

**SPECIFICATIONS:**

1. MECHANICAL CONTRACTOR IS RESPONSIBLE FOR PROVIDING A COMPLETE WORKING INSTALLATION AS SHOWN ON THE DRAWINGS AND THE SPECIFICATIONS.
2. THE LOCATION, ROUTING AND ELEVATION OF ALL NEW AND EXISTING SERVICES AND UTILITIES AS SHOWN ON THE DRAWINGS ARE TO BE CONSIDERED AS APPROXIMATIONS ONLY. VERIFY EXACT LOCATIONS, ROUTINGS, AND ELEVATIONS OF ALL SERVICES PRIOR TO COMMENCING WORK AND ASSUME RESPONSIBILITY FOR LAYING OUT ALL WORK. THE CONTRACTOR SHALL RETAIN RESPONSIBILITY FOR ANY DAMAGE TO EXISTING SERVICES AND UTILITIES.
3. ALL CUTTING, PATCHING AND RELATED CONSTRUCTION WORK IS TO BE PERFORMED BY GENERAL CONTRACTOR UPON INSTRUCTION FROM MECHANICAL CONTRACTOR.
4. ALL PLUMBING WORK TO BE PERFORMED IN ACCORDANCE WITH THE LATEST EDITION OF THE NATIONAL PLUMBING CODE, MANITOBA ENERGY CODE FOR BUILDINGS.
5. PERMITS: CONTRACTOR IS RESPONSIBLE FOR GIVING ALL NECESSARY NOTICES, OBTAINING ALL NECESSARY PERMITS AND PAYING ALL APPLICABLE FEES.
6. A MINIMUM OF SIX (6) COPIES OF MANUFACTURER'S SHOP DRAWINGS SHALL BE SUBMITTED FOR APPROVAL ON ALL EQUIPMENT.
7. FURNISH TO CONTRACT ADMINISTRATOR THREE (3) HARD COVER LOOSE LEAF BINDERS CONTAINING A COMPLETE SET OF MANUFACTURER'S OPERATING AND MAINTENANCE MANUALS C/W SPARE PARTS LIST, ADDRESSES, DETAILED AS BUILT DRAWINGS.
8. INSTALL EQUIPMENT AND PIPING WITH ADEQUATE CLEARANCES FOR HEADROOM, PASSAGE, OPERATION, SERVICE AND APPEARANCE.
9. COORDINATE PLUMBING WITH DUCT RUNS, HYDRONIC PIPING, AND ALL OTHER TRADES.
10. ALL WIRING AND SUPPLY AND INSTALLATION OF DISCONNECT SWITCHES FOR EQUIPMENT SPECIFIED HEREIN SHALL BE PERFORMED BY THE ELECTRICAL CONTRACTOR, UNLESS OTHERWISE NOTED.
11. PROVIDE DIELECTRIC COUPLINGS WHEREVER PIPES OF DISSIMILAR METALS ARE JOINED.
12. ALL PENETRATION THROUGH FIRE WALLS TO HAVE FIRE RATED DONUTS.
13. SHUTOFF VALVES AND PARTITION STOPS TO BE INSTALLED ON ALL LINES SERVING FIXTURES AND EQUIPMENT.
  - 13.1. ALL VALVES TO BE 1/4 TURN BALL VALVE FULL PORT

- 13.2. STANDARD OF ACCEPTANCE TOYO (RED & WHITE)
- 13.3. ALL FIXTURES TO HAVE TO HAVE COMMERCIAL SHUT OFF VALVE
14. MAKE PROVISION TO SUPPLY AND INSTALL P-TRAPS ON ALL SINKS AND LAVS WHETHER SHOWN OR NOT.
15. ALL PIPING IN FIRE WALLS TO BE COPPER.
16. ALL SOIL STACKS PENETRATING SLAB TO BE EQUIPPED WITH A FISSION JOINT.
17. BURIED PIPE TO BE LAID IN TRENCH FREE OF BOULDERS OR HARD CLAY BOULDERS. LAY 6 INCHES OF CLEAN SAND ON BOTTOM OF TRENCH, LEVEL AND COMPACT, PLACE DRAIN PIPE ON COMPACTED MEDIA, COVER PIPE WITH 6 INCHES OF CLEAN SAND, BACKFILL WITH LOCAL MEDIA--NO BOULDERS.

**PIPE:**

1. ALL WATER PIPING ABOVEGROUND INSIDE BUILDING SHALL BE NEW TYPE "L" COPPER WITH LEAD FREE SOLDERED FITTINGS. AQUA-RISE PLEX AND WATTS PIPING MATERIAL ACCEPTABLE WHEREVER APPROVED BY CODE.
2. SOIL AND VENT PIPING ABOVEGROUND INSIDE BUILDING SHALL BE: DWV COPPER WITH SOLDERED FITTINGS, CAST IRON WITH MJ FITTINGS, ABS, DWV DRAIN PIPING AND FITTINGS WITH SOLVENT CEMENT.
3. SOIL AND VENT PIPING BELOWGROUND INSIDE BUILDING SHALL BE CAST IRON CLASS 4000 WITH MJ FITTINGS, ABS OR PVC PLASTIC WITH SOLVENT CEMENT. PLASTIC PIPE ONLY WHERE ALLOWED BY PLUMBING CODE.
4. DRAINAGE PIPING BELOWGROUND OUTSIDE BUILDING SHALL BE CONCRETE PIPING, TRANSITE PIPE,, OR EXTRA STRENGTH PLASTIC PIPING.
5. DRAINS AND VENT PIPING BELOWGROUND OUTSIDE BUILDING SHALL BE CASTIRON CLASS 4000 WITH MJ FITTINGS, OR SDR-35 PVC PLASTIC WITH SOLVENT CEMENT FITTINGS
6. ALL VALVES TO BE BY ONE MANUFACTURER. STANDARD OF ACCEPTANCE: TOYO (RED & WHITE).
7. CONTRACTOR TO CONFIRM IF EXISTING BUILDING IS ON A STRUCTURAL SLAB. IF YES, CONTRACTOR TO CONTACT FOR PIPING SUPPORT DETAILS.

**INSULATION:**

1. DOMESTIC WATER 1 INCH DIAMETER FIBERGLASS INSULATION WITH ALL SERVICE JACKET, STAPLED @ 6 INCH O.C. PLACE 2 INCH

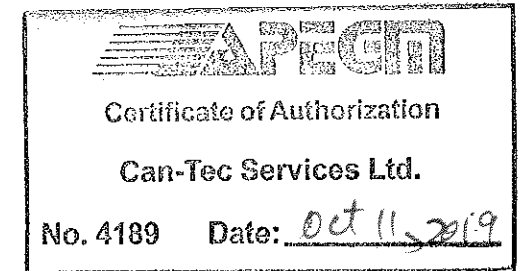
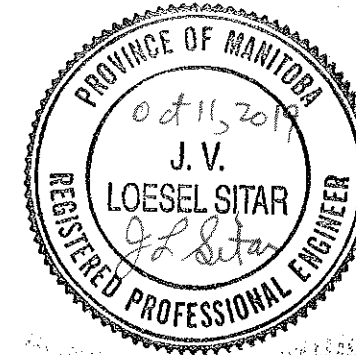
1. WIDE ASJ TAPE OVER STAPLED JOINTS (ALL DOMESTIC WATER PIPING IS TO BE INSULATED AS PER MECB).
2. VENT PIPING--FROM ROOF PENETRATION TO 10' - 0" BACK, INSULATE AS PER DOMESTIC WATER (INSULATE ALL VENT PIPING LOCATED IN COLD ATTIC AREAS).
3. ALL PLUMBING PIPING IS TO BE INSULATED AS PER MECB.

**PRESSURE TEST**

1. PRESSURE TEST DOMESTIC WATER PIPING (ENGINEER ON SITE TO VERIFY). PRESSURE TEST BURIED SANITARY PIPING PRIOR TO BACKFILL. BURIED PIPING TO BE INSPECTED BY AUTHORITY HAVING JURISDICTION PRIOR TO BACKFILLING.

**SCOPE OF WORK**

WORK TO BE PERFORMED IN TWO PHASES. AT COMPLETION OF PHASE 1, BOTH WASHROOMS TO BE OPERATIONAL. DESIGN PHASE 1 PLUMBING (ESPECIALLY SANITARY) IN A MANNER THAT WILL ALLOW EASY CONNECTION BY PHASE 2 PLUMBING.



PROJECT TITLE:  
KILDONAN PARK GOLF COURSE  
SHEET TITLE:  
PLUMBING SPECIFICATION  
PROJECT NUMBER:  
19-043-14-30

REV. #	REVISION	DATE (YY MM DD)	REV. BY
02	WORK DIVIDED INTO PHASE 1 & 2	19 10 10	JLS
01	REVISED SPEC	19 09 20	JLS
00	ISSUED FOR CONSTRUCTION	19 09 09	JLS

**TENDER 1123-2019**

REV. #	REVISION	DATE (YY MM DD)	REV. BY
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SCALE:  
AS NOTED  
DATE (YY MM DD):  
19 09 09

DRAWING NUMBER:

**M1.2**

REVISION NUMBER:  
00