



**MAIN FLOOR PLAN**  
SCALE: 1:100

**GENERAL NOTES:**

- BIDDERS MUST EXAMINE THE SITE & EXISTING CONDITIONS AFFECTING THE PROJECT. EXAMINE THE COMPLETE SET OF CONTRACT DOCUMENTS TO ENSURE THAT THE WORK CAN BE CARRIED OUT WITHOUT SIGNIFICANT CHANGES TO THE INTENT OF THE DOCUMENTS. NO FUTURE ALLOWANCE WILL BE MADE FOR CHANGES UNLESS THE ENGINEER HAS BEEN NOTIFIED IN WRITING OF ANY DISCREPANCIES OR INTERFERENCES, PRIOR TO THE CLOSE OF TENDERS. NO ALLOWANCE WILL BE MADE FOR ITEMS THAT SHOULD HAVE BEEN NOTED DURING A PRE-TENDER SITE INSPECTION.
- THE LOCATION, ROUTING & ELEVATION OF ALL NEW AND EXISTING SERVICES & UTILITIES AS SHOWN ON THE DRAWINGS ARE TO BE CONSIDERED AS APPROXIMATIONS ONLY. VERIFY EXACT LOCATIONS, ROUTINGS & ELEVATIONS OF ALL SERVICES PRIOR TO COMMENCING WORK, & ASSUME RESPONSIBILITY FOR LAYING OUT ALL WORK. THE CONTRACTOR SHALL RETAIN RESPONSIBILITY FOR ANY DAMAGE TO EXISTING SERVICES & UTILITIES.
- MECHANICAL CONTRACTOR SHALL VERIFY EXACT LOCATIONS, CONNECTIONS, SIZES, INVERTS, ETC. PRIOR TO TENDER CLOSE AND COMMENCEMENT OF WORK.
- FOR SANITARY PIPE 100MMØ (4") AND UP, THE PIPE IS TO SLOPE 1% UNLESS OTHERWISE NOTED. FOR SANITARY PIPE LESS THAN 100MMØ (4") THE PIPE SHALL SLOPE @ 2%. IF LOW FLOW TOILETS (LESS THAN 6L/FLUSH) ARE INSTALLED WITHIN THIS FACILITY, ALL PIPING CARRYING SANITARY WASTE FROM A TOILET TO THE BUILDING CLEAN OUT & DISCHARGE LOCATION SHALL SLOPE AT A MINIMUM 2%.
- MECHANICAL CONTRACTOR TO ENSURE THAT CLEANOUTS ARE ACCESSIBLE.
- MECHANICAL CONTRACTOR SHALL REFER TO ARCHITECTURAL, STRUCTURAL, ELECTRICAL DRAWINGS, EQUIPMENT SUPPLIER SHOP DRAWINGS, ETC. FOR EXACT LOCATIONS OF ALL FIXTURES, EQUIPMENT, ETC.
- ALL PLUMBING INSTALLATIONS, ETC. SHALL BE PERFORMED IN ACCORDANCE WITH ALL CODES, REGULATIONS & AUTHORITIES HAVING JURISDICTION.
- ALL VENT PIPING TO BE INSTALLED AS PER CODE.
- SHUTOFF VALVES & PARTITION STOPS TO BE INSTALLED ON ALL LINES SERVING FIXTURES & EQUIPMENT.
- MECHANICAL CONTRACTOR TO PROVIDE "ROUGH-IN" FOR OWNER SUPPLIED EQUIPMENT. FINAL CONNECTION TO BE BY OWNER, UNLESS NOTED OTHERWISE.
- THE DRAWINGS INDICATE APPROXIMATE LOCATION OF SOME EXISTING MECHANICAL SERVICES ALLOWED FOR ALL NECESSARY RELOCATION OF SERVICES TO ACCOMMODATE THE NEW WORK.
- COORDINATE PLUMBING WITH DUCT RUNS, HYDRONIC PIPING, & ALL OTHER TRADES.
- PROVIDE ISOLATION VALVES AT BASE OF EACH RISER & AT EACH FIXTURE.
- DOMESTIC WATER RUN OUTS SHALL BE 13mm (1/2") UNLESS NOTED OTHERWISE.
- THE MECHANICAL CONTRACTOR SHALL SUPPLY AND INSTALL ALL REQUIRED TRAP PRIMERS, AS PER CODE.

**DRAWING NOTES:**

- NATURAL GAS LINE DOWN TO CRAWLSPACE.
- DCW UP FROM CRAWLSPACE. REFER TO CRAWLSPACE PLAN & CIVIL FOR CONTINUATION. DCW TO RISE UP TO HIGH LEVEL TIGHT TO EXTERIOR WALL.
- PROVIDE NG CONNECTION FOR BOILER.
- NATURAL GAS LINE UP FROM CRAWLSPACE TO SERVE BOILERS B-1 & B-2.
- WEeping TILE SUMP PUMP DISCHARGE FROM CRAWLSPACE TO DISCHARGE ONTO SPLASH PAD @ GRADE SUPPLIED BY OTHERS.
- NATURAL GAS SERVICE FROM STREET UP TO BUILDING GAS METER.
- NATURAL GAS METER BY GAS UTILITY. COORDINATE FINAL LOCATION ON SITE WITH GAS UTILITY ALL OTHER DISCIPLINES; PAY ALL REQUIRED FEES. ENSURE REGULATOR IS INSTALLED AWAY FROM ALL BUILDING OPENINGS AS PER THE MB GAS NOTICES, GAS CODE, & UTILITY INSTALLATION REQUIREMENTS.
- PROVIDE 25Ø DCW TO SERVE W/C. TYPICAL. PROVIDE WATER HAMMER ARRESTOR FOR EACH W/C FIXTURE GROUP.
- PROVIDE 13Ø DCW & DHW TO SERVE LAVATORY. TYPICAL.
- PROVIDE 13Ø DCW & DHW TO SERVE MOP SINK.
- PROVIDE 13Ø DCW & DHW TO SERVE STAFF ROOM HAND SINK.
- PROVIDE 13Ø DCW & DHW TO SERVE SHOWER SH-1.
- PROVIDE DOUBLE SLOPED (1%) S/S DRAIN PAN EXTENDING TO SERVE CC-TF-2 C/W DRAIN OPENING AT CENTER LOW POINT. PROVIDE 38Ø CONDENSATE DRAIN LINE FROM DRAIN PAN DOWN TO INDIRECTLY DRAIN TO FUNNEL FLOOR DRAIN IN MECHANICAL ROOM, C/W AIR GAP AS PER CODE. PROVIDE C/W POSITIVE PRESSURE WATERLESS TRAP EQUAL TO DES-CHAMPS TECHNOLOGIES P-SERIES TRAP.
- EXTEND 20Ø DCW TO EXTERIOR NON-FREEZE WALL HYDRANT WH-1.
- 50Ø CONDENSATE DRAIN LINE DOWN IN WALL TO CRAWLSPACE.
- DRAIN PAN FOR FAN COIL (FC) TO DRAIN APPROXIMATELY AS SHOWN.
- PROVIDE DOUBLE SLOPED (1%) S/S DRAIN PAN EXTENDING TO SERVE RHP-2 C/W DRAIN OPENING AT CENTER LOW POINT. PROVIDE 38Ø CONDENSATE DRAIN LINE FROM DRAIN PAN DOWN TO INDIRECTLY DRAIN TO FUNNEL FLOOR DRAIN IN MECHANICAL ROOM, C/W AIR GAP AS PER CODE. PROVIDE C/W NEGATIVE PRESSURE WATERLESS TRAP EQUAL TO DES-CHAMPS TECHNOLOGIES N-SERIES TRAP.
- PROVIDE 38Ø CONDENSATE DRAIN LINE FROM DOUBLE SLOPED (1%) S/S DRAIN PAN INSIDE F/A SUPPLY DUCT DOWNSTREAM OF HUMIDIFIER DISPERSION TUBE. PROVIDE DRAIN OPENING AT CENTER LOW POINT. PROVIDE C/W POSITIVE PRESSURE WATERLESS TRAP EQUAL TO DES-CHAMPS TECHNOLOGIES P-SERIES TRAP. INDIRECTLY DRAIN TO FUNNEL FLOOR DRAIN C/W AIR GAP AS PER CODE.
- 13Ø DHWR LINE TO DROP DOWN TO LOW LEVEL & RETURN FROM DHW LINE.
- PV FROM CRAWLSPACE BELOW TO RISE UP TO HIGH LEVEL TIGHT TO EXTERIOR WALL/COLUMN AS REQUIRED. COORDINATE FINAL LOCATION ON SITE W/ ALL OTHER DISCIPLINES.
- PROVIDE NG CONNECTION FOR INDOOR/OUTDOOR FIREPLACE (SUPPLIED BY OTHERS).
- NATURAL GAS LINE UP FROM CRAWLSPACE TO SERVE FIREPLACE.

<p>TOWER PROJECT NO.: 181335 <b>TOWER ENGINEERING GROUP</b> UNIT 1-1140 WAVERLEY ST. WINNIPEG, MB R3T 0P4 TEL: (204) 925-1150 FAX: (204) 925-1155 EMAIL: towereng@towereng.ca WEB: www.towereng.ca • WINNIPEG • CALGARY</p>	<p>1 July 08, 2019 Issued For Construction JAC</p> <table border="1"> <thead> <tr> <th>No.</th> <th>Date</th> <th>Issue / Revision</th> <th>By</th> </tr> </thead> <tbody> <tr> <td> </td> <td> </td> <td> </td> <td> </td> </tr> </tbody> </table> <p>Drawn By: JChimko Printing Date: July 16, 2019</p>	No.	Date	Issue / Revision	By					<p><b>APEGM</b> Certificate of Authorization Tower Engineering Group No. 4156 Expiry: April 30, 2020</p>	<p>PROFESSEUR DE MANÈGE CHIMKO Member 23356 INGÉNIEUR PROFESSIONNEL (MEE)</p>	<p><b>Bill and Helen Norrie Library</b> Project No.: 2017-082 Tender No.: 542-2019 Address: 15 Poseidon Bay, Winnipeg, MB.</p>
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<p>500-136 Market Ave Winnipeg, Manitoba Canada R3B 0P4 t. (204) 942.0681 f. (204) 943.8676 www.lm-architects.com</p>	<p>Drawings and specifications, as instruments of service are the property of the architects, the copyright in the same being reserved to them. No reproduction may be made without the permission of the architects, and when made, must bear their names. All prints to be returned.</p> <p>The contractor is to verify dimensions and data noted herein with conditions on the site and is held responsible for reporting any discrepancy to the architects for adjustment.</p>	<p><b>MECHANICAL MAIN FLOOR- PLUMBING LAYOUT</b></p> <p>Comm. No.: 1847 Sheet: <b>M1.1</b></p>										