

RETURN BIDS TO: Parks Canada Agency Bid Receiving Unit National Contracting Services Bid Fax: 1-855-983-1808	Title: Waskesiu Storm Drain Improvements Phase 2 – Prince Albert National Park		
Bid Email: <u>soumissionsami-bidsrpc@pc.gc.ca</u>	Solicitation No.: 5P468-22-0129/A	Date: October 3, 2022	
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REVISION 004 TO A INVITATION TO TENDER	Solicitation Closes: At: 2:00 PM On: October 6, 2022	Time Zone: MDT	
The referenced document is hereby revised; unless otherwise indicated, all other terms and conditions remain the same.	F.O.B.: Plant: □ Destination: ⊠ Other: □		
Issuing Office: Parks Canada Agency National Contracting Services Calgary, AB	Address Enquiries to: Jen Maheu Telephone No.: F 587-432-8458 1 Email Address:	ax No.: -855-983-1808	
	Destination of Goods, Services, and Construction: See Herein		
	TO BE COMPLETED BY THE BIDDER		
	Vendor/ Firm Name:		
	Address:		
	Telephone No.:	Fax No.:	
	Name of person authorized to sign Firm (type or print):	I n on behalf of the Vendor/	
	Signature:	Date:	
Canada		1	



Amendment No.: 004

Title:

Contracting Authority: Jen Maheu

Client Reference No.:

Waskesiu Storm Drain Improvements Phase 2 - Prince Albert National Park

Amendment 004

This amendment is raised to distribute the answers to bidder questions and make revisions to the tender package.

Α. **QUESTIONS & ANSWERS**

Q4 Please confirm that the thickness of the Electrical Kiosk Pad is to be 22mm? This is too thin for constructability.

A4 Please refer to revised drawings for concrete pad details

Q5 Please confirm the overall dimensions of the Electrical Kiosk Pad. A5 Please refer to revised drawings for concrete pad details

Q6 Please confirm what (if anything) is required below the Electrical Kiosk Pad. le. Void form, granular depth, etc.

A6 Please refer to revised drawings for concrete pad details

Q7 Please confirm that the Xypex Modified coating is only required on the interior of the new insulated manhole and no waterproofing membrane is required.

A7 Correct. Xypex Modified coating is all that is required.

Β. **TENDER PACKAGE REVISIONS**

Add the following folder: DSP_2_22-0129

013.37 - Gov. Canada Waskesiu Str. Drain. Ph2 - Addendum

DELETE: IFT Drawings REPLACE WITH: revised drawings see DSP_2_22-0129: 013.37 - Gov. Canada Waskesiu Str. Drain. Ph2 - Addendum

IN: IFT Specifications DELETE: Section 45 10 00 **REPLACE WITH**: see electrical specifications provided on drawings; see DSP 2 22-0129: 013.37 - Gov. Canada Waskesiu Str. Drain. Ph2 - Addendum

IN: IFT Specifications ADD: Clarification on Boiler system:

Boiler System

Boiler system complete with heat exchanger system and auxiliary supply to all tubing installations for zone heating, and all pumps, valves, and gauges necessary to complete the installation within the kiosk. The equipment shall conform to the following specifications:

BOILER UNIT

.1 Description

The boiler shall include a single compact heat exchanger made of high-alloy stainless steel, designed based on the laminar heat transfer principle for high operational reliability and a long service life. A radial design shall be used to obtain maximum heat transfer performance in a single pass. Rectangular design of the coil is required to maximize the coil gap length and ensure maximum utilization of the heat exchanger surface. Defined gaps (0.8 mm) between coil passes and a heat exchanger length of 53 mm shall be sized to promote laminar flue gas flow for efficient heat transfer. The heat exchanger design shall allow for self-cleaning functionality.

The gas-fired hot water condensing heating boiler shall be fabricated of high-quality stainless steel (SA240-316Ti), featuring the latest innovations of condensing boiler technology. The boiler shall incorporate a modulating compact cylindrical stainless steel gas burner with a high-alloy stainless steel heat exchanger surface capable of operating with consistently high efficiency. The boiler control system shall maintain optimized combustion, even in case of fluctuating gas composition and air resistance. The boiler control shall have priority for both electrical and fuel savings with its intelligent combustion controller. Boiler shall be equipped with a variable speed combustion fan for quiet and economical operation.

.2 Burner

The burner shall be constructed from high-grade stainless steel for universal use with natural gas or propane gas. Burner ignition shall be by a direct spark ignition system. The boiler shall be equipped with a digital boiler control unit interface. The burner shall be capable of operating at altitudes of up to 10,000 ft. (3,000 m) without change of orifices, but with the use of an electronic coding card.

.3 Venting

The boiler shall be equipped with a flue gas vent opening at the top of the boiler. Venting shall be side wall horizontal or vertical sealed (direct vent) chimney system. The boiler shall operate under Category IV positive vent pressure conditions for room air dependent operation. Venting material for room air dependent operation shall be stainless steel UL approved venting system for positive pressure or CPVC ULC S636 listed material.

.4 Boiler Performance

The boiler shall be designed for operation at:Total input19-125 MBH (5.5-37 kW)

Total CSA/DOE output 18-117 MBH (5-34 kW)

Boiler turn-down ratio shall be as stated above.

Thermal efficiency shall not be below 95%, as tested in accordance with the harmonized standard ANSI Z21.13/CSA 4.9.

.5 Pressure Rating

Provide 30psig relief valves.

Provide Temperature & Pressure gage and pipe fittings.

.6 Limit Controls

Standard equipment shall also include the following items:

- Manual reset fixed high limit set at 210°F (99°C), wired in series with ignition system
- Integrated control system.
- Low water cutoff

BOILER CONTROLS

.1 General

The control shall be a Viessman on-board Vitotronic 100 model. The control shall communicate a modulating boiler temperature set point to the boiler, and shall be weather responsive reset-based. The control shall have the ability to communicate to mixing valve controls, and shall allow for a single outdoor temperature sensor to be used and communicated to mixing valve controls. The control shall use an infinitely adjustable heating curve to calculate supply temperature. To assist in the calculation of supply

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temperature, the control shall allow for the selection of building construction. The control shall be capable of managing DHW production.

The control shall be able to accept a 0-10VDC signal from an external resistive module.

.2 Control Panel

The control unit shall be integrated into the boiler.

.3 Control Interface

The control shall have the following features:

- 1. A visual indicator for system faults.
- 2. A multiple level access system for system programming and information

retrieval.

- 3. A visual indicator as to the current indoor and outdoor temperatures.
- 4. The ability to display current boiler water temperature.
- 5. The ability to display the current mode of the boiler.
- .4 Additional Features

The control shall provide the following additional features:

- 1. Demand dependent heating circuit pump and burner off control.
- 2. Anti-seizing pump protection.
- 3. Integral diagnostic system.
- 4. Maintenance display.
- 5. The control shall enter a warm weather mode with respect to warm weather

conditions.

.5 Certifications

All individual components shall be accepted as part of the system under the governing body having jurisdiction. Field approval shall not be required for any component. Installation to comply with manufacturer's installation, drawings and requirements.

VENT

.1 Exhaust Vent

The exhaust vent must be UL Listed for use with Category III and IV appliances and compatible with operating temperatures up to 480°F, positive pressure, condensing flue gas service. UL listed vents of AI 29-4C stainless steel must be used with the boiler.

.2 Combustion-Air Intake

Boilers shall be capable of drawing combustion air from the outdoors via a metal or PVC duct connected between the boiler and the outdoors.

.3 Venting Guidelines

Follow guidelines specified in manufacturer's venting guide.

MANUFACTURER'S FIELD SERVICES

Contractor shall provide the services of a local factory authorized representative to supervise all phases of equipment installation and startup. A letter of compliance with all factory recommendations and installation instructions shall be submitted to the Engineer with operation and maintenance instructions.

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Contractor shall provide the services of a local factory authorized representative to be on site a minimum of 5 times to ensure compliance with manufacturer's installation requirements and training of operations and maintenance staff. The site training and instruction requirements are as follows:

During contractor's installation - two visits. Startup and commissioning - one visit. During first year of operation - two visits.

ALL OTHER TERMS & CONDITIONS REMAIN UNCHANGED.