MINUTES OF THE BOARD OF PUBLIC WORKS

Tuesday November 28, 2023

The Regular Meeting of the Board of Public Works held on November 28, 2023 at 7:30 a.m. in the City Council Chambers located at 405 Jefferson Street, Washington, Missouri. The following were present/absent:

MEMBERS:		
Chairman	John Vietmeier	Present
Vice Chairman	Brad Mitchell	Present
Secretary	Mike Radetic	Present
Member	Steve Richardson	Present
Ex-officio Member	Steve Strubberg	Present
Ex-officio Member	Vacant	

OTHERS:		
Council Representative	Mike Coulter	Present
Council Representative	Chad Briggs	Absent
Mayor	James Hagedorn	Present
City Administrator	Darren Lamb	Present
Public Works Superintendent	Kevin Quaethem	Present
Water/Wastewater Admin. Asst.	Theresa Lamke	Present
Interim City Engineer	Charles Stankovic	Absent
Assistant City Engineer	Andrea Lueken	Absent
Waste Water Foreman	Kerry Duke	Present
Water Foreman	Dylan Voss	Present
GIS Engineering		

Originals and/or copies of agenda items of the meeting, including recorded votes are available on record in the office of the Public Works Department for one year. Video/DVD and audio tapes are kept only until the minutes have been approved for the meeting. DVD copies of this meeting are distributed to Board Members if requested.

Minutes

A motion made by Mr. Mitchell and seconded by Mr. Richardson to approve the minutes from the regular meeting held October 17, 2023 meeting. The motion passed without dissent.

Priority Items

None

Wastewater

We have a bill from Vandevanter for the pump we had worked on.

This is for the VFDs. I've been talking about VFD's and how they're starting to fail due to the age of the plant. This is another one that went out. This is a VFD for the disk aerators, which helps put the doo into the vertical loop reactors. This is just another one we had to replace. We have another one on order that's replacing one that's failing. Motion to approve Brad Mitchell and second Mike Radetic

This request is for last month because Insituform Technologies USA, LLC didn't get the invoice in time to get into last month's packet. The $104,469.31 is for the final materials part of the project for approval for payment. We have a bill for this year, right? We're catching up for last year. This is the finish of last year's project, our last budget year. They're coming back next year, though? Yes. We'll have them back again. It's going to be an ongoing rolling project. This is just for the project from last budget year that we're finalizing, finally finishing up. A motion made by Mike Radetic and seconded by Brad Mitchell. All in favor? Aye. Opposed? Okay. Pay the bill to Instituform.

The next one for Instituform Technologies is the final payment for the project, which is the retainage and additional costs that were incurred during the project. When they started to do the work, they found that one of our joints that we had made, for whatever reason, slipped, so they couldn't get their stuff through it. We had to come out and do an emergency repair on that, they had to wait for us. They had to pay wait time on that. Either that, or they were going to leave and then pay another mobilization fee, which would have been twice as much as the wait time. And if you want to take the time to look through all of the invoices that we've paid, some of the line items, when they came out and did the original inspections of it, some of the footages were off a little bit. When they actually put the material in the ground, some of the footages were longer; to cover the cost of more materials, that's what that difference is. This will be the final bill. The request for $17, 434, 98. a motion made by Mike Radetic and seconded by Brad Mitchell. All in favor? Aye. Opposed?

All right, the next thing is a system that I'm looking at purchasing for the wastewater department. It's what they call an eye tracker system. Twelve sensors that you can place in

manholes throughout an area, and then that's set up to pick up inflow and infiltration. The way it works is you put these sensors in twelve manholes that have been picked out by mapping. They are put into twelve manholes, and you wait for a rain; they sit there and they just wait for inflow and infiltration. When it starts raining, each one will detect more flow; as it goes on, depending on where it's at, it will detect the inflow and the infiltration. Whether it's in a manhole or in a line upstream, the next manhole would pick them up. This would give us a much better process of slip lining if we were to utilize this system. We know we have infiltration. We're just not 100% sure where it's at. By utilizing this system, we can put them out, see if we really have infiltration in that area; if we do, we fix the areas that are bad. It'll tell us if from manhole a to manhole b is bad, or manhole c to manhole d, all the way up to those twelve, and we just fix those areas and focus our money to where the most important and extreme places are. You put them in and you run your area, and then when you're done, you take them out, and then we can move them to where we've already slip lined and run a diagnostics through that to see if what we're slip lining is actually working.

We can also use it to put on our south side sewer that's coming in from the district to see if we have what, eight, nine manholes out there that are our manholes. We don't have any idea what's going on with them. We could place those out there and see if we're getting infiltration into the system out in that area, which runs along a creek, which would be a good thing to do. All our lines, manholes running along the river, we can utilize it for that to see what we've got going on there.

How much, $33,000, that comes with a software program that is housed through the icloud off site. We will not have to have a server or anything for that. It comes with onsite training for the crew to be trained on how to install them, how to program them. It comes with alarm notifications so that if a manhole does start to rise, it'll send us a notification which will help. If we get notifications of inflow, we'll have an idea of what we might have as far as backups and other things. The funding would come out of slip lining funding to purchase this, to be able to use it as a tool for slip lining. Do you think at some point this will eventually pay for itself? Yeah, I do think it will.

Anybody that's used this? The Missouri Rural Water association, which is actually doing a apprenticeship program and they're actually doing an apprenticeship program in Washington for the water and wastewater industry. Dylan's going to go in as the wastewater employee. He's actually a water guy, but he's going to be cross trained on that. And then John Contarini, who came over from streets, is going into the water side of it. They utilize this as part of their training. Then I went and sat through a seminar at the last conference I went to, and a company

named Dukes is the biggest user of this equipment. They're worldwide with it, utilizing it in communities almost everywhere is doing something with it, but it's better for us to have it as an internal tool, as to hirer Dukes, and then have them come back all the time and do it.
I've got the ball kind of rolling with the company, but I just wanted to wait to get approval from you guys before I went any further. One of their engineers will contact me. He'll need to get an access to some of our sewer maps to be able to look at what we've got, and then we'll move from there. They'll have an engineer involved in it through the process of analyzing the first stage and how we're going to do it and everything else.
Any idea what the lifespan of this kind of piece of equipment is? The website says ten years. Battery life is one year. The batteries in them will last no matter how long you run them. They'll last a year and they're replaceable. This is just like any other electronic device. It's how it's cared for while you're using it and storing it. Just requesting your approval to proceed with it and move forward with it. I move you go ahead with it. Sounds like a good idea.
A motion made by Mike Radetic and seconded by Brad Mitchell. Moved and seconded. Any other comments? Discussion? All right. All in favor? Aye. Opposed?

What's going on with this Trojan? Trojan is our UV system down at the treatment plant. This is, again, an operational cost that, if I remember right, I told you guys I was going to start bringing these to you guys so you can kind of get an idea of what's really going on. This is the lights and the sleeves and o-rings and everything that goes through. That's part of this UV system that we have to operate. From April to November. What we do is in November, we tear them down, we take them apart, we make sure everything's good on them, and then this is what is the materials that needs to be used. April, and we have to disinfect our wastewater before it goes out to Missouri river. It's a mandatory piece of equipment we have. They're just a very costly, expensive item. We have two banks of UV lights, down to 50 lights each; last year, we did bank one. This is bank two that we're doing this year. We'll always have some cost, but this was the biggest cost because we had numerous lights that were out. And right now, the only supplier of everything that this is is Trojan, the manufacturers of the equipment. We found that if we do all of it at once, it's actually cheaper for us to do this in volume than is to buy two lights here, two sleeves here, two lights here. As it goes on, we get it done on. So then, April, when we set it, we've got 100% operating of our system.
Is any of that salvageable? If you have some that are still operating, can you use them. The ones that are still operational, they are put then on a shelf in case one goes out. We don't just

throw them away. Any more discussion? Motion to approve Brad Mitchell, second motion Steve Richardson. Motion passes.

The Caldwell tank.The south point storage tank. It is 100% welded as we speak. It's been done now for two weeks. This should be their final pay request. The project is not over, but their final pay request won't be until April, when they come back to paint. This will close out the actual construction side, basically, of the tank itself, the welding, the erection, and everything else. The additional $584,674 is for painting. And that is actually, I rolled that into this year's budget to cover that from last year's budget. This bill to Caldwell is $100,977. 90.
Moved, Brad Mitchell, Second, Mike Radetic Moved and seconded. All in favor? Aye. Aye. Opposed? Is that Caldwell tank? Four and five. Pay request number five for $96,573. Steve Richard, motion and Brad Mitchell second the approval of four and five.All in favor of Caldwell tanks, four and five opposed?

There's KJU. This was the groundwork at the storage tank? Yes. All right. For $15,714.90 to KJU. Motion, Steve Richardson, Second motion Brad Mitchell. All in favor? Aye. Aye. Opposed? Motion passes. Thank you very much. Yes. They still have some groundwork to do. They've got to put a shed out there, fiberglass building for the control panels and everything. They're working on that now. And then they've got groundwork to do. I think they've got to put a guardrail up yet. Some other things like that.

Back to wastewater. I did forget about one thing. We finally have got everything ready to start working on the south point sewer that is in the creek, working as a great big p-trap. We should be moving forward on that here soon. I've got Brian here with Cochrane if you want to ask any questions on that. But it's all moving pretty good.

Where are we at the logo. Tank Logo. Speaker 2
That looks familiar. Darren came to me and asked me if I could look into possibly putting a logo on it, our city logo. There's an additional $6,200 cost to putting the city logo on it instead of just the normal Washington name on it. What they do is cut out a stencil. And then they bring that stencil, and then they put it on a tank and then they paint it. Do you anticipate doing this on all tanks as we go back? Paint? Yes. Well, it'll probably be before repainting. Because the paint we're putting on is 25 year paint. We shouldn't have to repaint the tank for the next 25 years.

What we could though, get costs on putting them on tanks, every year. Like, do this one this year, and then next year do Crestview, and then the following year do Clay street or down the road if we're interested in doing it. Or we can just stay with the Washington name. This is $6,000 more to do this than it is to put the Washington on it. My only thought about the logo, and I will have to put this out here, is that because of where that tank is located, it's not going to get a lot of visual from people coming into Washington.

People going out to South Point, going out to north goods Mill would see it all the time. But the only place that you can really see that tank good is at the intersection of Fifth street and 100. Now, if we wanted to do what they call this would be called branding of Washington. The best place to put that logo would be on Crestview. I guess I should say that if we don't do it now and we decide to do it later, it's going to cost more. If we had a different fund that paid for it, would you swallow that pill?

I'm saying if our tourism decided to go ahead and pay for that because they wanted that branding and they wanted to go ahead and pay that money. Now, that'd be different then. I'm not on the tourism board, so I can't speak for what they. I'm not asking to speak for them. I'm just saying, are you going to sleep at night if you know that they paid part rather than this board? I'll sleep a little bit better. That's right. You're going to call tourism this afternoon? Yeah, I can plan for that. Anybody got a proposal on this based on what we just heard?

When I first came on board, I discounted this brand stuff. But in the learning process, I've come to feel like it's kind of important that we promote that. And Darren's suggestion of using a different know to is when somebody comes to town, that's Washington. Okay. And I think that might be appropriate. And I get it. We do need to save money. We need to save nickels and dimes. But this is part of that process of identifying. Hopefully, we will never have to protect our brand. We may at some point in the future if bad stuff happens. This is something, and I know it sounds hokey, but we rally around, we identify ourselves with; just need approval to proceed. Okay. I agree with the mayor. I make a motion that we go ahead and proceed with that. Go ahead and proceed out of our funds. Well, if they could get somebody, get a grant or something like that, it'll be even better. Worst case is we're approving that we put the logo on the tank. The best case is that we're able to get the funding from tourism

Mike Radetic motion to pass, Steve Richardson second the motion All right. All in favor? Aye. Opposed? Okay, motion passes.

The connection fees that I brought to you last month for approval. As I was preparing them for council, Darren had gotten a hold of me. And the more we looked at it, the dollar amount fee

really seemed to be high for the waterside. He asked me if I could do some looking around real quick before I took it to the council, to other communities. Unfortunately, the other communities that I looked at, their ordinances are just as antiquated as ours as far as when they change them, all these ordinances. And what you guys saw last month was from O'Fallon, which their ordinances had changed in 21. I was looking at it, I realized that I had missed some verbiage, too. We're trying to match it to, like, what the wastewater is. Well, I had forgotten to put in the verbiage off the wastewater side. The red, if you're looking at the red, is everything that's been added that was missed. The dollar amounts have gone down for the connection fees. How I got to that number was because Darren asked me, he said, can you tell me how you got to that number? I said, the only way I can tell you is that O'Fallon's fees are that. What I did was go back to 96 from our previous codes we had that we had changed in 14 and took the percentage differences from 96 to 14; then I used those percentages to go from 14 to now to get these numbers, which are actually a lot easier to. I'm asking you guys to take my apology for bringing this back to you and approve to move forward with this ordinance to council, which will be going to council next Monday. These fees will add more revenue, which we're trying to do, along with our water rate increase that we did. Steve Richardson moved and Mike Ratdetic seconded. Any more discussion? Any questions? All in favor? Aye. Opposed? It's passed.

Okay, other business. I have Danny Flyn here from Flyn drilling. I brought him here today because, I don't know if you guys all remember, about three, four years ago, we got into a maintenance agreement with Flyn drilling to come and do a yearly evaluation of our wells. And it's a pretty in-depth evaluation on how the system is actually, every well is working, which is another great tool to have. What we found is that through all of this, it's benefited us greatly, because in this year's inspections, we found that we have a well that the pump is running, but it really shouldn't be running, which means there's something going to go wrong with it. I brought Danny here because he's the well expert. I'd like him to explain what's going on with well six, which is the well we're talking about. Well six is showing a zero on the meg, which is really bad. Basically, I'm thinking the well shouldn't be running, but it's running. The only way to figure it out is to pull the pump. To see that this agreement that you allowed us to get into, I think it's four years now, isn't Danny? Yeah. Fourth year is benefiting the city as far as how our operation of our wells are running and what conditions we have so that we don't get into these emergency.

My company has been doing the work for city of Washington for over 20 years. For years, we drilled your last two wells, and we've always looked out after your all's best interest to be

upfront and honest with Kevin. Kevin came to me and said, hey, do you all have an inspection program? We do them all over the state of Missouri. Kevin wrote a set of specs, and then we became your inspection program company. Basically, what they look like is this sheet of paper tallies up all the information on your well, from historical data to present day data. And this inspection program, we're able to look at trending analysis of your wells. When we started four years ago, we're able to every year, look back and say, okay, what was it last year? What was it the year before? How is the flow doing? Is it down in production? We meg the motors for what's called winding resistance, and what that basically is. We have what's called a megger. Kevin said it correctly, and we hook it up to the wires and we charge it, see how much resistance it holds. A new motor will hold 250,000,000 plus some 500 plus just depends on length of the wire and size of the motor and everything. This particular motor that we found a deficiency on, which is, well seven, has trended down and is now down to zero ohms. When it gets to zero, that means there's a direct short in the system. Now, how long can it run? It might be, could run another year. We don't know, but we know that it's on borrowed time. The question is, it helps in your budgeting for, okay, we're going to budget for a motor this year. We're going to budget for wiring. That's a great thing about these programs. They're great for budgeting purposes. And it's another good tool that, say you had a lightning strike in the city on a well and blew up some controls, and we've had that before. We're able to come in and make the motor after that and compare it to what the last Meg reading was prior to that. So if it did damage a motor, we got something to give the insurance company and say, hey, look, it was fine before this lightning strike, even though it's running because we all know sometimes insurance companies don't want to pay for stuff. So that's a great tool in that department, too. Plus, DNR with Missouri Department of Natural Resources, they have sanitary requirements and inspection requirements and everything. We help you all meet those needs and document them. When they come to do an inspection on Kevin, he hands them these inspection reports, they can see the sanitary inspection we performed and everything is up to DNR standards. The last sanitary inspection I had, which was two years and eight months, we're going to have another one here in May of 24. As soon as I said we have a maintenance program with Flyn drilling, they didn't even ask to look at the paperwork. That's how good it is to have that going. That was one thing that didn't even have to worry about, which helps on, because believe me, they come to find something wrong. That's their job. They come to find something wrong. So that really helps. That's one thing less we have to worry about anyway. So it's well six, actually, that is the one that's having the motor problem. We also have an issue with well seven. Well six, the flow seems to have dropped in. Well seven. It used to be like 400 some OD gallons a

minute. Now it's down to 358. What we also have with this program is a one time a year use of his clamp on flow meter to clamp on prior to the meter to see if our meter is going bad or if our well is lost in production, then that brings a whole another evaluation. We're actually going to try and get that done today on that one to see what we've got going on. The reason for all of this conversation is we're going to be polling well six to find out what's wrong. I just want to let you guys know, and I do budget every year, a well replacement and a well repair in the budget. A well replacement is to replace a well and a well repair is to, if we pull it and we find that it needs wire, and that's the only thing. If that's an issue, then we just put new wire in. This cooperation that we have with Flyn drilling helps out with DNR, too, because we are required to have a well drilling company in our back pocket for an emergency.

Mary Sprung told me that she wanted me to apologize to you guys, that she couldn't make it this month she does have some medical things going on. She will do everything in her power to be here next month to help us with the discussion of the budget. What I did was I have a lot of reading information for you guys. What I have found for operational, for me is to continue to use the budget report that's always in the budget because that gives me a snapshot of what's going on for operations. All this other stuff has to do with depreciations and bond this and bond that and all that other good stuff that I'd be more than happy to let Mary talk to you about because that's what she handles. But as far as the budget that I will be continuing to use is the normal budget report because that gives me line item by line-item snapshot of what's going on at that moment anyway.

Our next meeting is scheduled for December 26. Motion to adjourn.
Motion by Mike Radetic and seconded by Brad Mitchell. The motion passed.

Next Scheduled Meeting Date

The next scheduled meeting date is Tuesday January 23, 2024.

Adjourn

There being no further business the meeting adjourned on a motion by Mr. Radetic and seconded by Mr. Mitchell. All in favor aye, those oppose, none. We are adjourned.

Prepared by: _____
Theresa Lamke
Water/Wastewater
Administrative Assistant

Adopted and Approved by the Board of Public Works:

Date: _____ Signature: _____
Secretary