



OFFICIAL NOTICE AND AGENDA
of a meeting of a City Board, Commission, Department
Committee, Agency, Corporation, Quasi-Municipal
Corporation, or Sub-unit thereof.

A Meeting of Wausau Water Works Commission will be held in the
Council Chambers, 1st Floor City Hall, Wausau, WI 54403 at 1:30 p.m. on
Tuesday, June 1st, 2021.

Members: Katie Rosenberg (President), Dawn Herbst, Jim Force, Joe Gehin, John Robinson

AGENDA

1. Approve Minutes of May 5, 2021 Meeting.
2. Director's Report on Utility Operations
 - DWTF Update.
 - Accepted Position of the Distribution Maintainer/ Relief Operator.
 - LSL Funding Update.
 - Spring Flushing Update.
 - Locates.
 - AT&T Equipment.
 - WWTF Update.
 - Wastewater Treatment Plant Permit Limits.
 - Open Position for Wastewater Plant Mechanic and Sewer Maintainer.
 - Locates.
 - Wastewater Plant Upgrade- Donohue Progress Report Attached.
 - Spring Sludge Spreading Operation.
 - Commission and City Council Tour Provided in April.
 - Strand and Associates Update.
3. Discussion and Possible Action with Updates from Clark Dietz on the Ownership/Partnership with WPS Related to Solar.
4. Discussion and Possible Action on the LSL Replacement Program.
5. Discussion and Possible Action on the 2022-2026 Capital Budget.
6. Update on Rain Barrels.
7. Discussion and Possible Action Regarding the Wastewater Compliance Maintenance Annual Report.
8. Discussion of PFOS Sampling of Drinking Water, Wastewater Influent, Effluent and Bio Solids.
9. Discussion and Possible Action on the Date of our Next Water Works Commission Meeting.

Adjourn.

**Next meeting scheduled for July 13th 2021 at 1:30 P.M.*

THIS NOTICE POSTED AT CITY HALL AND EMAILED TO CITY PAGES AND DAILY HERALD: May 27, 2021 at 11:00 a.m.

Due to the COVID-19 pandemic, this meeting is being held in person and via teleconference. Members of the media and the public may attend in person, subject to the social distancing rules of maintaining at least 6 feet apart from other individuals, or by calling 1-408-418-9388. The Access Code is 187 723 2730 and the password is 2c5yQRPgWM7. Individuals appearing in person will either be seated in the Council Chambers or an overflow room, subject to the social distancing rules. Space available will be on a first come, first served basis. All public participants' phones will be muted during the meeting. Members of the public who do not wish to appear in person may view the meeting live over the internet at <https://tinyurl.com/wausaucitycouncil> on the City of Wausau's YouTube Channel https://www.youtube.com/channel/UC-Nigpdco_i8sq5FbbJD_aw and live by cable TV, Channel 981. Any person wishing to offer public comment who does not appear in person to do so, may e-mail michelle.weasler@ci.wausau.wi.us with "Water Commission public comment" in the subject line prior to the meeting start. All public comment, either by email or in person, will be limited to items on the agenda at this time. The messages related to agenda items received prior to the start of the meeting will be provided to the Chair.

In accordance with the requirements of Title II of the Americans with Disabilities Act of 1990 (ADA), the City of Wausau will not discriminate against qualified individuals with disabilities on the basis of disability in its services, programs or activities. If you need assistance or reasonable accommodations in participating in this meeting or event due to a disability as defined under the ADA, please call the ADA Coordinator at (715) 261-6590 or ADAServices@ci.wausau.wi.us to discuss your accessibility needs. We ask your request be provided a minimum of 72 hours before the scheduled event or meeting. If a request is made less than 72 hours before the event the City of Wausau will make a good faith effort to accommodate your request.



Minutes of May 5, 2021

A meeting of the Wausau Water Works Commission was called to order at 9:41 a.m. in City Hall on Wednesday, May 5, 2021. In compliance with Wisconsin Statutes, this meeting was posted and receipted for by the Wausau Daily Herald on April 30th, 2021.

Members Present: President Rosenberg, Commissioners Robinson, Herbst, Force, Gehin.
Others Present: Eric Lindman, Scott Boers, Valerie Swanborg, Ann Jacobson, Toni Vanderboom- via Webex, Dave Schneider/ WPS, Kelly Zagrzebski/ WPS, and Jeff Klarer/ WPS via Webex.

1) Approve Minutes of April 13, 2021 and April 20, 2021 Meeting.

Gehin moved to approve the minutes of the April 13, 2021 and April 20, 2021 meeting.
Seconded by Herbst.

Robinson stated an amendment on page 2 right before paragraph 3 is needed regarding the American Rescue Plan. The last sentence to replace city with county, delete in this goal and replace for to all, and adding municipalities after county. This was provided to secretary and a motion was moved to amend correction.

Motion to approve the minutes amended, motion carried 5-0.

2) Director's Report on Utility Operations.

Lindman advised on the updates of the drinking water facility and wastewater facilities that were in the packet along with funding report. He asked if any commissioners had any questions and apologizes that Erickson couldn't make it today but will answer any questions as best he can.

Gehin states he is interested in the changes to the general permit for the water but he will do some homework and we can discuss this later.

Lindman agrees.

3) Discussion and Possible Action Regarding the Purchase of a ½ Ton Pickup. Quotes opened at the 4/27/21 Board of Public Works Meeting. Staff recommends purchase of the vehicle from Fred Mueller GMC.

Herbst motion to approve the purchase of the GMC. Seconded by Robinson.

Force asked if we had other GMC trucks.

Boers replied saying we do have others GM but not GMC's as they were typically higher in price than other providers/vendors in the city before. All three vehicles meet spec, however, this one has additions included that made it more attractive and is the lowest price.

Motion to approve the purchase of the GMC, motion carried 5-0.

4) Discussion and Possible Action Partnering with WPS on the Proposed Solar Array at 1010 Bugbee Ave.

Please refer to attached documents in the packet for the presentation by WPS (Wisconsin Public Services).

Lindman introduces Kelly Zagrzebski and Dave Schneider who were present from WPS.

Zagrzebski introduces Jeff Klarer (Marketing Strategist) who is from Milwaukee is joining us through Webex who will walk us through the presentation.

Klarer introduces the WPS NatureWise Renewable Energy Program and starts by stating this is an affordable way to invest with no need to make significant changes or purchases of equipment. This will support continued production and expansion of local renewable energy resources. WPS would enter into a land lease with Wausau Water Works for the development of a 1-MW solar field. We would recommend a lease term of at least the life of the facility and negotiate land lease terms of other facilities. WPS would work with a developer on engineering, procurement and construction of the solar facility. WPS would own the solar facility within NatureWise renewable energy program and be responsible for ongoing operations and maintain it. Klarer goes over the comparison of owning the solar field to NatureWise renewable energy program. We are proposing the Wausau Water Works enter into a contract under NatureWise tariff for roughly the annual output of the solar facilities. We'd like to suggest the term of at least 20 years. The current rate cost would be \$2.40 per 100 kWh per month. Bringing the annual cost of \$48k. So the net cost would be \$48k minus the negotiated land lease payment. The next steps would be to have a notice of interest in leasing the property, then the notice of interest in NatureWise Program for full 20 year minimum commitment of water utility.

Zagrzebski asks if there were any additional questions and introduces that Dave Schneider who is the senior service manager present with us who would be answering questions as well.

Force questions if they have done this anywhere else.

Zagrzebski states this is the first of this type of partnership direct with an entity.

Force asked if there were any references on previous built and operated solar.

Zagrzebski replies two creeks located by two rivers. We have a fairly large one we are building in Dane County.

Robinson asks if \$48k annual cost is just for the system or if it was the anticipated electric cost based on current utilization.

Zagrzebski replies it would be cost for NatureWise on top of general cost of the electric cost for the facility.

Schneider adds to this stating we are currently on CG 20 rate. NatureWise Program has an addition increase cost of 2.4 cents per kWh. You'd buy 100 kWh blocks of NatureWise. We'd ask that the city purchase enough NatureWise blocks to amount for the load for the drinking water site to say we are 100% green at the drinking water site. Power sent to grid and used within NatureWise program. We are not opposed to adding additional accounts to the agreement for example well sites that could be included into the package in the future. As long as there are enough solar area to offset the drinking water site and the well sites then we can in essence say we are 100% green.

Robinson asks how the 2.4 cents per kWh compare to what the current rate is.

Schneider replies this is where the \$48k figure came in using the 2.4 cents per kWh. This is above what you normally pay.

Robinson replies so if we are going green, we would have a surcharge of \$48K for using that NatureWise Program?

Schneider replies yes, so taking the \$48k and subtracting the lease payment WPS will be

paying on the property that the solar farm would be on.

Force questions if we would own the property and lease it to WPS.

Schneider replies yes, WPS will make monthly payments.

Force asks if this will offset the \$48k in cost.

Schneider replies yes. The \$48k is just a mark in time.

Robinson asks Lindman what the kWh cost would be in installing the solar panels ourselves.

Lindman replies they've already done the capital cost.

Robinson states he is asking the question regarding the operation. He states he is intrigued by the idea but in our due diligence to the rate payers, states we need to look at NatureWise and WPS vs our own ownership and to look at what our cost is and compare it to one another over the 20-30 years- the life of the system. He asked if there was any way for us to estimate what our cost would be in producing kWh incorporated capital and operational cost for our ownership of the system.

Lindman replies yes there is.

Robinson states we would need that for a comparative analysis. We have that obligation going forward to do that comparison. He asked if that would require additional discussions with WPS and what the value of the land is from a lease perspective and where the NatureWise credits/cost comes in vs us doing the install and how soon can we have the operational lifetime and building and capital and operational maintenance cost. He then asked if that is part of the contract with Clark-Dietz?

Lindman replies yes, they have been looking at the O&M cost from the last meeting that they made the presentation on. I haven't received what the annual cost would be.

Force states these are great questions but implies that it is best to use the time this morning to ask questions specific to WPS' proposal. He states he is intrigued about last month's presentation by the solar company about the 2 million kWh per 12 months which states he believed would provide 57% of the estimated load for the new water plant exclusive of wells. He asks if WPS was on board with those numbers.

Lindman states that what WPS is offering is that we will generate as much power as we can from the field that is built which goes back to the grid. We will purchase what we need for the facility. Our solar array may not provide all of that power and the utility may purchase additional power from other solar fields WPS has in operation. It is a different concept. Initially we talked about building a 1 megawatt facility and whatever that generated we would use and if there were excess it would go back to the grid or just not get used.

Schneider stated he pulled a three year history on the existing drinking water site pulling 1.7 million kWh so 2 million kWh is a really realistic number.

Gehin asks if we went with WPS' program, we wouldn't be investing any money correct?

Schneider replied yes, WPS would own, operate and maintain that site moving forward but not own land.

Gehin asks if we would be issuing any contracts.

Schneider replied no, the engineering will be done internally by WPS.

Gehin states he is a bit fuzzy about the program and it seems like a win-win but will have to discuss this if we are not too sure yet.

Schneider states we can discuss after the meeting because there are a lot of details here.

Force asked if WPS has looked at the Sunvest's (competitors) proposal regarding the difference of installation time or if they were on the same wavelength as them.

Klarer answers and says they have a great working relationship with SunVest and there is a high probability that they would use SunVest as the project developer.

So it would be SunVest developing the project and then either you owning it or us owning it.

Gehin asks how much we pay for our power plant now. Is it \$2k to \$3k/month? He states he'd like to see what we are paying now and what we would be paying if we were under this program with WPS otherwise it seems difficult.

Schneider states at the existing water site for the three years he pulled, we were averaging about \$10k to \$12k/month.

Gehin states he would like to see what we would be potentially paying if we were under the program.

Schneider replies saying this will boil down to the land lease agreement which will have the biggest impact.

Robinson asks if they have kWh rate.

Schneider replies saying he didn't, but states the utility has two components to the rate we are on. There's a demand and then a kWh component. You have to take your annual cost and divide it by the number of kWh to get the average which has not been done but could be done.

Gehin states that there used to be a program that we could shed the use of our electricity through a generator but that saved the city of Wausau Water Works a lot of money.

Schneider states he knows the program and that they still have that program.

Lindman asks if the Commission was to move forward with this, is the 2022 construction time frame still ok.

Klarer replies that would still work well after reading the minutes from when SunVest was talking. They can still maintain timeframe/timeline looking at construction of the facility.

Force asks if the O&M cost would be theirs and there would be no additional fees to us.

Schneider replies yes.

Robinson asks if we need to direct staff to work with WPS for the purposes of the agreement and if they would be bringing that back to us.

Rosenberg reiterates we could do that to make sure the Commission has the information it needs to make a decision.

Robinson moved to have staff engage and continue to work with WPS and develop a partnership with the operation of the solar array.

Rosenberg states we have a motion to move forward with WPS in talking about the partnership of developing a solar array. Seconded by Force.

Robinson asks when they would be able to get the report from Clark- Dietz.

Lindman replies to set the expectation for the next meeting so there could be a final decision by then.

Motion to approve the move forward with the partnership and discussion with WPS. Motion carried 5-0.

5) Discussion and Possible Action on Options Moving Ahead with LSL Replacement City Wide.

Lindman starts that there has been some discussions in the past three/four years on the lead service line replacements in the city and the utility has received some grant funding through DNR and we have been doing 80-100 replacements annually. When we had talked at these meetings on how we could better do these replacements or shorten timeline and remove lead quicker, we looked at various organizational type set ups we could do and what the options are to us. He states upon working with staff, some memos were put together and there were three options and there could be some hybrids of the options, but this could be a starting point of how the organization could go forward.

We feel that at some point in the near future we would be pushed to make lead line removal mandatory. We've outlined what staff are working on now and moving through. He states he would like to know what the thoughts of the Commission are moving forward in the next couple of weeks. We need to find some direction on the avenues we are going to pursue in the next two to three years especially if there will be some funding available to support the utility to do this and particularly having a structure in place might help when we apply for those funds in how we do this.

Force applauded the city for recognizing this issue and moving in this direction on the statement of 80 plus years to remove lead service line from the city that from the public health perspective is unacceptable. We are bound to move at a quicker pace. If the utility performs the work and would have to hire three new employees and new equipment, what would that cost be to the city and if we anticipate federal or state or both financial assistants, would that cost be covered by the assistance we would receive? Not sure if the Biden infrastructure bill will be passed, I think it will be on a negotiated bases without any support from the other party so money would be available but what that cost would be and if that's the best approach, we would gain five years in replacing lead service line by doing it ourselves. Would that harm a lot of local plumbing who are relying on this work for their financial success?

Lindman replied that there were revisions but in talking with Boers, recommendations were that we could put a crew together but we would need 4 FTEs and it would be close to \$2 million annually overall. He states we don't know how the funding approvals would take place, if it would be just replacement and construction costs or if we would be able to pay our own people salaries with the funding. He didn't know what the restrictions would be on that funding but at least it would be on the construction of the replacements of those lines along with our side and hopes not just the private side. Lindman asks what the second question was.

Rosenberg replies that it was politics.

Force replies that he doesn't know if anyone would know the answer of the likelihood that we would get any assistance.

Rosenberg replies saying the American Rescue Plan seems to point to this kind of a project so it's something we could suggest to use part of the city's allocation on this but the one concern is if it's an ongoing expense that we are paying for with this one time money although with the infrastructure it could be a hundred years.

Lindman reiterates that Force asked about the local plumbers. The challenges at this point is that we require the homeowners to volunteer for the program, if they say yes they'd like to participate then we provide them the information, then they have to go out and get the bids on their own. They struggle to get the bids from the plumbers and that's really the pinch point for us. There are others interested but they make a few phone calls and nobody gets back to them, they just kind of fall off the radar and it doesn't get followed through.

Robinson asks if there was any action required here.

Lindman doesn't think so unless there was something different to dive deeper on but from his perspective was just showing the Commission what staff is looking at or if Commission wanted to pursue something or a hybrid of the options. He states we can look at other municipalities to see how they've done it and we could continue to bring information back and maybe we could narrow it down.

Force states he supports what we have here and thinks it's great.

Robinson indicates that under utility performed work you have 300 lines, is this higher because you wouldn't achieve in 15 years at a 300 per year basis.

Lindman states Robinson is correct. We were running through a couple of these iterations when we were going through this with Boers. Lindman states he might've had some of the timeline error on his end and apologizes.

Robinson questions if it is a higher number or a longer period.

Lindman replies longer period. Not a higher number of lead service lines. With one crew. He thinks 300 is challenging, we had calculated 7 months a year that's 170 days or so of working.

Boers states it would take 708 replacements to meet a 12 year schedule and that's all year because we are blessed with extreme frost for about 4 to 5 months a year which would cut our production down considerably and drive our costs up if we want to challenge winter with these replacements. When we calculated this out, we looked at about 7 or 8 months a year depending on weather and averaging one and a half to two a day would be probably running good. 300 replacements are pretty fairly optimistic for a year.

Lindman says 15 years was a typo and it should have read 30 years.

Force asks to see how we would prioritize this and if we'd be going through neighborhoods and one block after another or selective to sections of the city we wanted to attack first.

Boers replies if we did a mass replacement, it would be most cost beneficial to do them in block areas or in smaller bunched areas or groups within residential specified streets so that having the paving company come in a pave one street is better than having patches all over the entire city.

Force asks if we would anticipate any resentments from the homeowners.

Lindman replies yes, especially if there wasn't enough money to cover the private side, then it would be beneficial if the Commission would consider an ordinance for mandatory replacement at the same time. With one crew trying to run 300 replacements a year it would be anticipated the street reconstruction projects would also replace some LSL's annually. A lot of what's driving our street projects are the utilities so those are some high priority areas.

Force asks if we have an estimated cost of the replacements between \$3k and \$5k, the remainder goes to the homeowner's, what are some of the remainders as he's always thought \$5k was a top number.

Boers replied stating it depends. Wausau was lucky to have some of the highest replacement costs for one lateral in the state. He thinks it was just over \$18k or \$19k. There was a considerable amount of rock and the way the driveway was situated there was a lot of replacements. Because we are given the two numbers \$3k and \$5k, we are averaging \$4,500.00 for a replacement on the homeowner's side. Cities like Milwaukee and Madison are coming in at just under \$2,000.00. We do have a higher cost here.

Force asks then our experience would be that \$3k to \$5k would cover?

Boers confirms that is correct.

Gehin asks if we are digging the sewer laterals or pushing/pulling them through to avoid since we are in the trench. If you wanted to replace the sewer lateral, would that be a

timing issue?

Boers replied that the funding right now is for the private laterals cannot include sewer but the plumbers are doing most of the sewers along with them at an extra cost to the homeowner.

Gehin states the reason he is asking that question is because there are still plenty of work with the private side and we always refrain from doing any plumbing in somebody's basement to minimize our risk if it failed in the future that we could be sued for but it would still be a nightmare for those coordinating to get the private plumbers to do what we consider things we shouldn't be doing for them or that sewer lateral.

Force states the in-home work is going to be enough to keep the plumbers busy because that's where a lot of the lead comes from.

Gehin states the sewer lateral is being done by them as it is now.

Force asks if this is all an open trench.

Boers replies not always, there are a couple of contractors in town that aren't pulling services or systems.

Robinson asks if the issue here is for the Commission to set a goal on when we would want lead service lines updated and if that's it, do we want to pick a time, 12 or 15 years by 2035 and leave it to you (Lindman) to develop a plan.

Lindman states we can do that and set a timeline and then we could see what's realistic to meet that point.

Force states it also depends on funding too correct.

Robinson replies if the mandate is coming down from the feds, is it funding or can we have a push for funding? That could drive our strategy. We have a goal because we are truly concerned about public health and welfare we know that lead lines are a source of lead for children. Do we want to articulate a goal of 15 years from today that we would want to have all lead service lines free of lead and develop a plan to achieve that working with congressional/state delegations to obtain order and funding, but we would want to start with a goal. He asks to move that we have a goal set in replacing all service lines by 15 years. Seconded by Force.

Gehin states he doesn't disagree with setting the goal, but because it's unknown of the funding, so if we set that goal, we can change that goal as it's not the end of the world but feels he'd still like to know more and he feels kind of reluctant to do this but it doesn't mean he won't support this at the next meeting.

Robinson states whatever the staff brings back as additional information at the next meeting can be discussed.

Rosenberg recaps saying we would like that goal as we are looking at what the plan is to reach that goal and what it looks like from staff. Is a month long enough to look at that.

Lindman replies yes we can look at bringing this back even just to look to see if there is an update. If we are looking at a 15 year goal, we can take a look and finalize some numbers and get feedback from some other communities as well to see how we are comparing.

Robinson moves to set a 15 year goal.

Motion to approve staff come back with a 15 year replacement plan for lead laterals.
Motion carried 4-1.

Gehin states for record, having lead is a potential risk but based on our testing, it's not

totally true that the lead service lines are causing the lead because the test shows it isn't, I don't want to leave the message as a scare tactic and ask if Boers can qualify that.

Boers replies no, for lead lines we do have very low lead results. In fact, we've had higher lead results from copper lines with lead solder in the city with our treatment, so not as a scare tactic but no amount of lead is a good amount of lead.

6) Discussion and Possible Action on 2021 Water & Wastewater CIP Projects.

Lindman states we are getting into our capital budget season to update our capital project programs. We are looking at our current year and we are getting close to mid-year. Each year we review at this time to make sure we are within our budget related to what was approved. Right now with our projects we are within budget or below on what has been approved for both water and wastewater. He wanted to update the Commission that on the wastewater side we still had some engineering studies needing to bid out for the lift stations and still have our force main access points project on the industrial park lift station and then the cleaning yet to do this year but those projects are moving forward. Our street projects have been bid out we have 2nd Street from Short to Dekalb approved but the council changed where the CDBG funds are going so now it will be on McIntosh St. We are trying to finalize the cost on the sewer on that side so it may be up or down depending on the final decision. CIP lining projects on sewer side, we televised 2,000 or 3,000 feet of 24 and 30 inch interceptor lines and that would be where our focus would be on the slip lining. Our focus is on the H₂S issues, so we will try to finalize those and get estimates. On the water side we made a few adjustments and with the purchase of 1010 Bugbee approved by the city council we are moving forward with that too and funded that with our capital budget. We reduced the cost of some of things we were not going to do. He asks if Boers remembers any other changes to the water side.

Boers replies we just took some reductions and put it toward the purchase of the property and reallocated some funds towards the Elm Street line items

Lindman states the Elm Street main had old steel pipe, there is some development going on there so we wanted to complete this work before making any other connections on that line.

Gehin asks if we do 2,000 feet of the larger interceptor pipe, it would cost \$200 per foot, if that's the case, we can get that worked on those interceptors that are failing.

Lindman answers we are getting budget numbers about \$180 so we are good on that.

Gehin suggests we carry this over for the future meeting.

Lindman states he will bring this back and will show 2021 with the 5 year capital plan that will go out to 2026.

7) Discussion and Possible Action on Disconnection of Water Main and Booster Station Serving the Village of Maine (Former Brokaw Area).

Lindman provided a short memo on the Village of Maine having a full start up on their water supply and they are serving the former Brokaw Area. We have shut the valve and booster station down, giving them a couple of weeks to make sure they don't have any significant issues. We plan on moving ahead and doing a hard disconnect from the booster station on the watermain. We don't want to be connected to a 3 mile dead end line. There is a potential of contamination and this line is owned by the Village of Maine. Boers will be working with an engineering firm to see if we could use the booster station pumps at another

booster station and save some money. The Monroe Station has been on the capital list for the past few years.

Gehin states he has never envisioned that being gone but the intent of this makes a lot of sense but in the future if something happens with the Village of Maine, they will have to reinvest in the replacement of those pumps back in service.

Gehin moved to proceed with the service disconnection. Seconded by Robinson.

Motion approved 5-0.

8) Discussion on PFAS/PFOS Compounds in Wisconsin.

Robinson presented on publication by GreenFire which is a group committed to conservation EFA is trying to bring science back into discussion on public policies working with legislature and state agencies and the general public. PFAS are polyfluoroalkyl substances invented in 1930's. Over 5,000 fluorinated compounds developed since 1940 that are known as "forever chemicals" due to molecular structure which takes thousands of years to degrade. PFAS can be found in many areas including food packaging, processing, microwave popcorn containers, cook ware, cleaning products. In 1960's the department of Navy over fires and combat missions and training exercises that lead the development of aqueous film forming foam for fire suppressions, lead some of the more common ones such as polyfluoroalkyl and PFAS and PFOS's we see in Wisconsin today. In 1970's it was expanded to athletic ware and seen in larger devices as cell phones, tablets and conductors. Sources of PFAS in environment shows the way it gets transported through air emissions, wastewater, solid wastes and product breakdown. PFAS is found in drinking water, ground water, surface water through releases, manufacturing processes, landfill, influent, affluent and bio solids and gets into rain water through complete combustion and goes into the soils resulting in it going into living organisms such as fish and animals, deer and humans. They tend to bind in the proteins in the liver and they bio accumulate and bio magnify which increases toxicity in organisms they tend to bind. Since 1999 the CDC National Health and Nutrition examinations found up to 12 PFAS in the blood serum of studies participants over the age of 12. The CDC has found high levels of PFAS reduced antibodies response to vaccines and reduce infectious disease resistance which is critical. This increases risk for testicular cancer, increased levels of cholesterol, Parkinson's disease, decreased fertility and lower birth rate. Many studies have showed that low income and the communities of color are most likely to be near PFAS contaminated sites. The presence of the PFAS present in Wisconsin resulted in the issue of Health Advisories by the Department of Health Services. There are Fish and Water Advisory with Starkweather Creek and Lake Monona in the Madison are for Blue Gill, Carp, Large Mouth Bass, Walleyes, yellow Perch. Limit on fish consumption Smelt in Lake Superior and for drinking water at JCI Tyco in Marinette and an interim drinking water advisory in French Island next to LaCrosse airport. There was a five mile advisory due to deer liver advisory to not eat the deer liver. PFAS are everywhere as they are water soluble and move easily in the environment. 34 major US cities have had their water impacted across Rhinelander and Wisconsin. 1/2 of our contact comes from food or its packaging. A month ago there were 63 known sites, there are currently 69 so they are finding more and more sites. A map show the locations they are finding them. Former landfills and Hudson area many associated with airports and defense facilities in the state. There are a number of challenges associated with PFAS prevalence of products even if the

production would stop today the world would live with them forever because they are so strong they don't break down. The products they are attached to break down but they don't. They still have longevity and health concerns even though some of them are short changed with only eight or nine molecules. The science over PFAS is emerging as far as how it effects human health and the environment and are looking at rates in the parts per trillion.

There's a lack of regulations EPA has been slow to address PFAS. In 2000 EPA regulated PFAS under the substance control act and had a health advisory for drinking water at 70 parts per trillion. Department of Health services recommended a rate of about 20. EPA has issued a lifetime advisory on PFAS but the lack of federal action resulted in a different approach across the state where US is much further behind the European union relative to the regulation on PFAS. There are different regulatory standards which make it difficult for different to the industries to address it. Industries have twice the number of concerns. Wastewater treatment plant says we didn't produce it we are just passing it through it comes into our influent and goes to our affluent. Landfills say it's in our leachate we didn't generate it. There are concerns relative to regulations getting ahead of the science. We don't have a good science but it is emerging. Some have argued that the standards are openly conservative based upon the same risk analysis that other chemicals are manufactured. Manufacturers have slowly phased out PFOS, one of those firefighting foams in 2002 and eliminated emissions for PFO in 2015. In Wisconsin, commerce raised concerns in relative to regulation of PFAS, there was a bill to band firefighter use of foam and they opposed portions of the bill. They sued/filed a complaint against the DNR for doing a water sampling at the wastewater plant in February this year that was settled. Sampling will occur but the results will not be announced. Challenging the department on PFAs and the regulations as a hazardous substance. No sustainable approach right now for the life of that product or the manufacturer's responsibility. Cost to remove it is very high over 400 sites the cost or estimate is over 2 billion. No proven method for destruction as it is heat/fire resistant. Current practice is to capture/cluster them in organic carbon vs destruction. If you do try to burn it, it would be released into the environment. Wisconsin began regulating two years ago and banned the use of firefighting foam except in certain conditions and the speaker created a quality task force recommending a clean sweep of the PFAS out of the environment not funded in the governor's budget. The Governor's Executive Order# 40 creating the Wisconsin PFAS Action Council comprised of 17 state agencies to develop a state wide action plan to have discharges inventoried to minimize exposure, address historic discharges and educate/ communicate about the risks and developed 25 recommendations drive the state policy and are incorporated into the budget. In 2019 DNR water quality and fisheries program began monitoring water bodies and test fish tissues that lead to a number of the Health advisories and this year we are being sampled here. The affluent is being sampled at all the wastewater treatment plants. The Department of Health services proposed groundwater standards in June 2019 as part of cycle 10, for 2 PFAS compounds at 20 parts per trillion, in 2020 that list was expanded to 16 additional ones. DNR is in the process of developing rules on setting up those groundwater standards. DNR is also creating a number of stake holder groups as part of the rule making process and for individual sites and Marinette that created a PFAS external advisory committee to provide guidance. Johnson and I are both members of that PFAS advisory. The Governor's budget called for a number of initiatives

including funding for 11 FTE's for implementing PFAS action plan and are proposing a \$2 million statewide monitoring and testing for PFAS including wastewater/drinking water/ and public water supplies systems and provide an annual \$10 million municipal grant program for testing and remediation and \$1 million to remove/dispose of the firefighting foam with PFAS. Wisconsin Greenfire put together a work group that contributed to making a number of recommendations and included the identification of PFAS exposure to be released across the states and should be analyzing public water in the influent and effluent and bio solids of municipalities in industrial wastewater treatment facilities. It is effecting this group in both the water quality and the effluent, if we have PFAS going through our plant and we capture those in our bio solids, we become an arranger when that is widespread and that is a potential in liability going forward. They are recommending that rules be developed as soon as possible and on how we manage PFAS contamination and devise a cleanup procedures. We are still evolving science on how to treat it, sequester it, capture it and prevent it from being released. There is also a recommendation to control sources of PFAS and identify methods to reduce exposure and the clean sweep program looking for other ways to remove it and educate the public on environmental impact and assist consumers to have better knowledge of PFAS containing products. We want to encourage the state to host on summit on sharing this information to the public. We need to support the evidence science based environmental standards including the bio solid wastes. This is a quick overview of PFAS as this issue is not going away and we will probably face at some point in time. A lot of the releases of PFAS have been related to the airport and the aqueous fire foam because of the suppression but was found that it's gotten into the water supply and found it was the burn pit next to the wells. It's also gotten into other products that breakdown overtime. PFAS may persist but the rainwear may break down and those were the concerns.

Rosenberg thanks Robinson for the presentation.

Force adds to say good report.

9) Discussion and Possible Action regarding offer of settlement by Dean Prohaska, d/b/a A & D Contractors, LLC, tenant of Brownfield Investments, LLC, to resolve tax settlement received by City from Marathon County for forfeitures levied against 909 S. 60th Ave.

Jacobson stated that this was for tax settlement in 2018 and 2019.

This item was taken out of agenda order.

10) CLOSED SESSION pursuant to Section 19.85(1) (g), Wis. Stats., for the purpose of conferring with legal counsel for the governmental body who is rendering oral or written advice concerning strategy to be adopted by the body with respect to litigation in which it is or is likely to become involved, regarding offer of settlement to resolve potential litigation by Dean Prohaska, d/b/a A & D Contractors, LLC, tenant of Brownfield Investments, LLC, to resolve tax settlement received by City from Marathon County for forfeitures levied against 909 S. 60th Ave.

Rosenberg requested a Commissioner to read Agenda in Closed Session which was completed by Herbst.

Rosenberg moved to convene into closed session. Seconded by Gehin.

11) RECONVENE into open session for the purpose of acting upon closed session item, if necessary.

Robinson moved to reconvene into open session and moved to reimburse Marathon County for the amount forwarded by the city for special assessments and accept the settlement offer of \$5k contingent upon receipt of that payment within 30 days. Seconded by Herbst.

Gehin states if the legal part can't get resolved in 30 days we can extend to 60 days.

Jacobson replies saying it could be done within 30 days.

Motion carried unanimously 5-0.

12) Adjourn.

There being no further business to discuss, the meeting is adjourned.



MEMORANDUM

TO: President Rosenberg
Commissioner Herbst
Commissioner Force
Commissioner Gehin
Commissioner Robinson

FROM: Eric Lindman, P.E.
Director of Public Works & Utilities

SUBJECT: Director's Report – May 2021

The utility disconnected both the water services and the sewer laterals to the mall. This was completed to clear the way for demolition. The demolition is expected to last for about 8-weeks. Staff are in the process of determining the width of the right of way needed for the new roads and extension of utilities. It is expected that Washington St will be widened this year and converted to 2-way traffic. The remaining roads and utility extensions are expected to take place in 2022 and beyond as development occurs.

WATER DIVISION

1. Drinking Water Treatment Plant Update.
2. Floyd Smith has accepted the position of Distribution Maintainer/Relief Operator. We are very happy to have him in this role.
3. As of May 25th, we have had 90 customers express interest in LSL Funding, just over 70 of those verified as lead, and of those we received 28 completed applications.
4. Annual Spring Flushing was completed May 21st.
5. Staff is still overrun with digger's tickets, as of 5/26 we have received 1,221 already in May. That makes 2,871 so far this year.

6. The week of May 17th, AT&T had begun upgrades to their equipment located on the West Wausau Tower.

WASTEWATER DIVISION

1. The Wastewater plant is on-track to meet permit limits for April.
2. We interviewed for a Plant Maintenance Mechanic in January and since that time have offered the position to four of those candidates. Two initially accepted the offer, but eventually backed out. We have also been unsuccessful in filling the open Sewer Maintainer Position. We will need to re-advertise both openings.
3. TDS continues to submit a large number of locates. We had 120 requests one day last week. We don't always have to locate utilities in the field but reviewing the requests and making that determination still requires staff time.
4. The Wastewater Plant upgrade is proceeding rapidly. We have moved into the new Administration Building, except for the lab. The most recent Donohue progress report is attached.
5. The spring sludge spreading operation went well. The Department of Public Works assisted with trucking. We are pretty much caught up and will next be talking to farmers about topdressing alfalfa fields over the summer.
6. Commission and City Council members toured the WWTP on April 27th. Members are welcome to contact Dave at the WWTP if they would like to schedule another visit.
7. Strand and Associates has completed the manhole assessments as a follow-up to the I&I Study. They will come back to complete the smoke testing when we have drier weather.

Wausau Drinking Water Treatment Facility - Project Status

May 25, 2021

Drinking Water Treatment Facility

The pre-cast roof panels were installed over most of the second story. The only area without a roof is over the filters. The filter media will be installed by crane in the next 2 weeks and the last portion of the roof should be installed in June. The masonry contractor has completed approximately one-half of the exterior split face block. Installation of doors and knockout panels will begin in June.

Treatment equipment and piping is being installed in all areas of the building and will continue throughout the summer months. Many of the process pumps should be arriving shortly and will be installed after most of the large piping is completed. The air stripping equipment has been delivered and the steel structures for the aerators will be installed in June. Electrical work is ongoing with installation of conduit, wiring and permanent light fixtures. Many of the control panels have been delivered and are being installed. Interior walls are being coated as needed before placement of brackets for conduit and piping.

Inlet and outlet piping for the 500,000-gallon storage tanks has been completed and the contractor is in the process of backfilling around the piping. The base slab should be in. The pre-cast contractor is on site assembling the concrete forms for the precast tank panels. The panels will be poured on site and then lifted into place after the concrete base slab is constructed. Construction of the tanks will continue throughout the summer and is scheduled to be completed in September.

Administration Building and Garage

Footings and frost walls have been completed and are in the process of being backfilled. The structural steel for the garage area has been delivered and the contractor will begin erecting the steel frame in June.



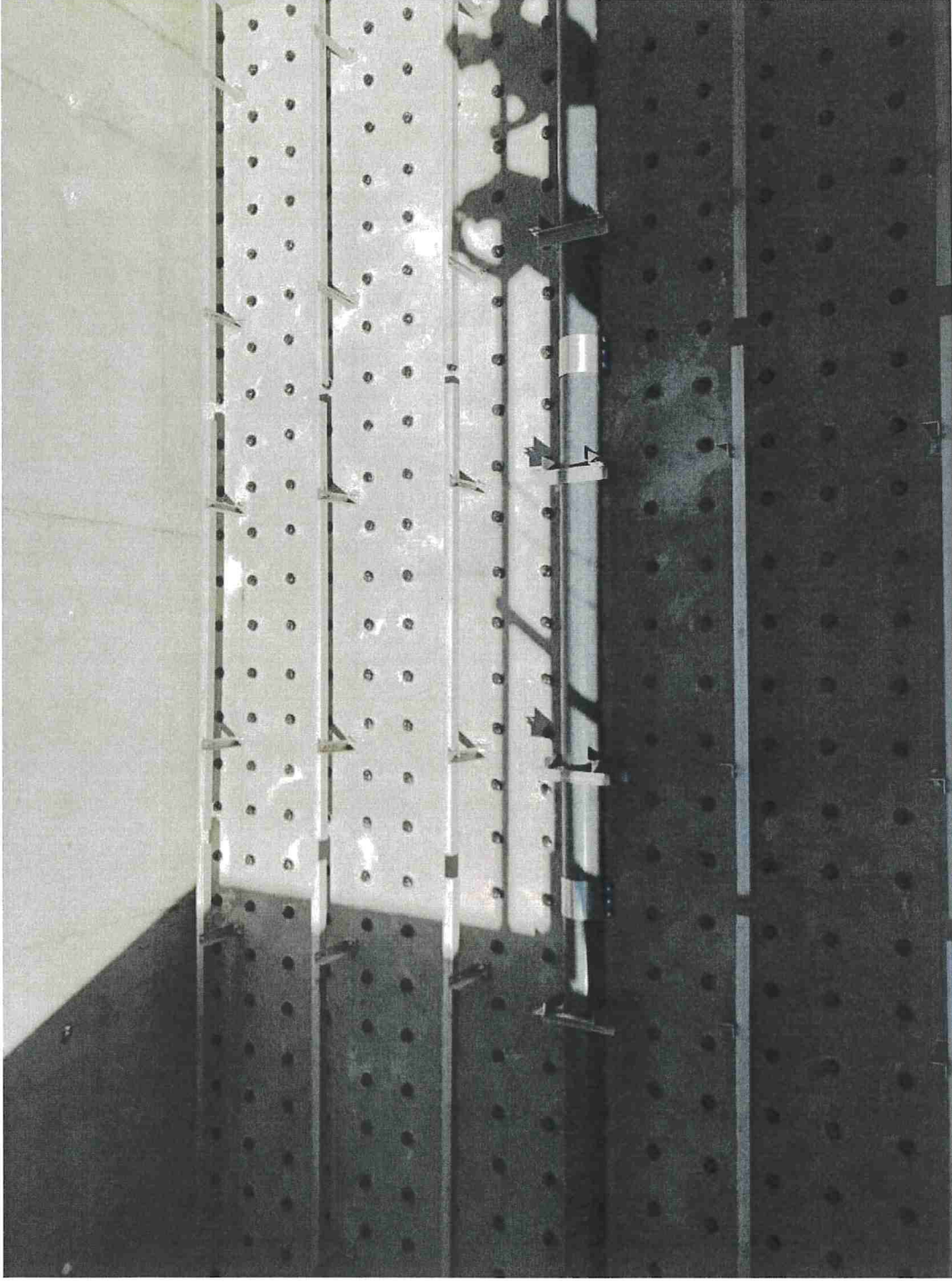
Pre-Cast Roof Planks Lifted into Place Over Process Treatment Area



Process Treatment Area with Roof Panels and Equipment Installed



Flocculation Equipment



Filter Underdrains

Wastewater Treatment Facility Improvements Project – Engineer During Construction

City of Wausau, Wisconsin

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Period | April 4, 2021 – May 8, 2021

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Engineer Activities This Period

- Construction administration services related to technical review of contractor shop drawings, responding to contract interpretation questions (RFIs), initiating requests for proposals (RFPs), attending weekly and monthly construction progress meetings, processing work change directives to the contract, and contractor monthly payment requests.
- Prepared and submitted Clean Water Fund disbursement request and provided CWF administration.
- Provided full time Resident Project Representative (RPR).
- Provided part time on-site observation of selected work by Becher-Hoppe.
- Becher-Hoppe also provides input into appropriate shop drawing reviews, RFI responses, and RFP requests.
- Prepared Work Change Directives to address unforeseen work that needed to be expedited to allow the Contractor to maintain their construction scheduled progress.
- Weekly coordination calls to facilitate contractor startup of the various systems that are being scheduled for near-future startup, discussions pertaining to system commissioning and how all systems tie together to provide further detail to the construction schedule.
- The Engineer's application engineering staff are working on the various systems programming that will need to be completed as the new unit process systems are brought into operation.
- Continued coordination with WPS on new electrical service route and installation.
- The "administrative" portion and garage of Administration Building (Structure 120) has been completed, and walked thru by the Design Team to develop a punchlist. Lab to be completed mid-May with a separate walk thru.
- Finalizing lab equipment allowance purchases.
- Participating in Start-up coordination meetings with Contractor.

Engineer Near-Term Activities

- As the project proceeds, the engineer will continue to provide construction administration services including the technical review of shop drawings, responding to RFIs, preparing RFPs, attending weekly and monthly construction progress meetings, processing change orders, reviewing contractor payment requests, and providing full-time on-site resident engineering services.
- Preparation of Change Order 7.
- Application Engineering programming.

Wastewater Treatment Facility Improvements Project – Engineer During Construction

City of Wausau, Wisconsin

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- The Contactor and subcontractors are in the process of addressing the “administrative” portion and garage of Administration Building (Structure 120) punchlist items identified by the Design Team.

Contractor Progress to Date

- The Notice to Proceed with Construction was issued to the Contractor on June 18, 2020 and established the final completion date as June 3, 2023.
- Construction on the improvements to the Wastewater Treatment Facility (WWTF) began on July 6, 2020.
- Structure 100 (Main Building):
 - Masonry work continues around and inside of Structure 100.
 - Doorway and window infills are ongoing as well as the enclosure of the northwest interior electrical service room.
 - Van Ert Electric continues with running conduit and electrical wiring for the main switchgear, generators and lighting.
 - August Winter & Sons, Inc. continues to complete the placement of duct work, unit heaters and piping.
 - Some demolition work has begun in the soon to be emptied worker occupied areas.
- Structure 120 (Administration Building):
 - Exterior grading, sidewalks, garage aprons and protection pipe bollards have been placed.
 - Punchlist items for the interior of the structure are in the process of being completed and reviewed.
 - Wastewater personnel have started their move from the former administration building, Structure 100 (Main Building), to the new facilities.
 - The exterior lettering, numbering and signage has been placed.
- Structure 200 (Grit Building):
 - Demolition work has begun on the current structure enclosure on the west side to allow for the new raw wastewater piping to be set.
 - New building extension footings on the west side of building are in process.
 - Excavation on the east side of the structure is also occurring to allow for helical piers to be placed and duct bank K to be extended from Tunnel 900 into Structure 200 (Grit Building).

Wastewater Treatment Facility Improvements Project – Engineer During Construction

City of Wausau, Wisconsin

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- Structures 310, 320, 330 and 340 (Primary Clarifiers 1, 2, 3, and 4) along with Structure 350 (Primary Effluent Channel) have been idle except for Structure 340 (Primary Clarifier 4) being drained down to allow August Winter & Sons, Inc. to take measurements.
- Structure 400 (Activated Sludge Building):
 - Window removal, ductwork/louvres and saw cutting openings for new doorways and equipment are occurring.
 - Masons have started some of the infill work on the interior and east exterior wall.
 - Conduit runs for the new blowers, switchboard and other electrical equipment has continued.
- Structure 420 (Mixed Liquor Channel) and Structure 500 (Secondary Splitter) – Excavation and helical pier placement have been completed on the new discharge channel for Structure 410 (Activated Sludge Basins). Formwork for the footings and basin walls has started. The last concrete slab floor has been completed in Structure 500 along with the mechanical gates being placed.
- Structure 540 (Secondary Clarifier 4): launder trough formwork has been completed.
- Structure 610 (Chemical Building):
 - Interior mechanical, electrical and plumbing work continues.
 - Door frames have been placed and formwork started for door stoops.
 - Painters are prepping the chemical containment area.
 - Insulators have been insulating the mechanical and chemical rooms.
 - Lighting and emergency exit lighting is installed.
 - Duct banks M and P between Structure 610 (Chemical Building) and Structure 600 (Effluent Building) have been started.
- Structure 700 (Digester Building) and Structures 710, 720, 730 and 740 (Digesters 1, 2, 3 and 4):
 - Heating glycol supply and return piping installation ongoing with insulation and jacketing of pipe.
 - Exterior routing of the heating glycol supply and return lines with tie in to existing system is complete.
 - Sludge cleanup in lower level complete but investigation of the spill is ongoing.
- Structure 770 (Solids Building):
 - Concrete formwork wall and column rub and fill continues in lower level.
 - Grout infill at the bottom of precast panels continues.

Wastewater Treatment Facility Improvements Project – Engineer During Construction

City of Wausau, Wisconsin

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Period | April 4, 2021 – May 8, 2021

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- Doors, frames and windows being placed.
 - Mechanical, electrical and plumbing work has commenced in lower level and has been ongoing in grade and upper levels.
 - Sprinkler system piping is installed in chemical area of structure.
 - Concrete pad formwork for dryer is complete.
 - Lower level equipment pad formwork and concrete pours have been started.
 - Mechanical and chemical room equipment pads complete as well as concrete floor infill.
 - Equipment is set on pads in mechanical room.
 - HVAC ductwork, heaters and equipment are being placed in all areas.
 - Painting of walls has been ongoing in the upper levels of the structure.
 - Caulking of wall joints still ongoing. Roof top access dog house construction started.
- Tunnel 900—Contractors continue to stage piping and equipment again along tunnel as well in other lower level areas of site.
- Tunnel 910—Mechanical pipe racking and pipe are installed along the east wall of the tunnel and insulators are working to insulate piping on racks in tunnel and water lines along the west wall of tunnel.
- Site Work: Integrity Grading and Excavating has continued placement of the W3 water piping, air and chemical feed lines along the east roadway of the site and has tied the lines into Structure 770 (Solids Building). They discovered the actual routing of the 42-inch storm sewer that discharged from the site to the river as well as an additional hidden manhole. Secondary effluent piping tie-in to Structure 540 (Secondary Clarifier 4) has been completed. Integrity has also completed the tie in of the 24-inch raw wastewater lines into the west side of Structure 200 Grit Building). Additionally, the biogas piping runs between Structure 750 (Gas Sphere), Structure 100 (Main Building) and the tunnel have been completed. The 4-inch potable water line from the Department of Public Works site over to the west side of Structure 400 (Activated Sludge Building) has been installed. Precision has completed some of the grading and brought the site up to paving grade. They have also completed some grading around the west side of Structure 540, and excavation and removal of manholes for helical pier placement for Structure 406 (Mixing Tank). Excavation at the west side of Structure 200 (Grit Building) has also started.
- Construction progress photographs are located at the end of this progress report.

Project Status Report



Wastewater Treatment Facility Improvements Project – Engineer During Construction

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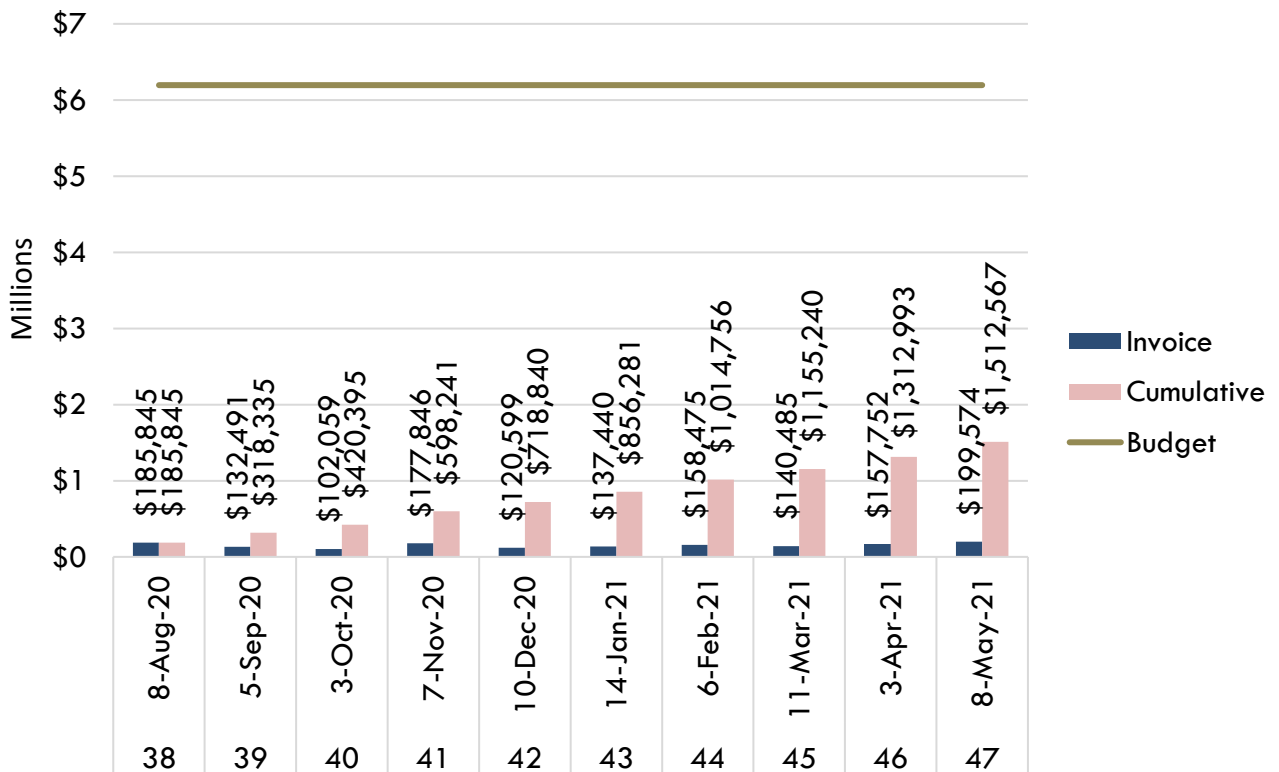
Invoice 47

Construction Schedule

- The Contractor has developed a detailed construction schedule that defines a timeline for the orderly completion of the work and a breakdown by structure of the work to be done in the various work areas. We continue to review the timeline and work tasks against the various constraints identified in the project manual to confirm that the contractor has adequately addressed them and accounted for shutdown time limits as their work proceeds.

Project Related Budget Snapshot

Construction Engineering Budget



Project Status Report



Wastewater Treatment Facility Improvements Project – Engineer During Construction

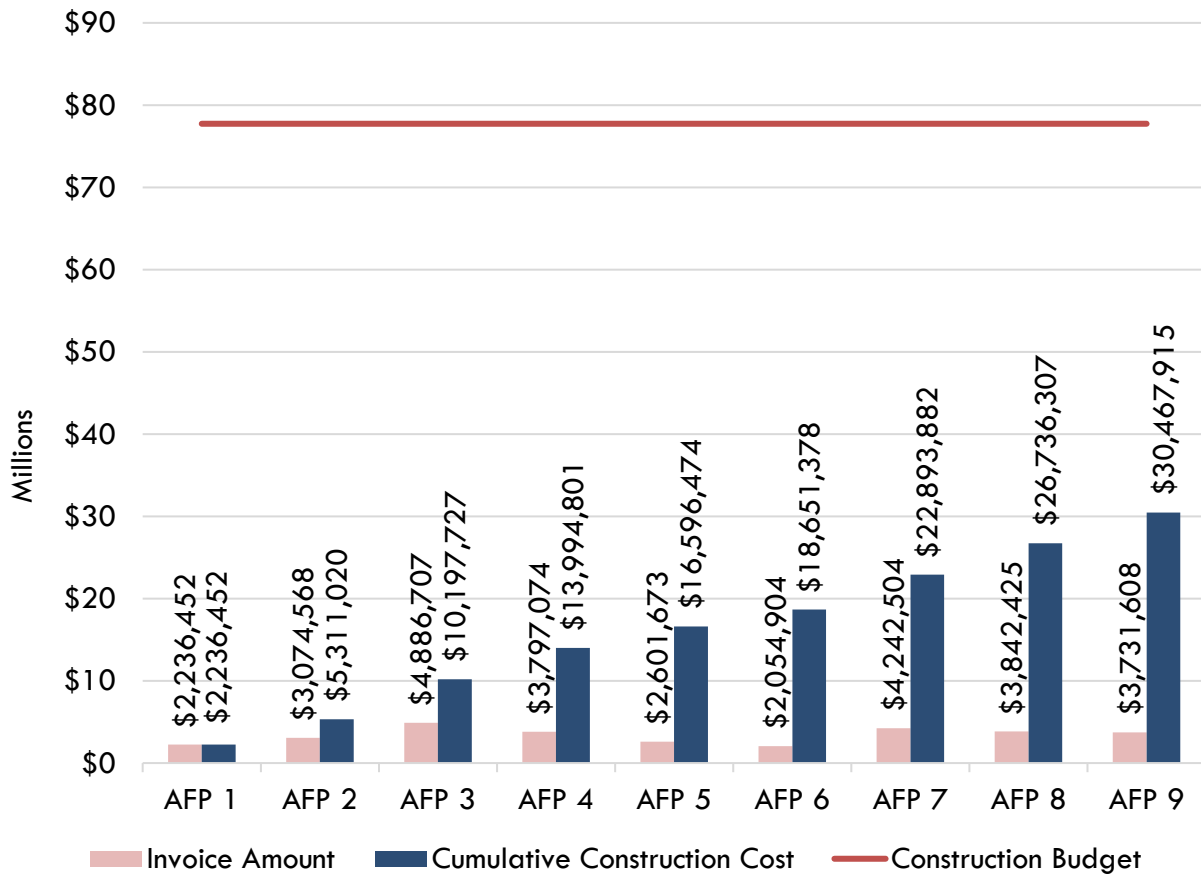
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Construction Budget: Pay Applications Approved by Engineer



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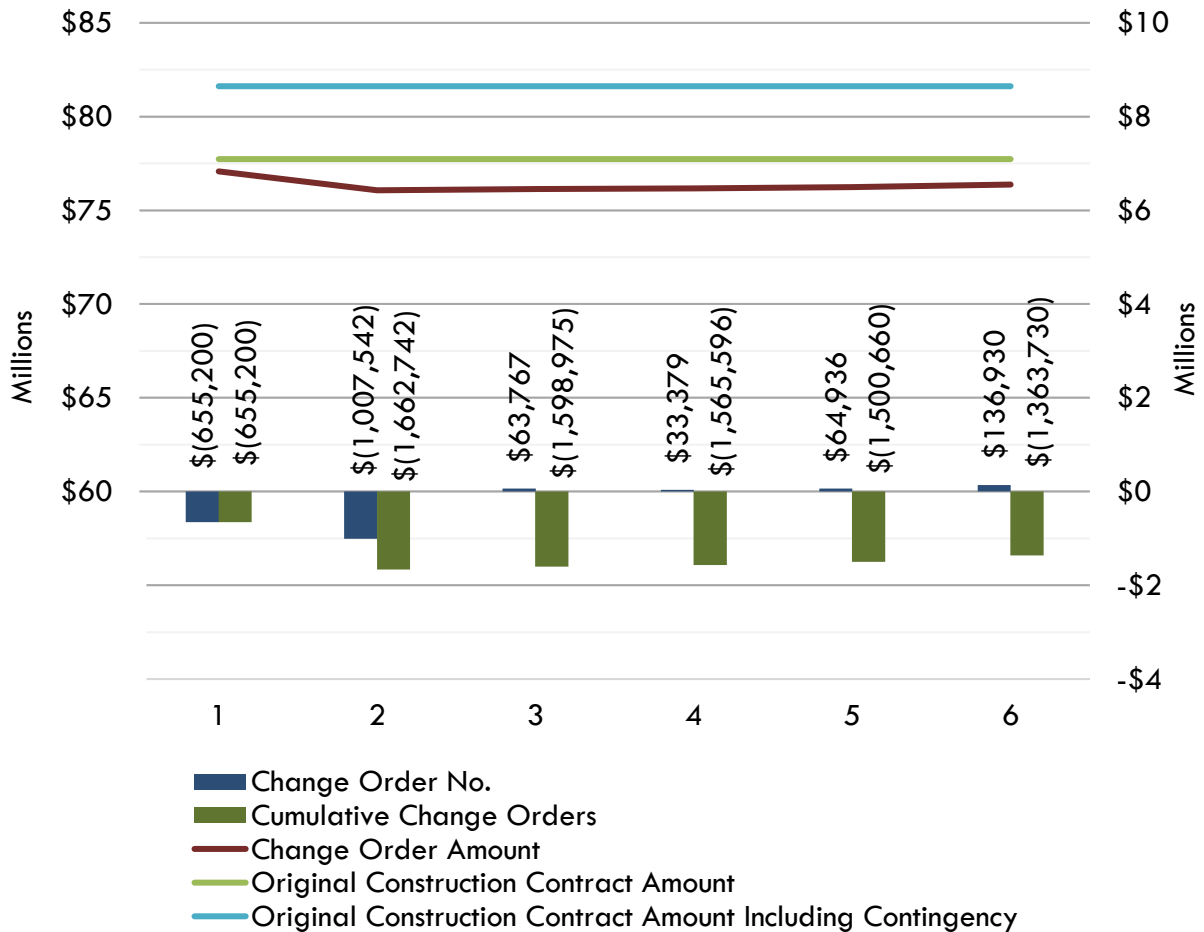
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Overall Project Budget



Budget Notes:

1. No budget issues at this time.

Remarks

1. None.

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Construction Photographs



Buried storm manhole discovered east of Structure 540 (Secondary Clarifier 4) before Wisconsin River outfall.



Precision Grading working on the grading north side parking area of Structure 120 (Administration Building).

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Integrity Grading & Excavating's installation of biogas piping requires working around a maze of piping, conduit, electrical vaults and storm manholes.



Structure 100 (Main Building): masons completed block walls of northwest electrical service room with window infill and door frame set.

Project Status Report



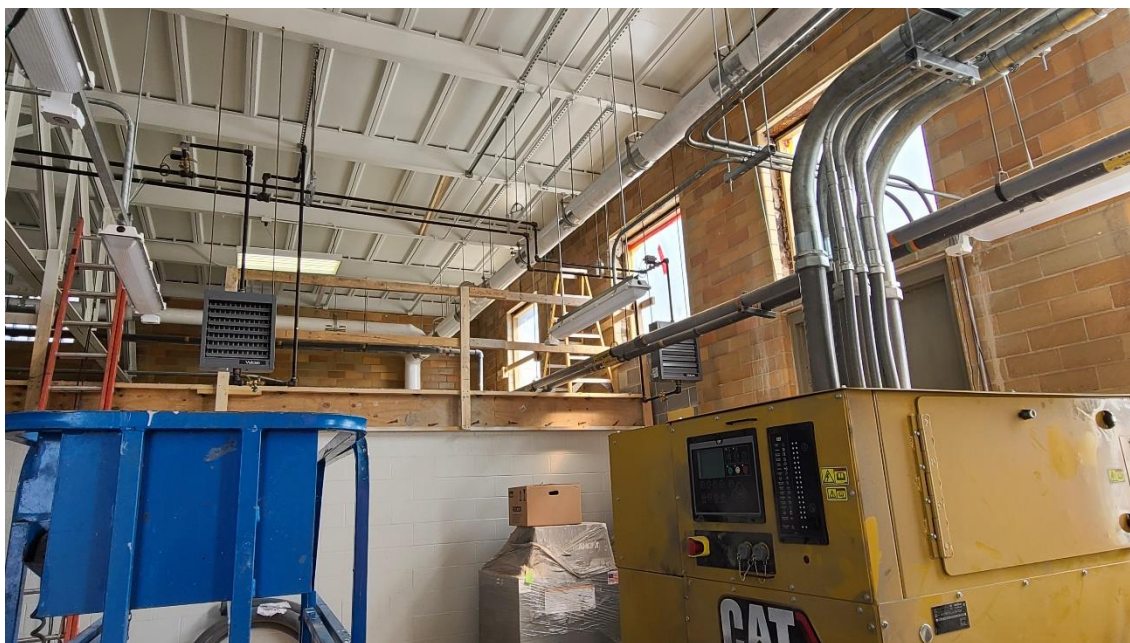
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Structure 100 (Main Building) generator room with conduit, lighting, unit heaters, concrete poured mezzanine area and door frame installed.



New sign, lettering, numbering, sidewalk have been placed for Structure 120 (Administration Building).

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Concrete formwork for the driveway entrance to Structure 115 (Equipment Storage Building) adjacent to Structure 120 (Administration Building).



Structure 120 (Administration Building) vestibule is ready for visitors and employees.

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Structure 200 (Grit Building) roof demolition, existing west slab and footings removed and preparations made for raw wastewater piping and new footings and slab.



New raw wastewater piping installed to Structure 200 (Grit Building) and helical piers to be placed for new footings/foundation.

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Saw cutting opening and demo of walls on the north side of Structure 400 (Activated Sludge Building).



New exterior brick infill of former blower vent opening, on exterior east wall of Structure 400 (Activated Sludge Building).

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Helical piers placed for the Structure 420 (Mixed Liquor Channel) footings.



North footings of Structure 420 (Mixed Liquor Channel) complete with foundation wall being formed and rebar placed.

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Structure 500 (Secondary Splitter) last slab pour and gates installed but not yet grouted in place.



Structure 540 (Secondary Clarifier 4) launders complete, being pumped down to allow for installation of new interior equipment.

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Portion of Duct Bank M and P coming out of the Electrical Manhole between Structure 600 (Effluent Building) and 610 (Chemical Building)

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Doorway stoops being formed at the west side of Structure 610 (Chemical Building).



New 16-inch pipe connecting to Structure 740 (Digester 4); the site of the Valentine's Day sludge leak.

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New 16-inch pipe and elbow being placed at the location of the leak site in the lower level of Structure 700 (Digester Building).



Windows and door frames being installed in Structure 770 (Solids Building).

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Dryer room pad complete, walkway construction nearly complete at Structure 770 (Solids Building).



Lower level overhead ductile iron piping for the waste activated sludge and return activated pumps being installed within Structure 770 (Solids Building).

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Structure 770 (Solids Building) roof access dog house steel stud framework being completed.



Work ongoing in new control room of Structure 770 (Solids Building).

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View from the top...of Structure 770 (Solids Building) that is; looking south.



Another rooftop view, looking southwest from Structure 770 (Solids Building).

INVOICE



3311 Weeden Creek Road
Sheboygan, WI 53081
Phone: 920-208-0296
www.donohue-associates.com

Invoice To:	Invoice Date:	May 13, 2021
	Donohue Project No.:	13229
City of Wausau	Invoice No:	13229-47
Attn: Dave Erickson	Project Manager:	Mike Gerbitz
407 Grant Street	Terms:	Net 30 Days
Wausau, WI 54403	Billing Period:	04/04/21 - 05/08/21

Project Description: Wastewater Facilities Plan & Design

Your Authorization: Engineering Services Agreement, Signed 03/29/17
Amendment No. 1, Signed 06/28/18
Amendment No. 2, Signed 03/05/19
Amendment No. 3, Signed 01/27/20
Amendment No. 4, Signed 05/07/20
Permit Review Fees Payment Request, 02/27/20

Compensation:	Time and Expense	\$	129,220.00
	Time and Expense	\$	984,565.00
	Time and Expense	\$	3,323,900.00
	Time and Expense	\$	4,351,831.00
	Time and Expense	\$	1,843,325.00
	Permit Review Fees	\$	12,534.50
	Total	\$	10,645,375.50

Billing Summary:	Total Charges to Date	\$	5,962,802.32
	Charges Previously Billed	\$	5,763,228.16
	Current Charges	\$	199,574.16

Summary of Current Charges

Labor (1264.5 hours)	\$	181,562.50
Reimbursable Expenses (Travel, shipping, printing)	\$	5,186.98
Permit Review Fees	\$	-
Subconsultants	\$	12,824.68
Total	\$	199,574.16

Current Charges Due	\$	199,574.16
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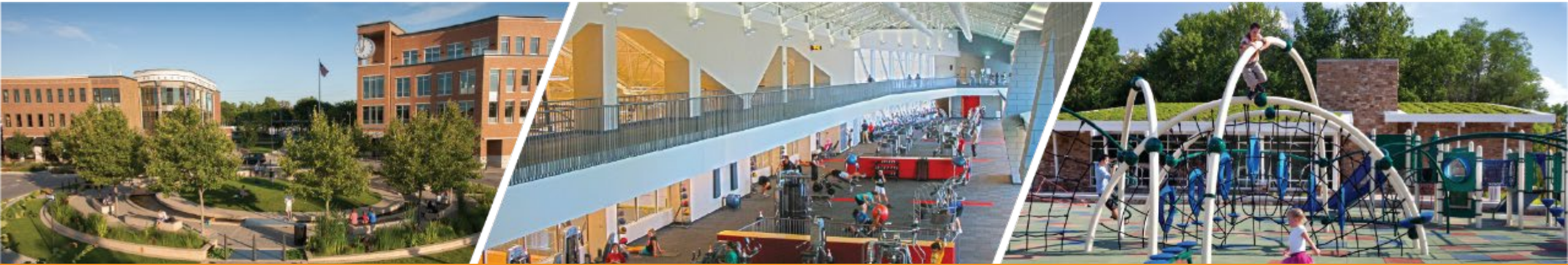
Please Remit to: Donohue & Associates, Inc.
3311 Weeden Creek Road
Sheboygan, WI 53081
Phone: 920-208-0296
Fax: 920-208-0402

Aged Receivables

<u>Current</u>	<u>31 - 60 Days</u>	<u>61 - 90 Days</u>	<u>91 - 120 days</u>	<u>>120 days</u>
\$199,574.16	\$0.00	\$0.00	\$0.00	\$0.00



Engineering Quality of Life®



Wausau DWTF Solar

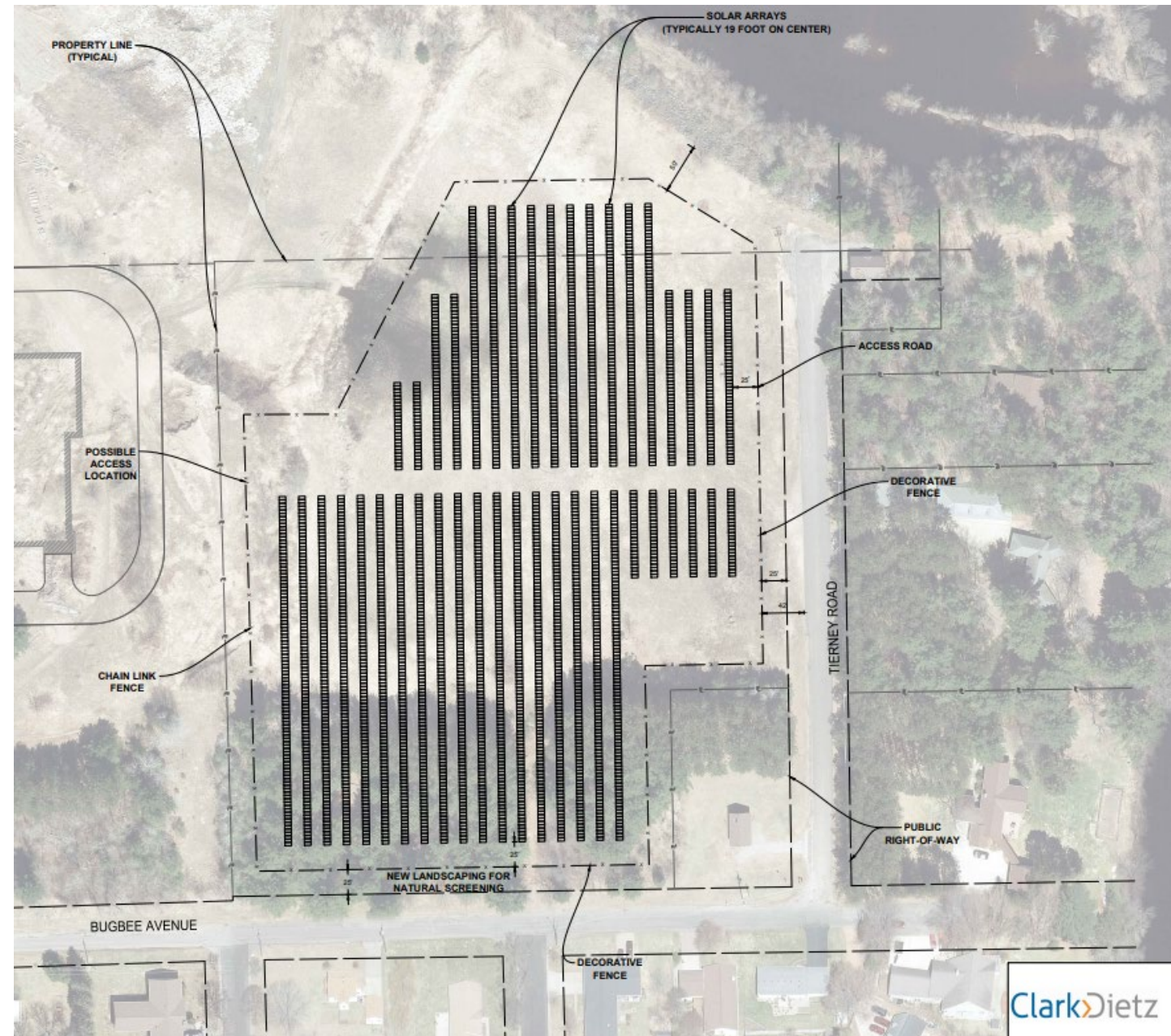
Water Commission Update – June 1, 2021

A large, stylized orange chevron graphic pointing to the right, composed of several parallel lines of varying shades of orange, located on the left side of the slide.

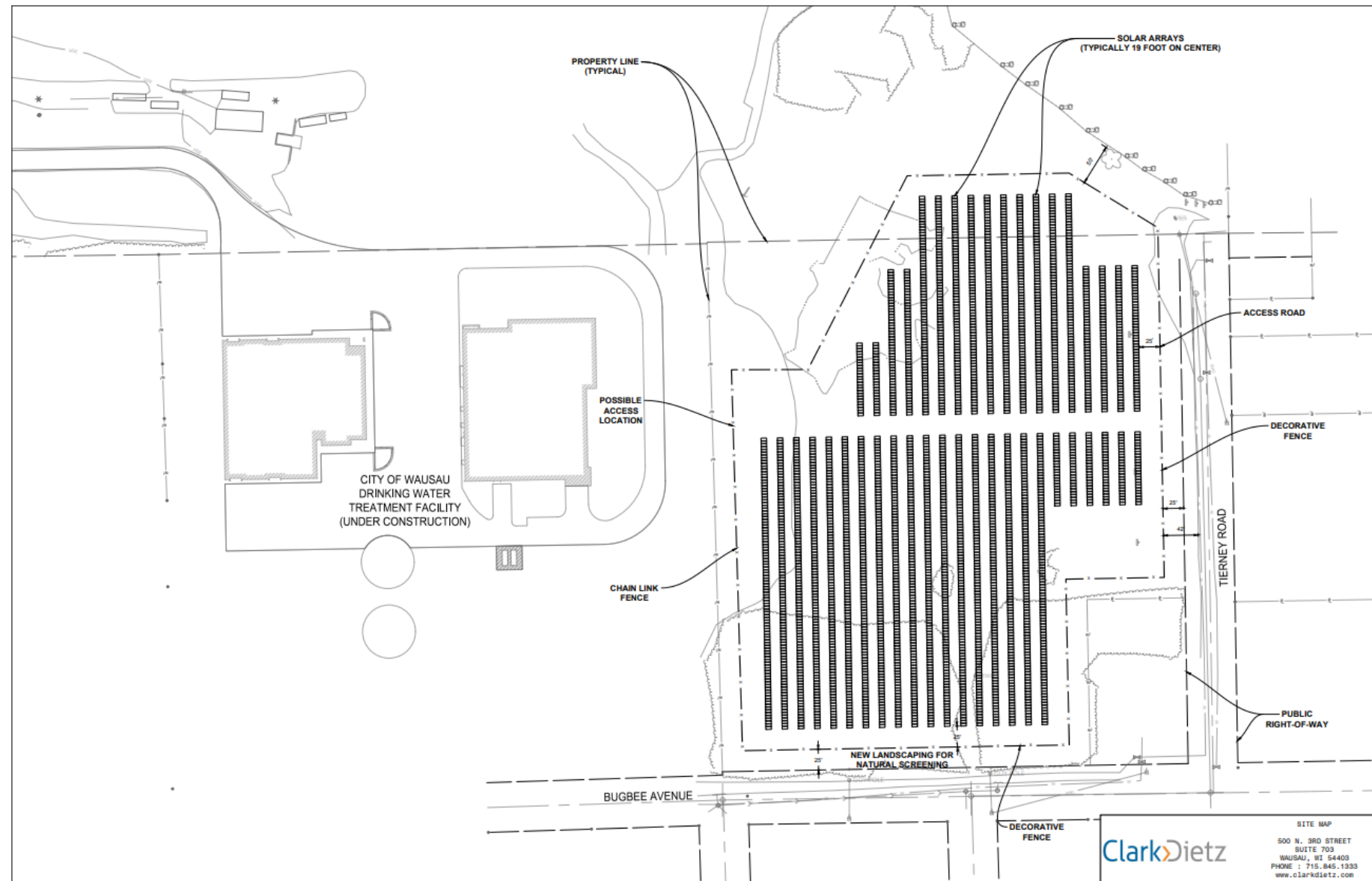
Update on Solar Site

- › 1010 Bugbee property purchase finalized
- › Geotechnical Investigation
- › Zoning and Setbacks
- › Site Access
- › Landscaping Buffer

Preliminary Layout – 1010 Bugbee



Preliminary Layout – 1010 Bugbee



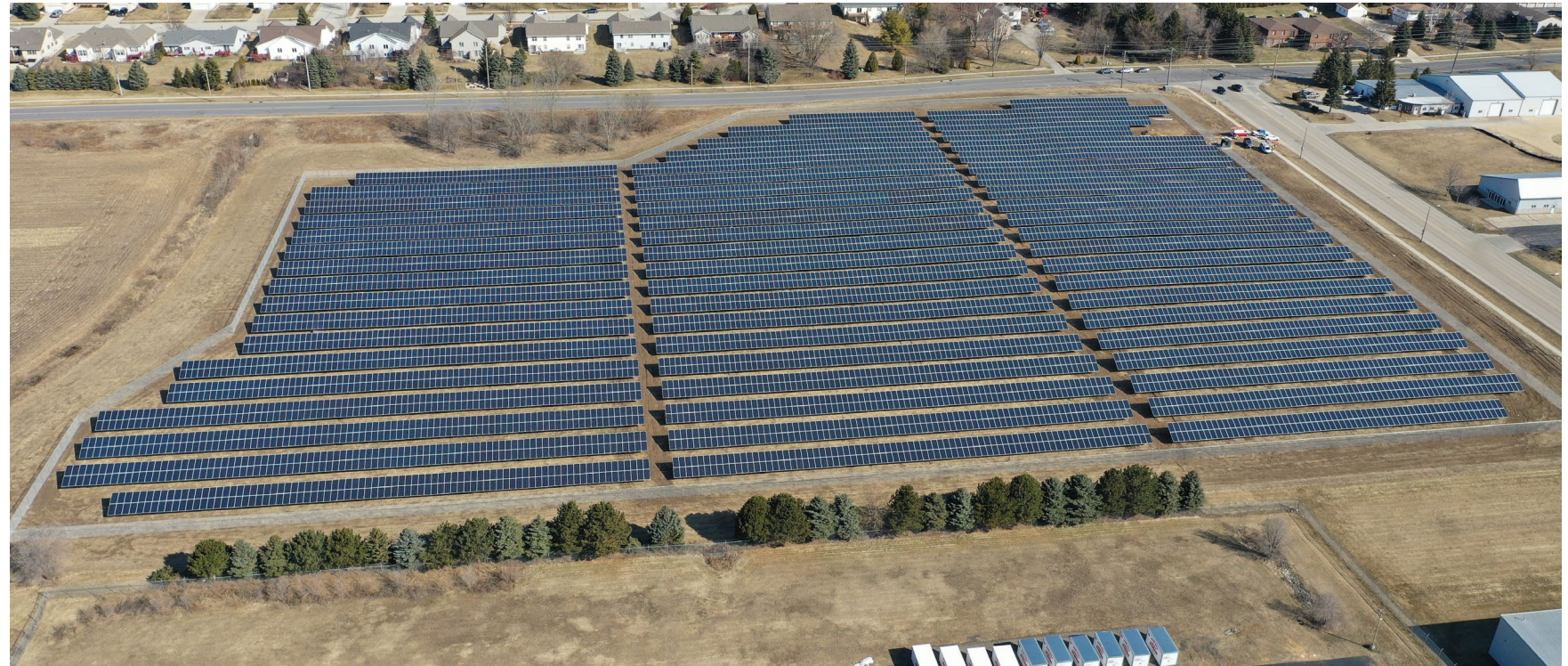


Example Array Photos

Example Photo – UW Parkside



Example Photo – Washington County



Typical Array – Ground Level



Array with Pollinator Habitat



Construction Photo – Racking Posts



Construction Photo – Racking



Construction Photo – Inverters



Preliminary Design (Electrical)

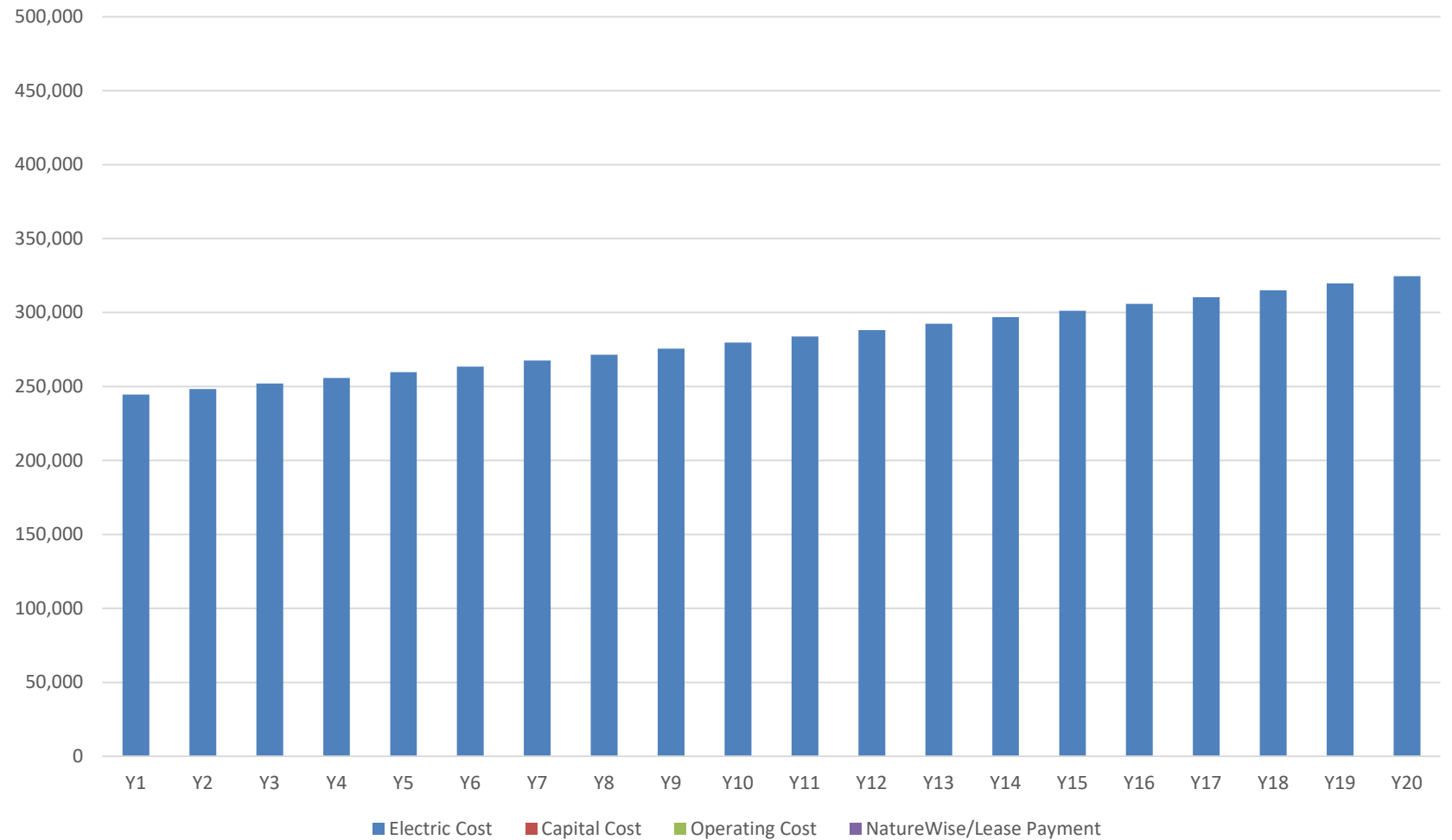
- › Facility annual electrical consumption is approximately 3,000,000kWh
- › Estimated production of Single Axis Tracking Solar Array – 1,409kWh/kW* – based on DC system size
- › Each MW (DC) of Single Axis Tracking solar requires 6 acres of viable property – dependent on soil quality, solar obstructions (trees) and topography
- › Potential system size at 1010 Bugbee Ave: 1.26 MW
- › **Annual production: 1,775,000 kWh, or 59% of estimated facility consumption**
- › **Estimated system cost: \$2,040,420 or \$1,620/kW* (DC)**

Cost Comparison

- › Four options reviewed – Baseline (do nothing), Water Utility Owned Solar Array, and Two WPS NatureWise program Scenarios
- › Reasonable assumptions were made for interest rates, escalators and discount rates. Assumptions were kept consistent through each option.
- › Costs for each option were divided into four categories
 - Electric cost
 - Capital cost (land purchase, design and construction of solar array)
 - O&M cost
 - NatureWise (per kWh adder and lease payment)

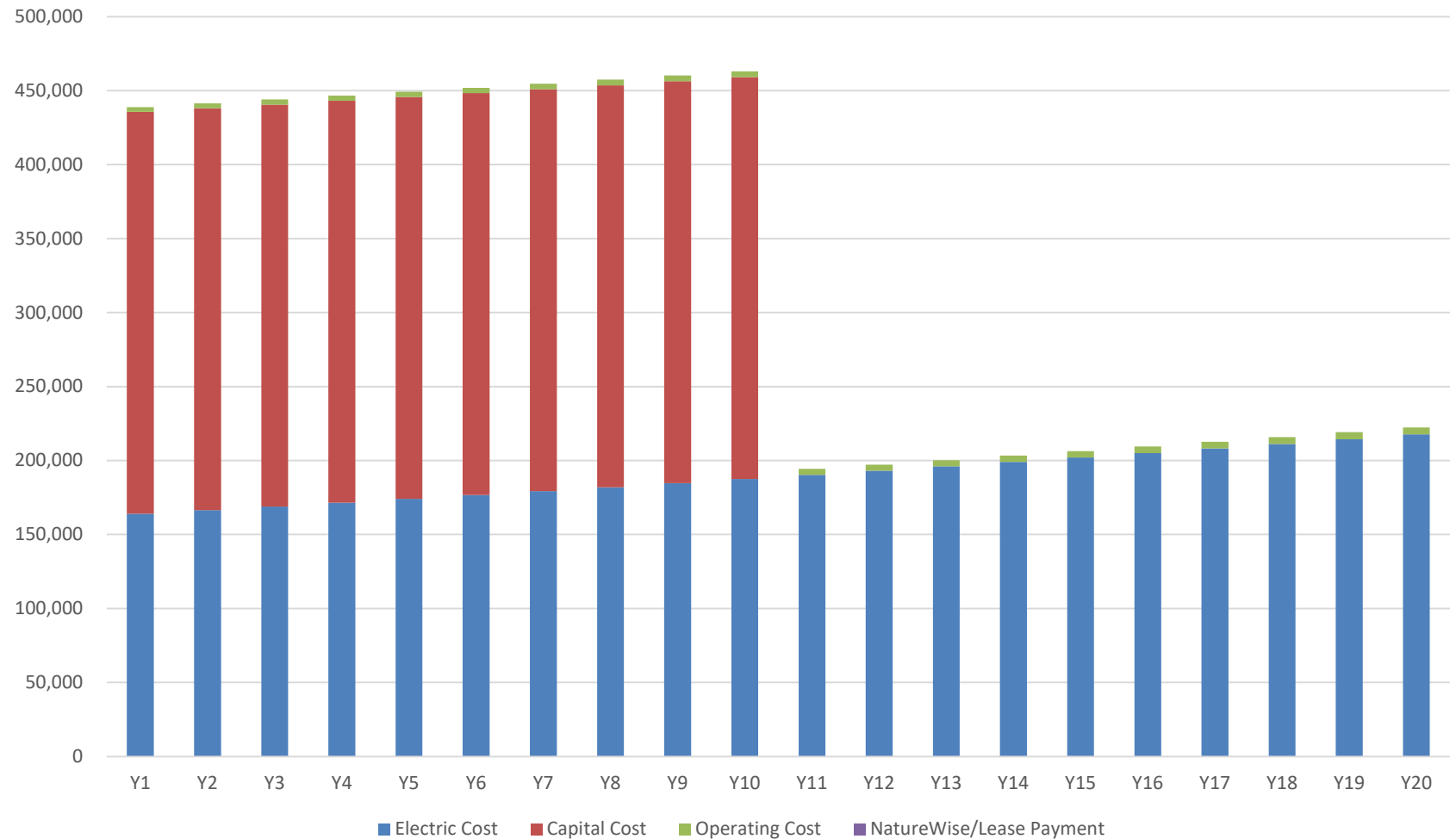
Baseline

› Present Value Total: \$4,670,749



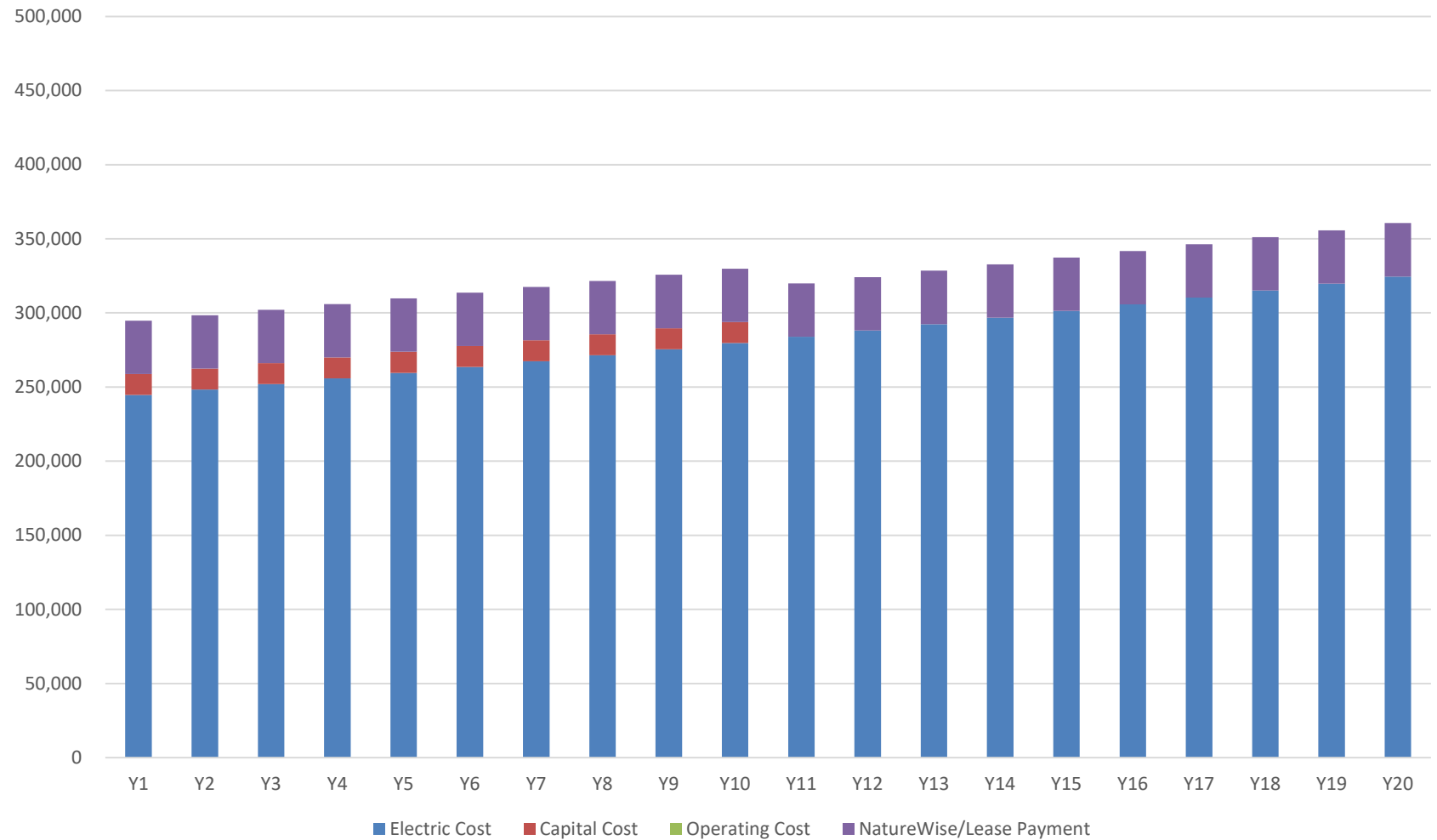
Water Utility Owned

➤ Present Value Total: \$5,221,962



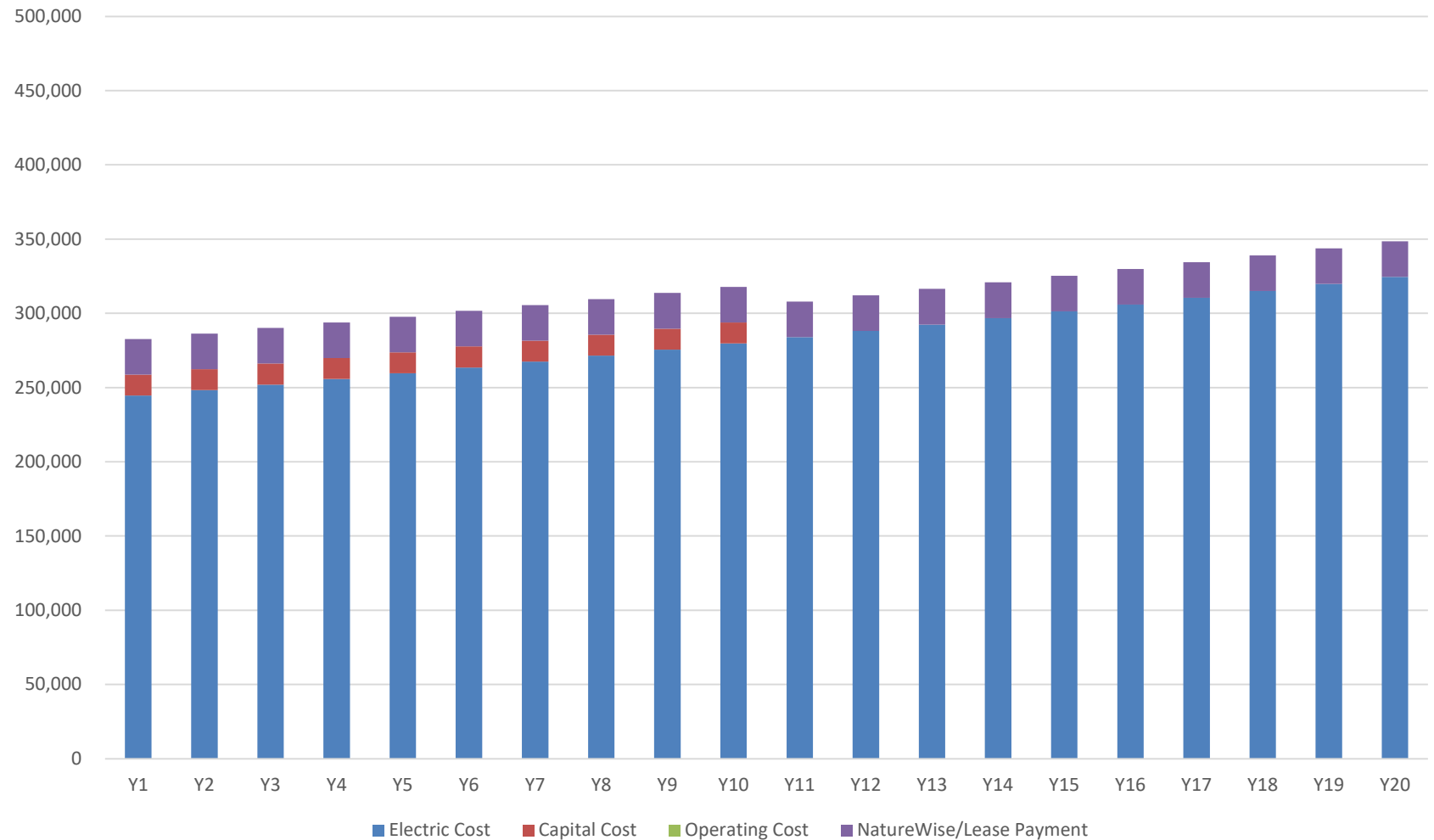
NatureWise – 2,000,000kWh purchased through program

› Present Value Total: \$5,400,732



NatureWise – 1,500,000kWh purchased through program

› Present Value Total: \$5,200,591





TO: Wausau Waterworks Commission

FROM: Eric Lindman, P.E.
Director of Public Works & Utilities

DATE: June 1, 2021

SUBJECT: Organizational Structure Options 2 – Removal of LSL's City Wide

Staff has been working on an organizational plan for removal of lead service lines throughout the water distribution system; both public and private side. The USEPA Lead/Copper Rule (LCR) will be requiring the following:

1. The Utility is required to submit a goal-based replacement plan within 3-years of the LCR publication. This plan is to include an inventory and procedures to conduct a Full Lead Service Line Replacement (FLSLR); meaning both public and private side.

At the May Commission meeting staff presented 3-concepts for the commission to consider. The three options were as follows and all with different timelines for removal of LSL's.

1. **Owner procured contract, our current program.**
2. **Utility established annual contract.**
3. **Utility performed Work.**

The Commission directed staff to prepare an option for replacing LSL's within a 15-year timeframe. Staff has prepared two options for review and discussion with the Commission, a 15-year schedule is very aggressive and will be challenging both financially and retaining resources.

Currently we are estimating about 8,500 private side LSL's and about 4,500 public side LSL's. Based on these estimated numbers it would be required to replace a minimum of 600 LSL's annually to meet a 15-year replacement.

I looked into the program Green Bay put in place (Article in the WI AWWA Section Fall 2020). This started in 2011 when they exceeded the 90th percentile in their lead samples. They began working on implementation of a corrosion control study in order to implement a process to mitigate corrosion in their distribution system. Green Bay had about 2000 LSL's within their system. Green Bay was able to fully remove public and private LSL's from the system within 5-years. The cost of the public side removal was \$6,200,000 and Green Bay was able to use \$1,100,000 of WDNR funds to assist homeowners with their private side LSL replacement. Green Bay replaced the public side LSL with their own crews (average cost of \$3,100 each) and the private side was done using outside contractors (average cost of \$4,700 each). In order to pay for the public side replacement there were two PSC rate cases completed during the 5-year program which increased water rates 14.72%.

The following are two options that may meet the requested deadline by the Commission of 15-years.

1. **Utility established annual contract – Contracted Services.** This would be a 3 or 5 year renewable contract with at least two separate plumbing businesses. It is expected we would be able to perform up to 600 private LSL replacements annually. This would be 100 related to annual street projects and 500 LSL replacements based on an annual contract with private plumbers through the utility. This would be a replacement timeline of about 15 years once work began.

OPTION 1 - Contracted Services (15-years)

Location	# Services (Annually)	Cost per service	Capital Cost	Annual Cost
Staffing (12 employees)				
Equipment				
Public Side LSL	250	\$5,000		\$1,250,000
Private Side LSL	600	\$4,500		\$2,700,000
		Total =	\$0.00	\$3,950,000

2. **Utility performed Work.** In order to meet the 15-year timeline the utility would need to hire 12- new employees and their sole responsibility would be LSL replacement. There would be three crews dedicated to LSL replacement. They would dig 7 to 8-months of the year, they would need to complete at least 2-service replacements per day. With 3 dedicated crews to replacement it is anticipated there would be 600 LSL replacements per year; 500 by internal crews and 100 through street reconstruction projects. This puts full replacement at about 15 years.

OPTION 2 - Utility Performed Work (15-years)

Location	# Services (Annually)	Cost per service	Capital Cost	Annual Cost
Staffing (12 employees)				\$1,000,000.00
Equipment			\$1,200,000.00	\$80,000.00
Public Side LSL	250	\$5,000		\$1,250,000
Private Side LSL	600	\$4,000		\$2,400,000
		Total =	\$1,200,000.00	\$4,730,000.00

As part of any LSL replacement program the Commission will need to consider creating a mandatory replacement ordinance for the private side. Even with the grant funding available the private side response and commitment has been much lower than expected. Also if the utility is to contract or complete replacements we would need the ability to make this mandatory for scheduling purposes. In order to meet such an aggressive LSL replacement schedule staff feels it would be necessary to have an ordinance in place.

As I presented at the May meeting, below is the current funding availability:

1. WDNr grants for private side LSL replacement. The EDNR has funds for LSL replacement and we are receiving \$450k in 2021 to replace about 100 private side LSL's. Currently the commission has approved \$3,000 per LSL within the limits of street reconstruction projects and \$5,000 for LSL replacement outside street construction limits. Any costs above this amount is the responsibility of the owner. We will again be applying for 2022 as the WDNr has remaining funds available. In order to request more funds we need to show the WDNr a program that would be able to spend the funds in one construction year, our current program has struggled to replace 100 LSL's annually.
2. Water Rate Revenue Funds. The PSC has authorized utilities to use rate revenue for private side LSL replacement. They have authorized the utility to pay up to 50% of the cost of replacement, the other 50% is the owner responsibility.

3. Utility Loans. The utility has the ability to set up low/no interest loans for the replacement of these lines if the commission would like to move ahead in this direction.
4. Federal/State Water grants. We anticipate some additional funding availability through the feds as it relates to water infrastructure and mitigating public health risks, LSL's would be eligible. We are not sure at this time when we can request these funds and if these funds will be given directly from the feds or routed through the WDNR for disbursement.
5. The American Recovery Plan (ARP) funds the City is receiving can be used for LSL replacement. These funds may be considered as a possible funding source.

As we move forward staff has established the following priorities, in order of precedence:

1. Complete and categorize inventory, public and private side
 - a. This is our first priority. We are proposing to establish interns to help complete this work or hire interns from private engineering firms.
2. Request/maintain grant funding and expenditures of grants timely
 - a. This has been ongoing since 2016, a robust program would allow us to request additional funds annually.
3. Establish mandatory LSL replacement ordinance
 - a. Staff would like to present some examples to the commission for their consideration over the next couple of months. To implement an ordinance such as this will take time and the implementation of the ordinance needs to be carefully thought out to make sure the utility is equipped financially and with resources to be effective.
4. Formally prepare a FLSLR Plan
 - a. Once we have an idea of a plan to put in place we will begin meetings with the DNR about requesting additional funds annually through the forgivable loan program.

WAUSAU WATER WORKS - DRINKING WATER DIVISION		5/18/2021					
CAPITAL PLAN - CAPITAL ASSETS 2022-2026							
IMPROVEMENTS/PROJECTS	COST EST 2022-2026	FUND SOURCE	2022	2023	2024	2025	2026
WATER TREATMENT PLANT							
TOWERS/RESERVOIRS/BOOSTER STATIONS							
GENERATOR - ONSITE (W. Wausau)	240,000	BORROW	240,000				
SCADA UPGRADES - BOOSTER STNS (\$360K)	360,000	BORROW		360,000	0		
MONROE BOOSTER STATION RECONSTRUCTION	560,000	BORROW	60,000	500,000			
SUBTOTAL	\$1,160,000		\$300,000	\$860,000	\$0	\$0	\$0
WELLS							
FUTURE WELL	650,000	BORROW				0	650,000
SUBTOTAL	\$650,000		\$0	\$0	\$0	\$0	\$650,000
TOOLS, SHOP AND GARAGE							
Vacuum Truck	180,000	BORROW			180,000		
SUBTOTAL	\$180,000		\$0	\$0	\$180,000	\$0	\$0
DISTRIBUTION/SUPPLY MAINS							
<u>Street Projects</u>							
3rd Ave (Randolph to Bos Creek)	0	BORROW					
5th Ave (West St to Garfield Ave)	0	BORROW					
Rosecrans (17th Ave - 22nd Ave)	0	BORROW					
McIntosh St.	0	BORROW					
4th St (McClellan St- Scott St)	30,000	BORROW	30,000				
Bugbee Ave (Burek Ave - Tiernaey Rd)	120,000	BORROW	120,000				
4th Ave (Bridge St - Knox St)	330,000	BORROW	330,000				
Emerson Street, EauClaire to Kent	20,000	BORROW			20,000		
Mount View Blvd., EauClaire to Kent	20,000	BORROW			20,000		
Pied Piper Lane, EC to Kent	40,000	BORROW			40,000		
Eau Claire BLVD	510,000	BORROW			510,000		
Jackson St (Rrtrackes o 12th St)	225,000	BORROW		225,000			
10th Ave (Bridge to West Wausau)	210,000	BORROW		210,000			
Grant St (6th St to 7th St)	120,000	BORROW		120,000			
Stark St (5th St- 122th St)	1,200,000	BORROW				1,200,000	
Hennrietta St (Bellis St - 13th St)	260,000	BORROW		0		260,000	
W. Randolph (Burek to Merrill)	350,000	BORROW					350,000
S. 11th Ave (W. Thomas to Flieth)	180,000	BORROW					180,000
Fulton Street (1st St to 6th St)	280,000	BORROW		280,000			
SUBTOTAL	\$3,895,000		\$480,000	\$835,000	\$590,000	\$1,460,000	\$530,000
<u>General Distribution Projects</u>							
STEWART AVE LOOPING-12"-60/68 AVE	315,000	BORROW			315,000		
Looping main Stettin Dr. Stewart to the Park	160,000	BORROW		160,000			
LOOPING MAIN STETTIN DRIVE, 48TH AVE TO 52ND	260,000	BORROW				260,000	
14" WM Replace (ELM ST;14TH- 17TH AVE & 17th Av	450,000	BORROW	450,000				
LSL REPLACEMENTS (Public Side)	1,500,000	BORROW	300,000	300,000	300,000	300,000	300,000
14" WM Extension Bugbee & Campus	550,000	BORROW	550,000				
MISC EXTENSIONS	0	BORROW					
SUBTOTAL	\$3,235,000		\$1,300,000	\$460,000	\$615,000	\$560,000	\$300,000
TOTAL CAPITAL	\$9,120,000		\$2,080,000	\$2,155,000	\$1,385,000	\$2,020,000	\$1,480,000
CUMULITIVE CAPITAL			\$3,299,000	\$5,454,000	\$6,839,000	\$8,859,000	\$10,339,000
WATER CIP FUNDING							
			2022	2023	2024	2025	2026
	OP FUNDS		\$0	\$0	\$0	\$0	\$0
	BORROW		\$2,080,000	\$2,155,000	\$1,385,000	\$2,020,000	\$1,480,000
	TOTAL		\$2,080,000	\$2,155,000	\$1,385,000	\$2,020,000	\$1,480,000

WAUSAU WATER WORKS - DRINKING WATER DIVISION			DATE 05/18/21				
CAPITAL PLAN-OPERATING 2022-2026							
IMPROVEMENTS/PROJECTS	COST EST 2022-2026	FUND SOURCE	2022	2023	2024	2025	2026
TOWERS/RESERVOIRS/BOOSTER STATIONS							
RESERVOIR INSPECTIONS	40,000	OP FUNDS			40,000		
RESERVOIR INTER/EXTER COATINGS & MAIN	1,000,000	OP FUNDS	180,000	180,000	180,000	310,000	150,000
SUBTOTAL	\$1,040,000		\$180,000	\$180,000	\$220,000	\$310,000	\$150,000
METERS & RADIO READ BOXES							
METER & RADIO BOX REPLACEMENT (ON-GOING)	2,100,000	OP FUNDS	420,000	420,000	420,000	420,000	420,000
SUBTOTAL	\$2,100,000		\$420,000	\$420,000	\$420,000	\$420,000	\$420,000
TRANSPORTATION EQUIPMENT - VEHICLES							
LIGHT DUTY TRUCK	200,000	OP FUNDS	40,000	40,000	40,000	40,000	40,000
SUBTOTAL	\$200,000		\$40,000	\$40,000	\$40,000	\$40,000	\$40,000
TOOLS, SHOP AND GARAGE							
Snow Removal Equipment		OP FUNDS	90,000				
Material Screener		OP FUNDS		40,000			
Forklift	40,000	OP FUNDS	40,000				
SUBTOTAL	\$40,000		\$130,000	\$40,000	\$0	\$0	\$0
TOTAL CAPITAL	\$3,380,000		\$770,000	\$680,000	\$680,000	\$770,000	\$610,000
CUMULITIVE CAPITAL			\$1,425,000	\$2,105,000	\$2,785,000	\$3,555,000	\$4,165,000
WATER CIP FUNDING							
			2022	2023	2024	2025	2026
		OP FUNDS	\$770,000	\$680,000	\$680,000	\$770,000	\$610,000
		BORROW	\$0	\$0	\$0	\$0	\$0
		TOTAL	\$770,000	\$680,000	\$680,000	\$770,000	\$610,000

WAUSAU WATER WORKS - WASTEWATER DIVISION
CAPITAL PLAN - CAPITAL ASSETS 2022-2026

DATE 05/17/2021

IMPROVEMENTS/PROJECTS	COST EST 2022-2026	FUND SOURCE	2022	2023	2024	2025	2026
SEWER LIFT STATIONS							
Lift Station Engineering Report & Recommendations	-	BORROW					
Airport Lift Station Bar Screen, pumps, and generator	525,000	BORROW			525,000		
LS Upgrades & Reconstruction	800,000	BORROW	550,000	250,000			
Greenwood Hills LS Access, Check Valves	150,000	BORROW	150,000				
Evergreen Lift Station replace/repair Forcemain	-	BORROW					
Packer Drive	100,000	BORROW				100,000	
24th & 44th Ave LS Upgrades	60,000	BORROW		60,000			
Industrial Park LS Parallel Force Main	300,000	BORROW					300,000
Townline Lift Station	180,000	BORROW				180,000	
Subtotal	2,115,000		700,000	310,000	525,000	280,000	300,000
TRANSPORTATION/EQUIPMENT							
Dump truck	240,000	BORROW	120,000			120,000	
TV truck	340,000	BORROW		340,000			
Slinger	175,000	BORROW					175,000
Subtotal	755,000		120,000	340,000	-	120,000	175,000
STREET PROJECTS							
3rd Ave (Randolph to Bos Creek)	-	BORROW					
5th Ave (West St to Garfield Ave)	-	BORROW					
Rosecrans (17th Ave - 22nd Ave)	-	BORROW					
McIntosh St	-	BORROW					
4th St (McClellan St- Scott St)	20,000	BORROW	20,000				
Bugbee Ave (Burek Ave - Tiernaey Rd)	90,000	BORROW	90,000				
4th Ave (Bridge St - Knox St)	225,000	BORROW	225,000				
Emerson Street, EauClaire to Kent	20,000	BORROW			20,000		
Mount View Blvd., EauClaire to Kent	20,000	BORROW			20,000		
Pied Piper Lane, EC to Kent	30,000	BORROW			30,000		
Eau Claire BLVD	280,000	BORROW			280,000		
Jackson St (Rrtrackes to 12th St)	180,000	BORROW		180,000			
10th Ave (Bridge to West Wausau)	195,000	BORROW		195,000			
Grant St (6th St to 7th St)	80,000	BORROW		80,000			
Stark St (5th St- 122th St)	800,000	BORROW				800,000	
Hennrietta St (Bellis St - 13th St)	200,000	BORROW				200,000	
Fulton Street (1st St to 6th St)	225,000	BORROW		225,000			
Subtotal	2,365,000		335,000	680,000	350,000	1,000,000	-
Proposed Developments/Extensions							
Northwestern Avenue (Higgenbotham)	120,000	BORROW					120,000
Subtotal	120,000		-	-	-	-	120,000
Sewer Collection System Projects							
Slipline Sewers (Cured in Place)	-	BORROW					
Stewart Avenue Force Main	1,500,000	BORROW			1,500,000		
River Crossing (Washington St Siphon)	400,000	BORROW	400,000				
Unanticipated Sewer Projects	750,000	BORROW	150,000	150,000	150,000	150,000	150,000
Subtotal	2,650,000		550,000	150,000	1,650,000	150,000	150,000
TOTAL PLANNED CAPITAL EXPENDITURES							
	8,005,000		\$1,705,000	\$1,480,000	\$2,525,000	\$1,550,000	\$745,000
TOTAL PLANT & COLLECTION ONLY							
			1,250,000	460,000	2,175,000	430,000	450,000
CUMULATIVE FULL UPGRADE							
			\$2,720,000	\$4,200,000	\$6,725,000	\$8,275,000	\$9,020,000

SEWER CIP FUNDING

	2022	2023	2024	2025	2026
OP FUNDS	\$0	\$0	\$0	\$0	\$0
BORROW	\$1,705,000	\$1,480,000	\$2,525,000	\$1,550,000	\$745,000
TOTAL	\$1,705,000	\$1,480,000	\$2,525,000	\$1,550,000	\$745,000

WAUSAU WATER WORKS - WASTEWATER DIVISION OF 05/17/2021
CAPITAL PLAN - OPERATING 2022-2026

IMPROVEMENTS/PROJECTS	COST EST 2022-2026	FUND SOURCE	2022	2023	2024	2025	2026
SEWER TREATMENT PLANT							
Asset/O&M Management	\$200,000	OP FUND:	200,000				
Subtotal	200,000		200,000	-	-	-	-
SEWER LIFT STATIONS							
	-	OP FUNDS					
Subtotal	-		-	-	-	-	-
TRANSPORTATION/EQUIPMENT							
Rodder Truck	60,000	OP FUNDS		60,000			
Subtotal	60,000		-	60,000	-	-	-
Street Projects							
Emerson Street, Eau Calaire Blvd to Kent	30,000	OP FUNDS			30,000		
Mount View Blvd, Eau Claire Blvd to Kent	25,000	OP FUNDS			25,000		
4th St (McClellan St - Scott St)	60,000	OP FUND:	60,000				
Subtotal	115,000		60,000	-	55,000	-	-
Proposed Developments/Extensions							
	-	OP FUNDS					
Subtotal	-		-	-	-	-	-
Sewer Collection System Projects							
Slipline Sewers (Cured in Place)	2,125,000	OP FUND:	425,000	425,000	425,000	425,000	425,000
Forcemain Pigging and Cleaning	490,000	OP FUNDS		120,000		120,000	250,000
Interceptor Line H2S Rprs	1,400,000	OP FUND:	400,000		500,000		500,000
Subtotal	4,015,000		825,000	545,000	925,000	545,000	1,175,000
TOTAL PLANNED CAPITAL EXPENDITURES	4,390,000		1,085,000	605,000	980,000	545,000	1,175,000
TOTAL PLANT & COLLECTION ONLY			1,025,000	545,000	925,000	545,000	1,175,000
CUMULATIVE FULL UPGRADE			1,255,000	1,860,000	2,840,000	3,385,000	4,560,000

SEWER CIP FUNDING

	2022	2023	2024	2025	2026
OP FUNDS	\$1,085,000	\$605,000	\$980,000	\$545,000	\$1,175,000
BORROW	\$0	\$0	\$0	\$0	\$0
TOTAL	\$1,085,000	\$605,000	\$980,000	\$545,000	\$1,175,000

Email received 05/26/2021 from Lynn at Rain Water Solutions:

Good Morning,

I have updated our spreadsheet and it looks like we'll be shipping a total of 7 pallets/ 231 rain barrels. What a great sale!

I feel that June 26th would work best if you have that available at your facility?

Let us know if you have any questions. Since I've just now closed the sale I'll add a "waitlist" to your website.

If you decide to run another sale we can contact those people and let them know.

Enjoy your day,

Lynn Ruck (she/her)
President & Co-Founder
[Rain Water Solutions, Inc.](#)
3812 Tarheel Dr Ste C
Raleigh, NC 27609
Office 919.835.1699
[Proud B-Corp since 2011](#)

Compliance Maintenance Annual Report

Wausau Water Works Ww Treatment Facility

Last Updated: Reporting For:

5/24/2021

2020

Influent Flow and Loading

1. Monthly Average Flows and BOD Loadings

1.1 Verify the following monthly flows and BOD loadings to your facility.

Influent No. 701	Influent Monthly Average Flow, MGD	x	Influent Monthly Average BOD Concentration mg/L	x	8.34	=	Influent Monthly Average BOD Loading, lbs/day
January	4.9540	x	242	x	8.34	=	9,987
February	4.4175	x	271	x	8.34	=	9,975
March	6.9421	x	185	x	8.34	=	10,726
April	5.8344	x	193	x	8.34	=	9,398
May	5.1773	x	231	x	8.34	=	9,991
June	5.8329	x	244	x	8.34	=	11,878
July	5.7396	x	220	x	8.34	=	10,514
August	3.9597	x	246	x	8.34	=	8,116
September	3.8996	x	310	x	8.34	=	10,087
October	3.8205	x	297	x	8.34	=	9,466
November	4.1424	x	287	x	8.34	=	9,918
December	3.7547	x	300	x	8.34	=	9,387

2. Maximum Monthly Design Flow and Design BOD Loading

2.1 Verify the design flow and loading for your facility.

Design	Design Factor	x	%	=	% of Design
Max Month Design Flow, MGD	8.2	x	90	=	7.38
		x	100	=	8.2
Design BOD, lbs/day	17000	x	90	=	15300
		x	100	=	17000

2.2 Verify the number of times the flow and BOD exceeded 90% or 100% of design, points earned, and score:

	Months of Influent	Number of times flow was greater than 90% of	Number of times flow was greater than 100% of	Number of times BOD was greater than 90% of design	Number of times BOD was greater than 100% of design
January	1	0	0	0	0
February	1	0	0	0	0
March	1	0	0	0	0
April	1	0	0	0	0
May	1	0	0	0	0
June	1	0	0	0	0
July	1	0	0	0	0
August	1	0	0	0	0
September	1	0	0	0	0
October	1	0	0	0	0
November	1	0	0	0	0
December	1	0	0	0	0
Points per each		2	1	3	2
Exceedances		0	0	0	0
Points		0	0	0	0
Total Number of Points					0

0

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3. Flow Meter

3.1 Was the influent flow meter calibrated in the last year?

- ☒ Yes Enter last calibration date (MM/DD/YYYY)
2020-04-24

☐ No

If No, please explain:

4. Sewer Use Ordinance

4.1 Did your community have a sewer use ordinance that limited or prohibited the discharge of excessive conventional pollutants ((C)BOD, SS, or pH) or toxic substances to the sewer from industries, commercial users, hauled waste, or residences?

☒ Yes

☐ No

If No, please explain:

4.2 Was it necessary to enforce the ordinance?

☒ Yes

☐ No

If Yes, please explain:

Minor issues were addressed through our pretreatment program. The Treatment Facility Overflow that occurred on 4/21/20 was caused by a local business and required a greater degree of intervention, as described in Section 6.

5. Septage Receiving

5.1 Did you have requests to receive septage at your facility?

Septic Tanks Holding Tanks Grease Traps

☒ Yes

☒ Yes

☒ Yes

☐ No

☐ No

☐ No

5.2 Did you receive septage at your facility? If yes, indicate volume in gallons.

Septic Tanks

☒ Yes 130,240 gallons

☐ No

Holding Tanks

☒ Yes 4,480,990 gallons

☐ No

Grease Traps

☐ Yes gallons

☒ No

5.2.1 If yes to any of the above, please explain if plant performance is affected when receiving any of these wastes.

Grease accumulates on our primary clarifiers and some may be from grease traps. We need to develop a FOG program and find or provide a location that accepts waste from grease traps.

6. Pretreatment

6.1 Did your facility experience operational problems, permit violations, biosolids quality concerns, or hazardous situations in the sewer system or treatment plant that were attributable to commercial or industrial discharges in the last year?

☒ Yes

☐ No

If yes, describe the situation and your community's response.

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On April 21st a local business discharged a product that caused a great deal of foaming at the wastewater treatment facility. Plant staff worked with the business to identify and resolve the source of the problem. Our pretreatment coordinator followed up with company officials to assure it wouldn't happen again.

6.2 Did your facility accept hauled industrial wastes, landfill leachate, etc.?

● Yes

○ No

If yes, describe the types of wastes received and any procedures or other restrictions that were in place to protect the facility from the discharge of hauled industrial wastes.

Village of Brokaw-(216,000 gals), Advanced Disposal-(50,500 gallons), REI-(7.409 gallons), WAULECO-(11,777,020 gallons), Marathon County Solid Waste Leachate (2,745,600 gallons)

Total Points Generated	0
Score (100 - Total Points Generated)	100
Section Grade	A

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Effluent Quality and Plant Performance (BOD/CBOD)

1. Effluent (C)BOD Results

1.1 Verify the following monthly average effluent values, exceedances, and points for BOD or CBOD

Outfall No. 001	Monthly Average Limit (mg/L)	90% of Permit Limit > 10 (mg/L)	Effluent Monthly Average (mg/L)	Months of Discharge with a Limit	Permit Limit Exceedance	90% Permit Limit Exceedance
January	30	27	17	1	0	0
February	30	27	21	1	0	0
March	30	27	16	1	0	0
April	30	27	11	1	0	0
May	30	27	7	1	0	0
June	30	27	6	1	0	0
July	30	27	6	1	0	0
August	30	27	8	1	0	0
September	30	27	9	1	0	0
October	30	27	14	1	0	0
November	30	27	17	1	0	0
December	30	27	17	1	0	0

* Equals limit if limit is ≤ 10

Months of discharge/yr	12		
Points per each exceedance with 12 months of discharge	7	3	
Exceedances	0	0	
Points	0	0	
Total number of points		0	

NOTE: For systems that discharge intermittently to state waters, the points per monthly exceedance for this section shall be based upon a multiplication factor of 12 months divided by the number of months of discharge. Example: For a wastewater facility discharging only 6 months of the year, the multiplication factor is $12/6 = 2.0$

1.2 If any violations occurred, what action was taken to regain compliance?

2. Flow Meter Calibration

2.1 Was the effluent flow meter calibrated in the last year?

● Yes

Enter last calibration date (MM/DD/YYYY)

2020-04-24

○ No

If No, please explain:

3. Treatment Problems

3.1 What problems, if any, were experienced over the last year that threatened treatment?

None

4. Other Monitoring and Limits

4.1 At any time in the past year was there an exceedance of a permit limit for any other pollutants such as chlorides, pH, residual chlorine, fecal coliform, or metals?

● Yes

○ No

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If Yes, please explain:

We had a few instances of low pH

4.2 At any time in the past year was there a failure of an effluent acute or chronic whole effluent toxicity (WET) test?

☐ Yes

☒ No

If Yes, please explain:

4.3 If the biomonitoring (WET) test did not pass, were steps taken to identify and/or reduce source(s) of toxicity?

☐ Yes

☐ No

☒ N/A

Please explain unless not applicable:

Total Points Generated	0
Score (100 - Total Points Generated)	100
Section Grade	A

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Effluent Quality and Plant Performance (Total Suspended Solids)

1. Effluent Total Suspended Solids Results

1.1 Verify the following monthly average effluent values, exceedances, and points for TSS:

Outfall No. 001	Monthly Average Limit (mg/L)	90% of Permit Limit >10 (mg/L)	Effluent Monthly Average (mg/L)	Months of Discharge with a Limit	Permit Limit Exceedance	90% Permit Limit Exceedance
January	30	27	11	1	0	0
February	30	27	13	1	0	0
March	30	27	8	1	0	0
April	30	27	5	1	0	0
May	30	27	6	1	0	0
June	30	27	7	1	0	0
July	30	27	9	1	0	0
August	30	27	10	1	0	0
September	30	27	15	1	0	0
October	30	27	12	1	0	0
November	30	27	15	1	0	0
December	30	27	10	1	0	0
* Equals limit if limit is <= 10						
Months of Discharge/yr				12		
Points per each exceedance with 12 months of discharge:					7	3
Exceedances					0	0
Points					0	0
Total Number of Points						0

NOTE: For systems that discharge intermittently to state waters, the points per monthly exceedance for this section shall be based upon a multiplication factor of 12 months divided by the number of months of discharge.

Example: For a wastewater facility discharging only 6 months of the year, the multiplication factor is $12/6 = 2.0$

1.2 If any violations occurred, what action was taken to regain compliance?

Total Points Generated	0
Score (100 - Total Points Generated)	100
Section Grade	A

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Effluent Quality and Plant Performance (Phosphorus)

1. Effluent Phosphorus Results

1.1 Verify the following monthly average effluent values, exceedances, and points for Phosphorus

Outfall No. 001	Monthly Average phosphorus Limit (mg/L)	Effluent Monthly Average phosphorus (mg/L)	Months of Discharge with a Limit	Permit Limit Exceedance
January	1	0.702	1	0
February	1	0.903	1	0
March	1	0.662	1	0
April	1	0.693	1	0
May	1	0.895	1	0
June	1	0.772	1	0
July	1	0.781	1	0
August	1	0.993	1	0
September	1	1.000	1	0
October	1	0.996	1	0
November	1	0.851	1	0
December	1	0.793	1	0
Months of Discharge/yr			12	
Points per each exceedance with 12 months of discharge:				10
Exceedances				0
Total Number of Points				0

NOTE: For systems that discharge intermittently to waters of the state, the points per monthly exceedance for this section shall be based upon a multiplication factor of 12 months divided by the number of months of discharge.

Example: For a wastewater facility discharging only 6 months of the year, the multiplication factor is $12/6 = 2.0$

1.2 If any violations occurred, what action was taken to regain compliance?

--

0

Total Points Generated	0
Score (100 - Total Points Generated)	100
Section Grade	A

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Biosolids Quality and Management

1. Biosolids Use/Disposal

1.1 How did you use or dispose of your biosolids? (Check all that apply)

- ☒ Land applied under your permit
- ☐ Publicly Distributed Exceptional Quality Biosolids
- ☐ Hauled to another permitted facility
- ☐ Landfilled
- ☐ Incinerated
- ☐ Other

NOTE: If you did not remove biosolids from your system, please describe your system type such as lagoons, reed beds, recirculating sand filters, etc.

1.1.1 If you checked Other, please describe:

2. Land Application Site

2.1 Last Year's Approved and Active Land Application Sites

2.1.1 How many acres did you have?

4188.90 acres

2.1.2 How many acres did you use?

330.2 acres

2.2 If you did not have enough acres for your land application needs, what action was taken?

2.3 Did you overapply nitrogen on any of your approved land application sites you used last year?

☐ Yes (30 points)

☒ No

2.4 Have all the sites you used last year for land application been soil tested in the previous 4 years?

☒ Yes

☐ No (10 points)

☐ N/A

0

3. Biosolids Metals

Number of biosolids outfalls in your WPDES permit:

3.1 For each outfall tested, verify the biosolids metal quality values for your facility during the last calendar year.

Outfall No. 002 - CAKE SLUDGE

Parameter	80% of Limit	H.Q. Limit	Ceiling Limit	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	80% Value	High Quality	Ceiling
Arsenic		41	75	<7.36			<6.86			5.01					<4.16		0	0
Cadmium		39	85	.656			.817			.764					.944		0	0
Copper		1500	4300	374			450			433					725		0	0
Lead		300	840	29.8			29.3			25.1					30		0	0
Mercury		17	57	.429			.355			.446					.493		0	0
Molybdenum	60		75	19.2			26.8			19					22	0		0
Nickel	336		420	57.5			51.4			38.7					40	0		0
Selenium	80		100	<6.5			<6.04			<3.89					<3.67	0		0
Zinc		2800	7500	595			669			605					592		0	0

3.1.1 Number of times any of the metals exceeded the high quality limits OR 80% of the limit for molybdenum, nickel, or selenium = 0

Exceedence Points

☒ 0 (0 Points)

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☐ 1-2 (10 Points)

☐ > 2 (15 Points)

3.1.2 If you exceeded the high quality limits, did you cumulatively track the metals loading at each land application site? (check applicable box)

☐ Yes

☐ No (10 points)

☒ N/A - Did not exceed limits or no HQ limit applies (0 points)

☐ N/A - Did not land apply biosolids until limit was met (0 points)

3.1.3 Number of times any of the metals exceeded the ceiling limits = 0

Exceedence Points

☒ 0 (0 Points)

☐ 1 (10 Points)

☐ > 1 (15 Points)

3.1.4 Were biosolids land applied which exceeded the ceiling limit?

☐ Yes (20 Points)

☒ No (0 Points)

3.1.5 If any metal limit (high quality or ceiling) was exceeded at any time, what action was taken? Has the source of the metals been identified?

0

4. Pathogen Control (per outfall):

4.1 Verify the following information. If any information is incorrect, use the Report Issue button under the Options header in the left-side menu.

Outfall Number:	002
Biosolids Class:	B
Bacteria Type and Limit:	Fecal Coliform
Sample Dates:	01/01/2020 - 03/31/2020
Density:	26,511
Sample Concentration Amount:	CFU/G TS
Requirement Met:	Yes
Land Applied:	No
Process:	Anaerobic Digestion
Process Description:	Primary and Secondary Anaerobic Digestion

Outfall Number:	002
Biosolids Class:	B
Bacteria Type and Limit:	Fecal Coliform
Sample Dates:	04/01/2020 - 06/30/2020
Density:	16,466
Sample Concentration Amount:	CFU/G TS
Requirement Met:	Yes
Land Applied:	Yes
Process:	Anaerobic Digestion
Process Description:	Primary and Secondary Anaerobic Digestion

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0

Outfall Number:	002
Biosolids Class:	B
Bacteria Type and Limit:	Fecal Coliform
Sample Dates:	07/01/2020 - 09/30/2020
Density:	14,850
Sample Concentration Amount:	CFU/G TS
Requirement Met:	Yes
Land Applied:	Yes
Process:	Anaerobic Digestion
Process Description:	Primary and Secondary Anaerobic Digestion

Outfall Number:	002
Biosolids Class:	B
Bacteria Type and Limit:	Fecal Coliform
Sample Dates:	10/01/2020 - 12/31/2020
Density:	14,640
Sample Concentration Amount:	CFU/G TS
Requirement Met:	Yes
Land Applied:	Yes
Process:	Anaerobic Digestion
Process Description:	Primary and Secondary Anaerobic Digestion

4.2 If exceeded Class B limit or did not meet the process criteria at the time of land application.

4.2.1 Was the limit exceeded or the process criteria not met at the time of land application?

o Yes (40 Points)

● No

If yes, what action was taken?

5. Vector Attraction Reduction (per outfall):

5.1 Verify the following information. If any of the information is incorrect, use the Report Issue button under the Options header in the left-side menu.

Outfall Number:	002
Method Date:	01/30/2020
Option Used To Satisfy Requirement:	Volatile Solids Reduction
Requirement Met:	Yes
Land Applied:	No
Limit (if applicable):	>=38
Results (if applicable):	61.30

Outfall Number:	002
Method Date:	04/09/2020
Option Used To Satisfy Requirement:	Volatile Solids Reduction
Requirement Met:	Yes
Land Applied:	Yes
Limit (if applicable):	>=38
Results (if applicable):	58.10

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2020

Outfall Number:	002		0
Method Date:	07/09/2020		
Option Used To Satisfy Requirement:	Volatile Solids Reduction		
Requirement Met:	Yes		
Land Applied:	Yes		
Limit (if applicable):	>=38		
Results (if applicable):	49.10		
Outfall Number:	002		0
Method Date:	12/03/2020		
Option Used To Satisfy Requirement:	Volatile Solids Reduction		
Requirement Met:	Yes		
Land Applied:	Yes		
Limit (if applicable):	>=38		
Results (if applicable):	66.30		
5.2 Was the limit exceeded or the process criteria not met at the time of land application? ☐ Yes (40 Points) ☒ No If yes, what action was taken?			
6. Biosolids Storage 6.1 How many days of actual, current biosolids storage capacity did your wastewater treatment facility have either on-site or off-site? ☒ >= 180 days (0 Points) ☐ 150 - 179 days (10 Points) ☐ 120 - 149 days (20 Points) ☐ 90 - 119 days (30 Points) ☐ < 90 days (40 Points) ☐ N/A (0 Points) 6.2 If you checked N/A above, explain why.			
7. Issues 7.1 Describe any outstanding biosolids issues with treatment, use or overall management:			

Total Points Generated	0
Score (100 - Total Points Generated)	100
Section Grade	A

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Staffing and Preventative Maintenance (All Treatment Plants)

1. Plant Staffing 1.1 Was your wastewater treatment plant adequately staffed last year? ☐ Yes ☒ No If No, please explain: We have been authorized to hire two additional staff but have not been able to fill the positions. The sewer collection crew, in particular, had a lot of turnover in 2020 which meant they were short handed and lost a lot of experience. Could use more help/staff for: Preventative maintenance, routine collection system cleaning and televising, housekeeping, maintaining minimum level of experience 1.2 Did your wastewater staff have adequate time to properly operate and maintain the plant and fulfill all wastewater management tasks including recordkeeping? ☐ Yes ☒ No If No, please explain: Additional time is needed to complete and document preventative maintenance, maintain sewers, keep GIS system updated, and recordkeeping (MSD's, safety, training)	
2. Preventative Maintenance 2.1 Did your plant have a documented AND implemented plan for preventative maintenance on major equipment items? ☐ Yes (Continue with question 2) ☐ ☒ No (40 points) ☐ If No, please explain, then go to question 3: Our current plant upgrade involves a lot of new equipment and our efforts to use a spreadsheet are no longer adequate. New asset management software is expected to be implemented as part of the upgrade. 2.2 Did this preventative maintenance program depict frequency of intervals, types of lubrication, and other tasks necessary for each piece of equipment? ☐ Yes ☐ No (10 points) 2.3 Were these preventative maintenance tasks, as well as major equipment repairs, recorded and filed so future maintenance problems can be assessed properly? ☐ Yes ☐ Paper file system ☐ Computer system ☐ Both paper and computer system ☐ No (10 points)	40
3. O&M Manual 3.1 Does your plant have a detailed O&M and Manufacturer Equipment Manuals that can be used as a reference when needed? ☒ Yes ☐ No	
4. Overall Maintenance /Repairs 4.1 Rate the overall maintenance of your wastewater plant. ☐ Excellent ☐ Very good	

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● Good

○ Fair

○ Poor

Describe your rating:

Our rating will improve as we manage to fill our open positions and implement new software to assist with maintenance management.

Total Points Generated	40
Score (100 - Total Points Generated)	60
Section Grade	F

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2020

Operator Certification and Education

1. Operator-In-Charge

1.1 Did you have a designated operator-in-charge during the report year?

- Yes (0 points)
- No (20 points)

Name:

DAVID A ERICKSON

Certification No:

34268

0

2. Certification Requirements

2.1 In accordance with Chapter NR 114.56 and 114.57, Wisconsin Administrative Code, what level and subclass(es) were required for the operator-in-charge (OIC) to operate the wastewater treatment plant and what level and subclass(es) were held by the operator-in-charge?

Sub Class	SubClass Description	WWTP	OIC		
		Advanced	OIT	Basic	Advanced
A1	Suspended Growth Processes	X			X
A2	Attached Growth Processes				
A3	Recirculating Media Filters				
A4	Ponds, Lagoons and Natural				
A5	Anaerobic Treatment Of Liquid				
B	Solids Separation	X			X
C	Biological Solids/Sludges	X			X
P	Total Phosphorus	X			X
N	Total Nitrogen				
D	Disinfection	X			X
L	Laboratory	X			X
U	Unique Treatment Systems				
SS	Sanitary Sewage Collection	X	NA	NA	NA

0

2.2 Was the operator-in-charge certified at the appropriate level and subclass(es) to operate this plant? (Note: Certification in subclass SS is required 5 years after permit reissuance and is basic level only.)

- Yes (0 points)
- No (20 points)

3. Succession Planning

3.1 In the event of the loss of your designated operator-in-charge, did you have a contingency plan to ensure the continued proper operation and maintenance of the plant that includes one or more of the following options (check all that apply)?

- ☒ One or more additional certified operators on staff
- ☐ An arrangement with another certified operator
- ☐ An arrangement with another community with a certified operator
- ☐ An operator on staff who has an operator-in-training certificate for your plant and is expected to be certified within one year
- ☐ A consultant to serve as your certified operator
- ☐ None of the above (20 points)

If "None of the above" is selected, please explain:

0

4. Continuing Education Credits

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4.1 If you had a designated operator-in-charge, was the operator-in-charge earning Continuing Education Credits at the following rates?

OIT and Basic Certification:

- ☐ Averaging 6 or more CECs per year.
- ☐ Averaging less than 6 CECs per year.

Advanced Certification:

- ☒ Averaging 8 or more CECs per year.
- ☐ Averaging less than 8 CECs per year.

Total Points Generated	0
Score (100 - Total Points Generated)	100
Section Grade	A

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Financial Management

1. Provider of Financial Information

Name:

Valerie Swanborg

Telephone:

(715) 261-6646

(XXX) XXX-XXXX

E-Mail Address
(optional):

valerie.swanborg@ci.wausau.wi.us

2. Treatment Works Operating Revenues

2.1 Are User Charges or other revenues sufficient to cover O&M expenses for your wastewater treatment plant AND/OR collection system ?

● Yes (0 points) ☐

○ No (40 points)

If No, please explain:

2.2 When was the User Charge System or other revenue source(s) last reviewed and/or revised?

Year:

2020

● 0-2 years ago (0 points) ☐

○ 3 or more years ago (20 points) ☐

○ N/A (private facility)

2.3 Did you have a special account (e.g., CFWP required segregated Replacement Fund, etc.) or financial resources available for repairing or replacing equipment for your wastewater treatment plant and/or collection system?

● Yes (0 points)

○ No (40 points)

REPLACEMENT FUNDS [PUBLIC MUNICIPAL FACILITIES SHALL COMPLETE QUESTION 3]

3. Equipment Replacement Funds

3.1 When was the Equipment Replacement Fund last reviewed and/or revised?

Year:

2020

● 1-2 years ago (0 points) ☐

○ 3 or more years ago (20 points) ☐

○ N/A

If N/A, please explain:

3.2 Equipment Replacement Fund Activity

3.2.1 Ending Balance Reported on Last Year's CMAR

\$ 1,898,191.13

3.2.2 Adjustments - if necessary (e.g. earned interest, audit correction, withdrawal of excess funds, increase making up previous shortfall, etc.)

\$ 0.00

3.2.3 Adjusted January 1st Beginning Balance

\$ 1,898,191.13

3.2.4 Additions to Fund (e.g. portion of User Fee, earned interest, etc.)

+

\$ 141,346.31

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3.2.5 Subtractions from Fund (e.g., equipment replacement, major repairs - use description box 3.2.6.1 below*)

- \$ 0.00

3.2.6 Ending Balance as of December 31st for CMAR Reporting Year

\$ 2,039,537.44

All Sources: This ending balance should include all Equipment Replacement Funds whether held in a bank account(s), certificate(s) of deposit, etc.

3.2.6.1 Indicate adjustments, equipment purchases, and/or major repairs from 3.2.5 above.

none

3.3 What amount should be in your Replacement Fund? \$ 1,663,576.25

0

Please note: If you had a CWFP loan, this amount was originally based on the Financial Assistance Agreement (FAA) and should be regularly updated as needed. Further calculation instructions and an example can be found by clicking the SectionInstructions link under Info header in the left-side menu.

3.3.1 Is the December 31 Ending Balance in your Replacement Fund above, (#3.2.6) equal to, or greater than the amount that should be in it (#3.3)?

☒ Yes

☐ No

If No, please explain.

4. Future Planning

4.1 During the next ten years, will you be involved in formal planning for upgrading, rehabilitating, or new construction of your treatment facility or collection system?

☒ Yes - If Yes, please provide major project information, if not already listed below. ☐ ☐

☐ No

Project #	Project Description	Estimated Cost	Approximate Construction Year
1	Northwestern Lift Station	200000	2021
2	Sewer Sliplining (annual)	425000	2020
3	Crocker St. Lift Station	200000	2021
4	Lift Station Forcemain Cleaning	200000	2020
5	Interceptor Line MH Reconstruction	750000	2021
6	Airport Lift Station Bar Screen	300000	2020
7	Plant Upgrade Project	20000000	2020
8	Plant Upgrade Project	30000000	2021
9	Plant Upgrade Project	30000000	2022
10	Industrial Park LS Pump Addition	400000	2020

5. Financial Management General Comments

Our plant upgrade is in progress and expected to be completed in 2023.

ENERGY EFFICIENCY AND USE

6. Collection System

6.1 Energy Usage

6.1.1 Enter the monthly energy usage from the different energy sources:

COLLECTION SYSTEM PUMPAGE: Total Power Consumed

Number of Municipally Owned Pump/Lift Stations: 25

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	Electricity Consumed (kWh)	Natural Gas Consumed (therms)
January	38,432	119
February	41,961	133
March	39,035	96
April	38,727	93
May	32,354	63
June	27,573	23
July	24,565	37
August	21,429	32
September	22,716	30
October	24,160	201
November	33,032	175
December	36,755	243
Total	380,739	1,245
Average	31,728	104

6.1.2 Comments:

6.2 Energy Related Processes and Equipment

6.2.1 Indicate equipment and practices utilized at your pump/lift stations (Check all that apply):

- ☒ Comminution or Screening
- ☐ Extended Shaft Pumps
- ☒ Flow Metering and Recording
- ☐ Pneumatic Pumping
- ☒ SCADA System
- ☒ Self-Priming Pumps
- ☒ Submersible Pumps
- ☒ Variable Speed Drives
- ☐ Other:

6.2.2 Comments:

6.3 Has an Energy Study been performed for your pump/lift stations?

- ☒ No
- ☐ Yes

Year:

By Whom:

Describe and Comment:

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6.4 Future Energy Related Equipment

6.4.1 What energy efficient equipment or practices do you have planned for the future for your pump/lift stations?

Upgrade pumps and controls, install VFDs, clean force mains

7. Treatment Facility

7.1 Energy Usage

7.1.1 Enter the monthly energy usage from the different energy sources:

TREATMENT PLANT: Total Power Consumed/Month

	Electricity Consumed (kWh)	Total Influent Flow (MG)	Electricity Consumed/ Flow (kWh/MG)	Total Influent BOD (1000 lbs)	Electricity Consumed/ Total Influent BOD (kWh/1000lbs)	Natural Gas Consumed (therms)
January	100,066	153.57	652	309.60	323	12,929
February	131,029	128.11	1,023	289.28	453	12,060
March	123,986	215.21	576	332.51	373	8,572
April	129,718	175.03	741	281.94	460	7,632
May	167,239	160.50	1,042	309.72	540	3,857
June	164,974	174.99	943	356.34	463	422
July	182,072	177.93	1,023	325.93	559	610
August	300,513	122.75	2,448	251.60	1,194	1,791
September	310,408	116.99	2,653	302.61	1,026	2,412
October	329,004	118.44	2,778	293.45	1,121	5,056
November	253,548	124.27	2,040	297.54	852	8,009
December	315,523	116.40	2,711	291.00	1,084	13,072
Total	2,508,080	1,784.19		3,641.52		76,422
Average	209,007	148.68	1,553	303.46	704	6,369

7.1.2 Comments:

Since September, our plant upgrade project has increased the amount of energy used and limited the time our microturbines were online.

7.2 Energy Related Processes and Equipment

7.2.1 Indicate equipment and practices utilized at your treatment facility (Check all that apply):

- ☐ Aerobic Digestion
- ☒ Anaerobic Digestion
- ☐ Biological Phosphorus Removal
- ☐ Coarse Bubble Diffusers
- ☒ Dissolved O2 Monitoring and Aeration Control
- ☐ Effluent Pumping
- ☒ Fine Bubble Diffusers
- ☒ Influent Pumping
- ☒ Mechanical Sludge Processing
- ☐ Nitrification
- ☒ SCADA System
- ☒ UV Disinfection
- ☒ Variable Speed Drives

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☐ Other:

7.2.2 Comments:

7.3 Future Energy Related Equipment

7.3.1 What energy efficient equipment or practices do you have planned for the future for your treatment facility?

The current plant upgrade includes new boilers, VFD's,

8. Biogas Generation

8.1 Do you generate/produce biogas at your facility?

☐ No

☒ Yes

If Yes, how is the biogas used (Check all that apply):

☒ Flared Off

☒ Building Heat

☒ Process Heat

☒ Generate Electricity

☐ Other:

9. Energy Efficiency Study

9.1 Has an Energy Study been performed for your treatment facility?

☒ No

☐ Yes

☐ Entire facility

Year:

By Whom:

Describe and Comment:

☐ Part of the facility

Year:

By Whom:

Describe and Comment:

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Total Points Generated	0
Score (100 - Total Points Generated)	100
Section Grade	A

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Sanitary Sewer Collection Systems

1. Capacity, Management, Operation, and Maintenance (CMOM) Program

1.1 Do you have a CMOM program that is being implemented?

☒ Yes

☐ No

If No, explain:

1.2 Do you have a CMOM program that contains all the applicable components and items according to Wisc. Adm Code NR 210.23 (4)?

☒ Yes

☐ No (30 points)

☐ N/A

If No or N/A, explain:

1.3 Does your CMOM program contain the following components and items? (check the components and items that apply)

☒ Goals [NR 210.23 (4)(a)]

Describe the major goals you had for your collection system last year:

Replace siphon lines, clean industrial park force main

Did you accomplish them?

☐ Yes

☒ No

If No, explain:

The Sturgeon Eddy siphon was replaced in 2019 and the Thomas Street siphon was replaced in 2020. Access structures for the industrial park force main will be installed and the actual cleaning completed late this year.

☒ Organization [NR 210.23 (4) (b)] ☐

Does this chapter of your CMOM include:

☒ Organizational structure and positions (eg. organizational chart and position descriptions)

☒ Internal and external lines of communication responsibilities

☒ Person(s) responsible for reporting overflow events to the department and the public

☒ Legal Authority [NR 210.23 (4) (c)]

What is the legally binding document that regulates the use of your sewer system?

Wausau Municipal Code Ch 13

If you have a Sewer Use Ordinance or other similar document, when was it last reviewed and revised? (MM/DD/YYYY) 2020-06-09

Does your sewer use ordinance or other legally binding document address the following:

☒ Private property inflow and infiltration

☒ New sewer and building sewer design, construction, installation, testing and inspection

☐ Rehabilitated sewer and lift station installation, testing and inspection

☐ Sewage flows satellite system and large private users are monitored and controlled, as necessary

☒ Fat, oil and grease control

☒ Enforcement procedures for sewer use non-compliance

☐ Operation and Maintenance [NR 210.23 (4) (d)]

Does your operation and maintenance program and equipment include the following:

☒ Equipment and replacement part inventories

☒ Up-to-date sewer system map

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☒ A management system (computer database and/or file system) for collection system information for O&M activities, investigation and rehabilitation ☒ A description of routine operation and maintenance activities (see question 2 below) ☐ Capacity assessment program ☒ Basement back assessment and correction ☒ Regular O&M training ☐ Design and Performance Provisions [NR 210.23 (4) (e)] ☐ ☐ What standards and procedures are established for the design, construction, and inspection of the sewer collection system, including building sewers and interceptor sewers on private property? ☒ State Plumbing Code, DNR NR 110 Standards and/or local Municipal Code Requirements ☒ Construction, Inspection, and Testing ☐ Others: ☒ Overflow Emergency Response Plan [NR 210.23 (4) (f)] ☐ ☐ Does your emergency response capability include: ☒ Responsible personnel communication procedures ☒ Response order, timing and clean-up ☒ Public notification protocols ☐ Training ☐ Emergency operation protocols and implementation procedures ☒ Annual Self-Auditing of your CMOM Program [NR 210.23 (5)] ☐ ☐ ☐ Special Studies Last Year (check only those that apply): ☒ Infiltration/Inflow (I/I) Analysis ☐ Sewer System Evaluation Survey (SSES) ☐ Sewer Evaluation and Capacity Management Plan (SECAP) ☐ Lift Station Evaluation Report ☐ Others: 	0																														
2. Operation and Maintenance 2.1 Did your sanitary sewer collection system maintenance program include the following maintenance activities? Complete all that apply and indicate the amount maintained. <table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 30%;">Cleaning</td> <td style="width: 20%; text-align: center; border: 1px solid black;">5</td> <td style="width: 50%;">% of system/year</td> </tr> <tr> <td>Root removal</td> <td style="text-align: center; border: 1px solid black;">1.4</td> <td>% of system/year</td> </tr> <tr> <td>Flow monitoring</td> <td style="text-align: center; border: 1px solid black;">5</td> <td>% of system/year</td> </tr> <tr> <td>Smoke testing</td> <td style="text-align: center; border: 1px solid black;">0</td> <td>% of system/year</td> </tr> <tr> <td>Sewer line televising</td> <td style="text-align: center; border: 1px solid black;">3</td> <td>% of system/year</td> </tr> <tr> <td>Manhole inspections</td> <td style="text-align: center; border: 1px solid black;">4</td> <td>% of system/year</td> </tr> <tr> <td>Lift station O&M</td> <td style="text-align: center; border: 1px solid black;">4</td> <td># per L.S./year</td> </tr> <tr> <td>Manhole rehabilitation</td> <td style="text-align: center; border: 1px solid black;">1.7</td> <td>% of manholes rehabbed</td> </tr> <tr> <td>Mainline rehabilitation</td> <td style="text-align: center; border: 1px solid black;">1.6</td> <td>% of sewer lines rehabbed</td> </tr> <tr> <td>Private sewer inspections</td> <td style="text-align: center; border: 1px solid black;">0</td> <td>% of system/year</td> </tr> </table>		Cleaning	5	% of system/year	Root removal	1.4	% of system/year	Flow monitoring	5	% of system/year	Smoke testing	0	% of system/year	Sewer line televising	3	% of system/year	Manhole inspections	4	% of system/year	Lift station O&M	4	# per L.S./year	Manhole rehabilitation	1.7	% of manholes rehabbed	Mainline rehabilitation	1.6	% of sewer lines rehabbed	Private sewer inspections	0	% of system/year
Cleaning	5	% of system/year																													
Root removal	1.4	% of system/year																													
Flow monitoring	5	% of system/year																													
Smoke testing	0	% of system/year																													
Sewer line televising	3	% of system/year																													
Manhole inspections	4	% of system/year																													
Lift station O&M	4	# per L.S./year																													
Manhole rehabilitation	1.7	% of manholes rehabbed																													
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Private sewer inspections	0	% of system/year																													

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Private sewer I/I removal % of private services

River or water crossings % of pipe crossings evaluated or maintained

Please include additional comments about your sanitary sewer collection system below:

Thomas Street siphon replaced

3. Performance Indicators

3.1 Provide the following collection system and flow information for the past year.

35	Total actual amount of precipitation last year in inches
32.4	Annual average precipitation (for your location)
232	Miles of sanitary sewer
25	Number of lift stations
1	Number of lift station failures
3	Number of sewer pipe failures
15	Number of basement backup occurrences
96	Number of complaints
	Average daily flow in MGD (if available)
	Peak monthly flow in MGD (if available)
	Peak hourly flow in MGD (if available)

3.2 Performance ratios for the past year:

0.04	Lift station failures (failures/year)
0.01	Sewer pipe failures (pipe failures/sewer mile/yr)
0.02	Sanitary sewer overflows (number/sewer mile/yr)
0.06	Basement backups (number/sewer mile)
0.41	Complaints (number/sewer mile)
	Peaking factor ratio (Peak Monthly:Annual Daily Avg)
	Peaking factor ratio (Peak Hourly:Annual Daily Avg)

4. Overflows

LIST OF SANITARY SEWER (SSO) AND TREATMENT FACILITY (TFO) OVERFLOWS REPORTED **

	Date	Location	Cause	Estimated Volume
0	4/22/2020 7:45:00 AM - 4/22/2020 3:30:00 PM	Wastewater Treatment Facility, 435 Adrian St. Wausau WI 54401	Other causes	1
1	5/15/2020 8:00:00 AM - 5/15/2020 9:15:00 AM	Westhill Dr & N 32nd Ave	Plugged Sewer	1,000
2	8/9/2020 10:00:00 PM - 8/10/2020 12:00:00 PM	750 Imm Street, Wausau, WI	Broken Sewer, Broken Sewer	600
3	10/30/2020 6:00:00 PM - 10/30/2020 10:30:00 PM	Intersection of Bridge Street and N 1st Avenue in Wausau	Plugged Sewer	500

** If there were any SSOs or TFOs that are not listed above, please contact the DNR and stop work on this section until corrected.

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What actions were taken, or are underway, to reduce or eliminate SSO or TFO occurrences in the future?

Continue public education regarding wipes and other non-flushable material, assess condition of collector lines and repair as necessary, work with boring contractors to assure mains are properly located

5. Infiltration / Inflow (I/I)

5.1 Was infiltration/inflow (I/I) significant in your community last year?

☒ Yes

☐ No

If Yes, please describe:

The I&I study divided the city into 15 drainage basins. Two of those basins had significant peaking factors during the monitoring period.

5.2 Has infiltration/inflow and resultant high flows affected performance or created problems in your collection system, lift stations, or treatment plant at any time in the past year?

☐ Yes

☒ No

If Yes, please describe:

5.3 Explain any infiltration/inflow (I/I) changes this year from previous years:

We believe overall I&I has decreased since the Sturgeon Eddy siphon was replaced but the decrease may also be due to the weather and a lack of intense thunderstorms.

5.4 What is being done to address infiltration/inflow in your collection system?

We are proceeding with some smoke testing and manhole evaluation to identify sources that can be eliminated.

Total Points Generated	0
Score (100 - Total Points Generated)	100
Section Grade	A

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Grading Summary

WPDES No: 0025739

SECTIONS	LETTER GRADE	GRADE POINTS	WEIGHTING FACTORS	SECTION POINTS
Influent	A	4	3	12
BOD/CBOD	A	4	10	40
TSS	A	4	5	20
Phosphorus	A	4	3	12
Biosolids	A	4	5	20
Staffing/PM	F	0	1	0
OpCert	A	4	1	4
Financial	A	4	1	4
Collection	A	4	3	12
TOTALS			32	124
GRADE POINT AVERAGE (GPA) = 3.88				

Notes:

- A = Voluntary Range (Response Optional)
- B = Voluntary Range (Response Optional)
- C = Recommendation Range (Response Required)
- D = Action Range (Response Required)
- F = Action Range (Response Required)

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Resolution or Owner's Statement

Name of Governing
Body or Owner:

City of Wausau

Date of Resolution or
Action Taken:

Resolution Number:

Date of Submittal:

ACTIONS SET FORTH BY THE GOVERNING BODY OR OWNER RELATING TO SPECIFIC CMAR SECTIONS (Optional for grade A or B. Required for grade C, D, or F):

Influent Flow and Loadings: Grade = A

Effluent Quality: BOD: Grade = A

Effluent Quality: TSS: Grade = A

Effluent Quality: Phosphorus: Grade = A

Biosolids Quality and Management: Grade = A

Staffing: Grade = F

The Utility will continue to recruit and fill the two positions we have open, and to monitor future staffing levels.
Software will be purchased or developed to assist with preventative maintenance and track purchase orders.

Operator Certification: Grade = A

Financial Management: Grade = A

Collection Systems: Grade = A

(Regardless of grade, response required for Collection Systems if SSOs were reported)

Continue public education regarding wipes and other non-flushable material, assess condition of collector lines and repair as necessary, work with boring contractors to assure mains are properly located

ACTIONS SET FORTH BY THE GOVERNING BODY OR OWNER RELATING TO THE OVERALL GRADE POINT AVERAGE AND ANY GENERAL COMMENTS

(Optional for G.P.A. greater than or equal to 3.00, required for G.P.A. less than 3.00)

G.P.A. = 3.88

CITY OF WAUSAU, 407 Grant Street, Wausau, WI 54403

RESOLUTION OF WAUSAU WATER WORKS – WASTEWATER DIVISION

Reviewing the 2020 Compliance Maintenance Annual Report for the Wastewater Plant

Committee Action:

Fiscal Impact: There is no fiscal impact to the City.

File Number:	Date Introduced: June 8, 2021
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FISCAL IMPACT SUMMARY

COSTS	<i>Budget Neutral</i>	Yes ☒ No ☐	
	<i>Included in Budget:</i>	Yes ☐ No ☐	<i>Budget Source:</i>
	<i>One-time Costs:</i>	Yes ☐ No ☐	<i>Amount:</i>
	<i>Recurring Costs:</i>	Yes ☐ No ☐	<i>Amount:</i>
SOURCE	<i>Fee Financed:</i>	Yes ☐ No ☐	<i>Amount:</i>
	<i>Grant Financed:</i>	Yes ☐ No ☐	<i>Amount:</i>
	<i>Debt Financed:</i>	Yes ☐ No ☐	<i>Amount</i> <i>Annual Retirement</i>
	<i>TID Financed:</i>	Yes ☐ No ☐	<i>Amount:</i>
	<i>TID Source: Increment Revenue</i> ☐ <i>Debt</i> ☐ <i>Funds on Hand</i> ☐ <i>Interfund Loan</i> ☐		

RESOLUTION

WHEREAS, Wausau Water Works – Wastewater Division owns, operates, and maintains a public owned treatment works (POTW) in the City of Wausau on Adrian Street, and

WHEREAS, the Utility’s POTW is authorized to discharge to the Wisconsin River under WPDES Permit No. WI-0025739-09, and

WHEREAS, by Wisconsin Administrative Code NR 208, all Wisconsin POTW’s are required to submit a Compliance Maintenance Annual Report (CMAR), and

WHEREAS, Wausau Water Works – Wastewater Division has prepared the attached 2020 CMAR and acknowledges the point total in the report, and

WHEREAS, the City of Wausau is committed to address the actions set forth in the attached 2020 CMAR; now therefore

BE IT RESOLVED that the Common Council of the City of Wausau has reviewed the attached

2020 Compliance Maintenance Annual Report from Wausau Water Works – Wastewater Division and hereby submits the Report as prescribed.

Approved:

Katie Rosenberg, Mayor