

File Name: P:\Projects\2012\12-2326-001\DocControl\ToBeIssued\DWG\12-2326-001_MPR-003-Rev 0.dwg - Tab: M03 Plotted By: DDeroche 13/03/19 [Tue 1:31pm]

MECHANICAL SPECIFICATIONS:

1.0 GENERAL:

1.1 SCOPE OF WORK:

1. REMOVAL AND DISPOSAL OF EXISTING SUPPLY AND RETURN GRILLES AND ASSOCIATED DUCTWORK AS SHOWN.
2. REMOVAL AND DISPOSAL OF EXISTING PLUMBING FIXTURES AND ASSOCIATED WATER AND DRAINAGE PIPING AS SHOWN.
3. SUPPLY AND INSTALL NEW SUPPLY AND RETURN GRILLES AND ASSOCIATED DUCTWORK AS SHOWN.
4. SUPPLY AND INSTALL NEW PLUMBING FIXTURES AND ASSOCIATED WATER AND DRAINAGE PIPING AS SHOWN.
5. COMMISSION ALL NEW EQUIPMENT.

1.2 DESCRIPTION WORK:

THE CONTRACTOR SHALL INCLUDE THE FURNISHING OF ALL LABOR, NEW MATERIALS, EQUIPMENT AND INSTALLATION OF EQUIPMENT AND SERVICES NECESSARY FOR AND INCIDENTAL TO THE COMPLETE INSTALLATION OF THE WORK SHOWN AND DESCRIBED ON THIS DRAWINGS AND TO THE SATISFACTION OF CONTRACT ADMINISTRATOR.

CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS FOR REQUIRED WORK AND PAY ALL FEES. OBTAIN DOL APPROVAL FOR NEW INSTALLATION.

WORK SHALL BE PERFORMED IN ACCORDANCE TO ALL APPLICABLE LOCAL CODES, STANDARDS AND REGULATIONS. CONTRACTOR TO COORDINATE ACCESS TO THE SITE WITH CONTRACT ADMINISTRATOR AND FOLLOW THEIR INSTRUCTIONS.

1.3 SUBMITTALS:

- SUBMIT SHOP DRAWINGS FOR APPROVAL FOR EQUIPMENT SPECIFIED.
- SUBMIT THREE (3) SETS OF O & M MANUALS.
- PROVIDE O & M TRAINING TO THE CONTRACT ADMINISTRATOR.
- AS-BUILTS OF INSTALLED SYSTEM. SUBMIT AS-BUILTS TO CONTRACT ADMINISTRATOR.

1.4 WORKMANSHIP:

WORKMANSHIP SHALL BE OF BEST QUALITY, EXECUTED BY WORKERS EXPERIENCED AND SKILLED IN RESPECTIVE DUTIES FOR WHICH THEY ARE EMPLOYED.

1.5 EXECUTION:

INSTALLATION OF EQUIPMENT:

TO NATIONAL BUILDING CODE, AND ALL LOCAL CODES, STANDARDS AND REGULATIONS. CONFORM TO DEPARTMENT OF LABOR REQUIREMENTS.

INSTALL ALL EQUIPMENT SPECIFIED OR INDICATED ON DRAWINGS IN A MANNER THAT WILL ENSURE ITS SATISFACTORY OPERATION UPON COMPLETION AND ACCORDING TO MANUFACTURER'S INSTRUCTIONS.

THE SAFE DELIVERY TO THE SITE OF ALL MATERIALS SHALL BE ENTIRELY THE CONTRACTOR'S RESPONSIBILITY. MATERIALS AND EQUIPMENT SHALL BE HANDLED AT ALL TIMES WITH CARE TO AVOID DAMAGE.

FOLLOW APPROVED MANUFACTURER'S RECOMMENDATIONS FOR SAFETY, EASY ACCESS FOR INSPECTION, AND MANUFACTURER'S REPAIRS.

PERMIT EQUIPMENT MAINTENANCE AND DISASSEMBLY WITH MINIMUM DISTURBANCE TO ADJACENT EQUIPMENT AND WITHOUT INTERFERENCE WITH BUILDING STRUCTURE OR OTHER EQUIPMENT.

BEFORE COMMENCING THE INSTALLATION, THE CONTRACTOR SHALL CONFIRM RECEIPT OF AN APPROVED COPY OF THE MANUFACTURER'S DRAWINGS AND INSTALLATION MANUAL FOR THE INSTALLATION THEREOF.

DISCREPANCIES OR IRREGULARITIES IN THE WORK OR DEFECTS OR DAMAGES TO THE EQUIPMENT, ATTRIBUTABLE TO FAULTY OR INCORRECT INSTALLATION, SHALL BE RECTIFIED BY THE CONTRACTOR AT HIS OWN EXPENSE.

MAINTAIN ADEQUATE ACCESS TO PROJECT SITE. COORDINATE WORK TO MINIMIZE INTERFERENCE OR DISRUPTION TO THE CITY'S OPERATION.

MAINTAIN WORK IN TIDY CONDITION, FREE FROM ACCUMULATION OF WASTE PRODUCTS AND DEBRIS.

PROTECT EQUIPMENT AND DUCTWORK FROM ACCUMULATION OF DUST ETC. SEAL ALL DUCT OPENINGS DURING DUST PRODUCING ACTIVITIES.

INSPECTION AND TESTING:

THE WORK SHALL BE AT ALL TIMES AVAILABLE FOR INSPECTION BY THE CONTRACT ADMINISTRATOR. ALL WORK SHALL BE ACCORDANCE WITH AND SHALL BE INSPECTED TO MEET THE REQUIREMENTS OF THIS SPECIFICATION.

ALL STARTUP AND TESTING SHALL BE PERFORMED IN THE PRESENCE OF CONTRACT ADMINISTRATOR. NOTICE OF THE DATE OF WHEN TESTS SHALL BE PERFORMED MUST BE RECEIVED BY CONTRACT ADMINISTRATOR.

WORK SHALL BE NOT INSULATED OR CONCEALED PRIOR TO BEING TESTED OR APPROVED.

OPERATE SYSTEM FOR A SUFFICIENT PERIOD OF TIME TO INSURE COMPLETE ACCEPTANCE; DEFECTS SHALL BE REMEDIED AT CONTRACTOR'S EXPENSE.

2.0 HVAC PRODUCTS

2.1 DUCTWORK:

CONFORM TO SMACNA STANDARDS FOR SUPPLY AND INSTALLATION OF DUCTWORK. PERFORM WORK IN ACCORDANCE WITH ALL APPLICABLE CODES AND STANDARDS. DUCTWORK SHALL BE RATED FOR 2" W.C. (500 PA).

SEAL ALL DUCTWORK JOINTS USING "DURO-DYNE" DUCT SEALER. SEAL ALL JOINTS IN DUCT INSULATION VAPOR BARRIER USING TAPE AND DUCT SEALER.

2.2 GRILLES:

GRILLES AS PER GRILLE SCHEDULE ON DRAWING MPR-M02.

2.0 HVAC PRODUCTS CONT'D:

2.3 AIR BALANCING:

GENERAL:

FOLLOW START-UP PROCEDURES AS RECOMMENDED BY CONTRACT ADMINISTRATOR, UNLESS OTHERWISE SPECIFIED. CONTRACTOR TO PROVIDE ABILITY FOR CONTRACT ADMINISTRATOR TO ADJUST OCCUPANCY SCHEDULE, SINCE HOURS OF WORK VARY FROM DAY-TO-DAY. INSTALL SHEAVES IF REQUIRED TO ACHIEVE FINAL AIR BALANCE.

BALANCE FOLLOWING SYSTEM: ALL NEW SUPPLY AND RETURN AIR GRILLES.

QUALIFICATIONS: PERSONNEL PERFORMING AIR BALANCING TO BE CURRENT MEMBER IN GOOD STANDING OF AABC.

QUALITY ASSURANCE: PERFORM AIR BALANCE UNDER DIRECTION OF SUPERVISOR QUALIFIED BY AABC.

REFERENCE STANDARDS: DO TAB OF COMPLETE MECHANICAL SYSTEMS OVER ENTIRE OPERATING RANGE IN ACCORDANCE WITH MOST STRINGENT CONDITIONS OF SELECT STANDARD:

- AABC (ASSOCIATED AIR BALANCE COUNCIL)
- SMACNA (SHEET METAL & AIR CONDITIONING CONTRACTORS NATIONAL ASSOCIATION)

ACCURACY: DO TAB TO WITHIN +/-5% OF DESIGN VALUES.

INSTRUMENT CALIBRATION: TO BE IN ACCORDANCE WITH TAB REF. STANDARD, BUT WITHIN 3 MONTHS OF COMMENCEMENT.

REPORT: FORMAT TO BE IN ACCORDANCE WITH TAB SCHEMATICS SHOWN AND RESULTS OF TAB.

SUBMIT ONE COPY OF DRAFT TAB REPORT FOR VERIFICATION AND APPROVAL OF CONTRACT ADMINISTRATOR. SUBMIT THREE FINAL COPIES WITH REVIEW COMMENTS INCORPORATED.

AIR MOVING SYSTEMS:

GENERAL:

MEASUREMENTS AS REQUIRED BY REFERENCED STANDARDS, INCLUDING BUT NOT LIMITED TO THE FOLLOWING MEASUREMENTS:

- STATIC PRESSURE
- BHP
- AMPERAGE

3.0 PLUMBING PRODUCTS:

3.1 PIPING:

DOMESTIC WATER - COPPER TYPE "K"
DRAINAGE - DRAINAGE PIPING SHALL BE PVC-DWV.

3.2 PIPING INSULATION:

PRE-FORMED MINERAL FIBER PIPE INSULATION WITH CANVAS JACKET. THICKNESS: UP TO 50mm(2")
NPS IS 25mm(1") THICK, 63mm(2 1/2") TO 100mm(4") NPS IS 38mm(1 1/2") THICK.

3.3 BALL VALVES:

NPS 2" AND UNDER, SOLDERED - 600 LB. BRONZE BODY, CHROME PLATED BRASS BALL, TEFLON SEAT, STEEL LEVER HANDLE WITH SOLDERED CONNECTIONS.

ACCEPTABLE PRODUCT: "TOYO" FIG. 5049A, GRINNEL, CRANE.

NPS 2" AND UNDER, SCREWED - 600 LB. BRONZE BODY, CHROME PLATED BRASS BALL, TEFLON SEAT, AND STEEL LEVER HANDLE.

ACCEPTABLE PRODUCT: "TOYO" FIG. 5044A, GRINNEL, CRANE.

3.4 P-1 SINGLE SINK:

REFER TO INTERIOR DESIGN SPECIFICATIONS.



B.M. ELEV.			
0	ISSUED FOR TENDER	13/03/11	
NO.	REVISIONS	DATE	BY

KGS GROUP CONSULTING ENGINEERS	
DESIGNED BY: TJC	CHECKED BY: PSS
DRAWN BY: TJC	APPROVED BY: <i>[Signature]</i>
HOR. SCALE: AS SHOWN	RELEASED FOR CONSTRUCTION: _____
VERTICAL: .	DATE: _____

ENGINEER'S SEAL

CONSULTANT DRAWING NO.
MPR-M03

THE CITY OF WINNIPEG
PLANNING, PROPERTY AND DEVELOPMENT DEPARTMENT

PROJECT TITLE
MULTI-PURPOSE ROOM, CORRIDORS AND RECEPTION COUNTER UPGRADES FOR FORT ROUGE LEISURE CENTRE
BID OPPORTUNITY NO. 939-2012

SHEET OF
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COMPUTER FILE NAME
12-2326-001_MPR-M03

CITY DRAWING NUMBER

MECHANICAL SPECIFICATIONS