

O'Shaughnessy Hydro Turbine Facilities Improvements Project,
CIP NO. 690444, CT NO. 972

Information to be included in all Legislation Modifying a Contract:

- 1. The names, contract compliance no. & expiration date, location by City/State and status of all companies (NPO, MAJ, MBE, FBE, HL1, AS1, or MBR) submitting a competitive bid or submitting an RFP or RFSQ.**

<u>Name</u>	<u>C.C. No./Exp. Date</u>	<u>DAX No.</u>	<u>City/State</u>	<u>Status</u>
Patrick Engineering Inc.	36-3008281 - 10/21/18	7237	Columbus/Ohio	MAJ

- 2. What type of bidding process was used (ITB, RFP, RFSQ, Competitive Bid).**
Requests for Proposals (RFP's) were opened December 20, 2013.
- 3. List the ranking and order of all bidders.**
 - Patrick Engineering Inc. (Only bidder)
- 4. Complete address, contact name, phone number, e-mail address, and original contract number for the successful bidder only.**
Patrick Engineering Inc.
4970 Varsity Drive
Lisle, Illinois 60532
Howard E. Firestone II, P.E., C.E.M., Vice President, P. (630) 795-7404, C. (630) 918-6363,
HFirestone@patrickco.com
EL016667

- 5. A description of work performed to date as part of the contract and a full description of work to be performed during any future phasing of the contract. The planning area should also be listed as well as any street or neighborhood names.**
The O'Shaughnessy Hydro Turbine Facility is more than thirty years old and its major components are in need of repair, including the turbines, generators, controls, and electrical gear. Currently, only one of the two turbines is operational. This contract provides engineering services to design the improvements needed to restore the facility to fully working condition. Work performed to date includes engineering study and field inspection of exposed / non-wetted areas (Phase 1- Study). This contract modification requests funding for Phase 2 work (Preliminary and Detailed Design Services), including bulkhead repairs, dewatering, inspections and condition assessments of concealed / wetted areas, development of a scope of improvements for detailed design work, detailed design, and bidding services. A future modification request will be submitted for Phase 3 (engineering services during construction).

Planning area 2: Far Northwest

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6. An updated contract timeline to contract completion.

Phase 2 preliminary design work is anticipated to be completed 1st quarter 2018. Phase 2 detailed design work is anticipated to start 1st quarter 2018 and be completed 3rd quarter 2018. Phase 3 (engineering services during construction) will begin 4th quarter 2018 and end approximately 4th quarter 2021.

7. A narrative discussing the economic impact or economic advantages of the project; community outreach or input in the development of the project; and any environmental factors or advantages of the project.

The O'Shaughnessy Dam and Reservoir are primarily used as a source of drinking water supply for Columbus and multiple suburbs. Hydropower and recreation are secondary uses. The power plant, owned and operated by the City of Columbus, is licensed by the Federal Energy Regulatory Commission (FERC). Under the Federal Energy Regulatory Commission (FERC) licensing authority, underutilized or abandoned power plants could potentially be taken over by another hydropower developer. Loss of operational control of the power plant by the City could result in conflicts of interest between water supply and power generation. By repairing the power plant's two hydro turbine units, the city will retain its license with FERC and full operational control of the drinking water supply.

Additionally, positive environmental impacts include utilizing a clean renewable energy source for generation of power. This will reduce the City's carbon footprint.

8. A description of any and all modifications to date including the amounts of each modification and the Contract Number associated with any modification to date. (List each modification separately.)

This is the first modification to this Engineering Services Contract.

9. A full description of the work to be performed as part of the proposed contract modification. (Indicating the work to be a logical extension of the contract is not sufficient explanation.)

This contract modification for Phase 2 work (preliminary and detailed design) will provide funding to perform the bulkhead repairs, dewater the system, conduct inspections and condition assessments of concealed / wetted areas, develop a scope of improvements for subsequent detailed design work, perform detailed design services, and perform bidding services.

10. If the contract modification was not anticipated and explained in the original contract legislation a full explanation as to the reasons the work could not have been anticipated is required. (Changed or field conditions is not sufficient explanation. Describe in full the changed conditions that require modification of the contract scope and amount.)

We did not anticipate that the bulkheads, which are used to keep water out of the facility during dewatering, would not be in good repair. This prevented the team from successfully dewatering the facility to perform the in-depth inspections required for preliminary engineering. Additionally, the original scope of work assumed that the disassembly and reassembly of the hydro turbines would be performed by the City of Columbus staff, or others. This is highly specialized work controlled by tight tolerances. The City staff cannot perform this work, so it has been added to the preliminary design scope.

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- 11. An explanation of why the work to be performed as part of the contract modification cannot be bid out. (Indicating the work to be a logical extension of the contract is not sufficient explanation.)**

The current consultant is familiar with the project and has completed the study phase of the project already. Bidding the work to another consultant will delay the project and will result in higher costs due to bringing the new consultant up to speed on the project.

- 12. A cost summary to include the original contract amount, the cost of each modification to date (list each modification separately), the cost of the modification being requested in the legislation, the estimated cost of any future known modifications and a total estimate of the contract cost.**

Original Contract (EL016667)	\$ 250,000.00
Mod 1 - Preliminary Design (current)	\$ 1,798,100.00
Mod 2 – Services During Construction (future)	\$ 800,000.00
Total	\$ 2,848,100.00

- 13. An explanation of how the cost of the modification was determined.**

The engineering firm obtained bids and quotes for the work to repair the bulkheads and prepared estimated hours and costs to perform the design engineering tasks. The estimates were reviewed by City staff and approved.