

State of Vermont
 Agency of Transportation
 Patrick J. Garrahan, Secretary
PHASE III

Renovations to the
MATERIALS & RESEARCH LABORATORY
 At the
 State Highway Laboratory
 Berlin, Vermont



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- M10 ROOF MECHANICAL PLAN
- M11 PLUMBING PLAN
- M12 SCHEDULES, DETAILS, RISERS

State of Vermont
 Department of State Buildings
 John Zampieri, Commissioner

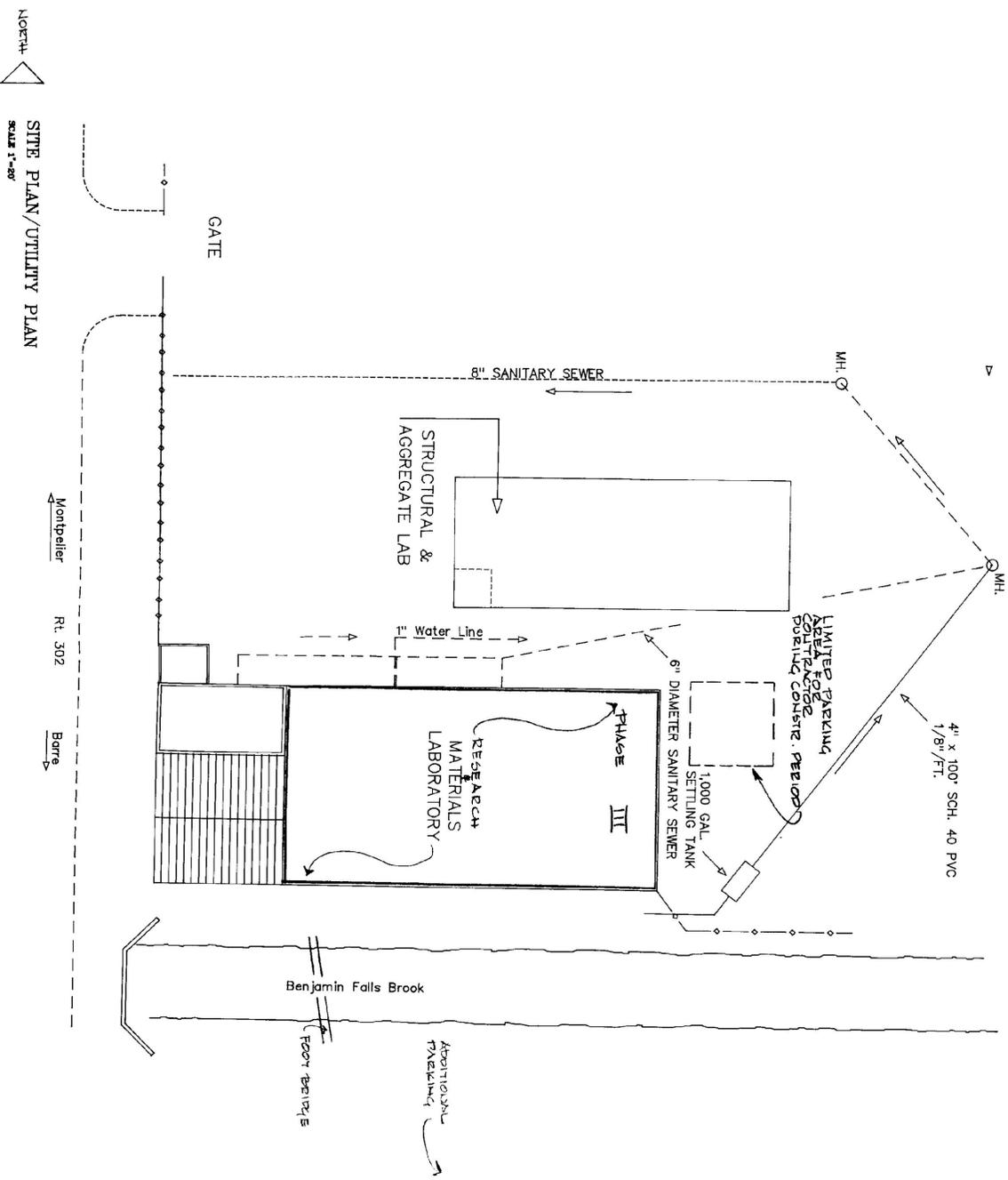
Materials & Research
 Laboratory
 Berlin, Vt.

PHASE III



Janson Design, Inc.
 FRED KELL, ARCHITECT
 P.O. BOX 55 - BOSTON ROAD, WATERBURY, VT 05676
 (802) 244-3900

TITLE SHEET
 REV. 1/20/41 SEE U.P.V.
 DWG. NO. 1/10/41
 DWG. NO.

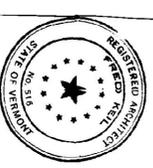


SITE PLAN/UTILITY PLAN
SCALE 1"=50'

State of Vermont
Department of State Buildings
John Zampieri, Commissioner

Materials & Research
Laboratory
Berlin, Vt.

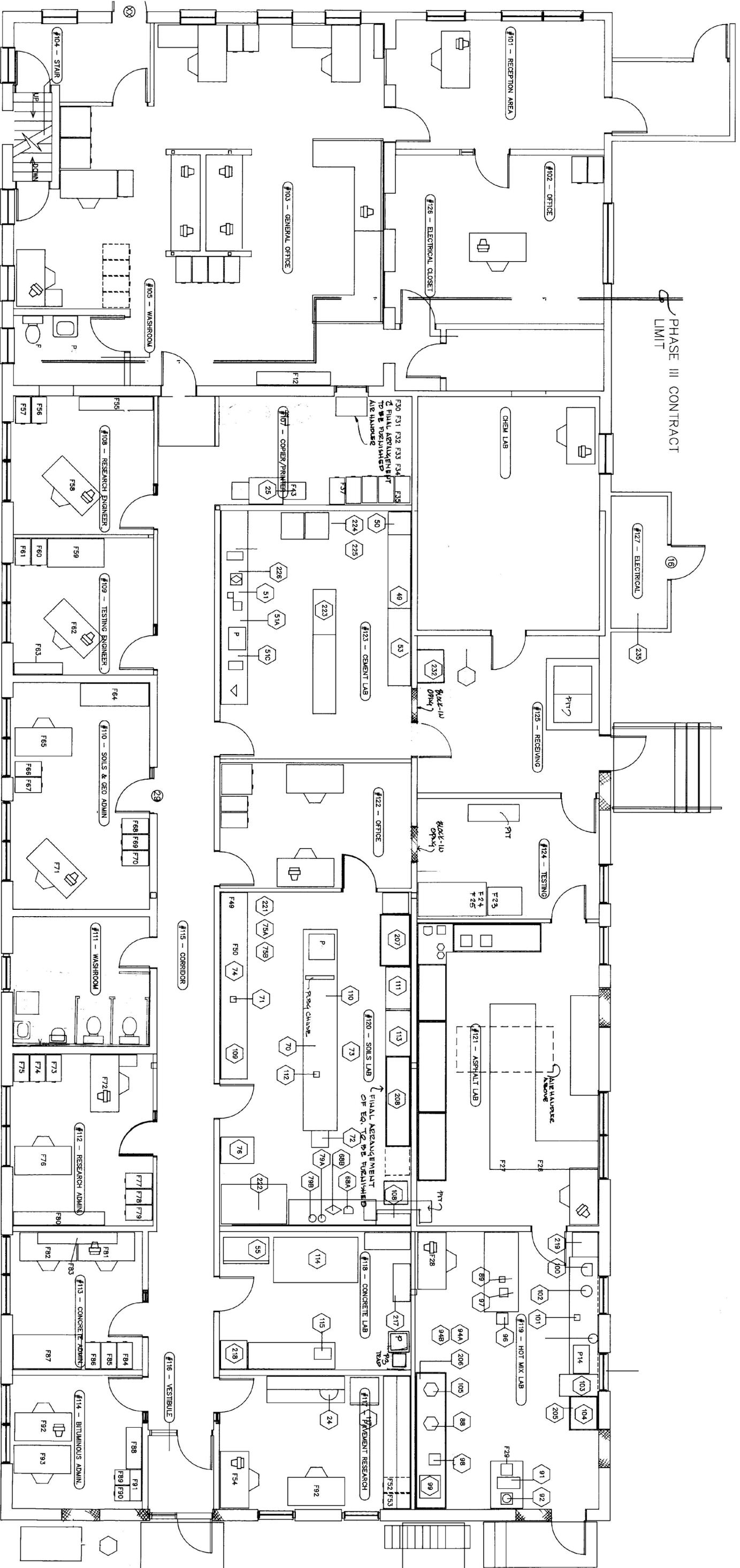
PHASE III



Janson Design, Inc.
FRED ZELL, ARCHITECT
P.O. BOX 55 - BERLIN, VERMONT 05603
(802) 244-3833

DATE:
1/10/41

DWG. NO.
S1



FIRST FLOOR
STATE HIGHWAY LAB
SCALE: 1/4" = 1'-0"

PHASE III CONTRACT
LIMIT

FURNITURE AND EQUIPMENT LAYOUT PLAN

SCALE 1/4" = 1'-0"
THIS DRAWING IS FOR INFORMATION ONLY.
SEE HIGH DWGS & E DWGS FOR SPECIFIC ITEMS.



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Department of State Buildings
John Zampieri, Commissioner

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Berlin, VT.
PHASE III



Janison Design, Inc.
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LAYOUT PLAN

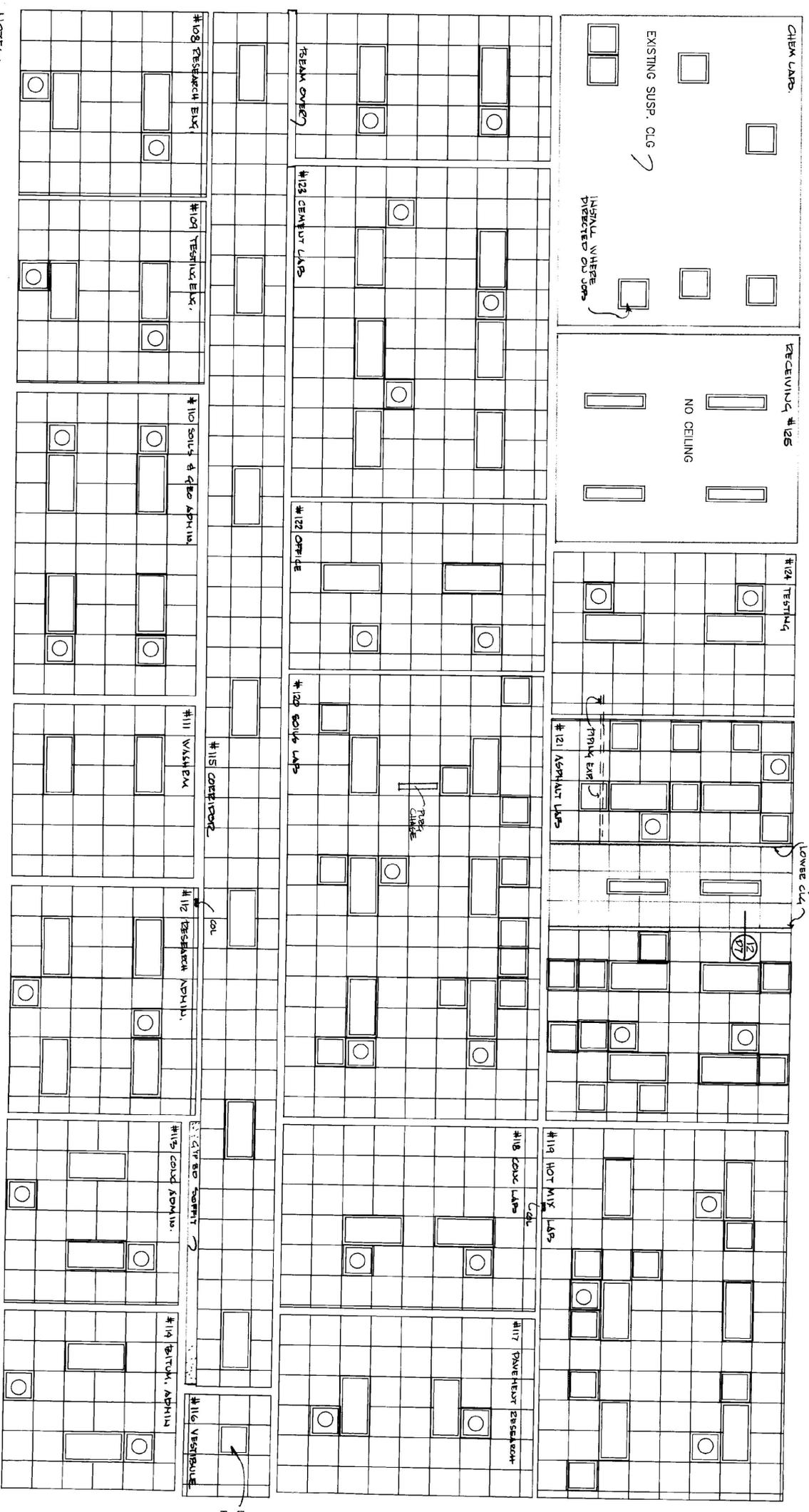
FIRST FLOOR

DATE: 1/10/91

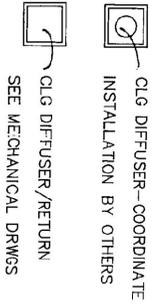
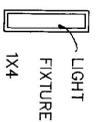
REV 1/29/91 244, 120, 117
2/10/91 244, 142

DWG. NO. L3

DROPPED CLG
SEE DET 12/107



NOTES:
1. CLG INSTALLATION: MAX HEIGHT EXACT HT TO BE ESTABLISHED. DURUM COAST. MIN CLG HT = 8'-3" 2. COUL. SHALL COORD ALL TRADES TO ACHIEVE MAX CLG HT. 3. REFER TO FIN. SCHED DWG DS & NOTES @ A13



REFLECTED CEILING PLAN
SCALE 1/4" = 1'-0"

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Department of State Buildings
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PHASE III



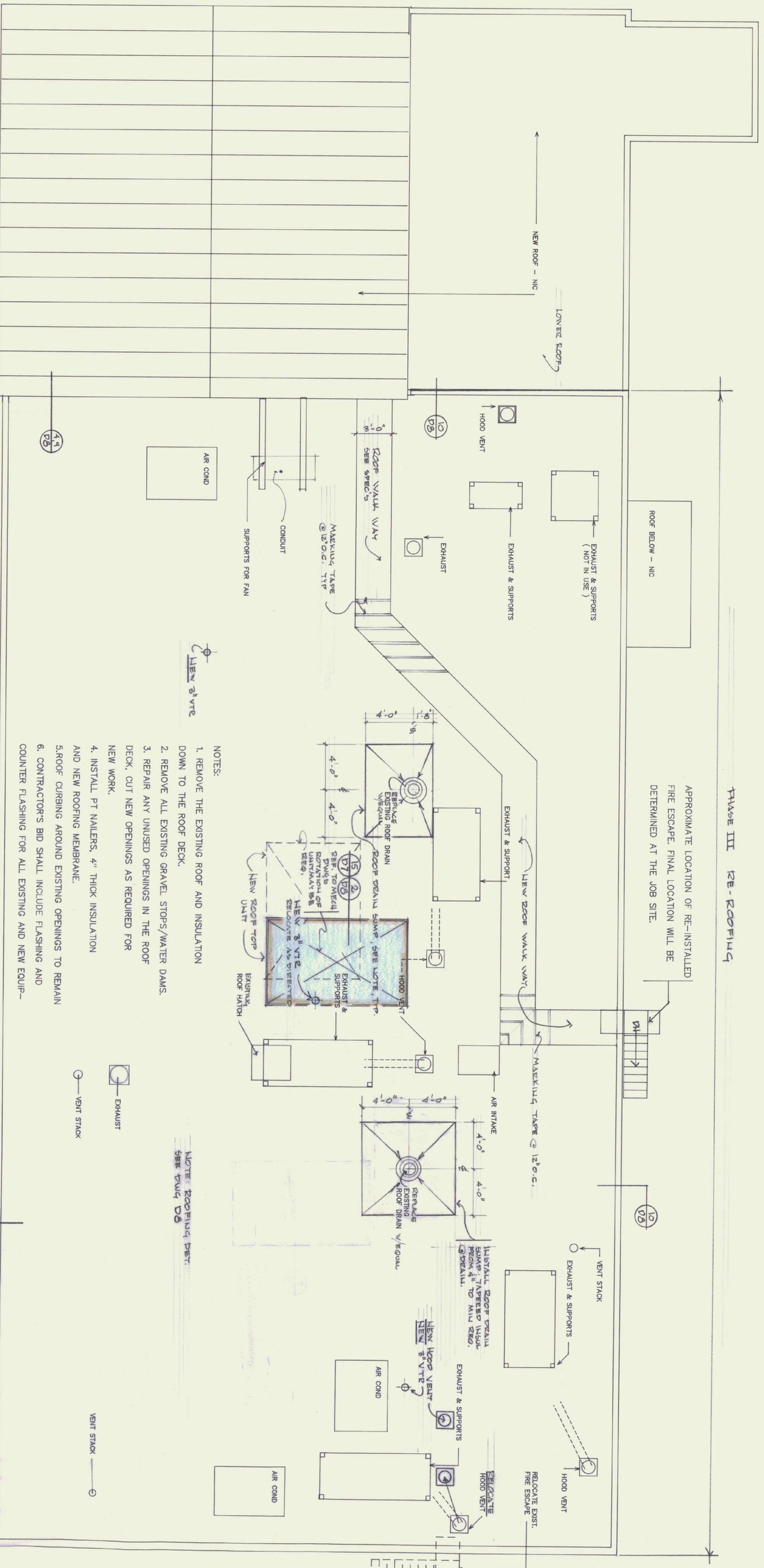
Janson Design, Inc.
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P.O. BOX 55 - 80 TOWN ROAD, WATERBURY, VT 05676

REFLECTED CEILING PLAN
DATE: 1/10/41
REV. 1/20/41

DWG. NO. A14

PHASE III RE-ROOFING

APPROXIMATE LOCATION OF RE-INSTALLED FIRE ESCAPE. FINAL LOCATION WILL BE DETERMINED AT THE JOB SITE.



NOTES:

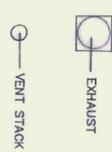
1. REMOVE THE EXISTING ROOF AND INSULATION DOWN TO THE ROOF DECK.
2. REMOVE ALL EXISTING GRAVEL STOPS/WATER DAMS.
3. REPAIR ANY UNUSED OPENINGS IN THE ROOF DECK, CUT NEW OPENINGS AS REQUIRED FOR NEW WORK.
4. INSTALL PT NAILERS, 4" THICK INSULATION AND NEW ROOFING MEMBRANE.
5. ROOF CURBING AROUND EXISTING OPENINGS TO REMAIN
6. CONTRACTOR'S BID SHALL INCLUDE FLASHING AND COUNTER FLASHING FOR ALL EXISTING AND NEW EQUIP-

MENT, NEW AND EXISTING ROOF PENETRATIONS, SAELEANT POCKETS, EQUIPMENT SUPPORTS, WALL FLASHING, TRANSITION TO LOWER ROOF, ETC.

7. NEW EQUIPMENT IS IDENTIFIED ALL OTHER EQUIPMENT BASES & PENETRATIONS EXIST. CONTRACTOR SHALL VERIFY EXISTE INSTALLATION, ALL DETAILS & INCLUDE ALL CRUPS, FLASHING & BASES IN HIS BID.

8. CONTRACTOR SHALL REPAIR ROOF DECK, CUT NEW OPENINGS & FURNISH & INSTALL ALL SUPPORTS, JOIST REINFORCEMENTS

NOTE: ROOFING DET. SEE DWG D8



(& CONT) STL COL & REBARING PL & CONNECTIONS AS SHOWN IN DEQ.

ROOF PLAN
SCALE 1/4" = 1'-0"

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John Zampieri, Commissioner

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Berlin, Vt.

PHASE III

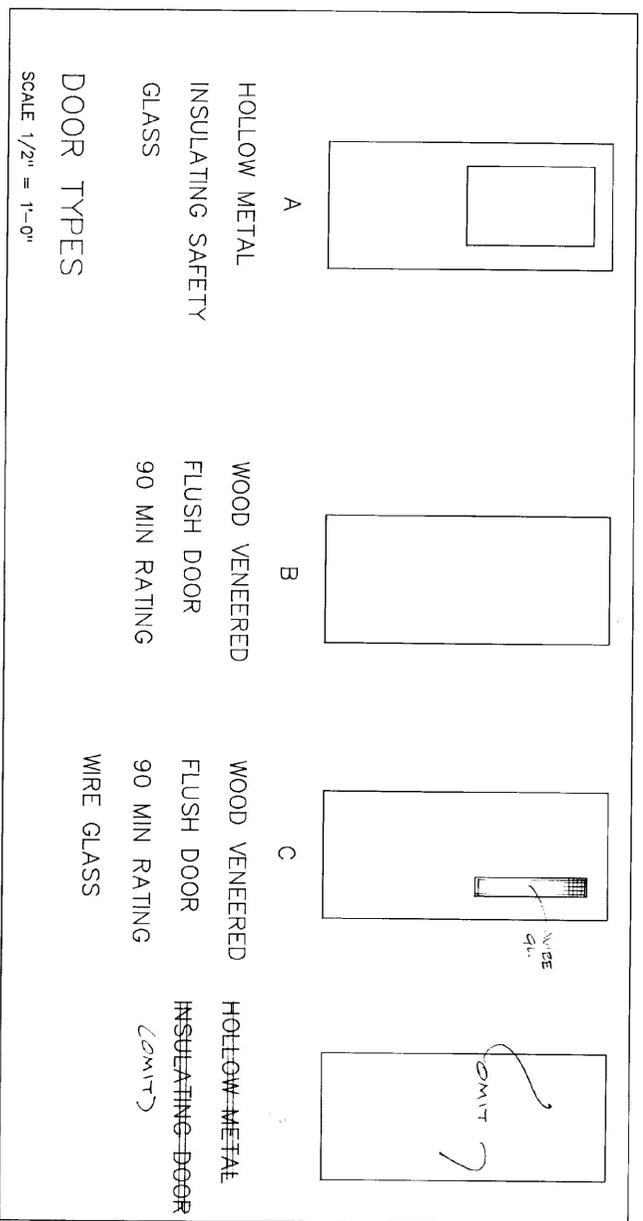


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ROOF PLAN
DATE: 1/10/91
DWG. NO. A15

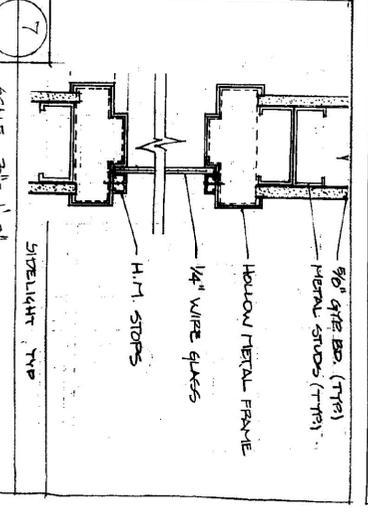
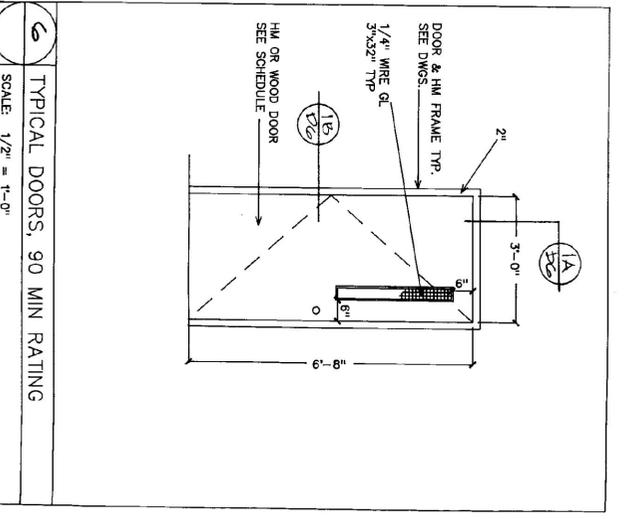
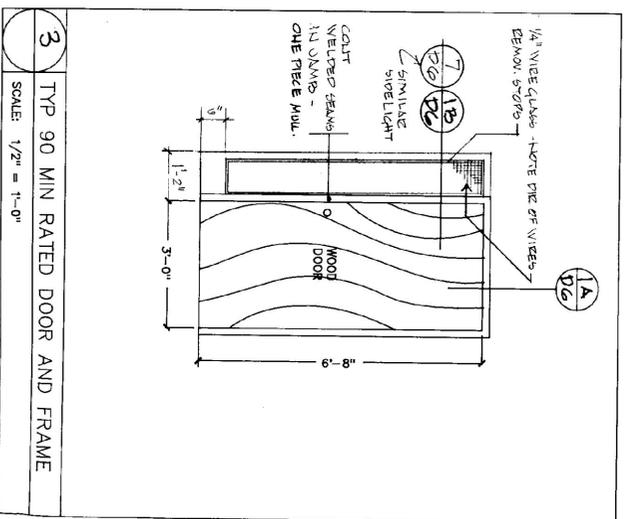
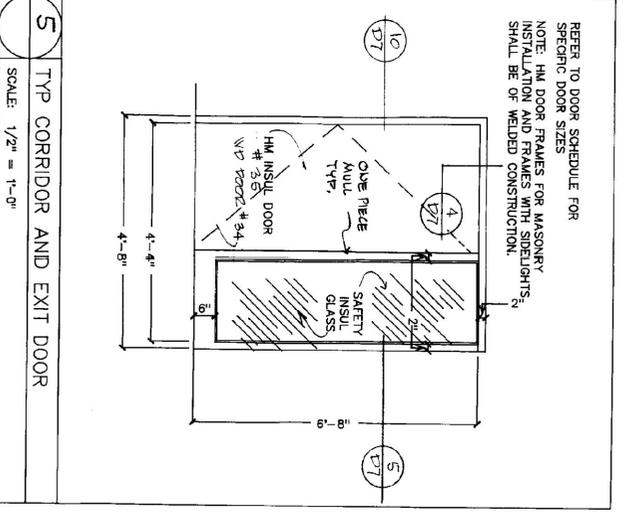
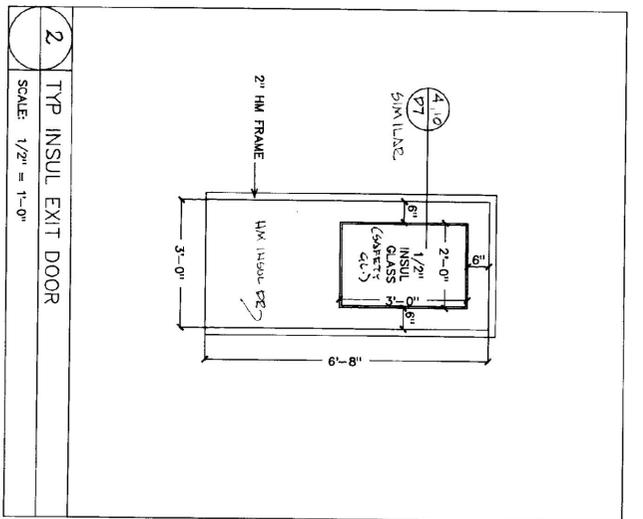
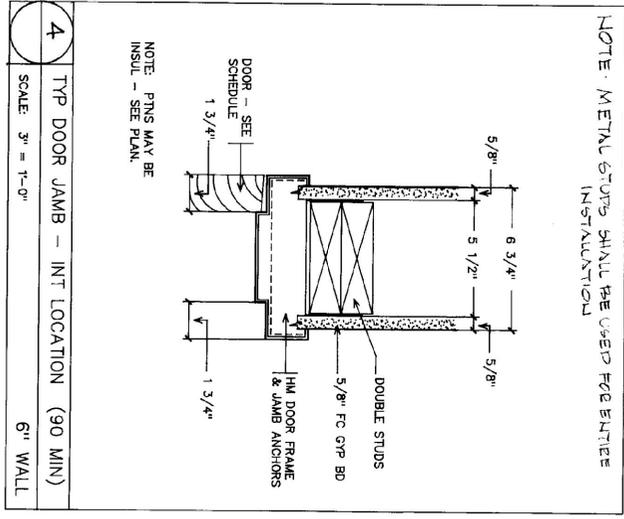
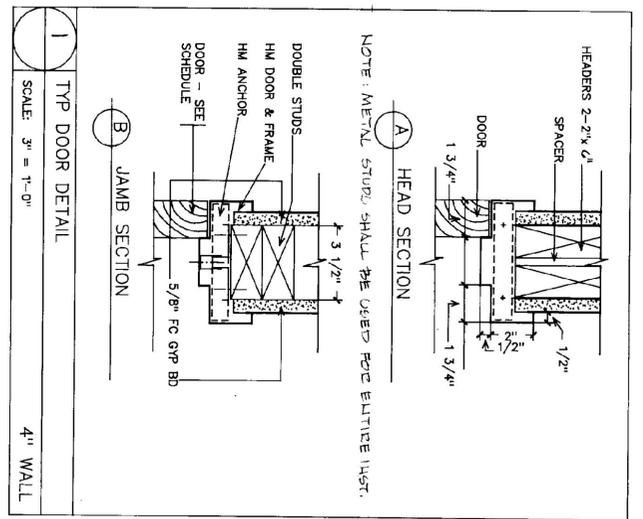
REV. 1/22/91 ROOF TOP UNIT & NOTES





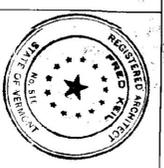
DOOR SCHEDULE:

NO.	DOOR				FRAME				REMARKS - REFER TO ALL DET. SPECIFIC INST. & ASSEMBLY. SEE ALSO PLAN DT			
	TYPE	WIDTH	HGT.	THK.	MAT'L	FIN.	MAT'L	FIN.		HDW.	DTL.	THR.
27	B	3'-0"	6'-8"	1 3/4"	WD	S&V	HM	PTD		3/16"		WELDED FRAME
28	B				WD							WELDED FRAME
29	B				WD							WELDED FRAME
30	(EXISTING) B				WD							WASH RM DOOR - EXISTING. CLEAN & REPAIR ALL SURFACES. REPAIR & REFINISH FRAME. SEE PLAN DT.
31	B				WD					3/16"		WELDED FRAME
32	B				WD							WELDED FRAME
33	B				WD							WELDED FRAME
34	B				WD					5/16"		WELDED FRAME
35	A				HM	PTD				5/16"	✓	INSULATED DOOR, WELDED FRAME. SEE PLAN DT. 4.8.10 ENCL. DT.
36	B				WD	S&V				3/16"		WELDED FRAME
37	C				WD					4/16"		
38	C				WD							
39	C				WD							
40	C				WD							
41	C				WD							WELDED FRAME
42												DOOR & FRAME DELIVERED - UPLIFT THIS REQ. 1/20/91
45	A				HM	PTD				2/16"	✓	INSULATED DOOR, WELDED FRAME
46	C				WD	S&V				4/16"		
47	C				WD	S&V				4/16"		
48	A				HM	PTD				2/16"	✓	INSULATED DOOR, WELDED FRAME
49	C				WD	S&V				4/16"		WELDED FRAME



State of Vermont
Department of State Buildings
John Zampieri, Commissioner

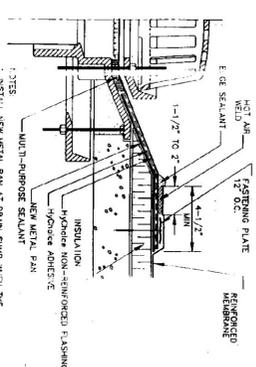
Materials & Research
Laboratory
Berlin, Vt.



Jonson Design, Inc.
FRED KELL, ARCHITECT
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(802) 524-2500

DATE: 1/10/91
DOOR SCHEDULE & DETAILS
REV: 1/22/91 VZ SCALES
DWG. NO. D6

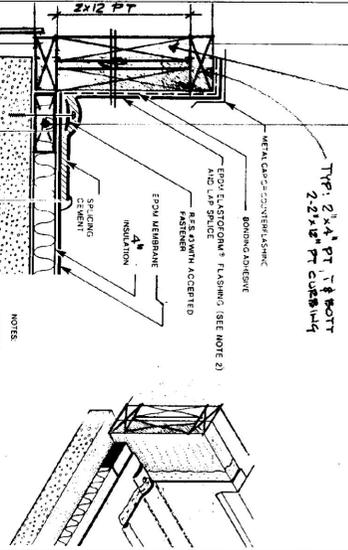
REPLACE EXISTING ROOF DRAIN W/ EQUAL.



1. REMOVE EXISTING DRAIN AND FLASHING.
2. PREPARE ROOF SURFACE TO RECEIVE NEW DRAIN.
3. INSTALL NEW METAL PAN AT DRAIN SLOPE. THE DRAIN SLOPE SHOULD BE THE SAME AS THE EXISTING DRAIN. THE METAL PAN SHOULD BE INSTALLED WITH THE DRAIN SLOPE AND THE METAL PAN SHOULD BE FASTENED TO THE ROOF DECK WITH 2\"/>
- 4. WHEN TAPPED INSULATION AT THE DRAIN SLOPE IS USED, IT SHOULD BE TO THE HORIZONTAL FOOT.
- 5. REMOVE ALL LEAD AND OTHER FLASHING.
- 6. REMOVE ALL LEAD AND OTHER FLASHING.
- 7. REMOVE ALL LEAD AND OTHER FLASHING.
- 8. REMOVE ALL LEAD AND OTHER FLASHING.
- 9. REMOVE ALL LEAD AND OTHER FLASHING.
- 10. REMOVE ALL LEAD AND OTHER FLASHING.

1 TYPICAL ROOF DRAIN

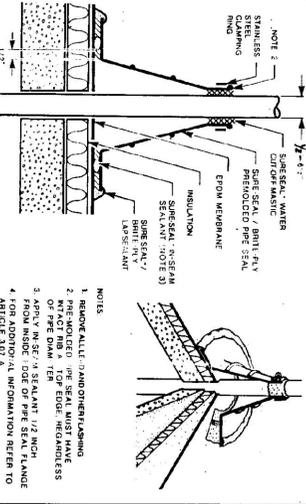
COUNTER FLASH SHALL INCLUDE DECKS PERIMETER WALLS, TYP (2\"/>



1. REMOVE EXISTING COUNTER FLASHING.
2. PREPARE ROOF SURFACE TO RECEIVE NEW COUNTER FLASHING.
3. INSTALL NEW COUNTER FLASHING AT THE DRAIN SLOPE. THE COUNTER FLASHING SHOULD BE INSTALLED WITH THE DRAIN SLOPE AND THE COUNTER FLASHING SHOULD BE FASTENED TO THE ROOF DECK WITH 2\"/>

2 CURBING FOR NEW EQUIPMENT

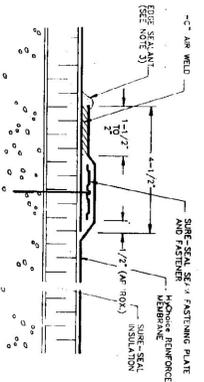
FURNISH MAJOR ACCEPTABLE DETAIL FOR DOOR & VENT PENETRATIONS GREATER THAN 2\"/>



1. REMOVE ALL EXISTING FLASHING AND INSULATION.
2. PREPARE ROOF SURFACE TO RECEIVE NEW FLASHING AND INSULATION.
3. INSTALL NEW FLASHING AND INSULATION AT THE DOOR OR VENT PENETRATION. THE FLASHING AND INSULATION SHOULD BE INSTALLED WITH THE DRAIN SLOPE AND THE FLASHING AND INSULATION SHOULD BE FASTENED TO THE ROOF DECK WITH 2\"/>

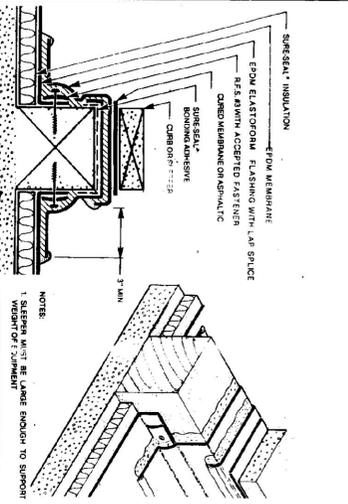
7 TYP VENT STACK & DOOR FLASHING

8 TYP JOINT



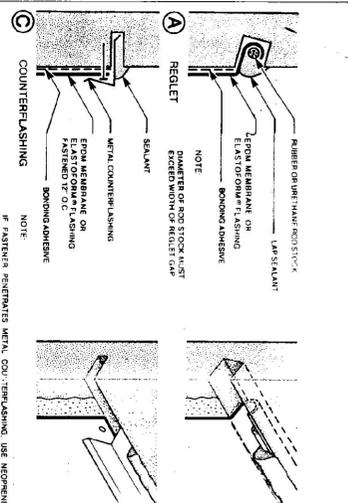
1. REMOVE ALL EXISTING FLASHING AND INSULATION.
2. PREPARE ROOF SURFACE TO RECEIVE NEW FLASHING AND INSULATION.
3. INSTALL NEW FLASHING AND INSULATION AT THE JOINT. THE FLASHING AND INSULATION SHOULD BE INSTALLED WITH THE DRAIN SLOPE AND THE FLASHING AND INSULATION SHOULD BE FASTENED TO THE ROOF DECK WITH 2\"/>

3 SLEEPER / EQU. BASE DET



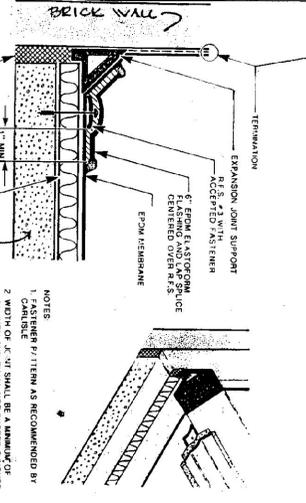
1. REMOVE EXISTING SLEEPER / EQUIPMENT BASE.
2. PREPARE ROOF SURFACE TO RECEIVE NEW SLEEPER / EQUIPMENT BASE.
3. INSTALL NEW SLEEPER / EQUIPMENT BASE AT THE DRAIN SLOPE. THE SLEEPER / EQUIPMENT BASE SHOULD BE INSTALLED WITH THE DRAIN SLOPE AND THE SLEEPER / EQUIPMENT BASE SHOULD BE FASTENED TO THE ROOF DECK WITH 2\"/>

4 WALL FLASHING - EITHER DET ACCEPTABLE TERMINATION DET



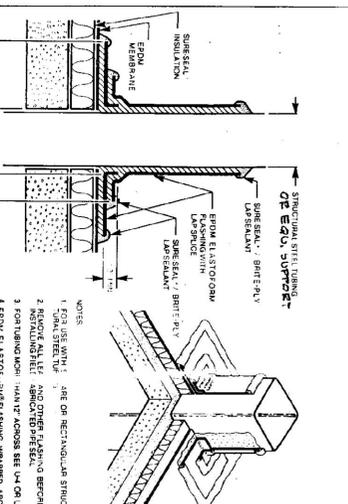
1. REMOVE EXISTING WALL FLASHING.
2. PREPARE ROOF SURFACE TO RECEIVE NEW WALL FLASHING.
3. INSTALL NEW WALL FLASHING AT THE DRAIN SLOPE. THE WALL FLASHING SHOULD BE INSTALLED WITH THE DRAIN SLOPE AND THE WALL FLASHING SHOULD BE FASTENED TO THE ROOF DECK WITH 2\"/>

9 DECK TO WALL FLASHING / JOINT



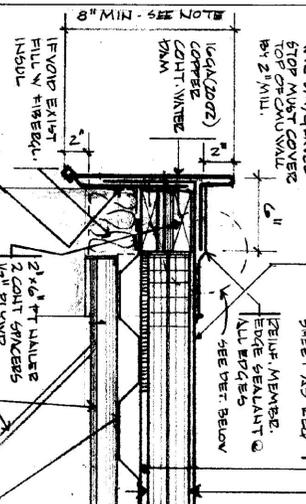
1. REMOVE ALL EXISTING FLASHING AND INSULATION.
2. PREPARE ROOF SURFACE TO RECEIVE NEW FLASHING AND INSULATION.
3. INSTALL NEW FLASHING AND INSULATION AT THE JOINT. THE FLASHING AND INSULATION SHOULD BE INSTALLED WITH THE DRAIN SLOPE AND THE FLASHING AND INSULATION SHOULD BE FASTENED TO THE ROOF DECK WITH 2\"/>

5 EQU SUPPORT TYP, OR MAY NOT PENETRE ROOF DECK



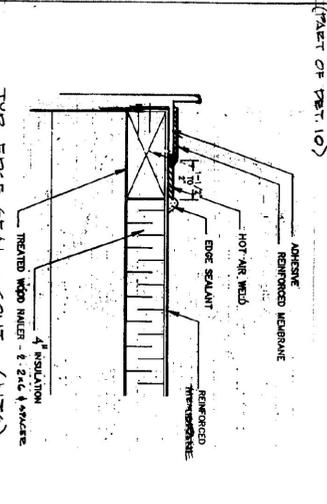
1. REMOVE EXISTING EQUIPMENT SUPPORT.
2. PREPARE ROOF SURFACE TO RECEIVE NEW EQUIPMENT SUPPORT.
3. INSTALL NEW EQUIPMENT SUPPORT AT THE DRAIN SLOPE. THE EQUIPMENT SUPPORT SHOULD BE INSTALLED WITH THE DRAIN SLOPE AND THE EQUIPMENT SUPPORT SHOULD BE FASTENED TO THE ROOF DECK WITH 2\"/>

10 TYP WATER DAM



1. REMOVE ALL EXISTING WATER DAM.
2. PREPARE ROOF SURFACE TO RECEIVE NEW WATER DAM.
3. INSTALL NEW WATER DAM AT THE DRAIN SLOPE. THE WATER DAM SHOULD BE INSTALLED WITH THE DRAIN SLOPE AND THE WATER DAM SHOULD BE FASTENED TO THE ROOF DECK WITH 2\"/>

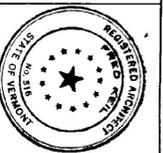
- NOTES:**
1. TYPICAL DET ARE BASED ON MAJOR REQD INSTALLATION METHODS (CARBULE) OTHER ACCEPTABLE MAJUF DET MAY VARY FROM THOSE SHOWN.
 2. FIELD COND. EXISTING CURBING & EQUIPMENT SUPPORTS MAY REQUIRE MODIFICATION OF STANDAED DET SHOWN. SUBMIT SHOP DRAWING FOR APPROVAL.
 3. TIMELY SUBMISSION OF SHOP DRAWINGS IS IMPORTANT. ALLOW 10 WORKING DAYS FOR PROGRESSING.



- TYP. EDGE SEAL - COIT (N7S)**
1. REMOVE ALL EXISTING EDGE SEAL.
 2. PREPARE ROOF SURFACE TO RECEIVE NEW EDGE SEAL.
 3. INSTALL NEW EDGE SEAL AT THE DRAIN SLOPE. THE EDGE SEAL SHOULD BE INSTALLED WITH THE DRAIN SLOPE AND THE EDGE SEAL SHOULD BE FASTENED TO THE ROOF DECK WITH 2\"/>

State of Vermont
Department of State Buildings
John Zampieri, Commissioner

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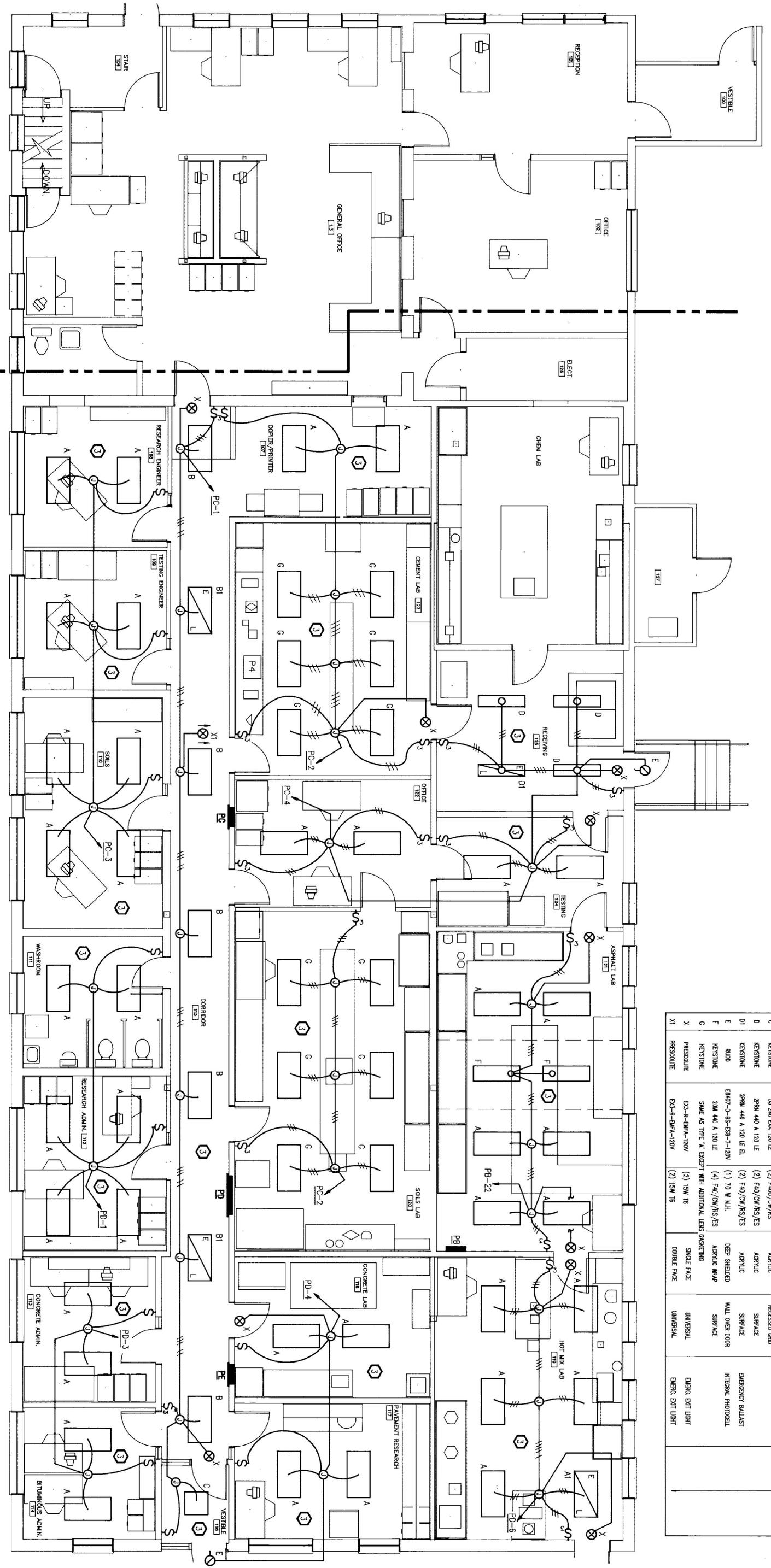
Janson Design, Inc.
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(802) 244-5900

DATE: 1/10/41
DWG. NO. D8

ROOFING
DETAILS

REV. 2/20/41 DET #2

TYPE	MANUFACTURER	CAT. No.	LAMPS	DIFFUSER	MOUNTING	REMARKS	ALTERNATE MFR'S.
A	KESTONE	2J 440 EDA 120 LE	(4) F40/CW/R5/ES	AEROLIC	RECESSED GRID	EMERGENCY BALLAST	DAYBRITE, KEENE, METALUX
AI	KESTONE	2J 440 EDA 120 LE EL	(4) F40/CW/R5/ES	AEROLIC	RECESSED GRID	EMERGENCY BALLAST	
B	KESTONE	2SM 340 EDA 120 WR LE	(3) F40/CW/R5/ES	AEROLIC	SURFACE	EMERGENCY BALLAST	
B	KESTONE	2SM 340 EDA 120 WR LE EL	(3) F40/CW/R5/ES	AEROLIC	SURFACE	EMERGENCY BALLAST	
C	KESTONE	UJ 240 EDA 120 LE	(2) F40L/CW/R5	AEROLIC	RECESSED GRID		
D	KESTONE	ZPRN 440 A 120 LE	(2) F40/CW/R5/ES	AEROLIC	SURFACE	EMERGENCY BALLAST	
D	KESTONE	ZPRN 440 A 120 LE EL	(2) F40/CW/R5/ES	AEROLIC	SURFACE	EMERGENCY BALLAST	
E	RUDO	E440-0-85-ESB-7-120V	(1) 70 W M.H.	DEEP SHIELDED	WALL OVER DOOR	INTERNAL PHOTOCELL	
F	KESTONE	20M 440 A 120 LE	(4) F40/CW/R5/ES	AEROLIC WRAP	SURFACE		
G	KESTONE	SMW AS THE 'A' EXCEPT WITH ADDITIONAL LENS GRINDING	(4) F40/CW/R5/ES	AEROLIC WRAP	SURFACE		
X	PRESCOTT	EX-R-EMF-A-120V	(2) 15W T8	SINGLE FACE	UNIVERSAL	EMERG. EXIT LIGHT	
XI	PRESCOTT	EX-R-EMF-A-120V	(2) 15W T8	DOUBLE FACE	UNIVERSAL	EMERG. EXIT LIGHT	



PHASE III CONTRACT LIMIT
LIGHTING PLAN
1/4" = 1'-0"



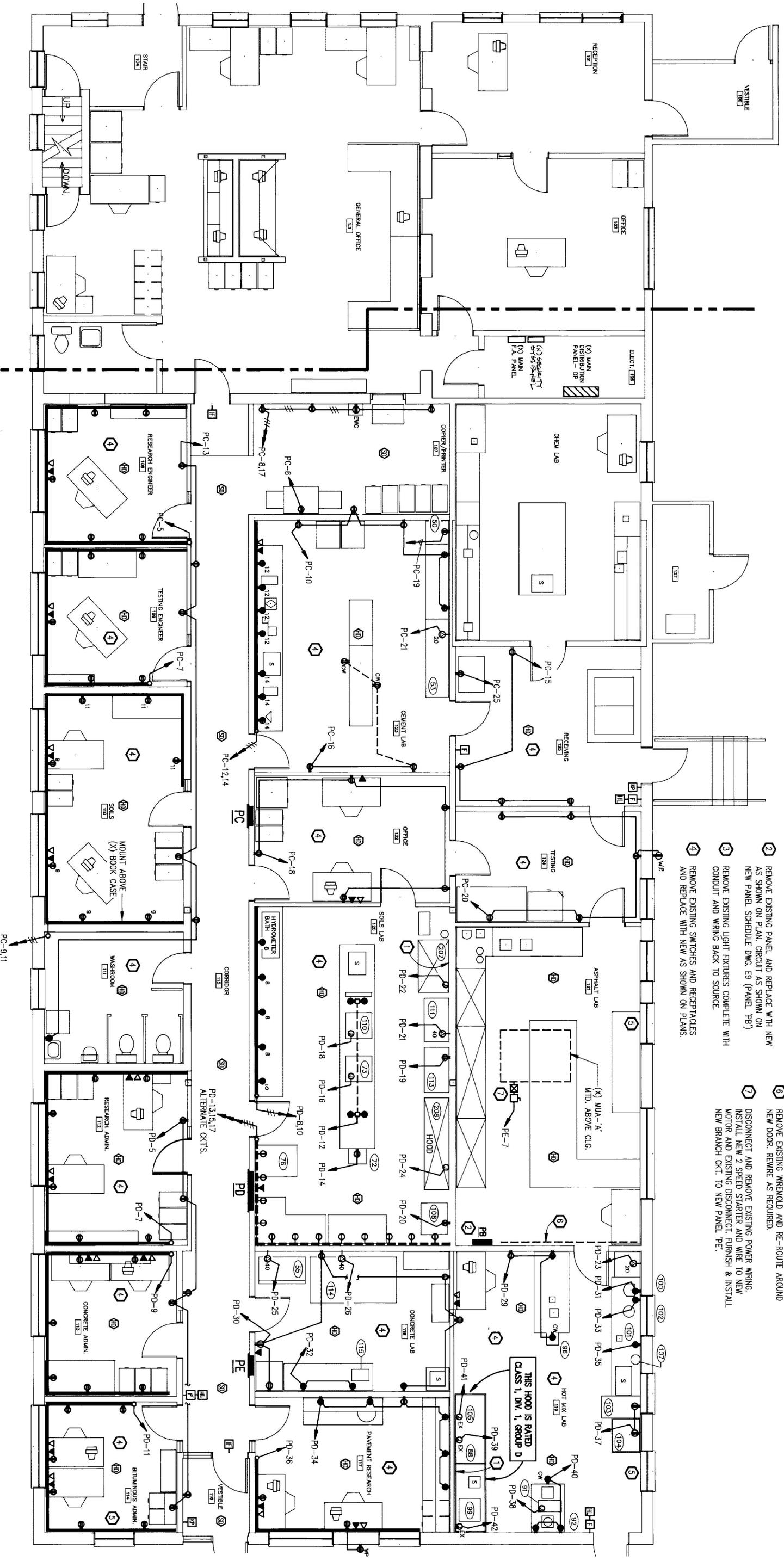
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(802) 888-4044

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Department of State Buildings
John Zampieri, Commissioner

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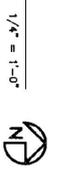
Janson Design, Inc.
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(802) 244-5800

PHASE III FLOOR PLAN
FIRST FLOOR
STATE HIGHWAY LAB
DATE: 1-10-91
DWG. NO. E-6



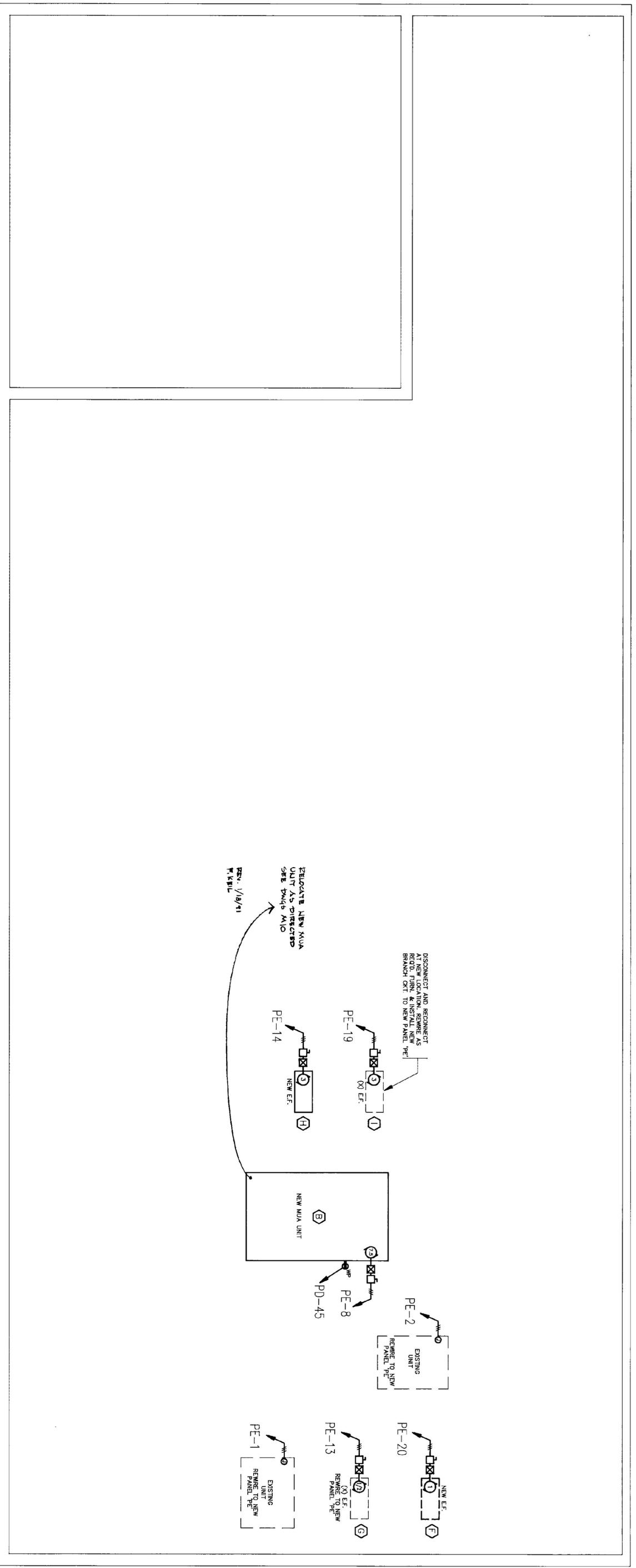
PHASE III CONTRACT
LIMIT

POWER PLAN



- DEMOLITION NOTES:**
- 1 REMOVE EXISTING PANEL COMPLETE WITH FEEDER AND BRANCH CKT. CONDUIT AND WIRING BACK TO SOURCE.
 - 2 REMOVE EXISTING PANEL AND REPLACE WITH NEW AS SHOWN ON PLAN. CIRCUIT AS SHOWN ON NEW PANEL SCHEDULE DWG. E9 (PANEL 'PB')
 - 3 REMOVE EXISTING LIGHT FIXTURES COMPLETE WITH CONDUIT AND WIRING BACK TO SOURCE.
 - 4 REMOVE EXISTING SWITCHES AND RECEPTACLES AND REPLACE WITH NEW AS SHOWN ON PLANS.
 - 5 REMOVE RECEPTACLE FOR EXISTING A/C UNIT COMPLETE WITH CONDUIT AND WIRING BACK TO SOURCE.
 - 6 REMOVE EXISTING WIREMOLD AND RE-ROUTE AROUND NEW DOOR. REMRE AS REQUIRED.
 - 7 DISCONNECT AND REMOVE EXISTING POWER WIRING. INSTALL NEW 2 SPEED STARTER AND WIRE TO NEW MOTOR AND EXISTING DISCONNECT. FURNISH & INSTALL NEW BRANCH CKT. TO NEW PANEL 'PE'.

	<p>Tolbach Engineering, Inc. Consulting Engineers 20 Kimball Ave, Suite 102, S. Burlington, VT 05403 (802) 688-4044</p>	<p>State of Vermont Department of State Buildings John Zampieri, Commissioner</p>	<p>Materials & Research Laboratory Berlin, Vt.</p> <p>PHASE III</p>
<p>Janson Design, Inc. FRED KERL, ARCHITECT P.O. BOX 55 - BOSTON ROAD, WATERBURY, VT 05676 (802) 244-5800</p>		<p>PHASE III FLOOR PLAN</p> <p>FIRST FLOOR STATE HIGHWAY LAB</p>	<p>DATE: 1-10-91</p> <p>DWG. NO. E-7</p>



ROOF PLAN POWER

1/4" = 1'-0"





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 Department of State Buildings
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Materials & Research
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PHASE III

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 FRED KEIL, ARCHITECT
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 (802) 244-5800

PHASE III FLOOR PLAN
 ROOF PLAN
 STATE HIGHWAY LAB

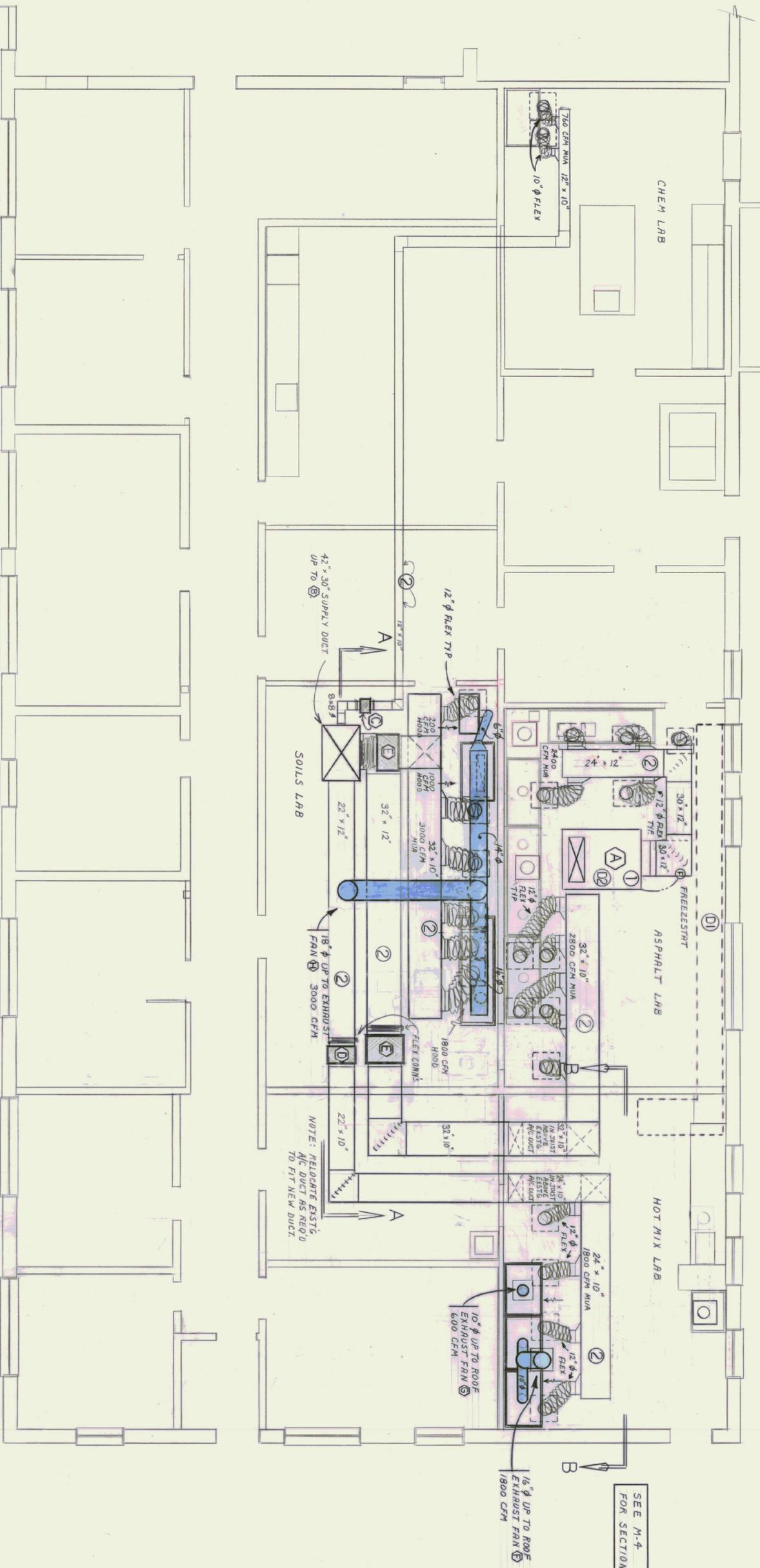
DATE: 1-10-91
 DWG. NO. E-8

DEMOLITION NOTES:

- D1 Remove all existing ductwork connected to existing MTA unit "A".
- D2 Remove all pneumatic controls and motor in existing MTA unit "A" in preparation for new electronic controls.

NEW MECHANICAL WORK NOTES:

- 1 Existing Make-Up-Air Unit: Modify ductwork and controls as shown on drawings and detail in specifications. Replace all pneumatic controls with electronic. Replace motor with three-speed, two-winding motor.
- 2 New Make-Up-Air Supply ductwork. Run tight to roof joists except where noted to be in joist space to get above existing air conditioning ductwork.



EAST END FIRST FLOOR PLAN

Scale: 1/4" = 1'-0"

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PHASE III FLOOR PLAN

FIRST FLOOR
MECHANICAL VENTILATION PLAN

1-10-91

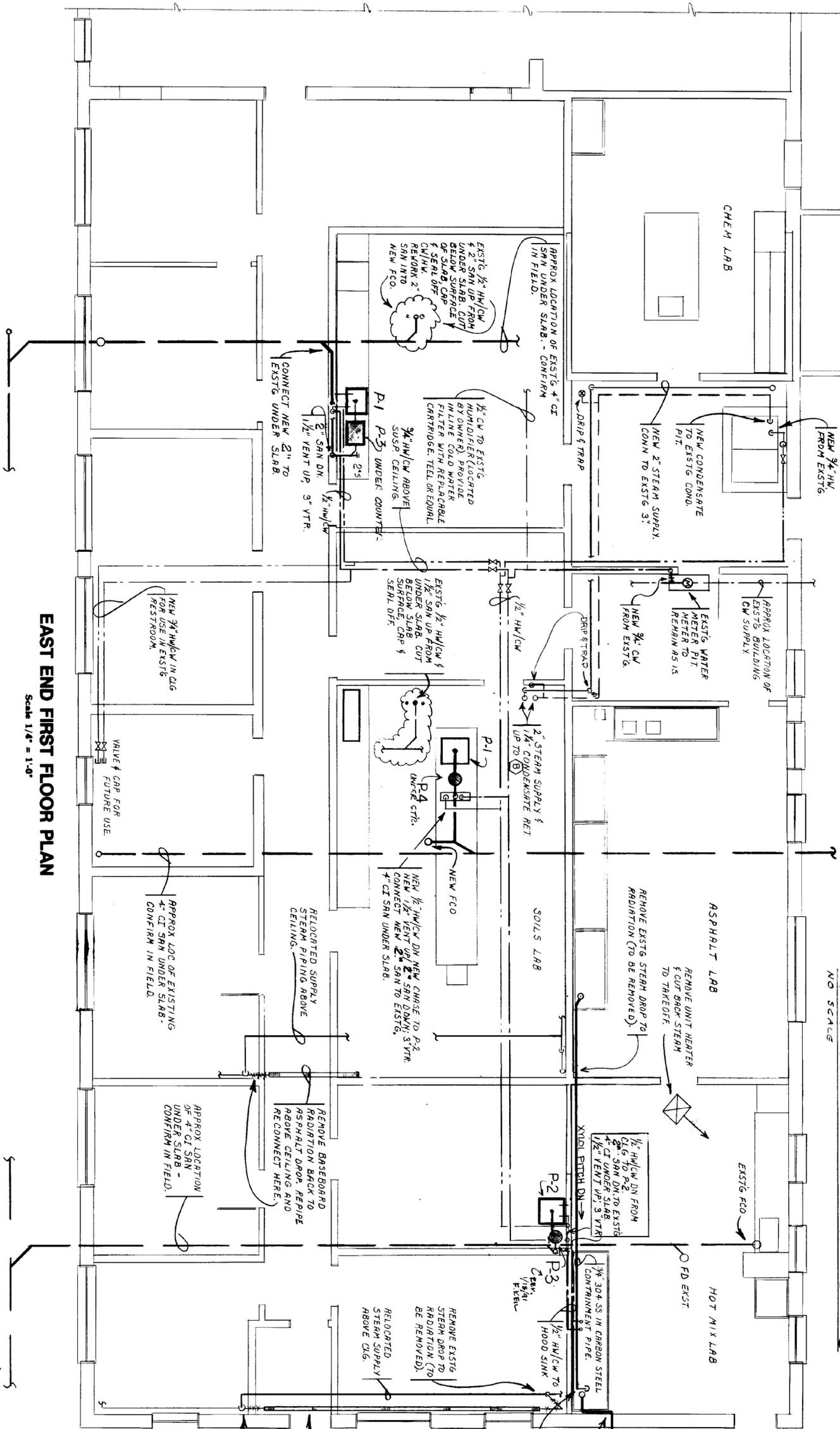
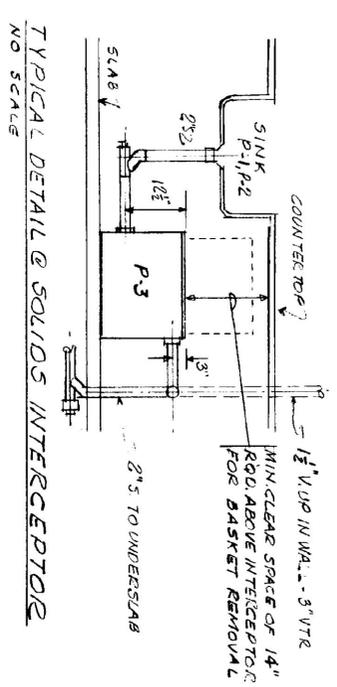
M-9

1 OF 3



PLUMBING FIXTURE SCHEDULE

MARK	TYPE	MANUFACTURER	MODEL	CONNECTIONS					NOTES
				HW	CW	W	V	G	
P-1	COUNTERTOP SINK STAINLESS STEEL	ELKAY	DIR-2522-10	1/2"	1/2"	2"	1-1/2"		27" X 18-3/4" X 10" COMPARTMENT LK-4323 DECK MOUNT FACET.
P-2	FREE STANDING STAINLESS STEEL SINK	ELKAY	SS-8124	1/2"	1/2"	2"	1-1/2"		SINK COMPARTMENT 24" X 24" X 14" LK-47-C 10" BRASS FACET LK-38-RT WASTE FITTING W/ HANDLE 1/2" STEEL, RESPONSIBLE REMOUNT FACET. 2" PIPE SIZE
P-3	SOLIDS INTERCEPTOR	ZURN	Z-1181	2"	1-1/2"				2" PIPE SIZE
P-4	SOLIDS INTERCEPTOR	ZURN	Z-1180	2"	1-1/2"				CAPT. HOOD



MARK	Type	Fluid Temp. Range	Minimum Pipe Insulation - R-values											
			1/2\"/>											
Heating Systems Steam & Hot Water	High Pressure	150-200	1.5	2.5	3.5	4.5	5.5	6.5	7.5	8.5	9.5	10.5	11.5	
	Medium Pressure	120-150	1.5	2.5	3.5	4.5	5.5	6.5	7.5	8.5	9.5	10.5	11.5	
	Low Pressure	90-120	1.5	2.5	3.5	4.5	5.5	6.5	7.5	8.5	9.5	10.5	11.5	
	Very Low Pressure	60-90	1.5	2.5	3.5	4.5	5.5	6.5	7.5	8.5	9.5	10.5	11.5	
Cooling Systems Chilled Water	High Temperature	45-65	1.5	2.5	3.5	4.5	5.5	6.5	7.5	8.5	9.5	10.5	11.5	
	Medium Temperature	40-55	1.5	2.5	3.5	4.5	5.5	6.5	7.5	8.5	9.5	10.5	11.5	
	Low Temperature	35-50	1.5	2.5	3.5	4.5	5.5	6.5	7.5	8.5	9.5	10.5	11.5	
	Very Low Temperature	30-45	1.5	2.5	3.5	4.5	5.5	6.5	7.5	8.5	9.5	10.5	11.5	

Rating	Non-enclosing		Enclosing		Minimum Pipe Insulation	
	Up to 1\"/>					
Some Water Heating	1/2\"/>					
	3/4\"/>					
75-82	1/2\"/>					
	3/4\"/>					
60-71	1/2\"/>					
	3/4\"/>					
38-54	1/2\"/>					
	3/4\"/>					

OWNER TO REMOVE ALL RADIATION ON OUTSIDE WALLS EXCEPT AS NOTED.

REMOVE EXISTG BASEBOARD RADIATION, REPIPE STEAM SUPPLY OVERHEAD AND RECONNECT HERE.



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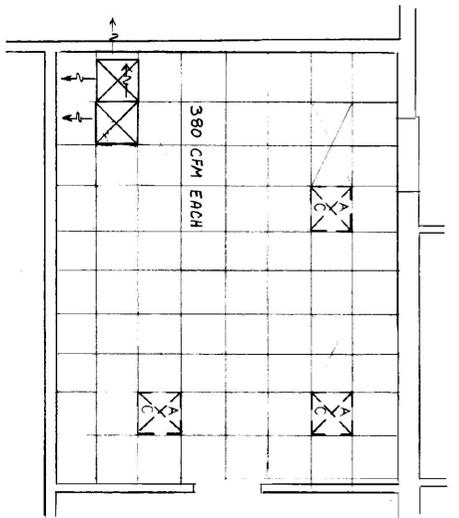
PHASE III

ARCHITECT:
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 FRENCH ARCHITECT
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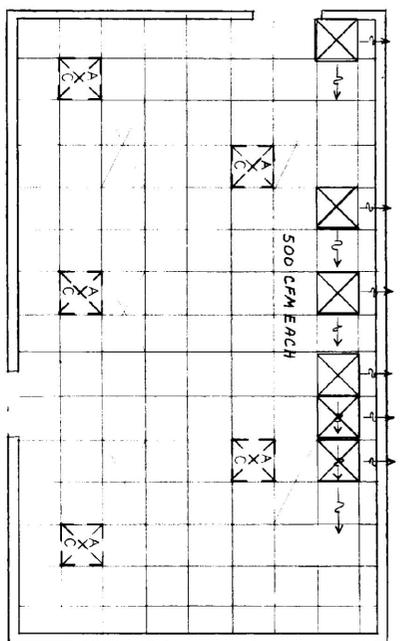
PHASE II FLOOR PLAN
 1-10-91

PLUMBING PLAN
M-11

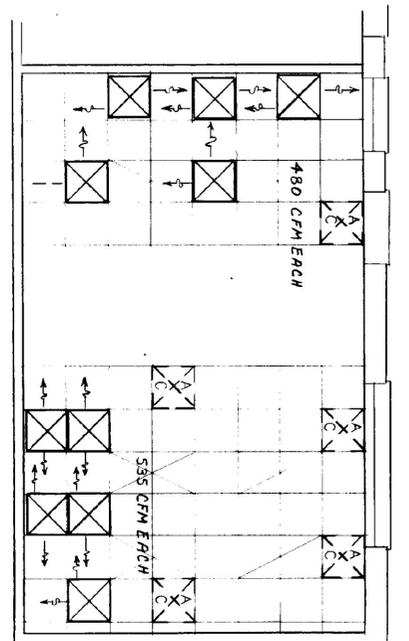
NOTE:
 ALL SUPPLY DIFFUSERS TO BE 2 WAY AS SHOWN. 18" X 18" NECK FOR ALL LABS EXCEPT CHEM LAB (2' X 12').
 DIFFUSERS TO BE 2' X 2' TO FIT LAY IN CEILING GRID. METPLAIRE (OR EQUAL) SERIES 5000, MODEL M-6,
 2-WAY AIR PATTERNS SC OR S2 AS SHOWN ON PLANS. SUPPLY IN BAKED ENAMEL FINISH WITH DAMPER
 & 12" Ø ROUND TRANSITIONS (10" FOR CHEM LAB).



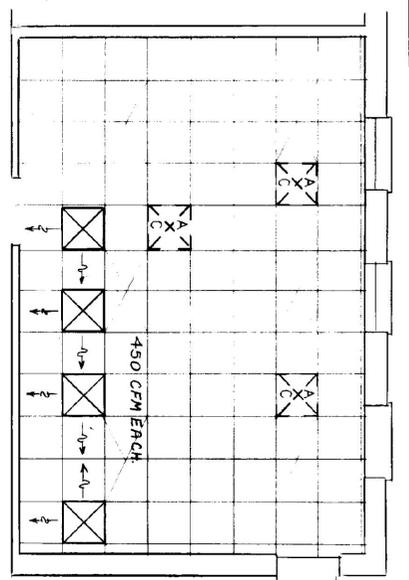
CHEM LAB



SOILS LAB



ASPHALT LAB

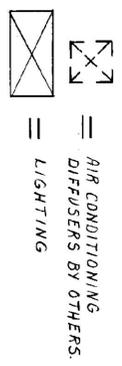


HOT MIX LAB

REFLECTED CEILING PLANS

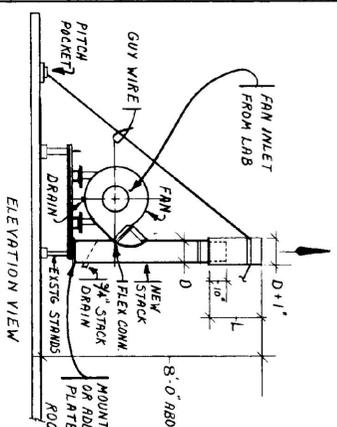
Scale: 1/4" = 1'-0"

NOTE: ALSO REFER TO ARCH. DWGS FOR REFLECTED CEILING PLANS



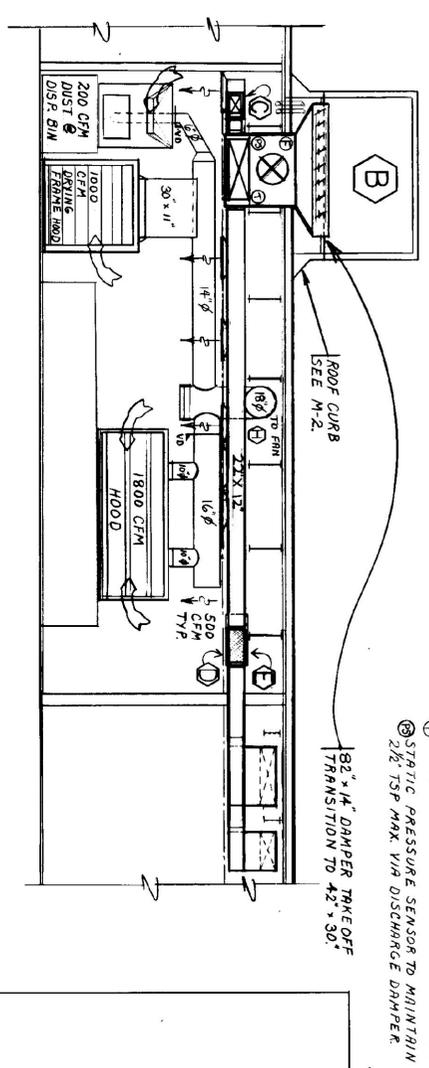
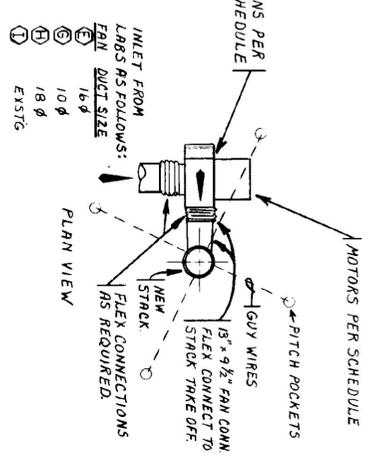
FAN	CFM	SERVING	NEW OR EXISTING ON ROOF	D	L	STACK MATERIAL
F	1800	HOT MIX LAB	NEW	10"	40"	PCD 4x2
G	600	HOT MIX LAB	EXISTG	7"	28"	PCD 4x2
H	3000	SOILS LAB	NEW	12"	48"	PCD 4x1
I	2800/316	ASPHALT LAB	EXISTG	12"	48"	PCD 4x2
EXISTG	2600/400	ASPHALT LAB	EXISTG	12"	48"	PCD 4x2
EXISTG	600	HOT MIX LAB	EXISTG	6"	24"	PCD 4x1

* NOTE: ON EXISTING FAN STACKS: REMOVE EXISTG. RECTANGULAR STACK & REPLACE WITH NEW STACK PER DRAWING.



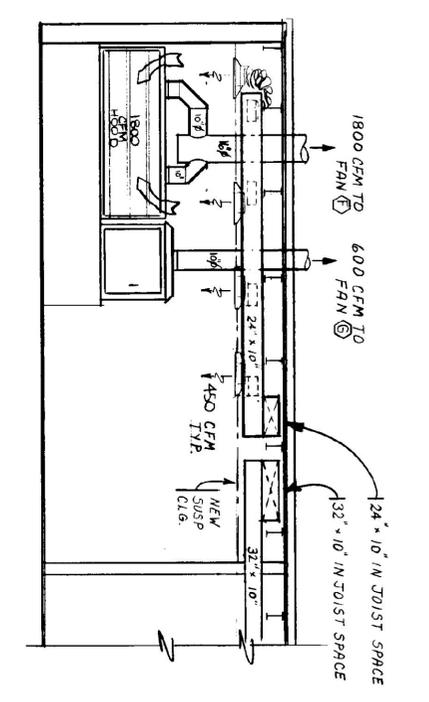
ROOF FANS & STACK DETAILS

No Scale



SOILS LAB ELEVATION SECTION A-A

Scale: 1/4" = 1'-0"



HOT MIX LAB ELEVATION SECTION B-B

Scale: 1/4" = 1'-0"

MARK	TYPE	MANUFACTURER	MODEL	CHARACTERISTICS	ELECTRICAL	NOTES
A	MAKE UP AIR UNIT	EXISTING AMERICAN STD		2400/1200 CFM MAKEUP EXIST. UNIT CONTROLS PER DRAWINGS & SPECS.	RELOCATE EXISTG. 2 SPEEDS, 1 PH	SEE CONTROL SECTION OF SPEC.
B	ROOF MOUNTED AIR HANDLER	MCQUAY	RDS-800B	6300 CFM @ 2.5" ESP. W/SUPPLY DAMPER, FACE & BYPASS. TWIN SUPPLY FANS 15" X 15"	7-1/2 PH., 1180 RPM 208 V., 3.8, 80 HZ	REFER TO CONTROL SECTION OF SPEC.
C	NAV BOX	ENVIRO-TEC	SSD-11 #8	760 CFM - CHEM LAB	24 V. SIGNAL FROM HOOD TO ACTIVATE	SEE CONTROL OF SPEC.
D	NAV BOX	ENVIRO-TEC	SSD-11 #14	1800 CFM - HOT MIX LAB	24 V. SIGNAL FROM HOOD TO ACTIVATE	SEE CONTROL OF SPEC.
E	NAV BOX	ENVIRO-TEC	SSD-11 #18	2600 CFM - ASPHALT LAB 3000 CFM - SOILS LAB	24 V. SIGNAL FROM HOOD TO ACTIVATE	SEE CONTROL OF SPEC.
F	EXHAUST FAN HOT MIX HOOD	BUFFALO FORGE	BL 245	1800 CFM @ 1" TSP STAINLESS STEEL WHEEL	1 PH., 2000 RPM 208 V., 3.8, 80 HZ	OWNER TO SUPPLY MECH. CONT. TO INSTALL.
G	EXHAUST FAN HOT MIX OVEN	EXISTING BUFFALO FORGE	BL 245	600 CFM @ 1/2" TSP HEADUST RPM/CM ON EXISTG. FAN.	1/2 PH., 1000 RPM 208 V., 3.8, 80 HZ	OWNER TO SUPPLY MECH. CONT. TO INSTALL.
H	EXHAUST FAN SOILS LAB	BUFFALO FORGE	BL 245	3000 CFM @ 2-1/2" TSP	3 PH., 3300 RPM 208 V., 3.8, 80 HZ	OWNER TO SUPPLY MECH. CONT. TO INSTALL.
I	EXHAUST FAN ASPHALT LAB	EXISTING BUFFALO FORGE	BL 245	RELOCATE ONLY. NO OTHER FAN MOVS REQD.	EXISTING	NO OTHER FAN MOVS REQD.

EQUIPMENT SCHEDULE

MECHANICAL CONSULTANT:



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REFLECTED CEILING PLANS SCHEDULES

1-10-91

DETAILS & ISSUES

M-12

4 OF 4