

## **POSSIBLE MOTION**

**I MOVE** to approve Change Order 2 in the amount of \$1,100,000.00 to Hatch Acres Corporation under the terms of the PSA dated April 2, 2009; authorize the Municipal Administrator to issue a PO for this Change Order; obligate funds from Capital Project No. 90594; and execute this action on behalf of the Assembly of the City and Borough of Sitka.



City & Borough of Sitka  
**Electric Department**

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# Memorandum

December 21, 2011

To: General Assembly, City & Borough of Sitka  
Via: Jim Dinley, Municipal Administrator  
From: Christopher Brewton, Utility Director  
Subject: **Blue Lake Hydroelectric Expansion Project – Professional Services Agreement (PSA) – Task Orders #2&3 - Hatch – Change Order #2**

## CHANGE ORDER NO. 1

On September 13, the General Assembly approved Change Order 1 to the contract with Hatch Acres Corporation (Hatch) for the detailed design of the Blue Lake Expansion Project. Change Order 1 was warranted due to increased engineering effort associated with the following primary tasks:

- Additional analyses requests by the FERC Board of Consultants (the federal oversight team).
- A more difficult than expected foundation design for Blue Lake dam.
- A group of City-requested design modifications to improve functionality or constructability of the project features.

Details of these previously approved additional engineering work tasks are summarized in the September 12 memorandum presented to the General Assembly. Change Order 1 was for \$1,000,000, increasing Hatch's authorized billings to \$7,367,551.

## PROPOSED CHANGE ORDER NO. 2

The design of the project is now about 95% complete, and we are requesting Assembly approval authorizing the Municipal Administrator to execute Change Order 2, to further increase the contract with Hatch by \$1,100,000 to complete the design, including assistance with the bidding of the general construction contract. This Change Order 2 would bring Hatch's overall authorized engineering budget to \$8,467,551.

The proposed Change Order 2 is warranted to cover additional design work provided by Hatch and to cover tasks where Hatch had initially underestimated the level of effort required. City Electric department staff also believes that a portion of Hatch's extra costs are related to their organization's inefficiencies, and Hatch has agreed to absorb some of the additional expenses.

## COST NEGOTIATIONS WITH HATCH

Dean Orbison, Paul Carson and Chris Brewton have engaged in a detailed review of Hatch's design costs to date and have negotiated with Hatch what we feel is a reasonable and fair settlement of Hatch's additional costs on this design project. This settlement we believe is fair to the City and Borough of Sitka.

Hatch has provided documentation that indicates their total expenditures on the feasibility study and design work (their tasks 1, 2, and 3 on the project) would total about \$8,967,000. Hatch has admitted some level of inefficiency in their work and offered to reduce their billings by \$500,000. This includes \$200,000 in project management services that were not billed to the City and an agreement to waive \$300,000 in billings to date.

We have further negotiated that engineering services by Hatch on Task 1,2 & 3 that exceed the approved amount of \$8,467,551 will not be billed to the CBS and performed entirely at Hatch's expense.. The intent is that, working without payment will provide an incentive to Hatch to finish the work within the budget increase covered by this Change Order 2. The \$300,000 reduction in Hatch's fee will be issued as a credit to their December 2011 invoice for the design work.

It is anticipated that Change Order 2 and Task 2 & 3 will be completed when Notice to Proceed is issued for General Construction Contract 9. This is scheduled for October 2012.

### **EFFICIENCIES AND BENEFITS OF WORK BY HATCH**

In our cost negotiations with Hatch we have identified a number of individual work activities that cost more than anticipated (at no fault of the Hatch organization) or which provide enhanced value to the City. We want to point out the following general efficiencies and benefits that the City has realized through the Hatch work:

- Compared to other engineering consultants who proposed on the Blue Lake Expansion design, the Hatch average hourly labor rates are the lowest. This may be due to Hatch being based partially in Canada where labor rates may be less than in the U.S. But, for whatever reason, the City has enjoyed generally lower labor costs than we would have with a different consultant.
- Hatch pursued a simple, straightforward geometry for the shape of the dam raise at Blue Lake. This allows us to increase the height of the dam without re-shaping the existing dam and without complicated multiple-curvature dam geometry as was proposed by other consultants. This may have saved the City millions of dollars.
- The dogged analysis and site investigations required to resolve the dam's left abutment rock support took almost two years, with several complicated analyses and multiple back-and-forth meetings with the FERC and their Board. This long effort by Hatch ultimately resulted in a design that does not require an extensive rock support program, again saving the City millions of dollars over what we might have ended up with.
- Hatch was selected by the City to provide the design in part because of their dam design skills and their technical specialists in the mechanical, penstock design and geotechnical analysis fields. All of these specialists have performed well and the City has received good "value for money" in these areas of the project design.
- Overall, the Electric Department feels we will end up with an adequate, complete design when we go out for construction bids in the spring of 2012.

## **FUTURE ENGINEERING SERVICES FOR BLUE LAKE EXPANSION**

We are concerned enough with the schedule performance and management work by Hatch that the Electric Department has decided not to award the Task 4 construction management phase of the project to Hatch as planned, but to issue a request for proposals (RFP). We anticipate issuing an RFP for Task 4 construction management early in January 2012 and awarding a contract for this work in the spring of 2012.

We do anticipate that a portion of the Task 4 engineering should remain with Hatch Acres Consultants. This work would include services where their staff is best able to do the work, namely:

- Geotechnical engineering support – to be provided by the Hatch geotech engineers who supervised all the site investigations in 2009 and 2010.
- Shop drawing review services for equipment supply contracts – to be provided by the Hatch engineers who specified or designed the equipment that will be supplied.
- Design review support – On-call, as-requested reviews by the Hatch designers for specific questions related to design changes and differing site conditions.

The proposed Task Order for the Hatch Task 4 engineering support services is described in a separate memo to the Assembly.

As noted above, authorizing Change Order # 2 will increase the Hatch PSA contract to \$ 8,467,551.

Dean Orbison, Project Engineer will be available to answer project questions.

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