



Legislation Details (With Text)

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| File #: | 20-3725 | Version: | 1 | Name: | Resolution - A Resolution Authorizing an Engineering Services Agreement with Plummer Associates Inc to Conduct a Plant Capacity, Membrane Filter Capacity, and Membrane Filter Pilot Study |
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| Title: | Resolution - A Resolution Authorizing an Engineering Services Agreement with Plummer Associates Inc to Conduct a Plant Capacity, Membrane Filter Capacity, and Membrane Filter Pilot Study | | | | |
| Sponsors: | Joe Smolinski, Jeff Price | | | | |

Indexes:

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| Date | Ver. | Action By | Action | Result |
|-----------|------|--------------|----------|--------|
| 9/14/2020 | 1 | City Council | Approved | Pass |

Resolution - A Resolution Authorizing an Engineering Services Agreement with Plummer Associates Inc to Conduct a Plant Capacity, Membrane Filter Capacity, and Membrane Filter Pilot Study
Consider the Resolution authorizing an engineering services agreement with Plummer Associates Inc. for an amount not to exceed \$478,100.00.

Utility Staff recommends approval of the Resolution.

In 2006 the City conducted a filter pilot study that looked at membrane filtration technology for the Phase IV Expansion at the Bud Ervin Water Treatment Plant (BEWTP). Upon the conclusion of this pilot study, Pall Membranes were selected and then later constructed into the expansion. These filters went online in early 2011 with an anticipated ten-year life expectancy. Now that we are approaching the end of the Pall Filters life, we need to identify a replacement strategy.

In the Utility Strategic Plan, we have identified and planned for the remaining 15 MGD of capacity to construct in 2024 and to include the replacement of the current Pall filters.

Technology in the membrane treatment industry has evolved since the 2006 pilot study. We believe there may be other manufacturers who have membrane filters that offer increased flow rates. Higher flow rates through the membrane filter process could lead to larger treatment capacity at the BEWTP.

This project consists of nine individual tasks. The first five tasks are established to evaluate manufacturers' technology and flow capabilities while determining the capabilities of the existing infrastructure at the BEWTP. Completing these steps first will evaluate the value and direction of pilot testing the membrane filters. Plummer Associates completed the 2006 filter pilot study and bring the expertise of conducting several other pilot studies on water plants receiving water from the same sources as the City. Membrane filter pilot testing is required by the TCEQ to determine the filters are capable of meeting all organic removal requirements before placing them into production.

Staff feels there is sufficient evidence showing new membrane technology avails to higher flow rates. If this technology proves out, we could see as much as a 15MGD increase in the BEWTP buildout capacity, thus significantly benefitting the timeline for needing the second water treatment plant.

Utility Fund

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