

POOL HEATING SCHEMATIC

SCALE: NTS

## **KEY NOTES**

EXISTING 3" Ø PVC INJECTION LOOP FROM MAIN POOL

BALANCE POOL HEATER INJECTION LOOP TO 68 gpm.

LOCATE ALL DIALS IN AN ACCESSIBLE AND VISIBLE LOCATION

HOT WATER HEATING LOOP TO BE COMPLETE WITH THERMAL PIPE INSULATION

DISCHARGE OVER EXISTING FLOOR DRAINS.

TEMPERATURE SENSORS IN HOT WATER SUPPLY FROM HEAT EXCHANGER TO POOL, AND SHALL CONTROL PU-1 AND PU-2 THROUGH THE PUMP STARTER PANEL. PU-1 SETPOINT TO BE 86 F. PU-2 SETPOINT TO BE 82 F. BOILERS SHALL BE CONTROLLED BY BUILT-IN TEMPERATURE SENSORS AND SHALL MODULATE STAGES TO MAINTAIN SETPOINTS.

SHUT-OFF VALVE  CONTROL VALVE  THREE WAY CONTROL VALVE  CHECK VALVE  GATE VALVE  GATE VALVE  GLOBE VALVE  PRESSURE REDUCING VALVE  PRESSURE RELIEF VALVE  TEMP. & PRESSURE RELIEF VALVE  UNION  HEANGE  STRAINER  BACK FLOW PREVENTOR  REVERSE PRESSURE BACK FLOW PREVENTOR  TRIPLE DUTY VALVE  DIRECTION OF FLOW  MANUAL AIR VENT  PRESSURE GAUGE  THERMOMETER	<u>e i mbele</u>	
THREE WAY CONTROL VALVE  CHECK VALVE  GATE VALVE  GLOBE VALVE  PRESSURE REDUCING VALVE  PRESSURE RELIEF VALVE  TEMP. & PRESSURE RELIEF VALVE  UNION  HIP BUTTERFLY VALVE  UNION  FLANGE  STRAINER  BACK FLOW PREVENTOR  REVERSE PRESSURE BACK FLOW PREVENTOR  TRIPLE DUTY VALVE  DIRECTION OF FLOW  MANUAL AIR VENT  PRESSURE GAUGE	——⋈——	SHUT-OFF VALVE
CHECK VALVE  GATE VALVE  GLOBE VALVE  PRESSURE REDUCING VALVE  PRESSURE RELIEF VALVE  TEMP. & PRESSURE RELIEF VALVE  BUTTERFLY VALVE  UNION  ILL  FLANGE  STRAINER  BACK FLOW PREVENTOR  REVERSE PRESSURE BACK FLOW PREVENTOR  TRIPLE DUTY VALVE  DIRECTION OF FLOW  MANUAL AIR VENT  PRESSURE GAUGE	<u> </u>	CONTROL VALVE
GATE VALVE  GLOBE VALVE  PRESSURE REDUCING VALVE  PRESSURE RELIEF VALVE  TEMP. & PRESSURE RELIEF VALVE  UNION  FLANGE  STRAINER  BACK FLOW PREVENTOR  REVERSE PRESSURE BACK FLOW PREVENTOR  TRIPLE DUTY VALVE  DIRECTION OF FLOW  MANUAL AIR VENT  PRESSURE GAUGE	——————————————————————————————————————	THREE WAY CONTROL VALVE
GLOBE VALVE  PRESSURE REDUCING VALVE  PRESSURE RELIEF VALVE  TEMP. & PRESSURE RELIEF VALVE  BUTTERFLY VALVE  UNION  FLANGE  STRAINER  BACK FLOW PREVENTOR  REVERSE PRESSURE BACK FLOW PREVENTOR  TRIPLE DUTY VALVE  DIRECTION OF FLOW  MANUAL AIR VENT  PRESSURE GAUGE		CHECK VALVE
PRESSURE REDUCING VALVE  PRESSURE RELIEF VALVE  TEMP. & PRESSURE RELIEF VALVE  BUTTERFLY VALVE  UNION  ILL  STRAINER  BEFF  BACK FLOW PREVENTOR  REVERSE PRESSURE BACK FLOW PREVENTOR  TRIPLE DUTY VALVE  DIRECTION OF FLOW  MANUAL AIR VENT  PRESSURE GAUGE	<u></u>	GATE VALVE
PRESSURE RELIEF VALVE  TEMP. & PRESSURE RELIEF VALVE  BUTTERFLY VALVE  UNION  FLANGE  STRAINER  BACK FLOW PREVENTOR  REVERSE PRESSURE BACK FLOW PREVENTOR  TRIPLE DUTY VALVE  DIRECTION OF FLOW  MANUAL AIR VENT  PRESSURE GAUGE		GLOBE VALVE
TEMP. & PRESSURE RELIEF VALVE  BUTTERFLY VALVE  UNION  FLANGE  STRAINER  BACK FLOW PREVENTOR  REVERSE PRESSURE BACK FLOW PREVENTOR  TRIPLE DUTY VALVE  DIRECTION OF FLOW  MANUAL AIR VENT  PRESSURE GAUGE		PRESSURE REDUCING VALVE
BUTTERFLY VALVE  UNION  FLANGE  STRAINER  BACK FLOW PREVENTOR  REVERSE PRESSURE BACK FLOW PREVENTOR  TRIPLE DUTY VALVE  DIRECTION OF FLOW  MANUAL AIR VENT  PRESSURE GAUGE	——————————————————————————————————————	PRESSURE RELIEF VALVE
UNION  FLANGE  STRAINER  BACK FLOW PREVENTOR  REVERSE PRESSURE BACK FLOW PREVENTOR  TRIPLE DUTY VALVE  DIRECTION OF FLOW  MANUAL AIR VENT  PRESSURE GAUGE	<del>-</del> -}	TEMP. & PRESSURE RELIEF VALVE
FLANGE  STRAINER  BEFP BACK FLOW PREVENTOR  REVERSE PRESSURE BACK FLOW PREVENTOR  TRIPLE DUTY VALVE  DIRECTION OF FLOW  MANUAL AIR VENT  PRESSURE GAUGE	——————————————————————————————————————	BUTTERFLY VALVE
STRAINER  BACK FLOW PREVENTOR  REVERSE PRESSURE BACK FLOW PREVENTOR  TRIPLE DUTY VALVE  DIRECTION OF FLOW  MANUAL AIR VENT  PRESSURE GAUGE		UNION
BFP BACK FLOW PREVENTOR  REVERSE PRESSURE BACK FLOW PREVENTOR  TRIPLE DUTY VALVE  DIRECTION OF FLOW  MANUAL AIR VENT  PRESSURE GAUGE		FLANGE
REVERSE PRESSURE BACK FLOW PREVENTOR  TRIPLE DUTY VALVE  DIRECTION OF FLOW  MANUAL AIR VENT  PRESSURE GAUGE	<del></del>	STRAINER
TRIPLE DUTY VALVE  DIRECTION OF FLOW  MANUAL AIR VENT  PRESSURE GAUGE	BFP	BACK FLOW PREVENTOR
DIRECTION OF FLOW  MANUAL AIR VENT  PRESSURE GAUGE	RPBFP	REVERSE PRESSURE BACK FLOW PREVENTOR
MANUAL AIR VENT  PRESSURE GAUGE		TRIPLE DUTY VALVE
PRESSURE GAUGE		DIRECTION OF FLOW
		MANUAL AIR VENT
THERMOMETER	94	PRESSURE GAUGE
Inerwowieter		THERMOMETER
IMMERSION TEMPERATURE SENSOR IN TEST WELL		IMMERSION TEMPERATURE SENSOR IN TEST WELL
PUMP	<b>O</b>	PUMP

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0 07-06-11 FOR TENDER & CONSTRUCTION





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CITY OF **WINNIPEG BUILDING SERVICES** 

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POOL BOILER RECREATION COMPLEX
BID OPPORTUNITY #434-2007

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AS NOTED

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