client/client

825 ADMIRALS ROAD
VICTORIA, BC, V9A 2P1

**SOUTH SUBSTATION
SWITCHGEAR
REPLACEMENT (SSSR)**

PWGSC Project Manager/Administrateur de Projets TPSGC
 Jamie LeBlanc

LEGEND

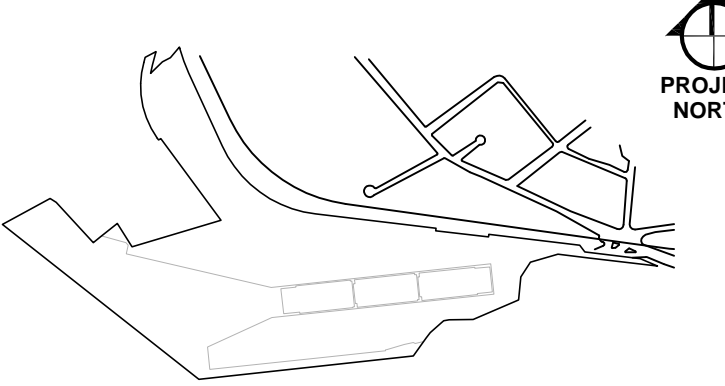
Project No./No. du projet	Sheet/Feuille	Revision no./ La Révision no.
R.062548.002	5800	5

SYMBOLS	
SYMBOL	DESCRIPTIONS
	DUCTWORK
	FLEXIBLE DUCT
	DUCTWORK C/W 25mm ACOUSTICAL LINER
	DUCTWORK C/W 50mm ACOUSTICAL LINER
	DUCTWORK C/W 50mm DUCT INSULATION
	SUPPLY DUCT RISER/SECTION
	RETURN/EXHAUST DUCT RISER/SECTION
	OUTDOOR AIR DUCT RISER/SECTION
	FLEXIBLE DUCT CONNECTOR
	TRANSFER AIR OPENING
	DUCT DROP
	DUCT RISE
	VOLUME DAMPER
	FIRE DAMPER IN VERTICAL SEPARATION
	FIRE DAMPER IN HORIZONTAL SEPARATION
	SMOKE DAMPER
	BACKDRAFT DAMPER (BDD)
	BAROMETRIC RELIEF DAMPER (BRD)
	MOTORIZED DAMPER
	AIRFLOW DIRECTION
	RETURN/EXHAUST AIRFLOW DIRECTION
	SUPPLY AIRFLOW DIRECTION
	THERMOSTAT
	TEMPERATURE SENSOR
	SPACE PRESSURE SENSOR
	MANUAL WALL SWITCH
	DOOR GRILLE (TYPE AS DESIGNATED "X")
	REFRIGERANT PIPING
	INDIRECT DRAIN
	DOMESTIC COLD WATER
	DOMESTIC HOT WATER
	DOMESTIC HOT WATER RECIRCULATION
	SANITARY DRAIN/SEWER
	STORM DRAIN/SEWER
	SUBSOIL DRAIN
	COMPRESSED AIR
	FLOW DIRECTION
	PIPE RISER
	PIPE DROP
	SANITARY VENT
	DRAIN LINE BELOW SLAB
	CONDENSATE DRAIN
	IRRIGATION WATER LINE

SYMBOLS	
SYMBOL	DESCRIPTIONS
	PIPE CAP
	UNION
	HOSE BIBB
	NON-FREEZE WALL HYDRANT
	CLEANOUT
	VENT TERMINATION
	FLOOR DRAIN / PIT DRAIN
	ROOF DRAIN
	CATCH BASIN
	MANHOLE
	BACKFLOW PREVENTOR
	CONCRETE THRUST BLOCK
	ISOLATION VALVE
	GLOBE VALVE
	ANGLE GLOBE VALVE
	CHECK VALVE
	STRAINER
	DRAIN W/ CAP & CHAIN
	HOSE BIBB OR GAUGE COCK
	PETIE'S PLUG
	TEMPERATURE & PRESSURE RELIEF VALVE
	PRESSURE REDUCING VALVE
	PIPE CAP
	PIPE FLANGE
	UNION
	CONCENTRIC REDUCER
	ECCENTRIC REDUCER
	THERMOMETER
	PRESSURE GAUGE
	PUMP
	PIPE ANCHOR
	FLEXIBLE PIPE CONNECTOR
	POINT OF CONNECTION
	POINT OF DISCONNECTION
	EQUIPMENT TAG
	AIR DISTRIBUTION TAG AIRFLOW: L/S (METRIC) OR CFM (P.)
	RADIANT PANEL & WALL FIN TAG
	CIRC. LOAD-MATCH PUMP TAG PUMP NUMBER FLOOR LEVEL BLOCK

ABBREVIATIONS	
ABBREV.	DESCRIPTIONS
AC	AIR COMPRESSOR
AFF	ABOVE FINISHED FLOOR
AHJ	AUTHORITY HAVING JURISDICTION
AHU	AIR HANDLING UNIT
AL	ALUMINUM
ASD	ADJUSTABLE SPEED DRIVE (= VFD)
BDD	BACKDRAFT DAMPER
BHP	BRAKE HORSEPOWER
BLDG	BUILDING
BMS	BUILDING MANAGEMENT SYSTEM
CONC.	CONCRETE
CU	CONDENSING UNIT
DCVA	DOUBLE CHECK VALVE ASSEMBLY
DOW	DOMESTIC COLD WATER
DHW	DOMESTIC HOT WATER
DHWR	DOMESTIC HOT WATER RECIRCULATION
DDC	DIRECT DIGITAL CONTROL
DA	DIAMETER
DN	DOWN
DWG	DRAWING
DX	DIRECT EXPANSION
EA, E/A	EXHAUST AIR
EBH	ELECTRIC BASEBOARD HEATER
EDH	ELECTRIC DUCT HEATER
EF	EXHAUST FAN
ELEV.	ELEVATION
ESP	EXTERNAL STATIC PRESSURE
EUH	ELECTRIC UNIT HEATER
FD	FIRE DAMPER
FLA	FULL LOAD AMP
HB	HOSE BIBB
IAC	INDOOR AIR CONDITIONING UNIT
INV.	INVERT
MCA	MINIMUM CIRCUIT AMPS
MCC	MOTOR CONTROL CENTRE
MOPP	MAX. OVER-CURRENT PROTECTION
MUA	MAKE-UP AIR UNIT
NC	NOISE CRITERIA
NIC	NOT IN CONTRACT
N.C.	NORMALLY CLOSED
N.O.	NORMALLY OPEN

[illegible]



Revision/	Description/Description	Date/Date
6		
5	ISSUED FOR TENDER	2016-01-28
4	ISSUED FOR 80% REVIEW	2016-01-06
3	ISSUED FOR 60% DESIGN REVIEW	2015-11-25
2	ISSUED FOR 30% DESIGN REVIEW	2015-10-26
1	ISSUED FOR DESIGN DEVELOPMENT	2015-09-15

Client/client

**ESQUIMALT
GRAVING DOCK**

**825 ADMIRALS ROAD
VICTORIA, BC, V9A 2P1**

Project title/Titre du projet

**825 ADMIRALS ROAD VICTORIA BC
ESQUIMALT GRAVING DOCK
ELECTRICAL SAFETY UPGRADE**

**SOUTH SUBSTATION
SWITCHGEAR
REPLACEMENT (SSSR)**

Consultant Signature Box Only

Designed by/Concept par
RV

Drawn by/Dessiné par
RV & SE

PWOSC Project Manager/Administrateur de Projets TPSOC
Jamie LeBlanc

PWOSC Regional Manager, Architectural and Engineering Services/
Gestionnaire régionale, Services d'architecture et de génie, TPSOC
Prestipal Paul

Drawing title/Titre du dessin

**MAIN FLOOR
MECHANICAL**

Project No./No. du projet

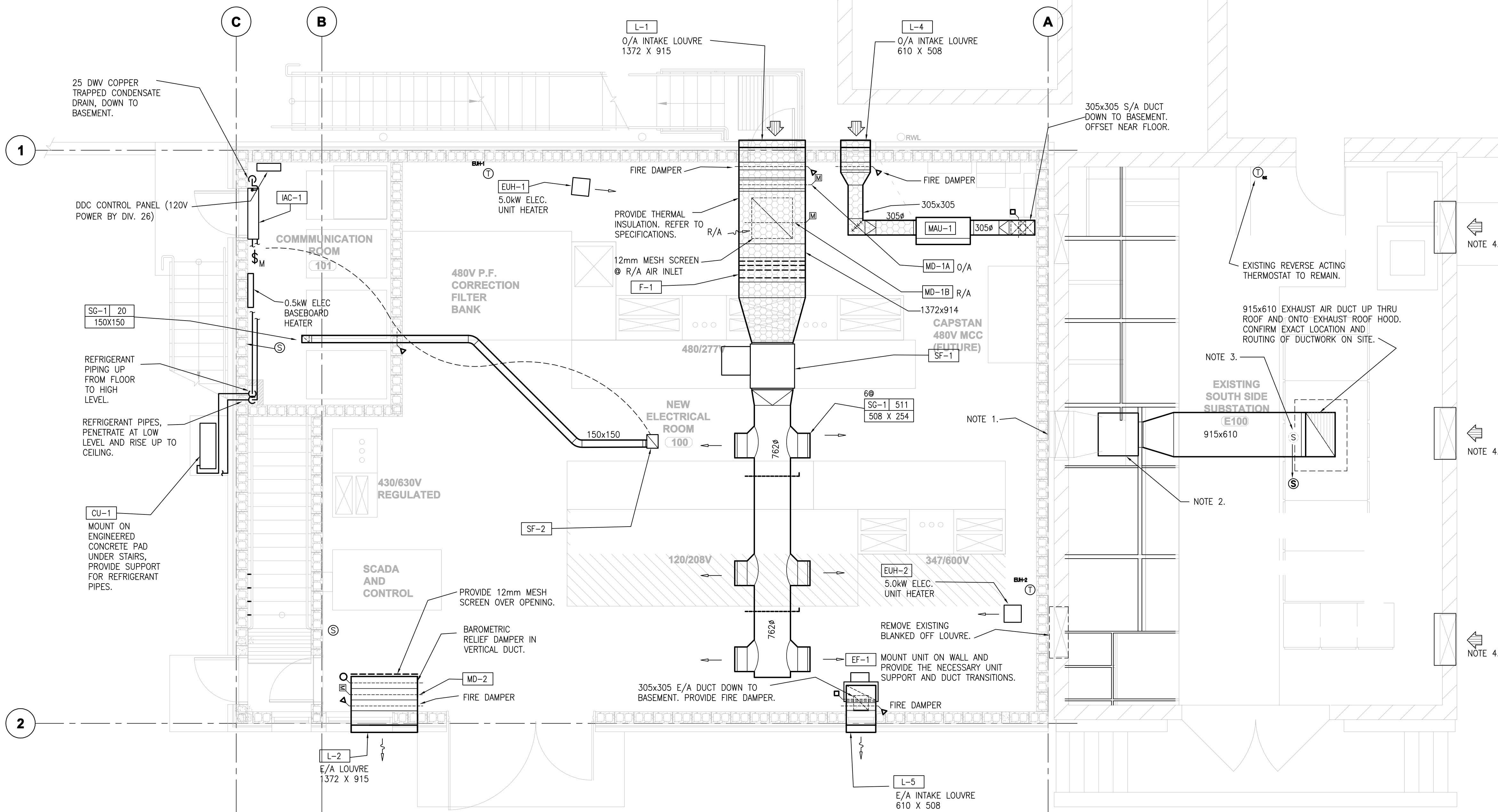
R.062548.002

Sheet/Fauille

5801

Revision no./
La révision
no.

5



2 NEW MAIN FLOOR PLAN
1:50

DRAWING NOTES:

- EXISTING EXHAUST LOUVRE AND REDUNDANT EXHAUST DUCTWORK TO BE REMOVED.
- EXISTING EXHAUST FAN TO REMAIN. ROTATE EXISTING FAN 180 DEG. TO ALLOW FOR DUCTWORK MODIFICATIONS. EXTEND EXISTING EXHAUST FAN SERVICES AND MODIFY FAN SUPPORT IF NECESSARY.
- EXISTING SENSOR AT THE CEILING TO BE RELOCATED TO ALLOW FOR NEW DUCTWORK AND ROOF HOOD. EXTEND SERVICE TO NEW SENSOR LOCATION IF NECESSARY.
- EXISTING FILTERED LOW LEVEL OUTDOOR AIR INTAKES TO REMAIN. ENSURE THAT INTAKE AIR PATH ARE NOT BLOCKED.



Revision		
Client/client		

825 ADMIRALS ROAD
VICTORIA, BC, V9A 2P1

**SOUTH SUBSTATION
SWITCHGEAR
REPLACEMENT (SSSR)**

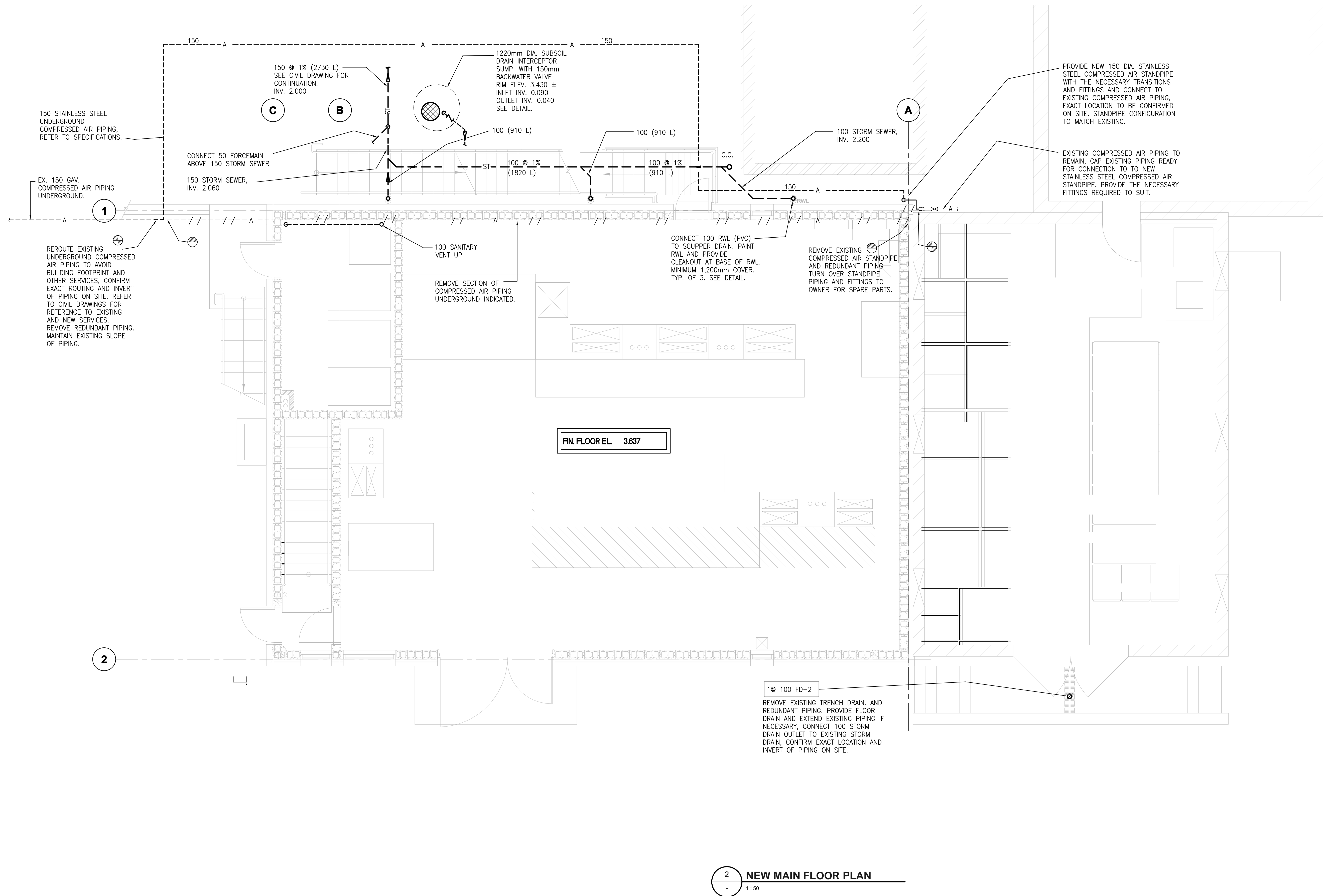
Designed by/Concept par RV	
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PWGSC, Regional Manager, Architectural and Engineering Services/
Gestionnaire régionale, Services d'architecture et de génie, TPSGC
Preetpal Paul

SECOND FLOOR MECHANICAL

		0001	1
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2 NEW MAIN FLOOR PLAN
1:50



EXISTING COMPRESSED AIR STANDPIPE
N.T.S.

EXISTING SECTION OF COMPRESSED AIR PIPING ON THE UPSTREAM OF THE ISOLATION VALVE TO REMAIN.

REMOVE EXISTING COMPRESSED AIR STANDPIPE AND REDUNDANT PIPING. TURN OVER STANDPIPE PIPING AND FITTINGS TO OWNER FOR SPARE PARTS.



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REAL PROPERTY SERVICES
Pacific Region


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Consulting Mechanical Engineers

PROJECT NUMBER 1000.00

KEY PLAN


PROJECT NORTH

6		
5	ISSUED FOR TENDER	2016-01-28
4	ISSUED FOR 80% REVIEW	2016-01-06
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2	ISSUED FOR 30% DESIGN REVIEW	2015-10-26
1	ISSUED FOR DESIGN DEVELOPMENT	2015-08-15
Revision/Revisión	Description/Description	Date/Date

Client/client

ESQUIMALT
GRAVING DOCK

825 ADMIRALS ROAD
VICTORIA, BC, V9A 2P1

Project title/Titre du projet

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ESQUIMALT GRAVING DOCK
ELECTRICAL SAFETY UPGRADE

SOUTH SUBSTATION
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RV

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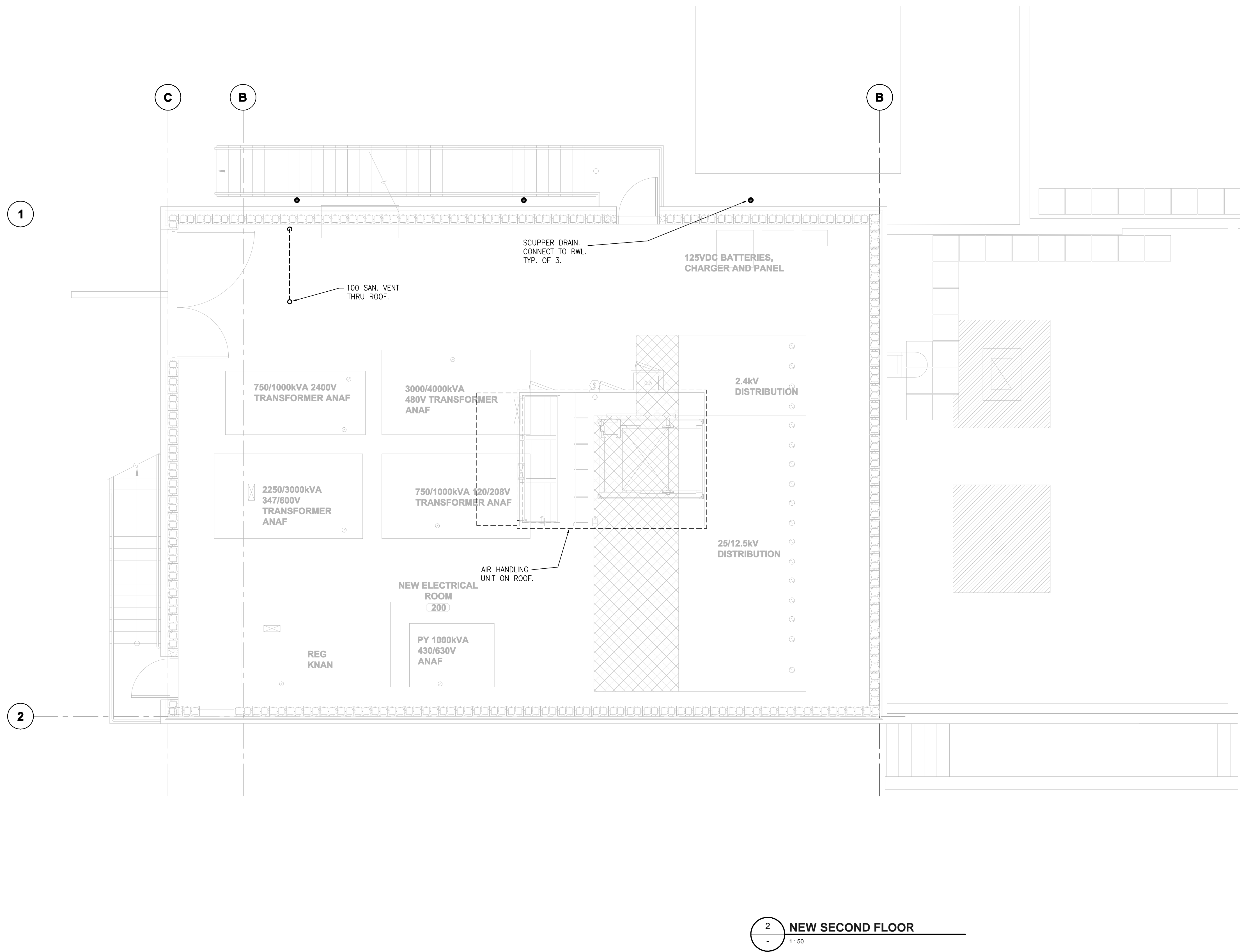
PWOSC Project Manager/Administrateur de Projets TPSGC
Jamie LeBlanc

PWOSC Regional Manager, Architectural and Engineering Services/
Gestionnaire régionale, Services d'architecture et de génie, TPSGC
Prestipal Paul

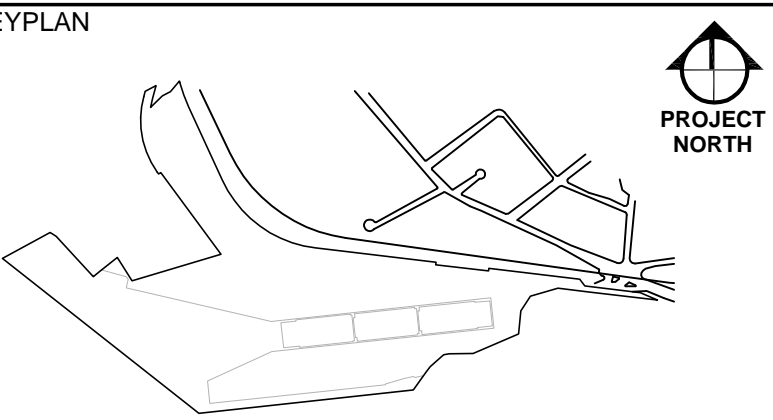
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MAIN FLOOR
PLUMBING

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2 NEW SECOND FLOOR
1:50



Revision/Revision	Description/Description	Date/Date
6		
5	ISSUED FOR TENDER	2016-01-28
4	ISSUED FOR 80% REVIEW	2016-01-06
3	ISSUED FOR 60% DESIGN REVIEW	2015-11-25
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Client/client

**ESQUIMALT
GRAVING DOCK**

825 ADMIRALS ROAD
VICTORIA, BC, V9A 2P1

Project title/Titre du projet
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ESQUIMALT GRAVING DOCK
ELECTRICAL SAFETY UPGRADE**

**SOUTH SUBSTATION
SWITCHGEAR
REPLACEMENT (SSSR)**

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RV

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RV & SE

PWOSC Project Manager/Administrateur de Projets TPSOC
Jamie LeBlanc

PWOSC Regional Manager, Architectural and Engineering Services/
Gestionnaire régionale, Services d'architecture et de génie, TPSOC
Prestipal Paul

Drawing title/Titre du dessin
**SECOND FLOOR
PLUMBING**



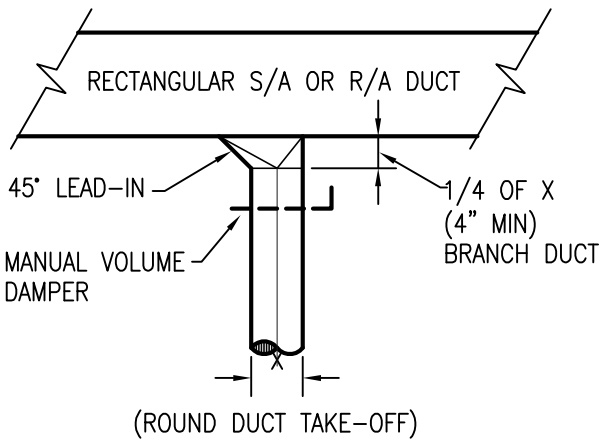
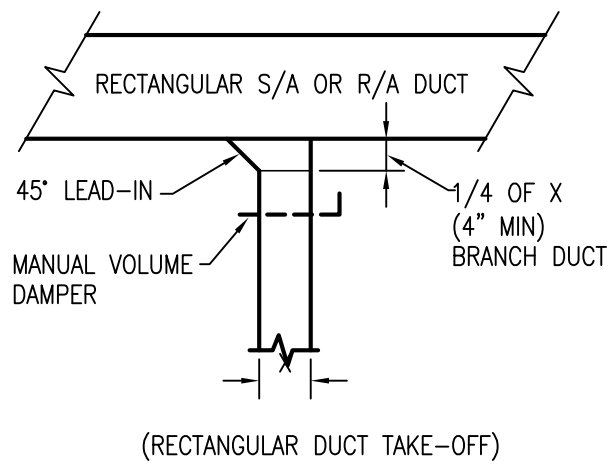
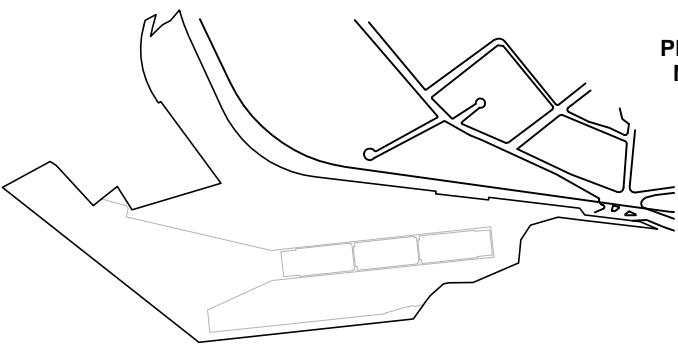
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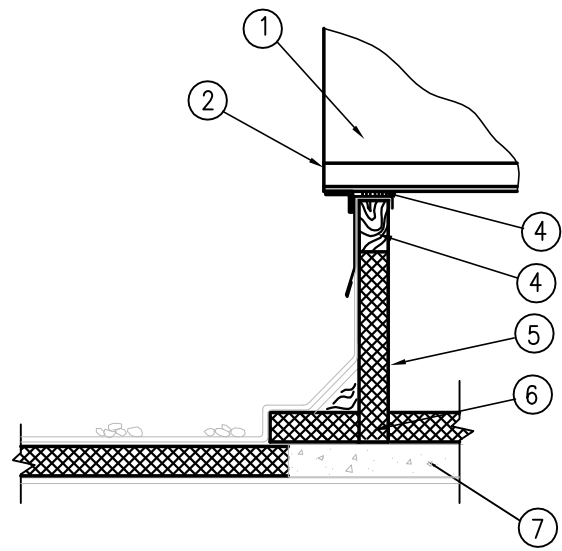
Consulting Mechanical Engineers

PROJECT NUMBER 1000.00

KEYPLAN

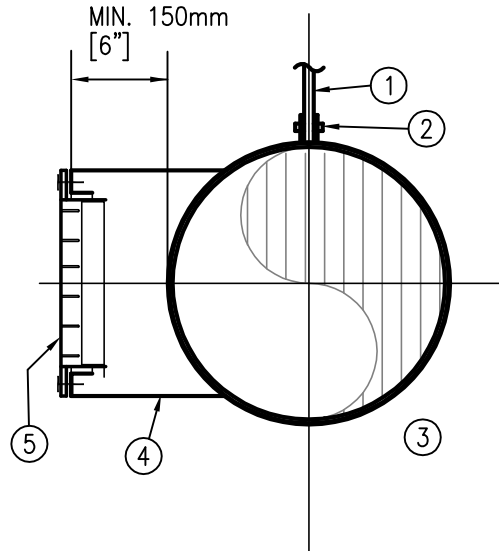


DUCT BRANCH TAKE-OFF DETAIL
N.T.S.

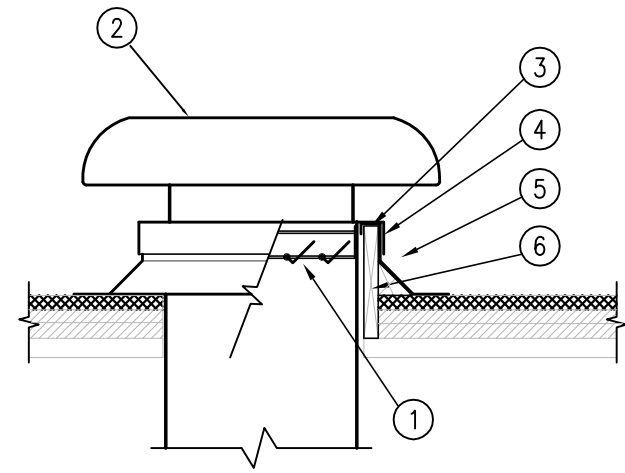


1. ROOFTOP UNIT
2. SEISMIC RESTRAINT TO MANUFACTURER'S SPECIFICATIONS
3. NEOPRENE SEAL
4. NAILER STRIP
5. ROOFTOP UNIT CURB
6. ROOFING CONTRACTOR TO PROVIDE RIGID INSULATION TO UNDERSIDE OF NAILER STRIP. EXTEND ROOFING MEMBRANE UP SIDE OF CURB WITH FLASHING & COUNTER FLASHING
7. CONCRETE PAD PER STRUCTURAL DRAWING. ANCHOR ROOF CURB TO CONCRETE PAD.

ROOFTOP UNIT CURB
N.T.S.

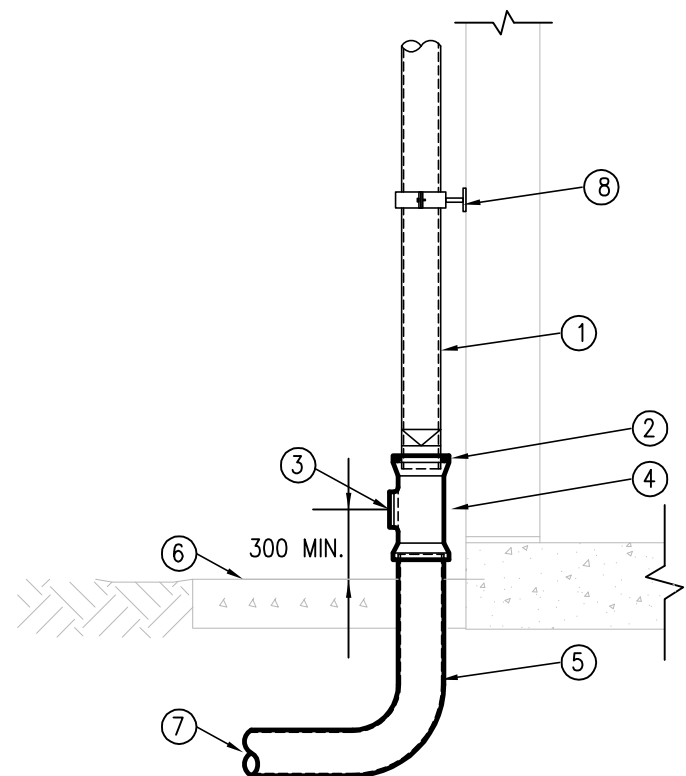


EXPOSED ROUND DUCT WITH SUPPLY REGISTER
N.T.S.



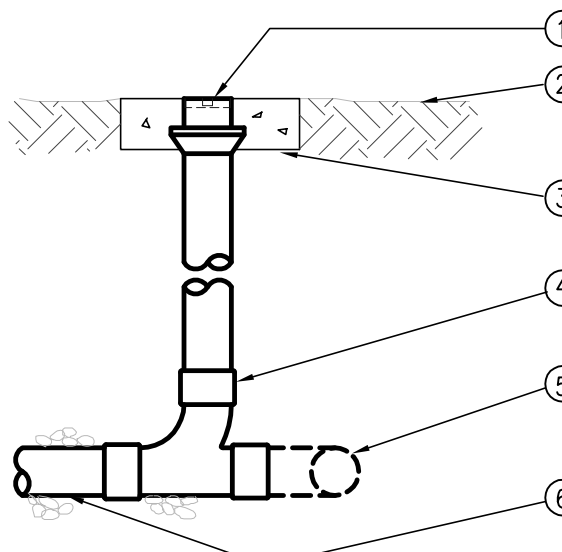
ROOF HOOD
N.T.S.

1. BACKDRAFT DAMPER (WHERE SPECIFIED)
2. ROOF HOOD
3. CAULK ALL AROUND.
4. GALVANIZED LAG SCREW TO BASE.
5. FLASHING & COUNTER FLASHING.
6. PRE-FABRICATED ROOF CURB. CURB HEIGHT SHALL BE MINIMUM 200mm ABOVE FINISHED ROOF.



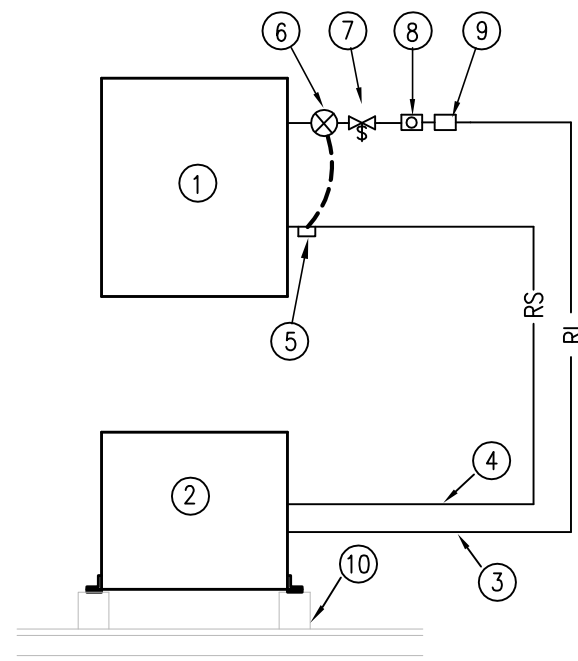
1. PVC RAINWATER LEADER.
2. "O" RING GASKET BETWEEN RWL & CLEANOUT TO SEAL GAP
3. C.O. PLUG
4. 100 DIA. PVC DWV IN-LINE CLEANOUT.
5. STORM SEWER (REFER TO PLAN FOR SIZE)
6. FINISHED GRADE
7. FOR CONT. REFER TO CIVIL DRAWINGS
8. PIPE CLAMP @ MAX. 2,400 O.C. ROUND OFF ALL SHARP EDGES.

EXTERIOR RAINWATER LEADER BASE
N.T.S.



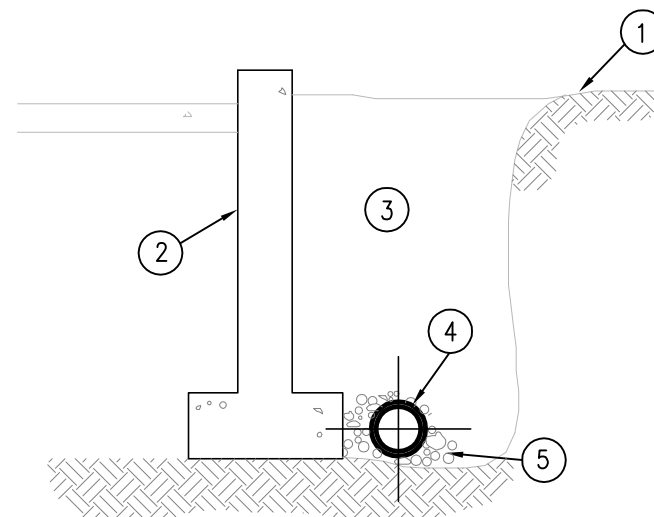
1. C.I. CLEANOUT FERRULE WITH BRONZE PLUG 100mm(4") ZURN MODEL 1449-BP (OR APPROVED EQUAL)
2. FINISH GRADE.
3. 406 x 406 x 100mm (16"x16"x4") CONCRETE PAD.
4. 100mm (4") PVC FITTING AS SPECIFIED.
5. AT END OF RUN PROVIDE PVC CAP.
6. PERFORATED PVC AS SPECIFIED.

SUB-SOIL DRAIN CLEANOUT
N.T.S.



1. EVAPORATOR COIL
2. CONDENSING UNIT TO BE MOUNTED ON LEVEL PLATFORM W/ NEOPRENE PAD.
3. LIQUID LINE
4. SUCTION LINE
5. EXPANSION VALVE SENSOR
6. THERMOSTATIC EXPANSION VALVE
7. SOLENOID VALVE
8. SIGHT GLASS
9. FILTER DRYER
10. EQUIPMENT CURB W/ SHEET METAL CAP. SEE ARCH DWG FOR DETAILS. ANCHORS THROUGH SHEET METAL CAPS SHALL BE SEALED WATERTIGHT.

REFRIGERANT PIPING SCHEMATIC
N.T.S.



1. FINISH GRADE.
2. FOUNDATION WALL.
3. BACKFILL MATERIAL. REFER TO SOILS SPECIFICATION.
4. SUB-SOIL DRAIN PIPE.
5. AT LEAST 150mm OF MINUS 19mm CLEAR CRUSHED GRAVEL INSTALLED AROUND THE BUILDING. THE INVERT OF THE DRAIN SHOULD BE AT LEAST 300mm BELOW THE UNDERSIDE OF SLAB.

SUB-SOIL DRAIN
N.T.S.

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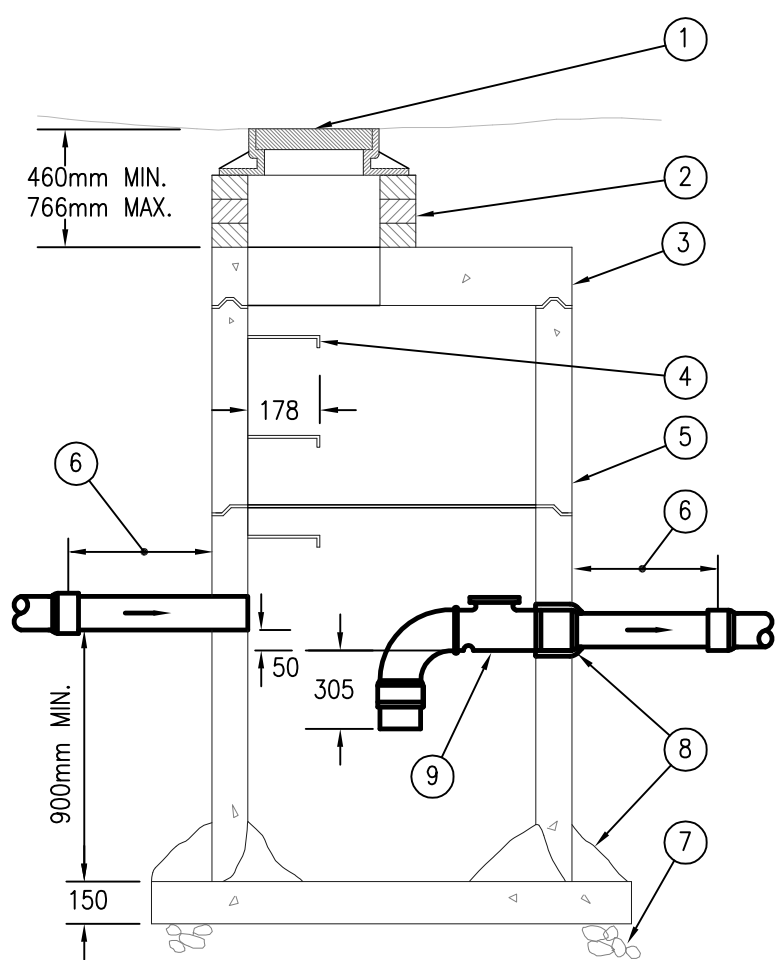
PWGSC Project Manager/Administrateur de Projets TPGSC
Jamie LeBlanc

PWGSC Regional Manager, Architectural and Engineering Services/
Gestionnaire régionale, Services d'architecture et de génie, TPGSC
Prestipal Paul

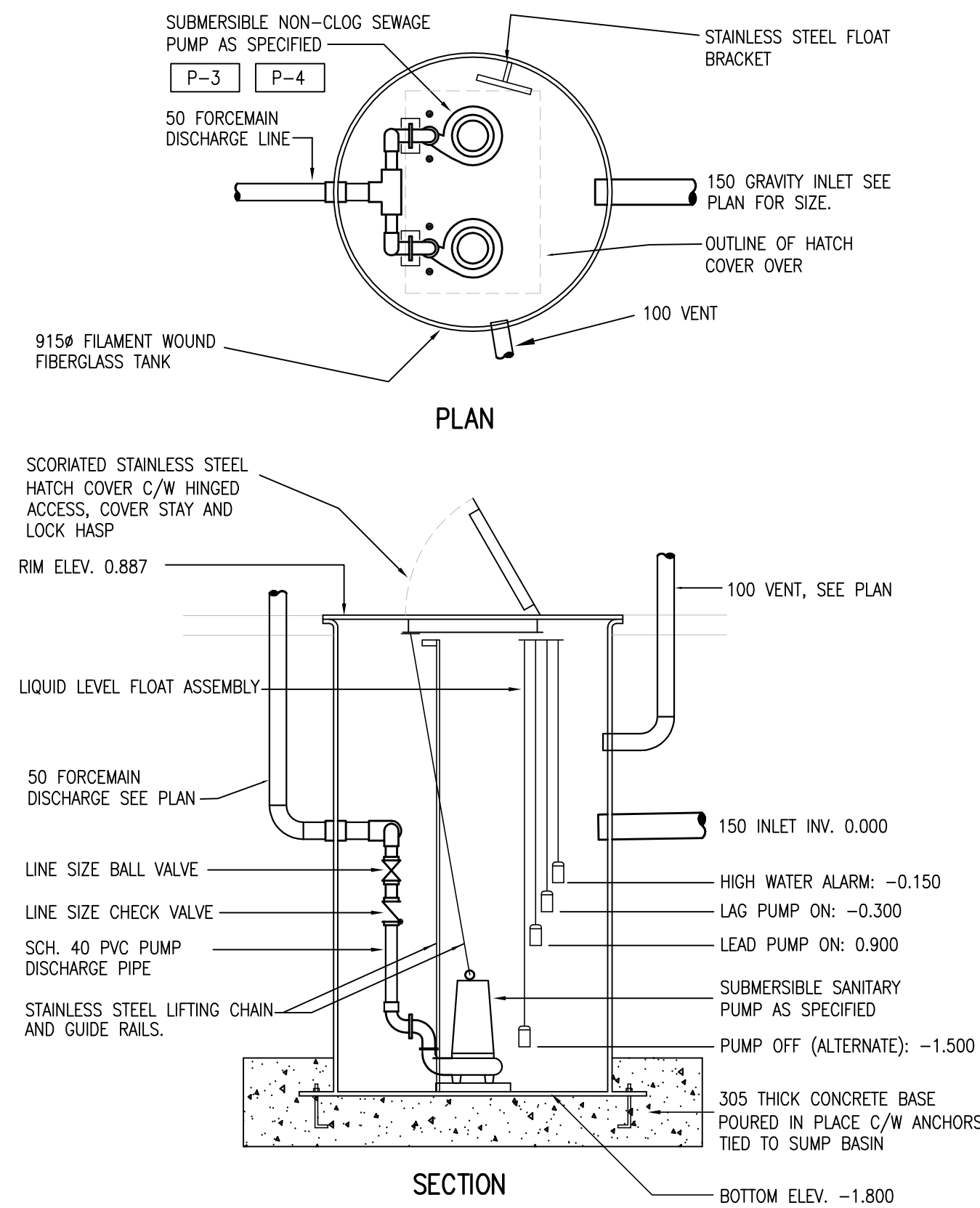
Drawing title/Titre du dessin

DETAILS AND SECTION

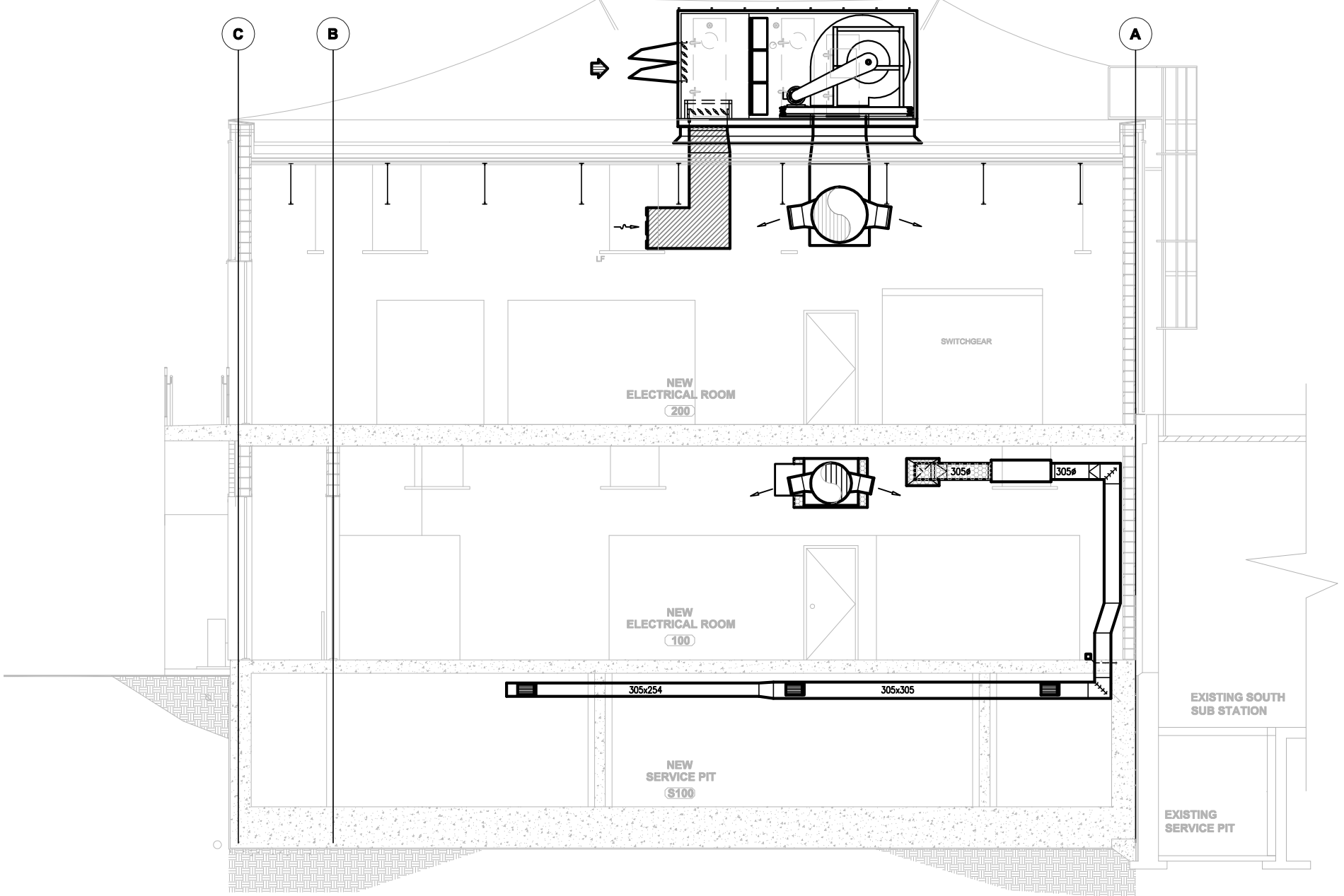
Project No./No. du projet	Sheet/Fauille	Revision no./ La Révision no.
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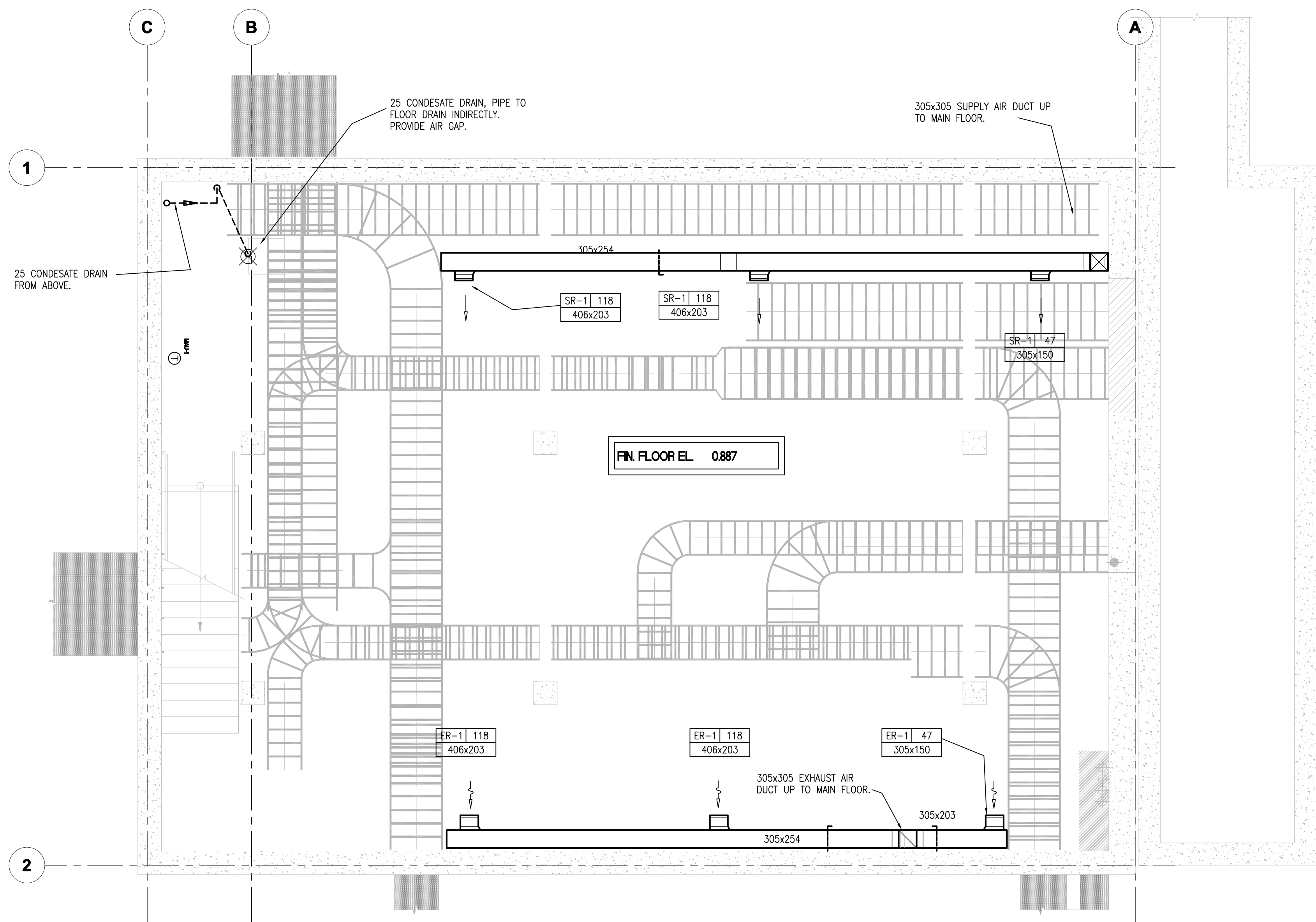
SUMP DETAIL
N.T.S.



SUBSOIL DRAIN LIFT SUMP PUMPS
N.T.S.



SECTION
1:50

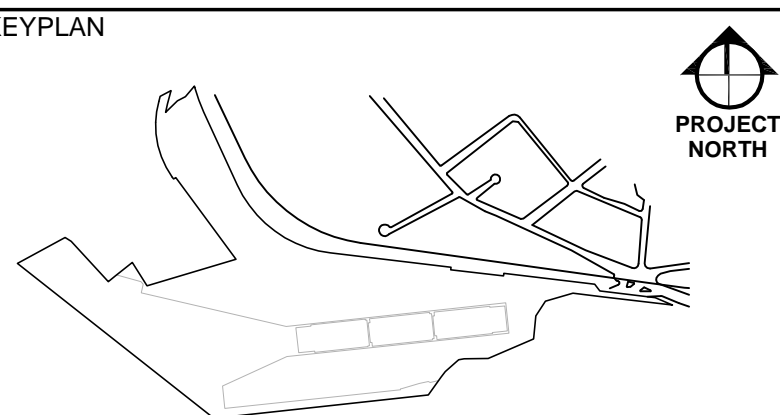


2 NEW BASEMENT FLOOR PLAN
1:50

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Consulting Mechanical Engineers

PROJECT NUMBER: 1000.00



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Jamie LeBlanc

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Prestipal Paul

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**BASEMENT FLOOR
MECHANICAL**

Project No./No. du projet	Sheet/Fauille	Revision no./ La Révision no.
R.062548.002	5807	5