

## MEMORANDUM

**TO:** Claire Powell, City Manager

**VIA:** Aaron Russell, P.E., Director of Public Services

**FROM:** Katelyn Hearon, Utilities Manager

**DATE:** April 15, 2024

**SUBJECT:** **Approval of a Professional Services Agreement with Birkhoff, Hendricks & Carter, L.L.P., Dallas, TX, in the Amount of \$1,599,500 for Professional Engineering Services for the Midway Branch Force Main; and Authorization for the City Manager, or her Designee, to Execute the Agreement.**

### **BACKGROUND**

Both the 2011 and 2018 Collection System Master Plans studied the conveyance of wastewater flows generated in Lewisville and determined that an additional lift station would be needed to provide service to address the continued growth in the Castle Hills area. The analyses indicated that the location of this lift station was best suited to be in the Midway Branch sewer basin, west of the Sam Rayburn Tollway (State Highway 121) and E. State Highway 121 Business split.

In 2015, a Professional Services Agreement (PSA) with Birkhoff, Hendricks & Carter, L.L.P., (BHC) was approved by Council for design and construction services of the Midway Branch Lift Station and Force Main. Originally conceptualized for a 10 million gallons per day (MGD) flow, the station would be upsized to 15 MGD upon the last master planning update. Early talks with the U.S. Army Corps of Engineers (USACE) indicated that the utility corridor running through the Lewisville Lake Environmental Learning Area (LLELA) was the most viable route at the time for the force main; early design efforts were centered around this alignment. This same corridor was utilized by the Upper Trinity Regional Water District (UTRWD) for both treated and raw/treated effluent water lines to convey flows eastward from their treatment facility.

### **ANALYSIS**

After the annexation of the Castle Hills area in November of 2021, staff met with UTRWD to better understand their water line alignments within the USACE utility corridor. Through the review of their easement agreements, it was determined that UTRWD had exclusive access to the corridor. For the City of Lewisville to utilize this route, USACE would have to approve an extension of the corridor.

While this analysis was planned to be part of the 2024 Collection System Master Plan update, given the expected time frame for the corridor expansion approval process and the rapid increase in development on the east side of the city, staff directed BHC to study alternate routes for the

force main in 2023. Following economic and schedule impact analysis, the most strategic route was determined to be within the Corporate Drive extension Right-of-Way. This route change results in necessary changes to the Midway Lift Station design; the original PSA was amended reallocating the necessary funds. Consequently, the design of the force main with the new route requires a new design agreement.

BHC has submitted a Professional Services Agreement in the amount of \$1,599,500 for the design of the Midway Branch Force Main. They have partnered with the City since the 1980s on a variety of utilities-related projects and have an extensive portfolio in conveyance projects including the 28 MGD Timber Creek Lift Station and Force Main, the 15 MGD Vista Ridge Lift Station, the 22 MGD Prairie Creek Lift Station, the 16 MGD Eastside Pump Station, the 28.6 MGD Midway Pump Station, and the 13.2 MGD Southside Pump Station. Services for this project include survey, design, land acquisition, and pre-construction and construction phase services.

Plans are expected to be completed one year from the date of the executed agreement and funding for the project is available in the Midway Branch Lift Station CIP fund.

#### **CITY STAFF'S RECOMMENDATION**

That the City Council approve the agreement and authorize the City Manager, or her designee, to execute the agreement as set forth in the caption above.