*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: NW ¼ of Sec 25
Property Tax ID Number: MNFV0098151
Date: November 3, 2020

Name of Business/Subdivision: Weyerhaven Subdivision-Phase 1 & 2
Address of Property: Weyerhaven Drive, Menomonee Falls, WI

| | |
|---|---|
| Dry Pond | |
| Wet Pond | X |
| Other | |

Pond ID: Wet Pond P-1
SWP25N009, SWP25N011

Location of Pond: Large Central Pond P-1 (East of Weyerhaven Blvd entrance from Lilly Road)

Year Pond Constructed: 2014

Year of Last Certification: 2015

| **Compliance Verification** | Design | Actual | Compliant Yes | Compliant No | Comments ( Condition of Structure) |
|---|---|---|---|---|---|
| ***Primary Outlet Pipe*** | | | | | Outlet Pipe Material |
| Opening Diameter (inches) | 14x23 | 14x23 | X | | RCP outlet pipe discharges into ditch line at northeast corner of Lilly Road & Weyerhaven Blvd. Outfall riprap is in good condition. |
| Upstream Invert | 775.7 | 775.61 | X | | |
| Downstream Invert | 773.64 | 773.62 | X | | |
| Length (feet) | 374 | 374 | X | | |
| Slope (%) | 0.55 | 0.53 | X | | |
| ***Secondary Outlet Pipe*** | (If Applicable) | | | | Outlet Pipe Material |
| Opening Diameter (inches) | | | | | N/A |
| Upstream Invert | | | | | |
| Downstream Invert | | | | | |
| Length (feet) | | | | | |
| Slope (%) | | | | | |
| ***Riser*** | (If Applicable) | | | | Riser Material |
| Opening Diameter (inches) | 48 | 48 | X | | RCP riser structure built in to the western slope of the pond; in good condition. |
| Elevation | 779.25 | 779.24 | X | | |
| ***Upper Discharge Control*** | (If Applicable) | | | | |
| Opening Diameter (inches) | | | | | |
| Elevation | | | | | |

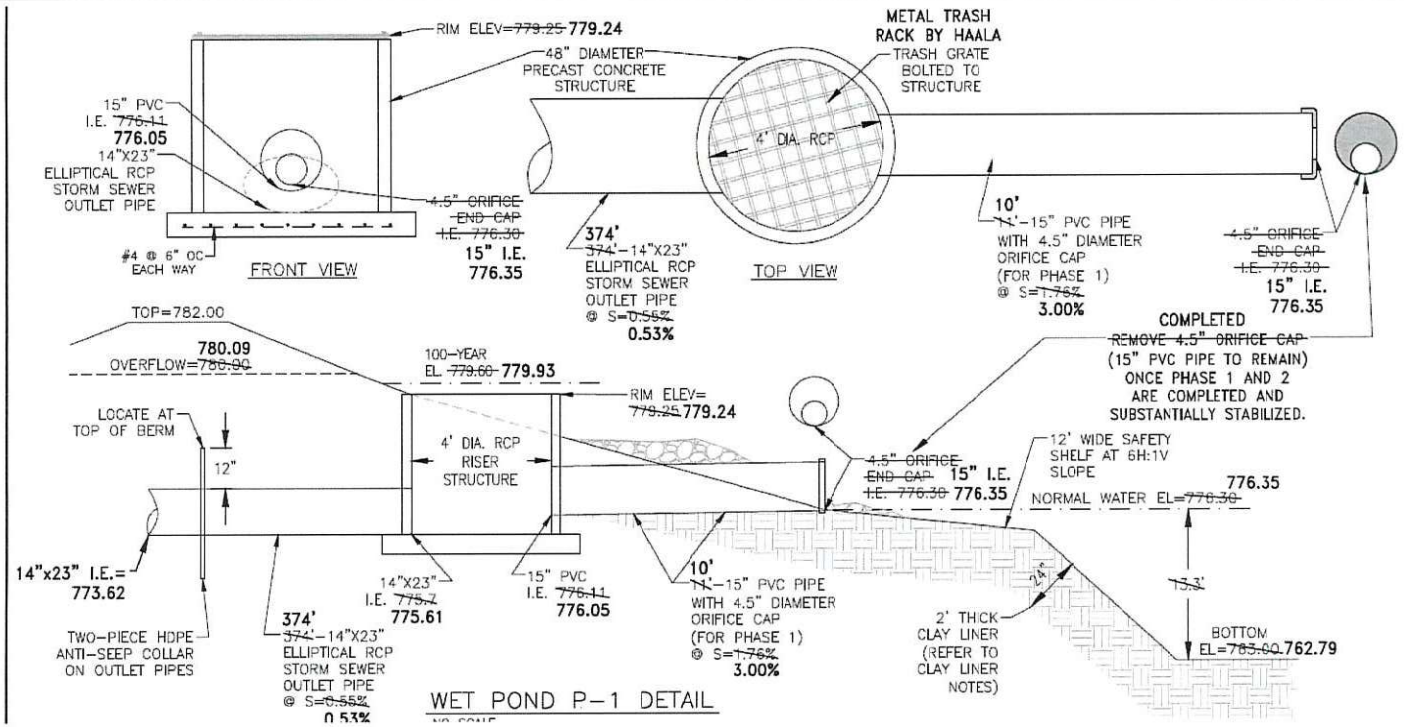
| **Compliance Verification** | Design | Actual | Compliant Yes | Compliant No | Comments |
|---|---|---|---|---|---|
| ***Lower Discharge Control*** | (If Applicable) | | | | |
| Opening Diameter (inches) | 15 | 15 | X | | 15" diameter PVC outlet pipe extends from the water's edge to the RCP riser structure. |
| Elevation | 776.30 | 776.35 | X | | |
| ***Other (Description)*** | | | | | |
| Opening Type and Size (inches) | 19x30 | 19x30 | X | | (3) – 19"x30" RCP outlet pipes (with poured in place endwalls) across Weyerhaven Drive provide conveyance of emergency spillway runoff (for events >100-year storm). |
| Elevation | 777.32 | 777.23 | X | | |
| ***Emergency Spillway*** | | | | | |
| Elevation | 780.00 | 780.09 | X | | Grass vegetation established. |
| Length of spillway (feet) | 20 | 20 | X | | |

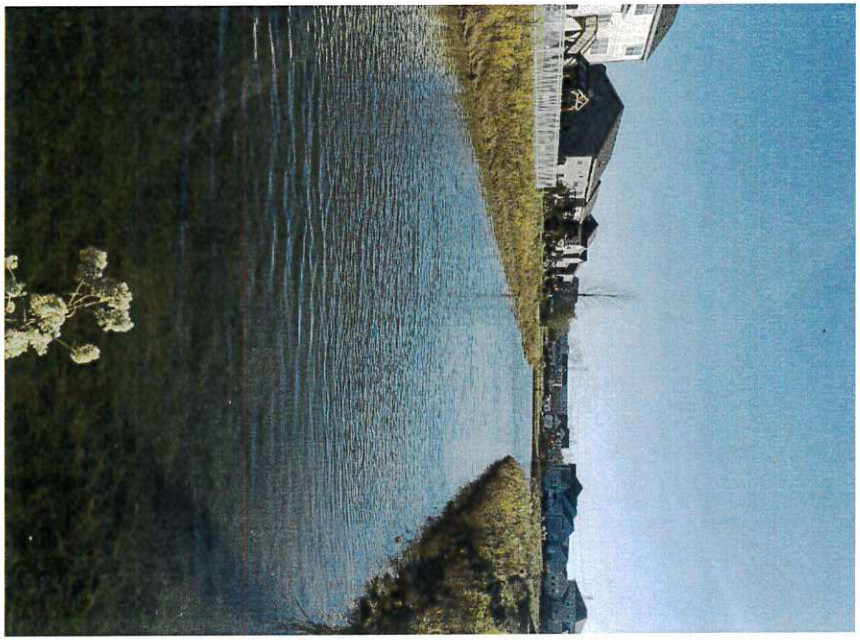
| ***Embankment*** | Present Yes | Present no | Comments/Maintenance Requirements |
|---|---|---|---|
| Unauthorized Plantings, trees, or woody vegetation | | X | |
| Animal burrows or slope erosion | | X | |

| ***Storm Sewer Outfalls*** | Type & Size | Location | Comments |
|---|---|---|---|
| Outfalls 1 & 2 | 12" & 30" RCP | Southwest Corner | Stabilized outfall |
| Outfall 3 | 18" RCP | Northeast Corner | Stabilized outfall |
| Outfall 4 | 33" RCP | Southeast Corner | Stabilized outfall |
| Outfalls 5, 6 & 7 | 15", 24" & 15" RCP | NW & NE Expansions | Stabilized outfall |

| **Storage Properties** | Design | Actual | Compliant Yes | Compliant No | Not Applicable | Equipment Used |
|---|---|---|---|---|---|---|
| Normal Water Elevation *(Wet Ponds)* | 776.3 | 776.35 | X | | | GPS (Navcom) |
| Design High Water Elevation | 779.93 | 779.93 | X | | | GPS (Navcom) |
| Area at Normal Water Elevation (Ac) (Wet Ponds) | 1.77 | 1.79 | X | | | |
| Area at Design High Water Elevation (Ac) | 2.57 | 2.60 | X | | | |
| Active Storage Available (Ac-Ft)* | 7.77 | 7.74 | X | | | |
| Lowest Elevation at Top of Embankment (If Applicable) | 781.0 | 781.34 | X | | | GPS (Navcom) |
| Average Elevation at Top of Embankment (If Applicable) | 781.0 | 781.37 | X | | | GPS (Navcom) |
| Maximum Bottom Elevation | 763.0 | 762.79 | X | | | GPS (Navcom) |
| Average Pond Bottom Elevation | 763.0 | 762.8 | X | | | Phase 2 Expansion Ave Bottom El = 770.15 [OK] |
| Pond Bottom Area (Ac) | 0.31 | 0.31 | X | | | |
| Maximum Pond Depth | 3.7 | 3.74 | X | | | |
| Average Pond Depth | 3.7 | 3.74 | X | | | For ponding depth between Normal Water Elevation and Overflow Spillway |
| Average Permanent Pool Depth *(Wet Ponds)* | 13.3 | 13.55 | X | | | Phase 2 Expansion = 6.2' [OK] |

*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*



East Expansion – Looking South

West Expansion – Looking South

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

| | | | |
|---|---|---|---|
| Inspection Firm: | Trio Engineering, LLC | Inspector Name : | Joshua D. Pudelko, PE |
| Phone Number: | 262-790-1480 | Inspection Date: | November 3, 2020 |
| Address: | 4100 N. Calhoun Road<br>Brookfield, WI 53005 | | |

Certifying Professional

Name: Joshua D. Pudelko, PE

Phone Number: *262-790-1480*

| *Date:* | *Signature:* | *Affix Seal Here* |
|---|---|---|
| 11/4/20 | | |