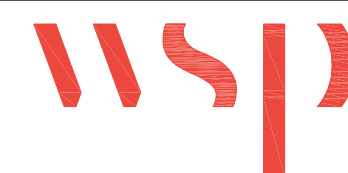


1 PARTIAL 1-ST FLOOR PLAN - LAB GASES - DEMOLITION & NEW WORK
M-205 SCALE 1:50



05	ISSUED FOR ADDENDUM No. 3	2020/11/13
04	ISSUED FOR FINAL TENDER	2020/09/18
03	ISSUED FOR TENDER	2020/08/21
02	99% CD	2020/08/04
01	50% CD	2020/07/07
revision	issued	date

Do not scale drawings.
Verify all dimensions and conditions on site and immediately
notify the Departmental Representative of all discrepancies.

A	Detail No. No. du détail
B	drawing no. - where detail required dessin no. - où détail exigé
C	drawing no. - where detailed dessin no. - où détaillé

project title
titre du projet
HAMILTON ONTARIO
NRCAN

183 LONGWOOD ROAD SOUTH
MAP LABORATORY RENOVATION

drawing title
titre du dessin
**PARTIAL 1-ST FLOOR PLAN -
LAB GASES - NEW WORK**

drawn by
dessiné par A.F.

designed by
conçue par A.F.

approved by
approuvé par V.L.

bid
offre project manager
administrateur de projets

project date
date du projet JUNE 2020

project no.
no. du projet
R.106310.002

drawing no.
dessiné no.
M-205

DRAWING NOTES

- COORDINATE FINAL CONNECTION SIZES AND CONFIGURATIONS OF PIPING CONNECTIONS TO OVERHEAD SERVICE CARRIERS WITH FF&E INFORMATION ON ARCHITECTURAL DRAWINGS, LABORATORY SERVICE FITTING SCHEDULE REFERENCES "3A", "3B" AND "3C" AND CARRIER MANUFACTURERS HOOK-UP DRAWINGS.
- COORDINATE FINAL CONNECTION SIZES AND CONFIGURATIONS OF PIPING CONNECTIONS TO FUME HOOD WITH FF&E INFORMATION ON ARCHITECTURAL DRAWINGS, LABORATORY SERVICE FITTING SCHEDULE REFERENCES "4A", "4B" AND "4C" AND FUME HOOD MANUFACTURERS HOOK-UP DRAWINGS.
- COORDINATE FINAL CONNECTION SIZES AND CONFIGURATIONS OF PIPING CONNECTIONS TO GLOVE BOX WITH FF&E INFORMATION ON ARCHITECTURAL DRAWINGS, LABORATORY SERVICE FITTING SCHEDULE REFERENCES "5A", "5B" AND "5C" AND GLOVE BOX MANUFACTURERS HOOK-UP DRAWINGS.
- PIPE MANIFOLD RELIEF VALVES TO ATMOSPHERE USING PIPING SIZED ONE SIZE LARGER THAN OUTLET PORT OF RELIEF VALVE. TERMINATE VENT PIPING IN A "TURNED DOWN" ELBOW ARRANGEMENT WITH BRONZE INSECT SCREEN PERMANENTLY SECURED OVER PIPE OPENING.
- PROVIDE SELF CONTAINED CONTROLLER CABABLE OF OXYGEN LEVEL MONITORING COMPLETE WITH 4-20 mA INPUT/OUTPUT AND ALARM LINE VOLTAGE OUTPUT AND DRY CONTACT RELAYS. CONTROLLER SHALL BE EQUIPPED WITH INTEGRAL AUDIBLE ALARM AND AN LCD DIGITAL DISPLAY WITH LED INDICATORS FOR ALARM STATUS AND FAULT CORRECTIONS. CONTROLLER SHALL BE INTEGRATED WITH EXISTING BAS SYSTEM FOR STATUS AND ALARMS. CONTROLLER SHALL BE MOUNTED 1200 MM A.F.F. AND SHALL BE COMPLETE WITH TUBING TO ALLOW SAMPLING OF AIR FROM TWO LOCATIONS, ONE AT 1000 MM A.F.F. AND ONE AT 1500 MM A.F.F. ALARM SHALL BE GENERATED WHEN OXYGEN LEVELS REACH 19.5% AT MEASURED LOCATIONS.
- PROVIDE CONTROLS WIRING AND INTEGRATION TO CONNECT OXYGEN LEVEL CONTROLLERS SERVING LAB SPACES TO LAB VENTILATION CONTROLLERS. UPON DETECTION OF OXYGEN LEVELS BELOW SPECIFIED LEVELS, OXYGEN LEVEL CONTROLLER SHALL INITIATE "PURGE MODE" PER LAB VENTILATION CONTROLS.
- PROVIDE CONTROLS WIRING AND INTEGRATION TO CONNECT NITROGEN MANIFOLD CONTROL PANEL TO REMOTE ALARM PANEL LOCATED WITHIN LAB SPACE.
- PROVIDE CONTROLS WIRING AND INTEGRATION TO CONNECT ARGON MANIFOLD CONTROL PANEL TO REMOTE ALARM PANEL LOCATED WITHIN LAB SPACE.
- PROVIDE BAS INTEGRATION FOR MANIFOLD CONTROLLER STATUS/ALARM.