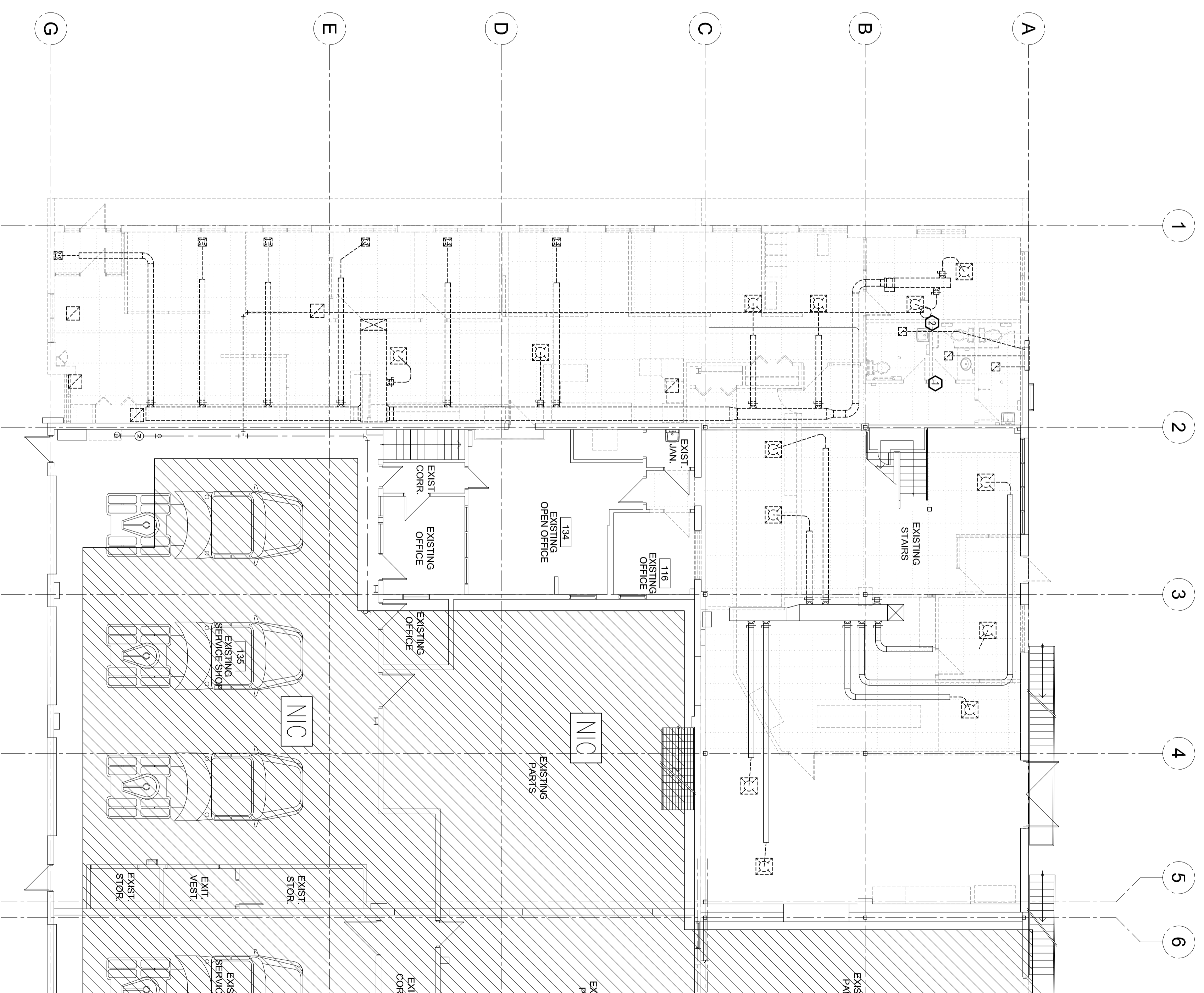


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**1**  
**MD-1**  
**GROUND FLOOR – DEMOLITION**

**DRAWING NOTES**

- ⊕ DISCONNECT, REMOVE AND DISPOSE OF EXISTING MECHANICAL AND ELECTRICAL SYSTEMS FROM MEN'S, WOMEN'S AND UNIVERSAL WASHROOMS. COMPLETELY CUTBACK AND CAP SERVICES TO MAIN.
- ⊖ DISCONNECT, REMOVE AND DISPOSE OF EXISTING ABOVE CEILING HOT WATER TANK COMPLETE WITH ALL DOMESTIC WATER PIPING AND ACCESSORIES.

NO.	DESCRIPTION	DATE
1.	ISSUED FOR PROGRESS REVIEW	AUG 10/18
2.	ISSUED FOR COORDINATION	SEP 04/18
3.	ISSUED FOR COORDINATION	NOV 08/18
4.	ISSUED FOR BUILDING PERMIT	DEC 04/18
5.	ISSUED FOR TENDER	JAN 17/19

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**PROJECT:**  
SURGENOR TRUCK CENTRE  
RENOVATION  
1571 LIVERPOOL COURT  
OTTAWA, ONTARIO

**DRAWING:**  
MECHANICAL  
GROUND FLOOR DEMOLITION

DATE: AUGUST 2018

DESIGNED BY: K.J.I.  
DRAWN BY: K.J.I.  
CHECKED BY: S.C.

SCALE: 1:100

NO. DWGS: 7  
PROJECT NO: 18165  
DRAWING NO: MD-1

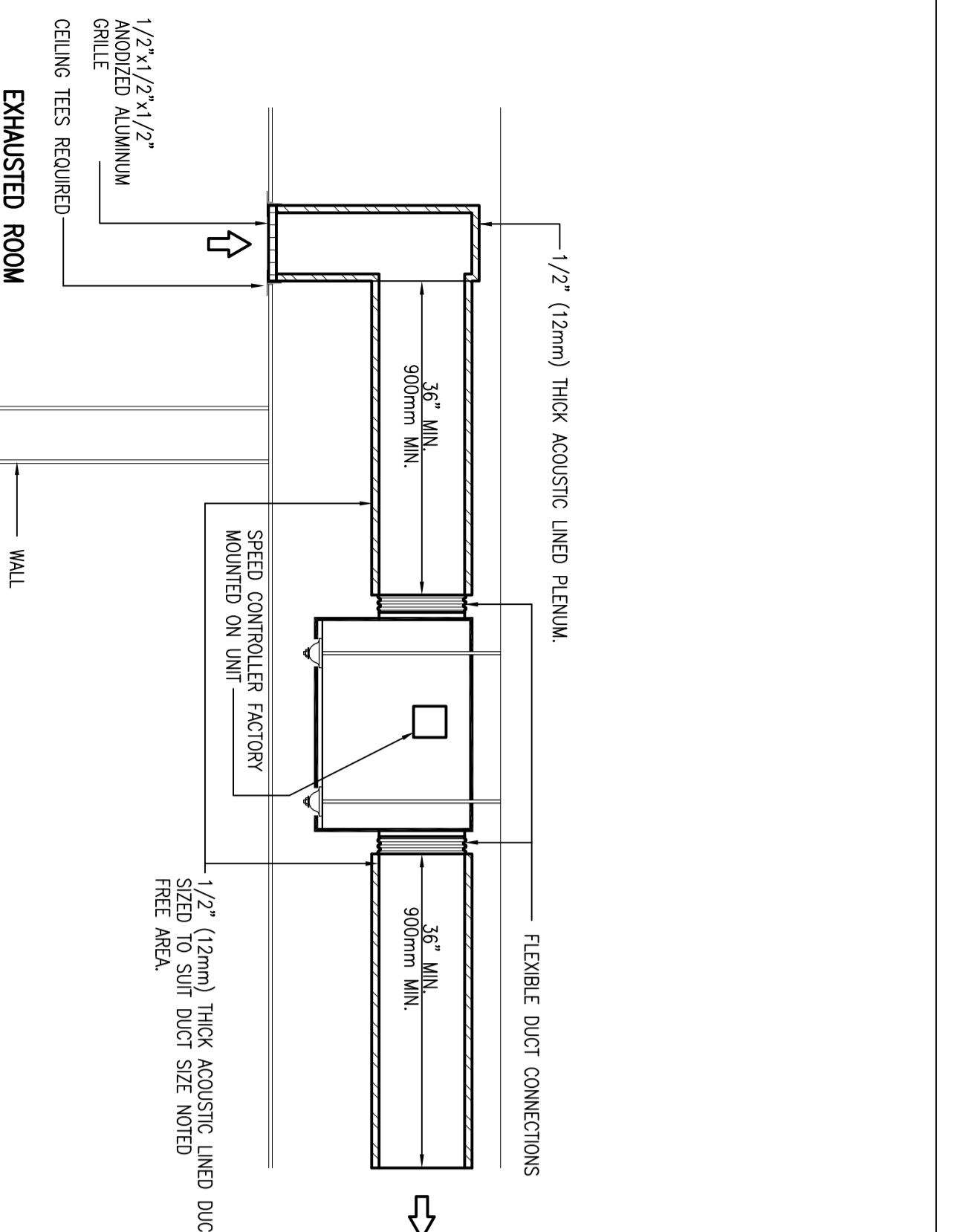
ROOFTOP UNIT SCHEDULE												
(BASED ON 35°C AIR ON CONDENSER)												
REF.	COOLING CAP. TONN	MINIMUM EER/EER	E.A.T.	HEATING	SUPPLY FAN	ELEC.	REMARKS					
	TYPE	EER	NO	NO	TYPE	WATTS	PH. W.A.	REMARKS				
RM-1	26.98	13.9	26.7	19.4	045	38.12	1201	249	575	3	19	EQUAL TO TENOXI CONDENSATE
RM-2	26.98	13.9	26.7	19.4	045	38.12	1201	249	575	3	19	EQUAL TO TENOXI CONDENSATE

GAS-FIRED RADIANT HEATER SCHEDULE											
REF.	CAPACITY	ELECTRICAL	REMARKS								
	WATT	OUTPUT	VOLTS								
RM-1	29.3	23.5	120	EQUAL TO SCHWANK STS-80-30 C/W TRIPLE STACK INFRARED THERMOSTAT, ROOF VENT							
RM-2	29.3	23.5	120	EQUAL TO SCHWANK STS-80-30 C/W TRIPLE STACK INFRARED THERMOSTAT, ROOF VENT							
RM-3	47.7	38.1	120	EQUAL TO SCHWANK STS-100-30 C/W TRIPLE STACK INFRARED THERMOSTAT, SIGNAL VENT							
RM-4	47.7	38.1	120	EQUAL TO SCHWANK STS-100-30 C/W TRIPLE STACK INFRARED THERMOSTAT, SIGNAL VENT							

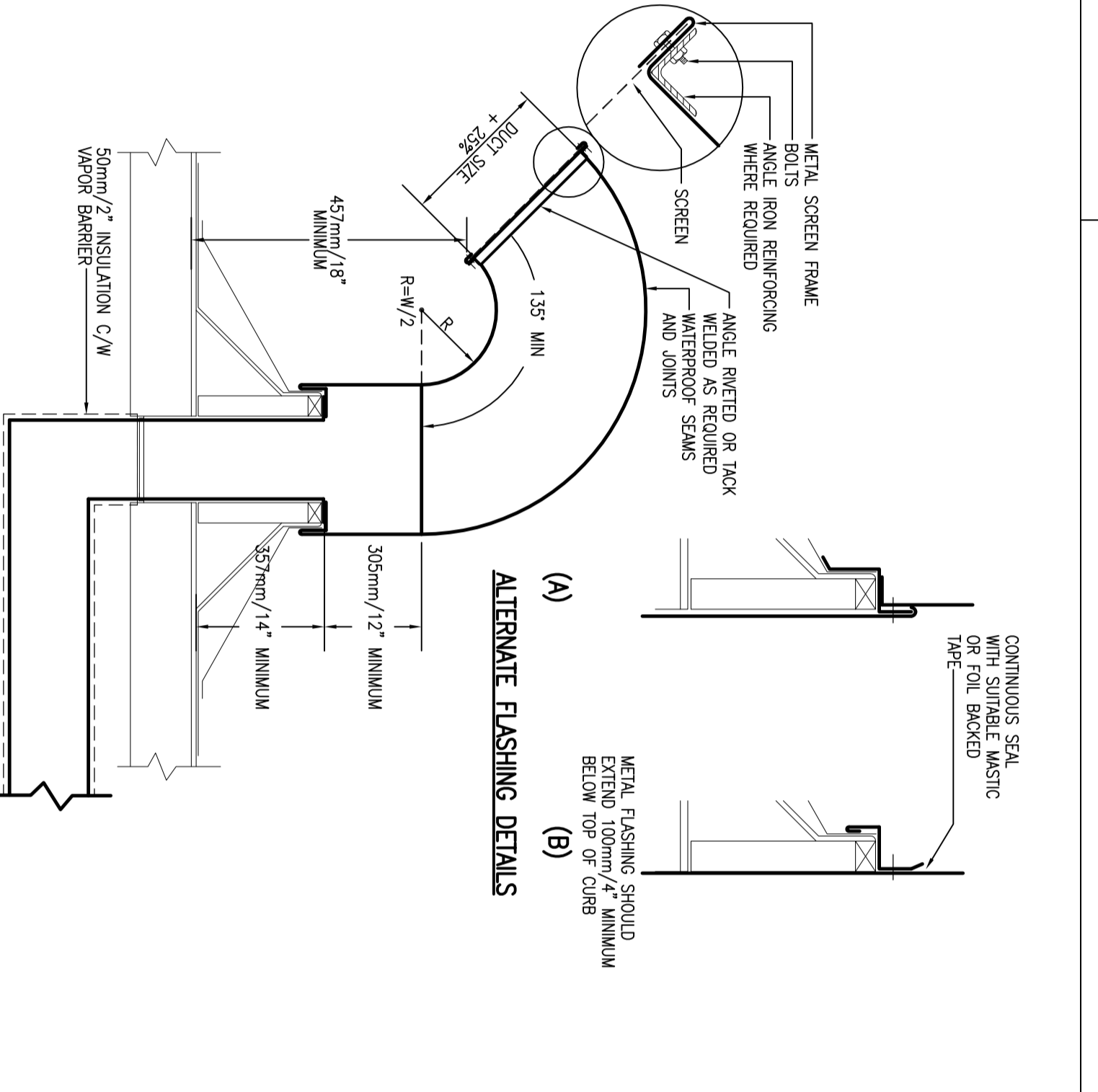
GRILLE & DIFFUSER SCHEDULE									
REF.	FUNCTION	THROW DIRECTION	FRAME OR BORDER TYPE	NECK SIZE	COLOR	BALANCING DAMPER	REMARKS		
A	SUPPLY	4-WAY	1-BAR	2039	WHITE	N. BRANCH	EQUAL TO MAJOR MODEL SERIES 516 F10410		
B	RETURN	---	1-BAR	610/035	WHITE	---	EQUAL TO MAJOR MODEL SERIES 516 C		
C							NOT USED		
D	SUPPLY	2-WAY	1-BAR	1539	WHITE	N. BRANCH	EQUAL TO MAJOR MODEL SERIES 5475 - 2 SLOTS - 1200mm LONG		
E	SUPPLY	2-WAY	DRYWALL	3054/152	WHITE	N. BRANCH	EQUAL TO MAJOR MODEL SERIES 5104-0		

FAN SCHEDULE											
REF.	FUNCTION	LOCATION	CAPACITY	REMARKS							
			FLOW L/S	SP. P.M.	ELECTRICAL	REMARKS					
			F <sub>0</sub>	WATTS	PH.						
F-1	EXHAUST	ROOM 108	47	1050	120	1	EQUAL TO PENN ZEPHUR Z85(RN)				
F-2	EXHAUST	ROOM 105	71	1050	77	120	1	EQUAL TO PENN ZEPHUR Z85(RN)			
F-3	EXHAUST	ROOM 104	47	1050	77	120	1	EQUAL TO PENN ZEPHUR Z85(RN)			
F-4	EXHAUST	ROOM 215	47	1050	77	120	1	EQUAL TO PENN ZEPHUR Z85(RN)			
F-5	EXHAUST	ROOM 141	944	910	1/4HP	120	1	EQUAL TO PENN DIXI 148			
F-6	DE-STRATIFICATION	ROOM 141						REFER TO SPECIFICATION			
F-7	DE-STRATIFICATION	ROOM 141						REFER TO SPECIFICATION			
F-8	TRANSFER	ROOM 204	250	62	1050	273	120	1	EQUAL TO PENN ZEPHUR 2105(STR)		

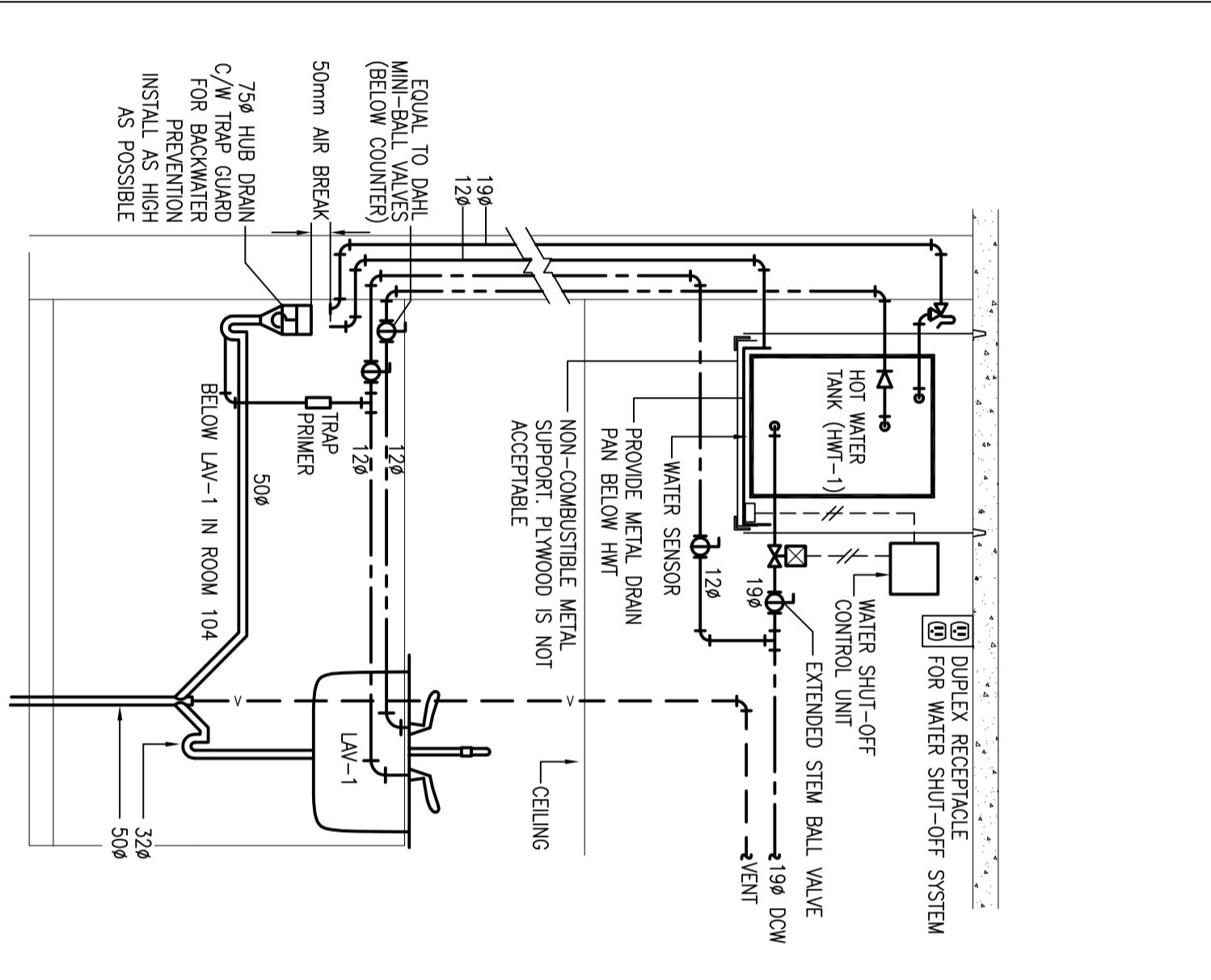
PLUMBING FIXTURE SCHEDULE					
REF.	SUPPLY SIZE	DRAIN SIZE	VENT SIZE		
LM-1	129	129	329	AS PER OBC	
LM-2	129	129	329	AS PER OBC	
LM-3	209	209	509	AS PER OBC	
WC-1	259	---	759	AS PER OBC	
WC-2	259	---	759	AS PER OBC	
WC-3	129	---	759	AS PER OBC	
SK-1	129	129	409	AS PER OBC	



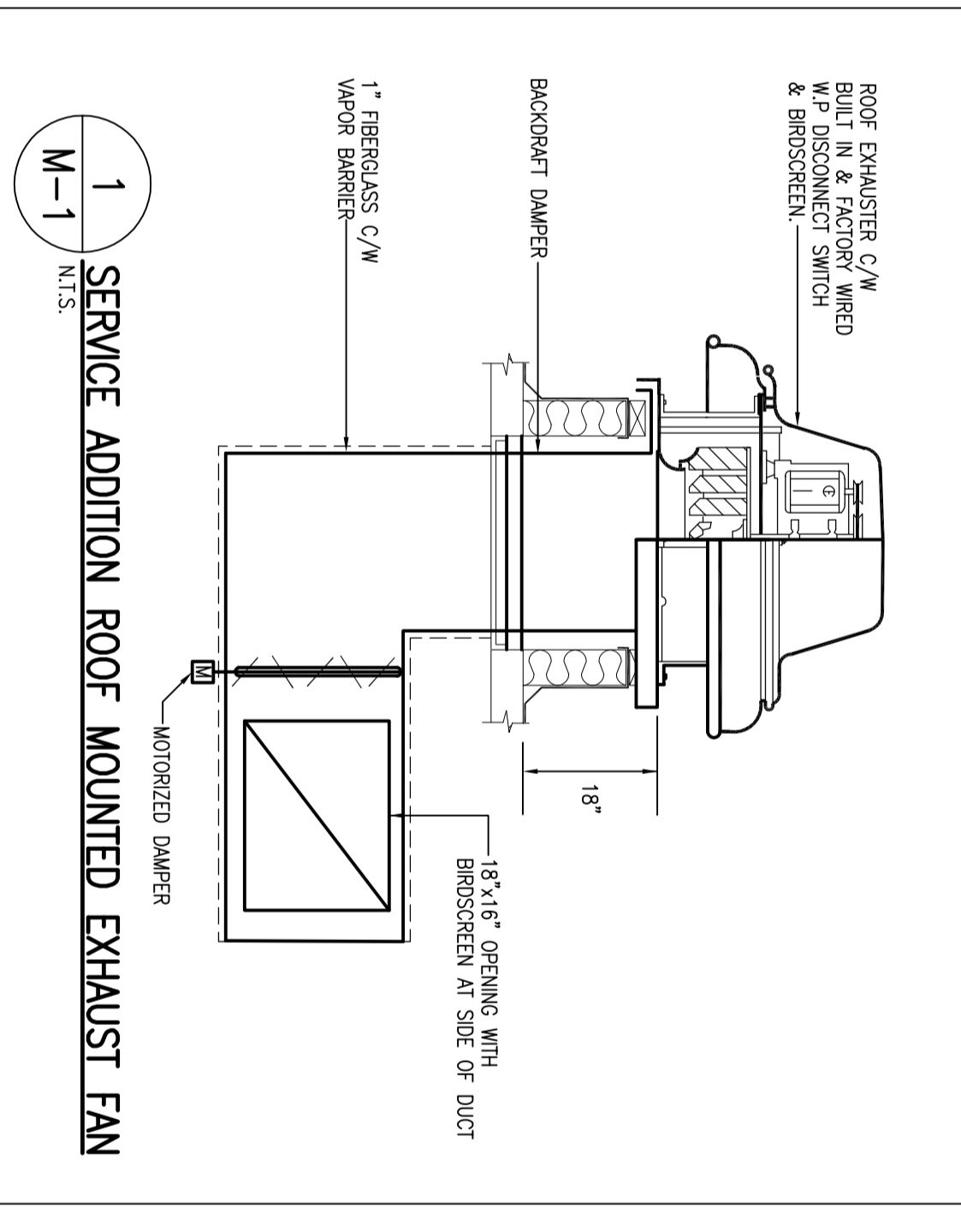
5 TRANSFER FAN INSTALLATION DETAIL  
M-1 N.T.S.



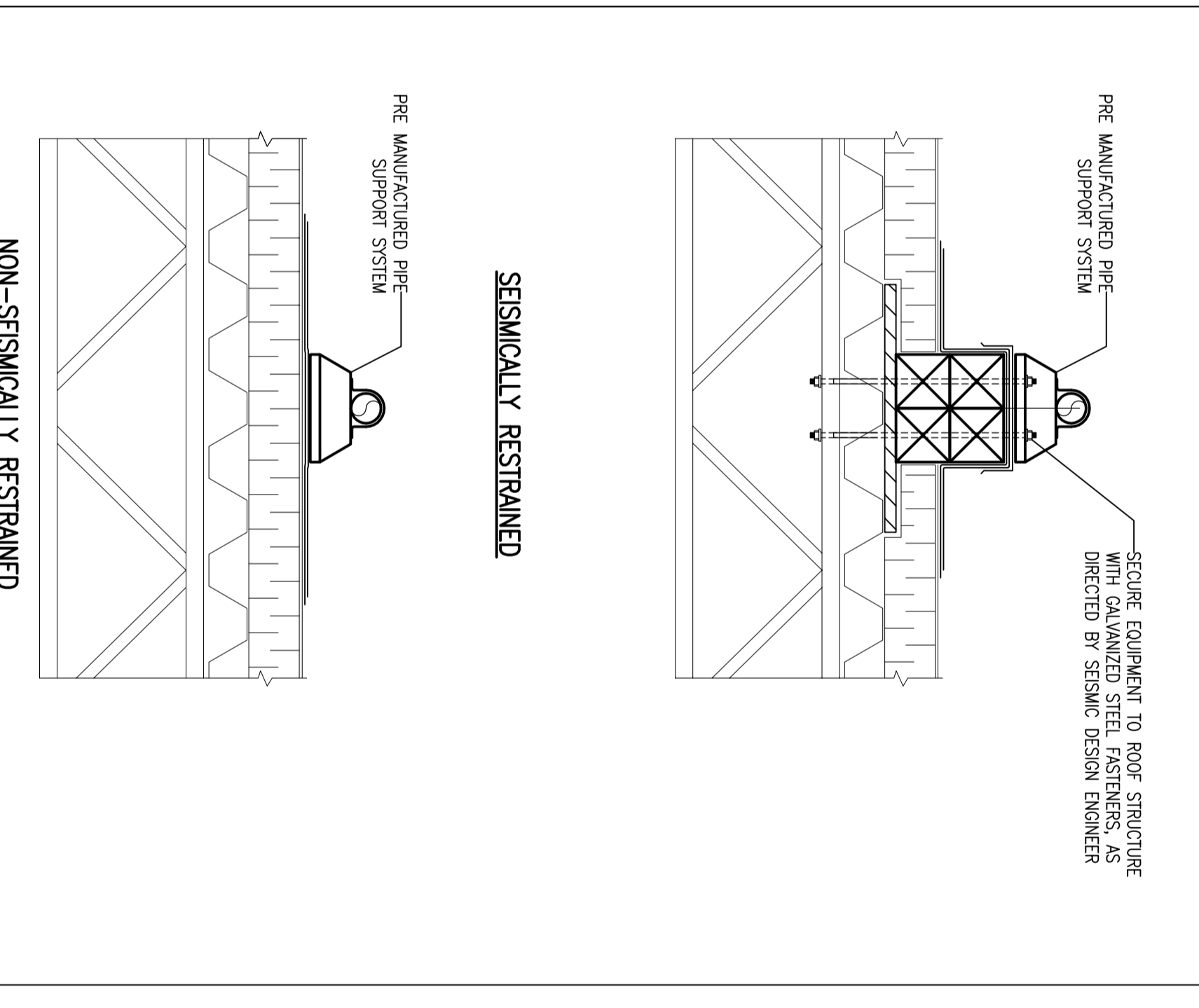
4 RECTANGULAR WASHROOM EXHAUST GOOSENECK  
M-1 N.T.S.



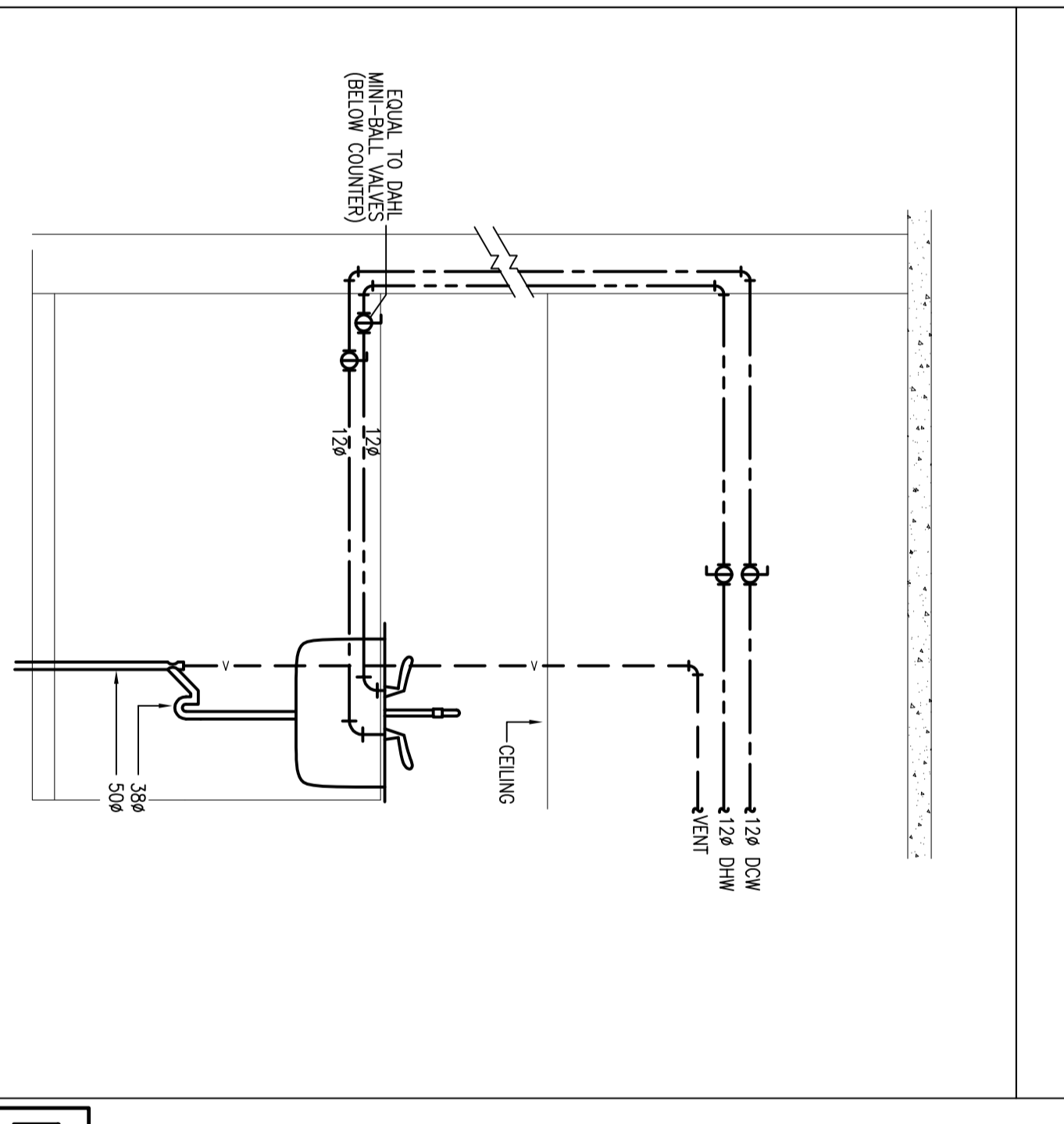
6 DOMESTIC HOT WATER TANK PIPING DETAIL - CEILING MOUNTED  
M-1 N.T.S.



1 SERVICE ADDITION ROOF MOUNTED EXHAUST FAN  
M-1 N.T.S.



2 PIPE ROOF SUPPORT - METAL DECK ROOF  
M-1 N.T.S.



3 PIPING DETAIL - KITCHEN SINK  
M-1 N.T.S.

REMOVED AND/OR RELOCATED	EXISTING TO REMAIN	NEW	HVAC LEGEND
			VERTICAL SUPPLY AIR DUCT
			VERTICAL RETURN OR EXHAUST AIR DUCT
			SUPPLY AIR DUCT
			RETURN OR EXHAUST DUCT
			INTERNAL ACOUSTIC DUCT LINING
			FIRE DAMPER
			MOTOR OPERATED DAMPER
			BALANCING DAMPER
			TURNING VANES
			SQUARE TO ROUND TRANSITION
			FLEXIBLE DUCT (MAX. 6' LENGTH)
			SQUARE DIFFUSER
			DUCTED RETURN/EXHAUST GRILLE
			SEPARATE RETURN/EXHAUST GRILLE
			DOOR GRILLE
			FLEXIBLE CONNECTION
			A = DIFFUSER TYPE (SEE SCHEDULE)
			B = VAN BOX SIZE AIR FLOW (L/S)
			C = BOX MINIMUM AIR FLOW (L/S)

REMOVED AND/OR RELOCATED	EXISTING TO REMAIN	NEW	CONTROLS LEGEND
			ROOM THERMOSTAT/TEMPERATURE SENSOR
			CONTROL WIRING/TUBING
			WALL BOX THERMOSTAT

REMOVED AND/OR RELOCATED	EXISTING TO REMAIN	NEW	PLUMBING LEGEND
			SANITARY PIPING ABOVE GRADE/FLOOR
			SANITARY PIPING BELOW GRADE/FLOOR
			STORM PIPING ABOVE GRADE/FLOOR
			STORM PIPING BELOW GRADE/FLOOR
			DOMESTIC COLD WATER PIPING
			DOMESTIC HOT WATER PIPING
			DOMESTIC HOT WATER RECIRCULATION PIPING
			NATURAL GAS PIPING
			CLEAN OUT
			DRAIN/ROOF DRAIN
			HUB DRAIN

REMOVED AND/OR RELOCATED	EXISTING TO REMAIN	NEW	VALVES & FITTINGS LEGEND
			GATE VALVE
			BALL VALVE
			DOUBLE CHECK VALVE BACKFLOW PREVENTER
			PRESSURE RELIEF VALVE
			PUMP
			ELBOW UP OR DOWN
			CAP
			DRIP LEG
			REDUCER

REMOVED AND/OR RELOCATED	EXISTING TO REMAIN	NEW	FIRE PROTECTION LEGEND
			FIRE EXTINGUISHER

MECHANICAL DRAWING LIST	
DRAWING NO.	DESCRIPTION
MD-1	MECHANICAL: GROUND FLOOR DEMOLITION
M-1	MECHANICAL: LEGEND, DRAWING LIST, DETAILS AND SCHEDULES
M-2	MECHANICAL: GROUND FLOOR PLUMBING AND FIRE PROTECTION
M-3	MECHANICAL: GROUND FLOOR HVAC
M-4	MECHANICAL: SECOND FLOOR PLUMBING, HVAC AND FIRE PROTECTION
M-5	MECHANICAL: SERVICE ADDITION LAYOUTS
M-6	MECHANICAL: STORAGE BUILDING

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THIS PAPER COPY OF THE DRAWINGS ISSUED FOR BUILDING PERMITS AND/OR OTHER REGULATORY PURPOSES OVER EXHAUSTION OF PERMITS.

**SURGENOR TRUCK GROUP**

PROJECT: SURGENOR TRUCK CENTRE RENOVATION 1571 LIVERPOOL COURT OTTAWA, ONTARIO

MECHANICAL: LEGEND, DRAWING LIST, DETAILS AND SCHEDULES

DRAWING: M-1

DATE: AUGUST 2018

DESIGNED BY: K.J.I.

DRAWN BY: K.J.I.

CHECKED BY: S.C.

SCALE: N.T.S.

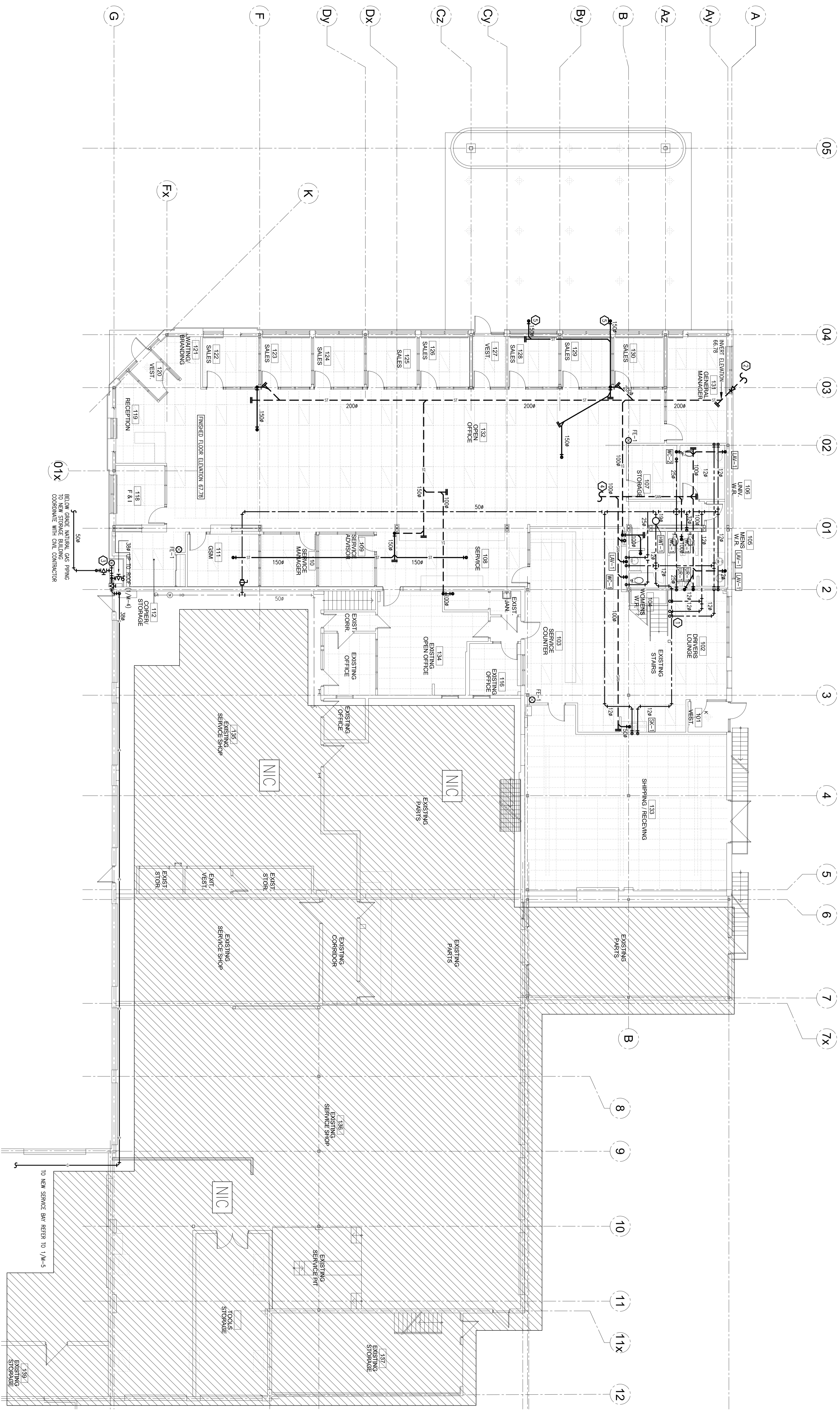
NO. DIMS: 7

PROJECT NO: 18165

**M-1**

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Fax: (613) 723-8884  
www.mckeeengineering.com

ISSUED FOR	DATE
ISSUED FOR TENDER	JAN 17/19
ISSUED FOR BUILDING PERMIT	DEC 04/18
ISSUED FOR COORDINATION	NOV 08/18
ISSUED FOR PROGRESS REVIEW	SEP 04/18



1 GROUND FLOOR - PLUMBING AND FIRE PROTECTION  
M-2

- DRAWING NOTES**
- ① EXISTING SERVICES UP THROUGH SUB CONNECT TO NEW AND EXIST WATER, GASES AND DRAINAGE TO 2500' OUTSIDE OF BUILDING.
  - ② COORDINATE WITH CIVIL CONTRACTOR, TRANSITION UPGRADE EXISTING EMERGE NATURAL GAS LOAD OF 650 MBH, 7' MIN.
  - ③ RELOCATE AND METER FOR AN ADDITIONAL GAS LOAD OF 650 MBH, 7' MIN.
  - ④ CONNECT TO EXISTING BELOW GRADE SANITARY PIPING.
  - ⑤ HEAT TRACING OF STORM WATER DRAIN FROM CHIMNEY DOWN TO CEILING SPACE, COORDINATE INSULATION OF PIPE.

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**SURGENOR TRUCK GROUP**

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PROJECT:  
SURGENOR TRUCK CENTRE  
RENOVATION  
1571 LIVERPOOL COURT  
OTTAWA, ONTARIO

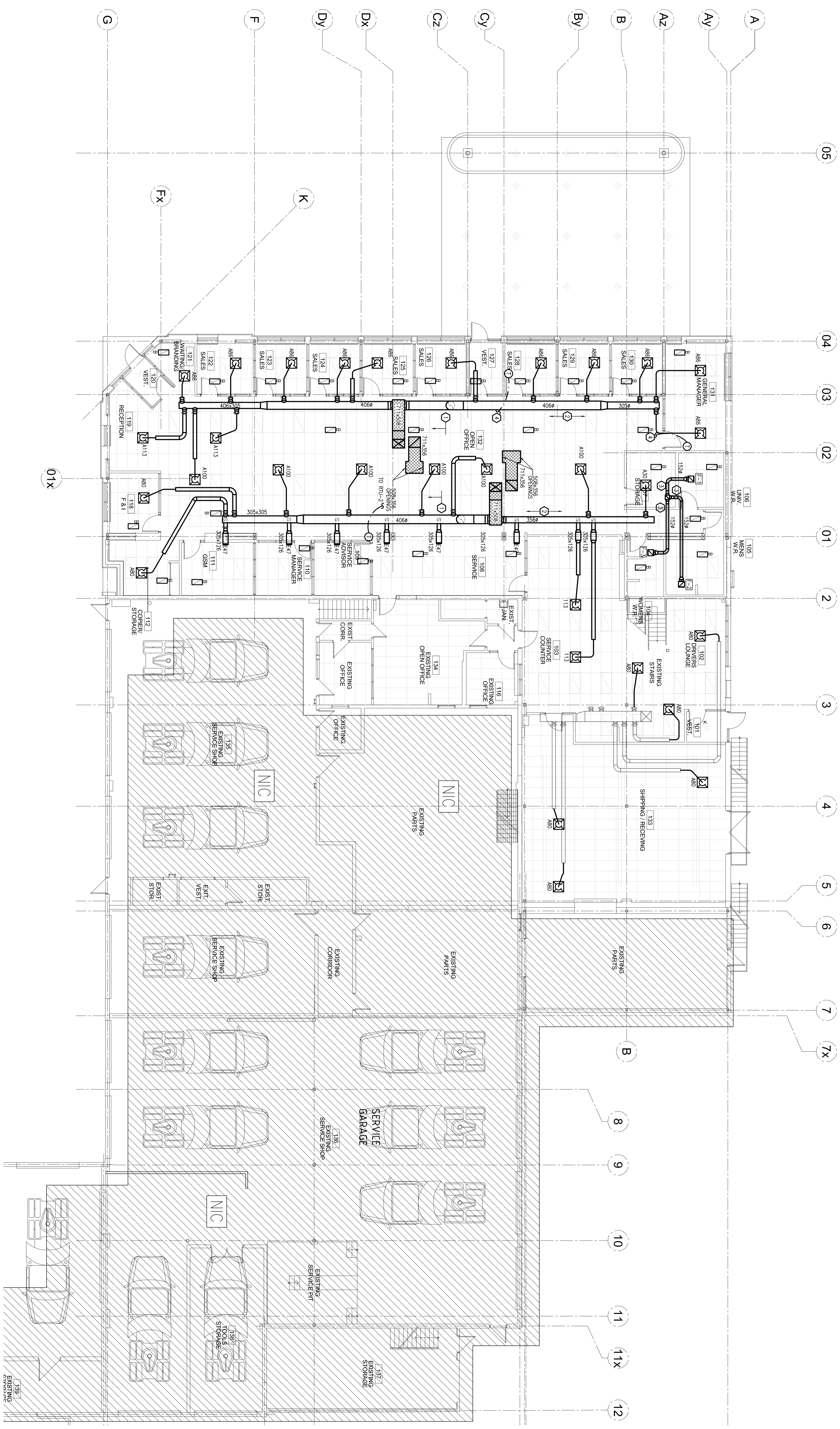
DRAWING:  
MECHANICAL -  
GROUND FLOOR PLUMBING  
AND FIRE PROTECTION

DATE: AUGUST 2018  
DESIGNED BY: K.J.I.  
DRAWN BY: K.J.I.  
CHECKED BY: S.C.

NO. DWGS: 7  
PROJECT NO: 18165  
DRAWING NO: M-2  
SCALE: 1:100

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1 GROUND FLOOR - HVAC  
M-3

- DRAWING NOTES**
- ① DUCTWORK TO TRAVEL WITHIN JOIST WEBBING SOUTH OF GRIDLINE C2. COORDINATE WITH STRUCTURAL AND ARCHITECTURAL DRAWINGS.
  - ② DUCTWORK TO TRAVEL BELOW JOISTS AND BEAMS STRUCTURAL AND ARCHITECTURAL DRAWINGS WITH STRUCTURAL AND ARCHITECTURAL DRAWINGS.
  - ③ TRANSITION TO SQUARE DUCT AND PROVIDE 15% AIRFLOW PER FOOT FROM FLOOR TO CEILING CONNECTING TO COORDEX EXHAUST.
  - ④ SUPPLY AND INSTALL NEW TEMPERATURE SENSORS AND CONNECT TO RLU-1. TAKE AVERAGE TEMPERATURE BETWEEN THE SENSORS TO CONTROL THE OUTPUT FROM THE FLOORPAC UNIT.

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PROJECT:  
SURGENOR TRUCK CENTRE  
RENOVATION  
1571 LIVERPOOL COURT  
OTTAWA, ONTARIO

MECHANICAL:  
GROUND FLOOR HVAC

DATE: AUGUST 2018  
DESIGNED BY: K.J.I.  
DRAWN BY: K.J.I.  
CHECKED BY: S.C.

SCALE: 1:100  
DRAWING NO.

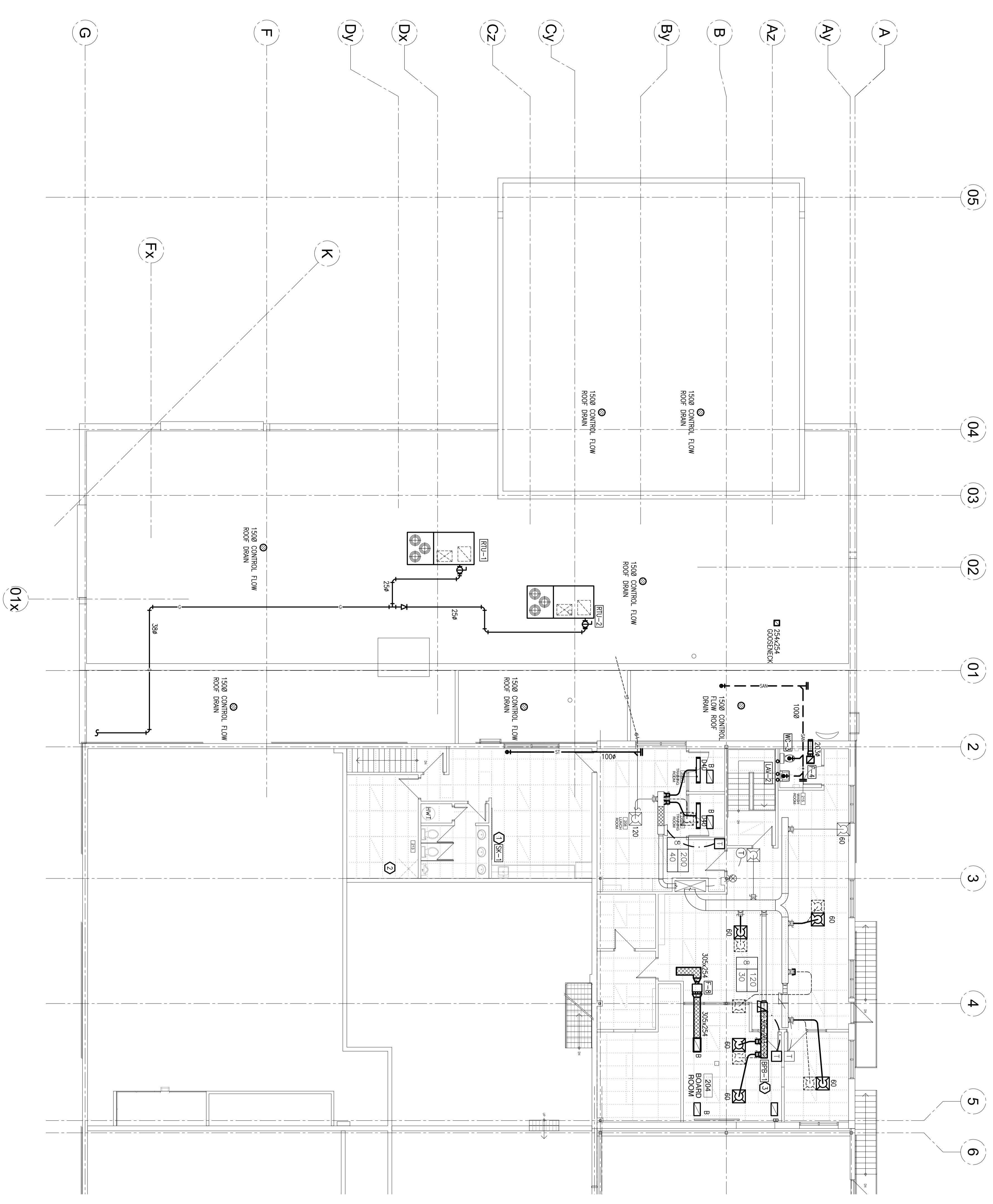
NO. DWGS: 7  
PROJECT NO: 18165  
DRAWING NO: M-3

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- DRAWING NOTES**
- ① DISCONNECT, REMOVE AND DISPOSE OF EXISTING KITCHENS SINK, TEMPORARILY CURB AND CAP SERVICES IN WALL SUPPLY AND INSTALL NEW SERVICES TO NEW LOCATION.
  - ② DISCONNECT, REMOVE AND DISPOSE OF EXISTING SHOWER CURB AND CAP SERVICES IN WALL SUPPLY AND INSTALL NEW 2000 BT-PLAS BOX.



**1 SECOND FLOOR – PLUMBING, HVAC AND FIRE PROTECTION**  
M-4

NO.	DESCRIPTION	DATE
1.	ISSUED FOR PROGRESS REVIEW	AUG 10/18
2.	ISSUED FOR COORDINATION	SEP 04/18
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4.	ISSUED FOR BUILDING PERMIT	DEC 04/18
5.	ISSUED FOR TENDER	JAN 17/19

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**PROJECT:**  
SURGENOR TRUCK CENTRE  
RENOVATION  
1571 LIVERPOOL COURT  
OTTAWA, ONTARIO

**DRAWING:**  
MECHANICAL:  
SECOND FLOOR PLUMBING,  
HVAC AND FIRE PROTECTION

DATE: AUGUST 2018

DESIGNED BY: K.J.I.  
DRAWN BY: K.J.I.  
CHECKED BY: S.C.

SCALE: 1:100

NO. DWGS: 7  
DRAWING NO. M-4

PROJECT NO. 18165



