



Compete. Contribute. Celebrate the 2011 Canada Games.

Thousands of our country's best and brightest youth will set their sights on Halifax as we host the Canada Winter Games from February 11-27, 2011. More than 3,600 athletes from across Canada, more than 400 media, 700 VIPs, 500 officials and thousands of visitors will head east for the two-week event. Featuring 20 sports and numerous cultural events and festivals, the Games will be the largest multi-sport event in Halifax's history, and our first Canada Winter Games.

**Equipment Pre-Selection
for
Halifax 2011 Canada Games Snow Venues**

**Halifax 2011 Canada Games Host Society
5077 George St., 2nd floor
Halifax Ferry Terminal Building
Halifax, Nova Scotia
Mailing Address: P.O. Box 1749
Halifax, Nova Scotia B3J 3A5**

THESE PROJECT DOCUMENTS HAVE BEEN PREPARED FOR USE IN CONJUNCTION WITH THE MOST RECENT EDITION OF THE **STANDARD SPECIFICATION FOR MUNICIPAL SERVICES** AS PUBLISHED BY THE NOVA SCOTIA ROAD BUILDERS ASSOCIATION – NOVA SCOTIA CONSULTING ENGINEERS ASSOCIATION **JOINT COMMITTEE ON CONTRACT DOCUMENTS.**

COPIES OF THE STANDARD SPECIFICATIONS ARE AVAILABLE FROM THE JOINT COMMITTEE ON CONTRACT DOCUMENTS
C/O SPECTECH LIMITED,
455 COLBY DRIVE, DARTMOUTH, NOVA SCOTIA
B2V 2K4 TEL: (902) 430-2534



PROJECT NAME: Halifax 2011 Canada Games Equipment Pre-Selection

LOCATION: 5077 George St, 2nd floor, Halifax, Nova Scotia

OWNER: Halifax 2011 Canada Games Host Society

ENGINEER: C.J. MacLellan & Associates Inc.

1. Tender Submission

- 1.1 Submit completed Form of Quotation for project in sealed envelope marked:

Equipment Pre-Selection
for
Halifax 2011 Canada Games Snow Venues
to

Halifax 2011 Canada Games Host Society
5077 George St, 2nd floor, Halifax, Nova Scotia
Mailing Address: P. O. Box 1749
Halifax, Nova Scotia B3J 3A5

- 1.2 **Quotations will only be accepted from Suppliers who have taken out a set of contract documents.** Suppliers must provide contact information including Fax and phone numbers.

2. Quotation Opening

- 2.1 Quotations will be opened on March 6th, 2009 after the closing at 12:00 noon at the Offices of the Halifax 2011 Canada Games Host Society. The opening will not be public.

3. Document Deposit

- 3.1 **NO** deposit required.

4. Accuracy of Referencing

- 4.1 Indexing and cross-referencing are for convenience only.

5. Conditions of Quotation

- 5.1 Take full cognizance of content of all Contract Documents in preparation of Quotation. Refer to Section 00330 - Form of Quotation, Subsection 3.8 for a complete list of Contract Documents.
- 5.2 This is an invitation for quotations and not a tender call. The Host Society does not intend to, and does not assume or owe any contractual or other duties or obligations as a result of the issuance of this RFQ, the preparation or submission of a quotation by a Proponent, the receipt, opening and consideration of a quotation, the evaluation of quotations, provision of additional information or conduct of presentations, the proponent's participation in any

discussions or negotiations, or on any other basis whatsoever arising out of this RFQ. Without limiting the generality of the foregoing and for certainty, no Contract is formed by the submission of a quotation in response to this RFQ.

6. Supplier to Investigate

- 6.1 Suppliers will be deemed to have familiarized themselves with the project requirements, existing site and working conditions and all other conditions which may affect performance of the Contract. No plea of ignorance of such conditions as a result of failure to make all necessary examinations will be accepted as a basis for any claims for extra compensation or an extension of time. For technical

7. Clarification and Addenda

- 7.1 Notify Engineer not less than 3 working days before Request for Quotation (RFQ) Closing of omissions, errors or ambiguities found in Contract Documents. If Engineer considers that correction, explanation or interpretation is necessary; a written addendum will be issued. All addenda will form part of Contract Documents. Engineer contact: C.J. MacLellan & Associates Inc, Harry Daemen telephone (902) 863-1220 between 8:00AM and 5:00PM or email at Harry.Daemen@snclavalin.com
- 7.2 Confirm in Quotation that all addenda have been received.

8. Preparation of Quotation

- 8.1 Complete Form of Quotation provided with Project Documents in ink or by typewriter. Tender all items and fill in all blanks. Have corrections initialed by person signing Tender.

9. Taxes & Duties

- 9.1 Include all duties and taxes in prices except Harmonized Sales Tax (HST) is excluded.
- 9.2 The future construction contractor will indicate on each application for payment, as a separate amount, the appropriate HST the Owner is legally obliged to pay. This amount will be paid to the Contractor in addition to the amount certified for the payment under the Contract and will therefore not affect the Contract Price.

10. Quotation Security

- 10.1 Quotation security **NOT** required.

11. Contract Security

- 11.1 The General Contractor who will respond to a later Tender on behalf of the owner will be required to post a Performance Bond and Labour and Materials Bond and to accept delivery of pre-selected process equipment as a result of this RFQ. The Labour and Materials Bond will provide security for payment to the Supplier selected under this RFQ.

12. Insurance

12.1 Insurance is **NOT** required.

13. Form of Agreement

13.1 A General Contractor will be selected through a later Tender. The Contract Documents will include the purchase and installation of the process equipment selected under this RFQ. It is anticipated that the General Contractor will require the Suppliers selected under this RFQ to enter into an agreement, in which the responsibilities for the Suppliers equipment selected through this RFQ process will correspond to the General Contractors obligation under the Contract Documents to the Owner.

13.2 Payment to the General Contractor for equipment supplied under this separate RFQ will be in staged progress claims of seventy percent (70%) on delivery; twenty percent 20% upon installation and manufacturer rep start-up attendance; and ten percent (10%) holdback will be retained until completion of performance testing and deficiency correction. The General Contractor may be awarded Substantial Performance independent of achieving acceptance of the equipment based on performance testing.

14. Warranty

14.1 The Manufacturer shall warrant all equipment to be suitable for the uses intended. The equipment Supplier as selected under this RFQ is required to warrant all equipment, materials and workmanship to be free from defect for a period of one (1) year from the date the wastewater treatment plant is placed into service. The Manufacturer shall investigate and repair all defective equipment which fails within one (1) year at no cost to the owner.

15. Amendment or Withdrawal of Quotation

15.1 Quotations may be amended or withdrawn by letter, delivered prior to the closure of the RFQ. Facsimile or E-mail amendments will **NOT** be accepted.

15.2 Amendment of individual unit prices is the only acceptable price amendment. Amendments shall not disclose either original or revised total price.

15.3 Head amendment or withdrawal as follows:
"(Amendment)/(Withdrawal) of Request for Quotation for the Equipment Pre-Selection for Halifax 2011 Canada Games Snow Venues". Sign and seal as required for RFQ, and submit at address given for receipt of Quotations prior to time of RFQ Closing.

16. Informal or Unbalance Quotations

16.1 Quotations which, in the opinion of the Owner, are considered to be informal or unbalanced may be rejected at the Owner's discretion.

17. Right to Accept/Reject any Quotation

17.1 The Owner reserves the right to: reject all quotations or any quotation; not necessarily accept the lowest quoted price; waive any irregularities, formalities, informalities or technicalities; and to accept or reject any quotation whatsoever as considered by the Owner to be in its best interest.

17.2 The Owner reserves right to evaluate all aspects of a quotation along with the prequalification information. The Owner reserves the right to assess the Manufacturer and it's Supplier's capabilities to complete the work; to deliver a high quality built project; to complete the project on time and within the budget; and to assess these and other relevant factors along with price in selecting the Supplier and defining the overall cost of the project.

18. Safety Certification

18.1 Construction site safety will be the responsibility of the General Contractor selected under separate Tender. The General Contractor shall name and appoint a site safety supervisor to coordinate and ensure appropriate construction and WHMIS safety procedures are observed and followed on the construction site. All work will be conducted in strict compliance with the NS OH&S Act and Regulations.

19. Units of Measurement

19.1 This is a metric unit project. Metric units of measure take precedence over imperial units. Imperial units where provided are for convenience only. Where conflicts may arise, notify the engineer for clarification. No claims for compensation due to conflicting units will be allowed.

End of Section

1. SALUTATION

1.1 To:

Halifax 2011 Canada Games Host Society
2nd floor Ferry Terminal Building
5077 George St, Halifax, Nova Scotia
Mailing Address: P. O. Box 1749
Halifax, Nova Scotia B3J 3A5

1.2 For:

Halifax 2011 Canada Games Snow Venues
Equipment Pre-Selection

1.3 From:

2. SUPPLIER DECLARES

2.1 That this Quotation is made without collusion or fraud.

2.2 That he has carefully examined the proposed Work; familiarized himself with local conditions, including labour conditions; carefully examined the Contract Documents and Addenda No. ___to ___ inclusive; and taken all the foregoing into consideration in preparation of this Tender.

3. SUPPLIER AGREES

3.1 To enter into a Supplier contract with a General Contractor to be selected subsequently by a competitive tender. The law of the place of work shall govern the interpretation of the contract.

3.2 The General Contractor will be responsible for issuing Purchase Orders, scheduling deliveries, accepting and installing equipment, submitting progress claims and making payment to the Supplier, and working with the supplier to have the equipment installed, commissioned and performance tested.

3.3 The General Contractor is also responsible for supplying the warranty for the equipment and built works from the date of acceptance of substantial completion as certified by the Engineer for a period of 12 months. Substantial Completion will not be approved by the Engineer until start-up

and commissioning have been completed.

- 3.4 Performance testing of the equipment and process will be the basis for acceptance of the equipment supplied under this contract. If the performance testing causes the substantial completion to be delayed by more than 60 days then the engineer may award the general contractor substantial completion independent of the performance testing. In such case, the warranty for the equipment will commence upon completion and acceptance of the performance testing. Monies held for the equipment contract will not be released until acceptance of performance testing.
- 3.5 The Supplier agrees to supply all material and equipment and to supply all installation directions, supervision, assistance and to provide commissioning, performance testing and operator training assistance as specified herein for the work packages for which that supplier has quoted prices.
- 3.6 That this quotation is valid for acceptance for 120 days from the time of the Request for Quotation Closing.
- 3.7 To provide evidence of ability and experience within one (1) week of request, including experience in similar work, work currently under contract, senior supervisory staff available for the project, equipment available for use on project, and financial resources.
- 3.8 That the Contract Documents include:
- 3.8.1 Project Documents
- 3.8.1.1 Request for Quotation
Information to Supplier, Section 00100
Form of Quotation, Section 00330
General Requirements, section 01001
- 3.8.1.2 Supplementary Technical Specifications as follows:
Section 11000 – Snow Guns
Section 11030 – Air Compressors
Section 15200 – Centrifugal Pumps– Horizontal
Section 15201 – Centrifugal Pumps– Vertical Turbine
- 3.8.2 Drawings
- not applicable --
- 3.8.3 Take note that the General Contractors Tender and Contract will be completed in accordance with the: Standard Specifications for Municipal Services as published by the Nova Scotia Road Builders Association and the Nova Scotia Consulting Engineers Association Joint Committee on Contract Documents - latest version. Sections of the General Contract may affect the agreement between the contractor and the Supplier. The Supplier is responsible to review as

deemed necessary in particular sections 00705, 00720, 00810, and 01001.

3.8.4 Addenda as issued and confirmed in Subsection 2.2 of this section.

4. PRICE QUOTATION

- 4.1 That price quoted includes all costs for design, engineering, shop drawing preparation, fabrication, assembly, ancillary equipment, shipping, and commissioning. The price also includes all duties, patent and licensing fees, insurance, and financing costs, which may be applicable to the equipment.
- 4.2 The supplier is permitted to quote any or all specified equipment. The supplier is not required to quote every piece of equipment, but it must be clear from the form of tender, which items are quoted.
- 4.3 The price quotation shall **NOT** include the Harmonized Sales Tax. (HST Extra)
- 4.4 The price quoted in Canadian Dollars.
- 4.5 Schedule of Work Packages and Prices

5. COMPLETION TIME

- 5.1 Supplier agrees to supply the components for which they have quoted within the number of calendar days from the receipt of a Purchase Order indicated in the Form of Quotation.

Spec No.	Tag	Description	Quotation Price Each		Delivery Time & charges	Delivery Time
			Air Cooled	Water Cooled	ARO*	ARAD**
1100		Snow Guns				
		Permanent Tower 6m	\$			
		Permanent Tower 9m	\$			
		Portable Sled 4.5m Alpine	\$			
		Portable Sled 4.5m Nordic	\$			
		Fan Gun	\$			
11030	M-AC-1	Air Compressors	\$	\$		
	W-AC-1A		\$	\$		
	W-AC-1B		\$	\$		
15200	M-PP-1	Centrifugal Pump - Horizontal	\$			
15201	M-RP-1A	Centrifugal Pumps - Vertical Turbine	\$			
	M-RP-1B		\$			
	W-RP-1		\$			
	W-PP-1A		\$			
	W-PP-1B		\$			

*ARO = Time in weeks to deliver shop drawings after receipt of "Letter of Intent" and charges to prepare included in total price as per section 01001 item 5.2

**ARAD = After Receipt of Approved Shop Drawings

6. SIGNATURES

DATED THIS ___ DAY OF _____, 2009

[Seal]

Name of Firm Quoting

Signing officer (sign & print name & title)

Witness (sign & print name & title)

Company address

Telephone no.

Fax no.

Quotations submitted by, or on behalf of any Corporation must be signed and sealed in the name of such Corporation by a duly authorized officer or agent. Each page of the form of Quotation must be initialled by the signing officer.

End of Section

1. General
 - 1.1 This section specifies administrative and procedural requirements.

2. List of Required Components
 - 2.1 The list of required components is provided in the Form of Quotation and detailed in the attached specifications.

3. Submission Requirements
 - 3.1 To assess the equipment being offered, submit the following information for each supply component for which a quoted price is offered (where applicable):
 - 3.1.1 Materials of Construction.
 - 3.1.2 Dimensions.
 - 3.1.3 Overall weight of units, empty and full, and foundation requirements.
 - 3.1.4 Layout and assembly drawings (including inter-piping arrangements, plan and sectional views of equipment with principal dimensions).
 - 3.1.5 Typical process P&ID drawing.
 - 3.1.6 Installation and site assembly requirements including manpower, time requirements, and equipment for lifting and installation.
 - 3.1.7 Hydraulic profile across the unit at maximum flow rate.
 - 3.1.8 Operating characteristics and efficiencies.
 - 3.1.9 Special operating characteristics or features.
 - 3.1.10 Safety features.
 - 3.1.11 Scheduled maintenance requirements and clearances for maintenance services.
 - 3.1.12 Location of Manufacturer, location of spare part inventories and service, etc.
 - 3.1.13 Product motor sizes and nameplate data.
 - 3.1.14 A signed statement from the supplier guaranteeing that the proposed product will meet the specified performance criteria for that specified product.
 - 3.1.15 A list of available options or deletions not reflected in the quoted price, which the supplier believes, may be appropriate for the installation together with an explanation of their purpose and incremental cost or discount from the quoted price.
 - 3.1.16 Such other information as the supplier deems appropriate to assist the Engineer in evaluating the proposed product.
 - 3.1.17 The name and phone number of a knowledgeable technical representative of the supplier who may be contacted by the Engineer for clarification or supplementary information during the evaluation period.

- 3.2 Standard manufacturer's literature will generally be acceptable in terms of supplying most of the information requested above, however; if this information is extensive, supplier is requested to highlight those sections which provide the information identified in the above list.
- 3.3 The Engineer may contact, or meet with representatives from one or more of the bidding companies during the evaluation process to obtain additional information and/or clarifications; but is not obligated to do so. Supplementary information in the form of specific dimensions and tolerances for items such as bolt rings, flanged dimensions etc., may be requested by the Engineer to enable comparison of tenders and so that detailed designs may be carried out specific to the final selected product.

4. Evaluation Criteria

- 4.1 Quotes will be evaluated by an evaluation team to determine if the quote substantially complies with the specifications. Those quotations which are deemed acceptable will be evaluated for quality of equipment and process offered, including but not limited to, materials of fabrication, overall assembly, process arrangement, hydraulics and operational control systems.
- 4.2 Consideration will be given to manufacturer's expertise/experience and local support team, quality of submission, whether similar products are currently use in the province, installation references and total price.
- 4.3 Equipment will be assessed based on quality of design and fabrication, quality of ancillary equipment and components, process arrangements and features, impact on building requirements, equipment capacity, hydraulic profiles, quality of control systems, and delivery time.
- 4.4 Operational considerations will include: energy and chemical requirements; manpower requirements for daily and cyclic activities; operational complexity, reliability, and serviceability; maintenance requirements; installation requirements/costs and building impacts; and operation control systems. The Owner's preferences related to compatibility with existing equipment and operations may also be considered.

5. Award to Selected Supplier

5.1 The Engineer, on behalf of the owner, will prepare “letters of intent” to the selected Supplier(s) who have submitted quotations for products which are selected.

5.1.1 The basic “letter of intent” for products which are standard manufactured products or those requiring only minor customisation will advise the Supplier that their product has been selected and will be specified for use on the project. Such a “letter of intent” will place no financial obligation on the owner to ever issue a purchase order or accept delivery of the product or make any payments of any nature whatsoever.

5.1.2 For long delivery pieces of equipment, the “letter of intent” will also authorize the supplier to proceed with preparation of detailed shop drawings for submission to the Engineer for review. This will facilitate the tendering by the General Contractor and enable the start of fabrication upon placement of an order by the selected contractor. A “letter of intent” does not authorize the supplier to proceed with fabrication of any product. This letter of intent will obligate the owner to pay the costs for preparation of shop drawings to the price as indicated in the Form of Quotation for shop Drawings.

6. Letters of Intent

6.1 The Owner intends to call for public tenders for the construction of the upgrades with all ancillary work during April 2009 with the intention that a contract will be awarded for the execution of the works by early May 2009

6.2 It is further the Owner’s intent to specify in the General Contract documents for the construction of these facilities that the products, for which “letters of intent” have been issued, are to be purchased by the contractor without exception, at the prices tendered and named in those “letters of intent”.

End of Section

Background:

Bids are requested on the following snowmaking guns for Ski Martock and Ski Wentworth in Nova Scotia:

Site	Air/Water snow gun			Fan snow gun
	Permanent Tower-mounted 6m & 9m high	Portable (sled mounted) 3m high		
		Alpine Staged throw	Trails XC Trails Narrow plume	
Martock	45	25	15	0
Wentworth	50	35	0	2

Owner reserves the right to adjust quantities without impacting unit pricing (total snow gun quantities will not be varied more than 25% without providing an opportunity to requote).

Commercial Notes:

All quotations must include:

- Freight costs to each site and listed as a separate cost.
- A firm date for supply of shop drawings after receipt of purchase order.
- A firm ship date after receipt of approved shop drawings.
- A minimum of 2 days start-up/operations assistance
- Pricing based on order date on or before 4/30/09

Products

Pricing shall include options for 6m (20') and 9m (30') height guns for permanent towers and approximately 3m (10') height for mobile sled mounted guns. All snow guns shall include the following characteristics:

1. Compressed Air consumption less than 47LPS @ 690kPa (100 CFM or less at 100 psig). Compressed air shall be supplied by compressors in the base and delivered by on hill piping
2. Snow guns shall operate efficiently at a minimum water pressure of 1725kPa (250 psig)
3. Snow guns to include removable strainer at snow gun
4. Snow guns to have valving mechanism to allow operation at 3 flow stages without modifying or changing nozzles. Nozzle settings shall permit operation of 6m (20') and 9m (30') towers at the following ambient temperatures:
 - a. Base setting...from -2.3C to -5C (28F to 23F) deg WB
 - b. Middle setting...from -5C to -7.8C (23F to 18F) deg WB
 - c. High setting...below -7.8C (18F) deg WB

Performance conditions assume a minimum water pressure of 1725kPa (250 psig) at the snow gun, a maximum water temperature of 4.5C (40 deg F), and mid base snow production (forms snowball, no water droplets when squeezed by hand)

5. Permanent (tower mounted) snow guns to include 50mm (2") quick connect female Camlock fittings and 4.5m (15') lengths of 50mm (2") hose for air and water with matching Camlock fittings.
6. All snow guns to be supplied with a mechanism that safely allows the tower to be adjusted from near vertical to horizontal vertical position and allows rotation of the fixed tower guns by a minimum of 120 deg and sled mounted should pivot 360 deg.

Bids to provide flow characteristics/nozzle description, performance criteria (temperature vs wet-bulb), approximate throw (distance from gun) assuming negligible wind, snow gun head mounting description (flanged vs. fixed mounting on tower head), and required base mounting detail (pipe size and recommended height above ground).

STANDARD OF ACCEPTANCE FOR FIXED TOWER AND MOBILE SLED SNOW GUNS:

1. HKD SV10201—permanent 6m & 9m (20' & 30') towers
2. HKDLX4400 3 stage Focus—mobile and fixed towers
3. Turbocristal LP Series – mobile and fixed towers

STANDARD OF ACCEPTANCE FOR FAN SNOW GUNS

1. Super crystal
2. SMI Super Wizzard

Notes:

1. Dimensional data must be included with your quotation complete with all significant assumptions for your selection.
2. Confirmation that equipment is suitable for continuous duty.
3. Performance data may be provided in SI or imperial units.
4. Any exceptions or deviations from the design must be clearly indicated on the quotation and summarized on the cover page.
5. Warranty to state 18 months from ship date or 12 months after startup (whichever date is later).

Regulatory & Documentation (to be provided):

CSA Certified

Installation, operation & maintenance manual (3 hard copies plus 1 electronic copy)

End of Section

Background:

Three new air compressors are needed to upgrade the snowmaking systems at Ski Wentworth (2) and Ski Martock (1). Each compressor will be located indoors and connected to a new water-cooling system complete with after cooler.

Commercial Notes:

All quotations must include freight costs to each site and listed as a separate cost.
Include a firm date for supply of shop drawings after receipt of purchase order.
Include a firm ship date after receipt of approved shop drawings.

Products & Quantities:

TAG	Quantity	Location	Description
M-AC-1	1	Martock	Oil Flooded Rotary Screw Compressor
W-AC-1A	1	Wentworth	Oil Flooded Rotary Screw Compressor
W-AC-1B	1	Wentworth	Oil Flooded Rotary Screw Compressor

Notes:

1. Dimensional data must be included with your quotation complete with all significant assumptions for your selection.
2. Confirmation that equipment is suitable for continuous duty.
3. All performance data must be provided in imperial units.
4. Any exceptions or deviations from the design must be clearly indicated on the quotation and summarized on the cover page.
5. Warranty to state 18 months from ship date or 12 months after startup (whichever date is later).

Air Compressor Specifications:

Tags:	M-AC-1; W-AC-1A; W-AC-1B
Style:	Oil Flooded Rotary Screw
Capacity:	1900 (+/- 5%) ACFM at 100 psi
Cooling:	Water-cooled or air cooled (see form of tender)
Modulation:	Capacity type using inlet valve
Separator:	less than 2 ppm oil carryover
Inlet Air Filter:	99.9% efficient at 3 micron
System Type/Duty:	Continuous duty
Outlet:	Class 150 RF
Lubricant:	Synthetic (extended life)
Bearings:	100,000 hours (L10)
Base:	Mfr standard
Colour/Coating:	Manufacturer standard
Special Tools:	No special tools shall be required to operate/maintain the equipment.
Guards:	Meet OSHA and NS Regulations
Motor:	ODP, Premium Efficiency, Class B Insulation, Design B, 1.0 SF
Control:	Digital with ON/OFF indicator, Loaded/Unload status, Load/Unload timers, Sequencing (ON/OFF/Standby),
Instrumentation:	Compressor discharge temperature Inlet air filter pressure differential Lube filter pressure differential Separator pressure differential Airflow rate.
Protection:	Motor thermal overload (manual reset), High discharge temperature, high discharge pressure
Power Supply:	600/3/60
Performance:	Provide CAGI Data Sheet
Enclosure:	Provide optional cost for enclosure if not standard feature. Supply noise ratings (dBA) with enclosure in place.
Startup:	Provide separate cost for one-day startup (Factory trained technician)

Notes: Air compressor shall be supplied turnkey mechanical and ready for electrical and piping hook-up. Package shall include all components in operating position.

Regulatory & Documentation (to be provided with air compressor):

CSA Certified
Installation, operation & maintenance manual (3 hard copies plus 1 electronic copy)

End of Section

Background:

One new horizontal intake, vertical discharge pump is needed to increase capacity of existing snowmaking water supply system. The new pump will be placed in an existing building and piped in parallel with two existing pumps.

Commercial Notes:

All quotations must include freight costs to Ski Martock and listed as a separate cost.
Include a firm date for supply of shop drawings after receipt of purchase order.
Include a firm ship date after receipt of approved shop drawings.

Product & Quantity:

TAG	Quantity	Location	Description
M-PP-1	1	Martock	Horizontal Centrifugal Pump

Notes:

1. A pump curve and dimensional data must be included with your quotation complete with all significant assumptions for your selection.
2. Confirmation that pumps and motors are suitable for continuous duty.
3. All performance data must be provided in imperial units.
4. Any exceptions or deviations from the design must be clearly indicated on the quotation and summarized on the cover page.
5. Warranty to state 18 months from ship date or 12 months after startup (whichever is later)

Supply Pump Specifications:

Tag:	M-PP-1
Style:	Horizontal (side intake), top discharge, steel base plate
Capacity:	800 USGPM at 1200 feet TDH, 75% efficiency min.
NPSHA:	125 ft (55 psi suction pressure)
Fluid:	River/Reservoir Water at 40 to 50 °F (4 to 10°C)
Seals:	Mechanical, High Performance Single Cassette (Chesterton or equal)
System Type/Duty:	Open type, continuous duty
Material:	Ductile Iron Body, 316 SS Impeller and shaft sleeve
Working Pressure:	Maximum 600 psig at 70°F
Inlet:	Class 300 RF
Outlet:	Class 300 RF
Bearings:	100,000 hours (L10)
Base:	Mfr standard
Lifting Lugs:	Required
Colour/Coating:	Manufacturer standard
Special Tools:	No special tools shall be required to operate/maintain the pumps.
Guards:	Meet OSHA and NS Regulations
Motor:	575/3/60, 3500 rpm nominal, ODP, CSA Certified Inverter Duty, Design B, Class B Insulation, Premium Eff, 1.0 SF
Power Supply:	600/3/60
Noise:	Supply noise ratings (dBA) – full load
Maintenance:	Back Pullout design
Startup:	Provide separate cost for one-day startup (Factory trained technician)

Notes: Pump assembly shall be supplied turnkey mechanical and ready for electrical hookup. Shipment shall include all components in operating position – coupling, guard, junction box, seals, etc.

Regulatory & Documentation (to be provided with the pump):

CSA Certified
Installation, operation & maintenance manual (3 hard copies plus 1 electronic copy)

End of Section

Background:

One new vertical Turbine, vertical discharge pump is needed to increase capacity of existing snowmaking water supply system. The new pump will be placed in an existing building and piped in parallel with two existing pumps.

Commercial Notes:

All quotations must include freight costs to each site and listed as a separate cost.
Include a firm date for supply of shop drawings after receipt of purchase order.
Include a firm ship date after receipt of approved shop drawings.

Product & Quantity:

TAG	Quantity	Location	Description
M-RP-1A	1	Martock	Vertical Turbine Centrifugal Pump
M-RP-1B	1	Martock	Vertical Turbine Centrifugal Pump
W-RP-1	1	Wentworth	Vertical Turbine Centrifugal Pump
W-PP-1A	1	Wentworth	Vertical Turbine Centrifugal Pump
W-PP-1B	1	Wentworth	Vertical Turbine Centrifugal Pump

Notes:

1. A pump curve and dimensional data must be included with your quotation complete with all significant assumptions for your selection.
2. Confirmation that pumps and motors are suitable for continuous duty.
3. All performance data must be provided in imperial units.
4. Any exceptions or deviations from the design must be clearly indicated on the quotation and summarized on the cover page.
5. Warranty to state 18 months from ship date or 12 months after startup (whichever is later)

Raw Water Pump Specifications:

Tags:	M-RP-1A and M-RP-1B
Style:	Vertical turbine, Bottom inlet with removable intake strainer, Side discharge
Capacity:	1000 USGPM at 290 feet TDH, 75% efficiency min.
Depth:	13 feet 8 inches (intake to face of base flange)
NPSHA:	Atm, 24 inches (min) submergence
Fluid:	River Water at 40 to 50 °F (4 to 10°C)
Seals:	Mechanical, High Performance Single Cassette (Chesterton or equal)
System Type/Duty:	Open type, continuous duty
Material:	Ductile Iron Body, 316 SS Impeller and shaft sleeve
Working Pressure:	Maximum 150 psig at 70°F
Inlet:	Intake strainer – Stainless Steel, removable
Outlet:	Class 125 FF
Bearings:	100,000 hours (L10)
Base:	Manufacturer standard
Lifting Lugs:	Required
Colour/Coating:	Manufacturer standard
Special Tools:	No special tools shall be required to operate/maintain the pumps.
Guards:	Meet OSHA and NS Regulations
Motor:	575/3/60, 1760 rpm nominal, ODP, CSA Certified Inverter Duty, Design B, Class B Insulation, Premium Eff., 1.0 SF
Power Supply:	600/3/60
Noise:	Supply noise ratings (dBA) – full load
Maintenance:	Top Pullout
Startup:	Provide separate cost for one-day startup (Factory trained technician)

Notes: Pump assembly shall be supplied turnkey mechanical and ready for electrical hookup. Shipment shall include all components in operating position – coupling, guard, junction box, seals, etc.

Regulatory & Documentation (to be provided with the pump):

CSA Certified
Installation, operation & maintenance manual (3 hard copies plus 1 electronic copy)

Raw Water Pump Specifications:

Tags:	W-RP-1
Style:	Vertical turbine, Bottom inlet with removable intake strainer, Side discharge
Capacity:	2400 USGPM at 45 feet TDH, 75% efficiency min.
Depth:	12 feet (intake to face of base flange)
NPSHA:	Atm, 24 inches (min) submergence
Fluid:	River Water at 40 to 50 °F (4 to 10°C)
Seals:	Mechanical High Performance Single Cassette (Chesterton or equal)
System Type/Duty:	Open type, continuous duty
Material:	Ductile Iron Body, 316 SS Impeller and shaft sleeve
Working Pressure:	Maximum 50 psig at 70°F
Inlet:	Intake strainer – Stainless Steel, removable
Outlet:	Class 125 FF
Bearings:	100,000 hours (L10)
Base:	Manufacturer standard
Lifting Lugs:	Required
Colour/Coating:	Manufacturer standard
Special Tools:	No special tools shall be required to operate/maintain the pumps.
Guards:	Meet OSHA and NS Regulations
Motor:	50 hp, 575/3/60, 1760 rpm Inverter Duty, Design B, Class B Insulation, Premium Eff, 1.0 SF
Power Supply:	600/3/60
Noise:	Supply noise ratings (dBA) – full load
Maintenance:	Top Pullout
Startup:	Provide separate cost for one-day startup (Factory trained technician)

Notes: Pump assembly shall be supplied turnkey mechanical and ready for electrical hookup. Shipment shall include all components in operating position – coupling, guard, junction box, seals, etc.

Regulatory & Documentation (to be provided with the pump):

CSA Certified
Installation, operation & maintenance manual (3 hard copies plus 1 electronic copy)

Process Water Pump Specifications:

Tags:	W-PP-1A and W-PP-1B
Style:	Vertical turbine bottom inlet with removable intake strainer, side discharge
Capacity:	W-PP-1A 600 USGPM at 1213 feet TDH, 75% eff. min. W-PP-1B 800 USGPM at 1213 feet TDH, 75% eff. min.
Depth:	14 feet 2 inches (intake to face of base flange)
NPSHA:	Atm, 24 inches (min) submergence
Fluid:	River/Reservoir Water at 40 to 50 °F (4 to 10°C)
Seals:	Mechanical, High Performance Single Cassette (Chesterton or equal)
System Type/Duty:	Open type, continuous duty
Material:	Ductile Iron Body, 316 SS Impeller and shaft sleeve
Working Pressure:	Maximum 650 psig at 70°F
Inlet:	Intake strainer – Stainless Steel, removable
Outlet:	Class 300 RF
Bearings:	100,000 hours (L10)
Base:	Manufacturer standard
Lifting Lugs:	Required
Colour/Coating:	Manufacturer standard
Special Tools:	No special tools shall be required to operate/maintain the pumps.
Guards:	Meet OSHA and NS Regulations
Motor:	575/3/60, 3500 rpm nominal, ODP, CSA Certified Inverter Duty, Design B, Class B Insulation, Premium Eff., 1.0 SF
Power Supply:	600/3/60
Noise:	Supply noise ratings (dBA) – full load
Maintenance:	Top Pullout
Startup:	Provide separate cost for one-day startup (Factory trained technician)

Notes: Pump assembly shall be supplied turnkey mechanical and ready for electrical hook-up. Shipment shall include all components in operating position – coupling, guard, junction box, seals, etc.

Regulatory & Documentation (to be provided with the pump):

CSA Certified
Installation, operation & maintenance manual (3 hard copies plus 1 electronic copy)

End of Section