



# INTENT TO CONTRACT

Design, Build and Install CO<sub>2</sub> Ice Plant Strathcona Gardens

Strathcona Regional District (“SRD”)

## SUMMARY OF KEY INFORMATION

Request Number	NOI-0118 – CO <sub>2</sub> Refrigeration Plant
Issued:	November 5, 2018
Closing Time and Date:	14:00:00 hours; November 27, 2018
Closing Location:	Strathcona Regional District #301-990 Cedar Street Campbell River, BC V9W 7Z8
Contact Person:	Gavin Hamblin, Manager of Arenas and Facility Operations <a href="mailto:procurement@srd.ca">procurement@srd.ca</a>

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## **1.0 NOTICE OF INTENT TO CONTRACT**

Strathcona Regional District (SRD) intends to award a contract for design, build and install services for a new CO<sub>2</sub> ice plant to serve two ice arenas at the Strathcona Gardens Recreation Complex located in Campbell River BC. This project is a component part of a comprehensive energy use reduction and re-use project at the Strathcona Gardens facility.

## **2.0 NOTICE**

Notice is hereby given by the (SRD) of its intent to award a contract to the CIMCO Refrigeration division of Toromont Industries Ltd. ("CIMCO") (the "Supplier"), to design, build and install a new CO<sub>2</sub> ice plant refrigeration system at the Strathcona Gardens Recreation Complex, more particularly as described below:

1. Replace both ammonia refrigeration plants and install a new 216 TR CO<sub>2</sub> plant. The plant will capture 100% of the waste heat to be transferred into the building energy recovery system.
2. The CO<sub>2</sub> plant would be piped such that each CO<sub>2</sub> circuit would have a maximum 108 TRs which has 180 kW of prime movers thus not requiring a certified operator. However, the brine side would be inter-connected to allow each ice surface to receive up to a maximum of 216 TR of cooling.
3. CO<sub>2</sub> has two grades of heat available at temperature ranges of 82°C and 32°C. The 82°C heating water would be a dedicated high-temperature loop to provide heat to the domestic hot water as well as heating water for the existing high temperature loads such as unit heaters and baseboard heat. The low-temperature loop would be to the existing piping system and provide loop temperature heat to the existing and proposed new facility.
4. A 220 TR cooling tower would be added to reject any waste heat from the heating water system.
5. The entire CO<sub>2</sub> system would be contained within the existing refrigeration plant room.

As the CO<sub>2</sub> refrigeration system is being housed in existing rooms, the following phases will have to occur:

1. Build the CO<sub>2</sub> plant so that it could be skid-mounted and manufactured in the contractor's facility. This would then be delivered to site during the shutdown;
2. Demolish the entire ammonia plant, remove and properly dispose;
3. Open exterior walls to place new skid systems in place c/w service clearance;
4. Interconnect the Brine cooling systems to maximize cooling potential for each slab;
5. Install new ventilation & detection system.

The installation of the new ice plant is scheduled for the summer of 2019 during the normal shut down period of the Strathcona Gardens ice arenas.

## **3.0 PROJECT ESTIMATED VALUE**

SRD estimates the value of this project to be between \$1.8 and \$1.9 million dollars.

## **4.0 RATIONALE**

SRD did not open competition for this award as there is only one Canadian Supplier of CO<sub>2</sub> ice plant refrigeration systems and associated design expertise. Additionally certain Patents for of such systems are only known to be held by CIMCO.

The SRD has decided to utilize a CO<sub>2</sub> system instead of an ammonia-based system for reasons of reduced ongoing operating costs and safety.

SRD believes that no other potential contractor will have the expertise, authority, capability and capacity to supply the CO<sub>2</sub> ice plant system, system design and associated works. SRD does not intend to break down this project into separate parts as significant co-ordination is required and best obtained from a single supplier.

## **5.0 OBJECTIONS**

Vendors wishing to object to this decision should submit in writing the reasons for their objection via e-mail to the Contact Person stated in the summary of key information of this Notice, before the Closing Date and time. Objections should clearly indicate how the vendor can meet the needs described in sections 2 and 4, above. Any and all objections received by this date will be given due consideration. If justified, a meeting with SRD representatives to discuss the decision will be arranged to receive vendor representations regarding this contract. SRD will determine if any objections received will result in a competition for this opportunity and the SRD's decisions in this regard will be final.