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RETOURNER LES SOUMISSIONS À:

**Bid Receiving - PWGSC / Réception des soumissions -
TPSGC**

11 Laurier St./11 rue Laurier

Place du Portage, Phase III

Core 0B2 / Noyau 0B2

Gatineau, Québec K1A 0S5

**SOLICITATION AMENDMENT
MODIFICATION DE L'INVITATION**

The referenced document is hereby revised; unless otherwise indicated, all other terms and conditions of the Solicitation remain the same.

Ce document est par la présente révisé; sauf indication contraire, les modalités de l'invitation demeurent les mêmes.

Comments - Commentaires

This documents contains a mandatory security requirement.

Ce document comporte des exigences relatives à la sécurité.

Vendor/Firm Name and Address

**Raison sociale et adresse du
fournisseur/de l'entrepreneur**

Issuing Office - Bureau de distribution

Construction Services Division/Division des services de construction

11 Laurier St./11 Rue Laurier

3C2, Place du Portage

Phase III

Gatineau, Québec K1A 0S5

Title - Sujet Renovation Room#2044-2046	
Solicitation No. - N° de l'invitation 01965-180572/A	Amendment No. - N° modif. 007
Client Reference No. - N° de référence du client 01965-180572	Date 2017-12-15
GETS Reference No. - N° de référence de SEAG PW-\$\$\$FG-356-73683	
File No. - N° de dossier fg356.01965-180572	CCC No./N° CCC - FMS No./N° VME
Solicitation Closes - L'invitation prend fin at - à 02:00 PM on - le 2018-01-09	Time Zone Fuseau horaire Eastern Standard Time EST
F.O.B. - F.A.B. Plant-Usine: <input type="checkbox"/> Destination: <input checked="" type="checkbox"/> Other-Autre: <input type="checkbox"/>	
Address Enquiries to: - Adresser toutes questions à: Steele, Harold	Buyer Id - Id de l'acheteur fg356
Telephone No. - N° de téléphone (873) 469-3596 ()	FAX No. - N° de FAX (819) 956-8335
Destination - of Goods, Services, and Construction: Destination - des biens, services et construction:	

Instructions: See Herein

Instructions: Voir aux présentes

Delivery Required - Livraison exigée	Delivery Offered - Livraison proposée
Vendor/Firm Name and Address Raison sociale et adresse du fournisseur/de l'entrepreneur	
Telephone No. - N° de téléphone Facsimile No. - N° de télécopieur	
Name and title of person authorized to sign on behalf of Vendor/Firm (type or print) Nom et titre de la personne autorisée à signer au nom du fournisseur/ de l'entrepreneur (taper ou écrire en caractères d'imprimerie)	
Signature	Date

Solicitation No. - N° de l'invitation
01965-180572

Amd. No. - N° de la modif.
007

Buyer ID - Id de l'acheteur
FG 356

Client Ref. No. - N° de réf. du client

File No. - N° du dossier

CCC No./N° CCC - FMS No./N° VME
01965 18 0572

Amendment 007

- To issue the following Addendum 003, included herein.

ALL OTHER TERMS AND CONDITIONS REMAIN THE SAME.

ADDENDUM N°: 003

Project Number: 01965 18 0572

The following changes in the bid documents are effective immediately. This addendum will form part of the contract documents.

DRAWINGS

Drawing A-101

1. Refer to A-101 Architectural Floor Plan Revision 1 (12/01/2017) for modifications to casework components.

Drawing A-102

1. Refer to A-102 Reflected Ceiling Plan Revision 1 (12/01/2017) for modifications to notes outlining ceiling requirements.

Drawing A-103.2

1. Refer to A-103.2 Casework Details Revision 1 (12/01/2017) for modifications to casework components.

Drawing A-104

1. Refer to A-104 Interior Elevations Revision 1 (12/01/2017) for modifications to casework components.

Drawing A-105

1. Refer to A-105 Schedules Revision 1 (12/01/2017) for modifications to Paint finishes, ceiling finishes, and glazing requirements.

Drawing M-101

1. Refer to M-101 HVAC Plan Revision 1 (12/01/2017) for modifications to ductwork positioning and sizing.

Drawing M-201

1. Refer to M-201 Hydronics Plan and Controls Schematics Revision 1 (12/01/2017) for modifications to chilled water pipe sizing, thermostats, and controls strategy.

Drawing M-501

1. Refer to M-501 Mechanical and Plumbing Schedules and Details Revision 1 (12/01/2017) for modifications to Fan Coil Unit installation requirements

Drawing P-101

ADDENDUM N°: 003

Project Number: 01965 18 0572

1. Refer to P-101 Plumbing Plan and Schedules Revision 1 (12/01/2017) for modifications to Reverse Osmosis service piping, and additional notes regarding gas piping requirements.

Drawing EP-101

1. Refer to EP-101 Power Plan Revision 1 (12/07/2017) for modifications to Fan Coil Unit wiring requirements and clarification of panel wiring note.

Drawing EP-102

1. Refer to EP-102 Panel Schedule Revision 1 (12/07/2017) for modifications to panel wiring.

SPECIFICATIONS

Section 01 32 16.07 – Construction Progress

1. Delete article 1.05.1.1
2. Replace with: 1.05.1.1 "Interior finishing and fitting, mechanical, and electrical work completed within approximately 20 weeks of Award of Contract date, as agreed upon with Departmental Representative."
3. Add 1.05.1.2 as follows "The following work is to be completed within 13 weeks: Demolition 80%, Architectural 80%, Mechanical 80%, Electrical 80%, and Plumbing 80%. All other work including supply and install of caseworks and fumehood to be completed within 20 weeks."

Section 09 52 13 – GFRP Ceiling System

1. Remove section in its entirety. Scope covered within drawings.

Section 09 91 23 - Painting

1. Delete article 3.7.8.1
2. Replace with: 3.7.8.1 as follows "INT. 9.2A Latex Finish (Gloss Level 5) Low VOC type."

Section 11 53 13 – Laboratory Fumehoods & Safety Cabinets

1. Delete article 1.4.1.5
2. Replace with: 1.4.1.5 as follows "Manufacturer of fume hoods shall have capability within their facility of performing fume hood tests based on latest ANSI/ASHRAE Specification 110, and provide one sample project where fumehood of same make and model has been certified to meet MD15128-2013."

ADDENDUM N°: 003

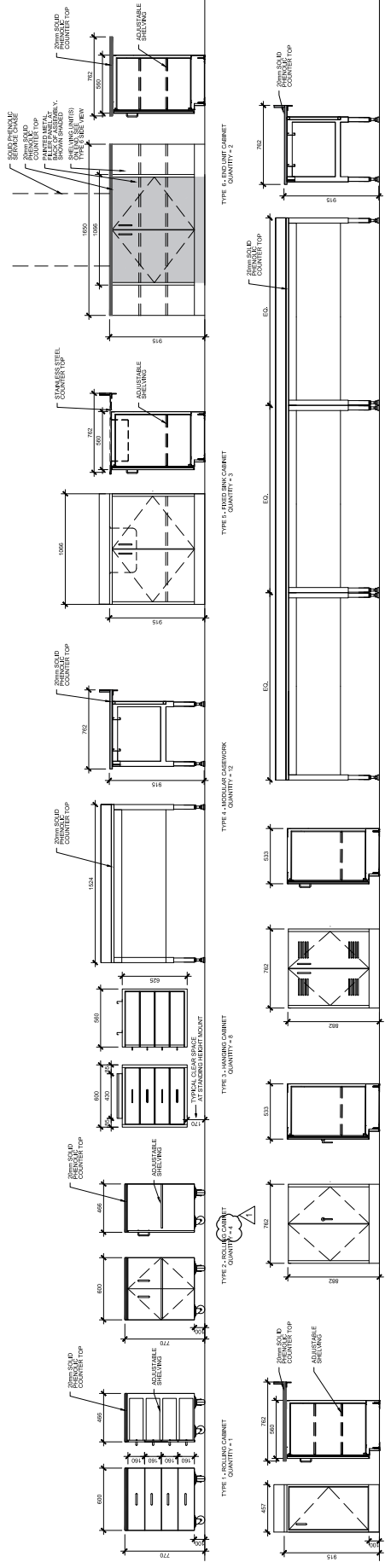
Project Number: 01965 18 0572

3. Delete article 2.1.1
4. Delete article 2.1.2

Section 12 35 53 – Laboratory Casework

1. Delete article 2.1

End of Addendum 003

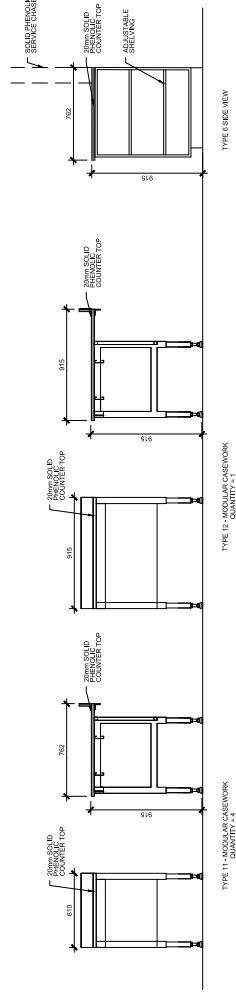


TYPE 10 - MODULAR CASEWORK
QUANTITY = 2

TYPE 9 - STORAGE CABINETS
BASIS OF DESIGN - BEI
VANGUARD FI-A25-2
QUANTITY = 1

TYPE 8 - STORAGE CABINET
BASIS OF DESIGN - BEDCO
VANGUARD FI-M23-30-JL
QUANTITY = 1

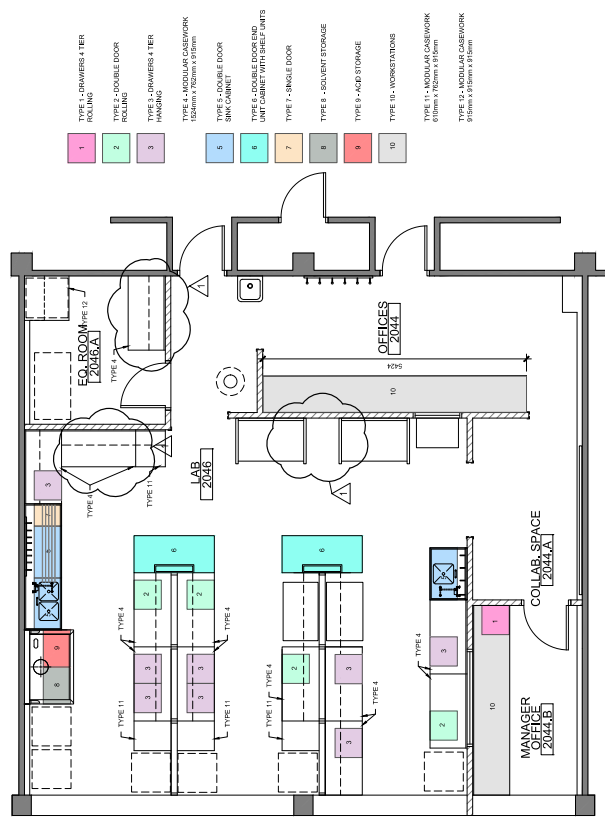
TYPE 7 • FIXED CASEWORK
QUANTITY = 1



TYPE 11 • MODULAR CASEWORK
QUANTITY = 4

TYPE 12 • MODULAR CASE
QUANTITY = 1

TYPE 6 SIDE VIEW



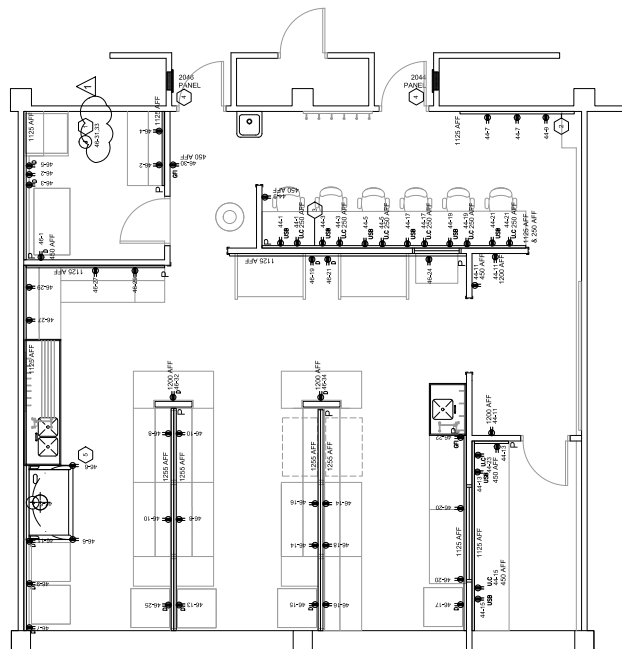
CASEWORK PLAN
A-103.2 SCALE 1:10

LINE	DESCRIPTION	DATE
3	99% CO	8/20/2017
3	99% CO	8/20/2017
1	ADSS-COM E	12/05/17

 **Agriculture and Agri-food Canada**
Agribusiness and Agri-Environment Canada

SHEET TITLE:
CASEWORK DETAILS

SCALE:	N/A
DATE:	3-6-2017
DRAWN:	SC
CHECKED:	SC
PROJECT:	7-62-18-034
SHEET NO:	



1 AAFC LAB RENOVATION - POWER PLAN

1. PROVIDE JUNCTION BOXES FOR POWER AND DATA DISTRIBUTION FOR EACH ISLAND BENCH INSIDE THE VERTICAL CHASE. FLEX CABLE IS NOT ALLOWED. SERVICE FOR ISLAND BENCHES MUST RUN THROUGH VERTICAL CHASE.

- ELECTRICAL DISTRIBUTION SYSTEMS SINGLE PHASE 240V 3 WIRE SYSTEM.
- ELECTRICAL PANEL INSTALLATION REQUIRES SCHEDULED POWER SHUTDOWN IN THE BUILDING AFTER REGULAR HOURS.
- EXISTING PANEL TUBES MUST REMAIN. ELECTRICAL CONTRACTOR IS RESPONSIBLE TO RETROFIT THE PANEL BOARDS WITH THE NEW CHASSIS. BOTTOM ENTRANCE CABLE IS REQUIRED.
- ELECTRICAL CONTRACTOR IS RESPONSIBLE TO PROVIDE LABEL FOR RECEPTACLES AND JUNCTION BOXES TO MATCH THE EXISTING BUILDING STANDARD.

- PROVIDE CONNECTION TO THE FLAME HOOD FROM THE RACEWAY SYSTEM RUNNING BEHIND IT. ADDITIONAL SURFACE MOUNT JUNCTION BOX INSTALLATION ABOVE THE FLAME HOOD MAY BE REQUIRED. RUN SURFACE MOUNT CONDUIT FOR CONNECTION BETWEEN THE J-BOX AND THE RACEWAY. ALL RACEWAY HEIGHTS ARE TAKEN FROM THE TOP OF THE FINISHED FLOOR TO THE CENTER OF THE RACEWAY.

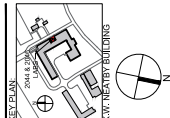
7. PROVIDE STAINLESS STEEL FACEPLATE FOR SWITCHES AND NON-RACEWAY RECEPTACLES.

10. ALL CIRCUITS MUST HAVE SEPARATE NEUTRAL. MINIMUM WIRE SIZE FOR HOT AND NEUTRAL SHALL BE:
- | | |
|-----------|----------------------------------|
| 10.1.1.1. | #12AWG FOR RUNS UP TO 21M |
| 10.1.1.2. | #10AWG FOR RUNS IN EXCESS OF 21M |

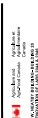
1. TYPE AC-90 WILL BE PERMITTED FROM CONDUIT SYSTEM JUNCTION BOXES TO INDIVIDUAL RECESSED LIGHT FIXTURES. DO NOT LOOP FROM JUNCTION TO LIGHT FIXTURE. SINGLE RUN TO EACH LIGHT FIXTURE WITH MAXIMUM 3 METER LENGTH.
2. CONTRACTOR MUST INCLUDE ALLOWANCE TO RECONNECT 4 CIRCUITS FROM EXISTING PANEL TO NEW PANEL. THAT ARE NOT LOCATED INSIDE LAB AREA AND HAS NOT BEEN IDENTIFIED IN THIS DRAWING SET.
3. CONTRACTOR MUST ALLOW TO PROVIDE AND FEED FOR UP TO 2 JUNCTION BOXES IN THE CEILING SPACE TO FEED CONTROL TRANSFORMERS (CLASS 1) FROM THE JUNCTION BOX LEVEL 204. COORDINATE WITH MECHANICAL (CLASS 1) WORK FOR THE REPAIR.

- 1 PROVIDE JUNCTION BOX AND DISCONNECT SWITCH ON THE UNIT
- 2 PROVIDE PENETRATION INTO THE BASEWAY FROM THE SHAFT BEHIND. FIRE RATED SEALING MUST APPLY FOR SHAFT PENETRATION.
- 3 PROVIDE AND INSTALL SINGLE CHANNEL RAILWAY FOR UNDER COUNTER AT 250mm AFF. AND DUAL CHANNEL ABOVE COUNTER AT 1125mm AFF.
- 4 CONTRACTOR IS TO REMOVE EXISTING INTERIOR AND NEW INTERIOR CENTER-TO-CENTER OF THE EXISTING TUB AND CUSTOM MOUNT INTERIOR TUB THAT THE DEPTH OF THE PANEL WILL MOUNT FLUSH WITH THE EXISTING TUB SURFACE. CONTRACTOR IS TO INSTALL NEW CUSTOM CUT TUB TO FIT EXISTING TUB.
- 5 CONTRACTOR IS TO REPLACE EQUIPMENT RECEPTACLE WITH GFI RECEPTACLE. PROVIDE FACE PLATE COLOUR TO MATCH THE OTHER SIDE RECEPTACLE.

POWER	
SYMBOL	DESCRIPTION
	RACEWAY
	NEMA 5-20R RECEPTACLE
	NEMA 5-20R RECEPTACLE WITH USB PORT
	NEMA 5-20R DEDICATED RECEPTACLE
	ELECTRICAL PANEL
	JUNCTION BOX
	PENETRATION POINT TO THE RACEWAY INSIDE NEW WALL CAVITY (VERTICAL DROP FROM THE CEILING)



DATE	DESCRIPTION	AMOUNT	BALANCE
1/1/2017	OPENING BALANCE		
1/15/2017	SALES		
1/20/2017	SALES		
1/25/2017	SALES		
1/30/2017	SALES		
2/5/2017	SALES		
2/10/2017	SALES		
2/15/2017	SALES		
2/20/2017	SALES		
2/25/2017	SALES		
2/28/2017	SALES		
3/5/2017	SALES		
3/10/2017	SALES		
3/15/2017	SALES		
3/20/2017	SALES		
3/25/2017	SALES		
3/30/2017	SALES		
4/5/2017	SALES		
4/10/2017	SALES		
4/15/2017	SALES		
4/20/2017	SALES		
4/25/2017	SALES		
4/30/2017	SALES		
5/5/2017	SALES		
5/10/2017	SALES		
5/15/2017	SALES		
5/20/2017	SALES		
5/25/2017	SALES		
5/30/2017	SALES		
6/5/2017	SALES		
6/10/2017	SALES		
6/15/2017	SALES		
6/20/2017	SALES		
6/25/2017	SALES		
6/30/2017	SALES		
7/5/2017	SALES		
7/10/2017	SALES		
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11/20/2017	SALES		
11/25/2017	SALES		
11/30/2017	SALES		
12/5/2017	SALES		
12/10/2017	SALES		
12/15/2017	SALES		
12/20/2017	SALES		
12/25/2017	SALES		
12/30/2017	SALES		
TOTAL			

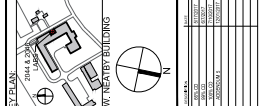


SHEET TITLE:
POWER PLAN

DATE	AS INDICATED
DATE	07/10/2017
DRAWN:	JT
RECORD:	SR
PROJECT	74015604
SHEET NO:	

PANEL 2044

PANEL 2046

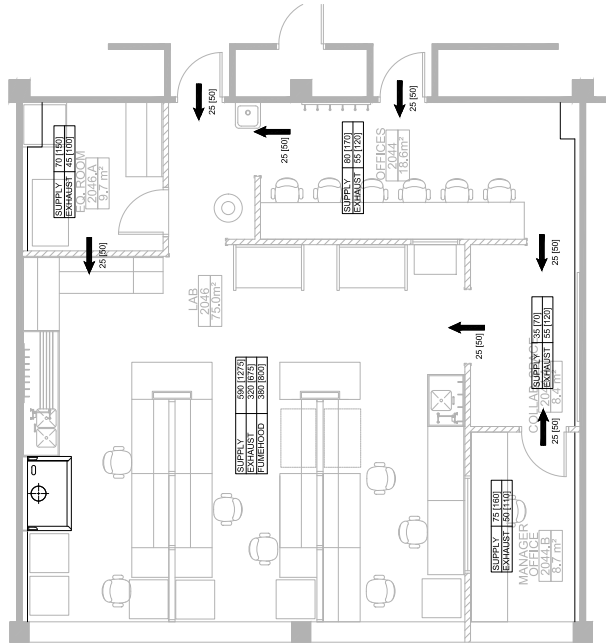
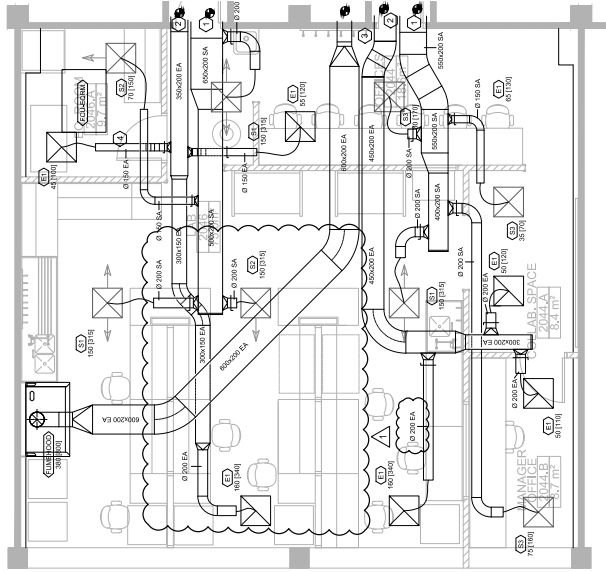


GENERAL NOTES

- [illegible]

KEY NOTES

- 1 SUBMIT DUCT TO SPACE TO CONNECT TO EXISTING RETURN COIL AND AIRFLOW CONTROLS. DAMPER IN CORRIDOR. TRANSITION DUCT TO MATCH CONNECTION SIZE OF REHEAT COIL.
- 2 EXHAUST DUCT TO SPACE TO CONNECT TO EXISTING MAIN IN CORRIDOR. TRANSITION DUCT IN CORRIDOR TO MATCH CONNECTION SIZE OF AIRFLOW CONTROL DAMPER.
- 3 FLAME HOOD EXHAUST TO CONNECT TO EXISTING RISER IN SHAFT. TRANSITION TO ROUND DUCT SIZED TO MATCH TRANSITING IN SPACE.
- 4 FAN COIL UNIT COOLING SYSTEM - SEE SCHEDULE.



2 DIRECTIONAL AIRFLOW DIAGRAM
14-101 SCALE 1/8" = 1'-0"

1 HVAC PLAN
M-101
SCALE 1/8"

AAEC Lab 2044 & 2046 Renovation Airflow Calculations

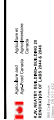
[illegible]

GENERAL NOTES:
 + PER ASHRAE 62
 ** PER NIH DRMT
 *** BASED ON 12

*** BASED ON 12 °C SUPPLY AIR TEMPERATURE AND 23°C COOLING SETPOINT. CONFIRM WITH EXISTING SYSTEM. SUPPLEMENTAL COOLING WILL BE SUPPLIED FOR EQUIPMENT ROOM



Item No.	Material Name	Unit	Qty	Rate	Total
1	50% CO			543.20	
2	50% CO			470.17	
3	50% CO			733.21	
4	50% CO			120.21	
5	50% CO			120.21	



SHEET TITLE:
HVAC PLAN

SCALE:	AS INDICATED
DATE:	07-10-2017
DRAWN:	DO
CHECKED:	DO / RG
PROJECT:	74079-494
SHEET NO:	

- TEMPERATURE QUALITY BE CONTROLLED TO 1.5°C



PLAN MARK	DUTY	TYPE	SIZE (in)	NECK SIZE (mm)	NECK SIZE (in)	MATERIAL	MAX AIRFLOW (L/S)	MAX AIRFLOW (CFM)	DAMPER	BASIS OF DESIGN	NOTES
S1	SUPPLY	LABORATORY FLUSH FACE RADIAL FLOW - TWO WAY	24 x 24	200 Ø	5 Ø	ALUMINUM	180	380	NO	PRICE AFFORD - TWO WAY	1-5
S2	SUPPLY	LABORATORY FLUSH FACE RADIAL FLOW - ONE WAY	24 x 24	200 Ø	5 Ø	ALUMINUM	180	380	NO	PRICE AFFORD - ONE WAY	1-5
S3	SUPPLY	SQUARE PLATE DIFFUSER	24 x 24	200 Ø	6 Ø	ALUMINUM	105	350	NO	PRICE SPD	1-5
E1	EXHAUST	CEILING, EGROUPEE, SPALLS WITH INTEGRATED PLENUM	12 x 12	200 x 200	7 x 7	ALUMINUM	0 - 455	0 - 900	NO	PRICE 360SR	1-3

REMARKS:

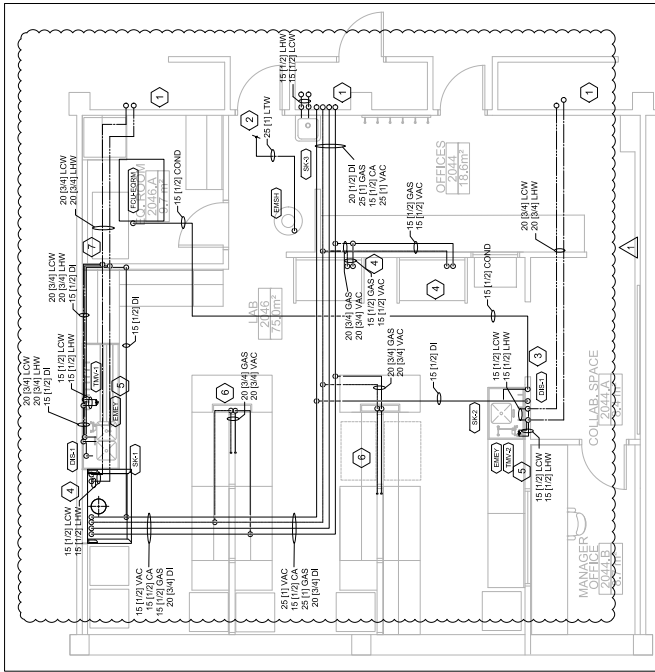
1. REFER TO ARCHITECTURAL DRAWINGS FOR TYPE OF CEILING AND/OR SUSPENSION SYSTEM TO PROVIDE NECESSARY MOUNTING FRAMES AND BRACKETS. ENSURE DIFFUSER SIZE MATCHES CEILING TILE SIZES.
2. FIRST SHALL BE MANUFACTURERS STANDARD WHITE, UNLESS NOTED OTHERWISE. REFER TO ARCHITECTURAL.
3. ALL DIFFUSERS SHALL BE 15' MAXIMUM SPACING UNLESS OTHERWISE NOTED.
4. PROVIDE TRANSITIONS AS REQUIRED. ROUND TO RECTANGULAR AND/OR ROUND TO NECK SIZE.
5. BALANCING DAMPERS PROVIDED IN DUCTWORK RUN OUTS



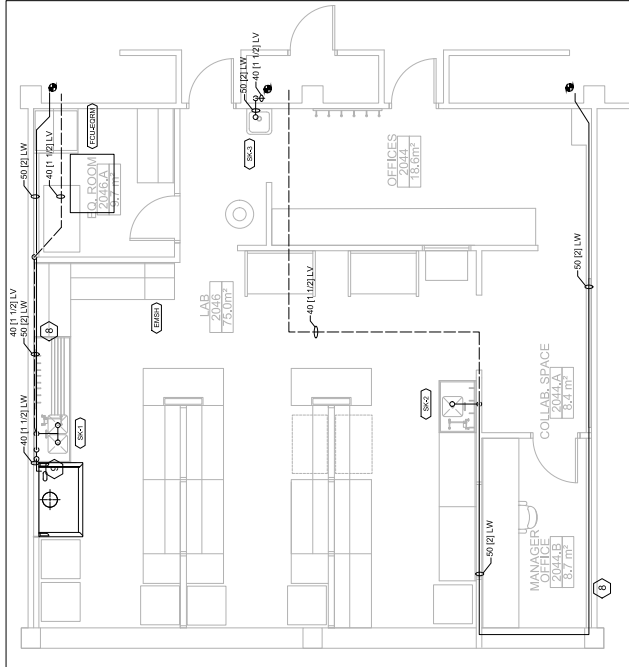
- PIPING IS LOCATED IN THE CEILING SPACE OF THE FLOOR PLAN SHOWN, EXCEPT WHERE INDICATED.
- SEE SCHEMATIC DRAWINGS AND DETAILS FOR VALVE CONTRACTOR TO PROVIDE AIR BLEED VALVES AS REQUIRED TO ENSURE NO AIR IN PRESENT IN HYDRONIC LINES DURING REGULAR OPERATION
- ROUTE ALL PIPING AS NECESSARY TO AVOID DUCTWORK, LIGHTING, ETC.
- CONTRACTOR TO VERIFY ALL CONNECTIONS TO OLD AND NEW AND INCORPORATE ACCURATE DIMENSIONING ON ALL NEW PIPING
- INCLUDE CIRCUIT SETTER BALANCING VALVES AND ISOLATION VALVES ON ALL HW/R BRANCHES.

KEY NOTES:

- 1 CONNECT TO EXISTING SERVICE RISERS LOCATED IN SERVICE ISLANDS. CONFIRM EXISTING LOCATIONS FOR EACH SERVICE. IF FEASIBLE, USE EXISTING TIE OFF RISER AND PIPE UP TO EXISTING VALVE. IF NOT, LOCATE AND INSTALL NEW SERVICE VALVES AT EACH TIE OFF. ENSURE ANY NEW PENETRATIONS ARE PROPERLY FIRE SEALED.
- 2 RELOCATE EXISTING EMERGENCY SHOWER AND CONNECT TO EXISTING LINE W/ PIPING.
- 3 PIPE IN COIL UNIT CONDENSATE FROM UNIT THROUGH CEILING SPACE AND DOWN WALL CAVITY. PENETRATE WALL AND CONNECT TO SINK DRAIN, UPSTREAM OF TRAP.
- 4 SERVICE DROPS FROM CEILING DOWN TO FUME HOOD OR LAMINAR FLOW HOOD EQUIPMENT. CONFIRM EXISTING DROPPING POINTS. IF NOT, LOCATE AND INSTALL NEW DROPPING POINTS. OWNER FURNISHED LAMINAR FLOW HOODS.
- 5 TAKE OFF FROM SUPPLY LINE TO SINK TO THERMOSTATIC MIXING VALVE SERVING COLD MOUNTED EMERGENCY EYEWASH. LOCATE THERMOSTATIC MIXING VALVE BELOW SINKS IN ACCESSIBLE LOCATION.
- 6 PIPING FOR FUTURE SERVICES TO GASEWORK ISLANDS PIPED FROM CEILING DOWN THROUGH UPRIGHT CHASE. CONTINUE THROUGH CEILING SPACE AND UP WITH GASEWORK C/W ISOLATION VALVES. AND CAP OFF WITH GASEWORK C/W ISOLATION VALVES.
- 7 LOW VOLTAGE TRAFFICED FROM CEILING SPACE DOWN THROUGH NEW WALL TO HP WALL CHASE. PIPE THROUGH HP WALL CHASE TO SINK.
- 8 LAB WASTE DRAINAGE ROUTED LOW THROUGH HP WALL CHASE AND CONNECT TO EXISTING DRAINAGE STACK IN CEILING SPACE. SERVICE ISLANDS LOCATED IN LINE THROUGH HP WALL CHASE AND RISE TO CEILING SPACE AT EQUIPMENT ROOM WALL JUNCTION.
- 9 LAB WASTE DRAINAGE CONNECTION TO FUMEHOOD C/W SINK DRAIN. TRAP DRAIN CONNECTION WITH WALL CHASE.



1 PLUMBING SUPPLY PIPING LAYOUT
P-101 SCALE 1:50



2 PLUMBING WASTE AND VENT LAYOUT
P-101 SCALE 1/50



PLUMBING FIXTURE SCHEDULE		BASIS OF DESIGN					
FEATURE MARK	FEATURE DESCRIPTION	SYSTEM	DRAIN	VENT	HOT WATER	COLD WATER	PRI
SK-1	LABORATORY DOUBLE SINK, STAINLESS STEEL, INTEGRAL TO CASEWORK WITH DRAINBOARD, MOUNTED GOOSENECK FAUCET WITH VACUUM BREAKER AND WRIST BLADES	LW	50	40	20	30	-
SK-2	LABORATORY DOUBLE SINK, STAINLESS STEEL, INTEGRAL TO CASEWORK WITH DECK MOUNTED GOOSENECK FAUCET WITH VACUUM BREAKER AND WRIST BLADES	LW	50	40	15	15	-
SK-3	LABORATORY SINK, STAINLESS STEEL, WALL-HUNG LAVATORY, 318 STAINLESS STEEL, MOUNTED GOOSENECK FAUCET WITH AUTO SENSOR AND WATER TURBINE	LW	50	40	15	15	-
EMSH	EMERGENCY SHOWER, CEILING HUNG WITH CHAIN PULL FOR SHOWER ACTIVATION.	SAN	-	-	-	25	-
MEY	MICROBIOLOGICAL FREE STAINLESS STEEL, EMERGENCY EYE WASH WITH PADDOLE ACTIVATION	SAN	-	-	-	15	-

-	REQUIRED	-	-	-	-
D8-4	DI WATER POINT OF USE FACUET, DECK MOUNTED, GOOD ENOUGH MATERIAL TO MATCH PIPING.	01	-	15	-
NOTES LW= LABORATORY WASTE SYSTEM					
CHICAGO FAUCETS R76P/MDF					

- Refer to spec sections 22.11.16, 22.13.18, 22.15.10, 22.67.13 for piping requirements.
- For Natural Gas Service:
- Piping to be black carbon steel in accordance with ASTM A53/ASME, schedule 40, threaded ends for size 50 MM and smaller
 - Flange and gasket material to be in accordance with ASME B31.3, Class 2500, for service temperature less than 400°C
 - Provide joint sealing compound as listed in UL FLAMMABLE & COMBUSTIBLE, CLASS 20 OR LESS. For tapping, use TAP-LOK® tapping sleeves.
 - Provide all pipe markings, warning and identification tags, and metal tags as required
 - Provide pipe, valves, and fittings to be in accordance with ASME B31.3, Class 2500, for service temperature less than 400°C
 - Provide shut-off or isolation valves conforming to ASME B16.33 standards and manufacture compatible with system materials used.
- Test entire gas piping system to ensure that it is gas-tight prior to putting into service. Prior to testing, purge the system, clean, and clear all foreign material. Test each joint with an approved gas detector, soap and water, or an equivalent nonflammable solution. Inspect and retest until no leaks are detected. Maintain a minimum pressure of 3 pounds gauge for a period of not less than 10 minutes as specified in NFPA 54 without showing any drop in pressure.
- Protect equipment, pipe, and valve openings by caps or plugs during installation. At the completion of all work, thoroughly flush the system with clean water of sufficient velocity and quantity to dislodge sediment or dirt. Purge the system with compressed air after draining is complete.