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Bid Receiving - PWGSC / Réception des soumissions - TPSGC
11 Laurier St. / 11, rue Laurier
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Core 0B2 / Noyau 0B2
Gatineau, Québec K1A 0S5
Bid Fax: (819) 997-9776

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
This Solicitation Amendment 004 is raised to answer bidders' questions.

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

Issuing Office - Bureau de distribution
Vehicles & Industrial Products Division
140 O'Connor, Tower East
4th Floor
140 O'Connor, Tour Est
4ème étage
Ottawa
Ontario
K1A 0S5

Title - Sujet Heavy Trucks with Crane	
Solicitation No. - N° de l'invitation F7047-200049/A	**Amendment No. - N° modif.** 004
Client Reference No. - N° de référence du client F7047-200049	**Date** 2020-09-22
GETS Reference No. - N° de référence de SEAG PW-$$HP-927-78951	
File No. - N° de dossier hp927.F7047-200049	**CCC No./N° CCC - FMS No./N° VME**
Solicitation Closes - L'invitation prend fin **at - à 02:00 PM** **on - le 2020-10-07**	**Time Zone** **Fuseau horaire** Eastern Daylight Saving Time EDT
F.O.B. - F.A.B. **Plant-Usine:** ☐ **Destination:** ☐ **Other-Autre:** ☐	
Address Enquiries to: - Adresser toutes questions à: Takam(hp927), Maurice	**Buyer Id - Id de l'acheteur** hp927
Telephone No. - N° de téléphone (613) 297-3516 ( )	**FAX No. - N° de FAX** ( ) -
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**	

AMENDMENT 004

This Solicitation Amendment 004 is raised to answer bidders' questions.

Important Notice:

Bidders are allowed to bid on:

Configuration A only; or
Configuration B only; or
Configurations A and B

Answer to bidders' questions.

Question 9b:
(Please refer to Amendment 001 for a refresher as this is a complement to the answer to question 9b)

We have many units operating all over the country with aluminum radiators in sever on / off rd. applications, including National Defence. Could you please provide us with the information to back up your claim? If this is not changed you are excluding us from bidding.

Answer 9b:

See document "Copper/Brass radiators vs Aluminum Plastic radiators" below.

Question 16:

Reference: 2.13.3 Ability to lift a minimum – Configuration B

After evaluating the crane size to meet Configuration B it has been determined that the required size of crane will result in the overloading of the chassis front axle due to resulting weights of the chassis requested along with the provincial hitch offset of 1.8m for the trailer towing provision.

a) Will you reevaluate the chassis requirements, crane size requirement, or trailer towing provision for Configuration B?

b) What will the tongue weight of the trailer be?

c) Will the trailer drawbar allow the hitch point to be under the deck somewhat?

Answer 16 a, b, c:

Remove hitch and towing requirement for configuration B.

Copper/Brass radiators vs Aluminum Plastic radiators

To preface this these trucks run cranes which results in long hours of constant vibration on the chassis as well as they routinely travel to remote locations. These vehicles also spend a great amount of time travelling on unpaved roadways and paths to access navigational sites for the Canadian Coast Guard.

As a result of the continuous crane usage and travel over rough terrain, we have had multiple radiator failures. The aluminum steel/plastic radiators have proven to fail on a regular basis. On average they fail approximately every 12 – 16 months. In the last seven years there have been 5 radiator replacements on the Charlottetown truck alone.

Typically what ends up happening is that the driver will notice a slight leak, and immediately gets the truck into a shop before a major failure. Unfortunately, there has been times where the truck has had to be towed into a shop for repair.

Usually there is a crack in the plastic, around a joint or fitting, or a hole in the aluminum. Which will result in the entire radiator having to be replaced. On average the repair cost , excluding tows, travel costs, etc. – is $1,600 - $2,000. We have also had failures where the hose connection points have failed.

These result in an immediate breakdown. One of the concerns with these failures is if it happens in a remote location, the possible damage that the coolant could do to the environment and habitat of wildlife in the area.

These radiators, due to their assembly and materials and the environment in which they operate, cannot withstand the vibrations that are being put on them. Nor, like a traditional copper/brass radiator, be repaired. Replacement only.

Yes, aluminum radiators have become more prevalent over the past couple of decades. They are lighter and offer better cooling then a traditional copper/brass radiator. The downside to this is that they also have less in the way of rigid strength, unable to be repaired, and result in a greater cost of ownership of the lifetime of the vehicle.

In an over the road/highway truck an aluminum radiator will likely work well (although I have checked with 2 local trucking companies and they have units that require the radiator to be replaced annually or every 100,000kms).

Where our issues arise is the aluminum radiator coupled with a truck with heavy front-end (20,000lb+ vs the standard 12,000lb front axle), a crane provision, and travelling to remote locations on unpaved roads – has resulted in constant radiator failure.

The other issue we have is the plastic/aluminum radiators cannot be repaired. Typically the plastic ends or connection points fail. This cannot be repaired. Whereas a standard

copper brass radiator leak can be repaired. We have attached a photo of the most latest radiator replacement that we have had. Aside from minimal marks on it, it looks fine, except for the fact that it leaks badly and cannot be repaired.

The other issue with this radiator is that there is a cost to Government for disposal as it is aluminum/steel/plastic combined. Not exactly environmentally friendly. Also, please take note of the corrosion. This radiator was in the truck for approximately 14 months and you can notice the obvious corrosion. Another downfall for a vehicle that spends the majority of its life in a salt-water environment.

Below are a few links for varying manufacturers and their line of aftermarket copper/brass radiators.
Freightliner:
Cascadia/Century - https://www.4statetrucks.com/engine-parts/semi-truck-radiator-freightliner-cascadia-century-and-columbia_27927.asp
114SD - https://www.heavytruckparts.net/item/Freightliner/Century-112/Radiator/254076/3/1711092

Kenworth:
https://www.heavytruckparts.net/search/Kenworth/W900/Radiator

Mack:
http://radiatorworks.com/heavy-duty-radiators/truck/mack/mack-ch-gu-granite-volvo-vhd84c-copper-brass-radiator-hdc010194sk/
https://www.heavytruckparts.net/item/Mack/Cxn612/Radiator/254076/3/1788361

Peterbilt:
https://www.4statetrucks.com/engine-parts/semi-truck-copper-brass-radiator-for-peterbilt-579-kenworth-t680-replaces-hk179001_198145.asp

https://www.heavytruckparts.net/search/Peterbilt/Any/Radiator

Volvo:
https://www.4statetrucks.com/engine-parts/semi-truck-copper-brass-radiator-metal-fits-volvo_34114.asp

https://www.heavytruckparts.net/item/Volvo/Wg/Radiator/254076/14/397709

Western Star:
https://www.heavytruckparts.net/item/Western-Star/4900/Radiator/254076/3/1752105
http://radiatorworks.com/heavy-duty-radiators/truck/western-star/?dir=asc&order=width

ALL OTHER TERMS AND CONDITIONS OF THIS SOLICITATION REMAIN UNCHANGED.