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REVISION 002 TO A INVITATION TO TENDER

RÉVISION 002 À UNE INVITATION À SOUMISSIONER DEMANDE D'OFFRES À COMMANDES

The referenced document is hereby revised; unless otherwise indicated, all other terms and conditions of the Offer remain the same.

Ce document est par la présente révisé; sauf indication contraire, les modalités de l'offre demeurent les mêmes.

Issuing Office - Bureau de distribution :
Parks Canada Agency
Calgary, AB

Title - Sujet : Lake Louise Waste Water Treatment Plant Rehabilitation – Banff National Park	
Solicitation No. - N° de l'invitation : 5P420-20-0448/A	**Date :** April 6, 2021
Amendment No. - N° de modification : **002**	
Client Reference No. - N° de référence du client : 1480	
GETS Reference No. | N° de reference de SEAG : PW-21-00949500	

Solicitation Closes - L'invitation prend fin : **At - à :** 2:00 PM **On - le :** April 15, 2021	**Time Zone - Fuseau horaire** MDT - HAR

F.O.B. - F.A.B. :
Plant - Usine : ☐ **Destination :** ☒ **Other - Autre :** ☐

Address Enquiries to - Adresser toutes demande de renseignements à : Rebecca Chen

Telephone No. - N° de telephone : (587) 439-3529	**Fax No. -N° de télécopieur :** (866) 246-6893	**Email Address – Couriel :** rebecca.chen2@canada.ca

Destination of Goods, Services, and Construction - Destination des biens, services, et construction :
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TO BE COMPLETED BY THE BIDDER - À REMPLIR PAR LE SOUMISSIONNAIRE

Vendor/ Firm Name - Nom du fournisseur/ de l'entrepreneur :	
Address - Adresse :	
Telephone No. - N° de telephone :	**Fax No. - N° de télécopieur :**
Name of person authorized to sign on behalf of the Vendor/Firm **Nom de la personne autorisée a signer au nom du fournisseur/ de l'entrepreneur**	
Signature :	**Date :**

Canada

Amendment 002

This amendment is being raised to distribute the mandatory site visit information, questions and answers and to make changes to the tender package.

A. Mandatory Site Visit Attendees

Vendor	Representative's Name
Champion Concrete Cutting	Denis Lussier
Industra Construction Corp	Aiden Wong and Michael Unyuen
BMP Mechanical	Chase Kozak
Alpha Construction	Karsten Priess
Chandos Construction	James Edighoffer
Balzer's Canada Inc	Steve Proskurniak
Simpson Industrial Services	Jim Simpson and Nick Schefter
Chamco	Shawn Oneill
Kelsey Pipelines	Richard Clunie
Trotter & Morton	Ryan Kallis and Ian Paterson
Graham Construction	Tyler Krug-Wilson and Michael Winder
Sure-form Contracting	Ryan Maloney
Maple Reinders	Michael Kordos and Darija Svilar
Vac Attack	Denis Smits
Karlin Group	Jeremy Rautiainen
Montgomery Power Management	John Montgomery
Mikes Electric	Chuck Carlson
Element Land Surveys	James Durant
Mequipco	Gareth Wright
North American Construction	Tim Frank
Ramtech	Alex Simon
Proform Precast	John Third
Goldbar Contractors	Harold Page
Everest Construction Management	Coleton Derochie
Building Works	Ryan Nagy

B. Question and Answer

Q1. How long can the Headworks be taken out of service or bypassed for the new screen and garbage compactor installation?

A1. The headworks bypass channel can be used for a period of up to two weeks during the installation and commissioning of the screen and garbage compactor equipment.

In order to install the screen, the following steps are necessary:

i. Isolate bypass channel and dewater

ii. Install 25mm trash rack in bypass channel

iii. Open up bypass channel to flow and ensure it is functional over a range of flows

iv. Isolate screening channel, dewater and ensure it is watertight

v. Disassemble and removal existing screen

vi. Install new mechanical fine screen, compactor and LCP(s)

vii. Provide electrical and instrumentation cable terminations for all equipment

viii. Dry test the new screen and compactor

ix. Open up screening channel to flow and begin commissioning process

x. Isolate bypass channel to flow

Q2. How will the bypass at the Headworks work when the new equipment is being installed? What range of flow rates are expected?

A2. The bypass channel is parallel to the screen channel in the Headworks building and can be used to bypass the raw sewage when the new equipment is being installed. There are hand gates and gate troughs in both the screen channel and the bypass channel. The Contractor to confirm the condition of the facilities and take measurements to make the isolation watertight for the work.

Q3. Can the existing aeration piping be removed in a Bioreactor when the concrete restoration is taking place?

A3. a) It is up to the Contractor. The aeration piping and devices including the diffusers should be protected properly from damage. The Contractor shall replace any damaged piping and diffusers with new units at no additional cost to the Owner.
b) If the Contractor chooses to remove the aeration piping and diffusers, they shall be re-installed as per the installation instructions of the equipment manufacturer (details to be provided).
c) Diffuser level to be confirmed and leakage test shall be conducted by the Contractor after re-installation of the aeration system by filling with clean water (service water or plant effluent if quick fill is required). The Contractor shall be responsible for any piping connections or pumping if it is required.
d) Leakage and leveling test:

i. Flood each cell with clean water to the top of the diffusers. Check the level of the diffusers to ensure that they are at the same elevation to within ± 5.0 mm.
ii. Flood the cells with clean water to a depth of 300 mm above the top of the diffusers. Turn on a blower and supply air evenly to all manifolds. Visually inspect the surface of the water in the presence of the Engineer to ensure that the airflow is uniformly distributed across a cell with no air leakage from the piping or diffuser connections.
iii. Repair any leaks in the element holders, elements, piping or the like. Repeat the test until the installation is void of any air leaks.
iv. Fill each aeration cell in operation with clean water to the design operating depth. Set the blower air flows for maximum and observe for any leakage.

Q4. Who is responsible for emptying, cleaning and sanitizing the bioreactor for upgrade work?

A4. Parks Canada will empty the bioreactors. The Contractor is responsible for cleaning and sanitizing the bioreactor for the upgrade work.

Q5. What is required of the existing aeration pipe after the elbows (photo below) are removed?
A5. Repair the paint and install blind flange to the existing process air pipe beside the bioreactor as shown in below picture.

WORK TO INCLUDE:
1. SUPPLY AND INSTALL 2 BLIND FLANGES PAINTED WITH COLOR TO MATCH EXISTING.
2. CLEAN AND REPAINT EX PIPES

Q6. Should the Contractor provide the enclosure of the odour removal system instead of the supplier?
A6. It is acceptable that the Contractor provides enclosure in accordance with the equipment supplier's specifications.

Q7. Provide and install process air flow control valves (FCV-11, 12, 13, 21, 22, 23) as per specified DV1- Diaphragm valves in Section 40 92 13.01, 75 mm diameter.
A7. Add NOTE 7 to drawing 2.P2-01: 7. REMOVE EX 150-FR-MS INSIDE BUILDING. FILL THE RESIDUAL PIPE (WALL PENETRATION) WITH NON-SHRINK GROUT.

Q8. Please specify if shotcrete or sika grout is to be used to patch concrete holes on the Bioreactors?
A8. Sika grout shall be used to patch holes. Roughen surface of hole and apply bonding agent to existing concrete.

Q9. Include photos of the inspection of the empty bioreactor and concrete core analysis.
A9.

Bioreactor Photo 1

Bioreactor Photo 2

Bioreactor Photo 3

Bioreactor Photo 4

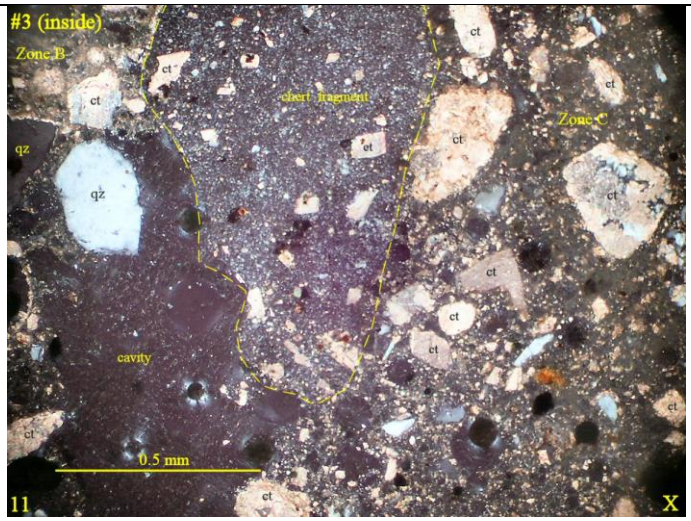
Bioreactor Photo 5

Bioreactor Photo 6

Bioreactor Photo 7

Bioreactor Photo 8

Bioreactor Photo 9



Petrographic Analysis – Photo 10

Q10. Are there any restrictions with bringing materials and equipment through the campground to the WWTP?
A10. There are no restrictions. There is an over-height access to the plant to the east of the main access gates if required.

Q11. Are there any pre-existing engineered tie-off points on the Bioreactors?
A11. No pre-existing engineering tie off points are known.

Q12. Where is the laydown and office trailer locations?
Q12. The laydown and construction office location will be northwest of the Bioreactors.

Q13. Can power be supplied from the plant to the office trailers?
A13. Yes.

Q14. Will the contractor be required to complete snow clearing at site or will PCA complete this?
A14. Snow clearing will be completed by Parks Canada.

Q15. What's the allowed working daily duration? Is it 7:00 am to 4:00 pm? Is it allowed to work overtime or in the weekend?
A15. Work hours are 8:00am to 8:00pm daily. Work will be permitted on weekends and long weekends, however traffic to be kept to a minimum on those days.

Q16. Where is the location of the MCC#3 breaker that feeds MCC#1?
A16. It is located in the Generator Building.

Q17. Will a Certificate of Recognition Equivalency Letter (COREL) issued by the Alberta Construction Safety Association be acceptable?
A17. Acceptable. However, the Contractor's health and safety management system would need to be open to audit by a certified auditor to ensure it satisfies the requirements of Alberta Occupational Health and Safety.

Q18. Based on previous experience for similar projects and after a thorough review of the documents, we do not believe a March 31, 2022 completion date is attainable given the shop drawing review process, equipment lead time, construction activities and phasing, etc. required for a project of this magnitude. Please review and confirm if this can be extended to August 31, 2022.

A18. The completion date beyond March 31, 2022 is contingent on PCA's fiscal year past that date. It is reasonable to extend the completion date to Aug 31, 2022, see revision below.

Q19. Note 3 on Drawing 2.P2-01 states that it was possible that asbestos was used for the existing structure; however, no hazardous material report has been provided. Please confirm that the Contractor is to assume that there are no hazardous materials for the purposes of the tender.
A19. The Contractor is to include the costs of a hazardous materials inspection, sampling and laboratory testing in their pricing.

Q20. On drawing 1.P2-01, the end of 50-DR-PVC makes reference to drawing 1.E0-00 for details. 1.E0-00 is a symbol legend for electrical. Please clarify.
A20. The arrow is pointing the U/G electrical ductbank, not to 50-Dr-PVC. This comment could be eliminated from the 1.P2-01 drawing. This comment has no relevance here.

Q21. On drawing 1.P2-01 Photo 1, the label "connect to septage tank" refers to Detail 1 on 8.P4-04 which is not applicable. Please clarify.
A21. Replace the note with "CONNECT TO SEPTAGE TANK. SEE DETAIL 4 ON 8.P4-04 FOR PIPE PENETRATION. NO METAL RING AND STOP FLANGE REQUIRED"

Q22. Section 44 43 33.02 Article 2.1.8 states that the bar screen shall be from the same manufacturer as the screenings handling unit, however the approved manufacturers are not the same for both. Please clarify if they can be from different manufacturers.
A22. Delete Clause 2.4.3 and 2.4.4 of Section 44 43 33 .11. Replace with: 2.4.3 Headworks

Q23. On drawing 3.P2-01, a 250mm pipe size for FA while 300mm pipe is shown leaving the bioreactor on drawing 1.P2-01. Please confirm pipe size.
A23. The diameter of FA pipe leaving bioreactor is 250 mm. The pipe size increases to 300 mm before the tee joint of FA pipe from headworks building.

Q24. ISS-FCV-1 states temperature rating shall be -40C to +60C. Section 40 93 01 / 2.3.3.8 states temperature shall be -40C to +40C. We would like to clarify which temperature rating takes precedence.
A24. Supply the product with temperature rating of -40C to +60C.

Q25. Pay Item 2.2 under D. Blower / Pump / Splitter / Alum lists two (2) sealed doors and spring loaded hardware in the corridor. The only doors shown on the drawings are four (4) at the headworks building. Please clarify which doors these are referring to.
A25. These are the doors on either end of the covered walkway between the Headworks and Blower building. Add Hardware Group 5 and door closer SRI-421-PCTB-EN 689 to doors EX20a and EX20b.

Q26. Drawing 3.S4-01 Detail 2 Type I Proposed Repair notes a "spray applied overlay of sulfate & mild acid resistant material". Is this referring to Sika 225, 223, or a different product? Please clarify.
A26. The note should be updated to read "SPRAY APPLIED OVERLAY REPAIR MORTOR".

Q27. Please provide as-built details of the existing precast hollow core panels for the bioreactors. This information is required for the proposed demolition.
A27. Please refer to drawings SM-4 and SM-5 from the 1984 As-Built Drawing package.

Q28. Drawing 3.P2-01 specifies screw caps for sample ports while drawing 3.P2-02 specifies Slip on Hinged caps. Please clarify.
A28. Slip on Hinged Caps shall be used for sample ports.

Q29. Drawing 3.A1-01 has a label, “new galvanized 42 dia. Guardrail, paint to match existing”, but painting over newly galvanized steel is not recommended. Please clarify if it can be simply galvanized guardrail and not painted.
A29. Painting is not required.

Q30. Drawing 3.S2-01 shows darkened lines labelled “partial height walls”, as well as a “1000 wide trench” and “thickening at top of wall for guard rail attachment”. Please clarify if these bioreactor components are existing or new, as there are no structural details provided.
A30. All items noted are existing:
i. Partial Height walls
ii. 1000 wide trench – Refer to Detail E & F/SM-6 from the 1984 As-Built Drawing package.
iii. Thickening at top of wall: Refer to details 7 & 10 /3.S4-01 for guard rail attachment showing edge thickening.

Q31. Section 13 34 23 Pre-Fabricated Structures Article 1.1.2 references standards such as Rainscreen Principle, NRC, ASHRAE 90.1, etc. These would not be applicable for a pre-engineered self-framing building to enclose the biotrickling filter system equipment. Please confirm.
A31. The building must meet the requirements of but not limited to Part 2 of Section 13 34 23. Pre-engineered self framing buildings must meet these requirements.

Q32. Section 46 33 42 Diaphragm Chemical Meting Pumps Article 2.4.1 Capacities and Performance – confirm if the 1000:1 turn down range is a typo. Should it be 10:1?
A32. The total turn down range of 1000:1 is correct.

Q33. Section 46 33 42 Diaphragm Chemical Meting Pumps – What type of space is required around the equipment for maintenance and access?
A33. Normally 750 mm working space in front of the equipment is required for maintenance and access.

Q34. Section 46 33 42 Diaphragm Chemical Meting Pumps – For the transfer pumps, utilizing a Milton Roy diaphragm pump may not be the best option. Would the Owner approve a reciprocating or screw pump in place of this?
A34. Same type of pumps are preferred for easy operation and maintenance. Other type of pumps from the listed manufacturers will be considered for approval after contract award.

Q35. Due to the volume of information required at tender close, including unit prices in the Combined Priced Table in Appendix 1. We respectfully ask that Parks Canada provide fillable electronic document to assist with bid submission.
A35 Yes, see attached Microsoft Word version of the price table

C. Tender Package Revisions

IN: ITT 20-0448: BID AND ACCEPTANCE FORM (BA)
DELETE: BA06 CONSTRUCTION TIME
The Contractor must perform and complete the Work by March 31, 2022.
REPLACE WITH: BA06 CONSTRUCTION TIME
The Contractor must perform and complete the Work by August 31, 2022.

IN: ITT 20-0448 - APPENDIX 3 – QUALIFICATION FORM (SUBMISSION 1)
Bidders may submit past project examples on both Waste Water Treatment Plants and or Water Treatment Plants and will be acceptable experience. All references to Waste Water Treatment Plant projects in **APPENDIX 3 – QUALIFICATION FORM (SUBMISSION 1)** are to be updated to also include Water Treatment Plants.

IN: DSP2_20-0448
ADD: *APPENDIX 1 - COMBINED PRICE FORM ITT 20-0448* (Microsoft Word)
ADD: *DWG_Lake Louise WWTP 1984 As-Built Drawings SM4_SM5 AND SM6*

IN: Drawing 2.P2-01
ADD: Note 7 REMOVE EX 150-FR-MS INSIDE BUILDING. FILL THE RESIDUAL PIPE (WALL PENETRATION) WITH NON-SHRINK GROUT.

IN: Drawing 1.P2-01 Photo 1, the label “connect to septage tank” refers to Detail 1 on 8.P4-04 which is not applicable. Please clarify.
REPLACE WITH: “CONNECT TO SEPTAGE TANK. SEE DETAIL 4 ON 8.P4-04 FOR PIPE PENETRATION. NO METAL RING AND STOP FLANGE REQUIRED”

IN: Drawing 3.S4-01 Detail 2 Type I Proposed Repair notes
DELETE: “SPRAY APPLIED OVERLAY OF SULFATE & MILD ACID RESISTANT MATERIAL”.
REPLACE WITH: “SPRAY APPLIED OVERLAY REPAIR MORTOR”.

IN: Specifications Section 44 43 33 .11
DELETE Clause 2.4.3 and 2.4.4
REPLACE WITH: 2.4.3 Headworks

IN: Section 40 93 01 / 2.3.3.8
DELETE: -40C to +40C
REPLACE WITH: 40C to +60C

ALL OTHER TERMS & CONDITIONS REMAIN UNCHANGED