

November 14, 2025

Addendum No. 03

File Reference Number: RFP 2025 092

Title: North Bay Car Shop Heating and Ventilation Upgrades

RE: Clarifications/Questions

CLARIFICATIONS:

Item 1: Would ONTC please provide the Cole, Sherman, & Associates mechanical plans in their full original scale?

- 5473-M10
- 5473-M11
- 5473-M12
- 5473-M14
- 5473-M16

Answer: Please see attached full scale drawings.

Item 2: Would ONTC kindly clarify a comment that was made at the site meeting in regard to the heating lines running on the outside of the building at all the overhead doors to track 1, 2, 3, and 4? The duct work definitely runs outside for track 1 and 2 on both ends of the building. The heating lines are drawn running inside the car shop with 2 unit heaters in each bay.

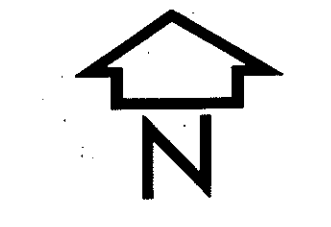
Answer: On tracks 1 and 2 the ventilation duct runs outside of the building on both ends. All heating lines will run inside the building.

This Addendum hereby forms part of the RFP.

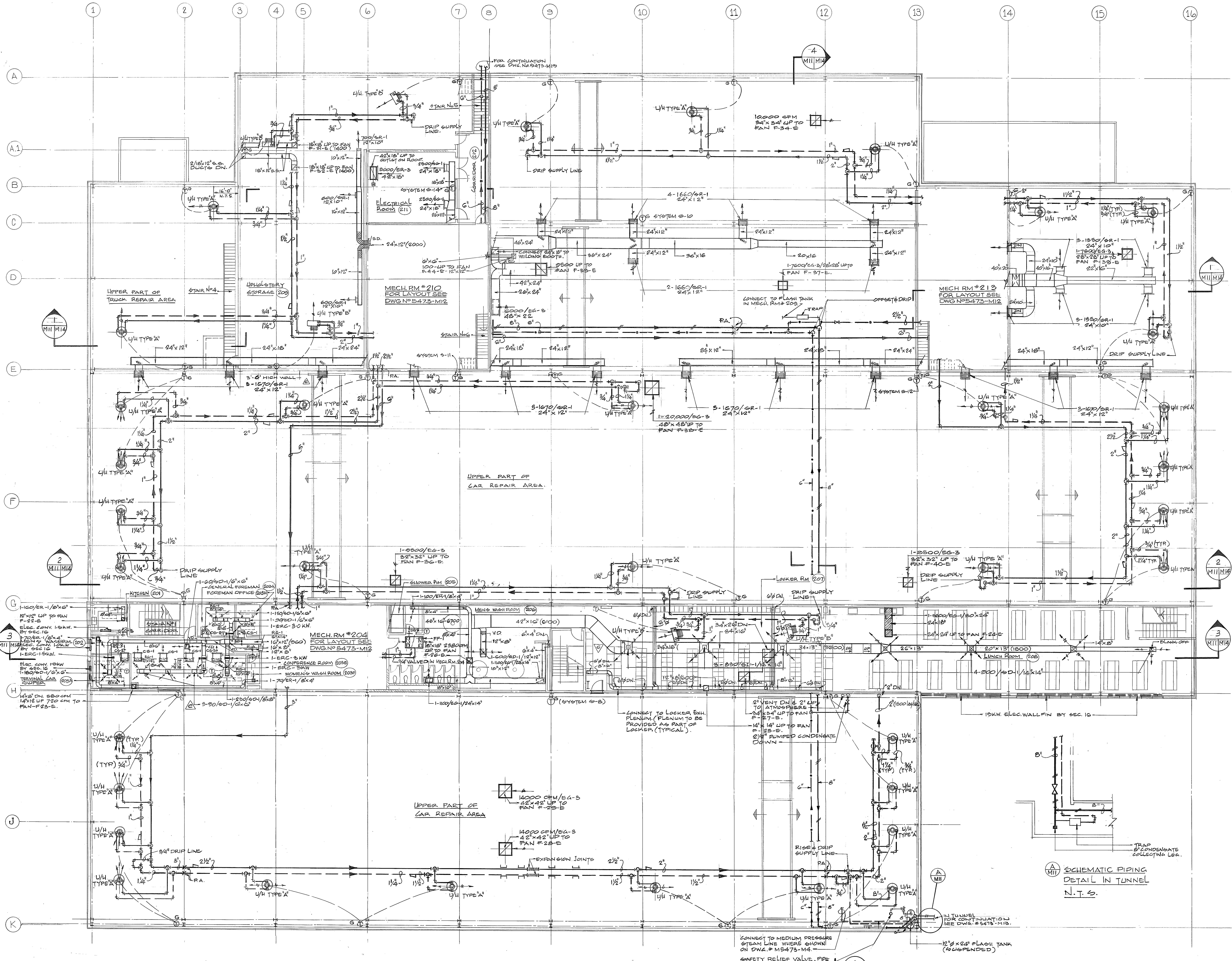
Regards,

Nicole Laplante
Procurement Contracts Specialist
nicole.laplante@ontarionorthland.ca



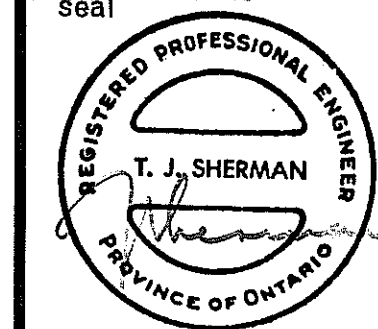


notes and reference drawings
1. REFER TO NOTE 2 & 3 ON DWG NO 5473-M12



D	11-28-75	AS BUILT DRAWING	M.L.	J.K.J.	T.J.S.
C	23-5-74	CHANGE NOTICE NO. 2	ES	J.K.J.	T.J.S.
B	10-5-74	ISSUED FOR CONSTRUCTION	C.A.	J.A.J.	T.J.S.
A	Mar. 74	Issued for General Contract Tender			
no.	date		drawn	checked	approved

revisions



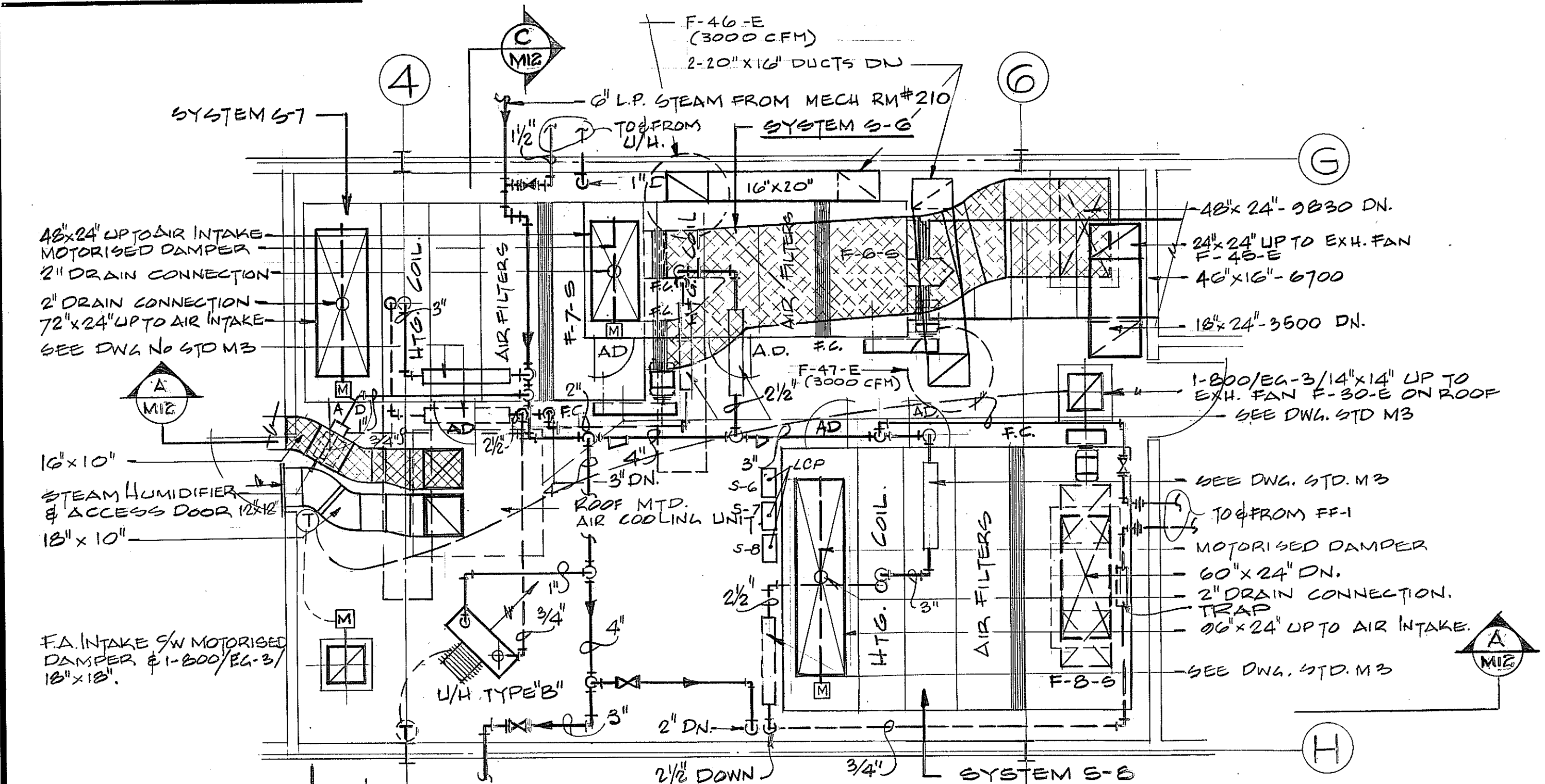
COLE, SHERMAN & ASSOC. LIMITED
TORONTO, ONTARIO

**ONTARIO NORTHLAND RAILWAY
NORTH BAY YARD
CONSOLIDATION OF REPAIR FACILITIES**

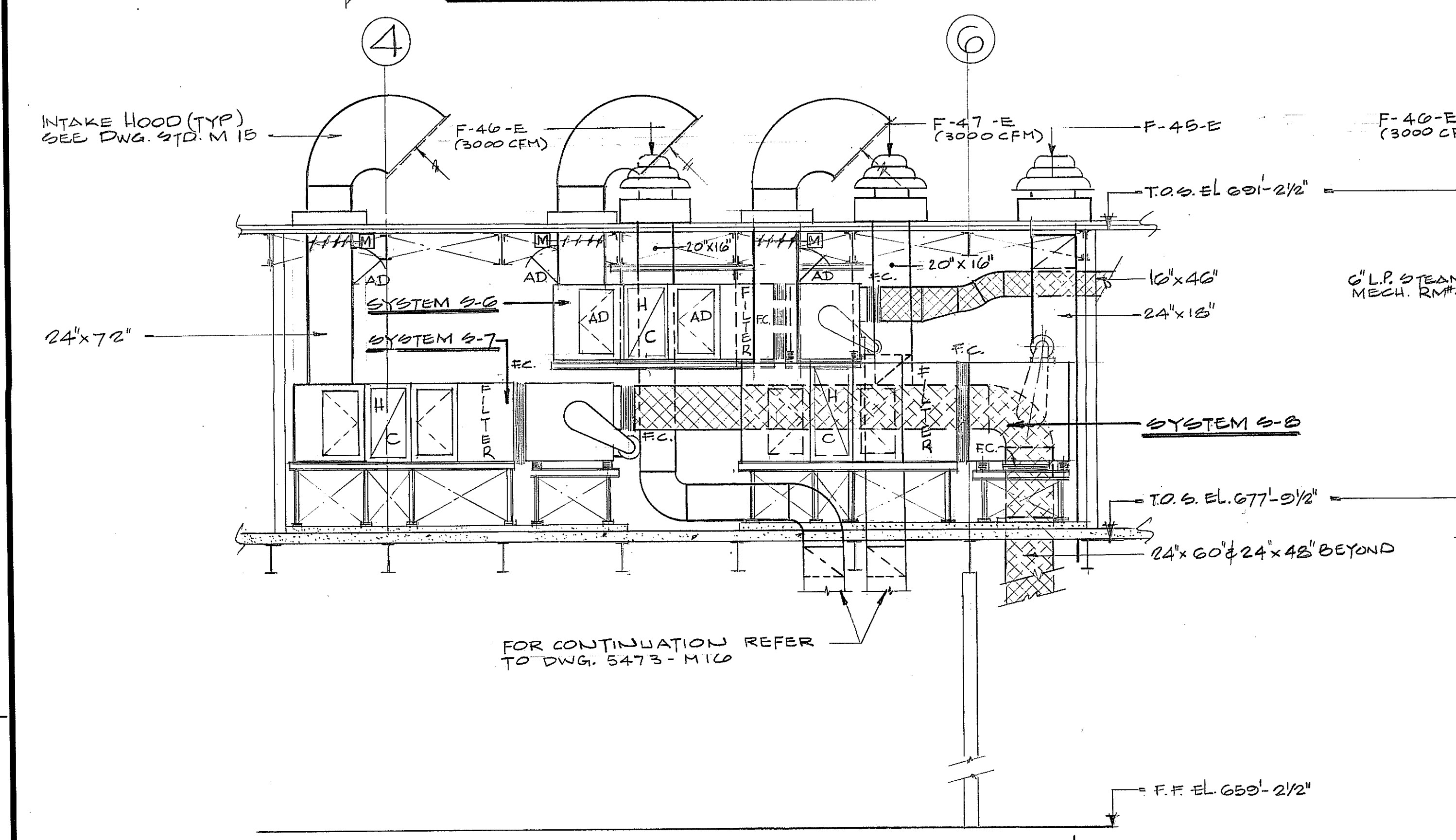
**REPAIR FACILITY
HEATING & VENTILATION**

drawing title
SECOND FLOOR PLAN

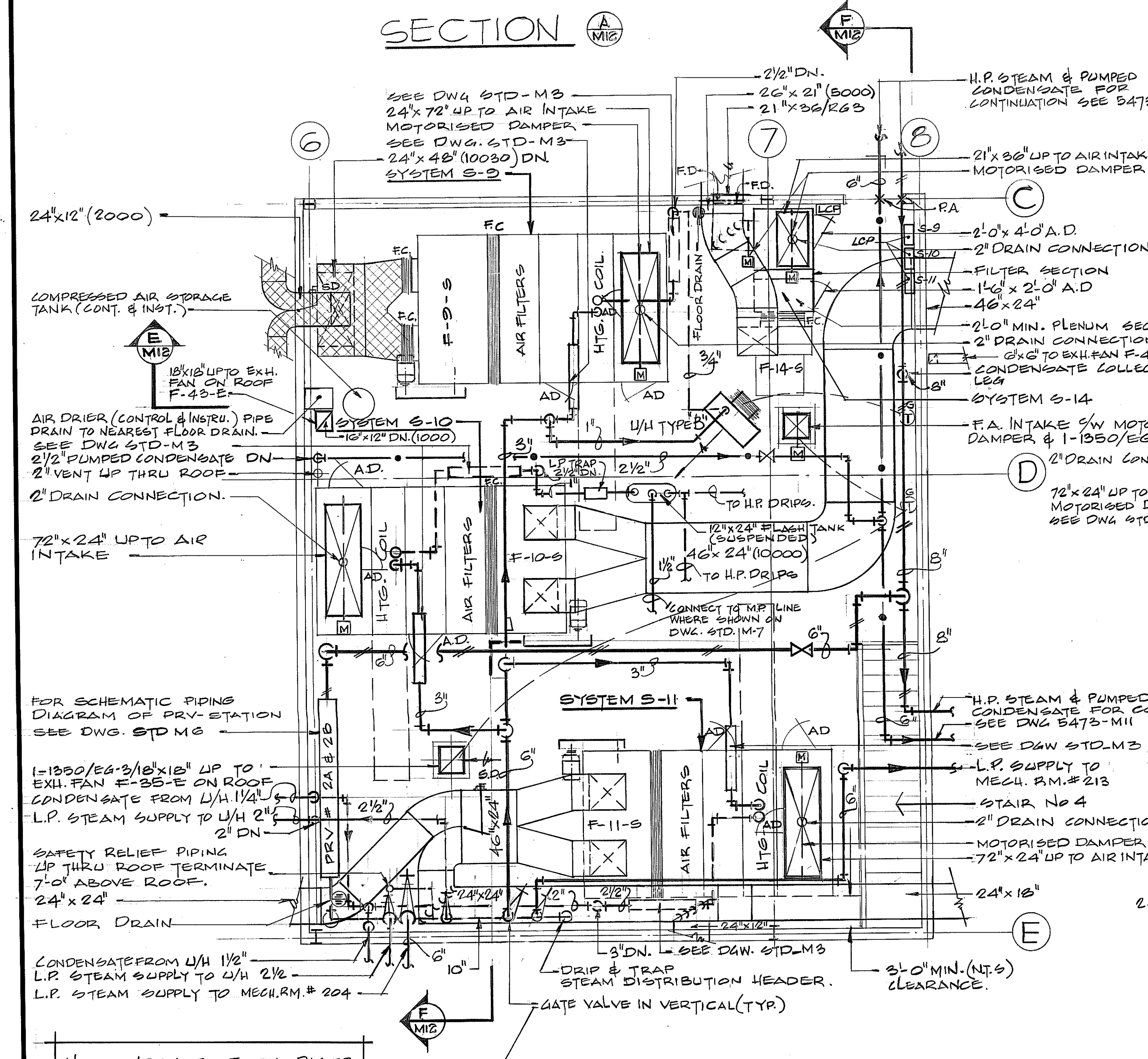
designed by	K.R.	checked by	J.K.J.	date	MARCH, 74
drawn by	H.D.	approved by	T.J.S.		
scale	1/8"=1'-0"	status		drawing number	5473-M11
project number					



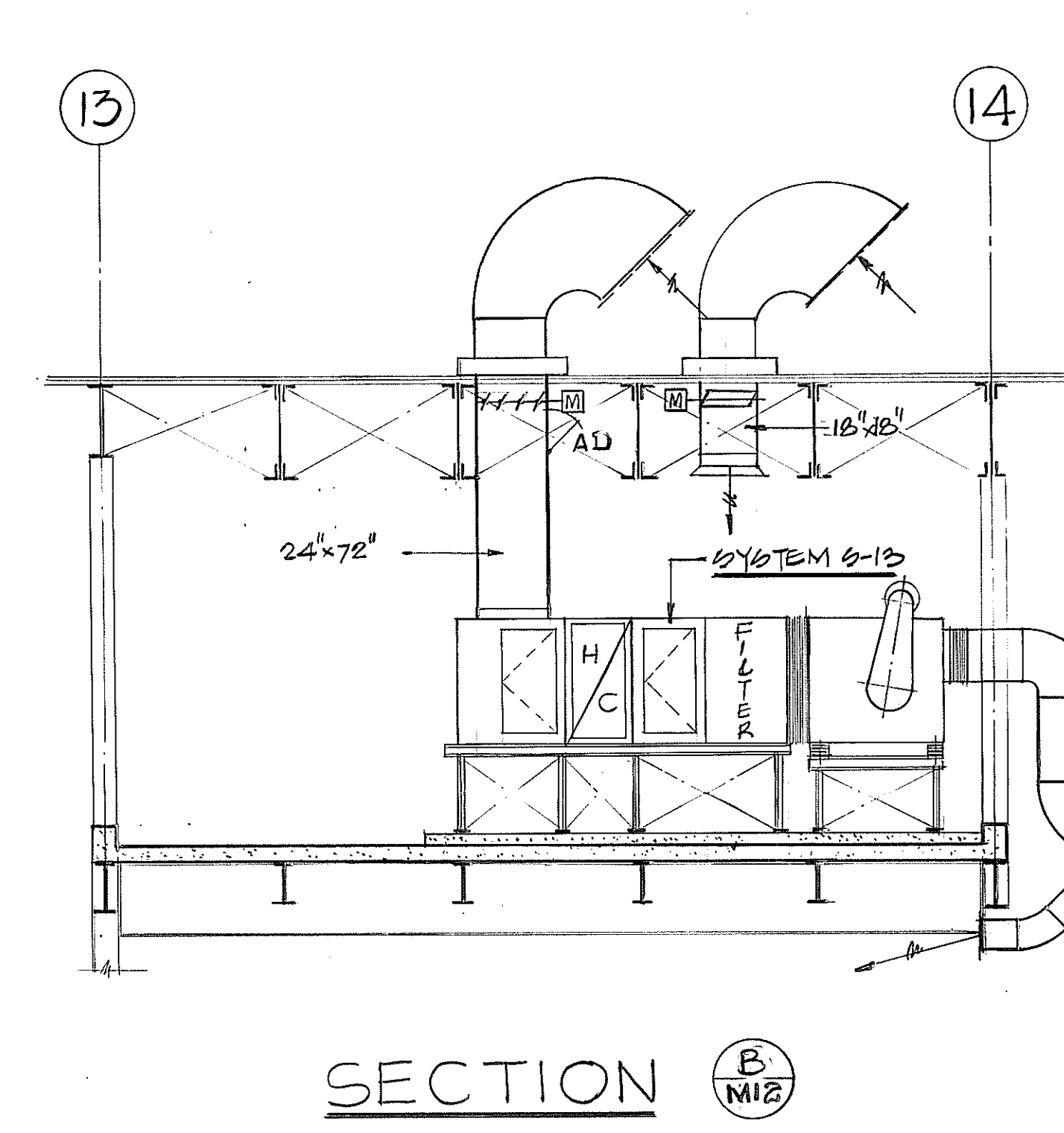
PLAN MECH. RM # 204



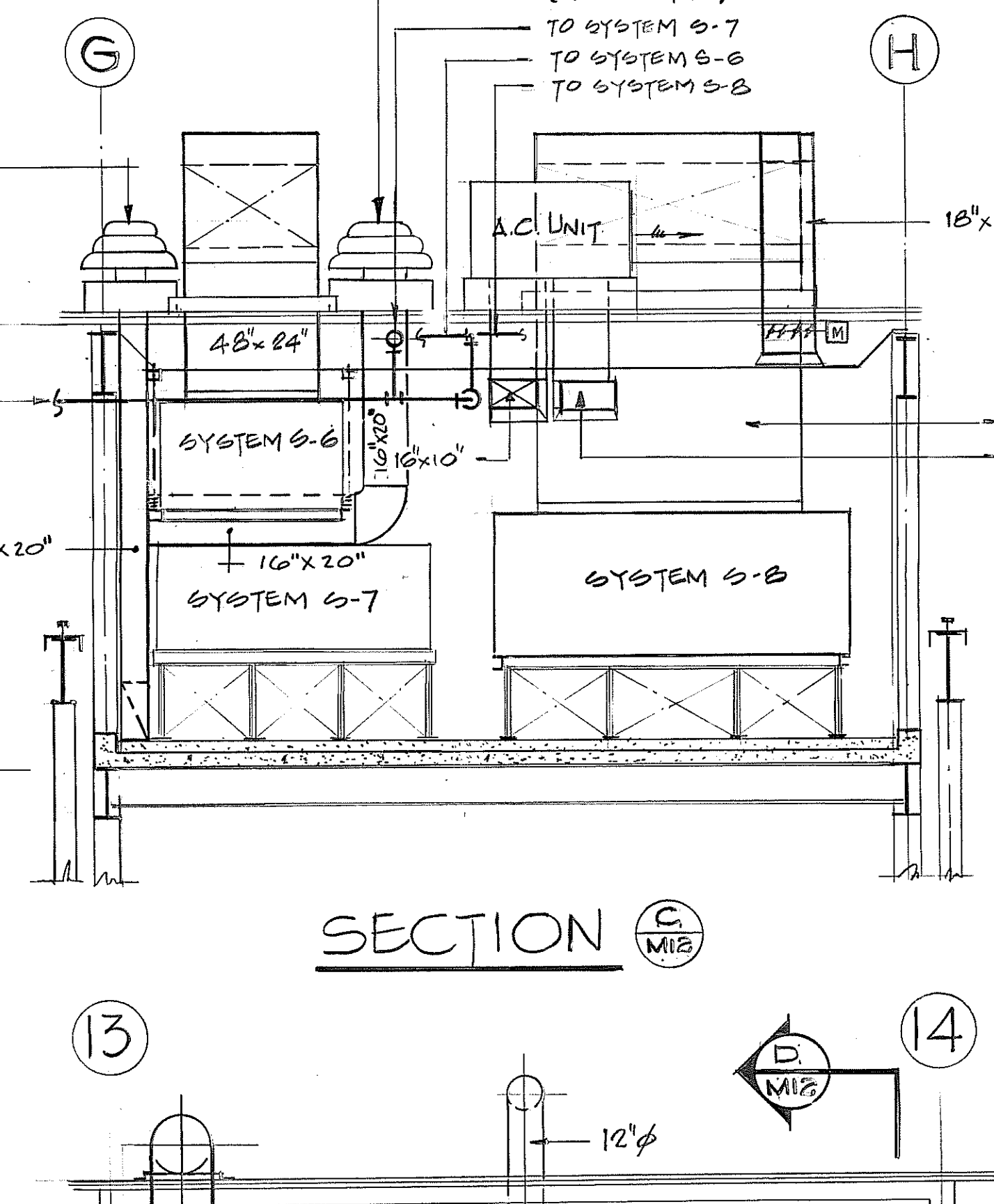
SECTION A



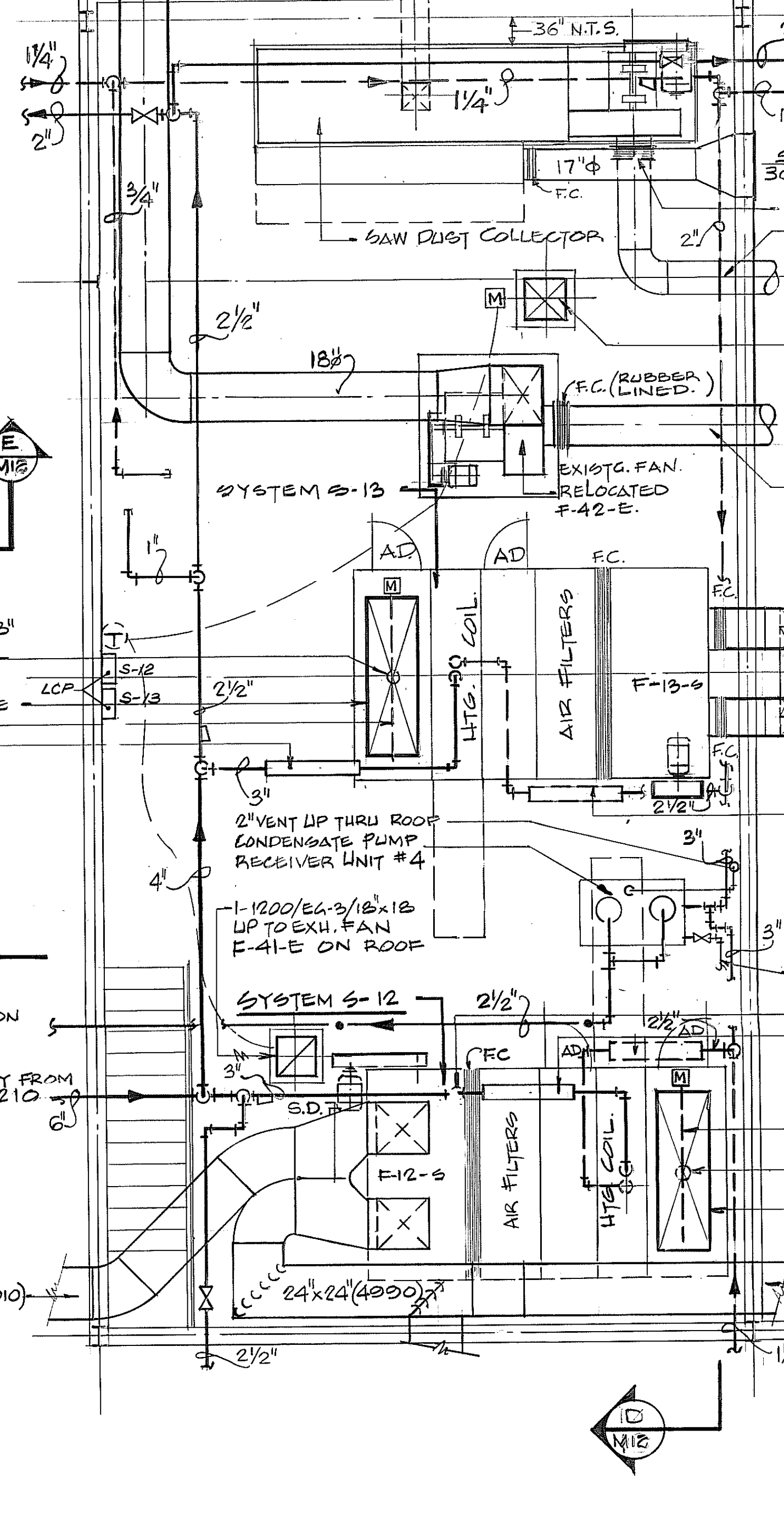
PLAN MECH. RM # 210



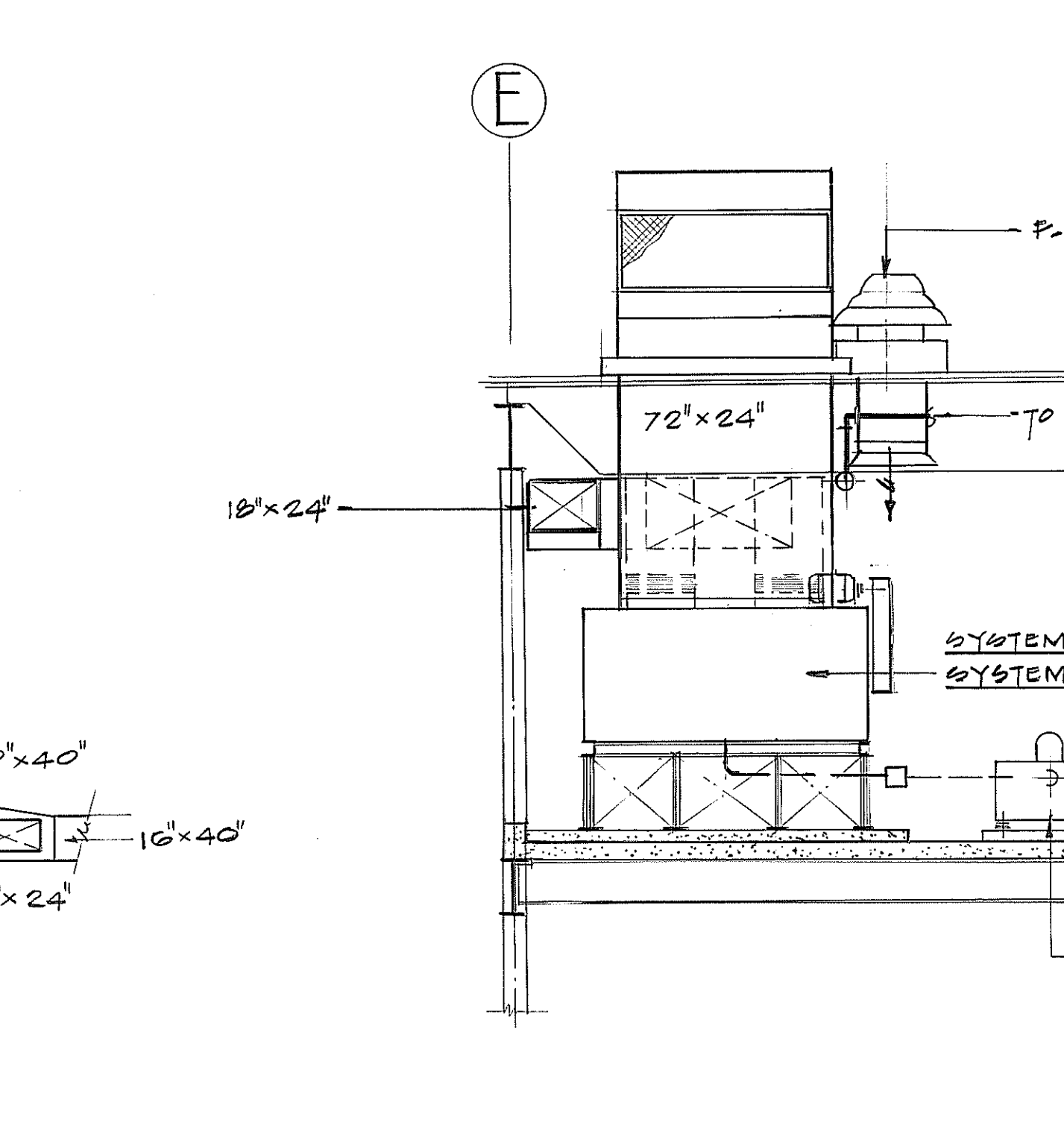
SECTION B



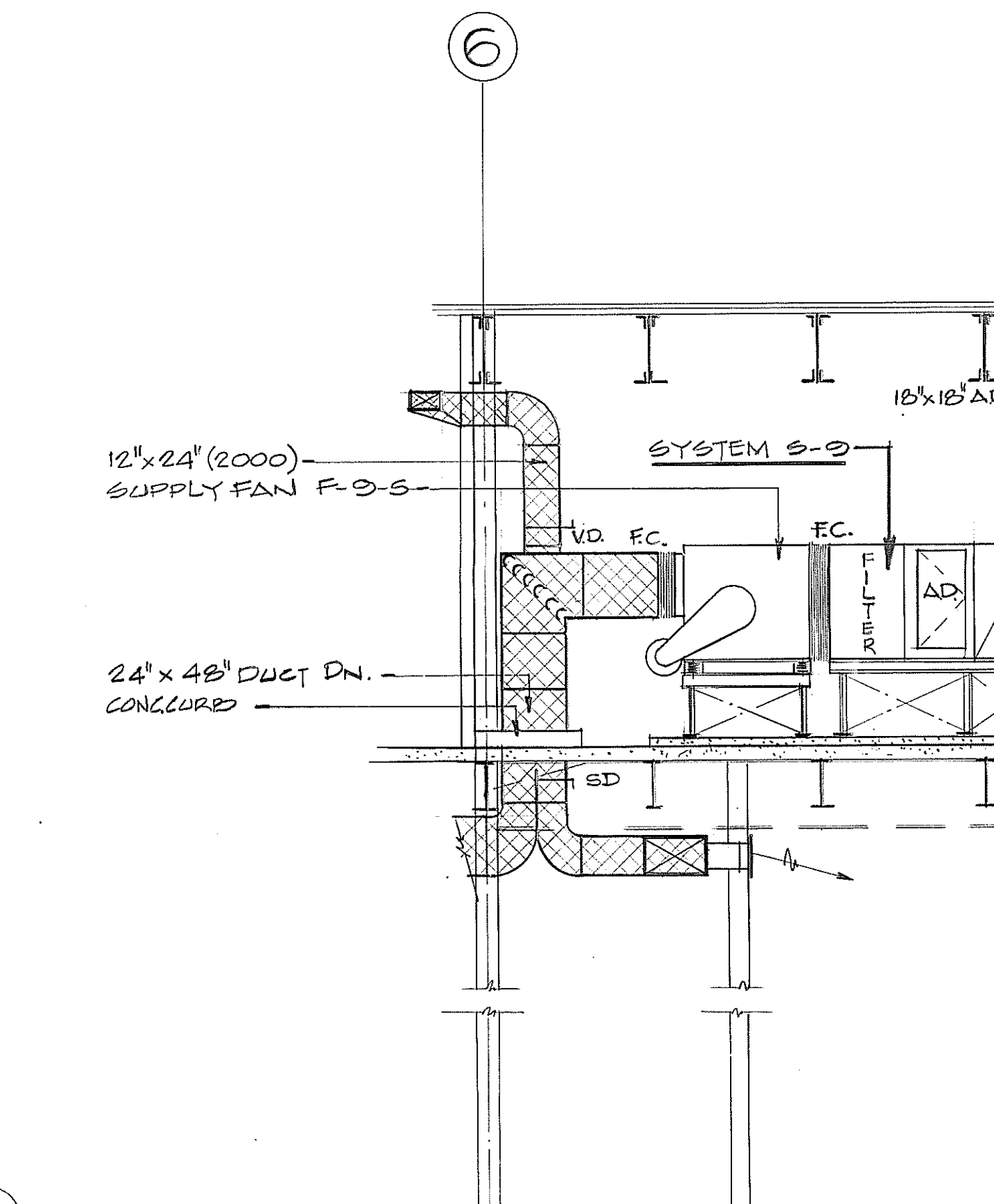
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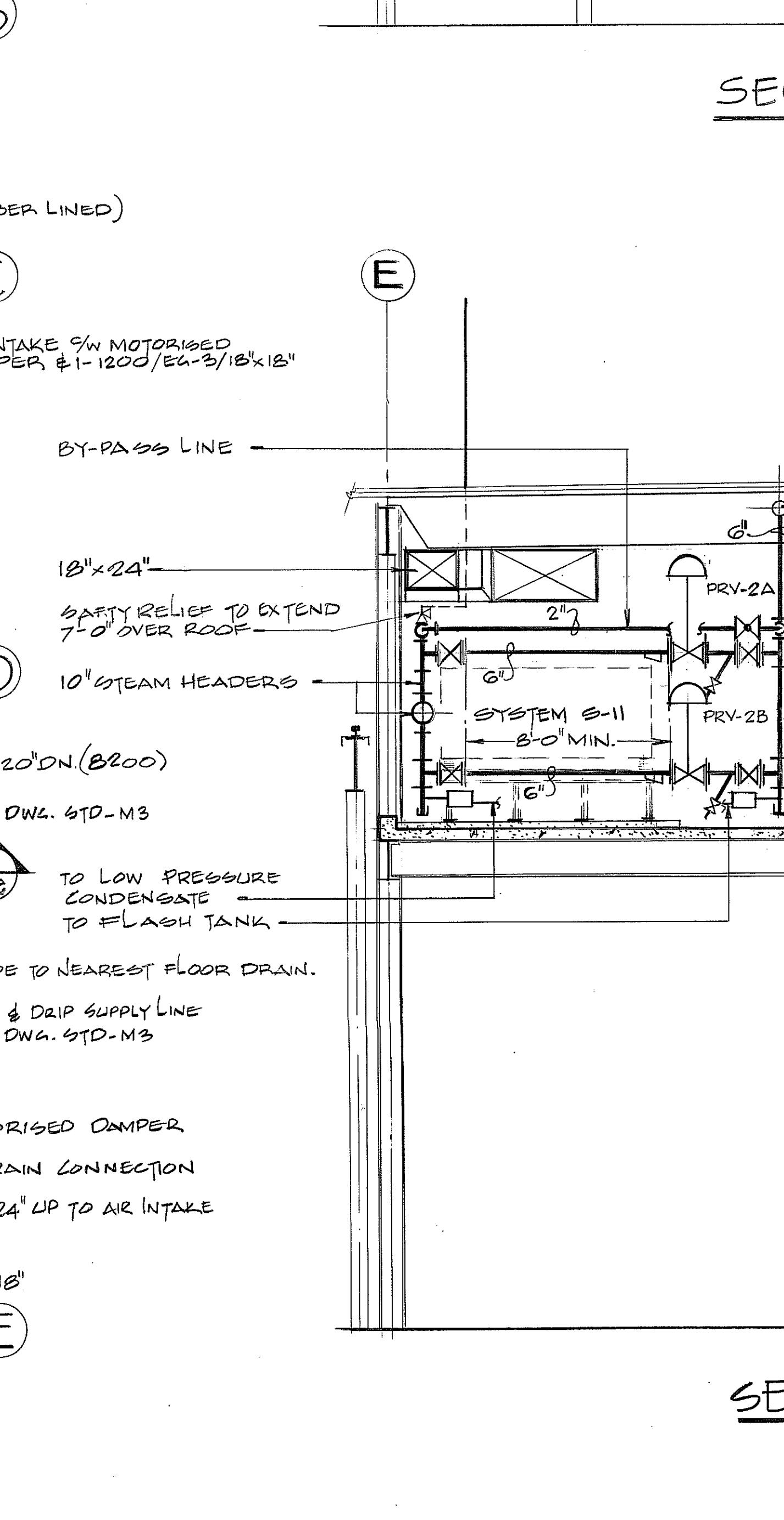
PLAN MECH. RM. # 213



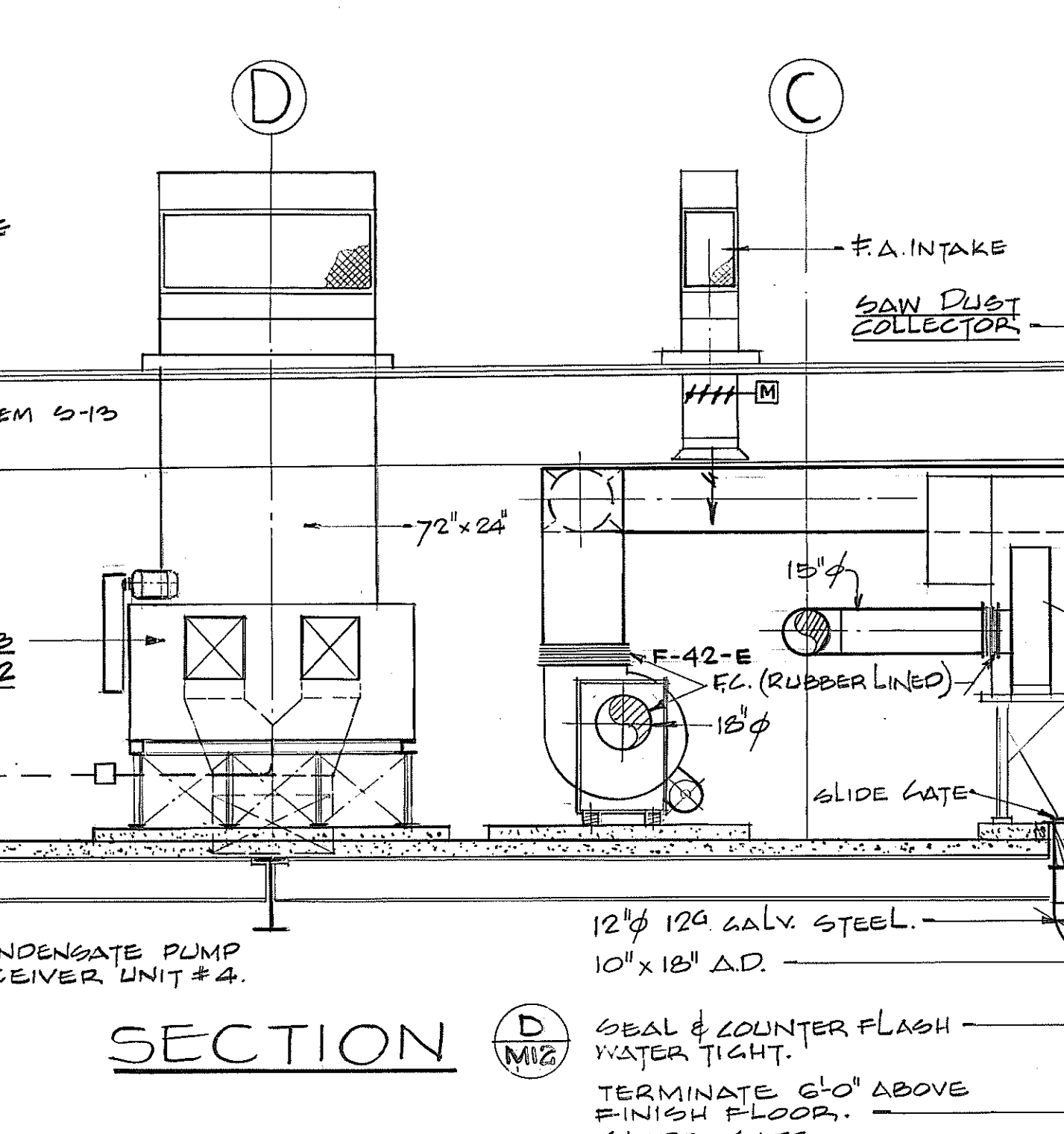
SECTION D



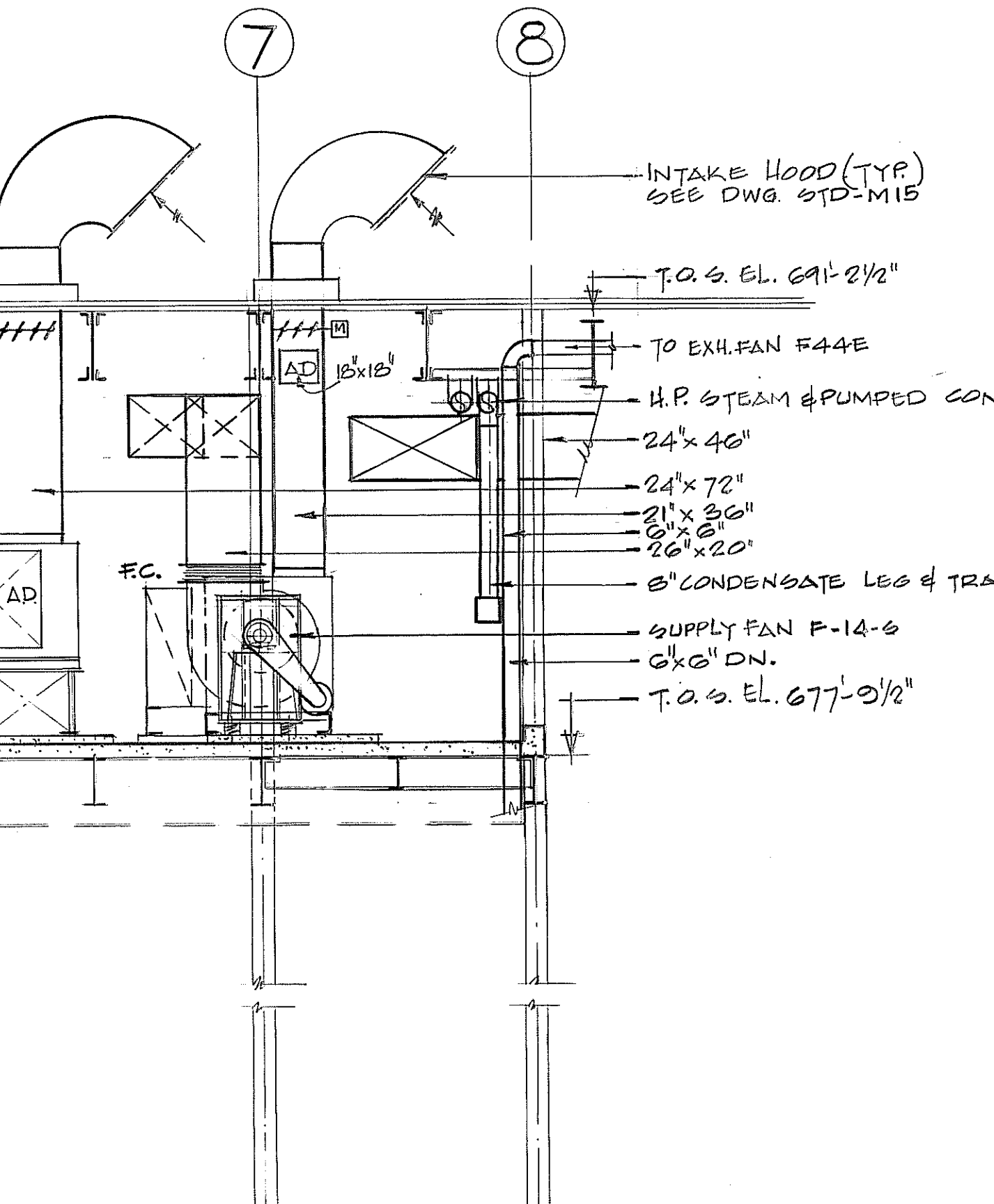
SECTION E



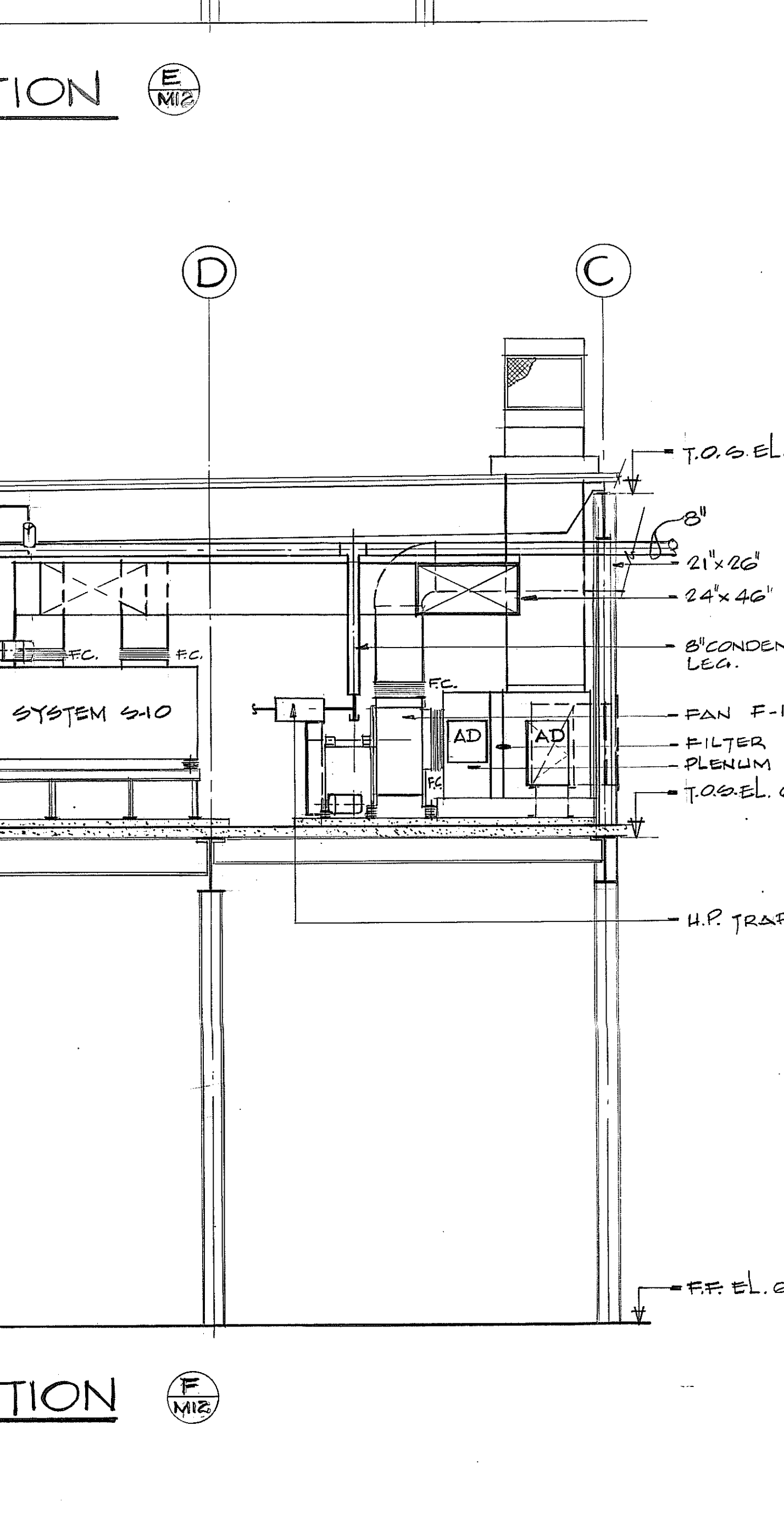
SECTION F



SECTION G



SECTION H



SECTION I

1. PIPE ALL EQUIPMENT DRAIN CONNECTIONS TO NEAREST FLOOR DRAIN.
2. SIZE OF ROOF OPENINGS SHOWN ON THE DWG. FOR EXHAUST FAN TYPE 'D' ARE APPROX. ONLY. SIZE OPENINGS, GRILLES, & CONNECTING DUCTWORK TO SUIT CURB DIMENSIONS OF FANIS SUPPLIED.
3. FOR FAN, HTG. COIL & STEAM TRAP, UNIT HEATER CONDENSATE PUMP/RECEIVER UNITS & PRV VALVE SCHEDULE SEE DWG. NO. 5473-M15
4. FOR TYPICAL AIR MAKE-UP & VENTILATION UNIT ARRANGEMENT SEE DWG. STD-M15.

C	11.28.75	AS BUILT DRAWING	M.L. J.K.J.	T.J.S.
D	10.2.74	ISSUED FOR CONSTRUCTION	C.A. J.K.J.	T.J.S.
A	Mar. 74	Issued for General Contract Tender		
no.	date	Issued for General Contract Tender	drawn	checked

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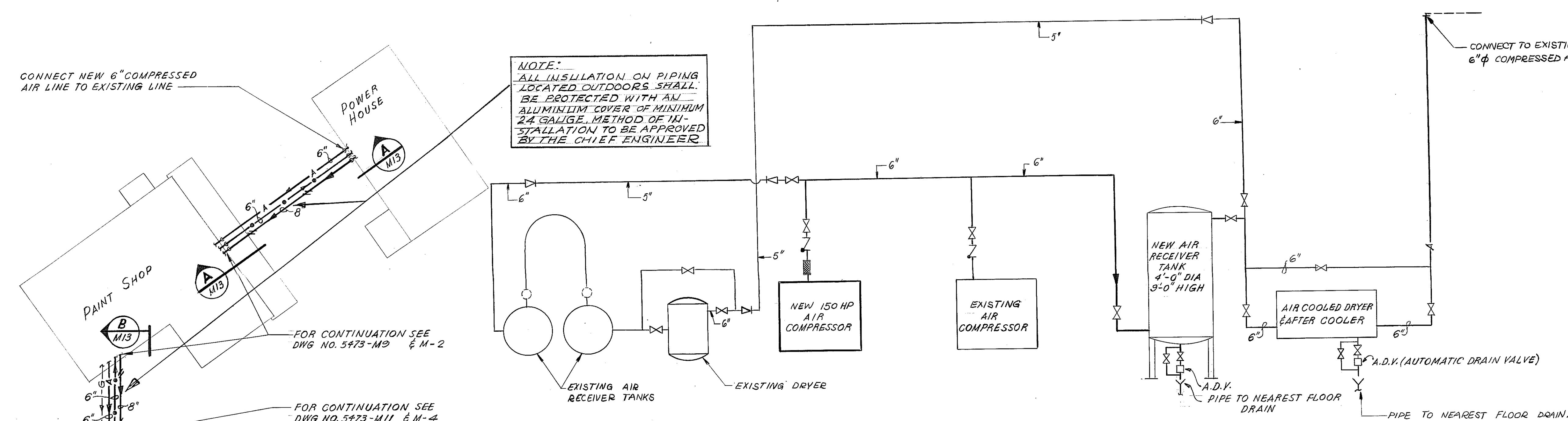
ONTARIO NORTHLAND RAILWAY
NORTH BAY YARD
CONSOLIDATION OF REPAIR FACILITIES

REPAIR FACILITY

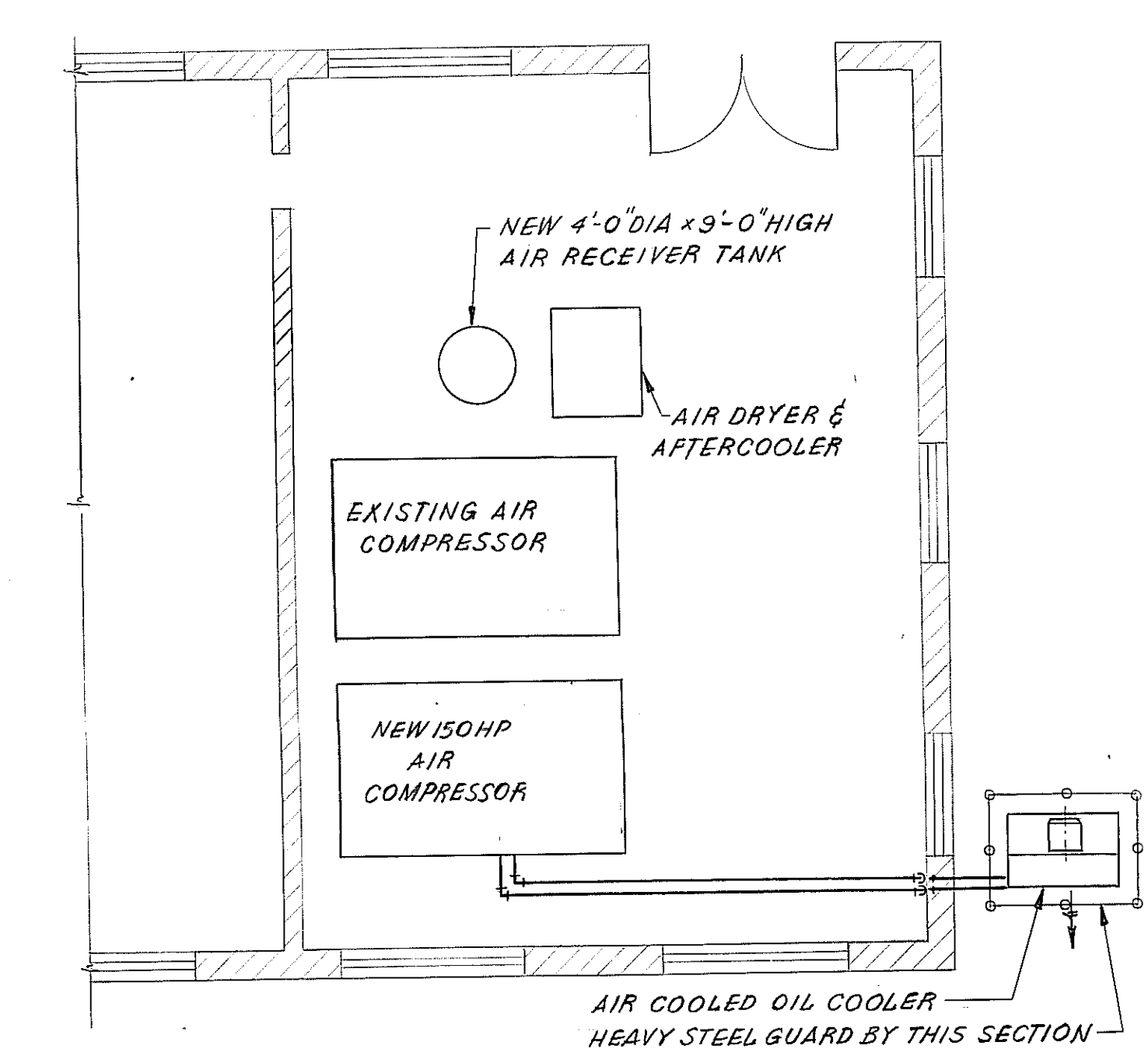
HEATING & VENTILATION

designed by	K.R.	checked by	J.K.J.	date	MARCH, 74
drawn by	H.D.	approved by	T.J.S.		
scale	1/4" = 1'-0"	drawing number	5473-M12	rev.	C
project number	5473				

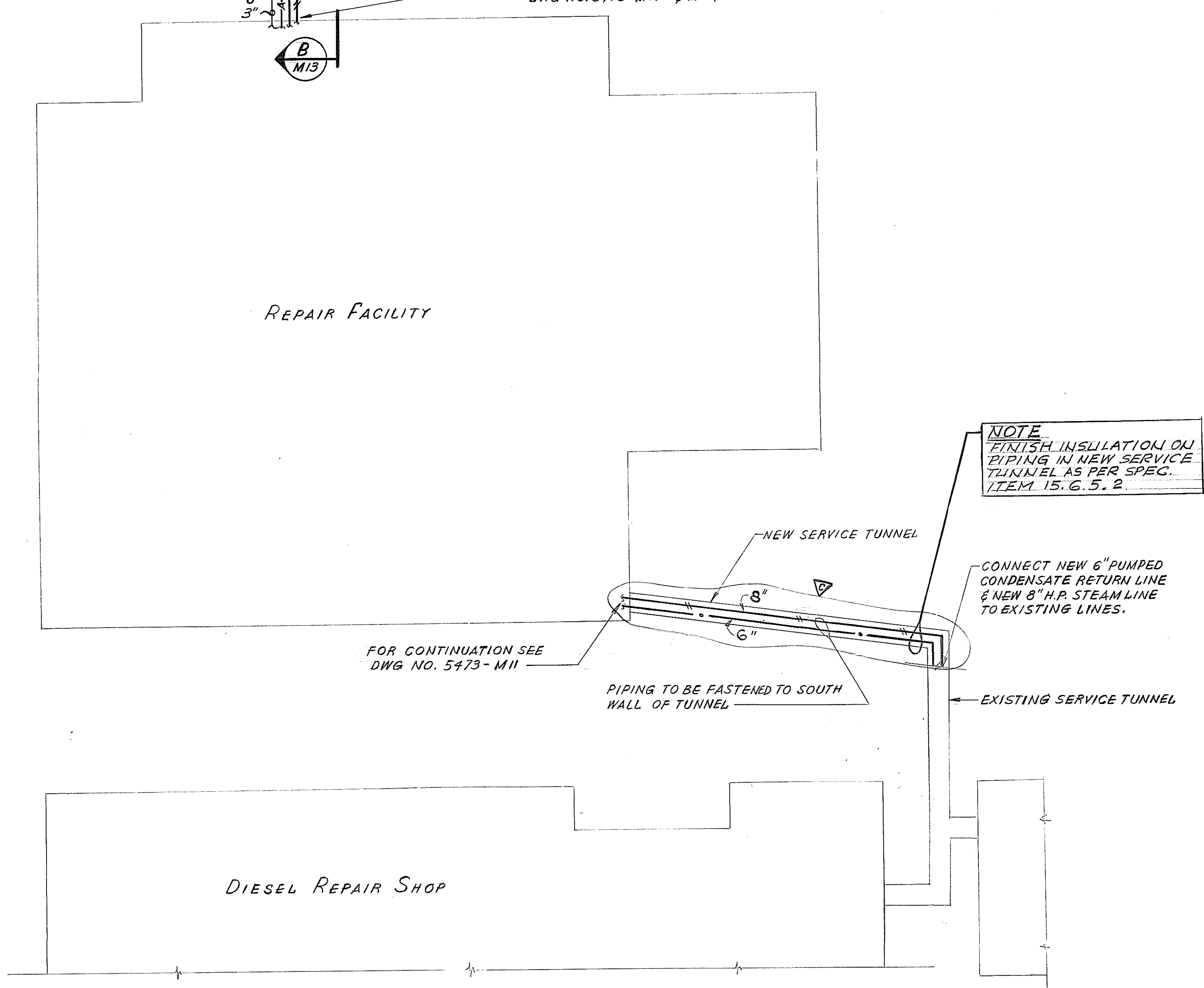
notes and reference drawings
1. VERIFY LOCATION & ARRANGEMENTS OF EXISTING PIPING SHOWN ON THIS DWG. ON SITE.



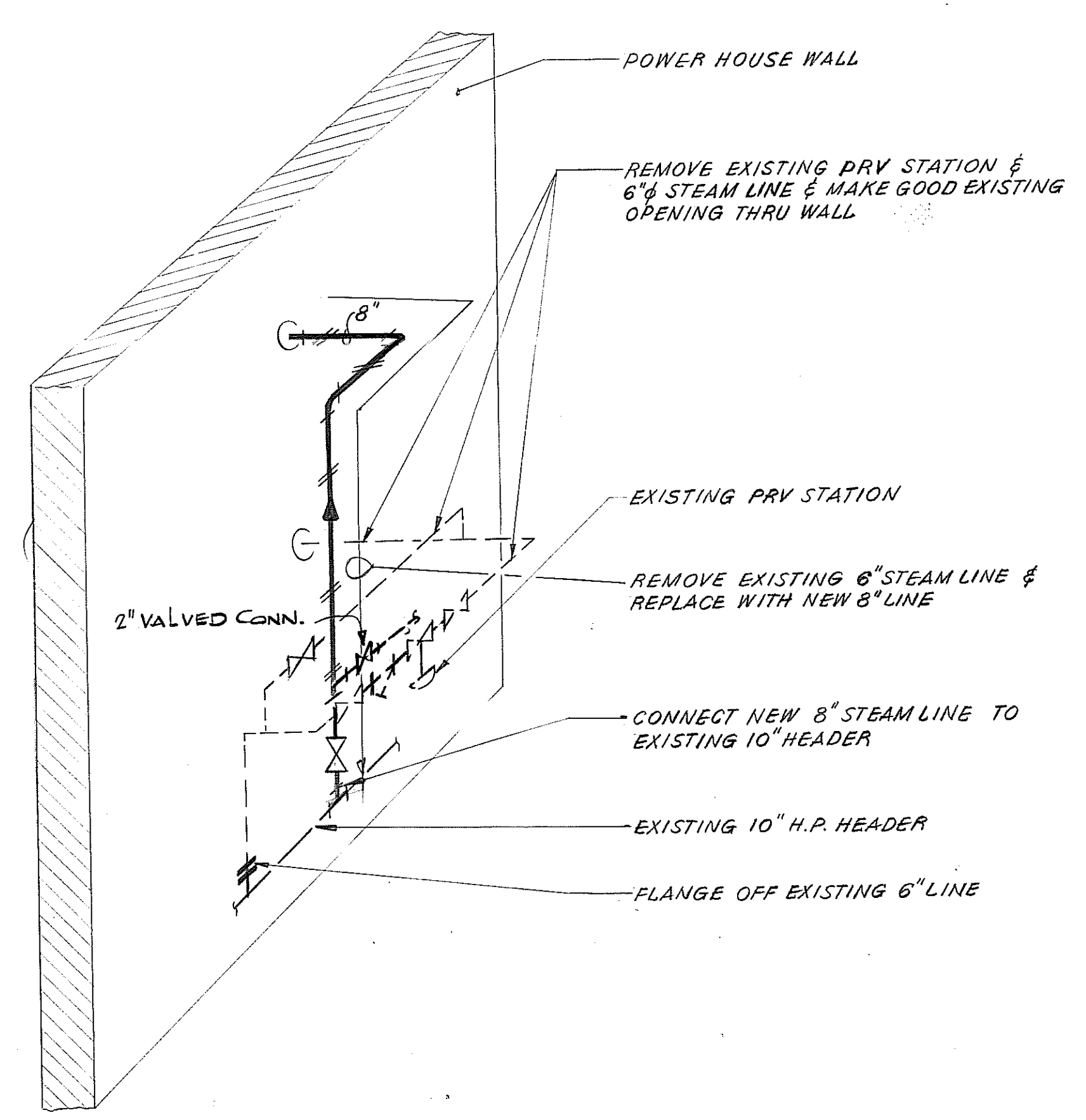
SCHEMATIC PIPING DIAGRAM FOR COMPRESSED AIR SYSTEM
N.T.S.



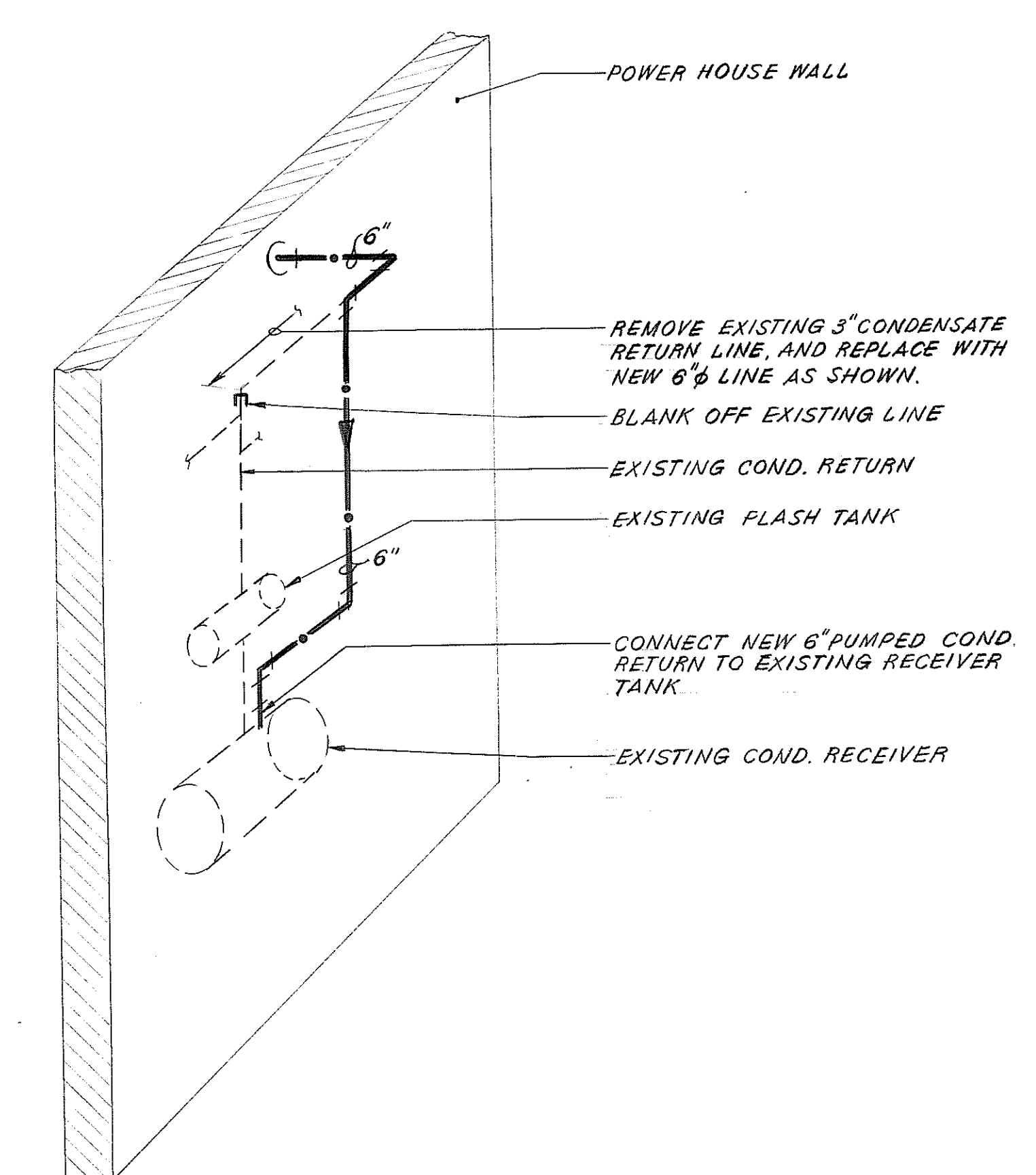
PART PLAN OF EXISTING POWER HOUSE
SCALE: 1/8"=1'-0"



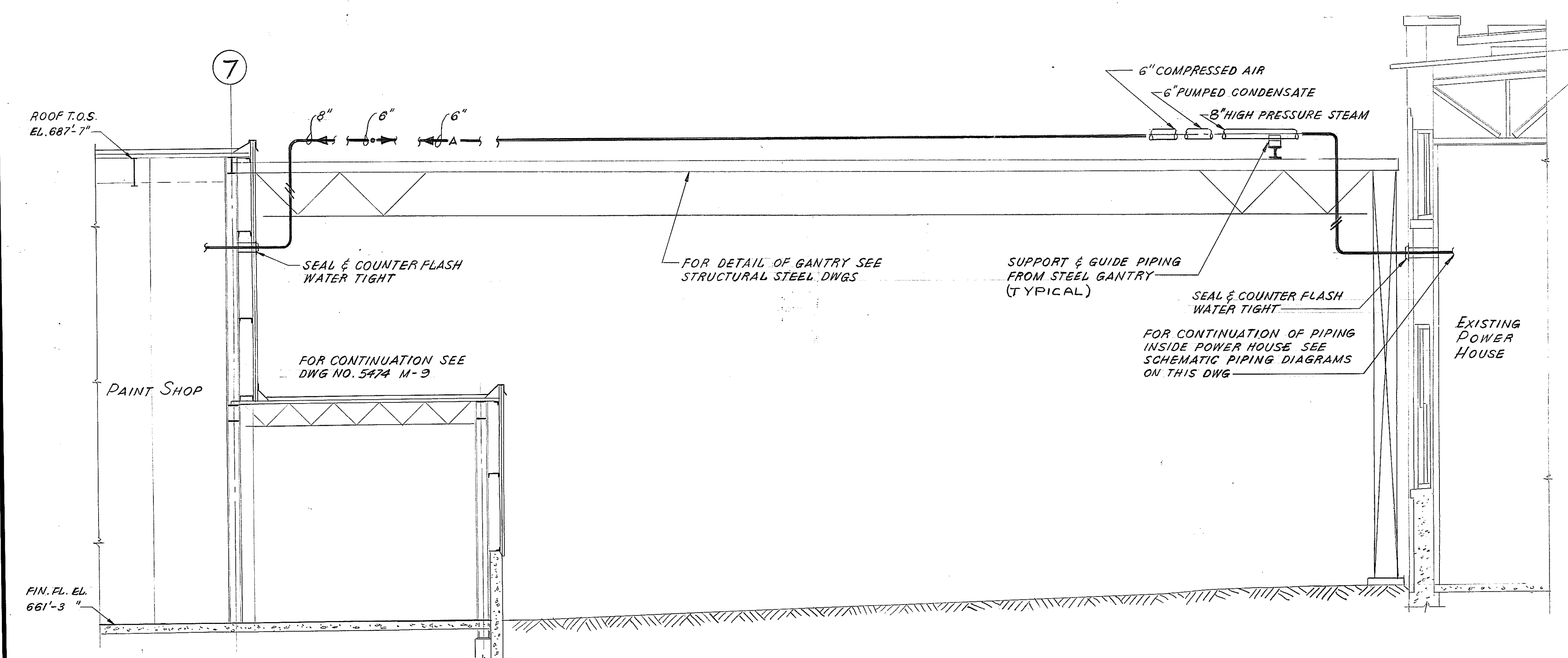
SITE PLAN
SCALE: 1/32"=1'-0"



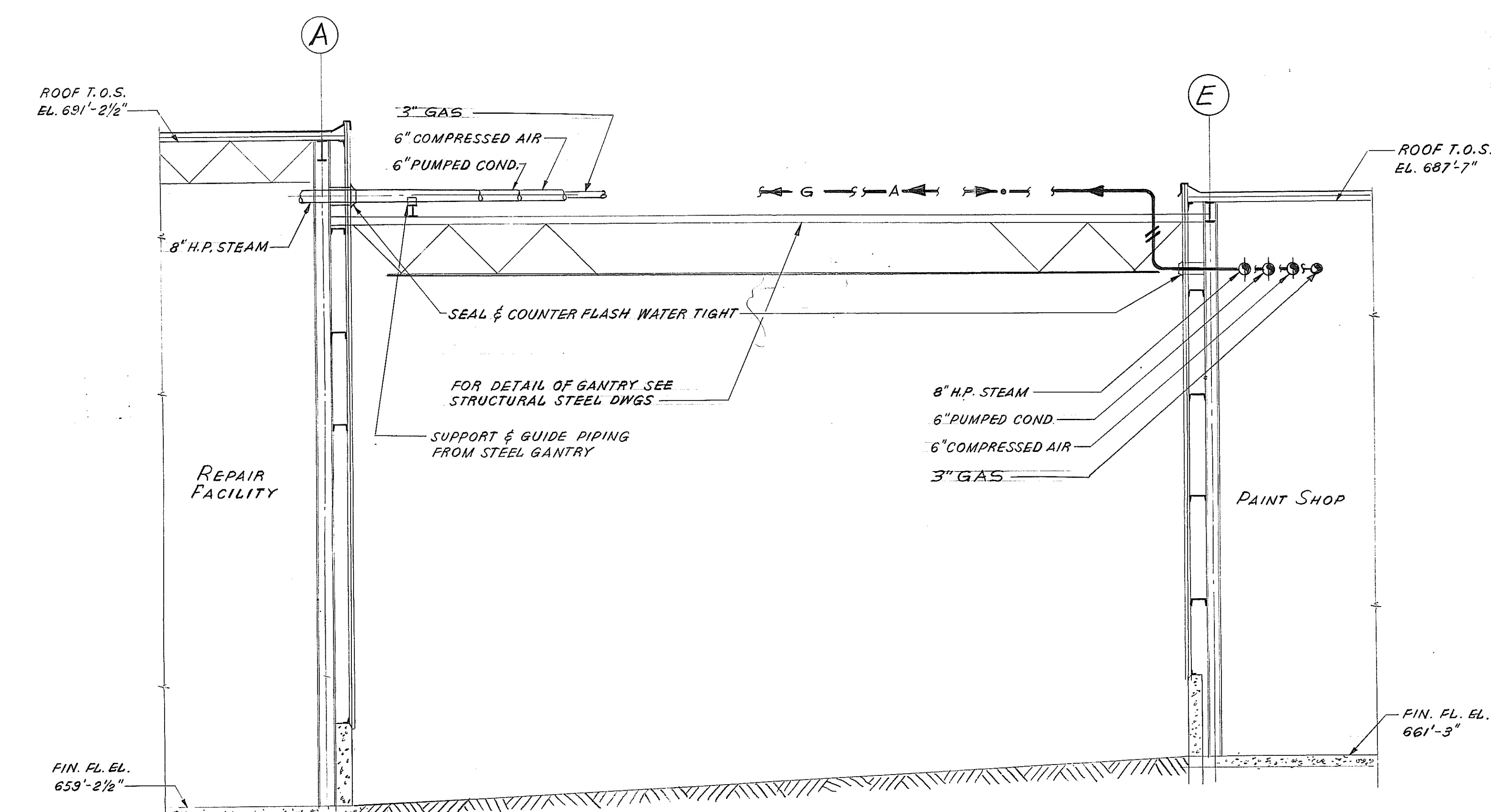
SCHEMATIC STEAM PIPING DIAGRAM INSIDE POWER HOUSE
N.T.S.



SCHEMATIC CONDENSATE PIPING ARRANGEMENT INSIDE POWER HOUSE
N.T.S.



SECTION A
N.T.S.



SECTION B
N.T.S.

D 11-85	AS BUILT DRAWING	M.L.	J.K.J.	T.J.S.
C 6-6-74	CHANGE NOTICE #6	V.N.W.	J.K.J.	T.J.S.
B 10-6-74	ISSUED FOR CONSTRUCTION	C.A.	J.K.J.	T.J.S.
A 10-6-74	ISSUED FOR GENERAL CONTRACT TENDER			
no.	date	revisions	drawn	checked

seal
T.Y. SHERMAN
PROF. OF ONTARIO

seal
COLE, SHERMAN & ASSOC. LIMITED
TORONTO, ONTARIO

**ONTARIO NORTHLAND RAILWAY
NORTH BAY YARD
CONSOLIDATION OF REPAIR FACILITIES**

MECHANICAL

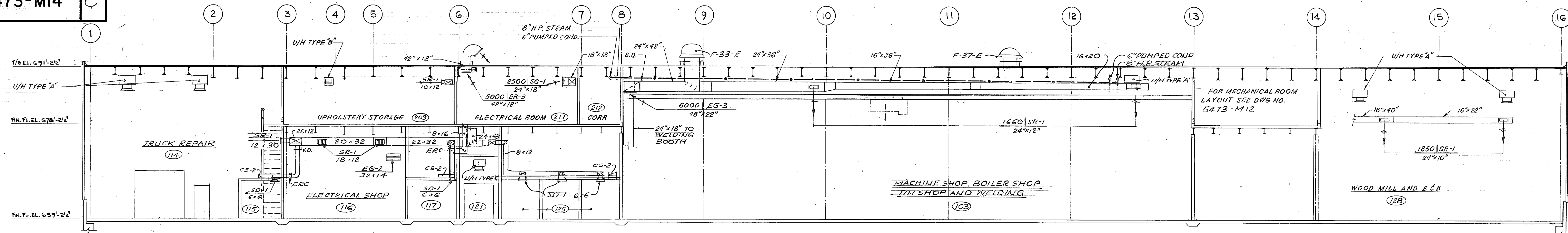
drawing title
**SITE PLAN, FLOOR PLANS,
SECTIONS & DETAILS**

designed by K.R.	checked by J.K.J.	date MARCH, 74
drawn by V.S.	approved by T.J.S.	
scale AS NOTED	draw. status	rev. no.
project number 5473	drawing number 5473-MI3	

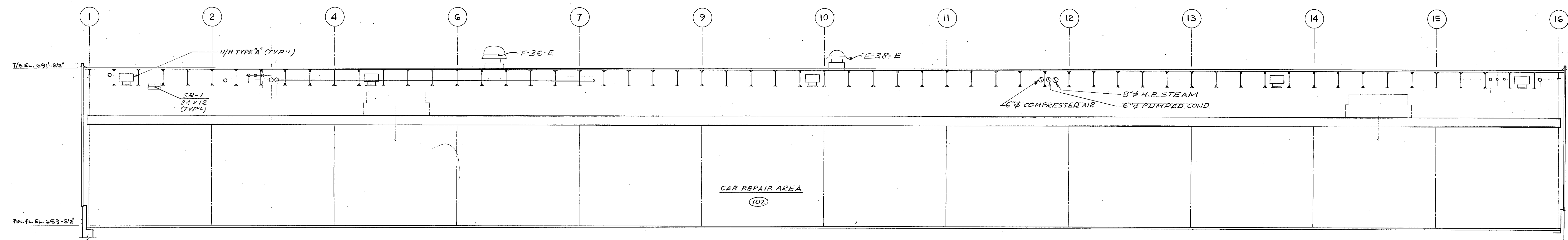
5473-M14

notes and reference drawings

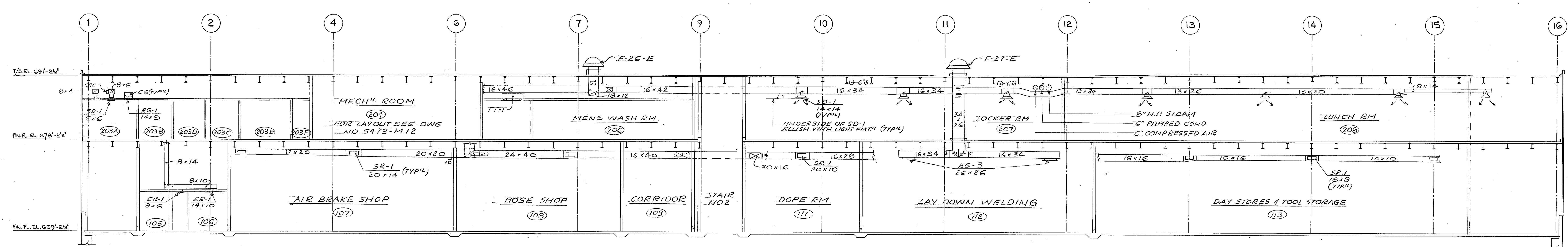
A detail no.
B location drawing no.
C drawing no.



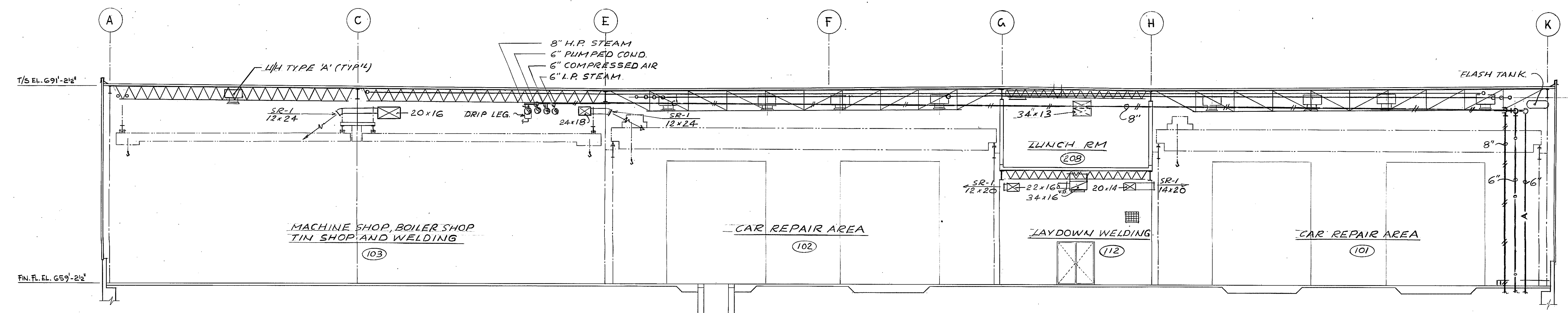
SECTION 1



SECTION 2



SECTION 3



SECTION 4

C 11-29-70	AS BUILT DRAWING	M.L.	J.K.J.	T.J.S.
D 10-6-70	ISSUED FOR CONSTRUCTION	C.A.	J.K.J.	T.J.S.
A 10-7-70	ISSUED FOR GENERAL CONTRACT TENDER			
no.	date	drawn	checked	approved

revisions



COLE, SHERMAN & ASSOC. LIMITED
TORONTO, ONTARIO

ONTARIO NORTHLAND RAILWAY
NORTH BAY YARD
CONSOLIDATION OF REPAIR FACILITIES

REPAIR FACILITY

MECHANICAL

drawing title

SECTIONS

designed by	K.R.	checked by	J.K.J.	date	MARCH 74
drawn by	V.S.	approved by	T.J.S.		
scale	1/8" = 1'-0"	drwg. status			
project number	5473	drawing number	5473-M14	rev. no.	C

FAN SCHEDULE

FAN NO.	SERVICE	CFM	S.P. W.G.	MIN. FAN WHEEL DIA.	MIN. MOTOR H.P.	MAX. O.V. FT./MIN.	FAN TYPE	BASE TYPE & STATIC DEFLECTION	REMARKS
F-1-S	PAINT SPRAY BOOTH MAKE-UP AIR VENTILATION	12000	1.25	18	7 1/2	2200	A	W-1/2"	
F-2-S	STORAGE & LOCKER ROOM VENTILATION	4000	1.25	15	2	2100	A	Y-1/2"	
F-3-S	PAINTING BAY HEATING	5000	.75	18	3		A		INDIRECT GAS FIRED HEATER ELECTRICALLY INTERLOCKED WITH F-3-S ON SPARKPROOF WHEEL & EXPLOSIONPROOF MOTOR.
F-4-S	PAINTING MAKE-UP AIR VENTILATION	32500	1.00		25		A	W-2"	
F-5-S	GRIT BLASTING BAY HEATING	5000	.75	18	3		A		INDIRECT GAS FIRED HEATER ELECTRICALLY INTERLOCKED WITH BLAST ROOM DUST COLLECTOR.
F-6-S	SECOND FLOOR SPINE VENTILATION	6700	1.25	15	5	1800	A	Y-1/2"	
F-7-S	FIRST FLOOR SPINE VENTILATION	9830	1.20	18	5	1800	A	W-1/2"	
F-8-S	LIGHT TRACK REPAIR VENTILATION	14850	1.20	22	7 1/2	1800	A	W-1/2"	
F-9-S	TRUCK REPAIR, ELEC. PIPE & UPHOLSTERY SHOP VENTILATION	12080	1.25	18	7 1/2	2200	A	W-1/2"	
F-10-S	MACHINE SHOP VENTILATION	10000	1.15	18	5	1800	A	W-1/2"	
F-11-S	HEAVY TRUCK REPAIR SHOP VENTILATION	10000	1.05	18	5	1800	A	W-1/2"	
F-12-S	"	10000	1.05	18	5	1800	A	W-1/2"	
F-13-S	WOOD MILL SHOP VENTILATION	8200	1.10	18	5	1800	A	W-1/2"	
F-14-S	ELECTRICAL RM VENTILATION	5000	.70	22	2	1800	B	W-1/2"	
F-15-E	VOLATILE STORAGE VENTILATION	490	.90	7	1/4	1200	B	Y-1"	FAN UNIT INCLUDING MOTOR TO BE OF EXPLOSION PROOF CONSTRUCTION
F-16-E	PAINT SPRAY BOOTH EXHAUST	12000	1.25	33	5	2200	C	Y-1/2"	FAN WHEEL TO BE OF SPARKPROOF CONSTRUCTION BELT DRIVE TO BE ENCLOSED IN VAPOUR TIGHT HOUSING.
F-17-E	LUNCH RM EXHAUST	1500	.25	18	1/4		D		
F-18-E	WASHROOM EXHAUST	1000	.25	14	1/4		D		
F-19-E	PAINTING BAY EXHAUST	32500	.75	48	15		C	Y-1/2"	FAN WHEEL TO BE OF SPARKPROOF CONSTRUCTION BELT DRIVE TO BE ENCLOSED IN VAPOUR TIGHT HOUSING.
F-20-E	ELECTRICAL RM EXHAUST VENTILATION	900	.30	14	1/4		D		
F-21-E	MECHANICAL RM VENTILATION	600	.30	14	1/4		D		
F-22-E	KITCHEN EXHAUST	160	.30	7	1/25		D		DIRECT DRIVE ACCEPTABLE
F-23-E	WASHROOM EXHAUST	720	.90	14	1/4		D		
F-24-E	LUNCH RM EXHAUST	3600	.30	36	1		D		ELECTRICALLY INTERLOCKED WITH F-6-S
F-25-E	LOCKER EXHAUST	1200	.45	18	1/2		D		
F-26-E	WASHROOM EXHAUST	2380	.90	24	3/4		D		
F-27-E	WELDING EXHAUST	8000	.45	42	3		D		ELECTRICALLY INTERLOCKED WITH F-7-S
F-28-E	LIGHT CAR TRACK EXHAUST	14000	.25	48	3		D		" " " F-8-S
F-29-E	LIGHT CAR TRACK EXHAUST (SUMMER VENTILATION)	14000	.25	48	3		D		
F-30-E	MECHANICAL RM VENTILATION	800	.25	14	1/4		D		
F-31-E	LEAD ACID BATTERY RM EXHAUST	1400	.45	18	1/2		D		AIR SIDE SURFACES OF FAN INCLUDING FAN WHEEL & BACKDRIFT DAMPER TO BE FINISHED WITH A PRIME COAT & TWO COATS OF EISEN-HEISS PAINT.
F-32-E	NICKEL, IRON ALKALINE BATTERY RM EXHAUST	1400	.45	18	1/2		D		"
F-33-E	MACHINE SHOP & WELDING BOOTH EXHAUST	9500	.90	48	3		D		ELECTRICALLY INTERLOCKED WITH F-10-S
F-34-E	MACHINE SHOP EXHAUST (SUMMER VENTILATION)	10000	.35	48	3		D		
F-35-E	MECHANICAL RM VENTILATION	1350	.30	18	1/2		D		
F-36-E	HEAVY TRUCK REPAIR EXHAUST	3500	.30	48	2		D		ELECTRICALLY INTERLOCKED WITH F-12-S
F-37-E	"	7600	.30	36	2		D		" " " F-9-S
F-38-E	HEAVY TRUCK REPAIR (SUMMER VENTILATION)	20000	.25	54	5		D		
F-39-E	WOOD MILL SHOP EXHAUST	7600	.30	36	2		D		ELECTRICALLY INTERLOCKED WITH F-13-S & F-42-E
F-40-E	HEAVY TRUCK REPAIR	3500	.25	48	2		D		" " " F-11-S
F-41-E	MECHANICAL RM VENTILATION	1200	.40	18	1/2		D		
F-42-E	WOOD MILL DUST COLLECTION				25				EXISTING FAN & MOTOR REFER TO SPECIFICATION
F-43-E	GENERATOR RM EXHAUST	1000	.45	14	1/2		D		
F-44-E	WASHROOM EXHAUST	100	.25	7	1/25		D		DIRECT DRIVE ACCEPTABLE
F-45-E	AIR BRAKE SHOP EXHAUST	3500	.45	30	1		D		

UNIT HEATER & CABINET UNIT HEATER SCHEDULE

DWG SYMBOL	CAPACITY (HSH) 2 LBS SAT STEAM 60° F. AIR TEMP.	FINAL AIR TEMP. °F	MOTOR RPM	MOTOR HP	MANUFACTURER & UNIT SIZE	REMARKS
U/H TYPE 'A'	141	118	1725	1/3	TRANE 150P	UNIT TO BE COMPLETE WITH LOUVER, CONVE. DIFFUSER & MOTOR DRIVE GUARD.
U/H TYPE 'B'	36	125	1500	1/30	" 72H	UNIT TO BE COMPLETE WITH LOUVER GUARD.
U/H TYPE 'C'	76	135	1140	1/20	" 120P	UNIT TO BE COMPLETE WITH LOUVER GUARD.
CAB. UNIT HEATER FF-1	43	129	1050	1/10 WATTS	" 06	HORIZONTAL CEILING RECESSED BOTTOM INTEGRAL GRILLES FOR INLET & OUTLET.

NOTE: U/H & MOTOR TYPE 'A' LOCATED IN VOLATILE STORAGE (104) & STORAGE (105) TO BE OF EXPLOSION PROOF CONSTRUCTION

CONDENSATE PUMP RECEIVER SCHEDULE

UNIT NO.	LOCATION	PUMP CAP. USGPM	DISCHARGE PRESSURE PSIG	MOTOR HP	MOTOR VOLTAGE, PHASE & CYCLE	RECEIVER CAP. USGPM	MANUFACTURER & UNIT NO.	REMARKS
1	PAINT SHOP MECH. RM 201	15	25	1/2 EACH	460/3/60	50	DARLING 10 UD 25	COMPLETE UNIT & MOTOR TO BE OF EXPLOSION PROOF CONSTRUCTION AND MOUNTED ON TYPE 'E' ISOLATORS.
2	DAY STORES & TOOL STORAGE REP. FAC.	37.5	35 PSIG	1 EACH	"	100	DARLING 25 UD 35	UNIT TO BE MOUNTED ON TYPE 'E' ISOLATORS.
3	LOCK UP ROOM REPAIR FACILITY	37.5	35 PSIG	1 EACH	"	100	DARLING 25 UD 35	"
4	MECH. RM 212 REPAIR FACILITY	37.5	25	3/4 EACH	"	100	DARLING 25 UD 25	"

STEAM PRESSURE REDUCING VALVE & SAFETY RELIEF VALVE SCHEDULE

DWG SYMBOL	LOCATION	INLET PRESSURE PSIG	OUTLET PRESSURE PSIG	REQ'D CAPACITY LBS/HR	VALVE BODY SIZE	VALVE TRIM SIZE	ACTUAL CAPACITY LBS/HR	EXIT BODY SIZE	TYPE OF VALVE	SAFETY SET PRESSURE PSIG	ORIFICE	CAPACITY LBS/HR	CONSOLIDATED MODEL	VENT SIZE
PRV-1	PAINT SHOP MECH. RM 201	120	15	2100	2" 250° SCR	1"	2450	LESS THAN 22000	PNEUMATIC	2 x 2 1/2	J	2535	1543J	3"
PRV-2A	REPAIR FAC MECH. RM 209	120	15	7000	4" 250° PLG	2"	11000	"	"	6 x 8	Q	23000	1511Q	10"
PRV-2B	"	120	15	7000	4" 250° PLG	2"	11000	"	"	"	"	"	"	"
PRV-3A & 3B	"	120	30	700 EACH	1/2" 250° SCR EACH	1/2"	750 EACH	N. A.	EXTERNAL PILOT	1/2 x 2	H	2183	1543H	2 1/2"
PRV-4	"	120	90	700	3/4" 250° SCR	3/4"	1000	N. A.	"	3/4 x 1	I	1210	1543G	1 1/2"

DOOR GRILLE SCHEDULE

DRAWING SYMBOL	C.F.M. RANGE	MINIMUM FREE AREA SQ. FT.
DG-1	0-50	.15 OR UNDERCUT DOOR 3/4"
DG-2	51-100	.35 OR UNDERCUT DOOR 3/4"
DG-3	101-200	.75

ELECTRIC DUCT AIR HEATER SCHEDULE

SIZE	CFM RANGE	CAPACITY KW	MAX. AIR P.D. W.G.
ERC	100-150	1.5	.10
ERC	230-270	3.0	.10

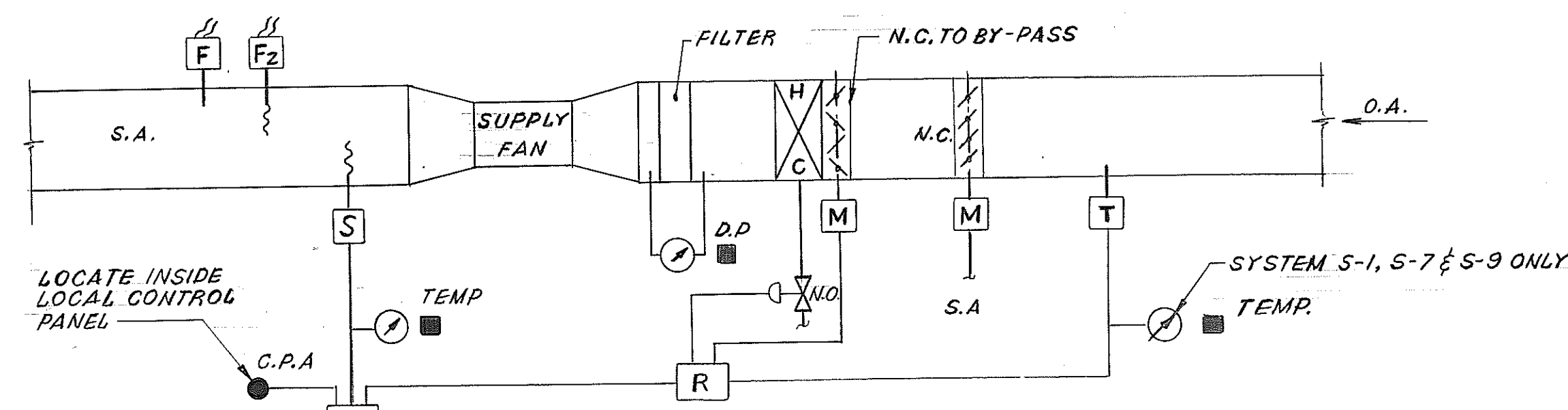
HEATING COIL & HEATING COIL STEAM TRAP SCHEDULE

SYSTEM OR COIL NO.	C.F.M.	ENT. AIR TEMP. °F	LEAVING AIR TEMP. °F	MAX. COIL FACE VEL. FT./MIN.	MAX. COIL AIR SIDE P.D. W.G.	NO. OF COIL ROWS	MANUFACTURER & TYPE	CONDENSATE LOAD IN LBS/HR	SAFETY FACTOR	TOTAL STEAM LOAD IN LBS/HR	MANUFACTURER 'SARCO'	ORIFICE	WORKING PRESSURE PSIG	NO. OF TRAPS REQ'D	REMARKS
S-1	12000	-25	70	600	.30	2	WING, V IFB	1280	3:1	3840	FTL-9C	7/8	0-15	2	
S-2	4000	-25	75	590	.30	2	"	450	3:1	1400	FTL-1C	1 1/2	0-15	2	
S-6	6700	-25	75	500	.20	2	"	725	3:1	2170	FTL-1C	1 1/2	0-15	2	
S-7	9830	-25	75	500	.20	2	"	1120	3:1	3450	FTL-9C	7/8	0-15	2	
S-8	14850	-25	75	500	.20	2	"	1680	3:1	5060	FTL-9C	7/8	0-15	2	
S-9	12030	-25	70	600	.30	2	"	1300	3:1	3900	FTL-9C	7/8	0-15	2	
S-10	10000	-25	75	500	.20	2	"	1130	3:1	3390	FTL-9C	7/8	0-15	2	
S-11	10000	-25	75	500	.20	2	"	1130	3:1	3390	FTL-9C	7/8	0-15	2	
S-12	10000	-25	75	500	.20	2	"	1130	3:1	3390	FTL-9C	7/8	0-15	2	
S-13	8200	-25	75	500	.20	2	"	980	3:1	2940	FTL-9C	7/8	0-15	2	

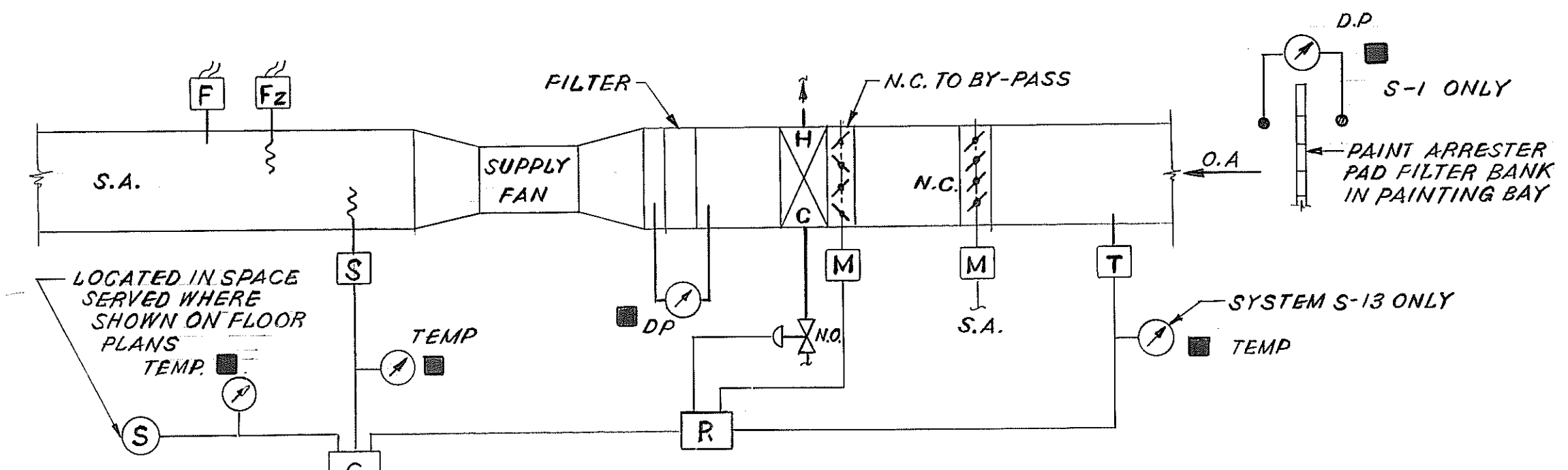
NOTE: STEAM PRESSURE FOR ALL HEATING COILS IS 15 PSIG SATURATED.

CROSS TALK SILENCER SCHEDULE

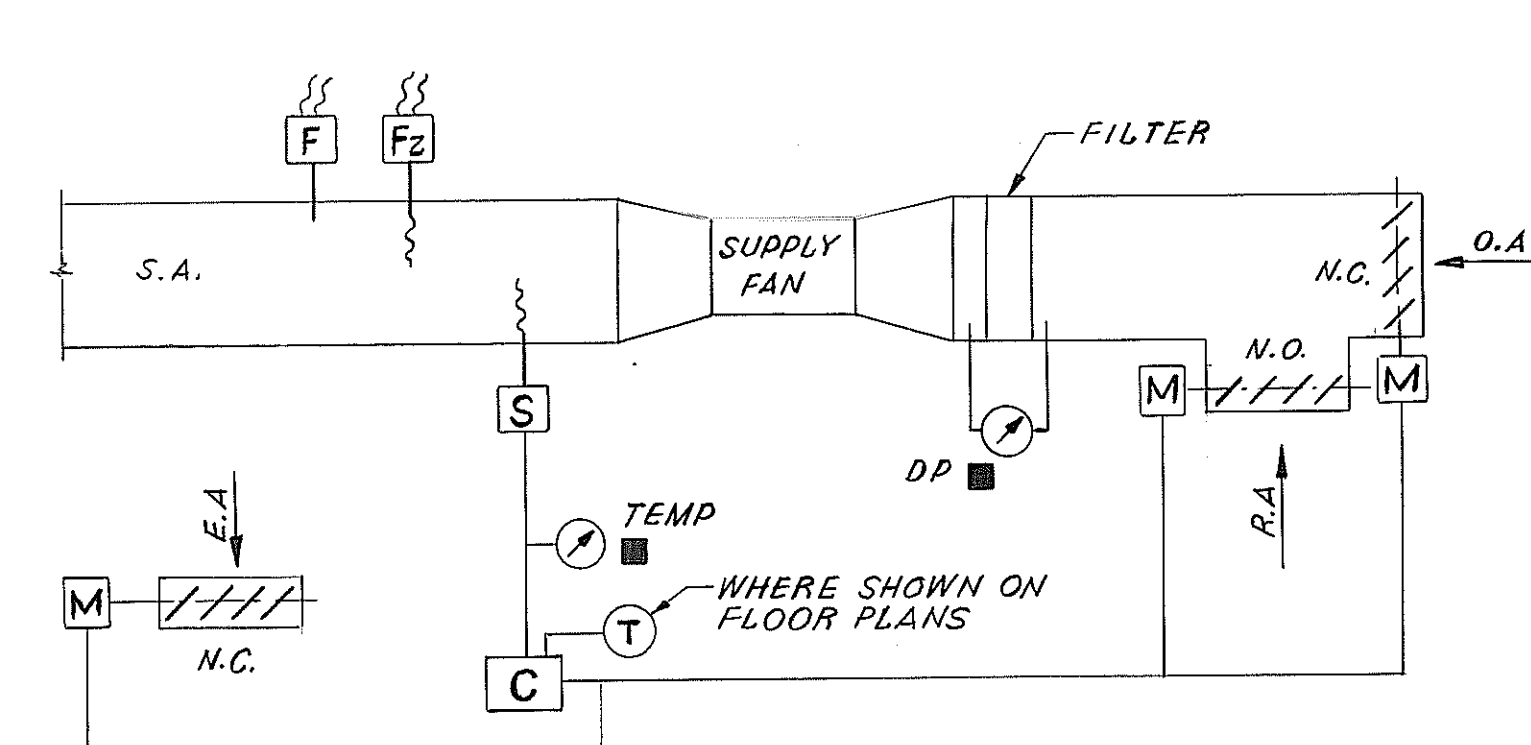
DRAWING SYMBOL	CAPACITY C.F.M.	THICKNESS	WIDTH	MAXIMUM P.D. W.G.	THICKNESS
CS-1	100	3 1/2"	14"	.05	6
CS-2	160	5"	14"	.05	8
CS-3	250	7"	14"	.05	10



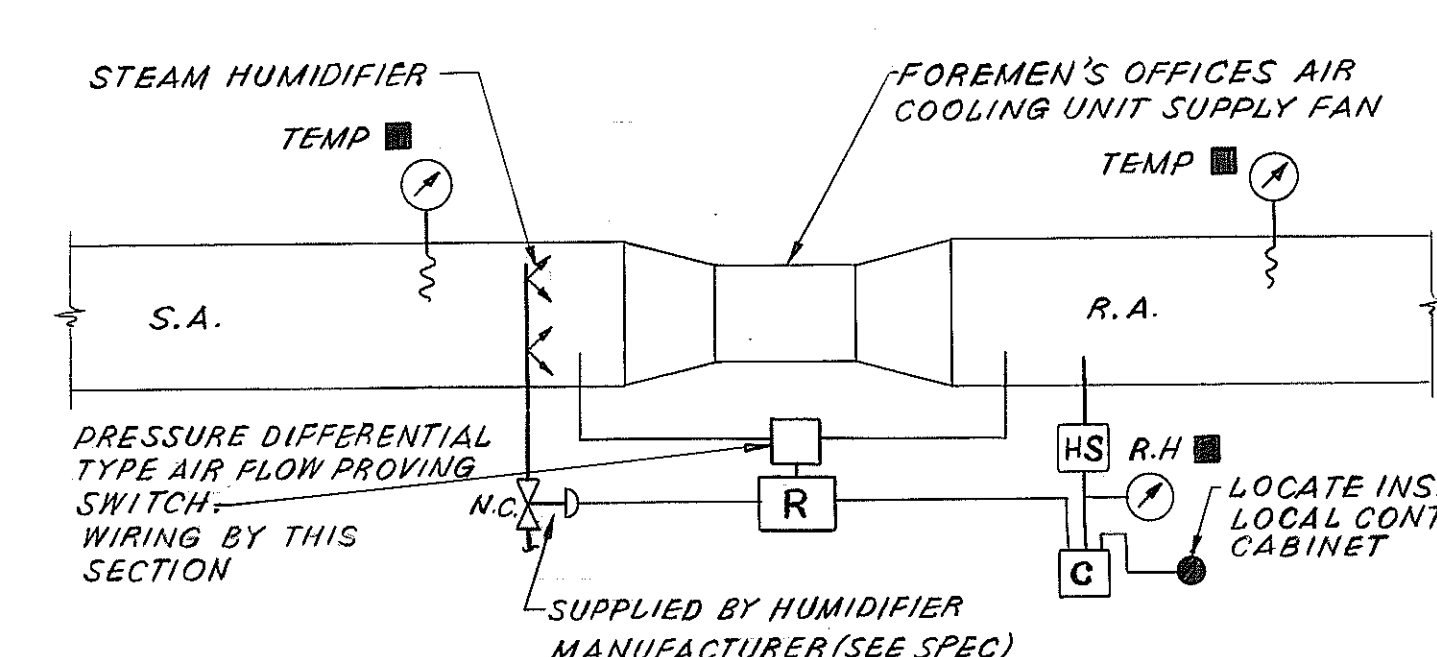
SCHEMATIC CONTROL DIAGRAM TYPICAL FOR SYSTEMS S-1, 2, 6, 7 & 9



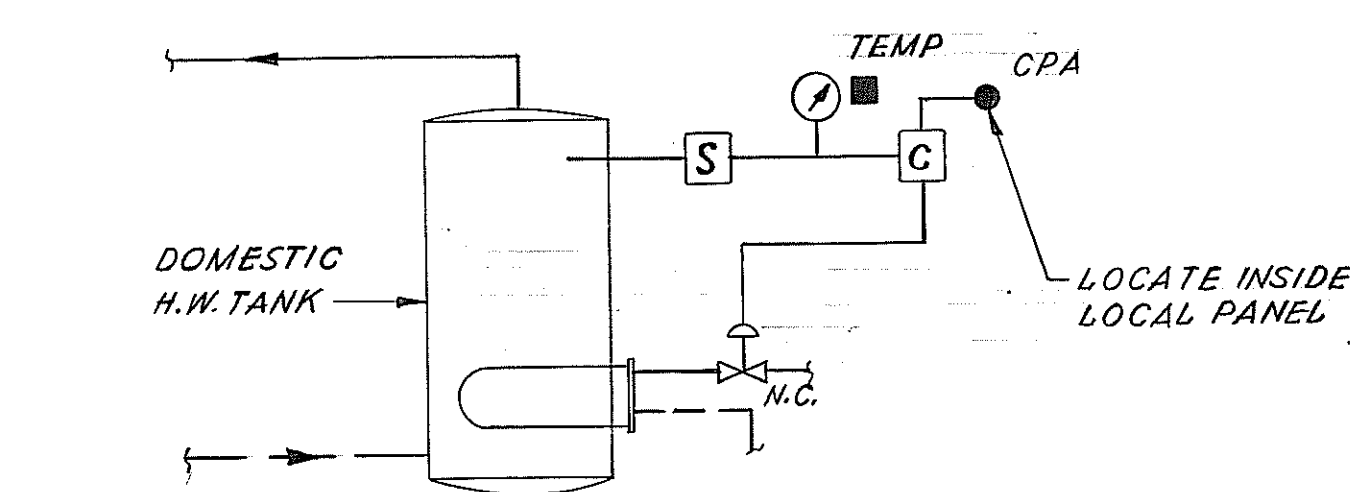
SCHEMATIC CONTROL DIAGRAM TYPICAL FOR SYSTEMS S-8, 10, 11, 12 & 13



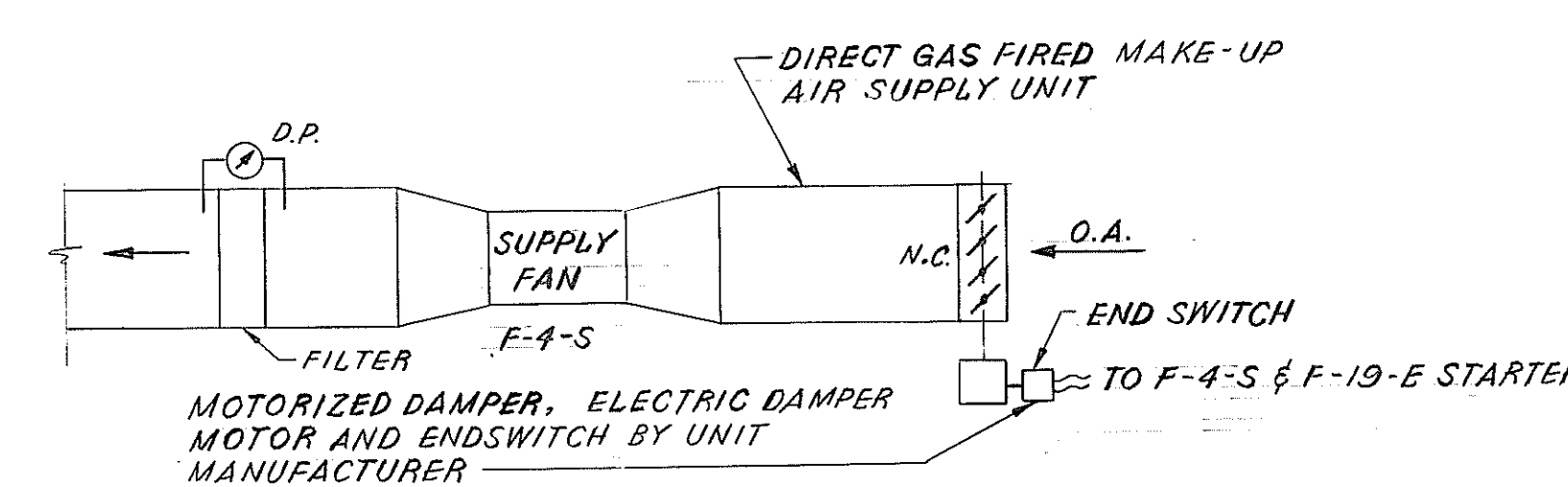
SCHEMATIC CONTROL DIAGRAM FOR SYSTEM S-14



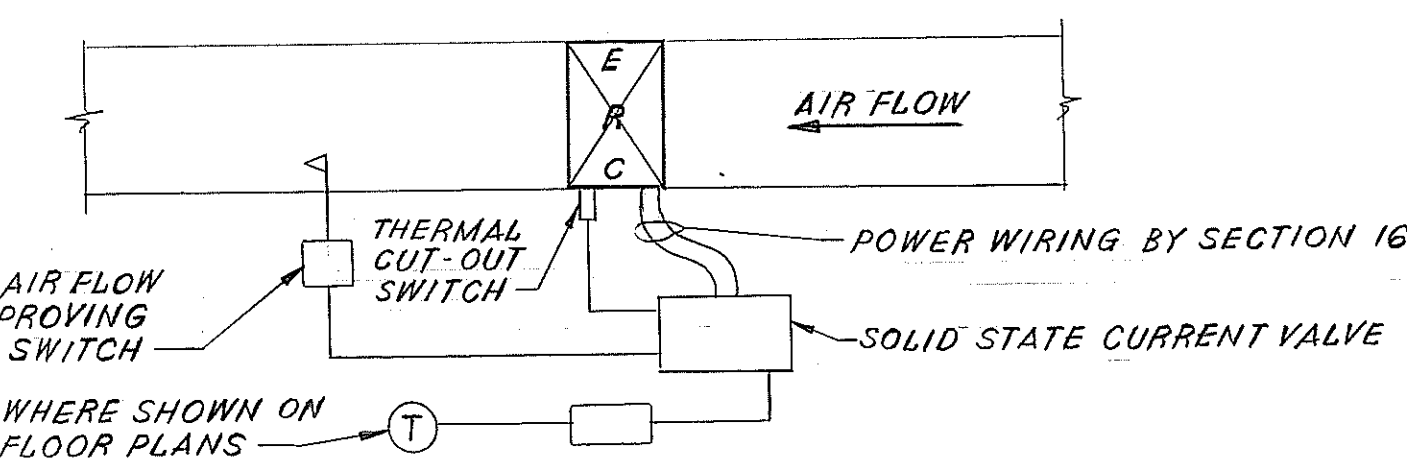
SCHEMATIC CONTROL DIAGRAM FOR FORMEN'S OFFICES AIR COOLING SYSTEM



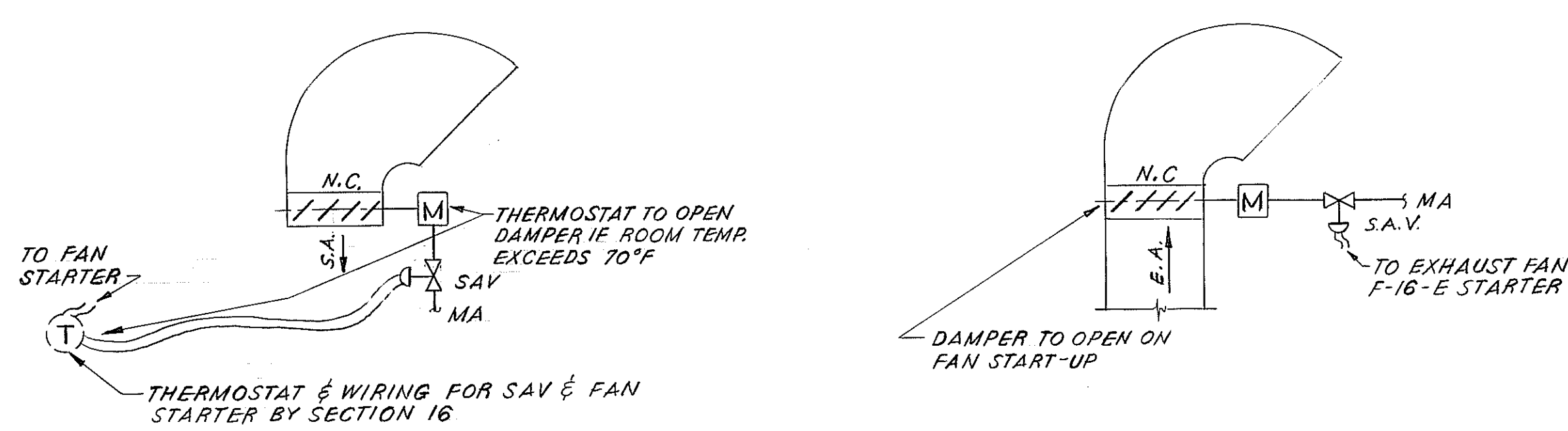
SCHEMATIC CONTROL DIAGRAM FOR DOMESTIC HOT WATER HEATING SYSTEM



SCHEMATIC CONTROL DIAGRAM FOR SYSTEM S-4



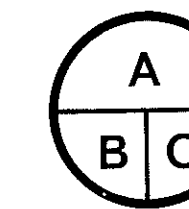
SCHEMATIC CONTROL DIAGRAM FOR ELECTRIC AIR DUCT HEATER



SCHEMATIC CONTROL DIAGRAM FOR F-20-E, F-30-E, F-35-E & F-41-E

TYPICAL CONTROL DIAGRAM FOR F-16-E

notes and reference drawings

A detail no.
B location drawing no.
C drawing no.

C	11.28.75	A-B BUILT DRAWING	ML	J.K.J.	T.J.S.
B	01.5.74	ISSUED FOR CONST'N	C.A.	J.K.J.	T.J.S.
A	Mar. 74	Issued for General Contract Tender			
no.	date		drawn	checked	approved

revisions

seal	seal	seal
PROFESSIONAL ENGINEER	PROFESSIONAL ENGINEER	PROFESSIONAL ENGINEER
J. J. SHERMAN	J. J. SHERMAN	J. J. SHERMAN
PRINCIPAL OF OFFICE	PRINCIPAL OF OFFICE	PRINCIPAL OF OFFICE
COLE, SHERMAN & ASSOC. LIMITED	COLE, SHERMAN & ASSOC. LIMITED	COLE, SHERMAN & ASSOC. LIMITED
TORONTO, ONTARIO	TORONTO, ONTARIO	TORONTO, ONTARIO

ONTARIO NORTHLAND RAILWAY
NORTH BAY YARD
CONSOLIDATION OF REPAIR FACILITIES

REPAIR FACILITY & PAINT SHOP

HEATING & VENTILATION

drawing title

SCHEDULES & CONTROL DIAGRAMS

designed by	K.R.	checked by	J.K.J.	date	MARCH, 74
drawn by	V.S.	approved by	T.J.S.		
scale	NONE	drawn	status		
project number	5473	drawing number	5473-MI5	rev. no.	C

