

City of Surrey HVAC Roof Equipment Replacement Document

Building Site: Newton Wave Pool

Unit(s) to be replaced 3

Unit(s) to be replaced with _____

City of Surrey Project Representative: _____

Contractor's responsibilities:

- Contractor to assume "Prime Contractor" role, by signing the attached document.
- Review of and adherence to City of Surrey HVAC Roof Equipment Replacement Document.
- Hoisting and placing unit of roof equipment and associated crane, trailer, and delivery costs.
- Removal, refrigerant reclaim, and proper disposal of associated equipment as per authority having jurisdiction.
- Replace existing curbs and all associated roof repairs, new curb adapters, New Sleepers.
- If existing sleepers are not secured to the roof, the sleepers shall be replaced with new sleepers that are properly roofed in and seismically attached to roof structure.
- New ductwork is to be leak tested and sealed with duct sealant.
- Hiring of and supervision of any subtrades associated with specified work, unless otherwise agreed upon.
- All electrical power wiring disconnection and reconnection.
- Control and control wiring reconnection to base building automation system.
- Disconnection and reconnection of natural gas piping. Gas piping to be threaded steel pipe, properly supported, and painted grey, all gas line must be capped during replacement.
- All associated permits with Technical Safety BC, Electrical Permit with City of Surrey (If needed) Plumbing Permit with City of Surrey (if needed) Copy of final acceptance must be provided before submitting final invoice for payment.
- Hot Work Permit required daily or as needed for work including but not limited to Cutting, Welding, Brazing, Hot Grinding, Soldering, or Torch Applied Roofing that may cause sparks, flame or an ignition source. Hot Work Permit shall follow at minimum the City of Surrey "Hot Work Permit" requirements.
- HVAC roof equipment to be seismically secured. Seismic Certification by a Professional Engineer is required.
- Firestopping.
- Start up and testing of equipment.
- Fill out City of Surrey asset inventory removal and new equipment form.
- Site demonstration for City of Surrey Staff.
- Balancing Agent and Report.
- Provide manuals and as built
- Warranty information.
- Prime Contractor is responsible for Establishing and monitoring, a roof safety plan following all work safe BC regulations

- Prime Contractor is responsible to submit a Notice of Project form to work safe BC if the project is estimated to cost over \$100,000
- Use of “strut support blocks” is required for all cable, conduit, and gas line management.
- NOTE: City will be responsible for any pre-reno or pre-demo hazardous building material reporting. Contractor to provide City Project Rep with adequate notification for any additional suspect hazardous materials to be sampled and tested. Assignment of any required removal work to be determined.

HVAC roof equipment specification:

- High efficient Dual Fuel Heat Pump & Gas Backup
- All the proposed units should be the highest efficient available units.
- 2 stage cooling & 2 stage heating
- Units should be equipped with “Free cooling economizer” C/W modulating valve control economizer that will accept 0-10 VDC control
- Unit to include terminal strip control
- Include low ambient control kit
- Hinged access doors
- New CO2 sensor on return air.
- Allow for graphics upgrade and integration of the installed equipment to the existing City of Surrey DDC by approved control company, DDC upgrades should include the following points:

SUPPLY FAN ·
 SUPPLY AIR TEMPERATURE ·
 RETURNED AIR TEMPERATURE ·
 MIXED AIR TEMPERATURES ·
 COMPRESSOR STATUS
 S/A, R/A & M/A DAMPER POSITIONS ·
 GAS BURNER FIRING RATE
 CO2 SENSOR ON R/A

- New units should be compatible with Merv 13 filters.

Extras to be included in quotation:

- Powered convenience GFCI receptacles Powered by unit dedicated power: yes
- New weatherproof type “NEMA 3R” electrical disconnect switch (yes)
- Replace thermostats (Y/N)
- Filter Type _____
- Refrigerant Type if applicable N/A
- Commissioning report (Y/N) Yes