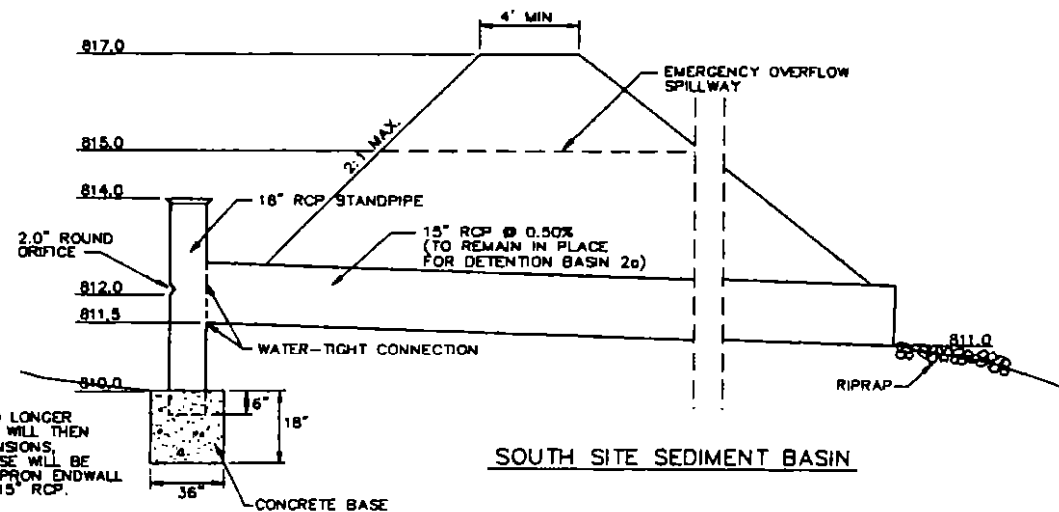
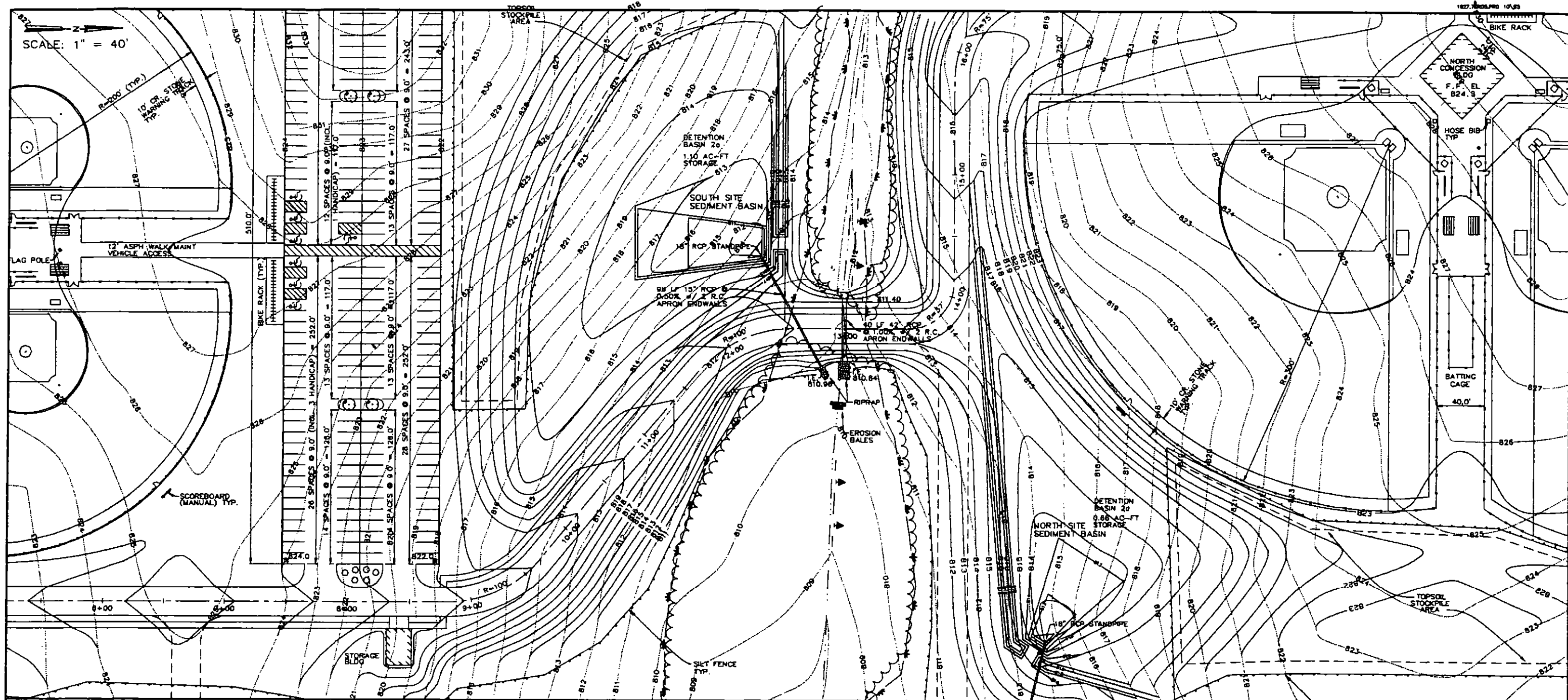
$$V = \left(\frac{2.66 \text{ Ft}}{3} \right) (0.285 \text{ AC} + 0.006 \text{ AC} + \sqrt{0.285 \text{ AC} \times 0.006 \text{ AC}})$$

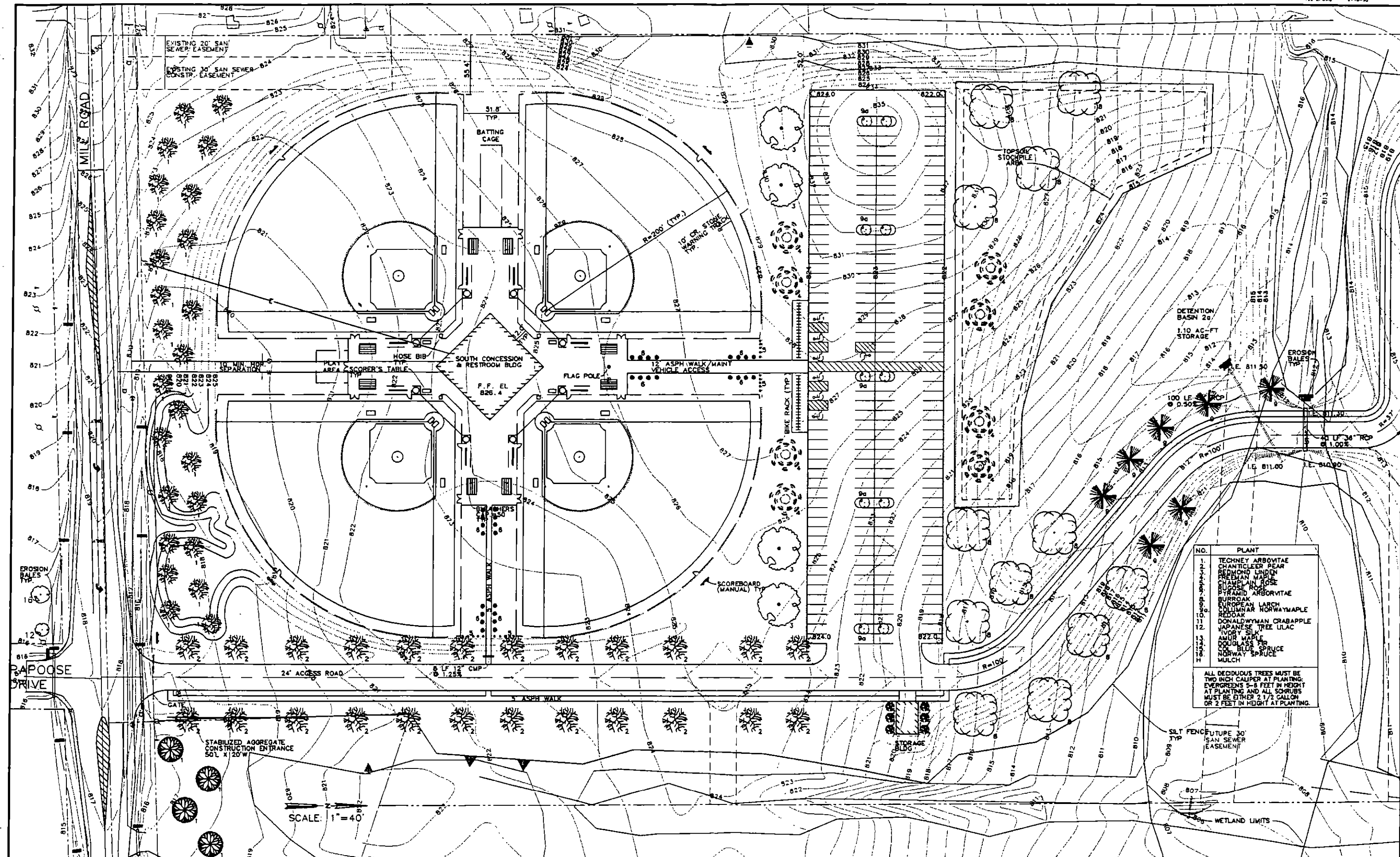
$$V = (0.887 \text{ Ft}) (0.291 \text{ AC} + \sqrt{0.291 \text{ AC}})$$

$$V = (0.887 \text{ Ft}) (0.539 \text{ AC})$$

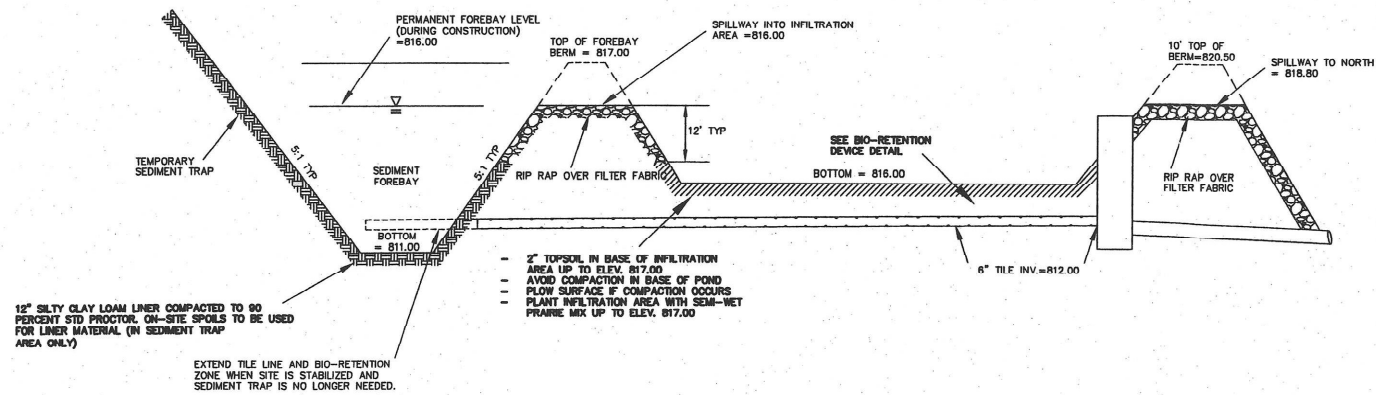
$$V = 0.478 \text{ AC Ft}$$

✓
CRG
11/21/22

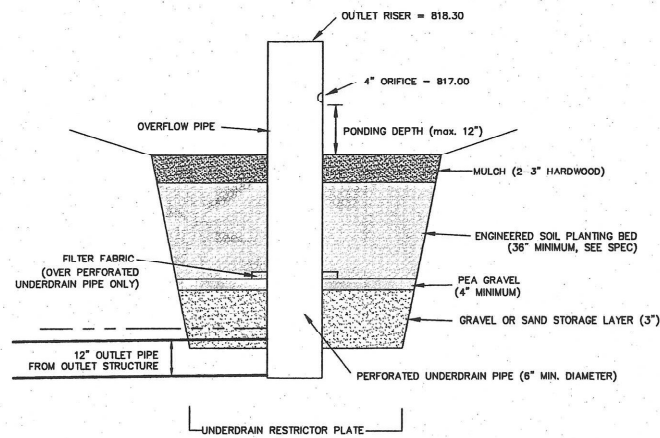




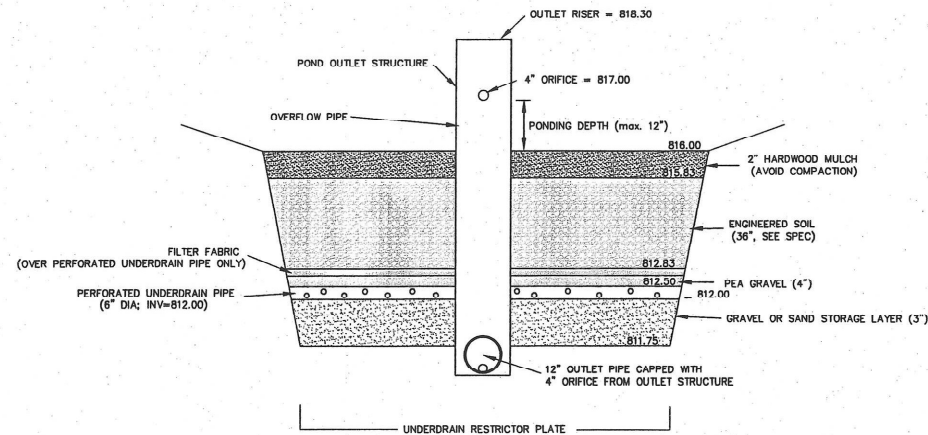
- | NO. | PLANT |
|-----|-----------------------|
| 1. | TECHNEY ARBOVITAE |
| 2. | CHANTICLEER PEAR |
| 3. | REDMOND LINDEN |
| 4. | BREWMAN MAHOG |
| 5. | CHAMPLAIN ROSE |
| 6. | STANIS ROSE |
| 7. | TECHNEY ARBOVITAE |
| 8. | BURROAK |
| 9. | EUROPEAN LARCH |
| 10. | COLUMBIAN NORWAYMAPLE |
| 11. | REDDOAK |
| 12. | DONALDWMAN CRABAPPLE |
| 13. | JAPANESE TREE LILAC |
| 14. | IVORY SILK |
| 15. | AMUR MAPLE |
| 16. | DOUGLASS FIR |
| 17. | NORWAY SPRUCE |
| 18. | NORWAY SPRUCE |
| 19. | MULCH |
- ALL DECIDUOUS TREES MUST BE TWO INCH CALIPER AT PLANTING. EVERGREENS 5-8 FEET IN HEIGHT AT PLANTING AND ALL SHRUBS MUST BE EITHER 2 1/2 GALLON OR 2 FEET IN HEIGHT AT PLANTING.



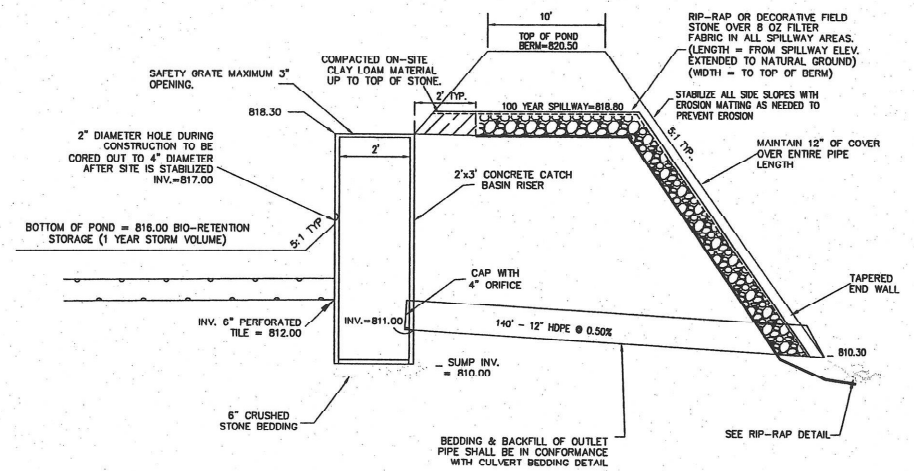
NORTH STORM POND DETAIL



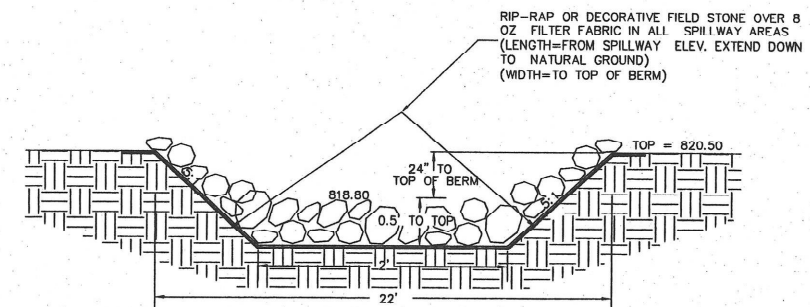
BIORETENTION DEVICE
(CROSS-SECTION ACROSS WIDTH OF DEVICE)



BIORETENTION DEVICE
(CROSS-SECTION ACROSS LENGTH OF DEVICE)



SOUTH POND OUTLET
STRUCTURE DETAIL



POND SPILLWAY DETAIL

TABLE 1. ENGINEERED SOIL MIX	
ENGINEERED SOIL COMPONENT	PERCENTAGE COMPOSITION (BY VOLUME)
SILICA SAND	40% (.02 TO .04 INCH DIA. WASHED)
TOPSOIL	20% (USE ON-SITE SPOILS)
COMPOST	40% (PER DNR SPEC S100)

NOTE: THIS MIXTURE MEETS THE EQUIVALENCY REQUIREMENTS OF S. NR 151.12(5)(C)5.1., WIS. ADM. CODE.