

THIEF RIVER FALLS CITY COUNCIL AGENDA

Tuesday, September 12, 2023

**COUNCIL CHAMBERS
CITY HALL – 405 3RD STREET EAST
4:00 PM**

- 1. CALL TO ORDER**
- 2. PLEDGE OF ALEGIANCE**
- 3. ROLL CALL**
- 4. PUBLIC FORUM - *Individuals may address the City Council about any item not included on the regular agenda. A maximum of 5 minutes is allotted for the public forum. The City Council will not take official action on items discussed at this time, with the exception of referral to staff or a committee, board or commission for a future report.***
- 5. APPROVE AGENDA - *Council members may add items to the agenda for discussion purposes or staff direction. The Council will not normally take official action on items added to the agenda.***
- 6. NEW BUSINESS**
 - 6.1. Rescinding Resolution No. 08.191.23 Approve the appointment of Trentyn Groslic as Water Treatment Plant Operator and Reopen Internally
 - 6.2. Amend Agreement amount to \$3,299,500 to Replace the R-22 Ice Plant with Co2 Ice Plant to service both the Ralph Engelstad Arena and the Huck Olson Memorial Civic Center.
- 7. ADJOURNMENT**

City of Thief River Falls complies with the ADA. Individuals with disabilities requiring special aids should contact the City Administrator, 405 Third Street East, Thief River Falls, MN 56701, 218-681-2943, 48 hours prior to the scheduled meeting.



City of Thief River Falls

405 Third Street East • PO Box 528
Thief River Falls MN 56701-0528

PHONE: 218-681-2943
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Request for Council Action

DATE: 9/12/2023

SUBJECT: Rescinding Resolution No. 08.191.23 Approve the appointment of Trentyn Groslic as Water Treatment Plant Operator and Reopen Internally

RECOMMENDATION: It is respectfully requested that the City Council approve the recommendation:

MOTION TO: Reverse the hiring of Trentyn Groslic due to internal posting irregularities and the application process be redone in compliance with the required internal posting procedures.

BACKGROUND: Trentyn Groslic, was hired as Water Treatment Plant Operator by City council approved vote on the 15th day of August, 2023 on Resolution No. 08.191.23.

The Teamsters Union has contacted the City and cited an irregularity in regard to the internal posting process.

Some department heads did not post the job as required by the Union contract internal job posting requirements to allow for application in regard to a lateral position transfer. The Union has expressed its intent to grieve it if this issue is not resolved.

KEY ISSUES:

FINANCIAL CONSIDERATIONS: This is a 2023 budgeted position.

LEGAL CONSIDERATION:

DEPARTMENT/RESPONSIBLE PERSON: Wayne Johnson, Water Systems Superintendent

ATTACHMENTS:

None

Refrigeration Upgrades Proposal

City of Thief River Falls-Venuworks- Ralph Englestad Arena and Huck Olson

Prepared By:

Drew Perryman
CIMCO Refrigeration Inc.
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Prepared For:

Travis Collins
Executive Director
Ralph Englestad Arena and Huck Olson Memorial Civic Center
tcollins@venueworks.com



September 1st, 2023



CIMCO is pleased to provide pricing to replace the existing R22 package at the Ralph Englestad Arena with a new 250TR Co2/ Glycol package which will be capable of eventually tying into the Huck Olsen Memorial Civic Center system

Toromont Industries Ltd. operates through two business segments: The Equipment Group and CIMCO. The Equipment Group includes one of the larger Caterpillar dealerships by revenue and geographic territory. In addition, the Group includes industry leading rental operations, a complementary material handling business and an agricultural equipment business. CIMCO is a market leader in the design, engineering, fabrication and installation of industrial and recreational refrigeration systems. Both segments offer comprehensive product support capabilities.



About CIMCO:

CIMCO Refrigeration is North America's largest supplier of thermal solutions, providing full-service capabilities including design, engineering, installation and after-market service. CIMCO operates through 29 locations across Canada and the United States.

Why CIMCO

CIMCO Refrigeration, Inc. has been in operation since 1913 and is part of Toromont Industries Refrigeration Group. Toromont Industries Ltd. is a public company with approximately 4,000 employees across North America. As part of the Toromont family, you are assured of the financial stability of CIMCO and our long-term presence in the refrigeration market.

Key factors why a partnership with CIMCO is beneficial to you:

- Over 300 Years worth of Engineering knowledge
- Continually abreast of the ever changing technology in the industry
- Extensive Training Program for Service Technicians, resulting in faster system maintenance and repairs and lower overall costs
- Large Number of Technicians ensure that every service requirement is met 24 hours a day, seven days a week
- Large Inventory of parts and compressors means that CIMCO does not rely on any outside suppliers for emergency repairs



In - House Refrigeration Project Expertise

From conception to decommissioning CIMCO has the in-house expertise and resources to handle all refrigeration project requirements including:

- Pre-planning
- Complete design and engineering
- Manufacturing
- Pre-fabrication Facility
- Project Management
- Equipment ordering, consolidating and staging
- Installation and start-up
- Post-construction service
- Dedicated technology



Key Fact About CIMCO

- North America's largest refrigeration contractor
- Over 1000 employees
- Over 15,000 completed refrigeration projects
- 8000 active customers
- 23 locations throughout North America
- Completed 53% of the world's ice rinks (70% of professional rinks in North America)
- Successfully installed ice rinks in over 45 countries
- Sustainable designs which included
 - 0 GWP natural refrigerants
 - 100% heat recovery
 - High efficiency 1.5 hp/tonne

What is Smart Rink Connect?

The Smart Rink Connect council is a group of like minded industry leaders with the mission to develop interconnected products on a common platform. Each Smart Rink Connect product has customized sensors, monitoring capabilities and native intelligence to improve the safety, reliability and efficiency of your ice rink .



Why consider CO₂ as your Refrigerant

ALL NATURAL

Natural refrigerant with global warming potential (GWP) of 1 and ozone depleting potential (ODP) of 0



FUTURE PROOF



Low environmental impact - unlikely that environmental legislation will prohibit its use or lead to phaseouts

SAFE

Classified as an A1 refrigerant (low toxicity and flammability)



HIGH EFFICIENCY



High potential for heat reclaim, which lowers plant operation cost. Higher suction pressure means higher efficiency

NON-CORROSIVE

Inert and stable substance - no chemical reactions with polymers



01
GWP

0
ODP

A1
Safety
Class

30000
PPM
Toxicity

0
Flammability

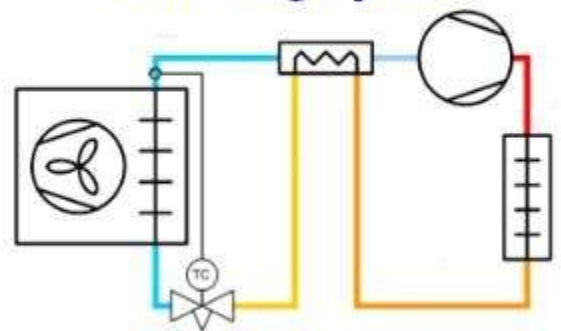
Excellent
Retrofit

Heat Reclaim
High & Mid
Grade

LOW
Cost of
refrigerant

CO₂ (R-744) has proven to be a highly advantageous refrigerant for the cooling industry. It has minimal impact on the environment, produces reduced waste, is highly efficient and safe. As far as refrigerant options are concerned, CO₂ is a leader in many aspects.

Simple CO₂ one stage plant



Winter operation

$COP_c = 4,69$

$COP_h = 5,65$

CIMCOs CO₂ Cooling Solution

CIMCO has been at the forefront of CO₂ cooling in terms of innovation and experience, so we are equipped to develop the perfect system for your arena. With a highly experienced team and over 75 CO₂ installations across North America, we can recommend and create the perfect fit for you. Taking into account various factors such as maintenance, replacement, environment, ice quality, and total cost of ownership, CIMCO's CO₂ solution proves itself a powerhouse of efficiency, performance and sustainability.



Note - this video talks about Co₂ direct floor - this one quoted will be Co₂/Glycol to the floor

KEY FEATURES

Energy Efficiency

Energy savings between 15% - 40% depending on the type of system and location

Superior quality allows energy stability

Reliable and accessible solution for different weather conditions, with features for warmer climates

Will maintain high COP and performance with seasonal operations

Special features for year-round operation

Superior ice quality

Consistent ice temperature and quicker reaction to load with direct system

High heat transfer in evaporators and condensers

Smaller heat exchanger

Allows low discharge floating head operation in colder climate

Lower compression ratios leading to higher compressor isentropic efficiency

Outlasts conventional installations

Less impact on loss of efficiency cause by pressure drop in piping - almost no impact

Cost Efficiency

Cost savings of 15% - 40% year after year (dependent on type of system and location)

Reduced capital and operating costs

Reduced cost of replacement equipment, low maintenance

System components easily available, normally off the shelf

Quicker installation

Ease of operation, maintenance and start-up

Fully integrated control system

Options available

Multiple pieces package to fit in existing mechanical room

Separate pump packages

Calcium Chloride or Ethylene glycol

DDC controls and monitoring

Infrared camera for ice temperature control

Adiabatic gas cooler for warmer climate

Parallel compression and ejector for warmer climate

Standard package size available for consultant and owners design requirements

Heat Recovery

Using heat recovery is environmentally friendly and lowers operating costs by re-purposing waste energy.

In the past, ice rink refrigeration systems would reject waste heat into the atmosphere. Overtime, they have undergone improvements in terms of both equipment performance and waste heat recovery. Recovering and using the waste heat can reduce energy consumption and costs by over 40% and GHG emissions by 80% (based on the assumption that the waste heat recovery replaces the fuels used for space heating and domestic hot water). High discharge temperatures in CO₂ system offer good potential for high grade heat recovery requirement. It also offers substantial medium grade heat recovery for various building heat requirements. Taking into account the impact they have on operating costs and GHG emissions, energy efficiency and heat recovery are essential in new facilities or when renovating or replacing existing systems.

Most common uses for recovered heat

High grade heat

Hot water for showers and resurfacers
Hydronic hot water heating elements

Medium grade heat

Fresh air intake heating
Room heat , hydronic or air
Infloor radiant in concrete floor, bleachers , walkways, showers, parking area

Lower grade heat

Slab underfloor heating
Snow melting

Safety

Classified as A1, which indicates non-toxicity and non-flammability, CO₂ tops the safety charts for all refrigerants. CO₂ operates at high pressures, which is one of its main deterrents. However, this risk can easily be countered by appropriate design, construction and commissioning of the system. High quality stainless steel fusion welded pipes ensure the safety and quality of the installation. CO₂ is present all around us; it is non uncommon to have CO₂ in the atmosphere. Gas detection is installed and prevents the low floor area from completely replacing oxygen with CO₂ in case of a major leak.

PHASE I - CIMCO Engineered - CO₂ Major Equipment - Firm Quote

Engineering

- CIMCO engineering to complete all equipment selections
- CIMCO engineering to prepare Refrigeration Equipment room; piping and flow diagram
- CIMCO engineering to prepare Refrigeration Electrical loads
- CIMCO Engineering to prepare drawings and scopes of work for selected civil, mechanical, electrical, Insulation, crane sub contractors, general construction contractors

Package 1 - Co₂ Refrigeration Package

- 250TR Co₂/glycol chiller package (approximate size 30'L x 7"W x 8.25'H) TBD on engineering
- (10) bitzer semi-hermetic reciprocating compressors
- (8) Co₂/glycol DX chillers for ice mode
- Main electrical panel which will provide power to the main Co₂ package, and wiring power to the pump package located beside and the adiabatic gas cooler - panel will require 1200 AMP, 460V fully rated main power to the disconnect
 - VFD on the first 30 HP compressor
 - VFD on the first 50HP compressor
 - Compressor relief valves and manifold
 - Package will have low-grade heat reclaim heat exchanger included
 - Package will have high-grade heat reclaim exchanger included
 - Package will also come with CIMCO IQ control system which will control the ice temperature, heat reclaim etc...

Package 2 - Pump Package

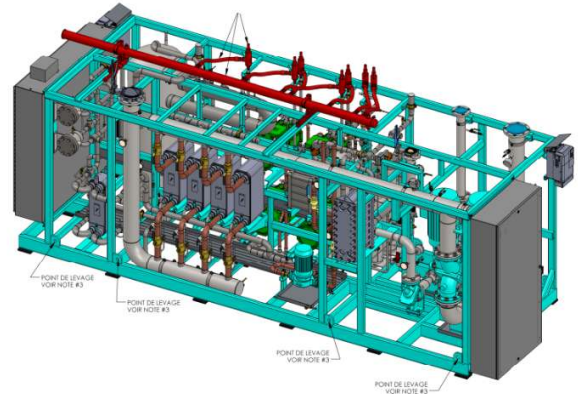
- CIMCO pump package (approximate size 10'L x 5"W x 6'6"H) TBD on engineering
- Includes 3 cold glycol pumps, 1 for Ralph Englestad, 1 for the Huck Olson Arena and 1 which can be swung from side to side
- Includes 1 warm pump for Ralph Englestad which will service the underfloor system and snow melt pit heat exchanger
- Includes 1 warm pump to circulate warm reclaim glycol to the Huck Olson Arena which will feed a custom coil installed in the existing AHU at the Huck Olson Arena
- The starters for these 5 pumps will be located in the main electrical panel mounted to the Co₂ package, also supplied in this quotation

Outdoor Co₂ Guntner Gas Cooler

- Supply and install GGFD 090.2A2x6/6JA-E257L/06P gas cooler located outdoors per the site layout below

Misc. Supply items:

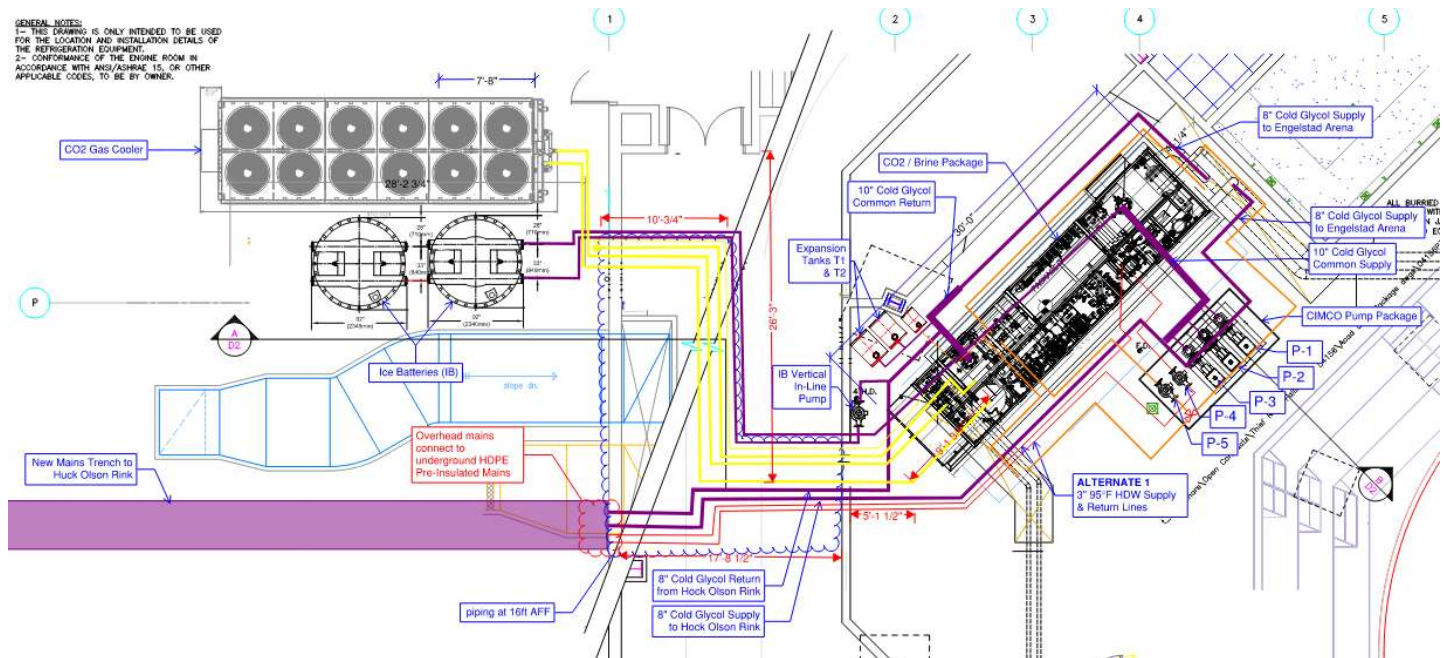
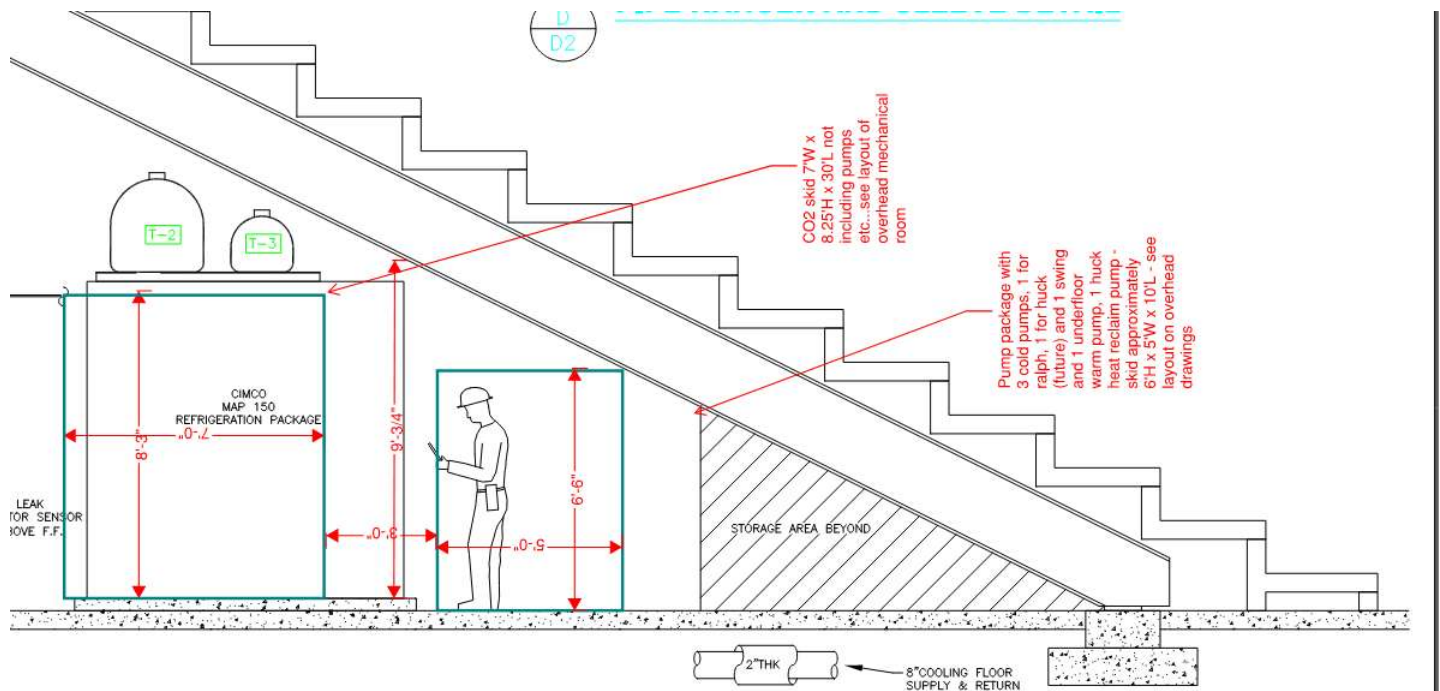
- Supply new cold and warm open top expansion tanks
- Supply new Co₂ refrigerant leak detection system in the Ralph Englestad mechanical room
- Supply (2) ice batteries located beside the gas cooler - see alternate 1 layout below
- Supply (1) in-line ice battery build pump located beside the Co₂ package - not on the pump package, will be separate



Pictures from recent ice rink in Reading, PA (180TR refrigeration package). R22/ glycol to Co2/ glycol change out,

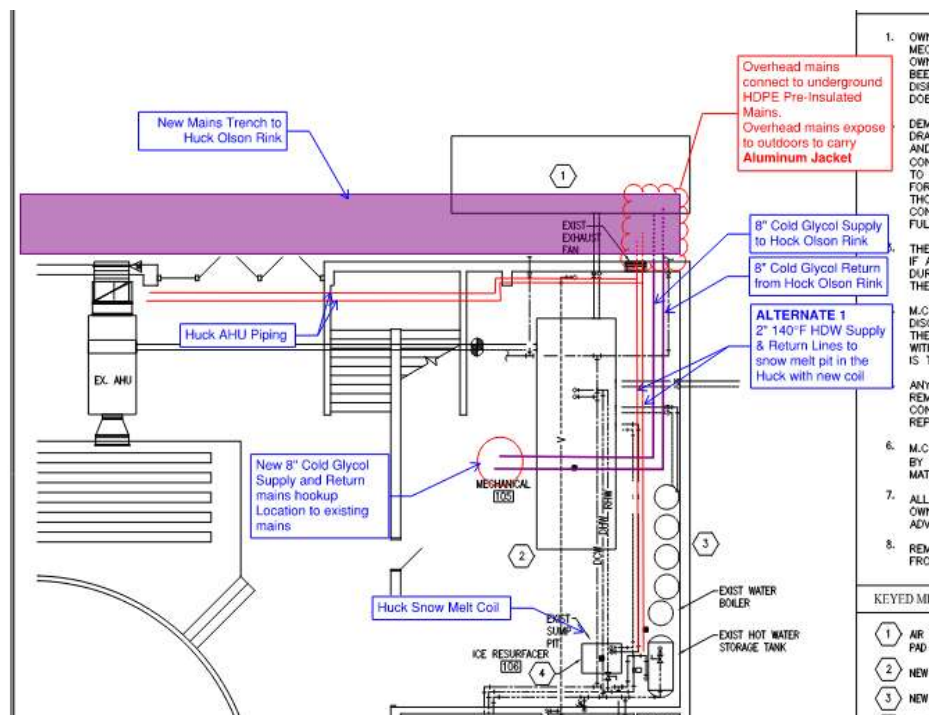
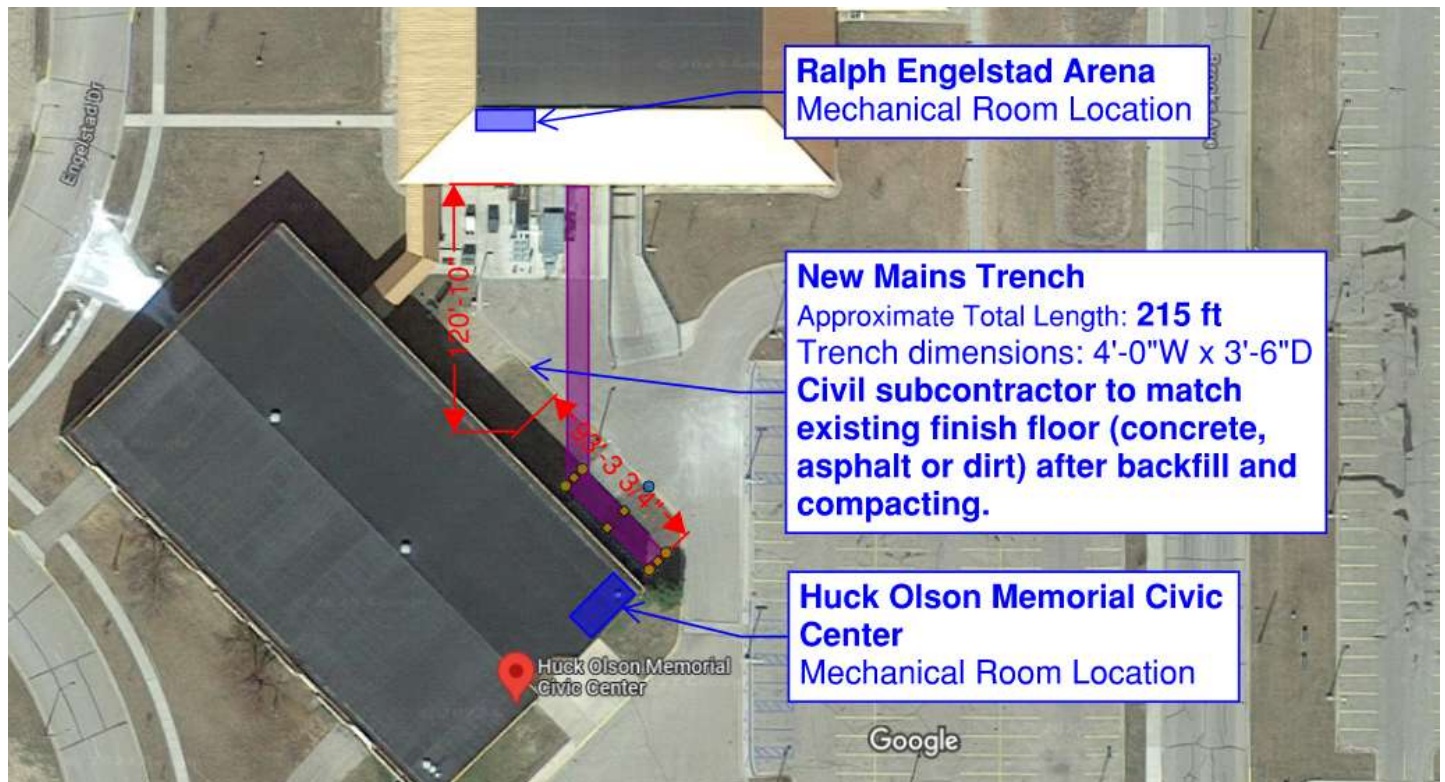


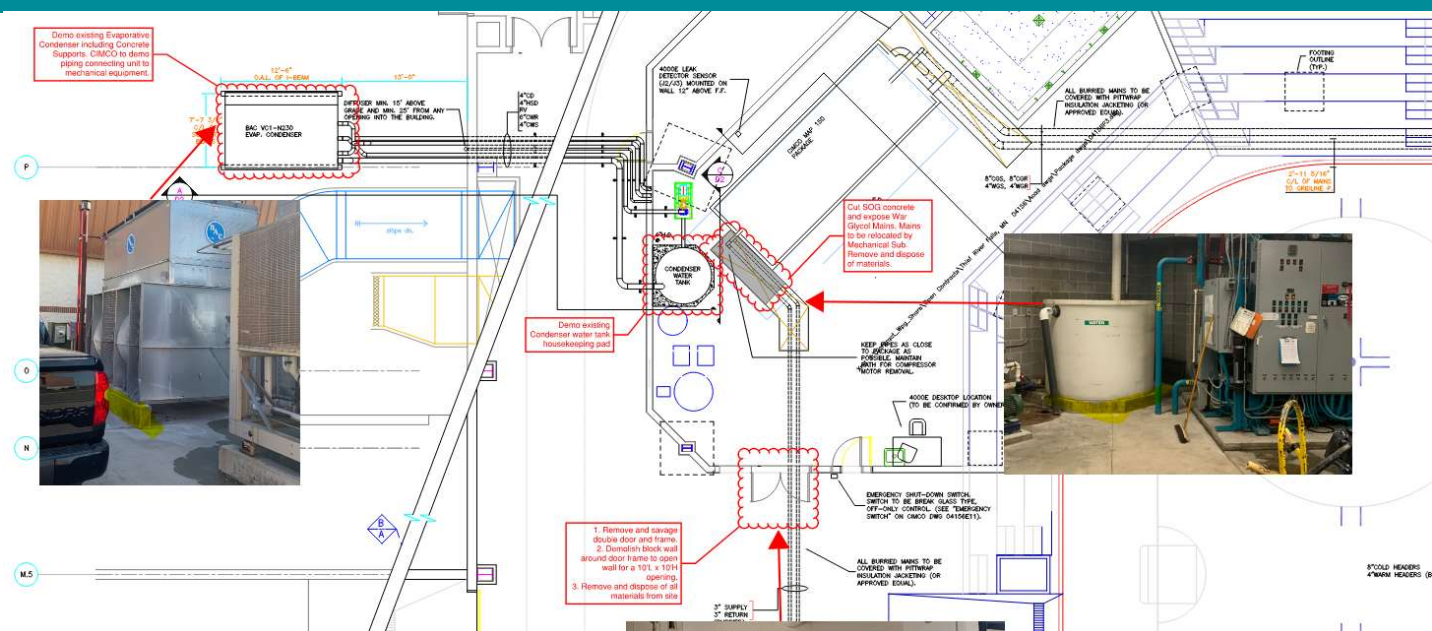
Mechanical Room Layout(s)



Parking Lot/Huck Olson Layout

*The ice battery and gas cooler piping will come out of the building in the current location to the West of the dehumidifier. The 2 x 8" pipes and 2 x 2" pipes feeding the Huck will come out on the East side of the dehumidifier as it makes piping easier inside the Ralph.





PHASE 2 - Installation of the major equipment at Ralph Englestad Arena and Tie in Requirements for the Huck Olson Arena

General Construction Scope

- Provide trench across the parking lot per layout above, approximately 4'W x 3'6"D
- Prepare trench for CIMCO piping running across the parking lot 2 x 8" insulated pipes for the cold floor at the Huck and 2 x 2" insulated pipes for heat reclaim to the Huck
- Backfill, compact trench and repair with concrete - not asphalt currently so it will not match exactly
- Demo existing R22 evaporative condenser stand supports and condenser for the Ralph
- Remove condenser water tank and housekeeping pad in the Ralph mechanical room
- Cut a small portion of the concrete to the plan SouthEast of the existing housekeeping pad to expose the pipes going to the snow melt pit (need to be relocated slightly to make room for the additional length of the Co2 package)
- Extend existing housekeeping pad to accommodate the 30'L Co2 package
- Pour new pad 10'x5' for the pump package located beside the Co2 package
- Remove block wall around the double door going into the Ralph mechanical room to accommodate installation of the Co2 package and demolition of the existing R22 package
- Re-install the block wall and double door

Electrical Scope of Work

- Supply and install new 1200AMP, 460V service to the disconnect in the Co2 package panel
- Supply floor temperature control from the Ralph Englestad main package to the floor at the Huck Olson (will run in the trench provided by the general construction contractor)
- Power and control wiring associated with the new Co2 refrigeration package
- See some exclusions in the (exclusions section at the bottom of the proposal)

Refrigeration Installation Scope of Work:

- New gas cooler supply and return piping
- New Co2 relief line piped outdoors
- Connection piping between the Co2 package and the pump package
- Install new cold and warm open top expansion tanks
- Connect to Ralph cold glycol supply and return piping
- Connect to Ralph warm floor glycol supply and return piping
- Connect to Ralph snow melt pit supply and return piping (snow melt pit coil and as much piping as possible will be re-used)
- Supply and install 8" HDPE pre-insulated pipes across the parking lot to the Huck Olson Arena
- Supply and install 2" HDPE pre-insulated heat reclaim pipes across the parking lot to the Huck Olson Arena
- Provide connection at the Huck Olson side to the existing glycol supply and return lines to the Huck
- Piping for the existing Huck Olson package will just be cut as close to the connection point as possible
- Provide connection piping from the 2" stub-up location at the Huck Olson side, to the side of the existing air handling unit which is not currently functioning
- Place and install 2 x ice batteries
- Place and install in-line ice battery build pump

Misc. Scope:

- Start-up and staff training on the new system
- New charge of 40% ethylene glycol in both ice rinks, ice batteries and air handling unit will be provided
- New operating charge of Co2 and oil as recommended by the manufacturer of the package
- Start-up and staff training on the new system
- Freight of all materials to site in Thief River Falls, MN
- Permitting costs associated with the project
- Rigging of major equipment and site rentals as required
- PE stamp as required in Minnesota
- Demolition of the existing Ralph Englestad ice plant area to prepared for the new Co2 package being installed
- R22 recovery out of the Ralph Englestad package - we have provided an optional deduct credit depending on how much R22 is reclaimed

Mechanical scope of work

- Upgrade exhaust fans at the Ralph Englestad Arena to accommodate Co2 refrigerant including upgrading the fan, locating the exhaust closer to the ground etc...
- Tie from the DDC CIMCO IQ controller to the exhaust fan to have it run when Co2 levels are beyond set-point
- Install customized coil in the existing McQuay/Daiken air handling unit at the Huck Olson Arena to use 95dF / 85dF glycol loop reclaimed from the main refrigeration plant
- Connect 2" loop reclaim from the Ralph Englestad to this coil connection

Design intent for heat reclaim:

1. Design intent is to reclaim the 95dF heat recovery from the Co2 package, fed via the 2 x 2" HDPE pre-insulated pipes through the parking lot over the Huck Olson Arena
2. This piping would be connected to a "custom" coil in the existing air handling unit (or new air handling unit if absolutely necessary) as the primary source of heating
3. The alternate of the (2) ice batteries essentially will act as a "false load" on the refrigeration system so that we can run the Co2 plant for the sole purpose of heat reclaim, heating the Huck Olson arena.
4. Those (2) electric heaters at the Huck would be set-up so that they only run when absolutely necessary

IMPORTANT CLARIFICATION FOR MECHANICAL AT THE HUCK OLSON ARENA:

CIMCO has consulted with our HVAC partners on this option for putting a custom coil in the existing air handling unit. This provision assumes everything else, outside of the coil is functional on this air handling unit including the blower, and general functionality of the unit. We could not physically go up to check out the unit, while on site August 29th, 2023. We assume, per our HVAC contractor that our custom coil solution can be integrated into the air existing air handling unit.

If there is something wrong with this unit, it may need to be replaced entirely which is not included in our proposal currently. Further, there are code requirements associated with ice rink design provided by ASHRAE related to fresh air intake, etc... which the Huck Olson Arena currently does not have. If during the project, there is a code requirement to bring any fresh air intake or mechanical HVAC up to code requirement, this would require a revise in price on this option.

Exclusions:

1. Supply one set of Architectural Drawings of all areas concerning refrigeration equipment and subsequent revised drawings.
2. Supply or ensure existing supports on floors, ceilings etc. are safe and useable for structural reinforcing for hanger bolts to hang equipment and pipes, and to support equipment on roof or floors not on grade.
3. Provide temporary water and electric power for lighting and power tool operation.
4. Low voltage from the exhaust fan provide by others to our system to ensure it turns on if Co2 is detected in the room (in budget for the HVAC exhaust upgrades)
5. Supply and installation of all water lines to within 20 feet of the CIMCO requirements in machine room.
6. Any water drain or plumbing requirements
7. Snow melt pit to be re-used and as much piping as possible
8. Removal and disposal of any substance, which is not environmentally safe, will be charged back to the customer as a cost plus 25% overhead and profit.
9. Any material or work not covered in the foregoing quotation or mentioned in the owner's obligations will be the responsibility of the owner.
10. Any seismic requirements
11. Any upgrades to the refrigeration room, outside of what was been outlined in the proposal above would be require a cost review
12. Existing in slab conduits to be reused in the Huck Arena for slab sensors, if the conduit are impassable new conduit to the sensors is not figured
13. Demolition of the ice plant at the Huck Olson Arena - piping will be cut as close to that package as possible, to be demolished at a later date
14. Snow melt coil installation in the Huck Olson mechanical room
15. Replacement of the existing Huck Olson air handling unit, or anything outside the coil
16. Bringing the Huck Olson arena HVAC to code related to fresh air etc... should it be required during the permit process
17. The building official had mentioned ensuring the mechanical room at Ralph Englestad is fire rated through other penetrations which were previously existing, nothing to do with our CIMCO system. If this is a requirement of our scope, this would be additional to the cost of the project.
18. Any moving of the existing equipment by the evaproative ocndenser outside above what's mentioned in this proposal - no moving of the generator, cooling for the dehumdifier etc...

Special Conditions:

- Pricing does not include any bonding at this time, however it can be added as requested.
- Pricing valid for 30 days
- We have not included sales taxes of any kind on materials or labor on the pricing below - our understanding is that a tax exemption certificate will be provided. If not, pricing will need to be adjusted.
- Pricing subject to CIMCO Refrigeration, Inc. standard terms and conditions attached herewith
- Proposal assumes the use of non-union labor and no prevailing wage requirements applicable.
- Standard 1 year warranty
- Delivery time will be confirmed upon received the purchase order and initial down payment. The lead time may be extended if any changes arise after receiving the purchase order
- No liquidated damages for deliveries have been included

Project Pricing

<u>FIRM NUMBERS BELOW</u>	Price	Yes/No Selected?
2023 Pricing - Base bid (2) packages, gas cooler, ice batteries, HVAC scope, installation etc... per the proposal pricing above	\$3,209,000 USD FIRM	
Credit for R22 recovered out of the system	\$20.00/lb x estimated 1200 lbs = \$24,000 credit (to be confirmed) FIRM	
Add snow melt pit for the Huck Olson tying into the 2" heat reclaim - attempt to eliminate the issues	\$39,500	

TOTAL PROJECT BUDGET FOR APPROVAL: \$3,224,500 USD (No contingency - optional below)

<u>BUDGETARY NUMBERS BELOW</u>	Price	Yes/No Selected?
Project contingency to be used for additional requirements discovered during the engineering process - project is priced based on 30% conceptual drawings and scopes of work to be executed at + 12% OH and 8% Fee	\$75,000 USD	
Optional selection which can be added to the project for unforeseen items		

Typical Replacement Schedule (Estimated)	53 WEEKS
Contract execution and ordering major equipment (critical path)	2 weeks
Full shop drawings and submittals	4 - 6 weeks
Mobilize & Demobilize	2 weeks
Longest Lead Time (Co2 Package) (critical path)	40 weeks
Ship package to site (critical path)	1 week
Place Equipment & Gas Cooler (critical path)	1 week
Pipe in new system for installation (critical path)	6 weeks
Start Up & Commission System (critical path)	3 weeks

Adverse Condition Delays:

An allowance of \$0 is included in this proposal for adverse weather conditions including, but not limited to winds, snow, ice, excessive heat, freezing temperatures and subsequent difficult site access which slow or prohibit the normal production and installation schedule of the work. If there is an allowance included it includes the following: Snow and ice removal; Loss of production time, non-productive payroll, expenses incurred, re-mobilizations, equipment rental related to the project delay from adverse weather as listed; wind blinds; temporary shelters heated or non-heated.

Agreement

The information contained in this proposal constitutes the terms between CIMCO Refrigeration, a division of Toromont Industries and the client the City of Thief River Falls

All prices agreed upon will be honored by both parties. Continued services after that time will require a new agreement.

Billing and Payment Terms. CIMCO will invoice The City of Thief River Falls as per the terms of this agreement, and The City of Thief River Falls will pay each such invoice within thirty (30) days after the date thereof. Invoices not paid within such thirty (30) day period will accumulate interest as per the terms and conditions of this agreement.

Authorized Signature: The undersigned agrees to the terms of this contract on behalf of the organization or business

Signature of Client: _____ Date: _____

Print Name of Client: _____

Purchase Order :

CIMCO Refrigeration Inc would like to thank you for the opportunity to provide a proposal for this project upgrade and options and look forward to your valued response and potentially working on your team!

Best Regards,

Drew Perryman
CIMCO Refrigeration Inc.
Account Manager - US Recreation
Cell: 416 254 5695
Email: dperryman@toromont.com



TERMS AND CONDITIONS

SUBJECT TO WRITTEN APPROVAL BY A DULY AUTHORISED OFFICER OF CIMCO REFRIGERATION (THE "VENDOR"), THIS QUOTATION, IF ACCEPTED IN WRITING BY THE PURCHASER, SHALL CONSTITUTE A BINDING CONDITIONAL CONTRACT OF SALE AS OF THE DATE OF THE PURCHASER'S ACCEPTANCE OR AS OF THE DATE OF THE VENDOR'S APPROVAL, WHICHEVER IS LATER. THIS QUOTATION IS INVALID IF NOT ACCEPTED BY THE PURCHASER WITHIN THIRTY DAYS OF THE DATE OF QUOTATION.

1. TITLE

(a) The title and ownership to and in the materials, equipment and other goods sold here under (the "goods") shall remain with the Vendor until payment in full of the Contract Price and any additional amounts payable to the Vendor pursuant to sections 2 and 10 of these Terms and Conditions. The Vendor hereby reserves, and the Purchaser hereby grants to the Vendor, a security interest in and to the goods, and the proceeds thereof, to secure the said payment and all of the other obligations of the Purchaser. At the option of the Vendor, the Purchaser will join with the Vendor in executing, in a form satisfactory to the Vendor, one or more financing statements or similar instruments pursuant to any applicable personal property security legislation. The Purchaser hereby authorizes the Vendor to file one or more such statements or instruments signed by the Vendor alone as the secured party. If the goods are to become affixed to real property, the Purchaser represents that a true and correct description of such real property and that the name of the registered owner thereof are as indicated on Page 1 of this Quotation/Contract.

(b) In the event of default by the Purchaser under the terms of payment of this contract, the full amount of the Contract Price, less any payments previously made, shall become due and payable, and the Vendor or its agent shall have the right to enter upon the premises and remove the goods, and to dispose of them as the Vendor may determine. If the proceeds from such disposal, less any related expenses, including but not limited to costs of seizure, removal and sale, and legal costs (including reasonable attorneys' fees and expenses) connected therewith (the "net proceeds"), are not sufficient to cover the amount in default, the Purchaser shall be liable to the Vendor for such deficiency. If the net proceeds exceed the amount in default such excess shall be returned to the Purchaser, and the Vendor shall not be liable further whether in respect of completion, performance, warranty or other contract terms.

(c) The Purchaser hereby waives all rights and claims against the Vendor in the event that the circumstances provided for in section 1 (b) arise, except for the express right of recovery of excess net proceeds as provided in that section.

(d) The Purchaser hereby waives the provisions of any Conditional Sales Act or other applicable legislation which limits the Vendor's rights to seize the security provided for herein, and to sue for any deficiency. The Purchaser expressly confers upon the Vendor the rights to seize and sell the goods and to recover from the Purchaser, by action on the covenant, the principal, interest and other moneys from time to time owing under this contract.

(e) Until the Contract Price has been paid in full, the Purchaser will not sell or agree to sell, or mortgage, charge or dispose of, or intentionally injure the goods or remove them from the place of initial installation.

2. PRICE ADJUSTMENTS

(a) The Purchaser shall pay all taxes, duties, levies and other charges assessed against or in respect of the goods, except those taxes, duties, levies and other charges expressly included in the Contract Price.

(b) If any taxes, duties, levies, or other charges shown to be included in the Contract Price are increased subsequent to the Date of Quotation, and increase the Vendor's costs here under, such increase shall be paid by the Purchaser to the Vendor.

(c) The Contract Price quoted herein is based on prices, costs and conditions prevailing at the Date of Quotation. Unless otherwise specified, if the estimated delivery and / or installation date is more than six months from the date of the contract, and if prior to shipment or installation there is an increase in the Vendor's costs due to increases in labor rates, cost of materials, suppliers' prices, foreign exchange, storage charges, or freight rates, such increase shall be paid to the Vendor by the Purchaser.

(d) If delivery or installation is delayed by the Purchaser, or by anyone under the Purchaser's control, for more than two months after the time estimated, any increase in those categories of the Vendor's costs listed in section 2(c) shall be paid to the Vendor by the Purchaser.

(e) All payments by the Purchaser to the Vendor under section 2 shall be in addition to the Contract Price and shall be paid at the time the final payment under the contract is due.

3. LIABILITY

The Vendor shall not be liable for any losses, injuries, expenses or damages, whether direct, indirect, special, incidental, consequential or punitive, arising out of the goods, or the installation, operation, or failure of operation of the goods or related systems even if caused by the Vendor's negligence.

4. DELIVERY AND INSTALLATION

Delivery and installation times and dates are approximate and are subject to extension for delays caused by fire, strike, lockout, labor dispute, civil or military authority, riot, embargo, car shortage, wrecks or delays in transportation, Acts of God, late delivery or non-delivery by the Vendor's suppliers, changes in the scope of the work as provided in section 9 of these Terms and Conditions, or other causes beyond the reasonable control of the Vendor, and the Vendor shall not be liable for any losses or damages resulting from any such causes. Acceptance of the work shall be a waiver by the Purchaser of all claims for damages for delay from any cause whatsoever.

5. RESPONSIBILITY AND INSURANCE

(a) In respect of goods sold F.O.B. point of origin, the Vendor shall deliver the goods in good condition to a common carrier or to the Purchaser at the Vendor's shipping point, and thereupon all risks of loss or damage thereto shall pass to the Purchaser.

(b) In respect of goods sold F.O.B. job site or sold with installation, all risks of loss or damage shall pass to the Purchaser upon receipt of the goods at the job site or at the Purchaser's designated delivery point.

(c) The Purchaser shall insure the goods against loss or damage from fire, theft, malicious damage or other causes as and from the time the Purchaser becomes responsible for the goods pursuant to sections 4(a) and 4(b) of these Terms and Conditions. The face value of the insurance policy shall be in an amount not less than the Contract Price. Any loss under such insurance policy shall be made payable to the Vendor as its interest may appear until the Contract Price shall be paid in full.

(d) Upon the request of the Vendor, the Purchaser shall provide an insurance certificate as evidence of the compliance with section 4(c) of these Terms and Conditions.

6. COST ESCALATION

The Vendor and Owner acknowledge and agree that at the time of execution of this project agreement, it is unknown whether prior estimates for performance of the work will be impacted by further development of the design, changed market conditions, availability of labor, equipment and/or materials or other conditions which materially differ from those existing at the time prior estimates were received. The Vendor agrees to make diligent and best efforts to mitigate any cost or schedule impacts arising out of these changed conditions. However, subject to such mitigation obligations of the Vendor, the Owner agrees the Vendor shall be entitled to an equitable adjustment of the contract sum and/or, if applicable, the contract time due to the following non-exhaustive list of possible events or circumstances: (1) a Subcontractor will not honor its prior estimate, (2) commodity price escalation and/or commodity delivery date impacts due to the length of time between a Subcontractor providing its estimate and subcontract award, (3) general conditions cost impacts due to anticipated completion dates at the time of Subcontractor's estimate differing from completion dates anticipated at time subcontract award, (4) commodity price escalation and/or delivery date impacts due to Subcontractor inability to obtain firm pricing or delivery date commitments from any supplier at or near time of subcontract award; or (5) cost of on-site or off-site material storage capacity to enable early receipt of certain materials when early procurement of such materials can be achieved for avoidance of price escalation or to secure availability so that the project schedule can be maintained.

7. TERMS OF PAYMENT

(a) Unless otherwise specified in this Quotation/Contract, payment shall be made by the Purchaser to the Vendor in respect of the Contract Price as follows:

(i) Goods sold without installation: 50% upon acceptance of this quotation by the Purchaser; an amount representing the value of each shipment, payable upon delivery; and the unpaid balance upon final shipment.

(ii) Goods sold with installation: 35% upon acceptance of this quotation by the Purchaser; an additional 25% upon written notification by the Vendor to the Purchaser that the goods are ready for shipment; an additional 30% immediately after installation but prior to the commencement of operation of the goods or related systems; and a final payment of 10% upon completion.

(b) Timely payment according to the terms of this Quotation/Contract is of the essence of the contract.

(c) Payment shall be made in the specified currency.

8. WARRANTY

UNLESS OTHERWISE SPECIFIED IN THIS QUOTATION/CONTRACT, THE VENDOR WARRANTS THE GOODS AND INSTALLATION SOLD HERE UNDER AGAINST ORIGINAL DEFECTS IN MANUFACTURE AND WORKMANSHIP BY EITHER A PERIOD OF EIGHTEEN MONTHS (18) AFTER THE DELIVERY OF EQUIPMENT OR TWELVE (12) MONTHS FROM COMPLETION AS DEFINED IN SECTION 9 OF THESE TERMS AND CONDITIONS. THE LENGTH OF WARRANTY WILL BE DETERMINED BY EQUIPMENT DELIVERY OR COMPLETION OF WORKMANSHIP BY WHICHEVER AGREEMENT EXPIRES FIRST. THIS WARRANTY IS IN LIEU OF ALL OTHER WARRANTIES, STATUTORY OR OTHERWISE, EXPRESS OR IMPLIED, INCLUDING FOR MERCHANT ABILITY OR FITNESS FOR A PARTICULAR PURPOSE. THE TERMS OF THE VENDOR'S WARRANTY ARE AS FOLLOWS:

- (a) In respect of goods sold without installation, the Vendor's sole liability shall be to repair or replace, at the Vendor's option, F.O.B. point of manufacture, any defective goods or parts thereof.
- (b) In respect of goods sold with installation, the Vendor's sole liability shall be to repair or replace, at the Vendor's option, any defective goods or parts thereof or any defective workmanship. The Vendor shall be responsible for all of its costs in connection therewith other than the out-of-pocket expenses incurred by the Vendor's employees and agents travelling from the Vendor's nearest place of business to the job site and charges for labor performed after normal working hours at the request of the Purchaser, which latter expenses and charges shall be for the account of the Purchaser.
- (c) The Vendor warrants goods not of the Vendor's manufacture only to the extent to which the Vendor is able to enforce a claim for liability against the manufacturer thereof.
- (d) The Purchaser shall promptly give written notice to the Vendor after the discovery of an apparent defect.
- (e) As a condition precedent to any liability by the Vendor here under, the Purchaser shall use, operate and maintain the goods and related systems in a careful, prudent, and reasonable manner, and in conformity with the Vendor's and / or the manufacturers' instructions.
- (f) the foregoing constitutes the purchaser's exclusive remedy and the vendor's sole liability arising out of the design, manufacture, sale, installation, or use of the goods.
- (g) This warranty shall be void if the Purchaser is in default under the terms of payment of this contract.

9. CHANGE IN SCOPE OF WORK

If the Purchaser requests a change in the scope of the work under this Quotation/Contract, the Vendor will submit a Contract Revision to the Purchaser which shall set forth the proposed changes in the work, and if the proposed changes result in an addition to or a deduction from the Contract Price, the Contract Revision shall set forth the amount of such addition or deduction. A Contract Revision shall not be binding or enforceable unless accepted in writing by the Purchaser and approved in writing by a duly authorized officer of the Vendor. Upon such acceptance and approval, the Contract Revision shall become part of the contract and, except when in consistent therewith, shall be subject to all its provisions.

10. COMPLETION AND ACCEPTANCE OF WORK

- (a) In respect of goods sold without installation, "Completion" shall be deemed to occur when risk of loss of the goods passes to the Purchaser in accordance with section 4 of these Terms and Conditions.
- (b) In respect of goods sold with installation, and unless otherwise defined in this Quotation/Contract, "Completion" shall be deemed to occur when any one of the following events takes place:
 - i. The Purchaser signs an acceptance certificate;
 - ii. The Vendor has installed and, where applicable, successfully tested the installation;
 - iii. The Purchaser commences regular use of the goods correlated systems;
 - iv. An independent expert, mutually acceptable to the Purchaser and the Vendor, certifies that the work has been completed.
- (c) Nothing in subsections (a) or (b) shall relieve the Vendor from its obligation to honor the warranty provisions contained herein.
- (d) The occurrence of any one of the events described in section 9(b)(i), (iii) and (iv) shall constitute acceptance of the work.

11. BONDS

Performance bonds and material and labor payment bonds will be provided by the Vendor upon request. Unless the Contract Price expressly includes the cost of such bonds, the Purchaser, in addition to the Contract Price, shall pay the cost of such bonds to the Vendor at the time of the receipt thereof by the Purchaser.

12. MISCELLANEOUS

- (a) This Quotation and any resulting contract shall be governed, enforced and construed in accordance with the laws of the Province/State of MN without regard to that province's/state's rules governing conflict of laws.
- (b) All rights and remedies of the Vendor under this contract and under applicable law shall be cumulative and may be exercised successively or concurrently, in any order, and on more than one occasion. The election by Vendor to exercise one remedy shall not preclude it from thereafter exercising one or more other remedies.
- (c) The Purchaser agrees to pay, in addition to the other amounts payable to Vendor under the contract, all costs and expenses, including reasonable attorneys' fees, incurred by the Vendor in enforcing this contract, exercising its rights here under or collecting or attempting to collect all amounts due the Vendor here under following default by the Purchaser in the payment or performance of its obligations here under, including those incurred in connection with any bankruptcy, insolvency, liquidation, reorganization or similar proceeding involving the Purchaser.
- (d) Any assignment or attempted assignment of this contract, in whole or in part, without the prior written consent of the Vendor shall be void. The Vendor may assign any of its rights, liabilities or obligations arising out of this contract without prior notice to the Purchaser and without the Purchaser's written consent except that the Vendor may not assign its warranty obligations without the Purchaser's written consent.
- (e) If any provision of this contract is unenforceable, such unenforceability shall not affect the remaining terms, which shall be enforced, if the same can be done, without regard to the unenforceable provision.
- (f) The headings to the paragraphs of this contract are provided for ease of reference only and shall not be construed to vary or limit the terms thereof.

THIS QUOTATION/CONTRACT CONTAINS THE COMPLETE AGREEMENT BETWEEN THE PURCHASER AND THE VENDOR, AND SUPERSEDES ALL PRIOR ORAL OR WRITTEN REPRESENTATIONS, PROMISES, AGREEMENTS OR UNDERSTANDINGS WITH RESPECT TO THE SUBJECT MATTER HEREOF. NO REPRESENTATION, PROMISE, AGREEMENT OR UNDERSTANDING ENTERED INTO OR MADE SUBSEQUENT TO THE DATE OF THE CONTRACT WHICH VARIES OR MODIFIES THE PROVISIONS OF THIS CONTRACT SHALL BE BINDING ON THE VENDOR UNLESS CONVEYED IN WRITING AND EXECUTED BY THE DULY AUTHORISED OFFICER OF THE VENDOR EXECUTING THIS QUOTATION/CONTRACT.