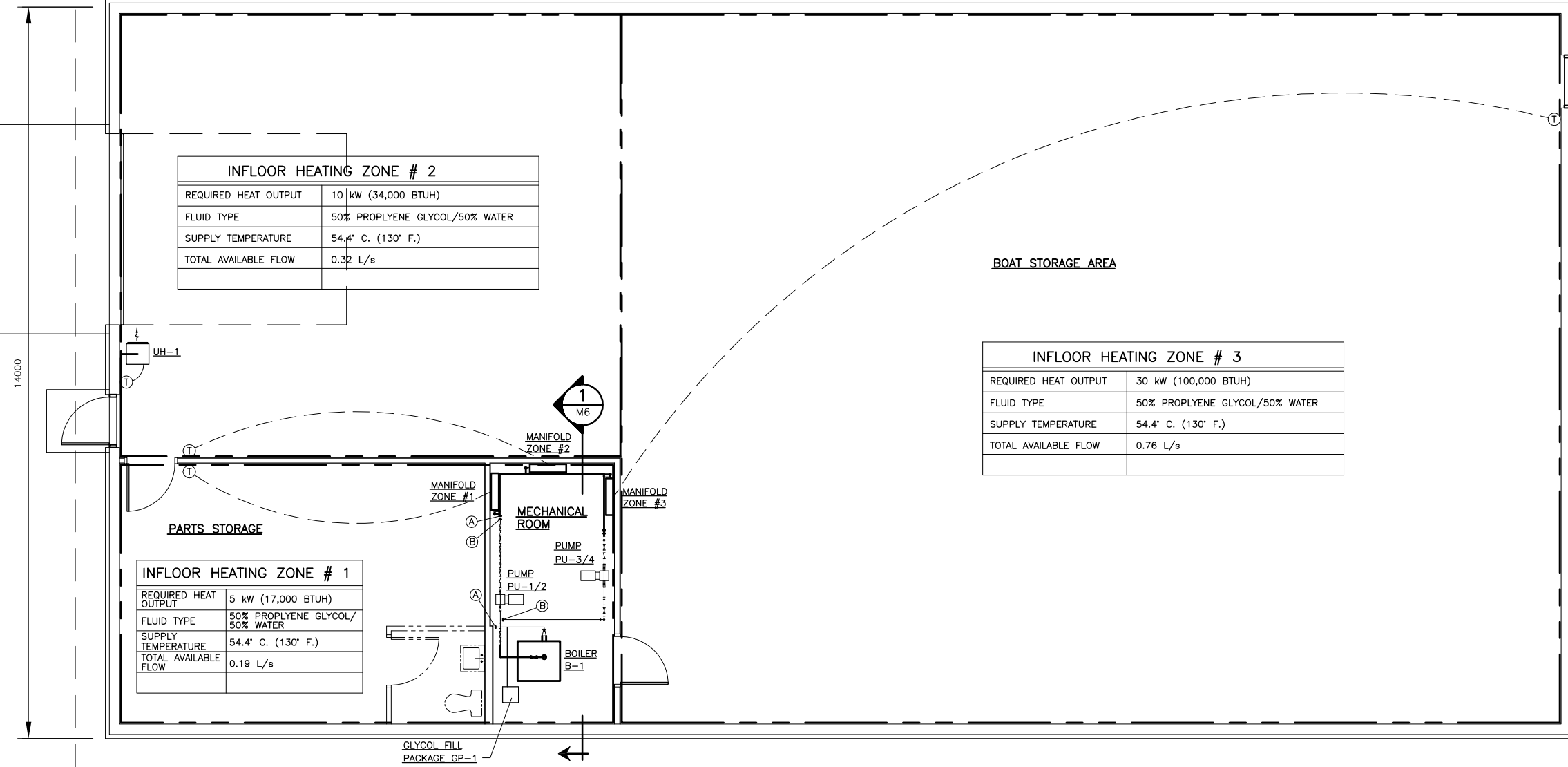


28000



INFLOOR HEATING ZONE # 2	
REQUIRED HEAT OUTPUT	10 kW (34,000 BTUH)
FLUID TYPE	50% PROPLYENE GLYCOL/50% WATER
SUPPLY TEMPERATURE	54.4° C. (130° F.)
TOTAL AVAILABLE FLOW	0.32 L/s

INFLOOR HEATING ZONE # 3	
REQUIRED HEAT OUTPUT	30 kW (100,000 BTUH)
FLUID TYPE	50% PROPLYENE GLYCOL/50% WATER
SUPPLY TEMPERATURE	54.4° C. (130° F.)
TOTAL AVAILABLE FLOW	0.76 L/s

INFLOOR HEATING ZONE # 1	
REQUIRED HEAT OUTPUT	5 kW (17,000 BTUH)
FLUID TYPE	50% PROPLYENE GLYCOL/50% WATER
SUPPLY TEMPERATURE	54.4° C. (130° F.)
TOTAL AVAILABLE FLOW	0.19 L/s

**GENERAL NOTES:**

- LAYOUT OF FLOOR HEATING SYSTEM SHALL BE DESIGNED AND INSTALLED IN ACCORDANCE WITH FLOOR HEATING SYSTEM MANUFACTURER'S INSTRUCTIONS AND RECOMMENDATIONS.
- HEATING LOOPS SHALL BE CONTINUOUS LENGTH, WITHOUT ANY FIELD JOINT, CUT TO LENGTH AFTER PIPE INSTALLATION. ACTUAL PIPE LENGTHS ARE TO BE DETERMINED BY INFLOOR SHOP DRAWINGS (PROVIDED BY INFLOOR HEATING CONTRACTOR). REFER TO ARCHITECTURAL DRAWINGS FOR LAYOUT AND DIMENSIONS.
- PROVIDE EXIT FROM FLOOR SLAB BY MEANS OF PVC CONDUIT ELBOWS/PIPE SLEEVE TO MINIMIZE TENSION IN PIPE.
- AFTER INSTALLATION, A PRESSURE TEST SHALL BE PERFORMED USING 550 kPa TEST PRESSURE FOR A PERIOD OF 12-24 HOURS. IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS. THE TEST MUST BE PERFORMED BEFORE AND DURING THE POURING OF CONCRETE.
- ALL OTHER PIPING, ELECTRICAL OR STRUCTURAL PENETRATIONS SHALL BE IDENTIFIED PRIOR TO POURING OF CONCRETE.  
\*\*\*\*\* ABSOLUTELY NO DRILLING WILL BE ALLOWED AFTER POURING OF CONCRETE \*\*\*\*\*
- REFER TO DRAWING M5 FOR HYDRONIC PIPING DETAILS.

**KEY NOTES:**

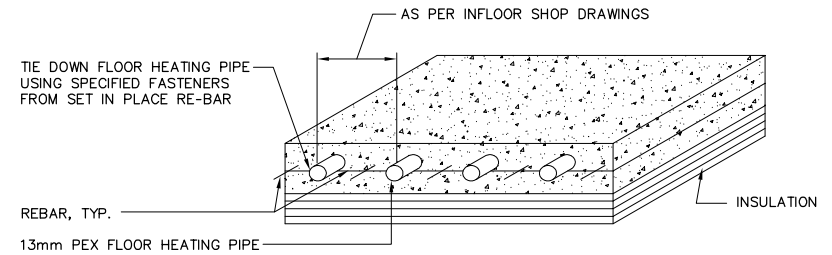
- ① INSTALL NEW ELECTRIC BOILER B-1 AT LOCATION SHOWN.
- ② INSTALL NEW PUMPS AND PIPING AS SHOWN. PROVIDE PAINTED PIPE SUPPORTS.

**LEGEND:**

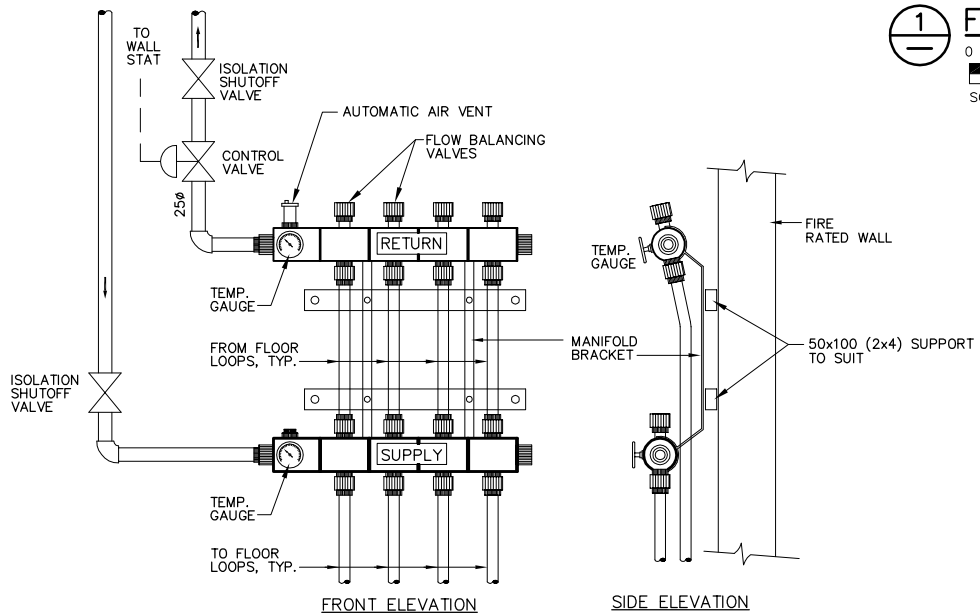
- ELECTRICAL/CONTROL WIRING
- Ⓣ THERMOSTAT

UNIT HEATER SCHEDULE				
TAG	DESCRIPTION	CAPACITY (kW)	VOLTAGE	MAKE/MODEL
UH-1	ELECTRIC UNIT HEATER	5	208/3/60	"CALORITECH"/GE052 C/W ET5-S REMOTE THERMOSTAT AND WALL MOUNTING BRACKET

**1 FLOOR PLAN**  
SCALE: 1:50mm (FULL SIZE)  
1:100mm (11"x17")



**3 HYDRONIC FLOOR HEATING PIPING INSTALLATION (TYP)**  
SCALE: N.T.S.



**2 HYDRONIC FLOOR HEATING MANIFOLD (TYP)**  
SCALE: N.T.S.



<b>KGS GROUP</b>		<b>CONSULTING ENGINEERS &amp; PROJECT MANAGERS</b>	
WINNIPEG (204) 896-1209		THUNDER BAY (807) 345-2233	
DESIGNED BY	PSS	CHECKED BY	RBB
DRAWN BY	VJH	APPROVED BY	
HOR. SCALE	AS NOTED	RELEASED FOR CONSTRUCTION	
VERTICAL	AS NOTED		
NO. 0	ISSUED FOR TENDER	NOV.16/06	PSS
NO. 1	REVISIONS	DATE	BY
		NOV. 2006	



CONSULTANT DRAWING NO. 06-0107-17M2

**THE CITY OF WINNIPEG**  
PLANNING PROPERTY AND DEVELOPMENT  
Winnipeg SERVICES DEPARTMENT

**RIVER PATROL BOAT STORAGE BUILDING**  
HEATING SYSTEM OPTION 1  
INFLOOR HEATING

SHEET	2	OF	8
CAD FILE DRAWING NUMBER 06-107-17M002.dwg			
PROJECT NUMBER 2005-081			

KGS FILE NO.: P:\PROJECTS\2006\06-0107-17\MECH\DWGS\06-0107-17M002.dwg  
PLOT SCALE: 1:1