Reconstruction of Dam at Lock 38 (EQ754-190606/B)

Question 1) Can a drawing be provided showing the slumped areas of the stack stone wall?

Answer 1) A drawing will not be generated. The photograph of the slumped area is shown in attached Figure 1. It has been anticipated that the stacked stone wall would be removed and replaced by divers from the upstream face of the dam to the upstream edge of the slumped area. Stones to be managed in accordance with the technical specifications.

Figure 1. Slumped area of stacked stone.

Question 2) Are there any slump areas identified beyond the cofferdam location?

Answer 2) Yes, slumped area is upstream of the upstream cofferdam.

Question 3) Can you provide which unit price item that the stack stone removal and reinstallation shall be included under?

Answer 3) The stacked stone removal and installation is part of Lump Sum Amount.

Question 4) What is to be included in the pay items for Excavation Standby, Demolition Standby and Dewatering Standby?

Answer 4) Items included in the standby is the manpower and equipment in use and directly affected. The contractor is expected to mitigate the impact of the standby through reallocation of resources and other similar measures.

Question 5) The temporary fencing shown on drawing C005 does not match drawing L001. Drawing L001 has an additional area to be fenced around the Lock Building. Please confirm what areas are to be protected by temporary fencing.

Answer 5) Refer drawing C005, please ignore temporary fencing described on L001.

Question 6) Please confirm that a permit to take water is not required for the initial dewatering. On March 29, 2016 O.Reg 387/04 was amended to exempt active in stream diversions. Section 01 41 00 2.2.2 states that a PTTW must be obtained for initial dewatering.

Answer 6) Permit is not required if contractor is meeting the requirements of O.Reg 387/04 (amended March 29, 2016) and other applicable regulations.

Question 7) Please consider making the repair of the slumped stacked stone wall a unit price item, per square meter. Inside of the cofferdam is reasonable as Lump Sum as it is controlled by the contractor's design, but "slumped area" is subjective and impossible to bid accurately

Answer 7) Slumped stacked stone repair to remain in the Lump Sum Amount as the exact dimensions of the repair are highly dependent on the means and methods of contractors. Please refer to Figure 1 for further reference.

Question 8) Unit Price Item #1 List the following to be paid at unit price: Contractor Staging and Turning Areas (on Parks Canada Agency property) - Construction/deconstruction including:

1. *Preparation, clearing and grubbing, soil stripping, rough grading and granular backfill, drainage of area etc. as required;*
2. *Sediment and erosion control measures;*
3. *Temporary utilities;*
4. *Site security;*
5. *General maintenance and cleaning;*
6. *Dust and noise management;*
7. *Land restoration.*

Lump Sum Table List the following to be paid under the lump sum price:

Mobilization/Demobilization, including:

1. *General site preparation, clearing and grubbing, soils stripping etc.*
2. *General maintenance and cleaning of work site, site access, and haul routes;*
3. *Site security;*
4. *Snow removal;*
5. *Temporary utilities;*
6. *Site Offices;*
7. *Shop drawings;*
8. *Submittals, approvals, permits and fees (other than specified below);*
9. *Agreements/permits/authorization and releases with private landowners, municipalities and other authorities having jurisdiction;*
10. *Dust and noise management;*
11. *Protection, maintenance, relocation and reconnection of existing services and utilities.*

Drainage/Sediment/Erosion Control - Temporary drainage, sediment and erosion control and treatment at work area, construction, maintenance and removal.

- *The items in red are listed under both lump sum and unit price items. Please revise the measurement and payment sections of the specifications to clearly identify where items are to be paid to avoid confusion during project payments. Having items such as site grading and backfill, land restoration under both the unit price and lump sum payments can cause serious issues during negotiation of quantities. It is in everyone's best interest to resolve these items prior to tender close to ensure a fair and competitive bidding process.*

- *All rough grading and backfill should be paid under unit price item 12*

- *All Drainage, Sediment and Erosion control should be paid either under Unit Price Item 1 or Lump Sum item 8 - not both*

- *Land restoration should all be paid under Unit price item 18*

Answer 8) There is no duplication of services between Lump Sum Amount and Unit Price Table. It has been presumed that the contractor will secure offsite staging and laydown areas. The Unit Price Table covers staging area on Parks Canada Property and Lump Sum Amount for offsite staging.

Question 9) Detail 4 on drawing S003 notes Type D waterstop. Please confirm this should read Type C,

Answer 9) Confirmed, it should read Type C. IFC drawings will be corrected.

Question 10) Detail 4 on drawing S003 notes Type A waterstop, but is drawn as Type B waterstop. Please confirm which is correct.

Answer 10) confirmed, this waterstop must be Type A. IFC drawings will be corrected.

Question 11) Drawing C004 shows a downstream cofferdam elevation of 232.00. My understanding is that the owners' requirements for cofferdams are for a 1:40 year flood, plus 500mm freeboard as referenced in specification 35 62 16.1.6.1. Currently, the navigation water level referenced on drawing C004 is elevation 230.44 for the downstream portion of the river. It is my understanding that if the water level was to rise to elevation 231.5 (cofferdam elevation minus 500mm freeboard), the entire downstream basin would be flooded to a dangerous, and unacceptable level. Please indicate which elevation governs.

Answer 11) Bidders must build the downstream cofferdam elevation 232.00 meters above sea level in 1978 GSC datum.

Question 12) Please provide the 1:40 year flood water elevations to adequately design the upstream and downstream cofferdams.

Answer 12) The 1:40 year flood elevation for the upstream cofferdam is 234.68 meters above sea level in 1978 GSC datum, however, the crest must be a minimum of 236.05 meters in 1978 GSC datum. The 1:40 year flood elevation for the downstream cofferdam is unknown, however, the crest must be a minimum of 232.00 meters above sea level in 1978 GSC datum. No surcharging the of the upstream water levels is allowed.

Question 13) Specification 35 62 16.1.6.7 states that "Contractor is fully responsible for the design and installation of the cofferdams that must include cellular cofferdam, structural steel with drilled/embedded post or any other design to be approved by the departmental representative."

a. Please provide clarification on the above. Our intent is to supply and install a system which has drilled/embedded posts, and is similar to other rigid, substantially watertight systems currently in use on two projects along the Trent Severn Waterway, but does not use a cellular system. Please advise that this will be acceptable.

b. Also, please indicate that a granular cofferdam/meterbag cofferdam similar to those currently being used in several southern dam rehabilitation projects will *NOT* be acceptable for use on this project.

Answer 13) As per the solicitation RFP section 1.5 a) states “The narrative should describe how the cofferdam construction and phasing will be executed as shown on the construction drawings.” As such, a system comprised of drilled/embedded post exclusively is not acceptable. Granular/Meterbag cofferdams are not acceptable.