

NATIONAL RESEARCH COUNCIL CANADA UPLANDS CAMPUS

RESEARCH PRIVATE, OTTAWA, ON. K1V 1S2
U-61 FRPC RETRO-FIT

DRAWING LIST
COVER PAGE

STRUCTURAL
STRUCTURAL: PLANS AND DETAILS

ARCHITECTURAL
DEMOLITION PLANS AND DEMOLITION REFLECTED CEILING PLANS
CONSTRUCTION PLANS, REFLECTED CEILING PLANS AND PARTITION ASSEMBLIES
FINISHES PLAN AND FURNITURE PLAN
DOOR, DOOR HARDWARE, WINDOW AND MILLWORK SCHEDULES AND DETAILS
CONSTRUCTION SECTIONS AND DETAILS

MECHANICAL
GROUND FLOOR MECHANICAL NEW WORK AND DEMOLITION
SECOND FLOOR AND ROOF MECHANICAL NEW WORK
MECHANICAL SCHEDULES AND DETAILS
CONTROL SEQUENCES AND LEGENDS

ELECTRICAL
ELECTRICAL WORK – NEW AND DEMOLITION
ELECTRICAL SINGLE LINE DIAGRAM AND SCHEDULES

DRAWING No.
6018-CP1

6018-S01

6018-A01
6018-A02
6018-A03
6018-A04
6018-A05

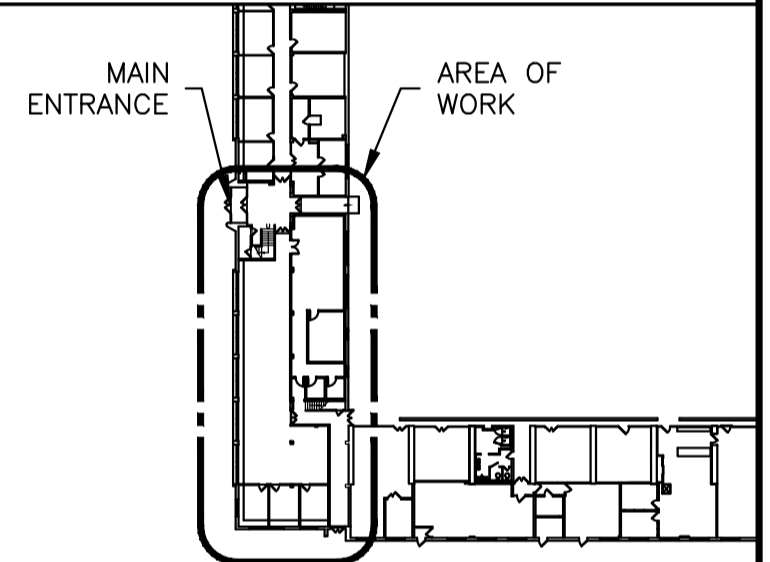
6018-M01
6018-M02
6018-M03
6018-M04

6018-E01
6018-E02

GENERAL NOTES

- CONTRACTOR TO VERIFY ALL DIMENSIONS AND CLEARANCES ON SITE PRIOR TO CONSTRUCTION AND REPORT ANY DISCREPANCIES AND/OR OMISSIONS TO DEPARTMENTAL REPRESENTATIVE.
- CONTRACTOR MUST VISIT THE SITE AND FULLY FAMILIARIZE THEMSELVES WITH THE SCOPE OF THE WORK PRIOR TO PROJECT COMMENCEMENT.
- ALL TRADES TO COORDINATE WORK ON SITE, WITH APPROVAL OF DEPARTMENTAL REPRESENTATIVE TO AVOID ANY CONFLICTS AND/OR INTERFERENCE.
- ANY AND ALL REQUIRED SHUTDOWNS SHALL BE COORDINATED WITH DEPARTMENTAL REPRESENTATIVE.
- INSTALLATION OF ALL SYSTEMS SHALL BE IN ACCORDANCE WITH APPLICABLE CODES AND STANDARDS.
- CONTRACTOR TO BE RESPONSIBLE FOR REINSTATEMENT AND REPAIR OF ANY DAMAGE CAUSED BY WORK.
- CONTRACTOR SHALL PREVENT THE SPREAD OF DUST AND DEBRIS BEYOND AREA OF WORK AND CLEAN ALL SURFACES AT COMPLETION.

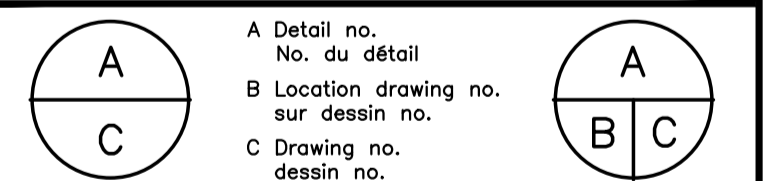
KEY PLAN PLAN CLÉ



7			
6			
5	OCT 2023	ISSUED FOR TENDER	JDG
4	JULY 2023	ISSUED FOR TRANSLATION	JDG
3	JUNE 2023	ISSUED FOR 99% COMMENT AND REVIEW	JDG
2	FEB 2023	ISSUED FOR 66% COMMENT AND REVIEW	JDG
1	DEC 2022	ISSUED FOR 33% COMMENT AND REVIEW	JDG
No.	Date	Revision	By: Par:

Date Printed Date imprimée

- Verify all dimensions and site conditions and be responsible for same
- Vérifier toutes les dimensions et l'état des lieux et en assumer la responsabilité



project projet

U-61 FRPC RETRO-FIT

UPLANDS CAMPUS

drawing dessin

COVER PAGE

designed	conçu	date	date
JDG		06/2023	

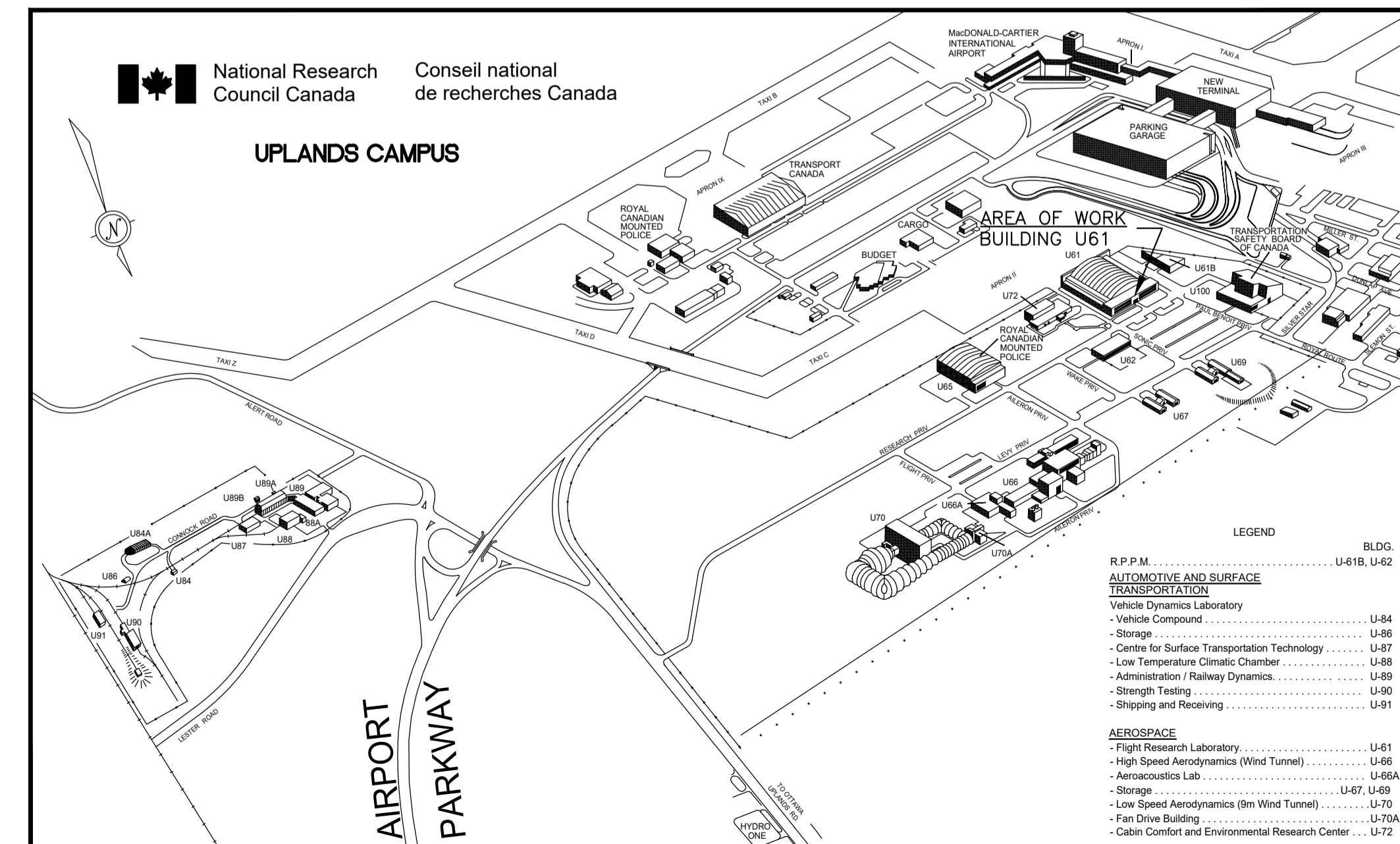
drawn	dessiné	scale	échelle
JDG		AS NOTED	

checked	vérifié	sheet	feuille
CE		A0 of/de	A5

approved	approuvé	W.O.no.	D.T.no.
FG			

dwg.no.	dessin no.
6018-CP1	

ACAD file:	fichier CDAO:

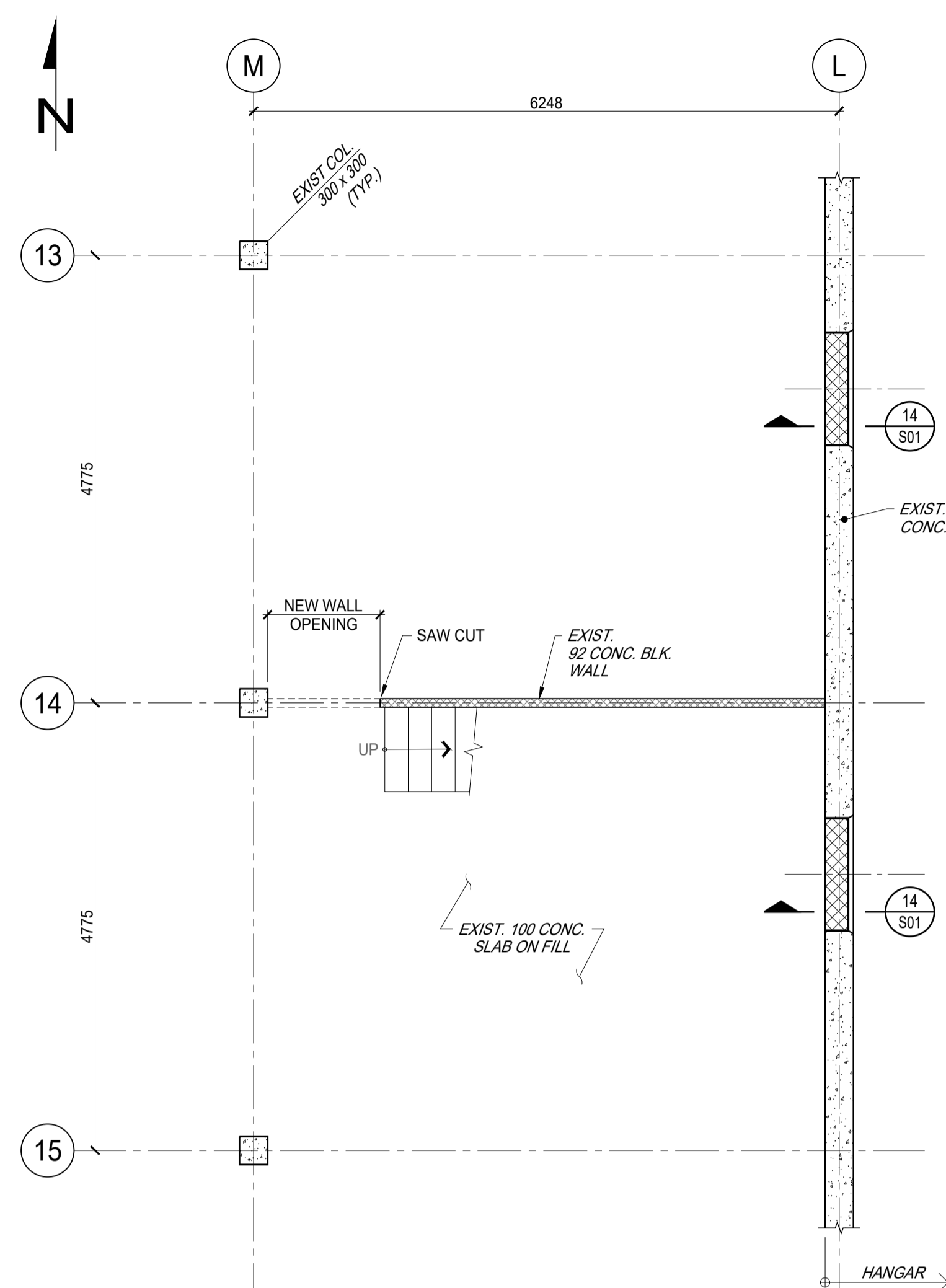




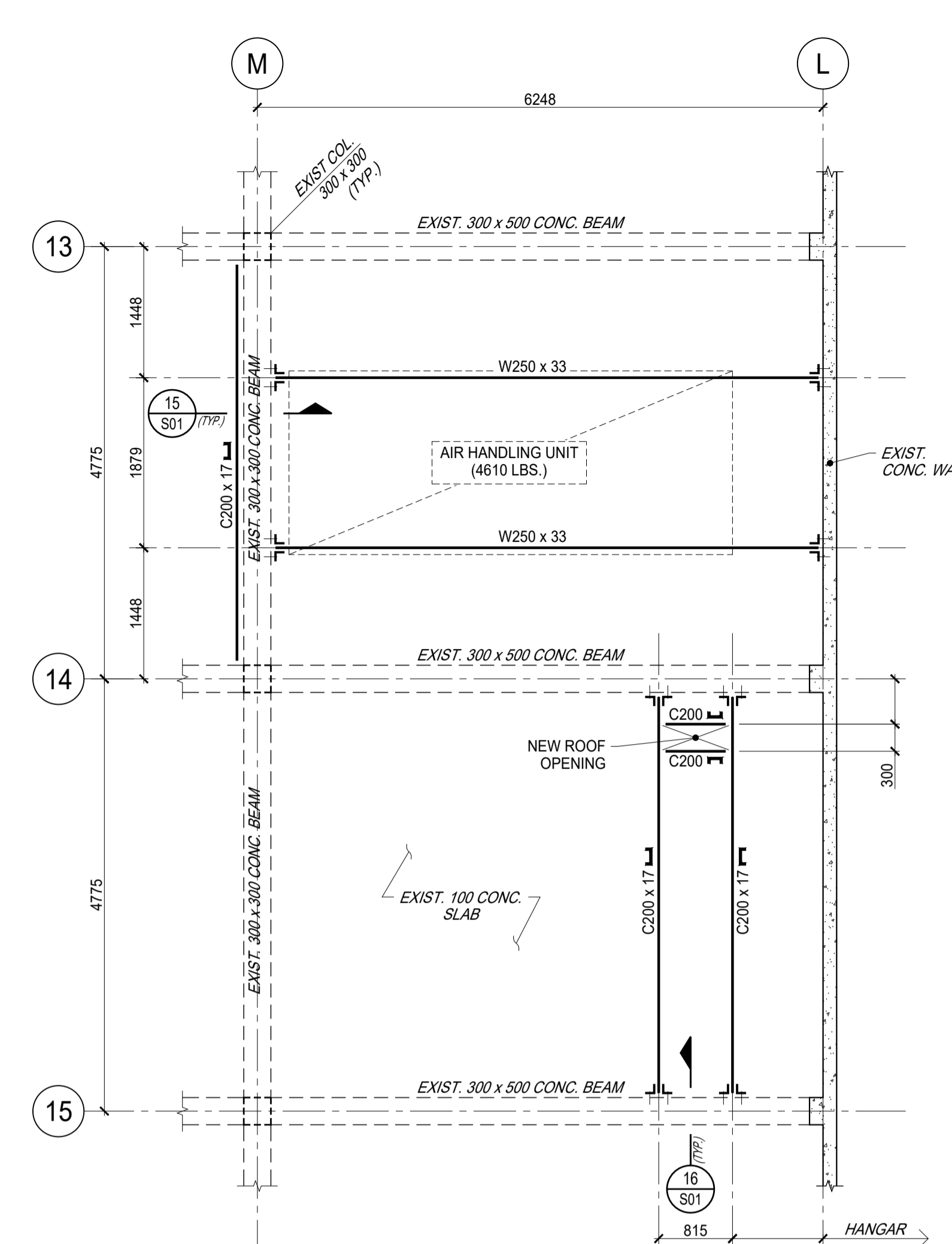
GENERAL NOTES:

STRUCTURAL STEEL:

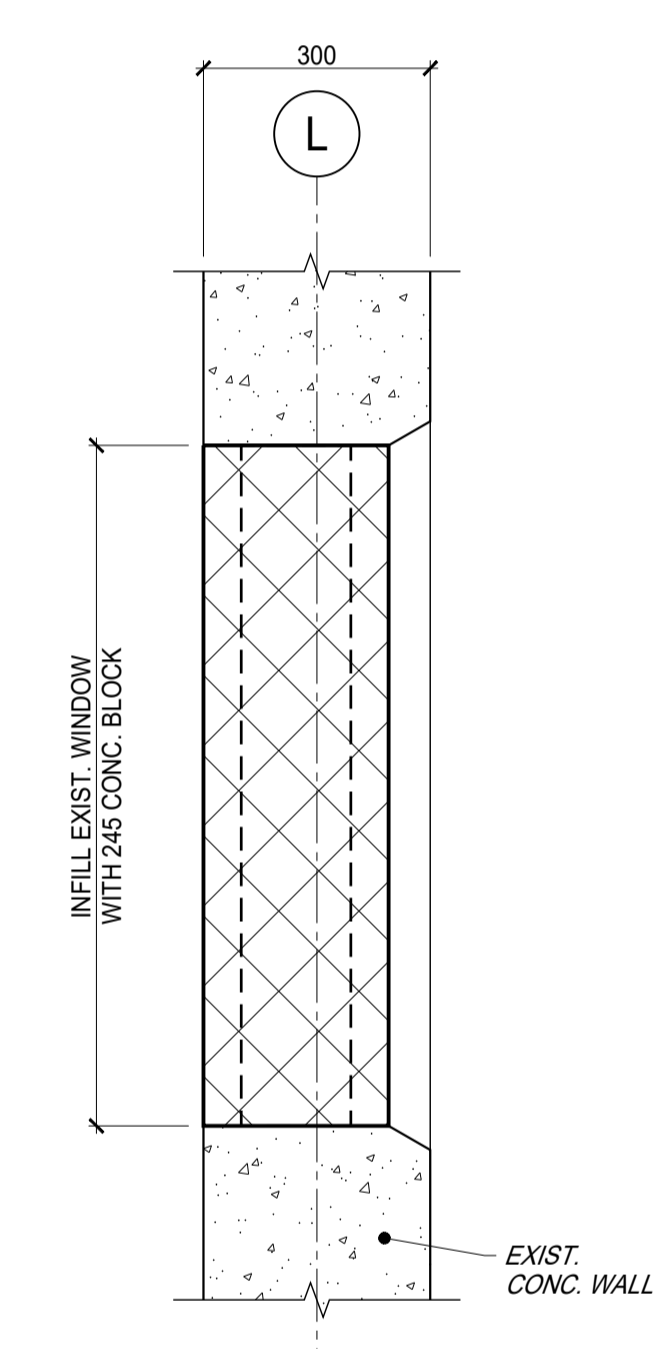
- ALL STRUCTURAL STEEL SHALL CONFORM TO CSA G40.20-04 AND CSA G40.21-04, GRADE 350.
- ALL STRUCTURAL STEEL SHALL RECEIVE ONE COAT OF PRIMER CONFORMING TO CAN/CSG 1-40.97, "ANTI-CORROSIVE STRUCTURAL STEEL ALKYD PRIMER."
- ALL WELDING MATERIALS SHALL CONFORM TO CSA W48.06.
- WELDING SHALL CONFORM TO CSA W59-03 (R2008) AND SHALL BE CARRIED OUT BY WELDERS QUALIFIED BY THE CANADIAN WELDING BUREAU.
- THE CONTRACTOR SHALL SUBMIT FOR REVIEW SHOP DRAWINGS OF THE STRUCTURAL STEEL, INCLUDING ERECTION AND SHOP DETAIL DRAWINGS.
- THE CONTRACTOR SHALL VERIFY DIMENSIONS ON SITE BEFORE THE START OF FABRICATION.
- ALL STRUCTURAL STEEL WORK SHALL CONFORM TO CAN/CSA S16-14.



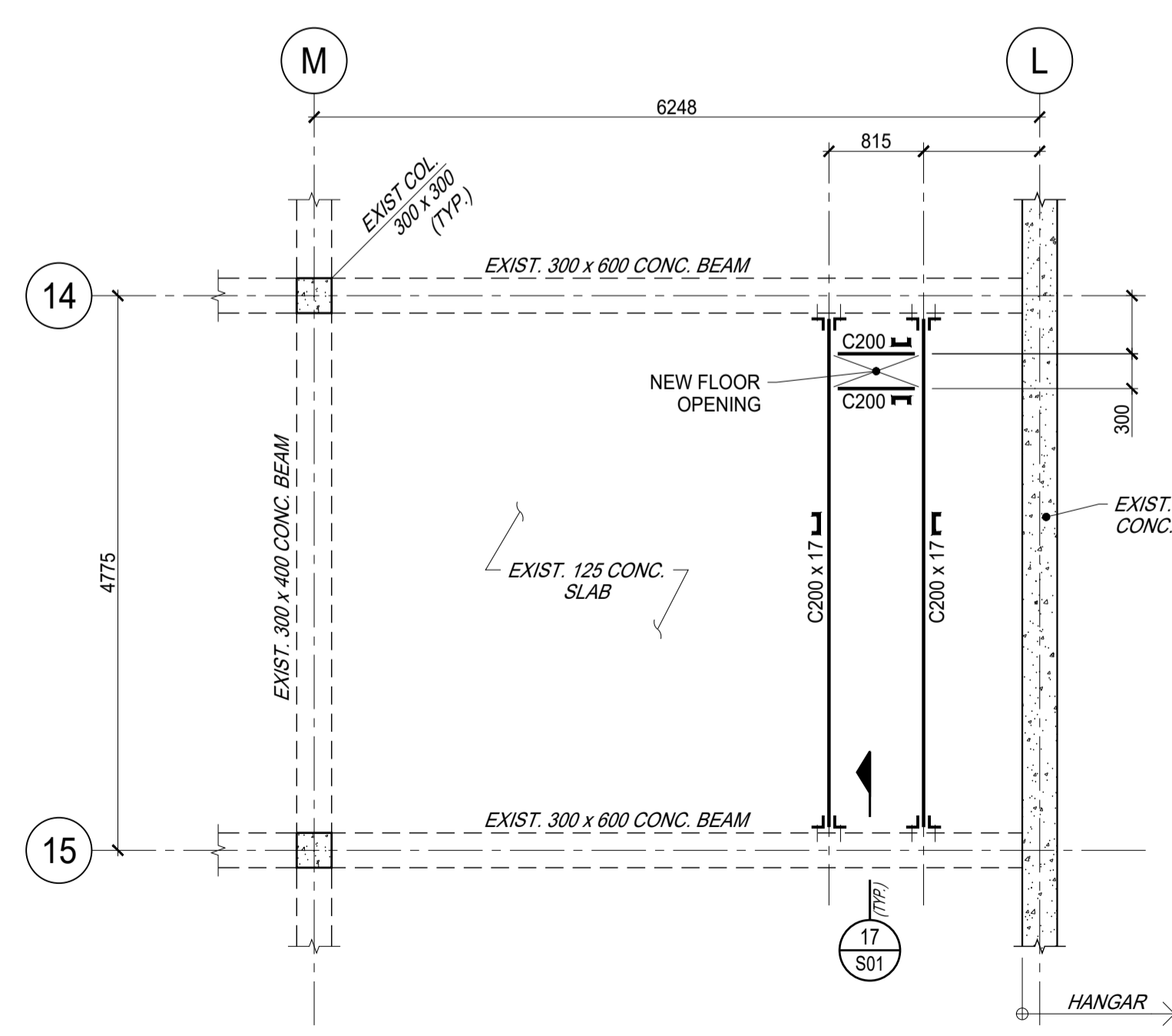
11 PART PLAN - GROUND FLOOR
 S01 SCALE = 1:50
 • ELEVATION = 101'-6"



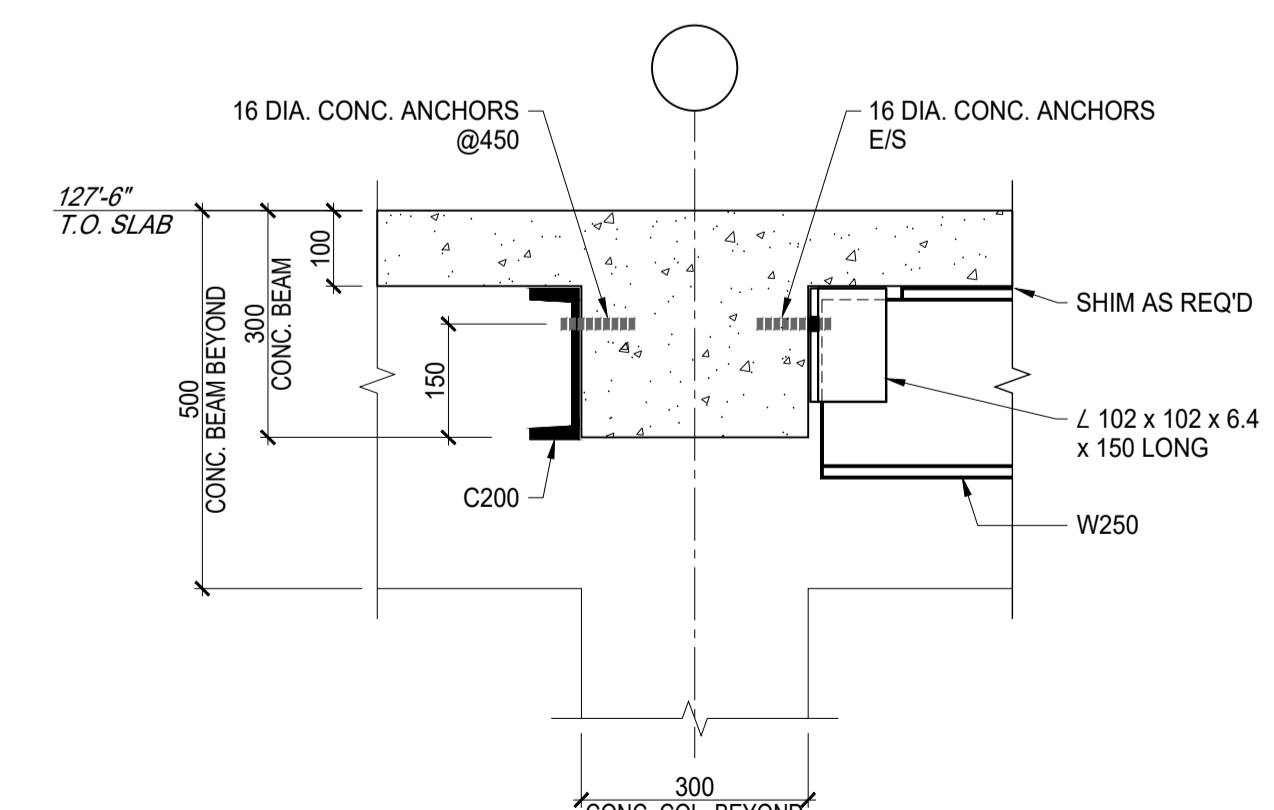
13 PART PLAN - ROOF
 S01 SCALE = 1:50
 • ELEVATION = 127'-6"



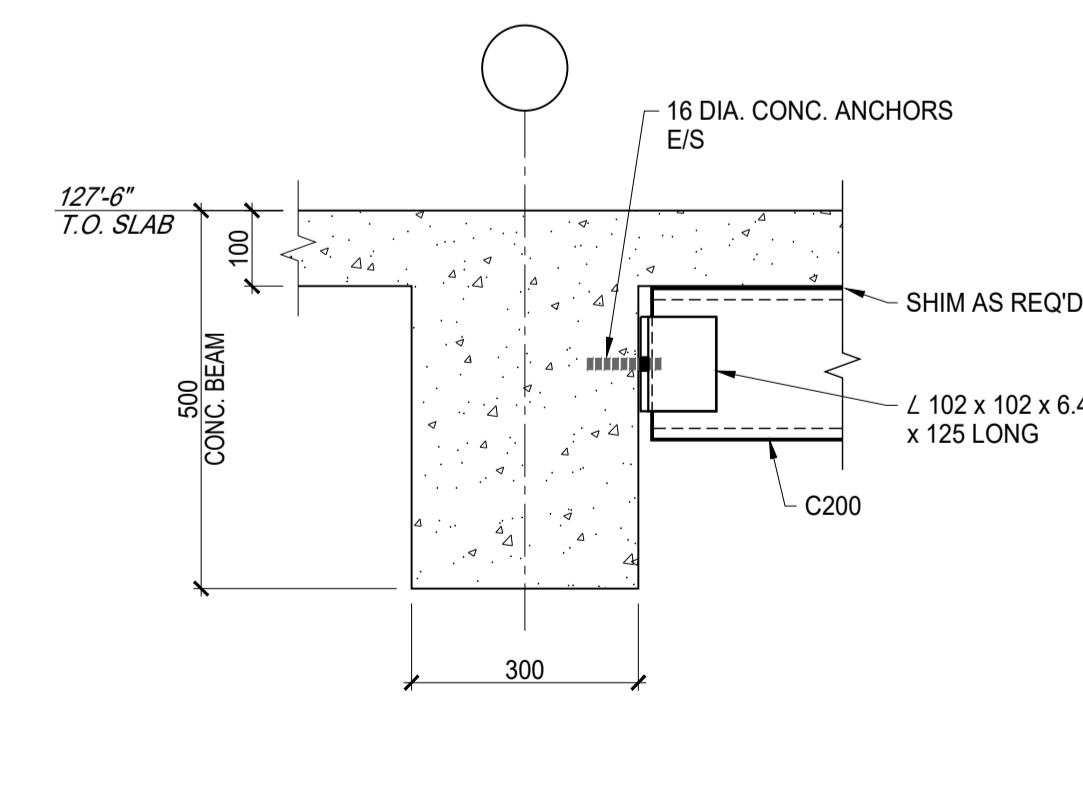
14 SECTION (TYPICAL @ 2 LOCATIONS)
 S01 SCALE = 1:10



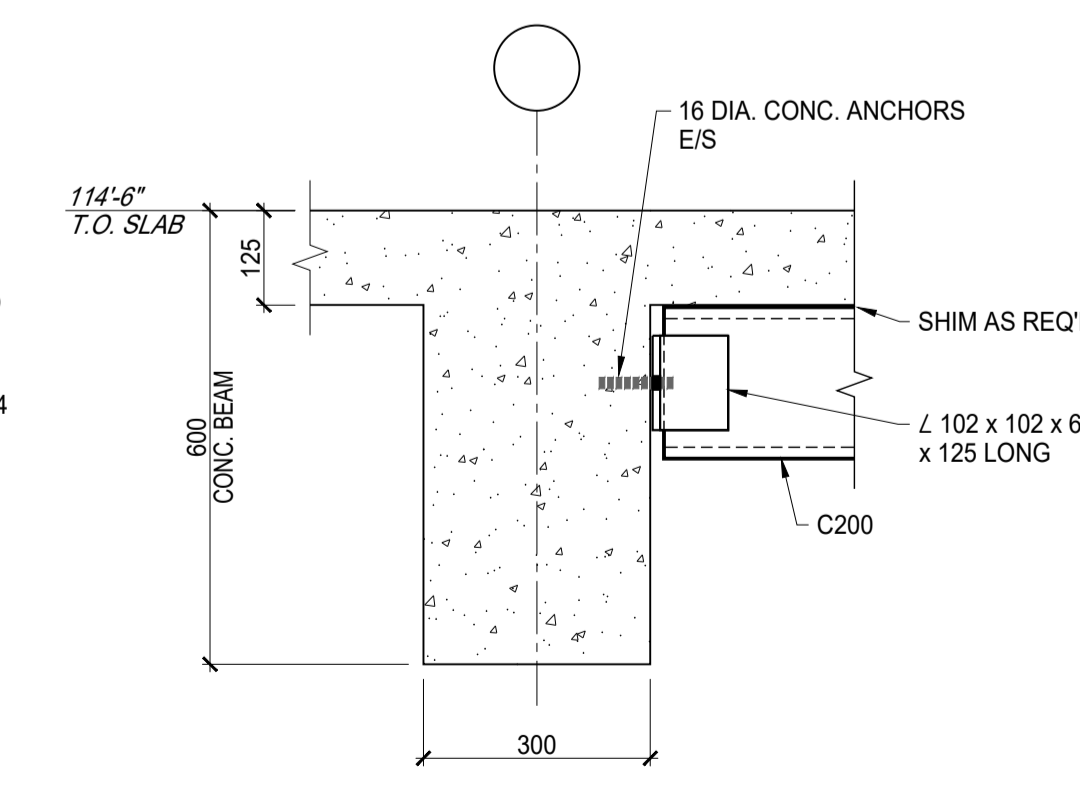
12 PART PLAN - SECOND FLOOR
 S01 SCALE = 1:50
 • ELEVATION = 114'-6"



15 SECTION (TYPICAL)
 S01 SCALE = 1:10



16 SECTION (TYPICAL)
 S01 SCALE = 1:10



17 SECTION (TYPICAL)
 S01 SCALE = 1:10

No.	Date	Revision	By:
1	AUG 28/2023	ISSUED FOR TENDER	R.L.
0	JUNE 27/2023	PRELIMINARY	R.L.

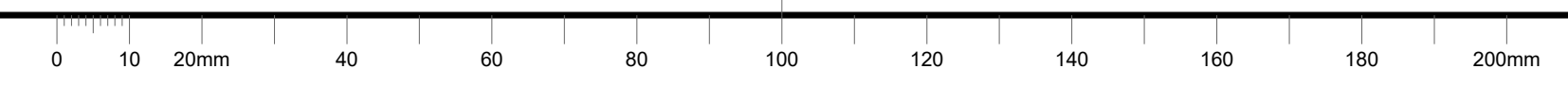
- Verify all dimensions and site conditions and be responsible for same.
- Vérifier toutes les dimensions et l'état des lieux et en assumer la responsabilité.

A	A Detail no. No. du détail	A
C	B Location drawing no. sur dessin no.	B
	C Drawing no. dessin no.	C

project / projet
BUILDING U-61
FRPC RETROFIT
 UPLANDS CAMPUS
 drawing / dessin
STRUCTURAL:
PLANS AND DETAILS

designed / conçu	R.L.	date / date	JUNE, 2023
drawn / dessiné	D.M.D.	scale / échelle	AS SHOWN
checked / vérifié	R.L.	sheet / feuille	S01 of / de S01
approved / approuvé		W.O.no. / D.T.no.	

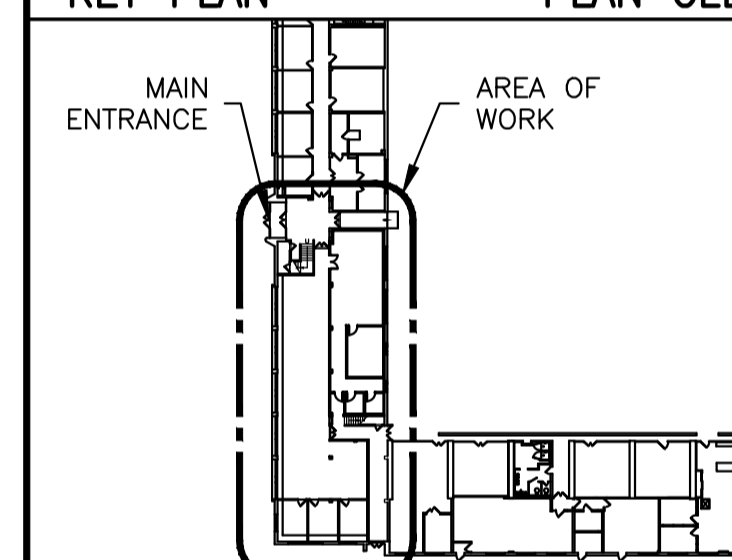
dwg no. / dessin no.
6018 - S01



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KEY PLAN PLAN CLÉ



No.	Date	Revision	By
7			
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Date Printed DD MM YYYY Date imprimée

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A	A Detail no. No. du détail	A
B	B Location drawing no. sur dessin no.	B
C	C Drawing no. dessin no.	C

project U-61 FRPC RETRO-FIT projet

UPLANDS CAMPUS

DEMOLITION PLANS AND DEMOLITION REFLECTED CEILING PLANS

designed	conçu	date	date
JDG		06/2023	
drawn	dessiné	scale	échelle
JDG		AS NOTED	
checked	vérifié	sheet	feuille
CE		A1 of/de A5	
approved	approuvé	W.O.no.	D.T.no.
FG			

dwg.no. 6018-A01
 ACAD file: 6018-A01
 dessin no. fichier CDAO:

DEMOLITION LEGEND SHEET A01 ONLY

- AREA OUT OF CONTRACT/ EXISTING TO REMAIN.
- EXTENT OF EXISTING VINYL COMPOSITE TILE FLOORING TO BE REMOVED (INCLUDING TILES INSTALLED ON METAL PAN COVERS). PREPARE SUBFLOOR TO RECEIVE NEW FLOOR FINISH. GRIND OR SHOTBLAST EXISTING GLUES AND ADHESIVES FOR SMOOTH, LEVEL SURFACE. PATCH AND REPAIR SUBFLOOR WITH SELF LEVELING CEMENT AS REQUIRED. REFER TO SPECIFICATIONS AND MANUFACTURERS RECOMMENDATIONS.
- EXISTING INTERIOR PARTITION TO REMAIN.
- EXTENT OF EXISTING INTERIOR PARTITION TO BE REMOVED.
- EXISTING INTERIOR DOOR AND DOOR FRAME TO REMAIN.
- EXISTING INTERIOR DOOR, DOOR FRAME, AND ALL ASSOCIATED HARDWARE TO BE REMOVED.
- EXTENT OF EXISTING ACOUSTIC CEILING TILES TO BE REMOVED. EXISTING T-BAR SYSTEM, HANGERS, AND ALL ASSOCIATED ATTACHMENTS TO REMAIN.
- EXTENT OF EXISTING ACOUSTIC CEILING TILES, T-BAR SYSTEM, AND ALL REDUNDANT HANGERS, SUPPORTS, ATTACHMENTS TO BE REMOVED WITHIN PLENUM SPACE.

DEMOLITION NOTES SHEET A01 ONLY

- REMOVE EXISTING PC350 WALL PANELS (BOTH SIDES OF WALL). STEEL STUDS TO REMAIN. CAREFULLY REMOVE BATTENS AND TRIMS AROUND DOOR FRAMES AND AT TOP OF WALL FOR REINSTATEMENT IN PRIOR EXISTING LOCATION.
- ALL EXISTING WALL MOUNTED ACOUSTIC PANELS AND ASSOCIATED FRAMING, BATTENS, TOP TRIMS/ FINISH, WITHIN ROOM 151 TO BE REMOVED (FULL HEIGHT OF WALLS).
- EXISTING ACOUSTIC ENCLOSURE INCLUDING FLOOR, WALLS, CEILING, DOOR AND DOOR FRAME TO BE REMOVED.
- EXISTING GLAZING COMPLETE WITH WINDOW FRAME, AND PLYWOOD PANELS, BLOCKING TO BE REMOVED. CLEAN AND PREPARE OPENING TO RECEIVE NEW WINDOWS.
- PORTION OF EXISTING WALL ASSEMBLY TO BE REMOVED; REFER TO STRUCTURAL.

WALL ASSEMBLY:

 - 100mm CONCRETE BLOCK
 - 13mm GYPSUMBOARD OR PLASTER
 - RESILIENT WALL BASE
- PORTION OF EXISTING FLOOR ASSEMBLY TO BE REMOVED. OPENING APPROX. 935mm X 400mm; COORDINATE EXACT SIZE AND LOCATION ON SITE. REFER TO STRUCTURAL.

FLOOR ASSEMBLY:

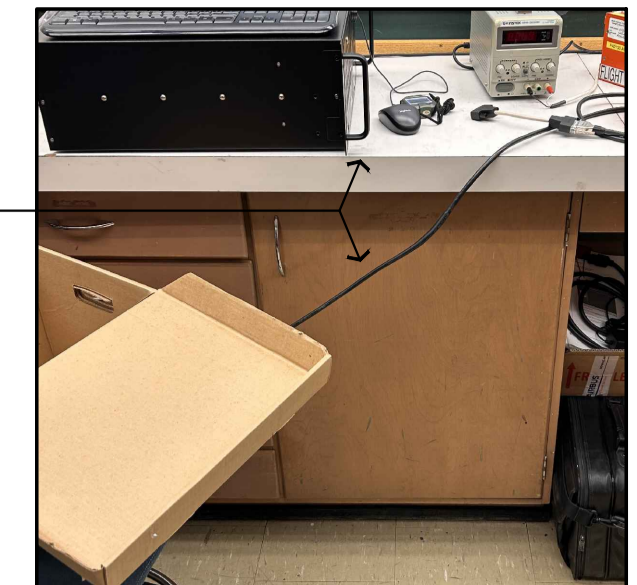
 - 127mm CONCRETE SLAB
 - VINYL COMPOSITE TILE
- REMOVE ALL EXISTING FINISHES AROUND CONCRETE COLUMNS (PLASTER AND/ OR TRANSITE PANEL).
- REMOVE ALL EXISTING PLASTER WALL FINISHES WITHIN ROOMS 151, 151A, 151B, 151C AS INDICATED.
- EXISTING MILLWORK CABINET (FULL LENGTH) COMPLETE WITH ASSOCIATED DOORS, HARDWARE AND COUNTERTOP TO BE REMOVED.
- REMOVE EXISTING SECURITY BARS.
- REMOVE EXISTING SUPPORTS BRACKETS AND PLYWOOD.
- CAREFULLY REMOVE EXISTING ELECTRICAL PANEL FOR RELOCATION; REFER TO ELECTRICAL.
- ALL EXISTING FURNITURE (CHAIRS, CUBICLES, WALL MOUNTED CABINETS & MOBILE FLOOR TRACK SHELVING SYSTEM C/W BASE, ALL ASSOCIATED COMPONENTS & FASTENERS) WITHIN ROOM 151, 151A, 151B, AND 151C TO BE UNINSTALLED, REMOVED AND DISPOSED OF AS PER SPECIFICATIONS SECTION 02 42 00 (TYPICAL).
- DISMANTLE EXISTING WORKSTATIONS AS PER MANUFACTURER'S INSTRUCTIONS & TEMPORARILY STORE ON SITE. GENERAL CONTRACTOR TO CARRY COST FOR LICENSED INSTALLER OF HAWORTH OFFICE SUPPLIES. PACKAGE DISMANTLED ITEMS ON PALLETS AND PROTECT WITH SHRINK WRAP. BUNDLE EXISTING WIRES IN CEILING; COORDINATE WITH ELECTRICAL. TEMPORARY STORE WORKSTATION AT BUILDING U-62 ROOM 111; COORDINATE WITH NRC DEPARTMENTAL REPRESENTATIVE. UPON COMPLETION OF WORK, RE-ASSEMBLE EXISTING WORKSTATIONS TO MATCH ORIGINAL SETUP & LAYOUT.
- PORTION OF EXISTING CONCRETE DECK AND ROOF ASSEMBLY TO BE REMOVED. OPENING APPROX. 935mm X 400mm; COORDINATE EXACT SIZE AND LOCATION ON SITE. REFER TO STRUCTURAL.

ROOF ASSEMBLY:

 - 2-PLY MOD. BIT. MEMBRANE
 - 2 LAYERS OF FIBERGLASS INSULATION
 - 2-PLY BUR AIR/ VAPOUR BARRIER MEMBRANE
 - CONCRETE DECK

GENERAL NOTES:

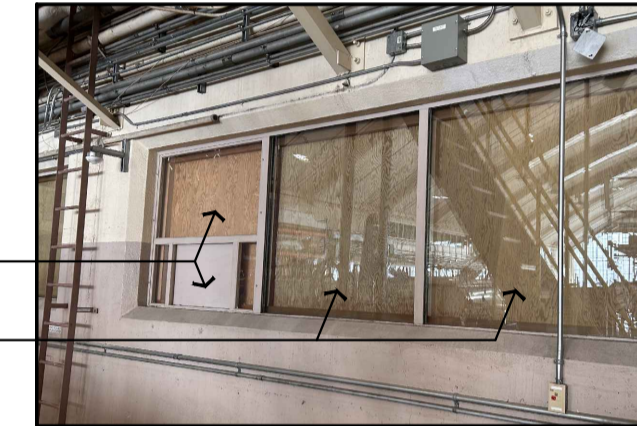
- CAREFULLY REMOVE EXISTING WALL HUNG ITEMS, LIGHT SWITCH COVERS, ETC. WITHIN SCOPE OF WORK PRIOR TO COMMENCING DEMOLITION. CONSERVE FOR REINSTATEMENT IN PRIOR EXISTING LOCATION.
- REMOVE ALL EXISTING WALL BASE WITHIN SCOPE OF WORK (GROUND FLOOR ONLY), AND DISPOSE OF OFF SITE. REMOVE ALL ASSOCIATED GLUES, ADHESIVES AND NAILS FOR AND REPAIR WALL FOR SMOOTH SURFACE ON EXISTING WALLS TO REMAIN - PREPARE TO RECEIVE NEW RUBBER WALL BASE.
- COORDINATE REMOVALS WITH DESIGNATED SUBSTANCE REPORT AND ABATEMENT SPECIFICATIONS. ENSURE ABATEMENT PROCEDURES ARE FOLLOWED AS PER SPECIFICATIONS.



3 EXISTING CONDITIONS SCALE = NONE



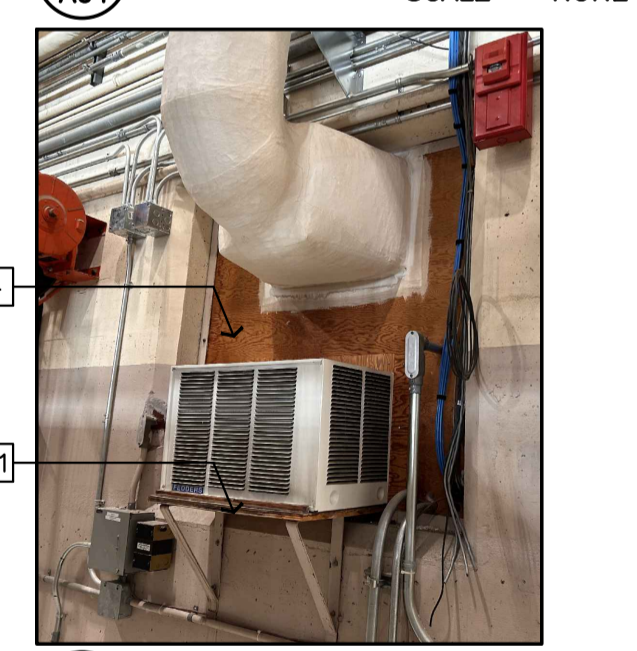
4 EXISTING CONDITIONS SCALE = NONE



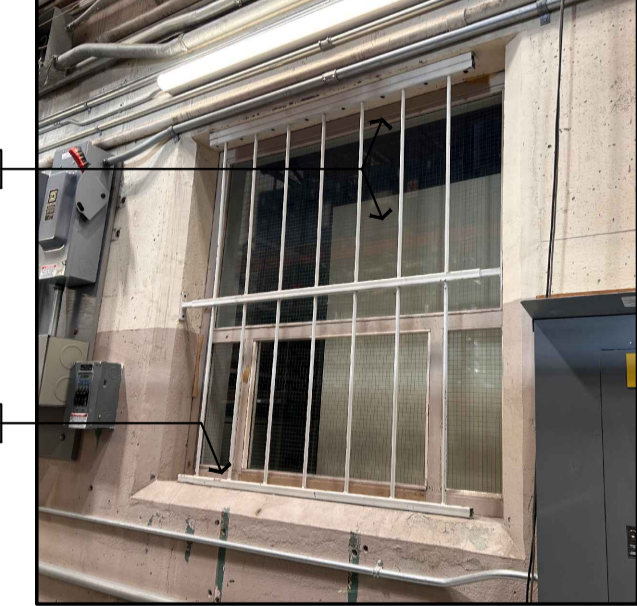
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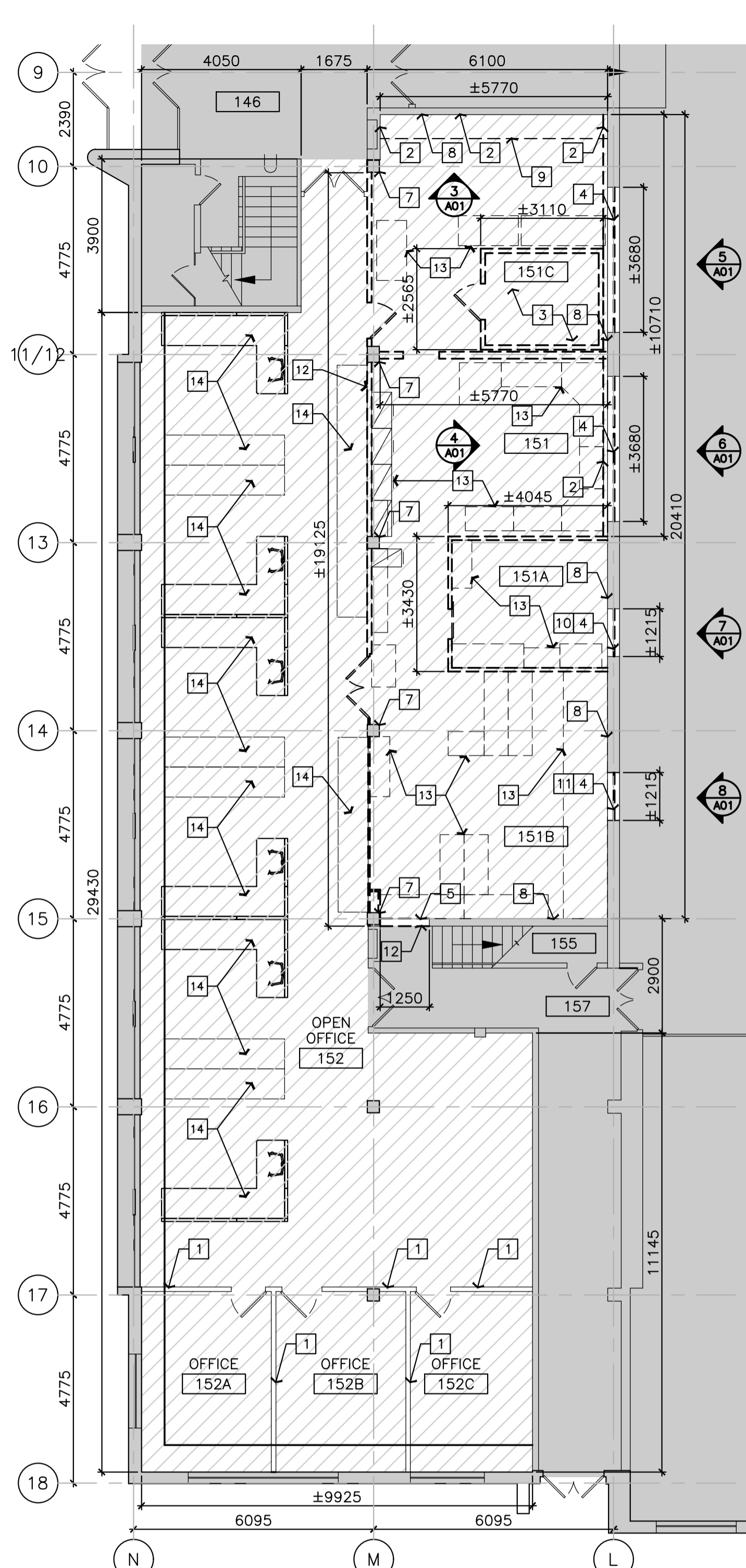
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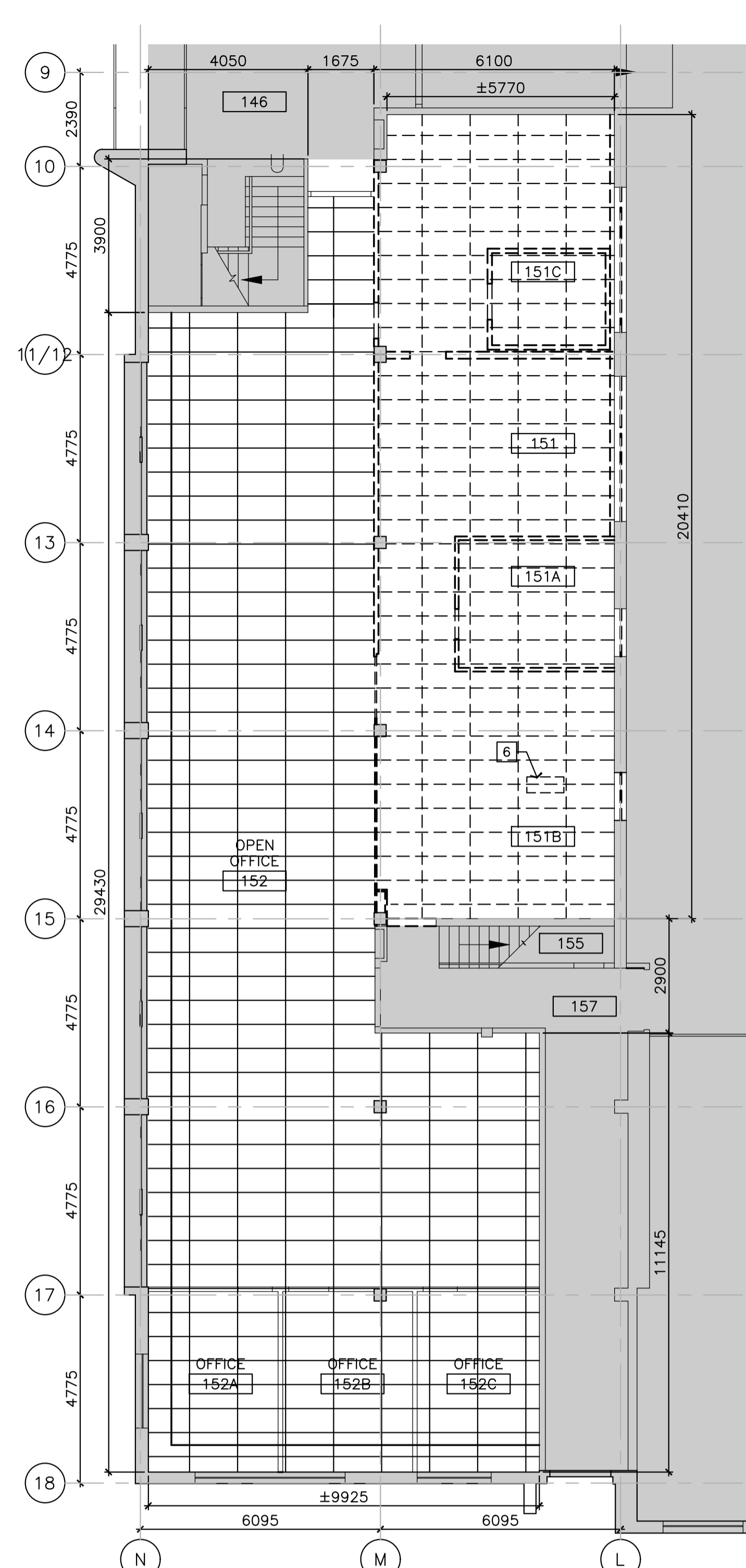
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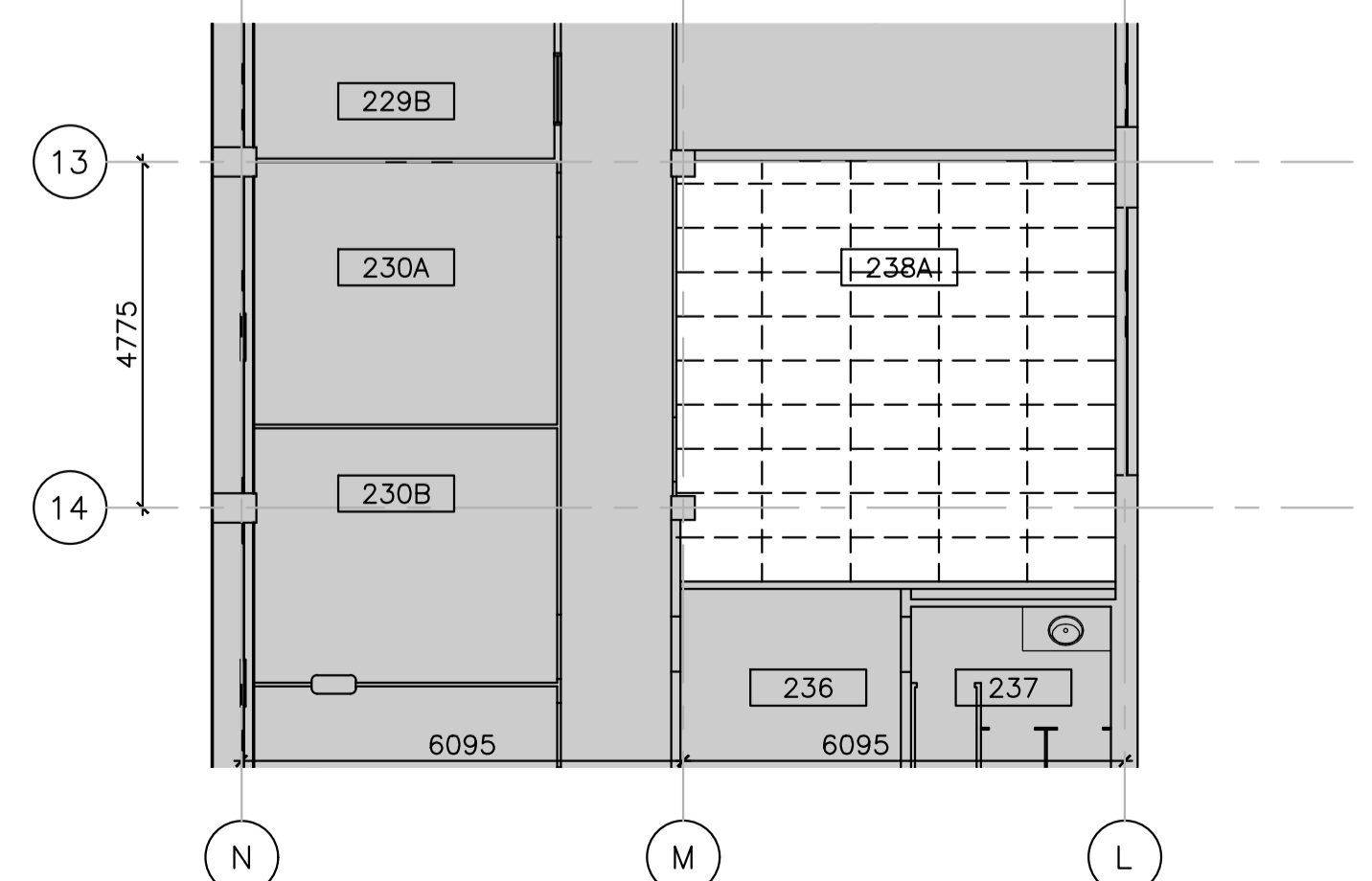
8 EXISTING CONDITIONS SCALE = NONE



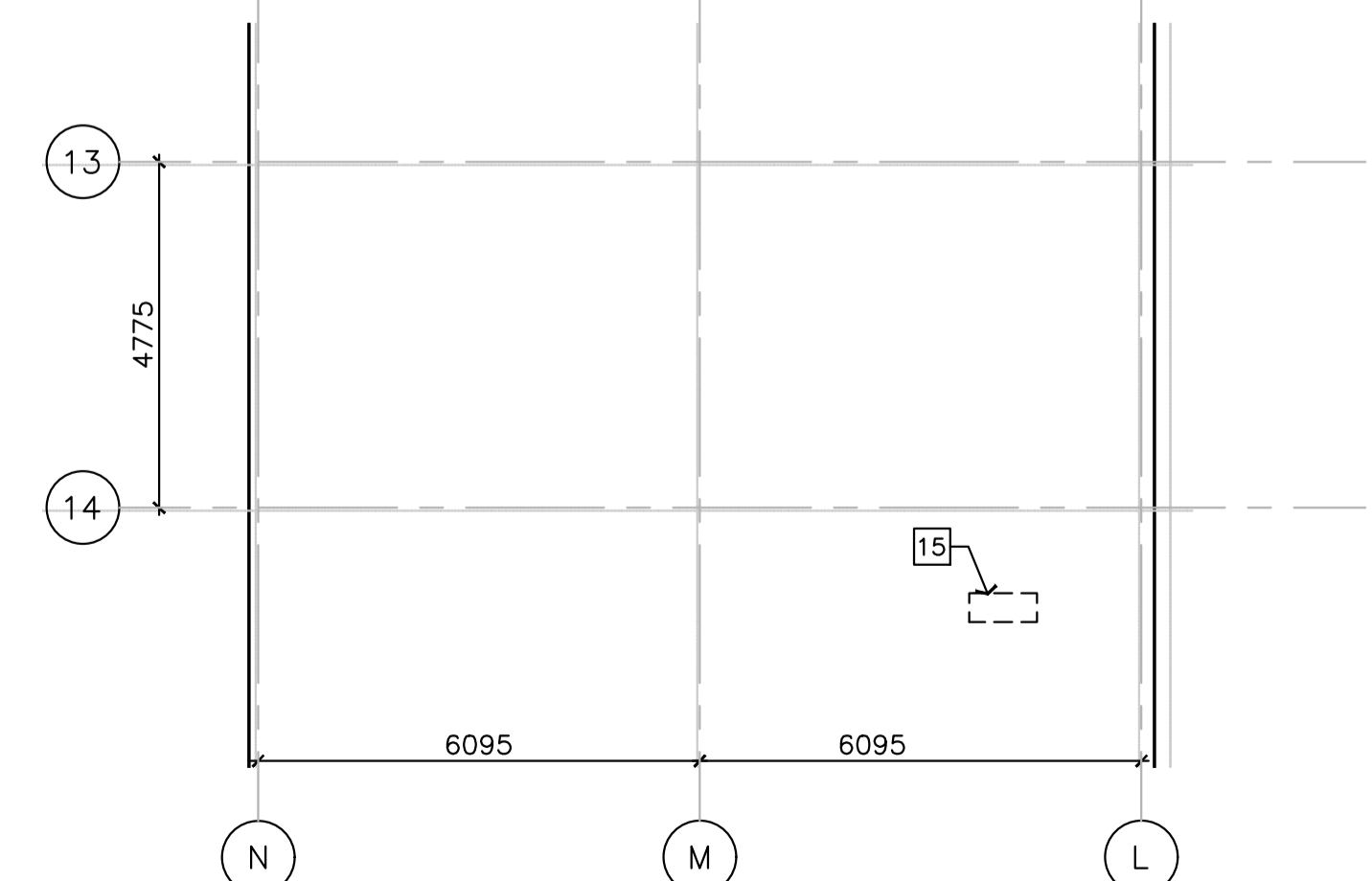
1 GROUND FLOOR - DEMOLITION PLAN SCALE = 1 : 100



2 GROUND FLOOR - DEMOLITION REFLECTED CEILING PLAN SCALE = 1 : 100



9 SECOND FLOOR - DEMOLITION PLAN SCALE = 1 : 100



9 ROOF PLAN - DEMOLITION PLAN SCALE = 1 : 100

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CONSTRUCTION LEGEND
SHEET A02 ONLY

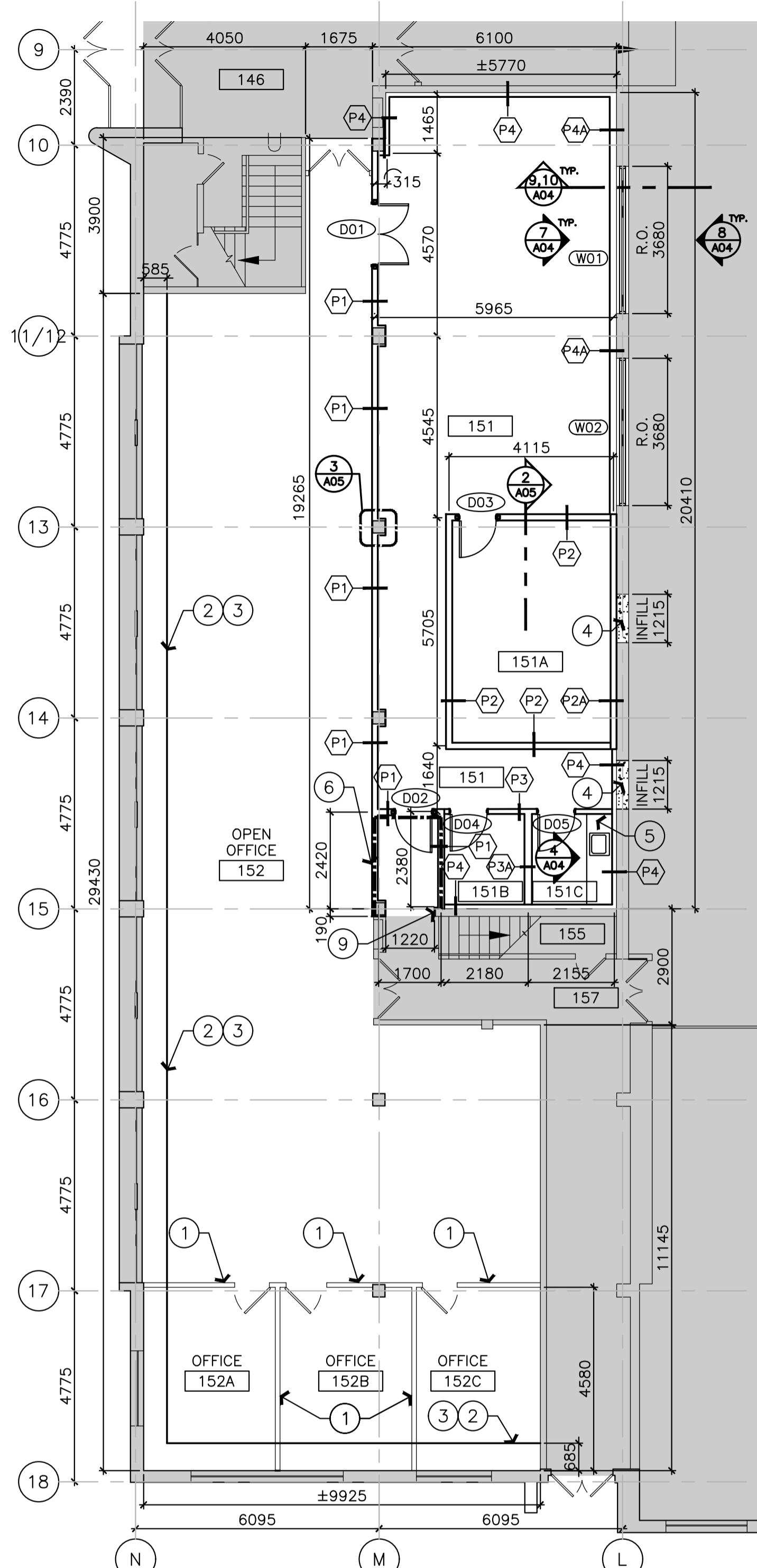
- AREA OUT OF CONTRACT/ EXISTING TO REMAIN.
- Px PARTITION TAG
- Dxx DOOR TAG
- Wxx WINDOW TAG
- EXISTING INTERIOR PARTITION TO REMAIN.
- NEW INTERIOR PARTITION; REFER TO PARTITION TYPES.
- EXISTING INTERIOR DOOR AND DOOR FRAME TO REMAIN.
- NEW INTERIOR DOOR AND DOOR FRAME; REFER TO DOOR AND HARDWARE SCHEDULE.
- EXTENT OF NEW SUSPENDED CEILING SYSTEM; REFER TO SPECIFICATIONS. ROOM 152, 152A, 152B AND 152C TO RECEIVE NEW ACOUSTIC PANELS ONLY (T-BAR TO REMAIN) - PANELS TO MATCH EXISTING CEILING PROFILE AND DIMENSIONS. REPAIR ALL DAMAGED AND/OR MISSING T-BAR SYSTEM COMPONENTS AND ATTACHMENTS PRIOR TO PANEL INSTALLATION. PROVIDE ADDITIONAL T-BAR AT PERIMETER OF WALL BETWEEN NEW AND EXISTING ROOMS.
- ELECTRICAL TRACK LIGHTING SYSTEM, FOR REFERENCE ONLY; REFER TO ELECTRICAL. COORDINATE WITH NEW SUSPENDED CEILING SYSTEM. EXACT LOCATION OF TRACK LIGHTING SYSTEM TO BE COORDINATED WITH NRC DEPARTMENTAL REPRESENTATIVE.
- SUPPLY AIR DIFFUSERS, FOR REFERENCE ONLY; REFER TO MECHANICAL.
- RETURN AIR DIFFUSERS, FOR REFERENCE ONLY; REFER TO MECHANICAL.
- LIGHTING FIXTURE, FOR REFERENCE ONLY; REFER TO ELECTRICAL.
- DENOTES 2HR FIRE RATING. CAULK AND SEAL ALL PENETRATIONS AND TOP AND BOTTOM TRACKS WITH FIRE RATED SEALANT; REFER TO SPECIFICATIONS.

- CONSTRUCTION NOTES**
SHEET A02 ONLY
- FILL EXISTING WALL CAVITIES WITH SOUNDPROOF INSULATION BY ROCKWOOL (WIDTH TO SUIT EXISTING WALL CAVITY). PROVIDE AND INSTALL NEW 13mm GYPSUM BOARD PANELS. HEIGHT = UNDERSIDE OF CEILING GRID (+3048mm). ENSURE NEW WALL FINISHES IS FLUSH WITH ADJACENT FINISHES. TAPE, MUD AND SAND ALL JOINTS, MAKE READY TO RECEIVE NEW PAINT. REINSTATE TRIM AND ATTACHMENTS AT DOOR FRAMES AND AT TOP OF WALL.
 - SCRAPE CLEAN AND PREPARE METAL COVER PAN OF RECESSED FLOOR TRENCH TO RECEIVE NEW VINYL COMPOSITE TILE. CLEAN REMOVE RUST AND ANY LOOSE FLAKING PAINT FROM TOP EXPOSED EDGE OF METAL COVER PAN FOR SMOOTH SURFACE AND PREPARE TO RECEIVE NEW PRIMER AND PAINT; REFER TO PAINT NOTES.
 - CLEAN AND CHIP OUT DETERIORATING AREAS OF TOP EDGE OF CONCRETE SLAB. REPAIR TOP EDGE OF CONCRETE SLAB WITH PATCHING COMPOUND. ENSURE SMOOTH LEVEL SURFACE.
 - INFILL EXISTING OPENING WITH NEW BLOCK WALL; REFER TO STRUCTURAL.
 - NEW MILLWORK LOWER CABINET COMPLETE WITH STAINLESS STEEL COUNTERTOP AND SINK. COORDINATE WITH SINK; REFER TO MECHANICAL.
 - PROVIDE AND INSTALL NEW 19mm PLYWOOD BACKING (INSIDE STUD CAVITY) TO SUIT NEW LOCATION OF ELECTRICAL PANEL; REFER TO ELECTRICAL. COORDINATE EXACT LOCATION WITH NRC DEPARTMENTAL REPRESENTATIVE.
 - REMOVE PORTION OF EXISTING GLAZING IN ORDER TO INSTALL NEW STRUCTURAL BEAMS; REFER TO STRUCTURAL. REINSTATE EXISTING GLAZING AFTER COMPLETION OF WORK.
 - NEW, 16mm GYPSUM BOARD BULKHEAD.
 - FINISH JAMB OF NEW BLOCK WALL OPENING WITH 16mm GYPSUM BOARD ON 13mm RESILIENT CHANNELS. HEIGHT TOP OF FLOOR FINISH TO UNDERSIDE OF STRUCTURE. ENSURE NEW GB IS FLUSH WITH EXISTING ADJACENT FINISHES.
 - 152mm SUSPENDED SYSTEM TRIM; REFER TO SPECIFICATIONS. ELECTRICAL LIGHTING SYSTEM TO BE RECESSED INSIDE SUSPENDED CEILING. COORDINATE WITH ELECTRICAL.
- GENERAL NOTES:**
 A. REINSTATE ALL WALL HUNG ITEMS, LIGHTS SWITCH COVERS, ETC IN PRIOR EXISTING LOCATION AFTER COMPLETION OF PAINT WORK.
 B. CONSTRUCTION PLAN DIMENSIONS ARE FROM CENTER LINE TO CENTER LINE OF ENTIRE WALL ASSEMBLY.

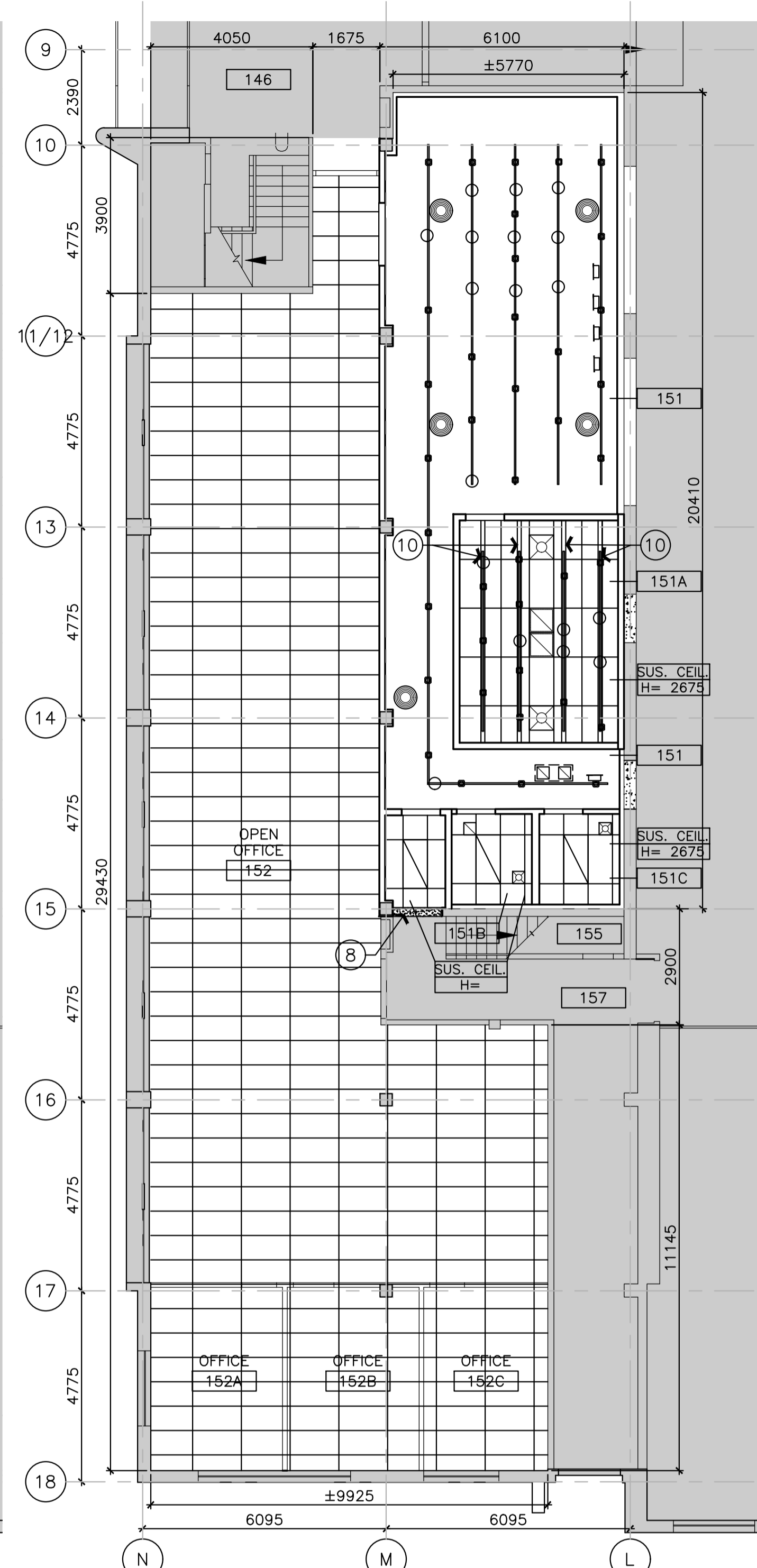
PARTITION ASSEMBLY NOTES:

- FIRE RATED SEALANT MUST BE APPLIED BETWEEN THE GYPSUM BOARD AND ALL ADJACENT SURFACES TO PREVENT SOUND LEAKAGE THROUGH SPACES AND GAPS.
- INSTALL "J" TRIM AT BASE OF WALLS PRIOR TO BASEBOARD INSTALL. CAULK AND SEAL BETWEEN BASE OF WALL AND ADJACENT SURFACES.
- SECURE ALL WALLS SLAB-TO-SLAB, FROM TOP OF STRUCTURAL FLOOR TO UNDERSIDE OF STRUCTURAL FLOOR.
- MINIMIZE DUCTS AND SERVICE PASS-THROUGHS WHERE POSSIBLE. WHERE PASS-THROUGHS ARE REQUIRED, FRAMES OPENINGS WITH STUDS TO WITHIN 25mm OF THE PIPE/ CONDUIT AND THE PIPE OR CONDUIT SECURED TO THE STUD FRAMING AT MINIMUM TWO PLACES. EXTEND THE GYPSUM WALL BOARD TO THE EDGE OF THE PIPE OR CONDUIT.
- P2 WALL ONLY: INSTALL STEEL BARS IN ALL MECHANICAL DUCT OPENINGS. REFER TO MECHANICAL.
- REFER TO DRAWING 6018-A05.
- THE GENERAL CONTRACTOR IS TO CARRY COST TO APPOINT INDEPENDENT THIRD PARTY ACOUSTICAL SPECIALIST FOR COMPLIANCE WITH THE REQUIRED STC FOLLOWING THE PROCEDURES DESCRIBES IN ASTM E2638.
- NOTIFY NRC DEPARTMENT REPRESENTATIVE AFTER ERECTION OF STEEL STUDS, AND INSULATION INSTALL. DO NOT FINISH WALL UNTIL APPROVAL FROM NRC DEPARTMENT REPRESENTATIVE.

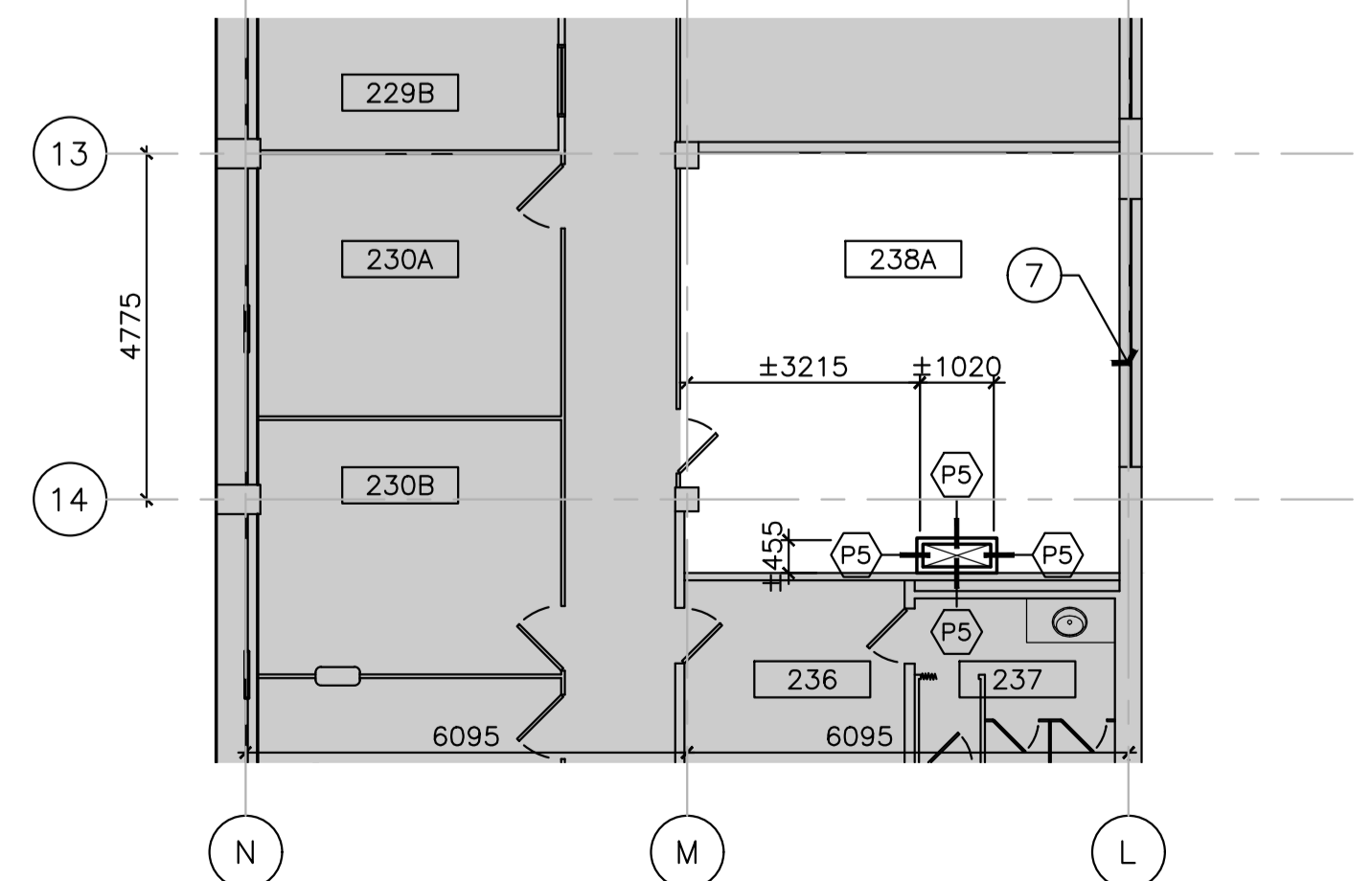
Tag	Description	RCPM #
P1	1 LAYER 16mm TYPE 'X' GYPSUM BOARD 92mm 25 GAUGE STEEL STUDS @610mm SPACING 92mm SOUNDPROOF INSULATION BY ROCKWOOL 2 LAYERS 16mm TYPE 'X' GYPSUM BOARD	RCPM #: S590(610) TL(avg): 54.6 STC RATING 53
P2	2 LAYERS OF 16mm TYPE 'X' GYPSUM BOARD 1 LAYER OF SHEET OR EXPANDED MESH STEEL 92mm 25 GAUGE STEEL STUDS @610mm SPACING 92mm SOUNDPROOF INSULATION BY ROCKWOOL 2 LAYERS OF 16mm TYPE 'X' GYPSUM BOARD	RCPM #: S590(610) TL(avg): 57.6 STC RATING 56
P2A	1 LAYER OF 16mm TYPE 'X' GYPSUM BOARD 92mm 25 GAUGE STEEL CH CHANNEL @610mm SPACING 92mm SOUNDPROOF INSULATION BY ROCKWOOL 2 LAYER OF 16mm TYPE 'X' GYPSUM BOARD	RCPM #: S590(610) TL(avg): 54.6 STC RATING 53
P3	1 LAYER 16mm TYPE 'X' GYPSUM BOARD 92mm 20 GAUGE STEEL STUDS @610mm SPACING 92mm SOUNDPROOF INSULATION BY ROCKWOOL 1 LAYER 16mm TYPE 'X' GYPSUM BOARD	
P3A	1 LAYER 16mm TYPE 'X' GYPSUM BOARD 152mm 20 GAUGE STEEL STUDS @610mm SPACING 152mm SOUNDPROOF INSULATION BY ROCKWOOL 1 LAYER 16mm TYPE 'X' GYPSUM BOARD	
P4	EXISTING 190mm CONCRETE BLOCK WALL 92mm 25 GAUGE STEEL STUDS @610mm SPACING 92mm ACOUSTICAL INSULATION BY ROCKWOOL 1 LAYER 16mm TYPE 'X' GYPSUM BOARD	
P4A	EXISTING 190mm CONCRETE BLOCK WALL 152mm 25 GAUGE STEEL STUDS @610mm SPACING 152mm ACOUSTICAL INSULATION BY ROCKWOOL 1 LAYER 16mm TYPE 'X' GYPSUM BOARD	
P5	2 LAYERS 16mm TYPE 'X' GYPSUM BOARD 64mm STEEL C-H STUDS 64mm SOUNDPROOF INSULATION BY ROCKWOOL 25mm GYPSUM LINER PANEL	2hr FRR SHAFT WALL ULC W452 SYSTEM B



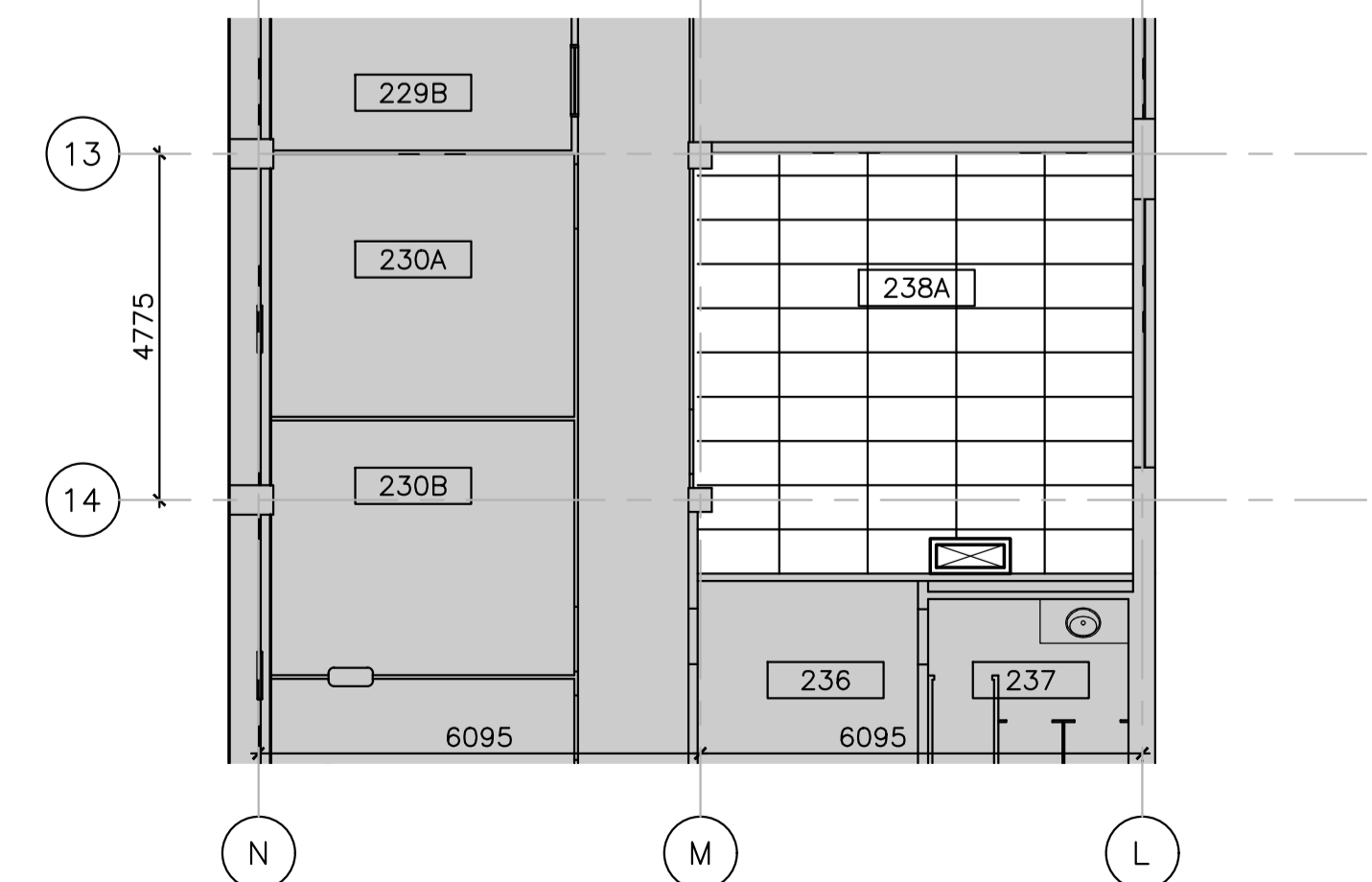
1 GROUND FLOOR - CONSTRUCTION PLAN
A02 SCALE = 1 : 100



3 GROUND FLOOR - REFLECTED CEILING PLAN
A02 SCALE = 1 : 100

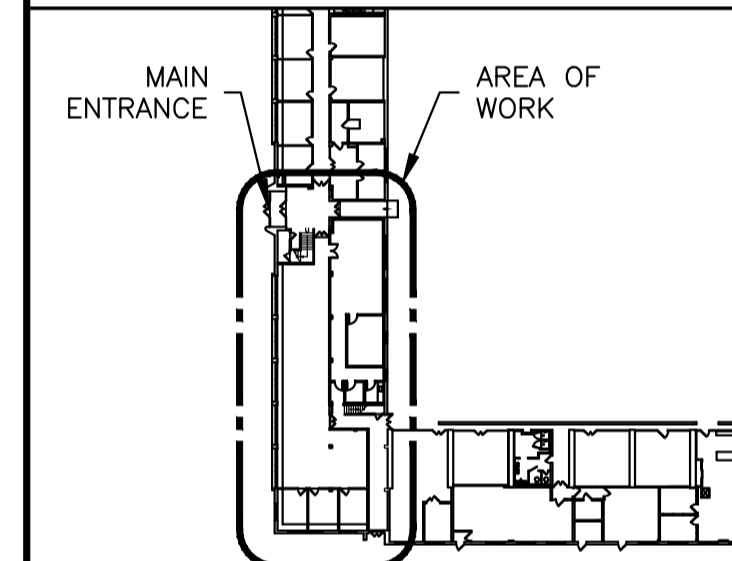


2 SECOND FLOOR - CONSTRUCTION PLAN
A02 SCALE = 1 : 100



4 SECOND FLOOR - REFLECTED CEILING PLAN
A02 SCALE = 1 : 100

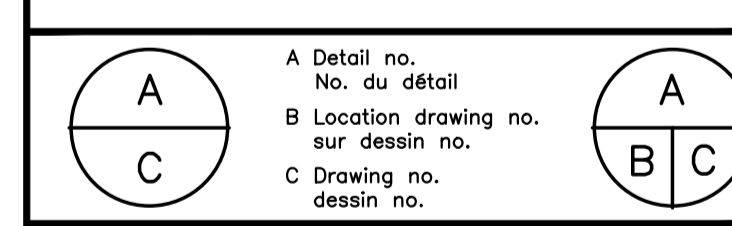
KEY PLAN / PLAN CLÉ



No.	Date	Revision	By: / Par:
7			
6			
5	OCT 2023	ISSUED FOR TENDER	JDG
4	JULY 2023	ISSUED FOR TRANSLATION	JDG
3	JUNE 2023	ISSUED FOR 99% COMMENT AND REVIEW	JDG
2	FEB 2023	ISSUED FOR 66% COMMENT AND REVIEW	JDG
1	DEC 2022	ISSUED FOR 33% COMMENT AND REVIEW	JDG

Date Printed DD MM YYYY / Date imprimée

- Verify all dimensions and site conditions and be responsible for same.
- Vérifier toutes les dimensions et l'état des lieux et en assumer la responsabilité.



project U-61 FRPC RETRO-FIT / projet

UPLANDS CAMPUS

CONSTRUCTION PLAN, REFLECTED CEILING PLAN AND PARTITION ASSEMBLIES

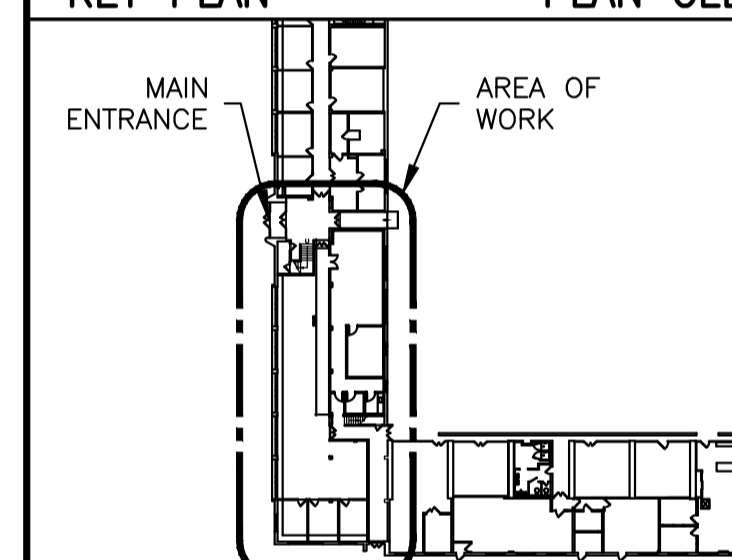
designed	conçu	date	date
JDG		06/2023	
drawn	dessiné	scale	échelle
JDG		AS NOTED	
checked	vérifié	sheet	feuille
CE		A2 of/ de A5	
approved	approuvé	W.O.no.	D.T.no.
FG			

dwg.no. / dessin no. 6018-A02 / fichier CDAO:

NOTES GÉNÉRALES

- L'ENTREPRENEUR DOIT VÉRIFIER TOUTES LES DIMENSIONS ET LES DÉGAGEMENTS SUR LE CHANTIER AVANT D'ENTREPRENDRE LES TRAVAUX DE CONSTRUCTION ET AVISER LE REPRÉSENTANT MINISTÉRIEL DE TOUTE DIVERGENCE OU DE TOUTE OMISSION.
- L'ENTREPRENEUR DOIT VISITER LE CHANTIER ET SE FAMILIARISER PLEINEMENT AVEC LA PORTÉE DES TRAVAUX AVANT LE DÉBUT DU PROJET.
- TOUTS LES CORPS DE MÉTIER DOIVENT COORDONNER LES TRAVAUX SUR LE CHANTIER, AVEC L'APPROBATION DU REPRÉSENTANT MINISTÉRIEL, AFIN D'ÉVITER LES CONFLITS OU LES INTÉRFÉRENCES.
- TOUTS LES ARRÊTS DE SERVICE NÉCESSAIRES DOIVENT ÊTRE COORDONNÉS AVEC LE REPRÉSENTANT MINISTÉRIEL.
- L'INSTALLATION DE TOUTS LES SYSTÈMES DOIT S'EFFECTUER CONFORMÉMENT AUX CODES ET AUX NORMES EN VIGUEUR.
- L'ENTREPRENEUR EST RESPONSABLE DE LA REMISE EN ÉTAT ET DE LA RÉPARATION DE TOUT DOMMAGE CAUSÉ PAR LES TRAVAUX.
- L'ENTREPRENEUR DOIT EMPÊCHER LA POUSSIÈRE ET LES DÉBRIS DE SE PROPAGER AU-DELÀ DE L'AIRES DES TRAVAUX ET NETTOYER TOUTES LES SURFACES UNE FOIS LES TRAVAUX TERMINÉS.

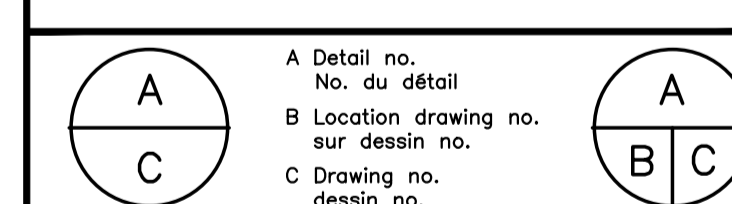
KEY PLAN / PLAN CLÉ



7			
6			
5	OCT 2023	ISSUED FOR TENDER	JDG
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No.	Date	Revision	By: Par.

Date Printed DD MM YYYY / Date imprimée

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- Vérifier toutes les dimensions et l'état des lieux et en assumer la responsabilité.



project U-61 FRPC RETRO-FIT / projet

CAMPUS UPLANDS

drawing FINISHES PLAN AND FURNITURE ACCOMMODATIONS / dessin

designed	conçu	date	06/ 2023	date
drawn	dessiné	scale	AS NOTED	échelle
checked	vérifié	sheet	A3 of/de A5	feuille
approved	approuvé	W.O.no.		D.T.no.

dwg.no. 6018-A03 / dessin no.
 ACAD file: / fichier CDAO:

FINISHES LEGEND
 SHEET A03 ONLY

- AREA OUT OF CONTRACT/ EXISTING TO REMAIN.
- EXTENT OF NEW 305mm x 305mm VINYL COMPOSITE TILE. COMPLETE INSTALLATION AS PER FLOOR MANUFACTURER'S INSTRUCTIONS. REFER TO SPECIFICATIONS.
 TYPE: STANDARD EXCELON EMERALD TEXTURE BY ARMSTRONG FLOORING; OR APPROVED EQUAL.
 COLORS - MAIN: SOFT GREY - 51860
 - ACCENT 1: HEAT WAVE - 57538
 - ACCENT 2: GRAYSON - 57532
- EXTENT OF NEW 305mm x 305mm VINYL COMPOSITE TILE. COMPLETE INSTALLATION AS PER FLOOR MANUFACTURER'S INSTRUCTIONS. REFER TO SPECIFICATIONS.
 TYPE: MATCH EXISTING (ROOM 157)
 COLOR: MATCH EXISTING (ROOM 157)
 NOTE: MATCH EXISTING BASEBOARDS AT THIS LOCATION ONLY.
- EXTENT OF NEW STATIC DISSIPATIVE TILE COMPLETE WITH BUSBAR. COMPLETE INSTALLATION AS PER FLOOR MANUFACTURER'S INSTRUCTIONS; REFER TO SPECIFICATIONS.
 TYPE: STATIC DISSIPATIVE BY ARMSTRONG; OR APPROVED EQUAL.
 PATTERN: ARMOUR GRAY - 5195

FINISHES NOTES
 SHEET A03 ONLY

- PROVIDE NEW PVC TRANSITION STRIP AT ALL FLOOR TRANSITIONS.
- PROVIDE PVC TRANSITION STRIP AT EDGE OF FLOOR TRENCH (FULL LENGTH).
- EXISTING METAL TRENCH COVER WITHIN SCOPE OF WORK TO BE REPAINTED WITH ONE COAT OF WATER-BASED (LATEX) PRIMER AND TWO COATS OF RUST INHIBITING PAINT; COLOR BLACK; REFER TO SPECIFICATIONS.

WALL BASE:
 INSTALL NEW RUBBER WALL BASE NEW 150mm RUBBER BASEBOARDS WITHIN SCOPE OF WORK; REFER TO SPECIFICATION.
 TYPE: JOHNSONITE. TRADITIONAL WALL BASE; OR APPROVED EQUAL.
 COLOR: 48 GREY

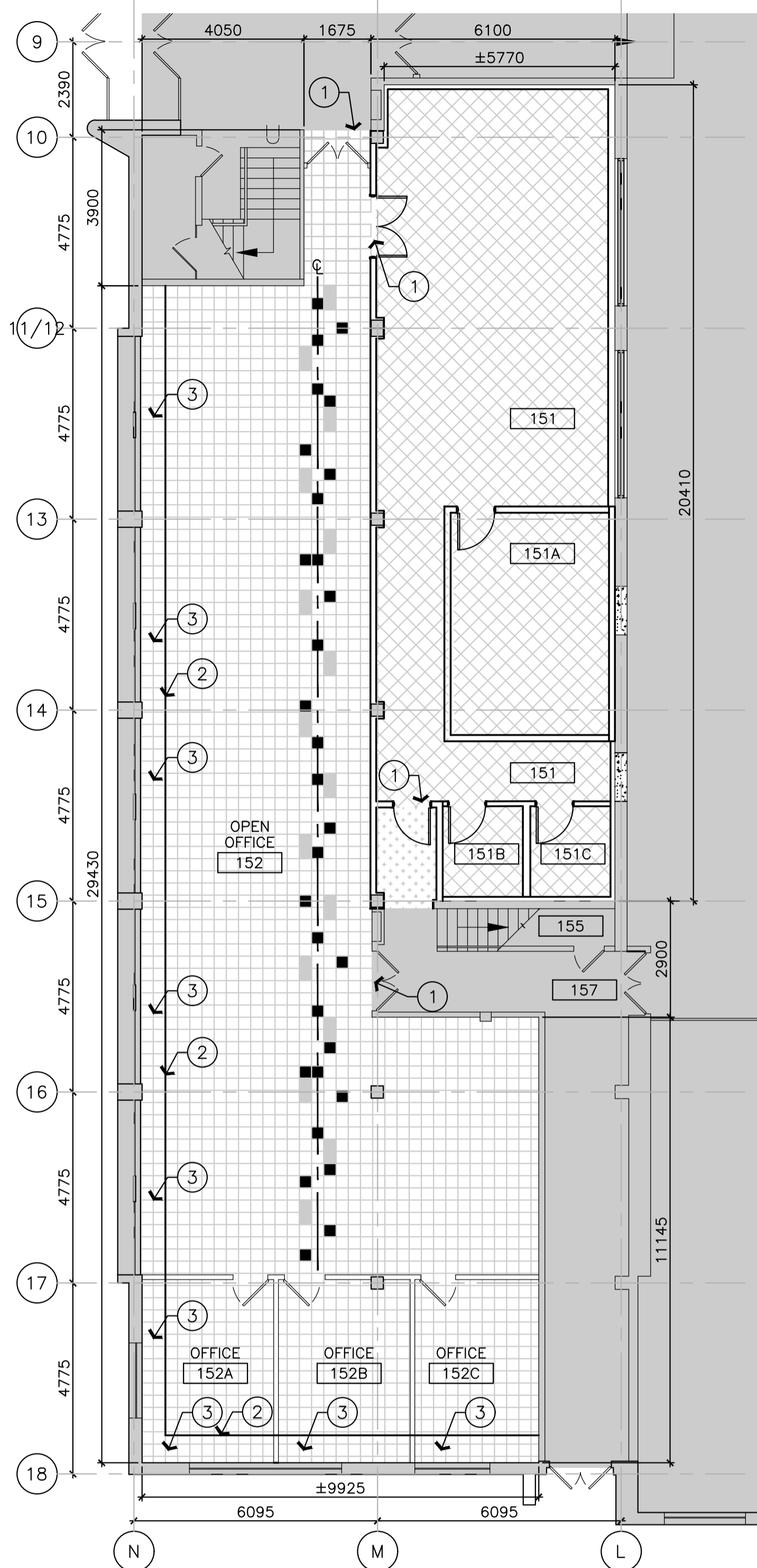
PAINT:

- PNT P1** ALL NEW AND EXISTING WALLS AND COLUMNS WITHIN SCOPE OF WORK; REFER TO SPECIFICATIONS:
 TYPE: SHERWIN WILLIAMS; OR APPROVED EQUAL.
 COLOR: ELDER WHITE - SW 7014
- PNT P2** ALL NEW AND EXISTING DOORS AND DOOR FRAMES WITHIN SCOPE OF WORK; REFER TO SPECIFICATIONS:
 TYPE: SHERWIN WILLIAMS; OR APPROVED EQUAL.
 COLOR: GAUNTLET GREY - SW 7019
- PNT P3** UNDERSIDE OF EXISTING CONCRETE SLAB, CONCRETE BEAMS AND NEW STRUCTURAL STEEL BEAMS; REFER TO STRUCTURAL. (ROOM 151 ONLY); REFER TO SPECIFICATIONS:
 TYPE: SHERWIN WILLIAMS; OR APPROVED EQUAL.
 COLOR: PROMAR 400 FLAT BLACK, B30B04600

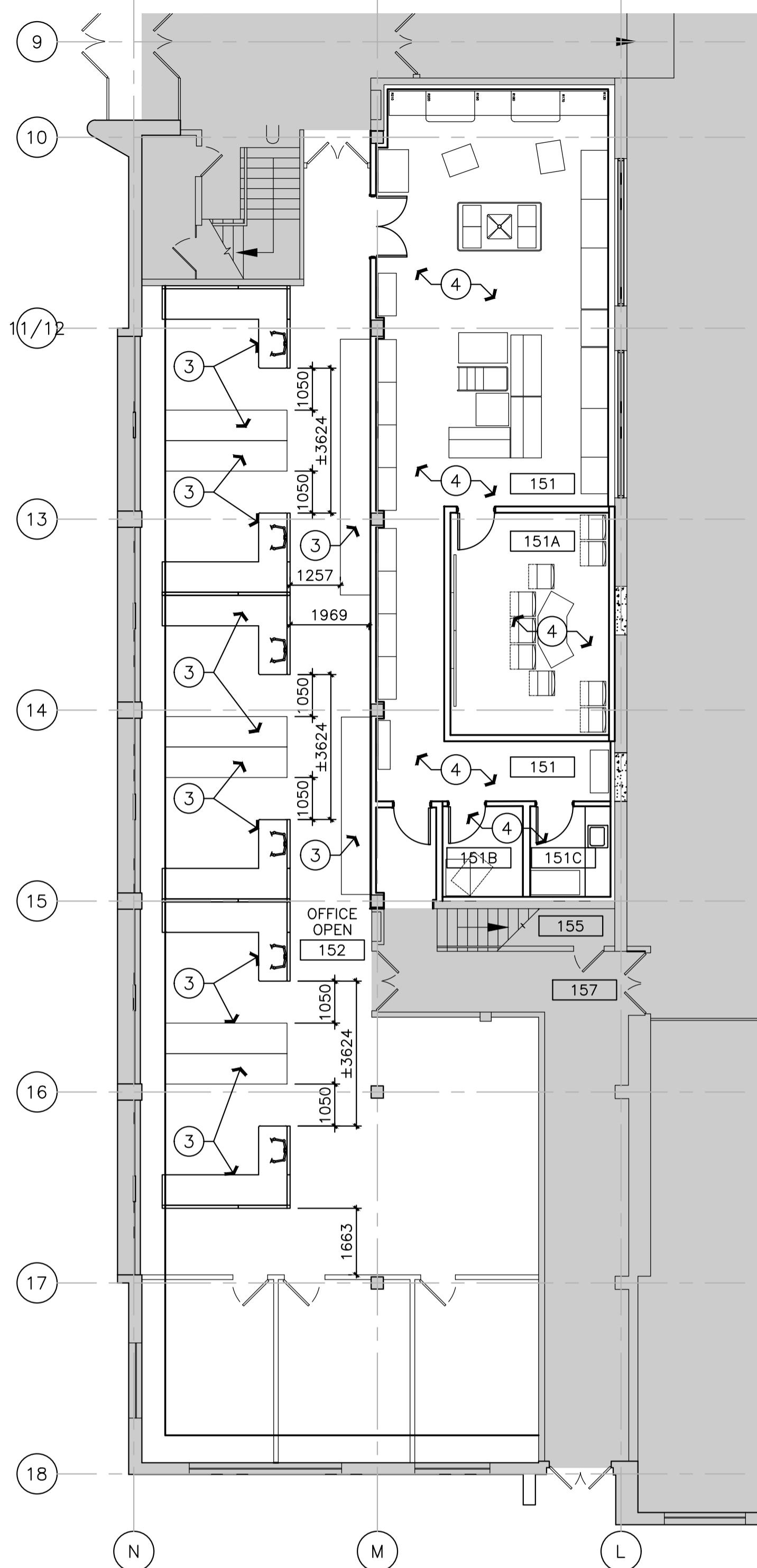
- ALL NEW AND EXISTING WALLS AND DOORS WITHIN SCOPE OF WORK TO BE PAINTED UNLESS OTHERWISE NOTED.
- PATCH, REPAIR, AND MAKE GOOD (CLEAN) ALL EXISTING PLASTER, GYPSUM BOARD (WALLS AND BULKHEAD). TAPE MUD AND PREPARE NEW SURFACES TO RECEIVE ONE COAT OF PRIMER AND TWO COATS OF PAINT FINISH; REFER TO SPECIFICATIONS.
- EXISTING CONVECTOR HOUSING UNITS, GRILLES AND COVERS TO BE REFINISHED. CLEAN DEGREASE, SAND SMOOTH, AND PREPARE TO RECEIVE TWO COATS OF HEAT RESISTANT PAINT TO MATCH WALLS. REMOVE EXISTING RADIATOR COVERS AND SAND LOOSE PAINT. ENSURE NEW PAINT DOES NOT LOCK ANY REMOVABLE PIECES IN PLACE; REFER TO SPECIFICATIONS. DISPOSE OF EXITING SCREWS AND REPLACE WITH STAINLESS STEEL SCREWS; DO NOT PAINT NEW SCREWS HEADS.
- PROTECT ALL NEW AND EXISTING WINDOWS, WINDOW FRAMES AND SILLS FROM NEW PAINT.
- PAINT ALL NEW AND EXISTING SURFACE MOUNTED WALL CONDUITS WITHIN SCOPE OF WORK; COLOR TO MATCH WALL; REFER TO SPECIFICATIONS.

FURNITURE NOTES
 SHEET A03 ONLY

- RELOCATE AND RE-ASSEMBLE EXISTING WORKSTATIONS, WORKBENCHES, AND STORAGE CABINETS TO MATCH ORIGINAL SETUP & LAYOUT.
- ALL EQUIPMENT SHOWN IN ROOM 151, 151A, 151B & 151C IS FOR REFERENCE ONLY.



1 GROUND FLOOR - FINISHES PLAN
 SCALE = 1 : 100



2 GROUND FLOOR - FURNITURE PLAN
 SCALE = 1 : 100

GENERAL NOTES

- CONTRACTOR TO VERIFY ALL DIMENSIONS AND CLEARANCES ON SITE PRIOR TO CONSTRUCTION AND REPORT ANY DISCREPANCIES AND/OR OMISSIONS TO DEPARTMENTAL REPRESENTATIVE.
- CONTRACTOR MUST VISIT THE SITE AND FULLY FAMILIARIZE THEMSELVES WITH THE SCOPE OF THE WORK PRIOR TO PROJECT COMMENCEMENT.
- ALL TRADES TO COORDINATE WORK ON SITE, WITH APPROVAL OF DEPARTMENTAL REPRESENTATIVE TO AVOID ANY CONFLICTS AND/OR INTERFERENCE.
- ANY AND ALL REQUIRED SHUTDOWNS SHALL BE COORDINATED WITH DEPARTMENTAL REPRESENTATIVE.
- INSTALLATION OF ALL SYSTEMS SHALL BE IN ACCORDANCE WITH APPLICABLE CODES AND STANDARDS.
- CONTRACTOR TO BE RESPONSIBLE FOR REINSTATEMENT AND REPAIR OF ANY DAMAGE CAUSED BY WORK.
- CONTRACTOR SHALL PREVENT THE SPREAD OF DUST AND DEBRIS BEYOND AREA OF WORK AND CLEAN ALL SURFACES AT COMPLETION.

DOOR No.	ROOM NAME	DOOR					FRAME		HARDWARE PACKAGE	NOTES	
		WIDTH	HEIGHT	THICKN.	MAT.	TYPE	FINISH	TYPE			FINISH
D01	ROOM 151	1830	2032	45	ACOUSTIC STEEL	C	PNT	F3	PNT	1	STC RATING: 53
D02	ROOM 151	915	2032	45	ACOUSTIC STEEL	A	PNT	F1B	PNT	2	STC RATING: 53; FIRE RATING: 90min.
D03	ROOM 151A	915	2032	70	ACOUSTIC STEEL	D	PNT	F2	PNT	3	STC RATING: 56
D04	ROOM 151B	915	2032	45	HOLLOW METAL	B	PNT	F1A	PNT	4	
D05	ROOM 151C	915	2032	45	HOLLOW METAL	B	PNT	F1A	PNT	4	

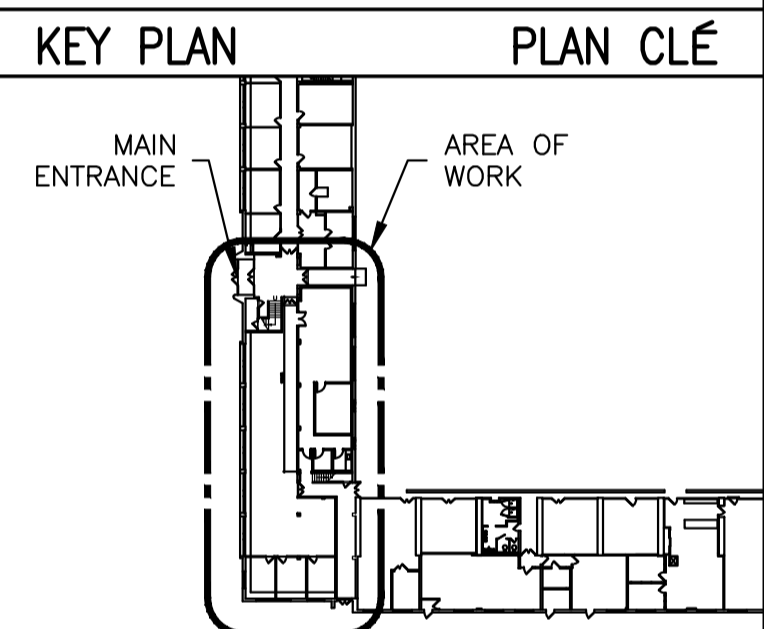
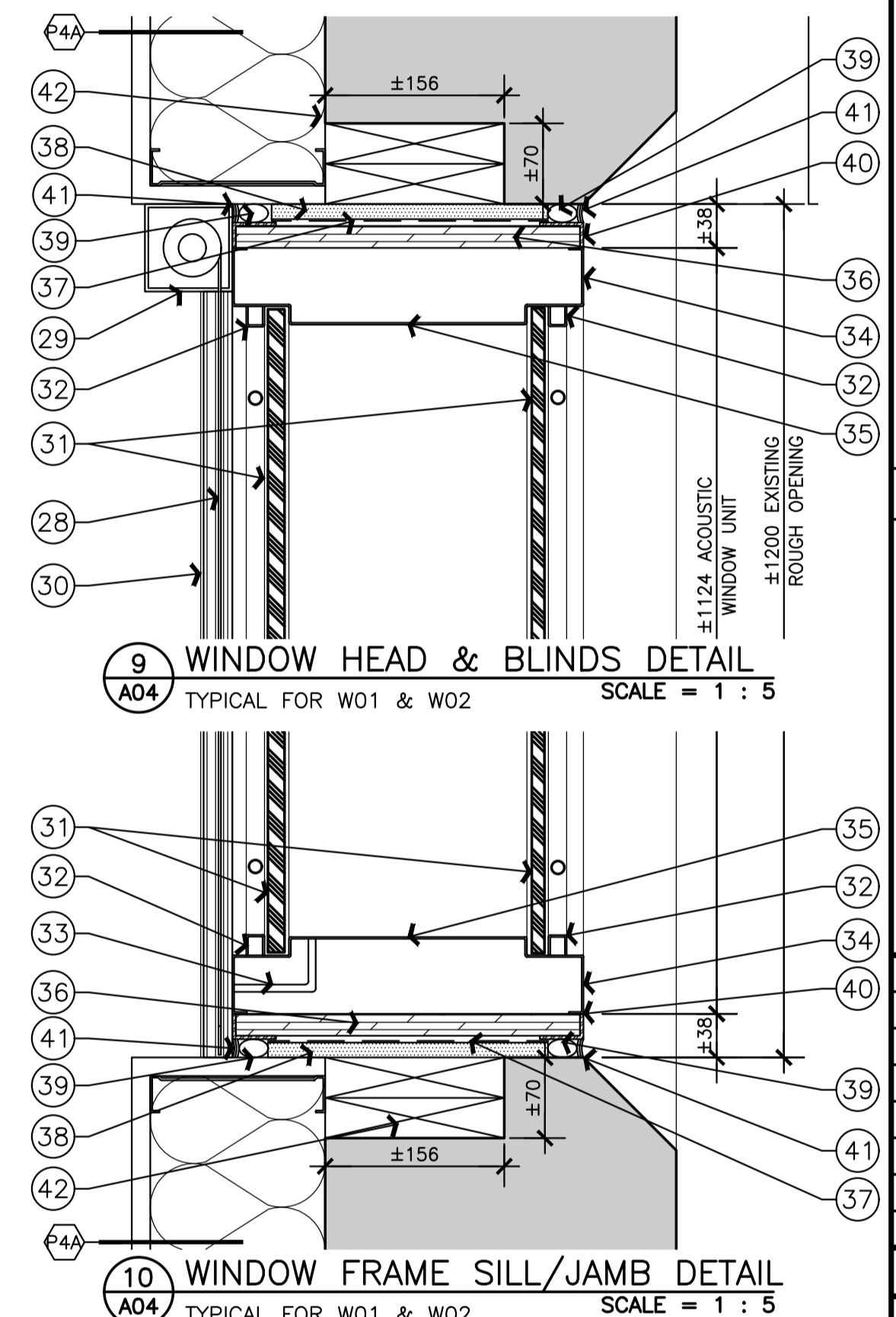
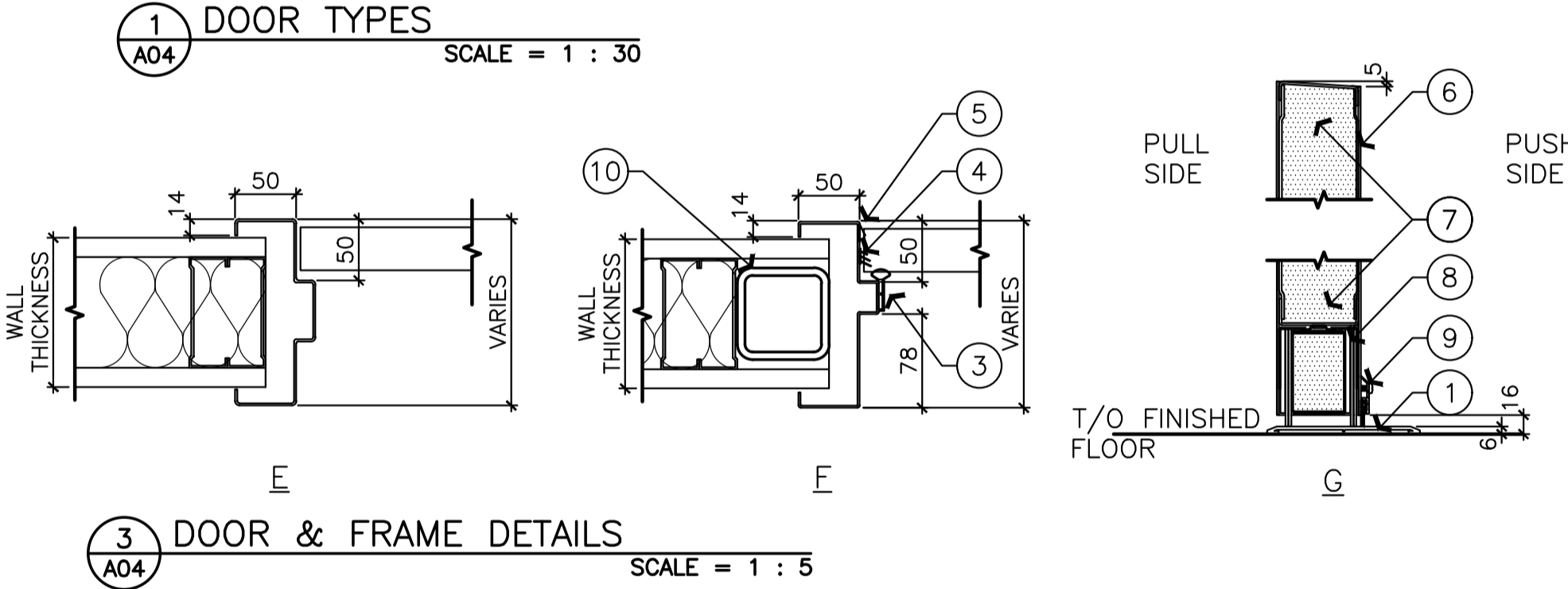
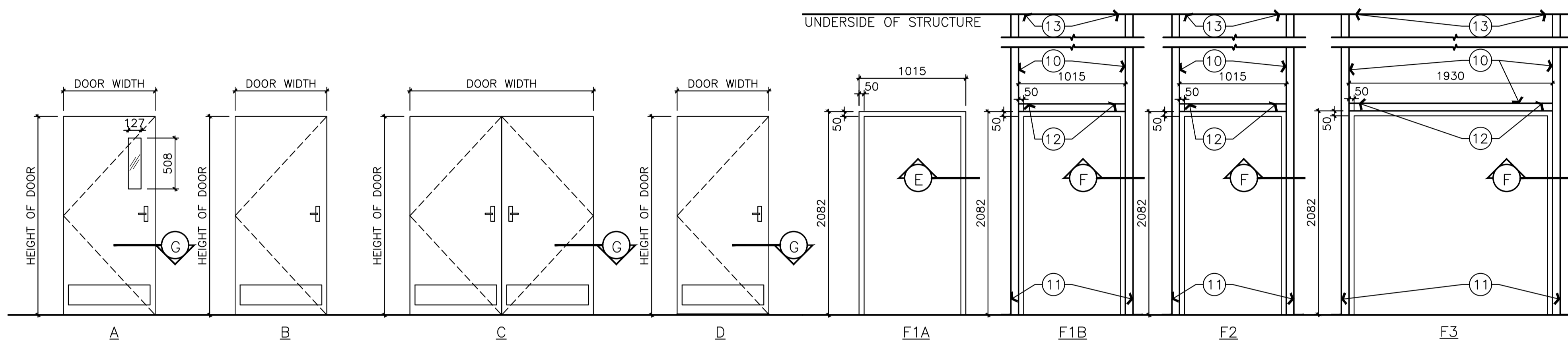
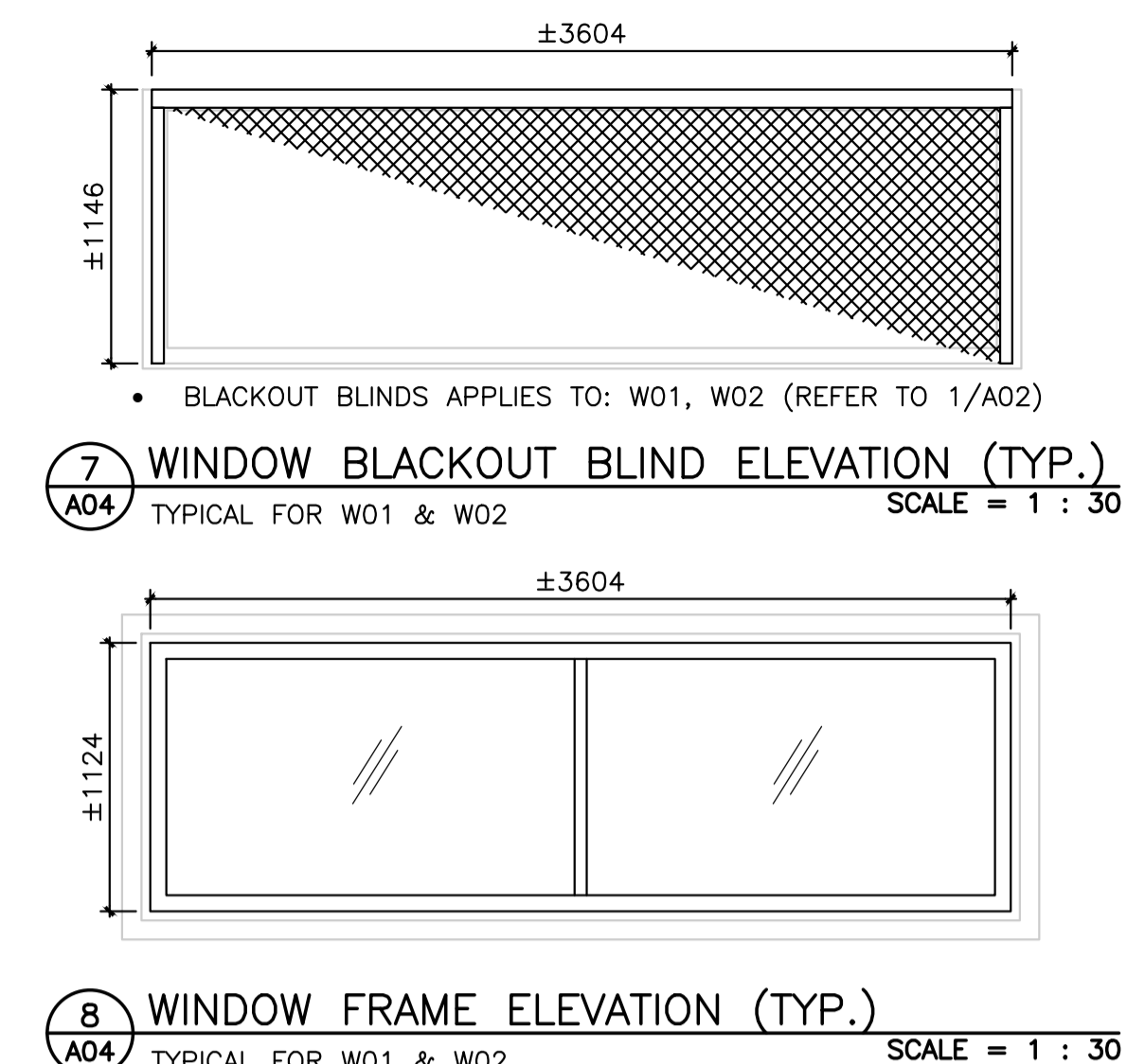
HARDWARE GROUPS:

GROUP 1:	GROUP 2:	GROUP 3:	GROUP 4:
<ul style="list-style-type: none"> 6 HINGES (CAM LIFT TYPE) 1 THRESHOLD 1 STEEL ASTRAGAL 1 ACOUSTIC SEALS (PERIMETER AND BOTTOM) 1 ELECTRIFIED MORTISE LATCH 1 ELECTRIC TRANSFER HINGE 1 DOOR CLOSER (ACTIVE LEAF) 4 KICK PLATES 2 DOOR HOLDERS 1 DOOR STOP (INACTIVE LEAF) TUBE CHANNEL FOR CABLE PASSTHROUGH (INACTIVE LEAF) 	<ul style="list-style-type: none"> 3 HINGES (CAM LIFT TYPE) 1 THRESHOLD 1 ACOUSTIC SEALS (PERIMETER AND BOTTOM) 1 RIM MOUNTED EXIT DEVICE COMPLETE WITH LATCHSET 1 ELECTRIC STRIKE 1 DOOR CLOSER 2 KICK PLATES 1 DOOR STOP 1 DOOR LITE COMPLETE WITH GLAZING STOPS 	<ul style="list-style-type: none"> 3 HINGES (CAM LIFT TYPE) 1 THRESHOLD 1 ACOUSTIC SEALS (PERIMETER AND BOTTOM) 1 ELECTRIFIED MORTISE LATCH 1 DOOR STRIKE 1 DOOR CLOSER 1 DOOR STOP 	<ul style="list-style-type: none"> 3 HINGES 1 STOREROOM LATCHING DEVICE 1 DOOR STRIKE 2 KICK PLATES 1 DOOR HOLDER 1 DOOR STOP

GENERAL NOTES:
DOORS D01, D02, D03, ARE PART OF COMPLETE TESTED AND RATED ASSEMBLY. SAME MANUFACTURER IS TO BE USED FOR THESE DOORS AND FRAMES UNLESS OTHERWISE NOTED; REFER TO SPECIFICATIONS.

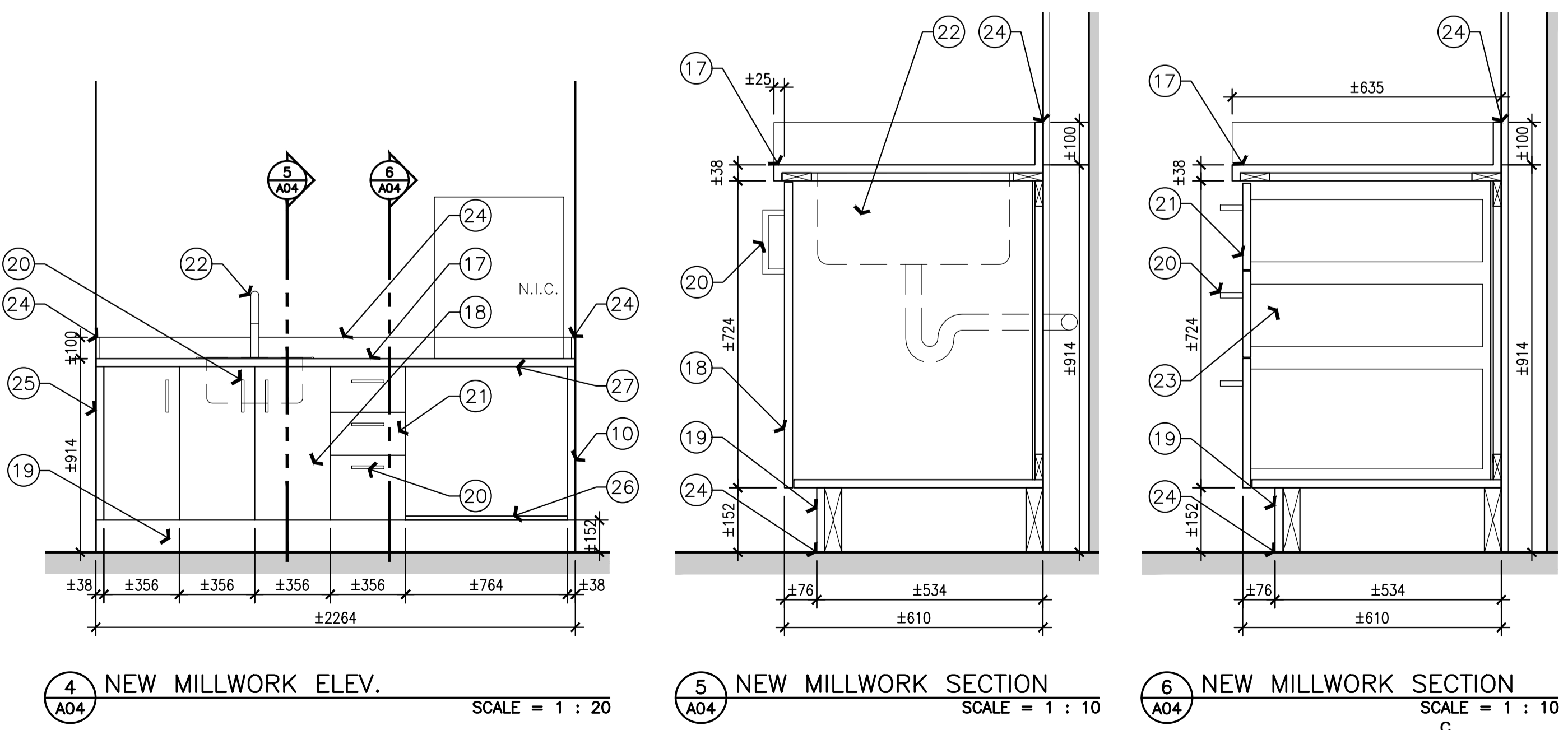
DOOR & FRAME NOTES
SHEET A04 ONLY

- 6mm HIGH X 127mm WIDE ACOUSTIC THRESHOLD TO BE INSTALLED AT TOP LEVEL OF FINISHED FLOOR SURFACE. (DO NOT EMBED IN FLOOR FINISHING).
-
- ACOUSTIC PERIMETER BULB SEAL TO BE FITTED AND FASTENED TO FRAME BY INSTALLER ON SITE.
- ACOUSTIC PERIMETER FIN SEAL TO BE FITTED AND FASTENED TO FRAME BY INSTALLER ON SITE.
- BRONZE ACOUSTIC SEAL.
- ACOUSTIC STEEL DOOR.
- ACOUSTIC CORE.
- MORTISED FIXED DOOR BOTTOM SEAL.
- SURFACE MOUNTED SWEEP SEAL.
- 76mm x 76mm x 6.4mm HSS.
- 6mm "L" SHAPED ANGLE WELDED TO HSS AND BOLTED TO TOP OF EXISTING SLAB WITH 16mm EPOXY ANCHORS.
- 6mm "L" SHAPED ANGLE WELDED TO HSS.
- 6mm TOP PLATE WELDED TO HSS AND BOLTED TO UNDERSIDE OF EXISTING SLAB WITH 16mm EPOXY ANCHORS.



No.	Date	Revision	By: / Par:
7			
6			
5	OCT 2023	ISSUED FOR TENDER	JDG
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1	DEC 2022	ISSUED FOR 33% COMMENT AND REVIEW	JDG

Date Printed DD MM YYYY / Date imprimée



MILLWORK NOTES
SHEET A04 ONLY

- CUSTOM STAINLESS STEEL COUNTERTOP, RETURN TO WALL ONLY; REFER TO SPECIFICATIONS.
- 19mm P-LAM DOORS AS PER SPECIFICATIONS (TYPICAL).
- 19mm P-LAM TOE KICK.
- STAINLESS STEEL D-PULL HARDWARE AS PER SPECIFICATIONS (TYPICAL).
- 19mm P-LAM DRAWER FRONTS AS PER SPECIFICATIONS (TYPICAL).
- STAINLESS STEEL SINK C/W FAUCET; REFER TO MECHANICAL.
- BOX FRAMED DRAWERS AS PER SPECIFICATIONS (TYPICAL).
- APPLY CONTINUOUS SEALANT (AS PER SPECIFICATIONS) ALONG COUNTERTOP/ CASEWORK PERIMETER.
- PROVIDE 38mm WIDE FILLER PANEL (AS PER SPECIFICATIONS).
- CONTINUE 19mm BOTTOM PLAM FULL LENGTH OF CABINET (TO PROVIDE STORAGE SPACE IN CASEWORK VOID).
- PROVIDE ADDITIONAL COUNTERTOP SUPPORTS AS REQUIRED FOR OVERHANG.

WINDOW NOTES
SHEET A04 ONLY

- OPAQUE FABRIC BLINDS (BLACK INSIDE, WHITE OUTSIDE)
- BLACK ALUMINUM ANODIZED VALANCE (INSIDE MOUNT) MOUNTED TO U/S OPENING HEADER.
- BLACK ALUMINUM ANODIZED SIDE CHANNELS MOUNTED TO EXISTING OPENING JAMBS.
- CLEAR ACOUSTIC LAMINATED GLASS (REFER TO SPECIFICATIONS AND GLAZING SCHEDULE)
- REMOVABLE GLAZING BEADS (REFER TO SPECIFICATIONS)
- PURGE PORTS - 4 PLACES (REFER TO SPECIFICATIONS)
- ACOUSTIC STEEL WINDOW FRAME (REFER TO SPECIFICATIONS)
- ACOUSTIC LINING (REFER TO SPECIFICATIONS)
- 19mm PLYWOOD FRAME (FULL PERIMETER) FOR ACOUSTIC WINDOW UNIT.
- 1lb. SOUND VINYL BARRIER
- 13mm SOUND BOARD
- CONTINUOUS 19mm DIA. BACKER ROD TO SUIT C/W FULL AND CONTINUOUS BEAD OF ACOUSTIC SEALANT ALL AROUND WINDOW UNIT (ON BOTH SIDES OF WALL)
- BLACK ANODIZED ALUMINUM BENT ANGLE (CONTINUOUS AROUND FULL WINDOW FRAME UNIT, FITTED W/ MITER JOINTS) ON BOTH SIDES OF WALL.
- CONTINUOUS BEAD OF CLEAR SILICONE SEALANT AROUND FULL PERIMETER OF WINDOW FRAME UNIT (ON BOTH SIDES OF WALL).
- PROVIDE WOOD BLOCKING TO SUIT VOID.

Verify all dimensions and site conditions and be responsible for same / Vérifier toutes les dimensions et l'état des lieux et en assumer la responsabilité

A	B	C
A Detail no. / No. du détail	B Location drawing no. / sur dessin no.	C Drawing no. / dessin no.

project / projet: U-61 FRPC RETRO-FIT

drawing / dessin: UPLANDS CAMPUS

DOOR, DOOR HARDWARE, WINDOW, AND MILLWORK SCHEDULES AND DETAILS

designed / conçu	date	scale / échelle
JDG	06/2023	AS NOTED

checked / vérifié	sheet / feuille	of / de
CE	A4	A5

approved / approuvé	W.O.no.	D.T.no.
FG		

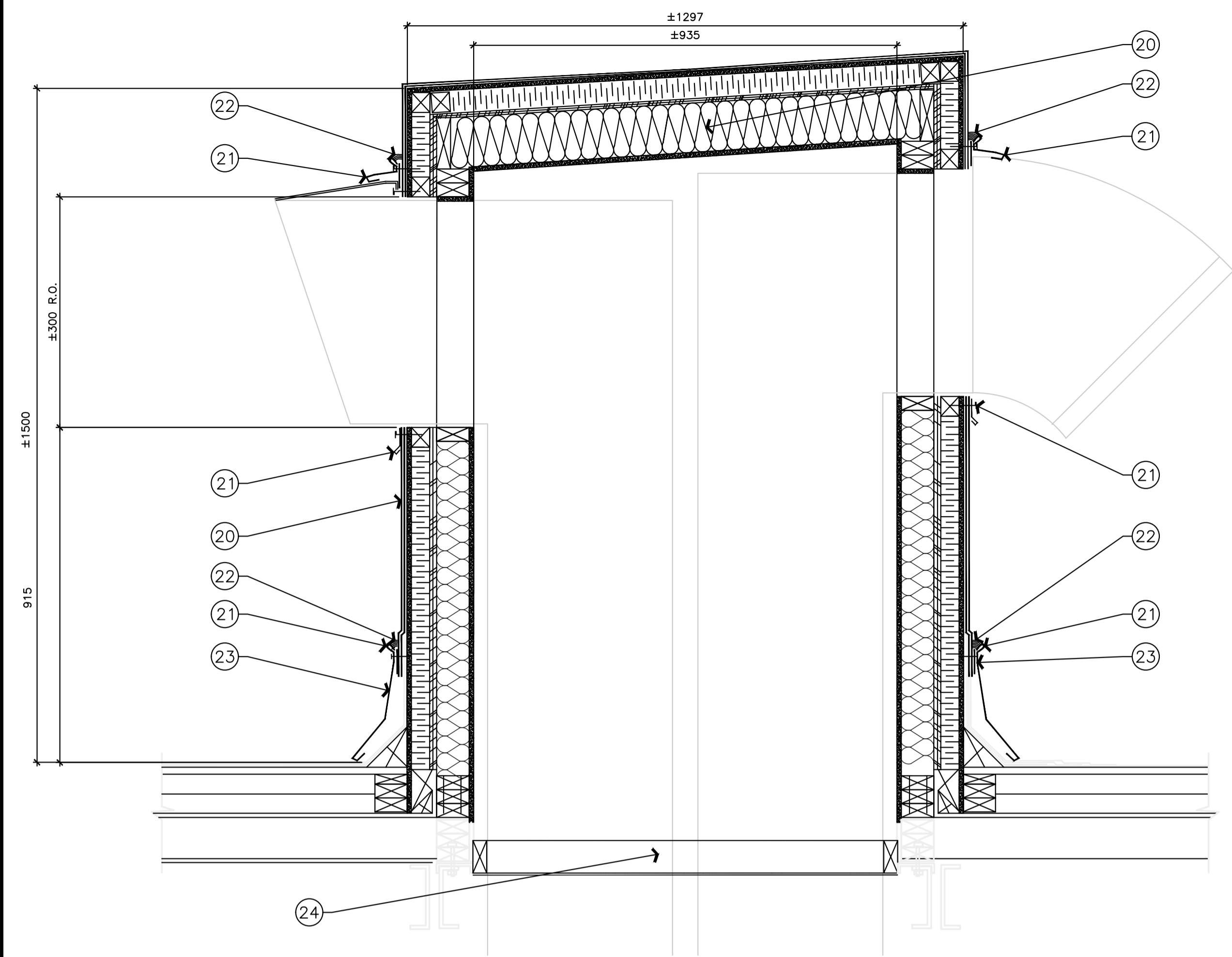
dwg.no. / dessin no.: 6018-A04
ACAD file: / fichier CDAO:

GENERAL NOTES

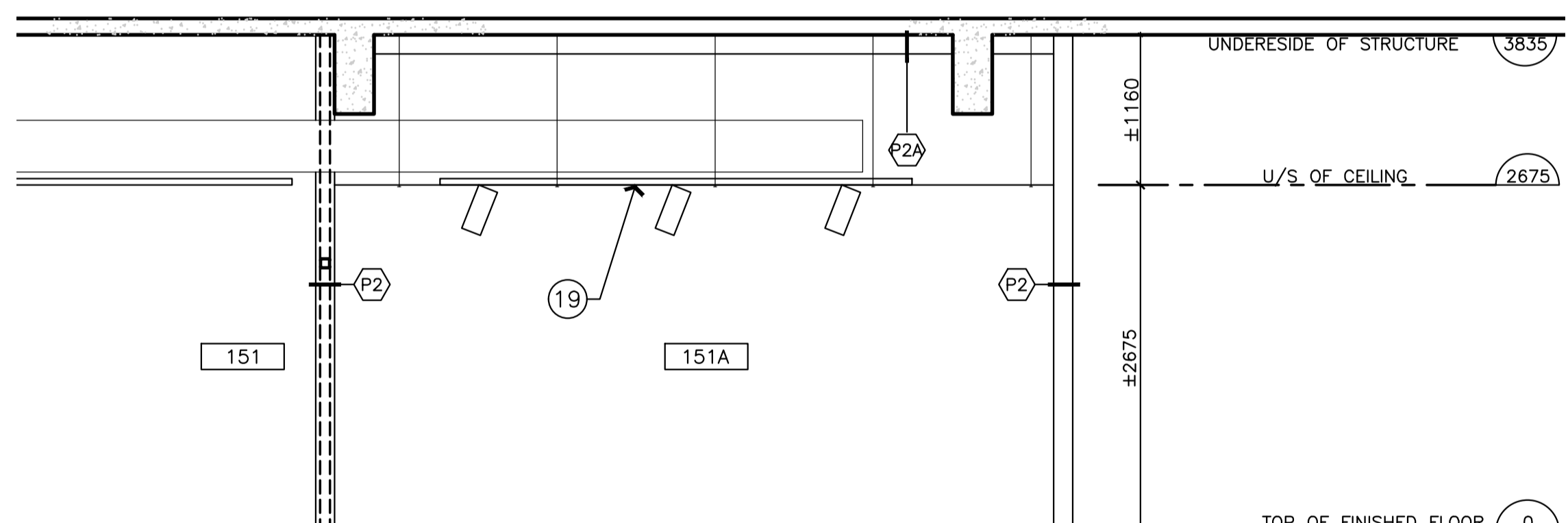
- CONTRACTOR TO VERIFY ALL DIMENSIONS AND CLEARANCES ON SITE PRIOR TO CONSTRUCTION AND REPORT ANY DISCREPANCIES AND/OR OMISSIONS TO DEPARTMENTAL REPRESENTATIVE.
- CONTRACTOR MUST VISIT THE SITE AND FULLY FAMILIARIZE THEMSELVES WITH THE SCOPE OF THE WORK PRIOR TO PROJECT COMMENCEMENT.
- ALL TRADES TO COORDINATE WORK ON SITE, WITH APPROVAL OF DEPARTMENTAL REPRESENTATIVE TO AVOID ANY CONFLICTS AND/OR INTERFERENCE.
- ANY AND ALL REQUIRED SHUTDOWNS SHALL BE COORDINATED WITH DEPARTMENTAL REPRESENTATIVE.
- INSTALLATION OF ALL SYSTEMS SHALL BE IN ACCORDANCE WITH APPLICABLE CODES AND STANDARDS.
- CONTRACTOR TO BE RESPONSIBLE FOR REINSTATEMENT AND REPAIR OF ANY DAMAGE CAUSED BY WORK.
- CONTRACTOR SHALL PREVENT THE SPREAD OF DUST AND DEBRIS BEYOND AREA OF WORK AND CLEAN ALL SURFACES AT COMPLETION.

CONSTRUCTION NOTES
SHEET A05 ONLY

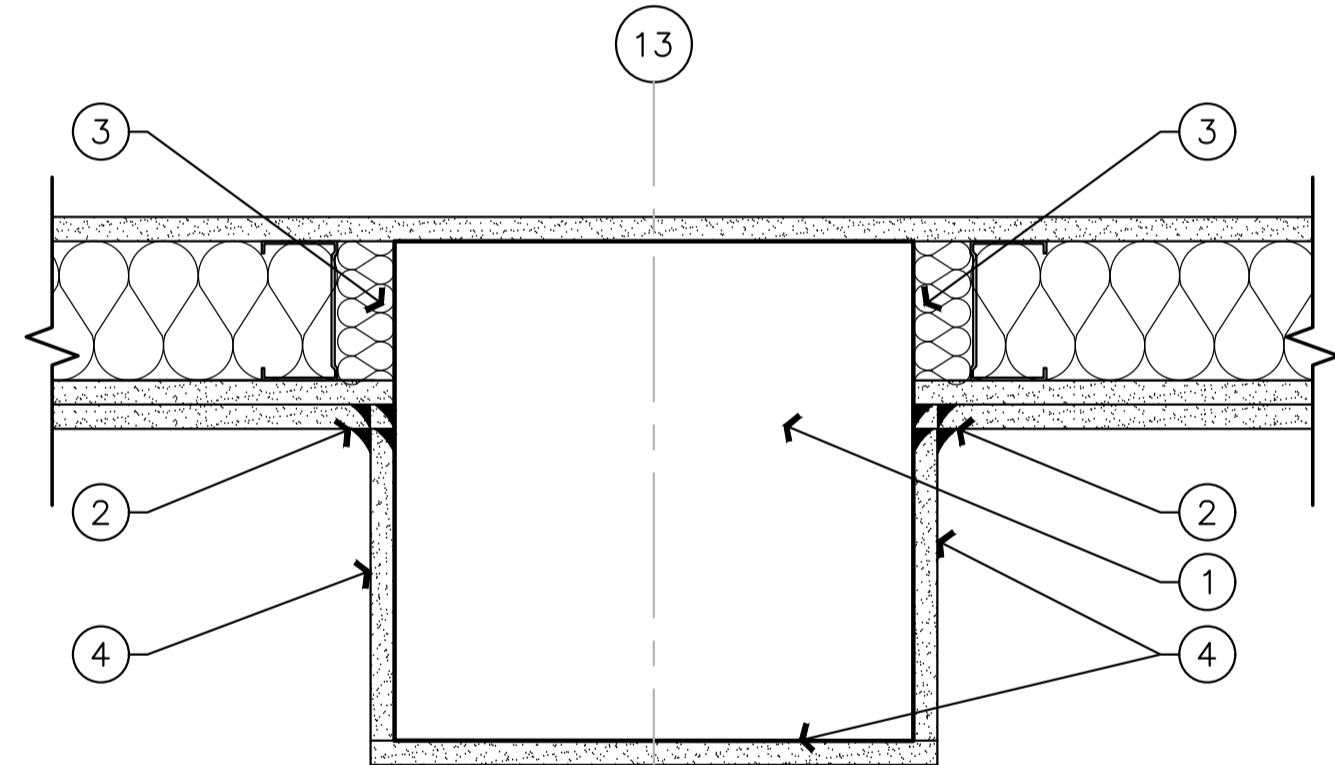
- EXISTING CONCRETE COLUMN TO REMAIN.
- APPLY CONTINUOUS FIRE SEALANT BEAD UNIFORMLY AND SEAL JOINT BETWEEN GYPSUM BOARD AND ADJACENT MATERIAL. ENSURE FULL AND CONTINUOUS CONTACT AND SEAL BETWEEN SEALANT BEAD AND SURFACES. APPLY FIRE SEALANT BEAD TO BOTH LAYERS OF GYPSUM BOARD, ALL AROUND PERIMETER AND GYPSUM BOARD LAYERS ON EACH SIDE OF STUD.
- PROVIDE INSULATION TO VOID BETWEEN STUD AND CONCRETE FACE.
- PROVIDE NEW 16mm TYPE "X" GYPSUM BOARD AND FULLY ADHERE TO ALL SIDES OF EXISTING CONCRETE COLUMN. EXTEND NEW GYPSUM BOARD TO UNDERSIDE OF EXISTING SLAB ABOVE.
- APPLY CONTINUOUS FIRE SEALANT BEAD UNIFORMLY AND SEAL JOINTS BETWEEN GYPSUM BOARD AND ADJACENT MATERIAL. ENSURE FULL AND CONTINUOUS CONTACT AND SEAL BETWEEN SEALANT BEAD AND SURFACES. APPLY FIRE RATED SEALANT BEAD TO ALL LAYERS ON EACH SIDE OF METAL STUD.
- PLUG ENDS OF CONDUIT WITH FIRE RATED SEALANT AT COMPLETION OF ALL WIRING. PROVIDE 38mm DEEP INSULATION BACKUP.
- PROVIDE CONTINUOUS JOINT FILLER AND TAPE AT JOINT BETWEEN GYPSUMBOARD AND PLYWOOD.
- METAL CONDUIT; REFER TO ELECTRICAL.
- 16mm PLYWOOD COLLAR.
- AT CORRIDOR EXTEND CONDUIT SLEEVES AS SHOWN.
- SUPPLY OR RETURN AIR DUCT; REFER TO MECHANICAL.
- PROVIDE CONTINUOUS FIRE RATED SEALANT AROUND PERIMETER OF GYPSUM BOARD COLLAR; TYPICAL TO BOTH SIDES OF WALL.
- 150mm WIDE, 16mm GYPSUM BOARD COLLAR WITH FIRE RATED SEALANT ALONG DUCT AND AT EDGE OF COLLAR; TYPICAL TO BOTH SIDES OF WALL.
- PROVIDE 16mm GYPSUM BOARD BETWEEN DUCT AND CONCRETE SLAB ABOVE. EXTEND TO WITHIN 9mm AT SIDES OF DUCT.
- PROVIDE TWO CONTINUOUS 12mm DIAMETER ROWS OF FIRE RATED SEALANT BETWEEN DUCT AND GYPSUM BOARD AND BETWEEN GYPSUM BOARD AND SLAB ABOVE. COMPRESS ROWS OF SEALANT AND MAKE TIGHT TO SLAB AND DUCT. RETURN ROWS OF SEALANT AT EDGES TO FORM A CLOSED LOOP BETWEEN FRONT ROWS NEAR CORRIDOR AND ROWS OF SEALANT BEHIND.
- PROVIDE CONTINUOUS FIRE RATED SEALANT AT EDGE AND SEAL BETWEEN TOP OF DUCT AND UNDERSIDE OF CONCRETE SLAB. APPLY SEALANT IN A LIBERAL AND EXCESSIVE MANNER.
- EXTEND DUCT BEYOND STUD FACE 55mm.
-
- ELECTRICAL TRACK LIGHTING SYSTEM FOR REFERENCE ONLY; REFER TO ELECTRICAL.
- TYPICAL PENTHOUSE WALL ASSEMBLY:**
- SINGLE PLY MODIFIED BITUMINOUS MEMBRANE CAP SHEET.
- SINGLE PLY MODIFIED BITUMINOUS MEMBRANE BASE SHEET.
- 6mm ASPHALT BOARD.
- 38mm RIGID INSULATION C/W BLOCKING.
- 19mm PLYWOOD G1S
- 38X140 PT ROOF JOISTS @ 400mm O.C.
- FILL STUD CAVITY WITH BATT INSULATION.
- 6mil POLY VAPOUR BARRIER
- 12mm CEMENT BOARD
- TYPICAL FLASHING:**
- 0.55mm PRE-PAINTED GALVANIZED METAL FLASHING.
- 2 PLY MODIFIED BITUMINOUS MEMBRANE
- CONTINUOUS BEAD OF SEALANT.
- CONTINUOUS STARTER STRIP, 100mm LAP.
- FRAME IN BOTTOM OF MECHANICAL OPENING WITH FRAMING AND PREFINISHED SHEET METAL (WHITE); REFER TO STRUCTURAL.



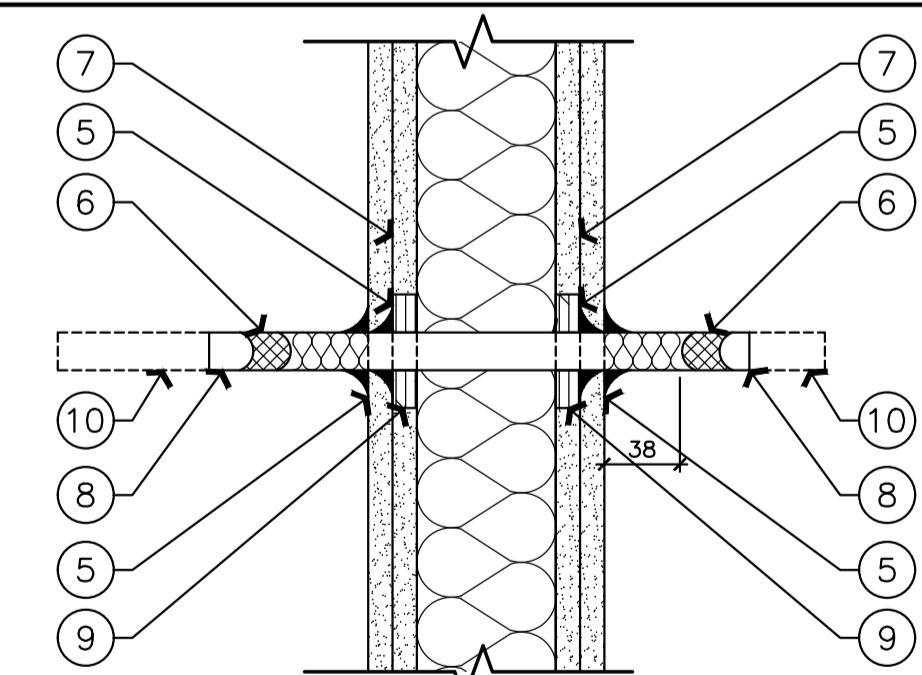
1 SECTION DETAIL AT ROOF MECHANICAL ENCLOSURE
SCALE = 1 : 10



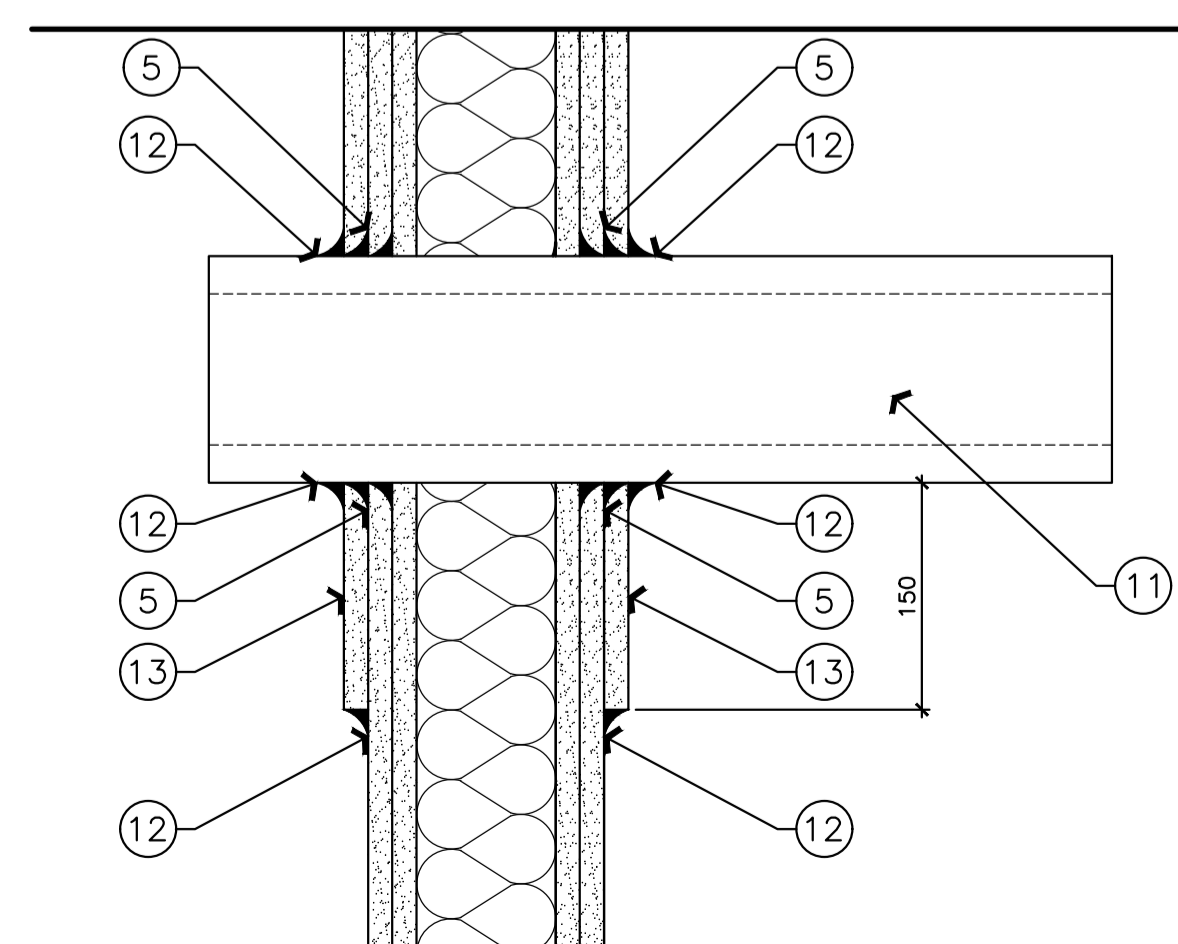
2 SECTION - ROOM 151 & 151A
SCALE = 1 : 40



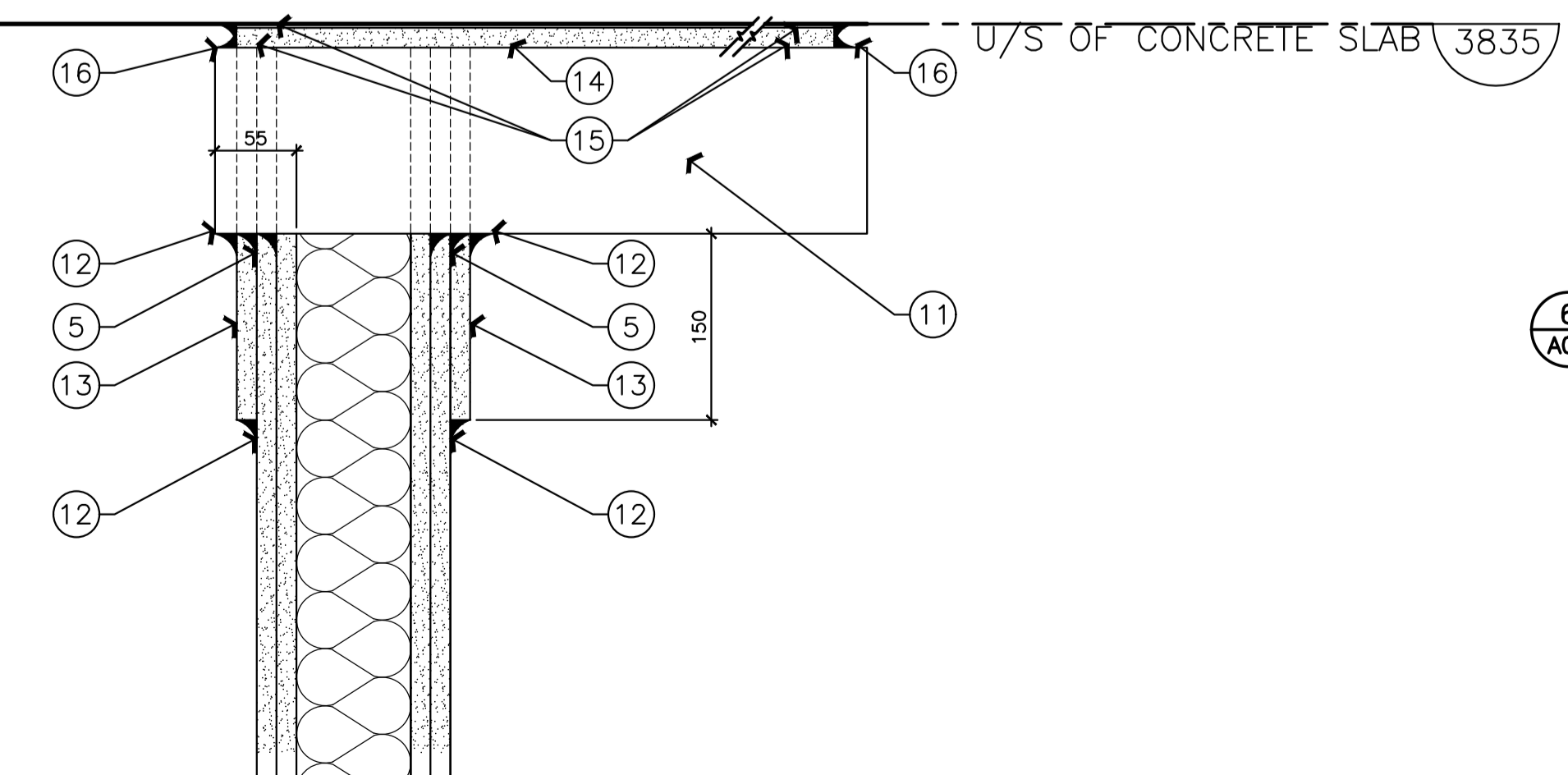
3 TYPICAL PLAN DETAIL AT CONCRETE COLUMN
SCALE = 1 : 5



6 TYPICAL SECTION DETAIL, CONDUIT PENETRATION AT WALL HEAD
SCALE = 1 : 5

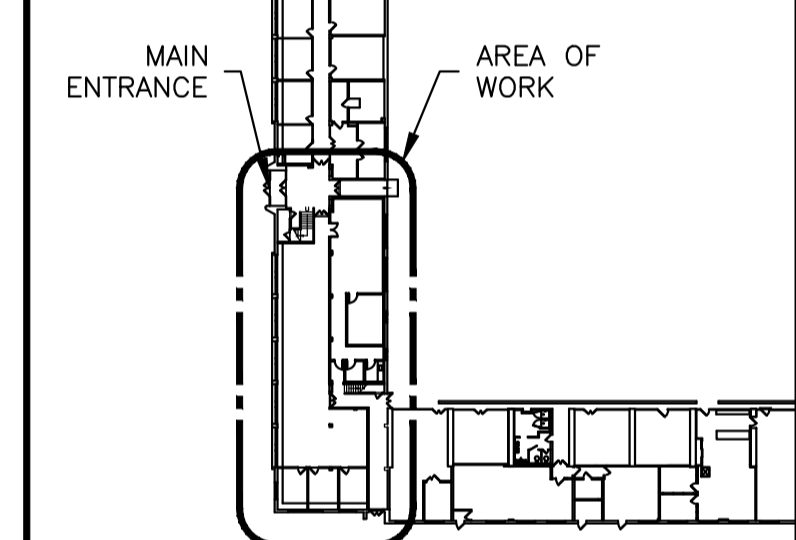


4 TYPICAL SECTION DETAIL AT DUCT PENETRATION
SCALE = 1 : 5



5 TYPICAL SECTION DETAIL AT DUCT PENETRATION
SCALE = 1 : 5

KEY PLAN PLAN CLÉ



No.	Date	Revision	By:
7			
6			
5	OCT 2023	ISSUED FOR TENDER	JDG
4	JULY 2023	ISSUED FOR TRANSLATION	JDG
3	JUNE 2023	ISSUED FOR 99% COMMENT AND REVIEW	JDG
2	FEB 2023	ISSUED FOR 66% COMMENT AND REVIEW	JDG
1	DEC 2022	ISSUED FOR 33% COMMENT AND REVIEW	JDG

Date Printed DD MM YYYY Date imprimée

- Verify all dimensions and site conditions and be responsible for same
- Vérifier toutes les dimensions et l'état des lieux et en assumer la responsabilité

A	A Detail no. / No. du détail	A
B	B Location drawing no. / sur dessin no.	B
C	C Drawing no. / dessin no.	C

project U-61 FRPC RETRO-FIT projet

UPLANDS CAMPUS

drawing CONSTRUCTION SECTIONS AND DETAILS dessin

designed	conçu	date	date
JDG		06/2023	
drawn	dessiné	scale	échelle
JDG		AS NOTED	
checked	vérifié	sheet	feuille
CE		A5 of/de	A5
approved	approuvé	W.O.no.	D.T.no.
FG			

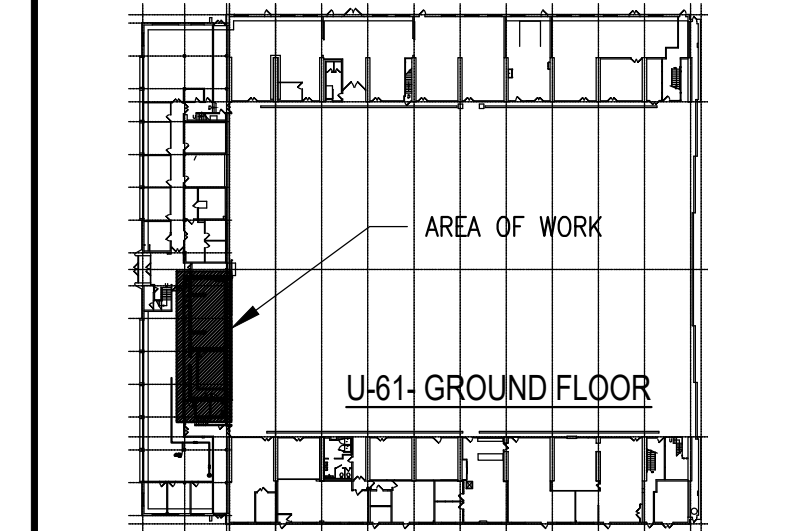
dwg.no. 6018-A05 dessin no. fichier CDAO:



GENERAL NOTES

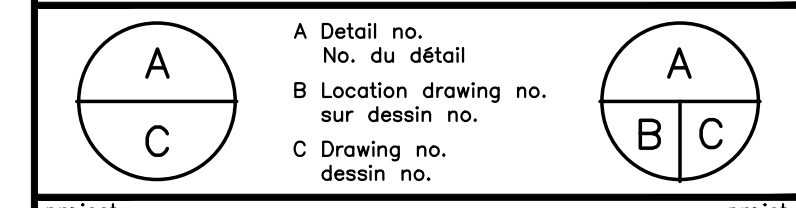
- CONTRACTOR TO VERIFY ALL DIMENSIONS AND CLEARANCES ON SITE PRIOR TO CONSTRUCTION AND REPORT ANY DISCREPANCIES AND/OR OMISSIONS TO DEPARTMENTAL REPRESENTATIVE.
- CONTRACTOR MUST VISIT THE SITE AND FULLY FAMILIARIZE THEMSELVES WITH THE SCOPE OF THE WORK PRIOR TO PROJECT COMMENCEMENT.
- ALL TRADES TO COORDINATE WORK ON SITE, WITH APPROVAL OF DEPARTMENTAL REPRESENTATIVE TO AVOID ANY CONFLICTS AND/OR INTERFERENCE.
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- INSTALLATION OF ALL SYSTEMS SHALL BE IN ACCORDANCE WITH APPLICABLE CODES AND STANDARDS.
- CONTRACTOR TO BE RESPONSIBLE FOR REINSTATEMENT AND REPAIR OF ANY DAMAGE CAUSED BY WORK.
- CONTRACTOR SHALL PREVENT THE SPREAD OF DUST AND DEBRIS BEYOND AREA OF WORK AND CLEAN ALL SURFACES AT COMPLETION.

KEY PLAN PLAN CLÉ



No.	Date	Revision	By:
2	OCT. 2023	ISSUED FOR TENDER	JWG
1	6 FEB '23	ISSUED FOR 60% REVIEW	JWG
0	16 DEC '22	ISSUED FOR 33% CONCEPT REVIEW	JWG

- Verify all dimensions and site conditions and be responsible for same.
- Vérifier toutes les dimensions et l'état des lieux et en assumer la responsabilité.

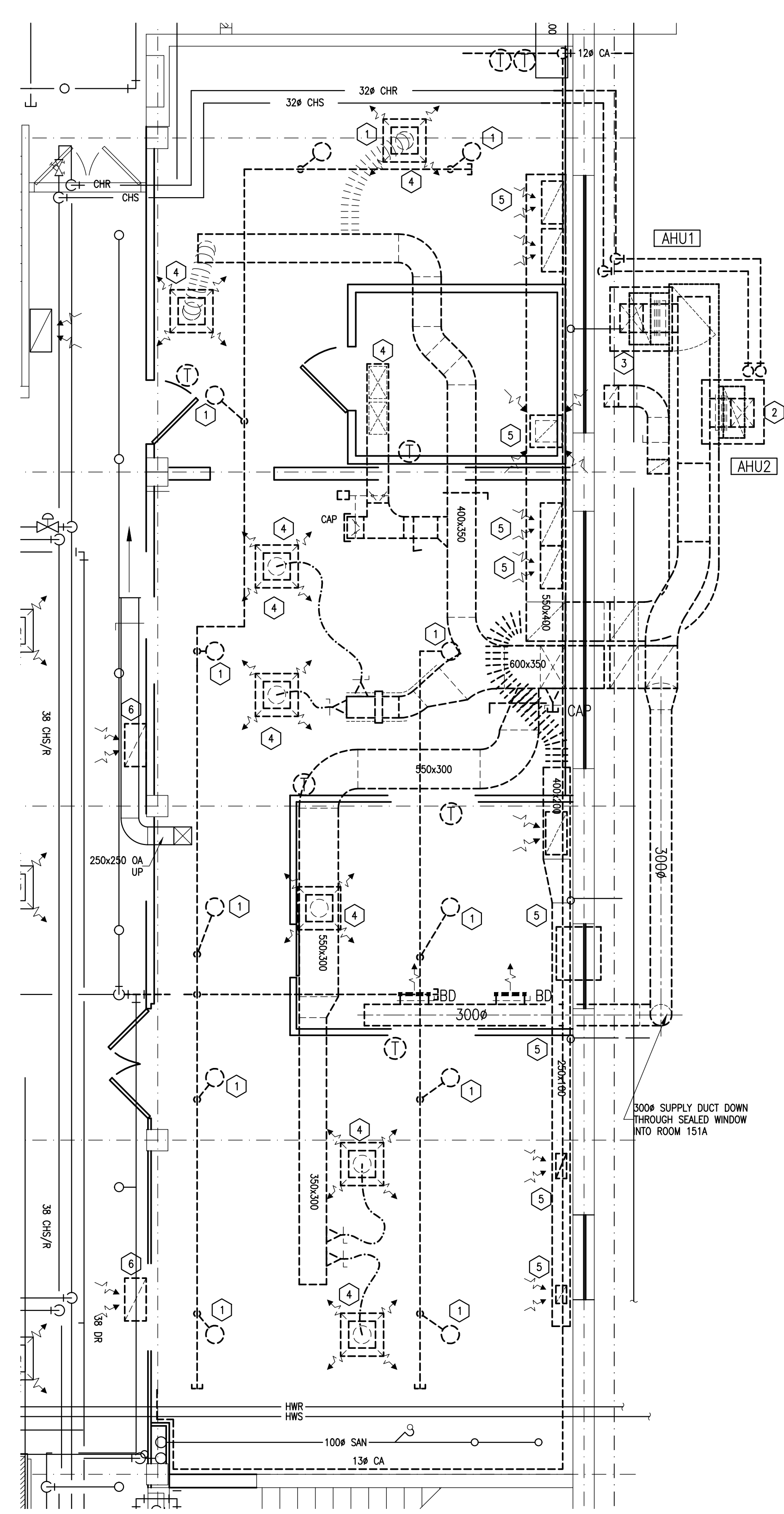


project: **FRPC RETRO-FIT**

MONTREAL ROAD CAMPUS

GROUND FLOOR MECHANICAL NEW WORK AND DEMOLITION

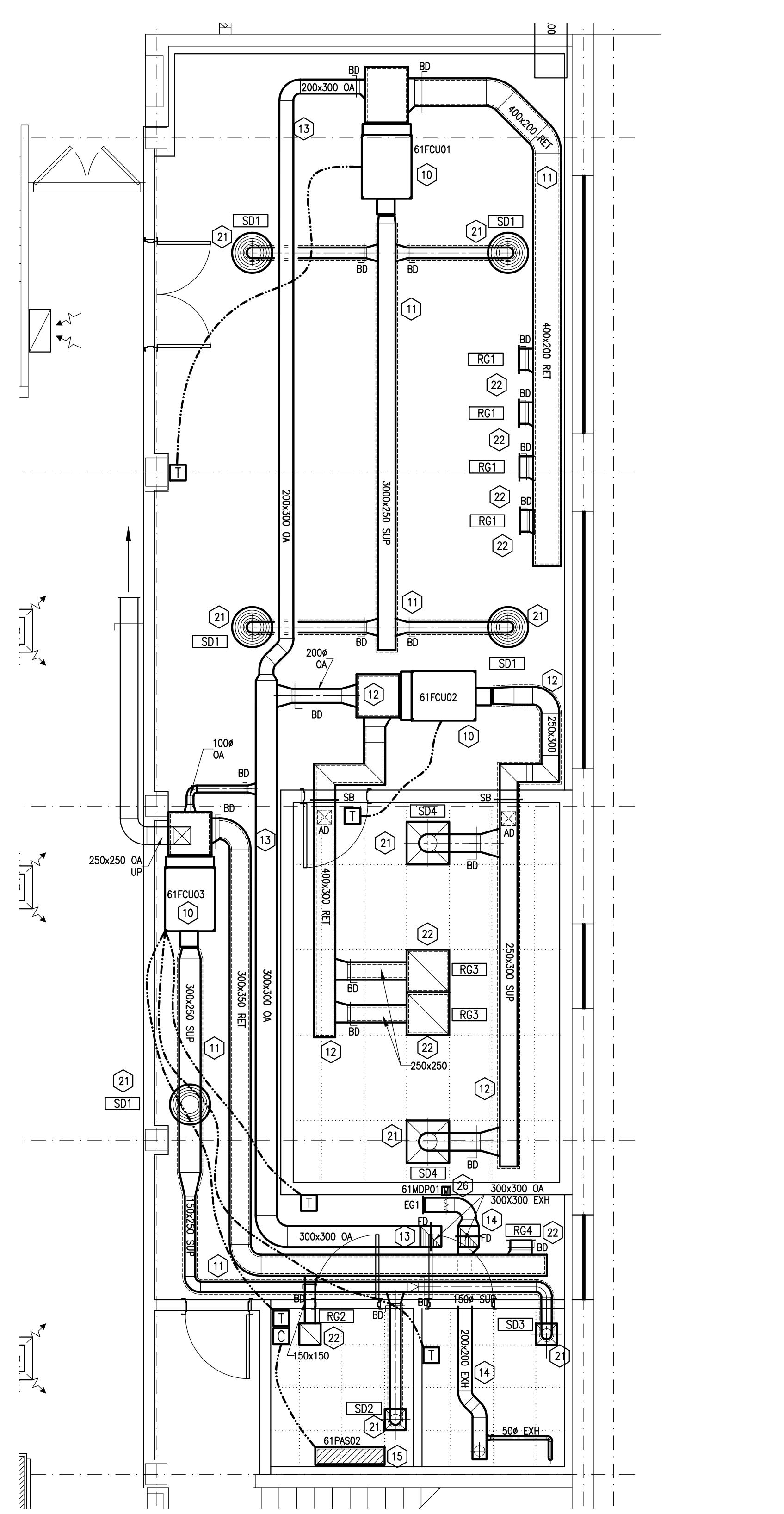
designed	conçu	date	date
JWG		OCT. 2023	
drawn	dessiné	scale	échelle
SG		AS INDICATED	
checked	vérifié	sheet	feuille
IAF		M1 of/de M4	
approved	approuvé	W.O.no.	D.T.no.
FG			
dwg.no.	dessin no.		
6018-M01			



1
M01
U-61 - GROUND FLOOR DEMOLITION
 SCALE: 1:50

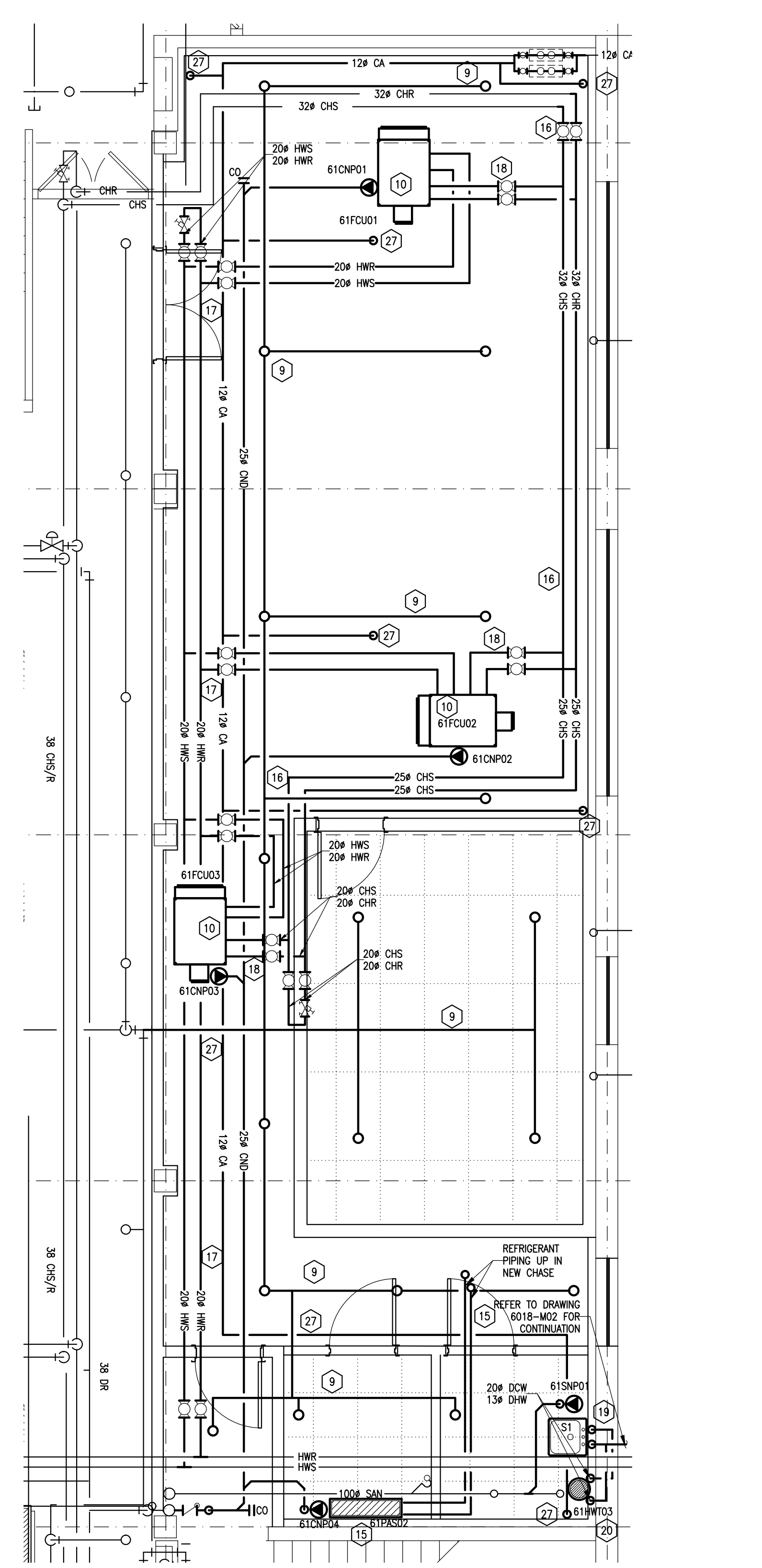
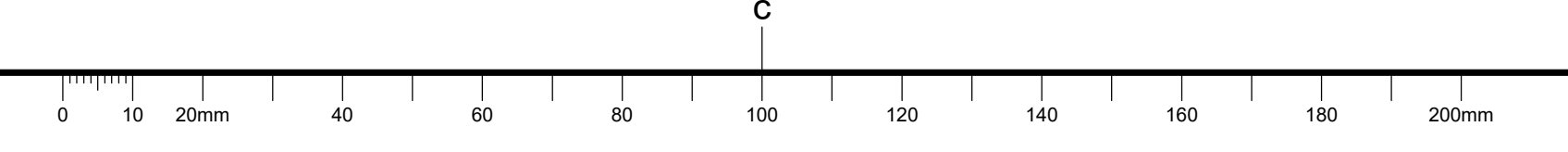
MECHANICAL DRAWING NOTES: (X)

- CONTRACTOR TO REMOVE AND RETAIN EXISTING SPRINKLERS AND REMOVE EXISTING SPRINKLER PIPING AS INDICATED. CONTRACTOR TO REUSE SPRINKLERS AS SHOWN ON NEW WORK PLAN.
- CONTRACTOR TO ISOLATE, DRAIN AND REMOVE EXISTING CHILLED WATER AIR HANDLING UNIT, ASSOCIATED CHILLED WATER SUPPLY AND RETURN PIPING, CONDENSATE PIPING, SUPPLY DUCTWORK, RETURN AIR DUCTWORK AND ASSOCIATED DAMPERS AND CONTROLS AS INDICATED. DISPOSE OFF SITE AS PER CRD WASTE MANAGEMENT PLAN.
- CONTRACTOR TO ISOLATE, DRAIN REMOVE EXISTING DIRECT EXPANSION (DX) AIR HANDLING UNIT, ASSOCIATED REFRIGERANT PIPING, CONDENSATE PIPING, SUPPLY DUCTWORK, RETURN AIR DUCTWORK AND ASSOCIATED DAMPERS AND CONTROLS AS INDICATED. CONTRACTOR TO CAPTURE REFRIGERANT (RELEASE TO ATMOSPHERE IS NOT ACCEPTABLE) AND PROVIDE NRC REPRESENTATIVE COPY OF REPORT FOR REVIEW AND RECORDS. DISPOSE OF MATERIAL OFF SITE AS PER CRD WASTE MANAGEMENT PLAN. CAP AND SEAL OUTDOOR AIR INTAKE AT WALL. FILL WITH INSULATION TO ASSURE MINIMAL HEAT TRANSFER.
- CONTRACTOR TO REMOVE EXISTING DIFFUSERS AND BRANCH DUCTWORK AS INDICATED. DISPOSE OF MATERIAL OFF SITE AS PER CRD WASTE MANAGEMENT PLAN.
- CONTRACTOR TO REMOVE EXISTING RETURN AIR DUCTWORK AND RETURN AIR GRILLES AS INDICATED. DISPOSE OF MATERIAL OFF SITE AS PER CRD WASTE MANAGEMENT PLAN.
- CONTRACTOR TO REMOVE EXISTING RETURN AIR GRILLES TO ALLOW FOR NEW WALL CONSTRUCTION AS INDICATED. DISPOSE OF MATERIAL OFF SITE AS PER CRD WASTE MANAGEMENT PLAN.
- CONTRACTOR TO REMOVE EXISTING COMPRESSED AIR PIPING, COMPRESSED AIR ACCESSORIES AND SUPPORT BRACKETS AS INDICATED AND DISPOSE OF MATERIAL OFF SITE AS PER CRD WASTE MANAGEMENT PLAN.
- CONTRACTOR TO REMOVE EXISTING THROUGH WALL AIR CONDITIONING UNIT AND DISPOSE OF MATERIAL OFF SITE AS PER CRD WASTE MANAGEMENT PLAN.
- CONTRACTOR TO PROVIDE NEW SPRINKLER PIPING AND INSTALL RETAINED SPRINKLERS AS INDICATED. CERTIFIED FIRE PROTECTION SPECIALIST TO VERIFY AND CONFIRM COVERAGE AND SIZE SPRINKLER PIPING TO SUIT. SPRINKLER PIPING SHALL BE COLOUR RED AND TO INCLUDE A SINGLE PENETRATION THROUGH SECURE ROOM.
- CONTRACTOR TO PROVIDE NEW FAN COIL UNITS AND CONTROLS AS INDICATED. REFER TO SPECIFICATIONS AND SCHEDULES (ON DRAWING M03) FOR ADDITIONAL INFORMATION AND BASIS OF DESIGN. CONDENSATE DRAIN SHALL CONNECT TO EXISTING STORM WATER RISER C/W CHECK VALVE AS INDICATED.
- CONTRACTOR TO PROVIDE NEW SUPPLY AIR AND RETURN AIR DUCTWORK (SIZED AND LOCATED AS INDICATED). NEW RETURN AIR DUCTWORK SHALL BE ACOUSTICALLY LINED AS PER SPECIFICATIONS. NEW SUPPLY AIR DUCTWORK SHALL BE THERMALLY INSULATED AS PER SPECIFICATION.
- CONTRACTOR TO PROVIDE HEAVY GAUGE SUPPLY AND RETURN AIR DUCTWORK C/W SECURITY GRILLES AND ACCESS DOORS SIZED AND LOCATED AS INDICATED (ACCESS DOORS SHALL BE LOCATED INSIDE ENCLOSED SECURE ROOM). NOTE THAT BOTH SUPPLY AND RETURN DUCTS REQUIRE DOUBLE 90° OFFSETS TO MEET RAMP



2
M01
U-61 - GROUND FLOOR HVAC NEW WORK
 SCALE: 1:50

- REQUIREMENTS FOR SOUND TRANSMISSION. RETURN AIR DUCTWORK SHALL BE ACOUSTICALLY LINED AS PER SPECIFICATIONS AND SUPPLY AIR DUCTWORK SHALL BE THERMALLY INSULATED AS PER SPECIFICATIONS.
- CONTRACTOR TO PROVIDE NEW OUTDOOR AIR (OA) OR FRESH AIR) DUCTWORK SIZED AND LOCATED AS INDICATED C/W FIRE DAMPER AND ACCESS DOOR AT FLOOR PENETRATION TO MAINTAIN REQUIRED RATED FIRE SEPARATION FROM NEW MAKE UP AIR UNIT 61AHU---. COORDINATE EXACT FLOOR PENETRATION LOCATIONS WITH STRUCTURAL ENGINEER AFTER SCANNING TO ASSURE NO RESTRICTIONS.
- CONTRACTOR TO PROVIDE NEW EXHAUST AIR (EXH) DUCTWORK SIZED AND LOCATED AS INDICATED C/W FIRE DAMPER AND ACCESS DOOR AT FLOOR PENETRATION. EXACT LOCATION SHALL BE COORDINATED WITH STRUCTURAL ENGINEER AFTER SCANNING TO ASSURE NO INTERFERENCES. PROVIDE NEW BRANCH DUCTWORK TO FUMEHOOD AND STORAGE CABINET SIZED AND LOCATED AS INDICATED. MAKE FINAL CONNECTIONS TO CLIENT EQUIPMENT.
- CONTRACTOR TO PROVIDE NEW DIRECT EXPANSION (DX) AIR CONDITIONING UNIT (61PAS02) C/W OUT CONDENSING UNIT (REFER TO DRAWING M02 FOR CONDENSING UNIT LOCATION) C/W INDOOR CONTROLLER AND REFRIGERANT PIPING. REFER TO SPECIFICATIONS AND SCHEDULES (ON DRAWING M03) FOR ADDITIONAL INFORMATION. PROVIDE NEW BRANCH PIPING C/W ISOLATION VALVES FOR NEW FAN COIL UNITS SIZED AND LOCATED AS INDICATED. PROVIDE NEW STRAINERS, FLEXIBLE CONNECTIONS CONTRACTOR TO PROVIDE NEW CHILLED WATER SUPPLY (CHS) AND CHILLED WATER RETURN (CHR) FROM EXISTING MAIN SUPPLY LINES SIZED AND LOCATED AS INDICATED. PROVIDE NEW ISOLATION VALVES AND CIRCUIT BALANCING VALVES (SET TO 1.9 L/MIN) AT END OF BRANCH RUN AS INDICATED.
- CONTRACTOR TO PROVIDE NEW HEATING WATER SUPPLY (HWS) AND HEATING WATER RETURN (HWR) FROM EXISTING MAIN SUPPLY LINES SIZED AND LOCATED AS INDICATED. PROVIDE NEW ISOLATION VALVES AND CIRCUIT BALANCING VALVES (SET TO 1.9 L/MIN) AT END OF BRANCH RUN AS INDICATED.
- PROVIDE NEW BRANCH PIPING C/W ISOLATION VALVES FOR NEW FAN COIL UNITS SIZED AND LOCATED AS INDICATED. PROVIDE NEW STRAINERS, FLEXIBLE CONNECTIONS CONTRACTOR TO PROVIDE NEW SINK (S1), DOMESTIC HOT AND COLD WATER PIPING, SANITARY DRAIN AND UNDER-SINK PUMP ASSEMBLY. REFER TO DRAWING M02 FOR TIE-IN LOCATIONS FOR DOMESTIC COLD AND PUMPED SANITARY PIPING.
- CONTRACTOR TO PROVIDE POINT OF USE HOT WATER TANK (61HW103) ABOVE CEILING C/W STAINLESS STEEL DRIP PAN, PRESSURE RELIEF VALVE (PIPED TO DRIP PAN) AND 20# DRAIN PIPING FROM DRIP PAN TO UNDER SINK PUMP ASSEMBLY.
- CONTRACTOR TO PROVIDE NEW DIFFUSERS, SIZED AND LOCATED AS INDICATED. REFER TO SPECIFICATIONS AND SCHEDULES FOR ADDITIONAL INFORMATION.
- CONTRACTOR TO PROVIDE NEW RETURN GRILLES, SIZED AND LOCATED AS INDICATED. REFER TO SPECIFICATIONS AND SCHEDULES FOR ADDITIONAL INFORMATION.
- NEW CHILLED WATER SUPPLY AND RETURN (CHS AND CHR), DOMESTIC HOT AND COLD WATER (DHW) AND REFRIGERANT (REF) SHALL BE INSULATED AS PER SPECIFICATIONS. LABEL ALL PIPING TO NRC STANDARDS.
- TEST, ADJUST AND BALANCE ALL FAN COIL UNITS, DIFFUSERS, RETURN GRILLES, OUTDOOR AIR CONNECTIONS TO FAN COIL UNITS AND EXHAUST AIR GRILLES TO AIR QUANTITIES INDICATED (REFER TO SCHEDULES). TEST, ADJUST AND BALANCE ALL CIRCUIT BALANCING VALVES TO QUANTITIES INDICATED ON DRAWING AND IN SCHEDULES. SUBMIT COPY OF BALANCING REPORT TO NRC REPRESENTATIVE FOR REVIEW BEFORE INSERTION INTO O&M MANUAL.
- ALL FAN COIL UNITS, EXHAUST FANS AND MAKE-UP AIR UNITS SHALL BE COMMISSIONED WITH NRC REPRESENTATIVE, GENERAL CONTRACTOR, MECHANICAL



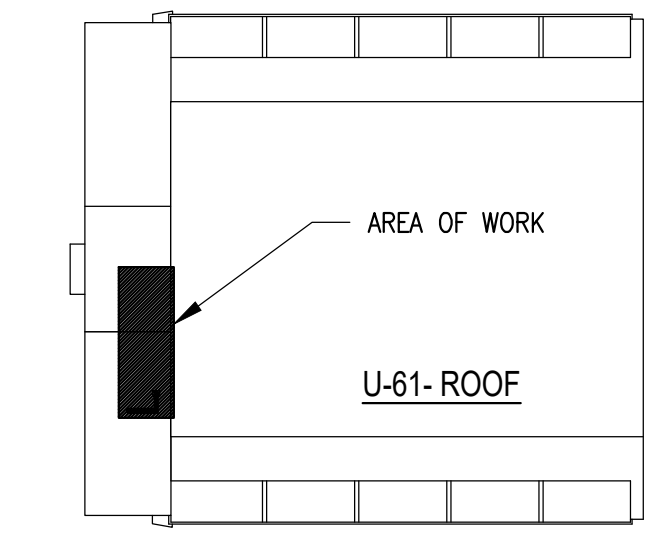
3
M01
U-61 - GROUND FLOOR UTILITIES AND FIRE PROTECTION NEW WORK
 SCALE: 1:50

- CONTRACTOR AND MANUFACTURER'S REPRESENTATIVE PRESENT AND SHALL BE COMPLETED ON FORMS PROVIDED BY NRC REPRESENTATIVE.
- CONTRACTOR TO PROVIDE EXHAUST GRILLE, MODULATING DAMPER (DAMPER ACTUATOR SHALL BE SUPPLIED BY CONTROLS CONTRACTOR), EXHAUST DUCTWORK SIZED AND LOCATED AS INDICATED. NEW EXHAUST DUCT SHALL MODULATE TO MAINTAIN CONSTANT AIR FLOW TO MAKE UP AIR UNIT MOUNTED ON ROOF AND SHALL BE CONTROLLED VIA BAS.
- CONTRACTOR TO PROVIDE NEW COMPRESSED AIR PIPING, COMPRESSED AIR DROPS, ISOLATION VALVES, CONNECTORS, FILTERS AND REGULATORS IN LOCATIONS INDICATED. NEW COMPRESSED AIR PIPING SHALL BE 12# UNLESS INDICATED OTHERWISE. NOTE THAT COMPRESSED AIR DROPS IN CENTRE OF "TEAR DOWN" AREA SHALL BE MOUNTED AT 250MM ABOVE THE FLOOR. UNITS MOUNTED ON WALL SHALL BE MOUNTED 1200MM ABOVE FLOOR LEVEL. REFER TO DETAIL 4 ON DRAWING 6018-M03 FOR END POINT REQUIREMENTS. REFER TO DETAIL 6 ON DRAWING M-03 FOR MAIN COMPRESSED AIR FILTER ASSEMBLY. MAIN COMPRESSED AIR FILTER ASSEMBLY: TWO STAGE SYSTEM USING TWO (2) SEPARATE CANISTERS AND FILTERS. CANISTERS TO BE CONSTRUCTED OF HEAVY GAUGE ALUMINUM, ROUNDED INTERIOR DESIGN ENGINEERED FOR EASY FILTER CHANGE, EQUIPPED WITH DIFFERENTIAL PRESSURE GAUGE AND INTERNAL DRAIN. CHROME-PHOSPHATE TREATED FOR CORROSION RESISTANCE. FILTERS TO CONSIST OF 2 STAGES-- FIRST STAGE: 10 MICRON FILTER, SECOND STAGE: 1 MICRON FILTER, ACCEPTABLE MATERIAL: D.V. SYSTEMS SERIES A (WITH "S" AND "A" FILTERS) OR APPROVED EQUAL.
- TYPICAL: LIGHTING IN GENERAL AREAS (WHERE NO CEILING GRID IS PRESENT) SHALL BE MOUNTED BELOW MECHANICAL SERVICES. DIFFUSERS SHALL NOT BE MOUNTED DIRECTLY OVER LIGHTS. SPRINKLERS AND LIGHT LOCATIONS SHALL BE COORDINATED BEFOREHAND TO AVOID ON SITE INTERFERENCES.

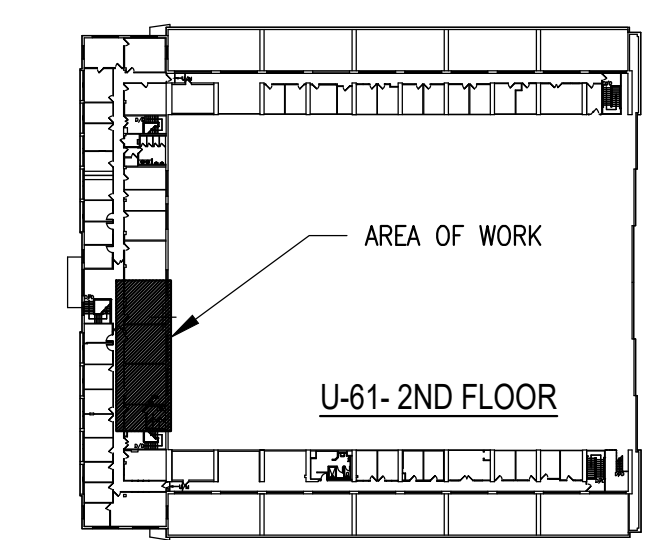
DWG NO.	DRAWING TITLE
6018-M01	GROUND FLOOR MECHANICAL NEW WORK AND DEMOLITION
6018-M02	SECOND FLOOR AND ROOF MECHANICAL NEW WORK
6018-M03	MECHANICAL SCHEDULES AND DETAILS
6018-M04	CONTROLS SEQUENCES AND LEGENDS

GENERAL NOTES

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- CONTRACTOR SHALL PREVENT THE SPREAD OF DUST AND DEBRIS BEYOND AREA OF WORK AND CLEAN ALL SURFACES AT COMPLETION.



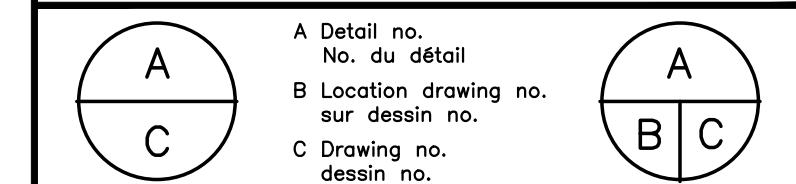
KEY PLAN PLAN CLÉ



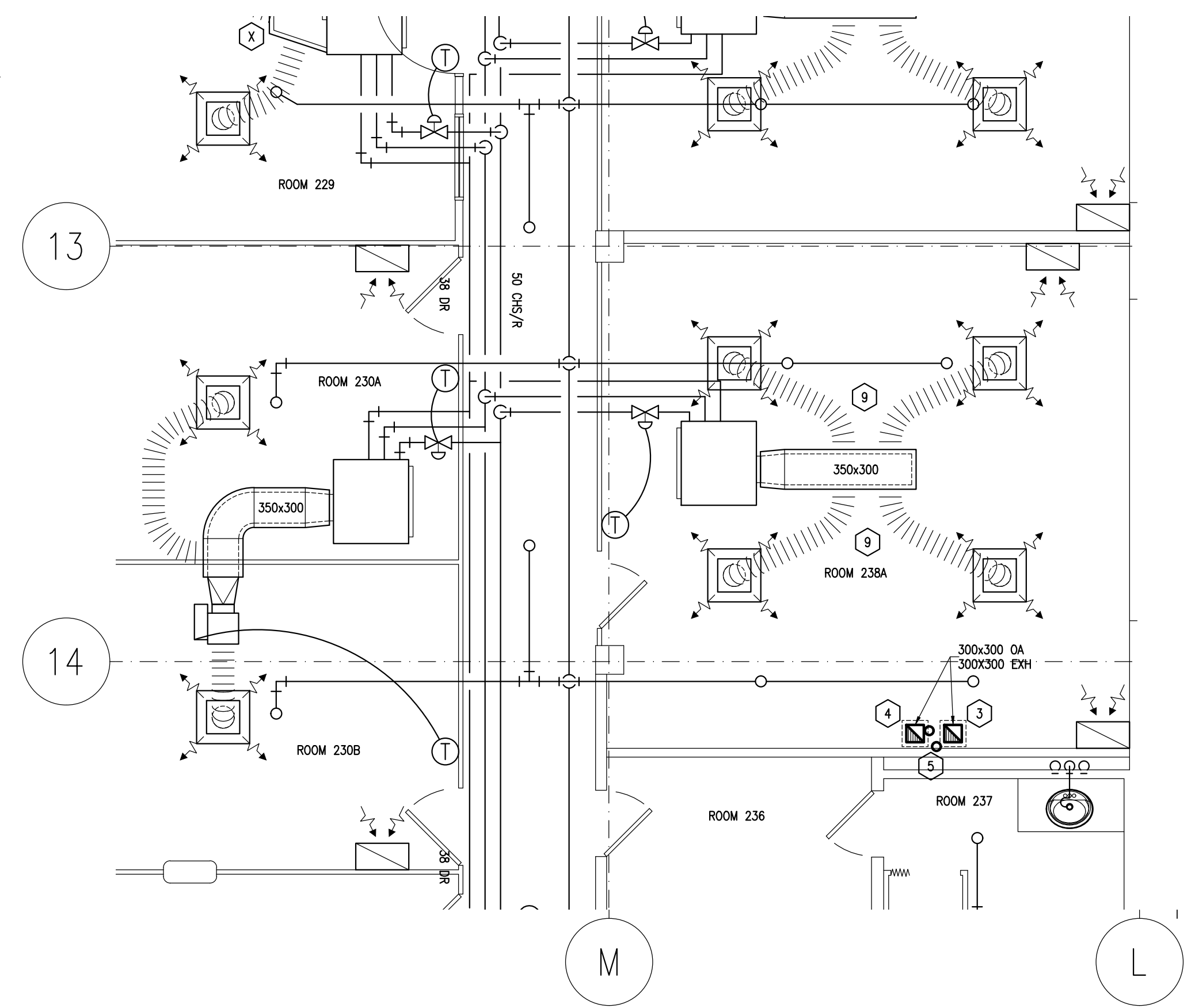
No.	Date	Revision	By:
2	OCT. 2023	ISSUED FOR TENDER	JWG
1	6 FEB '23	ISSUED FOR 66% REVIEW	JWG
0	16 DEC '22	ISSUED FOR 33% CONCEPT REVIEW	JWG

Date Printed: DD MM YYYY Date imprimée

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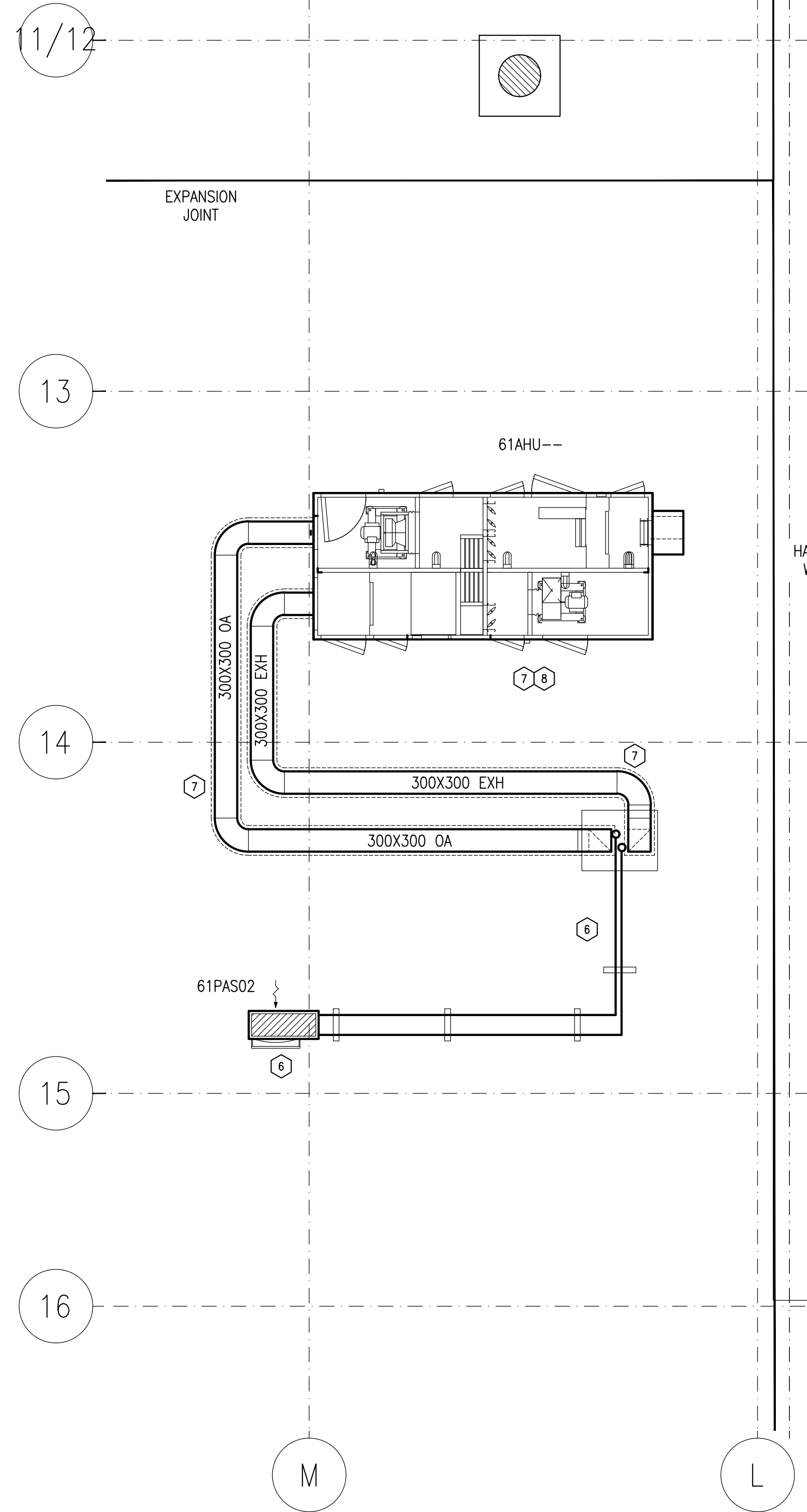
project / projet		FFPC RETRO-FIT	
drawing / dessin		MONTREAL ROAD CAMPUS	
designed / conçu		SECOND FLOOR AND ROOF MECHANICAL NEW WORK	
JWG	OCT. 2023	scale / échelle	AS INDICATED
SG	sheet / feuille	M2 of/de / de	M4
IAF	checked / vérifié	approved / approuvé	W.O.no. / D.T.no.
FG	dwg.no. / dessin no.	6018-M02	



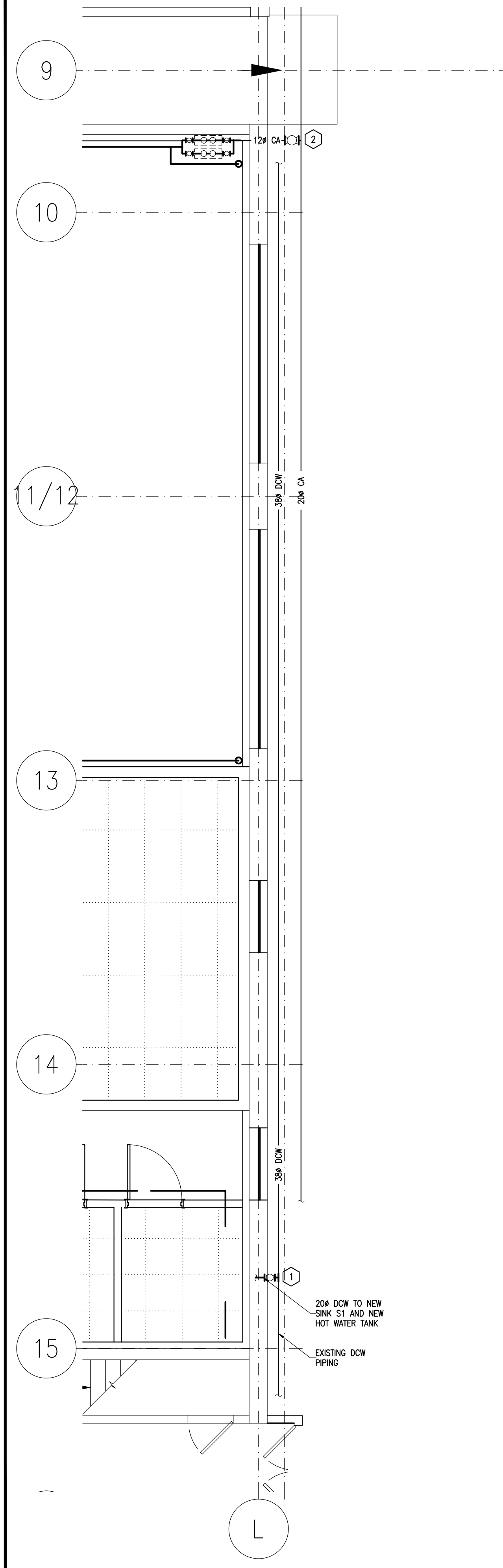
2 U-61 - SECOND FLOOR NEW WORK
 SCALE: 1:50

MECHANICAL DRAWING NOTES:

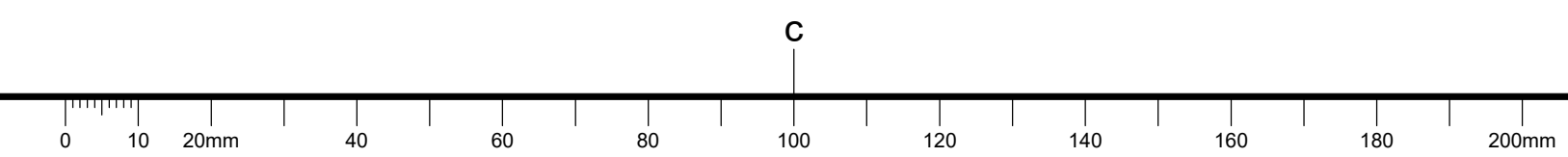
- CONTRACTOR TO PROVIDE NEW DOMESTIC COLD WATER LINE FROM EXISTING BUILDING SERVICES TO NEW SINK AND HOT WATER TANK SIZED AND LOCATED AS INDICATED.
- CONTRACTOR TO PROVIDE NEW COMPRESSED AIR PIPING ISOLATION VALVE ON BRANCH FROM MAIN SUPPLY AS INDICATED.
- CONTRACTOR TO PROVIDE OUTDOOR AIR RISER DUCTWORK SIZED AND LOCATED AS INDICATED FROM GROUND FLOOR UP TO ROOF. CONTRACTOR SHALL SUPPORT AND INSULATE OUTDOOR AIR DUCT AS PER SPECIFICATIONS. EXACT LOCATION OF FLOOR PENETRATIONS SHALL BE COORDINATED WITH STRUCTURAL ENGINEER.
- CONTRACTOR TO PROVIDE EXHAUST AIR DUCTWORK RISER SIZED AND LOCATED AS INDICATED FROM GROUND FLOOR UP TO ROOF. CONTRACTOR SHALL SUPPORT AND INSULATE EXHAUST AIR DUCT AS PER SPECIFICATIONS. EXACT LOCATION OF FLOOR PENETRATIONS SHALL BE COORDINATED WITH STRUCTURAL ENGINEER.
- CONTRACTOR TO SUPPLY NEW REFRIGERANT PIPING FROM NEW DIRECT EXPANSION (DX) INDOOR UNIT TO OUTDOOR UNIT. REFRIGERANT PIPING SHALL BE INSULATED AND SUPPORTED AS PER SPECIFICATIONS.
- CONTRACTOR TO PROVIDE NEW OUTDOOR CONDENSING UNIT (61PAS02), REQUIRED SUPPORT FRAME (STANDARD OF ACCEPTANCE "800-FOOT" SUPPORT SYSTEM), REFRIGERANT PIPING AND REQUIRED PIPING SUPPORTS AS PER SPECIFICATIONS. COORDINATE WITH ELECTRICAL CONTRACTOR AND BAS CONTRACTOR FOR POWER CONNECTIONS AND CONTROLS CONNECTIONS.
- CONTRACTOR TO PROVIDE NEW ENERGY RECOVERY UNIT (61AHU--), SEISMICALLY RESTRAINED ROOF CURB (COORDINATE WITH STRUCTURAL ENGINEER), OUTDOOR AIR DUCTWORK AND EXHAUST DUCTWORK SIZED AND LOCATED AS INDICATED. NEW DUCTWORK SHALL BE SUPPORTED USING APPROVED NON ROOF PENETRATING SUPPORT SYSTEM EXHAUST AND OUTDOOR AIR DUCTWORK SHALL BE INSULATED AS PER SPECIFICATIONS. SUBMIT COPY OF APPROVAL LETTER BY SEISMIC ENGINEER FOR REVIEW BEFORE INCLUSION IN O&M MANUAL. COORDINATE ELECTRICAL CONNECTIONS AND CONTROLS CONNECTIONS WITH ELECTRICAL CONTRACTOR AND CONTROLS CONTRACTOR. REFER TO SCHEDULE ON DRAWING M-03 FOR ADDITIONAL INFORMATION AND BASIS OF DESIGN.
- TEST, ADJUST AND BALANCE ENERGY RECOVERY UNIT TO AIR FLOWS INDICATED ON SCHEDULE AND SUBMIT COPY OF BALANCING REPORT TO NRC REPRESENTATIVE FOR REVIEW BEFORE INCLUSION IN O&M MANUAL.
- CONTRACTOR TO ALLOW FOR THE TEMPORARY REMOVAL AND RE-INSTATEMENT OF MECHANICAL SERVICES TO ALLOW FOR THE INSTALLATION OF NEW ENERGY RECOVERY UNIT. COORDINATE WITH STRUCTURAL DRAWINGS, ARCHITECTURAL CONTRACTORS AND NRC REPRESENTATIVE FOR EXACT SERVICES OR EQUIPMENT ITEMS THAT NEED TO BE TEMPORARILY MOVED AND RE-INSTATED.



3 U-61 - ROOF NEW WORK
 SCALE: 1:50



1 U-61 - GROUND FLOOR BASE BUILDING CONNECTIONS
 SCALE: 1:50

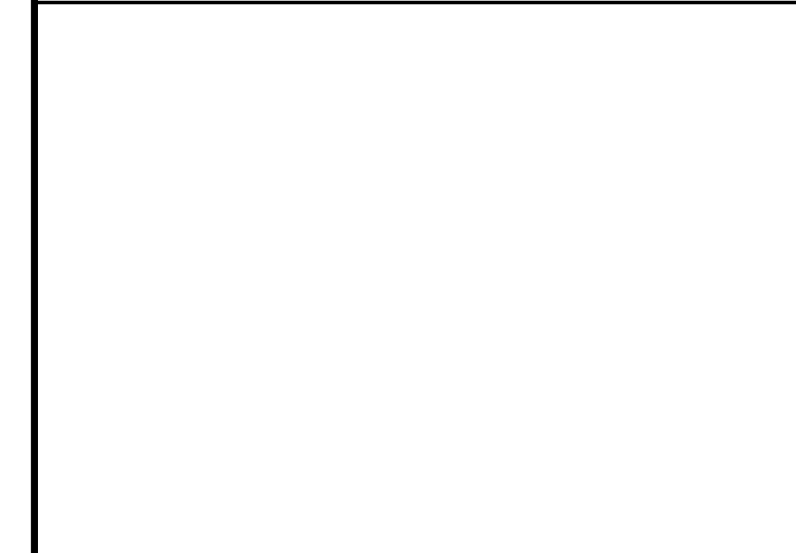




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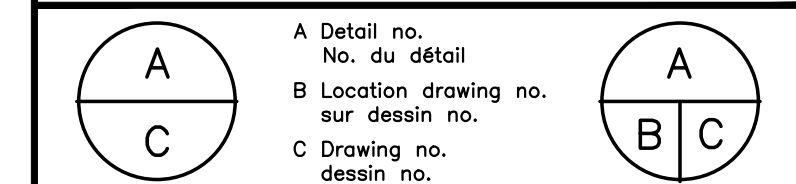
KEY PLAN / PLAN CLÉ



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Date Printed: DD MM YYYY / Date imprimée

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project: **FPFC RETRO-FIT** / projet
MONTREAL ROAD CAMPUS

drawing: **CONTROLS SEQUENCES AND LEGENDS** / dessin

designed	conçu	date	date
JWG		OCT. 2023	
drawn	dessiné	scale	échelle
SG		AS INDICATED	
checked	vérifié	sheet	feuille
IAF		M4 of/de M4	
approved	approuvé	W.O.no.	D.T.no.
FG			
dwg.no.		dessin no.	
6018-M04			

MECHANICAL LEGEND	
SYMBOL	DESCRIPTION
[Symbol]	VALVE
[Symbol]	VALVE - VERTICAL
[Symbol]	GATE VALVE
[Symbol]	BALL VALVE
[Symbol]	2-WAY CONTROL VALVE - DDC
[Symbol]	CIRCUIT BALANCING VALVE
[Symbol]	CHECK VALVE
[Symbol]	SAFETY RELIEF VALVE
[Symbol]	DRAIN VALVE
[Symbol]	STRAINER
[Symbol]	PUMP
[Symbol]	CLEANOUT
[Symbol]	THERMOMETER
[Symbol]	PRESSURE GAUGE
[Symbol]	PIPE UP
[Symbol]	PIPE DOWN
[Symbol]	SANITARY TRAP
[Symbol]	UNION
[Symbol]	CAP
[Symbol]	AIR VENT
[Symbol]	VACUUM BREAKER
[Symbol]	FIRE EXTINGUISHER
[Symbol]	FIRE EXTINGUISHER CABINET
[Symbol]	FIRE HOSE CABINET
[Symbol]	SPRINKLER - PENDANT
[Symbol]	SPRINKLER - PENDANT SEMI-RELEASED
[Symbol]	SPRINKLER - CONCEALED
[Symbol]	SPRINKLER - UP-RIGHT
[Symbol]	SPRINKLER - UP-RIGHT WITH CAGE
[Symbol]	RECTANGULAR DUCTWORK
[Symbol]	ROUND DUCTWORK
[Symbol]	90° ELBOW
[Symbol]	45° ELBOW
[Symbol]	FAN COIL UNIT
[Symbol]	FLEXIBLE CONNECTION
[Symbol]	ACOUSTICALLY LINED DUCT
[Symbol]	THERMALLY INSULATED DUCT
[Symbol]	ROUND DUCT UP
[Symbol]	RECTANGULAR SUPPLY DUCT UP
[Symbol]	RECTANGULAR RETURN/EXH DUCT UP
[Symbol]	RECTANGULAR SUPPLY DUCT DOWN
[Symbol]	RECTANGULAR RETURN/EXH DUCT DOWN
[Symbol]	FLEX DUCT
[Symbol]	RECTANGULAR TAKE OFF
[Symbol]	RECTANGULAR TAKE OFF C/W BALANCING DAMPER
[Symbol]	ROUND TAKE OFF C/W BALANCING DAMPER
[Symbol]	BALANCING DAMPER
[Symbol]	SECURITY BARS
[Symbol]	FIRE DAMPER
[Symbol]	ACCESS DOOR
[Symbol]	T-STAT (DDC)
[Symbol]	AC UNIT CONTROLLER
[Symbol]	HUMIDITY SENSOR
[Symbol]	OXYGEN SENSOR (DDC)
[Symbol]	PRESSURE SENSOR (DDC)
[Symbol]	MODULATING DAMPER
[Symbol]	START-STOP SENSOR
[Symbol]	T-STAT (PNEUMATIC)
[Symbol]	ELECTRIC THERMOSTAT

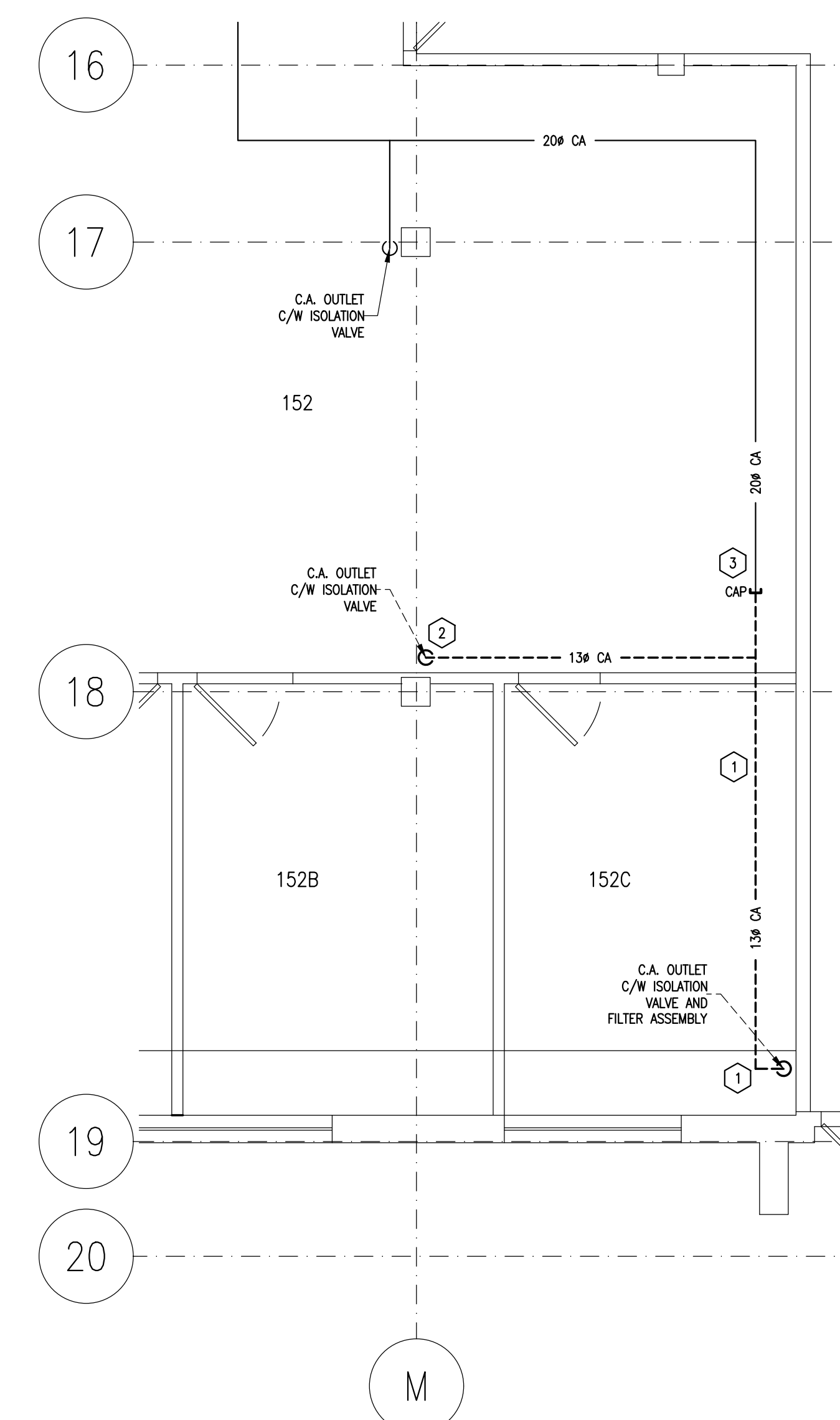
MECHANICAL LINE TYPE LEGEND	
LINE	DESCRIPTION
[Symbol]	INDICATES NEW
[Symbol]	INDICATES EXISTING (TO REMAIN)
[Symbol]	INDICATES DEMOLISHED/ REMOVED
[Symbol]	DOMESTIC COLD WATER
[Symbol]	DOMESTIC HOT WATER
[Symbol]	SANITARY DRAIN PIPING
[Symbol]	VENT PIPING
[Symbol]	STORM WATER PIPING
[Symbol]	CHILLED WATER SUPPLY
[Symbol]	CHILLED WATER RETURN
[Symbol]	REFRIGERANT PIPING
[Symbol]	COMPRESSED AIR
[Symbol]	CONTROL LINE

COMMISSIONING OF AIR HANDLING UNIT 61AHU--:

- OFF HOURS/ SETBACK MODE:
- WHEN THE SYSTEM IS STOPPED, THE SUPPLY AND EXHAUST FANS SHALL BE SET TO 20% AND MODULATED TO MAINTAIN MINIMUM DISCHARGE TEMP. DURING WINTER OPERATION DEPENDANT.
 - THE INTEGRATED REHEAT COIL SHALL MODULATE TO MAINTAIN A MINIMUM DISCHARGE TEMPERATURE 12.7°C AT DISCHARGE OF UNIT DURING WINTER OPERATIONS.
- NORMAL/ WORKING HOURS OPERATION (6:30 TO 18:00):
- SUMMER MODE: NORMAL TEMPERATURE SETPOINT (12.7°C). THE FAN SPEED WILL BE SET TO MEET DEMANDS OF ROOMS 151, 151A, 151B AND 151C REQUIREMENTS. FAN SPEED CAN BE OVERRIDDEN BY OWS IF REQUIRED.
 - WINTER MODE: HEATING VALVE COIL MODULATE TO MAINTAIN DISCHARGE TEMPERATURE (18.3°C) UNLESS AVERAGE OCCUPIED SPACE TEMPERATURE IN AREA SERVED ON GROUND FLOOR EXCEEDS 24°C. WHEN SPACE TEMPERATURE EXCEEDS 24°C DISCHARGE TEMPERATURE SHALL BE REDUCED TO 18.3°C UNTIL AVERAGE OCCUPIED SPACE IS 22°C.
 - THE FAN COIL SUPPLY AIR TEMPERATURE (DISCHARGE AIR TEMPERATURE) DAT ALARM WILL ONLY BE ACTIVE WHEN CHILLED WATER TEMPERATURE CWST IS BELOW 50 DEG F.
 - THE REHEAT COIL (20RHCD1) LOCATED IN DUCT ON GROUND FLOOR SHALL OPERATE DURING WINTER OPERATION ALONE AND SHALL MODULATE TO MAINTAIN A MINIMUM TEMPERATURE OF 10°C AT INLET OF AIR HANDLING UNIT HEATING COIL.
- POWER FAILURE:
- ON A RETURN TO NORMAL POWER FOLLOWING A POWER FAILURE, THE SYSTEM WILL BE RE-STARTED AUTOMATICALLY. RETURN FAN SHALL START FIRST TO ASSURE DISCHARGE AIR IS ABOVE 10°C. SUPPLY FAN SHALL ONLY COMMENCE AFTER CONFIRMATION THAT EXHAUST AIR MEETS TEMPERATURE REQUIREMENTS.
 - IF RETURN AIR TEMP DOES NOT REACH 10°C, AIR HANDLING UNIT SHALL NOT START AND PRIORITY ALARM SHALL BE SENT FROM THE BAS.

GENERAL SEQUENCE OF OPERATION (FAN COILS):

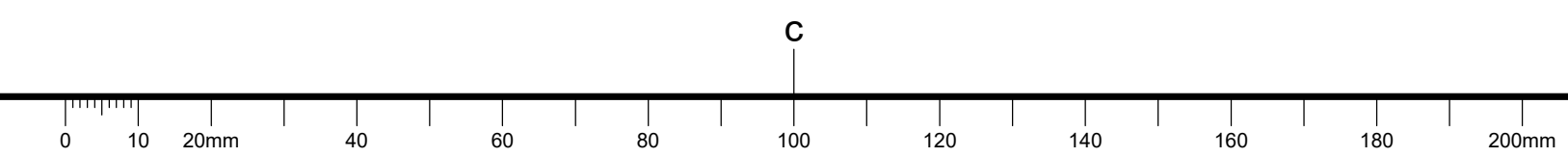
- STOPPED MODE:
- WHEN THE SYSTEM IS STOPPED, THE SUPPLY FAN ECM IS SET TO 5%. THE COOLING VALVE CLG IS CLOSED.
- START-UP MODE:
- THE FAN COIL UNIT WILL BE STARTED BY AN OWS MANUAL COMMAND, CLIENT OVERRIDE OR BY AN AUTOMATIC START/STOP SCHEDULE PROGRAM.
 - A CURRENT SENSOR IS INSTALLED ON THE LOAD SIDE OF THE SUPPLY FAN SFA. THE DDC SYSTEM USES THE SENSOR TO CONFIRM THE SUPPLY FAN IS IN THE DESIRED STATE (IE. ON OR OFF) AND GENERATES AND ALARM IF STATUS DEVIATES FROM DDC START/STOP CONTROL.
- NORMAL OPERATION:
- SUMMER MODE: THE HEATING COIL VALVE (HLG) WILL BE CLOSED. THE CHILLED WATER COOLING COIL VALVE CLG WILL BE MODULATED TO MAINTAIN A ROOM TEMPERATURE SETPOINT (ADJUSTABLE). THE FAN SPEED WILL MODULATE BETWEEN 50% AND 100% TO MAINTAIN SPACE TEMPERATURE SETPOINT ONLY ONCE THE COOLING VALVE HAS OPENED TO 100%. FAN SPEED CAN BE OVERRIDDEN BY OWS OR CLIENT VIA SMART STAT. IF THE FAN SPEED IS MANUALLY OVERRIDDEN TO LOW, MEDIUM OR HIGH SPEED IT WILL RETURN TO AUTOMATIC MODE ONCE OCCUPANCY FLAG IS VACANT.
 - WINTER MODE: THE COOLING COIL (CLG) VALVE WILL BE CLOSED. THE HEATING WATER COIL HLG WILL BE MODULATED TO MAINTAIN A ROOM TEMPERATURE SETPOINT (ADJUSTABLE). THE FAN SPEED WILL BE KEPT IN LOW SPEED. FAN SPEED CAN BE OVERRIDDEN BY OWS OR CLIENT VIA SMART STAT. IF FAN SPEED IS MANUALLY OVERRIDDEN TO LOW, MEDIUM OR HIGH SPEED IT WILL RETURN TO AUTOMATIC MODE ONCE OCCUPANCY FLAG IS VACANT.
 - THE FAN COIL SUPPLY AIR TEMPERATURE (DISCHARGE AIR TEMPERATURE) DAT ALARM WILL BE ACTIVE WHEN CHILLED WATER TEMPERATURE CWST IS BELOW 10°C (50°F), IF ROOM TEMPERATURE EXCEEDS 25.5°C (78°F) OR IF ROOM TEMPERATURE FALLS BELOW 18°C (64°F).
- POWER FAILURE:
- ON A RETURN TO NORMAL POWER FOLLOWING A POWER FAILURE, THE SYSTEM WILL BE RE-STARTED AUTOMATICALLY, IF SO SCHEDULED.



U-61 - GROUND FLOOR ROOM 152 COMPRESSED AIR REMOVALS
 SCALE: 1:50

MECHANICAL DRAWING NOTES:

- CONTRACTOR TO REMOVE EXISTING COMPRESSED AIR OUTLET AND FILTER ASSEMBLY LOCATED IN OFFICE ROOM 152C. REMOVE COMPRESSED AIR PIPING IN CEILING AS INDICATED.
- CONTRACTOR TO REMOVE EXISTING COMPRESSED AIR OUTLET AND ISOLATION VALVE LOCATED ON WALL OF OFFICE 152B AS INDICATED.
- CONTRACTOR TO CAP AND SEAL MAIN COMPRESSED AIR LINE AS INDICATED.

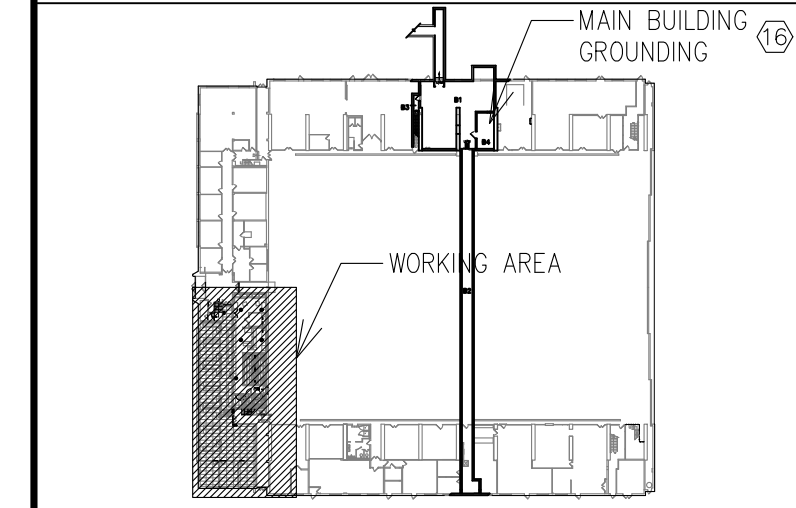




GENERAL NOTES

- CONTRACTOR TO VERIFY ALL DIMENSIONS AND CLEARANCES ON SITE PRIOR TO CONSTRUCTION AND REPORT ANY DISCREPANCIES AND/OR OMISSIONS TO DEPARTMENTAL REPRESENTATIVE.
- CONTRACTOR MUST VISIT THE SITE AND FULLY FAMILIARIZE THEMSELVES WITH THE SCOPE OF THE WORK PRIOR TO PROJECT COMMENCEMENT.
- ALL TRADES TO COORDINATE WORK ON SITE, WITH APPROVAL OF DEPARTMENTAL REPRESENTATIVE TO AVOID ANY CONFLICTS AND/OR INTERFERENCE.
- ANY AND ALL REQUIRED SHUTDOWNS SHALL BE COORDINATED WITH DEPARTMENTAL REPRESENTATIVE.
- INSTALLATION OF ALL SYSTEMS SHALL BE IN ACCORDANCE WITH APPLICABLE CODES AND STANDARDS.
- CONTRACTOR TO BE RESPONSIBLE FOR REINSTATEMENT AND REPAIR OF ANY DAMAGE CAUSED BY WORK.
- CONTRACTOR SHALL PREVENT THE SPREAD OF DUST AND DEBRIS BEYOND AREA OF WORK AND CLEAN ALL SURFACES AT COMPLETION.
- FOLLOW RCMP SPECIAL DISCUSSION AREA CONSTRUCTION GUIDE GCPSG-017(2022) FOR INSTALLATION AROUND AND INSIDE SDA ROOM 151A. ALL ELECTRICAL DEVICES ARE SURFACE MOUNTED INSIDE SDA ROOM. CONDUITS ENTER THE ROOM FROM SIDE WALLS AND PROVIDE PROPER SEALANT AS PER THE GUIDE. REFER TO 6/A05 FOR ADDITIONAL INFORMATION.

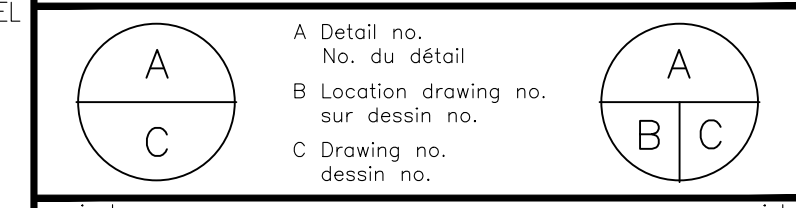
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1	OCT 2023	ISSUED FOR TENDER	CYC
0	JUN 2023	ISSUED FOR 99% COMMENT AND REVIEW	CYC

Date Printed DD MM YYYY / Date imprimée

- Verify all dimensions and site conditions and be responsible for same.
- Vérifier toutes les dimensions et l'état des lieux et en assumer la responsabilité.



PROJECT: FPFC RETRO-FIT

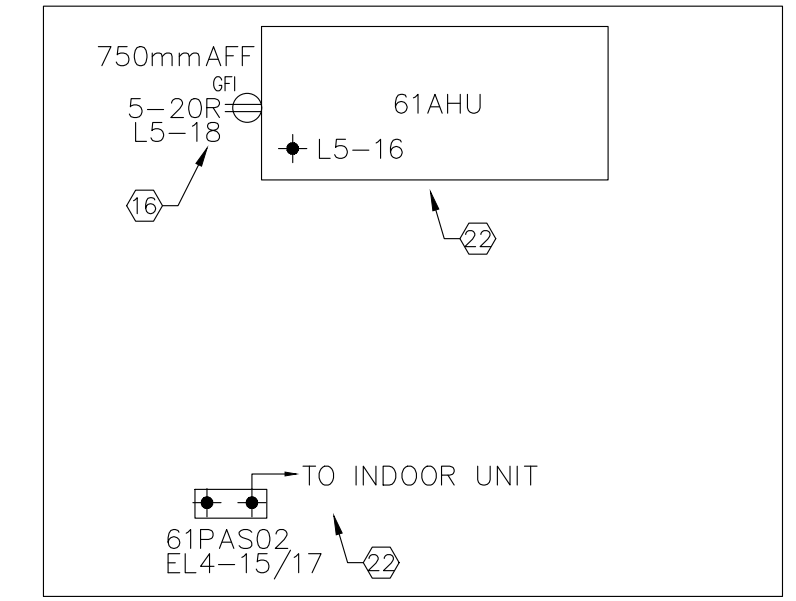
MONTREAL ROAD CAMPUS

drawing / dessin: ELECTRICAL WORKS - NEW AND DEMOLITION

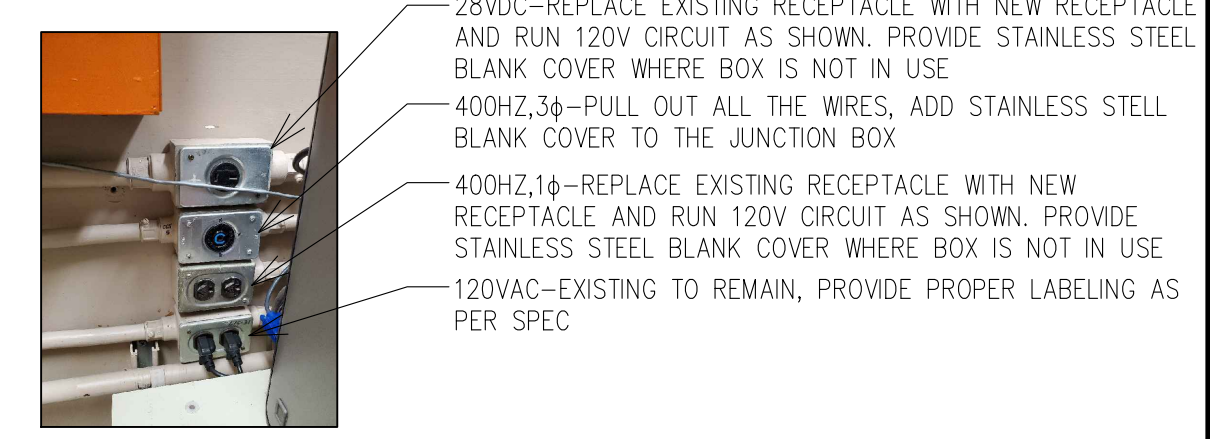
designed	conçu	date	date
CYC		06/2023	
drawn	dessiné	scale	échelle
CYC		AS NOTED	
checked	vérifié	sheet	feuille
KXL		E01 of/de	2
approved	approuvé	W.O.no.	D.T.no.
FG			
dwg.no.	dessin no.		
6018-E01			

ELECTRICAL DRAWING SYMBOLS LEGEND

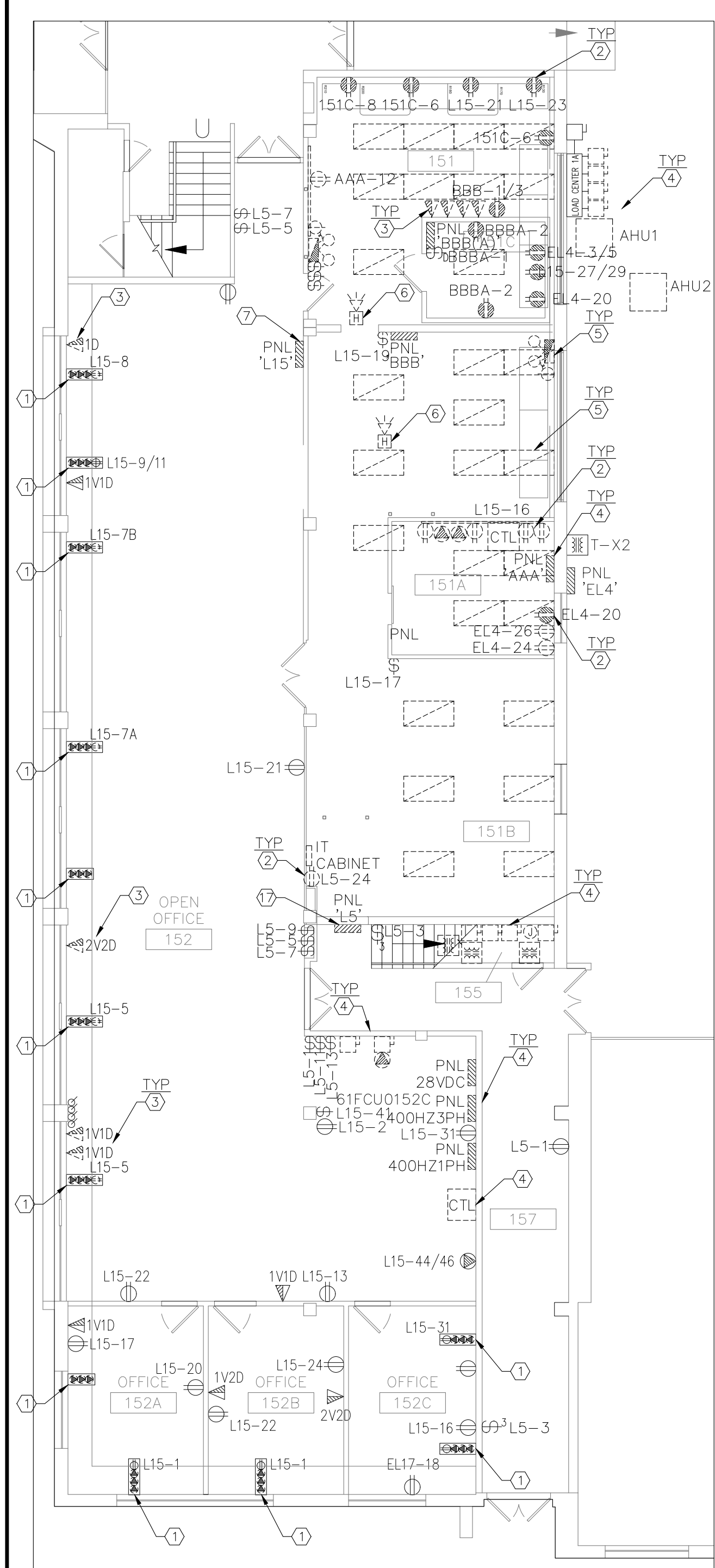
	TYPICAL EXISTING
	TYPICAL NEW
	TYPICAL DEMOLITION / REMOVALS
	LED TRACK LIGHTING FIXTURE, TYPE AS SHOWN
	LIGHT FIXTURE ON EMERGENCY CIRCUIT, LIGHT WILL BE CONTROLLED ON/OFF/DIM DURING NORMAL CONDITION AND 100% ON WHEN THE NORMAL POWER IS OFF
	WALL MOUNTED 'OCCUPIED' ILLUMINATED INDICATOR
	WALL MOUNTED LIGHTING CONTROL MOTION SENSOR WITH DIMMING
	LIGHTING CONTROL TOUCH SCREEN PANEL
	FIRE ALARM HORN/STROBE
	ELECTRICAL PANEL
	5-15R DUPLEX RECEPTACLE
	DUPLEX RECEPTACLE ON DEDICATED CIRCUIT
	GROUND FAULT INTERRUPT RECEPTACLE
	CEILING MOUNTED 5-15R DUPLEX RECEPTACLE
	5-15R DUPLEX RECEPTACLE MOUNTED ABOVE COUNTER CONFIRM EXACT MOUNTING HEIGHT AND LOCATION ON SITE.
	SPECIAL RECEPTACLE, TYPE AS SHOWN
	SPLIT RECEPTACLE
	STAINLESS STEEL BLANK COVER
	HARDWIRE CONNECTION
	TRANSFORMER
	JUNCTION BOX
	CONDUIT UP
	TWO CHANNEL FURNITURE POLE SUPPLIED BY FURNITURE SUPPLIER
	1/4"x2"x10" GROUNDING BUS BAR CONNECTED BACK TO ROOM 151B BUS BAR
	1/4"x2"x24" GROUNDING BUS BAR CONNECTED BACK TO BUILDING MAIN BUS BAR
	SLEEVE FOR CONDUITS ENTER SDA ROOM. REFER TO ARCHITECTURAL DRAWING FOR DETAILS
	ROUGH-IN FOR DATA/VOICE OUTLET, EACH OUTLET TO HAVE THREE CABLES ONE VOICE (V) AND TWO DATA (D)
	COMMUNICATION PULL BOX, SIZE PER TIA-569
	CARD READER BY NRC
	DOOR CONTACT BY NRC
	ELECTRIC LEVER SUPPLIED AND PRE-WIRED BY DOOR SUPPLIER
	POWER TRANSFER BY DOOR SUPPLIER
	REUSE EXISTING DEVICE IN NEW LOCATION
	ABOVE FINISHED FLOOR
	CEILING MOUNTED



4 E01 ROOF ELECTRICAL LAYOUT SCALE: 1:100



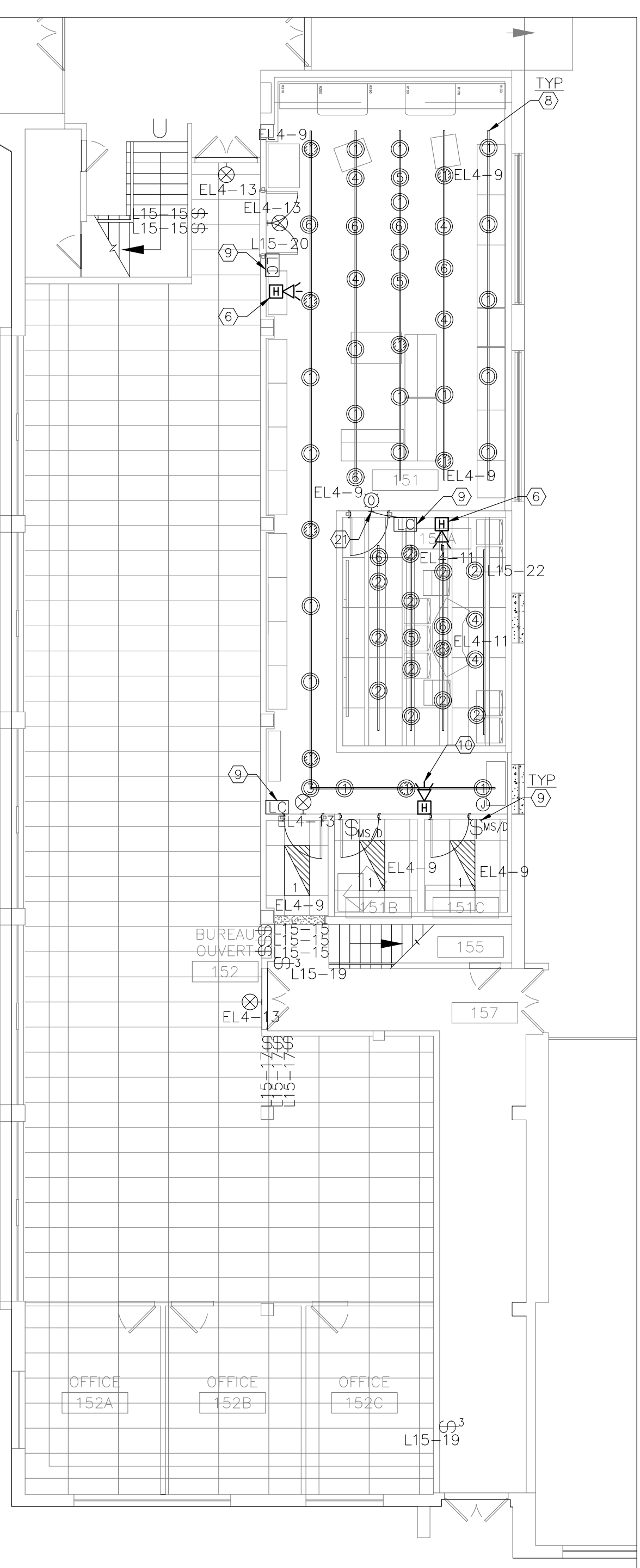
5 E01 RECEPTACLE LAYOUT SCALE: N.T.S



1 E01 GROUND FLOOR DEMOLITION SCALE: 1:100

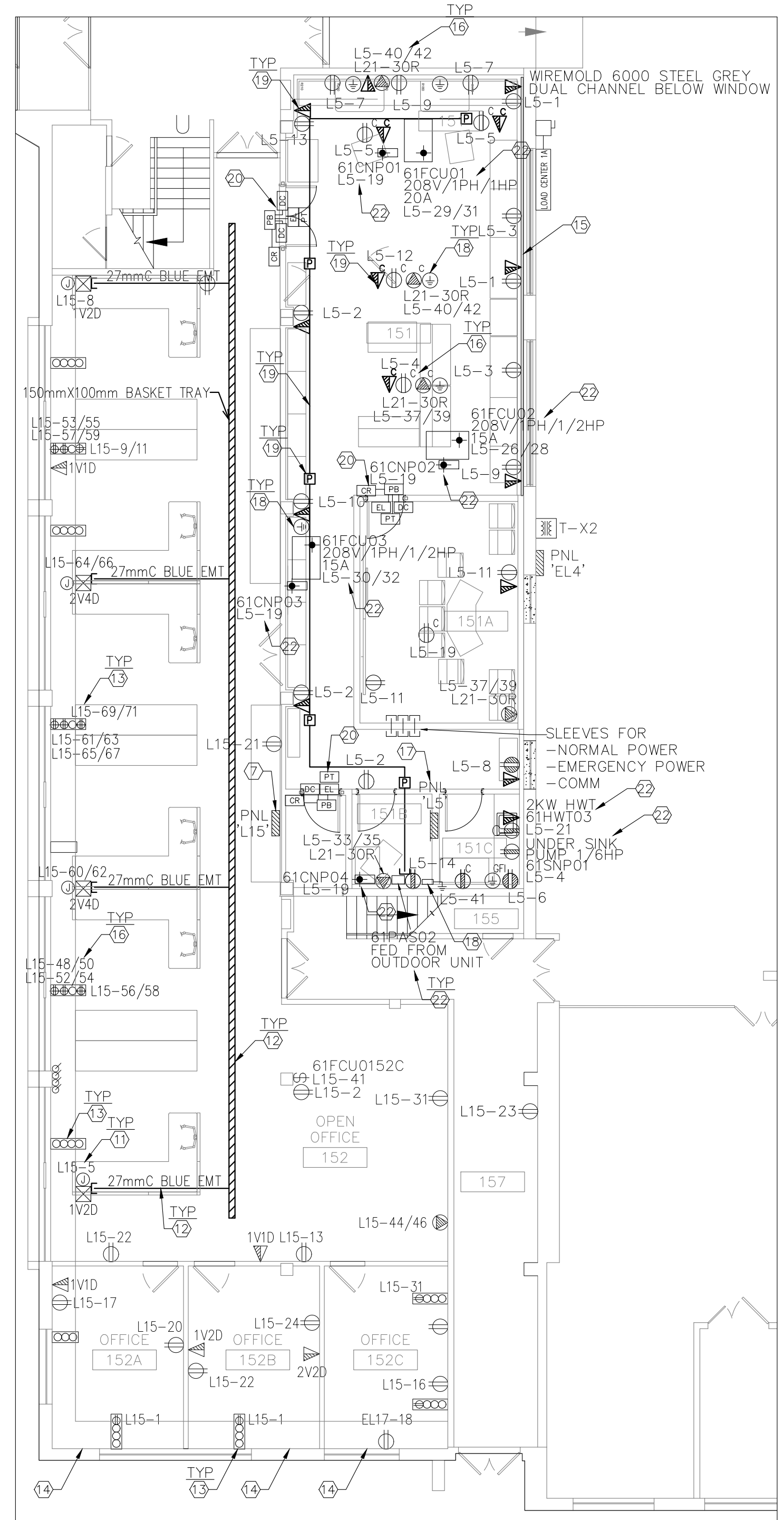
DRAWING NOTES:

- DISCONNECT AND REMOVE EXISTING 28VDC SYSTEM, 400HZ, 1Φ SYSTEM AND 400HZ, 3Φ SYSTEM, C/W ALL REDUNDANT WIRING. CONDUITS WILL REMAIN AS NEW 120V RECEPTACLE RACEWAY, REPLACE EXISTING RECEPTACLE WITH NEW TYPE OR BLANK COVER PLATE. CHECK NEW LAYOUT FOR ADDITIONAL INFORMATION.
- DISCONNECT AND REMOVE EXISTING RECEPTACLE C/W REDUNDANT WIRING AND CONDUITS BACK TO SOURCE. TRACE CIRCUIT AND UPDATE PANEL SCHEDULE UPON JOB COMPLETION. TURN UNUSED BREAKER TO "OFF" POSITION AND MARK "SPARE".
- DISCONNECT AND REMOVE EXISTING DATA/VOICE OUTLET C/W WIRING AND CONDUITS BACK TO SOURCE. NOTE THAT EXISTING CABLES RUN THROUGH FLOOR TRENCH.
- DISCONNECT AND REMOVE POWER DISTRIBUTION EQUIPMENT C/W WIRING AND CONDUITS BACK TO SOURCE AND MAKE SAFE. REFER TO E02 FOR ADDITIONAL INFORMATION.
- DISCONNECT AND REMOVE EXISTING LUMINAIRES AND CONTROL SWITCHES, C/W WIRING AND CONDUITS, BACK TO SOURCE AND MAKE SAFE.
- RELOCATE EXISTING FIRE ALARM HORN/STROBE TO NEW LOCATION AS SHOWN. PULL BACK WIRING AND CONDUITS TO THE NEAREST SOURCE AND RUN NEW WIRING TO THE NEW LOCATION. NO SPLICE IS ALLOWED.
- RELOCATE EXISTING PANEL 'L15' TO NEW LOCATION C/W ALL ASSOCIATED LOADS AS SHOWN. EXTEND/MODIFY CONDUITS AND WIRING TO SUIT NEW LAYOUT.
- PROVIDE NEW COMPLETE TRACK LIGHTING SYSTEM C/W LED FIXTURE AND CONNECT TO CIRCUIT AS SHOWN. THE TRACK SYSTEM WILL INCLUDE 2 CIRCUIT TRACK SYSTEM WITH LENGTH TO MATCH SITE LAYOUT AND C/W END CAPS AND CONNECTORS. THE LIGHTS ARE ADDRESSABLE AND CAN BE PROGRAMMED



2 E01 LIGHTING AND FIRE ALARM NEW WORK SCALE: 1:100

- INDIVIDUALLY OR GROUPED. REFER TO LIGHTING SCHEDULE ON E02 FOR ADDITIONAL INFORMATION. MOUNT THE TRACK AT 2700AFF AND CONFIRM EXACT HEIGHT ON SITE TO AVOID ANY CONFLICT WITH MECHANICAL DUCTWORK AND OTHER SERVICES.
- PROVIDE LIGHTING CONTROL SWITCH/TOUCH SCREEN STATION AND CONNECT TO FIXTURES AS SHOWN. THE CONTROLLER WILL ALLOW USER TO TURN THE LIGHTS ON/OFF AND DIM.
- PROVIDE FIRE ALARM HORN/STROBE AND CONNECT TO EXISTING ANNUNCIATION CIRCUIT, TYPE TO MATCH EXISTING. PROVIDE VERIFICATION REPORT UPON JOB COMPLETION.
- NEW FURNITURE POLE TO BE SUPPLIED WITH FURNITURE, DIV.26 TO PROVIDE CEILING MOUNTED JUNCTION BOX, CIRCUIT AS SHOWN, AND MAKE FINAL CONNECTION TO THE FURNITURE POLE.
- PROVIDE CLASS C BASKET CABLE TRAY AND RACE WAY FOR VOICE/DATA CABLES, SIZE AS SHOWN. CABLE TO BE PROVIDED BY OTHERS. QUANTITIES ARE LISTED FOR REFERENCE. RUN BLUE CONDUIT FROM CABLE TRAY TO WHERE THE FURNITURE POLE IS. PROVIDE BUSHINGS ON BOTH ENDS. CONFIRM EXACT LOCATION ON SITE, THOROUGHLY GROUND CABLE TRAY AND CONDUITS AND CONNECT BACK TO IT ROOM GROUNDING.
- IN ROOM 152, PROVIDE STAINLESS STEEL BLANK COVER PLATE OR NEW RECEPTACLE AS SHOWN. CONNECT RECEPTACLE TO CIRCUIT AS INDICATED. REUSE EXISTING CONDUIT AND JUNCTION BOX. REFER TO DETAIL #5 FOR ADDITIONAL INFORMATION.
- OFFICE 152A, 152B AND 152C WILL HAVE NEW WALL FURNISHING, DIV.16 TO REMOVE ALL EXISTING DEVICES AND REINSTALL TO NEW WALL. PROVIDE EXTENSION RING TO RECESS MOUNTED BOXES WHERE REQUIRED. COORDINATE WORK ON SITE.
- PROVIDE DUAL-CHANNEL STEEL SURFACE RACEWAY, C/W RECEPTACLES AND DATA OUTLET, AND MOUNT UNDERNEATH THE WINDOW/SILL. SURFACE RACEWAY



3 E01 POWER AND SYSTEM NEW WORK SCALE: 1:100

- STANDARD OF ACCEPTANCE: WIREMOLD 6000.
- PROVIDE NEW RECEPTACLE, TYPE AS SHOWN, AND CONNECT TO CIRCUIT AS INDICATED.
- RELOCATE PANEL 'L5' TO ROOM 151B AND WILL BE DEDICATED FOR ROOM 151 AND ASSOCIATED AREA. FOR THE LOADS TO BE DEMOLISHED, REMOVE ALL THE WIRING AND CONDUITS COMPLETELY FROM THE SITE. FOR THE LOADS STILL LIVE, TRANSFER THE CIRCUITS TO PANEL 'L15' AND MAKE ALL FINAL CONNECTIONS. REFER TO PANEL SCHEDULE FOR ADDITIONAL INFORMATION. TRACE CIRCUITS AND VERIFY ON SITE BEFORE CUTTING THE POWER. RE-LABEL ALL THE AFFECTED CIRCUITS UPON JOB COMPLETION.
- PROVIDE GROUNDING BUS BAR ON THE WALL OR CEILING FOR EQUIPMENT BONDING AND CONNECT BACK TO ROOM 151C WITH #6 COPPER GROUNDING WIRE. FROM ROOM 151C GROUNDING BUS BAR, PROVIDE #6 BONDING CABLE BACK TO MAIN ELECTRICAL ROOM BUILDING MAIN GROUNDING BAR. STANDARD OF ACCEPTANCE: BURNDY BBB-14210A AND 14224B.
- PROVIDE 103mmC BLUE EMT CONDUITS AND 381mmX1524mmX203mm PULL BOX FOR DATA CABLES AS SHOWN. PROVIDE 27mm BLUE EMT AND SINGL GANG BOX ROUGH IN FOR EACH OUTLET. FOLLOW TIA-569 FOR INSTRUCTION.
- PROVIDE NEW PULL BOX, CONDUITS, ETC. FOR DOOR SECURITY DEVICES. REFER TO DETAIL #4 ON E02 FOR ADDITIONAL INFORMATION. CONFIRM EXACT LOCATION ON SITE WITH NRC DEPARTMENTAL REPRESENTATIVE.
- PROVIDE WALL MOUNTED OCCUPIED SIGN, C/W 120/24V POWER SUPPLY, AND CONNECT TO LIGHTING CONTROL CONSOLE INSIDE SDA ROOM SO THE SIGN WILL BE TURNED ON EVERY TIME THE LIGHTS INSIDE SDA ROOM IS ON. OCCUPIED SIGN STANDARD OF ACCEPTANCE: CAMDEN CM-AF500.
- PROVIDE POWER TO MECHANICAL EQUIPMENT AS SHOWN. CONFIRM EXACT LOCATION ON SITE AND COORDINATE WORK WITH DIV.25.



GENERAL NOTES

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- ALL TRADES TO COORDINATE WORK ON SITE, WITH APPROVAL OF DEPARTMENTAL REPRESENTATIVE TO AVOID ANY CONFLICTS AND/OR INTERFERENCE.
- ANY AND ALL REQUIRED SHUTDOWNS SHALL BE COORDINATED WITH DEPARTMENTAL REPRESENTATIVE.
- INSTALLATION OF ALL SYSTEMS SHALL BE IN ACCORDANCE WITH APPLICABLE CODES AND STANDARDS.
- CONTRACTOR TO BE RESPONSIBLE FOR REINSTATEMENT AND REPAIR OF ANY DAMAGE CAUSED BY WORK.
- CONTRACTOR SHALL PREVENT THE SPREAD OF DUST AND DEBRIS BEYOND AREA OF WORK AND CLEAN ALL SURFACES AT COMPLETION.
- FOLLOW RCMP SPECIAL DISCUSSION AREA CONSTRUCTION GUIDE GCPSG-017(2022) FOR INSTALLATION AROUND AND INSIDE SDA ROOM 151A. ALL ELECTRICAL DEVICES ARE SURFACE MOUNTED INSIDE SDA ROOM. CONDUITS ENTER THE ROOM FROM SIDE WALLS AND PROVIDE PROPER SEALANT AS PER THE GUIDE. REFER TO 6/AOS FOR ADDITIONAL INFORMATION.

KEY PLAN PLAN CLÉ



No.	Date	Revision	By:
1	OCT 2023	ISSUED FOR TENDER	CYC
0	JUN 2023	ISSUED FOR 99% COMMENT AND REVIEW	CYC

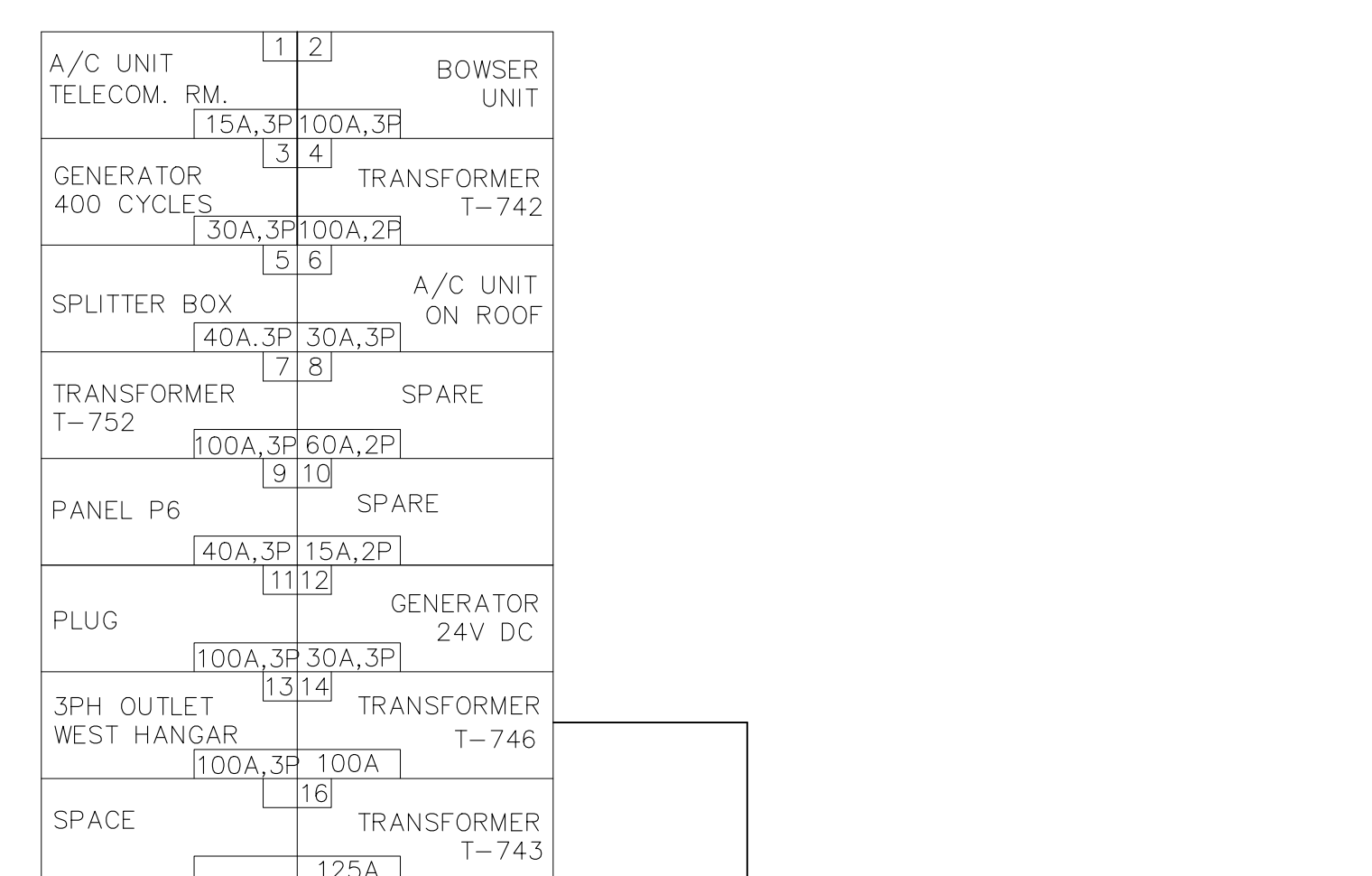
Date Printed	DD MM YYYY	Date imprimée

PROJECT: **FRPC RETRO-FIT**

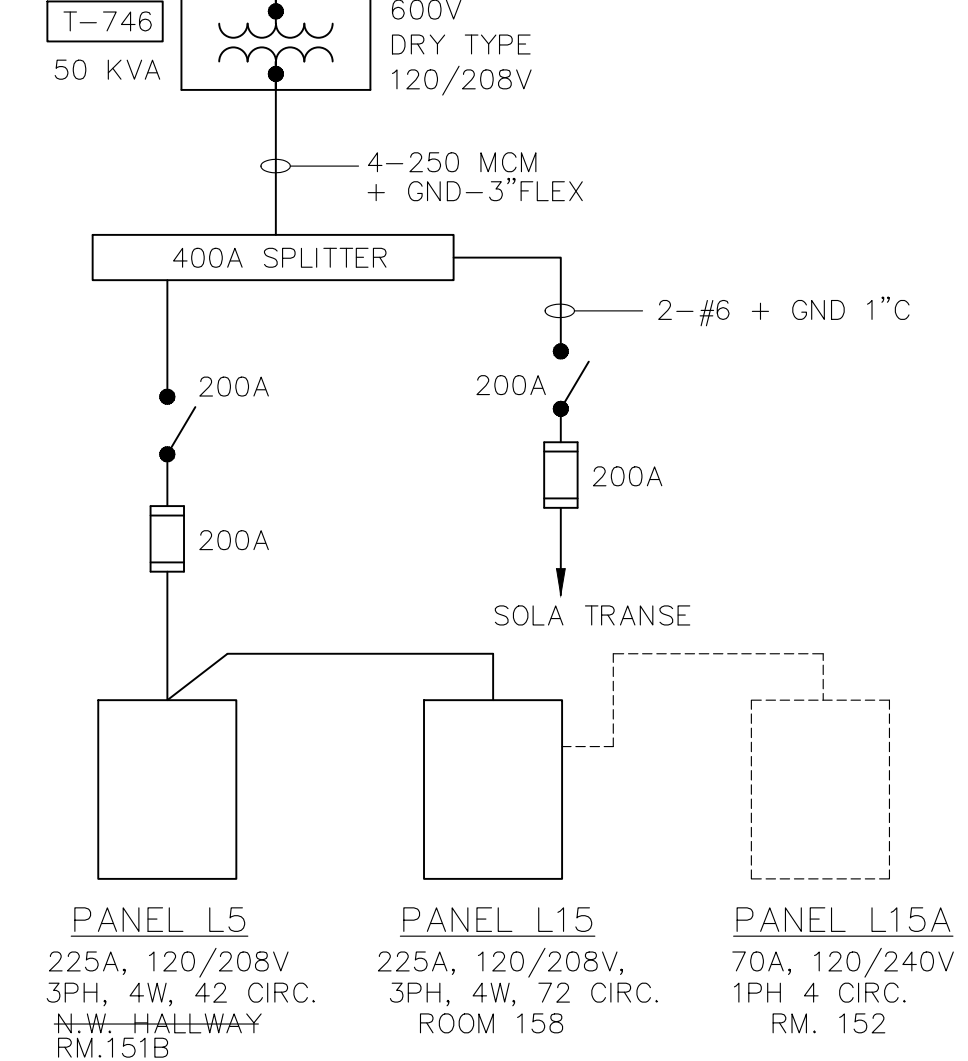
DRAWING: **MONTREAL ROAD CAMPUS**

TITLE: **ELECTRICAL SINGLE LINE DIAGRAM AND SCHEDULES**

designed	conçu	date	date
CYC		JANUARY 2023	
drawn	dessiné	scale	échelle
CYC		AS INDICATED	
checked	vérifié	sheet	feuille
		E02 of/da 2	
approved	approuvé	W.O.no.	D.T.no.
dwg.no.	dessin no.		
6018-E02			



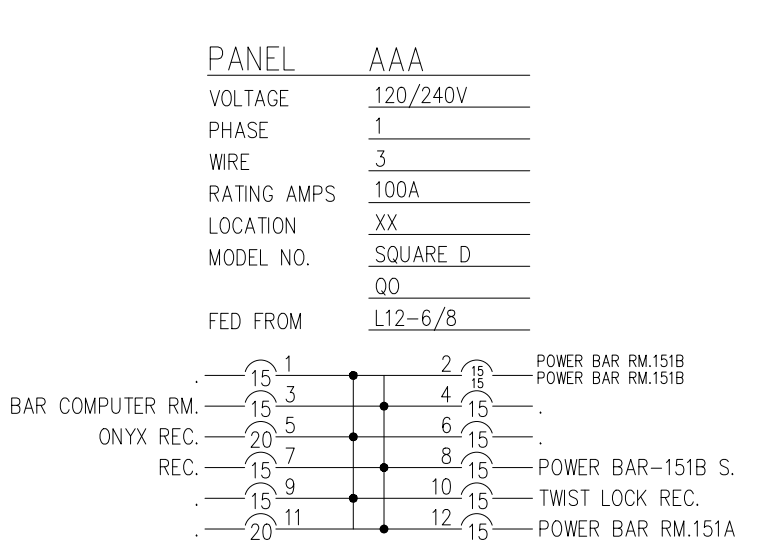
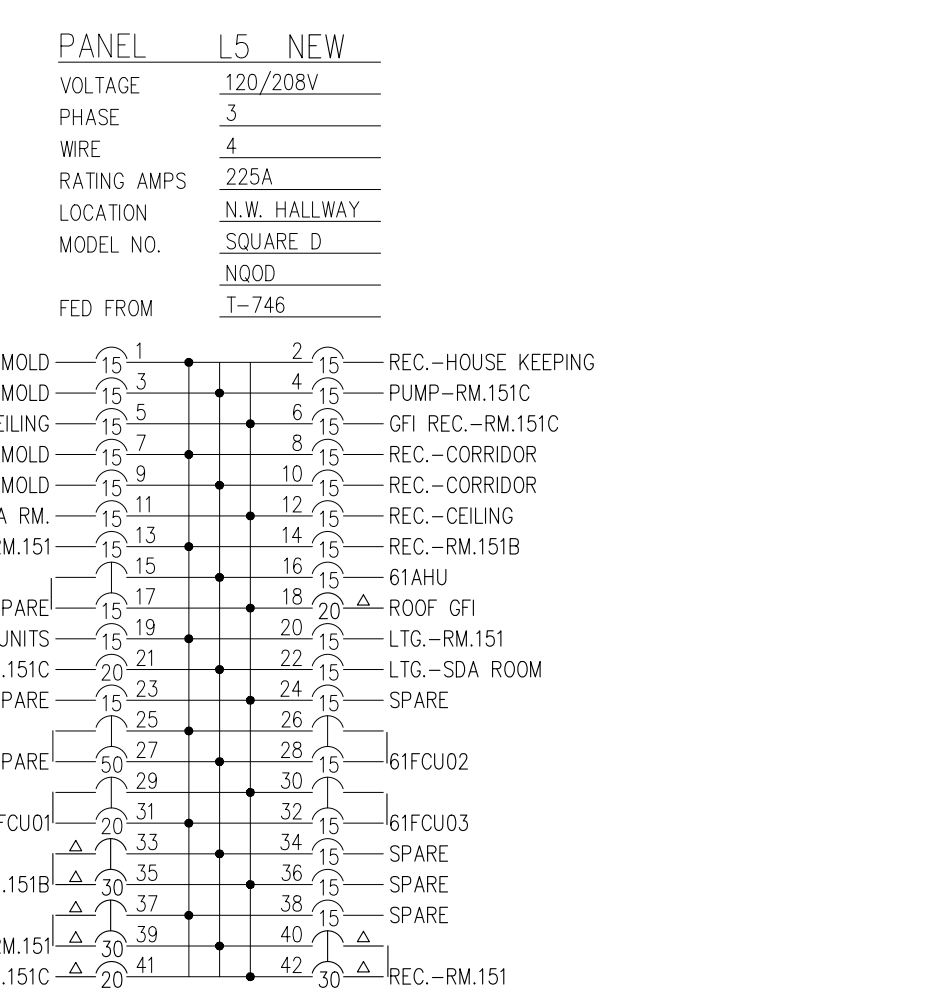
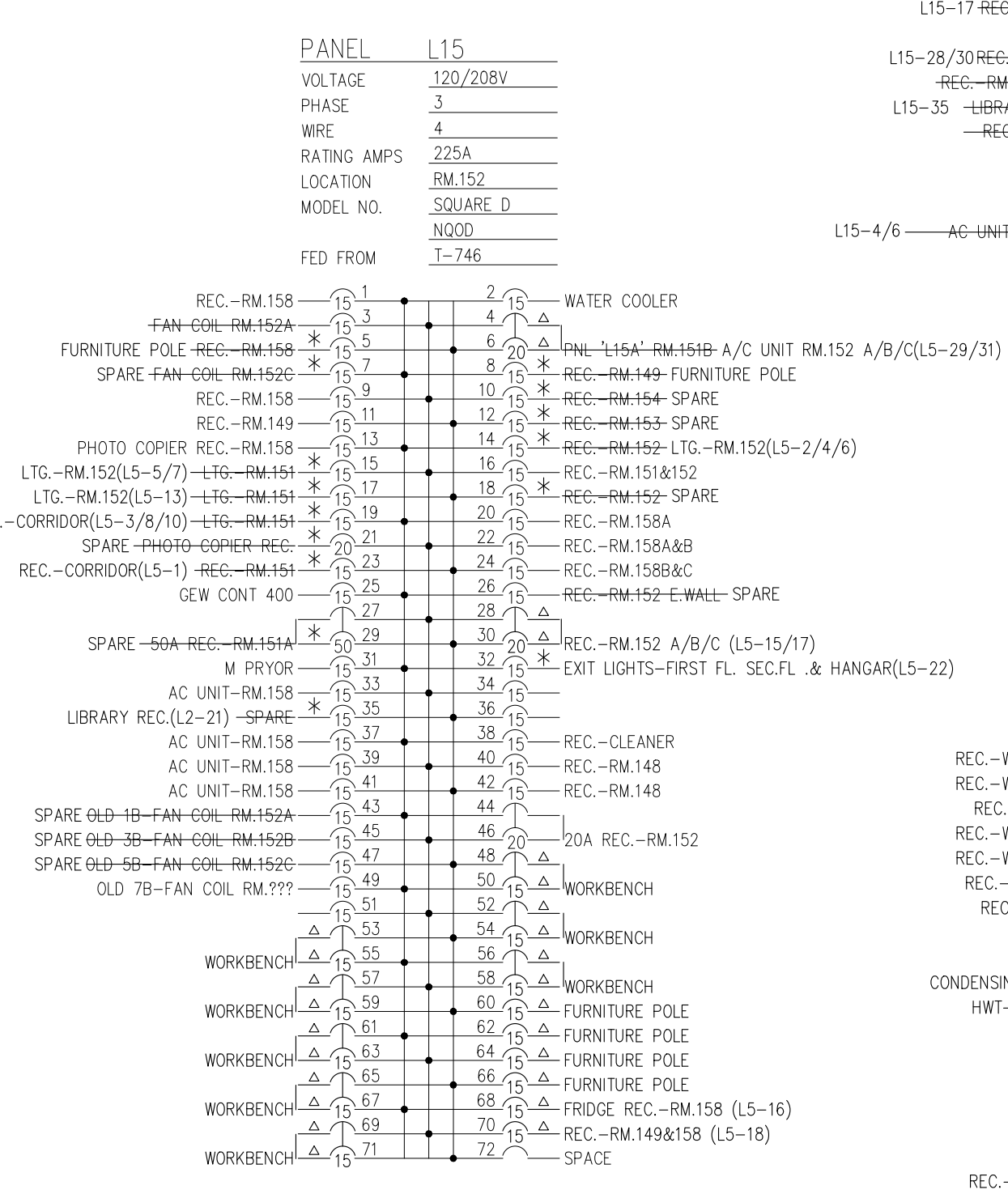
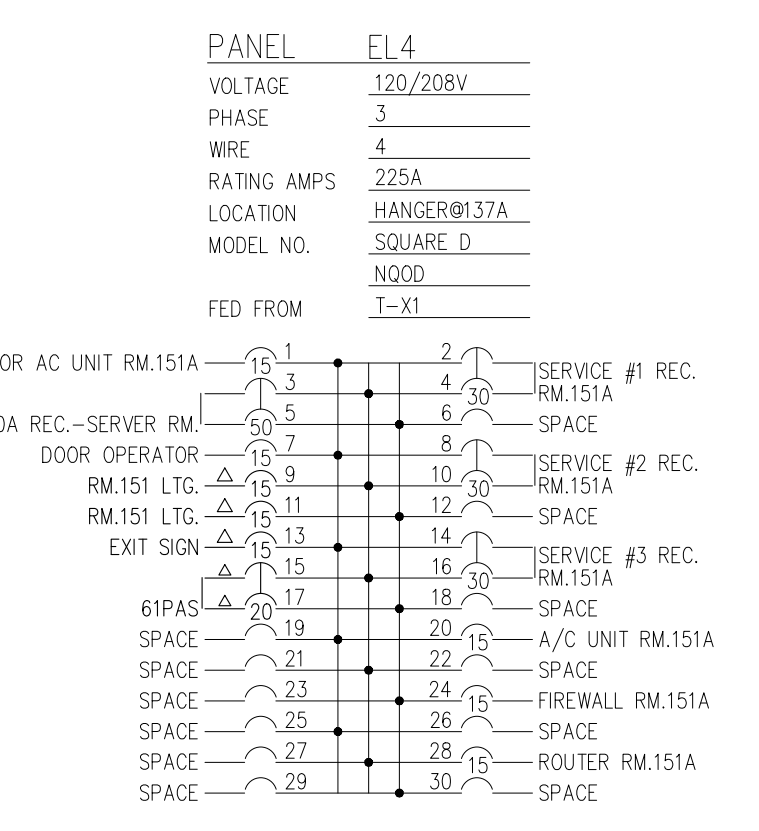
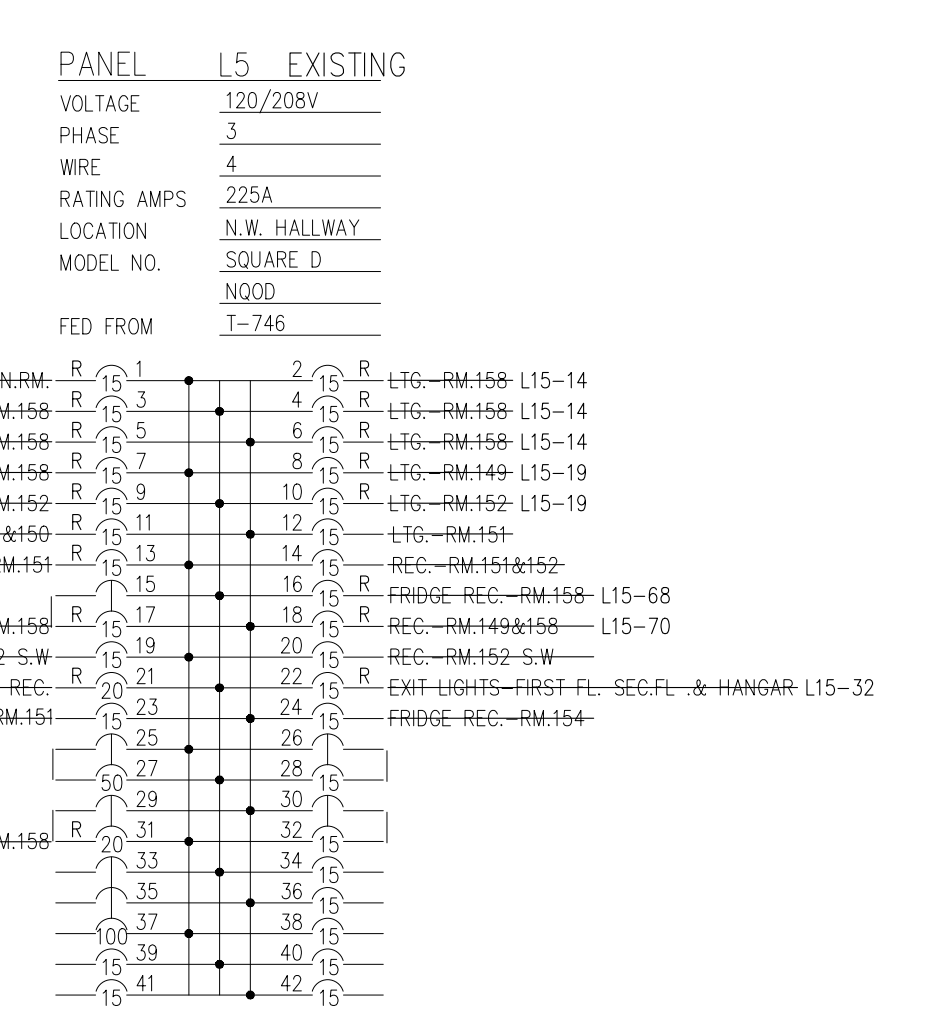
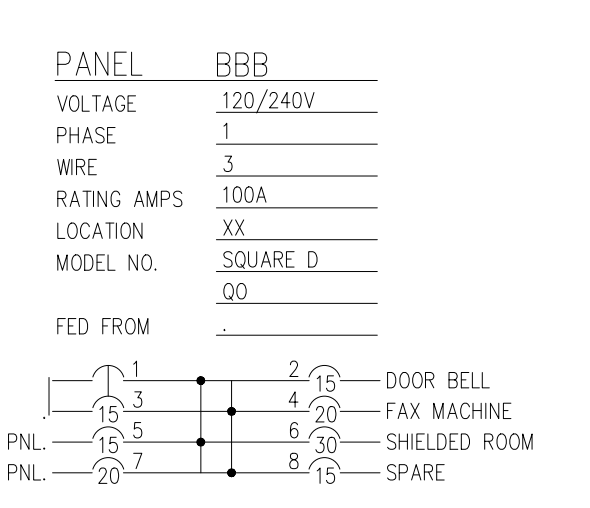
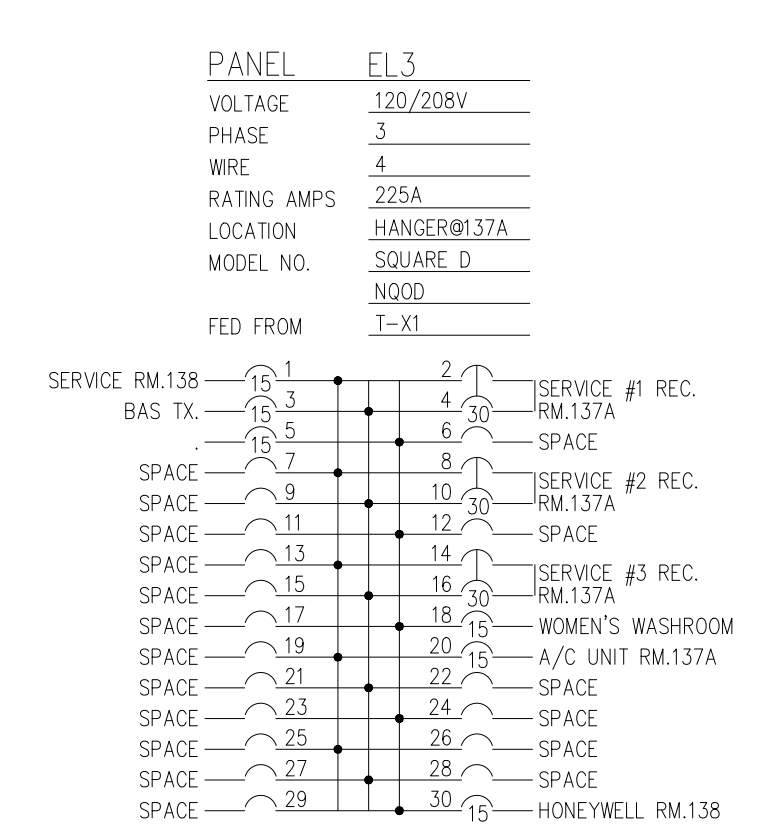
PANEL P3
 400A, 347/600V, 4W
 SQUARE "D" I-LINE
 N. EAST HANGAR



PANEL L5
 225A, 120/208V
 3PH, 4W, 42 CIRC.
 N.W. HALLWAY
 RM.151B

PANEL L15
 225A, 120/208V,
 3PH, 4W, 72 CIRC.
 ROOM 158

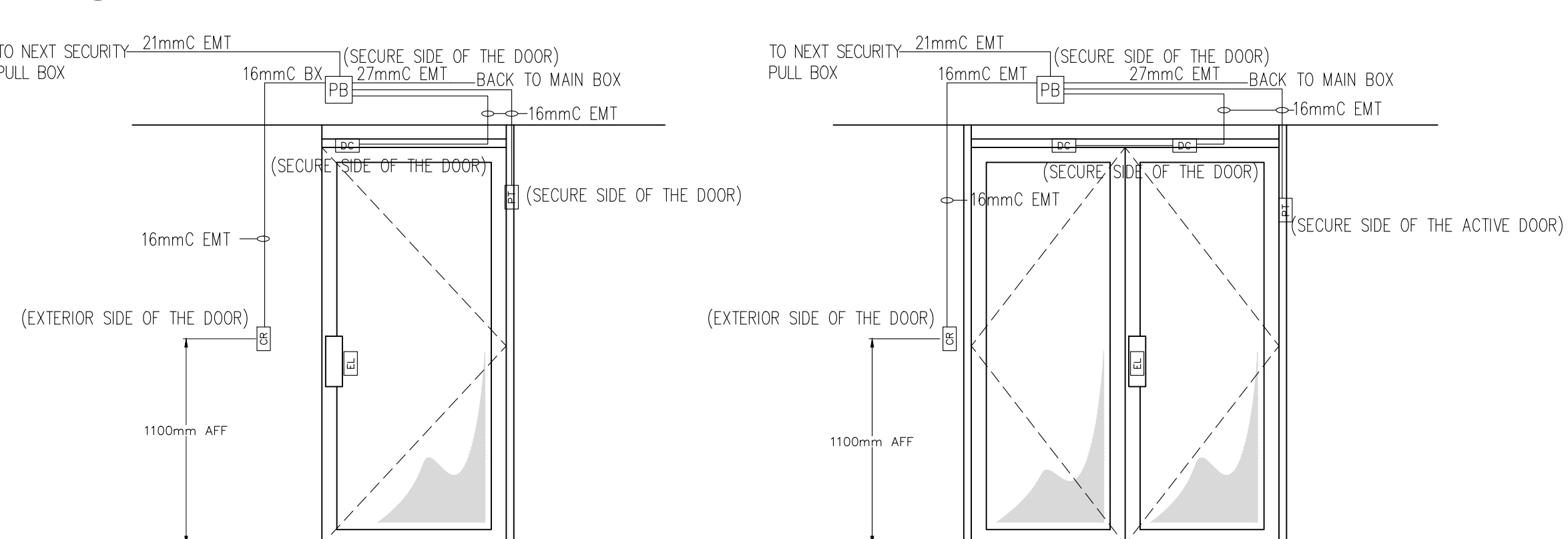
PANEL L15A
 70A, 120/240V
 1PH, 4 CIRC.
 RM. 152



2 PANEL SCHEDULES

TYPE	LUMINAIRE TYPE	LAMP TYPE	LAMP WATT	LAMP VOLTAGE	MODEL NUMBER	SIZE	NOTE
1	TRACK MOUNTED 60 DEGREE LED	LED	20W	120	ETC ONE CELL YOKE ARCP1-3-50-B-Y		
2	TRACK MOUNTED MINI 60 DEGREE LED	LED	20W	120	ETC IRIDEON IREFPZ-30-90-120V-T-DMX		
3	TRACK MOUNTED WLZ LED	LED	20W	120	ETC IRIDEON IRWLZ-30-90-120V-T-DMX		
4	TRACK MOUNTED MINI LED 26 DEGREE	LED	12W	120	ETC SOURCE FOUR MINI 4ML-30-90-120V-T		
5	TRACK MOUNTED MINI LED 36 DEGREE	LED	12W	120	ETC SOURCE FOUR MINI 4ML-30-90-120V-T		
6	TRACK MOUNTED MINI LED 50 DEGREE	LED	12W	120	ETC SOURCE FOUR MINI 4ML-30-90-120V-T		

3 LUMINAIRE SCHEDULE



4 DOOR SECURITY DETAIL

1 PARTIAL SINGLE LINE DIAGRAM



SCALE: N.T.S.