TO: James L. App, City Manager

FROM: Doug Monn, Public Works Director

SUBJECT: Nacimiento Water Recovery Well - Contract for Well Design and

Construction Oversight

DATE: June 17, 2014

NEEDS: For City Council to consider a contract with Cleath-Harris Geologists, Inc. to provide

well drilling plans, specifications, bid documents, and technical services for

construction of a Nacimiento Water Recovery Well.

FACTS:

1. During the summer of 2013, the City began using additional Lake Nacimiento water to supplement its production from the Salinas River underflow and deep basin wells.

- 2. To utilize additional Nacimiento supply, water is turned into the dry Salinas River channel and recaptured at the Thunderbird well field.
- 3. Examination of well water quality data and recent groundwater computer modeling of the well field indicate that up to 90% of the recharge can be recovered, and thus the well field provides a significant drought buffer when Nacimiento water is introduced.
- 4. The addition of a fifth shallow well at the wellfield will be for the purpose of recovering Nacimiento water that is turned into the River channel (not native underflow) in both dry and normal years. This additional well will allow for increased use of Nacimiento water.
- 5. The City requested that Cleath-Harris Geologists, Inc, conduct a groundwater modeling study to determine:
 - a. how much additional Nacimiento water could be recovered if a new recovery well were constructed at the Thunderbird well field, and
 - b. the optimal location of a new well.

Cleath-Harris was selected for the work because the firm has completed several previous modeling studies of the Thunderbird well field.

6. The modeling study, completed May 21, 2014, indicates that a new Nacimiento recovery well would increase total well field production by a minimum of about 290 gallons per minute of water (0.42 million gallons per day), assuming a sufficient amount of Nacimiento water was turned into the River channel for recapture.

Analysis & Conclusion:

The construction of a new Nacimiento recovery well will: 1) Provide additional water production capacity to meet peak summer demands, and 2) allow for increased use of Nacimiento water during both dry and normal rainfall years.

Under the proposed scope of work, Cleath-Harris Geologists Inc. would prepare well drilling plans, specifications and technical bid documents. In addition the firm would provide technical support and construction monitoring services throughout the well construction project. These services include but are not limited to:

- Review contractor submittals and well construction materials for conformity with technical specifications.
- On-site observation during borehole drilling and geophysical logging.
- Design of casing, screen, filter pack, and annular seal, with final approval by City.
- On-site observation of casing, screen, filter pack, and annular seal installation.
- Daily site visits during well development.
- Coordinate water sampling during pumping test (analytical testing performed by others).
- Preparation of well construction and testing report.

The proposed schedule for completion of the well design, specifications, and bid package is 4 weeks from the issuance of the Notice-to-Proceed. The estimated total cost for well design and construction period monitoring services is \$20,500 (\$18,000 plus \$2,500 contingency). The total estimated cost for the well construction contract is approximately \$175,000. Staff would return to Council after completion of the bidding process for consideration of approval of the well construction contract.

POLICY

REFERENCE: Cal. Water Code sections 7043, 7075.

FISCAL IMPACT:

Contract amount \$20,500. Expenditures will be from the existing water fund reserves.

OPTIONS:

- **a.** Approve contract with Cleath-Harris Geologists Inc. for a not-to-exceed amount of \$20,500, or
- **b.** Amend, modify, or reject the above option.

RESOLUTION NO. 14-XXX

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF PASO ROBLES AUTHORIZING A CONTRACT WITH CLEATH-HARRIS GEOLOGISTS INC. FOR WELL DESIGN AND TECHNICAL SERVICES DURING CONSTRUCTION OF A NACIMIENTO WATER RECOVERY WELL

WHEREAS, during the summer of 2013, the City began using additional Lake Nacimiento water to supplement its production from the Salinas River underflow and deep basin wells; and

WHEREAS, to utilize additional Nacimiento supply, water is turned into the dry Salinas River channel and recaptured at the Thunderbird well field; and

WHEREAS, the addition of a fifth shallow well at the well field to recover Nacimiento water will be for the purpose of recovering Nacimiento water that is turned into the River channel (not native underflow) in both dry and normal years; and

WHEREAS, this additional well will allow for increased use of Nacimiento water; and

WHEREAS, the proposed fifth recovery well would mirror current practice with no reasonably foreseeable direct or indirect physical change in the environment and is therefore not a project as defined by the California Environmental Quality Act.

THEREFORE, BE IT RESOLVED AS FOLLOWS:

<u>SECTION 1.</u> The City Council of the City of Paso Robles does hereby authorize the City Manager to enter into a contract with Cleath-Harris Geologists, Inc. in the amount of \$20,500 to provide well drilling plans, specifications, bid documents, and technical services during construction of a Nacimiento Water Recovery Well.

PASSED AND ADOPTED by the City Council of the City of Paso Robles this 17th day of June 2014 by the following vote:

AYES: NOES: ABSENT: ABSTAIN:	
ATTEST:	Duane Picanco, Mayor
Caryn Jackson, Deputy City Clerk	