

GENERATOR FOR WATER PLANT

There continues to be chatter, questions and mis-information being spread on social media regarding the reasons for the lack of a generator at the water plant. Hopefully, this article will present a clear picture of exactly where we are on this issue and how we got there.

First, this generator as well as the one at the sewer plant were covered by our insurance carrier and we received full payment for these pieces of equipment after the flood. They were declared a total loss by the carrier and therefore we were paid the full value they were insured for. About 2 or 3 months after we were paid for them, the insurance company called to say they could not get any salvage companies to even come and look at them let alone get a salvage quote for them, so they asked us if we wanted them and we said yes. Keep in mind that after we were paid full value by our carrier, these generators now belonged to the insurance carrier. The City Secretary called several salvage companies to see if she could sell them for scrap and the highest bid she received was \$5,000 for both machines. This additional \$5,000 was a *gift* from our insurance carrier since they belonged to them.

The insurance carrier solicited a letter from the company (an authorized Generac Dealer) that originally installed these generators back in 2009 for a quote to either rebuild them or a recommendation as to how to proceed. His recommendation came back that it would be more expensive to rebuild these machines than to replace them combined with the fact that there would be **NO** warranty or guarantee on a rebuilt flooded generator. Thus, our carrier declared them a total loss. It should also be noted how these generators came about. In 2009, the City was awarded a \$200,000 grant from Hurricane Rita funding to spend on infrastructure with no strings attached. The City decided to give the money to BOMUD to purchase and install these two generators. Prior to 2009, BOMUD only had a 35 KW generator mounted on a trailer that they moved around between the water plant and three lift station when needed and an operator had to stay with the generator around the clock, when in use, as there were no automatic controls with this unit.

This is the history of the generators. The reasons that we do not have a generator at the water plant, nor will we until this project is complete, can be broken down into three categories. They are: 1) Administrative, 2) Technical, and 3) Financial.

ADMINISTRATIVE

When we learned of the availability of the \$500,000 Texas Water Development Board Grant (here after referred to as the TWDB) for utility infrastructure repair or replacement, the first

step was to put together a budget estimate for the project. In this estimate, it was decided to include the generator in the water plant project. Since this was not a FEMA sponsored project, it did not carry the restriction that if you were paid by insurance for an item, that item was disqualified to be included in a grant thereafter. Therefore, the thought process was, if the project came in at bid time for \$500,000 or less, we could get the generator paid for by the grant and be free to use the insurance money that we were paid for the generators on other needs (of which they are many). What this also meant, however, is that since it was included in the project, we could not spend our own funds ahead of the process of acceptance and funding and expect to be able to be reimbursed. Or, put another way, that expenditure would be disqualified. This is a common requirement in most all government grants whether state or federal.

TECHNICAL

The water plant is operated on a 220-volt 3 phase power. Water well number 1 & 2 are operated, and receive their power, from the water plant power connection. Water well number 3, at the back of the property, is operated off of a separate service and is 480-volt 3 phase. The two are not compatible. So, in the engineering planning phase, it was decided to eliminate the two different separate services and have one service that would operate the whole water system. So, it is planned to eliminate the 480-volt 3 phase service to well #3, provide a 480-volt 3 phase service to the water plant and use a 220-volt 3 phase step down transformer to power the water plant, run 480-volt power back to well number 3 underground and then use a 480-volt 3 phase generator, when necessary, to power everything with one generator as well as one service connection instead of two.

FINANCIAL

Now that the project has been recently funded by the TWDB, theoretically, we could use some of that money to go ahead and purchase the generator, mount it on the ground and connect it to the water plant to use until it was time to mount it up on the new platform with all of the new equipment that is to be installed at least one foot above the highest water level reached by Harvey flood waters. The problems, or the conditions pointed out in the TECHNICAL issues section above, make it expensive to purchase and install the components necessary to connect a new generator to the old components in the existing water plant. Most of these components would not be compatible with the new equipment to be later installed and, therefore, would be useless to us after the project is completed.

In addition, since these are grant funds, they carry strict purchasing requirements; a separate bid package would have to be created by our engineering firm and advertised for bid. Then when a contractor was selected, the order for the generator would have to be placed. This

generator will more than likely have to be built for our specific needs or purpose and will, therefore, have a long lead time before it could be built and delivered to us. This process alone could take up to 5 months, but just as important, it could easily add \$25,000 to \$30,000 in additional cost to the project including additional engineering cost. Remember, this generator would have to be temporarily installed on the ground and then disconnected later and moved up onto the platform. It is for these reasons just listed that our engineer advised that we not do this when we asked him this question back in January and, we agreed. These are the real reasons we will not have a generator at the water plant until the project is completed. Not this other nonsense that gets posted on social media, from time to time or, that is stated as fact by people during citizens comments at council meetings.

Also, regarding cost, there is a good possibility that this project will run over the \$500,000 grant based on the early budget estimate put together to secure the grant before any engineering was started. We had to commit to the TWDB in writing that we had the funds to finish this project should it run over the grant amount and, this grant by the TWDB, was approved based on this commitment. We cannot afford to be spending additional money unnecessarily out of our insurance proceeds. At present, we have absolutely no answers as to how much money we can expect from FEMA with regards to: roads, rebuilding of city hall or the rebuilding of the civic center. Nor do we know how much the water plant project is going to cost. It is imperative that we try and spend as little of our insurance money as possible on operations until we know the extent of how much help we can expect from FEMA. Twenty months into this disaster, we still have nothing but questions; no answers.

I urge everyone to keep in mind that for everything that you think has not been done or was done in a manner that you don't think is correct, it was done for a reason. Those reasons are; we don't have the answers we need, we don't have the money we need; or, we are following the rules and/or laws of FEMA, the state or the federal government. It's as simple as that and no other reason. And, to follow these rules, etc., we have had to sit thru hours of meetings, answer and send hundreds of emails as well as make and receive many phone calls....all for **YOUR** benefit.

Also posted on this website today are the schedules for the WATER PLANT REBUILDING PROJECT, the SEWER PLANT REBUILDING PROJECT as well as the two SEWER LIFT STATION PROJECTS that involve the elevating of the electrical components for the sewer lift stations onto a platform at the east end of the River Oaks Boulevard as well as the one on River Bend Dr. These two projects will be designed for generators in the future should we be awarded the HMGP grant that we have applied for to provide them.

And one last item on this article. This informative article was written by former Councilman and Mayor Pro-Tem, Danny Fruge, at the request of the City. While he is no longer a council person,

there is no one in Bevil Oaks with more knowledge of this subject, and how it came about, due to the fact that he has been involved in this process since the water went down after Harvey. In our attempt to keep our citizens informed and up-to-date on these critical issues, there may be some forth coming articles about topics that will fall under this category as well. He has graciously agreed to help us with those articles as they are needed. We hope that this article has been informative and that everyone has a better understanding of why we are where we are today. And, we hope that our citizens will appreciate the personal time and effort that Mr. Fruge has put into sharing this information with you.

City of Bevil Oaks

**ESTIMATED SCHEDULES
FOR THE THREE (3)
TEXAS WATER DEVELOPMENT BOARD GRANT PROJECTS**

**City of Bevil Oaks
TWDB Emergency Relief Projects
5/7/2019**

Summary of Funding

The City has secured funding through the Texas Water Development Board's (TWDB) Clean Water and Drinking Water State Revolving Funds program. This program was restructured after Hurricane Harvey to provide \$500,000 increment, 100% Principle Forgiveness Loans for emergency relief projects. The City submitted three applications and all three were awarded for a total of \$1.5 million.

DWSRF Project #62806 – Water Treatment Plant Restoration Project

This project will provide for the restoration and flood mitigation of the Water Treatment Plant (WTP) by constructing an elevated platform and relocating all vital components of the WTP into a control building located on the elevated platform. This project will also provide for a stand-by generator.

Scope of Work

- Construct an elevated steel platform approximately 9 feet above grade.
- Construct new control building on elevated steel platform.
- Install new electrical equipment inside the new control building including, but not limited to, the service entrance switchgear, transformers, panel boards, and local switches for the WTP and Water Well #3.
- Install approximately 350 LF of underground electrical conduit from WTP to Well #3 located at the rear of the property.
- Abandon existing electrical service pole, electrical rack, and controls for Well #3
- Construct concrete sidewalk modifications.
- Install new stand-by generator on elevated platform.

Schedule

On 2/12/2019 the Engineering Feasibility Report was approved by TWDB permitting LJA to proceed with the design phase of the project. Braun-Intertec has conducted geotechnical services on the soil conditions at the project site and LJA has been in coordination with the Structural and Electrical Engineers for design.

A set of plans and contract documents are currently in production and it is anticipated they will be complete and ready for TWDB review by the end of May. Below is the project schedule:

Project Task	Schedule Date
Engineering Feasibility Report Completion (APPROVED)	2/12/2019
Design Phase Complete (CURRENT PHASE)	5/31/2019
TWDB Design Approval	6/30/2019
Advertisement and Bidding	7/31/2019
Start of Construction	8/15/2019
Construction Completion	12/31/2019

It should be noted that this schedule is based on a short approval process from TWDB, approximately one month. This schedule could change based on how long it takes for TWDB approval.

CWSRF Project #73804 – Project A: Sanitary Sewer Lift Station Restoration Project

This project will provide for the restoration and flood mitigation of the Main Lift Station (Former WWTP) by constructing an elevated platform and relocating all vital components of the Main Lift Station onto the elevated platform. This project will also provide for a stand-by generator and restoration of the wash down pump facility.

Scope of Work

- Replacement of the wash down facility pump panel.
- Replacement of the wash down facility pump.
- Reinstallation of the existing wash down pump tank.
- Construct an elevated steel platform approximately 9 feet above grade.
- Replacement and installation of electrical controls and switch gear on the new elevated platform.
- Removal and reinstallation of the cover for the electrical controls on the new elevated platform.
- Construct concrete sidewalk to connect to the new elevated platform.
- Install new stand-by generator on elevated platform.
- Replacement of the flow meter.

Schedule

On 4/19/2019 the Engineering Feasibility Report was approved by TWDB permitting LJA to proceed with the design phase of the project. Below is the project schedule:

Project Task	Schedule Date
Engineering Feasibility Report Completion (APPROVED)	4/19/2019
Design Phase Complete (CURRENT PHASE)	6/30/2019
TWDB Design Approval	7/31/2019
Advertisement and Bidding	8/31/2019
Start of Construction	9/15/2019
Construction Completion	1/31/2020

It should be noted that this schedule is based on a short approval process from TWDB, approximately one month. This schedule could change based on how long it takes for TWDB approval.

CWSRF Project #73830 – Project B: Sanitary Sewer Lift Station Restoration Project

This project will provide for the restoration and flood mitigation of the Riverbend and Boulevard Lift Stations by constructing an elevated platform and relocating all vital components onto the elevated platforms.

Scope of Work

Riverbend Lift Station

- Installation of elevated steel platform approximately 9 feet above grade.
- Installation of fence around platform.
- Relocate existing control panel to platform.
- Installation of new electrical service.
- Installation of new force main connection.

Boulevard Lift Station

- Installation of an elevated steel platform approximately 9 feet above grade.
- Relocate existing manhole.
- Extend existing ditch culvert.
- Installation of fence around platform.
- Relocate existing control panel to platform.
- Installation of new electrical service.
- Installation of new force main connection.

It should be noted that this project will also prepare these sites for the possible HMGP grants which will provide for new stand-by generators. Currently, generators are not part of this project without the HMGP grant.

Schedule

At present, this is a best guest estimate as it projects 15 months out. As the project progresses within the planning phase a more accurate and up to date schedule for this project will be produced. See below the schedule:

Project Task	Schedule Date
Engineering Feasibility Report Completion	5/30/2019
Design Phase Complete	7/15/2019
TWDB Design Approval	8/15/2019
Advertisement and Bidding	9/15/2019
Start of Construction	10/30/2019
Construction Completion	8/15/2020