

C-12

September 6, 2022

HONORABLE MAYOR AND CITY COUNCIL
City of Long Beach
California

RECOMMENDATION:

Adopt a Resolution authorizing the City Manager, or designee, to execute a contract, and any necessary documents including any necessary subsequent amendments, with Xylem Water Solutions USA, Inc., of Charlotte, NC, for the purchase of submersible fill pumps for the Rainbow Lagoon Facility, in an amount of \$145,242, with a 10 percent contingency in the amount of \$14,524, for a total contract amount not to exceed \$159,766, for a period of one year. (District 1)

DISCUSSION

City Council approval is requested to enter into a contract with Xylem Water Solutions USA, Inc. (Xylem), for furnishing and delivering submersible fill pumps for the Rainbow Lagoon Pumps Replacement Project (Project).

The Rainbow Lagoon (Lagoon) is a 5.5 acre manmade saltwater lagoon that is located in what is now filled tide lands, where subtidal and intertidal habitat historically were present. The Lagoon was constructed between the late 1960's early and 1970's when Shoreline Drive and the Convention Center complex was originally built. The Lagoon is a unique recreational amenity and serves as functioning marine habitat for fish and wildlife and is regulated by the California Coastal Commission under CDP #5-91-193. The City of Long Beach (City) is obligated to maintain, protect, and preserve the lagoon as a functioning marine habitat under its Coastal Development Permit.

The Lagoon sits at a higher elevation than the adjacent Rainbow Harbor. Water replenishment and tidal exchange is manually conducted through the raising and lowering of weirs and the activation of fill pumps that allow the replenishment and exchange of seawater between the lagoon and Rainbow harbor (i.e. water is pulled in via pumps). It is environmentally and regulatorily recognized that fresh seawater and tidal exchange is critical for an ecologically balanced and healthy waterbody, regardless of whether this is done manually through mechanical pumps or naturally through streams, inlets, or sloughs. This fresh seawater is critical and provides a bulk of the water supply and circulation to the Lagoon. However, a separate and antiquated aeration system also provides limited oxygen through a series of underwater piping along certain areas of the Lagoon.

Recently, the main fill pump and secondary fill pump have failed due to age and deterioration; the pumps, while previously having been serviced on a regular basis, are now beyond repair and

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replacement is required and critical. New fill pumps are necessary to supply, replenish, maintain, and circulate fresh seawater to the Lagoon thereby providing needed oxygen to the water body. Without the water replenishment provided by the fill pumps, the Lagoon will eventually suffer due to anoxic conditions (lack of oxygen). Anoxic conditions will exacerbate the growth of undesired algae blooms in warm and hot weather, and the risk of significant algae blooms will result in algae out-competing resident fish of oxygen and would likely result in fish die-off.

An Exception to Policy is being requested to procure Flygt Submersible NP with patented N Technology that features a unique impeller shape and design, as well as a self-cleaning impeller from Xylem Water Solutions as quickly as possible. This is a request to expedite the procurement of specialty pumps that are necessary for the aquatic functioning of the water body to avoid habitat impacts. The timely acquisition of these pumps is imperative to the health of the saltwater lagoon, to avoid risk of fish and marine organism die-off, and any potentially nuisance odor conditions. The request for a sole source procurement is to allow for the purchase of Flygt Submersible NP with patented N Technology, specialty pumps, which are the only pumps that can support this intensive pumping operation. This approval will allow Parks, Recreation and Marine (PRM) Queensway Bay Maintenance staff to perform the critical maintenance operations required to replenish and exchange water between the Rainbow Harbor and the lagoon absent natural tidal connections.

PRM maintenance staff have conducted extensive research and determined that the Flygt Submersible NP Pumps provided by Xylem possess a unique shape and design and self-cleaning impeller, which is required for a wet-well, submerged application in a marine environment where pumps and pipes experience marine growth and pull in debris. Within a marine environment, mechanical systems often experience constant marine organism growth. Previous pumps utilized by PRM staff in other locations, frequently become clogged due to these conditions, and Flygt pumps have the technology to minimize the risk of clogging and therefore would reduce pump failure in the near and long-term. Based on the experience of the PRM maintenance staff, pumps with this technology are the only pumps that will meet PRM's saltwater pumping needs. Flygt is the sole provider of this patented N technology and Xylem Water Solutions USA, Inc., is the sole distributor of Flygt products.

Much larger capital improvements for the Lagoon are anticipated to be needed, including coping repair, electrical system upgrades, vault repairs, and replacement of aeration and circulation pumps. These improvements are anticipated to be designed, engineered and publicly bid; however immediate installation of brand new pumps are critical to avoid costly events associated with habitat impacts and species loss.

City Charter Section 1801 requires that contracts for City purchases be awarded to the lowest responsible bidder after a competitive bid process, but allows for awards without a competitive bid process if accompanied by a Resolution adopted by City Council.

This matter was reviewed by Deputy City Attorney Vanessa S. Ibarra on August 10, 2022, Purchasing Agent Michelle Wilson on August 9, 2022, and by Budget Management Officer Nader Kaamouh on August 22, 2022.

TIMING CONSIDERATIONS

City Council action to adopt a Resolution and award a contract concurrently is requested on September 6, 2022 to ensure the contract is in place expeditiously.

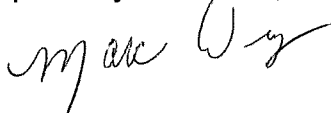
FISCAL IMPACT

The total amount of the contract will not exceed \$159,766 , inclusive of a 10 percent contingency. The total estimated cost of the Project is \$551,354 including the larger capital improvements for the Lagoon that are anticipated to be needed, which includes the contract award, consulting services, design, plan check and permit inspection fees, utility fees, construction support, project labor compliance, and related project support. The Project has sufficient appropriation in the Tidelands Operating Fund Group in the Public Works Department. On May 24, 2012, the State Lands Commission (SLC) approved expenditures for a more comprehensive Rainbow Lagoon Pump Replacement Project, which included concrete vault repairs, in the amount of \$500,000. The project was bid, however, a contract was not awarded due to higher than expected bid results and pricing. Some funding is instead proposed to be used on a separate set of pumps, which provide water supply to the Lagoon. The annual operating and preventative maintenance costs for the pumps is estimated at \$10,000, which is appropriated in Tidelands Operating Fund Group in Parks, Recreation, and Parks and Marine Department. This recommendation has no staffing impact beyond the normal budgeted scope of duties and is consistent with existing City Council priorities. There is no local job impact associated with this recommendation.

SUGGESTED ACTION:

Approve recommendation.

Respectfully submitted,



ERIC LOPEZ
DIRECTOR OF PUBLIC WORKS



BRENT DENNIS
DIRECTOR OF PARKS,
RECREATION AND MARINE

APPROVED:



THOMAS B. MODICA
CITY MANAGER

1 RESOLUTION NO.
2

3 A RESOLUTION OF THE CITY COUNCIL OF THE
4 CITY OF LONG BEACH AUTHORIZING THE CITY
5 MANAGER TO EXECUTE A CONTRACT WITH XYLEM
6 WATER SOLUTIONS USA, INC., WITHOUT ADVERTISING
7 FOR BIDS, FOR THE PURCHASE OF SUBMERSIBLE FILL
8 PUMPS FOR THE RAINBOW LAGOON FACILITY IN THE
9 AMOUNT OF \$145,242, WITH A 10% CONTINGENCY IN
10 THE AMOUNT OF \$14,524, FOR A TOTAL NOT TO
11 EXCEED AMOUNT OF \$159,766, FOR A PERIOD OF ONE
12 YEAR, AT THE DISCRETION OF THE CITY MANAGER
13

14 WHEREAS, the Rainbow Lagoon (lagoon) is a 5.5 acre manmade saltwater
15 lagoon that is located in what is now filled tidelands, where subtidal and intertidal habitat
16 historically were present; and

17 WHEREAS, the lagoon is a unique recreational amenity and serves as
18 functioning marine habitat for fish and wildlife and regulated by the California Coastal
19 Commission under CDP #5-91-193; and

20 WHEREAS, the lagoon sits at a higher elevation than the adjacent Rainbow
21 Harbor. Water replenishment and tidal exchange is manually conducted through the raising
22 and lowering of weirs and the activation of fill pumps that allow the replenishment and
23 exchange of seawater between the lagoon and harbor. It is environmentally and regulatorily
24 recognized that fresh seawater and tidal exchange is critical for an ecologically balanced
25 and healthy waterbody, regardless of whether this is done manually through mechanical
26 pumps or naturally through streams, inlets, or sloughs; and

27 WHEREAS, the main fill pump and secondary fill pump at the lagoon have
28 failed due to age and deterioration. The pumps, while previously having been serviced on

1 a regular basis, are now beyond repair and replacement is required and critical. A new fill
2 pump and new secondary fill pump are now necessary to supply, maintain, and replenish
3 seawater, which provides the needed oxygen to this water body. Without water exchange
4 and water replenishment offered by the fill pumps, the lagoon will eventually suffer due to
5 anoxic conditions (lack of oxygen). Anoxic conditions will exacerbate the growth of
6 undesired algae blooms in warm and hot weather, and the risk of significant algae blooms
7 will result in algae out-competing resident fish and marine organisms of oxygen and would
8 result in fish and marine organism die-off; and

9 WHEREAS, the City is obligated to maintain, protect, and preserve the
10 Rainbow Lagoon as a functioning marine habitat under its Coastal Development Permit;
11 and

12 WHEREAS, the City desires to procure Flygt Submersible Pumps which
13 features a patented N-Technology that consists of a unique shape and design of the
14 impeller, plus a self-cleaning impeller that minimizes failure and allows City staff to perform
15 the critical maintenance operations required to replenish and exchange water absent of
16 natural tidal connections between the Rainbow Harbor and the Rainbow Lagoon to avoid
17 habitat loss; and

18 WHEREAS, City staff have utilized and explored other pumps, but none have
19 met the technology requirements that self-cleaning impellers offer that are required in a
20 marine-based application where marine growth often builds in the pumps and piping and
21 debris can be pulled into the pumps. Other pumps have failed due to clogging; and

22 WHEREAS, pumps with this technology are the only pumps that will meet the
23 saltwater pumping needs and Flygt is the sole provider of this patented N technology and
24 Xylem Water Solutions USA, Inc. is the sole distributor of Flygt products; and

25 WHEREAS, as a result, no useful purpose would be served by advertising
26 for bids and to do so would constitute an idle and useless act and unnecessary expenditure
27 of public funds;

28 NOW, THEREFORE, the City Council of the City of Long Beach resolves as

