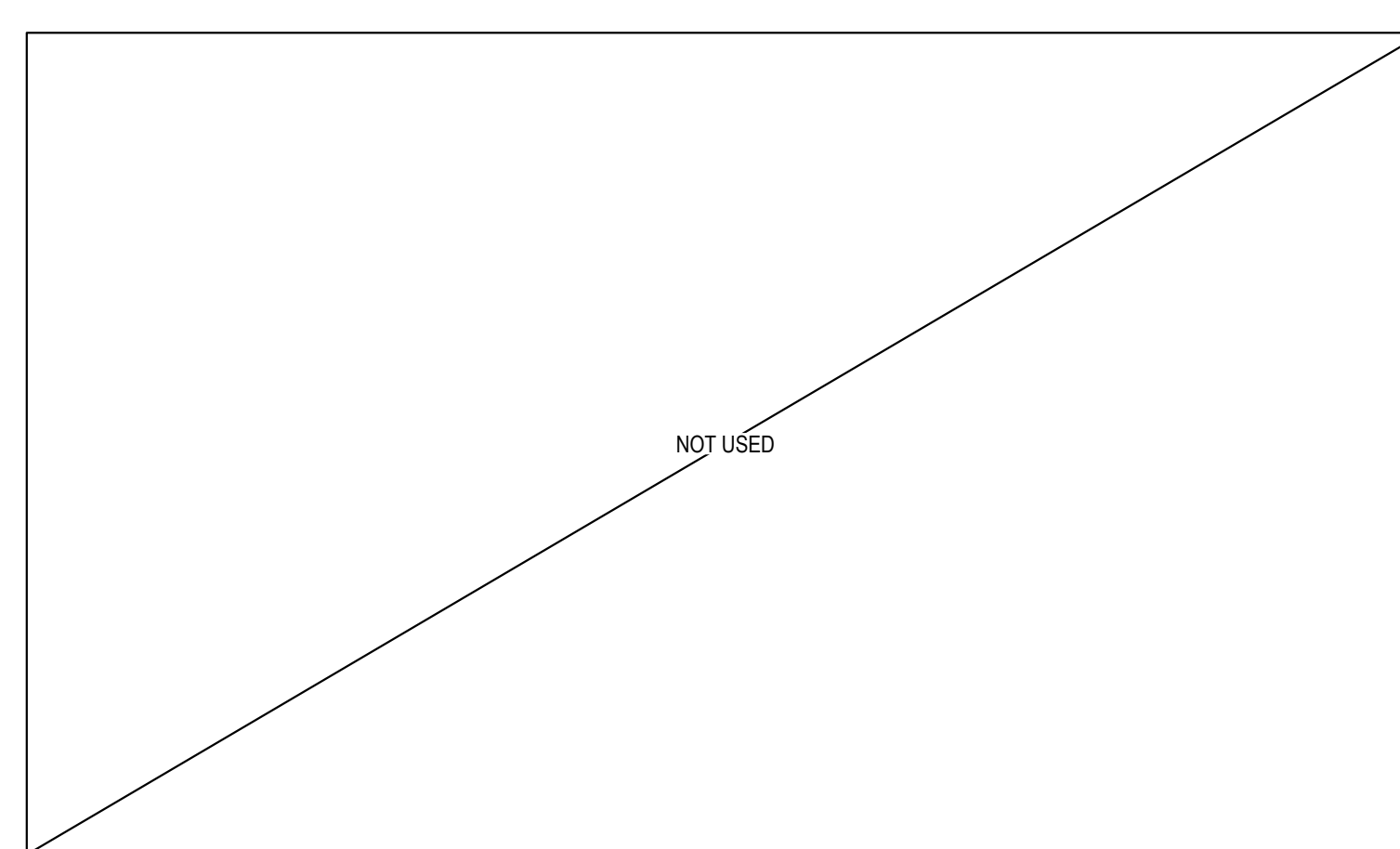


ABBREVIATIONS	
FIRE PROTECTION	HVAC
AFF ABOVE FINISHED FLOOR	AC AIR CONDITIONING
BOB BOTTOM OF BEAM	AHU AIR HANDLING UNIT
BOD BOTTOM OF DUCT	AL ACOUSTICAL LINING
BOP BOTTOM OF PIPE	BCU BLOWER COIL UNIT
CH CEILING HEIGHT	BPD BYPASS DAMPER
DN DOWN	BTU BRITISH THERMAL UNIT
DR DRAIN	BHP BRAKE HORSE POWER
DWG DRAWING	CAC COMPUTER ROOM AC
EL ELEVATION	CD CEILING DIFFUSER
F FIRE SERVICE	CFM CUBIC FEET PER MINUTE
FDC FIRE DEPARTMENT CONNECTION	CHW CHILLED WATER
FHR FIRE HOSE RACK	CWR CONDENSER WATER RETURN
FP FIRE PROTECTION	CWS CONDENSER WATER SUPPLY
FSP FIRE STAND PIPE	CP CONDENSATE PUMP
NTS NOT TO SCALE	CV CONSTANT VOLUME
PA PRE-ACTION	DN DOWN
QTY QUANTITY	EAT ENTERING AIR TEMPERATURE
SPR SPRINKLER	EF EXHAUST FAN
SQ.FT. SQUARE FOOT (FEET)	ER EXISTING TO BE RELOCATED
T.C.S.P. TEMPORARY CORE SPRINKLER PROTECTION	FC FLEXIBLE CONNECTION
TEMP TEMPERATURE	FD/AD FIRE DAMPER WITH ACCESS DOOR
TS TAMPER SWITCH	FSD/AD COMBINATION FIRE & SMOKE DAMPER WITH ACCESS DOOR
TYP TYPICAL	GPM GALLONS PER MINUTE
ULC UNDERWRITERS LABORATORY OF CANADA	HP HORSEPOWER
	IN WC INCHES OF WATER COLUMN
PLUMBING	KW KILOWATT
CM COFFEE MAKER	LPS LITER PER SECOND
CO CLEAN OUT	LD LINEAR DIFFUSER
CW COLD WATER	NTS NOT TO SCALE
DN DOWN	PA PASCAL
DW DISHWASHER	PD PUMP DISCHARGE
EL ELEVATION	RA RETURN AIR
ES EMERGENCY SHOWER	RG RETURN AIR GRILLE
ER EXISTING TO BE RELOCATED	RL RELOCATED
EW EYEWASH STATION	RPM ROTATIONS PER MINUTE
EWH ELECTRIC WATER HEATER	RPS ROTATIONS PER SECOND
EX EXISTING ITEM	RTU ROOFTOP UNIT
F WATER FILTER	TF TRANSFER FAN
FD FLOOR DRAIN	TO TRANSFER OPENING
HW HOT WATER	TR TOP REGISTER
HWD HOT WATER DISPENSER	VAV VARIABLE AIR VOLUME
HWVO HOT WATER VALVED OUTLET	VD VOLUME DAMPER
IM ICE MAKER	WMS WIRE MESH SCREEN
IW INDIRECT WASTE	(XXX) CFM OF AIR SUPPLY
IWH INSTANTANEOUS WATER HEATER	(XXX)V VAV DIFFUSER, MAXIMUM AIRFLOW RATE INDICATED
LAV LAVATORY	(XXX) CFM OF AIR - RETURN/EXHAUST
MER MECHANICAL EQUIPMENT ROOM	
NCW NON-POTABLE COLD WATER	
NHW NON-POTABLE HOT WATER	
NTS NOT TO SCALE	
PO PLUGGED OUTLET	
RL RELOCATED	
RO REVERSE OSMOSIS	
RPZ REDUCED PRESSURE ZONE BACKFLOW PREVENTER	
S SOIL	
SA SHOCK ABSORBER	
SAN SANITARY	
SK SINK	
SPECS SPECIFICATIONS	
SQ.FT. SQUARE FOOT (FEET)	
TMV THERMOSTATIC MIXING VALVE	
TP TRAP PRIMER	
TYP TYPICAL	
UL UNDERWRITERS LABORATORY	
UR URINAL	
V VENT	
W WASTE	
WC WATER CLOSET	
WCO WATER CLEANOUT	
WHA WATER HAMMER ARRESTOR	

SYMBOLS			
FIRE PROTECTION		PLUMBING	HVAC
— SPR — EXISTING SPRINKLER PIPING TO REMAIN	— — — — — EXISTING COLD WATER PIPING TO REMAIN	— — — — — EXISTING HOT WATER PIPING TO REMAIN	18x10 18x10 DUCT SIZE (FIRST FIGURE INDICATES PLAN SIZE)
--- DR --- EXISTING SPRINKLER DRAIN PIPING TO REMAIN	--- --- --- EXISTING VENT PIPING TO REMAIN	--- --- --- EXISTING DRAINAGE PIPING TO REMAIN (W OR S)	RETURN OR EXHAUST DUCT UP (SUCTION SIDE OF FAN)
////// EXISTING PIPING TO BE REMOVED	////// EXISTING PIPING TO BE REMOVED	////// EXISTING PIPING TO BE REMOVED	RETURN OR EXHAUST DUCT DOWN (SUCTION SIDE OF FAN)
— SPR — SPRINKLER SYSTEM PIPING	— — — — — COLD WATER PIPING (CW)	— — — — — HOT WATER PIPING (HW)	2x2 RETURN AIR OUTLET
— FSP — FIRE STANDPIPE SYSTEM PIPING	— — — — — DRAINAGE PIPING ABOVE SLAB	— — — — — DRAINAGE PIPING BELOW SLAB	2x2 SUPPLY AIR OUTLET
— PA — PRE-ACTION SYSTEM PIPING	— — — — — VENT PIPING (V)	— — — — — DIRECTION OF FLOW	ACOUSTIC LINING IN DUCT
→ DIRECTION ARROW	→ DIRECTION OF FLOW	→ DIRECTION OF FLOW	FLEXIBLE CONNECTION
○ PIPE-UP UNLESS OTHERWISE NOTED	○ PIPE-UP UNLESS OTHERWISE NOTED	○ PIPE-UP UNLESS OTHERWISE NOTED	ELBOW WITH TURNING VANES
○ PIPE DROP UNLESS OTHERWISE NOTED	○ PIPE DROP UNLESS OTHERWISE NOTED	○ PIPE DROP UNLESS OTHERWISE NOTED	RADIUS ELBOW
○ TOP CONNECTION	○ TOP CONNECTION	○ TOP CONNECTION	WIRE MESH SCREEN
○ BOTTOM CONNECTION	○ BOTTOM CONNECTION	○ BOTTOM CONNECTION	REMOVAL WORK
○ CAPPED OUTLET	○ CAPPED OUTLET	○ CAPPED OUTLET	EXISTING WORK TO REMAIN
LOW HIGH DROP OR RISE	LOW HIGH DROP OR RISE	LOW HIGH DROP OR RISE	NEW WORK
NEW CONNECTION	NEW CONNECTION	NEW CONNECTION	① THERMOSTAT
EXISTING FIRE HOSE RACK (RISER DIAGRAM/ELEVATION)	EXISTING FIRE HOSE RACK (RISER DIAGRAM/ELEVATION)	EXISTING FIRE HOSE RACK (RISER DIAGRAM/ELEVATION)	TEMPERATURE SENSOR
EXISTING FIRE HOSE RACK (PLAN)	EXISTING FIRE HOSE RACK (PLAN)	EXISTING FIRE HOSE RACK (PLAN)	SW SWITCH
EXISTING FLOOR CONTROL ASSEMBLY	EXISTING FLOOR CONTROL ASSEMBLY	EXISTING FLOOR CONTROL ASSEMBLY	SD DUCT MOUNTED SMOKE DETECTOR
EXISTING WATER FLOW DETECTOR	EXISTING WATER FLOW DETECTOR	EXISTING WATER FLOW DETECTOR	40MM DOOR UNDERCUT
EXISTING SHUT-OFF VALVE	EXISTING SHUT-OFF VALVE	EXISTING SHUT-OFF VALVE	CUT AND CAP AIR TIGHT
EXISTING NORMALLY CLOSED DRAIN VALVE	EXISTING NORMALLY CLOSED DRAIN VALVE	EXISTING NORMALLY CLOSED DRAIN VALVE	POINT OF NEW CONNECTION
EXISTING CHECK VALVE	EXISTING CHECK VALVE	EXISTING CHECK VALVE	POINT OF DISCONNECTION
EXISTING O.S.&Y. VALVE	EXISTING O.S.&Y. VALVE	EXISTING O.S.&Y. VALVE	CONDENSATE PUMP
EXISTING O.S.&Y. VALVE WITH TAMPER SWITCH	EXISTING O.S.&Y. VALVE WITH TAMPER SWITCH	EXISTING O.S.&Y. VALVE WITH TAMPER SWITCH	M MID MOTORIZED DAMPER W/ ACCESS DOOR
EXISTING PRESSURE REDUCING VALVE (PRV)	EXISTING PRESSURE REDUCING VALVE (PRV)	EXISTING PRESSURE REDUCING VALVE (PRV)	FIRE DAMPER W/ ACCESS DOOR
EXISTING PRE-ACTION VALVE	EXISTING PRE-ACTION VALVE	EXISTING PRE-ACTION VALVE	FIRE/SMOKE DAMPER W/ ACCESS DOOR
EXISTING 3 WAY ROOF MANIFOLD	EXISTING 3 WAY ROOF MANIFOLD	EXISTING 3 WAY ROOF MANIFOLD	VOLUME DAMPER
EXISTING SIAMESE CONNECTION	EXISTING SIAMESE CONNECTION	EXISTING SIAMESE CONNECTION	SUPPLY
EXISTING PRESSURE GAUGE (PG)	EXISTING PRESSURE GAUGE (PG)	EXISTING PRESSURE GAUGE (PG)	RETURN/EXHAUST
EXISTING UNION	EXISTING UNION	EXISTING UNION	TRANSFER DUCT
EXISTING WATER-PROOF PIPE SLEEVE	EXISTING WATER-PROOF PIPE SLEEVE	EXISTING WATER-PROOF PIPE SLEEVE	TRANSFER OPENING WITH RETURN GRILLES ON BOTH SIDES. 12x6 GRILLE U.O.N.
EXISTING PUMP	EXISTING PUMP	EXISTING PUMP	(XXX) SUPPLY AIR CFM
POINT OF DISCONNECTION FROM EXISTING	POINT OF DISCONNECTION FROM EXISTING	POINT OF DISCONNECTION FROM EXISTING	(XXX) RETURN/EXHAUST AIR CFM
POINT OF NEW CONNECTION TO EXISTING	POINT OF NEW CONNECTION TO EXISTING	POINT OF NEW CONNECTION TO EXISTING	
SHEET KEYNOTE DESIGNATION	SHEET KEYNOTE DESIGNATION	SHEET KEYNOTE DESIGNATION	



1 DETAIL - NOT USED
M-001 N.T.S.

MECHANICAL DRAWING LIST	
SHEET NUMBER	SHEET TITTLE
M-001	MECHANICAL SYMBOLS & ABBREVIATIONS
M-002	MECHANICAL PROJECT GENERAL NOTES
M-201	MECHANICAL RISER DIAGRAMS & SCHEDULES
M-301	PLUMBING 4TH FLOOR PLAN
M-401	HVAC 4TH FLOOR PLAN
M-701	FIRE PROTECTION 4TH FLOOR PLAN
M-801	MECHANICAL DETAILS SHEET 1

REV	DATE	DESCRIPTION
D	06.06.24	ISSUED FOR TENDER
C	05.30.24	ISSUED FOR PERMIT
B	05.13.24	ISSUED FOR 75% CD
A	04.15.24	ISSUED FOR 100% DD

NOTES

DRAWINGS ARE NOT TO BE SCALED.

CONSTRUCTION MUST CONFIRM TO ALL APPLICABLE CODES AND REQUIREMENTS OF THE AUTHORITIES HAVING JURISDICTION.

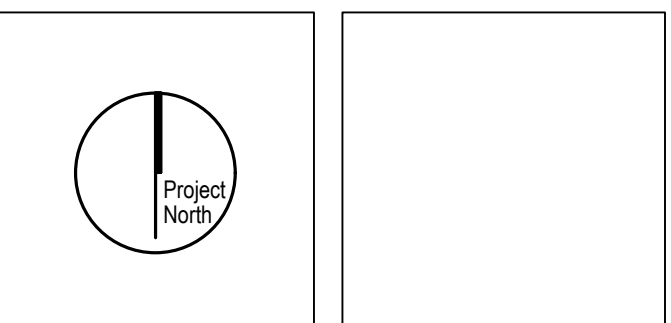
CONTRACTOR MUST VERIFY AND ACCEPT RESPONSIBILITY FOR ALL DIMENSIONS AND CONDITIONS ON SITE AND SHALL NOTIFY THE APPROPRIATE CONSULTANT OF DISCREPANCIES WITH OR VARIATIONS FROM THE INFORMATION PROVIDED BEFORE PROCEEDING WITH THE WORK.

THIS DRAWING IS NOT TO BE USED FOR CONSTRUCTION UNLESS SPECIFICALLY ISSUED "FOR CONSTRUCTION" OR OTHERWISE CONFORMING TO THE DRAWINGS THAT FORM THE BASIS FOR WHICH A BUILDING PERMIT FOR THE PROJECT HAS BEEN ISSUED.

ALL DRAWINGS, SPECIFICATIONS AND RELATED DOCUMENTS ARE THE COPYRIGHT PROPERTY OF THE ARCHITECT AND MUST BE RETURNED UPON REQUEST. REPRODUCTION OF DRAWINGS, SPECIFICATIONS AND RELATED DOCUMENTS IN PART OR IN WHOLE IS FORBIDDEN WITHOUT THE ARCHITECT'S WRITTEN PERMISSION.

HSC419A, 421, 421A
ANT LAB RENO
UTM PROJECT NO. P300-23-095
UNIVERSITY OF TORONTO MISSISSAUGA
TERRENCE DONNELLY HEALTH SCIENCES COMPLEX
1777 OUTER CIRCLE, MISSISSAUGA ON L5L 1G6

V+A ARCHITECTS
VAN ELSLANDER AND ASSOCIATES ARCHITECTS
ARCHITECTS, ENGINEERS & INTERIORS



MECHANICAL
SYMBOLS & ABBREVIATIONS

Entered: JF
Checked: ADJ
Plot: 2024-06-06

13970

M-001

PROJECT GENERAL NOTES

GENERAL	COORDINATION	FIRE PROTECTION
<p>A. INSTALLATION OF MECHANICAL EQUIPMENT SHALL BE COMPLETED IN STRICT ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS.</p> <p>B. CUT, PATCH, AND PAINT CEILINGS AND SLAB AS REQUIRED TO MATCH EXISTING CONDITIONS.</p> <p>C. DRAWINGS ARE DIAGRAMMATIC AND INDICATE GENERAL ARRANGEMENT.</p> <p>D. UPON COMPLETION OF ALL NEW WORK NO ABANDONED DUCTS OR PIPES SHALL REMAIN.</p> <p>E. THE EXISTING SYSTEMS SHALL BE LEFT IN PERFECT WORKING ORDER UPON COMPLETION OF ALL NEW WORK.</p> <p>F. PRIOR TO SUBSTANTIAL COMPLETION, THE TESTING AND BALANCING REPORT AND NFPA STAMPED LETTER SHALL BE PROVIDED TO THE CONSULTANT.</p>	<p>A. THE CONTRACTOR SHALL VISIT THE PREMISES AND COMPARE SAME WITH A FULL SET OF BID BEFORE PROCEEDING WITH ANY WORK IN OCCUPIED OR USED AREAS. THE CONTRACTOR SHALL APPLY TO LANDLORD FOR PERMISSIONS TO ENTER SUCH AREAS. THE CONTRACTOR IS OBLIGED TO PERFORM WORK ONLY AT TIMES DESIGNATED BY THE LANDLORD. THERE WILL BE NO ADDITIONAL COMPENSATION FOR THE WORK PERFORMED AFTER HOURS OR ON OFF-DAYS WITHOUT PRIOR WRITTEN APPROVAL.</p> <p>B. CONTRACTOR SHALL COORDINATE THE WORK WITH ALL TRADES AND EXISTING CONDITIONS.</p> <p>C. CONTRACTOR SHALL COORDINATE SLAB PENETRATIONS WITH STRUCTURAL ENGINEERS. STRUCTURAL ENGINEER TO BE RETAINED BY CONTRACTOR.</p>	<p>A. CONTRACTOR SHALL VERIFY IN THE FIELD LOCATION OF EXISTING FIRE STANDPIPE AND/OR SPRINKLER RISERS.</p> <p>B. VERIFY ALL GOVERNING DIMENSIONS, PIPE SIZES AND LOCATION OF THE PIPING AND EQUIPMENT TO BE REMOVED.</p> <p>C. NOTIFY BUILDING MANAGER AT LEAST 48 HOURS BEFORE DEMOLITION WORK OR BEFORE SHUT DOWN OF EXISTING SERVICES. RISER SHUT DOWNS SHALL BE PERFORMED AT CONTRACTOR'S COST, AT DESIGNATED TIMES UNDER BUILDING MANAGER'S SUPERVISION AND ONLY WITH APPROVAL.</p> <p>D. THE CONTRACTOR'S WORK ACTIVITIES SHALL NOT INTERFERE WITH THE BUILDING SERVICES IN ANY WAY WITHOUT THE EXPRESS PERMISSION IN WRITING BY THE BUILDING MANAGER. SUCH INTERRUPTIONS AND INTERFERENCES SHALL BE MADE AS BRIEF AS POSSIBLE AND ONLY AT THE TIME STATED BY THE BUILDING MANAGER.</p> <p>E. PROVIDE A FIRE WATCH FOR THE DURATION OF THE SPRINKLER SHUT-DOWN. RESTORE SPRINKLER SYSTEM TO ACTIVE CONDITIONS WHEN THE FIRE WATCH IS NOT PROVIDED. COORDINATE SCHEDULING WITH BUILDING MANAGEMENT.</p> <p>F. LOCATIONS AND SIZES OF EXISTING PIPING ARE APPROXIMATE. FIELD VERIFY EXACT SIZES AND LOCATIONS OF ALL EXISTING PIPING AT THE SITE.</p> <p>G. NO REMOVED EXISTING PIPING FITTINGS, VALVES, ETC. SHALL BE REUSED UNLESS OTHERWISE APPROVED BY THE ENGINEER.</p> <p>H. CONTRACTOR & ITS SUB'S SHALL BE RESPONSIBLE FOR LOCATING ALL EXISTING SPRINKLERS AND RELATED PIPING AS WELL AS REMOVING SPRINKLERS AS REQUIRED TO MEET NEW PROPOSED SPRINKLER HEAD LAYOUT.</p> <p>I. THE CONTRACTOR SHALL INCLUDE IN THE PRICE THE COST FOR DRAINING AND FILLING THE EXISTING SPRINKLER SYSTEM IN ORDER TO FACILITATE THE SPRINKLER SCOPE OF WORK. NOTIFY ALL MONITORING SERVICES OF SYSTEM SHUT DOWN FOR ALARMS.</p>
<p>EXISTING CONDITIONS</p> <p>A. THE CONTRACTOR SHALL VISIT THE PREMISES AND COMPARE SAME WITH A FULL SET OF BID DOCUMENTS AND SPECIFICATIONS AND BECOME SATISFIED WITH THE CONDITIONS EXISTING AT THE BUILDING BEFORE DELIVERY OF THE PROPOSAL. NO ADDITIONAL ALLOWANCE WILL BE MADE TO THE CONTRACTOR DUE TO THE NEGLIGENCE OR FAILURE TO COMPLY WITH THE SPECIFIED REQUIREMENTS.</p> <p>B. REFER TO ARCHITECTURAL DRAWINGS FOR ALL CEILING HEIGHTS.</p>	<p>HVAC</p> <p>A. BALANCE SUPPLY OUTLETS TO AIRFLOW QUANTITIES SHOWN ON FLOOR PLAN.</p> <p>B. CLEAN ALL EXISTING AIR OUTLETS FOR REUSE AND ALL NEW AIR OUTLETS AFTER BALANCING PRIOR TO TURN OVER OF WORK.</p> <p>C. TAKE EXTRA CARE TO PREVENT DUST/DEBRIS FROM ENTERING THE HVAC SYSTEM FROM THE CONSTRUCTION AREA IN ORDER TO AVOID SPREADING DUST/DEBRIS TO OTHER AREAS OF THE BUILDING.</p> <p>D. ALL SUPPLY AIR DIFFUSERS, RETURN/EXHAUST AIR GRILLES LOCATED WITHIN THE TENANT SPACE SHALL BE VACUUMED AND CLEANED AFTER CONSTRUCTION HAS BEEN COMPLETED AND BEFORE OCCUPANCY.</p> <p>E. PROVIDE TEMPORARY MERV 8 FILTERS ON ALL BASE BUILDING RETURN AIR OPENINGS PRIOR TO CONSTRUCTION AND REPLACE FILTERS WEEKLY.</p>	
<p>DEMOLITION/REMOVALS</p> <p>A. NOTES AND GRAPHIC REPRESENTATIONS SHALL NOT LIMIT THE EXTENT OF DEMOLITION REQUIRED. CONTRACTOR SHALL VISIT THE SITE, CAREFULLY EXAMINE EXISTING CONDITIONS AND SHALL PERFORM ALL DEMOLITION REQUIRED TO ACHIEVE THE FINAL DESIGN INTENT AS REQUIRED BY THE CONTRACT DOCUMENTS. EXTENT OF ALL DEMOLITION WORK SHALL BE COORDINATED WITH THE ARCHITECT.</p> <p>B. EQUIPMENT INDICATED TO BE REMOVED SHALL BE TAKEN FROM THE SITE AND DISPOSED OF IN ACCORDANCE WITH APPLICABLE LAWS AND ENVIRONMENTAL REGULATIONS. LANDLORD SHALL HAVE THE OPTION TO RECEIVE ANY ITEMS CALLED TO BE REMOVED PRIOR TO REMOVAL FROM SITE. EQUIPMENT REQUIRED TO BE TURNED OVER TO THE OWNER SHALL BE PLACED IN A MUTUALLY ACCEPTABLE LOCATION.</p> <p>C. THE WORK SHALL INCLUDE THE REMOVAL OF MATERIALS AS DIRECTED. PRIOR TO REMOVING EQUIPMENT AND MATERIALS FROM THE PROJECT SITE, THE BUILDING MANAGER SHALL INSPECT AND ADVISE WHICH ITEMS WILL BE RESTORED.</p> <p>D. CONTRACTOR SHALL BE RESPONSIBLE FOR REMOVAL FROM THE PREMISES ALL DEBRIS RESULTING FROM REMOVAL OF WORK.</p> <p>E. CONTRACTOR SHALL CAP AIRTIGHT ALL REMAINING SERVICES, AT ALL POINTS OF DISCONNECTION, UNLESS OTHERWISE INDICATED.</p> <p>F. DEMOLITION AND OTHER WORK WHICH CREATES DISTURBING NOISE, MUST BE PERFORMED AFTER NORMAL WORKING HOURS OR ON WEEKENDS. THE DELIVERY, HANDLING, AND INSTALLING OF MATERIALS, EQUIPMENT AND DEBRIS MUST BE ARRANGED TO AVOID ANY INCONVENIENCE AND ANNOYANCE TO OTHER TENANTS. CLEANING MUST BE CONTROLLED TO PREVENT DIRT AND DUST FROM INFILTRATING INTO ADJACENT TENANT OR MECHANICAL AREAS. WELDING OR BURNING MUST BE PERFORMED ONLY DURING TIMES SPECIFICALLY APPROVED BY THE BUILDING MANAGER.</p>	<p>PLUMBING</p> <p>A. CONTRACTOR SHALL VERIFY IN THE FIELD LOCATIONS OF EXISTING PLUMBING RISERS, WHICH ARE EXISTING TO REMAIN.</p> <p>B. CONTRACTOR SHALL COORDINATE THE ROUTING OF ALL SAN, V, NCW, NHW, CW, HW, & HWR PIPING WITH DUCTS AND LIGHT FIXTURES.</p> <p>C. CONTRACTOR SHALL VERIFY IN THE FIELD THE EXISTING WATER PRESSURE. CONTRACTOR SHALL PROVIDE A PRESSURE REDUCING VALVE IF THE WATER PRESSURE EXCEEDS 80PSI.</p>	

REF	DATE	DESCRIPTION
D	06.06.24	ISSUED FOR TENDER
C	05.30.24	ISSUED FOR PERMIT
B	05.13.24	ISSUED FOR 75% CD
A	04.15.24	ISSUED FOR 100% DD

NOTES

DRAWINGS ARE NOT TO BE SCALED.

CONSTRUCTION MUST CONFIRM TO ALL APPLICABLE CODES AND REQUIREMENTS OF THE AUTHORITIES HAVING JURISDICTION.

CONTRACTOR MUST VERIFY AND ACCEPT RESPONSIBILITY FOR ALL DIMENSIONS AND CONDITIONS ON SITE AND SHALL NOTIFY THE APPROPRIATE CONSULTANT OF DISCREPANCIES WITH OR VARIATIONS FROM THE INFORMATION PROVIDED BEFORE PROCEEDING WITH THE WORK.

THIS DRAWING IS NOT TO BE USED FOR CONSTRUCTION UNLESS SPECIFICALLY ISSUED "FOR CONSTRUCTION" OR OTHERWISE CONFORMING TO THE DRAWINGS THAT FORM THE BASIS FOR WHICH A BUILDING PERMIT FOR THE PROJECT HAS BEEN ISSUED.

ALL DRAWINGS, SPECIFICATIONS AND RELATED DOCUMENTS ARE THE COPYRIGHT PROPERTY OF THE ARCHITECT AND MUST BE RETURNED UPON REQUEST. REPRODUCTION OF DRAWINGS, SPECIFICATIONS AND RELATED DOCUMENTS IN PART OR IN WHOLE IS FORBIDDEN WITHOUT THE ARCHITECT'S WRITTEN PERMISSION.

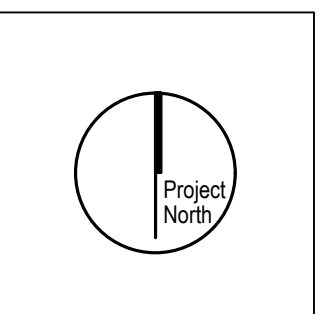
HSC419A, 421, 421A

ANT LAB RENO

UTM PROJECT NO. P300-23-095

UNIVERSITY OF TORONTO MISSISSAUGA
TERRENCE DONNELLY HEALTH SCIENCES COMPLEX
1777 OUTER CIRCLE, MISSISSAUGA ON L5L 1G6

V+A ARCHITECTS
VAN ELSLANDER AND ASSOCIATES ARCHITECTS
ARCHITECTS, ENGINEERS, INTERIORS, LANDSCAPE ARCHITECTS

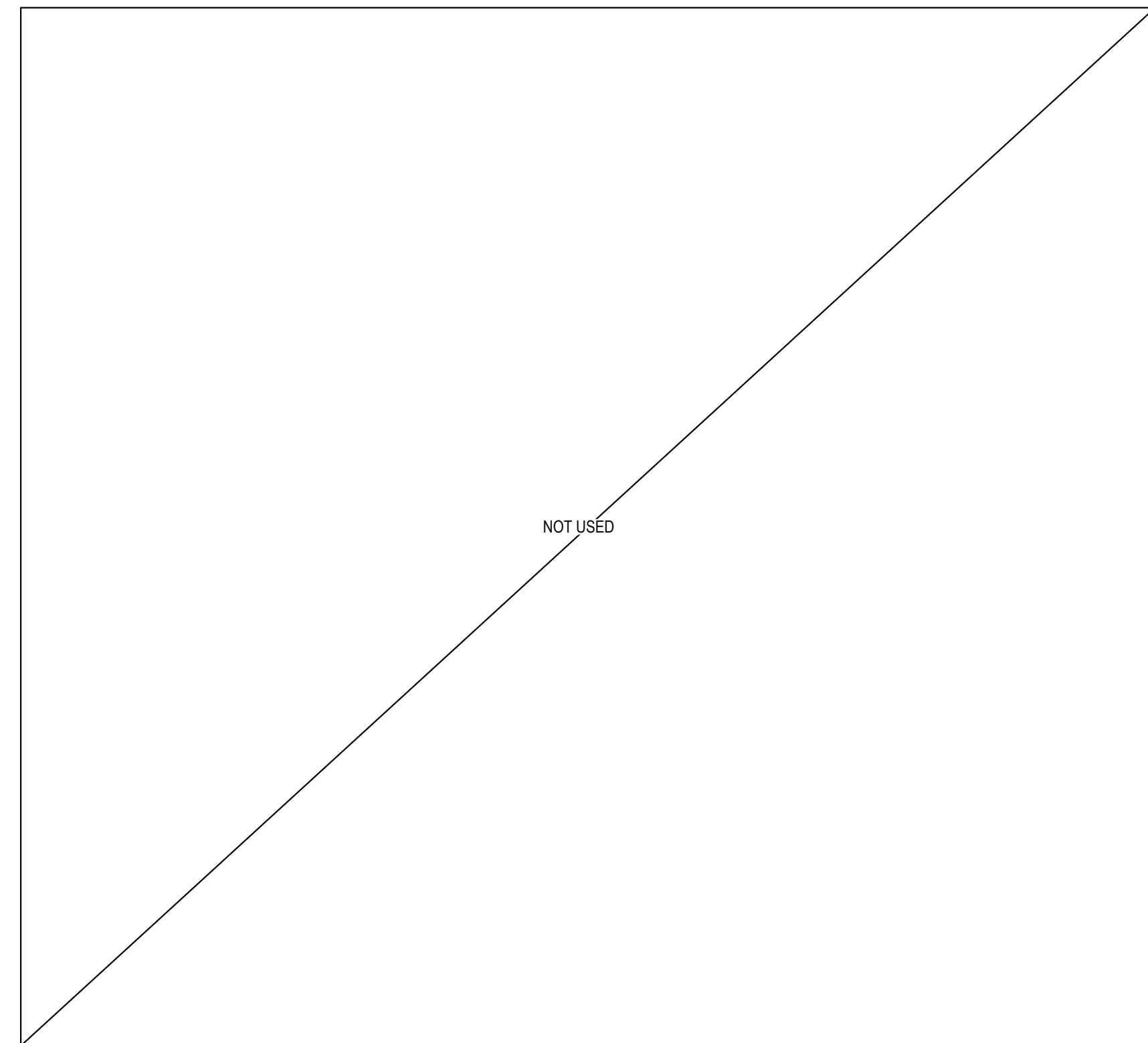


MECHANICAL
PROJECT GENERAL NOTES

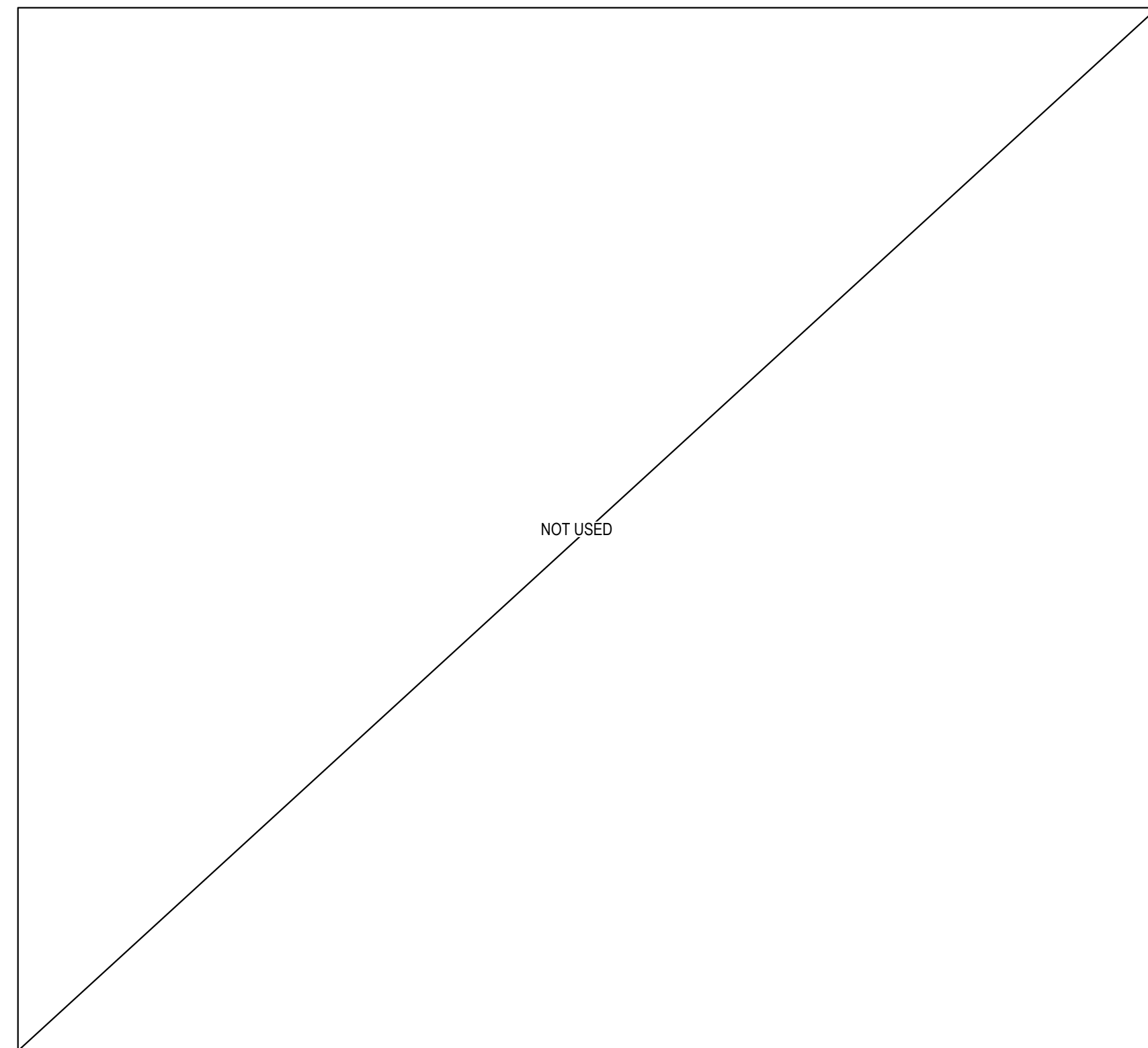
Entered: JF
Checked: ADJ
Plot: 2024-06-06

M-002

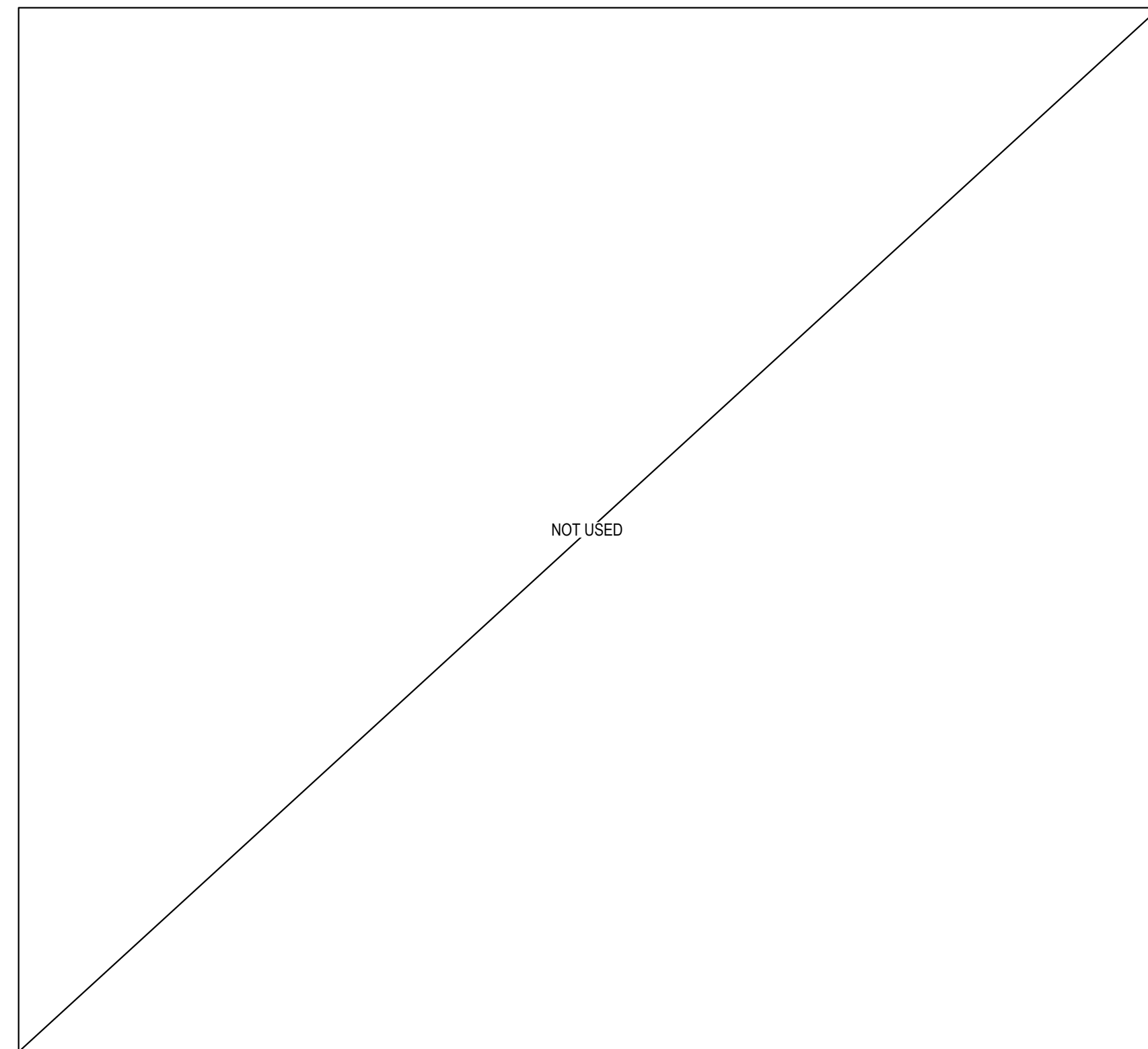
13970



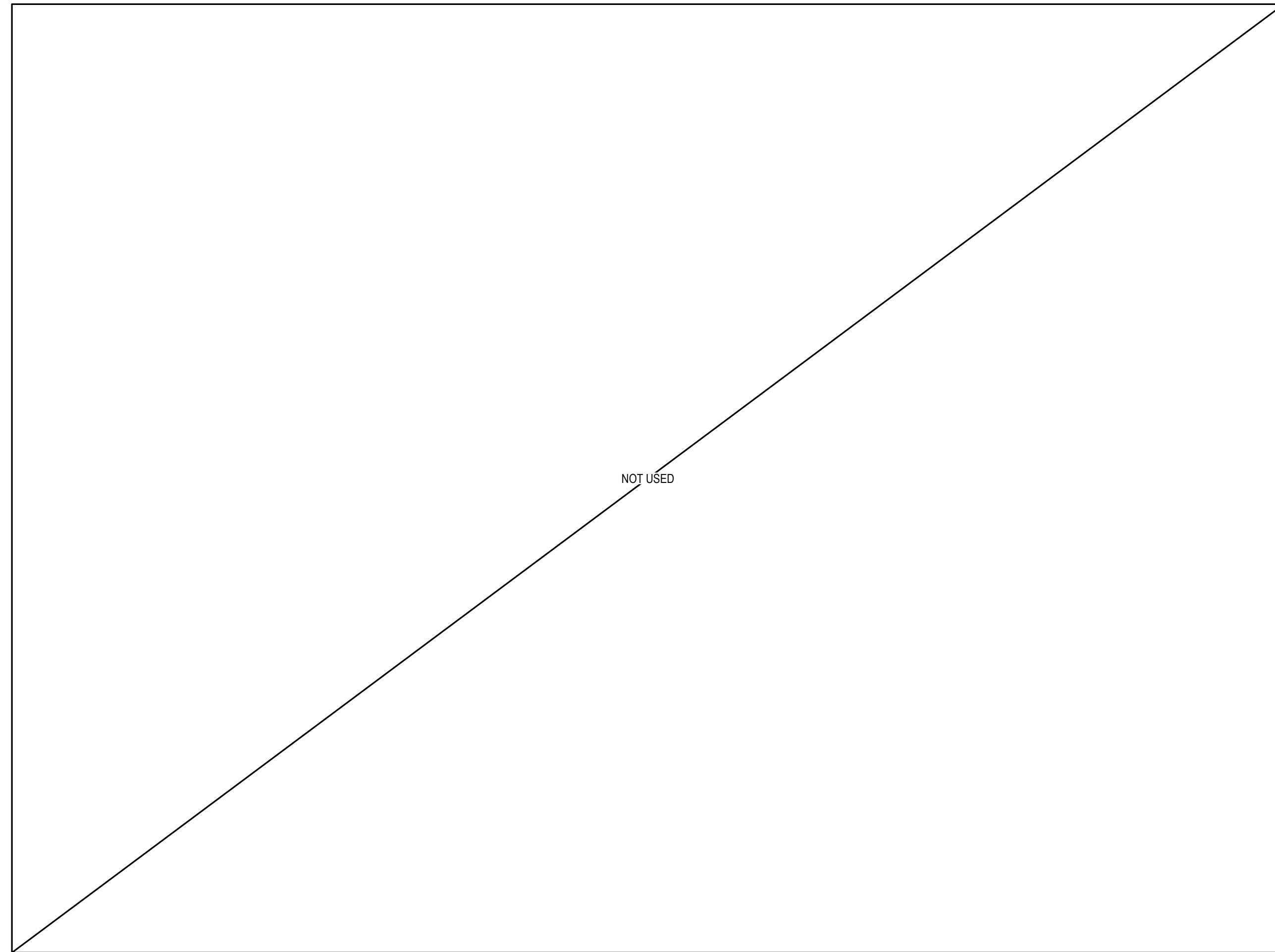
3 DETAIL - NOT USED
M-002 N.T.S.



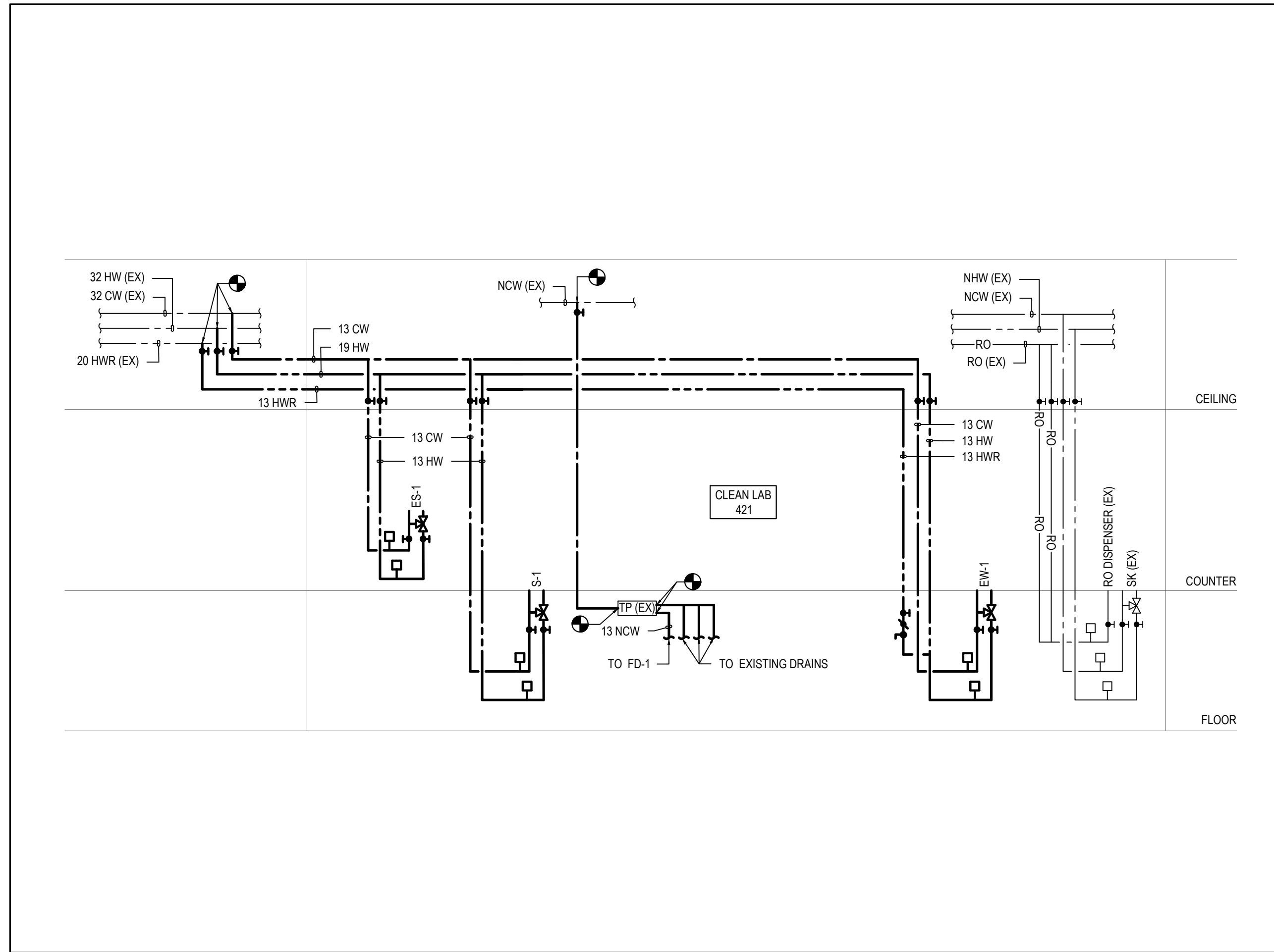
2 DETAIL - NOT USED
M-002 N.T.S.



1 DETAIL - NOT USED
M-002 N.T.S.



4 DETAIL - NOT USED
 M-201 N.T.S.



2 DOMESTIC WATER RISER DIAGRAM
 M-201 N.T.S.

REF	DATE	DESCRIPTION
D	06.06.24	ISSUED FOR TENDER
C	05.30.24	ISSUED FOR PERMIT
B	05.13.24	ISSUED FOR 75% CD
A	04.15.24	ISSUED FOR 100% DD

NOTES

DRAWINGS ARE NOT TO BE SCALED.
 CONSTRUCTION MUST CONFIRM TO ALL APPLICABLE CODES AND REQUIREMENTS OF THE AUTHORITIES HAVING JURISDICTION.
 CONTRACTOR MUST VERIFY AND ACCEPT RESPONSIBILITY FOR ALL DIMENSIONS AND CONDITIONS ON SITE AND SHALL NOTIFY THE APPROPRIATE CONSULTANT OF DISCREPANCIES WITH OR VARIATIONS FROM THE INFORMATION PROVIDED BEFORE PROCEEDING WITH THE WORK.
 THIS DRAWING IS NOT TO BE USED FOR CONSTRUCTION UNLESS SPECIFICALLY ISSUED "FOR CONSTRUCTION" OR OTHERWISE CONFORMING TO THE DRAWINGS THAT FORM THE BASIS FOR WHICH A BUILDING PERMIT FOR THE PROJECT HAS BEEN ISSUED.
 ALL DRAWINGS, SPECIFICATIONS AND RELATED DOCUMENTS ARE THE COPYRIGHT PROPERTY OF THE ARCHITECT AND MUST BE RETURNED UPON REQUEST. REPRODUCTION OF DRAWINGS, SPECIFICATIONS AND RELATED DOCUMENTS IN PART OR IN WHOLE IS FORBIDDEN WITHOUT THE ARCHITECT'S WRITTEN PERMISSION.

HSC419A, 421, 421A

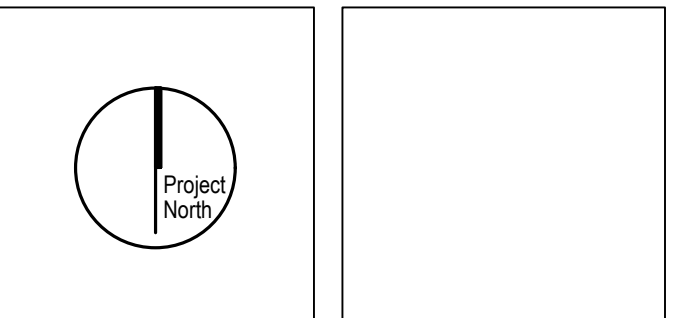
ANT LAB RENO

UTM PROJECT NO. P300-23-095
 UNIVERSITY OF TORONTO MISSISSAUGA
 TERENCE DONNELLY HEALTH SCIENCES COMPLEX
 1777 OUTER CIRCLE, MISSISSAUGA ON L5L 1G6

V+A ARCHITECTS

VAN ELSLANDER AND ASSOCIATES ARCHITECTS

ARCHITECTS, ENGINEERS, INTERIORS, LANDSCAPE ARCHITECTS



MECHANICAL RISER DIAGRAMS & SCHEDULES

Entered: JF
 Checked: ADJ
 Plot: 2024-06-06

M-201

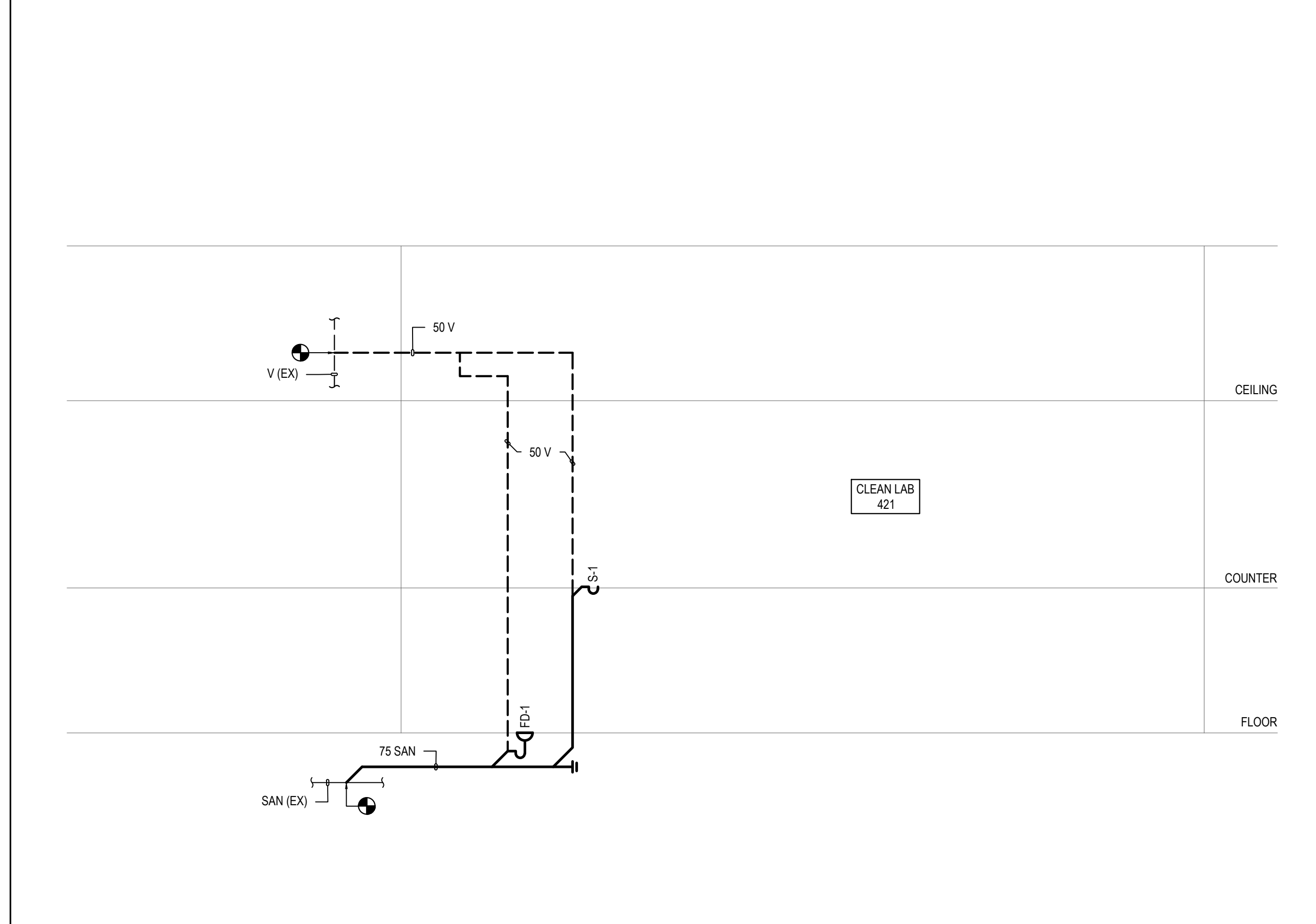
13970

PLUMBING FIXTURE CONNECTION SCHEDULE								
TAG	DESCRIPTION	WASTE	VENT	CW	HW	HWR	NCW	REMARKS
ES-1	EMERGENCY SHOWER	-	-	13 MM	13 MM	-	-	PROVIDE AND INSTALL THERMOSTATIC VALVE BELOW COUNTER AND SET TO 35°C. SEE RISER DIAGRAM FOR PIPING SCHEMATIC.
EW-1	EYEWASH STATION	-	-	13 MM	13 MM	13 MM	-	PROVIDE AND INSTALL THERMOSTATIC VALVE BELOW COUNTER AND SET TO 29°C. SEE RISER DIAGRAM FOR PIPING SCHEMATIC.
S-1	SINK	50 MM	50 MM	13 MM	13 MM	-	-	PROVIDE AND INSTALL THERMOSTATIC VALVE BELOW COUNTER AND SET TO 43°C. SEE RISER DIAGRAM FOR PIPING SCHEMATIC.
FD-1	FLOOR DRAIN	75 MM	50 MM	-	-	-	-	PROVIDE CW CONNECTION AND ROUTE TO ELECTRONIC TRAP PRIMER.
TP	TRAP PRIMER	-	-	-	-	-	13 MM	SEE RISER DIAGRAM FOR PIPING SCHEMATIC.

NOTES:
 1. UNLESS OTHERWISE NOTED, SEE ARCHITECTURAL DRAWINGS FOR EXACT LOCATIONS.

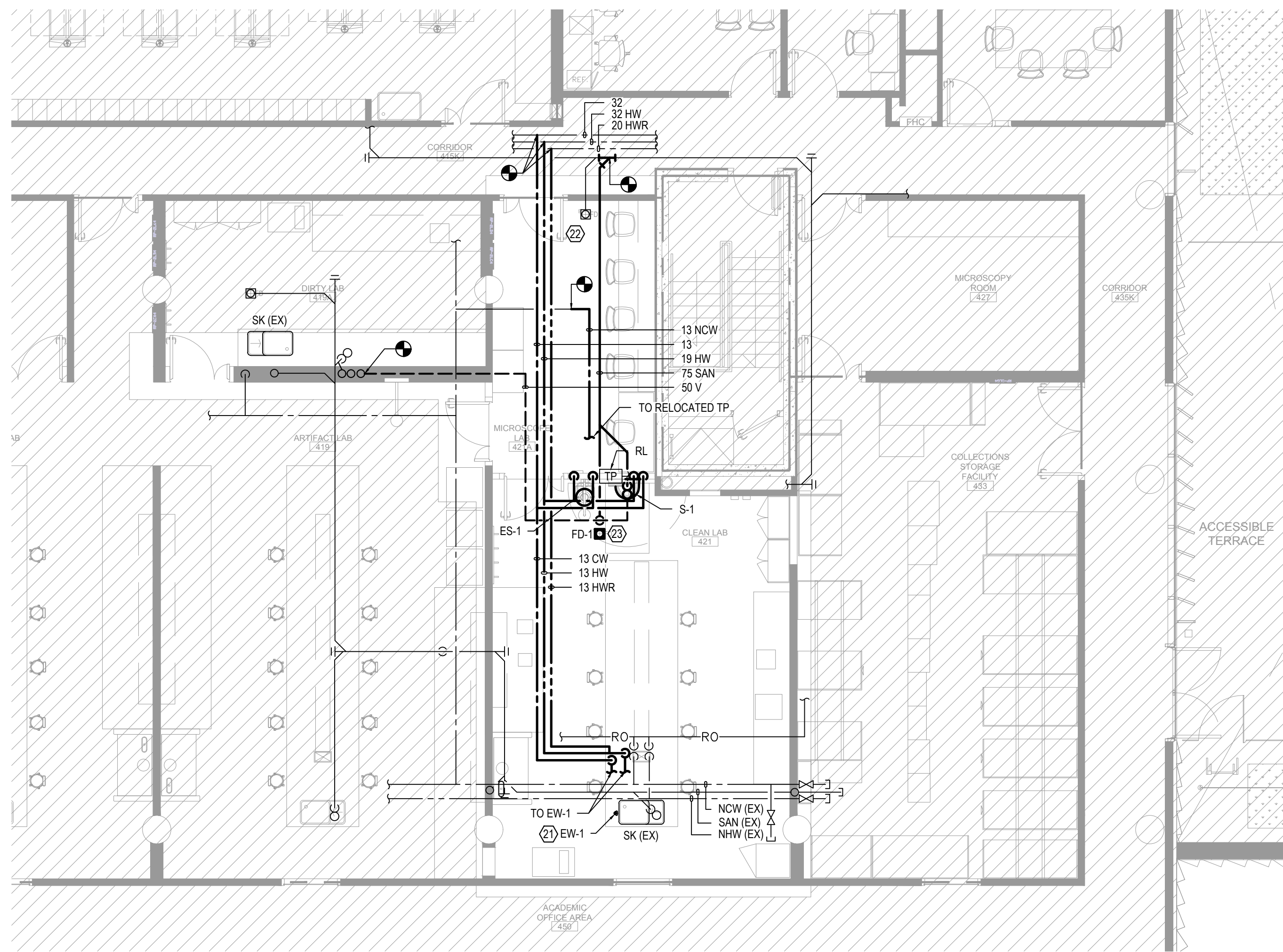
AIR INLETS AND OUTLETS SCHEDULE								
TAG	SERVICE	MAX AIRFLOW (LPS)	FACE SIZE (MM)	NECK SIZE (MM)	BORDER TYPE	NOISE CRITERIA AT MAX CFM (NC)	MAKE / MODEL	REMARKS
EG-A	EXHAUST GRILLE	0-115	400 X 150	-	-	20	E.H. PRICE / 530	SEE NOTES

NOTES:
 1. DIFFUSER COLOUR/FINISH TO BE COORDINATED WITH ARCHITECT.
 2. VOLUME DAMPERS 3 FEET MIN. FROM GRILLES.
 3. FOR DUCTED EXHAUST/RETURN REGISTERS, PROVIDE MIN. 4" DEEP PLENUM, TRANSITION TO REGISTER COLLAR/NECK OPENING SIZES INDICATED FOR DUCT CONNECTIONS.



1 SANITARY RISER DIAGRAM
 M-201 N.T.S.

3 MECHANICAL SCHEDULE
 M-201 N.T.S.



GENERAL NOTES THAT APPLY TO ALL DRAWINGS ON THIS SHEET:

1. THIS DRAWING'S "EXISTING" PART IS ISSUED FOR REFERENCE PURPOSES. IT REPRESENTS AN INVENTORY OF THE MAIN EXISTING INSTALLATIONS, GENERALLY VERIFIED IN CONNECTION WITH THE MODIFICATIONS SHOWN ON THIS DRAWING'S "MODIFIED" PART, AND OF WHICH THE GENUINE CONDITIONS MUST BE OBSERVED ON THE SITE BY THE CONTRACTOR. CONTRACTOR SHALL VERIFY IN THE FIELD LOCATIONS OF EXISTING PLUMBING RISERS, WHICH ARE EXISTING TO REMAIN.

 HATCH INDICATES AREAS NOT IN SCOPE

DEMOLITION DRAWING NOTES:

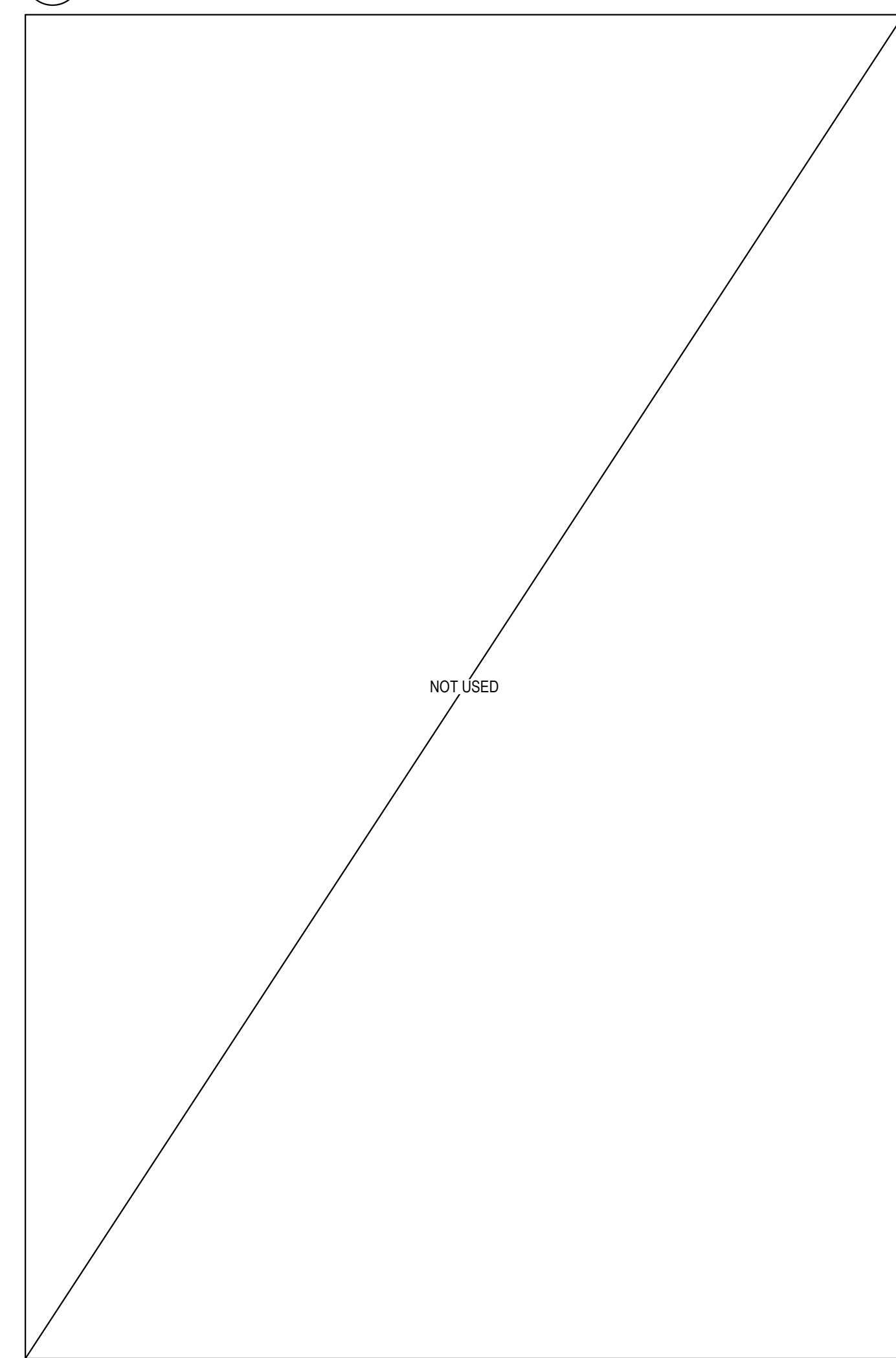
- ① EXISTING SINK AND RO DISPENSER TO REMAIN.
- ② EXISTING TRAP PRIMER TO BE RELOCATED. CONTRACTOR TO CUT BACK AND EXTEND ASSOCIATED PLUMBING SERVICES AS NEEDED TO INSTALL THE TRAP PRIMER AT THE NEW LOCATION AS SHOWN ON THE NEW WORK PLAN. REROUTE AND EXTEND OUTLETS AS NEEDED TO RETAIN EXISTING CONNECTIONS TO DRAINS.

NEW WORK DRAWING NOTES:

- ②1 CONTRACTOR TO PROVIDE A NEW DECK-MOUNTED EYE WASH ONTO THE EXISTING SINK. REFER TO THE PLUMBING RISER DIAGRAM FOR CONNECTION DETAILS.
- ②2 CONTRACTOR TO CAP AND SEAL EXISTING FLOOR DRAIN. PROVIDE A COVER SIMILAR TO ZURN C02450-PV4.
- ②3 CONTRACTOR TO PROVIDE A REMOVABLE COVER WITH THE NEW FLOOR DRAIN.

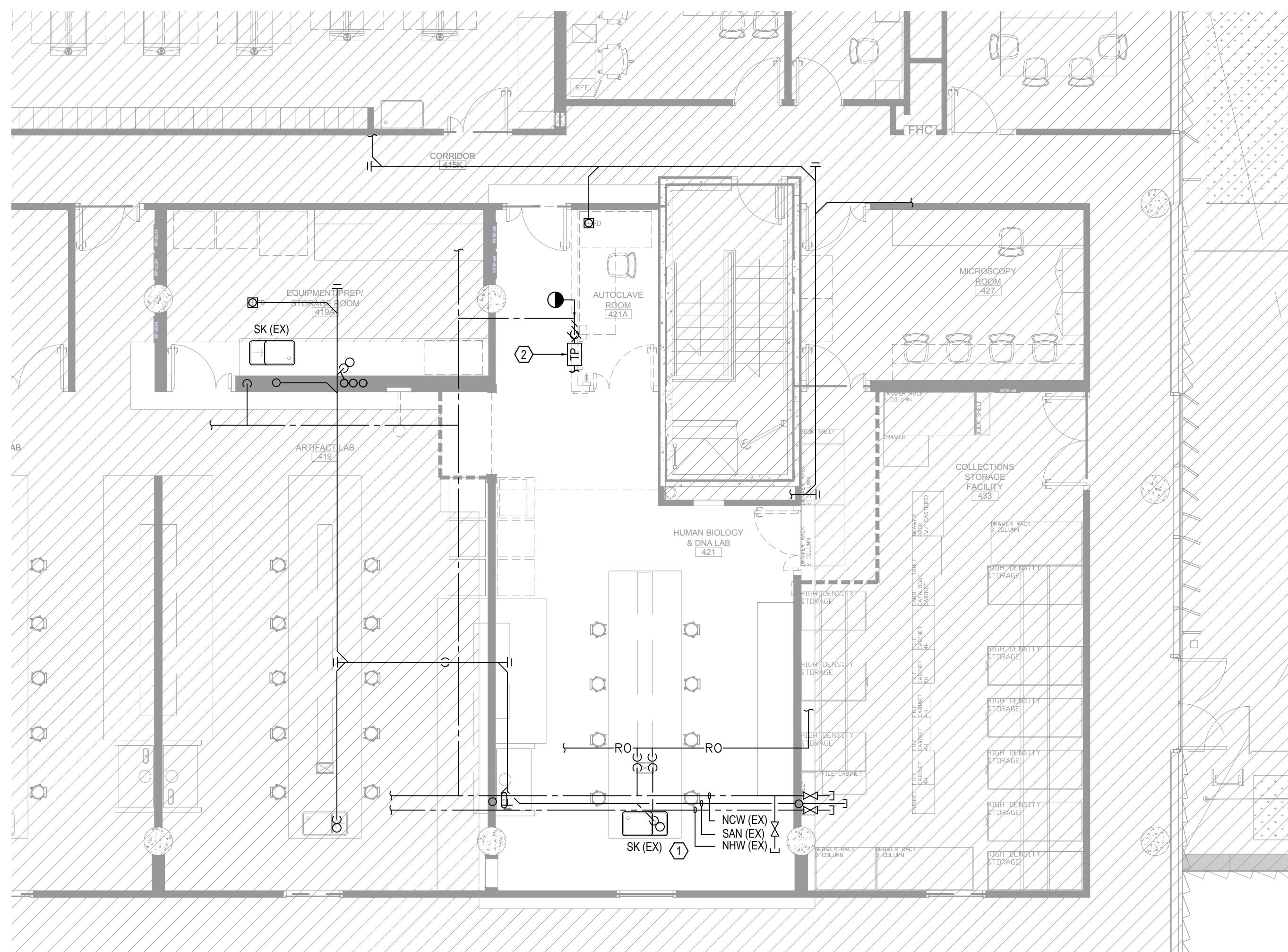
REF	DATE	DESCRIPTION
D	06.06.24	ISSUED FOR TENDER
C	05.30.24	ISSUED FOR PERMIT
B	05.13.24	ISSUED FOR 75% CD
A	04.15.24	ISSUED FOR 100% DD

2 DRAWING NOTES
M-301



1 DETAIL - NOT USED
M-301 N.T.S.

4 NEW PLAN - 4TH FLOOR
M-301 1:75



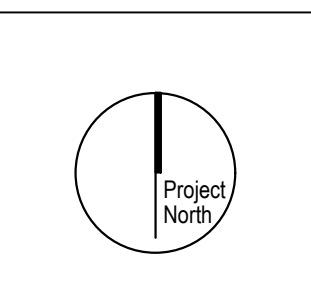
3 DEMOLITION PLAN - 4TH FLOOR
M-301 1:75

NOTES

DRAWINGS ARE NOT TO BE SCALED.
CONSTRUCTION MUST CONFIRM TO ALL APPLICABLE CODES AND REQUIREMENTS OF THE AUTHORITIES HAVING JURISDICTION.
CONTRACTOR MUST VERIFY AND ACCEPT RESPONSIBILITY FOR ALL DIMENSIONS AND CONDITIONS ON SITE AND SHALL NOTIFY THE APPROPRIATE CONSULTANT OF DISCREPANCIES WITH OR VARIATIONS FROM THE INFORMATION PROVIDED BEFORE PROCEEDING WITH THE WORK.
THIS DRAWING IS NOT TO BE USED FOR CONSTRUCTION UNLESS SPECIFICALLY ISSUED "FOR CONSTRUCTION" OR OTHERWISE CONFORMING TO THE DRAWINGS THAT FORM THE BASIS FOR WHICH A BUILDING PERMIT FOR THE PROJECT HAS BEEN ISSUED.
ALL DRAWINGS, SPECIFICATIONS AND RELATED DOCUMENTS ARE THE COPYRIGHT PROPERTY OF THE ARCHITECT AND MUST BE RETURNED UPON REQUEST. REPRODUCTION OF DRAWINGS, SPECIFICATIONS AND RELATED DOCUMENTS IN PART OR IN WHOLE IS FORBIDDEN WITHOUT THE ARCHITECT'S WRITTEN PERMISSION.

HSC419A, 421, 421A
ANT LAB RENO
UTM PROJECT NO. P300-23-095
UNIVERSITY OF TORONTO MISSISSAUGA
TERRENCE DONNELLY HEALTH SCIENCES COMPLEX
1777 OUTER CIRCLE, MISSISSAUGA ON L5L 1G6

V+A ARCHITECTS
VAN ELSLANDER AND ASSOCIATES ARCHITECTS
ARCHITECTS, ENGINEERS, INTERIORS, LANDSCAPE ARCHITECTS



PLUMBING
4TH FLOOR PLAN

Entered: JF
Checked: ADJ
Plot: 2024-06-06

13970

M-301

GENERAL NOTES THAT APPLY TO ALL DRAWINGS ON THIS SHEET:

- THIS DRAWING'S "EXISTING" PART IS ISSUED FOR REFERENCE PURPOSES, IT REPRESENTS AN INVENTORY OF THE MAIN EXISTING INSTALLATIONS, GENERALLY VERIFIED IN CONNECTION WITH THE MODIFICATIONS SHOWN ON THIS DRAWING'S "MODIFIED" PART, AND OF WHICH THE GENUINE CONDITIONS MUST BE OBSERVED ON THE SITE BY THE CONTRACTOR.
- CONTRACTOR TO UPDATE THE EXISTING BAS GRAPHICS TO REFLECT THE NEW LAYOUT.

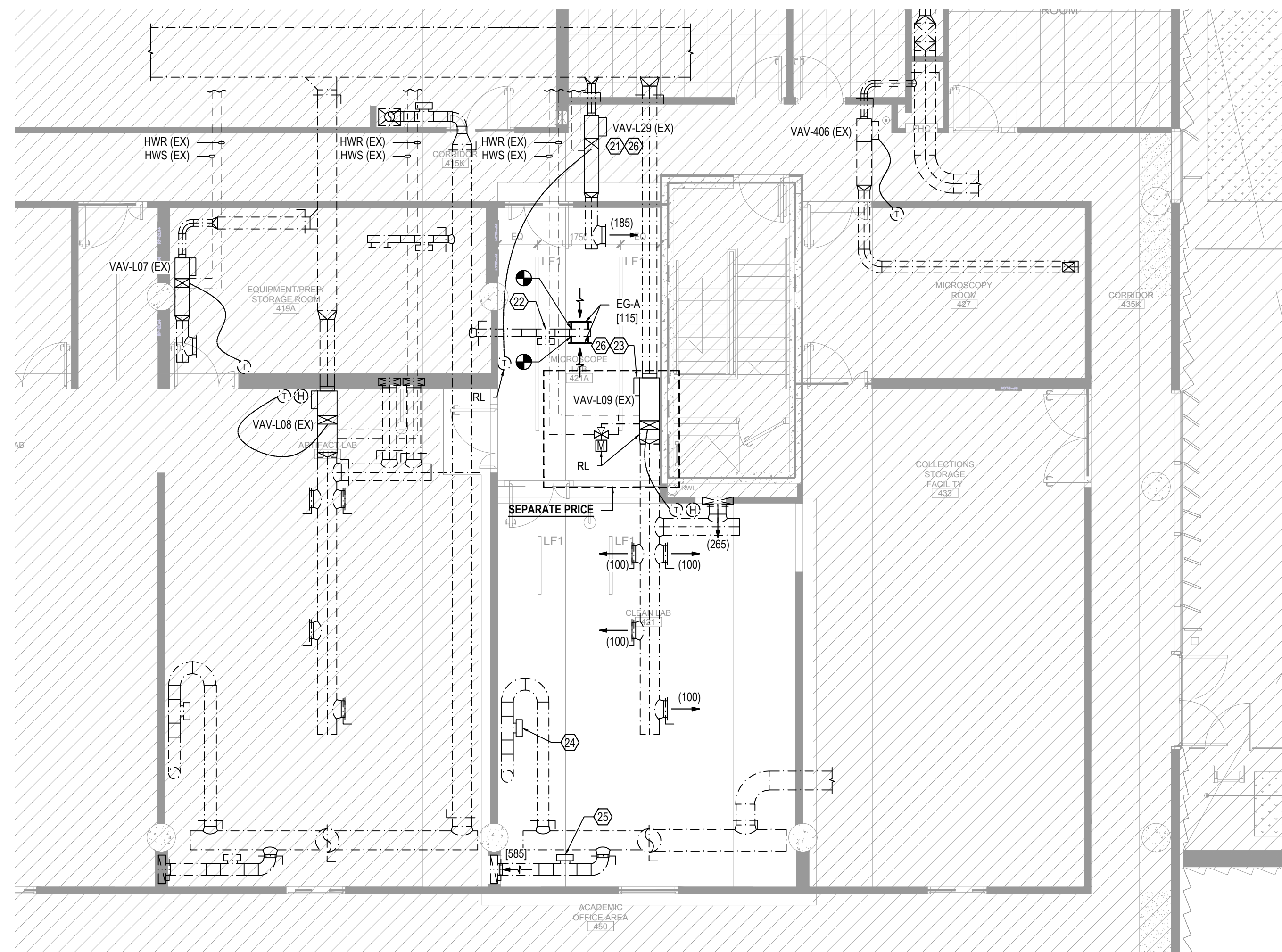
 HATCH INDICATES AREAS NOT IN SCOPE

DEMOLITION DRAWING NOTES:

- PROVIDE A **SEPARATE PRICE** TO RELOCATE EXISTING VAV BOX AND CORRESPONDING REHEAT COIL TO THE NEW LOCATION TO ACCOMMODATE THE NEW PARTITION. CONTRACTOR TO FREEZE HOT WATER PIPING AND DEMOLISH EXISTING SERVICES AS NEEDED TO FACILITATE THE RELOCATION SCOPE OF WORK. RE-USE EXISTING VALVES AND PIPE ACCESSORIES.
- CONTRACTOR TO PERFORM AN AIR AUDIT PRIOR TO DEMOLITION PHASE. PROVIDE THE AIRFLOW AND STATIC PRESSURE FOR CONSULTANT'S REVIEW.

NEW WORK DRAWING NOTES:

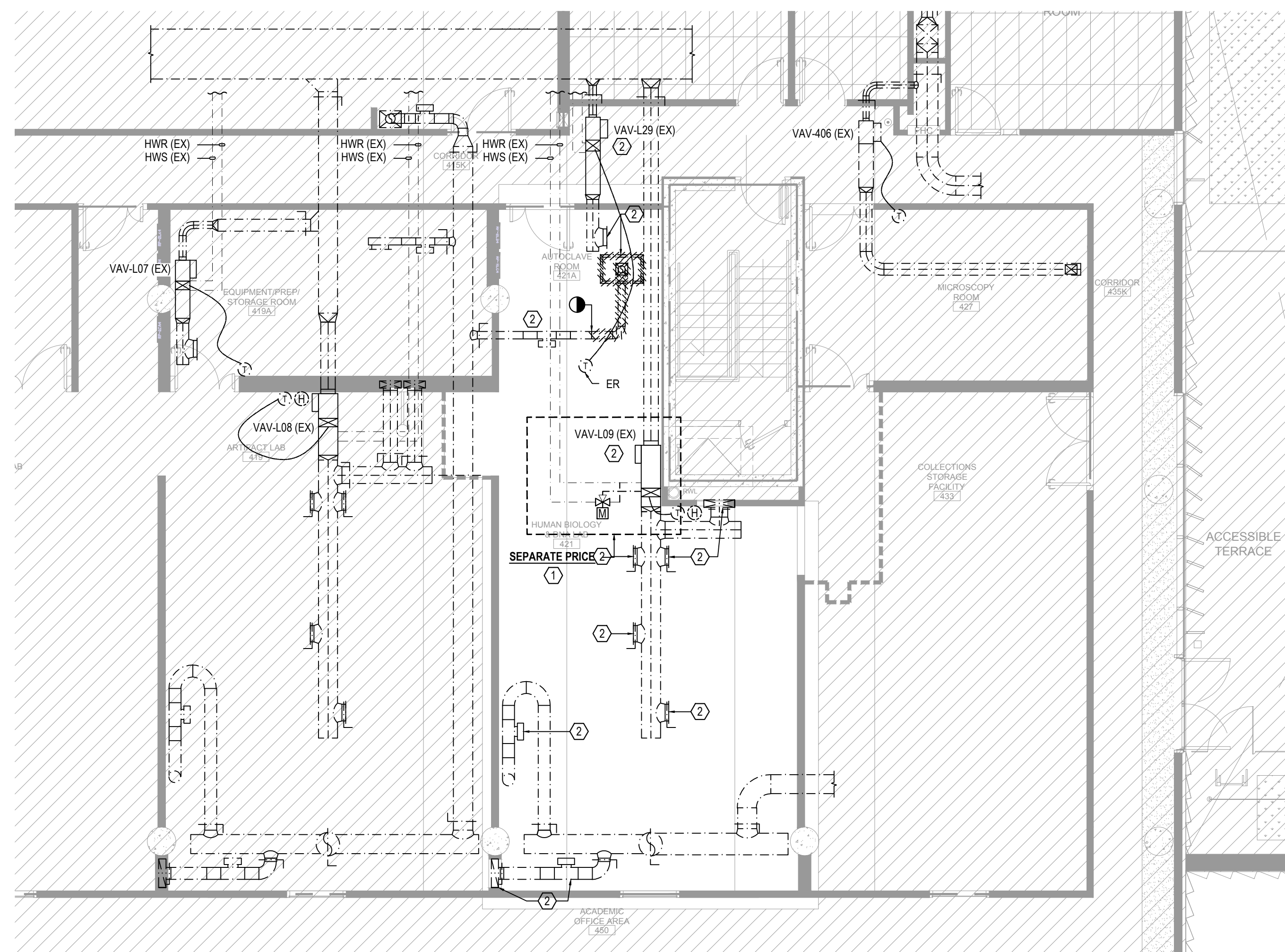
- RE-BALANCE EXISTING VAV BOX TO PROVIDE A MAX AIRFLOW RATE OF 185 LPS AND A MIN AIRFLOW RATE OF 130 LPS.
- RE-BALANCE EXISTING VAV BOX TO EXHAUST A MAX AIRFLOW RATE OF 230 LPS AND A MIN AIRFLOW RATE OF 177 LPS.
- RE-BALANCE EXISTING VAV BOX TO PROVIDE A MAX AIRFLOW RATE OF 665 LPS AND A MIN AIRFLOW RATE OF 345 LPS.
- AIRFLOW SETTINGS ON THE EXISTING VAV BOX SERVING THE FUMEHOOD TO REMAIN.
- RE-BALANCE THE EXISTING VAV BOX TO EXHAUST A MAXIMUM AIRFLOW RATE OF 585. MINIMUM AIRFLOW RATE SHALL BE ADJUSTED SUCH THAT THE TOTAL EXHAUST OUT OF THE SPACE IS 50 LPS HIGHER THAN THE TOTAL SUPPLY INTO THE SPACE.
- VERIFY OPERATION OF CONTROLS FOR THE VAV TERMINAL BOX AND REHEAT COIL. CALIBRATE THE THERMOSTAT AND CONTROL VALVE FOR PROPER OPERATION AND TEMPERATURE CONTROL.



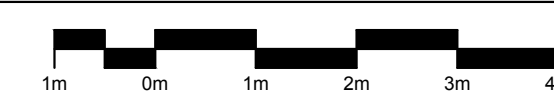
4 NEW WORK PLAN - 4TH FLOOR
 M-401 1:75



2 DRAWING NOTES
 M-401



3 DEMOLITION PLAN - 4TH FLOOR
 M-401 1:75



1 DETAIL - NOT USED
 M-401 N.T.S.

REF	DATE	DESCRIPTION
D	06.06.24	ISSUED FOR TENDER
C	05.30.24	ISSUED FOR PERMIT
B	05.13.24	ISSUED FOR 75% CD
A	04.15.24	ISSUED FOR 100% DD

NOTES

DRAWINGS ARE NOT TO BE SCALED.

CONSTRUCTION MUST CONFORM TO ALL APPLICABLE CODES AND REQUIREMENTS OF THE AUTHORITIES HAVING JURISDICTION.

CONTRACTOR MUST VERIFY AND ACCEPT RESPONSIBILITY FOR ALL DIMENSIONS AND CONDITIONS ON SITE AND SHALL NOTIFY THE APPROPRIATE CONSULTANT OF DISCREPANCIES WITH OR VARIATIONS FROM THE INFORMATION PROVIDED BEFORE PROCEEDING WITH THE WORK.

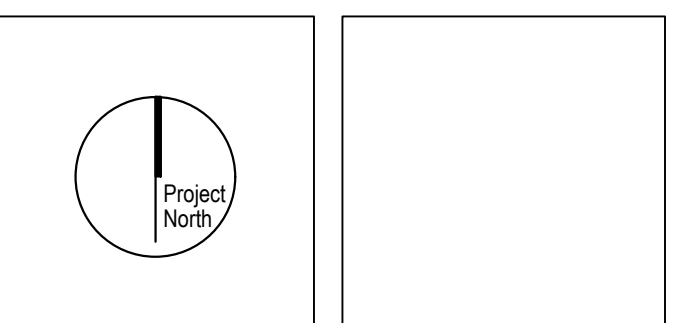
THIS DRAWING IS NOT TO BE USED FOR CONSTRUCTION UNLESS SPECIFICALLY ISSUED "FOR CONSTRUCTION" OR OTHERWISE CONFORMING TO THE DRAWINGS THAT FORM THE BASIS FOR WHICH A BUILDING PERMIT FOR THE PROJECT HAS BEEN ISSUED.

ALL DRAWINGS, SPECIFICATIONS AND RELATED DOCUMENTS ARE THE COPYRIGHT PROPERTY OF THE ARCHITECT AND MUST BE RETURNED UPON REQUEST. REPRODUCTION OF DRAWINGS, SPECIFICATIONS AND RELATED DOCUMENTS IN PART OR IN WHOLE IS FORBIDDEN WITHOUT THE ARCHITECT'S WRITTEN PERMISSION.

**HSC419A, 421, 421A
 ANT LAB RENO**

UTM PROJECT NO. P300-23-095
 UNIVERSITY OF TORONTO MISSISSAUGA
 TERENCE DONNELLY HEALTH SCIENCES COMPLEX
 1777 OUTER CIRCLE, MISSISSAUGA ON L5L 1G6

V+A ARCHITECTS
 VAN ELSLANDER AND ASSOCIATES ARCHITECTS



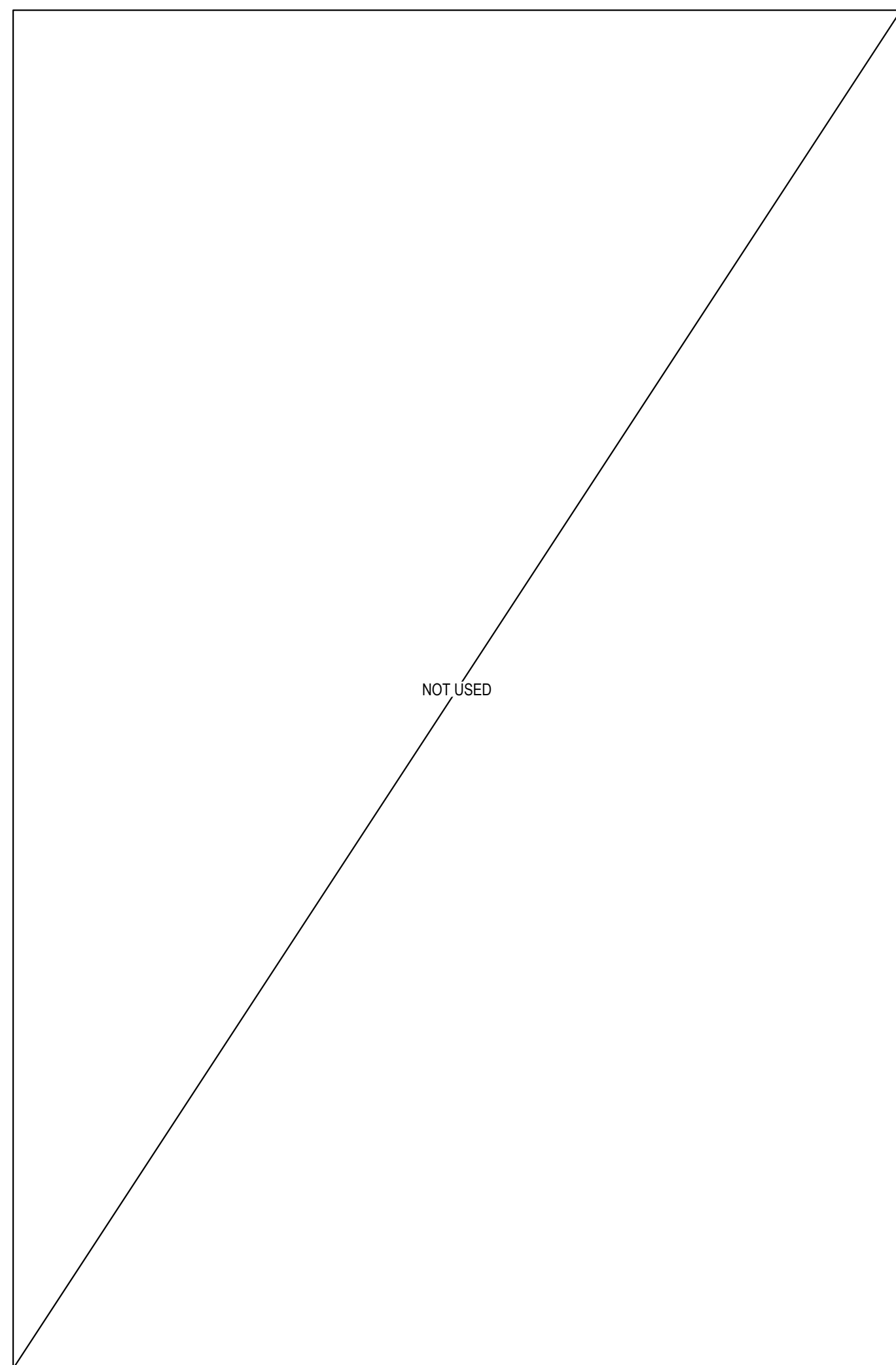
**HVAC
 4TH FLOOR PLAN**

Entered: JF
 Checked: ADJ
 Plot: 2024-06-06

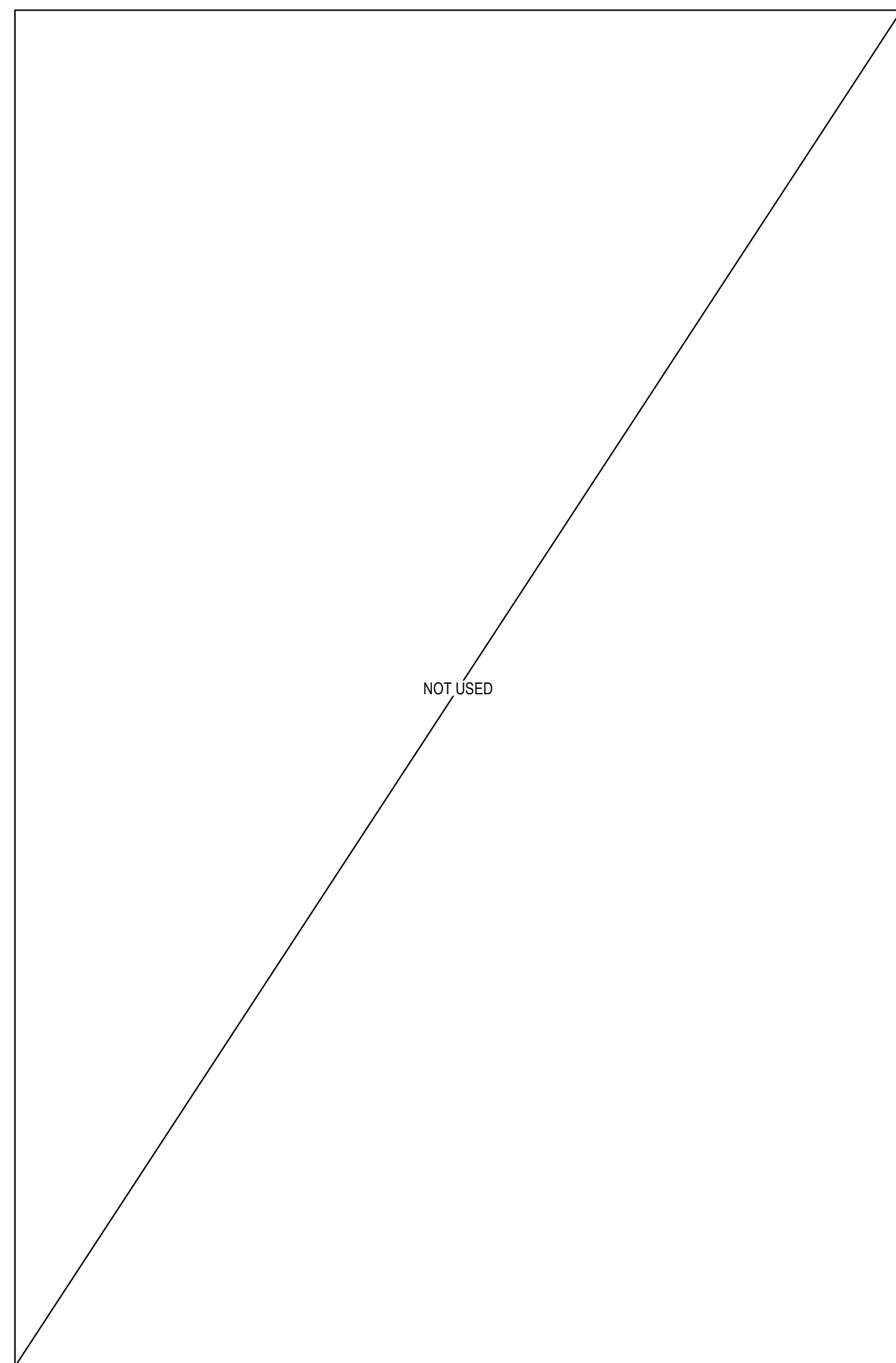
M-401

13970

NOT USED



6 DETAIL - NOT USED
M-701 / N.T.S.




5 DETAIL - NOT USED
M-701 / N.T.S.

SPRINKLER SCHEDULE								
SYMBOL	TAG	TYPE	LOCATION	TEMPERATURE RATING		K-FACTOR	MANUFACTURER	MODEL/ID NO.
				ORDINARY	INTERMEDIATE			
⊙	-	EXISTING SPRINKLER TO REMAIN	-	-	-	-	-	-
⊗	-	EXISTING SPRINKLER TO BE REMOVED	-	-	-	-	-	-

4 SPRINKLER SCHEDULE
M-701 / N.T.S.

GENERAL NOTES THAT APPLY TO ALL DRAWINGS ON THIS SHEET:

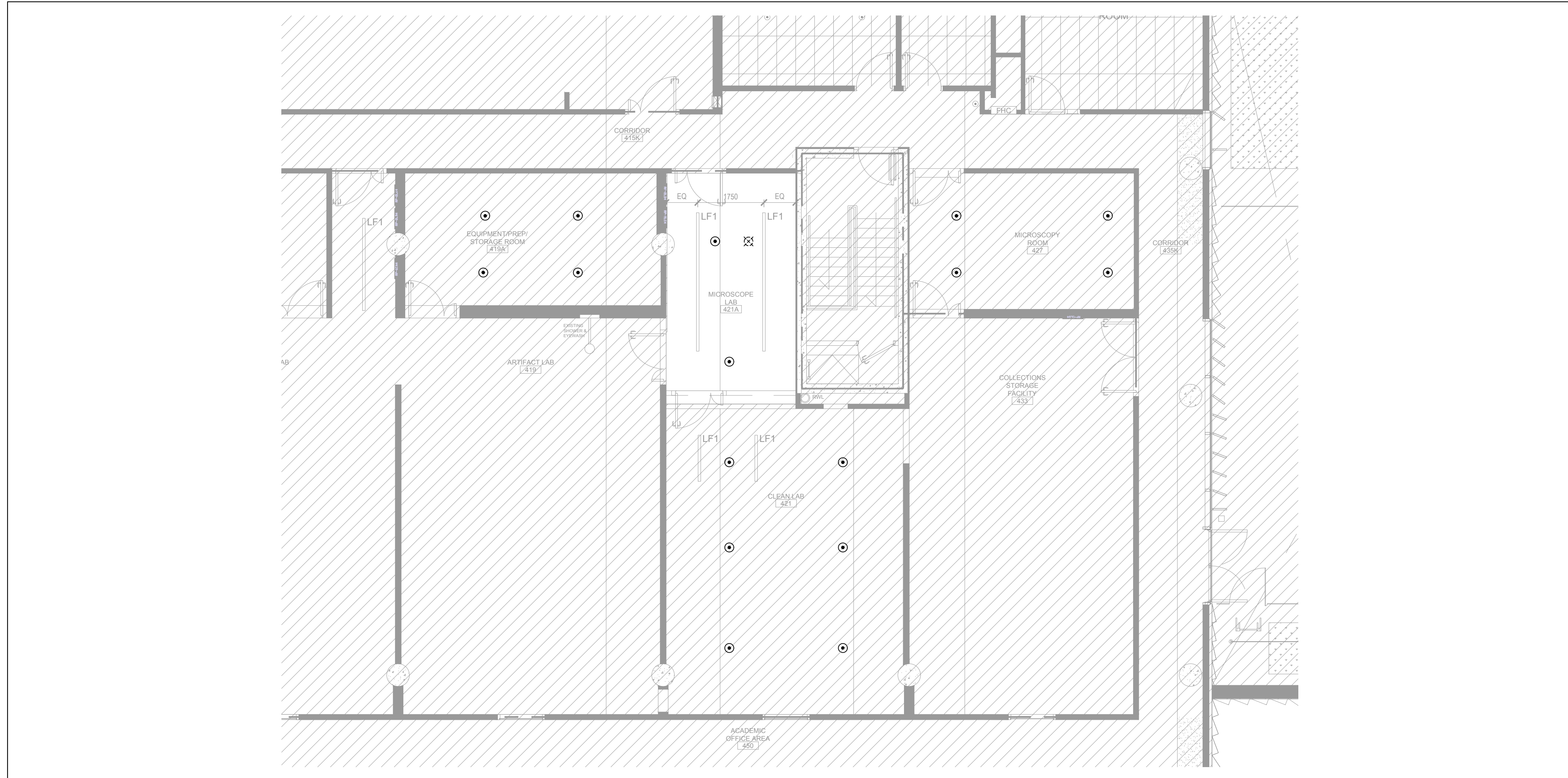
- THIS DRAWING IS ISSUED FOR REFERENCE PURPOSES, IT REPRESENTS AN INVENTORY OF THE MAIN EXISTING INSTALLATIONS, GENERALLY VERIFIED IN CONNECTION WITH THE MODIFICATIONS SHOWN ON THIS DRAWING'S "MODIFIED" PART, AND OF WHICH THE GENUINE CONDITIONS MUST BE OBSERVED ON THE SITE BY THE CONTRACTOR.
- THIS DRAWING'S "DEMOLITION" PART IS ISSUED FOR REFERENCE PURPOSES, IT REPRESENTS AN INVENTORY OF THE MAIN EXISTING INSTALLATIONS, GENERALLY VERIFIED IN CONNECTION WITH THE MODIFICATIONS SHOWN ON THIS DRAWING'S "NEW WORK" PART, AND OF WHICH THE GENUINE CONDITIONS MUST BE OBSERVED ON THE SITE BY THE CONTRACTOR.

 HATCH INDICATES AREAS NOT IN SCOPE

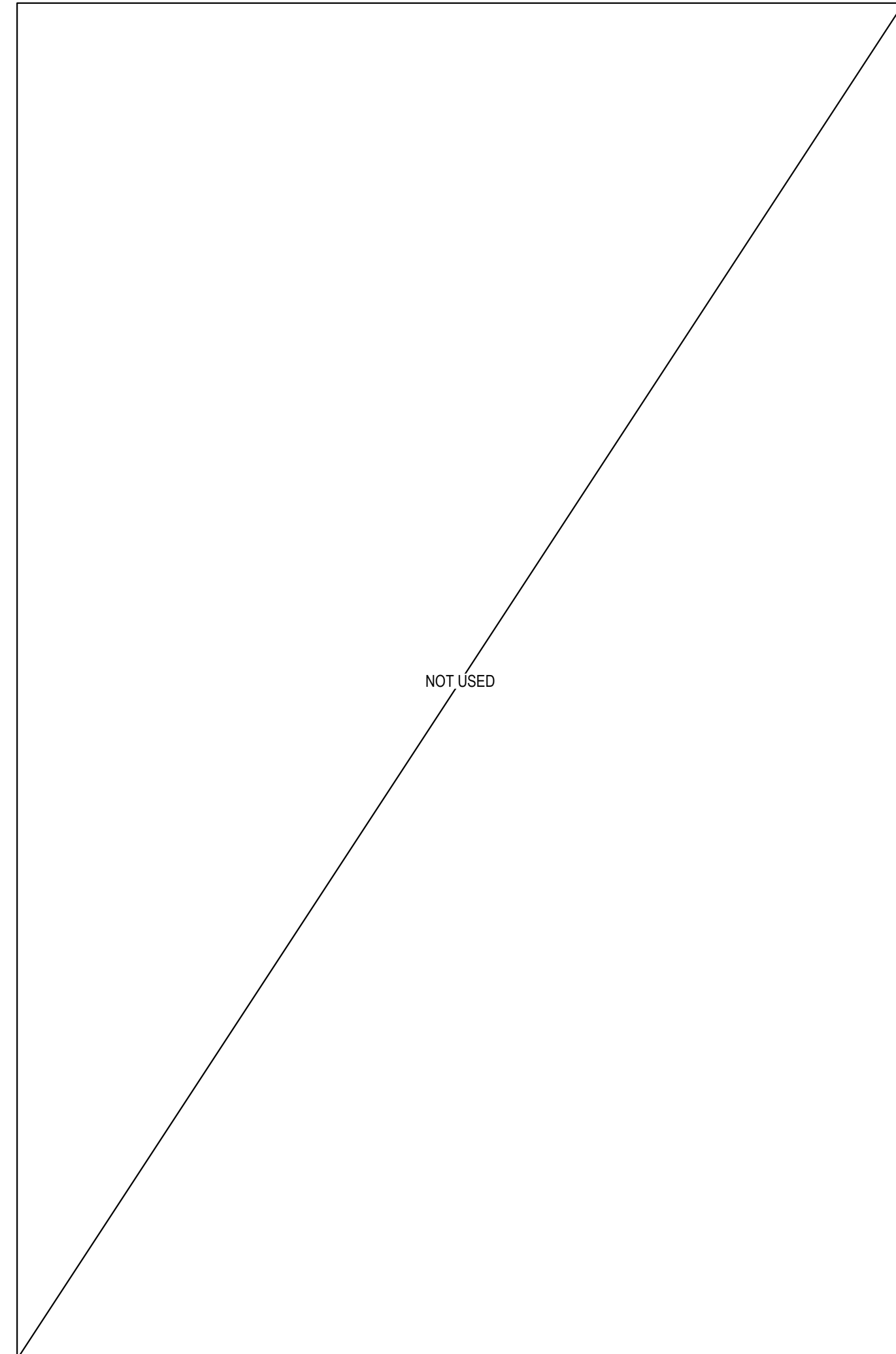
DRAWING NOTES:

① NOT USED.

2 DRAWING NOTES
M-701



3 NEW WORK PLAN - 4TH FLOOR
M-701 / 1:75



1 DETAIL - NOT USED
M-701 / N.T.S.

REF	DATE	DESCRIPTION
D	06.06.24	ISSUED FOR TENDER
C	05.30.24	ISSUED FOR PERMIT
B	05.13.24	ISSUED FOR 75% CD
A	04.15.24	ISSUED FOR 100% DD

NOTES

DRAWINGS ARE NOT TO BE SCALED.

CONSTRUCTION MUST CONFIRM TO ALL APPLICABLE CODES AND REQUIREMENTS OF THE AUTHORITIES HAVING JURISDICTION.

CONTRACTOR MUST VERIFY AND ACCEPT RESPONSIBILITY FOR ALL DIMENSIONS AND CONDITIONS ON SITE AND SHALL NOTIFY THE APPROPRIATE CONSULTANT OF DISCREPANCIES WITH OR VARIATIONS FROM THE INFORMATION PROVIDED BEFORE PROCEEDING WITH THE WORK.

THIS DRAWING IS NOT TO BE USED FOR CONSTRUCTION UNLESS SPECIFICALLY ISSUED "FOR CONSTRUCTION" OR OTHERWISE CONFORMING TO THE DRAWINGS THAT FORM THE BASIS FOR WHICH A BUILDING PERMIT FOR THE PROJECT HAS BEEN ISSUED.

ALL DRAWINGS, SPECIFICATIONS AND RELATED DOCUMENTS ARE THE COPYRIGHT PROPERTY OF THE ARCHITECT AND MUST BE RETURNED UPON REQUEST. REPRODUCTION OF DRAWINGS, SPECIFICATIONS AND RELATED DOCUMENTS IN PART OR IN WHOLE IS FORBIDDEN WITHOUT THE ARCHITECT'S WRITTEN PERMISSION.

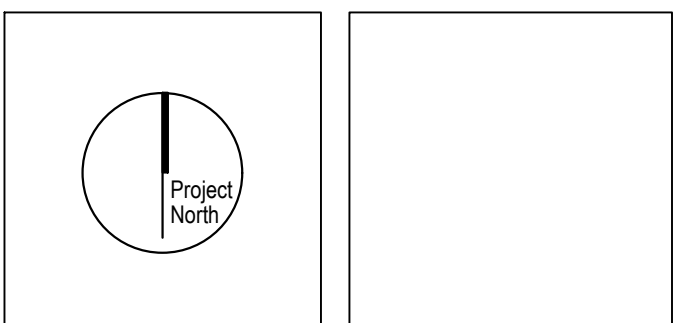
HSC419A, 421, 421A

ANT LAB RENO

UTM PROJECT NO. P300-23-095

UNIVERSITY OF TORONTO MISSISSAUGA
TERRENCE DONNELLY HEALTH SCIENCES COMPLEX
1777 OUTER CIRCLE, MISSISSAUGA ON L5L 1G6

V+A ARCHITECTS
VAN ELSLANDER AND ASSOCIATES ARCHITECTS
ARCHITECTS, ENGINEERS, INTERIORS, LANDSCAPE ARCHITECTS

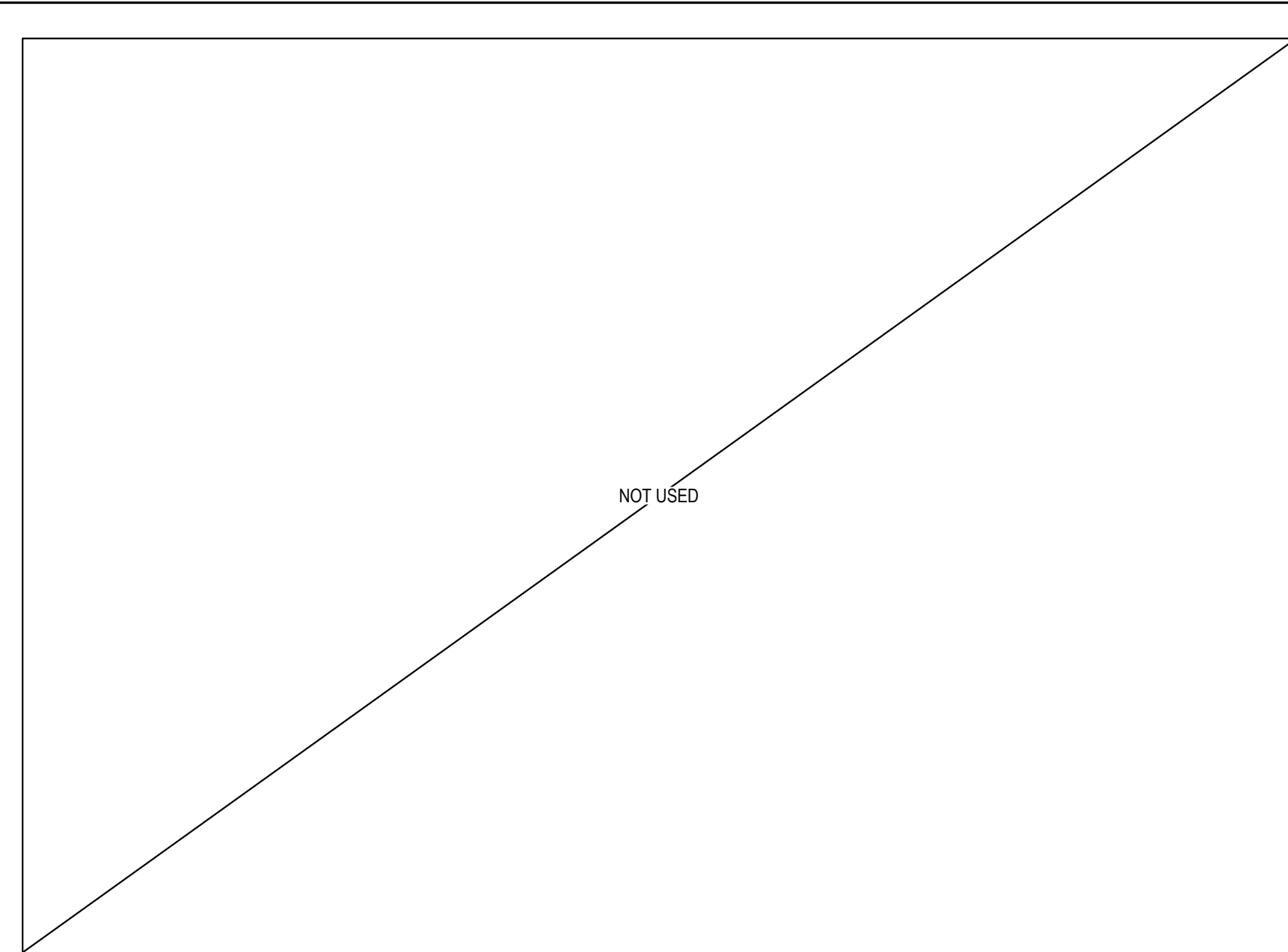


FIRE PROTECTION
4TH FLOOR PLAN

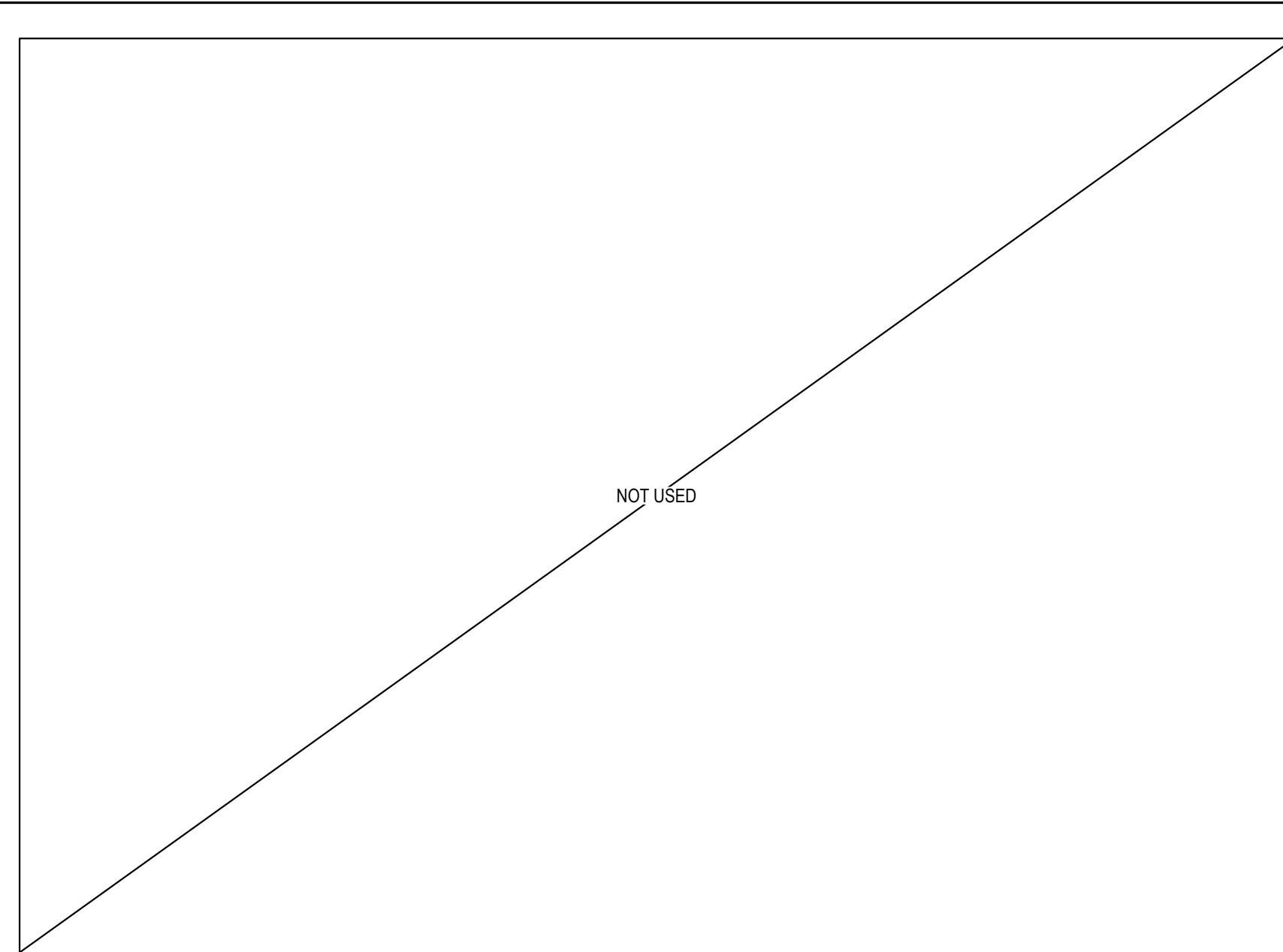
Entered: JF
Checked: ADJ
Plot: 2024-06-06

13970

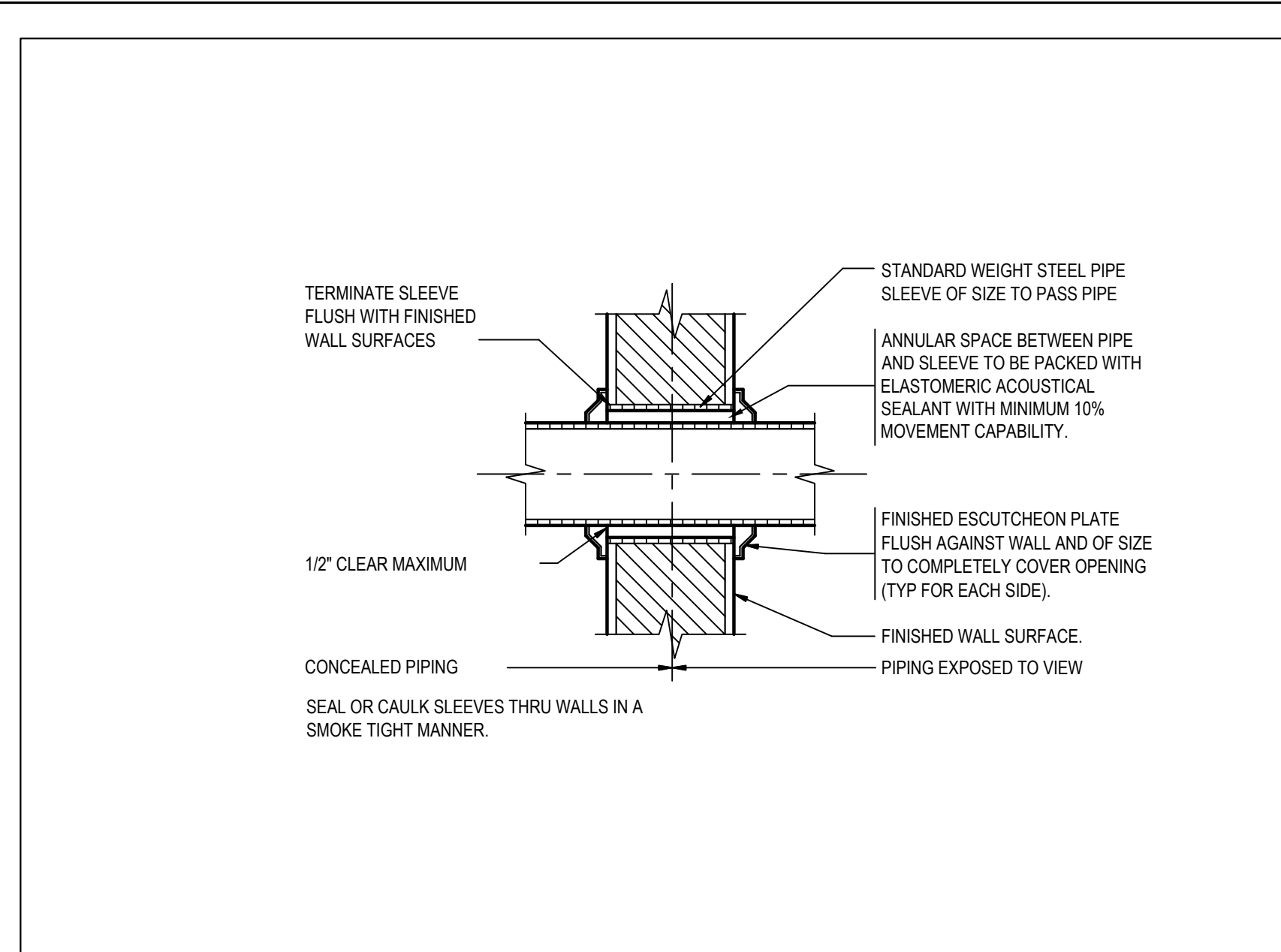
M-701



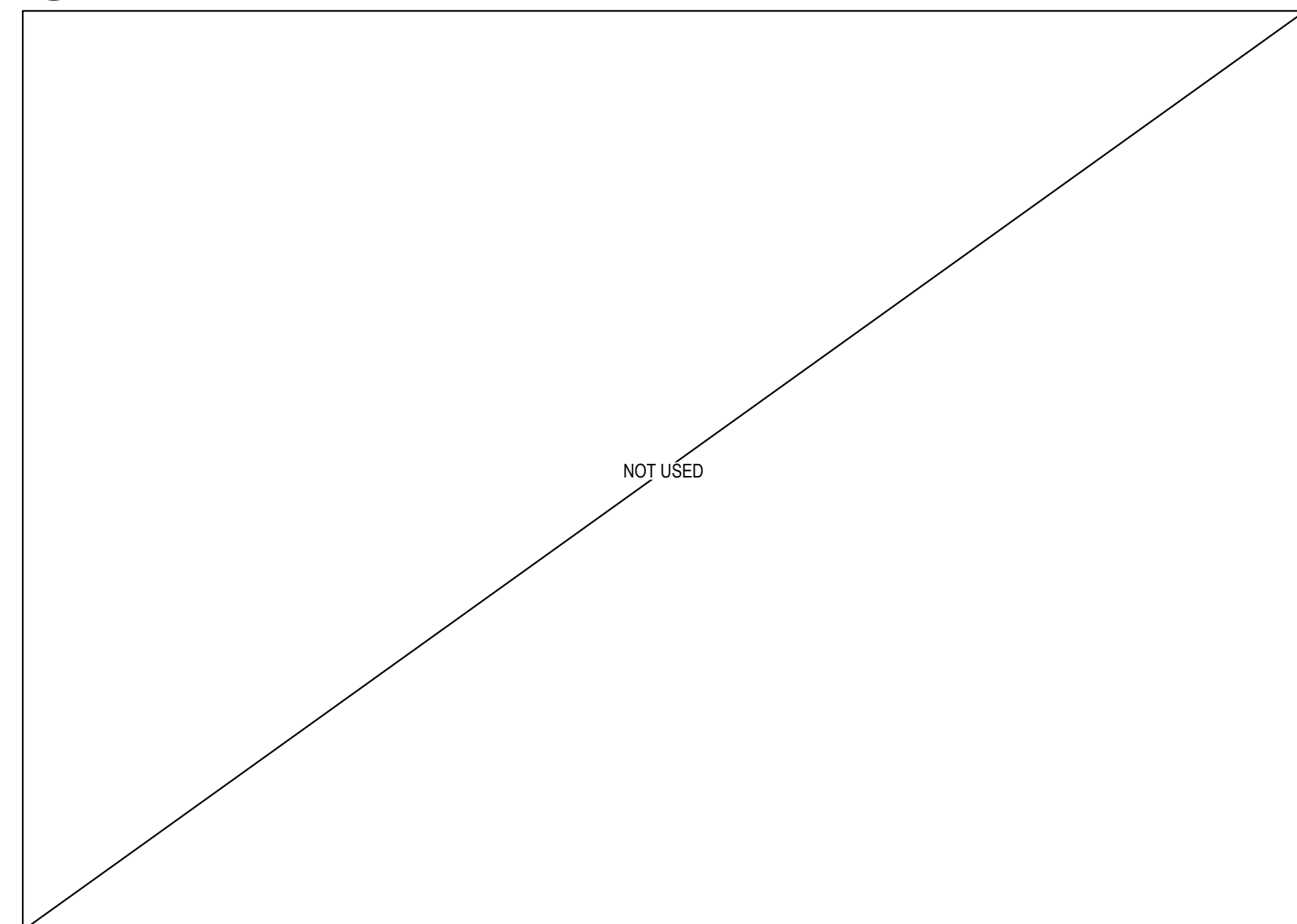
9 DETAIL - NOT USED
M-801 N.T.S.



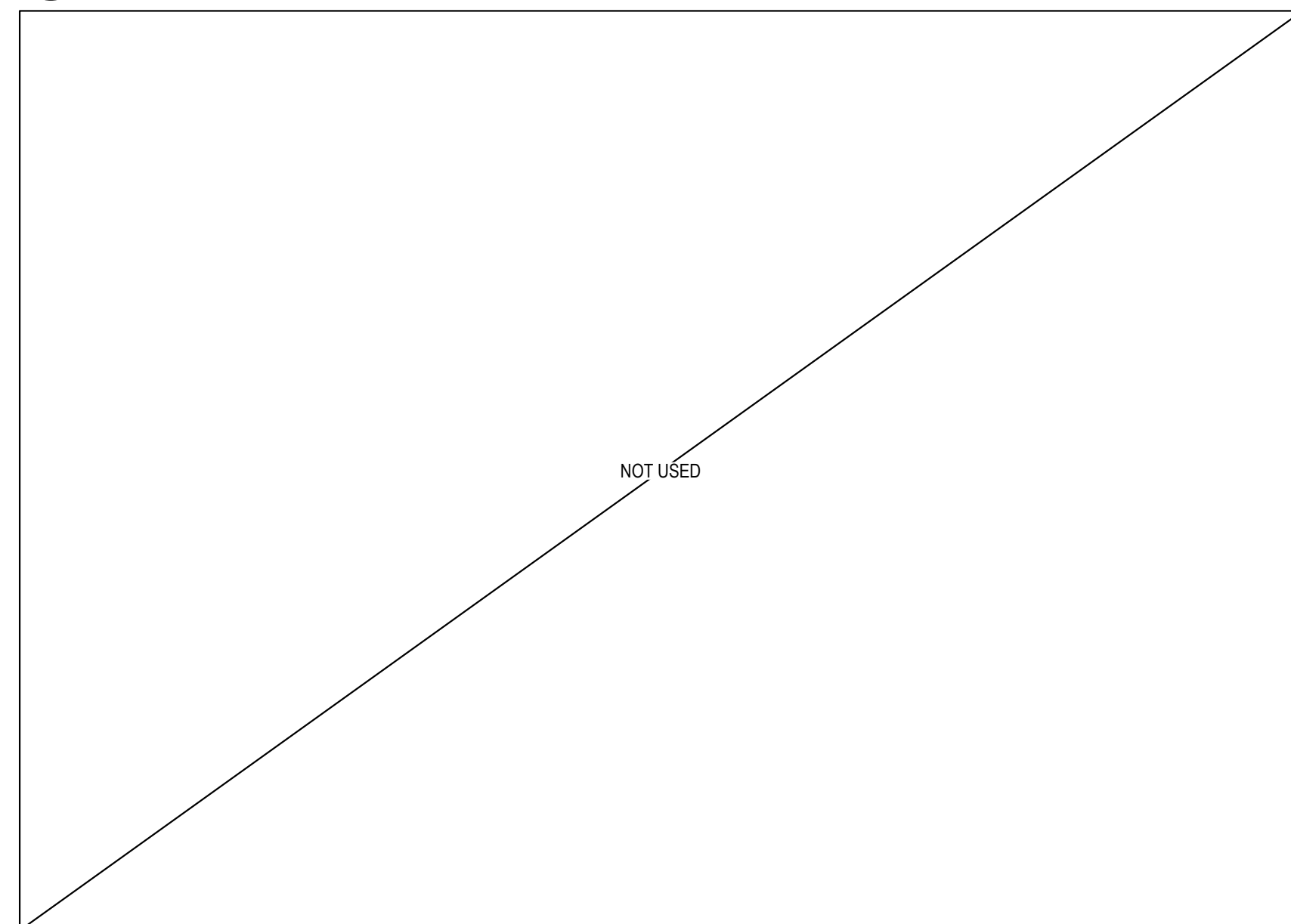
6 DETAIL - NOT USED
M-801 N.T.S.



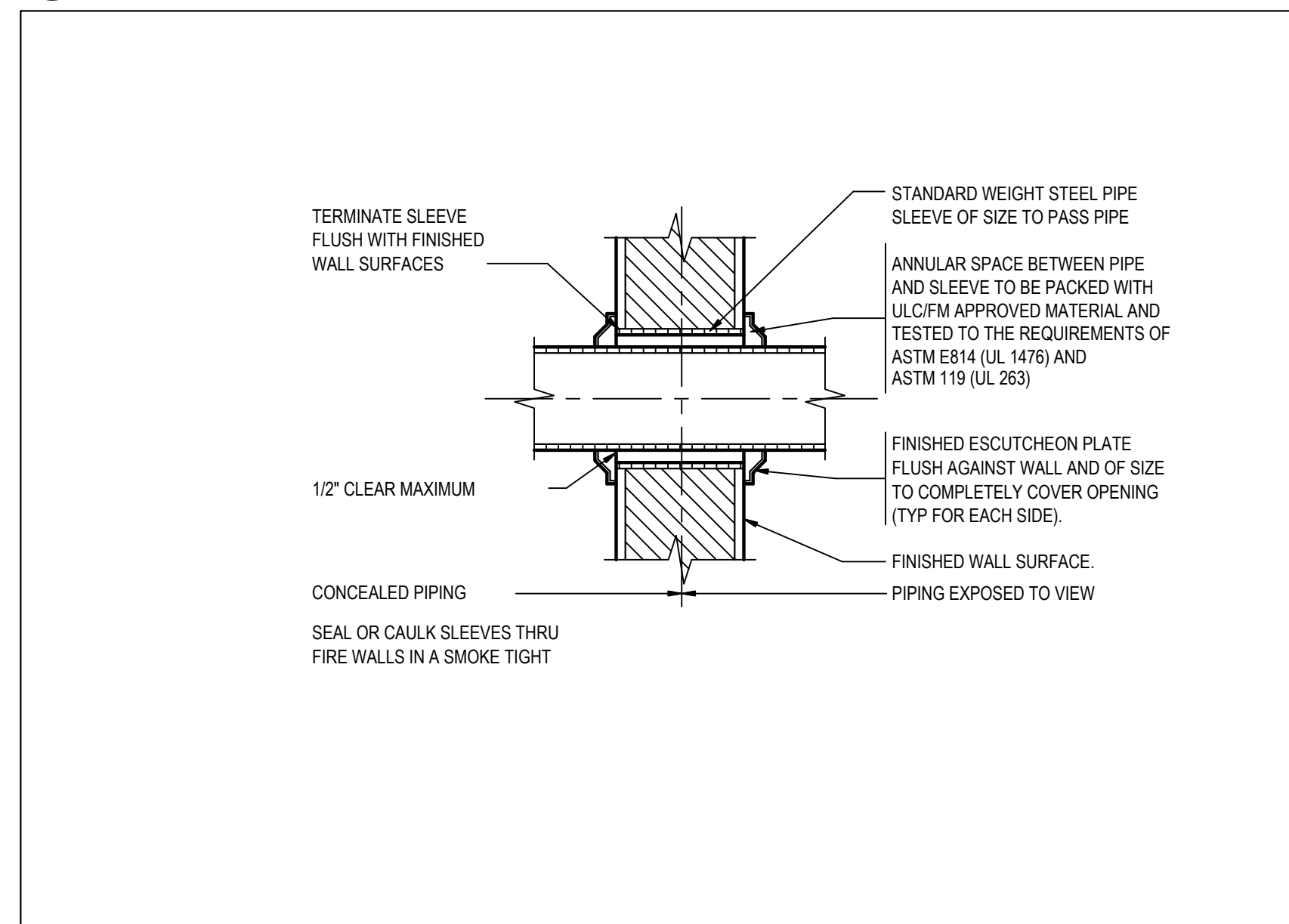
3 DETAIL - OF PIPE PENETRATING THROUGH NON FIRE RATED WALL
M-801 N.T.S.



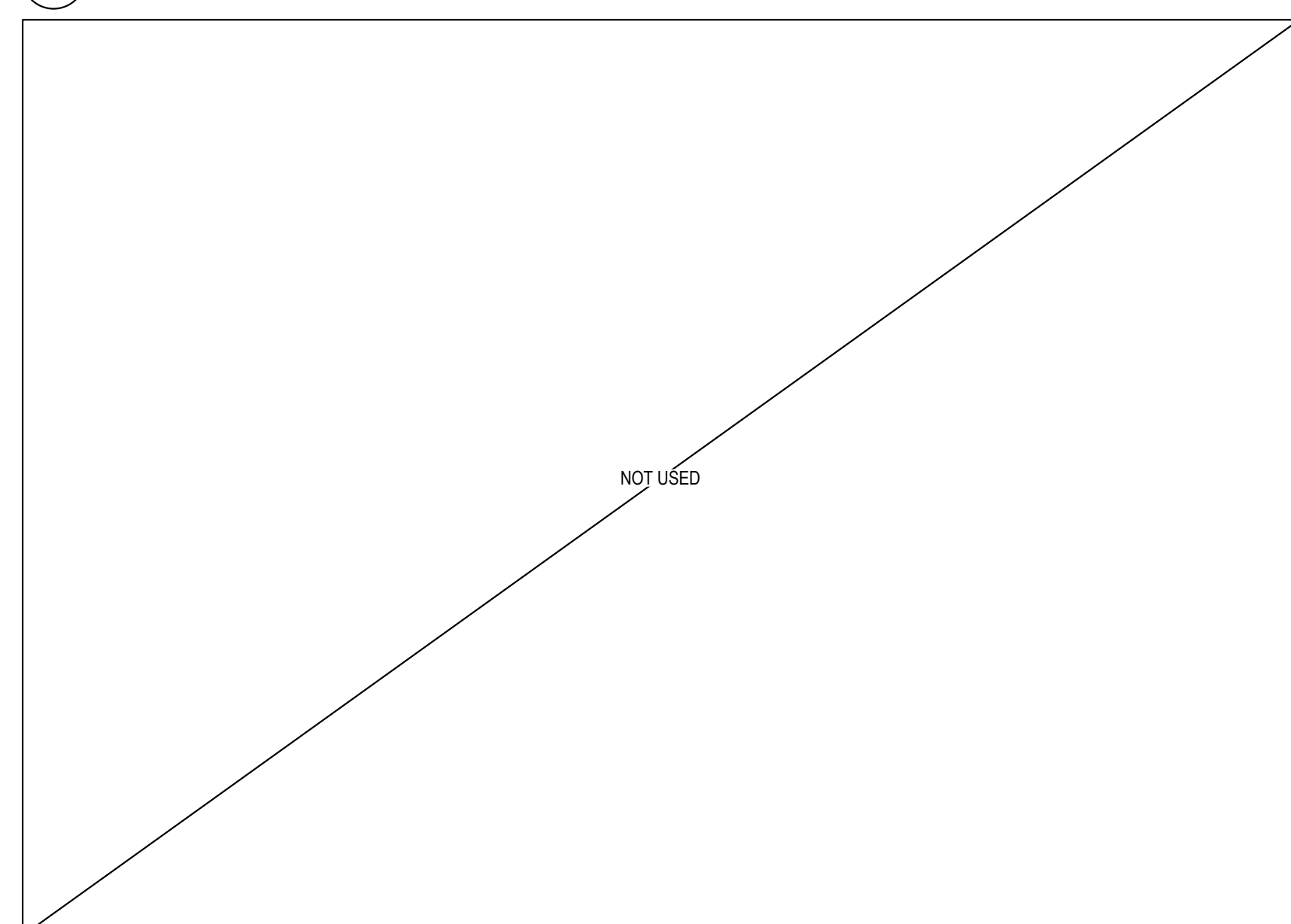
8 DETAIL - NOT USED
M-801 N.T.S.



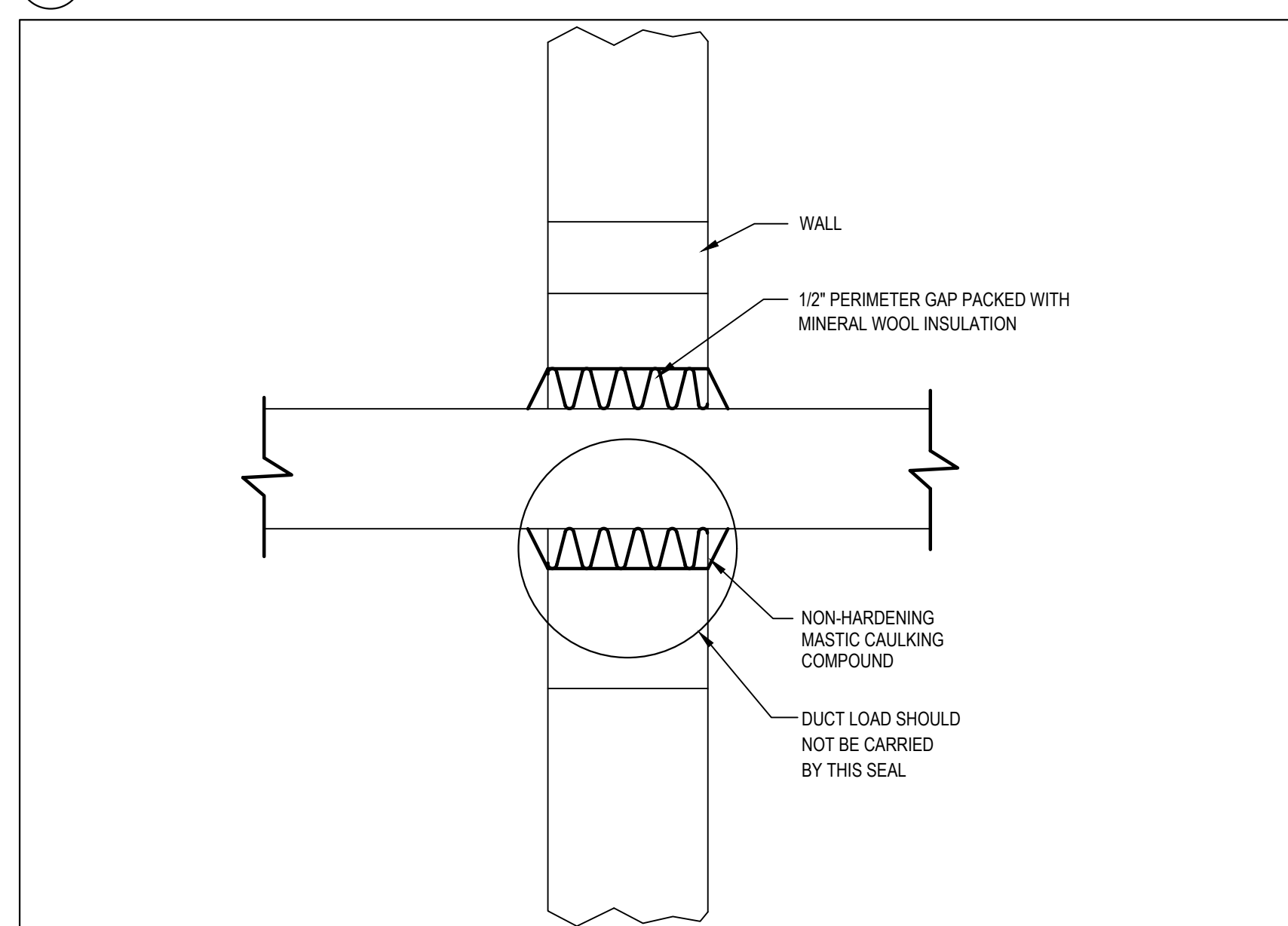
5 DETAIL - NOT USED
M-801 N.T.S.



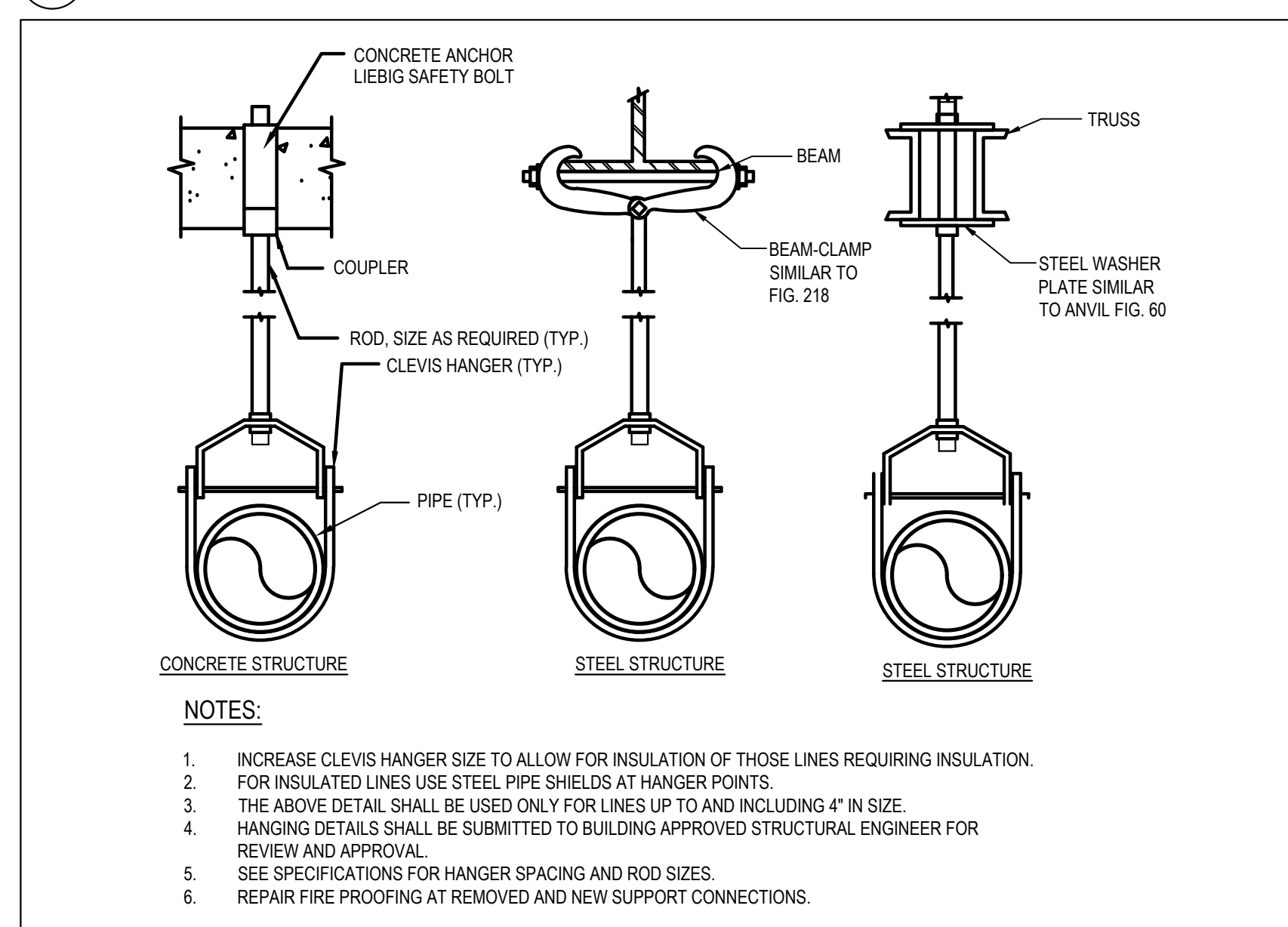
2 DETAIL - PIPE PENETRATING THROUGH FIRE RATED WALL AND FLOOR
M-801 N.T.S.



7 DETAIL - NOT USED
M-801 N.T.S.



4 DETAIL - FOR ACOUSTICAL SEALING OF DUCT/PIPE PENETRATING WALLS
M-801 N.T.S.



1 DETAIL - TYPICAL HANGER
M-801 N.T.S.

REF	DATE	DESCRIPTION
D	06.06.24	ISSUED FOR TENDER
C	05.30.24	ISSUED FOR PERMIT
B	05.13.24	ISSUED FOR 75% CD

NOTES

DRAWINGS ARE NOT TO BE SCALED.

CONSTRUCTION MUST CONFIRM TO ALL APPLICABLE CODES AND REQUIREMENTS OF THE AUTHORITIES HAVING JURISDICTION.

CONTRACTOR MUST VERIFY AND ACCEPT RESPONSIBILITY FOR ALL DIMENSIONS AND CONDITIONS ON SITE AND SHALL NOTIFY THE APPROPRIATE CONSULTANT OF DISCREPANCIES WITH OR VARIATIONS FROM THE INFORMATION PROVIDED BEFORE PROCEEDING WITH THE WORK.

THIS DRAWING IS NOT TO BE USED FOR CONSTRUCTION UNLESS SPECIFICALLY ISSUED "FOR CONSTRUCTION" OR OTHERWISE CONFORMING TO THE DRAWINGS THAT FORM THE BASIS FOR WHICH A BUILDING PERMIT FOR THE PROJECT HAS BEEN ISSUED.

ALL DRAWINGS, SPECIFICATIONS AND RELATED DOCUMENTS ARE THE COPYRIGHT PROPERTY OF THE ARCHITECT AND MUST BE RETURNED UPON REQUEST. REPRODUCTION OF DRAWINGS, SPECIFICATIONS AND RELATED DOCUMENTS IN PART OR IN WHOLE IS FORBIDDEN WITHOUT THE ARCHITECT'S WRITTEN PERMISSION.

HSC419A, 421, 421A

ANT LAB RENO

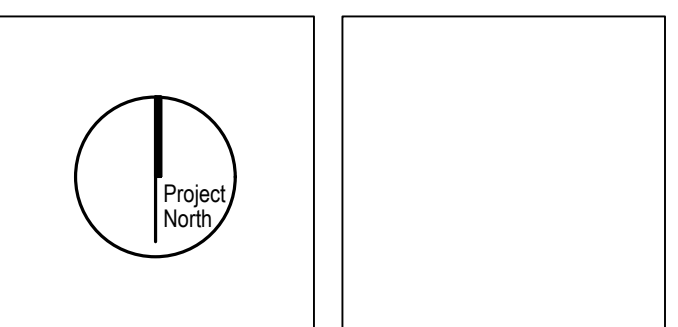
UTM PROJECT NO. P300-23-095

UNIVERSITY OF TORONTO MISSISSAUGA
TERRENCE DONNELLY HEALTH SCIENCES COMPLEX
1777 OUTER CIRCLE, MISSISSAUGA ON L5L 1G6

V+A ARCHITECTS

VAN ELSLANDER AND ASSOCIATES ARCHITECTS

ARCHITECTS, ENGINEERS, INTERIORS, LANDSCAPE ARCHITECTS



MECHANICAL

DETAILS

SHEET 1

Entered: JF
Checked: ADJ
Plot: 2024-06-06

13970

M-801