



# City of Pflugerville

## Legislation Text

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**File #:** 2021-0818, **Version:** 1

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Discuss and consider action authorizing the City Manager to award a construction contract for the Lake Pump Station Emergency Generator to McDonald Municipal and Industrial in the amount of \$1,149,469.

As has been noted on previous City Council items, the Surface Water Treatment Plant and Lake Pump Station currently do not have backup power supply in the event of an extended power failure as was experienced from February 15, 2021 to February 17, 2021. This creates a significant risk for the City's Public Water System as the plant produces most of the water that is used within the City. Due to this risk and the need to make the City's water system more resilient in the event of an emergency, the City Council approved a professional services agreement with Gupta and Associates, Inc. on September 22, 2020 to design the emergency generator power system. The design of the standby generator system has begun and the installation of the generators will allow the City to continue producing water in the event of a power failure affecting the Surface Water Treatment Plant and Lake Pump Station.

City staff gave an update to City Council on March 23, 2021 which provided for various redundant power options for both the Surface Water Treatment Plant and the Lake Pump Station. During this update, it was explained that we can work with Oncor to provide a secondary redundant feed to the Surface Water Treatment Plant from a separate substation. This redundant feed to the Surface Water Treatment Plant is currently being scoped by Oncor and City staff have yet to receive a contract for the cost to get this redundant feed to the Surface Water Treatment Plant to bring to Council for approval. In addition to this, City staff is currently expediting the Surface Water Treatment Plant generator by finishing the purchasing scope for the generator so the City can pre-purchase the equipment to minimize the amount of time the construction will take to bring online at the facility. The current design for the Surface Water Treatment Plant generator is scheduled to be completed by September and be brought to City Council in October 2021.

The City's Lake Pump Station is primarily responsible for bringing raw water from Lake Pflugerville to the Surface Water Treatment Plant. As a means to make sure that the Surface Water Treatment Plant can continue to treat raw water, an emergency power source needs to be installed at the Lake Pump Station. The design of this generator is intended to serve the existing pump station while also considering the future expansions of the facility as the City grows. This generator will be able to serve average day flows of the facility until the build-out of the City and the water system. As was mentioned to City Council previously, the generator at the Lake Pump Station is much simpler than the generator system at the Surface Water Treatment Plant as it only has a single transformer feed and a single switchgear. This minimizes the amount of work that is needing to be done and also simplifies the construction sequencing of the project. The Surface Water Treatment Plant generator has different transformers for the different facilities and also has an incredibly complex construction sequencing that has to coordinate with the ability to send water out to the City.

As was approved by City Council on May 11th, City staff and Gupta and Associates have pulled this

project was broken out from the entire generator project as it is much simpler and can be done much quicker than the Surface Water Treatment Plant Generator Project. The scope of the work is to install a generator and associated duct banks as well as the Automatic Transfer Switch within the existing Motor Control Center room to connect into the existing switchgear. The scope of work will also include the replacement of the electrical transformer and relocating it around the new underground duct banks that are going to be installed. While most of this work will be able to be done without shutting down the facility for long stretches of time, the work will involve tie-ins to the existing gear that will require extended plant shutdowns that will take significant coordination with the operations team to ensure that there is no disruption of water service while the work is being performed. The construction contract duration is such that the work will be completed in the early months of 2022.

The City received 3 bids for this project of which McDonald Municipal and Industrial was the lowest responsible bidder for the project. The Design Consultant's Opinion of Probable Construction Costs (OPCC) was \$1.5 million. While the City has not worked with McDonald Municipal and Industrial in the past, they are currently working on a similar project of a similar size and complexity for the City of Garland. That project is currently about 75% complete, on schedule without change orders, and the general consensus is that the project is going well. The Design Consultant for this work, Gupta and Associates, has recommended this be awarded based upon their bid and previous work history on similar projects.

#### **Prior City Council Action**

On September 22, 2020, City Council approved the selection of Gupta and Associates for professional services associated with the standby generator at the Water Treatment Plant and Lake Pump Station project and authorized the City Manager to execute a professional services agreement in the amount of \$652,914 for design and engineering services for the emergency generator at the Water Treatment Plant and Lake Pump Station.

On March 23, 2021, staff provided an update regarding the possibility of expediting the project and feasibility options for a temporary power generation system installation to get completed before the permanent installation.

On May 11, 2021, City Council approved the Professional Services Supplemental Agreement with Gupta and Associates for professional services associated with the modification of the scope of work and the modification of the original schedule to expedite the generator project as much as possible.

#### **Deadline for City Council Action**

August 10, 2021

**Funding Expected:** Revenue ☐ Expenditure ☒ N/A ☐

**Budgeted Item:** Yes ☒ No ☐ N/A ☐

This project is being funded with a combination of utility bond funds and utility fund balance.

**Amount:** \$1,149,469

**1295 Form Required?** Yes ☒ No ☐

**Legal Review Required:** N/A ☐ Required ☒ Date Completed: 8/3/2021

**Supporting documents attached:**

Invitation for Bids, Addendum 1, Addendum 2, Letter of Recommendation, 1295 Form

#### **Recommended Action**

Staff recommends authorizing the City Manager to award a construction contract for the Lake Pump Station Emergency Generator to McDonald Municipal and Industrial in the amount of \$1,149,469.