Amendment No. 2 to Professional Services Agreement Between City of Newport and Jacobs Engineering Group Inc.

THIS AMENDMENT No. 2 is to the Agreement for Professional Services between the City of Newport (City) and Jacobs Engineering Group Inc. (Consultant) dated June 11, 2021, for professional consulting services.

Recitals:

- 1. City and Consultant entered into an agreement dated June 11, 2021 (Agreement) for professional consulting services related to investigation of internal erosion and repair of spillway conduit function at Big Creek Dam #2.
- 2. City and Consultant executed an amendment for Consultant to provide the City with professional consulting services for the emergency repair of the spillway conduit at Big Creek Dam #2.
- 3. City and Consultant desire to further amend the agreement, utilizing the remaining project budget from the previously executed amendment, for Consultant to provide periodic dam safety monitoring through June of 2022.

Terms of Amendment:

City and Consultant agree to amend the Agreement, as provided for in section 27, as follows, effective on the date of the last signature below:

- A. City and Consultant will proceed with the scope of work attached to this Amendment, for no additional fee.
- B. This Amendment may be executed in counterparts and a signed copy transmitted by facsimile or other electronic means, each of which will be deemed an original, but all of which taken together will constitute one and the same agreement.

Except as expressly set forth herein, all provisions of the Agreement shall continue and remain in full force and effect.

City of Newport

Spencer R. Nebel, City Manager

Date: [-12 - 22

Jacobs Engineering Group Inc.

Name/Title Pat Van Duser, Designated Manager

Date: 1/5/2022

City of Newport

Scope of Work for

Ongoing Monitoring of the Dam and Spillway Conduit at Big Creek Dam #2

This scope of work describes the services to be provided by Jacobs Engineering Group Inc. (Jacobs) to the City of Newport (City) for periodic ongoing monitoring of the City's Big Creek Dam #2 embankment, underdrain system and spillway conduit during the winter and spring of 2021/2022.

Background

The City of Newport's Big Creek reservoir complex provides the City with drinking water, which the City treats and distributes to its residents. Big Creek Dam #2 is the upper dam in the complex. It is an earthen dam that was originally built in 1968. In 1975, the dam was raised by approximately 15 feet to its present constructed height at elevation 88 feet. The dam was constructed with a morning glory spillway in the reservoir connected to a 90-inch diameter, 100.5-foot-long corrugated metal pipe (CMP) spillway through the center of the dam. Both the upstream and downstream end of the spillway were modified in 1975 when the dam was raised. The downstream end of the spillway is open and discharges through a concrete structure to a stilling basin.

In the summer of 2021, Jacobs completed an investigation at the dam looking for voids, movement of material, or other signs of internal erosion associated with the CMP spillway. The findings of that investigation were documented in a technical memorandum to the City and discussed in a meeting with the City and the State Engineer for Dam Safety. Based on the findings of the investigation and condition assessment, the State Engineer asked the City to repair the lower (downstream) portion of the CMP spillway before refilling the reservoir.

Jacobs and the City subsequently developed a repair strategy that included grouting identified voids along the length of the spillway and providing for drainage of pore water flowing into the spillway. In October 2021, the City contracted with the James W. Fowler Company (JWF) to complete the necessary repairs prior to the onset of winter rains and the typical filling of the reservoir. Jacobs was put under contract to provide engineering support to the City during the work and monitor the repair work and dam's overall condition. The repairs were completed in late October 2021 and following concurrence from the State Engineer, the City began refilling the reservoir.

The purpose of this Scope of Work is to provide the City with periodic ongoing dam safety monitoring at Big Creek Dam #2 through the winter and spring of 2021 and 2022. This specifically focuses on monitoring the recent repair work and performance of the dam during re-filling of the reservoir and subsequent operation of spillway. Jacobs will work with the City and JWF on completing any additional repairs deemed necessary.



Task 1 – Project Management

The Project Manager (PM) will be the primary point of contact for the City. The PM will monitor the progress of the work and coordinate directly with City on a regular basis. The PM will track and report monthly on project work status, schedule and budget. Invoices for the work will be submitted monthly. This SOW anticipates eight additional months of project management in support of the repair of the CMP culvert (December through July).

Task 2 – Embankment Dam and Spillway Condition Monitoring

Jacobs will provide the City with dam safety inspection monitoring through the coming winter and spring (November through June). Jacobs geotechnical staff familiar with the Big Creek #2 dam and spillway will visit the project site approximately twice per month through June 2022. A total of up to 14 site visits are planned.

During these visits Jacobs will conduct a visual inspect the spillway culvert, the dam's underdrain system flow rate and turbidity, and the earthen embankment dam in general, focusing on the downstream soils around/adjacent to the spillway and retaining wall. Jacobs will schedule the visits with City staff and provide the City with an email update after each visit.

Specifically, Jacobs will inspect the spillway culvert for the presence of new seeps. If new seeps are identified that have the potential to move soil, Jacobs will confer with the City and JWF about additional repairs. Jacobs will inspect the floor relief drain and cover grate performance, and suggest corrective action as needed. Jacobs will inspect the areas where chemical grouting was used to confirm the durability of the repairs to spillway flows and debris. Jacobs will inspect the grout patches for "pop out" or spalling. Jacobs will also look for signs of distress or additional cracking of the remaining asphalt lining, which may be indicative of additional seeps and corrosion behind the lining that should be inspected for repair. Jacobs will make observations on the condition of the CMP, particularly noting changes in the condition. Outside of the spillway culvert, Jacobs will monitor seepage from the concrete seam of the cold-joint where the spillway ends at the stilling basin. These seeps were first observed by Jacobs following the October 2021 repair work.

On the embankment dam, Jacobs will check for soft and/or wet spots on the dam face near the spillway retaining wall and at the downstream toe of the dam. Jacobs will immediately alert the City if any area of concern is identified and provide the City with recommendations to address the concern. Jacobs will observe underdrain flows at the weir boxes and confirm that the observed flows are consistent with previous flow at similar reservoir levels prior to the grouting. Jacobs will also check for turbid water or other changes in the condition of the discharge. Finally, Jacobs will monitor the piezometers on site with the help of the City for changes in the piezometric levels compared with previous observations at similar reservoir levels.



Assumptions

- Jacobs will provide twice-monthly inspection site visits of roughly four hours in duration through June 2022. One person from Jacobs will complete the site visits. A total of 14 visits are planned.
- Jacobs will communicate observations and any recommendations from each site visit through email correspondence.
- Communication, correspondence and any necessary meetings between Jacobs, the City and JWF will occur remotely or as part of the regular by-monthly inspections.

Deliverables

Deliverables include the following:

- 1. Monthly Project Management updates, included as part of Jacobs' invoicing process.
- 2. Email summaries of site visit inspections.

Schedule

Jacobs will conduct bi-monthly site visits between through June 2022. Project closeout will occur in July 2022.

Compensation

The work contemplated in this scope will be completed using existing/remaining project budget from the previously executed contract and amendment. No additional fee is requested for the completion of this work.



AUTHORIZATION FOR AGREEMENTS, MOUS, OR OTHER DOCUMENTS OBLIGATING THE CITY

All contracts, agreements, grant agreements, memoranda of understanding, or any document obligating the city (with the exception of purchase orders), requires the completion of this form. The City Manager will sign these documents after all other required information and signatures are obtained.

Document: Amendment to Professional Services Agreement - Jacobs Engineering Group

Date: <u>12/12/21</u> 1/06/2022

Statement of Purpose: Provide ongoing monitoring utilizing unspent funds from original contract.

Department Head Signature:

Remarks, if any: ___This is a zero-cost amendment using funds saved due to efficient work that went faster than anticipated and now allows us the security of monitoring of the spillway.

City Attorney Review and Signature: Daily D. alle Date: 1/10/2022

Other Signatures as Requested by the City Attorney:

					Name/Position Date:
Budget Confirmed:	Signature Yes □X	No	N/A		
Certificate of Insurance Attached:		Yes	No	X□	N/A 🗶
City Council Approval Needed:		Yes	No	X□	Date: 10/4/21

After all the above requested information is complete and signatures obtained, return this form, along with the original document to the City Manager for signature. No documents should be executed prior to the City Manager's approval as evidenced by signature of this document.

City Manager Signature: _

Date:)-12-22

Once all signatures and certificates of insurance have been obtained, return this document, along with the original, fully-executed agreement, MOU, or other document to the City Recorder. A copy of grant agreement and all project funding documents, must be forwarded to the Finance Department for tracking and audit purposes.

City Recorder Signature:	Date:
Date posted on website:	

