From: Michele James [mailto:mjames@ctsgroup.com]

Sent: Monday, October 31, 2016 8:04 AM

To: Napoleon Haney **Cc:** Jaime Frausto

Subject: FW: DHW Sportsplex Options

Hi Napoleon,

Per our conversation, we have listed the options below for temporary domestic water heating for your consideration. Also, see attached proposals for the options below. Please contact me if you have any questions or need additional information. Thanks again.

Option 1 - Purchase Electric Domestic Hot Water Heater

Install a new Bradford White 120 gallon #BWC M-II-120-24-3SF49 480 Volt 3Phase – 28.9 Full Load Amps commercial electric hot water heater.

All material and after hours labor to disconnect, cap, re pipe and valve the new 120 gallon commercial hot water heater with expansion tank furnished by mechanical contractor.

Existing storage tank will be drained and left out of service.

Village to shut down of the domestic water in the building for installation.

The village would provide the electric 480 service to the electric hot water heater with disconnects.

Start up by village.

Estimated delivery and installation: 1-2 days from PO.

Option 2 - Domestic Water Heater - 4-month rental

One (1) RAYPAK Raytherm model WH3-624 Indoor Hot Water Supply Unit.

Input of 624 MBH, atmospheric burner, AGA certified for natural gas firing, thermal efficiency of 82%, recovery rate of 956 GPH from 40°F to 140°F 2-1/2" water inlet & outlet, 12" diameter flue outlet, ASME 160 PSI design pressure, 125 PSI pressure relief valve, 2 stage firing,

Electronic Intermittent Ignition, flow switch, all bronze headers, copper finned tube heat exchanger, reset hi limit, T&P gauge and wired for Economaster II pump controller with time delay relay.

Indoor 12" draft hood (mushroom style) included for use.

Existing heat exchanger circulator to be repurposed to circulate tank and heater.

Existing stat to enable existing circulator and firing stages (two-stage heater can be fired on-off if required)

Full freight allowed from our shop to sportsplex and back to our shop. All loading/unloading by Village

Full installation by Village to include;

- Natural gas piping, inlet and outlet water piping, distribution piping tie-in.
- Flue exhaust connection to existing flue (take one existing Lochinvar Heater out of service)
- Electrical connection of furnace and ancillary equipment.

Start up by village.

Estimated delivery and installation: 6 days from PO.

Option 3 - Tankless Water Heater

The tankless or demand type water heater solution was investigated further and would not be recommended for this application.

Common installations for showers are usually done in series due to the demand of multiple showers and sinks. A common installation would include the installation of three (3) heaters/per shower.

While the Men's locker room domestic water mixing valve and piping is in a storage closet with room to install the needed number of units, the mixing valve for the Women's locker is in the CMU wall across from the shower area with no room to install locally.

The number of these units that would be required to have three shower open in each locker room would be eighteen (18) units.

The village would furnish mechanical installation (mounting and plumbing) as well as electrical connections to each unit.

Estimated delivery and installation: 10 – 14 days from PO.

Sincerely,

Michele A. James

GROUP

3501 North Southport, #459
Chicago, IL 60657
773.633.0691 (p)
mjames@ctsgroup.com
www.ctsgroup.com