

KEYNOTES:

- 1 SUPPLY & INSTALL NEW HOT WATER BOILER AND ALL RELATED ACCESSORIES. INSTALL ON CONCRETE PAD AS SHOWN. PROVIDE ALL PIPING & GAS CONNECTIONS. RUN DRAINAGE PIPING AS SHOWN ON DETAIL 2 ON DRAWING M06.
- 2 PROVIDE NEW CONCRETE PAD FOR BOILER. PAD TO BE 200mm (8") HIGH AND EXTEND 150mm (6") PAST EACH SIDE OF BOILER. CONSTRUCT PAD IN ACCORDANCE WITH DETAIL A ON THIS DRAWING.
- 3 SUPPLY & INSTALL NEW DHW HEAT EXCHANGER. ENSURE PROPER CLEARANCES EXIST FOR HEAT EXCHANGER INSTALLATION. CONNECT TO RELATED PIPING. REFER TO DRAWING M05 FOR SYSTEM CONNECTIONS, PIPING & ASSOCIATED VALVES.
- 4 SUPPLY & INSTALL NEW POOL HEAT EXCHANGER. ENSURE PROPER CLEARANCES EXIST FOR HEAT EXCHANGER INSTALLATION. CONNECT TO EXISTING PIPING & RETAIN EXISTING VALVES. REFER TO DRAWING M05 FOR SCHEMATIC DETAILS.
- 5 RELOCATE EXISTING DHW HEATING SYSTEM TO LOCATION SHOWN. RE-PIPE EXISTING EQUIPMENT THE SAME AS ORIGINALLY PIPED. PROVIDE NEW SUPPORTS FOR PIPING, PUMPS & DHW EXPANSION TANK AS REQUIRED. PROVIDE NEW CONCRETE HOUSE KEEPING PAD IN ACCORDANCE WITH DETAIL A ON THIS DRAWING.
- 6 SUPPLY AND INSTALL NEW 450mmx450mm (18"x18") COMBUSTION AIR DUCT. ROUTE IN MECHANICAL ROOM AND CHASE SIMILAR TO EXISTING. INSTALL "U" TRAP AT FLOOR SIMILAR TO EXISTING.

KEYNOTES CONT'D:

- 7 SUPPLY AND INSTALL NEW 150mmx150mm (6"x6") VENTILATION DUCT. ROUTE AROUND EXISTING DUCTWORK AND TERMINATE WHERE SHOWN.
- 8 SUPPLY AND INSTALL NEW PIPING COMPLETE WITH INSULATION. ROUTE AS SHOWN AS HIGH AS POSSIBLE AND AVOID INTERFERENCES WITH EXISTING INFRASTRUCTURE. REFER TO DRAWING M05 FOR DETAILS ON PIPING CONNECTIONS AND VALVES. MINIMUM FINISHED HEIGHT TO BE 2700mm (110") ABOVE FINISHED FLOOR WHEN BELOW EXISTING DUCTWORK. ELEVATION OF PIPING TO BE HIGHER IF EXISTING CONDITIONS PERMIT.
- 9 INSTALL NEW BOILER VENTING AS SHOWN. INSTALL AS HIGH AS POSSIBLE TO AVOID INTERFERENCES WITH PIPING. INSTALL DRAIN AND DRAIN PIPING TO FLOOR DRAIN FROM BASE TEE AT BOILER.
- 10 REFER TO HYDRONIC HEATING SCHEMATIC ON DWG. M05 FOR PIPING CONNECTIONS AND VALVING TO BOILERS B-3 & B-4.
- 11 CONNECT TO EXISTING RADIATOR PIPING AT CEILING OF MECHANICAL ROOM.
- 12 SUPPLY AND INSTALL NEW BASE MOUNTED PUMPS AS SHOWN. INSTALL ON NEW CONCRETE HOUSE KEEPING PADS CONSTRUCTED IN ACCORDANCE WITH DETAIL A ON THIS DRAWING. PROVIDE ALL PIPING CONNECTIONS, VALVES AND FITTINGS TO CONNECT TO PIPING. REFER TO DETAIL A ON DRAWING M04 FOR PIPING DETAILS AND M05 FOR HYDRONIC SCHEMATIC.

KEYNOTES CONT'D:

- 13 SUPPLY AND INSTALL NEW WATER MAKE-UP UNITS IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS. CONNECT TO PIPING AS SHOWN ON HYDRONIC SCHEMATIC ON DRAWING M05.
- 14 SUPPLY AND INSTALL NEW EXPANSION TANK AND SUSPEND FROM CEILING. CONNECT TO PIPING AS SHOWN ON HYDRONIC SCHEMATIC ON DRAWING M05.
- 15 SUPPLY AND INSTALL NEW INJECTION LOOP PUMP FOR BOILER. PROVIDE PIPING CONNECTIONS AND SUPPORT IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS. PUMP TO BE INSTALLED APPROXIMATELY 1200mm (4'-0") ABOVE FINISHED FLOOR AND PIPED INLINE WITH BOILER PIPING.
- 16 CUT CEILING OPENING LARGER AS REQUIRED TO ACCOMMODATE NEW BOILER VENTS.

KEYNOTES CONT'D:

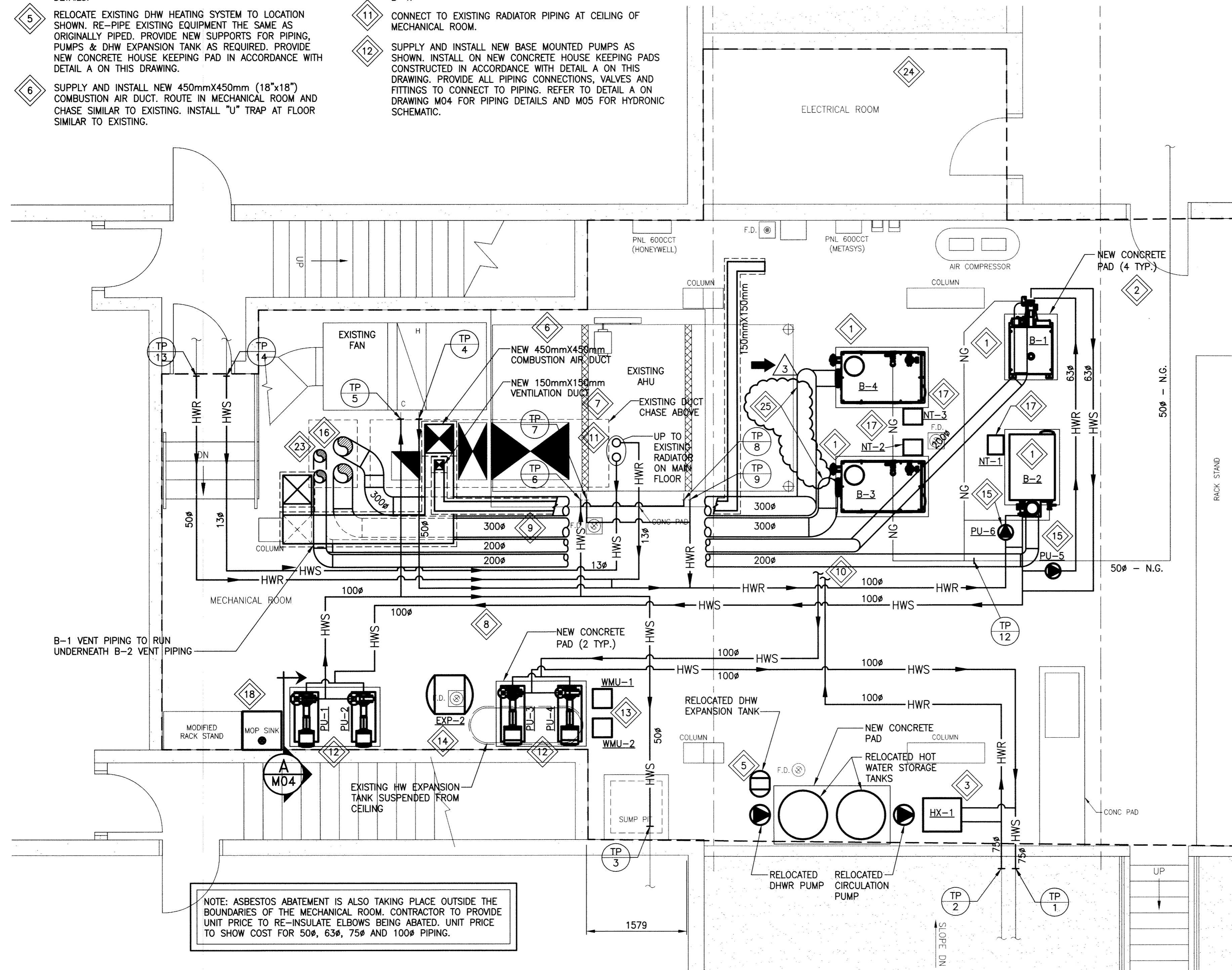
- 17 SUPPLY AND INSTALL CONDENSATE NEUTRALIZERS SUITABLE FOR THE BOILER. DRAIN NEUTRALIZED CONDENSATE INTO 25MM FLOOR TRENCHES INSTALLED IN THE FLOOR. CONTRACTOR TO DETERMINE ON SITE WHERE TRENCHES WILL BE LOCATED AND COORDINATE WITH THE CONTRACT ADMINISTRATOR. MODIFY EXISTING FLOOR DRAIN AS REQUIRED. REFER TO DETAIL 2 ON DRAWING M06 FOR PIPING DETAILS. PAINT TRENCHES AND SURROUNDING CONCRETE WITH INDUSTRIAL GRADE, WATER RESISTANT FLOOR PAINT.
- 18 RELOCATE MOP SINK AND ASSOCIATED FAUCET TO POSITION SHOWN. EXTEND DRAINAGE AND SUPPLY WATER PIPING TO ACCOMMODATE. PROVIDE NEW BASE FOR MOP SINK SIMILAR TO EXISTING TO PERMIT PROPER SLOPE OF DRAINAGE PIPING. ANCHOR DRAINAGE PIPING TO WALL TO MAINTAIN SLOPE.

KEYNOTES CONT'D:

- 19 RELOCATE CHLORINE INJECTION SYSTEM TO LOCATION SHOWN. MOVE ASSOCIATED BASE, ELECTRICAL DISCONNECT AND RECEPTACLES TO NEW LOCATION. INSTALL NEW PIPING TO MATCH EXISTING TO RECONNECT SYSTEM TO POOL WATER HEADERS.
- 20 SUPPLY AND INSTALL NEW UV SYSTEM CONTROL PANEL. INSTALL WITHIN 4.5M (15'-0") OF UV UNIT. MOUNT CONTROL PANEL TO WALL AND INSTALL ALL RELATED CONNECTIONS BETWEEN PANEL AND UV UNIT.
- 21 SUPPLY AND INSTALL NEW UV SYSTEM. INSTALL AT GROUND LEVEL AND PIPE INTO EXISTING POOL WATER HEADER. REFER TO DRAWING M06 FOR PIPING SCHEMATIC.
- 22 REROUTE PIPING AS SHOWN. PIPING SHALL BE RUN TO ACCOMMODATE EXISTING VALVE STATION.
- 23 INSTALL BASE TEE AT BOTTOM OF CHASE TO COLLECT ANY STORM DRAINAGE CAPTURED BY BOILER STACK. DRAIN BASE TEE TO NEAREST DRAIN. (4 TYP.)
- 24 BOUNDARY OF WORK AREA.
- 25 MINIMUM FINISHED HEIGHT TO BE 2250mm (90") FROM FLOOR TO UNDERSIDE OF BOILER VENT.

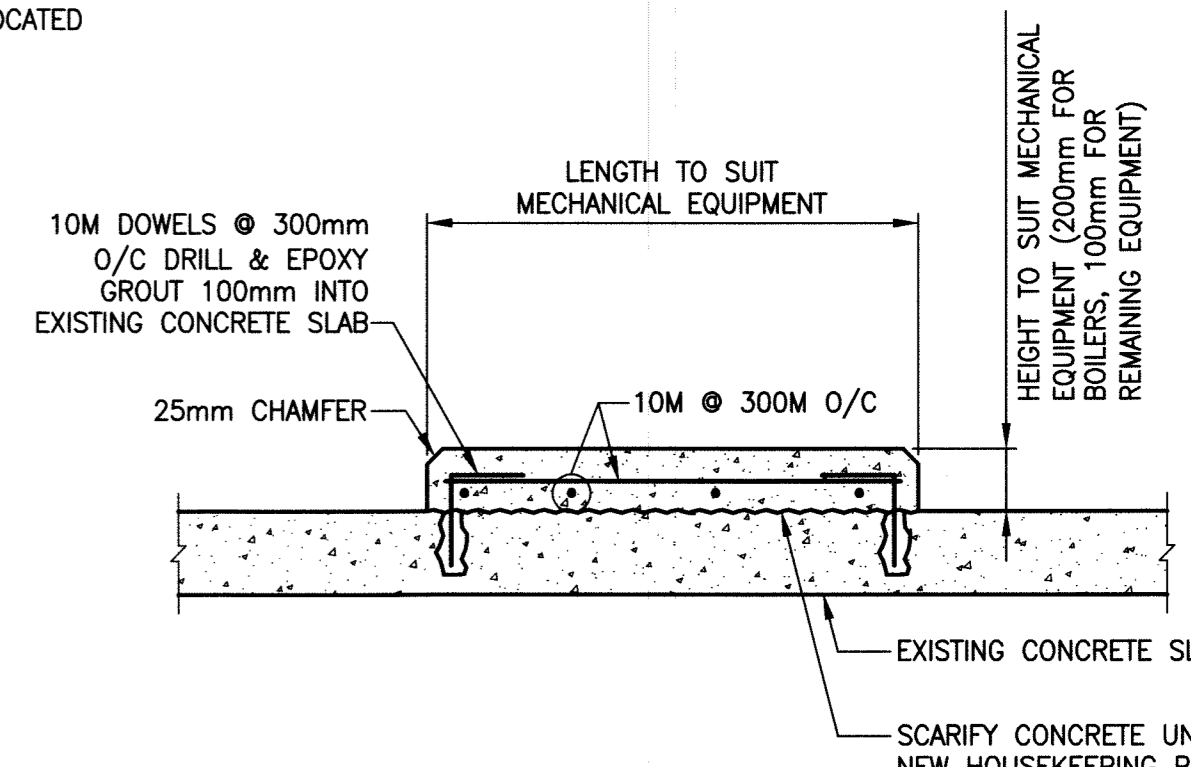
GENERAL NOTES:

- 1. PERFORM WORK IN ACCORDANCE TO ALL APPLICABLE CODES AND REGULATIONS.
- 2. EQUIPMENT LOCATIONS, DUCT AND PIPE ROUTING INDICATED ON THE DRAWINGS IS APPROXIMATE ONLY. CONFIRM IN THE FIELD. REROUTE DUCTWORK AND PIPING AS REQUIRED TO ELIMINATE FIELD INTERFERENCES WITH BUILDING STRUCTURES, ELECTRICAL, ETC. CONFIRM CHANGES WITH CONSULTANT. CO-ORDINATE WORK WITH ALL SUBTRADES. WHERE DIMENSIONS ARE INDICATED FOR PIPING, DUCTWORK, DUCT SIZES, EQUIPMENT SIZES, ETC. THESE ARE FOR BIDDING PURPOSES ONLY. VERIFY ALL DIMENSIONS IN THE FIELD PRIOR TO ORDERING EQUIPMENT AND COMMENCING INSTALLATION WITHOUT EXTRA TO THE PROJECT. ENSURE ALL EQUIPMENT, DUCTWORK, AND PIPING FITS IN THE SPACE AVAILABLE AND TO MAINTAIN THE GENERAL DESIGN INTENT FOR THE SYSTEMS.
- 3. REFER TO DRAWING M05 FOR HYDRONIC SCHEMATIC AND DETAILS ON PIPING CONNECTIONS, VALVING AND RELATED ACCESSORIES.
- 4. EXISTING INSULATED DUCTWORK IN MECHANICAL ROOM TO BE RE-INSULATED. CANVAS WRAPPED INSULATION FOR THE AIR HANDLER IN MECHANICAL ROOM DOES NOT NEED TO BE REPLACED UNLESS IN POOR CONDITION. CONTRACTOR TO REMOVE EXISTING INSULATION AND RE-INSULATE ACCORDING TO THE SPECIFICATIONS. DETERMINE SCOPE OF WORK ON SITE BEFORE BIDDING.

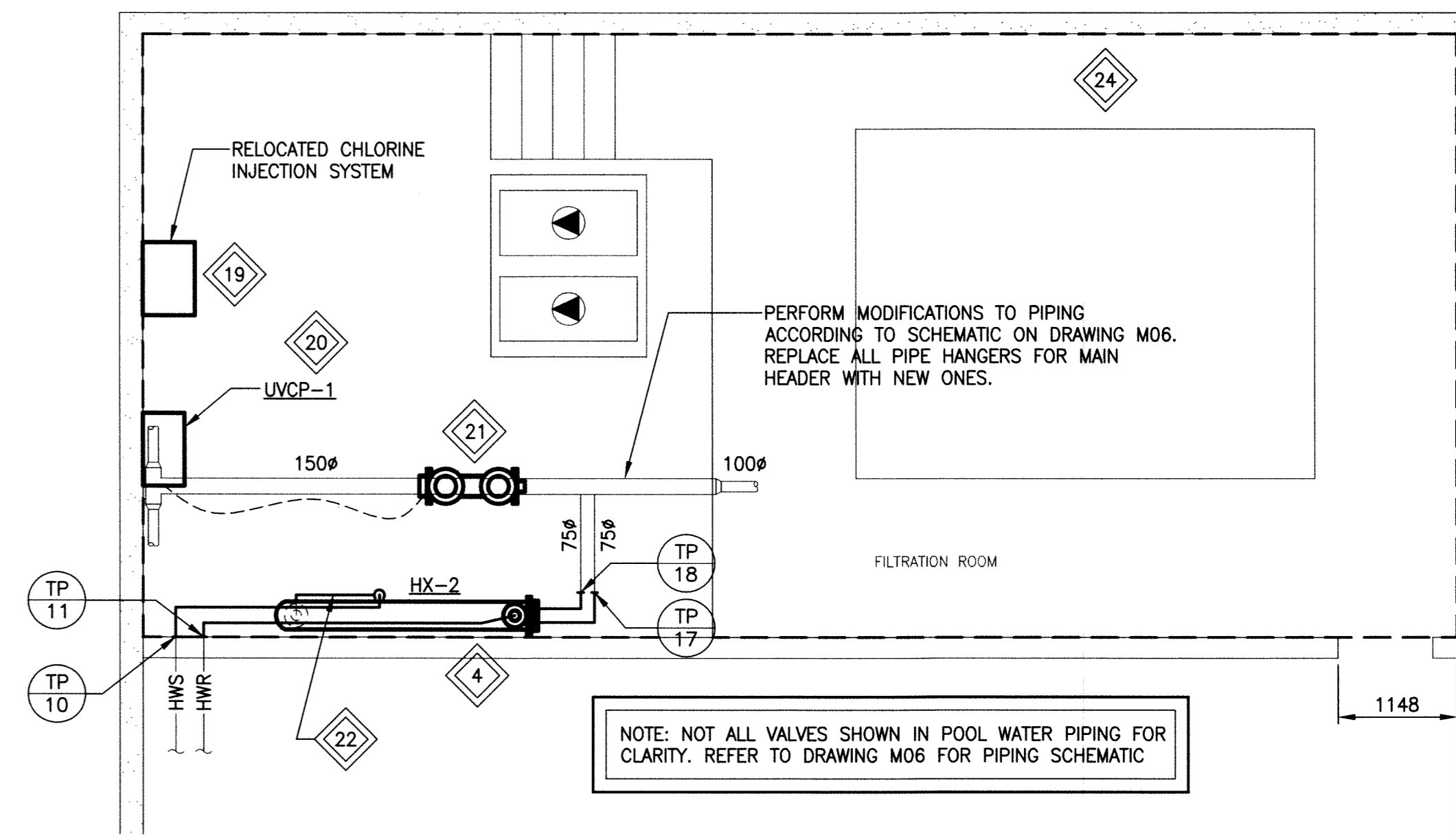


LEGEND:

- PIPING/EQUIPMENT NEW OR RELOCATED
- EXISTING PIPING/EQUIPMENT
- HWS HOT WATER SUPPLY
- HWR HOT WATER RETURN
- TP TIE-IN POINT
- B BOILER
- HX HEAT EXCHANGER
- PU PUMP
- WMU WATER MAKE-UP UNIT
- UVCP UV SYSTEM CONTROL PANEL
- NT CONDENSATE NEUTRALIZER
- F.D FLOOR DRAIN

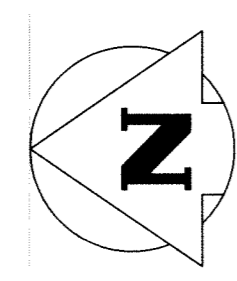


DETAIL - CONCRETE HOUSEKEEPING PAD
SCALE: N.T.S.



BASEMENT FILTRATION ROOM PLAN - NEW
SCALE: 1:50mm

BASEMENT MECHANICAL ROOM PLAN - NEW
SCALE: 1:40mm



Z

800 0 800 1600 2400 3200

SCALE: 1:40mm

SCALE VERIFIED BY: _____



NO.	REVISIONS	DATE	BY	DATE
3	ISSUED FOR ADDENDUM #1	12/03/13	RLR	
2	RE-ISSUED FOR TENDER	12/03/01	RED	
1	RE-ISSUED FOR TENDER	12/02/28	RED	
0	ISSUED FOR TENDER	12/02/24	RED	

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DESIGNED BY: SHC	CHECKED BY:	DRAWN BY: RLR/TJC	APPROVED BY:
HOR. SCALE: AS SHOWN		RELEASED FOR CONSTRUCTION:	
VERTICAL:		DATE:	

ENGINEER'S SEAL
THE ORIGINAL ISSUE REV. 0 WAS STAMPED, DATED AND SIGNED BY: R.E. DERKSEN, P.ENG ON 2012/02/24
CONSULTANT DRAWING NO. **M03**

THE CITY OF WINNIPEG
PLANNING, PROPERTY & DEVELOPMENT

PROJECT TITLE: **ST. JAMES CENTENNIAL POOL**
644 PARKDALE STREET
BID OPPORTUNITY: 45-2012
UPGRADE HYDRONIC HEATING SYSTEM

SHEET **003** OF **006**
COMPUTER FILE NAME: **11-0107-32-M03**
CITY DRAWING NUMBER