AUTHORIZATION TO APPROPRIATE ADDITIONAL FUNDS FOR THE MITIGATION WATER WELL PROJECT

Public Works Department - Engineering Division

Johnson Drilling Company has completed the casing hammer drilling method for the Mitigation Water Well Project. Irrigating the Elderberry bushes and other associated plant habitat for the Valley Elderberry Longhorn Beetle (VELB) is the reason for the water well. Unfortunately, not one water bearing sand stratum was discovered while drilling 170 feet deep.

City Council authorized expenditure of $33,330.18 for this project. Construction cost to date is $22,329.23.

Johnson Drilling Company drilled a well about a ½ mile upstream from the Mitigation Water Well site that is producing about 50 gallons per minute. The total depth of this well is around 360 feet and they hit hard rock about 245 feet. A considerable amount of water was discovered once the driller hit a fractured rock zone at about 250 feet. This well information was not available when staff and our consultant performed the initial design research.

The consultant for the VELB Mitigation Site is requiring about 40 gallons per minute to irrigate all the plants. To meet the criteria set by the consultant, drilling deeper based on the information provided by Johnson Drilling Company is a reasonable approach. The contractor is willing to mobilize to the site, insert a smaller casing and continue drilling until water is encountered. Due to the time constraints for setting up the Mitigation Site, staff feels the contractor’s offer has merit and is recommending that additional funds be appropriated to continue with the current contract. It is estimated that the additional work necessary to drill to a depth of 360 feet will cost $60,000.

It should be noted that it is not possible to guarantee that a water bearing sand stratum or fractured rock zone will be encountered due to the varying geological characteristics that exist on the eastside of Porterville.

Funding will be drawn from all the Capital Improvement Projects and COP Street Projects that have been impacted by the VELB habitat issue.
RECOMMENDATION: That City Council:

1. Authorize an extension to Johnson Drilling Company’s contract by Change Order;

2. Authorize staff to direct Johnson Drilling Company to continue drilling until water is encountered; and

3. Authorize staff to expend up to a total of $82,329.23.

ATTACHMENT: Locator Map