

PLUMBING LEGEND

—	DOMESTIC COLD WATER
—	DOMESTIC HOT WATER
—	NATURAL GAS
—	SANITARY ABOVE GRADE
—	SANITARY BELOW GRADE
—	STORM ABOVE GRADE
—	STORM BELOW GRADE
+	PIPE CONNECTION
G	PIPE ELBOW DROP
O	PIPE ELBOW RISE
⊘	ISOLATION VALVE
⊘	BACK FLOW PREVENTER
⊘	PRESSURE REDUCING VALVE
⊘	FLOOR DRAIN
⊘	ROOF DRAIN
⊘	NON-FREEZE WALL HYDRANT
⊘	WATER METER
⊘	GAS METER
⊘	CLEANOUT
⊘	UNION
⊘	BREAK
⊘	ROOF DRAIN TAG
⊘	DRAWING NOTE
⊘	EQUIPMENT TAG

1	2017.02.21	ISSUED FOR CONSTRUCTION
No.	DATE	REVISION / ISSUANCE
Self		

PROVINCE OF MANITOBA
RES. GLOCKNER
 Member
 22951
 REGISTERED PROFESSIONAL ENGINEER

ENGINEERS
 GEOSCIENTISTS
 MANITOBA
 Certificate of Authorization
CGM Engineering Ltd.
 No. 6241

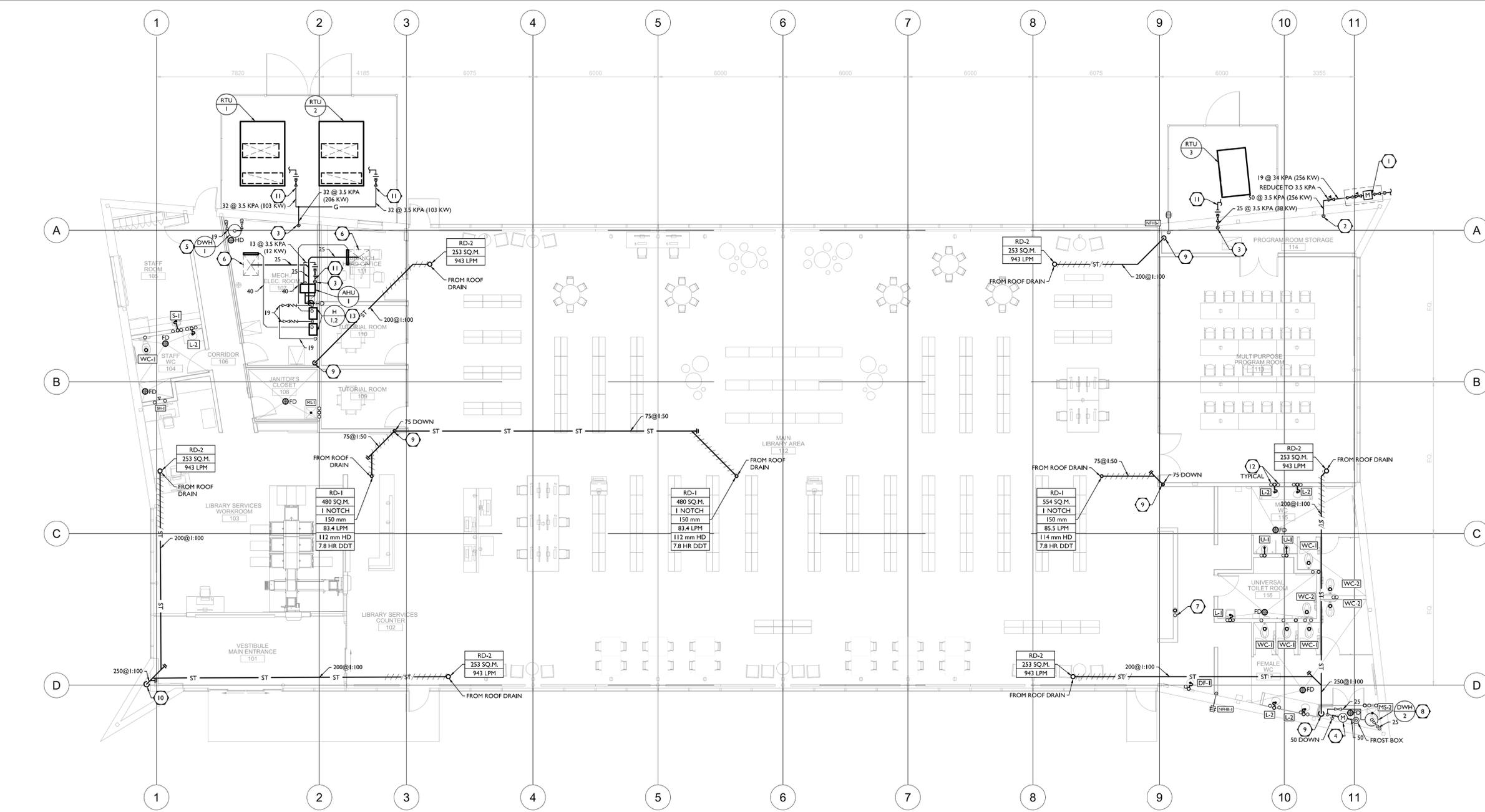
Consultant:
CGM 2-472 STRADBROOK AVENUE
 WINNIPEG, MB R3L 0J9
 (204) 272-3255
 ENGINEERING LTD. 10 B : 1 6 1 1 2

Cibinel
 Architecture Ltd
 560 ACADEMY ROAD, WINNIPEG, MB R3N 0E3
 T. 204 989 8910 F. 204 989 8920

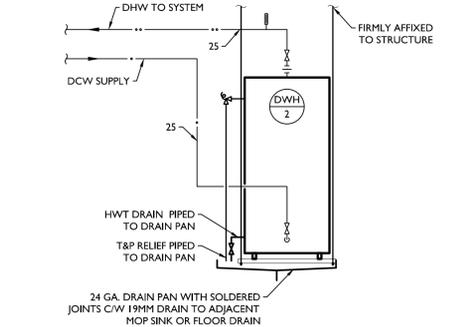
Project:
TRANSCONA LIBRARY
 1500 PLESSIS ROAD, WINNIPEG, MANITOBA

Sheet Title:
**MECHANICAL
 MAIN FLOOR PLUMBING**

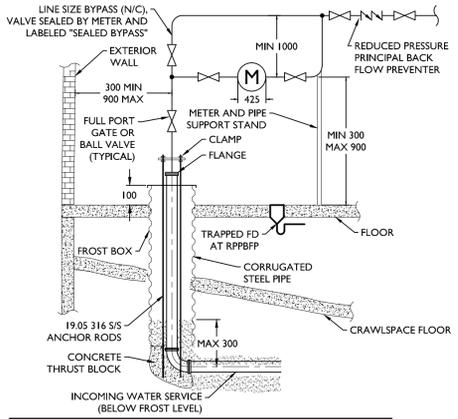
Project No. 1487
 Sheet **M-101**



1 MAIN FLOOR PLAN - PLUMBING
 SCALE: 1/8"=1'-0"



2 DOMESTIC WATER HEATER PIPING DIAGRAM
 SCALE: N.T.S.



CORRUGATED STEEL PIPE SCHEDULE

WATER PIPE SIZE	FROST BOX DIAMETER	STEEL PIPE (BOX) GAUGE
1/2 - 3/4	300	14
1 - 1 1/2	450	14
2 - 3	600	12

3 INCOMING WATER SERVICE (50)
 SCALE: N.T.S.

DRAWING NOTES - PLUMBING

- PROPOSED LOCATION OF NATURAL GAS METER ASSEMBLY AND PRV BY LOCAL UTILITY. COORDINATE FINAL LOCATION WITH UTILITY. AND NOTIFY THE CONTRACT ADMINISTRATOR IF LOCATION IS REVISED. COORDINATE ESTIMATED LOAD OF APPROXIMATELY 256 KW AT 34 KPA WITH UTILITY.
- DROP NATURAL GAS PIPE INTO CRAWLSPACE C/W APPROVED THROUGH-PENETRATION FIRE STOP SYSTEM AT FLOOR. REFER TO CRAWLSPACE PLAN FOR CONTINUATION.
- NATURAL GAS PIPE UP FROM CRAWLSPACE C/W APPROVED THROUGH-PENETRATION FIRE STOP SYSTEM AT FLOOR. REFER TO CRAWLSPACE PLAN FOR CONTINUATION.
- APPROXIMATE LOCATION OF INCOMING WATER SERVICE. EXTENDED UP THROUGH CRAWLSPACE. COMPLETE WITH WATER METER, BACK FLOW PREVENTER, AND ISOLATION VALVES TO CITY OF WINNIPEG STANDARD DETAIL SD-027 REQUIREMENTS. REFER TO INCOMING WATER SERVICE DETAIL. REFER TO CRAWLSPACE PLAN FOR CONTINUATION.
- NEW ELECTRIC WATER HEATER C/W EXPANSION TANK INSTALLED ON GRADE BENEATH EXHAUST DUCT. EXTEND T&P RELIEF TO HUB DRAIN. PROVIDE ISOLATION VALVES ON INLET AND OUTLET FROM WATER HEATER.
- CONNECT DRAIN TO DOUBLE SLOPED DUCT DOWNSTREAM OF HUMIDIFIER DISPERSION TUBE. OFFSET DRAIN AT HIGH LEVEL BACK TO HUB DRAIN.
- ROUGH IN CAPPED 1/2" COPPER OR PEX WATER LINE AND 25mm COPPER OR PEX DRAIN PIPE WITHIN WALL FOR FUTURE EXTENSION BY GSKY. ISOLATION VALVE, BACKFLOW PREVENTER AND DRAIN TRAP BY GSKY. COORDINATE ALL REQUIREMENTS AND LOCATIONS WITH GSKY PRIOR TO ROUGH-IN.
- NEW ELECTRIC WATER HEATER C/W EXPANSION TANK AND DRAIN PAN, SUSPENDED AT HIGH LEVEL ABOVE MOP SINK. EXTEND T&P RELIEF TO DRAIN PAN. EXTEND DRAIN FROM DRAIN PAN TO MOP SINK. PROVIDE ISOLATION VALVES ON INLET AND OUTLET FROM WATER HEATER.

- RAIN WATER LEADER TO DROP DOWN TO CRAWL SPACE. C/W CLEANOUT AT LOW LEVEL IN CRAWL SPACE AND RETAINING STRAP ON CLEANOUT COVER. REFER TO CRAWLSPACE PLAN FOR CONTINUATION.
- RAIN WATER LEADER TO DROP DOWN TO CRAWLSPACE. C/W CLEANOUT AT LOW LEVEL WITHIN VESTIBULE WALL AND RETAINING STRAP ON CLEANOUT COVER. REFER TO CRAWLSPACE FLOOR PLAN FOR CONTINUATION.
- PROVIDE NATURAL GAS CONNECTION TO EQUIPMENT C/W DRIP LEG, UNION, ISOLATION VALVE AND SWING JOINT.
- EXTEND DOMESTIC COLD WATER/DOMESTIC HOT WATER UP WITHIN WALL TO FIXTURE CONNECTION C/W ISOLATION VALVE FOR EACH FIXTURE CONNECTION. REFER TO CRAWL SPACE DRAWING FOR CONTINUATION.
- CONNECT 1/2" DOMESTIC COLD WATER TO HUMIDIFIER WATER INLET AND DRAIN TEMPERING VALVE. EXTEND 50mm DRAIN FROM HUMIDIFIER DRAIN OUTLET TO ADJACENT HUB DRAIN.

GENERAL NOTES - PLUMBING

- CONTRACTOR SHALL BE FAMILIAR WITH REFER TO, AND COMPLY WITH ALL LOCAL CODES. ALL MECHANICAL WORK SHALL COMPLY IN EVERY RESPECT WITH RELEVANT EDITIONS OF THE NATIONAL AND PROVINCIAL BUILDING CODES, NFPA, ASHRAE, AND ANY ADDITIONAL REQUIREMENTS OF THE LOCAL AUTHORITY HAVING JURISDICTION.
- DRAWINGS ARE DIAGRAMMATIC ONLY AND SHALL NOT BE SCALED. THEY ESTABLISH DESIGN INTENT AND ARE NOT INTENDED TO BE DETAILED INSTALLATION DOCUMENTS. MECHANICAL SUBCONTRACTOR SHALL ALLOW IN THEIR CONTRACT PRICE ALL COMPONENTS REQUIRED TO PROVIDE A COMPLETE AND FUNCTIONAL, CODE-COMPLIANT MECHANICAL INSTALLATION.
- ANY OMISSIONS OR DISCREPANCIES IN THE DRAWINGS SHALL BE BROUGHT TO THE IMMEDIATE ATTENTION OF THE CONTRACT ADMINISTRATOR IN ACCORDANCE WITH B3 ENQUIRIES.
- INSPECT JOB SITE PRIOR TO COMMENCEMENT OF WORK AND MAKE APPROPRIATE PROVISIONS FOR ALL SITE CONDITIONS. EXACT SIZING/ROUTING OF MECHANICAL SYSTEMS SHALL BE SITE CONFIRMED AND COORDINATED WITH AVAILABLE ARCHITECTURAL, ELECTRICAL, CIVIL AND STRUCTURAL DRAWINGS AND TRADES. REOUTER/RESIZE PIPING AND RELOCATE EQUIPMENT AND COMPONENTS AS REQUIRED.
- CAREFULLY EXAMINE THE DRAWINGS OF OTHER TRADES. COORDINATE THE ELECTRICAL REQUIREMENTS OF ALL MECHANICAL EQUIPMENT WITH THE ELECTRICAL SUBCONTRACTOR. AN APPROVED FIRE STOP SYSTEM SHALL BE APPLIED AT ALL PENETRATIONS OF WALLS OR FLOORS DENOTED TO BE FIRE SEPARATIONS ON THE ARCHITECTURAL DRAWINGS. REFER TO ARCHITECTURAL ELEVATIONS FOR MOUNTING HEIGHTS OF FIXTURES. COORDINATE THE EXACT SIZES, LOCATIONS AND INVERTS OF ALL SEWERS WITH CIVIL DRAWINGS AND ON SITE.
- INSTALL EQUIPMENT AND RELATED ACCESSORIES OR COMPONENTS AS PER MANUFACTURER'S WRITTEN INSTALLATION INSTRUCTIONS.
- ACCESS DOORS SHALL BE PROVIDED AS REQUIRED TO SERVICE VALVES AND MECHANICAL EQUIPMENT.

- ALL PIPING AND EQUIPMENT SHALL BE INSULATED TO THE REQUIREMENTS OF THE LATEST EDITION OF ASHRAE 90.1 AND TO THE REQUIREMENTS OF THE MANITOBA ENERGY CODE FOR BUILDINGS. ALL VENT PIPES WITHIN 10' (3M) OF THERMAL ENVELOPE PENETRATION SHALL BE THERMALLY INSULATED.
- CUTTING AND/OR PATCHING OF ROOFS, WALLS OR FLOORS SHALL BE BY THE GENERAL SUBCONTRACTOR UNLESS SPECIFICALLY INDICATED OTHERWISE.
- ALL DRAINAGE SYSTEMS AND TRAPS SHALL BE VENTED. ALL VENTING SHALL BE INSTALLED IN ACCORDANCE WITH THE REQUIREMENTS OF THE NATIONAL AND PROVINCIAL PLUMBING CODES AND ANY ADDITIONAL REQUIREMENTS OF THE LOCAL AUTHORITY HAVING JURISDICTION. SYSTEM SHALL BE INSTALLED SUCH THAT ABOVE-GRADE VENTS ARE LOCATED IN INCONSPICUOUS LOCATIONS WHERE POSSIBLE.
- DWV PIPING AND ELECTRICAL/CONTROL WIRING INSTALLED WITHIN H.V.A.C. PLENUMS SHALL HAVE A FLAME SPREAD RATING NOT EXCEEDING 25 AND A SMOKE DEVELOPED RATING NOT EXCEEDING 50 WHEN TESTED IN ACCORDANCE WITH ASTM E84 (UL 723).
- PROVIDE DIELECTRIC COUPLINGS WHERE COMPONENTS OF DISSIMILAR METAL ARE JOINED.
- ENSURE THAT ALL TRAPS SERVING FLOOR DRAINS ARE PRIMED OR FITTED WITH WADE TRAPS GUARDS.
- GAS PIPING SHALL BE BLACK STEEL TO ASTM A-53 SCHEDULE 40, 150 LB. STANDARD BLACK MALLEABLE IRON SCREW FITTING FOR SIZES BELOW 2 1/2". ALL MATERIALS AND INSTALLATION SHALL CONFORM TO ALL REQUIREMENTS OF THE LATEST EDITION OF CSA B149.1 NATURAL GAS AND PROPANE INSTALLATION CODE AND ALL LOCAL GAS NOTICES.
- COORDINATE THE LOCATIONS OF ALL FLOOR DRAINS AND HUB DRAINS WITH ARCHITECTURAL DRAWINGS.