

no.	date	issued
1	MAR 15 2024	ISSUED FOR REVIEW
2	JULY 10 2024	ISSUED FOR TENDER

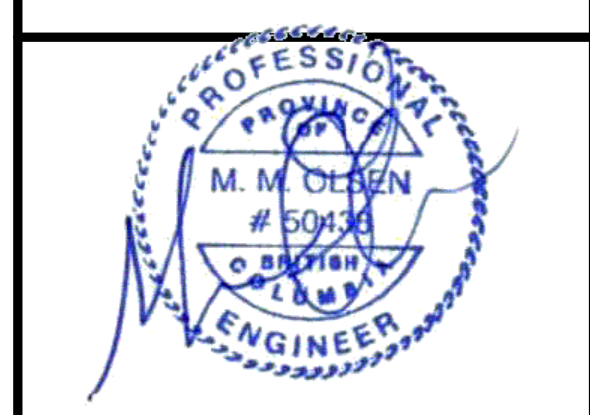
PLUMBING AND DRAINAGE SYMBOLS AND ABBREVIATIONS			
SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION
	PIPE DROP OR FROM BELOW		COMBINATION BALANCE AND METERING VALVE (CIRCUIT SETTER)
	PIPE UP OR FROM ABOVE		PRESSURE INDEPENDENT CONSTANT FLOW VALVE (AUTO-FLOW VALVE)
	VALVE		CHECK VALVE
	SAFETY RELIEF VALVE		BACKFLOW PREVENTOR
	UNION OR FLANGE FITTING		PRESSURE REDUCING VALVE
	FLEXIBLE CONNECTION		STRAINER
	HOSE BIBB		REDUCERS
	PLUMBING FIXTURE (TYPE NOTED)		PUMP
	WALL HYDRANT		PRESSURE GAUGE
	THERMOMETER		FLOW SWITCH
	VACUUM BREAKER		PRESSURE SWITCH
	WATER TEMPERATURE SENSOR		GAS TURRET
	PRESSURE TEMPERATURE PLUG		COMPRESSED AIR OUTLET
	FLOOR DRAIN SIZE AS NOTED REFER TO SPECIFICATION FOR TYPES		FLOOR DRAIN FROM ABOVE WITH TRAP
	FUNNEL FLOOR DRAIN SIZE AS NOTED REFER TO SPECIFICATION FOR TYPES		UPTURNED CLEANOUT
	HUB DRAIN SIZE AS NOTED REFER TO SPECIFICATION FOR TYPES		HORIZONTAL CLEANOUT
	ROOF DRAIN SIZE AS NOTED REFER TO SPECIFICATION FOR TYPES		FLOOR CLEANOUT
	DOMESTIC COLD WATER (DCW)		NATURAL GAS
	DOMESTIC HOT WATER (DHW)		NATURAL GAS VENT
	DOMESTIC HOT WATER RECIRCULATION (DHWRC)		PROPANE GAS
	TEMPERED DOMESTIC HOT WATER		COMPRESSED AIR
	IRRIGATION SYSTEM PIPING		ACID VENT
	SANITARY ABOVE GRADE OR FLOOR		ACID WASTE
	SANITARY BELOW GRADE OR FLOOR		SANITARY VENT
	STORM ABOVE GRADE OR FLOOR		RADON GAS BELOW GRADE
	STORM BELOW GRADE OR FLOOR		GREASE INTERCEPTOR ABOVE GRADE
	PUMP SANITARY DRAIN		GREASE INTERCEPTOR BELOW GRADE
	PUMP STORM DRAIN		INDIRECT DRAIN
	NON-POTABLE WATER		FOUNDATION DRAIN
	SQUARE EXTERIOR AREA DRAIN		CONDENSATE DRAIN
	CIRCULAR AREA DRAIN		VENT THROUGH ROOF
	THRUST BLOCK		MANHOLE
	GAS METER		CATCH BASIN
	WATER METER		

NOTE: NOT ALL SYMBOLS APPLY. REFER TO FLOOR PLANS AND DRAWINGS

HVAC SYMBOLS AND ABBREVIATIONS			
SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION
	ELBOW DROPPING		CHECK VALVE
	ELBOW RISING		BACKFLOW PREVENTOR
	ISOLATION VALVE		STRAINER
	CONTROL VALVES		REDUCERS
	SAFETY RELIEF VALVE		PUMP
	ELECTRONIC PRESSURE INDEPENDENT CONTROL VALVE		PRESSURE INDEPENDENT CONSTANT FLOW VALVE (AUTO-FLOW VALVE)
	COMBINATION BALANCE AND METERING VALVE (CIRCUIT SETTER)		FLEXIBLE CONNECTION
	MANUAL AIR VENT		AUTOMATIC AIR VENT
	UNION OR FLANGE FITTING		PRESSURE GAUGE
	THERMOMETER		AIR OR WATER FLOW IN L/S
	FLOW SWITCH		PRESSURE SWITCH
	FLOW MEASURING DEVICE		PRESSURE SENSOR
	VISUAL FLOW INDICATOR		PRESSURE TEMPERATURE PLUG
	AIR SEPARATOR		WATER TEMPERATURE SENSOR
	HEAT TRACE		RADON STAT
	ELECTRIC THERMOSTAT/TEMPERATURE SENSOR		REVERSE ACTING THERMOSTAT
	FIRE DAMPER		DIFFERENTIAL PRESSURE SENSOR
	MOTORIZED DAMPER		BALANCING DAMPER
	SMOKE/FIRE DAMPER		
	SUPPLY DUCT UP OR FROM ABOVE		BACKDRAFT DAMPER
	SUPPLY DUCT DOWN OR FROM BELOW		SQUARE ELBOW DUCT WITH TURNING VANE
	RETURN DUCT UP OR FROM ABOVE		ROUND SUPPLY DIFFUSER
	RETURN DUCT DOWN OR FROM BELOW		DUCTED RETURN OR EXHAUST REGISTER OR GRILLE
	OUTSIDE AIR DUCT UP OR FROM ABOVE		SQUARE OR RECTANGULAR DIFFUSER
	OUTSIDE AIR DUCT DOWN OR FROM BELOW		NON DUCTED RETURN OR EXHAUST GRILLE
	RELIEF/EXHAUST DUCT UP OR FROM ABOVE		NON DUCTED ROUND RETURN OR EXHAUST GRILLE
	RELIEF/EXHAUST DUCT DOWN OR FROM BELOW		DUCT MOUNTED SUPPLY OR RETURN GRILLE
	ROUND DUCT UP OR FROM ABOVE		LINEAR SUPPLY OR RETURN GRILLE
	ROUND DUCT DOWN OR FROM BELOW		WALL FIN ELEMENT IN CONTINUOUS ENCLOSURE
	ACOUSTIC LINED DUCT		DOOR GRILLE
	FLEXIBLE CONNECTION		FLEXIBLE DUCTWORK
	DIFFUSER GRILLE OR REGISTER TYPE		ENCLOSURE HEATING ELEMENT TAG
	HEATING WATER SUPPLY		HEAT PUMP WATER SUPPLY
	HEATING WATER RETURN		HEAT PUMP WATER RETURN
	CHILLED WATER SUPPLY		GROUND SOURCE SUPPLY
	CHILLED WATER RETURN		GROUND SOURCE RETURN
	CONDENSER WATER SUPPLY		REFRIGERATION SUCTION
	CONDENSER WATER RETURN		REFRIGERATION LIQUID

NOTE: NOT ALL SYMBOLS APPLY. REFER TO FLOOR PLANS AND DRAWINGS

CONNECTED GAS LOAD			
EQUIPMENT DESCRIPTION	NAME	STATUS	GAS INPUT (btuh)
DOMESTIC WATER HEATER	DWH-104	EXISTING	35,500
FURNACE	F-104	EXISTING	75,000
UNIT HEATER	UH-100-1	EXISTING	150,000
	UH-100-2	EXISTING	150,000
	UH-100-3	NEW	150,000
EMERGENCY GENERATOR	-	EXISTING	660,000
TOTAL:			1,220,500



project
CITY OF SALMON ARM - FIRE HALL #2 BUILDING ADDITION
 200 - 30th Street SE
 Salmon Arm, BC

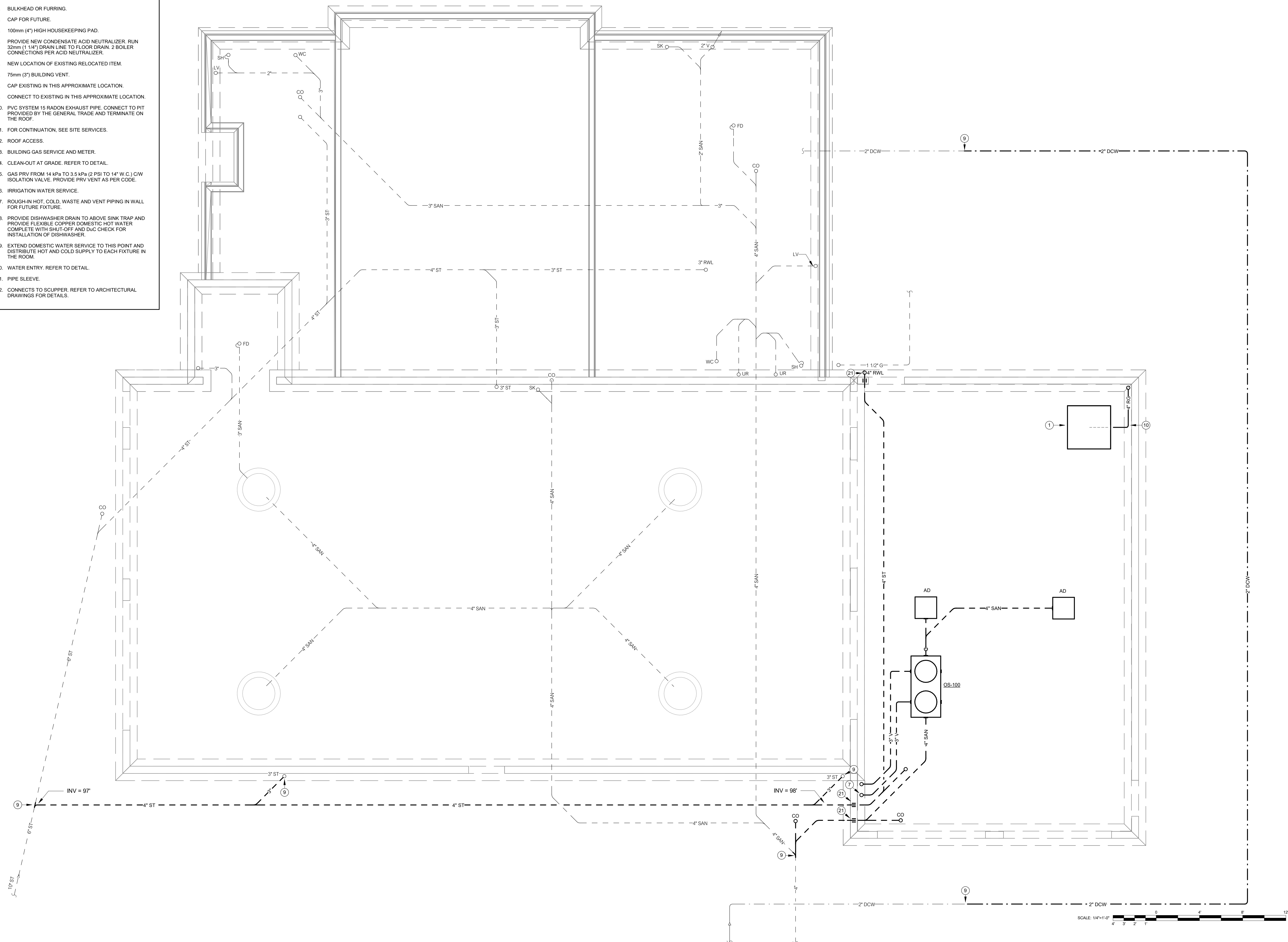
drawing title
SYMBOL LEGENDS

date	MARCH 2024	dr. by	AS
scale	NTS	des. by	MH
job no	24010.001	eor	MH
		rev. by	

drawing no.
M0.0

DRAWING NOTES APPLY WHERE INDICATED: 

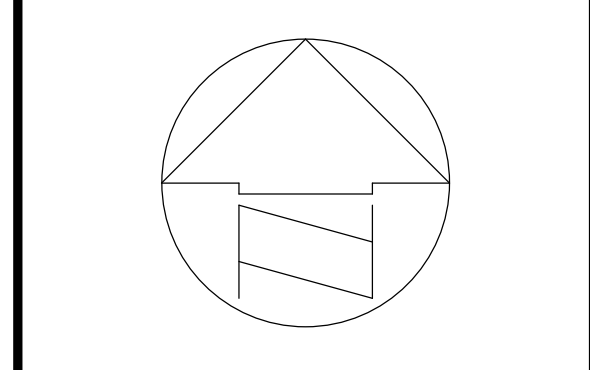
1. REFER TO DETAIL.
2. BULKHEAD OR FURRING.
3. CAP FOR FUTURE.
4. 100mm (4") HIGH HOUSEKEEPING PAD.
5. PROVIDE NEW CONDENSATE ACID NEUTRALIZER. RUN 32mm (1 1/4") DRAIN LINE TO FLOOR DRAIN. 2 BOILER CONNECTIONS PER ACID NEUTRALIZER.
6. NEW LOCATION OF EXISTING RELOCATED ITEM.
7. 75mm (3") BUILDING VENT.
8. CAP EXISTING IN THIS APPROXIMATE LOCATION.
9. CONNECT TO EXISTING IN THIS APPROXIMATE LOCATION.
10. PVC SYSTEM 15 RADON EXHAUST PIPE. CONNECT TO PIT PROVIDED BY THE GENERAL TRADE AND TERMINATE ON THE ROOF.
11. FOR CONTINUATION, SEE SITE SERVICES.
12. ROOF ACCESS.
13. BUILDING GAS SERVICE AND METER.
14. CLEAN-OUT AT GRADE. REFER TO DETAIL.
15. GAS PRV FROM 14 kPa TO 3.5 kPa (2 PSI TO 1/2 PSI). CW ISOLATION VALVE. PROVIDE PRV VENT AS PER CODE.
16. IRRIGATION WATER SERVICE.
17. ROUGH-IN HOT, COLD, WASTE AND VENT PIPING IN WALL FOR FUTURE FIXTURE.
18. PROVIDE DISHWASHER DRAIN TO ABOVE SINK TRAP AND PROVIDE FLEXIBLE COPPER DOMESTIC HOT WATER COMPLETE WITH SHUT-OFF AND DVC CHECK FOR INSTALLATION OF DISHWASHER.
19. EXTEND DOMESTIC WATER SERVICE TO THIS POINT AND DISTRIBUTE HOT AND COLD SUPPLY TO EACH FIXTURE IN THE ROOM.
20. WATER ENTRY. REFER TO DETAIL.
21. PIPE SLEEVE.
22. CONNECTS TO SCUPPER. REFER TO ARCHITECTURAL DRAWINGS FOR DETAILS.



SCALE: 1/4" = 1'-0"



no.	date	issued
1	MAR 15 2024	ISSUED FOR REVIEW
2	JULY 10 2024	ISSUED FOR TENDER



FALCON ENGINEERING
 INGENUITY DELIVERED
 210-1715 Dickson Ave. Kelowna, BC V1Y 9G6 250.762.9993 www.falcon.ca
 Permit to Practice: 1001295

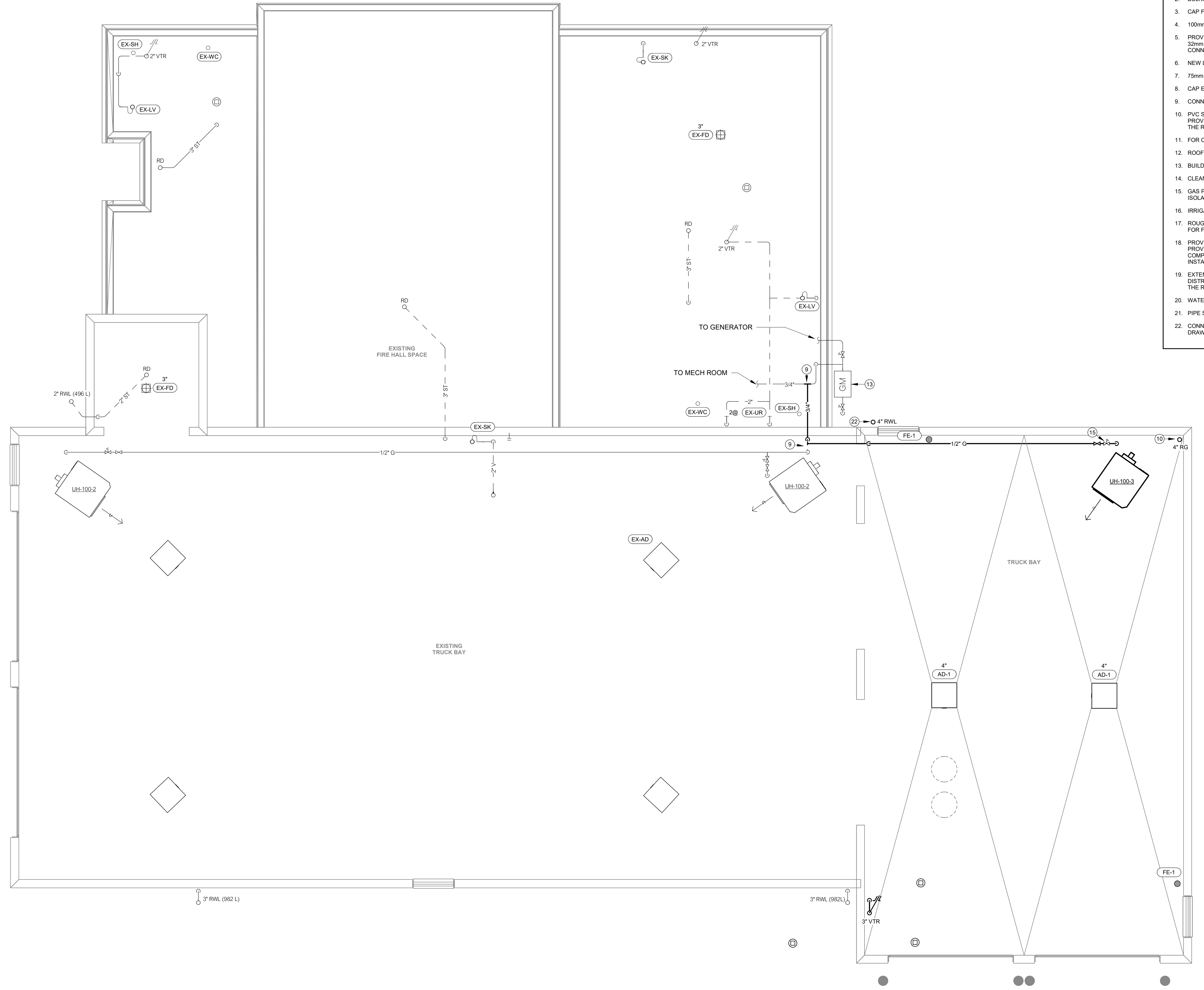


project
CITY OF SALMON ARM - FIRE HALL #2 BUILDING ADDITION
 200 - 30th Street SE
 Salmon Arm, BC

drawing title
FOUNDATION PLAN

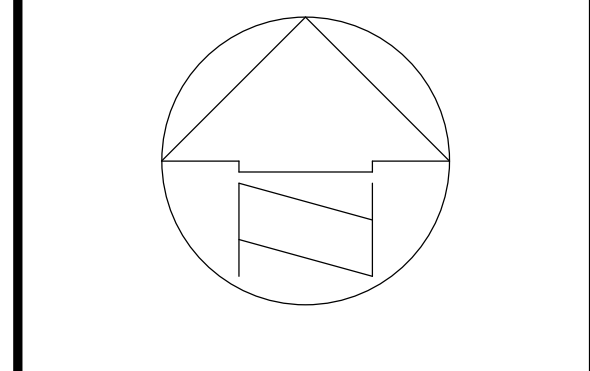
date	dr. by	AS
MARCH 2024	des. by	MH
scale	1/4" = 1'-0"	1/4" = 1'-0"
job no	24010.001	24010.001
	rev. by	

drawing no.
M1.0

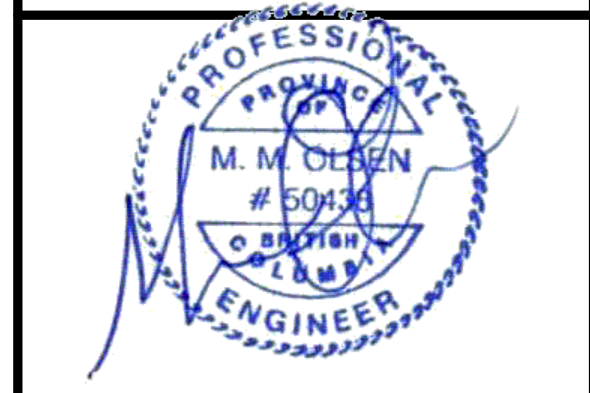


- DRAWING NOTES APPLY WHERE INDICATED:
1. REFER TO DETAIL.
 2. BULKHEAD OR FURRING.
 3. CAP FOR FUTURE.
 4. 100mm (4") HIGH HOUSEKEEPING PAD.
 5. PROVIDE NEW CONDENSATE ACID NEUTRALIZER. RUN 32mm (1 1/4") DRAIN LINE TO FLOOR DRAIN. 2 BOILER CONNECTIONS PER ACID NEUTRALIZER.
 6. NEW LOCATION OF EXISTING RELOCATED ITEM.
 7. 75mm (3") BUILDING VENT.
 8. CAP EXISTING IN THIS APPROXIMATE LOCATION.
 9. CONNECT TO EXISTING IN THIS APPROXIMATE LOCATION.
 10. PVC SYSTEM 15 RADON EXHAUST PIPE. CONNECT TO PIT PROVIDED BY THE GENERAL TRADE AND TERMINATE ON THE ROOF.
 11. FOR CONTINUATION, SEE SITE SERVICES.
 12. ROOF ACCESS.
 13. BUILDING GAS SERVICE AND METER.
 14. CLEAN-OUT AT GRADE. REFER TO DETAIL.
 15. GAS PRV FROM 14 kPa TO 3.5 kPa (2 PSI TO 14" W.C.) C/W ISOLATION VALVE. PROVIDE PRV VENT AS PER CODE.
 16. IRRIGATION WATER SERVICE.
 17. ROUGH-IN HOT, COLD, WASTE AND VENT PIPING IN WALL FOR FUTURE FIXTURE.
 18. PROVIDE DISHWASHER DRAIN TO ABOVE SINK TRAP AND PROVIDE FLEXIBLE COPPER DOMESTIC HOT WATER COMPLETE WITH SHUT-OFF AND D/C CHECK FOR INSTALLATION OF DISHWASHER.
 19. EXTEND DOMESTIC WATER SERVICE TO THIS POINT AND DISTRIBUTE HOT AND COLD SUPPLY TO EACH FIXTURE IN THE ROOM.
 20. WATER ENTRY. REFER TO DETAIL.
 21. PIPE SLEEVE.
 22. CONNECTS TO SCUPPER. REFER TO ARCHITECTURAL DRAWINGS FOR DETAILS.

no.	date	issued
1	MAR 15 2024	ISSUED FOR REVIEW
2	JULY 10 2024	ISSUED FOR TENDER



FALCON ENGINEERING
 INGENUITY DELIVERED
 210-1715 Dickson Ave. Kelowna, BC V1Y 9G6 250.762.9993 www.falcon.ca
 Permit to Practice: 1001295




project
CITY OF SALMON ARM - FIRE HALL #2 BUILDING ADDITION
 200 - 30th Street SE
 Salmon Arm, BC

drawing title
MAIN FLOOR PLAN - PLUMBING

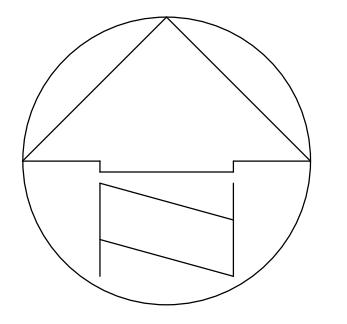
date	MARCH 2024	dr. by	AS
scale	1/4" = 1'-0"	des. by	MH
job no	24010.001	eor	MH
		rev. by	

drawing no.
M1.1

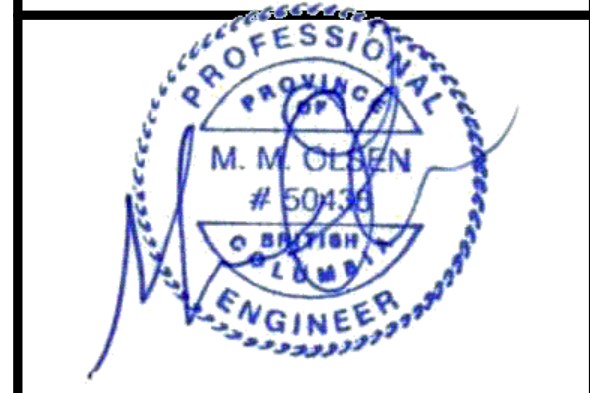


- DRAWING NOTES APPLY WHERE INDICATED: 
- REFER TO DETAIL.
 - GAS PRV FROM 34 kPa TO 3.5 kPa (5 PSI TO 14" w.c.) CW ISOLATION VALVE, MAINTAIN MINIMUM 3048mm (10'-0") CLEARANCE FROM ALL AIR INTAKES.
 - CAP FOR FUTURE.
 - GOOSENECK, SEE DETAIL.
 - ROOF ACCESS.
 - NEW LOCATION OF EXISTING RELOCATED ITEM.
 - PVC SYSTEM 15 RADON EXHAUST PIPE, CONNECT TO PIT PROVIDED BY GENERAL TRADE AND TERMINATE ON ROOF, MAINTAIN 7.6m (25') FROM ALL AIR INTAKES.
 - CAP EXISTING IN THIS APPROXIMATE LOCATION.
 - CONNECT TO EXISTING IN THIS APPROXIMATE LOCATION.

no.	date	issued
1	MAR 15 2024	ISSUED FOR REVIEW
2	JULY 10 2024	ISSUED FOR TENDER



FALCON ENGINEERING
 INGENUITY DELIVERED
 210-1715 Dickson Ave. Kelowna, BC V1Y 9G6 250.762.9993 www.falcon.ca
 Permit to Practice: 1001295

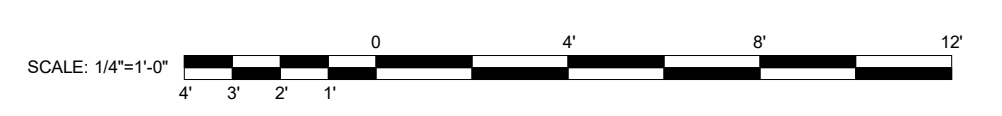


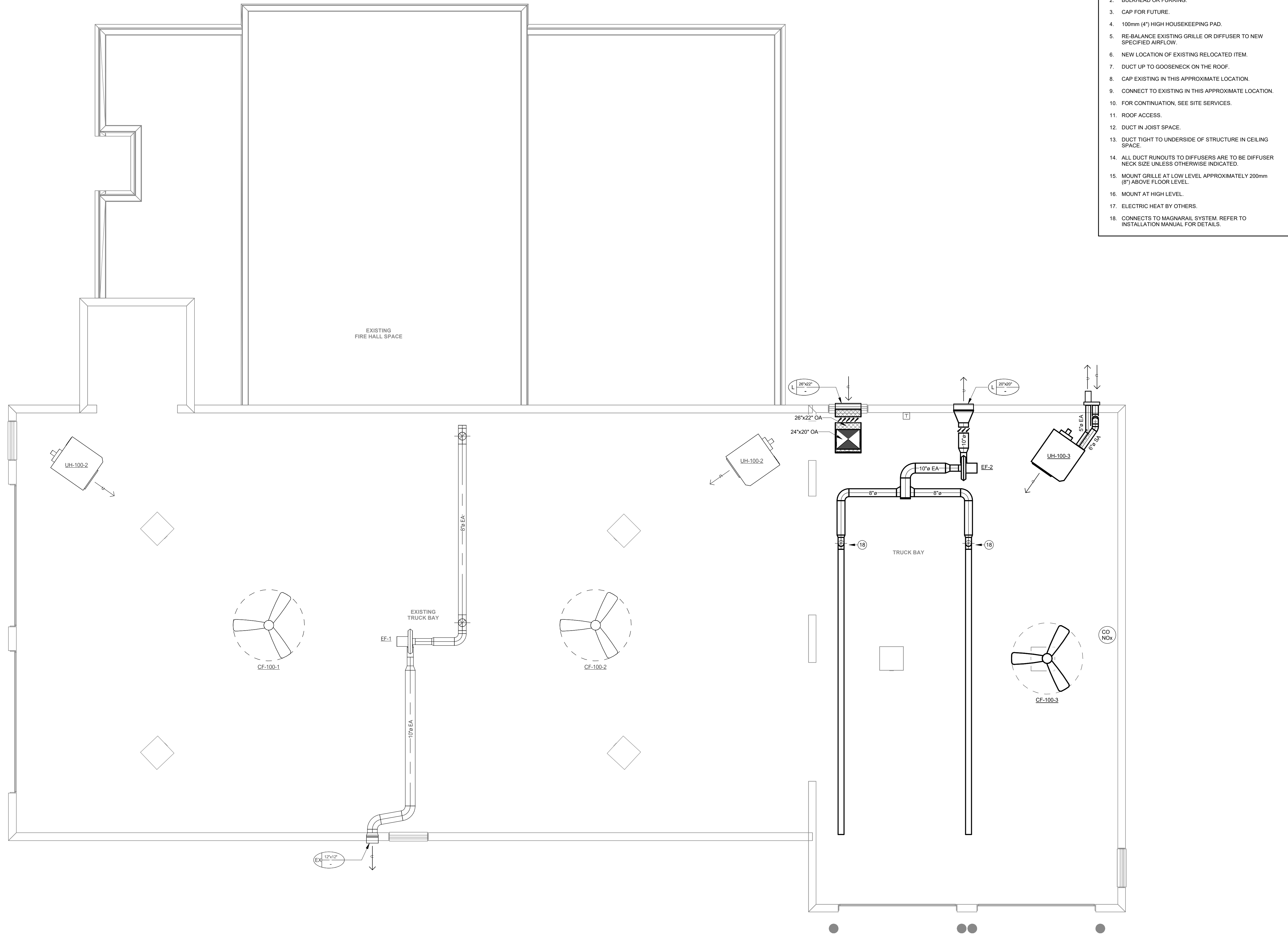
project
CITY OF SALMON ARM - FIRE HALL #2 BUILDING ADDITION
 200 - 30th Street SE
 Salmon Arm, BC

drawing title
ROOF PLAN

date	MARCH 2024	dr. by	AS
scale	1/4" = 1'-0"	des. by	MH
job no.	24010.001	eor	MH
		rev. by	

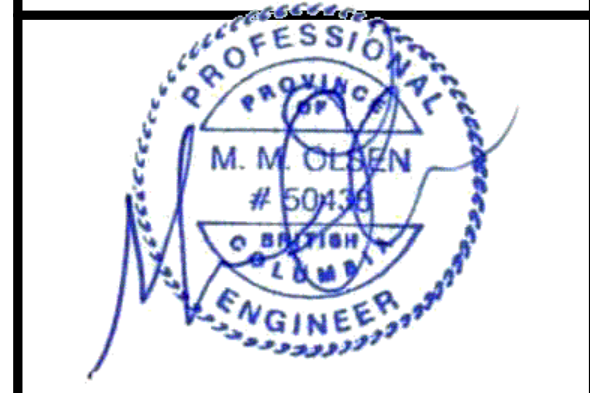
drawing no.
M1.2





- DRAWING NOTES APPLY WHERE INDICATED:
1. REFER TO DETAIL.
 2. BULKHEAD OR FURRING.
 3. CAP FOR FUTURE.
 4. 100mm (4") HIGH HOUSEKEEPING PAD.
 5. RE-BALANCE EXISTING GRILLE OR DIFFUSER TO NEW SPECIFIED AIRFLOW.
 6. NEW LOCATION OF EXISTING RELOCATED ITEM.
 7. DUCT UP TO GOOSENECK ON THE ROOF.
 8. CAP EXISTING IN THIS APPROXIMATE LOCATION.
 9. CONNECT TO EXISTING IN THIS APPROXIMATE LOCATION.
 10. FOR CONTINUATION, SEE SITE SERVICES.
 11. ROOF ACCESS.
 12. DUCT IN JOIST SPACE.
 13. DUCT TIGHT TO UNDERSIDE OF STRUCTURE IN CEILING SPACE.
 14. ALL DUCT RUNOUTS TO DIFFUSERS ARE TO BE DIFFUSER NECK SIZE UNLESS OTHERWISE INDICATED.
 15. MOUNT GRILLE AT LOW LEVEL APPROXIMATELY 200mm (8") ABOVE FLOOR LEVEL.
 16. MOUNT AT HIGH LEVEL.
 17. ELECTRIC HEAT BY OTHERS.
 18. CONNECTS TO MAGNARAIL SYSTEM. REFER TO INSTALLATION MANUAL FOR DETAILS.

no.	date	issued
1	MAR 15 2024	ISSUED FOR REVIEW
2	JULY 10 2024	ISSUED FOR TENDER

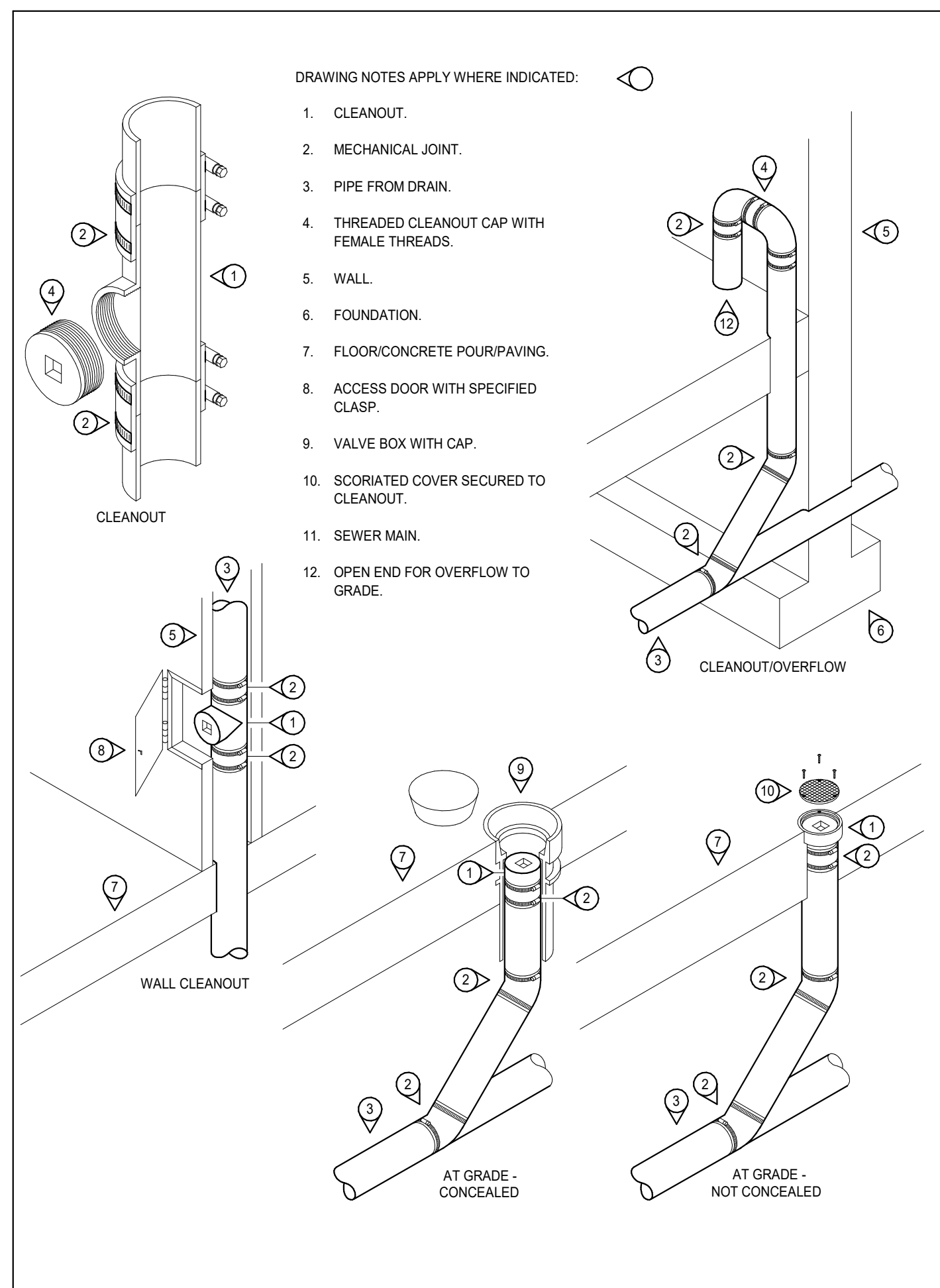


project
CITY OF SALMON ARM - FIRE HALL #2 BUILDING ADDITION
200 - 30th Street SE
Salmon Arm, BC

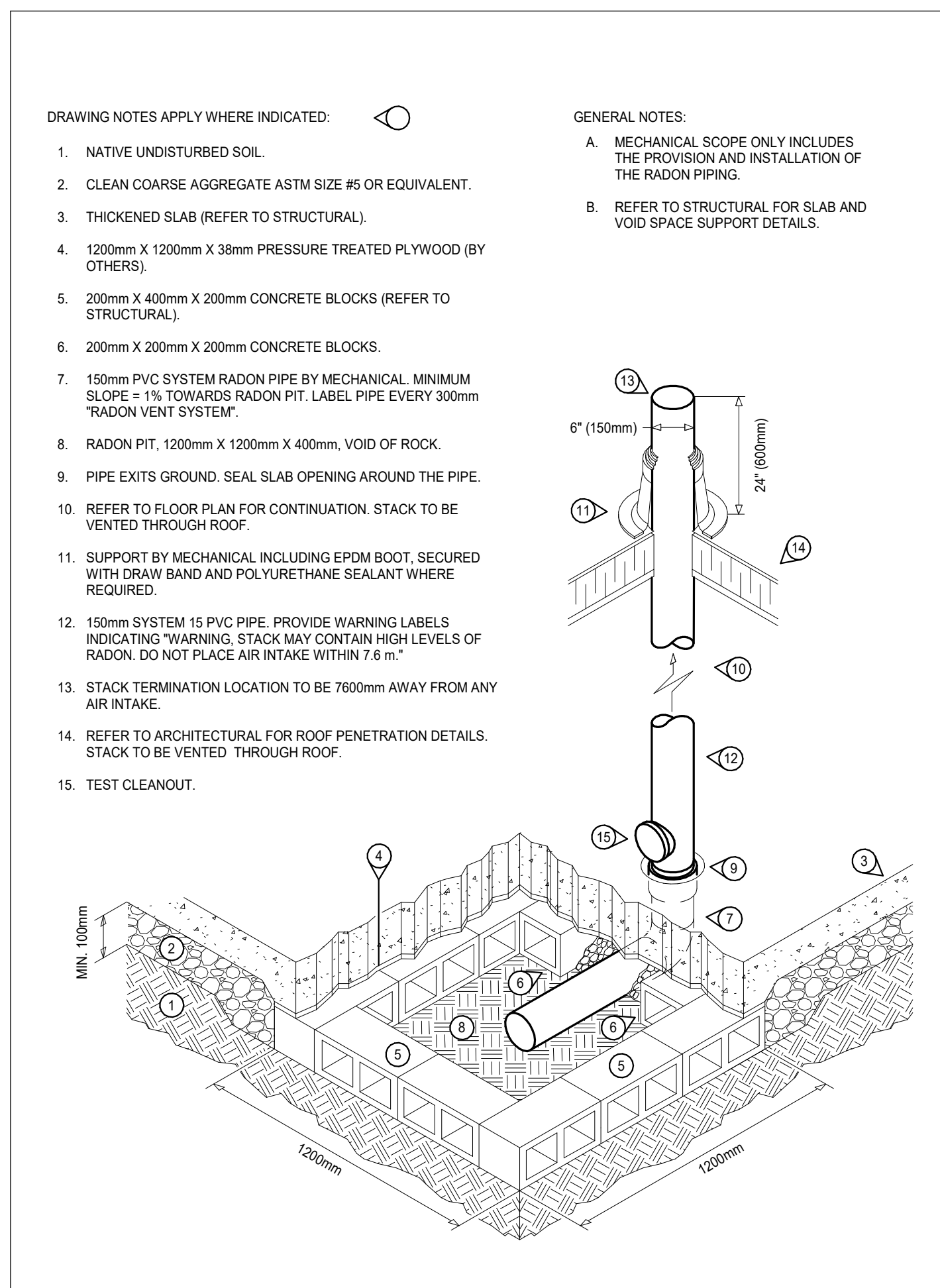
drawing title
MAIN FLOOR PLAN - HVAC

date	MARCH 2024	dr. by	AS
scale	1/4" = 1'-0"	des. by	MH
job no	24010.001	eor	MH
		rev. by	

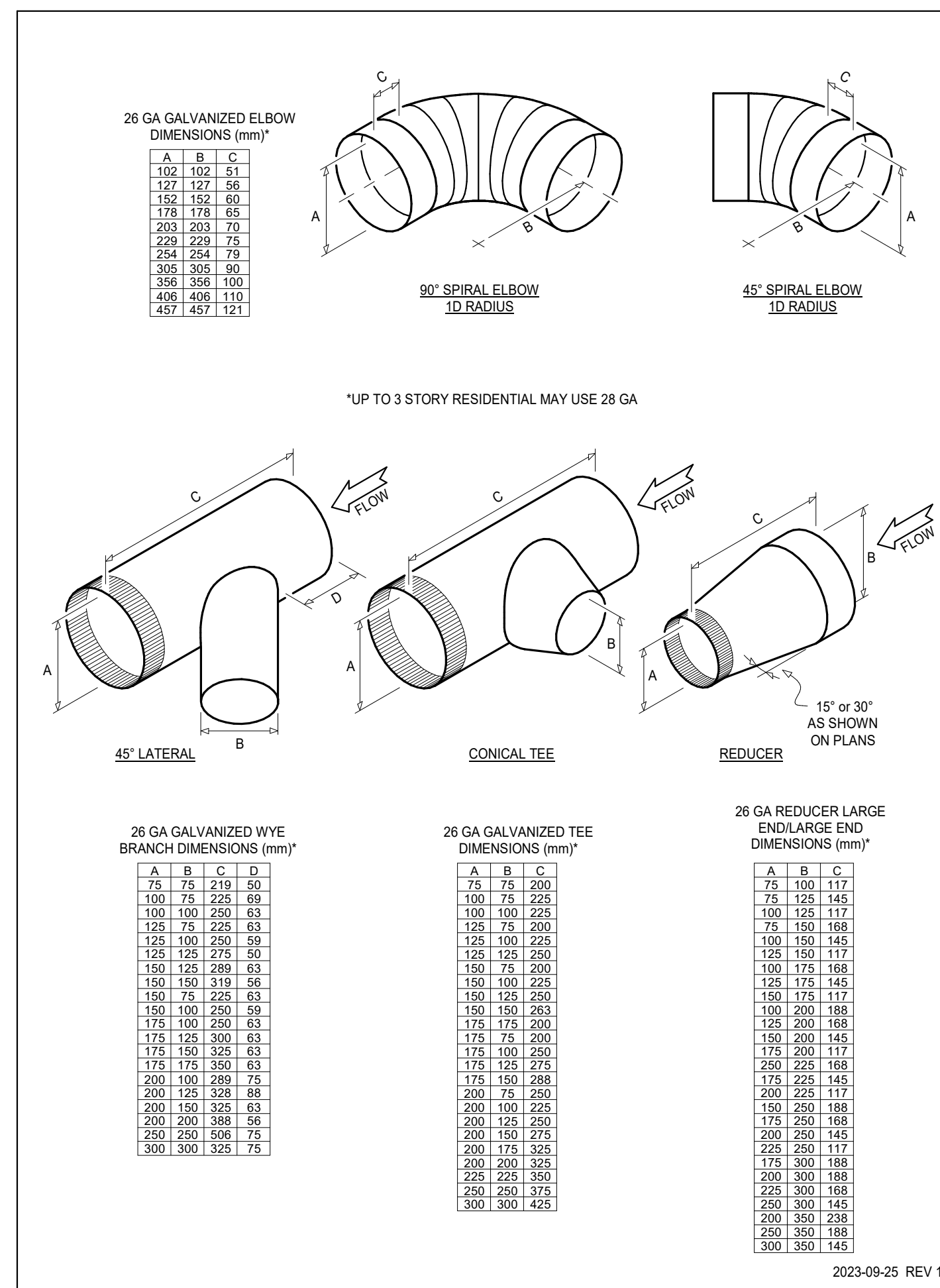
drawing no.
M2.0



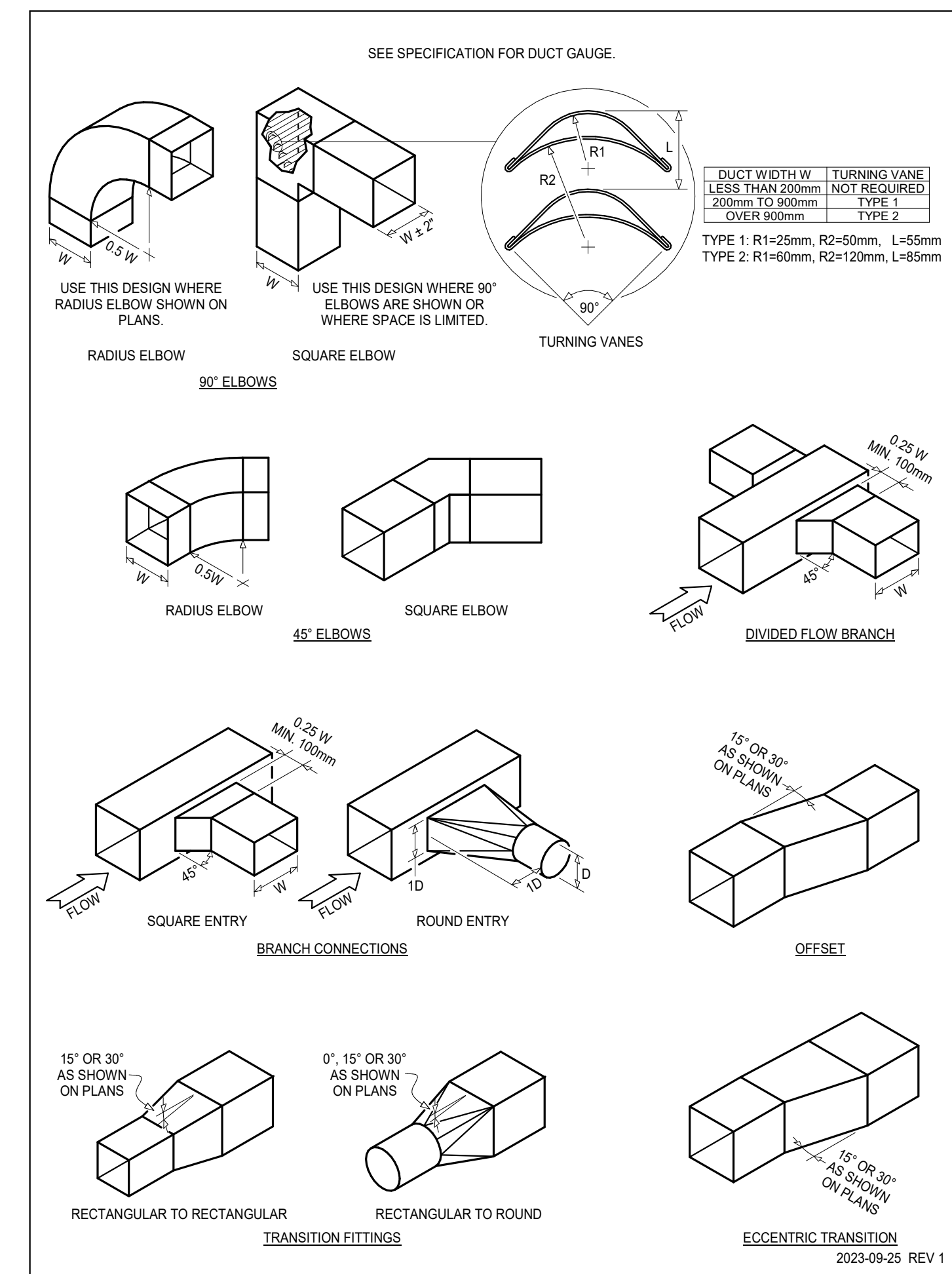
1 PIPING - CLEANOUTS



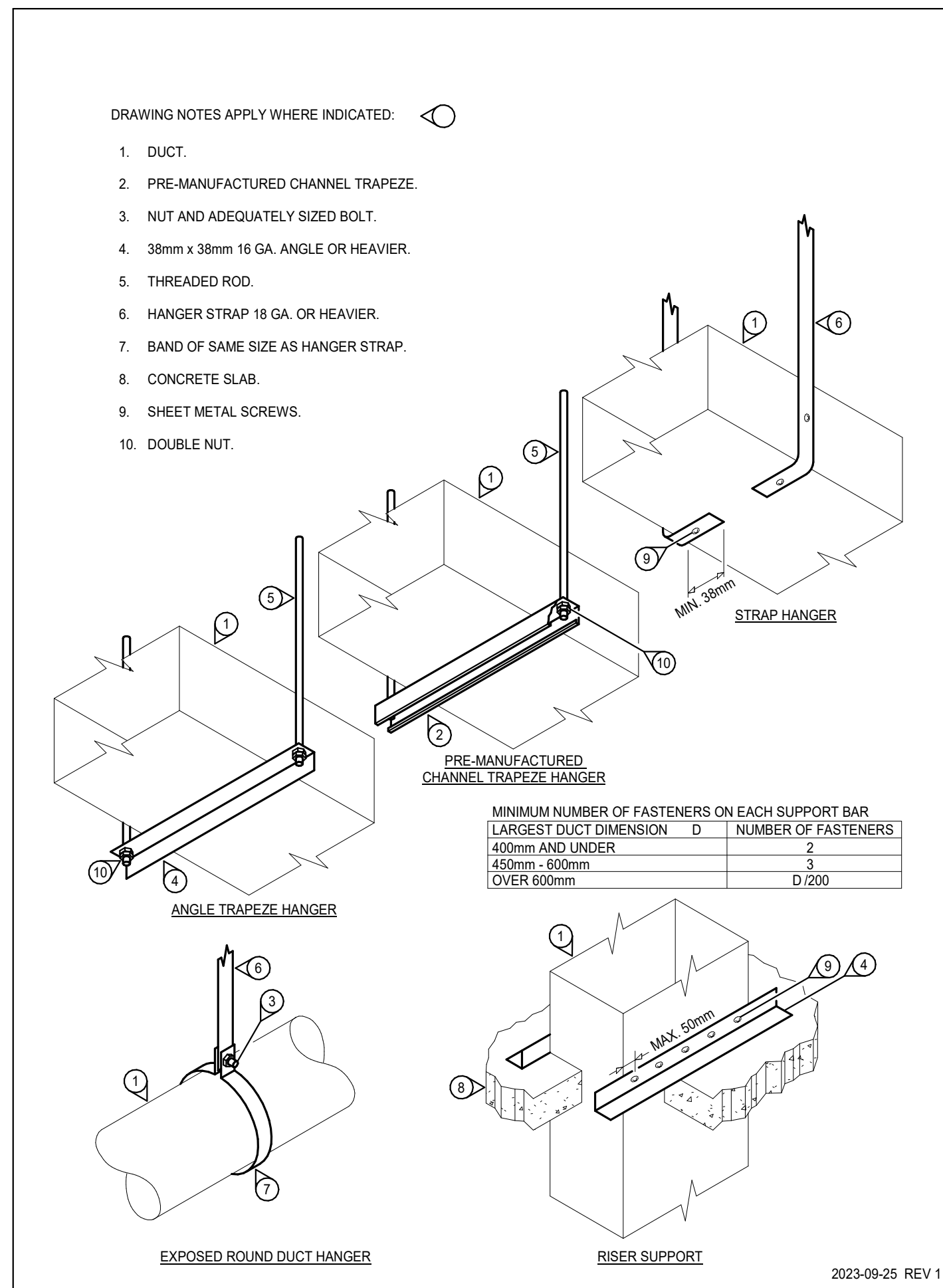
2 PIPING - RADON SYSTEMS



3 DUCTWORK - LOW VELOCITY - ROUND FITTINGS

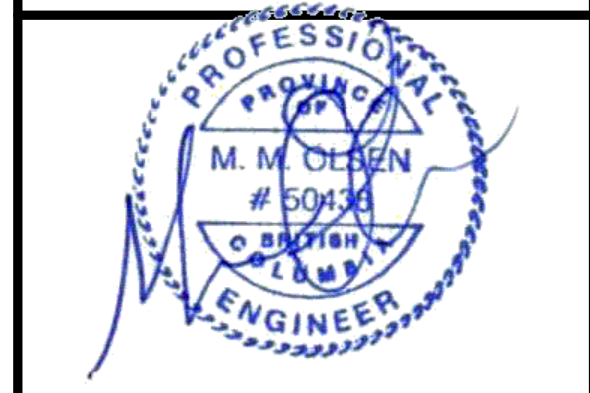


4 DUCTWORK - LOW VELOCITY - SQUARE FITTINGS



5 DUCTWORK - SUPPORT

no.	date	issued
1	MAR 15 2024	ISSUED FOR REVIEW
2	JULY 10 2024	ISSUED FOR TENDER



project
CITY OF SALMON ARM - FIRE HALL #2 BUILDING ADDITION

200 - 30th Street SE
Salmon Arm, BC


drawing title

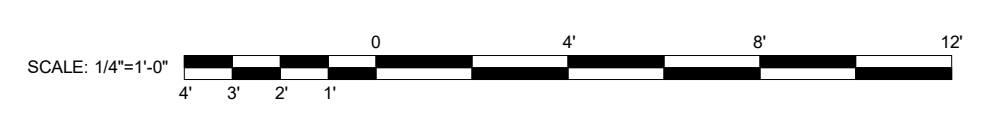
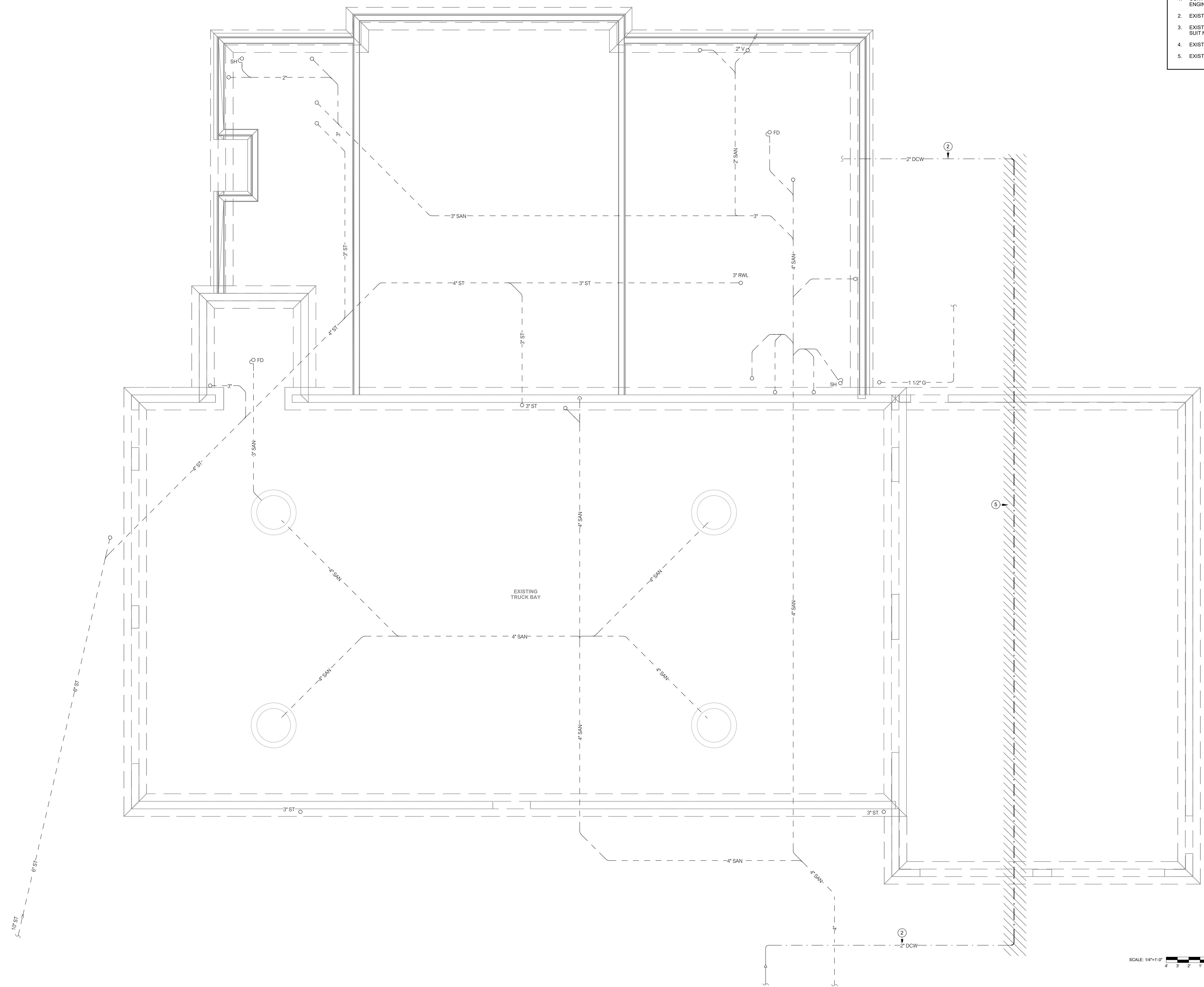
DETAILS

date	dr. by	AS
MARCH 2024	des. by	MH
scale	NTS	eor
job no	24010.001	MH
	rev. by	

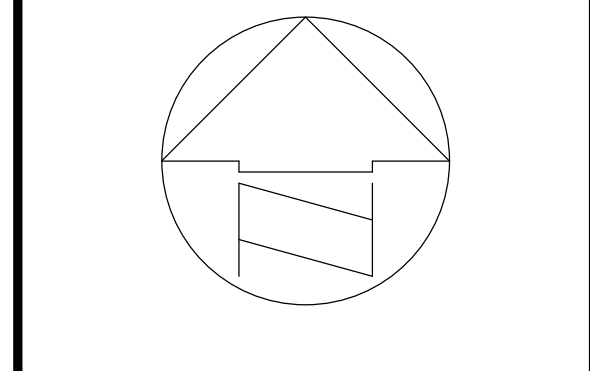
drawing no.

M3.0

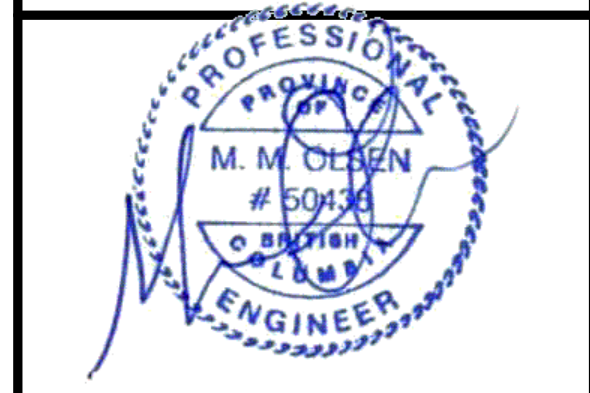
- DRAWING NOTES APPLY WHERE INDICATED: 
1. CONTRACTOR TO EXAMINE SITE AND REPORT BACK TO ENGINEER.
 2. EXISTING TO REMAIN IN SERVICE.
 3. EXISTING TO BE ABANDONED. REMOVE AS REQUIRED TO SUIT NEW CONSTRUCTION.
 4. EXISTING TO BE RELOCATED.
 5. EXISTING TO BE REMOVED.



no.	date	issued
1	MAR 15 2024	ISSUED FOR REVIEW
2	JULY 10 2024	ISSUED FOR TENDER



FALCON ENGINEERING
 INGENUITY DELIVERED
 210-1715 Dickson Ave. Kelowna, BC V1Y 9G6 250.762.9993 www.falcon.ca
 Permit to Practice: 1001295

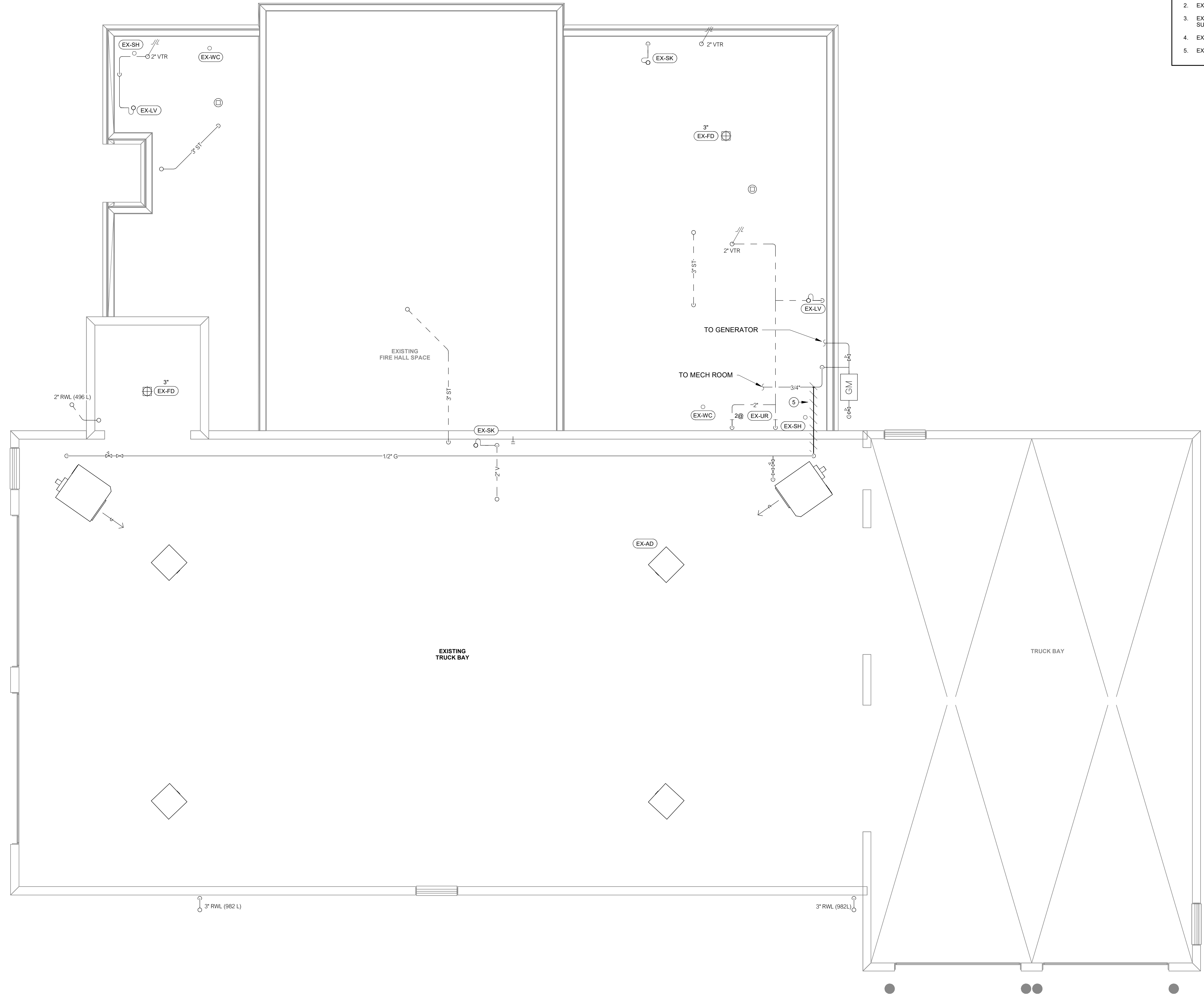



project
CITY OF SALMON ARM - FIRE HALL #2 BUILDING ADDITION
 200 - 30th Street SE
 Salmon Arm, BC

drawing title
FOUNDATION PLAN - DEMOLITION

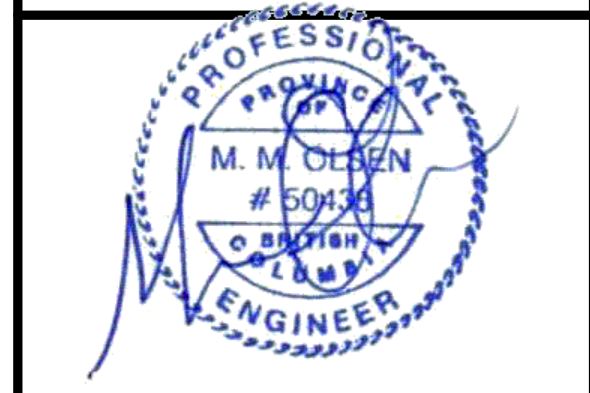
date	dr. by	AS
MARCH 2024	dr. by	AS
scale	des. by	MH
1/4" = 1'-0"	des. by	MH
job no	eor	MH
24010.001	eor	MH
	rev. by	

drawing no.
M4.0



- DRAWING NOTES APPLY WHERE INDICATED: 
1. CONTRACTOR TO EXAMINE SITE AND REPORT BACK TO ENGINEER.
 2. EXISTING TO REMAIN IN SERVICE.
 3. EXISTING TO BE ABANDONED. REMOVE AS REQUIRED TO SUIT NEW CONSTRUCTION.
 4. EXISTING TO BE RELOCATED.
 5. EXISTING TO BE REMOVED.

no.	date	issued
2	JULY 10 2024	ISSUED FOR TENDER



project
CITY OF SALMON ARM - FIRE HALL #2 BUILDING ADDITION
 200 - 30th Street SE
 Salmon Arm, BC

drawing title
MAIN FLOOR PLAN - PLUMBING DEMOLITION

date	MARCH 2024	dr. by	AS
scale	1/4" = 1'-0"	des. by	MH
job no	24010.001	eor	MH
		rev. by	

drawing no.
M4.1

