

MECHANICAL LEGEND									
DRAWING					DRAWING SYMBOLS:		DRAWING ABBREVIATIONS:		
	RECTANGULAR DUCT, SIDE FACING/DEPTH ROUND DUCT		BRANCH DUCT, SIZE AS NOTED						
	25 THICK ACOUSTIC DUCT INSULATION		ROUND DUCT TAKEOFF, TOP, BOTTOM		ROUND DUCT TAKEOFF TO ROUND, SIDE		SQUARE DUCT TAKEOFF TO ROUND, SIDE		SQUARE DUCT TAKEOFF TO SQUARE, SIDE
	BALANCE DAMPER		CONCEALED BALANCE DAMPER		CONTROL DAMPER		TURNING VANES		
	RETURN/EXHAUST GRILLE		EXHAUST GRILLE		SIDE WALL GRILLE		FLOW MEASURING BALANCING VALVE		2 WAY CONTROL VALVE
	3 WAY CONTROL VALVE		REDUCER		FLANGE		PIPE CONNECTION		PIPE CAP
	PIPE BROKEN END		PIPE UP		PIPE DOWN		HWS HOT WATER SUPPLY PIPING		HWR HOT WATER RETURN PIPING
	FLOW DIRECTION		FIRE DAMPER (HORIZONTAL DUCT)		FIRE DAMPER (VERTICAL DUCT)		TEMPERATURE SENSOR		CARBON MONOXIDE SENSOR
	HUMIDITY SENSOR		DRAWING NOTE						
	VALVE		GLOBE VALVE		BALANCING VALVE		PRESSURE REDUCING VALVE		STRAINER
	CHECK VALVE		PUMP		UNION		PRESSURE GAUGE		HOSE BIBB
	FLOOR DRAIN		PIPE CAP		PIPE BROKEN END		PIPE OFFSET UP		PIPE OFFSET DOWN
	CLEANOUT TO GRADE		COLD WATER		HOT WATER		HOT WATER RECIRCULATION		SANITARY PIPING UNDER FLOOR
	SANITARY PIPING ABOVE FLOOR		STORM PIPING UNDER FLOOR		STORM PIPING ABOVE FLOOR		PERIMETER DRAIN		PLUMBING VENT
	VENT TO ROOF								

HEATING UNIT SCHEDULE									
TAG	TYPE	AIR FLOW l/s / cfm	INLET	OUTLET	HEATING		ELECTRICAL DATA		
					CAPACITY MBH	WATER FLOW l/min / gpm	MOTOR HP	VOLTS	PHASE
FF-01	VERT. SEMI-RECESS. FORCE FLOW	90 / 190	FRONT TOE SPACE	TOP BAR GRILLE	9.8	2.48 / 0.65	1/6	120	1
FF-03	VERT. SEMI-RECESS. FORCE FLOW	90 / 190	FRONT TOE SPACE	TOP BAR GRILLE	10.7	2.72 / 0.72	1/6	120	1
FF-11	VERT. SEMI-RECESS. FORCE FLOW	90 / 190	FRONT TOE SPACE	TOP BAR GRILLE	9.4	2.38 / 0.63	1/6	120	1
FF-28	VERT. SEMI-RECESS. FORCE FLOW	90 / 190	FRONT TOE SPACE	TOP BAR GRILLE	9.8	2.38 / 0.65	1/6	120	1
BB-06	ELECTRIC BASEBOARD HEATER	-	-	-	750 W	-	-	-	6
BB-07	BASEBOARD HEATER	-	-	-	1.8	0.45 / 0.12	-	-	-
BB-10	BASEBOARD HEATER	-	-	-	0.6	0.15 / 0.04	-	-	-
BB-12	ELECTRIC BASEBOARD HEATER	-	-	-	750 W	-	-	-	6
BB-13	ELECTRIC BASEBOARD HEATER	-	-	-	750 W	-	-	-	6
BB-14	BASEBOARD HEATER	-	-	-	0.5	0.13 / 0.03	-	-	-
BB-15	BASEBOARD HEATER	-	-	-	1.0	0.25 / 0.07	-	-	-
BB-19	BASEBOARD HEATER	-	-	-	0.3	0.08 / 0.02	-	-	-
BB-21	BASEBOARD HEATER	-	-	-	1.8	0.45 / 0.12	-	-	-
BB-22	BASEBOARD HEATER	-	-	-	1.4	0.35 / 0.09	-	-	-
BB-27	BASEBOARD HEATER	-	-	-	0.4	0.10 / 0.03	-	-	-
BB-28	BASEBOARD HEATER	-	-	-	1.6	0.40 / 0.11	-	-	-
BB-29A	BASEBOARD HEATER	-	-	-	1.9	0.48 / 0.13	-	-	-
BB-29B	BASEBOARD HEATER	-	-	-	1.9	0.48 / 0.13	-	-	-
UH-16	UNIT HEATER	285 / 600	HORIZONTAL		1.0	0.25 / 0.07	1/20	120	1
UH-17	UNIT HEATER	285 / 600	HORIZONTAL		2.1	0.53 / 0.14	1/20	120	1
UH-18A	UNIT HEATER	635 / 1350	VERTICAL DOWNFLOW		25.0	6.32 / 1.67	1/8	120	1
UH-18B	UNIT HEATER	635 / 1350	VERTICAL DOWNFLOW		25.0	6.32 / 1.67	1/8	120	1
UH-18C	UNIT HEATER	635 / 1350	VERTICAL DOWNFLOW		25.0	6.32 / 1.67	1/8	120	1
UH-18D	UNIT HEATER	635 / 1350	VERTICAL DOWNFLOW		25.0	6.32 / 1.67	1/8	120	1

- NOTE:
- CONTROL VALVES SHALL BE ELECTRONIC 2-WAY MODULATING.
  - THE CONTROL VALVE NO. SHALL MATCH THE UNIT DESIGNATION (e.g. FF-100, CV-FF100).
  - CONTROL VALVE MAXIMUM PD 12 kPa (1.75 psi).
  - UNIT SHALL BE RATED AT:  
MAX WPD: 12 kPa (4 FT).  
EAT: 15.6°C (60°F) DB, EWT/LWT: 54.4/37.8°C (130/100°F).
  - PROVIDE ALL UNIT MOUNTING, SUSPENSION HARDWARE AND WALL TRIM.
  - PROVIDED BY ELECTRICAL DIVISION.

HEAT RECOVERY VENTILATOR SCHEDULE													
TAG	LOCATION	SERVICE	AIR FLOW l/s / cfm	EXT. STATIC PRESS. Pa / in	EFFICIENCY			FILTERS		ELECTRICAL DATA			
					S/A LAT °C / °F	SENSIBLE	RECOVERED ENERGY kW / MBH	THICKNESS - NO. x SIZE	RATING	MOTOR HP	VOLTS	PHASE	NOTES
HRV-1	CEILING	OUTDOOR AIR	470 / 1000	125 / 0.5	SUMMER	27.9 / 82.3	47.3%	100 - 6 x 500x600	MERV 8	1260 W	120	1	1, 2, 3
		EXHAUST AIR	470 / 1000	125 / 0.5	WINTER	5.7 / 42.3	49.7%	100 - 6 x 500x600	MERV 13				

- NOTE:
- INDOOR UNIT COMPLETE WITH VIBRATION ISOLATION, FLEXIBLE CONNECTIONS, FILTERS, INTERNAL ENTHALPY WHEEL, MOTORIZED DAMPERS, AIR PROOVING SWITCHES, WALL LOUVRES.
  - SUMMER: OUTDOOR EAT: 28.9/21.1°C (84/70°F) DBWB, INDOOR EAT: 26.7/19.4°C (80/67°F) DBWB.
  - WINTER: OUTDOOR EAT: 9.4/9.4°C (51/14°F) DBWB, INDOOR EAT: 21.1/14.4°C (70/58°F) DBWB.

PLUMBING FIXTURE SCHEDULE					
TAG	MODEL NO.	MATERIAL	MOUNTING / TYPE	WATER FLOW	NOTES
WC1	WATER CLOSET FLUSH VALVE	VITREOUS CHINA	FLOOR MOUNT	4.85 LPF / 1.28 GPF	1
WC2	WATER CLOSET FLUSH VALVE, ACCESSIBLE	VITREOUS CHINA	FLOOR MOUNT	4.85 LPF / 1.28 GPF	1
U1	URINAL FLUSH VALVE	VITREOUS CHINA	WALL MOUNT	0.47 LPF / 0.13 GPF	1
LB1	LAVATORY BASIN ACCESSIBLE	VITREOUS CHINA	COUNTER MOUNT	1.9 LPM / 0.5 GPM	1
LB2	LAVATORY BASIN ACCESSIBLE	VITREOUS CHINA	WALL MOUNT	1.9 LPM / 0.5 GPM	1
S1	SINK SINGLE BOWL	STAINLESS STEEL	COUNTER MOUNT	5.7 LPM / 1.5 GPM	1
S2	SINK SINGLE BOWL LAUNDRY	STAINLESS STEEL	WALL MOUNT	5.7 LPM / 1.5 GPM	1
S3	SINK SINGLE BOWL SHOP	STAINLESS STEEL	WALL MOUNT	5.7 LPM / 1.5 GPM	1
SS1	JANITOR'S SINK	-	FLOOR MOUNT	-	1
SH1	SHOWER - ACCESSIBLE	ACRYLIC	FLOOR MOUNT	5.7 LPM / 1.5 GPM	1
ES1	EMERGENCY SHOWER / EYEWASH	STAINLESS STEEL	FLOOR MOUNT	-	1
EW1	EMERGENCY EYEWASH	STAINLESS STEEL	WALL MOUNT	-	1

- NOTES:
- REFER TO SPECIFICATION

HEATING COIL SCHEDULE				
TAG	AIR FLOW l/s / cfm	SIZE W x H	CAPACITY kW / MBH	WATER FLOW l/min / gpm
HC-HRV1	470 / 1000	400x400	10.4 / 35.6	13.51 / 3.56

NOTE:

- CONTROL VALVES SHALL BE ELECTRONIC 2-WAY
- THE CONTROL VALVE NO. SHALL MATCH THE UNIT DESIGNATION (e.g. CV-1)
- CONTROL VALVE MAXIMUM PD 12 kPa (1.75 psi).
- HEATING COILS SHALL BE RATED AT:  
MAX APD: 49.8 Pa (0.2" W.G.), MAX WPD: 12 kPa (4 FT).  
MAX APD: 49.8 Pa (0.2" W.G.), MAX WPD: 12 kPa (4 FT).

GRILLE, REGISTER AND DIFFUSER SCHEDULE								
TAG	TYPE	BORDER	MATERIAL	CORE STYLE	LOUVRE ORIENT.	VOLUME DAMPER	FASTENING	FINISH
SR1	SUPPLY REGISTER	NOTE 1	ALUMINIUM	AIRFOIL DOUBLE DEFLECTION	L	YES	SCREW	BAKED ENAMEL, ALUMINIUM
ER1	EXHAUST REGISTER	NOTE 1	ALUMINIUM	12 x 12 x 12 mm EGGRATE	-	YES	SCREW	BAKED ENAMEL, ALUMINIUM
TG1	TRANSFER GRILLE	NOTE 1	ALUMINIUM	AIRFOIL LOUVRED FIXED GRILLE	L, 45°, 20mm	NO	CONCEALED	BAKED ENAMEL, ALUMINIUM

- NOTE:
- BORDER/MOUNTING FRAME: ALUMINIUM CURVED FOR SURFACE MOUNT OR FLAT FACE FOR T-BAR LAY-IN TO SUIT APPLICATION.

BOILER SCHEDULE											
TAG	TYPE	CAPACITY (kW / MBH)		WORKING TEMP.		FLOW l/min / gpm	FLUID	EFFICIENCY AT 100% FLOW	ELECT DATA		NOTES
		INPUT	OUTPUT	IN °C / °F	OUT °C / °F				VOLTS	PHASE	
B-1	PROPANE CONDENSING	83.5 / 285	76.8 / 262	37.8 / 100	54.4 / 130	70 / 18	WATER	95%	120	1	1, 2

- NOTE:
- REFER TO SPECIFICATIONS.
  - BOILER COMPLETE WITH CIRCULATION PUMP WITH INTEGRAL CHECK VALVE.

PUMP SCHEDULE										
TAG	SERVICE	PUMP TYPE	FLOW l/min / gpm	FLUID	FLUID TEMP. °C / °F	DIFF. PRESS kPa / feet	PUMP SPEED rpm	ELECTRICAL DATA		
								MOTOR HP	VOLTS	PHASE
P-HW1	BLDG HEATING WATER CIRC.	INLINE	75 / 20	HEATING WATER	54.4 / 130	135 / 45	1800	3/4	208	3
P-HW2	BLDG HEATING WATER CIRC.	INLINE	75 / 20	HEATING WATER	54.4 / 130	135 / 45	1800	3/4	208	3
P-B1	BOILER CIRCULATION	INLINE	70 / 18	HEATING WATER	54.4 / 130	30 / 10	1800	1/8	120	1
P-DHWR	DHW RECIRCULATION	INLINE	30 / 8	DOMESTIC WATER	60 / 140	45 / 15	1800	1/6	120	1

- NOTE:
- REFER TO SPECIFICATIONS.
  - PUMP COMPLETE WITH VFD.
  - PROVIDED WITH THE BOILER COMPLETE WITH INTEGRAL CHECK VALVE.

TANK SCHEDULE												
TAG	SERVICE	TYPE	ORIENTATION	VOLUME L / Us gal	CAPACITY KW	ELECTRICAL DATA		DIMENSIONS mm	TAPPINGS # - mm	FRONT TAPPINGS # - mm	MAX. WORKING PRESSURE kPa / psi	NOTES
						VOLTS	PHASE					
T-DHW	DOMESTIC HOT WATER	ELECTRIC	VERTICAL	190 / 50	13.5	208	3	OL 1420 DIA: 550	2 - 30 TOP	TOP: NONE MID: NONE BOTTOM: 1 - 40	1035 / 150	1, 3
ET-DHW	BLDG DOMESTIC HOT WATER	EXPANSION	VERTICAL	10 / 3.2	-	-	-	OL 375 DIA: 275	1-20 TOP	TOP: NONE MID: NONE BOTTOM: NONE	1035 / 150	2, 3
ET-HW	BUILDING HW	EXPANSION	VERTICAL	45 / 11.3	-	-	-	OL 750 DIA: 400	1 - 12 BOTTOM	TOP: NONE MID: NONE BOTTOM: NONE	860 / 125	2, 3

- NOTE:
- TAPPINGS ARE FOR PIPE CONNECTIONS. PROVIDE ADDITIONAL TAPPINGS AS REQUIRED FOR SENSORS AND SAFETY VALVES.
  - REFER TO SPECIFICATIONS.

FIXTURE ROUGH-IN SCHEDULE						
ROUGH-IN FIXTURE PIPING CONNECTIONS IN ACCORDANCE WITH THE FOLLOWING TABLE OF MINIMUM SIZES.						
FIXTURE	COLD WATER	HOT WATER	HOT WATER RECIRC.	TEMP. WATER	SANITARY	VENT
FLOOR DRAIN	-	-	-	-	75	40
HOSE BIBB (20mm)	20	-	-	-	-	-
SINK (8.3 LPM OR LESS)	12	12	12	-	40	30
LAVATORY BASIN (8.3 LPM)	12	12	12	-	40	30
SHOWER (9.5 LPM)	12	12	12	-	50	40
WATER CLOSET (FV 6 LPM)	25	-	-	-	75	50
JANITOR'S SINK	20	20	-	-	75	50
EMERGENCY EYEWASH	12	12	-	12	40	30
EMERGENCY SHOWER	25	25	-	25	40	30
CLOTHES WASHER	12	2	-	-	40	30

- NOTES:
- DESIGNED TO PLUMBING CODE 2012, WITH 5 FT/SEC FOR DHW & 8 FT/SEC FOR DCW.

FAN SCHEDULE										
TAG	SERVICE	AIR FLOW l/s / cfm	STATIC PRESSURE Pa / in	SONES	RPM	MOTOR HP	ELECT DATA VOLTS	PHASE	NOTES	
EF-06	ELEC RM EXHAUST FAN	150 / 320	125 / 0.5	2.5	1275	102 W	120	1	1	
EF-14	BATTERY STORAGE EXHAUST FAN	95 / 200	125 / 0.5	9.3	1690	1/4	120	1	2	
EF-15	POL STORAGE EXHAUST FAN	160 / 340	125 / 0.5	7.0	1442	1/4	120	1	2	
TF-17	PARTS STORAGE TRANSFER FAN	50 / 105	95 / 0.375	2.0	992	42 W	120	1	3	
EF-18A	VEHICLE BAY EXHAUST FAN	1890 / 4000	185 / 0.75	10.32	775	1-1/2	575	3	4	
EF-18B	VEHICLE BAY EXHAUST FAN	1890 / 4000	185 / 0.75	10.32	775	1-1/2	575	3	4	
EF-19	WASHROOM EXHAUST FAN	40 / 80	125 / 0.5	1.5	800	42 W	120	1	1	

- NOTE:
- COMPLETE WITH ALUMINIUM GRILLE, VIBRATION ISOLATION, FLEXIBLE CONNECTIONS, SPEED CONTROLLER FOR BALANCING, CONTROL DAMPER, WALL LOUVER.
  - SPARK RESISTANT CONSTRUCTION TO AMCA A RATING COMPLETE WITH SHAFT SEALS, VIBRATION ISOLATION, FLEXIBLE CONNECTIONS, WALL LOUVER.
  - COMPLETE WITH ALUMINIUM GRILLE, VIBRATION ISOLATION, FLEXIBLE CONNECTIONS, SPEED CONTROLLER FOR BALANCING.
  - HORIZONTALLY MOUNTED, COMPLETE WITH VIBRATION ISOLATION, CONTROL DAMPER, WALL LOUVER.

REAL PROPERTY SERVICES  
Pacific Region  
SERVICES IMMOBILIERS  
Région de Pacifique

KEY PLAN



Project No:  
180293



Project No.: 161-14582-00





KEY PLAN



**kasian**

Project No:  
180293

**wsp**

Project No: 151-1452-00



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Revision Sequence	Description/Description	Date/Date

Client/client

**TRANSPORT CANADA**

Operations and Technical Services  
#820 - 800 Burrard St.  
Vancouver, BC V6Z 2J8

Project title/Titre du projet

**PORT HARDY AIRPORT  
EQUIPMENT MAINTENANCE  
BUILDING**

3675 BYNG ROAD  
PORT HARDY, BC V0N 2P0

Consultant Signature Box Only

Designed by/Concept par	Approved by/Approuvée par
PDT	PDT

Drawn by/Dessiné par

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PWSSC Project Manager/Administrateur de Projets TPSGC

**JIMMY WONG**

PWSSC, Regional Manager, Architectural and Engineering,  
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**OREST KLUFAS**

Drawing title/Titre du dessin

**PLUMBING  
FOUNDATION  
AND LEVEL 1  
PLANS**

Project No./No. du projet

**R.077016.001**

Sheet Feuille

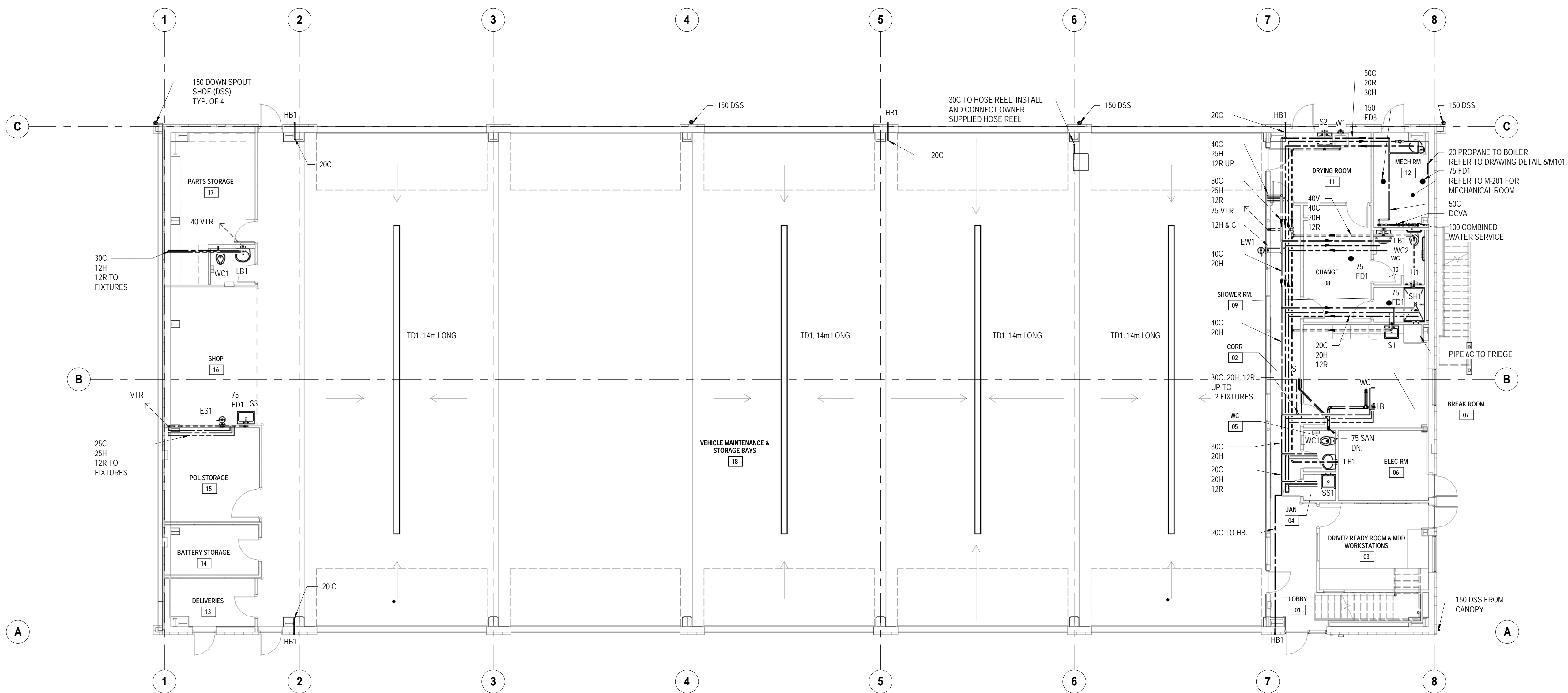
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Revision

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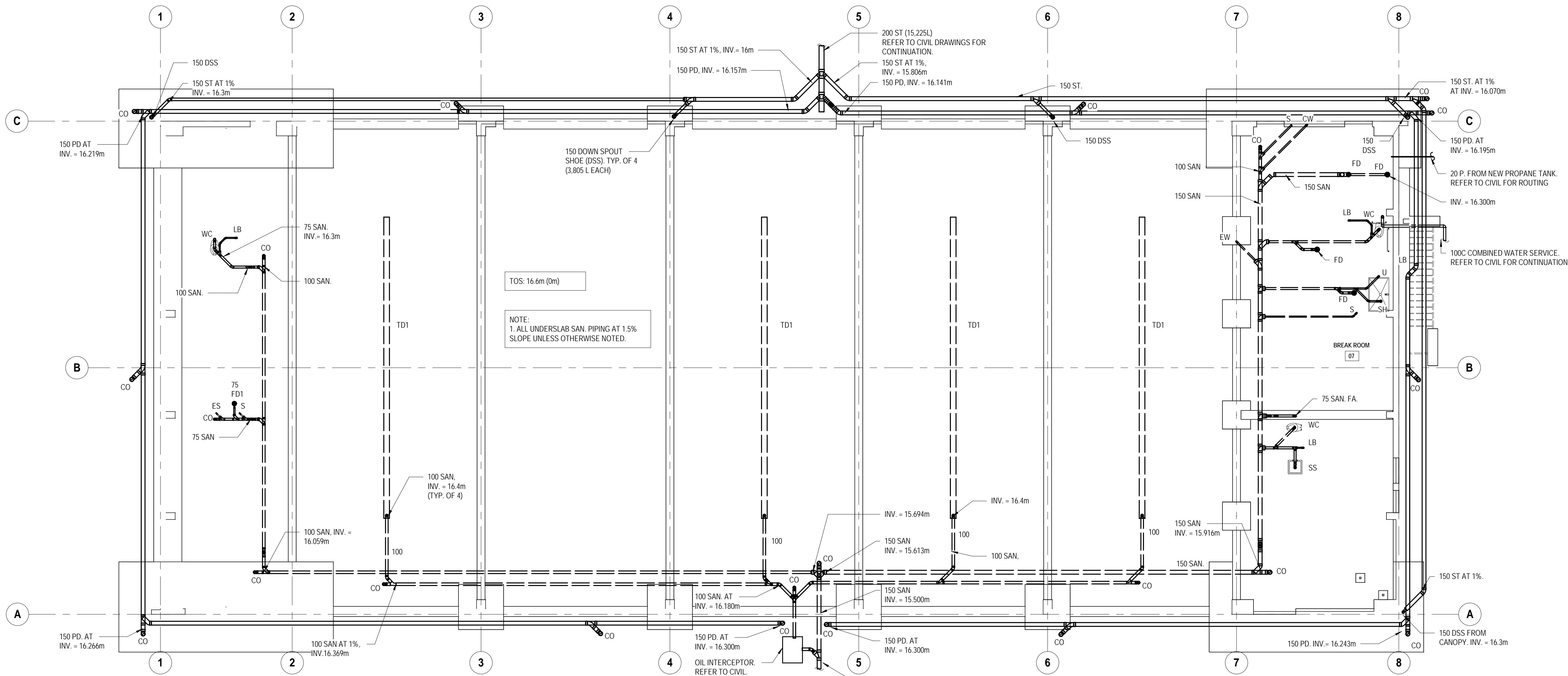
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**2 Level 1 Plan Plumbing**

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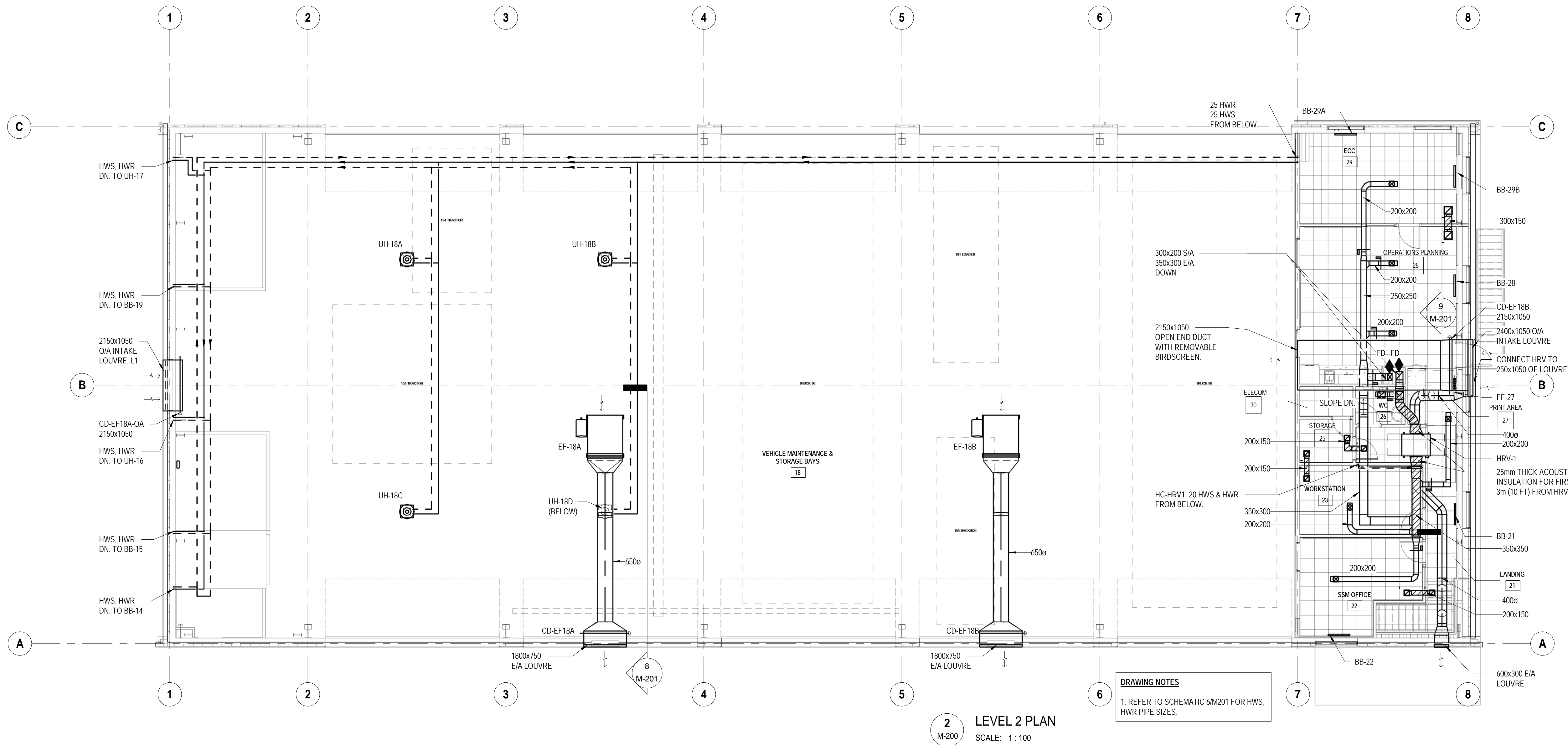
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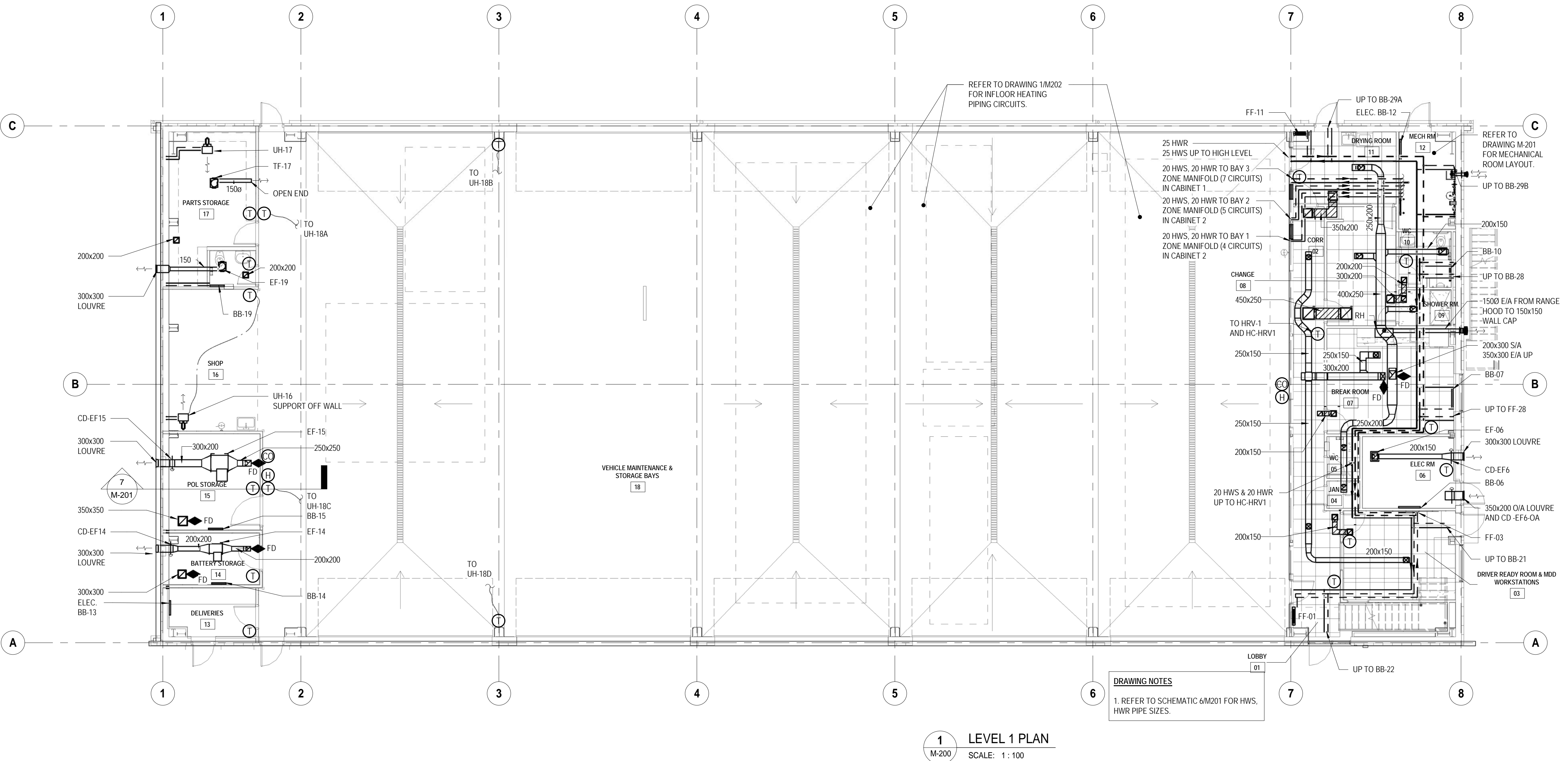








AIR TERMINAL SCHEDULE									
ROOM	GRILLES AND DIFFUSERS								
NO.	NAME	TYPE	NO.	SIZE W x H	AIR FLOW l/s / cfm	TYPE	NO.	SIZE W x H	AIR FLOW l/s / cfm
02	CORRIDOR	SR1	2	150x150	35 / 75	-	-	-	- / -
03	DRIVER READY RM	SR1	1	150x150	45 / 100	TG1	2	200x200	- / -
04	JANITOR'S ROOM	UNDERCUT DOOR 25mm			ER1	1	150x150	30 / 60	
05	WASHROOM	UNDERCUT DOOR 25mm			ER1	1	150x150	30 / 60	
06	ELEC. ROOM	-	-	-	- / -	EF-06	1	150 / 320	
07	BREAK ROOM	SR1	1	200x200	60 / 130	TG1	2	200x200	- / -
08	CHANGE ROOM TG1	TG1	2	450x450	- / -	ER1	1	250x250	150 / 320
			1	300x300	- / -	-	-	- / -	
09	SHOWER	TG1	1	200x200	- / -	ER1	1	150x150	40 / 80
10	WASHROOM	TG1	1	200x200	- / -	ER1	1	200x200	60 / 130
11	DRYING ROOM	TG1	2	350x350	- / -	ER1	1	250x250	140 / 300
14	BATTERY STORAGE	TG1	1	300x300	- / -	EG1	1	200x200	95 / 200
15	POL STORAGE	TG1	1	350x350	- / -	EG1	1	250x250	160 / 340
17	PARTS STORAGE	TG1	1	200x200	- / -	TF-17	2	200x200	50 / 105
19	WASHROOM	TG1	1	200x200	- / -	EF-19	1	40 / 80	
22	SSM OFFICE	SR1	1	200	45 / 100	TG1	2	200x200	- / -
23	WORKSTATION	SR1	1	200	40 / 85	TG1	2	200x200	- / -
25	STORAGE	-	-	-	- / -	-	-	- / -	
26	WC	UNDERCUT DOOR 25mm			ER1	1	150x150	30 / 65	
27	PRINT AREA	SR1	1	200	10 / 25	-	-	- / -	
28	OPERATIONS	SR1	2	200	70 / 150	-	-	- / -	
29	ECC	SR1	1	200	65 / 140	TG1	2	300x300	- / -



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**REAL PROPERTY SERVICES**  
 Pacific Region  
**SERVICES IMMOBILIERS**  
 Région de Pacifique

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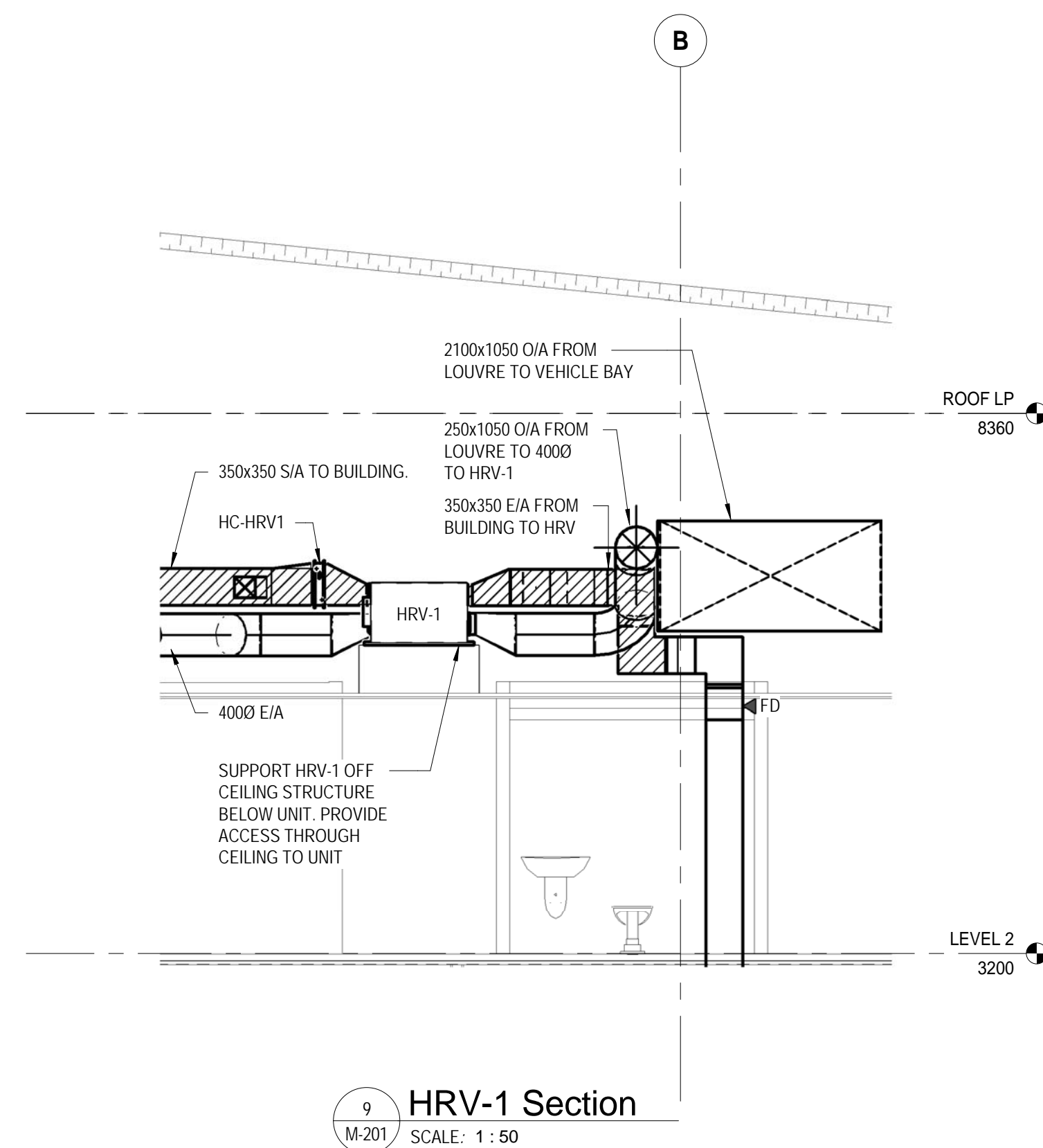
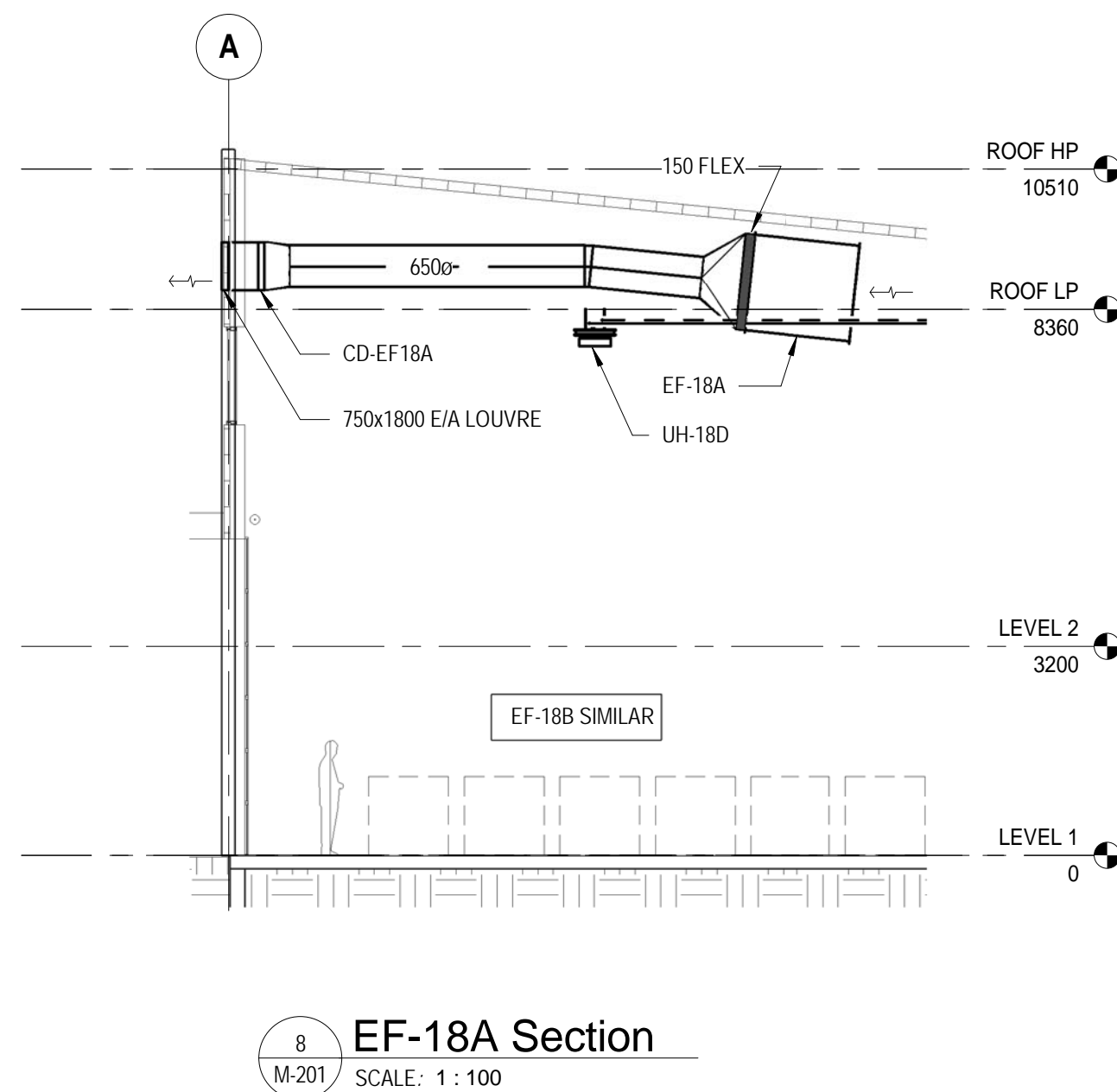
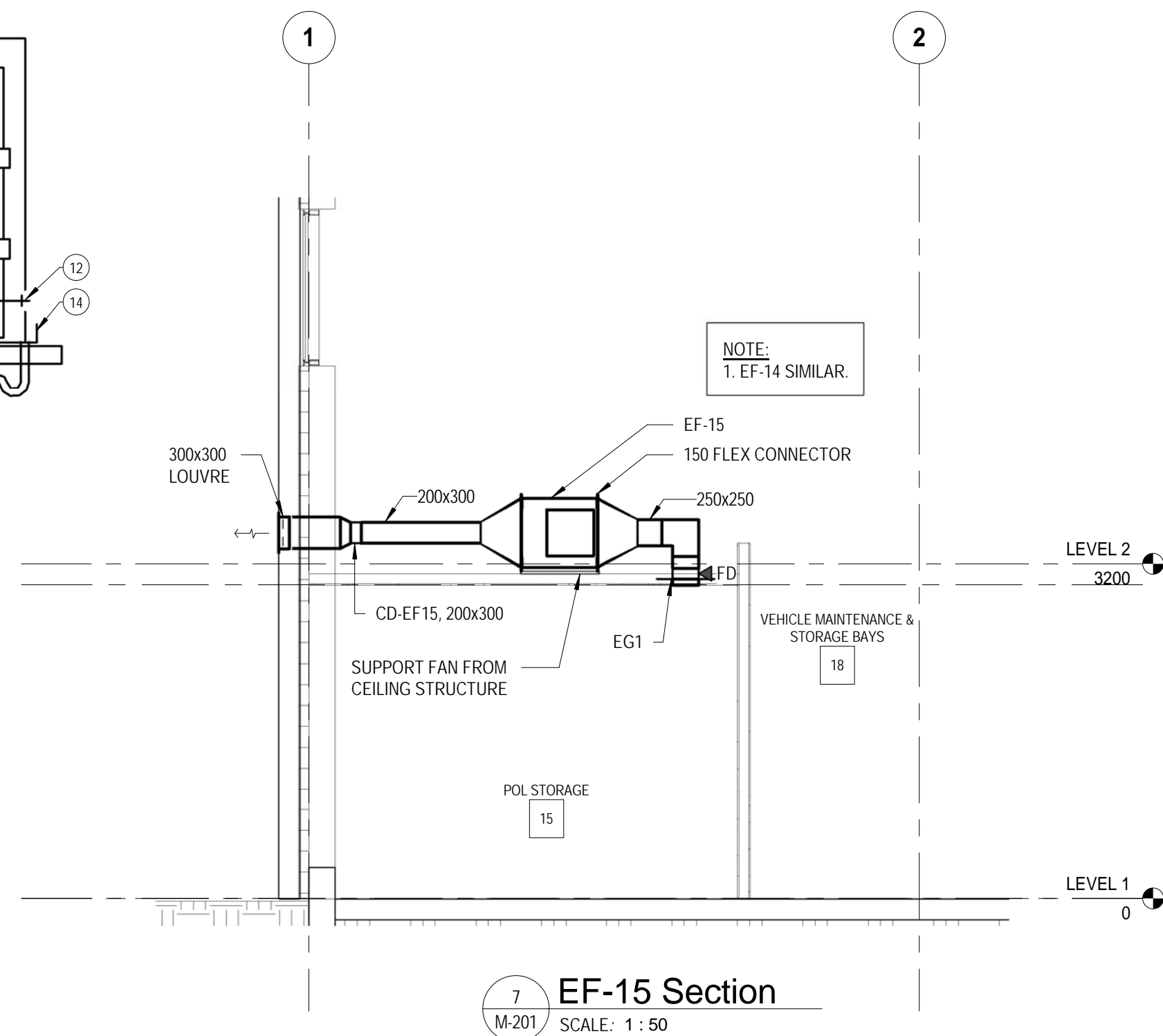
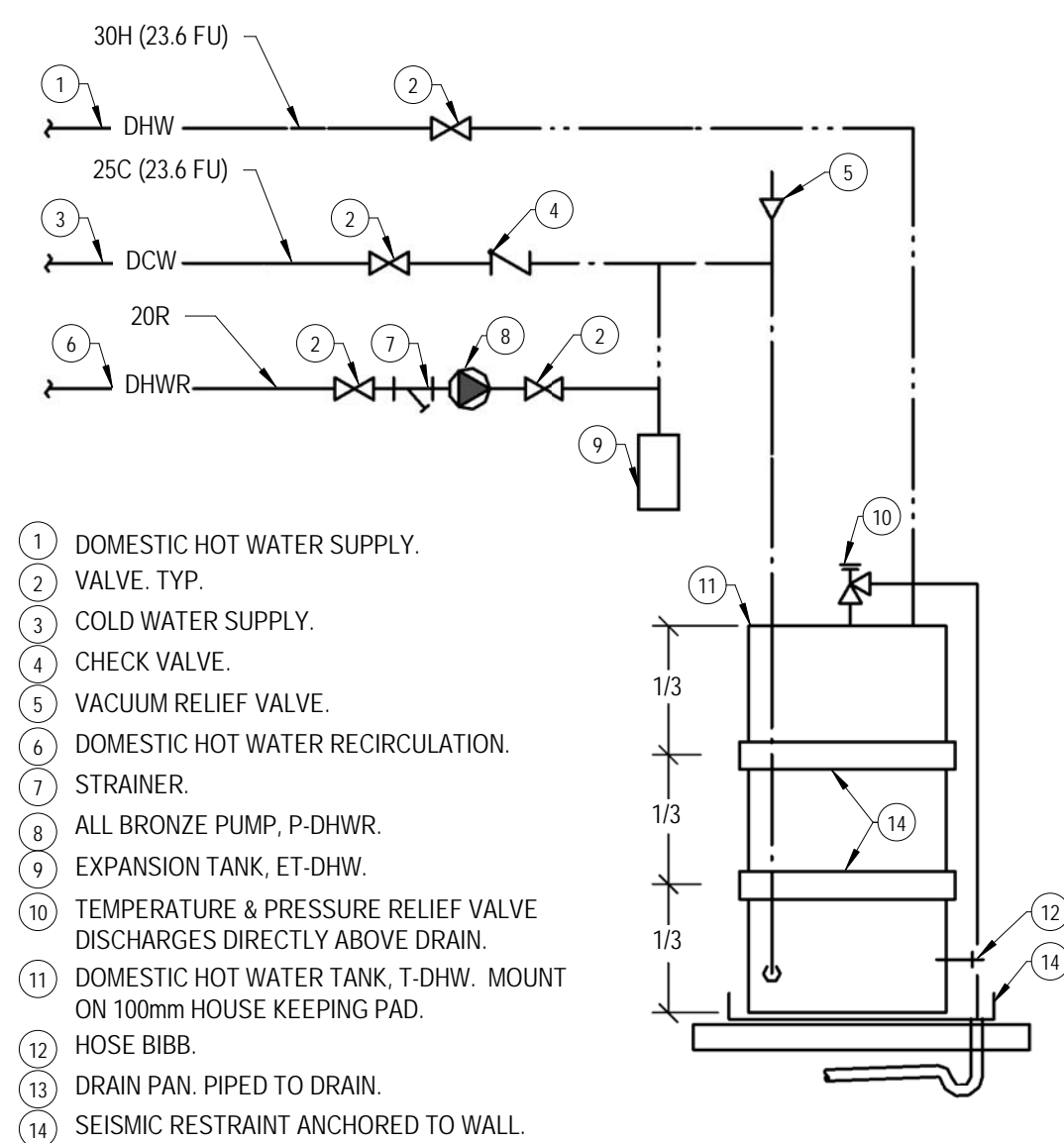
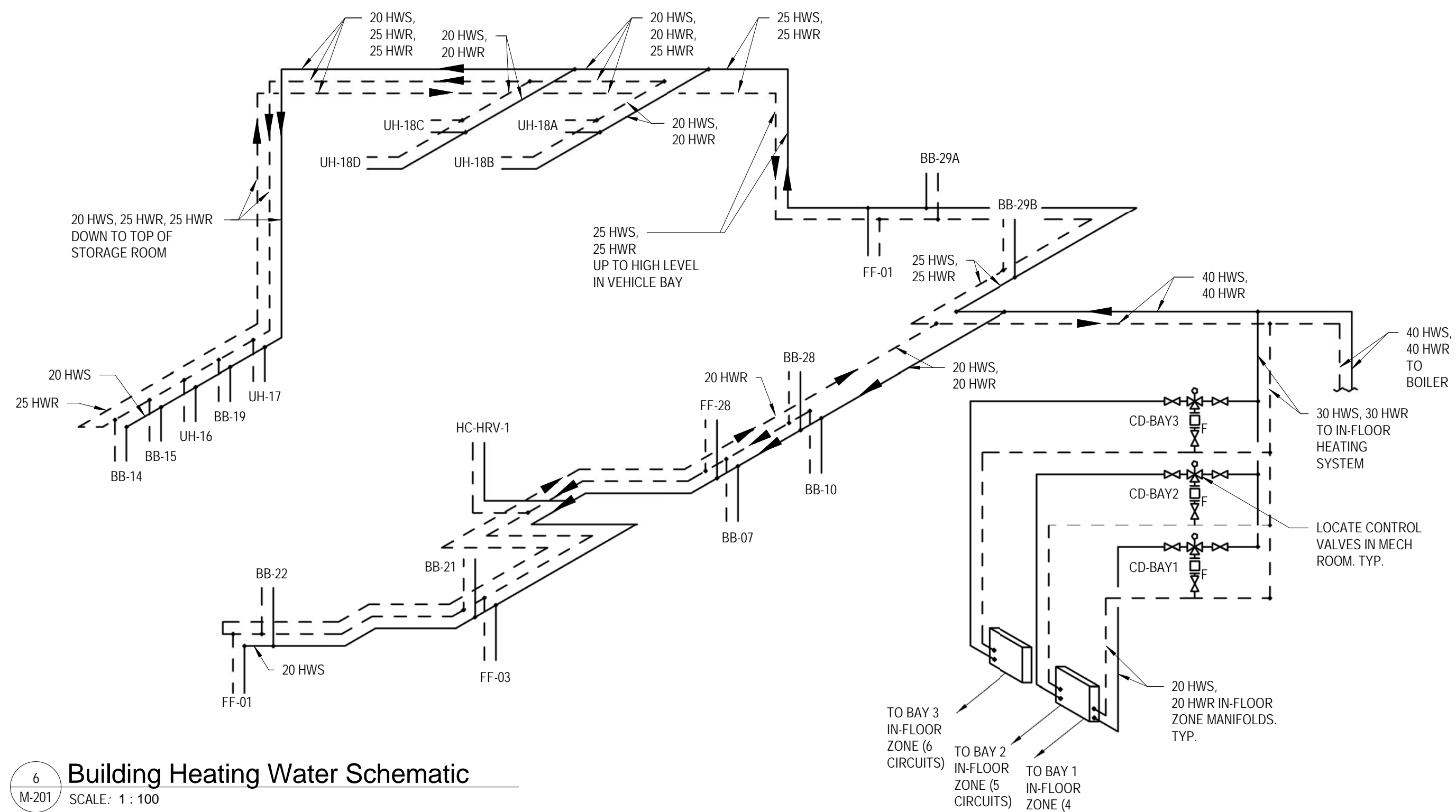
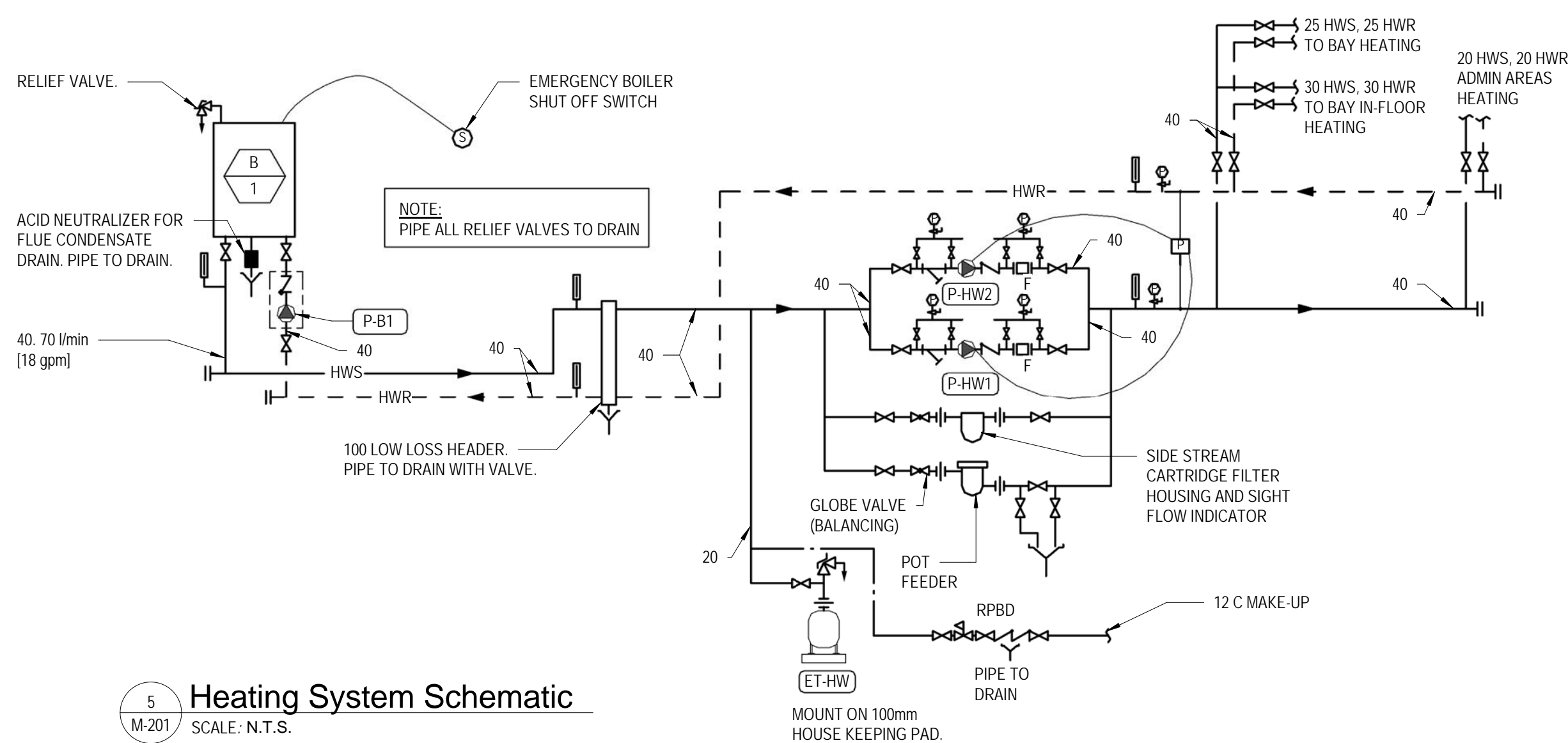
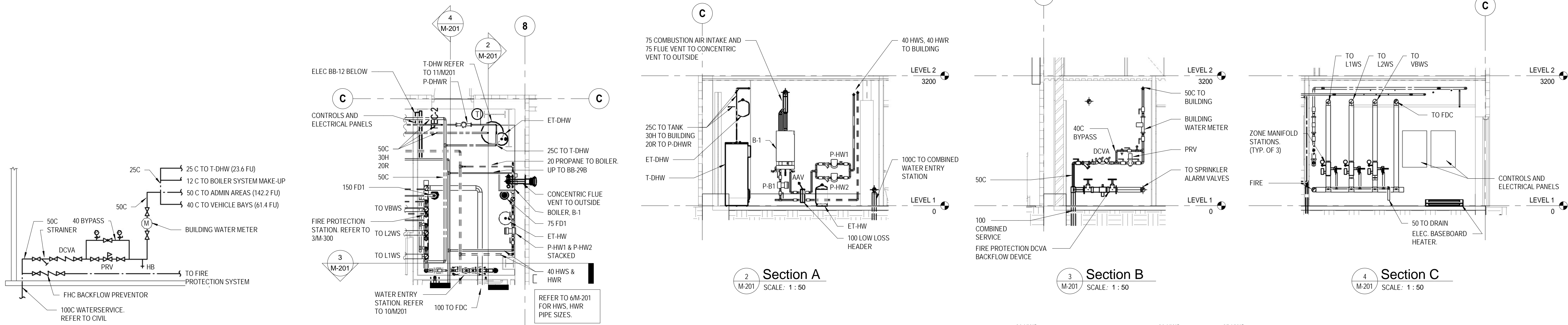
Client/client  
**TRANSPORT CANADA**  
 Operations and Technical Services  
 #820 - 800 Burrard St.  
 Vancouver, BC V6Z 2J8

Project title/Titre du projet  
**PORT HARDY AIRPORT EQUIPMENT MAINTENANCE BUILDING**  
 3675 BYNG ROAD  
 PORT HARDY, BC V0N 2P0

Consultant Signature Box Only  
 Designed by/Concept par: PDT  
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 Drawing title/Titre du dessin: MECHANICAL LEVEL 1 AND LEVEL 2 PLANS

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**REAL PROPERTY SERVICES**  
Pacific Region  
**SERVICES IMMOBILIERS**  
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Designed by/Concept par  
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Approved by/Approuvée par  
**PDT**

Drawn by/Dessiné par  
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Drawing title/Titre du dessin  
**MECHANICAL  
ROOM AND  
HVAC  
SCHEMATICS**

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**R.077016.001**

Sheet Feuille  
**M-201**

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La  
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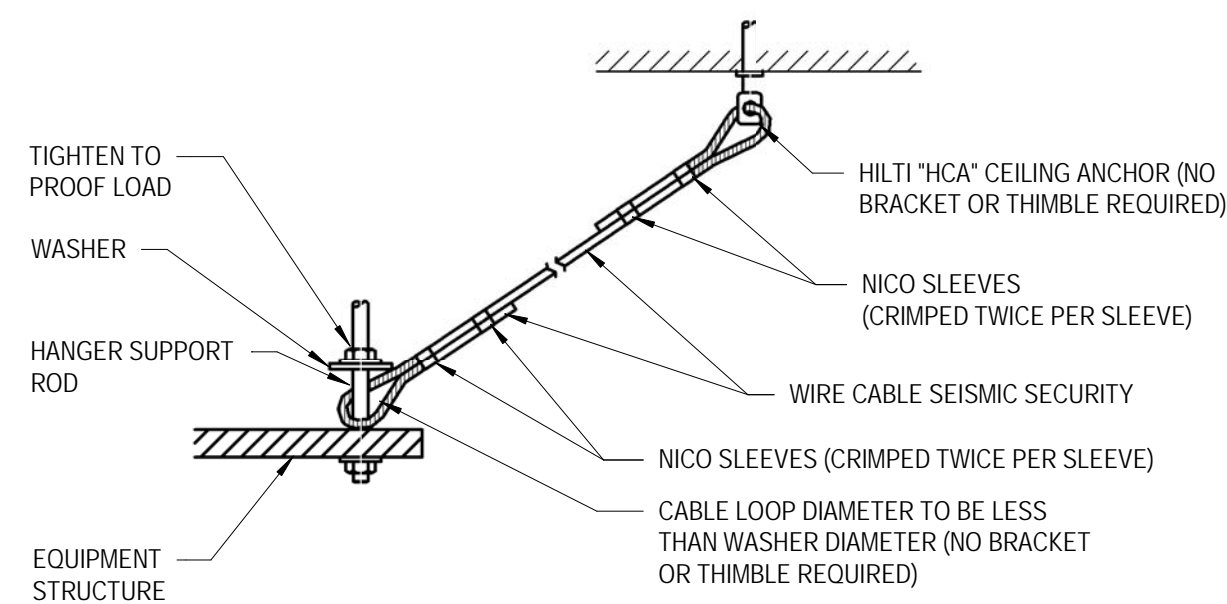
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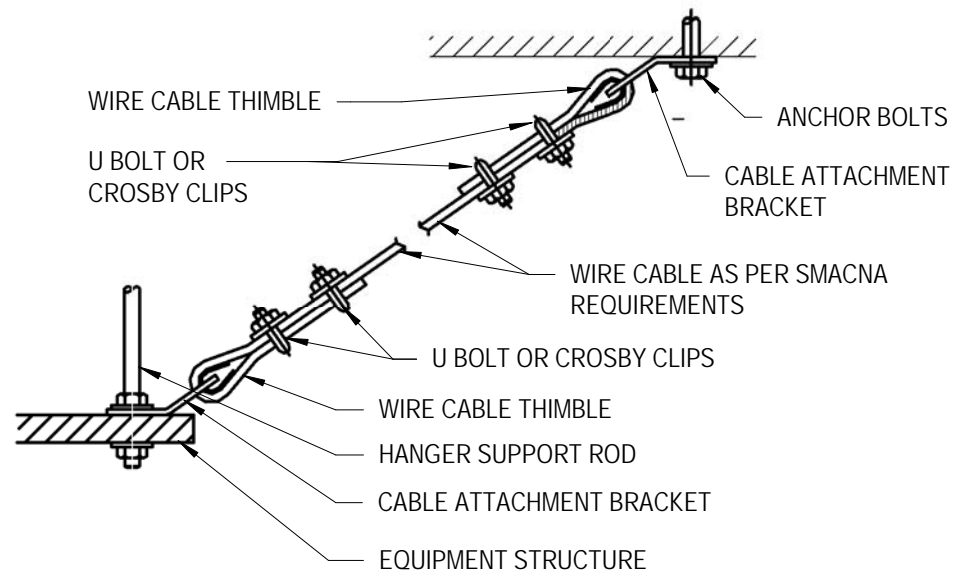




- NOTES:**
1. VERTICAL ROD SUPPORT REQUIRED WHEN ROD LENGTH EXCEEDS 58 TIMES ITS DIAMETER.
  2. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO DETERMINE THE APPROPRIATE SIZE DEVICES REQUIRED FOR EACH INDIVIDUAL PIECE OF EQUIPMENT.
  3. THIS DETAIL INDICATES AN ACCEPTABLE METHOD OF CABLE RESTRAINT. CABLE ATTACHMENT AND SIZING ARE REQUIRED TO BE SUBMITTED AS SHOP DRAWINGS CERTIFIED BY A B.C. REGISTERED SEISMIC ENGINEER.

### Seismic Cable Attachment For Equipment Under 20 kg

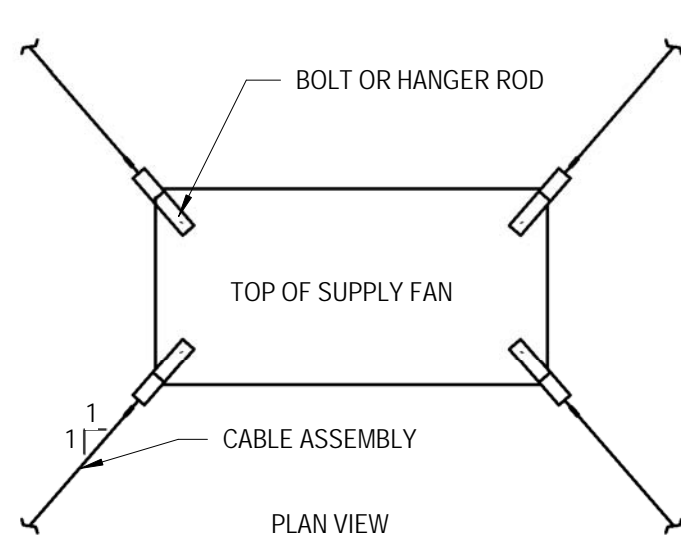
9  
M-202 SCALE: N.T.S.



- NOTES:**
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### Seismic Cable Attachment for Equipment Over 20 kg

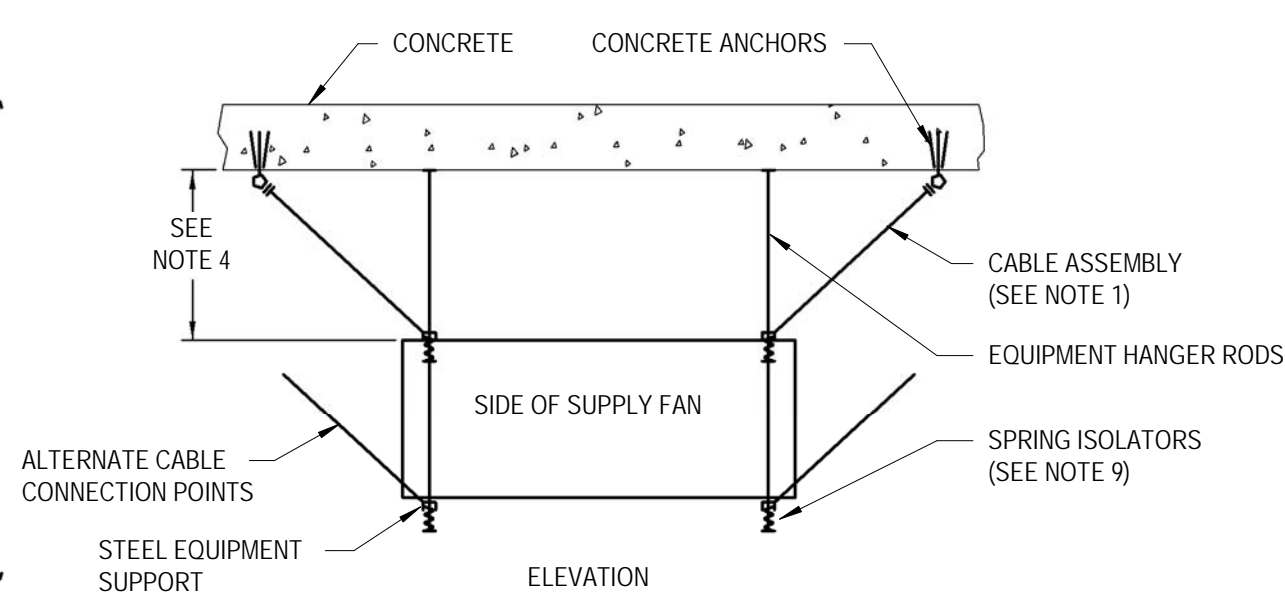
10  
M-202 SCALE: N.T.S.



- NOTES:**
1. CABLE ASSEMBLY (AS SUPPLIED BY VIBRA-SONIC CONTROL) TO INCLUDE GALVANIZED AIRCRAFT CABLE.
  2. CABLES ARE ORIENTED 45 DEG. (+15 DEG.) TO THE HORIZONTAL (ON THE CABLE AXIS).
  3. CABLES TO BE INSTALLED STRAIGHT. IT IS NOT ACCEPTABLE TO BEND CABLE AROUND AN OBSTRUCTION.

### Seismic Restraint for HVAC Equipment

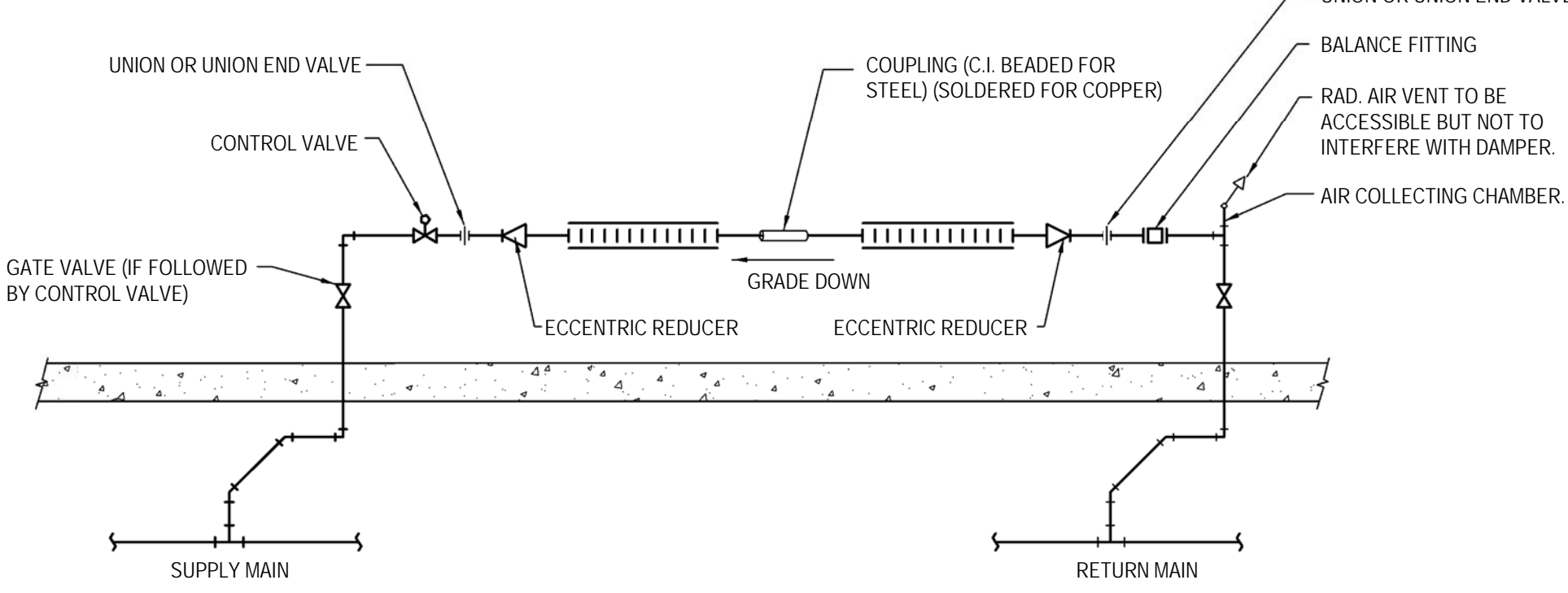
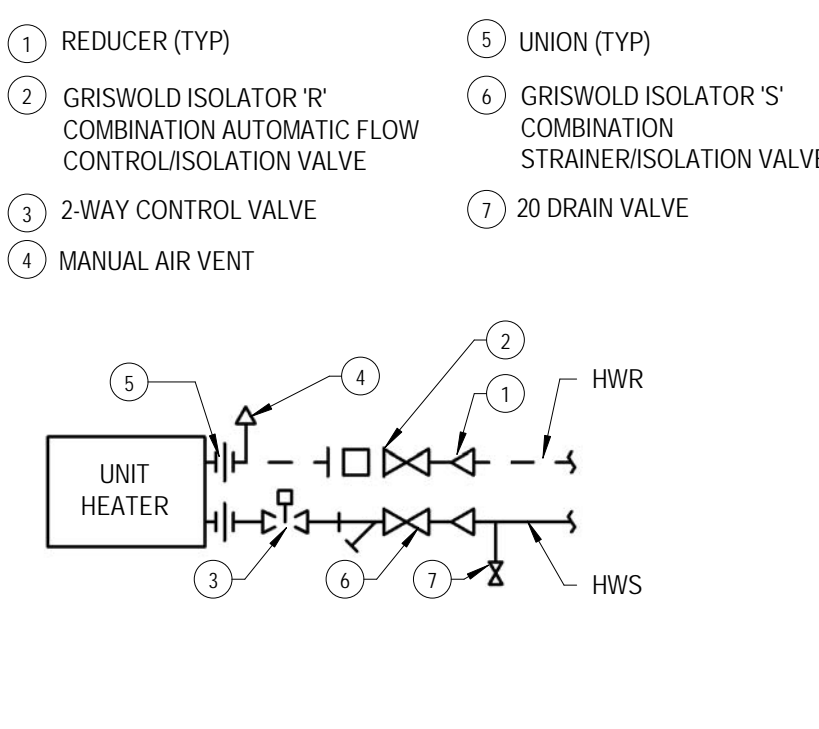
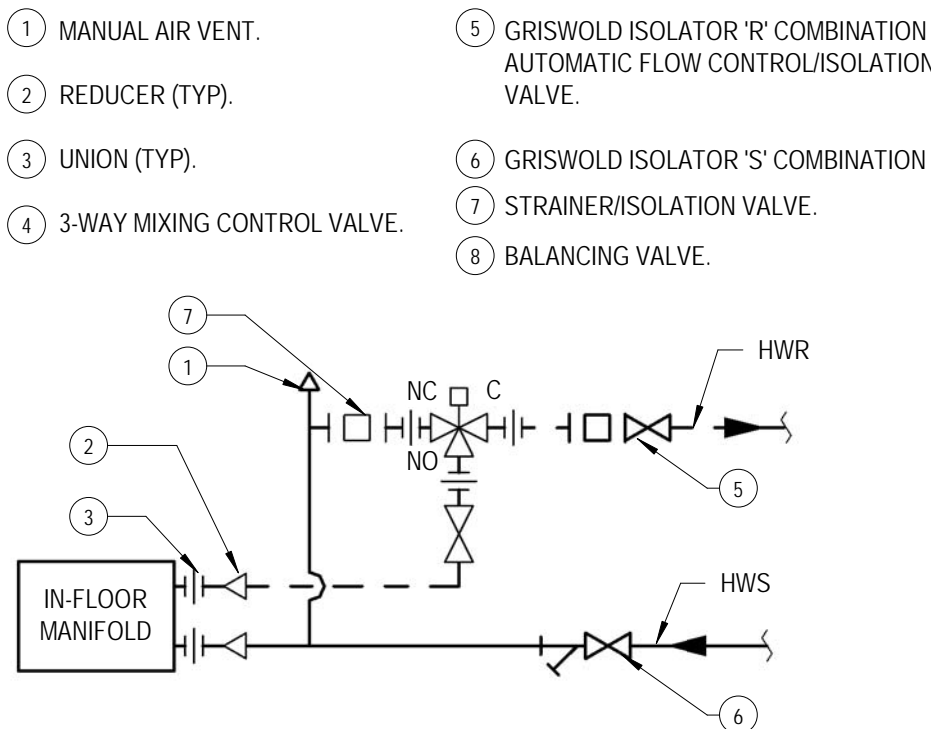
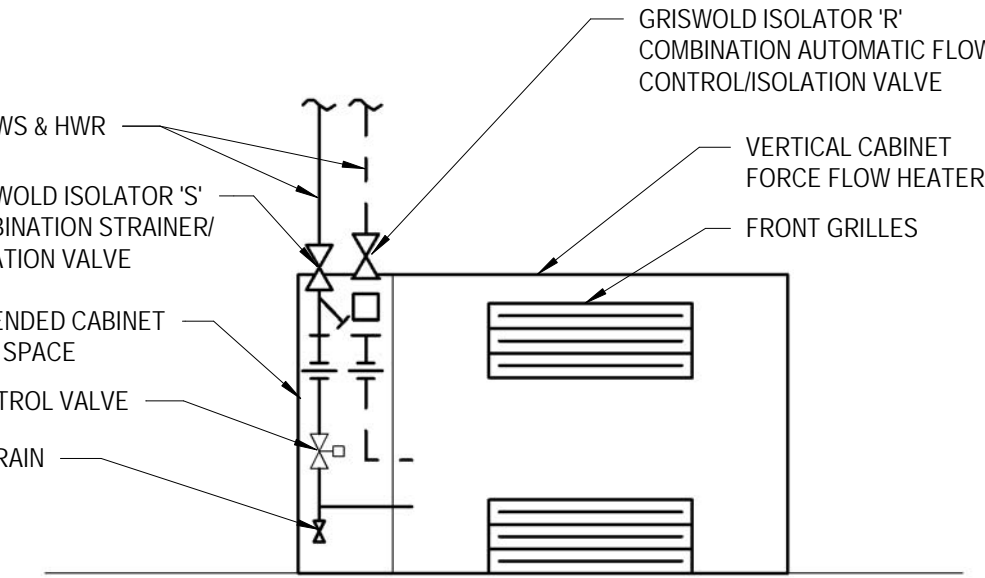
11  
M-202 SCALE: N.T.S.



4. CABLES NOT TO BE INSTALLED TAUT OR VISIBLY SLACK. MAXIMUM DEFLECTION AT MID POINT (UNDER THUMB PRESSURE) NOT TO EXCEED 38mm FOR A 1524mm CABLE LENGTH (EQUIVALENT RATIO FOR OTHER CABLE LENGTHS).
5. THICKNESS OF CONCRETE TO BE AT LEAST 1.3x ANCHOR EMBEDMENT.
6. VERTICAL HANGER RODS TO BE STIFFENED WHEN ROD LENGTH 'L' EXCEEDS 50x ROD DIAMETER.
7. EQUIPMENT SHALL BE DESIGNED TO WITHSTAND SEISMIC FORCES AT POINT OF ATTACHMENT OF CABLE RESTRAINTS.
8. INSTALLATION AND TORQUING OF CONCRETE ANCHORS TO BE AS PER MANUFACTURER'S SPECIFICATIONS.
9. SPRING ISOLATOR: 25mm DEFLECTION SPRING WITH 6mm NEOPRENE PAD IN HANGER BOX. ACCEPTABLE PRODUCT MASON HS.

### Forced Flow Heater Piping Detail

12  
M-202 SCALE: N.T.S.

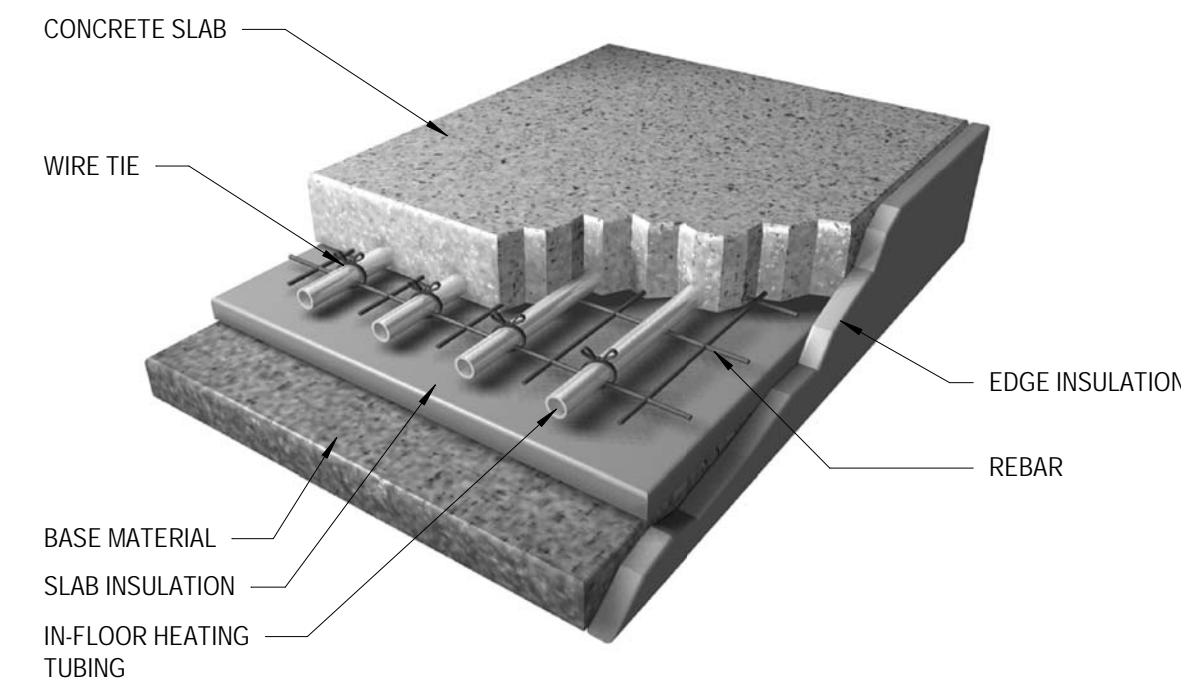


### Baseboard Piping From Below - Schematic

7  
M-202 SCALE: N.T.S.

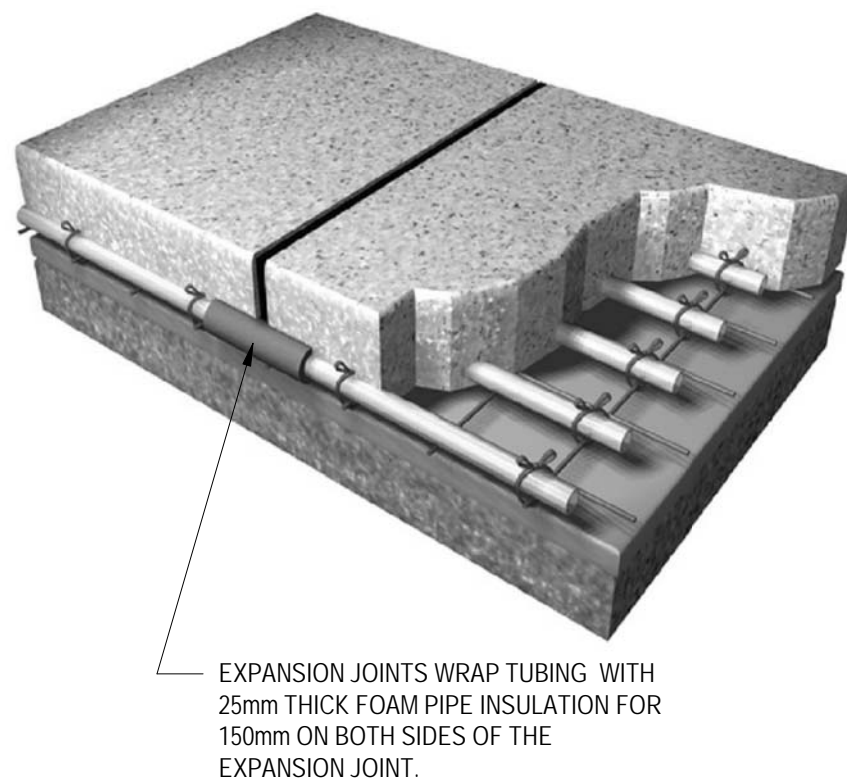
### Baseboard Piping From Above - Schematic

8  
M-202 SCALE: N.T.S.



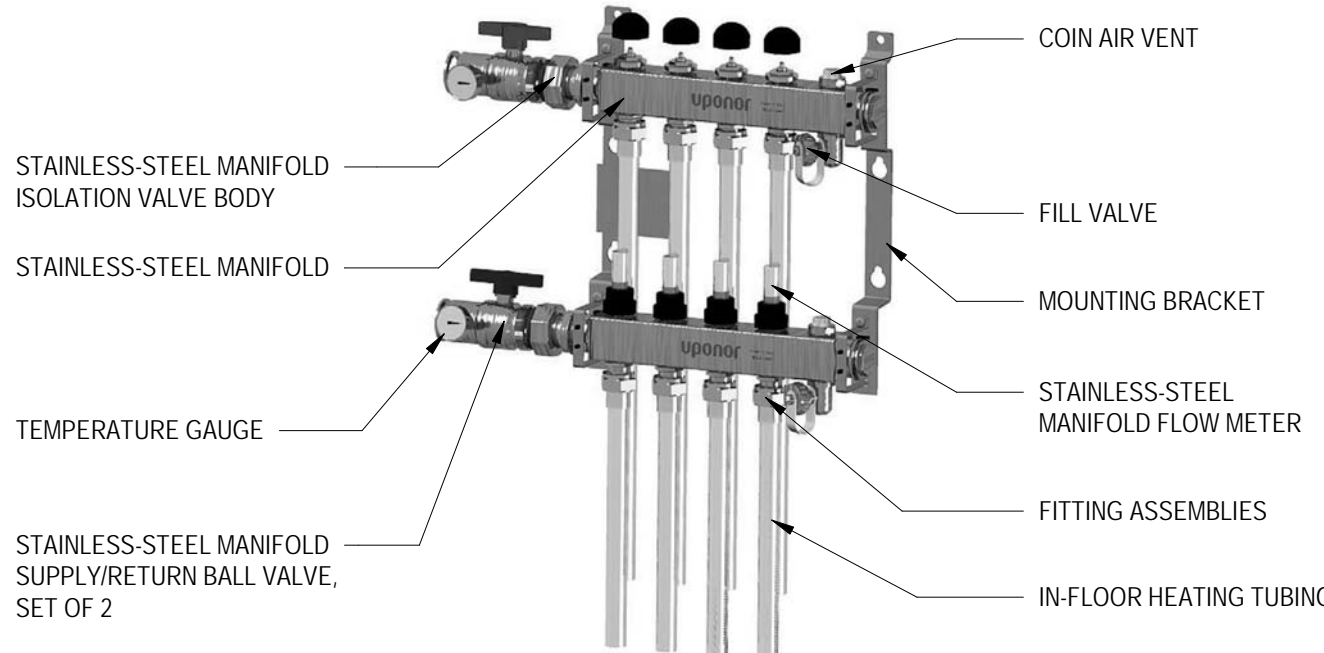
### In-Floor Heating Detail

3  
M-202 SCALE: N.T.S.



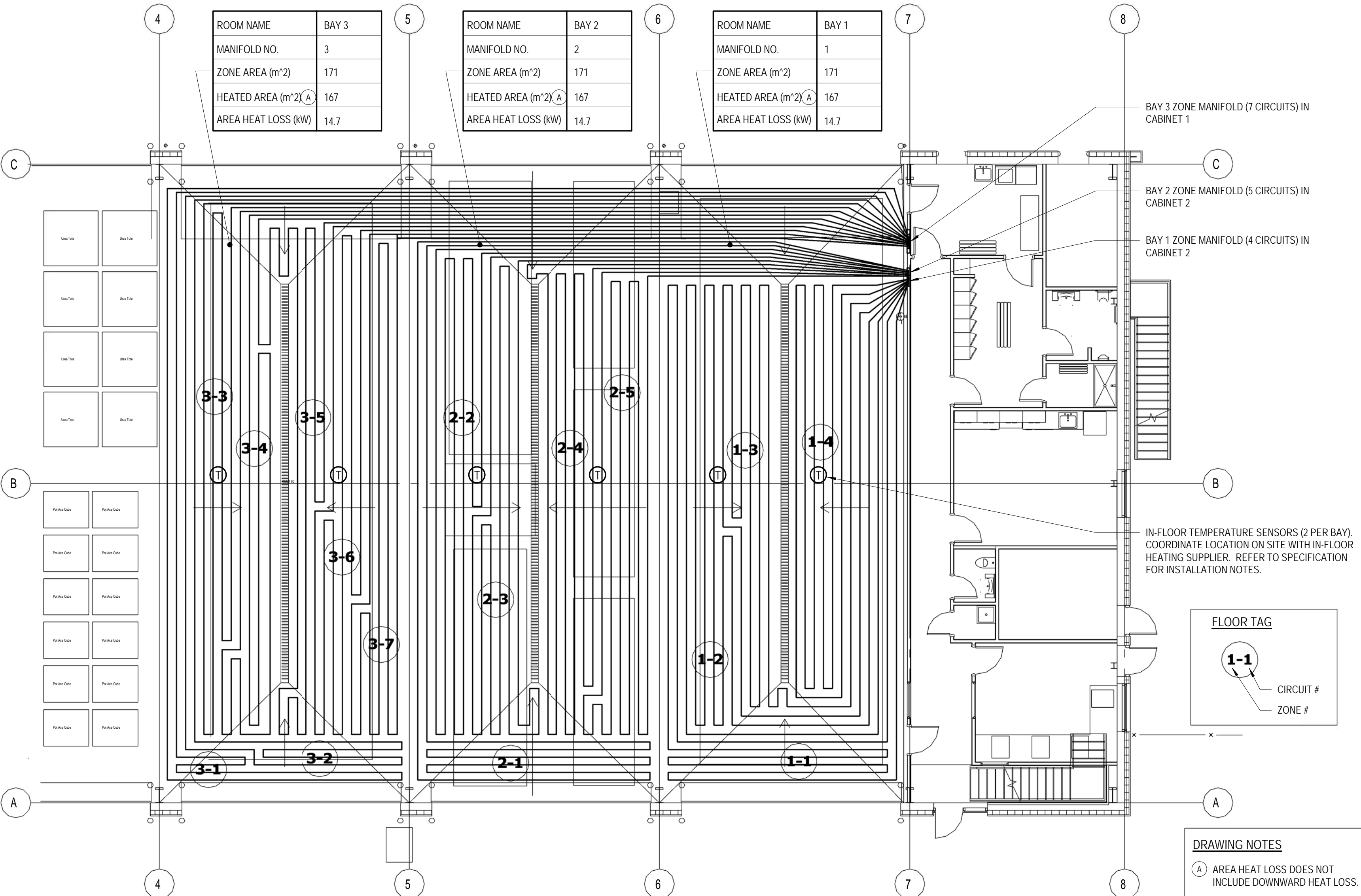
### In-Floor Heating Expansion Joints

4  
M-202 SCALE: 1 : 100



### In-Floor Heating Manifold

2  
M-202 SCALE: N.T.S.



### In-Floor Heating System

1  
M-202 SCALE: 1 : 100

