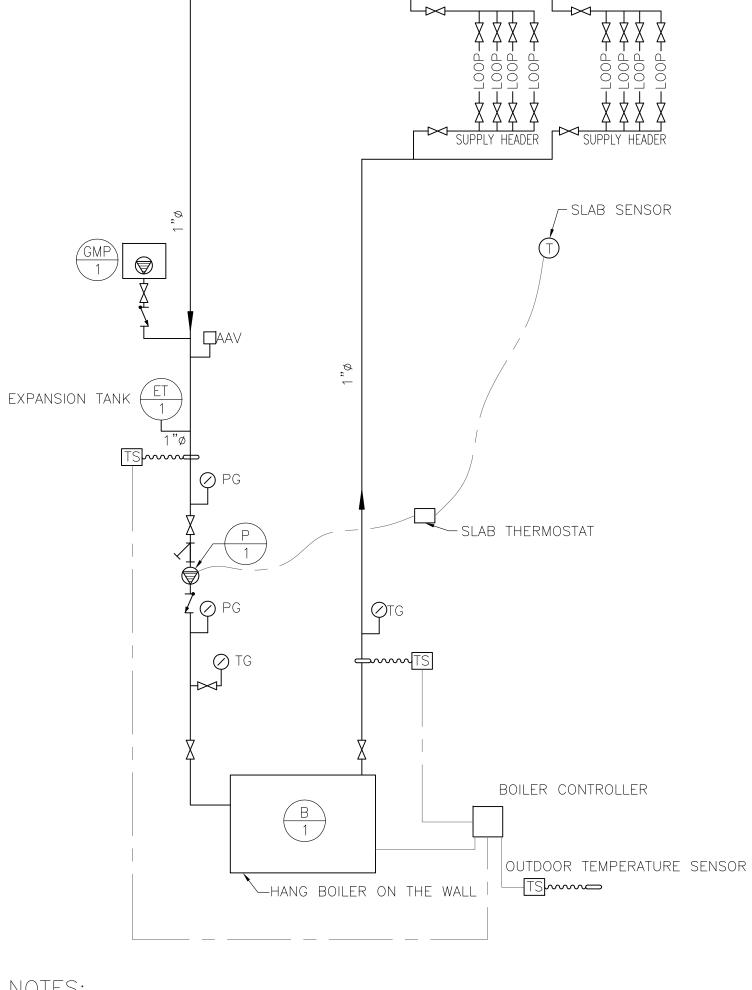
GENERAL NOTES:

- 1. SUBMIT DETAIL TUBING LAYOUT AND CALCULATION FOR REVIEW PRIOR TO CONSTRUCTION.
- 2. INFLOOR HEATING ZONE INDICATED THUS
- 3. LOCATE MECHANICAL EQUIPMENT TO MAINTAIN REQUIRED CLEARANCE TO ELECTRICAL PANEL AND ROOF HATCH. PROVIDE SKETCH FOR REVIEW AND APPROVAL PRIOR TO INSTALLATION.

DRAWING NOTES:

- PROVIDE CABINET WITH ACCESS DOOR FOR SUPPLY/RETURN HEADERS,
- RECESS CABINET IN THE WALL.
- PROPOSED SLAB TEMPERATURE SENSOR LOCATION, 6 FEET AWAY FROM EXTERIOR WALLS.
- 3 WALL MOUNTED SLAB TEMPERATURE CONTROLLER, SET AT 25°C(77°F).

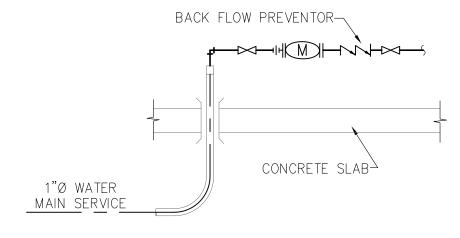


1"ø RETURN HEADER | 1"ø RETURN HEADER

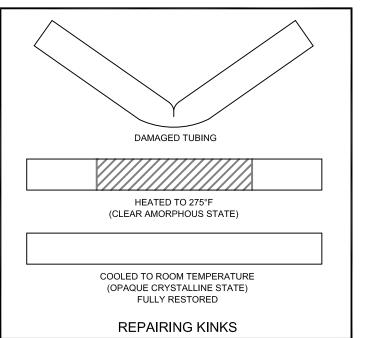
NOTES:

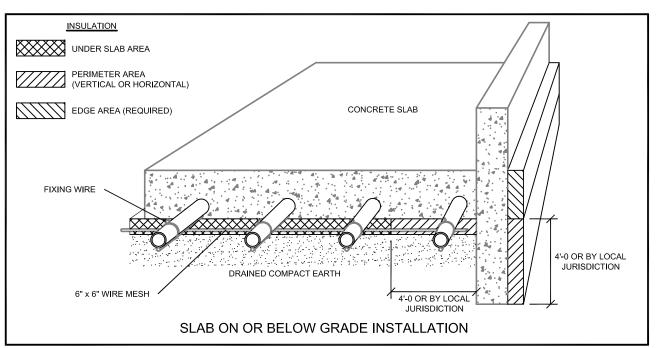
1) PROVIDE DRAIN LINE FOR BOILER TO NEARBY FUNNEL FLOOR DRAIN.

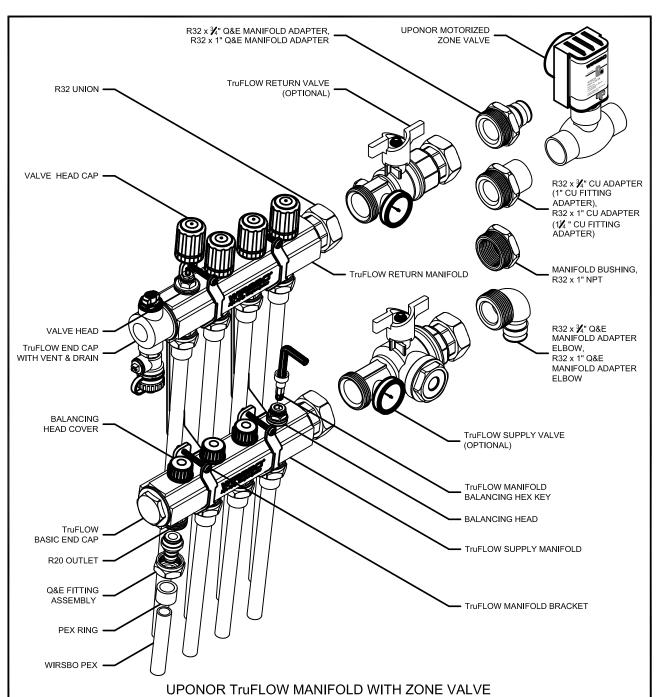
INFLOOR HEATING SYSTEM SCHEMATIC SCALE: N.T.S.



DOMESTIC WATER METRE SCHEMATIC







CAUTION

DOWNWARD HEATLOSS MAY BE CRITICAL TO THE PERFORMANCE OF A SNOWMELT PANEL COMPLETE UNDERSLAB INSULATION IS REQUIRED WHEN:

- A HIGH WATER TABLE IS PRESENT
- THE SNOWMELT SYSTEM WILL BE OPERATED AS AN ON/OFF SYSTEM
- THE LINEAR FEET OF PERIMETER IS HIGH IN RELATIONSHIP TO SNOWMELT AREA (AS IN A TYPICAL SIDE WALK APPLICATION)

INSTALLATION MANUAL, CURRENT EDITION.

1. REFER TO UPONOR RADIANT FLOOR HEATING

2. THIS DRAWING IS TO BE READ WITH ALL OTHER CONTRACT DOCUMENTS & SPECIFICATIONS.

3. ALL TUBING IS WIRSBO hePEX™ PLUS, CROSS-LINKED POLYETHYLENE PEX-a TUBING WITH OXYGEN DIFFUSION BARRIER, UNLESS OTHERWISE

4. WIRSBO PEX TUBING IS VERY FLEXIBLE. BENDS LESS THAN 12" IN DIAMETER SHOULD BE MADE SLOWLY AND CAREFULLY TO AVOID OVER-BENDING AND POSSIBLY KINKING. BEND SUPPORTS SHOULD BE USED TO MAKE 90° RIGID BENDS THAT ARE OTHERWISE NOT SUPPORTED.

5. ALL TUBING RUNS TYPICALLY START AT 6" FROM WALLS OR NAILING SURFACES AND ARE NORMALLY SPACED AT 6" ON CENTRES. SOME AREAS MAY REQUIRE TIGHTER TUBE SPACING DEPENDING ON HEAT LOSS REQUIREMENTS. TUBING RUNS AT 6" ON CENTRES ARE PLACED NEAR EXTERIOR WALLS TO IMPROVE RESPONSE TIME OF THE RADIANT FLOOR SYSTEM. SNOWMELT LOOPS ARE AT 6" ON CENTRES. REFER TO SCALED LOOP LAYOUT FOR ACTUAL TUBE SPACING.

6. INSULATION IS CRUCIAL FOR PROPER AND EFFICIENT OPERATION OF THE RADIANT FLOOR SYSTEM. A MINIMUM INSULATION VALUE OF R10 IS RECCOMMENDED IN SLAB ON GRADE APPLICATIONS COMBINED WITH A HIGH WATER TABLE OR MOIST SOIL CONDITIONS AND/OR BEDROCK. SEE NOTE 14 FOR INFORMATION REGARDING THE INSULATION VALUES USED TO DESIGN THIS PROJECT.

7. FOR INSTALLATIONS IN CONCRETE FLOORS, A MINIMUM CONCRETE COVERING OF 1½" OVER THE TUBING IS REQUIRED IF THE SLAB IS EXPOSED TO EARTH OR WEATHER. IF THE SLAB IS NOT EXPOSED TO EARTH OR WEATHER, A MINIMUM CONCRETE COVERING OF 34" OVER THE TUBING IS ACCEPTABLE. THE MAXIMUM CONCRETE COVER OVER THE TUBING TYPICALLY SHOULD NOT EXCEED 4". FOR CONCRETE SLABS THICKER THAN 4", SPECIAL DESIGN CONSIDERATIONS MAY BE REQUIRED.

8. MANIFOLDS SHOULD BE INSTALLED ON AN INTERIOR WALL. ON AN INTERIOR WALL, TUBING CAN BE ROUTED TO THE FLOOR IN FRONT OF, OR BEHIND THE MANIFOLD.

9. MANIFOLDS MAY BE INSTALLED IN EITHER A VERTICAL OR HORIZONTAL POSITION. **DO NOT** INSTALL THE MANIFOLD UPSIDE-DOWN.

10. CONTRACTOR IS TO MEASURE AND RECORD ACCURATE LENGTHS OF TUBING DURING INSTALLATION FOR INITIAL BALANCING PURPOSES.

11. BALANCE FINAL SYSTEM WHEN FACILITY IS OCCUPIED DURING HEATING SEASON.

12. THE SYSTEM IS TO BE PRESSURIZED TO AT LEAST 60 PSIG USING 30% PROPYLENE GLYCOL, PRIOR TO AND DURING THE FINAL FLOOR INSTALLATION.

13. HANDLING GUIDELINES: DO NOT USE WIRSBO PEX TUBING WHERE TEMPERATURES AND PRESSURES EXCEED RATINGS. DO NOT USE OR STORE WIRSBO PEX TUBING WHERE IT WILL BE EXPOSED TO DIRECT SUNLIGHT FOR MORE

THAN 30 DAYS. DO NOT WELD, GLUE OR USE ADHESIVES OR ADHESIVE TAPES WITH WIRSBO PEX TUBING. DO NOT APPLY OPEN FLAME TO WIRSBO PEX TUBING. DO NOT SOLDER WITHIN 18" OF ANY WIRSBO PEX TUBING IN THE SAME WATER LINE.

DO NOT INSTALL WIRSBO PEX TUBING WITHIN 6" OF ANY GAS APPLIANCE VENTS, WITH THE EXCEPTION OF DOUBLE-WALL B-VENTS, WHICH HAVE A MINIMUM CLEARANCE OF 1".

DO NOT INSTALL WIRSBO PEX WITHIN 12" OF ANY RECESSED LIGHT FIXTURES, UNLESS THE PEX LINE IS PROTECTED WITH SUITABLE INSULATION. DO NOT SPRAY ON OR ALLOW ORGANIC CHEMICALS, PESTICIDES, STRONG ACIDS OR STRONG BASES TO COME INTO CONTACT WITH WIRSBO PEX TUBING. DO NOT USE PETROLEUM OR SOLVENT-BASED PAINTS ON WIRSBO PEX TUBING.

USE ONLY APPROVED AND APPROPRIATE FIRESTOP MATERIALS WITH WIRSBO PEX TUBING.

14. MINIMUM INSULATION VALUES USED TO DESIGN THIS PROJECT WERE BASED ON HEAT LOADS SUPPLIED BY THE ENGINEER. SUPPLEMENTAL HEAT REQUIRED TO MEET SPECIFIED LOADS.

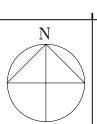


Certificate of Authorization DJK CONSULTING Inc. o. 4038 Date: <u> APRIL_30, 2021</u>

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COMMUNITY PUBLIC WASHROOM 715 MAIN STREET WINNIPEG MB

Project Number: 20046 Drawing Title:

NFLOOR HEATING FLOOR PLAN

Issue/Revision Date 1. ISSUED FOR CONSTRUCTION 01/03/2

Sheet No: M-2