



250 ROWNTREE DAIRY RD, WOODBRIDGE, ON
TEL: 905-507-0800
WEB: WWW.QUASARGROUP.COM

YORK REGIONAL POLICE HELICOPTER HANGAR

350 GARFIELD WRIGHT
BOULEVARD
TOWN OF EAST GWILLIMBURY

Key
Plan

| NO. | ISSUED | DATE |
|-----|----------------------------|------------|
| 5 | ISSUED FOR ADDENDUM 7 | 2024-10-03 |
| 4 | ISSUED FOR ADDENDUM 6 | 2024-09-30 |
| 3 | ISSUED FOR ADDENDUM 3 | 2024-09-23 |
| 2 | ISSUED FOR TENDER | 2024-09-09 |
| 1 | ISSUED FOR BUILDING PERMIT | 2024-07-31 |

Issues

All measurements are to be checked and verified on site by the contractor before proceeding with work

Do not scale drawings

Drawn by: Fizzah Khan / Iulian Turiga
Checked by: Ali Nakhaei-Zadeh
Original Issue Date: 2024-07-31
Project No: TT-24-005
Scale:

Sheet
Title:

MECHANICAL SCHEDULES

Drawing
No.
M-900

ROOFTOP UNITS - DOAS (DEDICATED OUTDOOR AIR SUPPLY)

| TAG | MANUFACTURER | MODEL | LOCATION | SERVICE | AIRFLOW | | OUTDOOR AIR % | FANS | | | FILTERS | SOUND POWER @ INLET/OUTLET/RADIATED (DB) | | | | | | | ELECTRICAL | | | | WEIGHT (kg) | NOTES | | |
|-------|--------------|---------|----------|---------|------------------|--------------------|---------------|---------|--------|--------------|--------------|--|-------------------|-------|--------|--------|--------|---------|------------|---------|------|------|-------------|----------|------|---|
| | | | | | TOTAL AIRFLOW... | OUTDOOR AIRFLOW... | | TYPE | SERIES | FAN SPEED... | | HEATING COIL (KW) | COOLING COIL (KW) | 63 HZ | 125 HZ | 250 HZ | 500 HZ | 1000 HZ | 2000 HZ | 4000 HZ | FLA | MCA | | | MOCP | V/Ph/Hz |
| RTU-1 | DAIKIN | DPSH03B | ROOF | OFFICE | 567 | 567 | 100 | SWSI AF | II | 2200 | 2 IN. MERV 8 | 8.78 | 11.3 | 78 | 77 | 85 | 80 | 82 | 81 | 76 | 35.8 | 40.6 | 50 | 208/3/60 | 754 | THE ROOF CURBS SUPPLIED BY THE MANUFACTURER AND INSTALLED BY THE MECHANICAL CONTRACTOR. |
| RTU-2 | DAIKIN | DAHA11A | ROOF | HANGAR | 1652 | 1652 | 100 | SWSI AF | I | 1441 | 2 IN. MERV 8 | 93.8 | - | 83 | 84 | 80 | 81 | 76 | 73 | 67 | 23.7 | 27.1 | 40 | 208/3/60 | 866 | THE ROOF CURBS SUPPLIED BY THE MANUFACTURER AND INSTALLED BY THE MECHANICAL CONTRACTOR. |

VRF FAN COIL UNIT

| TAG | ASSOCIATED CONDENSER | MANUFACTURER | MODEL | TYPE | SERVICE | REFRIGERANT | AIRFLOW (L/S) | | | E.S.P (Pa) | TOTAL CAPACITY (KW) | SENSIBLE CAPACITY (KW) | COOLING | | | | HEATING | | | | SOUND (DBA) | | ELECTRICAL | | | | WEIGHT (kg) | NOTES |
|--------|----------------------|--------------|-------------|--------------------------|------------------|-------------|---------------|--------------|------------|------------|---------------------|------------------------|-------------------|-------------------|----------------|----------------|---------------|-------------------|----------------|------------------|-------------|------|------------|----------|-------|--|-------------|-------|
| | | | | | | | LOW SPEED | MEDIUM SPEED | HIGH SPEED | | | | SET POINT DB (°C) | SET POINT WB (°C) | S.A.T. DB (°C) | S.A.T. WB (°C) | CAPACITY (KW) | SET POINT DB (°C) | S.A.T. DB (°C) | PRESSURE (H/M/L) | POWER | MCA | MOCP | V/Ph/Hz | | | | |
| FCU-1 | ODU-1 | DAIKIN | FXSQ07TBVJU | HORIZONTAL, DUCTED | CONFERENCE RM | R-410A | 109 | 125 | 133 | 0.10 | 2.20 | 1.61 | 26.7 | 19.4 | 12.8 | 12.2 | 2.49 | 21.1 | 29.4 | 33/30/28 | 61 | 0.8 | 15 | 208/1/60 | 24.9 | | | |
| FCU-2 | ODU-1 | DAIKIN | FXSQ24TBVJU | HORIZONTAL, DUCTED | MECHANICS OFFICE | R-410A | 242 | 292 | 350 | 0.10 | 7.03 | 5.01 | 26.7 | 19.4 | 12.8 | 12.2 | 7.91 | 21.1 | 29.4 | 36/32/29 | 64 | 1.8 | 15 | 208/1/60 | 60 | | | |
| FCU-3 | ODU-1 | DAIKIN | FXSQ07TBVJU | HORIZONTAL, DUCTED | KITCHEN/LUNGE | R-410A | 109 | 125 | 133 | 0.10 | 2.20 | 1.61 | 26.7 | 19.4 | 12.8 | 12.2 | 2.49 | 21.1 | 29.4 | 33/30/28 | 61 | 0.8 | 15 | 208/1/60 | 24.9 | | | |
| FCU-4 | ODU-1 | DAIKIN | FXSQ24TBVJU | HORIZONTAL, DUCTED | GENERAL OFFICE | R-410A | 242 | 292 | 350 | 0.10 | 7.03 | 5.01 | 26.7 | 19.4 | 12.8 | 12.2 | 7.91 | 21.1 | 29.4 | 36/32/29 | 64 | 1.8 | 15 | 208/1/60 | 60 | | | |
| FCU-5 | ODU-1 | DAIKIN | FXSQ07TBVJU | HORIZONTAL, DUCTED | QUARTER MASTER | R-410A | 133 | 125 | 133 | 0.10 | 1.70 | 1.38 | 26.7 | 19.4 | 12.8 | 12.2 | 1.90 | 21.1 | 29.4 | 33/30/28 | 61 | 0.8 | 15 | 208/1/60 | 24.9 | | | |
| FCU-6 | ODU-1 | DAIKIN | FXSQ07TBVJU | HORIZONTAL, DUCTED | OFFICE 1 | R-410A | 133 | 125 | 133 | 0.10 | 1.70 | 1.38 | 26.7 | 19.4 | 12.8 | 12.2 | 1.90 | 21.1 | 29.4 | 33/30/28 | 61 | 0.8 | 15 | 208/1/60 | 24.9 | | | |
| FCU-7 | ODU-1 | DAIKIN | FXSQ07TBVJU | HORIZONTAL, DUCTED | OFFICE 2 | R-410A | 133 | 125 | 133 | 0.10 | 1.70 | 1.38 | 26.7 | 19.4 | 12.8 | 12.2 | 1.90 | 21.1 | 29.4 | 33/30/28 | 61 | 0.8 | 15 | 208/1/60 | 24.9 | | | |
| FCU-8 | ODU-1 | DAIKIN | FXSQ09TBVJU | HORIZONTAL, DUCTED | QUIET RM | R-410A | 109 | 125 | 150 | 0.10 | 2.78 | 2.05 | 26.7 | 19.4 | 12.8 | 12.2 | 3.08 | 21.1 | 29.4 | 33/30/28 | 61 | 0.8 | 15 | 208/1/60 | 24.9 | | | |
| FCU-9 | ODU-1 | DAIKIN | FXSQ12TBVJU | HORIZONTAL, DUCTED | LOCKER RM | R-410A | 117 | 134 | 158 | 0.20 | 3.52 | 2.84 | 26.7 | 19.4 | 12.8 | 12.2 | 3.96 | 21.1 | 29.4 | 34/32/30 | 62 | 0.8 | 15 | 208/1/60 | 24.9 | | | |
| FCU-10 | ODU-1 | DAIKIN | FXSQ24TBVJU | HORIZONTAL, DUCTED | FITNESS RM | R-410A | 242 | 292 | 350 | 0.10 | 7.03 | 5.01 | 26.7 | 19.4 | 12.8 | 12.2 | 7.91 | 21.1 | 29.4 | 36/32/29 | 64 | 1.8 | 15 | 208/1/60 | 60 | | | |
| FCU-11 | ODU-2 | DAIKIN | FTX24WVJU8R | WALL MOUNTED, NON-DUCTED | IT ROOM | R-410A | 0 | 0 | 155 | 0.00 | 6.21 | 4.82 | 26.7 | 19.4 | 12.8 | 12.2 | 7.03 | 21.1 | -273.2 | 5144/37 | 0 | 18.8 | 0 | 208/1/60 | 14.96 | | | |

EXHAUST FANS

| TAG | QUANTITY | MANUFACTURER | MODEL | SERVICE | AIRFLOW (L/S) | SOUND POWER | | | | | | | E.S.P (PA) | MOTOR CHARACTERISTICS | | | | | WEIGHT (KG) | NOTES |
|------|----------|--------------|-------------------|-------------------|---------------|-------------|--------|--------|--------|---------|---------|---------|------------|-----------------------|-----|------|-----|----------|-------------|-------------------------------|
| | | | | | | 63 HZ | 125 HZ | 250 HZ | 500 HZ | 1000 HZ | 2000 HZ | 4000 HZ | | FAN SPEED (RPM) | VFD | BHP | FLA | V/PH/Hz | | |
| EF-1 | 1 | PENNBARRY | Z8H - INLINE - SC | JANITOR/STORAGE 4 | 95 | 59 | 60 | 56 | 52 | 48 | 43 | 38 | 0.5 | 1218 | NO | 0.04 | 1.6 | 115/1/60 | 7 | |
| EF-2 | 1 | PENNBARRY | SQX135 | STORAGE 3 | 283 | 70 | 64/71 | 63/68 | 61/62 | 60/66 | 56/65 | 50/59 | 0.5 | 1053 | NO | 0.14 | 5.8 | 115/1/60 | 14 | Spark resistance construction |
| EF-3 | 1 | PENNBARRY | SQX100 | MECHANICAL ROOM | 182 | 73/76 | 62/73 | 67/71 | 65/66 | 64/65 | 68/64 | 53/52 | 0.5 | 1525 | YES | 0.1 | 7.2 | 115/1/60 | 20 | |
| EF-4 | 1 | PENNBARRY | SQX122 | VEHICLE BAY | 378 | 61/71 | 64/68 | 62/63 | 61/62 | 65/62 | 57/56 | 52/51 | 0.5 | 1525 | NO | 0.5 | 9.8 | 115/1/60 | 34 | |

TANKLESS ELECTRIC WATER HEATER

| TAG | MANUFACTURER | MODEL | SERVICE | OUPUT CAPACITY (KW) | FLUID | | | ELECTRICAL | | | | WEIGHT (kg) | REMARKS | |
|--------|--------------|----------|----------------|---------------------|-------|-----------------|----------------|------------|-----|------|---------|-------------|---------|--|
| | | | | | TYPE | FLOW RATE (L/S) | TEMP. RISE (C) | AMPS (A) | MCA | MOCP | V/Ph/Hz | | | |
| TLWH-1 | RHEEM | RETEX-04 | LAVATORY | 3.5 | WATER | 0.03 | 8.9 | 29 | | | | 120/1/60 | 2.0 | |
| TLWH-2 | RHEEM | RETEX-11 | KITCHEN/WASHER | 11.8 | WATER | 0.09 | 10 | 46 | | | | 240/1/60 | 3.9 | |
| TLWH-3 | RHEEM | RETEX-13 | SHOWER/JAN RM | 13.0 | WATER | 0.13 | 6.7 | 54 | | | | 240/1/60 | 3.9 | |

BOILER

| TAG | MANUFACTURER | MODEL | LOCATION | GAS | | | | FLUID | | | | ELECTRICAL | | | | WEIGHT (kg) | REMARKS | |
|-----|--------------|----------------|----------|---------------------|----------------|--------------------|--------------------|------------|-----------------|-----------|-----------|------------|-----|------|---------|-------------|---------|------------|
| | | | | OUPUT CAPACITY (KW) | BOILER EFF (%) | MIN GAS PRES. (IN) | MAX GAS PRES. (IN) | TYPE | FLOW RATE (GPM) | E.F.T (F) | L.F.T (F) | AMP | MCA | MOCP | V/Ph/Hz | | | |
| B-1 | DE DIETRICH | GT 430-8A PLUS | MECH RM | 432 | 96 | 7 | 14 | 40% GLYCOL | 130 | 120 | 95 | 9.8 | | | | 120/1/60 | 1470 | CONDENSING |
| B-2 | DE DIETRICH | GT 430-8A PLUS | MECH RM | 432 | 96 | 7 | 14 | 40% GLYCOL | 130 | 120 | 95 | 9.8 | | | | 120/1/60 | 1470 | CONDENSING |

ELECTRIC UNIT HEATER

| TAG | MANUFACTURER | MODEL | LOCATION | MOUNTING CONFIGURATION | HEATING CAPACITY (KW) | AIRFLOW (L/s) | MOTOR KW | FAN RPM | ELECTRICAL | | | WEIGHT (kg) | NOTES |
|------|--------------|-------|-----------------|------------------------|-----------------------|---------------|----------|---------|------------|------|----------|-------------|-------|
| | | | | | | | | | FLA | MOCP | V/Ph/Hz | | |
| UH-1 | SIGMA | 058H | MECH RM | WALL MOUNT | 10.76 | 94 | 0.093 | 1550 | 1.8 | 15 | 120/1/60 | 21.8 | |
| UH-2 | SIGMA | 047H | VEHICLE BAY | WALL MOUNT | 7.62 | 190 | 0.093 | 1550 | 1.8 | 15 | 120/1/60 | 18.1 | |
| UH-3 | SIGMA | 047H | VEHICLE BAY | WALL MOUNT | 7.62 | 190 | 0.093 | 1550 | 1.8 | 15 | 120/1/60 | 18.1 | |
| UH-4 | SIGMA | 047H | PAINT ROOM | WALL MOUNT | 7.62 | 190 | 0.093 | 1550 | 1.8 | 15 | 120/1/60 | 18.1 | |
| UH-5 | SIGMA | 047H | MAINTENANCE STG | WALL MOUNT | 7.62 | 190 | 0.093 | 1550 | 1.8 | 15 | 120/1/60 | 18.1 | |
| UH-6 | REZVOR | EHC | VESTIBULE | WALL MOUNTED | 3.00 | 75 | | | | | | | |

SNOW MELTING SYSTEM

| TAG | AREA (M2) | HEATING LOAD (KW) | FLOW (L/S) | HEAD LOSS (M) | FLUID TYPE | DELTA T | LOOP TYPE | SPACING |
|------|-----------|-------------------|------------|---------------|------------------|---------|---------------------|------------------|
| SM-1 | 1,582 | 998 | 21 | 34 | 40% PROP. GLYCOL | 13.9C | 25.4MM UPONER HEPEX | 229MM CTRS TUBES |

IN FLOOR HEATING

| TAG | AREA (M2) | TOTAL LOAD (KW) | FLOW (L/S) | HEAD LOSS (M) | FLUID TYPE | DELTA T | LOOP TYPE/SIZE | SPACING |
|------|-----------|-----------------|------------|---------------|------------|---------|--------------------|------------------|
| IF-1 | 405 | 45 | 2 | 4 | 100% WATER | 11 C | 12.7MM UPONO HEPEX | 305MM CTRS TUBES |