

Minutes of TIFA LLC Meeting  
September 29, 2016  
11:00 a.m.  
City of Titusville Water Resources  
Mourning Dove Water Plant  
2836 Garden Street  
Titusville, Florida 32796

Persons in Attendance

Mike Brown, Miami Corporation, TIFA Management Committee Member  
Jim Ball, City of Titusville, TIFA Management Committee Member  
Sean Stauffer, City of Titusville, Water Resources Director  
Ana Abreu, City of Titusville,  
Richard Broome, City of Titusville, City Attorney  
Andrew Jantzer, City of Titusville, Water Resources Deputy Director  
David Fuechtman, Miami Corp. (by telephone)  
Barbra Goering, Farnton Water Resources (by telephone)  
Susan Pattock, Farnton Water Resources (by telephone)  
Helen Hutchens, Miami Corporation (by telephone)  
Dave deNagy, GMS LLC

Dave deNagy conducted the meeting.

**Action Items**

**I. Approval of the Minutes of the TIFA LLC Meeting of August 25, 2016 (Presenter: Dave deNagy)**

Member Brown moved to approve the August 25, 2016 meeting minutes. Member Ball concurred and the motion passed.

**II. Approval of Renegade Testing, Inc. (a division of Versa Integrity Group) for Inspection of Wellhead Assemblies (Presenter: Sean Stauffer)**

Mr. Stauffer stated, at a previous meeting we talked about the fact that we were getting new wellhead assemblies constructed and Member Ball recommended that we do similar testing to what we did on the existing wellheads to the new ones to make sure before they are installed that everything is appropriate. We requested a quote from the same company that did the well testing previously and the total price is \$2,110 and this will cover visual test by the welding inspector, penetrant test and radiographic testing. This is all the same testing we had done early on when we were trying to determine what was wrong with the wellfield and the wellheads. We

have been requested to perform this testing but now we have the quote and dollar figure I wanted to present that. At this point the wellheads themselves are at the welding shop in Port St. Lucie and we have decided rather than have the items brought onsite and inspected that we would leave them at the weld shop until we were ready for installation and the tester will go to the weld shop and he is coordinating with them now to do the testing. The good part about that is if there is anything wrong with the welding it will be at the weld shop and they will be able to fix it right there. We recommend you approve the expenditure for \$2,110 for additional inspections.

Member Ball moved to approve the proposal from Renegade Testing, Inc. in the amount of \$2,110. Member Brown concurred and the motion passed.

### **Financial Items and Reports**

#### **III. Ratification of Expenses Paid from Operating Account and Request for Reimbursement (Presenter: Dave deNagy)**

Ms. Hutchens, Ms. Pattock, Ms. Goering and Mr. Fuechtman left the telephone conference call at this time (11:08 a.m.).

Member Ball moved to approve the expenses paid from operating account and the request for reimbursement in the amount of \$8,007.56. Member Brown concurred and the motion passed.

#### **IV. Approval of Capital Call Notice**

Member Brown moved to approve the capital call notice in the amount of \$353,613.75. Member Ball concurred and the motion passed.

### **Staff Reports/Informational Items**

#### **V. Update on Rail Trail Project (Presenter: Andy Jantzer)**

Mr. Jantzer stated, since the last TIFA meeting the design engineer submitted the updated 100% drawings for the northern phase of the rail trail project and those have been placed on the server so that information is available. The second update on the rail trail project is I have heard unofficially from field people that they have actually received permits to proceed with the northern phase of the project. I have not heard that from any project managers and it is possible the field foreman might have been confused about the scope of the clearances but as of last week based on our input from the field they were making arrangements to get stormwater contractors and sub-contractors out there and get rolling with a lot of the sub-grade preparation and stormwater work on the northern phase. It is kind of surprising because they weren't expecting a permit for another month or so but maybe something got expedited.

Member Ball asked what is the latest on what you reported at the last meeting about damages and trying to avoid conflicts.

Mr. Jantzer stated, our water department construction inspector is now freed up from a major project and he is doing daily drop-bys on the job site so they can't tear into work without us knowing, which was part of the problem in the past. We have eyes on them and we are going to work as closely as possible to see if we can work together to get this built with minimum cost to the city and TIFA.

Mr. Ball asked so there has been no recurrent damage?

Mr. Jantzer stated, no new damage is reported yet but they haven't necessarily moved much earth since the last damages. We are probably going to see a lot more activity in the future but we are now going to have somebody in the field watching it.

Member Ball stated, I notice in the TIFA conference notes that you had been in to the review of the DOT drawings and you hadn't discovered any piping conflicts. Is that the design you were just referencing?

Mr. Jantzer stated, that is a design that preceded it but this new design should not change any of the potential for conflict unless they make drastic changes in stormwater but those types of changes were not expected it was more of a realignment, refinements were expected this round. We are not expecting any major changes at this point.

## **VI. Area IV Phase 2 Update (Presenter: Sean Stauffer)**

Mr. Stauffer stated, the new wellheads have been fabricated, they have been pressure tested, they all passed so it looks good. The gentleman from Renegade Testing Inspection is scheduling with the weld shop to take care of his third party inspections and that should occur before October 10<sup>th</sup>. We now also have a schedule for the installation of these new wellheads. The plan is we are going to do two wellheads per week, the wellheads will be installed on Monday and Tuesday and that will be followed by two days of Bac-T testing and if that passes then those wells should be started up on a Saturday. We will take two down work on them during the week get them tested and hopefully start them back up on Saturday. We will do that two per week for the next five weeks, scheduled to start October 10<sup>th</sup> and it looks like the last one will be done the first week of November.

We talked a little bit about fencing and concrete, these are some warranty issues. While Felix will be out there working on the wells they will also be addressing some of the cracks in the concrete as well as some issues with shims in the fence posts.

We also had some issues with the paint, with some rust coming through. We reached out to a coating rep to get some advice about how we move forward with making a claim for this. They have only been out there about a year and it is not expected to have rust coming through at this point. The Phase 1 wells have been in a couple years and there is no rust coming through. If you look at the picture you can see it is the spool pieces that are rusting. This is a separate issue from the stainless steel wellhead repairs. That was due to welding we think this is due to poor surface preparation. We are going to bring that back to them with the expectation that they will repair it.

As we talked about at the last meeting WR-8 is currently off. At the last meeting we approved Hausinger and a hydrogeologist, Colinas, to go out and inspect WR-8 and we received the report and I forwarded Jim a copy of the draft report and I will go through some of the basic findings. The debris at the bottom of the well was found to be limestone fragments or rocks and unfortunately they are too big to be removed so we weren't able to get them out with an airlift

method. When they did do the testing while it was pumping the testing showed that there was no flow coming from the bottom of the well and I know one of the issues we had talked about was, has something happened to the grout plug at the very bottom of the well and since there is no flow that shows that the grout seal, the plug, at the bottom has held. With that we can conclude that there is nothing wrong with the grout seal. I don't see any reason to remove any of the rocks at the bottom, they are not in the way of anything they are not blocking any flow so the plan is to leave those there.

Some of the other things we also looked at during the videolog it showed that the casing was in good shape it also showed the welds along the joints were in good shape as well as the grout seal. That is very good news because I know there were concerns that there were problems with the grout seal but while the well was pumping there was no recorded flow from anywhere around there. It looks like the well is well constructed and is in good shape. During the testing they also measured the chlorides and the chlorides were recorded at 39 mg per liter and this was after a seven week rest and that is also some good news that shows that the well itself can recover after it has been rested and if you remember when we originally turned off WR-8 it had chloride levels around 115 and 120 and this value of 39 is in the same range as when the well was drilled so they are back to almost an original condition.

One of the other things the report talked about is that it is known that there are higher chloride levels down below 200 feet and when it was originally drilled it was drilled at 250 and when it was logged they found that around 230 feet there was quite a bit of salty water at that point high chlorides so that was back plugged to try to eliminate that from coming up.

The ultimate conclusions are that it looks like the well is constructed properly it is in good shape but the rates that we are pumping it were drawing that salty water up. The recommendation has been to reduce the pumpage and go to weekly monitoring for WR-8. With that recommendation the city is already working on putting the well back in and it should be back online around the week of the 10<sup>th</sup> of October.

Member Brown asked wouldn't that be a good one to replace the wellhead assembly while it is down rather than do all the testing and get it up and then go back down with it?

Mr. Stauffer stated, probably but we will have to see because we still haven't had it inspected yet so that schedule they gave you is tentative on passing the inspections. Once we know that they are passed we will probably approach CPH and see if we can agree to wait on WR-8. Another thing to consider too is we want to make sure that we are keeping up with our requirements for pumping.

Member Brown asked the chloride tests that were run that showed the 115 did the same company test those as tested the chloride levels when they were pumped in the field?

Mr. Stauffer stated, all the chloride levels that we have, the city does the sampling and testing. When I just spoke about the value of the 39 mg per liter the sampling was done by Hausinger and the testing was done by an outside lab so that was a different group. I would say that a chloride test is a pretty simple test and I wouldn't expect there to be a lot of variability between the labs. I know the lab they used is a certified lab and our lab is a certified lab so we should be using the same methods. I believe that number I don't have any reason to question it.

Member Ball asked the evidence early on that showed higher chloride levels at a deeper strata was that throughout the entire wellfield or is that a localized problem?

Mr. Stauffer stated, throughout the wellfield. If you go deep enough you will find saltwater and that is just the way it is. We have found that and we have evidence of that because we have two deep saltwater monitoring wells and when you get 400 to 500 feet the chloride

levels go way up. It varies throughout the wellfield, there are some wells where at 230 feet it wasn't salty so it was not unexpected to have that there for WR-8.

Member Ball asked on the flow rate I know it is going to be reduced by the recommendation and once you stabilize on the chloride measurement are you going to try to gradually try to bring it up a little bit?

Mr. Stauffer stated, ultimately we need to get 2.75 MGD from the wellfield, that is the goal. We would certainly like to return these wells to their full production, the goal right now is to lower the pumpage and achieve a stable chloride level. If we are stable at the 155,000 gallons per day then we will talk about what we could increase it to because what we have done is now what we have reduced these two wells we have increased the other wells. It would be great to be able to have them back to the way they were I don't know that we will get there but ultimately we need to get the 2.75 MGD from the wellfield itself. These wells are very new and haven't been running a year yet so we don't have a lot of data, we don't really know what the perfect pumping rate for this well is and it won't be the same for all the wells because while the source is the same the strata or rock around it is different, the depth of the freshwater is different. When we started with this we had recommendations for what we should pump the wells but that was based off of modeling. You don't really know until you get in there and start using it. We can find out that some wells are better than we thought and some wells aren't as good as we thought.

Member Ball stated, so it is not unusual in a wellfield to have unique conditions associated with individual wells.

Mr. Stauffer stated, not at all. The City of Titusville has a well by the fire station that sits right by the road and it is one of the best wells in Area 3 Wellfield. A couple hundred yards to the east the well is horrible and is out in the middle of the woods. They are the same depth but that is all part of the management plan that is what we will continue to do and as we get more data as we learn how it behaves we will continue to modify the way we operate to keep its longevity.

I would also like to add that the September chloride results for WR-9, which is located right next to WR-8 showed a spike and came up to about 115 mg per liter from about 70 where it had been running. For quite a while we have been asking ourselves why would WR-8 be salty and WR-9 not be since they are pretty close together. We are going to be following the same recommendations that we did with WR-8 and that is reduce the pumping from WR-9. I think we implemented that revised pumping schedule last week.

Member Brown asked what is the next one in line as you go east, is that 6 or 7?

Mr. Stauffer stated, if you go east I believe you go to the rail trail if you go west it would be 7 but there is quite a bit of difference.

Member Brown stated, I'm thinking going east you have probably have half a mile or so east I'm curious what the chloride levels look like in the next easternmost well.

Mr. Stauffer stated, to the east they look fine they are stable those are the Phase 1 wells they are running with the same chloride levels they have had for years. I think we need to learn how to run these two wells we need experience and I would say if we are having issues with them the first five or six months that just shows that we haven't identified how to use this resource. One of the things I talked to Jim Boyd about and he had talked to Bob Oros with the Colinas Group is that there is a certain amount of water everyday that the well can produce without causing more salt water to come up. You don't know exactly what that is until you start pumping it. We will see how that works and find out where it is.

Member Ball asked once you find that mark it tends to be consistent?

Mr. Stauffer stated, yes and that is what we are looking for.

Member Ball asked on the wellhead repairs did you have somebody go down?

Mr. Stauffer stated, yes there was a City of Titusville employee witnessed the pressure test and it all passed and everything worked like it was supposed to so we are real pleased that we have a high quality product now going in.

### **Other Business**

Mr. Stauffer stated, I want to make one other note and I'm sure that Helen would have brought this up about the capital call notice is that this is the final capital call notice for the construction project. At this point all costs have come in and this will be the last one for construction. There may be others in the future if we do additional construction or if we have major repairs to the wellfield that would be considered a capital investment then we would go back to this but we would consider this wrapped up. When you look at these values on the capital call that gives you an idea of what the total cost of the wellfield was.

### **Public Comment**

### **Next Scheduled Meeting**

The next meeting will be held Thursday, October 20, 2016 at 11:00 a.m.

### **Open Items**

### **Adjournment**

Member Brown moved to adjourn the meeting at 11:30 a.m. Member Ball concurred and the meeting adjourned.