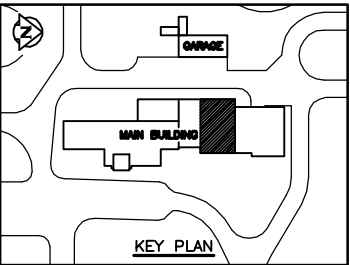


1 PARTIAL FLOOR PLAN - LABORATORY RENOVATION
1 : 100


- CODE REVIEW - NBC 1990
- OCCUPANCY CLASSIFICATION**
MAJOR OCCUPANCIES: WATER TREATMENT PLANT
TOTAL BUILDING AREA: 1969m²
WATER LABORATORY: 152m²
WASTEWATER LABORATORY: 156m²
TOTAL LABORATORY AREA: 308m²
NO. OF STOREYS: 2
NO. OF STREETS: 4
SPRINKLERED: NO
CLASSIFICATION(S) OF BUILDING: 3.2.2.59 INDUSTRIAL BUILDINGS, GROUP F, DIVISION 3
MAJOR OCCUPANCY: 1 AND 2 STOREYS
 - HEIGHT AND AREA REQUIREMENTS**
TYPE OF CONSTRUCTION: COMBUSTIBLE OR NONCOMBUSTIBLE (BUILDING IS NONCOMBUSTIBLE)
FLOOR ASSEMBLY ABOVE BASEMENT: 45 min.
OTHER FLOOR ASSEMBLIES: 45 min.
BALCONIES AND MEZZANINES: 45 min.
ROOF ASSEMBLY: 45 min. OR NONCOMBUSTIBLE
LOAD BEARING WALLS AND COLUMNS: 45 min. OR NONCOMBUSTIBLE
 - EXIT REQUIREMENTS**
MINIMUM REQUIRED FROM EACH LAB AREA: 3.3.1.5 AND TABLE 3.3.1.A - ONE REQUIRED (TWO PROVIDED)
MINIMUM REQUIRED FROM THE ENTIRE LAB AREA: TABLE 3.4.2.A - TWO REQUIRED (FOUR PROVIDED)
 - FIRE SAFETY WITHIN FLOOR AREAS**
SEPARATION OF LAB AREA: 3.3.1.1 (CONFORMS TO REQUIREMENTS FOR SEPARATION OF SUITES)
TRAVEL DISTANCE: 3.4.2.5.(1)(F) - 30m (TRAVEL DISTANCE CONFORMS)
TRAVEL IN OPPOSITE DIRECTION TO 2 EXITS: CONFORMS



AS CONSTRUCTED
DATE 97.05.12 BY D.L.P.
APPROVED BY _____

B.M. ELEV.				WARDROP ENGINEERING INC. WINNIPEG TORONTO THUNDER BAY			
				DESIGNED BY	M.F.	CHECKED BY	
				DRAWN BY	D.L.P.	APPROVED BY	
1	AS CONSTRUCTED	97.06.12	M.F.	HOR. SCALE:		RELEASED FOR CONSTRUCTION:	
0	ISSUED FOR TENDER	96/02	M.F.	VERTICAL: 1 : 100			
—	ISSUED FOR CITY REVIEW	95.12.00	M.F.				
NO. REVISIONS		DATE	BY	DATE 96.02.23		DATE	

ENGINEER'S SEAL
ORIGINAL DRAWING
REVISION "0" SEALED BY
D.J. KRAMBLE
96.02.27
CONSULTANT DRAWING NO.
940012-03-00-B102

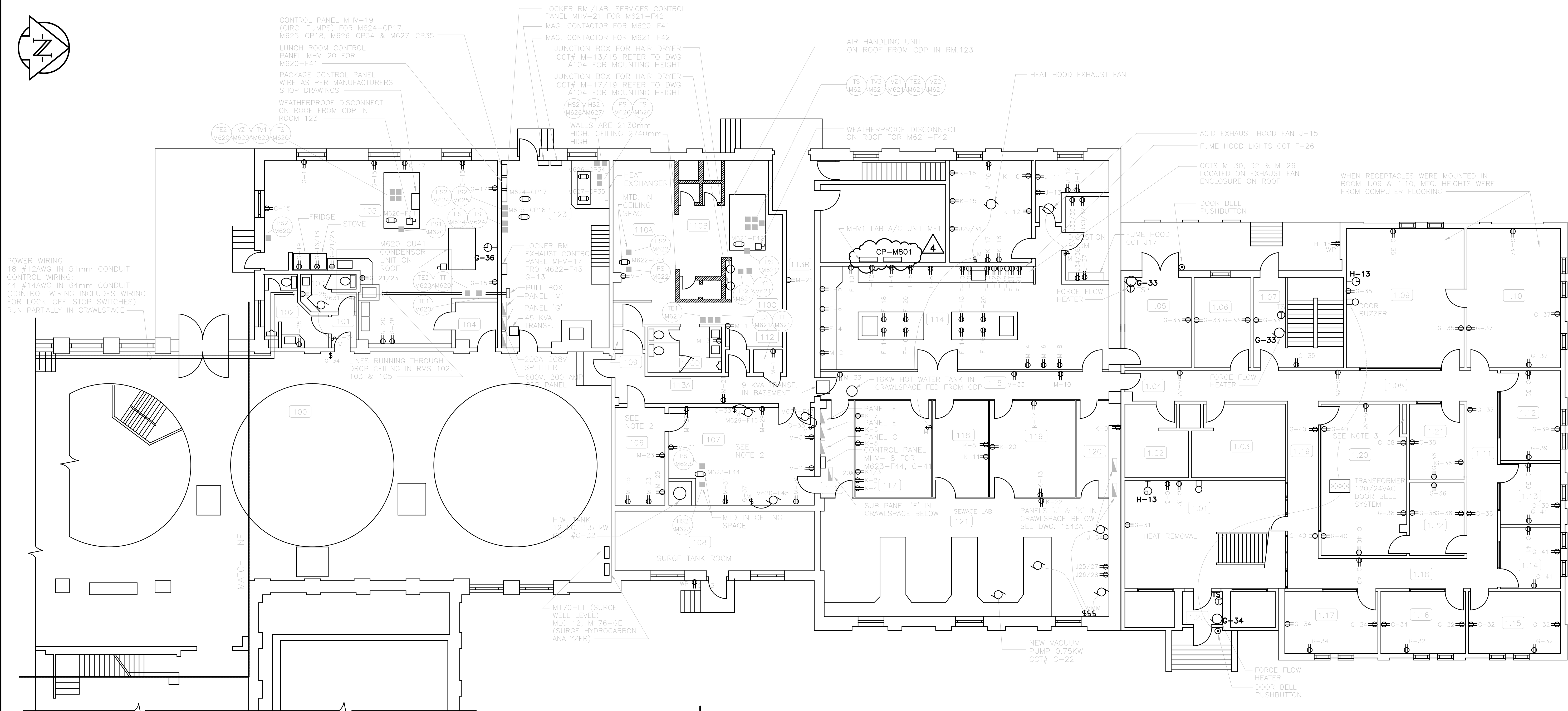
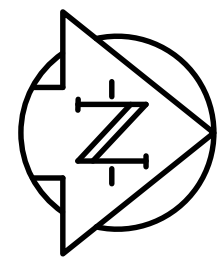


THE CITY OF WINNIPEG
WORKS AND OPERATIONS DIVISION
WATER AND WASTE DEPARTMENT

NORTH END WATER POLLUTION CONTROL CENTRE
LABORATORY RENOVATIONS - BUILDING

RENOVATED FLOOR PLAN

CITY DRAWING NUMBER
SHEET OF
NEP-2289



POWER WIRING:
18 #12AWG IN 51mm CONDUIT
CONTROL WIRING:
44 #14AWG IN 64mm CONDUIT
(CONTROL WIRING INCLUDES WIRING
FOR LOCK-OFF-STOP SWITCHES)
RUN PARTIALLY IN CRAWLSPACE

CONTROL PANEL MHV-19
(CIRC. PUMPS) FOR M624-CP17,
M625-CP18, M626-CP34 & M627-CP35
LUNCH ROOM CONTROL
PANEL MHV-20 FOR
M620-F41
PACKAGE CONTROL PANEL
WIRE AS PER MANUFACTURERS
SHOP DRAWINGS
WEATHERPROOF DISCONNECT
ON ROOF FROM CDP IN
ROOM 123

LOCKER RM./LAB. SERVICES CONTROL
PANEL MHV-21 FOR M621-F42
MAG. CONTACTOR FOR M620-F41
MAG. CONTACTOR FOR M621-F42
JUNCTION BOX FOR HAIR DRYER
CCT# M-13/15 REFER TO DWG
A104 FOR MOUNTING HEIGHT
JUNCTION BOX FOR HAIR DRYER
CCT# M-17/19 REFER TO DWG
A104 FOR MOUNTING HEIGHT

AIR HANDLING UNIT
ON ROOF FROM CDP IN RM.123

HEAT HOOD EXHAUST FAN

ACID EXHAUST HOOD FAN J-15
FUME HOOD LIGHTS CCT F-26

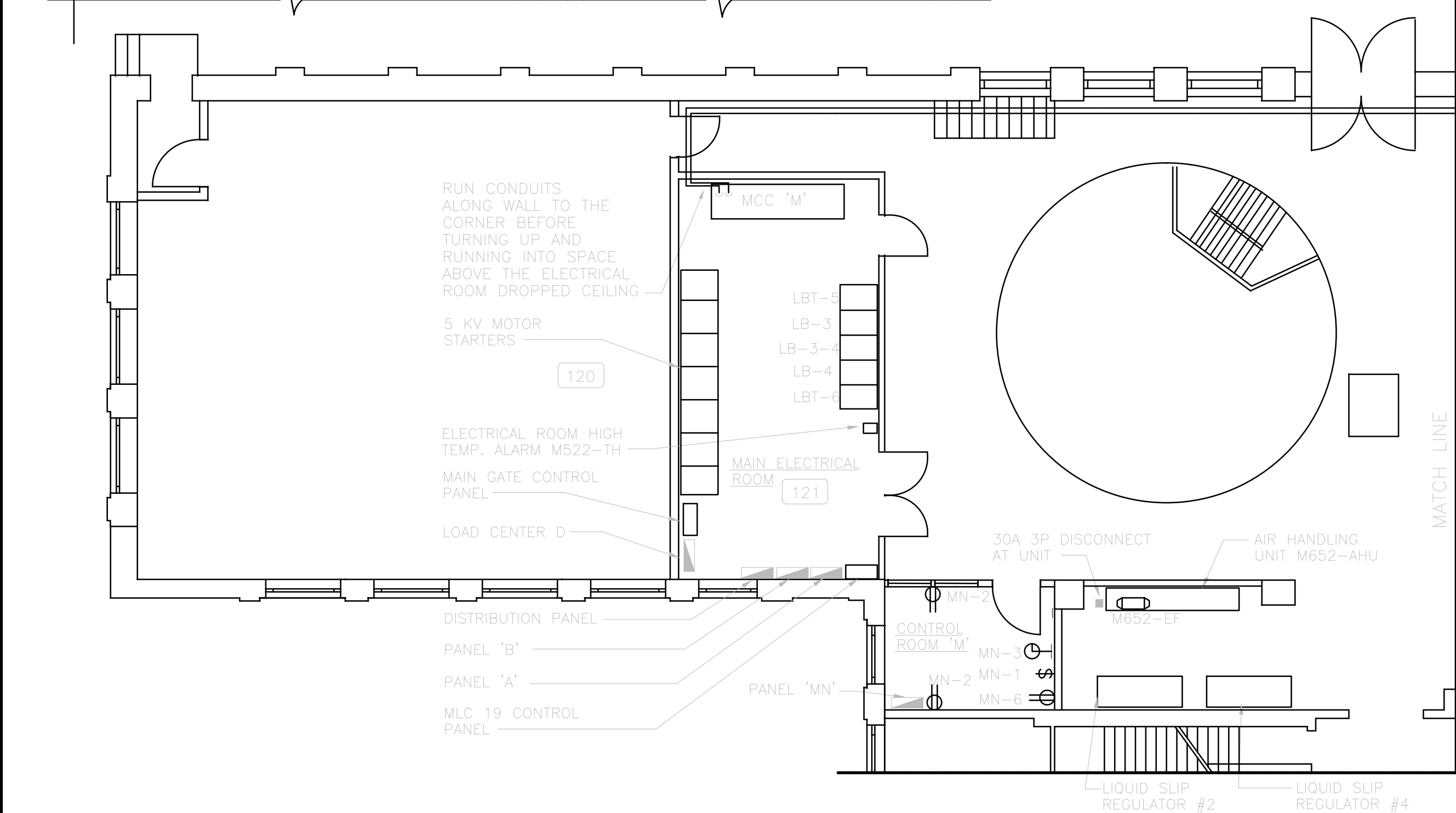
WHEN RECEPTACLES WERE MOUNTED IN
ROOM 1.09 & 1.10, MTG. HEIGHTS WERE
FROM COMPUTER FLOORING

MAIN FLOOR PLAN

1:100

NOTES:

1. RECEPTACLES MOUNTED AT 1200mm ABOVE FINISHED FLOOR
IN ROOMS 106 & 107.
2. RECEPTACLE PROVIDED FOR RELOCATED DRINKING FOUNTAIN.
3. CONTRACTOR UTILIZED PIPE CHASE FOR RUNNING CONDUITS
BETWEEN MAIN FLOOR, CRAWLSPACE AND SECOND FLOOR.



RUN CONDUITS
ALONG WALL TO THE
CORNER BEFORE
TURNING UP AND
RUNNING INTO SPACE
ABOVE THE ELECTRICAL
ROOM DROPPED CEILING

ELECTRICAL ROOM HIGH
TEMP. ALARM M522-TH

MAIN GATE CONTROL
PANEL

LOAD CENTER D

DISTRIBUTION PANEL

PANEL 'B'

PANEL 'A'

MLC 19 CONTROL
PANEL

MAIN ELECTRICAL
ROOM

30A 3P DISCONNECT
AT UNIT

AIR HANDLING
UNIT M652-AHU


CONTROL
ROOM 'M'

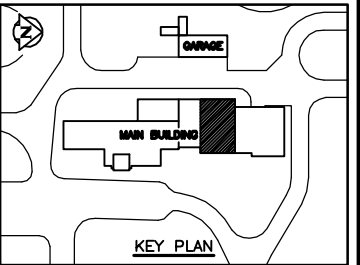
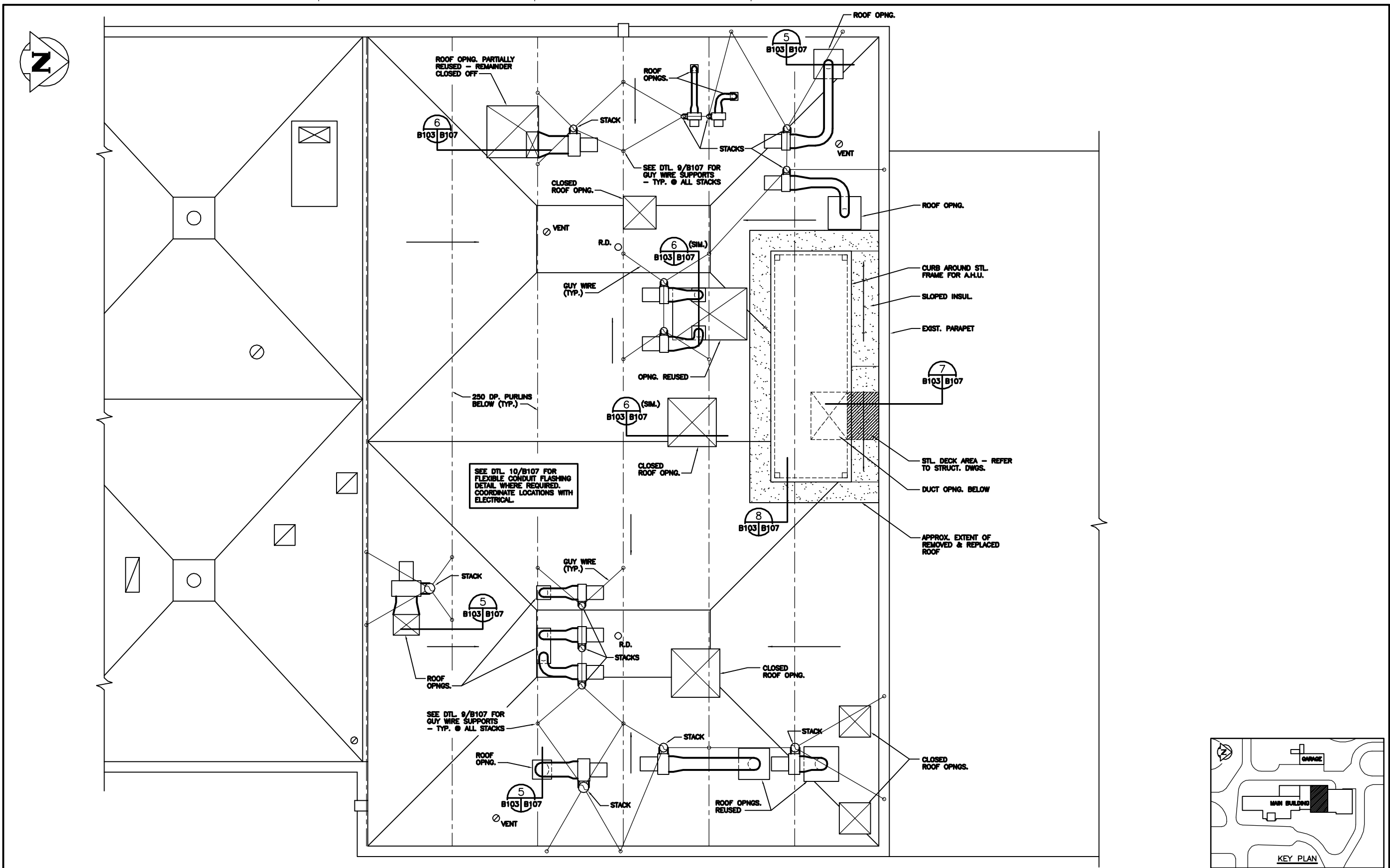
PANEL 'MN'

VN-2 MN-1
MN-6

LIQUID SLIP
REGULATOR #2


LIQUID SLIP
REGULATOR #4

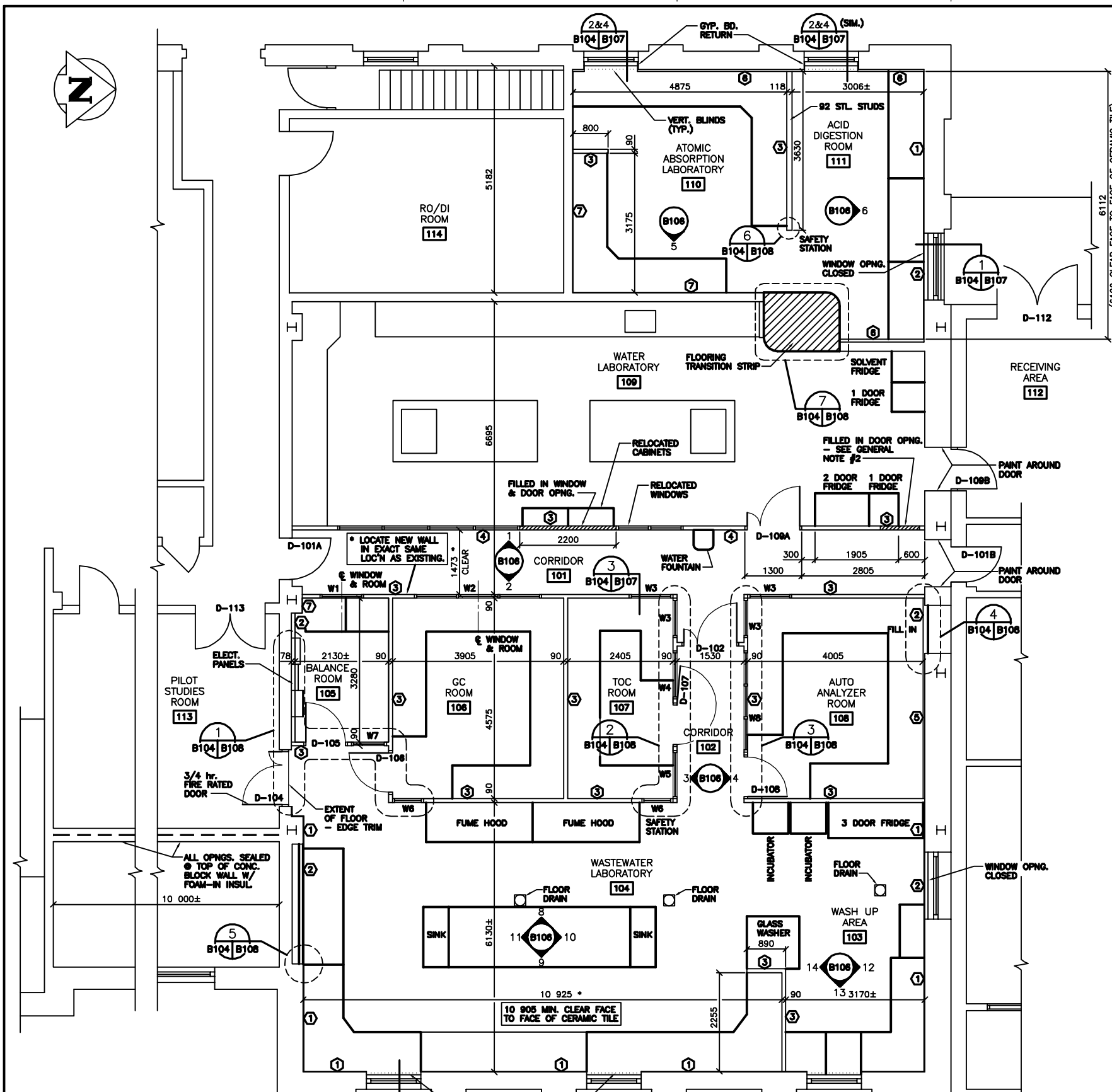
B.M. ELEV.								ENGINEER'S SEAL		<div></div> <div>THE CITY OF WINNIPEG WORKS AND OPERATIONS DIVISION WATERWORKS, WASTE & DISPOSAL DEPARTMENT</div>	
4	ISSUED FOR 90% REVIEW	16/08		DESIGNED BY	R.A.H.	CHECKED BY		NORTH END WATER POLLUTION CONTROL CENTRE		CITY DRAWING NUMBER	
3	AS CONSTRUCTED	91/07	R.A.H.	DRAWN BY	N.B.	APPROVED BY		MAIN BUILDING RENOVATIONS—ELECTRICAL		SHEET OF	
2	AS CONSTRUCTED	89/08		HOR. SCALE: 1:100 VERTICAL:		RELEASED FOR CONSTRUCTION:		MAIN FLOOR PLAN			
1	REISSUED FOR TENDER	89/01	A.S.					POWER & EQUIPMENT			
0	ISSUED FOR TENDER	88/08	A.S.					LAYOUT		NEP-1540	
NO. REVISIONS		DATE	BY	DATE		DATE		CONSULTANT DRAWING NO.			
				JUNE/91		880012-01-03					



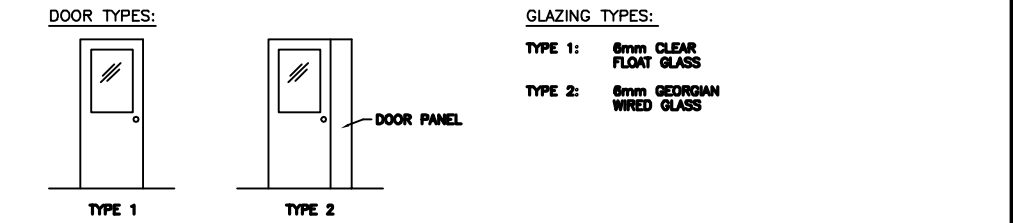
1 PARTIAL ROOF PLAN
1 : 50

AS CONSTRUCTED
DATE 97.05.12 BY D.L.P.
APPROVED BY _____

B.M. ELEV.				<div>WARDROP ENGINEERING INC. TORONTO TORONTO TORONTO ONT</div>				<div>ENGINEER'S SEAL</div> <div>ORIGINAL DRAWING REVISION "0" SEALED BY D.J. KRAMBLE 96.02.27</div> <div>CONSULTANT DRAWING NO. 940012-03-00-B103</div>				<div> THE CITY OF WINNIPEG WORKS AND OPERATIONS DIVISION WATER AND WASTE DEPARTMENT</div> <div>NORTH END WATER POLLUTION CONTROL CENTRE</div> <div>LABORATORY RENOVATIONS - BUILDING</div> <div>PARTIAL ROOF PLAN</div>				CITY DRAWING NUMBER			
DESIGNED BY M.F.																CHECKED BY			
DRAWN BY D.L.P.																APPROVED BY			
HOR. SCALE: 1 : 50																RELEASED FOR CONSTRUCTION:			
1 AS CONSTRUCTED 97.05.12 M.F.												SHEET OF							
0 ISSUED FOR TENDER 96/02 M.F.																			
-- ISSUED FOR CITY REVIEW 96.12.06 M.F.																			
NO. REVISIONS				DATE BY DATE 96.02.23								NEP-2290							



DOOR & INTERIOR WINDOW SCHEDULE:											
DOOR				FRAME				REMARKS			
DOOR/WINDOW No.	DOOR TYPE	RATING	MATERIAL	FINISH	PAINT COLOUR	SIZE	RATING	MATERIAL	FINISH	PAINT COLOUR	REMARKS
D-101A	-	-	P	5	-	-	-	P	2	-	-
D-101B	-	-	P	5	-	-	-	P	2	-	-
D-102	2	3/4	HM	P	4,5	1-800x2150x45 1-300x2150x45	3/4	PS	P	2	2 2
D-104	2	3/4	HM	P	1,4	1-800x2150x45 1-300x2150x45	3/4	PS	P	2	3 2
D-105	1	1	HM	P	4	900x2150x45	-	PS	P	2	8 1
D-106	1	1	HM	P	4	800x2150x45	-	PS	P	2	1 1
D-107	1	1	HM	P	4	900x2150x45	-	PS	P	2	1 1
D-108	1	1	HM	P	4	900x2150x45	-	PS	P	2	1 1
D-108A	2	1	HM	P	1,5	1-900x2150x45 1-300x2150x45	-	PS	P	2	2 2
D-108B	-	-	-	-	-	-	-	-	-	-	-
D-112	-	-	-	-	-	-	-	-	-	-	5
D-113	-	-	-	-	-	-	-	-	-	-	4
W1	1000x1525	-	N	AL	-	-	-	2	SEE DETAILS	-	-
W2	3000x1525	-	N	AL	-	-	-	2	SEE DETAILS	-	-
W3	1000x1525	-	N	AL	-	-	-	2	SEE DETAILS	-	-
W4	1150x1525	-	N	AL	-	-	-	1	SEE DETAILS	-	-
W5	1150x1525	-	N	AL	-	-	-	1	SEE DETAILS	-	-
W6	700x1525	-	N	AL	-	-	-	1	SEE DETAILS	-	-
W7	800x1525	-	N	AL	-	-	-	1	SEE DETAILS	-	-
W8	2300x1525	-	N	AL	-	-	-	1	SEE DETAILS	-	-



ROOM FINISH SCHEDULE:														
ROOM NUMBER		FLOOR				WALLS				CEILING		REMARKS		
		MATERIAL	FINISH	BASE	MATERIAL	FINISH	NORTH	EAST	SOUTH	WEST				
							MATERIAL	FINISH	MATERIAL	FINISH	MATERIAL		FINISH	HEIGHT
101	C	SF	RB	-	P-2	GB	P-3	-	GB	P-3	2665	LAT	-	<div>ABBREVIATIONS:</div> <div>C - CONCRETE</div> <div>CB - CONCRETE BLOCK</div> <div>CT - CERAMIC TILE</div> <div>GB - GYPSUM BOARD</div> <div>LAT - LAY-IN ACOUSTIC TILE</div> <div>P-3 - PAINT AND COLOUR NUMBER</div> <div>RB - RUBBER BASE</div> <div>SF - SHEET FLOORING</div> <div>NOTES:</div> <div>- A DASH (-) INDICATES NO WORK IS REQUIRED.</div>
102	C	SF	SF	GB	CT	-	GB	CT	GB	CT	2665	LAT	-	
103	C	SF	SF	GB	CT	GB	CT	GB	CT	2665	LAT	-	-	
104	C	SF	SF	GB	CT	GB	CT	GB	CT	2665	LAT	-	-	
105	C	SF	SF	GB	P-3	GB	P-3	GB	P-3	2665	LAT	-	-	
106	C	SF	SF	GB	P-3	GB	P-3	GB	P-3	2665	LAT	-	-	
107	C	SF	SF	GB	P-3	GB	P-3	GB	P-3	2665	LAT	-	-	
108	C	SF	SF	GB	P-3	GB	P-3	GB	P-3	2665	LAT	-	-	
109	C	EF	-	-	P-2	GB	CT	-	-	2665	LAT	-	-	
110	C	SF	SF	GB	P-3	GB	P-3	GB	P-3	2665	LAT	-	-	
111	C	SF	SF	GB	CT	GB	CT	GB	CT	2665	LAT	-	-	

- WALL TYPES:**
- 1 CONCRETE BLOCK.
 - 2 13 GYPSUM BOARD ON 85 STEEL STUDS @ 400 O.C. TO 100 ABOVE CEILING.
 - 3 13 GYPSUM BOARD BOTH SIDES 85 STEEL STUDS (EXCEPT AS SHOWN) @ 400 O.C. TO U/S CEILING. SEE SPECIFICATION SECTION 10618.
 - 4 13 GYPSUM BOARD ON 85 STEEL STUDS TO U/S CEILING. SEE SPECIFICATION SECTION 10618.
 - 5 13 GYPSUM BOARD ON 19 STRAPPING OVER CONCRETE BLOCK TO 100 ABOVE CEILING.
 - 6 13 GYPSUM BOARD ON 38(±) STRAPPING OVER CONCRETE BLOCK.
 - 7 13 GYPSUM BOARD LAMINATED TO CONCRETE BLOCK.
- GENERAL NOTES:**
- 1. ALL DIMENSIONS SHOWN ARE FACE TO FACE OF WALL (EXCLUDING CERAMIC TILE).
 - 2. ALL DIMENSIONS SHOWN ARE APPROXIMATE.
 - 3. EXTERIOR WINDOWS RESEALED. SEE DETAIL 1/B107.
- KEY PLAN**

NOTE:
FOR DETAILED LAB FURNITURE
PLANS AND ELEVATIONS REFER
TO DRAWINGS IN SPECIFICATION
INDICATED BY ROOM NUMBER.
i.e.: 104 and 104A etc.

1
- -
PARTIAL FLOOR PLAN
1 : 50

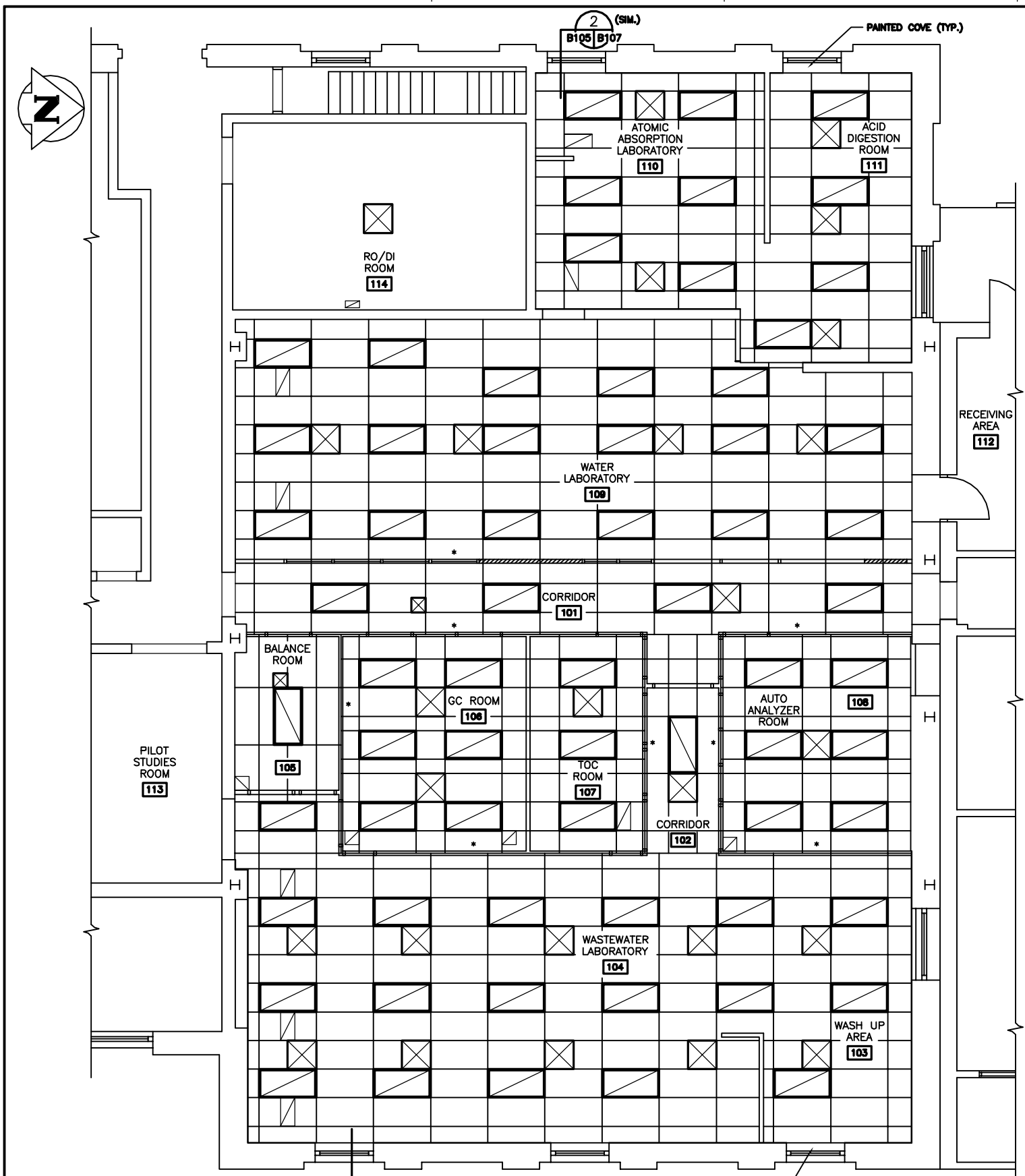
AS CONSTRUCTED
DATE 97.05.12 BY D.L.P.
APPROVED BY _____

WARDROP ENGINEERING INC.
DESIGNED BY M.F.
DRAWN BY D.L.P.
HORIZ. SCALE: 1 : 50
VERTICAL: 1 : 50
DATE 96.02.23

ENGINEER'S SEAL
ORIGINAL DRAWING
REVISION "0" SEALED BY
D.J. KRAMBLE
96.02.27
CONSULTANT DRAWING NO.
940012-03-00-B104

THE CITY OF WINNIPEG
WORKS AND OPERATIONS DIVISION
WATER AND WASTE DEPARTMENT
NORTH END WATER POLLUTION CONTROL CENTRE
LABORATORY RENOVATIONS - BUILDING
PARTIAL FLOOR PLAN
NEW LABORATORY LAYOUT
AND SCHEDULES

CITY DRAWING NUMBER
SHEET OF
NEP-2291

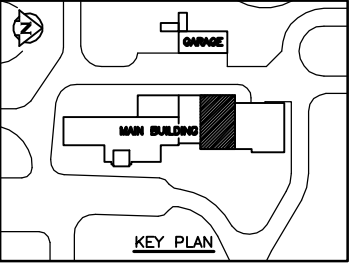


LEGEND:

	FLUORESCENT LIGHT FIXTURE
	SUPPLY AIR GRILLE
	RETURN AIR GRILLE

NOTES:

- WALLS DENOTED WITH "*" HAVE CEILING SUSPENSION "TEE" RUNNING ALONG CENTER LINE OF WALL.
- REFER TO ELECTRICAL DRAWINGS FOR LIGHT FIXTURES AND LENSES.



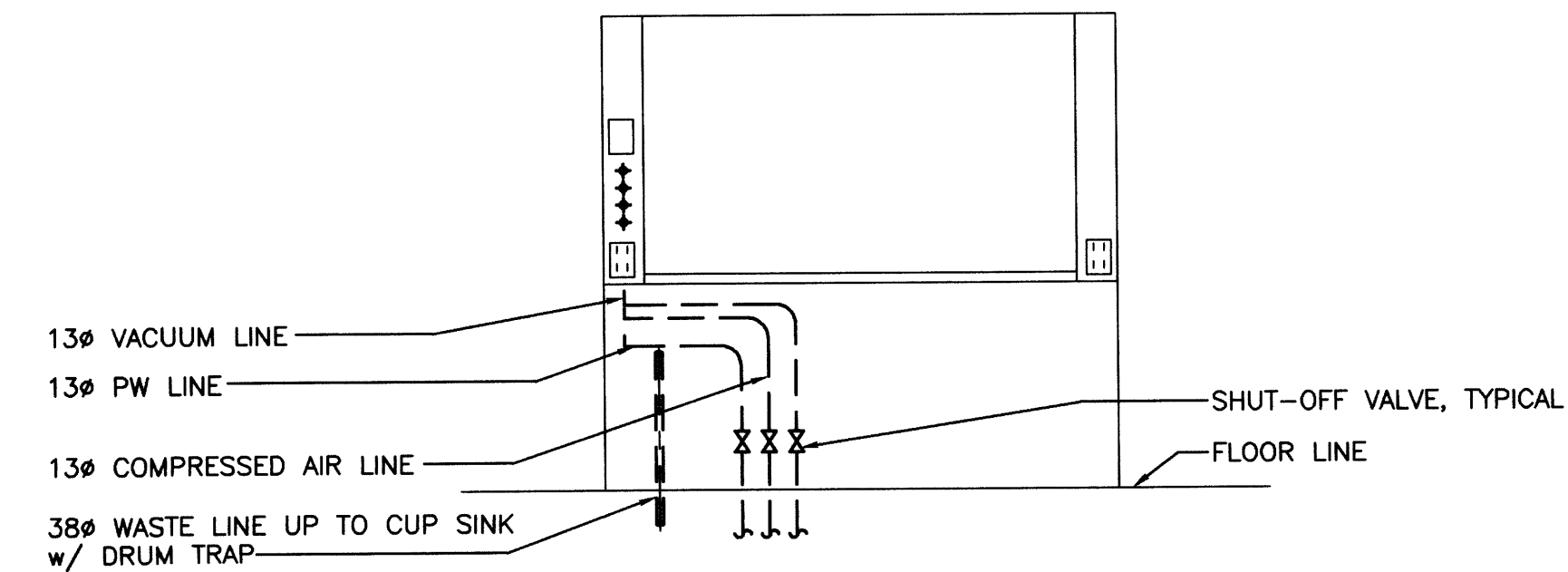
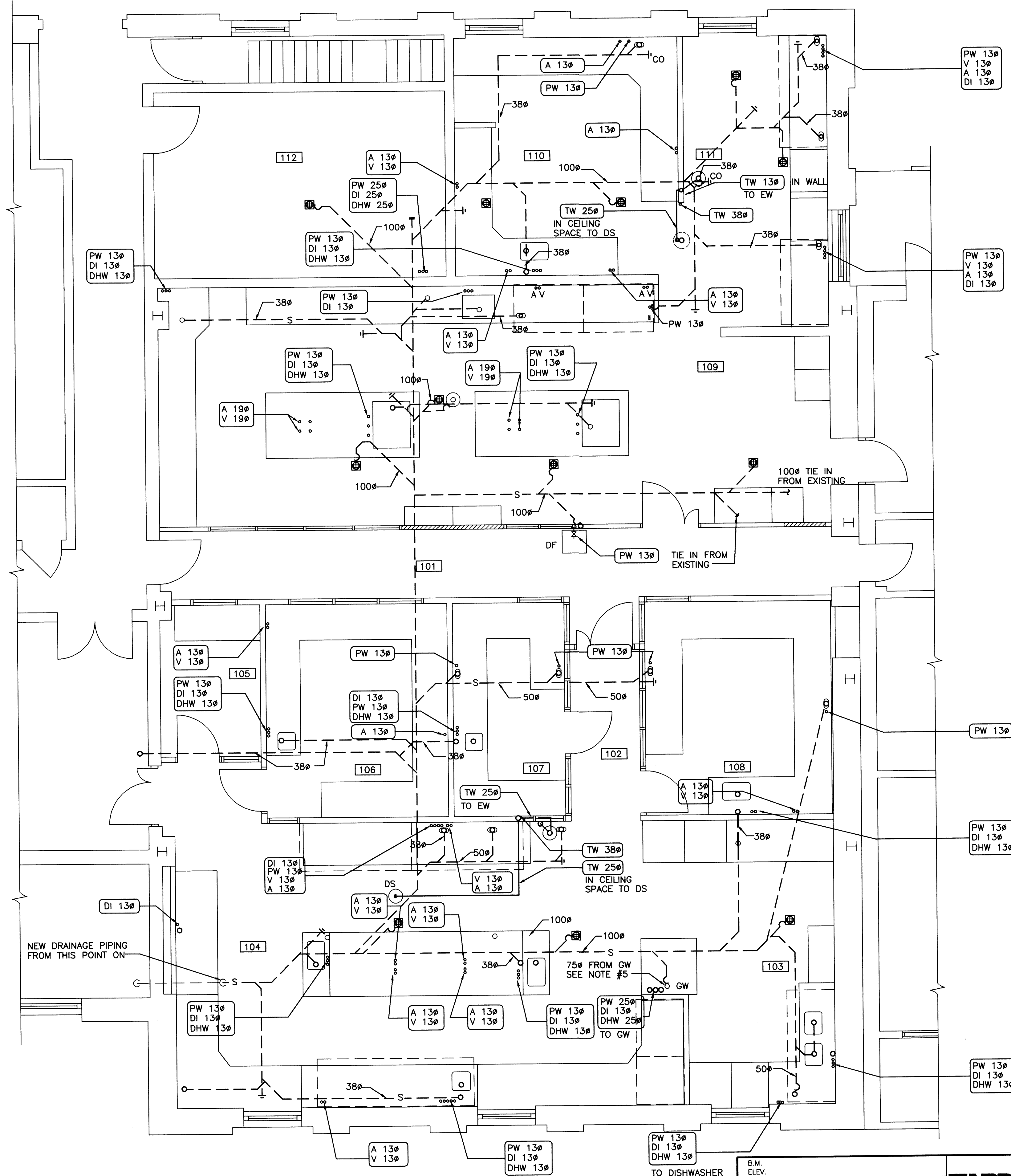
1 REFLECTED CEILING PLAN
1 : 50

AS CONSTRUCTED
DATE 97.05.12 BY D.L.P.
APPROVED BY _____

B.M. ELEV.			WARDROP ENGINEERING INC. VICTORIA TORONTO THUNDER BAY		
DESIGNED BY M.F.			CHECKED BY _____		
DRAWN BY D.L.P.			APPROVED BY _____		
1 AS CONSTRUCTED 97.05.12 M.F.			HOR. SCALE: 1 : 50		
0 ISSUED FOR TENDER 96/02 M.F.			RELEASED FOR CONSTRUCTION: _____		
- ISSUED FOR CITY REVIEW 95.12.08 M.F.			DATE 96.02.23		
NO. REVISIONS	DATE	BY	DATE	DATE	DATE

ENGINEER'S SEAL	
ORIGINAL DRAWING REVISION "0" SEALED BY D.J. KRAMBLE 96.02.27	
CONSULTANT DRAWING NO. 940012-03-00-B105	

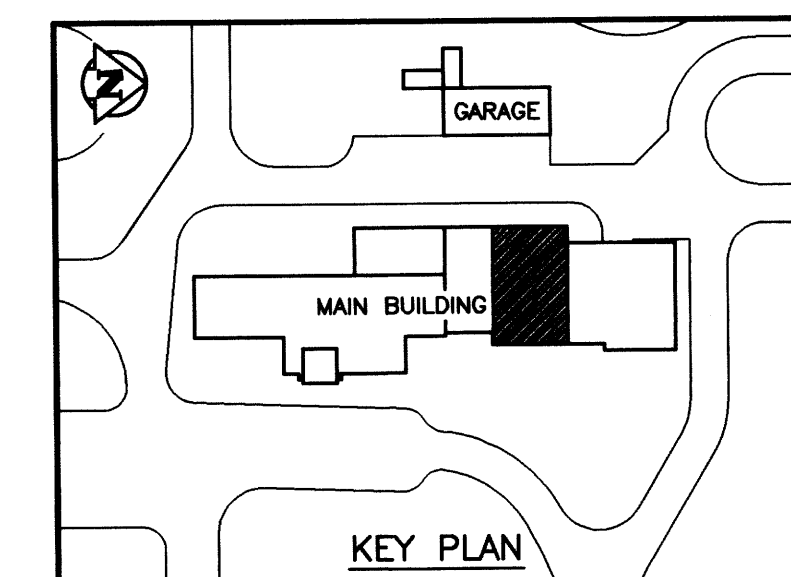
THE CITY OF WINNIPEG WORKS AND OPERATIONS DIVISION WATER AND WASTE DEPARTMENT	
NORTH END WATER POLLUTION CONTROL CENTRE LABORATORY RENOVATIONS - BUILDING	
REFLECTED CEILING PLAN	
CITY DRAWING NUMBER SHEET OF NEP-2292	



2 FUME HOOD CONNECTION DETAIL
- - N.T.S.

1. PIPING, VALVES UP TO UNDERSIDE OF PRE-PIPED FUME HOOD TABLE AND CONNECT TO FACTORY INSTALLED CONNECTIONS.
2. ALL SINK CONNECTIONS ARE 38mm ϕ UNLESS OTHERWISE NOTED. ALL FLOOR DRAIN CONNECTIONS ARE 100mm ϕ UNLESS NOTED OTHERWISE.
3. OPENING IN SLAB FOR 75mm ϕ HUB DRAIN FROM GLASS WASHER.
4. 50mm ϕ VENT LINE IN CEILING SPACE WITH DROPS DOWN TO GLASSWASHER AND IN GC ROOM 106.
5. 6mm ϕ PW AND 19mm ϕ DRAIN LINES FOR HUMIDIFIER IN CEILING SPACE ABOVE ROOM 105, PW LINE c/w ISOLATION VALVE.

DATE 97.05.12 BY D.C.
APPROVED BY _____

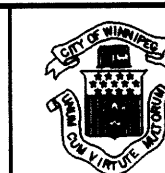


1 PARTIAL MAIN FLOOR PLAN
1 : 50

B.M. ELEV.				<div style="display: flex; justify-content: space-between; align-items: center;"> <div style="text-align: center;"> <h1 style="margin: 0;">WARDROP</h1> <p style="margin: 0;">ENGINEERING INC.</p> <p style="margin: 0; font-size: small;">WILNIPIC TORONTO THUNDER BAY</p> </div> </div>			
				DESIGNED BY	S.Q.	CHECKED BY	
				DRAWN BY	D.C. / P.O.	APPROVED BY	
1	AS CONSTRUCTED	97.05.12	S.Q.	HOR. SCALE: 1 : 50 VERTICAL:		RELEASED FOR CONSTRUCTION:	
0	ISSUED FOR TENDER	96/02	S.Q.				
—	ISSUED FOR CITY REVIEW	95.12.08	S.Q.				
NO	REVISIONS	DATE	BY	DATE 95.12.01		DATE	

ORIGINAL DRAWING
REVISION "0" SEALED BY
SEAN QUIGLEY
96.02.27

CONSULTANT DRAWING NO.
940012-03-00-M109



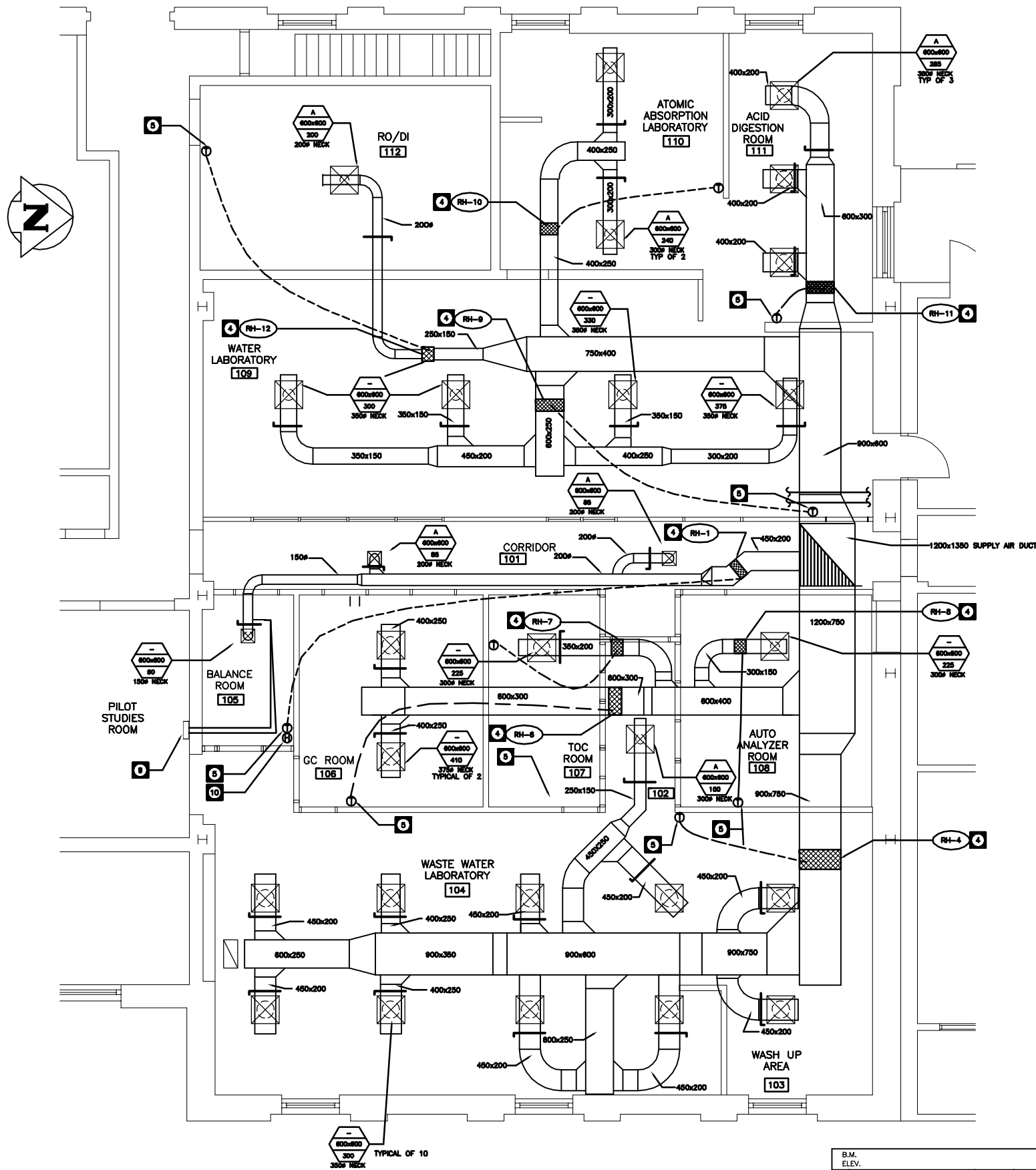
BY NORTH END WATER POLLUTION CONTROL CENTRE
LABORATORY RENOVATIONS – MECHANICAL
PARTIAL MAIN FLOOR PLAN
PLUMBING SERVICES

CITY DRAWING NUMBER

SHEET OF

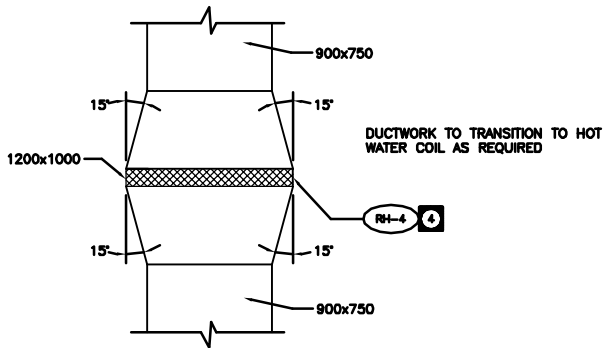
NEP-2305

NEP-2305

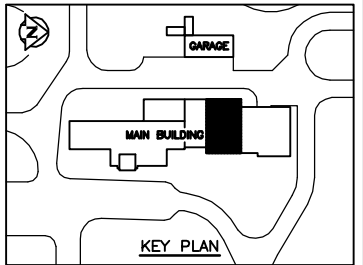


DRAWING NOTES - HVAC

- 1500x800 SUPPLY AIR DUCT TO RISE UP ON EXTERIOR OF WALL ENTIRELY INSULATED AND COATED WITH WEATHERPROOF COMPOUND. DUCT TO ENTER BUILDING AT CEILING SPACE LEVEL.
- AIR HANDLING UNIT AHU-1 AS SPECIFIED AT GRADE LEVEL ON SUPPORT PLATFORM. REFER DETAIL ON DRAWING M-113 FOR MOUNTING AND INSTALLATION.
- RUN SUPPLY AIR DUCTWORK IN MAIN FLOOR CEILING SPACE.
- TYPICAL REHEAT COIL REFER TO REHEAT COIL SCHEDULE FOR COIL SIZES AND CAPACITIES. REFER TO FLOOR PLAN MECHANICAL DRAWING M112 FOR REHEAT COIL HOT WATER HEATING PIPING CONNECTIONS. REFER TO MECHANICAL DRAWING M112 FOR DETAIL OF TYPICAL REHEAT COIL PIPING AND VALVING SCHEMATIC HOOK-UP.
- PROVIDE NEW THERMOSTAT MOUNTED ON WALL WIRED TO CONTROL REHEAT COIL CONTROL VALVE (EXACT LOCATION TO BE SITE DETERMINED). REFER TO SPECIFICATION FOR SEQUENCE OF OPERATION.
- REFER TO MECHANICAL DRAWING M114 FOR EXHAUST DUCT SYSTEMS FOR LABORATORY AREAS.
- DENOTES TYPICAL BALANCE DAMPER.
- MECHANICAL CONTRACTOR SHALL CO-ORDINATE AND CONFIRM FINAL LOCATIONS FOR ALL GRILLES AND DIFFUSERS WITH ARCHITECTURAL REFLECTED CEILING PLAN AND LIGHTING LAYOUT. ADJUST CONNECTING DUCTWORK AS REQUIRED.
- HUMIDIFIER H-1 AS SPECIFIED MOUNTED IN CEILING SPACE. CONNECT TO DISPERSION TUBING MOUNTED IN BALANCE ROOM SUPPLY AIR DUCTWORK. SEE M109 FOR PIPING FOR HUMIDIFIER.
- PROVIDE HUMIDISTAT CONTROL WIRED TO CYCLE HUMIDIFIER H-1.
- SUPPLY AIR DUCTWORK TO SLOPE DOWN.
- CO-ORDINATE ALL DUCT RISERS WITH EXISTING STRUCTURAL BEAM.
- INSTALL DRIP PANS UNDER ALL REHEAT COILS, TYPICAL.
- TRANSITION DUCTWORK TO SUIT HWS/HWR PIPING AT THIS LOCATION.



2 HOT WATER COIL DUCTWORK DETAIL
SCALE 1 : 25



1 PARTIAL MAIN FLOOR PLAN
SCALE 1 : 50

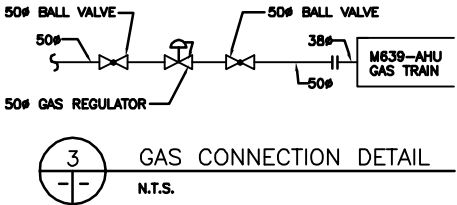
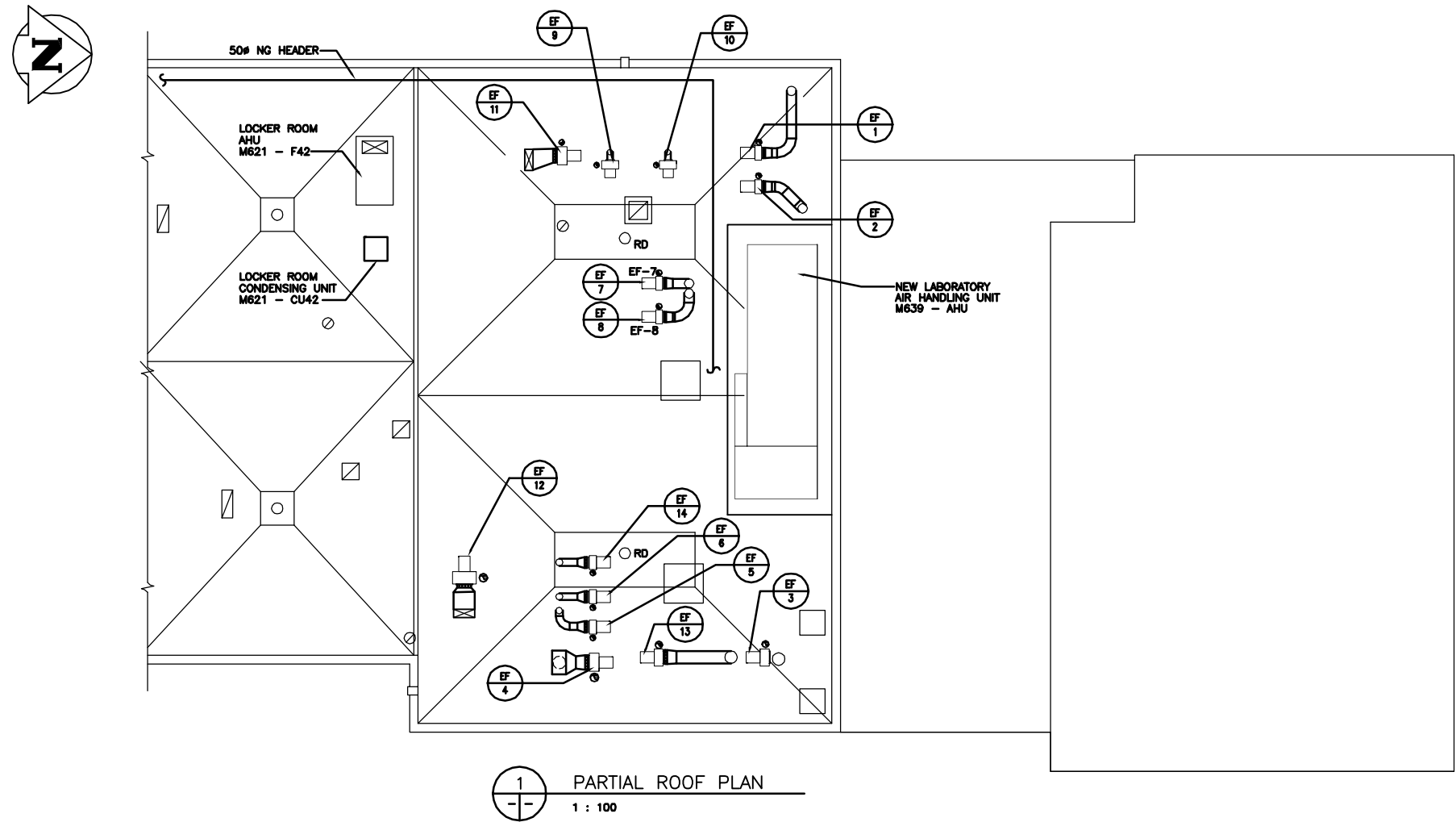
AS CONSTRUCTED
DATE 97.05.12 BY D.C.
APPROVED BY _____

NO.	REVISIONS	DATE	BY
1	AS CONSTRUCTED	97.05.12	S.Q.
0	ISSUED FOR TENDER	96.02	S.Q.
-	ISSUED FOR CITY REVIEW	95.12.08	S.Q.

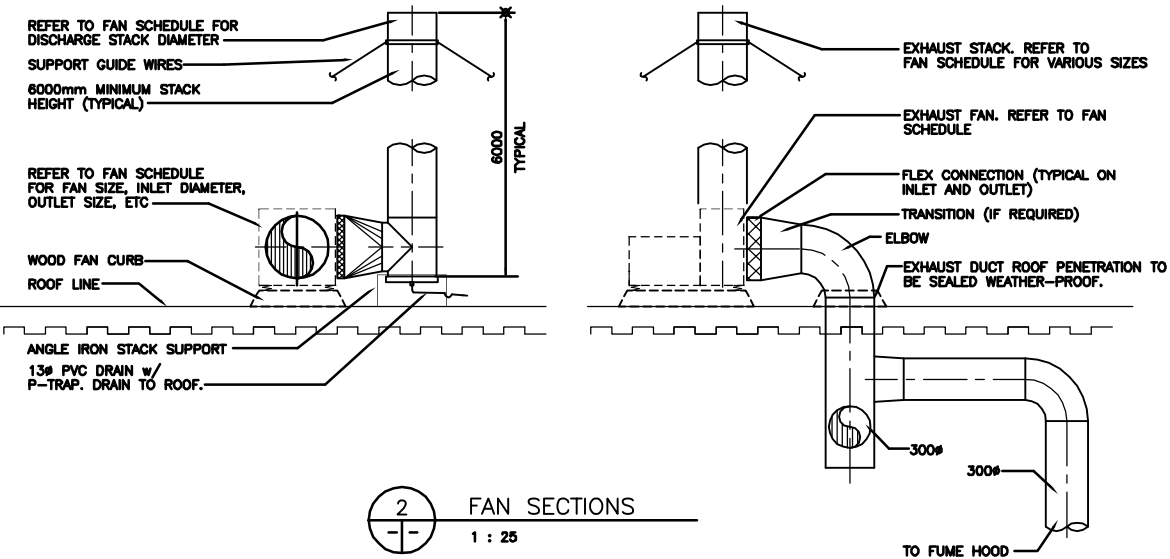
WARDROP ENGINEERING INC.			
DESIGNED BY	S.Q.	CHECKED BY	
DRAWN BY	D.C., P.O.	APPROVED BY	
HOR. SCALE:	1 : 50	RELEASED FOR CONSTRUCTION:	
DATE	95.12.01	DATE	

ENGINEER'S SEAL	
ORIGINAL DRAWING	REVISION "0" SEALED BY SEAN QUIGLEY 96.02.27
CONSULTANT DRAWING NO.	940012-03-00-M110

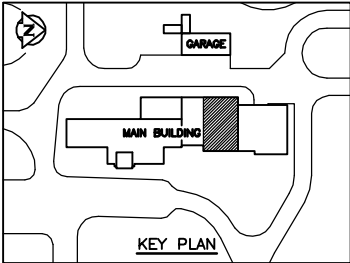
THE CITY OF WINNIPEG WORKS AND OPERATIONS DIVISION WATER AND WASTE DEPARTMENT	
NORTH END WATER POLLUTION CONTROL CENTRE LABORATORY RENOVATIONS - MECHANICAL PARTIAL MAIN FLOOR PLAN HEATING AND VENTILATION	CITY DRAWING NUMBER SHEET OF NEP-2306



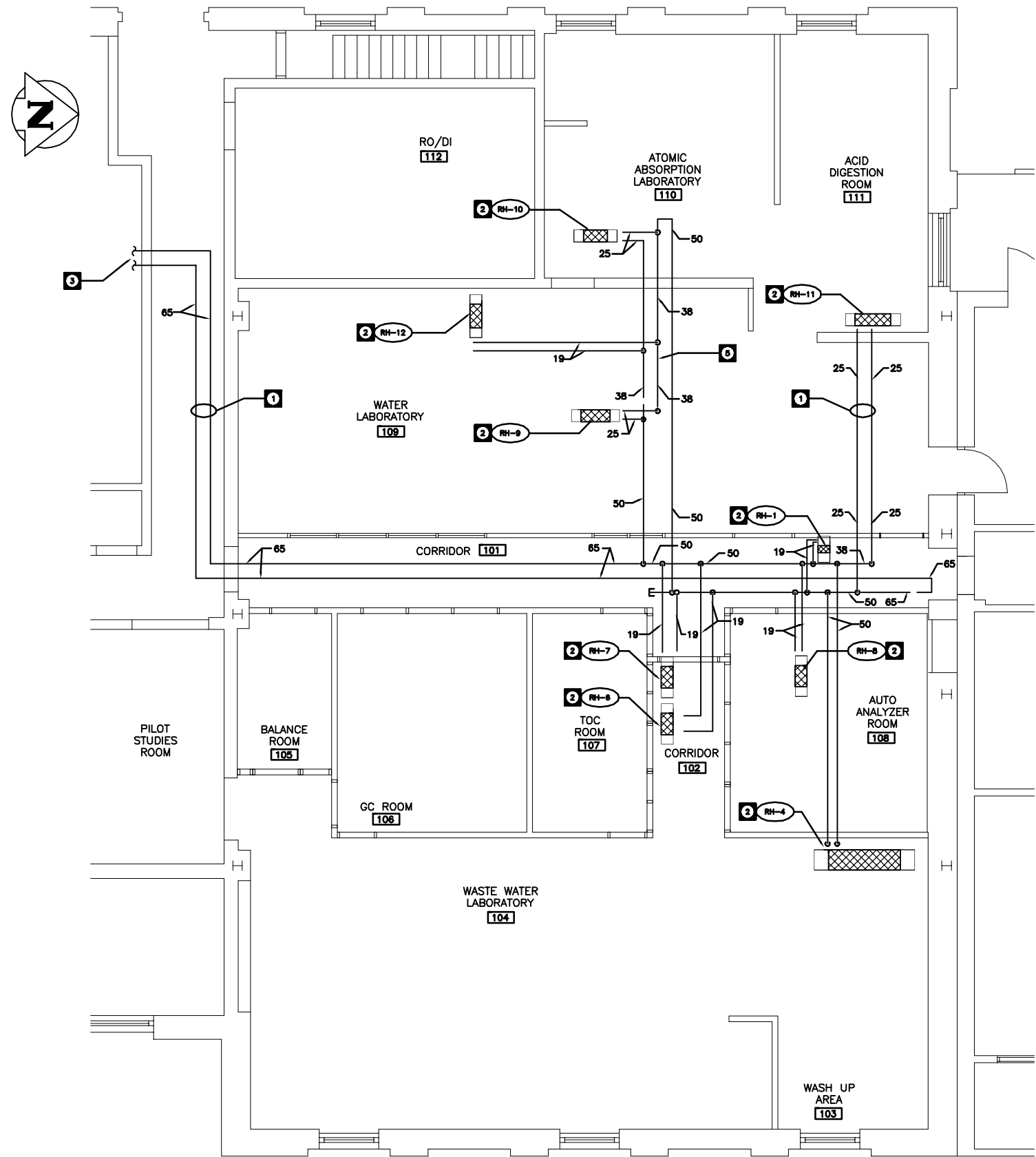
- NOTES:**
1. REFER TO S101 FOR LOCATION OF STEEL SUPPORT FRAME FOR M639 - AHU.
 2. EXHAUST FAN STACKS ARE DOUBLE WALL CHIMNEYS AS PER DIVISION 15.
 3. APPROXIMATE LOCATION OF 50mm# NATURAL GAS HEADER. NG HEADER ON WOOD BLOCKS IN ACCORDANCE WITH APPLICABLE GAS CODES.



AS CONSTRUCTED
DATE 97.05.12 BY D.C.
APPROVED BY _____

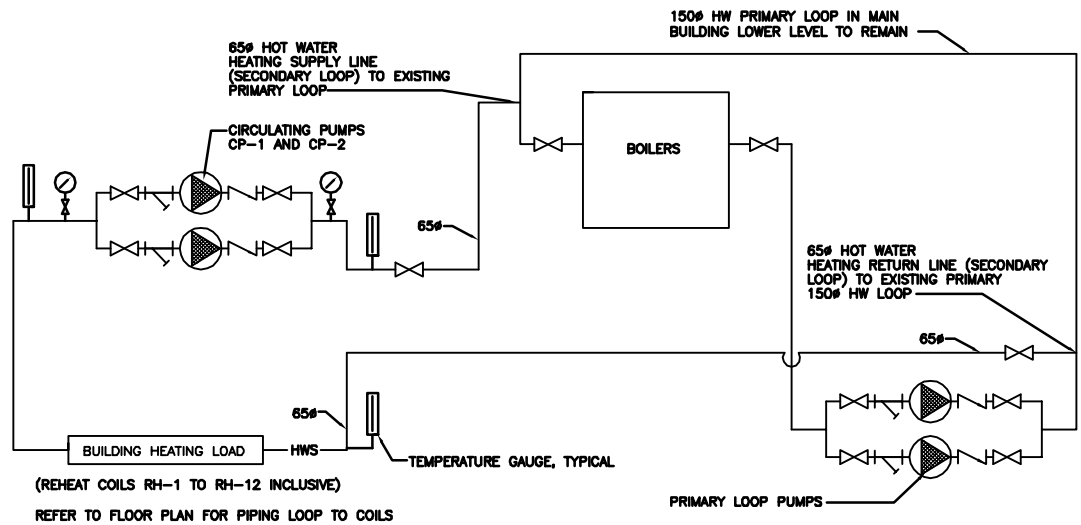


B.M. ELEV.			WARDROP ENGINEERING INC. VICTORIA TORONTO WINNIPEG		ENGINEER'S SEAL	THE CITY OF WINNIPEG WORKS AND OPERATIONS DIVISION WATER AND WASTE DEPARTMENT	
			DESIGNED BY S.Q.	CHECKED BY	ORIGINAL DRAWING REVISION "0" SEALED BY SEAN QUIGLEY 98.02.27	NORTH END WATER POLLUTION CONTROL CENTRE	
			DRAWN BY D.C.	APPROVED BY		LABORATORY RENOVATIONS - MECHANICAL	
1 AS CONSTRUCTED 97.05.12 S.Q.			HOR. SCALE: 1 : 100	RELEASED FOR CONSTRUCTION:		PARTIAL ROOF PLAN	
0 ISSUED FOR TENDER 98/02 S.Q.			DATE 95.12.01	DATE		VENTILATION EQUIPMENT LAYOUT	
- ISSUED FOR CITY REVIEW 95.12.08 S.Q.						CONSULTANT DRAWING NO. 940012-03-00-M111	
NO. REVISIONS DATE BY						CITY DRAWING NUMBER	
						SHEET OF	
						NEP-2307	

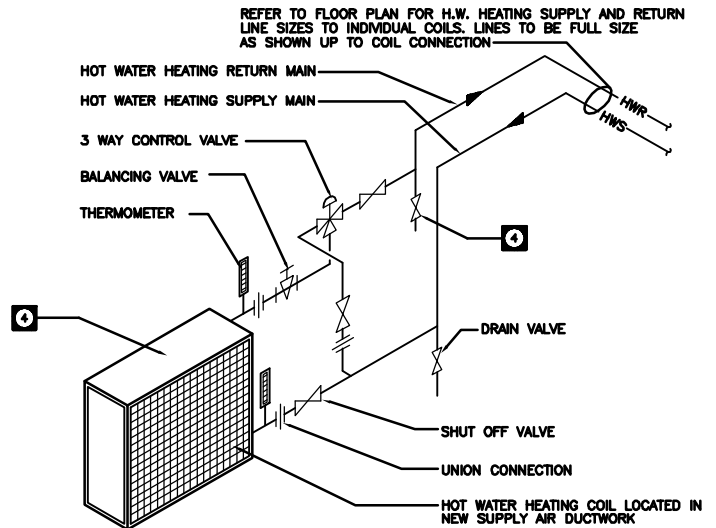


1 PARTIAL MAIN FLOOR PLAN
1 : 50

AS CONSTRUCTED
DATE 97.05.12 BY D.C.
APPROVED BY _____



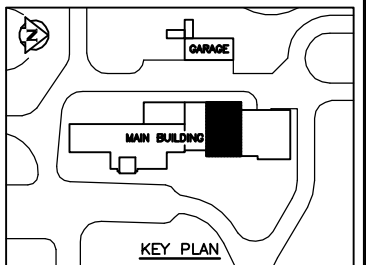
3 HOT WATER HEATING SCHEMATIC FLOW DIAGRAM
N.T.S.




2 HOT WATER REHEAT COIL DETAIL
N.T.S.

DRAWING NOTES

- 65# HOT WATER HEATING SUPPLY AND RETURN LINES IN MAIN FLOOR CEILING SPACE
- TYPICAL REHEAT COIL. REFER TO SCHEDULE FOR COIL SPECIFICATION. SEE DETAIL 2 FOR TYPICAL PIPING AND VALVING HOOK-UP.
- 65# REHEAT LOOP HOT WATER HEATING SUPPLY AND RETURN LINES TO EXISTING GALLERY LOCATION.
- REFER TO SPECIFICATION FOR COIL AND VALVE SCHEDULES
- REHEAT COIL REVERSE RETURN HOT WATER LINE.



KEY PLAN

B.M. ELEV.				<div><div><div>WARDROP</div><div>ENGINEERING INC.</div><div>WINNIPEG TORONTO VICTORIA B.C.</div></div></div>				ENGINEER'S SEAL		<div><div><div></div><div><div>THE CITY OF WINNIPEG</div><div>WORKS AND OPERATIONS DIVISION</div><div>WATER AND WASTE DEPARTMENT</div></div></div></div>				
				DESIGNED BY	S.Q.	CHECKED BY		ORIGINAL DRAWING REVISION "0" SEALED BY SEAN QUIGLEY 96.02.27	NORTH END WATER POLLUTION CONTROL CENTRE				CITY DRAWING NUMBER	
				DRAWN BY	D.C. / P.O.	APPROVED BY			LABORATORY RENOVATIONS – MECHANICAL				SHEET OF	
1	AS CONSTRUCTED		97.05.12	S.Q.					PARTIAL MAIN FLOOR PLAN					
0	ISSUED FOR TENDER		96/02	S.Q.	HOR. SCALE:	1 : 50	RELEASED FOR CONSTRUCTION:	CONSULTANT DRAWING NO. 940012-03-00-M112	HOT WATER HEATING				NEP-2308	
- ISSUED FOR CITY REVIEW		95.12.08	S.Q.	VERTICAL:										
NO. REVISIONS		DATE	BY	DATE	95.12.01	DATE								

NOTE: ALL EXHAUST DUCTWORK FOR ACID DIGESTION AREA EXHAUST SYSTEMS IS PVC PLASTIC PIPE.

250# TO EXHAUST FAN ON ROOF

100#

CHEMICAL FUME HOOD

150# PVC

150# FLEX

75#

DIG. BLOCK HOODS (2)

100# FLANGE

100# BLAST GATE

SCRUBBER

CORED OPENINGS IN COUNTERTOP

38mm PVC - SCH 80

19mm PVC - SCH 80

SPRAY PUMP 0.56 Kw, 208V

38mm PVC - SCH 80

RECIRC TANK



38# DRAIN

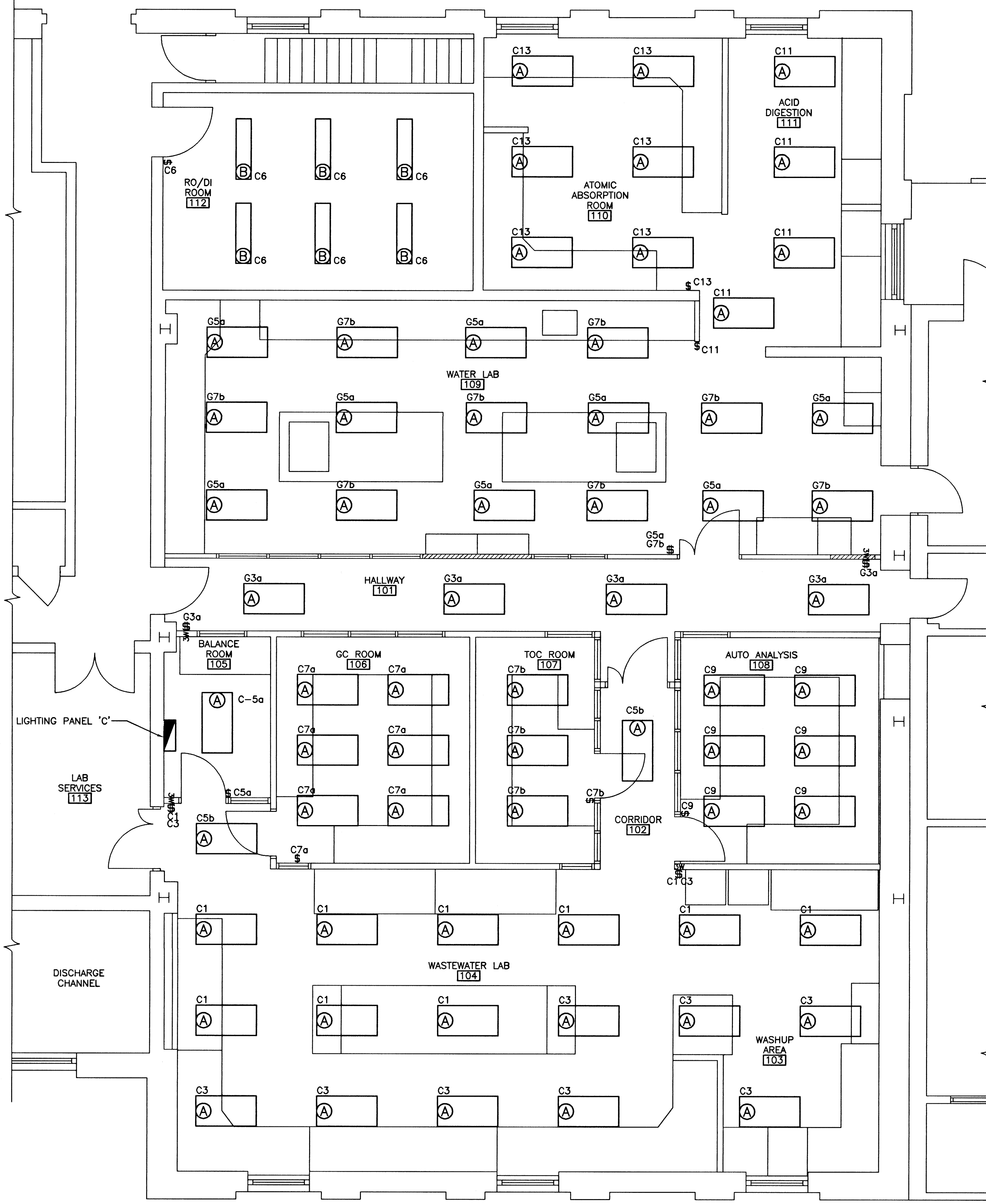
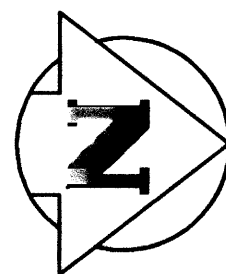
38# OVERFLOW

13# PW

FLOAT VALVE

1 PARTIAL MAIN FLOOR PLAN
1 : 50

B.M. ELEV.				 WARDROP ENGINEERING INC. <small>WINNIPEG TORONTO THUNDER BAY</small>		ENGINEER'S SEAL		 THE CITY OF WINNIPEG WORKS AND OPERATIONS DIVISION WATER AND WASTE DEPARTMENT	
						ORIGINAL DRAWING REVISION "0" SEALED BY SEAN QUIGLEY 96.02.27			
				DESIGNED BY S.Q.	CHECKED BY	NORTH END WATER POLLUTION CONTROL CENTRE		CITY DRAWING NUMBER	
				DRAWN BY D.C.	APPROVED BY	LABORATORY RENOVATIONS – MECHANICAL		SHEET OF	
1	AS CONSTRUCTED	97.05.12	S.Q.	HOR. SCALE:	RELEASED FOR CONSTRUCTION:	PARTIAL MAIN FLOOR PLAN		NEP-2310	
0	ISSUED FOR TENDER	96/02	S.Q.	VERTICAL: 1 : 50		EXHAUST SYTEMS			
—	ISSUED FOR CITY REVIEW	95.12.08	S.Q.						
NO. REVISIONS		DATE	BY	DATE	DATE	CONSULTANT DRAWING NO.			
				95.12.01		940012-03-00-M114			



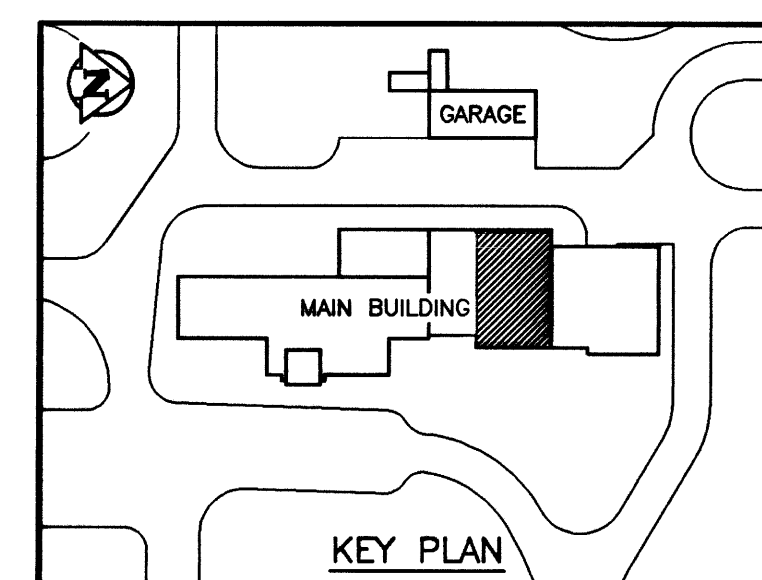
LIGHT FIXTURE SCHEDULE		
TYPE	DESCRIPTION	MOUNTING
A	2'x4' 3-32 WATT, 120V FLUORESCENT FIXTURE	T-BAR
B	1'x4' 2-32 WATT, 120V FLUORESCENT FIXTURE	SUSPENDED FROM CEILING TO 8ft. FROM FLOOR

NOTES:

1. CO-ORDINATE INSTALLATION OF NEW LIGHT FIXTURES WITH NEW CEILING AND NEW MECHANICAL DUCTWORK.
2. FOR DETAILED DESCRIPTION OF LIGHT FIXTURES, REFER TO SPECIFICATIONS AND OPERATIONS & MAINTENANCE MANUALS.
3. LIGHTING PANEL "G" IS LOCATED IN MAIN BUILDING MECHANICAL ROOM NORTH OF LUNCHROOM.

NEP-2315

AS CONSTRUCTED
 DATE 97/02 BY D.C.
 APPROVED BY _____



NO.	REVISIONS	DATE	BY
1	AS CONSTRUCTED	97/02	B.T.
0	ISSUED FOR TENDER	96/02	B.T.
-	ISSUED FOR CITY REVIEW	95/12	B.T.

WARDROP ENGINEERING INC.	
DESIGNED BY R.M./B.T.	CHECKED BY
DRAWN BY H.P.C.C./D.C.	APPROVED BY
HOR. SCALE: 1:50 U/N	RELEASED FOR CONSTRUCTION:
DATE 95.07.24	DATE


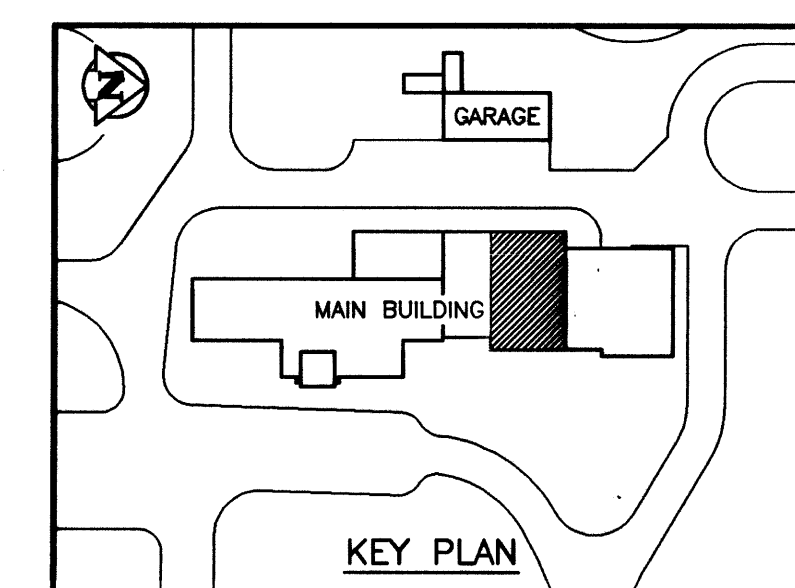
ENGINEER'S SEAL
ORIGINAL DRAWING REVISION "0" SEALED BY W.B. TODD 96.02.26
CONSULTANT DRAWING NO. 940012-03-00-E105

THE CITY OF WINNIPEG WORKS AND OPERATIONS DIVISION	
NORTH END WATER POLLUTION CONTROL CENTRE	
LABORATORY RENOVATIONS - ELECTRICAL	
LIGHTING FLOOR PLAN	
CITY DRAWING NUMBER	SHEET OF
NEP-2315	



1. ALL RECEPTACLES SHOWN UNSHADED SUPPLIED AS PART OF THE LABORATORY FURNITURE BY THE LABORATORY FURNITURE MANUFACTURER. THIS CONTRACTOR SHALL SUPPLY AND INSTALL ALL WIRING AND CONDUIT FROM PANELS FOR CONNECTION TO THESE RECEPTACLES, AS INDICATED. RECEPTACLES SHOWN NOT SHADED SUPPLIED AND INSTALLED BY CONTRACTOR.
2. THE LABORATORY EQUIPMENT SUPPLIER SUPPLIED THE FUME HOODS COMPLETE WITH A FLUORESCENT LIGHT FIXTURE AND SWITCH PRE-WIRED TO A JUNCTION BOX AS SHOWN. THIS CONTRACTOR SHALL SUPPLY AND INSTALL ALL WIRING AND CONDUIT FROM THE PANELS FOR CONNECTION TO THE JUNCTION BOXES, AS INDICATED.
3. THE LABORATORY EQUIPMENT SUPPLIER WILL SUPPLY THE ACID HOODS SHOWN IN THE ACID DIGESTION ROOM AND THE FUME HOODS SHOWN ON THE WEST WALL OF THE WASTE WATER LAB COMPLETE WITH A FLUORESCENT LIGHT FIXTURE, SWITCH, AND 120 V RECEPTACLES PRE-WIRED TO A JUNCTION BOX. THE LABORATORY EQUIPMENT SUPPLIER WILL SUPPLY THE 240 V RECEPTACLES FOR THESE HOODS FOR INSTALLATION IN THE BASE CABINETS BY THIS CONTRACTOR. THIS CONTRACTOR SHALL SUPPLY AND INSTALL ALL WIRING AND CONDUIT FROM PANELS TO THE JUNCTION BOXES AND FROM PANELS TO 240 V RECEPTACLES, AS INDICATED.
4. REFER TO LABORATORY FURNITURE SPECIFICATIONS FOR ADDITIONAL DETAILS, AND BECOME FAMILIAR WITH LAB EQUIPMENT SUPPLIED, PRIOR TO COMMENCING WORK.
5. COORDINATE WITH MTS AND CITY OF WINNIPEG REGARDING INSTALLATION OF TELEPHONE AND LAN SYSTEM EMPTY CONDUITS AND ASSOCIATED OUTLETS.
6. EXISTING RECEPTACLES IN THE WATER LAB RELOCATED TO ACCOMMODATE RELOCATED FRIDGES.
7. COORDINATE INSTALLATION OF RECEPTACLES IN RO/DI ROOM WITH LOCATIONS OF RELOCATED EQUIPMENT FROM EXISTING RO/DI ROOM.
8. RECEPTACLES INDICATED AS "*" SHALL BE USED TO FEED NEW UNINTERRUPTIBLE POWER SUPPLIES.
9. FOR DOOR ACCESS SECURITY SYSTEM DETAIL, REFER TO DRAWING NEP-2320. CONTROLLERS, POWER SUPPLIES, AND RECEPTACLES MOUNTED IN CEILING SPACE.
10. K10 REPRESENTS PANEL "K", CIRCUIT #10 (TYPICAL).

DATE 97/02 BY T.G.
APPROVED BY _____



THE CITY OF WINNIPEG
WORKS AND OPERATIONS DIVISION
WATER AND WASTE DEPARTMENT

BY	NORTH END WATER POLLUTION CONTROL CENTRE
	LABORATORY RENOVATIONS – ELECTRICAL

CITY DRAWING NUMBER
SHEET OF

RECEPTACLES, TELEPHONE AND
6 COMMUNICATION FLOOR PLAN

NEP-2316

B.M. ELEV.			
1	AS CONSTRUCTED	97/02	B.T.
0	ISSUED FOR TENDER	96/02	B.T.
-	ISSUED FOR CITY REVIEW	95/12	B.T.
NO.	REVISIONS	DATE	BY

WARDROP ENGINEERING INC.
WINNIPEG TORONTO THUNDER BAY

DESIGNED BY	R.M./B.T.
DRAWN BY	H.P.C.C./D.C

HOR. SCALE:	1:50 U/N
VERTICAL:	
DATE	95.07.24

ENGINEER'S SEAL

ORIGINAL DRAWING
REVISION "D" SEALED BY
W.B. TODD
96.02.26

CONSULTANT DRAWING NO.
040012 03 00 E106

RECEPTACLES, TELEPHONE AND COMMUNICATION FLOOR PLAN



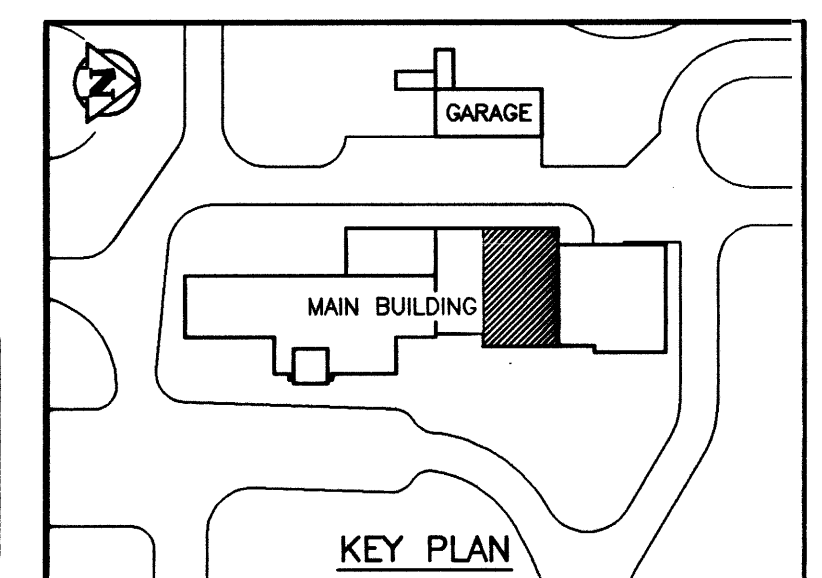
1. AIR HANDLING UNIT M639-AHU, ALL EXHAUST FANS, AND ASSOCIATED DISCONNECTS ARE LOCATED ON THE ROOF. COORDINATE EXHAUST LOCATIONS WITH DIVISION 15. INSULATED CABLE SLEEVES FOR ROOF PENETRATIONS TO BE SUPPLIED AND INSTALLED BY ARCHITECTURAL TRADES. COORDINATE WITH ARCHITECTURAL TO ENSURE CORRECT SIZES FOR SLEEVES ARE PROVIDED. SUPPLY AND INSTALL LIQUID TIGHT FLEX FROM FAN MOTOR THROUGH SLEEVE AND INTO BUILDING.
2. LOCATION OF ALL FIELD CONTROL COMPONENTS IS APPROXIMATE ONLY. FOR EXACT LOCATIONS, COORDINATE WITH ACTUAL SITE CONDITIONS AND WITH THE CONTRACT ADMINISTRATOR.
3. ALL ROOF MOUNTED 1 PHASE EXHAUST FANS ARE FED FROM PANEL 'O'. REFER TO PANEL SCHEDULE FOR CIRCUITING.
4. SCRUBBERS ARE PACKAGED UNITS, SUPPLIED AND INSTALLED BY DIVISIONS 11 & 15.
5. COORDINATE INSTALLATION OF BALANCE ROOM HUMIDIFIER WITH DIVISION 15.
6. FOR EXACT LOCATIONS OF M639-AHU, REFER TO MECHANICAL DRAWINGS.



NEP-2319

AS CONSTRUCTED

DATE 97/02 BY D.C.

APPROVED BY _____



B.M. ELEV.				 WARDROP ENGINEERING INC. <small>WINNIPEG TORONTO THUNDER BAY</small>				ENGINEER'S SEAL ORIGINAL DRAWING REVISION "0" SEALED BY W.B. TODD 96.02.26		 THE CITY OF WINNIPEG WORKS AND OPERATIONS DIVISION WATER AND WASTE DEPARTMENT	
				DESIGNED BY B.T.		CHECKED BY		NORTH END WATER POLLUTION CONTROL CENTRE		CITY DRAWING NUMBER	
				DRAWN BY H.P.C.C./D.C.		APPROVED BY				LABORATORY RENOVATIONS – ELECTRICAL	
1	AS CONSTRUCTED	97/02	B.T.	HOR. SCALE: VERTICAL: 1:50 U/N		RELEASED FOR CONSTRUCTION:		CONSULTANT DRAWING NO. 940012-03-00-E109		MOTOR LOCATIONS AND CONTROL COMPONENTS FLOOR PLAN	
0	ISSUED FOR TENDER	96/02	B.T.								
-	ISSUED FOR CITY REVIEW	95/12	B.T.							NEP-2319	
NO.	REVISIONS	DATE	BY	DATE	95 12 04						