

Wednesday, December 20, 2023**6:00 PM****McFarland Municipal Center**
*Community Room***AGENDA**

You are invited to this meeting through a Zoom webinar. The public may attend in-person or remotely through the webinar or telephone options listed below.

PLEASE CLICK THE LINK BELOW TO JOIN THE ZOOM WEBINAR:

<https://us02web.zoom.us/j/87321231583>

Or by Telephone: +1 (312) 626-6799

Webinar ID: 873 2123 1583

Press *9 to raise/lower hand. Press *6 to mute/unmute.

1. CALL TO ORDER, ROLL CALL.

2. PUBLIC APPEARANCES.

- a. This is an opportunity for members of the public to address the Public Works and Utilities Committee for items that are not on the agenda. Please remember this is a hybrid meeting conducted in person and through the Zoom online meeting platform. Meeting attendees wishing to address the Committee about items not on the agenda may do so at this time. Zoom attendees should type their name and address in the Question and Answer feature within the Zoom online meeting platform at this time. Members of the public who are present in person and wish to address the Committee should fill out a public comment form and turn into the meeting chairperson. When you are called upon to speak, state your name, address, and provide your comments to the Committee for their consideration. Please adhere to the 3-minute time limit. Additionally, you may send your public comments to public.works@mcfarland.wi.us to be included as part of the meeting.

Members of the public may also speak during their selected agenda item as they designate on the public comment form or in the Question and Answer feature on Zoom.

3. APPROVAL OF MINUTES.

- a. Motion to approve the minutes of the November 27, 2023 Public Works & Utilities Committee meeting.

4. BUSINESS.

- a. Discussion and action to make a recommendation to the Village Board regarding the Maintenance Plan for Village-Owned Stormwater Improvements.
- b. Discussion and action to make a recommendation to the Village Board regarding the final Water Utility Financial Forecast as prepared by Baker Tilly.

5. SCHEDULE NEXT MEETING DATE.

- a. Monday, January 22, 2024, at 6:00 p.m.

6. ADJOURNMENT.

Any person who has a qualifying disability as defined by the Americans with Disabilities Act that requires the meeting or materials at the meeting to be in an accessible location or format should contact the McFarland Municipal Center at (608)838-3153, 5915 Milwaukee Street, McFarland, Wisconsin, or village.clerk@mcfarland.wi.us by 2:00 p.m. at least 5 business days prior to the meeting so that any necessary arrangements can be made to accommodate each request. If the meeting or request is less than 5 business days from the meeting, requests for accommodations may still be made and reasonable efforts will be made to accommodate each request.

VILLAGE OF MCFARLAND
Public Works & Utilities Committee Minutes

Monday, November 27, 2023 - 6:00 PM

1. CALL TO ORDER, ROLL CALL.

Trustee Wreh called the regular meeting of the Public Works & Utilities Committee to order at 6:00 PM in the Community Room of the Municipal Center. This meeting was also held via Zoom webinar.

Members present: Edward Wreh, Hilary Brandt, Pauline Boness, Marc Nielsen, Chris Fredrick, Eric Kindschi, Matthew Coan

Members not present: n/a

Staff Present: Village Administrator Matt Schuenke, Public Works Director Lee Igl, Assistant to the Public Works Director Aimee Irwin, Town & Country staff Brian Berquist and Tim Stieve.

2. PUBLIC APPEARANCES.

- a. *This is an opportunity for members of the public to address the Public Works and Utilities Committee for items that are not on the agenda. Please remember this is a hybrid meeting conducted in person and through the Zoom online meeting platform. Meeting attendees wishing to address the Committee about items not on the agenda may do so at this time. Zoom attendees should type their name and address in the Question and Answer feature within the Zoom online meeting platform at this time. Members of the public who are present in person and wish to address the Committee should fill out a public comment form and turn into the meeting chairperson. When you are called upon to speak, state your name, address, and provide your comments to the Committee for their consideration. Please adhere to the 3-minute time limit. Additionally, you may send your public comments to public.works@mcfarland.wi.us to be included as part of the meeting.*

Members of the public may also speak during their selected agenda item as they designate on the public comment form or in the Question and Answer feature on Zoom.

None.

3. APPROVAL OF MINUTES.

- a. *Motion to approve the minutes of the October 23, 2023 Public Works & Utilities Committee meeting.*

Motion by Trustee Wreh, seconded by Trustee Brandt, to approve the minutes of the October 23, 2023, Public Works & Utilities Committee meeting. Motion carries 6 - 0 - 1, with Boness abstaining.

4. BUSINESS.

- a. *Presentation and discussion of the Water Utility Financial Forecast as prepared by Baker Tilly.*

Jodi Dobson of Baker Tilly presented and reviewed the enclosed Water Utility Financial Forecast which provides a five-year outlook to assist with future planning.

b. Discussion and action to make a recommendation to the Village Board regarding the Water Utility Impact Fee Study as prepared by Baker Tilly.

Dobson presented and reviewed the impact fee study as enclosed within the packet. Dobson explained that Schedule 5 presents the maximum impact fee rate adjustments recommended by Baker Tilly.

Motion by Fredrick, seconded by Trustee Brandt, to recommend approval to the Village Board regarding the Water Utility Impact Fee Study as prepared by Baker Tilly. Motion carries 7 - 0 - 0.

c. Discussion and action to make a recommendation to the Village Board regarding stormwater rates.

Berquist presented the cash flow analysis for the stormwater utility as enclosed within the packet. Based on the calculations, the recommendation would be to increase the bimonthly charge from \$14.83 per ERU to \$20.00

Motion by Trustee Wreh, seconded by Trustee Brandt, to recommend approval to the Village Board regarding the stormwater rate study and for an increase of the bimonthly charge per ERU to \$20.00 effective in January 2024. Motion carries 7 - 0 - 0 by acclamation.

d. Presentation and discussion regarding the draft Maintenance Plan for Village-Owned Stormwater Improvements.

Stieve presented the draft maintenance plan for Village-Owned Stormwater improvements. Included with the plan are some recommendations for potential maintenance that could be conducted to the private channel behind Babock Park between the Yahara River and Lake Waubesa.

5. SCHEDULE NEXT MEETING DATE.

a. Wednesday, December 20, 2023 at 6:00 p.m.

6. ADJOURNMENT.

Motion by Trustee Brandt, seconded by Fredrick, to adjourn at 7:51 p.m.

Pursuant to law, written notice of this meeting was given to the public and posted on the public bulletin board in accordance with Open Meetings Law.

Respectfully submitted,
Aimee Irwin
Assistant to the Public Works Director

VILLAGE OF
McFarland
SUMMARY SHEET

MEETING DATE: Wednesday, December 20, 2023

SECTION: Business

DEPARTMENT: Public Works

CONTACT: Matt Schuenke, Village Administrator, Lee Igl, Public Works Director

AGENDA ITEM: Discussion and action to make a recommendation to the Village Board regarding the Maintenance Plan for Village-Owned Stormwater Improvements.

PREVIOUS ACTION:

The Public Works & Utilities Committee recommended approval to the Village Board regarding a proposal from Town & Country Engineering to create a stormwater management area maintenance plan at their April 24, 2023 meeting.

The Village Board approved the proposal from Town & Country at their May 8, 2023 meeting.

The Public Works and Utilities Committee reviewed the first draft of the enclosed plan at their meeting on November 27, 2023.

ISSUE SUMMARY:

The committee previously approved a proposal from Town & Country Engineering to create a stormwater management maintenance plan. The plan is intended to assist with maintaining the stormwater management areas throughout the village and for additional areas that will be transferred to the Village in the future. Enclosed is the plan created by Town & Country Engineering that was reviewed at our last meeting. As a plan, it can be used as a guide to steer projects within our capital improvement planning and other maintenance needs from year to year.

Another topic that was discussed at the last meeting was related to the lagoon and channel connected to Lake Waubesa. Sediment depths were measured within this project and included within the plan. Additionally, cleaning out the lagoon area adjacent Severson Road is included as a recommendation within the plan. Past direction from the Committee was to proceed with dredging this area when sediment measurements identified the need to do so. The measurements shown within the plan compared to past readings in 2017 suggest that it is time to plan for the removal of built up sediment and as such the project is recommended for inclusion as part of the stormwater management plan as well as our capital improvement plan. This area is defined by the stormwater outfall at USH 51 to the gabion wall that is approximately 250' west of the outfall (shown in blue in the enclosed map). This is the area referred to as the lagoon.

Everything then west of the gabion wall is referred to as the channel and also received interest



previously to dredge this area recognizing it as a connected feature to Lake Waubesa and a navigable water way. This is not included within the stormwater management plan as it is not directly related to the stormwater improvements other than it is used for the conveyance of water mainly at depths and flow dictated by adjoining Lake Waubesa. This area is broken into three locations...1) Top (Yellow) - channel area from the Lake Edge Road bridge to the north; 2) Middle (Green) - channel area between the Lake Edge and Burma Road bridges; and 3) Bottom (Red) - channel area south of the Burma Road bridge. These three areas have been discussed also for dredging over the years but present complexities given their navigability, access, impact, cost, and other factors. It is desired that at least options be prepared to address these areas so that the Village and those impacted are aware of how they could move forward in the future.

Village Staff working with the Village Engineer will prepare an outline for each area to provide more definitions as to the extent of options for a project. The outline will summarize each location to provide definition of the amount of properties it impacts, estimated volumes of sediment to remove, total project cost, and challenges related to addressing the site. The outline will also include possible sources of funding for the project as might benefit all areas of the project. We will make an initial draft report back to the Committee in April, schedule a Public Information Meeting in May, and the Committee can further discuss in June as warranted. Also in June we anticipate beginning the Capital Improvement Planning process of which if desired the Committee can discuss further inclusion of resources in whatever capacity for this work within that financial plan. At the very least the lagoon mentioned above and depicted in blue will already be accounted for within that planning.

The purpose of our meeting on Wednesday is to conduct a final review of the enclosed plan and make a recommendation to the Village Board regarding its acceptance. Additionally, this memo outlines how Staff will continue to work on addressing the channel into 2024 that we can discuss in the meeting.

FINANCIAL/BUDGET IMPACT:

To implement the Stormwater maintenance plan in the public locations, future operational dollars will need to be added to the budget within the years desired. The Stormwater Utility Fund will guide operational needs from year to year while the 5 year Capital Improvement Plan will address capital projects from year to year. Presently there is an allocation of \$350,000 in Program Year 2025 of the 2024-2028 Capital Improvement Plan. Through this maintenance plan, we need to address the capital improvements within the whole system we want to pursue through the use of these funds in 2025 and beyond.

VILLAGE PLAN REFERENCE:

None.

ORDINANCE REFERENCE:

None.

BOARD, COMMISSION OR COMMITTEE RECOMMENDATION:

Recommended Action:

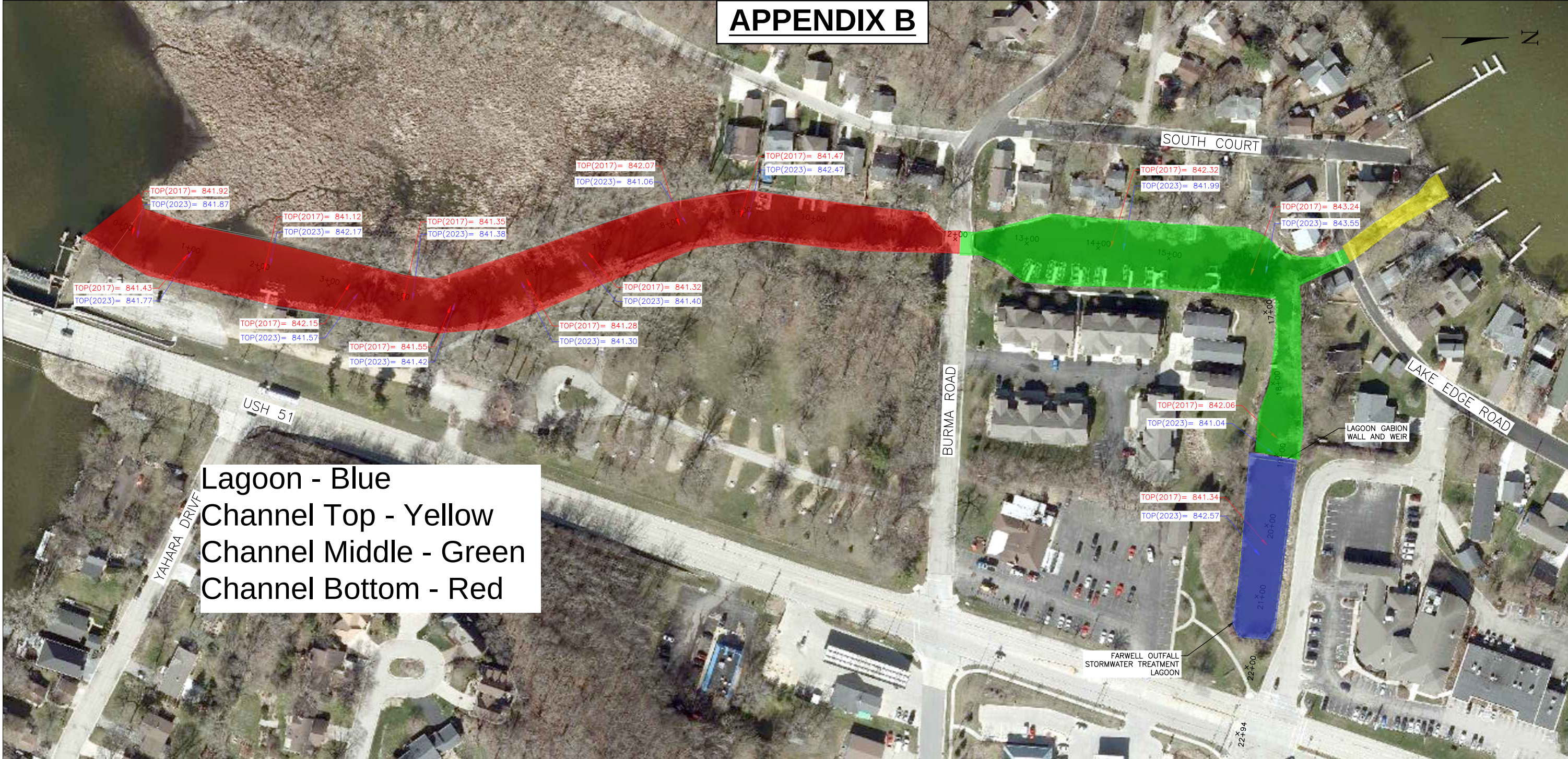


Motion, second to make a recommendation to the Village Board regarding the Maintenance Plan for Village-Owned Stormwater Improvements.

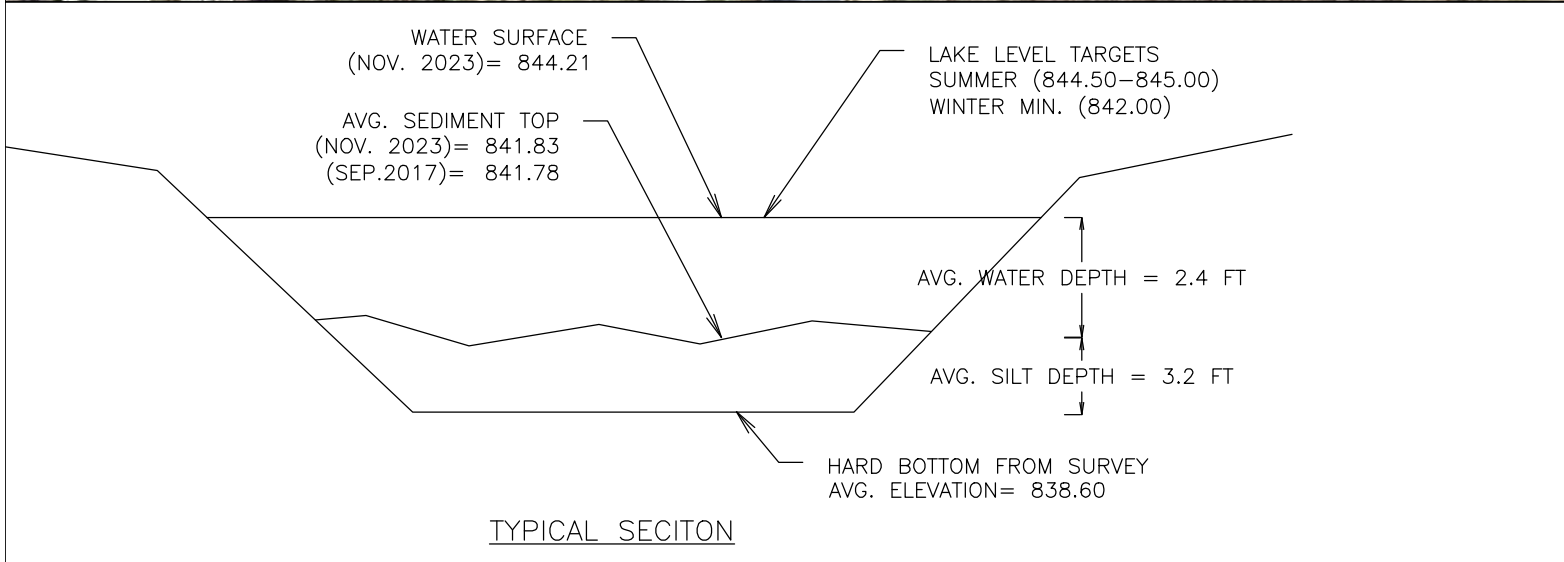
ATTACHMENTS:

1. Appendix B
2. 2023 Stormwater BMP Maintenance Plan

APPENDIX B



Lagoon - Blue
Channel Top - Yellow
Channel Middle - Green
Channel Bottom - Red



RESTORATION TO HARD BOTTOM

- REMOVAL OF APPROXIMATELY 8450 CUBIC YARDS WILL ACHIEVE THE HARD BOTTOM FOUND DURING SURVEY
- THIS WOULD ACHIEVE AN APPROXIMATE 6 FOOT DEPTH IN THE CENTER OF THE CHANNEL AT SUMMER MIN. LAKE LEVELS
- ESTIMATED COST = \$875,000
- ESTIMATED COST/SHORELINE FOOT = \$213/FT FOR 4850 FT
- COST ASSUMES A TRAPEZOIDAL FINISHED CHANNEL, WITH SHALLOWER DEPTHS AT THE SHORELINE THAN IN THE CENTER.
- COST ASSUMES AN AVERAGE CHANNEL EXCAVATION WIDTH OF 60 FEET
- COST DOES NOT INCLUDE DREDGING OF THE CHANNEL PORTION UNDER LAKE EDGE ROAD
- COST DOES NOT INCLUDE DREDGING OF THE VILLAGE STORM WATER TREATMENT LAGOON
- COST DOES NOT INCLUDE WORK PIER REMOVAL AND REPLACEMENT COSTS
- COST ASSUMES DREDGED SEDIMENT MATERIAL IS ABLE TO BE LAND APPLIED

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(608) 273-3350
www.townandcountry.net

tc TOWN & COUNTRY
ENGINEERING, INC.

PROJECT NO.: MC 216
DRAWING FILE: MC 216 BASE.DWG
DRAWN BY: T.J.S.
CHECKED BY: T.J.S.
DATE: 11-22-23
REVISIONS:
SCALE:
0 35 70
SHEET: 1

CHANNEL CONDITIONS
Babcock Channel and Farwell Outfall
Village of McFarland, Wisconsin

**Maintenance Plan for Village-Owned
Stormwater Best Management Practices**

Village of McFarland, Wisconsin

November 2023

TOWN & COUNTRY ENGINEERING, INC.

Madison ♦ Rhinelander ♦ Kenosha

6264 Nesbitt Road

Madison, WI 53719

☎ (608) 273-3350 ♦ tce@tcengineers.net

General Information

The Village of McFarland is located on United States Highway (USH) 51, several miles south of USH 12/18 in Dane County, Wisconsin. The Village is a Municipal Separate Storm Sewer System (MS4) permittee through the Wisconsin Department of Natural Resources, and is also a member of the Madison Area Municipal Stormwater Partnership (MAMSWaP) group.

Since the early 2000s, the Village and County have had ordinances in place to require post-construction stormwater management. In many areas, this is provided via regional collection, conveyance, and treatment devices, often referred to as Best Management Practices (BMPs).

This document is prepared to create an inventory of existing Village-owned BMPs, identify work items necessary at each location, and layout a plan for future repairs and ongoing maintenance.

The Village-owned BMP locations are shown in Appendix A.

Existing Conditions and Recommended Maintenance

The Village operates and maintains 17 stormwater ponds and over 5300 feet of drainage conveyance channels. This is in addition to over 112,000 feet of storm sewer pipe and associated inlet and manhole structures. Maintenance of the piping and junction structures is not covered in this document.

The following pages contain a location map, site photographs, and specific recommended maintenance tasks for each BMP.

Maintenance Recommendations

While many BMPs have similar maintenance tasks, there are some differences based on actual design details and configuration of the device. General recommended maintenance tasks are listed below. These recommendations cover items not currently in the Village's BMP inventory, but are listed here to cover the potential future need for such items.

Vegetated and Non-Vegetated Conveyance Swales

1. Limit off-street parking or other activities that may cause rutting or soil compaction in swales and repair as needed.
2. Inspect swales annually to detect and remedy nuisance conditions such as standing water, weeds, woody growth, and trash dumping.
3. Limit the use of pesticides and fertilizer if swale is used for water quality control.
4. State the proper vegetation type and design height for dense vegetation in the maintenance plan, and maintain the specified height when mowing or cutting.
5. Remove sediment when infiltration rates are impeded, sediment accumulation is visible, or if standing water exists for 48 hours after a rainfall/runoff event. Avoid compaction of the soil in the swale during the sediment removal process. After sediment removal, repair any damaged or eroded areas by filling with topsoil that meets appropriate infiltration requirements. If compaction occurs, restore the swale infiltration capacity by mitigating for compaction as described DNR Technical Standards. Mitigation practices can include subsoiling or chisel plowing. Reseed as needed to reestablish vegetation.
6. Implement erosion control measures if erosion during construction or maintenance becomes severe enough to prevent establishment of vegetation. Refer to WDNR Technical Standards "Channel Erosion Mat" (1053), "Mulching for Construction Sites" (1058), and "Seeding for Construction Site Erosion Control" (1059) for further guidance.

Bio-Retention Areas

1. Inspect all components of the BMP at least semi-annually in early Spring and early Autumn; and within 72 hours following any major storm or flood event of sufficient intensity or duration to pose significant risk of damage to the system.
2. Visually inspect (usually during mowing operations) the bio-retention basin monthly to identify and repair eroded areas and remove litter and debris, if applicable.
3. Maintain plants by watering, weeding, hand pulling and/or herbicide applications, restoring plant saucers around planting holes, tightening and repairing any guy

supports, replacing flagging of guy wires, pruning and resetting plants to proper grades or vertical positions, as required to establish healthy, viable plantings. Herbicide treatments shall be performed by licensed applicators who are experienced with native and non-native plant identification. Herbicides will be used in full conformance with label requirements and application techniques will limit overspray and damage to off-target species.

4. Mow native plantings at a frequency to prevent significant flowering and seed set of annual weed species and cover crops. Mowing should be timed to maximize the annual weeds and cover crop cut down in one mowing. Mowing should not be so frequent as to train non-native weeds or cover crops to spread laterally and become shading ground covers. Vegetation should be mowed at a height of approximately 6 inches allowing ample sunlight to still reach the ground after the mowing. Care should be taken during the mowing operation to prevent the creation of any ruts, sources of erosion, or other damage to the basin landscape. Expect two to three mowing applications in the initial growing season after seeding.
5. Apply spot selective invasive weed control treatment on the entire basin area once in the initial growing season, two times in the first full growing season after seeding, two times in the second full growing season after seeding, and three times in the third full growing season after seeding. This can include combinations of hand weed control and selective herbicide treatment. Herbicide treatment can be conducted with tools such as hand held or backpack sprayers. Examples of common invasive species to be controlled from spread are Narrow-leaved cattail and reed canary grass in wetland areas; Canada thistle, Flowering spurge, Common teasel, Sweet clover, Red clover, Wild parsnip are examples of more upland type species to be controlled. Applications to perennial weeds need to occur prior to seed formation of such species. If such species do go to seed, contractor is responsible for cutting the seed heads, bagging them, and removing them from the site. Herbicide applications that are necessary must be performed by qualified personnel trained in the identification of native species and also licensed appropriately for herbicide applications in the state or region in which they are applying.
6. Burning is an excellent management tool for native plantings once established with the methods documented above. Typically after the third full growing season after seeding, a prescribed burn can be conducted at the site. Perform all necessary actions including preparing the burn plans, acquiring necessary permits, and preparing the fire breaks. Adjacent property owners must be notified and appropriate signage shall be placed along roadways.
7. Watering shall be provided every day for the first 10 days after installation, if rainfall is not sufficient. If plantings are planted in spring, water for 3 to 6 weeks after seed placement. If plantings are planted in the fall, water for 3 to 6 weeks in the spring if dry conditions exist until established. Apply water in a manner to preclude puddling, washing and erosion. The equivalent of one-half inch of rainfall per week shall be considered the minimum until germination.
8. All areas of the bio-retention basin where the mulch has been displaced shall be re-mulched as needed. Additional mulch shall be applied annually.
9. Snow shall not be dumped directly onto the bio-retention basin.

10. Repair shall be required when system shows standing water beyond 24 hours of rain event. Cleaning shall consist of removal of sediment, two (2) foot undercut, undercut replacement with material consisting of 70% sand / 30% compost and restoration in-kind. Restoration of plant material shall be by plugging, not seeding alone.
11. Check condition of receiving area at outlet for signs of erosion or sparse vegetation.

Wet and Dry Retention Ponds

1. For wet ponds, require sediment removal once the average depth of the permanent pool is 3.5 ft.
2. Annually inspect inlet and outlet structures, keeping embankments clear of woody vegetation, and providing access to perform the operation and maintenance activities.
3. Annually inspect the forebay and safety shelf and confirm that access routes for personnel and equipment are maintained.
4. Address weed or algae growth and removal, insect and wildlife control and any landscaping practices. Algaecide application requires separate permitting through DNR.

Permeable Pavements

1. Inspect systems at least twice per year. Inspections are recommended to be made during and after heavy rainfalls (eg: 2.9" or more over the area of the pervious pavement system within a 24 hour period). An alternative to inspecting during heavy rainfalls would be to apply sufficient water onto the pervious pavement system to simulate a heavy rainfall. Inspection of the permeable pavement system shall be conducted to evaluate the following:
 - a. Pavement Condition – Inspect permeable pavement surfaces for settlement, deformation or cracking.
 - b. Surface Infiltration – Inspect permeable pavement surfaces for sedimentation or evidence of ponding.
 - c. Drainage – Inspect observation wells 72 hours after a rain event of 0.5 inches or greater to verify that the aggregate storage reservoir is draining down effectively.
 - d. Outfalls - Inspect underdrain outfall locations for obstructions and erosion.
- Run-on Areas – Inspect run-on areas for adequate cover and stability.
2. Clean the pervious pavement at least twice per year using industry recommended methods, such as regenerative air or vacuum sweeping. After vacuuming, the pervious pavement system shall be tested and inspected again for ponding. If ponding still occurs, coordinate the necessary repairs and/or replacement.
3. Prohibit the following activities from occurring on the permeable pavement surface:
 - a. Temporary or permanent stockpiling of soil, snow or other material that can potentially cause or contribute to clogging; application of pavement seal-coating; application of sand for deicing.

4. At least once per year measure and record water depth in the observation well at 72 to 80 hours after a rainfall event of 0.5 inches or more during a 24-hour period. Water depth in the observation pipe existing 72 hours after any storm event indicates additional monitoring may be needed to determine if maintenance or corrective action is necessary.

Cost Impacts

The largest cost item for maintenance of these facilities is likely to be the dredging of sediment collected in the basins. The following table summarizes projected dredging costs based on the depths of sediment observed in the ponds during inspection:

Village-Owned Stormwater Treatment Pond Projected Dredging Needs						
BMP Name	Dredging Timeframe (yr)	Pond Area (sqyd)	Sediment Depth- 2023 (ft)	Dredged Volume (cy)	Current Approximate Dredging Cost (\$65/CY)	Approximate Dredging Cost at 3.5ft Sediment Depth (\$65/CY)
Commerce Park 3	2	1700	3	1700	\$110,500	\$128,917
Highland Oaks	2	3800	3	3800	\$247,000	\$288,167
Parkview Estates- Pond 2	2	3500	4	4667	\$303,333	\$265,417
Woodland Commons- Pond 1A	2	1200	3.5	1400	\$91,000	\$91,000
Woodland Commons- Pond 1B	2	300	3	300	\$19,500	\$22,750
Sub-Totals 0-2 Years					\$771,333	\$796,250
Farwell Outfall	3-10	1700	2.5	1417	\$92,083	\$128,917
Commerce Park 1	3-10	1200	2	800	\$52,000	\$91,000
Commerce Park 4	3-10	2200	2	1467	\$95,333	\$166,833
Meredith Heights	3-10	700	2	467	\$30,333	\$53,083
Parkview Estates- Pond 1	3-10	13300	2.5	11083	\$720,417	\$1,008,583
Sub-Totals 2-5 Years					\$990,167	\$1,448,417
Commerce Park 2	10+	2200	1	733	\$47,667	\$166,833
Marsh-Siggelkow Pond	10+	800	1	267	\$17,333	\$60,667
Osborn-Leanne	10+	2800	1.5	1400	\$91,000	\$212,333
Red Oak Addition	10+	12800	0.5	2133	\$138,667	\$970,667
Valley Drive	10+	2800	1	933	\$60,667	\$212,333
Sub-Totals 5-10 Years					\$355,333	\$1,622,833

The dredging needs have been categorized into recommended timeframes. Additionally, a column has been provided to estimate dredging at all location assuming a 3.5ft sediment depth. This estimate provides for a potential future dredging cost at the locations that currently do not have high sediment levels. For facilities recommended for dredging within a time period more than 2 years, we recommend that the Village continue to monitor sediment depth levels on a regular basis to assess the need for dredging.

Additional Considerations- Babcock Channel

Included as an attachment to this report is consideration for the work required to remove accumulated sediment from the navigable channel downstream of the Village's Farwell outfall stormwater treatment lagoon. An exhibit detailing accumulated sediment levels and including an estimate is included as Appendix B.

The dredging of this area was considered previously in 2017. At that time, survey was taken of the elevation levels of sediment in the channel to determine the approximate amount of accumulated sediment. These survey measurements were replicated in November 2023 to verify current conditions and determine if additional sediment had accumulated in the channel. Recent survey efforts found that no significant amount of additional sediment buildup had accumulated between 2017 and present day.

The estimated cost for dredging the channel is \$875,000. This is representative of approximately 8450 cubic yards of dredging and would achieve an approximate 6 foot depth in the center of the channel at target summer minimum lake levels. This is a preliminary estimate that relies on many assumptions and the work of dredging the channel would have numerous additional details to resolve. If dredging beneath private piers is desired, the piers would need to be removed prior to construction and the overall amount of dredging required would increase. This cost estimate does not include dredging of the channel area beneath Lake Edge Road.

The estimate also assumes that the excavated material would be able to be land applied and that it would not require disposal at a landfill. Testing of the material was completed in 2017. The sampling results from that time indicated that the sediments from both the Babcock Channel and the Village stormwater treatment lagoon were suitable for land application.

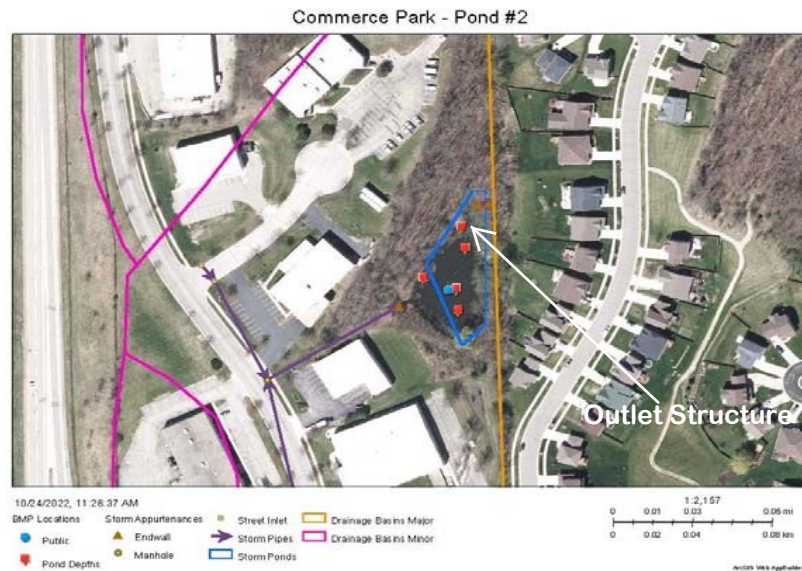
Commerce Park - Pond 1

- 1 Establish maintenance access route with easement or agreement.
- 2 Clear vegetation from around the concrete outlet structure on the west side of the pond and stabilize slopes.
- 3 Place rip-rap in influent gully on north side of pond.
- 4 Clear vegetation from around the discharge apron endwall at the outlet structure.
- 5 Consider dredging in next five years.



Commerce Park - Pond 2

- 1 Establish maintenance access route with easement or agreement to northwest and northeast corners of the pond.
- 2 Clear vegetation and debris from around the inlet apron endwall in the northwest corner of the pond.
- 3 Clear vegetation and debris from around the concrete outlet structure and discharge apron endwall in the northeast corner of the pond.
- 4 Clean debris from outlet structure.
- 5 Consider dredging in next ten years.



Commerce Park - Pond 3

- 1 Establish maintenance access route with easement or agreement to outlet structure and discharge pipe on northwest bank of pond.
- 2 Clear vegetation and clean debris from around the concrete outlet structure.
- 3 Clear vegetation and debris from around the discharge apron endwall northeast of the outlet structure.
- 4 Consider dredging in within the next two years.



Commerce Park - Pond 4

- 1 Establish maintenance access route with easement or agreement to outlet apron endwall and discharge apron endwalls in the southeast corner of pond.
- 2 Clear vegetation and debris from around the outlet apron endwall in southeast corner of the pond.
- 3 Replace cast in place concrete outlet apron endwalls for dual 24"x36" HERCP outlet discharge pipes.
- 4 Place rip-rap on downstream side of 12 CMP on west bank of pond.
- 5 Consider dredging in next five years.



Commerce Park - Pond 1

- 1 Establish maintenance access route with easement or agreement.
- 2 Clear vegetation from around the concrete outlet structure on the west side of the pond and stabilize slopes.
- 3 Place rip-rap in influent gully on north side of pond.
- 4 Clear vegetation from around the discharge apron endwall at the outlet structure.
- 5 Consider dredging in next 3-10 years.



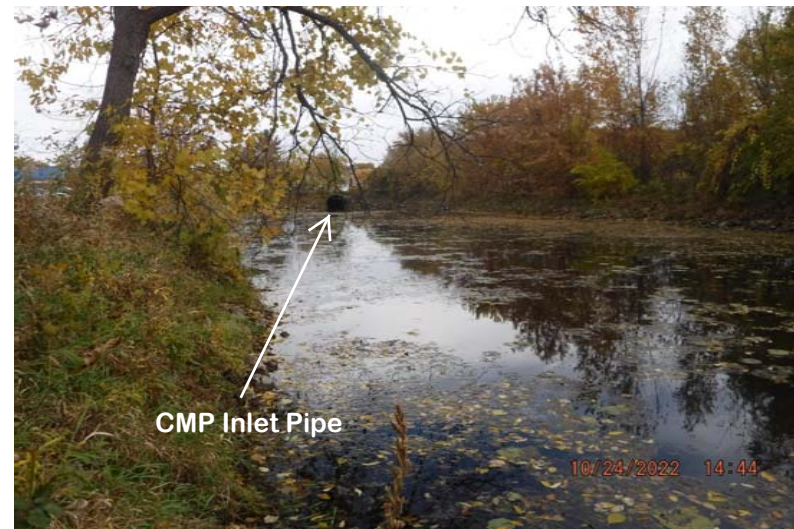
Commerce Park - Pond 4

- 1 Establish maintenance access route with easement or agreement to outlet apron endwall and discharge apron endwalls in the southeast corner of pond.
- 2 Clear vegetation and debris from around the outlet apron endwall in southeast corner of the pond.
- 3 Replace cast in place concrete outlet apron endwalls for dual 24"x36" HERCP outlet discharge pipes.
- 4 Place rip-rap on downstream side of 12 CMP on west bank of pond.
- 5 Consider dredging in next 3-10 years.



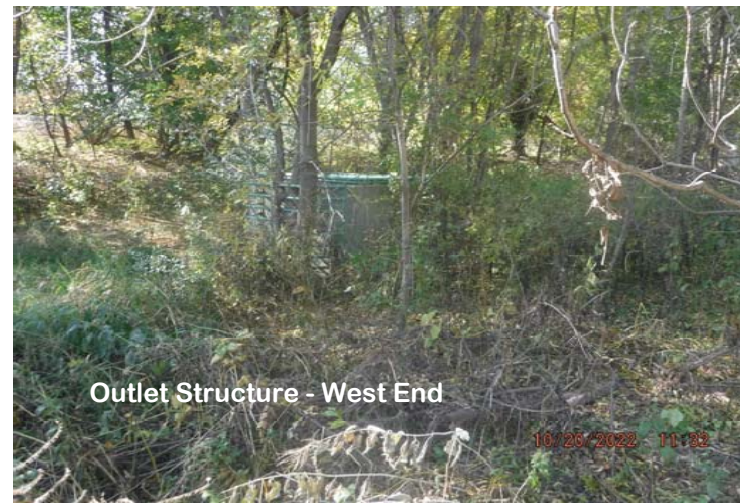
Farwell Outfall Stormwater Treatment Lagoon

- 1 Clean sludge pile next to large diameter CMP inlet pipe. Restrict public access to inlet pipe.
- 2 Consider dredging within the next 3-5 years.



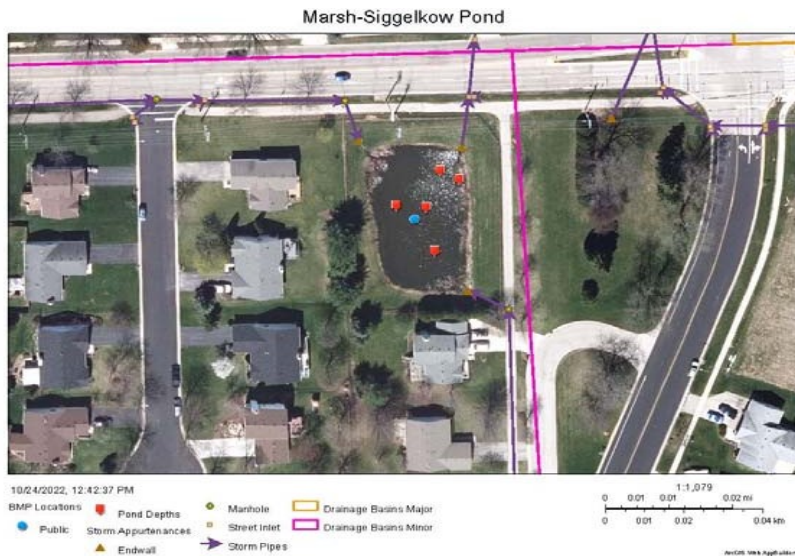
Highland Oaks Wet Pond

- 1 Remove trees from around the 42" inlet apron endwall in the northeast corner of pond. Add rip-rap on downstream side and stabilize structure.
- 2 Clear vegetation and remove leaves clogging the inlet apron endwall on the north bank of the pond.
- 3 Clear the trees and vegetation from around the outlet discharge structure on the west end of the pond.
- 4 Consider dredging within the next 2 years.



Marsh-Siggelkow Pond

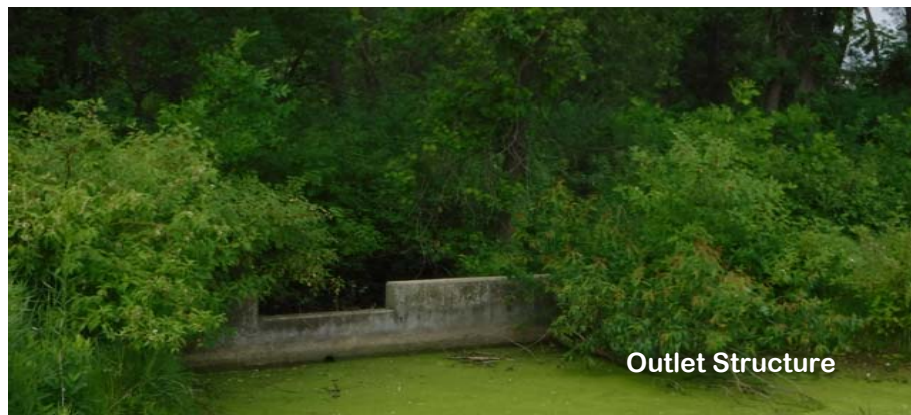
- 1 Clear the vegetation around the two inlet apron endwalls on the northeast and northwest corners of the pond. Add rip-rap on downstream side of endwalls and stabilize bank.
- 2 Clear vegetation and debris from around the inlet apron endwall in the southeast corner of the pond.
- 3 Consider dredging within the next 10 years.



Meredith Heights Pond

- 1 Clear vegetation around inlet apron endwall on west end of pond.
- 2 Clear vegetation around outlet structure.
- 3 Heavy algae growth.
- 4 Clear vegetation along banks of discharge channel on downstream side of outlet structure.
- 5 Consider dredging in next 3-10 years.

Meredith Heights Storm Water Pond



Osborn-Leanne Wet Pond

- 1 Remove vegetation around inlet apron endwall on north bank of pond. Add rip-rap and stabilize downstream side of endwall.
- 2 Remove the trees and vegetation around the 48" inlet apron endwalls in the northwest corner of the pond. Add rip-rap and stabilize downstream side of endwalls
- 3 Consider dredging within the next 10 years.



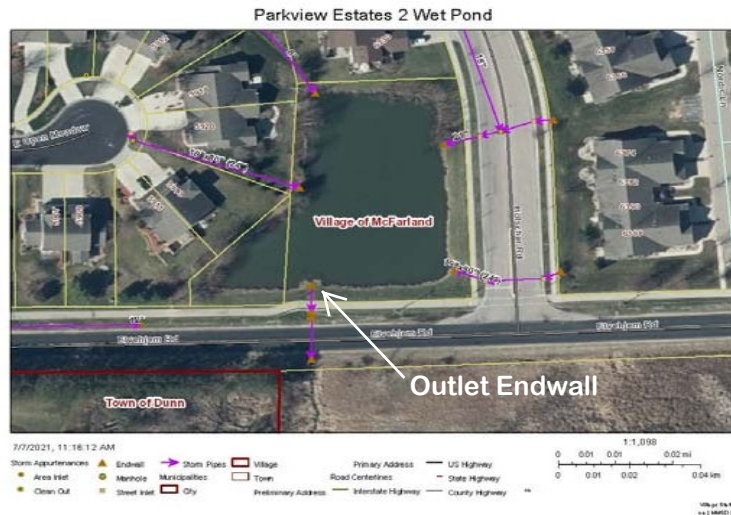
Parkview Estates - Pond 1

- 1 Clear the vegetation in the area of the outlet structure and outlet apron endwalls at the east end of the pond. Stabilize the bank.
- 2 Clear vegetation, add rip-rap and stabilize the bank at the inlet apron endwall in the northwest corner of the pond.
- 3 Clean debris from inlet apron endwall located on the south bank of the pond. Place rip-rap and stabilize slope.
- 4 Consider dredging within the next five years.



Parkview Estates - Pond 2

- 1 Clear vegetation from the inlet apron endwalls on the east bank and in the southeast corner of the pond. Add rip-rap and stabilize slopes.
- 2 Clear vegetation, add rip-rap and stabilize the bank at the outlet apron endwall on the south bank of the pond.
- 3 Add rip-rap and stabilize slopes at downstream side of inlet apron endwall on west side of pond.
- 4 Install HDPE endwall on inlet pipe in northwest corner of pond. Add rip-rap on downstream side.
- 5 Reconnect apron endwall to outlet pipe on south bank of pond.
- 6 Consider dredging within the next 2 years.



Parkview Estates - Pond 1

- 1 Clear the vegetation in the area of the outlet structure and outlet apron endwalls at the east end of the pond. Stabilize the bank.
- 2 Clear vegetation, add rip-rap and stabilize the bank at the inlet apron endwall in the northwest corner of the pond.
- 3 Clean debris from inlet apron endwall located on the south bank of the pond. Place rip-rap and stabilize slope.
- 4 Consider dredging within the next 3-10 years.



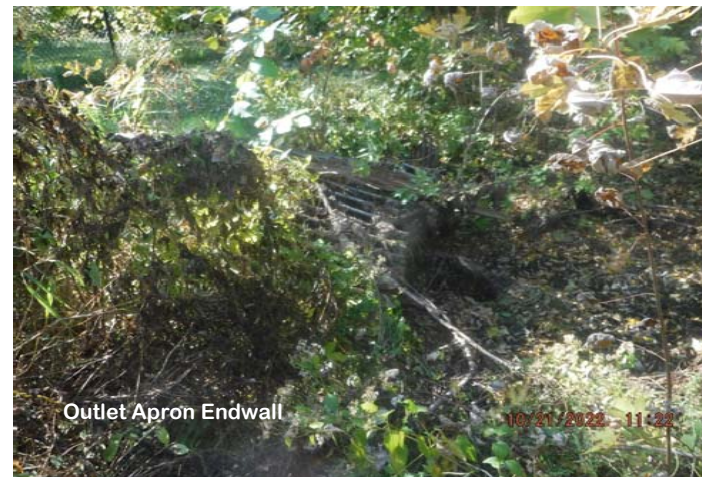
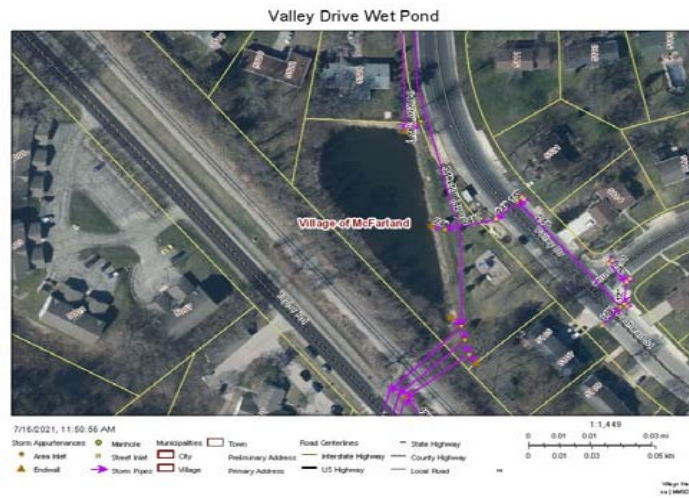
Red Oak Addition

- 1 Clear vegetation and add rip-rap on downstream side of 24" inlet apron endwall in southeast corner of pond.
- 2 Clear vegetation and debris from around the 30" inlet apron endwall and stabilize the inlet on the west bank of the pond.
- 3 Work with the adjacent landowners to establish an equipment access route to the inlet on the west bank of the pond. Landscaping improvements in the pipeline easement restrict access.
- 4 Clear the vegetation and debris from around the outlet apron endwall and stabilize the bank at the northwest corner of the pond.
- 5 Clear vegetation, place rip-rap and stabilize the bank at the inlet apron endwall on the north bank of the pond adjacent to the condominiums.
- 6 Consider dredging within the next 10 years.



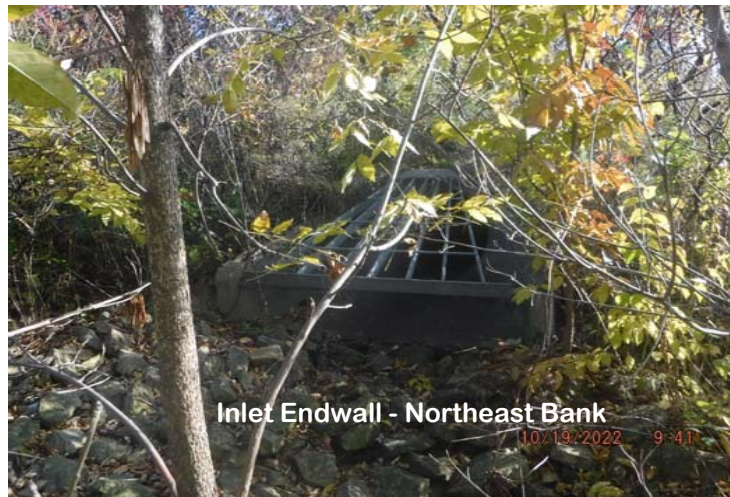
Valley Drive Pond

- 1 Clean debris from grate on outlet apron endwall in south corner of pond.
- 2 Clear vegetation around outlet apron endwall.
- 3 Clear vegetation around 24" inlet apron endwall on east bank
- 4 Clear debris and vegetation around the two large inlet apron endwalls in the northeast corner of the pond.
- 5 Install grate on eastern inlet apron endwall in northeast corner of pond.
- 6 Consider dredging in next 10 years.



Woodland Commons - Pond 1A

- 1 Establish maintenance access route with easement or agreement.
- 2 Install grate on inlet apron endwall at south end of pond. Add rip-rap on downstream side of apron endwall.
- 3 Clear vegetation around inlet apron endwalls on southeast bank of pond.
- 4 Install rip-rap in eroded channel above and east of inlet pipes on southeast bank
- 5 Update the storm sewer mapping to include all newer inlet pipes.
- 6 Clear vegetation from 36" inlet apron endwall on the northeast bank of the pond along Taylor Road.
- 7 Clear brush and debris from the upstream end of storm pipe crossing Taylor Road to the northeast bank endwall.
- 8 Consider dredging north area of pond in next two years.
- 9 Investigate manhole structure on north bank of pond.



Woodland Commons - Pond 1B

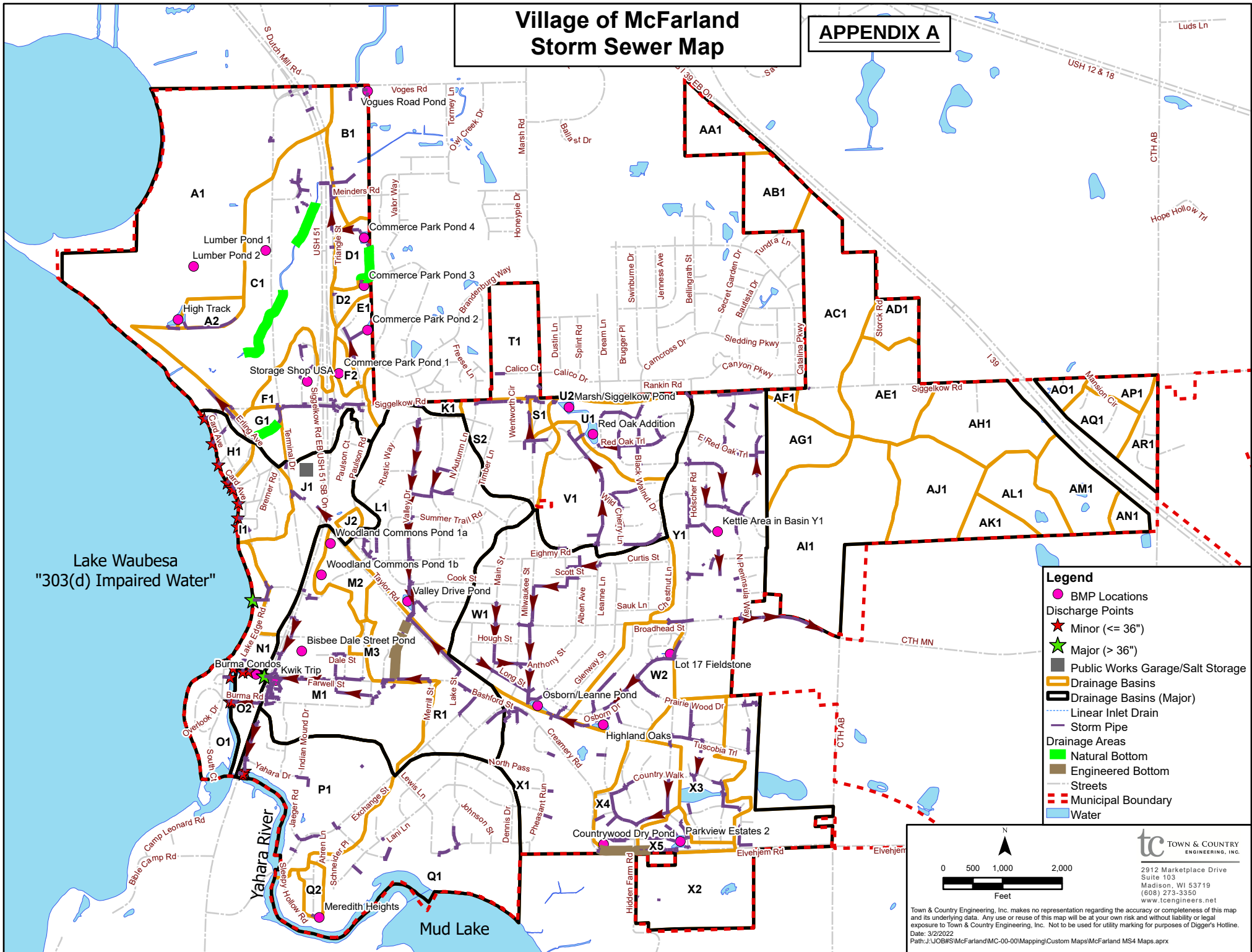
- 1 Establish maintenance access route with easement or agreement.
- 2 Install grate on outlet apron endwall in northwest corner of pond.
- 3 Clean up debris and mow grass sideslopes.
- 4 Consider dredging in next two years.

Woodland Commons Pond 1b



Village of McFarland Storm Sewer Map

APPENDIX A



- Legend**
- BMP Locations
 - ★ Discharge Points
 - ★ Minor (<= 36")
 - ★ Major (> 36")
 - Public Works Garage/Salt Storage
 - ▭ Drainage Basins
 - ▭ Drainage Basins (Major)
 - Linear Inlet Drain
 - Storm Pipe
 - ▭ Drainage Areas
 - ▭ Natural Bottom
 - ▭ Engineered Bottom
 - Streets
 - ▭ Municipal Boundary
 - ▭ Water

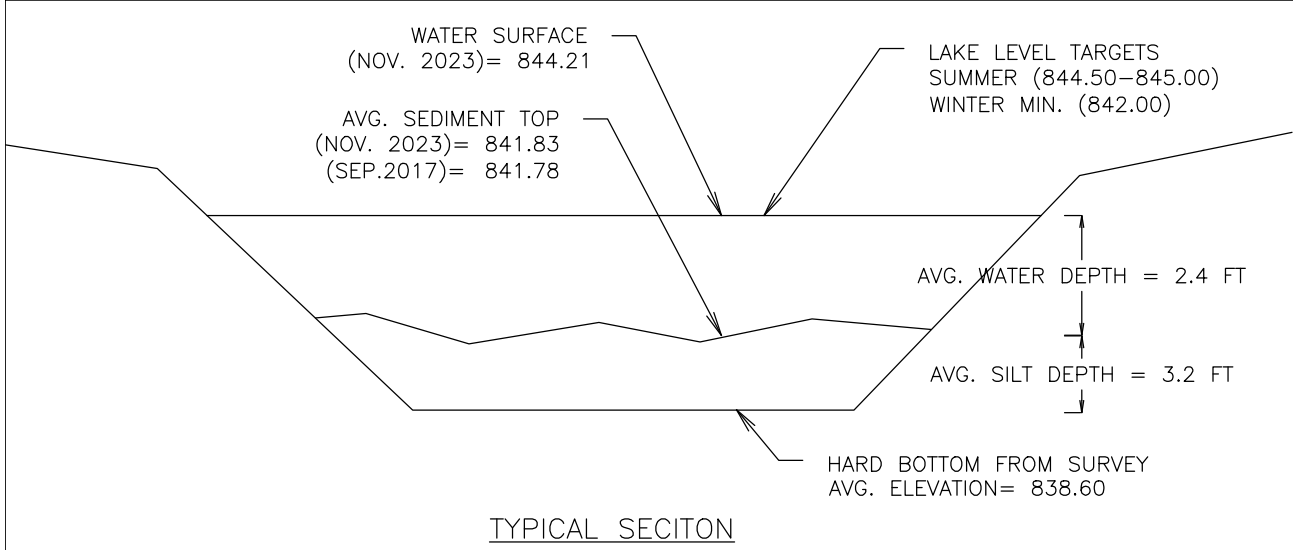
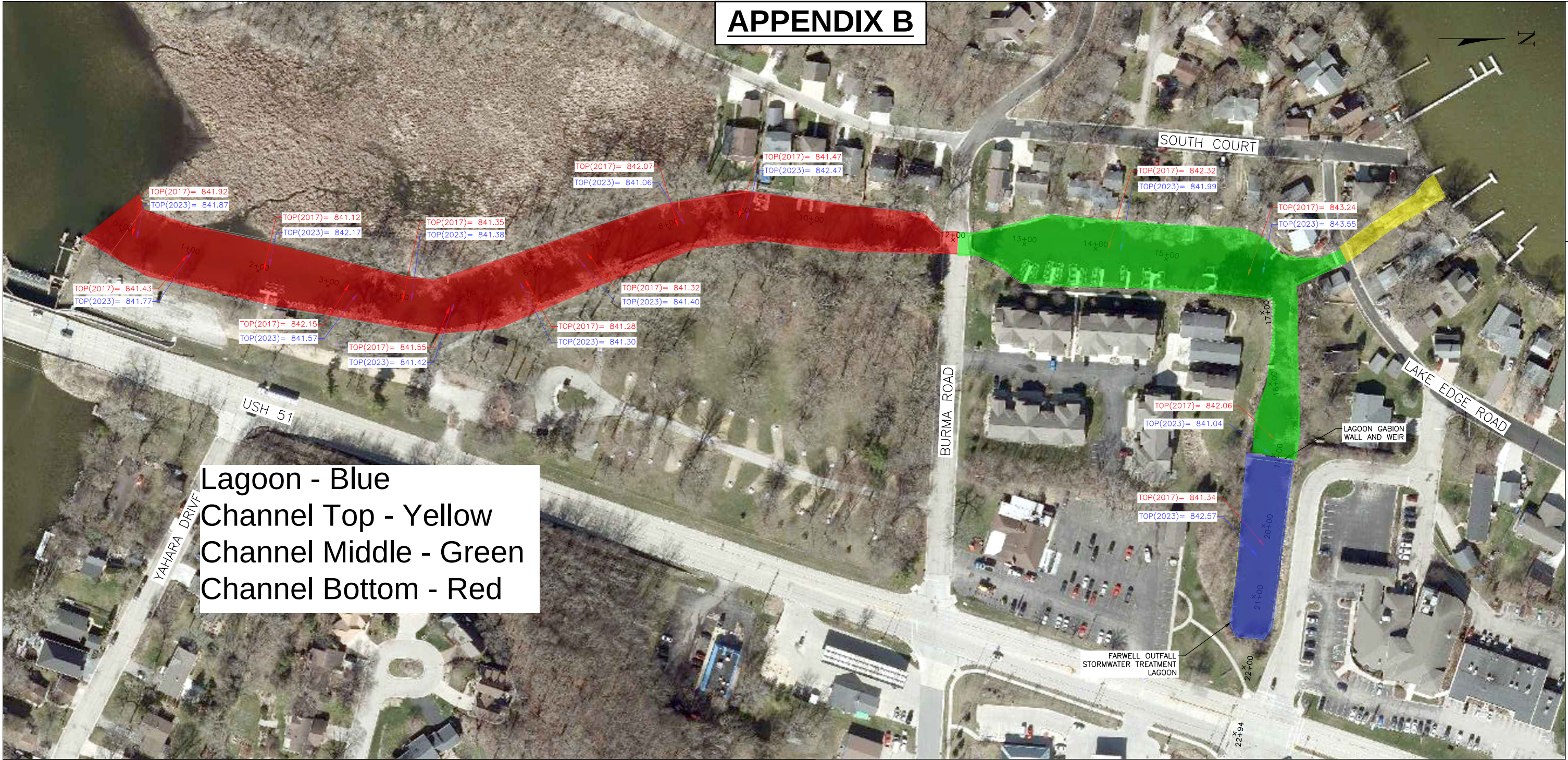
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APPENDIX B



RESTORATION TO HARD BOTTOM

- REMOVAL OF APPROXIMATELY 8450 CUBIC YARDS WILL ACHIEVE THE HARD BOTTOM FOUND DURING SURVEY
- THIS WOULD ACHIEVE AN APPROXIMATE 6 FOOT DEPTH IN THE CENTER OF THE CHANNEL AT SUMMER MIN. LAKE LEVELS
- ESTIMATED COST = \$875,000
- ESTIMATED COST/SHORELINE FOOT = \$213/FT FOR 4850 FT
- COST ASSUMES A TRAPEZOIDAL FINISHED CHANNEL, WITH SHALLOWER DEPTHS AT THE SHORELINE THAN IN THE CENTER.
- COST ASSUMES AN AVERAGE CHANNEL EXCAVATION WIDTH OF 60 FEET
- COST DOES NOT INCLUDE DREDGING OF THE CHANNEL PORTION UNDER LAKE EDGE ROAD
- COST DOES NOT INCLUDE DREDGING OF THE VILLAGE STORM WATER TREATMENT LAGOON
- COST DOES NOT INCLUDE WORK PIER REMOVAL AND REPLACEMENT COSTS
- COST ASSUMES DREDGED SEDIMENT MATERIAL IS ABLE TO BE LAND APPLIED

McFarland
SUMMARY SHEET

MEETING DATE: Wednesday, December 20, 2023

SECTION: Business

DEPARTMENT: Public Works

CONTACT: Lee Igl, Public Works Director, Matt Schuenke, Village Administrator, Aimee Irwin, Assistant to the Public Works Director

AGENDA ITEM: Discussion and action to make a recommendation to the Village Board regarding the final Water Utility Financial Forecast as prepared by Baker Tilly.

PREVIOUS ACTION:

The Public Works & Utilities Committee recommended approval to the Village Board regarding a proposal from Baker Tilly to conduct a five-year financial forecast for the water utility at their February 27, 2023, meeting.

The Village Board approved the proposal at their March 14, 2023, meeting.

ISSUE SUMMARY:

Enclosed is the final draft of the Water Utility Financial Forecast as prepared by Baker Tilly. The forecast is a five-year outlook for the water utility to assist management with future planning. The draft plan was introduced at the November Public Works & Utilities Committee meeting. Also enclosed is a document showing the changes that occurred from the draft to the final version. Staff recommend the approval of the final Financial Forecast as enclosed.

A brief overview of changes from the draft file includes:

- Dates - multiple locations throughout document
- Calculations - multiple locations throughout document based on other adjustments
- Calculated cumulative excess in revenue requirement - page 5 of changes draft
- Adjustment on Attachment 1 (page 9) to show the planned water tower painting for Holscher water tower
- Attachment 5 has several changes to align with the approved village [Capital Improvement Plan for 2024 to 2028](#)

FINANCIAL/BUDGET IMPACT:

The proposal to conduct a water utility forecast was estimated to cost \$9,000 to \$10,000. Funds were included in the 2023 budget for this proposal.

VILLAGE PLAN REFERENCE:

None.



ORDINANCE REFERENCE:

None.

BOARD, COMMISSION OR COMMITTEE RECOMMENDATION:

Recommended motion:

Motion, second to recommend approval to the Village Board regarding the final Water Utility Financial Forecast as enclosed.

ATTACHMENTS:

1. McFarland Utilities 2023-2027 Forecast 12.01.2023 CHANGES
2. McFarland Water Utility 2023-2027 Forecast FINAL

McFarland Water Utility

Enterprise Fund of the
Village of McFaland, Wisconsin

Water Utility Financial Forecast

2023 - 2027

Prepared as of

December __, 2023

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Accountants' Compilation Report

To the Village Board
McFarland Water Utility

Management is responsible for the accompanying forecasted Attachments 1 through 11 (Attachments) as identified in the table of contents of the McFarland Water Utility, an enterprise fund of the Village of McFarland, Wisconsin for the years ended December 31, 2023-2027, including the related summaries of significant assumptions and accounting policies in accordance with guidelines for the presentation of a forecast established by the American Institute of Certified Public Accountants (AICPA). We have performed a compilation engagement in accordance with *Statements on Standards for Accounting and Review Services* promulgated by the Accounting and Review Services Committee of the AICPA. We did not examine or review the forecasted Attachments nor were we required to perform any procedures to verify the accuracy or completeness of the information provided by management. Accordingly, we do not express an opinion, a conclusion, nor provide any form of assurance on this forecasted Attachments.

The forecasted results may not be achieved, as there will usually be differences between the forecasted and actual results because events and circumstances frequently do not occur as expected, and these differences may be material. We have no responsibility to update this report for events and circumstances occurring after the date of this report.

The accompanying supplementary information, identified as historical financial information for the year ended December 31, 2022 and nonfinancial information, contained in the Attachments is presented for purposes of additional analysis and is not a required part of the forecast. Such information is the responsibility of management. The supplementary information was subject to our compilation engagement. We have not examined or reviewed the supplementary information and do not express an opinion, a conclusion nor provide any assurance on such information.

Madison, Wisconsin
December __, 2023

Purpose and Scope

The McFarland Water Utility (Utility) requested Baker Tilly US, LLP to compile a multi-year financial forecast which would quantify the financial impact of capital projects on Water user rates. In addition, this study incorporates management's expectations for the timing and amount of financing required over the next five years.

The Village Board the Public Works and Utilities Committee and members of the staff should be commended for their proactive approach in undertaking this project. The tools are now in place for the Utility to move forward and make decisions to solidify the Utility's financial future.

Nature of Forecast

This financial forecast presents, to the best of management's knowledge and belief, the Utility's expected results of operations for the forecast period. Accordingly, the forecast reflects management's judgment as of December __, 2023, the date of this forecast, of the expected conditions and the expected course of action. The assumptions disclosed herein are those that management believes are significant to the forecast. There will usually be differences between the forecast and actual results because events and circumstances frequently do not occur as expected, and those differences may be material.

Approach

An interactive approach was followed in completing the study, which included drawing upon input from staff and management at the Utility and the Village. The steps followed in completing the study include:

- Obtain historical revenues, expenses and cash flow for three years.
- Develop a template to forecast five years into the future.
- Discussions with Utility personnel regarding projects under consideration.
- Completion of five-year capital project's list by Utility personnel.
- Review historical growth and forecast growth based on discussions with management.
- Preparation of a formal report outlining the significant assumptions and the forecast results.

This collaborative effort has resulted in a meaningful forecast that all involved can understand and use to guide the financial future of the Utility.

Forecast Results

Forecast Results

The forecast presents a five-year prospective look based on estimates provided by management. The water utility is planning substantial capital additions over the next five years. The forecast calls for borrowing during the forecast period to assist in financing the aforementioned capital projects over the next five years. The planned increases are designed to allow the utility to continue to meet debt coverage and return to a position of adequate cash reserves and earn a reasonable rate of return throughout the forecast period.

The revenue requirement includes calculating annual debt coverage as required by the outstanding 2022 revenue bonds. All current general obligation notes do not have a debt coverage requirement.

Forecasted revenue requirement demonstrates some periods of excess and others with a deficiency of revenue. Generally, these swings are driven between the timing of a debt issue and the completion of the related capital asset construction. The forecast demonstrates a cumulative excess in revenue requirement from 2022 – 2027 of approximately \$760,437.

We understand that the capital plan used as the basis for attachment 5 is subject to change. For a matter of perspective, for each \$1,000,000 of capital activity the impact on the overall revenue required from water rates is approximately \$105,000 (including the depreciation, PILOT and return on investment of 6.25%).

McFarland Water Utility**Summary of Significant Accounting Policies**

Nature of Operations

The Utility is an enterprise fund of the Village of McFarland. The Utility is managed by the Public Works and Utilities Committee and the Village Board. The Utility is subject to regulation by the Public Service Commission of Wisconsin (PSCW) in matters of rates, financial reporting, and other procedures.

Revenue Recognition

Water revenues are recorded for service rendered based on water meter readings, with billings made to customers bi-monthly. The utility does not accrue beyond billing dates.

Expenses

Historical operation and maintenance expenses are reported on the accrual basis. Forecasted 2023 through 2027 expenses are also generally reported on the accrual basis with the exception of certain nonrecurring major expenses which are normalized for rate-making purposes. This accounting for nonrecurring expenses differs from generally accepted accounting principles. Expenses related to pensions are based on cash contributions, rather than GASB 68 expenses, as required by the PSCW.

Plant

Additions to and replacements of Utility plant are recorded at the original cost, which includes material, labor, and overhead. The Utility does pay a tax equivalent to the Village per State Statute. The cost of renewals and betterments relating to retirement units is added to plant accounts. The cost of property replaced, retired or otherwise disposed of, is deducted from plant accounts and, generally, together with removal costs less salvage, is charged to accumulated depreciation.

Depreciation

Depreciation is computed using straight line rates authorized by the PSCW applied to the average plant investment balances for the calendar year.

Taxes

Municipal utilities are exempt from income taxes and therefore, no income tax liability is recorded by the McFarland Water Utility.

Summary of Significant Forecast Assumptions

Revenues**Operating Revenue**

Forecasted operating revenue is based on average revenue per customer per class. Customer growth assumptions are based on historical growth rates and discussions with Utility management of known upcoming developments or expansions. The increase in customers by class for the Utility is shown on Attachment 7.

Current water rates were approved by the PSCW effective August 13, 2021. This rate adjustment has been incorporated into this forecast.

Presented on Attachment 2 are projected minimum rate increases, which are forecasted to meet the cumulative revenue requirement through 2027. The proposed Test Year 2024 rate increase was a forecasted 32% effective in quarter 2 of 2024, 4.5% effective in the first quarter of 2026 and 28% effective in the first quarter of 2027.

Impact Fees

Revenues forecasted for impact fees are based on historical average impact fees and the 2023 Water Impact Fee Study to allocate a portion of the improvement of existing wells and the building of a new well attributed to growth.

Investment Income

Investment income forecasted for years 2023 - 2027 has been adjusted to include a 2% increase to account for inflation.

Operating Expenses

Expenses are forecasted based on historical trends, the 2023 approved budgets, and discussions with Utility management. Wages have been inflated by 2% annually for the years 2023 - 2027. Maintenance expenses have been inflated by the PSC inflation rate of 4.2% for 2023, 2.6% for 2024 and an average of 3.4% thereafter.

The remaining operating expenses as of May 31, 2023, were annualized for 2023 and inflated assuming a 2.6% inflationary increase in 2024 followed by a 3.4% inflationary increase for the years 2025 – 2027. Estimated expenses for water tower painting in 2023 and 2024 were normalized. Detailed operation and maintenance expenses are shown on Attachment 8.

Capital Additions

Capital additions are based on the Utility's capital project budget approved by the Village council and discussions with management. Detailed capital additions are shown on Attachment 5.

Debt Service

Management anticipates the issuance of new revenue bonds in the amount of \$5,225,500 and \$3,895,000 in 2024 and 2025, respectively. The debt is forecasted to bear an average interest rate of 4.5%. Debt proceeds are to fund anticipated Utility capital projects. The debt service schedule is forecasted on Attachment 10.

Forecasted debt issues were determined by management and management's registered municipal advisor.

ATTACHMENTS

McFarland Water Utility

Sources and Uses of Funds Summary - Water
Actual 2022 - Forecasted 2027

Attachment 1

Sources of Funds	Actual	Forecasted				
	2022	2023	2024	2025	2026	2027
Operating income	\$ 382,656	\$ 213,563	\$ 422,966	\$ 546,599	\$ 499,192	\$ 832,791
Add: Depreciation	400,304	430,178	456,671	537,296	641,746	718,696
Total From Operations	782,960	643,741	1,112,636	1,083,895	1,207,618	1,971,977
From Other Sources:						
Proceeds from debt issue	3,150,000	-	5,225,500	-	3,895,000	-
Interest income	123,185	126,204	128,728	131,303	133,929	136,607
Impact fees	36,402	43,900	\$77,073	77,073	77,073	77,073
Total From Other Sources	3,309,587	170,104	5,431,301	208,376	4,106,002	213,680
Total Sources of Funds	4,092,547	813,845	6,543,937	1,292,270	5,313,620	2,185,657
Uses of Funds						
Acquisition and construction of utility plant **	1,272,605	1,196,500	1,127,750	3,557,940	2,954,000	2,277,655
Plan Water Tower Painting	-	-	-	-	500,000	-
Debt Service - existing	444,328	676,977	682,782	498,281	412,386	407,518
Debt Service - forecasted	-	-	-	401,716	401,716	701,149
Tax Equivalent	258,404	264,054	288,483	312,859	392,793	451,543
Total Uses of Funds	1,975,337	2,137,531	2,099,015	4,770,796	4,660,895	3,837,865
Net Cash Flows	\$ 2,117,210	\$ (1,323,686)	\$ 4,444,922	\$ (3,478,526)	\$ 652,725	\$ (1,652,208)

** This excludes plant financed by TIF and not initially paid for by the utility

Cumulative cash flow for six year period	\$ 760,437
Estimated cash flow for future annual capital financed from operations	600,000

McFarland Water Utility

Income Statement - Water (GAAP basis)

Actual 2022 - Forecasted 2027

Attachment 2

	Actual 2022	2023	2024	Forecasted 2025	2026	2027
OPERATING REVENUES						
Unmetered	4,119	2,205	2,249	2,294	2,340	2,387
Metered (current rates):						
Residential	\$ 705,969	\$ 708,537	\$ 726,605	\$ 736,852	\$ 751,009	\$ 765,167
Multifamily residential	61,750	65,783	72,178	69,831	71,855	73,879
Commercial	86,433	89,477	92,762	91,142	91,974	92,806
Public authorities	29,477	35,009	38,378	37,131	38,192	39,300
Total Metered Sales	883,629	898,806	929,923	934,956	953,030	971,152
Private fire protection	52,161	50,934	54,024	54,616	56,457	58,298
Public fire protection	472,300	472,300	472,300	472,300	472,300	472,300
Proposed Rate Increases *	-	-	233,000	465,999	532,679	953,836
Total Sales of Water	1,412,209	1,424,245	1,691,496	1,930,165	2,016,806	2,457,973
OTHER OPERATING REVENUES						
Forfeited discounts	3,546	3,617	3,689	3,763	3,838	3,915
Miscellaneous service revenue	305	311	317	323	329	336
Other	51,623	52,655	53,708	54,782	55,878	56,996
Total Other Operating Revenues	55,474	56,583	57,714	58,868	60,045	61,247
TOTAL OPERATING REVENUES	1,467,683	1,480,828	1,749,210	1,989,033	2,076,851	2,519,220
OPERATING EXPENSES						
Pumping	160,260	76,935	78,894	81,576	84,350	87,218
Water treatment	30,927	26,917	27,568	28,505	29,474	30,476
Transmission & distribution	111,643	149,228	165,860	171,499	177,330	183,359
Customer accounts	49,933	65,781	67,162	69,446	71,807	74,248
Administration & general	316,627	496,453	507,750	531,014	549,068	567,736
Total Operation and Maintenance	669,390	815,314	847,234	882,040	912,029	943,037
Depreciation	400,304	430,178	456,671	537,296	641,746	718,696
Taxes	15,333	21,773	22,339	23,098	23,884	24,696
TOTAL OPERATING EXPENSES	1,085,027	1,267,265	1,326,244	1,442,434	1,577,659	1,686,429
NET OPERATING INCOME	\$ 382,656	\$ 213,563	\$ 422,966	\$ 546,599	\$ 499,192	\$ 832,791
Percentage Increase in Rates			32.00%	0.00%	4.50%	28.00%
Proposed Rate Increases *						
2023	-	-	-	-	-	-
2024	-	-	233,000	465,999	465,999	465,999
2025	-	-	-	-	-	-
2026	-	-	-	-	66,680	67,347
2027	-	-	-	-	-	420,490

* assumes 1/2 year impact in year of implementation for TY24 conventional rate case

Please refer to Accountants' Report, Summary of Significant Assumptions and Summary of Significant Accounting Policies

McFarland Water Utility

Rate of Return and Increase Suggested - Water
Actual 2022 - Forecasted 2027

Attachment 3

	Actual 2022	2023	2024	Forecasted 2025	2026	2027
Net Investment Rate Base	\$ 7,546,824	\$ 8,519,672	\$ 9,382,597	\$ 11,368,695	\$ 14,188,952	\$ 16,288,307
Operating Income- Regulatory Basis (A)	260,135	150,554	334,925	443,558	327,863	604,269
Rate of Return	3.45%	1.77%	3.57%	3.90%	2.31%	3.71%
Recommended Return - 6.20% (B)	468,000	528,000	582,000	705,000	880,000	1,010,000
Increase Required	\$ 207,865	\$ 377,446	\$ 247,075	\$ 261,442	\$ 552,137	\$ 405,731
Percent of Increase Required	14.72%	26.50%	14.61%	13.55%	27.38%	16.51%
Increase from Current Rates		26.50%	16.94%	17.86%	37.20%	26.97%
Proposed Increase			32.00%	0.00%	4.50%	28.00%
Rate of Return after Proposed Increase			6.05%	3.90%	2.78%	6.29%

(A) This is prior to the current year rate increase. Regulatory basis excludes depreciation on contributed assets and includes the tax equivalent and rent of water towers.

(B) The current authorized rate of return is 4.9%. While the utility may be eligible for up to a 6.2% rate of return, the recommended rate of return for this study was maintained at 6.0% due to the utilities existing resources and the ability to use debt for capital projects.

Operating Income- Regulatory Basis (A)	2022	2023	2024	2025	2026	2027
Net operating income (after increases)	\$ 382,656	\$ 213,563	\$ 422,966	\$ 546,599	\$ 499,192	\$ 832,791
Rent of Water towers (included in GAAP int inc)	71,986	69,295	66,442	63,418	60,214	56,821
GASB 68 Adjustment	(65,601)	-	-	-	-	-
Depreciation Expense- CIAC Plant	129,498	131,750	134,000	146,400	161,250	166,200
Tax Equivalent	(258,404)	(264,054)	(288,483)	(312,859)	(392,793)	(451,543)
	\$ 260,135	\$ 150,554	\$ 334,925	\$ 443,558	\$ 327,863	\$ 604,269

Please refer to Accountants' Report, Summary of Significant Assumptions and Summary of Significant Accounting Policies

McFarland Water Utility

Average Rate Base - Water
Actual 2022 - Forecasted 2027

Attachment 4

	Actual 2022	2023	2024	2025	2026	2027
Utility Plant in Service						
Balance - Beginning of year	\$ 10,432,611	\$ 11,594,372	\$ 12,636,972	\$ 13,659,022	\$ 16,894,369	\$ 19,580,535
Balance - End of year	11,594,372	12,636,972	13,659,022	16,894,369	19,580,535	21,651,679
Average Balance	11,013,491	12,115,672	13,147,997	15,276,695	18,237,452	20,616,107
Accumulated Depreciation						
Balance - Beginning of year	(3,371,902)	(3,531,864)	(3,676,392)	(3,893,363)	(3,961,666)	(4,174,328)
Balance - End of year	(3,531,864)	(3,676,392)	(3,893,363)	(3,961,666)	(4,174,328)	(4,520,313)
Average Balance	(3,451,883)	(3,604,100)	(3,784,900)	(3,927,500)	(4,068,000)	(4,347,300)
Materials and Supplies						
Balance - Beginning of year	19,450	19,450	19,450	19,450	19,450	19,450
Balance - End of year	19,450	19,450	19,450	19,450	19,450	19,450
Average Balance	19,450	19,500	19,500	19,500	19,500	19,500
Regulatory Liability						
Balance - Beginning of year	(45,644)	(22,823)	-	-	-	-
Balance - End of year	(22,823)	-	-	-	-	-
Average Balance	(34,234)	(11,400)	-	-	-	-
Average Net Investment Rate Base	\$ 7,546,824	\$ 8,519,672	\$ 9,382,597	\$ 11,368,695	\$ 14,188,952	\$ 16,288,307

Please refer to Accountants' Report, Summary of Significant Assumptions and Summary of Significant Accounting Policies

McFarland Water Utility

Capital Projects Forecast - Water
Forecasted 2023 - Forecasted 2027

Attachment 5

Water	2023	2024	2025	2026	2027	Total Project Cost
Network Equip	\$ 2,500	\$ 3,000	\$ 3,500	\$ 4,000	\$ 4,500	\$ 17,500
Leak Locator	35,000	-	-	-	-	35,000
Leased Equipment	8,000	8,000	8,000	8,000	8,000	40,000
Patrol Truck	65,000	-	-	-	-	65,000
Paulson Road	517,500	-	-	-	-	517,500
Paving and Utility Plan	504,500	20,000	-	-	-	524,500
Pickup Truck	12,000	57,000	-	15,000	16,000	100,000
Trailer	2,000	-	-	-	-	2,000
USH 51	50,000	-	-	-	-	50,000
Exchange Street	-	1,039,750	-	-	-	1,039,750
Well #5	-	-	3,320,000	-	-	3,320,000
Patrol Truck	-	-	80,000	-	82,500	162,500
Paving and Utility Plan	-	-	1,401,400	500,750	532,655	2,434,805
Egner Park Facility	-	-	-	425,000	-	425,000
CTH MN 5	-	-	-	882,250	-	882,250
Well #3	-	-	-	-	1,720,000	1,720,000
Well #4	-	-	-	1,200,000	-	1,200,000
Mains, Services, Hydrants	267,300	-	211,900	211,900	211,900	903,000
Total Capital Projects	\$ 1,463,800	\$ 1,127,750	\$ 5,024,800	\$ 3,246,900	\$ 2,575,555	\$ 13,438,805
Impact Fee Financed Projects (Wells)	\$ -	\$ -	\$ 1,254,960	\$ 81,000	\$ 86,000	\$ 1,421,960
Developers Financed	\$ 267,300	\$ -	\$ 211,900	\$ 211,900	\$ 211,900	\$ 903,000
Utility Financed	\$ 1,196,500	\$ 1,127,750	\$ 3,557,940	\$ 2,954,000	\$ 2,277,655	\$ 11,113,845
 Book Cost of Plant Retired	 153,900	 105,700	 322,593	 267,834	 206,511	 1,056,538
Total Additions Net of Retirements	\$ 1,309,900	\$ 1,022,050	\$ 4,702,207	\$ 2,979,066	\$ 2,369,044	\$ 12,382,267

Please refer to Accountants' Report, Summary of Significant Assumptions and Summary of Significant Accounting Policies

McFarland Water Utility

Plant and Depreciation - Water
Actual 2022 - Forecasted 2027

Attachment 6

2022 Depreciation Expense	\$ 302,820	129,498	Utility Financed Plant 1/1/22 (less land)	\$ 10,422,997	Contributed Plant 1/1/22 (less land)	7,674,104
2022 Ave Depreciable Plant	<u>\$ 11,003,878</u>	<u>\$ 7,674,104</u>	Utility Financed 12/31/22 (less land)	<u>11,584,759</u>	Contributed Plant 12/31/22 (less land)	<u>7,674,104</u>
Composite Depreciation Rate	2.752%	1.687%	Depreciable Plant	<u>\$ 11,003,878</u>	Depreciable Plant	<u>\$ 7,674,104</u>

	Plant Additions	Depreciation Rates	Actual 2022	2023	2024	Forecasted 2025	2026	2027
Base Plant Jan 1, 2023- Utility Financed	<u>\$ 11,584,759</u>	2.752%	\$ 302,820	\$ 322,732	\$ 315,025	\$ 318,800	\$ 318,800	\$ 318,800
Base Plant Jan 1, 2023- CIAC	<u>7,674,104</u>	1.687%	129,498	129,500	129,500	129,500	129,500	129,500

<u>Additions</u>								
2023								
Utility Financed Projects	1,196,500	2.752%	-	16,450	32,900	32,900	32,900	32,900
Contributed Projects	267,300	1.687%	-	2,250	4,500	4,500	4,500	4,500
2024								
Utility Financed Projects	1,127,750	2.752%	-	-	15,500	31,000	31,000	31,000
Contributed Projects	-	1.687%	-	-	-	-	-	-
2025								
Utility Financed Projects	3,557,940	2.752%	-	-	-	48,950	97,900	97,900
Contributed Projects	1,466,860	1.687%	-	-	-	12,400	24,800	24,800
2026								
Utility Financed Projects	2,954,000	2.752%	-	-	-	-	40,650	81,300
Contributed Projects	292,900	1.687%	-	-	-	-	2,450	4,900
2027								
Utility Financed Projects	2,277,655	2.752%	-	-	-	-	-	31,350
Contributed Projects	297,900	1.687%	-	-	-	-	-	2,500
Depreciation charged to Sewer			(32,014)	(40,754)	(40,754)	(40,754)	(40,754)	(40,754)
Total Depreciation Expense			<u>\$ 400,304</u>	<u>\$ 430,178</u>	<u>\$ 456,671</u>	<u>\$ 537,296</u>	<u>\$ 641,746</u>	<u>\$ 718,696</u>
Total Retirements	<u>(1,056,538)</u>							
Plant Balance (net of retirements)	<u>\$ 31,641,130</u>							
Depreciation Expense- Utility Financed Plant			<u>\$ 270,806</u>	<u>\$ 298,428</u>	<u>\$ 322,671</u>	<u>\$ 390,896</u>	<u>\$ 480,496</u>	<u>\$ 552,496</u>
Depreciation Expense- CIAC Plant			<u>\$ 129,498</u>	<u>\$ 131,750</u>	<u>\$ 134,000</u>	<u>\$ 146,400</u>	<u>\$ 161,250</u>	<u>\$ 166,200</u>
CIAC Plant January 1			<u>\$ 7,674,104</u>	<u>\$ 7,674,104</u>	<u>\$ 7,941,404</u>	<u>\$ 7,941,404</u>	<u>\$ 9,408,264</u>	<u>\$ 9,701,164</u>
CIAC Plant December 31			<u>\$ 7,674,104</u>	<u>\$ 7,941,404</u>	<u>\$ 7,941,404</u>	<u>\$ 9,408,264</u>	<u>\$ 9,701,164</u>	<u>\$ 9,999,064</u>

Please refer to Accountants' Report, Summary of Significant Assumptions and Summary of Significant Accounting Policies

McFarland Water Utility

Revenues Forecast - Water (current rates)
Actual 2022 - Forecasted 2027

Attachment 7

	Actual 2022	2023	2024	Forecasted 2025	2026	2027
Residential						
Total Revenue	705,969	\$ 708,537	\$ 726,605	\$ 736,852	\$ 751,009	\$ 765,167
Volume Sold (MG)	147,467	147,229	150,171	153,112	156,054	158,996
Average Number of Customers	3,185	3,203	3,267	3,331	3,395	3,459
Revenue Per Customer	222	221	221	221	221	221
Volume Per Customer	46	46	46	46	46	46
Multifamily residential						
Total Revenue	61,750	65,783	72,178	69,831	71,855	73,879
Volume Sold (MG)	19,413	21,694	22,361	23,029	23,696	24,364
Average Number of Customers	63	65	67	69	71	73
Revenue Per Customer	980	1,012	1,012	1,012	1,012	1,012
Volume Per Customer	308	334	334	334	334	334
Commercial						
Total Revenue	86,433	89,477	92,762	91,142	91,974	92,806
Volume Sold (MG)	24,497	27,067	27,318	27,570	27,822	28,074
Average Number of Customers	214	215	217	219	221	223
Revenue Per Customer	404	416	416	416	416	416
Volume Per Customer	114	126	126	126	126	126
Public Authorities						
Total Revenue	29,477	35,009	38,378	37,131	38,192	39,300
Volume Sold (MG)	9,873	11,905	12,266	12,626	12,987	13,348
Average Number of Customers	28	33	34	35	36	37
Revenue Per Customer	1,053	1,061	1,061	1,061	1,061	1,061
Volume Per Customer	353	361	361	361	361	361
Private Fire Protection						
Total Revenue	52,161	50,934	54,024	54,616	56,457	58,298
Average Number of Customers	85	83	86	89	92	95
Revenue Per Customer	614	614	614	614	614	614
Public Fire Protection						
	472,300	472,300	472,300	472,300	472,300	472,300
Total Revenue	\$ 1,408,090	\$ 1,422,040	\$ 1,456,247	\$ 1,461,872	\$ 1,481,787	\$ 1,501,750

2023 forecasted customers to be consistent with the customer count on 5/31/2023.

2024 forecasted customers to be consistent with the customer count on 5/31/2023, adjusted for the 5-year average change in customer numbers.

Forecasted consumption to be consistent with the consumption per customer for the previous 12 months.

Please refer to Accountants' Report, Summary of Significant Assumptions and Summary of Significant Accounting Policies

McFarland Water Utility

Expenses Forecast - Water (GAAP basis)

Actual 2022 - Forecasted 2027

Attachment 8

	Actual 2022	Forecasted				
		2023	2024	2025	2026	2027
OPERATING EXPENSES						
Pumping	\$ 160,260	\$ 76,935	\$ 78,894	\$ 81,576	\$ 84,350	\$ 87,218
Water treatment	30,927	26,917	27,568	28,505	29,474	30,476
Transmission & distribution *	111,643	149,228	165,860	171,499	177,330	183,359
Customer accounts expense	49,933	65,781	67,162	69,446	71,807	74,248
Administration & general	316,627	496,453	507,750	531,014	549,068	567,736
Total Operation & Maintenance	669,390	815,314	847,234	882,040	912,029	943,037
Depreciation expense	400,304	430,178	456,671	537,296	641,746	718,696
Taxes-FICA	15,333	21,773	22,339	23,098	23,884	24,696
TOTAL OPERATING EXPENSES	\$ 1,085,027	\$ 1,267,265	\$ 1,326,244	\$ 1,442,434	\$ 1,577,659	\$ 1,686,429

Forecasted 2023 and 2024 are based on the Test Year 2024 Rate Study and thereafter are inflated at a rate of 3.4% annually.

* Changes in expenses beyond inflation include the following:

- \$12,500 of tower painting in transmission & distribution in 2023 and \$26,042 in 2024

-\$6,000 T24 Rate Study in 2023, 2024 & 2025

McFarland Water Utility

Debt Coverage - Water

Actual 2022 - Forecasted 2027

Attachment 9

	Actual 2022	Forecasted 2023	Forecasted 2024	Forecasted 2025	Forecasted 2026	Forecasted 2027
Actual Defined Earnings						
Operating Revenues	\$ 1,467,683	\$ 1,480,828	\$ 1,749,210	\$ 1,989,033	\$ 2,076,851	\$ 2,519,220
Add: Interest income	123,185	126,204	128,728	131,303	133,929	136,607
Less: Operation and Maintenance Expenses	669,390	815,314	847,234	882,040	912,029	943,037
Taxes Other than Equivalent	15,333	21,773	22,339	23,098	23,884	24,696
	<u>\$ 906,145</u>	<u>\$ 769,945</u>	<u>\$ 1,008,365</u>	<u>\$ 1,215,197</u>	<u>\$ 1,274,867</u>	<u>\$ 1,688,094</u>
Net Defined Earnings						
Required Defined Earnings						
Subsequent Year Principal and Interest Payment- Revenue Debt	230,299	\$ 228,954	\$ 228,781	\$ 228,436	\$ 227,918	\$ 227,228
Subsequent Year Principal and Interest Payment - Proposed Debt	-	-	401,716	401,716	701,149	701,149
Subtotal	<u>230,299</u>	<u>228,954</u>	<u>630,497</u>	<u>630,152</u>	<u>929,067</u>	<u>928,377</u>
Required Coverage Factor	<u>1.25</u>	<u>1.25</u>	<u>1.25</u>	<u>1.25</u>	<u>1.25</u>	<u>1.25</u>
	<u>\$ 287,874</u>	<u>\$ 286,193</u>	<u>\$ 788,121</u>	<u>\$ 787,690</u>	<u>\$ 1,161,334</u>	<u>\$ 1,160,471</u>
Required Defined Earnings						
Excess (Shortage)	<u>\$ 618,271</u>	<u>\$ 483,752</u>	<u>\$ 220,243</u>	<u>\$ 427,507</u>	<u>\$ 113,533</u>	<u>\$ 527,623</u>
Actual Coverage Factor		<u>3.36</u>	<u>1.60</u>	<u>1.93</u>	<u>1.37</u>	<u>1.82</u>

Please refer to Accountants' Report, Summary of Significant Assumptions and Summary of Significant Accounting Policies

McFarland Water Utility
Annual Debt Service - Water

Attachment 10

	2015	2017	2019	2020	2022	2024	2026	Annual
	G.O. Promissory Note	G.O. Promissory Note	G.O. Promissory Note	G.O. Promissory Note	Revenue Bonds	Estimated Revenue Bonds	Estimated Revenue Bonds	Debt Service
2023	187,578	79,900	100,800	78,400	230,299	-	-	676,977
2024	188,978	83,400	104,100	77,350	228,954	-	-	682,782
2025	-	91,800	101,400	76,300	228,781	401,716	-	899,997
2026	-	-	103,700	80,250	228,436	401,716	-	814,102
2027	-	-	100,850	78,750	227,918	401,716	299,433	1,108,667
2028	-	-	103,000	77,250	227,228	401,716	299,433	1,108,627
2029	-	-	-	76,125	226,365	401,716	299,433	1,003,639
2030	-	-	-	-	229,644	401,716	299,433	930,793
2031	-	-	-	-	228,264	401,716	299,433	929,413
2032	-	-	-	-	226,710	401,716	299,433	927,859
2033	-	-	-	-	229,299	401,716	299,433	930,448
2034	-	-	-	-	228,824	401,716	299,433	929,973
2035	-	-	-	-	228,220	401,716	299,433	929,369
2036	-	-	-	-	227,487	401,716	299,433	928,636
2037	-	-	-	-	229,213	401,716	299,433	930,362
2038	-	-	-	-	230,594	401,716	299,433	931,743
2039	-	-	-	-	227,314	401,716	299,433	928,463
2040	-	-	-	-	228,177	401,716	299,433	929,326
2041	-	-	-	-	228,695	401,716	299,433	929,844
2042	-	-	-	-	228,918	401,716	299,433	930,067
2043	-	-	-	-	-	401,716	299,433	701,149
2044	-	-	-	-	-	401,716	299,433	701,149
2045	-	-	-	-	-	-	299,433	299,433
2046	-	-	-	-	-	-	299,433	299,433
Totals	376,556	255,100	613,850	544,425	4,569,340	8,034,320	5,988,660	20,382,251
						(A)	(B)	

(A) Forecasted Revenue Bond issue of \$5,225,500 bearing an interest rate of 4.5% annually for 20 years

(B) Forecasted Revenue Bond issue of \$3,895,000 bearing an interest rate of 4.5% annually for 20 years

McFarland Water Utility
Taxes - Water
Actual 2022 - Forecasted 2027

Attachment 11

	Actual	Forecasted				
	2022	2023	2024	2025	2026	2027
Water						
Plant in Service - January 1	\$ 18,184,651	\$ 19,346,412	\$ 20,656,312	\$ 21,678,362	\$ 26,380,569	\$ 29,359,635
Held for Future Use - January 1	224,112	224,112	224,112	224,112	224,112	224,112
CWIP	22,736	64,902	29,213	29,213	29,213	29,213
Materials and Supplies	19,450	19,450	19,450	19,450	19,450	19,450
Assessable Plant	18,450,949	19,654,876	20,929,087	21,951,137	26,653,344	29,632,410
Assessment Ratio	95.12%	99.11%	99.11%	99.11%	99.11%	99.11%
Assessed Value	17,550,340	19,480,713	20,743,633	21,756,626	26,417,167	29,369,835
Mill Rate (A)	14.7236	13.5547	13.9071	14.3799	14.8688	15.3744
Tax Equivalent	258,404	264,054	288,483	312,859	392,793	451,543
1994 Tax Equivalent Floor	78,428	78,428	78,428	78,428	78,428	78,428
Larger of two lines above	258,404	264,054	288,483	312,859	392,793	451,543
Less local & school tax equivalent on meters charged to sewer department	5,927	9,955	10,214	10,561	10,920	11,291
Net property tax equivalent	252,477	254,099	278,269	302,298	381,873	440,252
Social Security	19,998	20,838	21,380	22,107	22,859	23,636
PSC Remainder Assessment	1,262	1,315	1,349	1,395	1,442	1,491
Total Water Tax Expense	\$ 273,737	\$ 276,252	\$ 300,998	\$ 325,800	\$ 406,174	\$ 465,379
2022 Mill Rate Computation (A)	Total	Utility				
State	0.0000	N/A				
County	2.6254	N/A				
Local	5.7824	5.7824				
School	8.2094	8.2094				
Vocational	0.6959	0.6959				
Gross Tax Rate	17.3131	14.6877				
School Credit	-1.3356	-1.1330				
Net Tax Rate	15.9775	13.5547				
2022 Assessment Ratio	0.9512					

Please refer to Accountants' Report, Summary of Significant Assumptions and Summary of Significant Accounting Policies

McFarland Water Utility

Enterprise Fund of the
Village of McFarland, Wisconsin

Water Utility Financial Forecast

2023 - 2027

Prepared as of

December 1, 2023

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Accountants' Compilation Report

To the Village Board
McFarland Water Utility

Management is responsible for the accompanying forecasted Attachments 1 through 11 (Attachments) as identified in the table of contents of the McFarland Water Utility, an enterprise fund of the Village of McFarland, Wisconsin for the years ended December 31, 2023-2027, including the related summaries of significant assumptions and accounting policies in accordance with guidelines for the presentation of a forecast established by the American Institute of Certified Public Accountants (AICPA). We have performed a compilation engagement in accordance with *Statements on Standards for Accounting and Review Services* promulgated by the Accounting and Review Services Committee of the AICPA. We did not examine or review the forecasted Attachments nor were we required to perform any procedures to verify the accuracy or completeness of the information provided by management. Accordingly, we do not express an opinion, a conclusion, nor provide any form of assurance on this forecasted Attachments.

The forecasted results may not be achieved, as there will usually be differences between the forecasted and actual results because events and circumstances frequently do not occur as expected, and these differences may be material. We have no responsibility to update this report for events and circumstances occurring after the date of this report.

The accompanying supplementary information, identified as historical financial information for the year ended December 31, 2022 and nonfinancial information, contained in the Attachments is presented for purposes of additional analysis and is not a required part of the forecast. Such information is the responsibility of management. The supplementary information was subject to our compilation engagement. We have not examined or reviewed the supplementary information and do not express an opinion, a conclusion nor provide any assurance on such information.

Baker Tilly US, LLP

Madison, Wisconsin
December 1, 2023

Purpose and Scope

The McFarland Water Utility (Utility) requested Baker Tilly US, LLP to compile a multi-year financial forecast which would quantify the financial impact of capital projects on Water user rates. In addition, this study incorporates management's expectations for the timing and amount of financing required over the next five years.

The Village Board the Public Works and Utilities Committee and members of the staff should be commended for their proactive approach in undertaking this project. The tools are now in place for the Utility to move forward and make decisions to solidify the Utility's financial future.

Nature of Forecast

This financial forecast presents, to the best of management's knowledge and belief, the Utility's expected results of operations for the forecast period. Accordingly, the forecast reflects management's judgment as of December 1, 2023, the date of this forecast, of the expected conditions and the expected course of action. The assumptions disclosed herein are those that management believes are significant to the forecast. There will usually be differences between the forecast and actual results because events and circumstances frequently do not occur as expected, and those differences may be material.

Approach

An interactive approach was followed in completing the study, which included drawing upon input from staff and management at the Utility and the Village. The steps followed in completing the study include:

- Obtain historical revenues, expenses and cash flow for three years.
- Develop a template to forecast five years into the future.
- Discussions with Utility personnel regarding projects under consideration.
- Completion of five-year capital project's list by Utility personnel.
- Review historical growth and forecast growth based on discussions with management.
- Preparation of a formal report outlining the significant assumptions and the forecast results.

This collaborative effort has resulted in a meaningful forecast that all involved can understand and use to guide the financial future of the Utility.

Forecast Results

The forecast presents a five-year prospective look based on estimates provided by management. The water utility is planning substantial capital additions over the next five years. The forecast calls for borrowing during the forecast period to assist in financing the aforementioned capital projects over the next five years. The planned increases are designed to allow the utility to continue to meet debt coverage and return to a position of adequate cash reserves and earn a reasonable rate of return throughout the forecast period.

The revenue requirement includes calculating annual debt coverage as required by the outstanding 2022 revenue bonds. All current general obligation notes do not have a debt coverage requirement.

Forecasted revenue requirement demonstrates some periods of excess and others with a deficiency of revenue. Generally, these swings are driven between the timing of a debt issue and the completion of the related capital asset construction. The forecast demonstrates a cumulative excess in revenue requirement from 2022 – 2027 of approximately \$760,437.

We understand that the capital plan used as the basis for attachment 5 is subject to change. For a matter of perspective, for each \$1,000,000 of capital activity the impact on the overall revenue required from water rates is approximately \$105,000 (including the depreciation, PILOT and return on investment of 6.25%).

McFarland Water Utility

Summary of Significant Accounting Policies

Nature of Operations

The Utility is an enterprise fund of the Village of McFarland. The Utility is managed by the Public Works and Utilities Committee and the Village Board. The Utility is subject to regulation by the Public Service Commission of Wisconsin (PSCW) in matters of rates, financial reporting, and other procedures.

Revenue Recognition

Water revenues are recorded for service rendered based on water meter readings, with billings made to customers bi-monthly. The utility does not accrue beyond billing dates.

Expenses

Historical operation and maintenance expenses are reported on the accrual basis. Forecasted 2023 through 2027 expenses are also generally reported on the accrual basis with the exception of certain nonrecurring major expenses which are normalized for rate-making purposes. This accounting for nonrecurring expenses differs from generally accepted accounting principles. Expenses related to pensions are based on cash contributions, rather than GASB 68 expenses, as required by the PSCW.

Plant

Additions to and replacements of Utility plant are recorded at the original cost, which includes material, labor, and overhead. The Utility does pay a tax equivalent to the Village per State Statute. The cost of renewals and betterments relating to retirement units is added to plant accounts. The cost of property replaced, retired or otherwise disposed of, is deducted from plant accounts and, generally, together with removal costs less salvage, is charged to accumulated depreciation.

Depreciation

Depreciation is computed using straight line rates authorized by the PSCW applied to the average plant investment balances for the calendar year.

Taxes

Municipal utilities are exempt from income taxes and therefore, no income tax liability is recorded by the McFarland Water Utility.

McFarland Water Utility

Summary of Significant Forecast Assumptions

Revenues

Operating Revenue

Forecasted operating revenue is based on average revenue per customer per class. Customer growth assumptions are based on historical growth rates and discussions with Utility management of known upcoming developments or expansions. The increase in customers by class for the Utility is shown on Attachment 7.

Current water rates were approved by the PSCW effective August 13, 2021. This rate adjustment has been incorporated into this forecast.

Presented on Attachment 2 are projected minimum rate increases, which are forecasted to meet the cumulative revenue requirement through 2027. The proposed Test Year 2024 rate increase was a forecasted 32% effective in quarter 2 of 2024, 4.5% effective in the first quarter of 2026 and 28% effective in the first quarter of 2027.

Impact Fees

Revenues forecasted for impact fees are based on historical average impact fees and the 2023 Water Impact Fee Study to allocate a portion of the improvement of existing wells and the building of a new well attributed to growth.

Investment Income

Investment income forecasted for years 2023 - 2027 has been adjusted to include a 2% increase to account for inflation.

Operating Expenses

Expenses are forecasted based on historical trends, the 2023 approved budgets, and discussions with Utility management. Wages have been inflated by 2% annually for the years 2023 - 2027. Maintenance expenses have been inflated by the PSC inflation rate of 4.2% for 2023, 2.6% for 2024 and an average of 3.4% thereafter.

The remaining operating expenses as of May 31, 2023, were annualized for 2023 and inflated assuming a 2.6% inflationary increase in 2024 followed by a 3.4% inflationary increase for the years 2025 – 2027. Estimated expenses for water tower painting in 2023 and 2024 were normalized. Detailed operation and maintenance expenses are shown on Attachment 8.

Capital Additions

Capital additions are based on the Utility's capital project budget approved by the Village council and discussions with management. Detailed capital additions are shown on Attachment 5.

Debt Service

Management anticipates the issuance of new revenue bonds in the amount of \$5,225,500 and \$3,895,000 in 2024 and 2025, respectively. The debt is forecasted to bear an average interest rate of 4.5%. Debt proceeds are to fund anticipated Utility capital projects. The debt service schedule is forecasted on Attachment 10.

Forecasted debt issues were determined by management and management's registered municipal advisor.

ATTACHMENTS

McFarland Water Utility

Sources and Uses of Funds Summary - Water
Actual 2022 - Forecasted 2027

Attachment 1

Sources of Funds	Actual	Forecasted				
	2022	2023	2024	2025	2026	2027
Operating income	\$ 382,656	\$ 213,563	\$ 422,966	\$ 546,599	\$ 499,192	\$ 832,791
Add: Depreciation	400,304	430,178	456,671	537,296	641,746	718,696
Total From Operations	782,960	643,741	1,112,636	1,083,895	1,207,618	1,971,977
From Other Sources:						
Proceeds from debt issue	3,150,000	-	5,225,500	-	3,895,000	-
Interest income	123,185	126,204	128,728	131,303	133,929	136,607
Impact fees	36,402	43,900	\$77,073	77,073	77,073	77,073
Total From Other Sources	3,309,587	170,104	5,431,301	208,376	4,106,002	213,680
Total Sources of Funds	4,092,547	813,845	6,543,937	1,292,270	5,313,620	2,185,657
Uses of Funds						
Acquisition and construction of utility plant **	1,272,605	1,196,500	1,127,750	3,557,940	2,954,000	2,277,655
Plan Water Tower Painting	-	-	-	-	500,000	-
Debt Service - existing	444,328	676,977	682,782	498,281	412,386	407,518
Debt Service - forecasted	-	-	-	401,716	401,716	701,149
Tax Equivalent	258,404	264,054	288,483	312,859	392,793	451,543
Total Uses of Funds	1,975,337	2,137,531	2,099,015	4,770,796	4,660,895	3,837,865
Net Cash Flows	\$ 2,117,210	\$ (1,323,686)	\$ 4,444,922	\$ (3,478,526)	\$ 652,725	\$ (1,652,208)

** This excludes plant financed by TIF and not initially paid for by the utility

Cumulative cash flow for six year period	\$ 760,437
Estimated cash flow for future annual capital financed from operations	600,000

Please refer to Accountants' Report, Summary of Significant Assumptions and Summary of Significant Accounting Policies

McFarland Water Utility

Income Statement - Water (GAAP basis)

Actual 2022 - Forecasted 2027

Attachment 2

	Actual 2022	Forecasted				
		2023	2024	2025	2026	2027
OPERATING REVENUES						
Unmetered	4,119	2,205	2,249	2,294	2,340	2,387
Metered (current rates):						
Residential	\$ 705,969	\$ 708,537	\$ 726,605	\$ 736,852	\$ 751,009	\$ 765,167
Multifamily residential	61,750	65,783	72,178	69,831	71,855	73,879
Commercial	86,433	89,477	92,762	91,142	91,974	92,806
Public authorities	29,477	35,009	38,378	37,131	38,192	39,300
Total Metered Sales	883,629	898,806	929,923	934,956	953,030	971,152
Private fire protection	52,161	50,934	54,024	54,616	56,457	58,298
Public fire protection	472,300	472,300	472,300	472,300	472,300	472,300
Proposed Rate Increases *	-	-	233,000	465,999	532,679	953,836
Total Sales of Water	1,412,209	1,424,245	1,691,496	1,930,165	2,016,806	2,457,973
OTHER OPERATING REVENUES						
Forfeited discounts	3,546	3,617	3,689	3,763	3,838	3,915
Miscellaneous service revenue	305	311	317	323	329	336
Other	51,623	52,655	53,708	54,782	55,878	56,996
Total Other Operating Revenues	55,474	56,583	57,714	58,868	60,045	61,247
TOTAL OPERATING REVENUES	1,467,683	1,480,828	1,749,210	1,989,033	2,076,851	2,519,220
OPERATING EXPENSES						
Pumping	160,260	76,935	78,894	81,576	84,350	87,218
Water treatment	30,927	26,917	27,568	28,505	29,474	30,476
Transmission & distribution	111,643	149,228	165,860	171,499	177,330	183,359
Customer accounts	49,933	65,781	67,162	69,446	71,807	74,248
Administration & general	316,627	496,453	507,750	531,014	549,068	567,736
Total Operation and Maintenance	669,390	815,314	847,234	882,040	912,029	943,037
Depreciation	400,304	430,178	456,671	537,296	641,746	718,696
Taxes	15,333	21,773	22,339	23,098	23,884	24,696
TOTAL OPERATING EXPENSES	1,085,027	1,267,265	1,326,244	1,442,434	1,577,659	1,686,429
NET OPERATING INCOME	\$ 382,656	\$ 213,563	\$ 422,966	\$ 546,599	\$ 499,192	\$ 832,791
Percentage Increase in Rates			32.00%	0.00%	4.50%	28.00%
Proposed Rate Increases *						
2023	-	-	-	-	-	-
2024	-	-	233,000	465,999	465,999	465,999
2025	-	-	-	-	-	-
2026	-	-	-	-	66,680	67,347
2027	-	-	-	-	-	420,490

* assumes 1/2 year impact in year of implementation for TY24 conventional rate case

Please refer to Accountants' Report, Summary of Significant Assumptions and Summary of Significant Accounting Policies

McFarland Water Utility

Rate of Return and Increase Suggested - Water
Actual 2022 - Forecasted 2027

Attachment 3

	Actual 2022	2023	2024	Forecasted 2025	2026	2027
Net Investment Rate Base	\$ 7,546,824	\$ 8,519,672	\$ 9,382,597	\$ 11,368,695	\$ 14,188,952	\$ 16,288,307
Operating Income- Regulatory Basis (A)	260,135	150,554	334,925	443,558	327,863	604,269
Rate of Return	3.45%	1.77%	3.57%	3.90%	2.31%	3.71%
Recommended Return - 6.20% (B)	468,000	528,000	582,000	705,000	880,000	1,010,000
Increase Required	\$ 207,865	\$ 377,446	\$ 247,075	\$ 261,442	\$ 552,137	\$ 405,731
Percent of Increase Required	14.72%	26.50%	14.61%	13.55%	27.38%	16.51%
Increase from Current Rates		26.50%	16.94%	17.86%	37.20%	26.97%
Proposed Increase			32.00%	0.00%	4.50%	28.00%
Rate of Return after Proposed Increase			6.05%	3.90%	2.78%	6.29%

(A) This is prior to the current year rate increase. Regulatory basis excludes depreciation on contributed assets and includes the tax equivalent and rent of water towers.

(B) The current authorized rate of return is 4.9%. While the utility may be eligible for up to a 6.2% rate of return, the recommended rate of return for this study was maintained at 6.0% due to the utilities existing resources and the ability to use debt for capital projects.

Operating Income- Regulatory Basis (A)	2022	2023	2024	2025	2026	2027
Net operating income (after increases)	\$ 382,656	\$ 213,563	\$ 422,966	\$ 546,599	\$ 499,192	\$ 832,791
Rent of Water towers (included in GAAP int inc)	71,986	69,295	66,442	63,418	60,214	56,821
GASB 68 Adjustment	(65,601)	-	-	-	-	-
Depreciation Expense- CIAC Plant	129,498	131,750	134,000	146,400	161,250	166,200
Tax Equivalent	(258,404)	(264,054)	(288,483)	(312,859)	(392,793)	(451,543)
	\$ 260,135	\$ 150,554	\$ 334,925	\$ 443,558	\$ 327,863	\$ 604,269

Please refer to Accountants' Report, Summary of Significant Assumptions and Summary of Significant Accounting Policies

McFarland Water Utility

Average Rate Base - Water
Actual 2022 - Forecasted 2027

Attachment 4

	Actual	Forecasted				
	2022	2023	2024	2025	2026	2027
Utility Plant in Service						
Balance - Beginning of year	\$ 10,432,611	\$ 11,594,372	\$ 12,636,972	\$ 13,659,022	\$ 16,894,369	\$ 19,580,535
Balance - End of year	11,594,372	12,636,972	13,659,022	16,894,369	19,580,535	21,651,679
Average Balance	11,013,491	12,115,672	13,147,997	15,276,695	18,237,452	20,616,107
Accumulated Depreciation						
Balance - Beginning of year	(3,371,902)	(3,531,864)	(3,676,392)	(3,893,363)	(3,961,666)	(4,174,328)
Balance - End of year	(3,531,864)	(3,676,392)	(3,893,363)	(3,961,666)	(4,174,328)	(4,520,313)
Average Balance	(3,451,883)	(3,604,100)	(3,784,900)	(3,927,500)	(4,068,000)	(4,347,300)
Materials and Supplies						
Balance - Beginning of year	19,450	19,450	19,450	19,450	19,450	19,450
Balance - End of year	19,450	19,450	19,450	19,450	19,450	19,450
Average Balance	19,450	19,500	19,500	19,500	19,500	19,500
Regulatory Liability						
Balance - Beginning of year	(45,644)	(22,823)	-	-	-	-
Balance - End of year	(22,823)	-	-	-	-	-
Average Balance	(34,234)	(11,400)	-	-	-	-
Average Net Investment Rate Base	\$ 7,546,824	\$ 8,519,672	\$ 9,382,597	\$ 11,368,695	\$ 14,188,952	\$ 16,288,307

Please refer to Accountants' Report, Summary of Significant Assumptions and Summary of Significant Accounting Policies

McFarland Water Utility

Capital Projects Forecast - Water
Forecasted 2023 - Forecasted 2027

Attachment 5

Water	2023	2024	2025	2026	2027	Total Project Cost
Network Equip	\$ 2,500	\$ 3,000	\$ 3,500	\$ 4,000	\$ 4,500	\$ 17,500
Leak Locator	35,000	-	-	-	-	35,000
Leased Equipment	8,000	8,000	8,000	8,000	8,000	40,000
Patrol Truck	65,000	-	-	-	-	65,000
Paulson Road	517,500	-	-	-	-	517,500
Paving and Utility Plan	504,500	20,000	-	-	-	524,500
Pickup Truck	12,000	57,000	-	15,000	16,000	100,000
Trailer	2,000	-	-	-	-	2,000
USH 51	50,000	-	-	-	-	50,000
Exchange Street	-	1,039,750	-	-	-	1,039,750
Well #5	-	-	3,320,000	-	-	3,320,000
Patrol Truck	-	-	80,000	-	82,500	162,500
Paving and Utility Plan	-	-	1,401,400	500,750	532,655	2,434,805
Egner Park Facility	-	-	-	425,000	-	425,000
CTH MN 5	-	-	-	882,250	-	882,250
Well #3	-	-	-	-	1,720,000	1,720,000
Well #4	-	-	-	1,200,000	-	1,200,000
Mains, Services, Hydrants	267,300	-	211,900	211,900	211,900	903,000
Total Capital Projects	\$ 1,463,800	\$ 1,127,750	\$ 5,024,800	\$ 3,246,900	\$ 2,575,555	\$ 13,438,805
Impact Fee Financed Projects (Wells)	\$ -	\$ -	\$ 1,254,960	\$ 81,000	\$ 86,000	\$ 1,421,960
Developers Financed	\$ 267,300	\$ -	\$ 211,900	\$ 211,900	\$ 211,900	\$ 903,000
Utility Financed	\$ 1,196,500	\$ 1,127,750	\$ 3,557,940	\$ 2,954,000	\$ 2,277,655	\$ 11,113,845
 Book Cost of Plant Retired	 153,900	 105,700	 322,593	 267,834	 206,511	 1,056,538
Total Additions Net of Retirements	\$ 1,309,900	\$ 1,022,050	\$ 4,702,207	\$ 2,979,066	\$ 2,369,044	\$ 12,382,267

Please refer to Accountants' Report, Summary of Significant Assumptions and Summary of Significant Accounting Policies

McFarland Water Utility

Plant and Depreciation - Water
Actual 2022 - Forecasted 2027

Attachment 6

2022 Depreciation Expense	\$ 302,820	129,498	Utility Financed Plant 1/1/22 (less land)	\$ 10,422,997	Contributed Plant 1/1/22 (less land)	7,674,104		
2022 Ave Depreciable Plant	\$ 11,003,878	\$ 7,674,104	Utility Financed 12/31/22 (less land)	11,584,759	Contributed Plant 12/31/22 (less land)	7,674,104		
Composite Depreciation Rate	2.752%	1.687%	Depreciable Plant	\$ 11,003,878	Depreciable Plant	\$ 7,674,104		
	Plant Additions	Depreciation Rates	Actual 2022	2023	2024	Forecasted 2025	2026	2027
Base Plant Jan 1, 2023- Utility Financed	\$ 11,584,759	2.752%	\$ 302,820	\$ 322,732	\$ 315,025	\$ 318,800	\$ 318,800	\$ 318,800
Base Plant Jan 1, 2023- CIAC	7,674,104	1.687%	129,498	129,500	129,500	129,500	129,500	129,500
Additions								
2023								
Utility Financed Projects	1,196,500	2.752%	-	16,450	32,900	32,900	32,900	32,900
Contributed Projects	267,300	1.687%	-	2,250	4,500	4,500	4,500	4,500
2024								
Utility Financed Projects	1,127,750	2.752%	-	-	15,500	31,000	31,000	31,000
Contributed Projects	-	1.687%	-	-	-	-	-	-
2025								
Utility Financed Projects	3,557,940	2.752%	-	-	-	48,950	97,900	97,900
Contributed Projects	1,466,860	1.687%	-	-	-	12,400	24,800	24,800
2026								
Utility Financed Projects	2,954,000	2.752%	-	-	-	-	40,650	81,300
Contributed Projects	292,900	1.687%	-	-	-	-	2,450	4,900
2027								
Utility Financed Projects	2,277,655	2.752%	-	-	-	-	-	31,350
Contributed Projects	297,900	1.687%	-	-	-	-	-	2,500
Depreciation charged to Sewer			(32,014)	(40,754)	(40,754)	(40,754)	(40,754)	(40,754)
Total Depreciation Expense			\$ 400,304	\$ 430,178	\$ 456,671	\$ 537,296	\$ 641,746	\$ 718,696
Total Retirements	(1,056,538)							
Plant Balance (net of retirements)	\$ 31,641,130							
Depreciation Expense- Utility Financed Plant			\$ 270,806	\$ 298,428	\$ 322,671	\$ 390,896	\$ 480,496	\$ 552,496
Depreciation Expense- CIAC Plant			\$ 129,498	\$ 131,750	\$ 134,000	\$ 146,400	\$ 161,250	\$ 166,200
CIAC Plant January 1			\$ 7,674,104	\$ 7,674,104	\$ 7,941,404	\$ 7,941,404	\$ 9,408,264	\$ 9,701,164
CIAC Plant December 31			\$ 7,674,104	\$ 7,941,404	\$ 7,941,404	\$ 9,408,264	\$ 9,701,164	\$ 9,999,064

Please refer to Accountants' Report, Summary of Significant Assumptions and Summary of Significant Accounting Policies

McFarland Water Utility

Revenues Forecast - Water (current rates)
Actual 2022 - Forecasted 2027

Attachment 7

	Actual 2022	2023	2024	Forecasted 2025	2026	2027
Residential						
Total Revenue	705,969	\$ 708,537	\$ 726,605	\$ 736,852	\$ 751,009	\$ 765,167
Volume Sold (MG)	147,467	147,229	150,171	153,112	156,054	158,996
Average Number of Customers	3,185	3,203	3,267	3,331	3,395	3,459
Revenue Per Customer	222	221	221	221	221	221
Volume Per Customer	46	46	46	46	46	46
Multifamily residential						
Total Revenue	61,750	65,783	72,178	69,831	71,855	73,879
Volume Sold (MG)	19,413	21,694	22,361	23,029	23,696	24,364
Average Number of Customers	63	65	67	69	71	73
Revenue Per Customer	980	1,012	1,012	1,012	1,012	1,012
Volume Per Customer	308	334	334	334	334	334
Commercial						
Total Revenue	86,433	89,477	92,762	91,142	91,974	92,806
Volume Sold (MG)	24,497	27,067	27,318	27,570	27,822	28,074
Average Number of Customers	214	215	217	219	221	223
Revenue Per Customer	404	416	416	416	416	416
Volume Per Customer	114	126	126	126	126	126
Public Authorities						
Total Revenue	29,477	35,009	38,378	37,131	38,192	39,300
Volume Sold (MG)	9,873	11,905	12,266	12,626	12,987	13,348
Average Number of Customers	28	33	34	35	36	37
Revenue Per Customer	1,053	1,061	1,061	1,061	1,061	1,061
Volume Per Customer	353	361	361	361	361	361
Private Fire Protection						
Total Revenue	52,161	50,934	54,024	54,616	56,457	58,298
Average Number of Customers	85	83	86	89	92	95
Revenue Per Customer	614	614	614	614	614	614
Public Fire Protection						
	472,300	472,300	472,300	472,300	472,300	472,300
Total Revenue	<u>\$ 1,408,090</u>	<u>\$ 1,422,040</u>	<u>\$ 1,456,247</u>	<u>\$ 1,461,872</u>	<u>\$ 1,481,787</u>	<u>\$ 1,501,750</u>

2023 forecasted customers to be consistent with the customer count on 5/31/2023.

2024 forecasted customers to be consistent with the customer count on 5/31/2023, adjusted for the 5-year average change in customer numbers.

Forecasted consumption to be consistent with the consumption per customer for the previous 12 months.

Please refer to Accountants' Report, Summary of Significant Assumptions and Summary of Significant Accounting Policies

McFarland Water Utility

Expenses Forecast - Water (GAAP basis)
Actual 2022 - Forecasted 2027

Attachment 8

	Actual 2022	Forecasted				
		2023	2024	2025	2026	2027
OPERATING EXPENSES						
Pumping	\$ 160,260	\$ 76,935	\$ 78,894	\$ 81,576	\$ 84,350	\$ 87,218
Water treatment	30,927	26,917	27,568	28,505	29,474	30,476
Transmission & distribution *	111,643	149,228	165,860	171,499	177,330	183,359
Customer accounts expense	49,933	65,781	67,162	69,446	71,807	74,248
Administration & general	316,627	496,453	507,750	531,014	549,068	567,736
Total Operation & Maintenance	669,390	815,314	847,234	882,040	912,029	943,037
Depreciation expense	400,304	430,178	456,671	537,296	641,746	718,696
Taxes-FICA	15,333	21,773	22,339	23,098	23,884	24,696
TOTAL OPERATING EXPENSES	\$ 1,085,027	\$ 1,267,265	\$ 1,326,244	\$ 1,442,434	\$ 1,577,659	\$ 1,686,429

Forecasted 2023 and 2024 are based on the Test Year 2024 Rate Study and thereafter are inflated at a rate of 3.4% annually.

* Changes in expenses beyond inflation include the following:

- \$12,500 of tower painting in transmission & distribution in 2023 and \$26,042 in 2024

-\$6,000 T24 Rate Study in 2023, 2024 & 2025

McFarland Water Utility

Debt Coverage - Water

Actual 2022 - Forecasted 2027

Attachment 9

	Actual 2022	Forecasted 2023	Forecasted 2024	Forecasted 2025	Forecasted 2026	Forecasted 2027
Actual Defined Earnings						
Operating Revenues	\$ 1,467,683	\$ 1,480,828	\$ 1,749,210	\$ 1,989,033	\$ 2,076,851	\$ 2,519,220
Add: Interest income	123,185	126,204	128,728	131,303	133,929	136,607
Less: Operation and Maintenance Expenses	669,390	815,314	847,234	882,040	912,029	943,037
Taxes Other than Equivalent	15,333	21,773	22,339	23,098	23,884	24,696
	<u>\$ 906,145</u>	<u>\$ 769,945</u>	<u>\$ 1,008,365</u>	<u>\$ 1,215,197</u>	<u>\$ 1,274,867</u>	<u>\$ 1,688,094</u>
Required Defined Earnings						
Subsequent Year Principal and Interest Payment- Revenue Debt	230,299	\$ 228,954	\$ 228,781	\$ 228,436	\$ 227,918	\$ 227,228
Subsequent Year Principal and Interest Payment - Proposed Debt	-	-	401,716	401,716	701,149	701,149
Subtotal	<u>230,299</u>	<u>228,954</u>	<u>630,497</u>	<u>630,152</u>	<u>929,067</u>	<u>928,377</u>
Required Coverage Factor	<u>1.25</u>	<u>1.25</u>	<u>1.25</u>	<u>1.25</u>	<u>1.25</u>	<u>1.25</u>
	<u>\$ 287,874</u>	<u>\$ 286,193</u>	<u>\$ 788,121</u>	<u>\$ 787,690</u>	<u>\$ 1,161,334</u>	<u>\$ 1,160,471</u>
Excess (Shortage)	<u>\$ 618,271</u>	<u>\$ 483,752</u>	<u>\$ 220,243</u>	<u>\$ 427,507</u>	<u>\$ 113,533</u>	<u>\$ 527,623</u>
Actual Coverage Factor		<u>3.36</u>	<u>1.60</u>	<u>1.93</u>	<u>1.37</u>	<u>1.82</u>

Please refer to Accountants' Report, Summary of Significant Assumptions and Summary of Significant Accounting Policies

	2015	2017	2019	2020	2022	2024	2026	Annual
	G.O. Promissory Note	G.O. Promissory Note	G.O. Promissory Note	G.O. Promissory Note	Revenue Bonds	Estimated Revenue Bonds	Estimated Revenue Bonds	Debt Service
2023	187,578	79,900	100,800	78,400	230,299	-	-	676,977
2024	188,978	83,400	104,100	77,350	228,954	-	-	682,782
2025	-	91,800	101,400	76,300	228,781	401,716	-	899,997
2026	-	-	103,700	80,250	228,436	401,716	-	814,102
2027	-	-	100,850	78,750	227,918	401,716	299,433	1,108,667
2028	-	-	103,000	77,250	227,228	401,716	299,433	1,108,627
2029	-	-	-	76,125	226,365	401,716	299,433	1,003,639
2030	-	-	-	-	229,644	401,716	299,433	930,793
2031	-	-	-	-	228,264	401,716	299,433	929,413
2032	-	-	-	-	226,710	401,716	299,433	927,859
2033	-	-	-	-	229,299	401,716	299,433	930,448
2034	-	-	-	-	228,824	401,716	299,433	929,973
2035	-	-	-	-	228,220	401,716	299,433	929,369
2036	-	-	-	-	227,487	401,716	299,433	928,636
2037	-	-	-	-	229,213	401,716	299,433	930,362
2038	-	-	-	-	230,594	401,716	299,433	931,743
2039	-	-	-	-	227,314	401,716	299,433	928,463
2040	-	-	-	-	228,177	401,716	299,433	929,326
2041	-	-	-	-	228,695	401,716	299,433	929,844
2042	-	-	-	-	228,918	401,716	299,433	930,067
2043	-	-	-	-	-	401,716	299,433	701,149
2044	-	-	-	-	-	401,716	299,433	701,149
2045	-	-	-	-	-	-	299,433	299,433
2046	-	-	-	-	-	-	299,433	299,433
Totals	376,556	255,100	613,850	544,425	4,569,340	8,034,320	5,988,660	20,382,251

(A)

(B)

(A) Forecasted Revenue Bond issue of \$5,225,500 bearing an interest rate of 4.5% annually for 20 years

(B) Forecasted Revenue Bond issue of \$3,895,000 bearing an interest rate of 4.5% annually for 20 years

McFarland Water Utility
Taxes - Water
Actual 2022 - Forecasted 2027

Attachment 11

	Actual	Forecasted				
	2022	2023	2024	2025	2026	2027
Water						
Plant in Service - January 1	\$ 18,184,651	\$ 19,346,412	\$ 20,656,312	\$ 21,678,362	\$ 26,380,569	\$ 29,359,635
Held for Future Use - January 1	224,112	224,112	224,112	224,112	224,112	224,112
CWIP	22,736	64,902	29,213	29,213	29,213	29,213
Materials and Supplies	19,450	19,450	19,450	19,450	19,450	19,450
Assessable Plant	18,450,949	19,654,876	20,929,087	21,951,137	26,653,344	29,632,410
Assessment Ratio	95.12%	99.11%	99.11%	99.11%	99.11%	99.11%
Assessed Value	17,550,340	19,480,713	20,743,633	21,756,626	26,417,167	29,369,835
Mill Rate (A)	14.7236	13.5547	13.9071	14.3799	14.8688	15.3744
Tax Equivalent	258,404	264,054	288,483	312,859	392,793	451,543
1994 Tax Equivalent Floor	78,428	78,428	78,428	78,428	78,428	78,428
Larger of two lines above	258,404	264,054	288,483	312,859	392,793	451,543
Less local & school tax equivalent on meters charged to sewer department	5,927	9,955	10,214	10,561	10,920	11,291
Net property tax equivalent	252,477	254,099	278,269	302,298	381,873	440,252
Social Security	19,998	20,838	21,380	22,107	22,859	23,636
PSC Remainder Assessment	1,262	1,315	1,349	1,395	1,442	1,491
Total Water Tax Expense	<u>\$ 273,737</u>	<u>\$ 276,252</u>	<u>\$ 300,998</u>	<u>\$ 325,800</u>	<u>\$ 406,174</u>	<u>\$ 465,379</u>
2022 Mill Rate Computation (A)	Total	Utility				
State	0.0000	N/A				
County	2.6254	N/A				
Local	5.7824	5.7824				
School	8.2094	8.2094				
Vocational	0.6959	0.6959				
Gross Tax Rate	17.3131	14.6877				
School Credit	-1.3356	-1.1330				
Net Tax Rate	<u>15.9775</u>	<u>13.5547</u>				
2022 Assessment Ratio	0.9512					

Please refer to Accountants' Report, Summary of Significant Assumptions and Summary of Significant Accounting Policies