Legislation Text

File #: RES 17-0039, **Version:** 1

TO:
Honorable Mayor and Members of the City Council

THROUGH:
Mark Danaj, City Manager

FROM:
Stephanie Katsouleas, Director of Public Works
Shawn Igoe, Utilities Division Manager

SUBJECT:
Resolution Authorizing the City Manager to Execute a Professional Services Agreement with ValveTek Utility Services, Inc. for $81,844 for Flushing and Disinfection Services of 30 Miles of the City's Potable Water System (Public Works Director Katsouleas).
APPROVE; ADOPT RESOLUTION

RECOMMENDATION:
Staff recommends that the City Council adopt a Resolution authorizing the City Manager to execute a Professional Services Agreement with ValveTek Utility Services, Inc. for $81,844 for flushing and disinfection of 30 miles of the City's potable water system.

FISCAL IMPLICATIONS:
Funds are available in the FY2016-2017 Public Works Department's Water Maintenance and Water Pumping Operating budgets for these services.

BACKGROUND:
In order to maintain residual chlorine disinfection in the water system, minimize discoloration and continue to meet Regional Water Quality Control Board drinking water standards, the City of Manhattan Beach's water distribution system should be comprehensively flushed on a regular basis by a technique known as unidirectional flushing (UDF). UDF uses a combination system pressure and opening of fire hydrants to force potable water through pipes segments at high velocity. This increased velocity scours and cleans the pipe walls, flushes sediment from the mainline pipes and removes aging water from the water distribution system. The flushing continues until the water within the pipe segment is clear, which can take 30 minutes or more to achieve. Note that each segment that undergoes UDF is isolated during the procedure.

Historically, water released through the hydrants during flushing was released to the storm drain system. But, in response the sustained regulatory demand to conserve water and to avoid adverse public response to the apparent wasting of water during the flushing process, the City suspended its comprehensive UDF program in April, 2012 and has only performed selective low-scale flushing to address immediate water quality needs since that time. However, in 2016, the City discovered a new UDF technique, which captures nearly all of the water released from the flushing activities and

returns it to the system after it has undergone extensive filtering. And, by recapturing most of the water flushed, the City was able to address the real and perceived water-waste issue during the prolonged drought. It is estimated that 26 million gallons is lost during a typical flushing processing of the entire system, costing the city about $98,400 in water loss. With the new UDF technique, this financial loss is also significantly reduced.

In 2016 the City contracted with ValveTek Utility Services, Inc. to complete City wide flushing of approximately 101 miles of the City's Potable Water System using the proprietary recapture technique. In addition to the water and cost savings achieved, after using the recapture technique, chlorine residuals increased and stabilized throughout the City and residential complaints related to cloudy water were almost eliminated.

DISCUSSION:
To address water conservation challenges while complying with water quality regulations and meeting customer service expectations, staff is recommending that we again utilize the UDF water recapture services of ValveTek Utility Services, Inc. (Proposal - Attachment 1). ValveTek uses proprietary-patented water system flushing equipment provided by NO-DES, Inc. and is the only authorized user of the NO-DES equipment in Los Angeles County. The flushing process involves pumping water at high velocities from a closed loop within the water system through filtration vessels, and employs a color analyzer and chlorine injection/analyzer. The water is then reinjected into the same closed loop. Once the water color and disinfection levels reach optimal levels, the process is halted and the truck moves on to the next line segment. The process is repeated until the 30 miles of water mains have been flushed.

Benefits of utilizing the NO-DES System include:

- Elimination of cloudy water, pressure loss and surging complaints normally associated with conventional flushing;
- Scouring the insides of the water lines is more effective than conventional flushing techniques because velocity can be increased;
- Improved water quality attained through removal of more particulates;
- Elimination of water discharges and associated with conventional flushing;
- Consistent message is delivered to the public about the need for water conservation;
- Eliminates vehicular and pedestrian hazards associated with water flowing down the City's streets; and
- Results in lower water loss, which will also save money.

POLICY ALTERNATIVES:
Do not approve the proposed agreement.

PROS:
City would need to fund the additional cost to perform the service.

CONS:
City would need to conduct conventional water main flushing to address particulate build up and water quality impacts. This would lead to greater water loss, revenue loss and negative impacts to the City's water conservation goals.

PUBLIC OUTREACH/INTEREST:
Staff will post the water system flushing schedule on the City's website; traffic control measures will be exercised in the vicinity of the flushing equipment; signage will be staged around the flushing equipment to inform the public of the nature of the work being done.

ENVIRONMENTAL REVIEW
The City reviewed the proposed project for compliance with the California Environmental Quality Act (CEQA) and determined that the project qualifies for a Class 1(b) categorical exemption pursuant to Section 15301, Existing Facilities of the State CEQA Guidelines. No environmental review is necessary.

LEGAL REVIEW
The City Attorney has reviewed and approved the proposed agreement as to form.

Attachment/Attachments:
1. ValveTek Utility Services, Inc. Proposal
2. Professional Services Agreement - ValveTek Utility Services, Inc.
3. Resolution No. 17-0039