Public Works and Government Services Canada | Travaux publics et Services gouvernementaux Canada

RETURN BIDS TO:
RETOURNER LES SOUMISSIONS À:
PWGSC/TPSGC Acquisitions Bid Receiving
Box/Boite de Réception des Soumissions
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1st Floor/1ière étage, Suite 1212
100-1045 Main Street
Moncton
New Brunswick
E1C 1H1
Bid Fax: (506) 851-6759

SOLICITATION AMENDMENT
MODIFICATION DE L'INVITATION

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

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

Comments - Commentaires

Vendor/Firm Name and Address
Raison sociale et adresse du fournisseur/de l'entrepreneur

Issuing Office - Bureau de distribution
Acquisitions NB/PEI (Moncton Office) – Bureau d'acquisitions N.-B./Î.-P.-É. (Moncton)
1045 Main Street / 1045, rue Main
Moncton
New Bruns
E1C 1H1

Title - Sujet Submersible Mixers	
Solicitation No. - N° de l'invitation F4758-190016/A	**Amendment No. - N° modif.** 001
Client Reference No. - N° de référence du client F4758-190016	**Date** 2019-09-03
GETS Reference No. - N° de référence de SEAG PW-$MCT-041-5601	
File No. - N° de dossier MCT-9-42029 (041)	**CCC No./N° CCC - FMS No./N° VME**
Solicitation Closes - L'invitation prend fin **at - à 02:00 PM** **on - le 2019-09-10**	**Time Zone** **Fuseau horaire** Atlantic Daylight Saving Time ADT
F.O.B. - F.A.B. **Plant-Usine:** ☐ **Destination:** ☑ **Other-Autre:** ☐	
Address Enquiries to: - Adresser toutes questions à: Owens (MCT), Shannon	**Buyer Id - Id de l'acheteur** mct041
Telephone No. - N° de téléphone (506) 962-5402 ( )	**FAX No. - N° de FAX** (506) 851-6759
Destination - of Goods, Services, and Construction: **Destination - des biens, services et construction:**	

Instructions: See Herein

Instructions: Voir aux présentes

Delivery Required - Livraison exigée	**Delivery Offered - Livraison proposée**
Vendor/Firm Name and Address **Raison sociale et adresse du fournisseur/de l'entrepreneur** **Telephone No. - N° de téléphone** **Facsimile No. - N° de télécopieur**	
Name and title of person authorized to sign on behalf of Vendor/Firm (type or print) **Nom et titre de la personne autorisée à signer au nom du fournisseur/ de l'entrepreneur (taper ou écrire en caractères d'imprimerie)** **Signature** **Date**	

Canada

Solicitation Amendment No. 001

Title Submersible Mixers

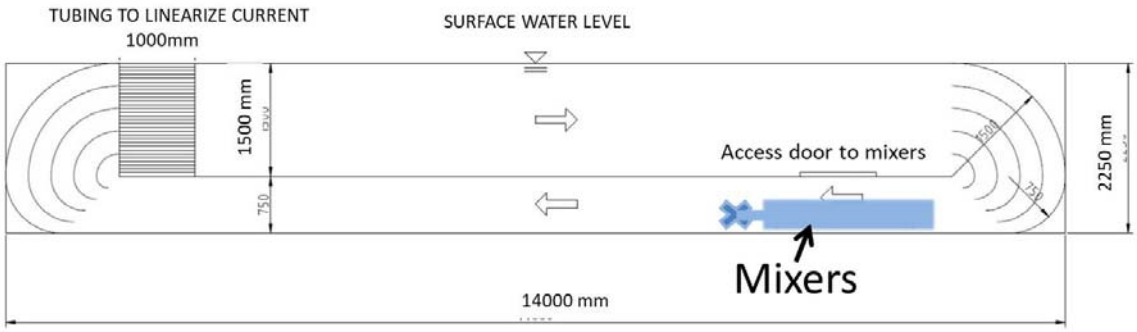
This solicitation is hereby amended to provide responses to the following questions:

Q1: Could you please confirm the size of the tank (that the mixers will be installed in)?

A1: The revised drawing now indicates that the tank size is 2.00 m (width) x 2.25 m (depth) x 14.00 m (length). The tank holds 63 m^3 of water.

Q2: Is a clearer drawing of the tank available? The drawing provided in Annex A of the RPF is not readable

A2: A higher resolution drawing is provided below.



Width of tank: 2.00 m
Water depth: 2.25 m
Length of tank: 14.00 m
Water volume: 63 m^3

Q3: The unit is completely made of SS316 material. Do you need the control box in SS316 as well?

A3: Two control boxes, one for each mixer, are required. SS316 casing is unnecessary for these control units as we can find other means to protect them from corrosion.

Q4: Is the mounting with backside bracket 70x70mm square pipe okay?

A4: Yes, such a bracket would be suitable for the application.

Q5: In terms of floor mounting kit- the kits only includes 12x80 screws to bolt the Mixer to the floor. Is that what is meant by customer when they ask for floor mounting kit?

A5: Yes, such screws are sufficient assuming they enable the fastening of the two mixers to the bottom of the tank.

Q6: Does customer require 1 control box per mixer? If so, should it be in SS316 material with hi-lo speed control?

A6: Yes, 1 control box per mixer is required. SS316 casing is not required for these control units as we can protect them from corrosion by other means. However it is essential that the speed can be adjusted in a manner similar to a dimmer light switch, such that the operator can progressively increase speed from null to full capacity. A dual (low/high) speed control is insufficient.

If your bid has already been forwarded and you wish to revise same, this revision should be sent either in a sealed envelope and mailed to the above address or by facsimile (506) 851-6759 and reach the undersigned before the appropriate closing date. The solicitation number and the closing date are to be shown on the outside of the sealed envelope or on the facsimile transmission.

All other terms and conditions of the solicitation document remain unchanged remain unchanged.

All enquiries concerning this amendment are to be forwarded to:

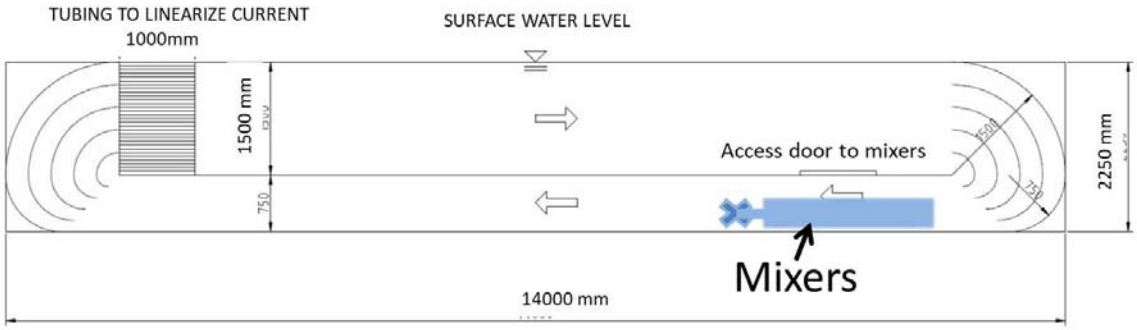
Name: Shannon Owens
1045 Main Street
Moncton, NB E1C 1H1
Telephone No: (506) 962-5402
Facsimile No: (506) 851-6759
Email: shannon.owens@pwgsc-tpsgc.gc.ca

ANNEX "A" – REQUIREMENT (REVISED September 3, 2019)

SCOPE:

Public Services and Procurement Canada, on behalf of Fisheries and Oceans Canada, (343 Université Avenue, Moncton, New Brunswick E1C 9B6) has a requirement to procure two (2) Submersible Mixers. The function of this mechanical hardware will be to create water motion in a large ~~(2.6m x 2.6m x 12.2m)~~ (2.00m x 2.25m x 14.00m) flow tank intended for estuarine biological research.

The tank will be split into a bottom and a top section along most of its length, and the two sections will communicate at the two ends of the tank (see diagram below). Water will flow in a closed loop in the following manner: it will flow in one direction through the bottom section, drive through radial channels at one end of the tank to change the flow direction by 180 degrees, pass through a turbulence reducing device, flow over the top section, and again turn 180 degrees at the other end of the tank to return to the bottom section. The tank will be used for biological studies in seawater (4 to 18 °C) flows ranging from 1 to 20 cm/s. It was determined, in a hydrological engineering study, that the desired way to create these variable currents was to use two submersible mixers affixed to the floor of the tank in the first third of the bottom section (see REVISED diagram below).



Width of tank: 2.00 m
Water depth: 2.25 m
Length of tank: 14.00 m
Water volume: 63 m^3

MANDATORY REQUIREMENTS:

1. Two (2) submersible mixers, each meeting the following requirements:
   a. Powered by 600-V, 60 Hz, 3-phase current
   b. IP-68 dust and water protection rating
   c. Flow capacity of 300 L/s at 300 mm head and a minimum thrust of 600 N
   d. 316 stainless steel propeller, to be used in seawater, with a maximum diameter of 40 cm
   e. Jet ring with maximum outer diameter of 600 mm
   f. Set of zinc sacrificial anodes to minimize mixer corrosion in seawater
   g. Floor mounting kit
   h. Power cables with minimum length of 12 m

2. Two (2) variable speed drives with specifications appropriate to control independently the two mixers' rotation speed.

3. Two (2) dv/dt output current filters with specifications appropriate to protect each mixer from surcharges.

4. Required electrical cables and connectors to connect the two mixers, variable speed drives and output filters.

DELIVERY REQUIREMENTS:

Two (2) submersible mixers must be delivered to:

Fisheries and Oceans Canada
343 Université Avenue
Moncton, New Brunswick E1C 9B6

Submersible mixers should be delivered within eight (8) weeks of contract award and must be delivered by **December 31, 2019**.