



APECM
Certificate of Authorization
MCW/AGE Consulting
Professional Engineers
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DO NOT SCALE DRAWINGS

Revision/Revision	Description/Description	Date/Date
0	ISSUED FOR CONSTRUCTION	2016/11/02

PUBLIC WORKS AND GOVERNMENT SERVICES AGENCY

Project title/Titre du projet
**EMERSON, MANITOBA
HIGHWAY 75, UNITED STATES BORDER**
**EXPANSION AND
REDEVELOPMENT OF THE
EMERSON PORT OF ENTRY**

Approved by/Approuvé par
AL

Designed by/Concept par
CD/AL

Drawn by/Dessiné par
KL

PWSSC Project Manager/Administrateur de Projets TPSSC
JAMES HUTCHINGS

PWSSC, Architectural and Engineering Resources Manager/
Ressources Architectural et de Directeur d'ingénierie, TPSSC

Client/client

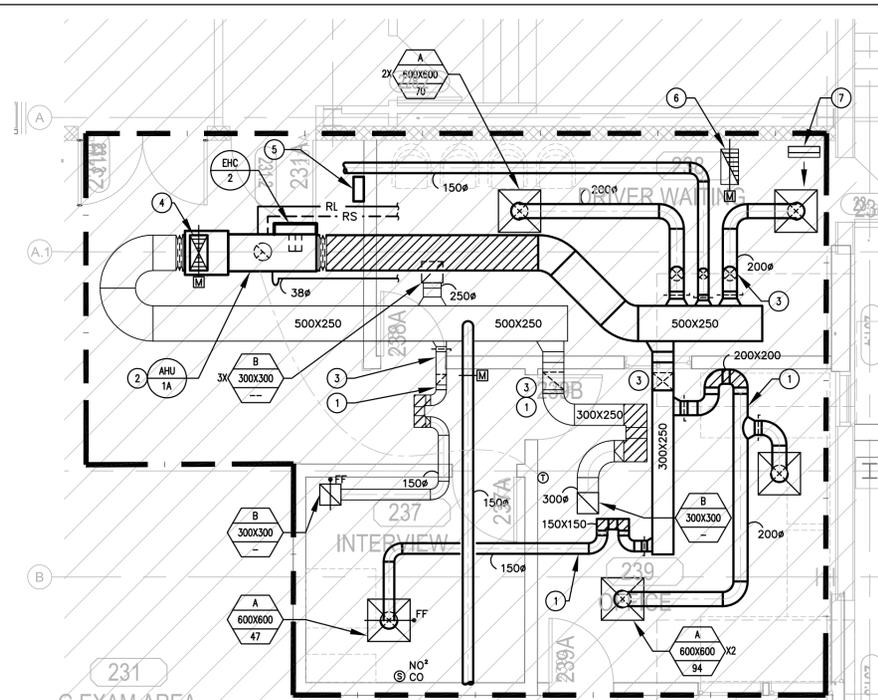
Drawing title/Titre du dessin

**WAREHOUSE ENLARGEMENTS &
ELEVATIONS**

Project No./No. du projet
R.068431.001

Sheet/Feuille
M5.1

Revision no./
La Révision no.
0



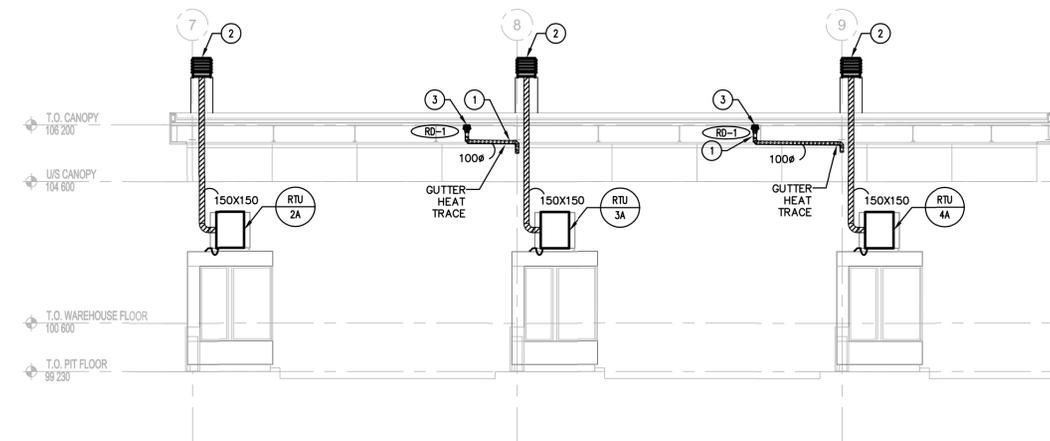
1 PARTIAL WAREHOUSE ADDITION - HVAC RENOVATION PLAN
M5.1 SCALE: 1:50

DRAWING NOTES FOR 1/M5.1:

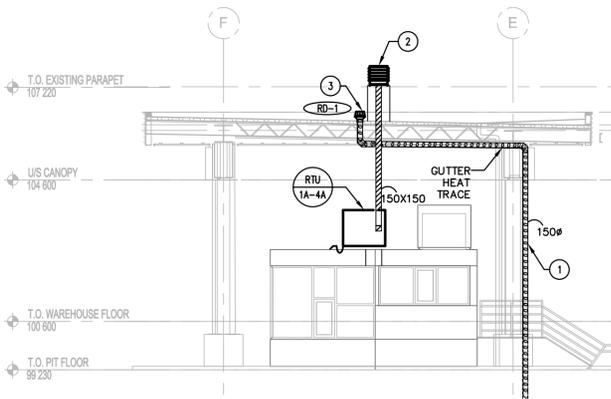
- 1 DIFFUSER/SUPPLY AIR DUCT WITH ACOUSTICALLY LINED SOUND ATTENUATOR U-BEND.
- 2 NEW AIR HANDLING UNIT WITH SPLIT DX COOLING AND ELECTRIC HEAT, SUSPENDED FROM ROOF TRUSS AS CLOSE AS POSSIBLE TO OFFICE CEILING.
- 3 PROVIDE FIRE FLAPS AT DIFFUSERS. SUPPORT DUCTS FROM HIGH LEVEL ROOF TRUSS. REFER TO ARCHITECTURAL DRAWINGS FOR ROOM SECTIONS.
- 4 500X250 OUTSIDE AIR DUCT THROUGH TO GOOSENECK ON ROOF WITH MOTORIZED DAMPER, FOR FREE COOLING.
- 5 AHU-1A CONTROL PANEL.
- 6 500X250 RELIEF AIR DUCT THROUGH TO GOOSENECK ON ROOF WITH MOTORIZED DAMPER.
- 7 NEW ELECTRIC FORCE FLOW HEATER ON WALL, SEE ELECTRICAL.

DRAWING NOTES FOR 2A/2B/3/4B/5/M5.1:

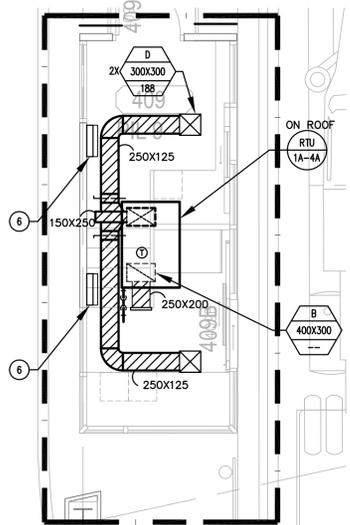
- 1 ROOF DRAIN LEADER COMPLETE WITH GUTTER TYPE ELECTRIC HEAT TRACE CABLE IN PIPE. EXTEND CABLE TO 2 METERS BELOW GRADE FOR FROST AND ICE PROTECTION. (DETAIL 2A, 2B).
- 2 PROVIDE 450X450 LOUVRED PENTHOUSE ON CURB (DETAIL 2A, &2B).
- 3 REFER TO DETAIL 4/M6.1.
- 4 DUCT OPENING AT HIGH LEVEL WITH GALVANIZED STEEL MESH AND BALANCING DAMPER. BALANCE TO 513 L/S (DETAIL 4B).
- 5 750 x 300 DUCT OPENING AT LOW LEVEL (400mm AFF) WITH GALVANIZED STEEL MESH AND BALANCING DAMPER. BALANCE TO 513 L/S (DETAIL 4B).
- 6 NEW 5KW ELECTRIC FORCE FLOW ON WALL, SEE ELECTRICAL.



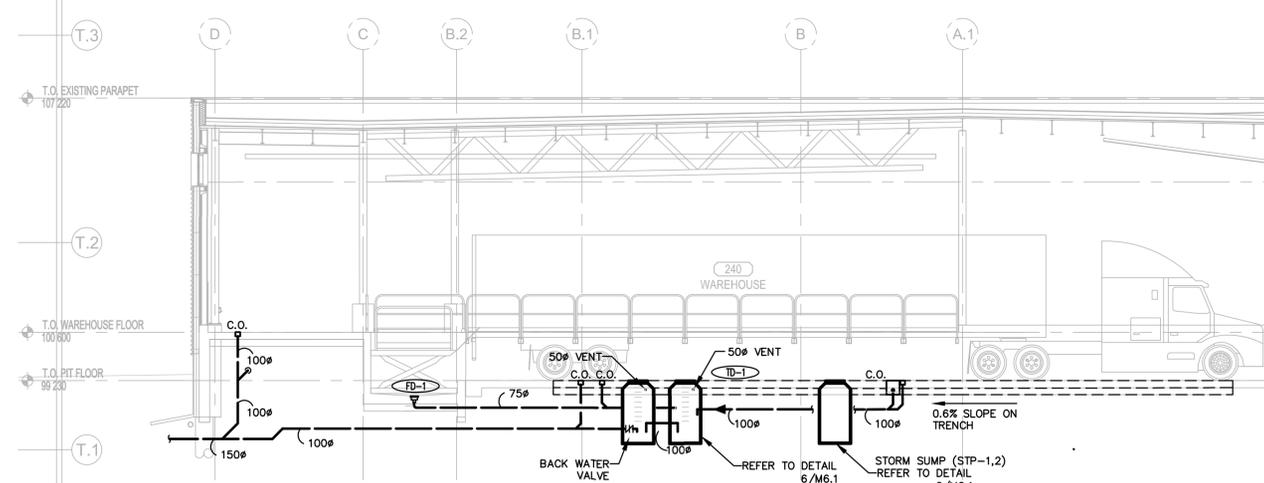
2A CANOPY - ELEVATION
M5.1 SCALE: 1:100



2B CANOPY - ELEVATION
M5.1 SCALE: 1:100



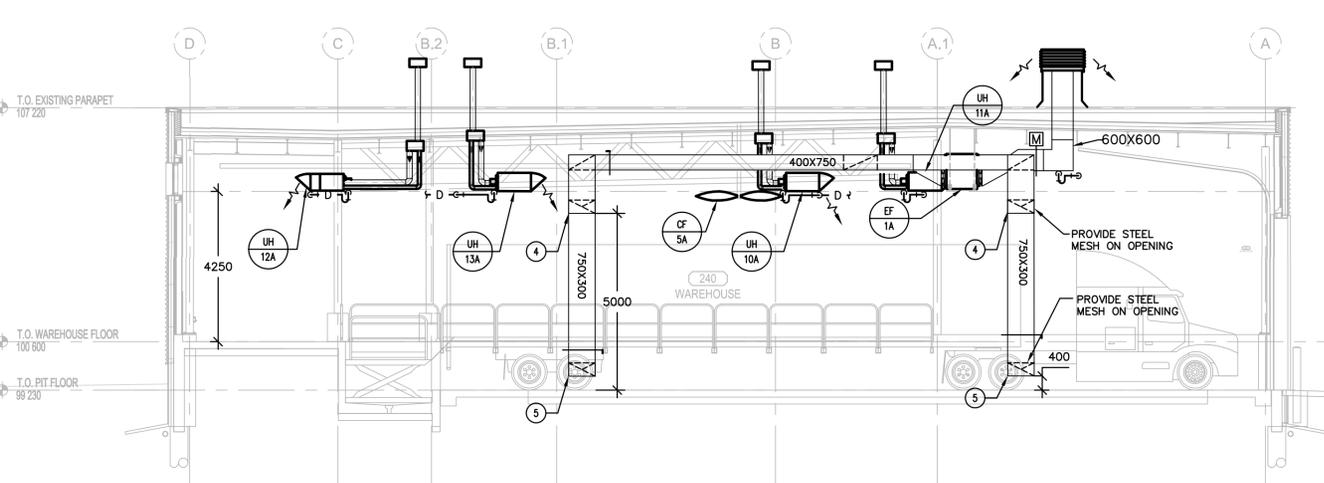
3 PIL HVAC RENOVATION PLAN (TYPICAL)
M5.1 SCALE: 1:50



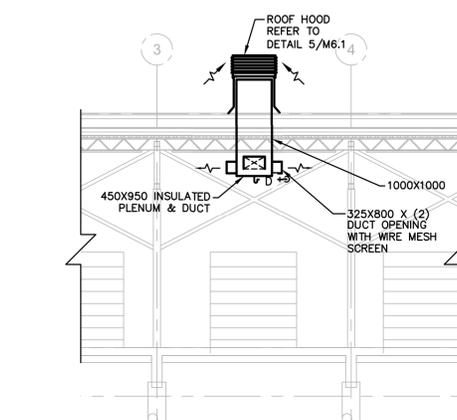
4A WAREHOUSE PLUMBING ELEVATION
M5.1 SCALE: 1:100

GENERAL NOTES:

1. THIS DRAWING IS DIAGRAMMATIC ONLY. DO NOT SCALE.
2. THE MECHANICAL SYSTEMS SHOWN ARE APPROXIMATE IN LOCATION ONLY. CONTRACTOR TO VERIFY EXACT LOCATION OF SYSTEMS BEING MODIFIED ON SITE PRIOR TO COMMENCEMENT OF WORK.
3. ALL WORK SHALL COMPLY WITH THE MOST CURRENT VERSION OF ALL APPLICABLE CODES AND STANDARDS, WHICH SHALL BE CONSIDERED PART OF THIS SPECIFICATION. IN THE CASE OF CONFLICTING REQUIREMENTS, THE MOST STRINGENT REGULATION SHALL PREVAIL.
4. CONTRACTOR TO MAINTAIN DIGITAL PHOTOGRAPHIC RECORD OF ALL INSTALLATIONS PRIOR TO CONCEALMENT BY SUPPORTING TRADES.
5. PROVIDE CAP ON ALL DOMESTIC SUPPLIES AND SANITARY LINES UNTIL LINES ARE READY TO BE CONNECTED TO FIXTURES.
6. ALL PIPING IN RETURN AIR PLENUM SHALL BE RATED FOR SUCH USE.
7. PROVIDE CLEANOUTS WHERE REQUIRED BY CODE AND SHOWN ON DRAWING. CLEANOUTS INSTALLED IN FLOOR SHALL BE BRASS AND INSTALLED FLUSH WITH FLOOR.
8. ALL PLUMBING VENT PIPING SHALL BE RATED FOR USE IN RETURN AIR PLENUM.
9. COORDINATE FINAL LOCATION OF SUPPLY, RETURN AND EXHAUST DIFFUSERS ON SITE WITH FINAL LIGHTING LAYOUT, ARCHITECTURAL CEILING, STRUCTURAL, ELECTRICAL, FIRE PROTECTION AND MECHANICAL SYSTEMS.
10. ALL DUCT DIMENSIONS DENOTED REFER TO INTERNAL OPEN AREA OF THE DUCT.
11. PROVIDE FIRE DAMPERS AT EACH LOCATION WHERE A DUCT PENETRATES A FIRE SEPARATION OR FIRE WALL IN ACCORDANCE TO NFPA 90A. REFER TO ARCHITECTURAL FOR LOCATIONS OF FIRE SEPARATIONS AND FIRE WALLS, AND THEIR RATINGS.
12. PROVIDE CEILING DAMPERS FOR ALL DIFFUSERS, GRILLES, OR REGISTERS LOCATED IN FIRE RATED CEILINGS IN ACCORDANCE TO NFPA 90A. REFER TO ARCHITECTURAL FOR LOCATIONS OF FIRE RATED CEILINGS. DIFFUSERS, TO BE PROTECTED BY CK 2000 THERMAL BLANKET WHERE REQUIRED.



4B WAREHOUSE HVAC ELEVATION
M5.1 SCALE: 1:100



5 WAREHOUSE HVAC ELEVATION
M5.1 SCALE: 1:100