



Legislation Text

File #: 16-435, **Version:** 1

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SUBJECT: First Amendment to Agreement for Professional Services with AECOM Technical Services, Inc., for Well Site Design Services, Project No. 113026

REPORT IN BRIEF

Authorizes an amendment to a contract for well design services for municipal Well 21 at the intersection of Bellevue Road and G Street.

RECOMMENDATION

City Council - Adopt a motion approving an amendment to an Agreement for Professional Services with AECOM Technical Services, Inc., in the amount of \$9,769 for engineering design services; and, authorizing the City Manager to execute the necessary documents.

ALTERNATIVES

1. Approve, as recommended by staff; or,
2. Approve, subject to modifications as conditioned by City Council; or,
3. Refer to staff for reconsideration of specific items; or,
4. Deny.

AUTHORITY

Charter of the City of Merced, Section 200 et seq.

Services with an estimated value greater than \$28,000.00 are made by written contract in accordance with Merced Municipal Code, Title 3 - Revenue and Finance, Chapter 3.04.

CITY COUNCIL PRIORITIES

As provided for in the 2016-17 Adopted Budget.

DISCUSSION

The City Engineer and the Public Works Director have recommended that a new water well be located at the intersection of Bellevue Road and G Street. On September 21, 2015, the City Council awarded an Agreement for Professional Services to AECOM Technical Services, Inc. (AECOM), to design the new Well 21 municipal well and pump station. The AECOM contract includes provisions for developing one drilling bid package for the purpose of advancing a pilot test hole at the Well 21 site, followed by the drilling and construction of the final water production well. The water quality data obtained from the pilot test boring is used to design the screened water intake intervals of the final production well casing.

Water Sample Quality Issue

The proposed pilot hole will be drilled to 700 feet below grade surface utilizing reverse rotary drilling. In this method a liquid drilling fluid circulates through the drill pipe as the cutting bit advances and brings soil to the surface for removal. Upon reaching the total depth, discrete groundwater samples are obtained at different aquifer levels by installing a temporary test pump and transporting water to the surface for collection. Because the drilling fluid circulates from the surface to the bottom of the borehole there is the potential for water mixing at different aquifer levels. This could lead to questionable laboratory results for the pilot boring water samples.

Staff conveyed this concern to AECOM regarding the potential for water mixing at different aquifer levels due to the drilling method. They recommended changing the drilling method for the Well 21 pilot test boring. Instead of using reverse rotary drilling with circulating fluid, they advise using the driven casing drilling method. In this method the drilling bit is advanced downward concurrent with a steel casing that stabilizes the surrounding material. Water samples are obtained at discrete depths with less chance of mixing due to a circulating drilling fluid.

The contract amendment under consideration is for the design of a separate bid package for the pilot borehole using the driven casing drilling method. The final production well drill bid package, utilizing the proposed reverse rotary drilling as acceptable, is included in AECOM's existing contract. It is necessary to separate the bids because generally drilling companies don't specialize in both the reverse rotary and driven casing drilling methods. AECOM has advised that the cost of the pilot test boring utilizing either method is the same at approximately \$120,000.

History and Past Actions

On February 2, 2004, the City Council adopted a resolution 2004-24 approving the final subdivision map for "*Bellevue Ranch East Village 16*" and accepting lot "*W2*" for well site purposes.

On February 17, 2015, the City Council adopted a motion affirming the use of lot "*W2*" for well site purposes.

IMPACT ON CITY RESOURCES

This project was established as a Capital Improvement Project and account 556-1118-637.65-00-113026 contains sufficient funding to complete the project.

ATTACHMENTS

1. AECOM Contract Amendment