

PROPOSED

classroom addition

lake area vocational technical school

WATERTOWN, SOUTH DAKOTA

FOR

watertown independent school dist. no. 1

WATERTOWN, SOUTH DAKOTA

board members

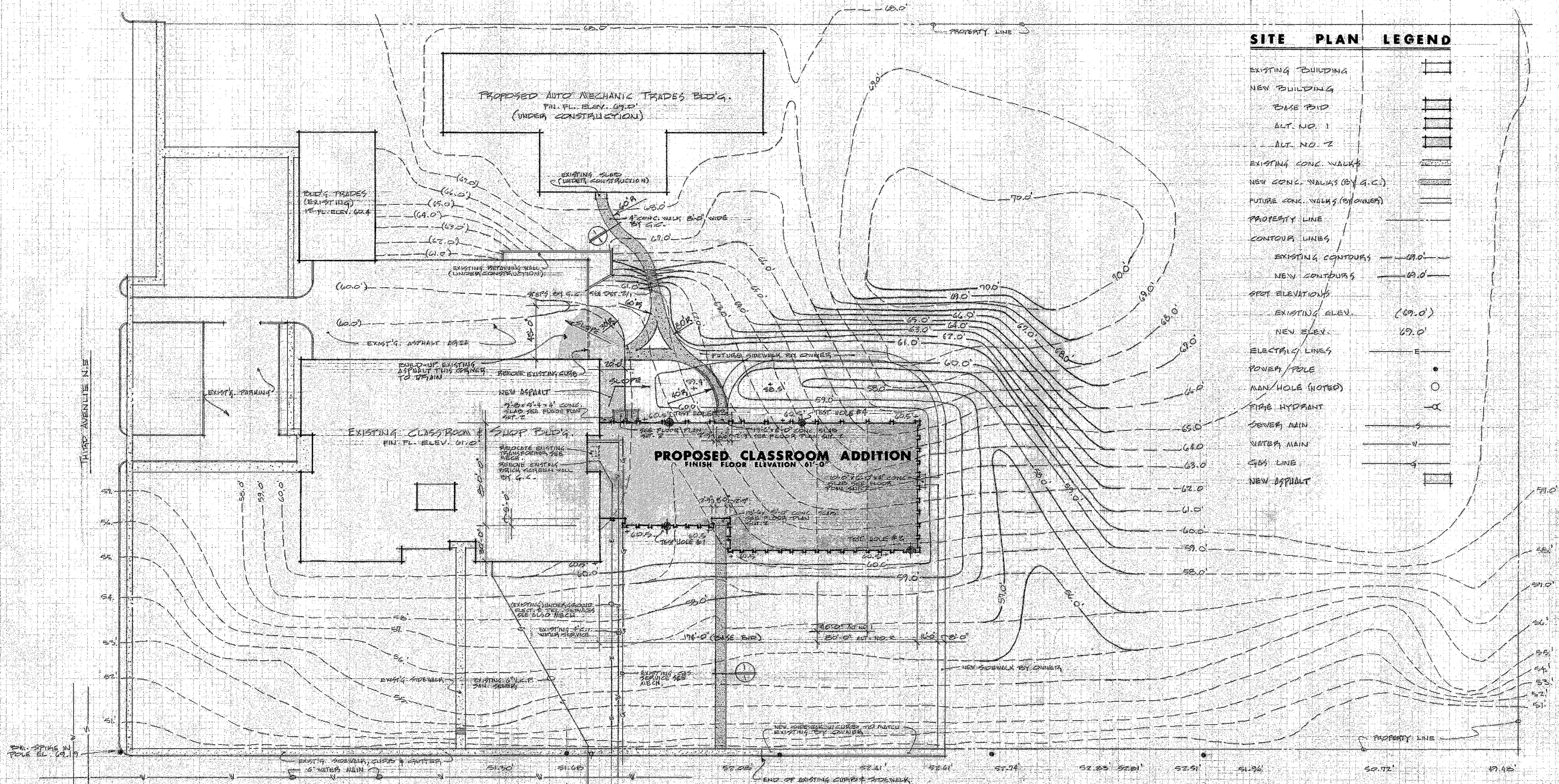
Mr. Charles O. Stormo	President
Mr. Howard C. Hopper	Vice President
Dr. Alexander A. Wylie	Member
Dr. Alden R. Heupel	Member
Mr. James T. Cook	Member
Mr. Robert H. Cackle	Supt. of Schools
Mr. Jerald D. Eggen	Business Manager
Mr. Leonard Timmerman	Director, Industry & Technology, Vo-tech
Dr. Max C. Johnson	Director, Health Occupations, Vo-tech
Mr. E. B. "Ike" Oleson	State Director Vocational Education

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J. C. Pope, architect - watertown, south dakota

THIRTEENTH STREET N.E.

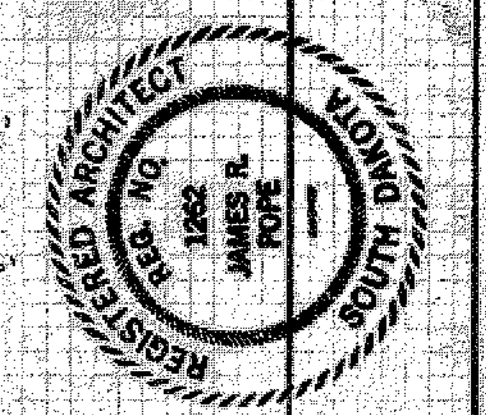


SITE PLAN LEGEND

EXISTING BUILDING	[Symbol]
NEW BUILDING	[Symbol]
BASE PAD	[Symbol]
ALT. NO. 1	[Symbol]
ALT. NO. 2	[Symbol]
EXISTING CONC. WALKS	[Symbol]
NEW CONC. WALKS (BY G.C.)	[Symbol]
FUTURE CONC. WALKS (BY OWNER)	[Symbol]
PROPERTY LINE	[Symbol]
CONTOUR LINES	[Symbol]
EXISTING CONTOURS	— 69.0 —
NEW CONTOURS	— 69.0 —
SPOT ELEVATIONS	[Symbol]
EXISTING ELEV.	(69.0)
NEW ELEV.	69.0
ELECTRIC LINES	E
POWER POLE	•
MAN HOLE (NOTED)	○
FIRE HYDRANT	⊗
SEWER MAIN	— S —
WATER MAIN	— W —
GAS LINE	— G —
NEW ASPHALT	[Symbol]

J. R. POPE, architect
Watertown, South Dakota

PROPOSED CLASSROOM ADDITION
LAME MED. VOCATIONAL TECHNICAL SCHOOL
SITE PLAN, SEVEN DRAWING

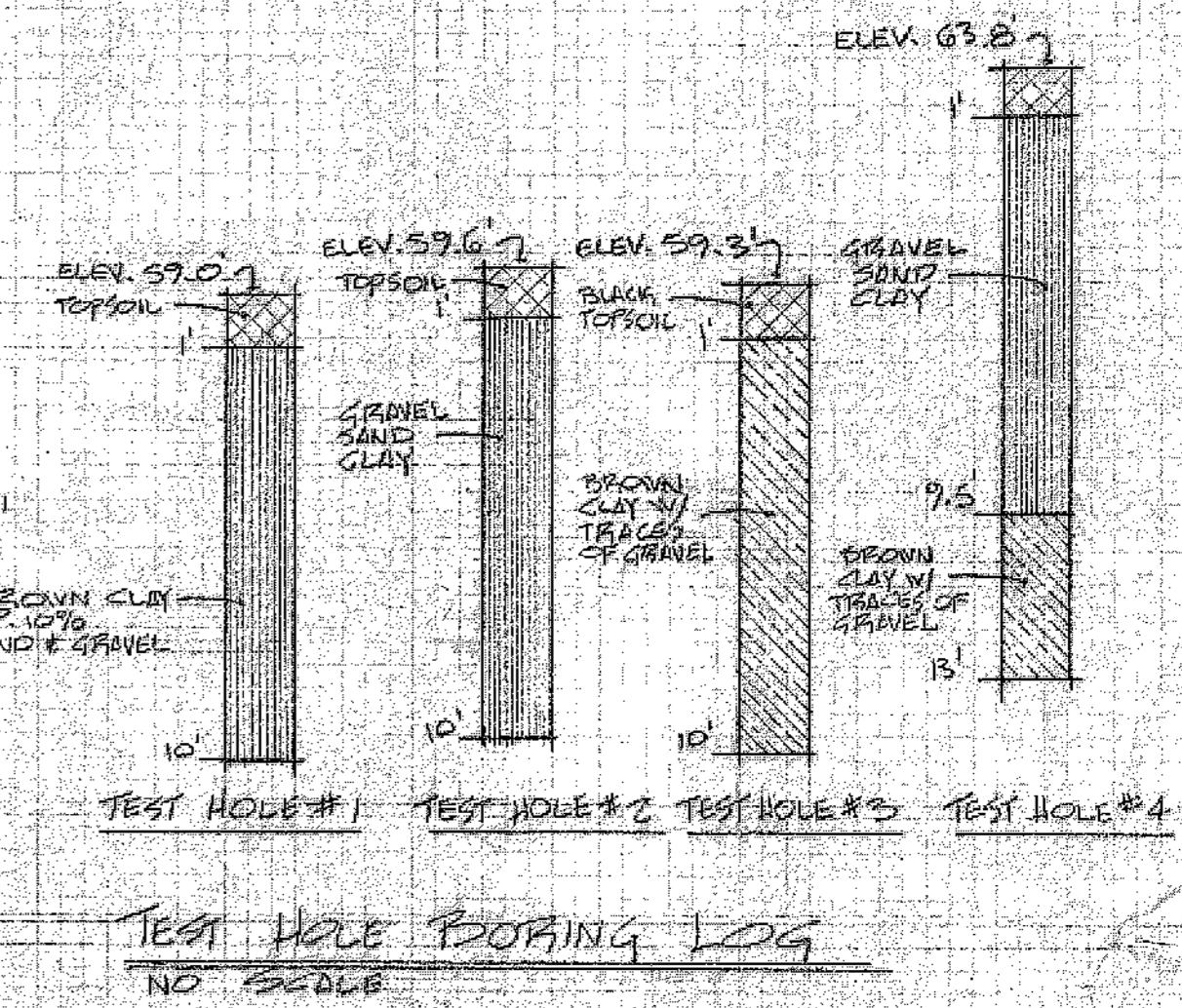
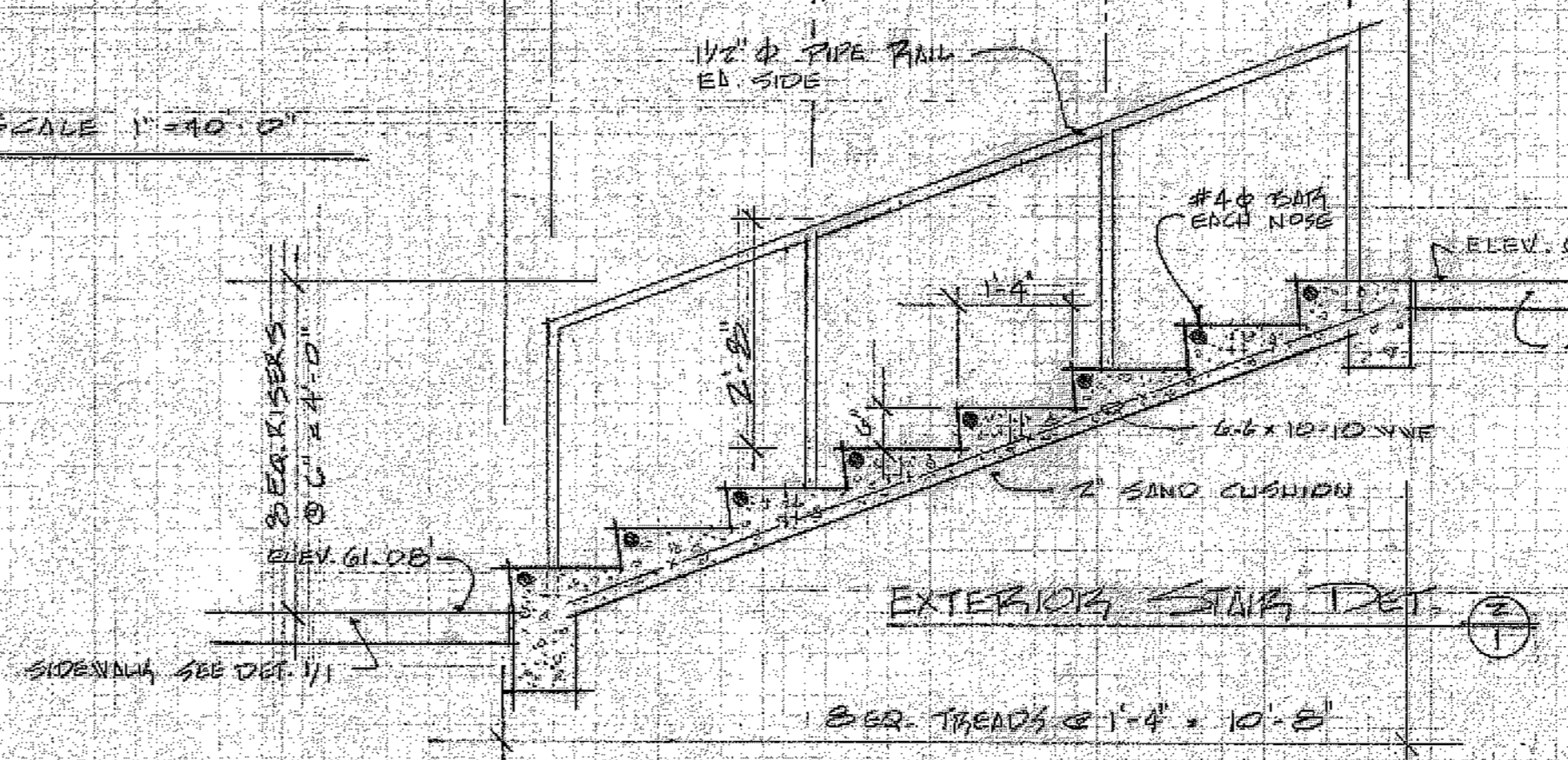
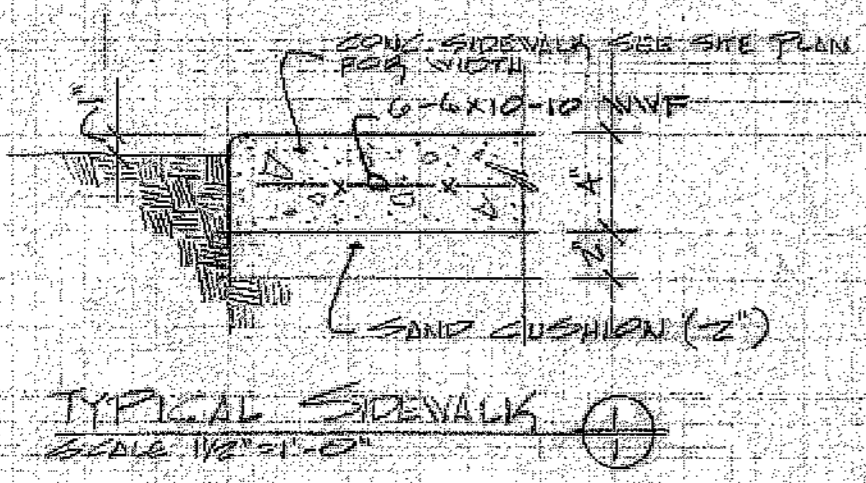


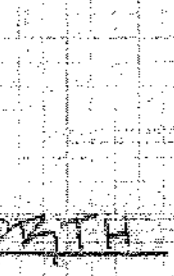
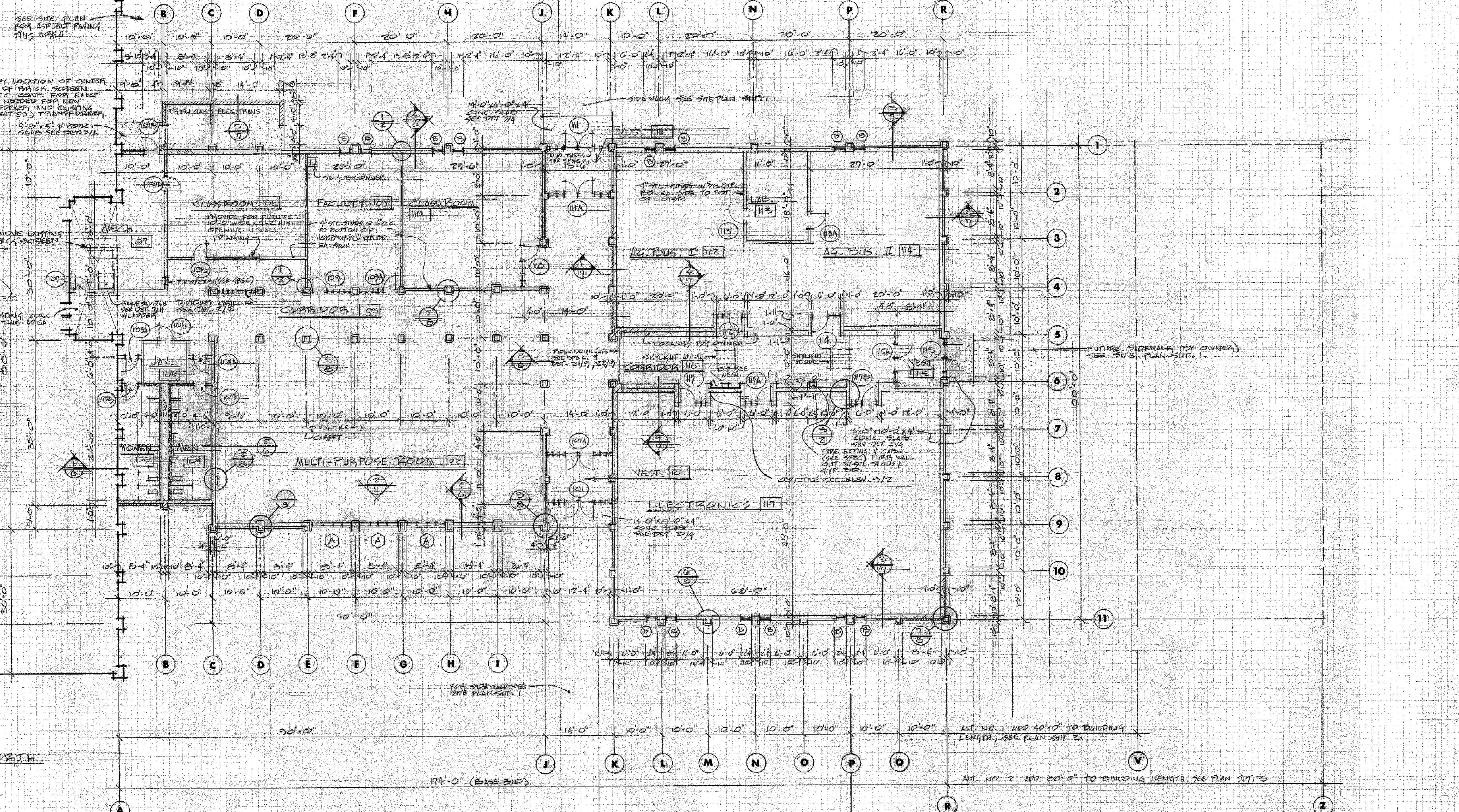
JUL 10 1974

Sheet: SITE PLAN
design drawn checked revisions

ELEVENTH STREET N.E.

SITE PLAN SCALE 1"=40'-0"



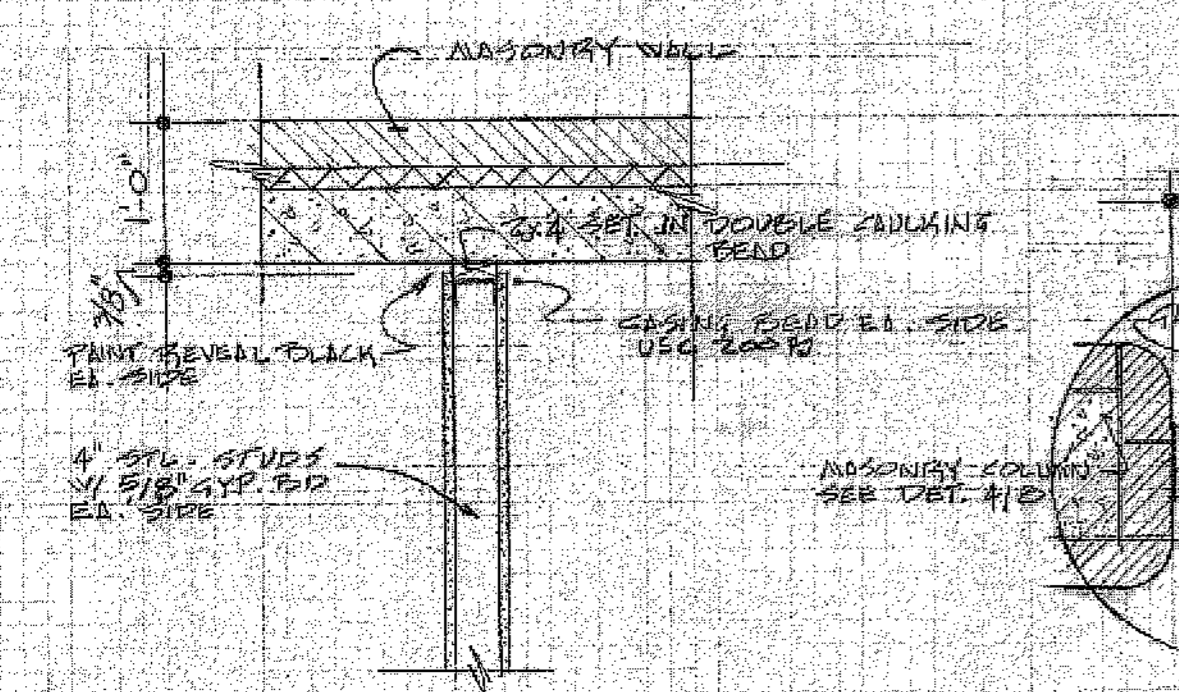


NOTE: VERIFY LOCATION OF CENTER WALL OF PORCH SCREEN W/ ELEC. COMP. FOR EXIST. HOOD. NEEDED FOR NEW TRANSFORMER AND EXISTING (FIELD CUT) TRANSFORMER.
9'-0\"

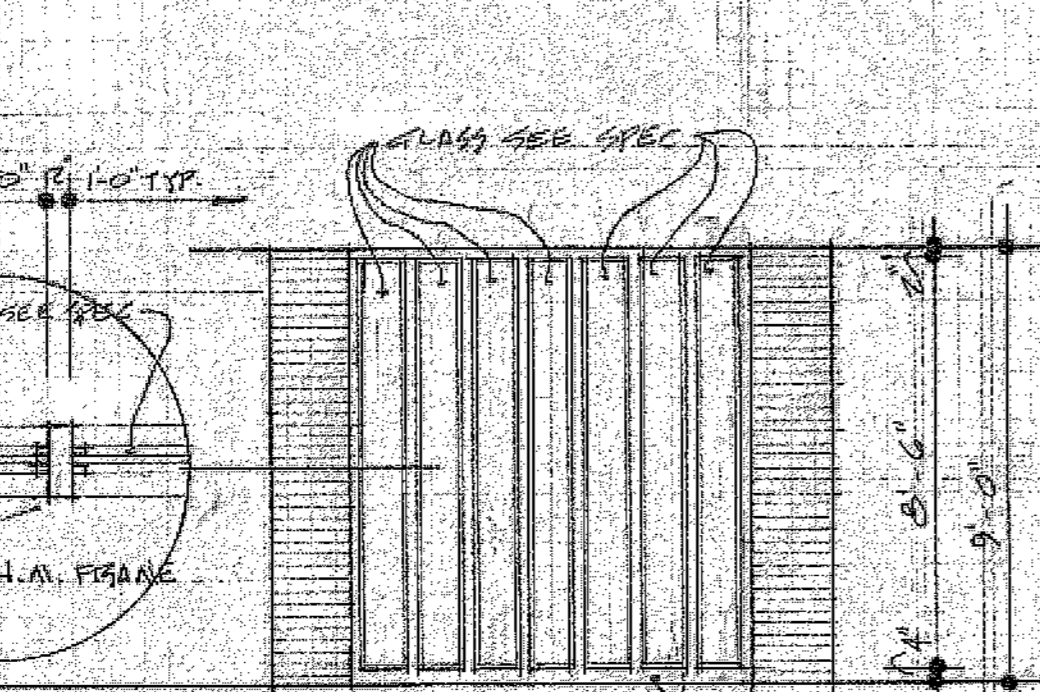
NOTE: (1) SEE ENLARGED PLAN SHIT. 5 FOR ROOMS: WOMEN (108), MEN (109), JAN. (106)
(2) PARTITIONS SHOWN THIS DRAWING TO HAVE RESILIENT SLIP ON SHEET AND FULL THICK INSULATION AND TO GO TO UNDERSIDE OF ROOF DECK.

FLOOR PLAN - BASE BID

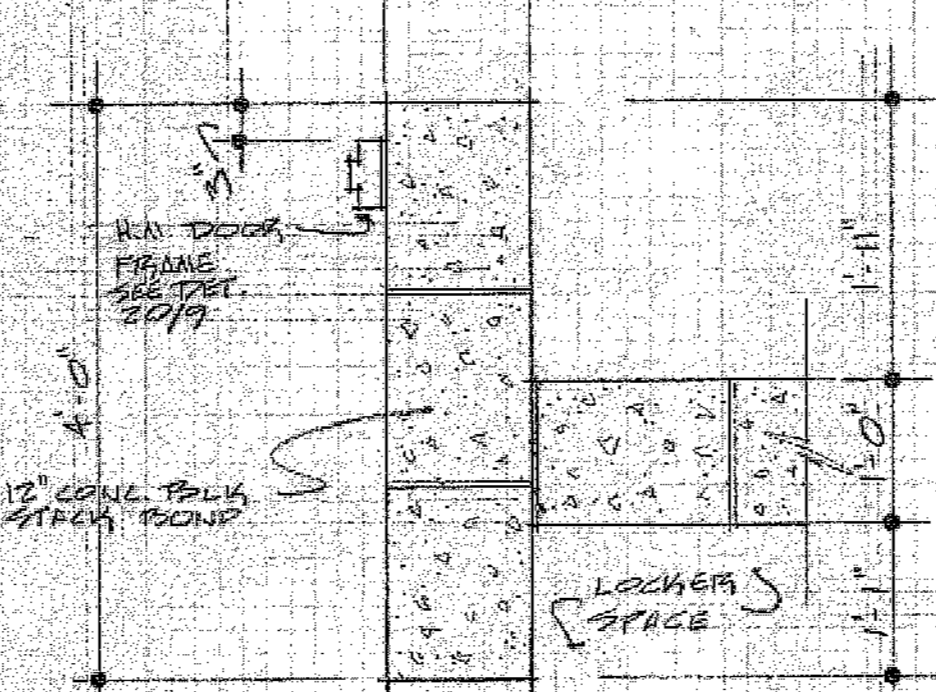
SCALE 3/4\"



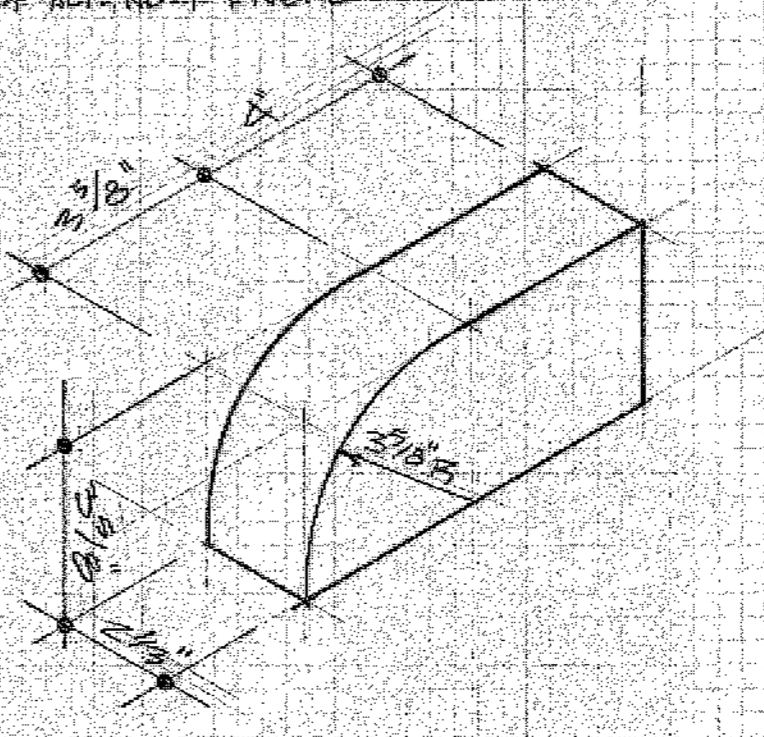
TYP. STUD TO MASONRY WALL DETAIL SCALE 3/4\"



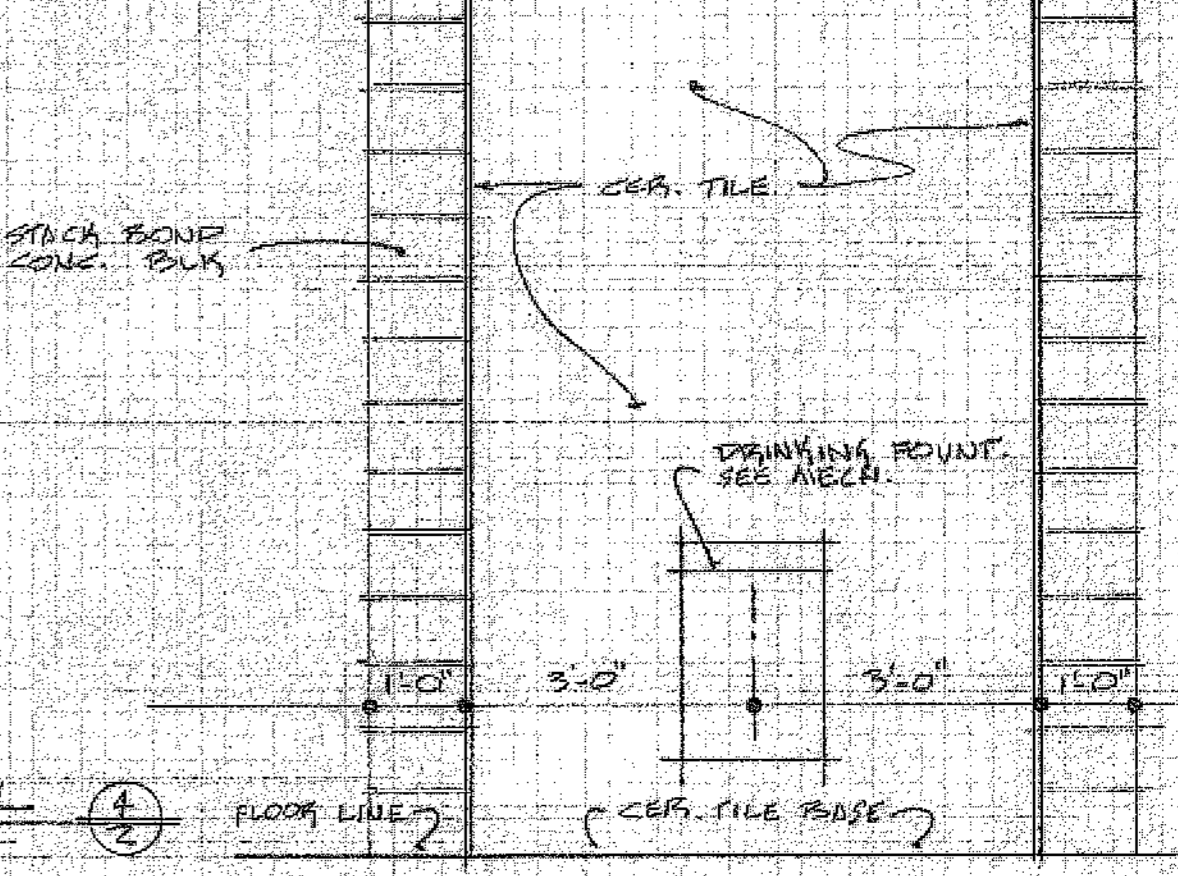
DIVIDING CABINET DETAIL SCALE 1/4\"



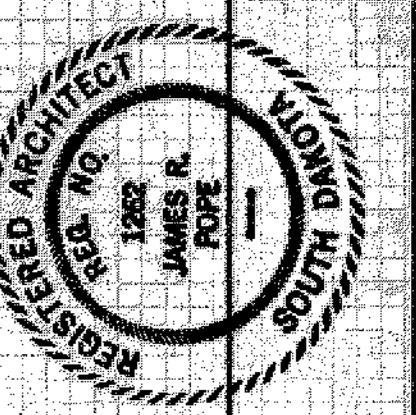
TYPICAL WALL DETAIL SCALE 3/4\"

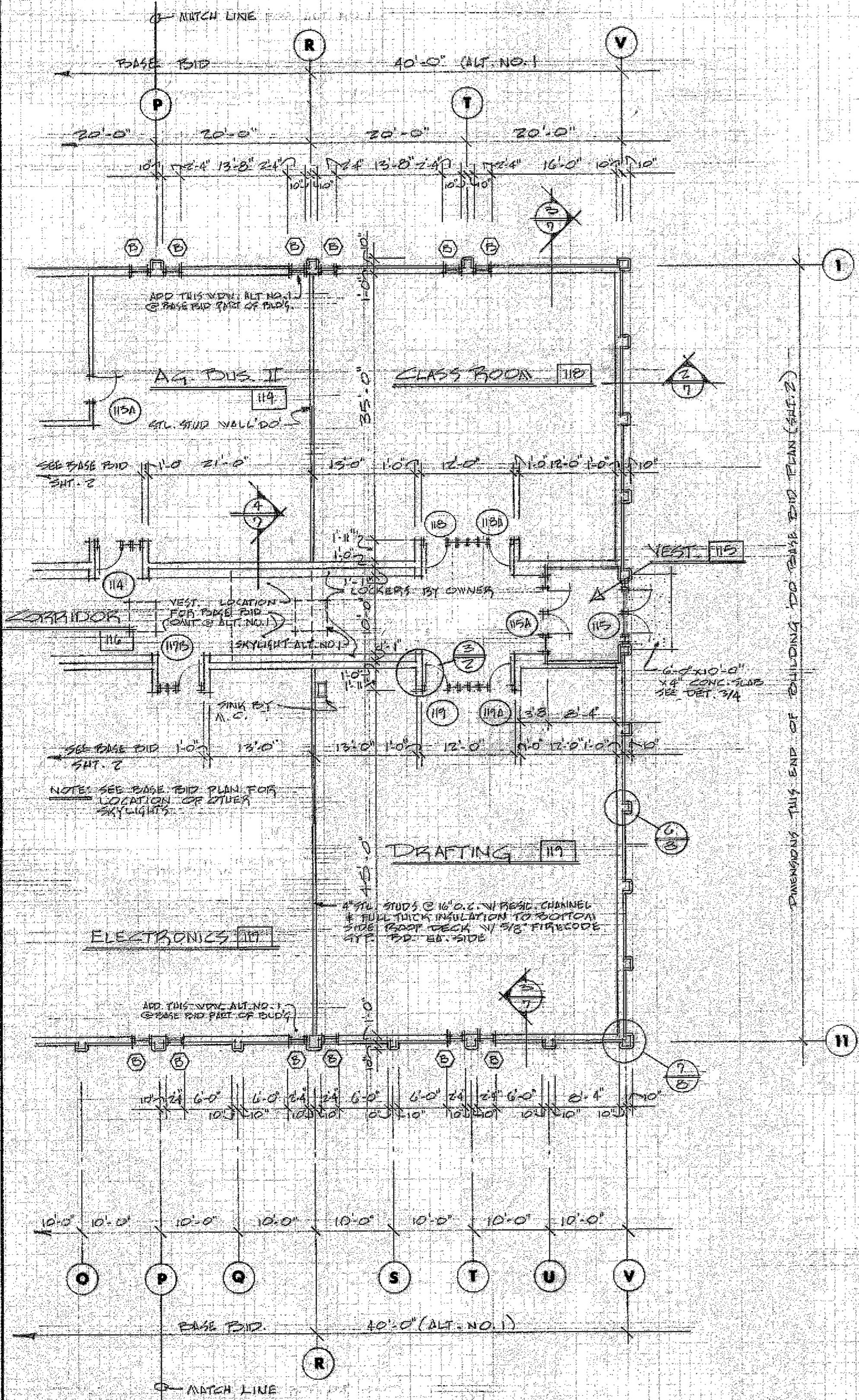


TYPICAL CORNERS PORCH DETAIL NO. SCALE

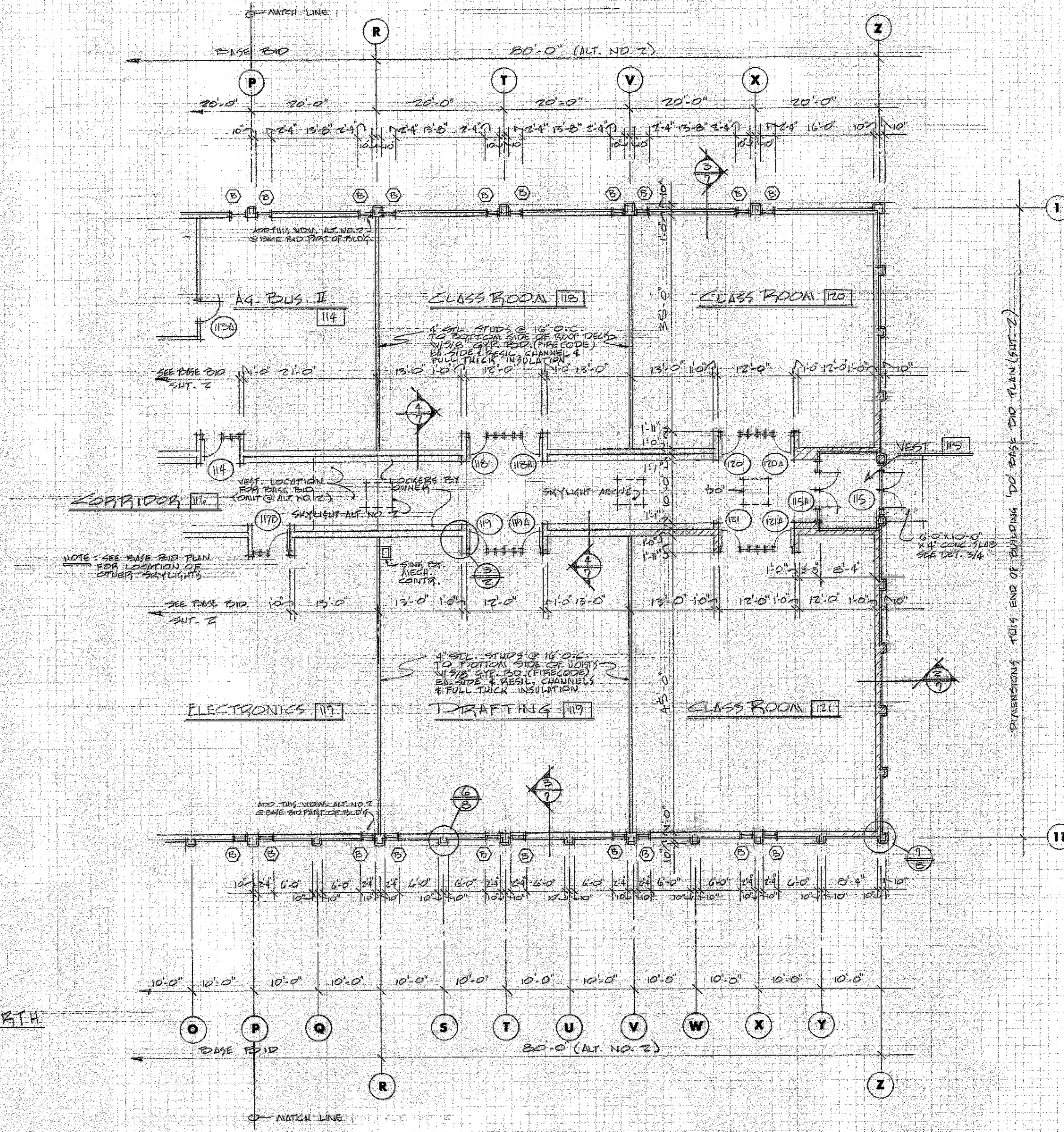


ELEV. DRINKING FOUNT. WALL SCALE 1/2\"





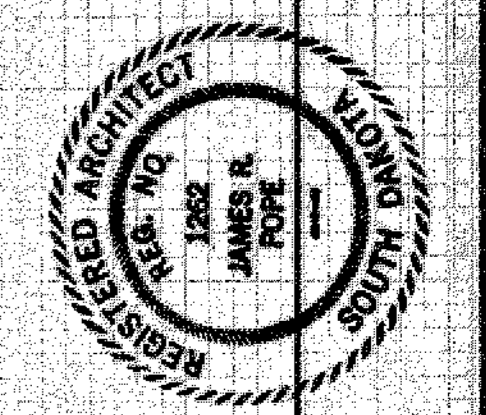
ALT. NO. 1 FLOOR PLAN
SCALE 3/32" = 1'-0"



ALT. NO. 2 FLOOR PLAN
SCALE 3/32" = 1'-0"

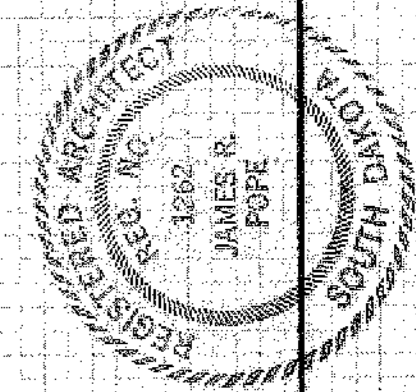
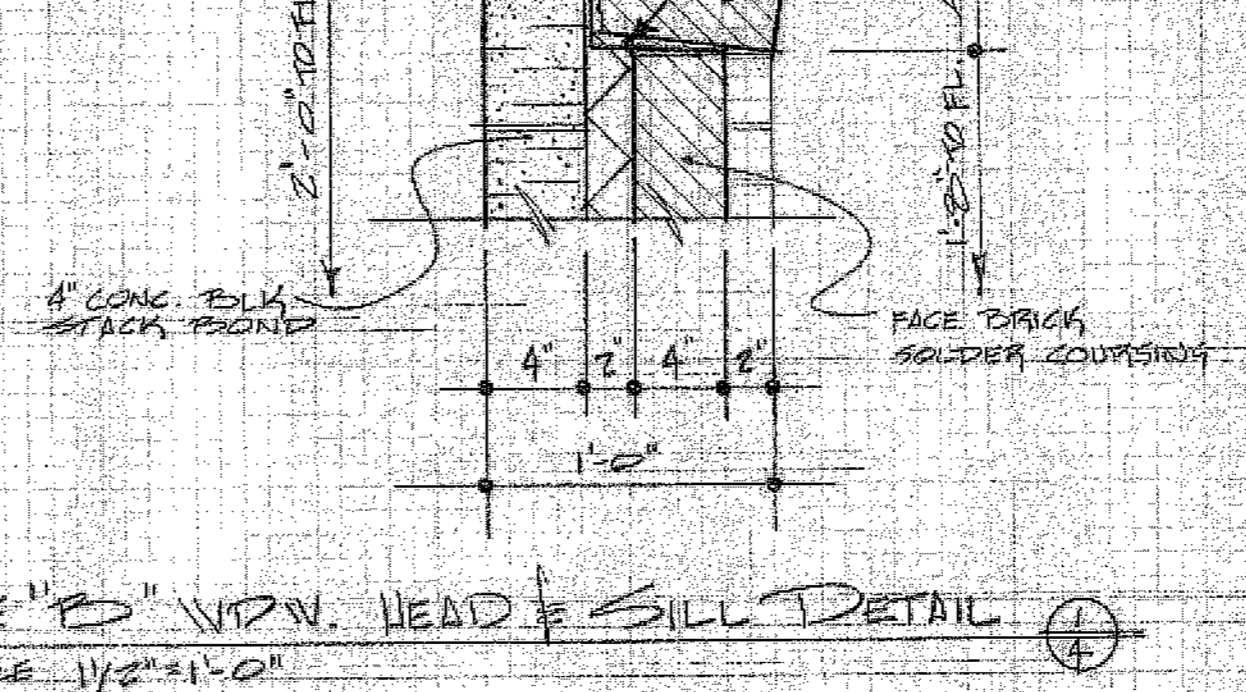
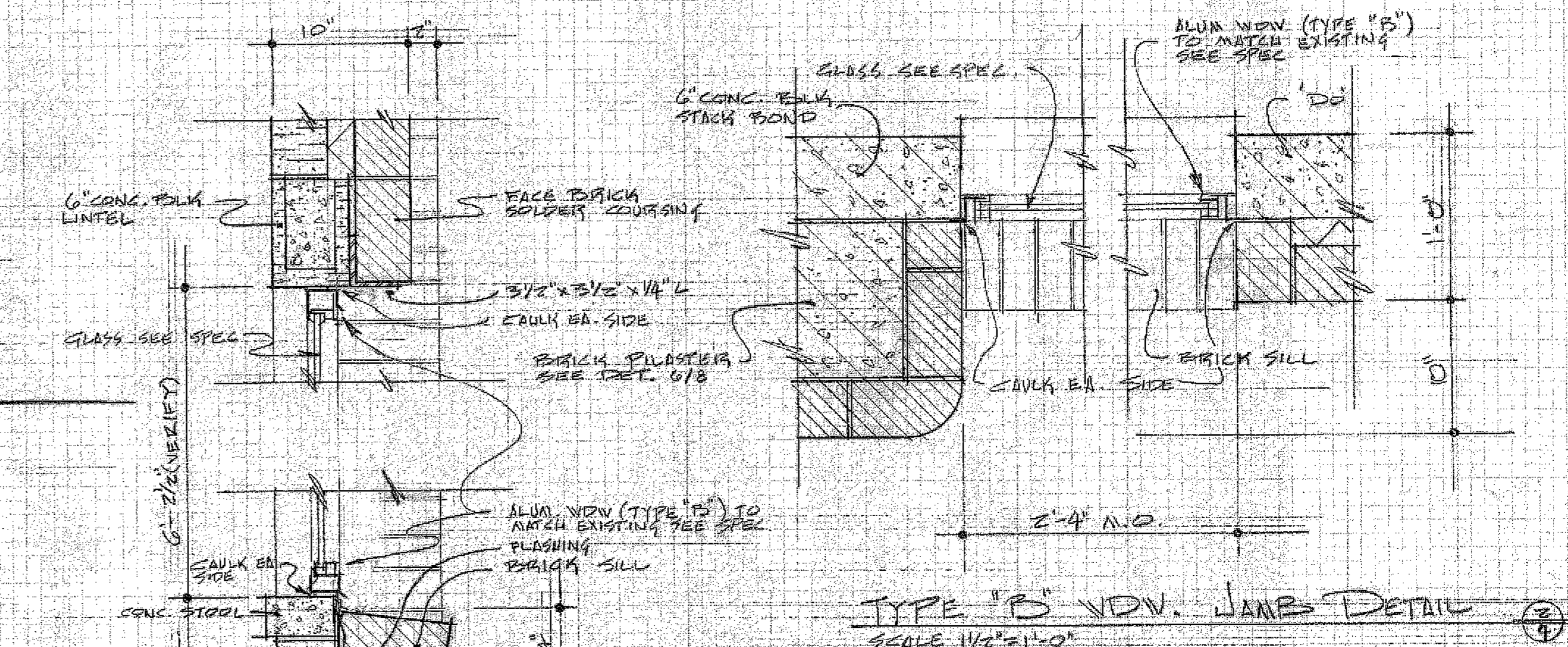
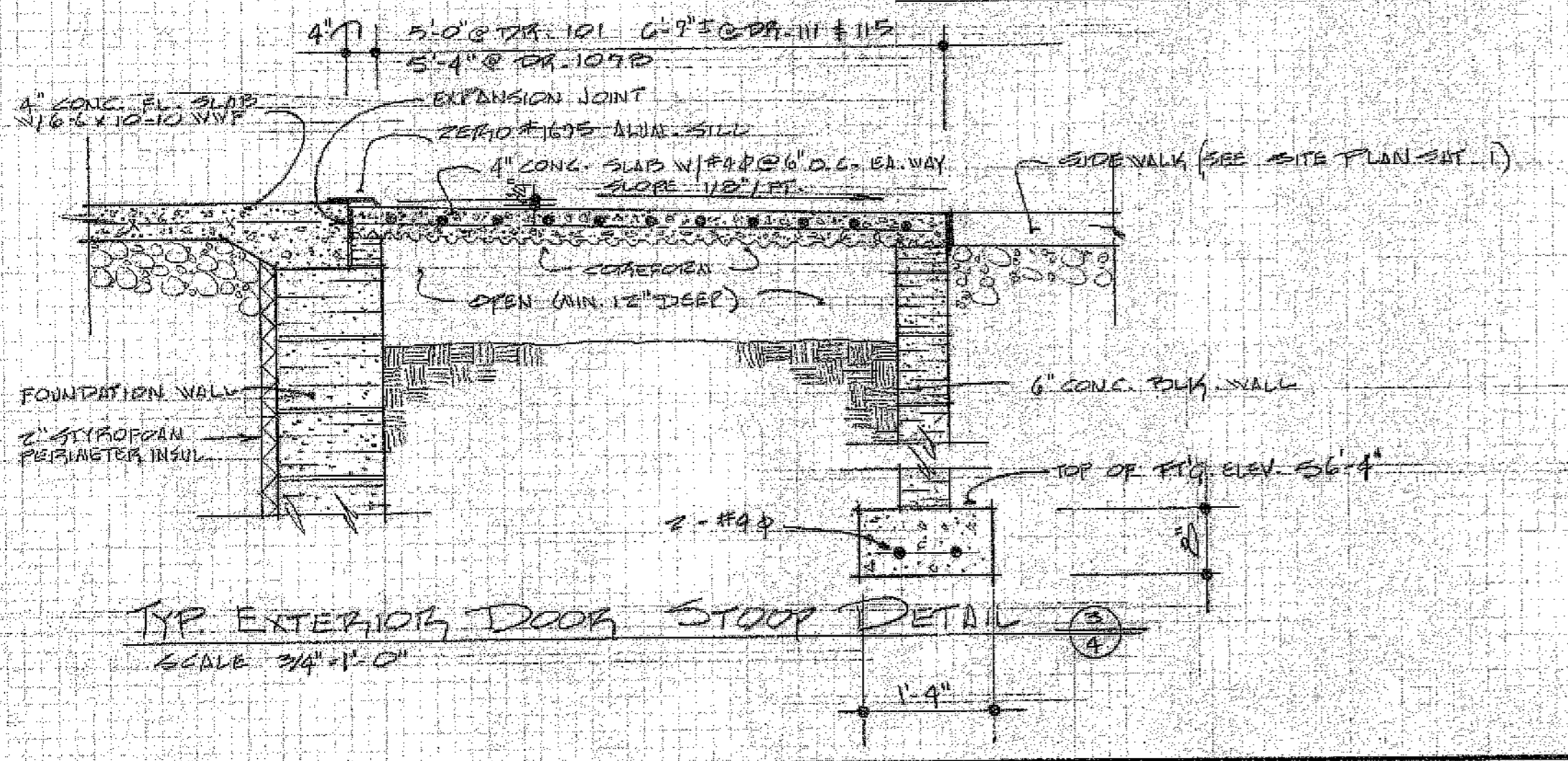
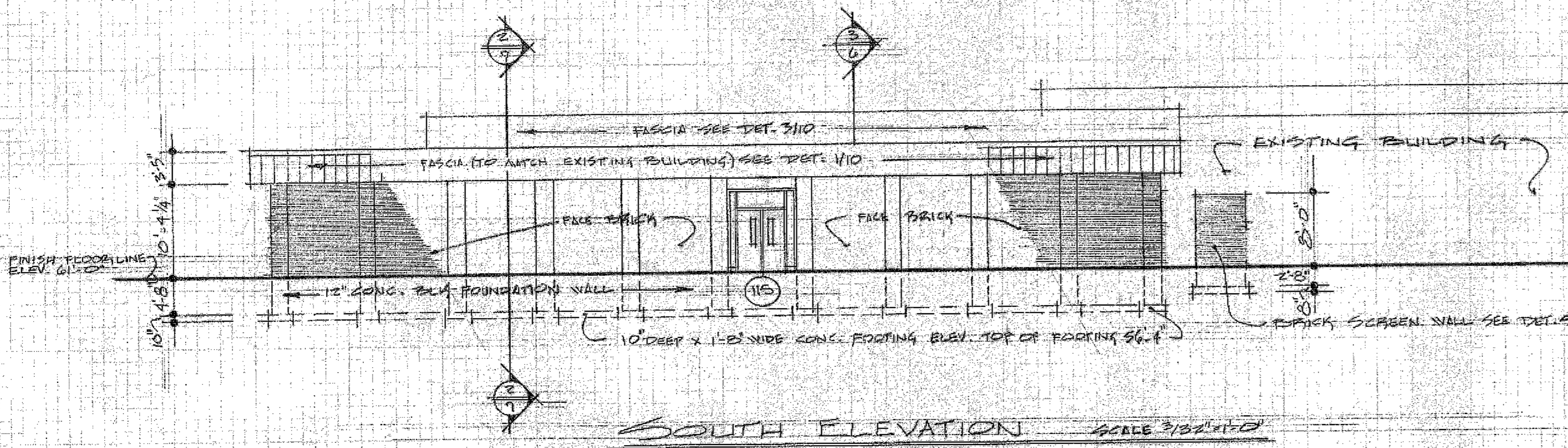
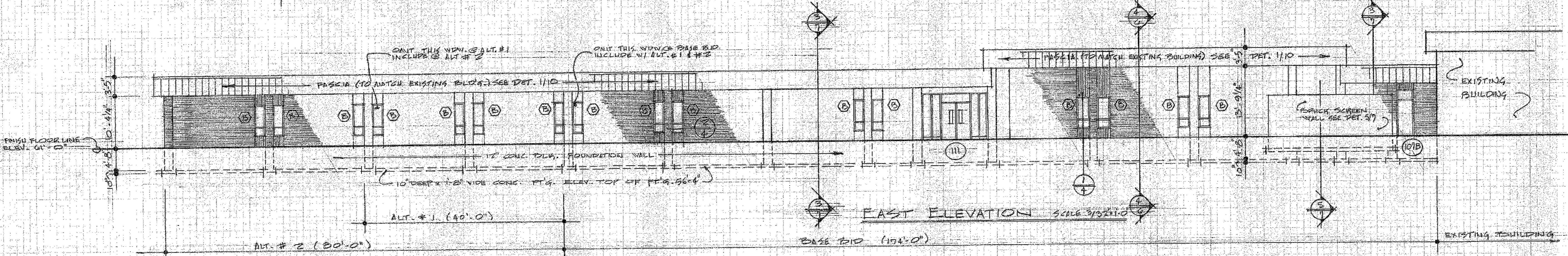
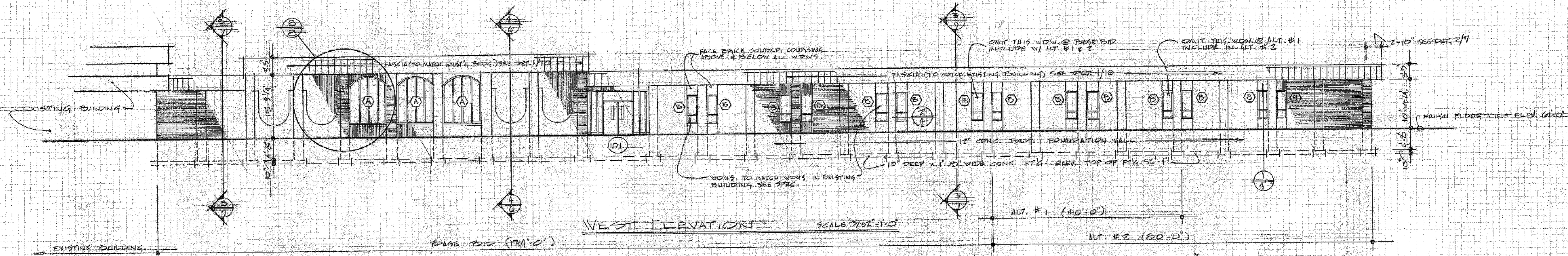
J. R. POPE, ARCHITECT
WATERTOWN, SOUTH DAKOTA

PROPOSED CLASSROOM ADDITION
JAMES EARL VOKATIONAL TECHNICAL SCHOOL
WATERTOWN, SOUTH DAKOTA



J.R.P.
10/10/1974

SHEET FLOOR PLANS - ALT. NO. 1 & NO. 2
design
drawn
checked
revisions



J. R. Pope, architect
 water town, south dakota

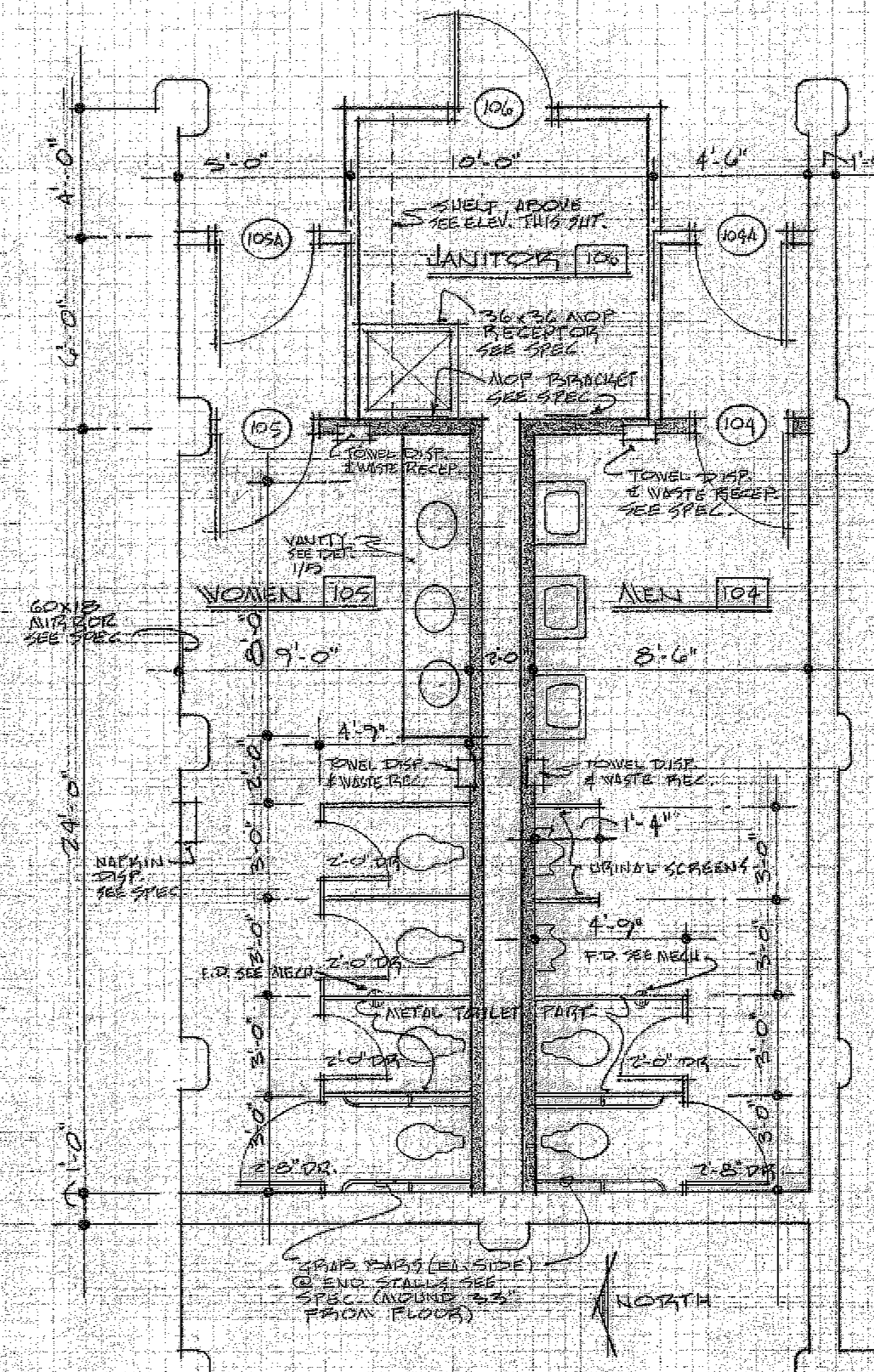
PROPOSED SUBSIDIARY ADDITION
 LAKE AREA VOCATIONAL TECHNICAL SCHOOL
 WATER TOWN, SOUTH DAKOTA

JAN. 10, 1994

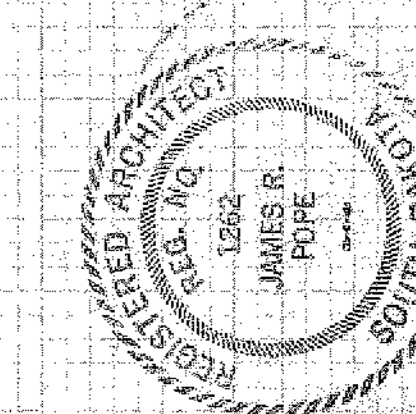
sheet exterior elevations
 design
 drawn
 checked
 revisions

4

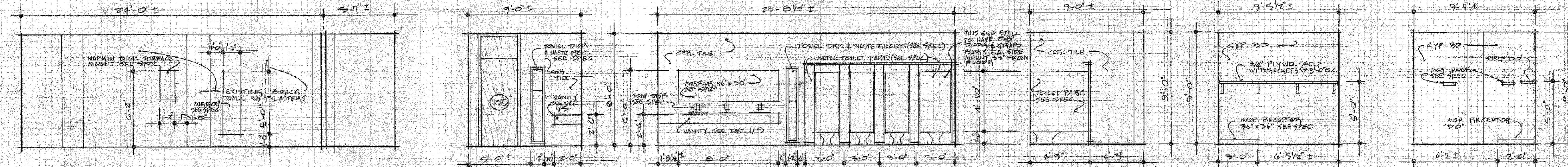
ROOM		FINISH		SCHEDULE				PAINTERS SCHEDULE				SCHEDULE			
ROOM NO.	FLOOR	BASE	WALLS	CEILING	REMARKS	WALLS	CEILING	REMARKS	WALLS	CEILING	REMARKS	WALLS	CEILING	REMARKS	
		QUARRY TILE	CERAMIC TILE	QUARRY TILE	CERAMIC TILE	ACQUISTE TILE	OFF-PAV. BRD	EXPOSED STEEL	VINYL FABRIC	EPOXY ENAMEL	ALUMINUM	ALUMINUM	SPECIAL TEXTURE	FACTORY FIN.	
VESTIBULE	101														
MULTI-PURPOSE	102	3													
COMBODOR	103														
MEN'S TOILET	104														
WOMEN'S TOILET	105														
BANITOP	106														
MECH.	107														
CLASS ROOM	108														
FACULTY	109														
CLASS ROOM	110	3													
VESTIBULE	111														
A.G. BUS. I	112														
LAB.	113														
A.G. BUS. II	114														
VESTIBULE	115														
COMBODOR	116														
ELECTRONICS	117														
CLASS ROOM	118	3													
DRAFTING	119	3													
CLASS ROOM	120	3													
CLASS ROOM	121	3													



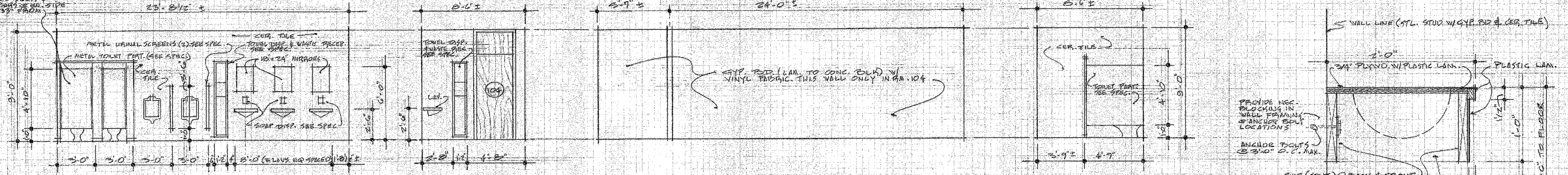
NOTE:
PARTITIONS SHOWN THIS
TO HAVE RESISTENT CHANNELS ONE
SIDE AND FULL THICK PARTITION
AND TO GO TO UNDER SIDE OF
ROOF DECK.



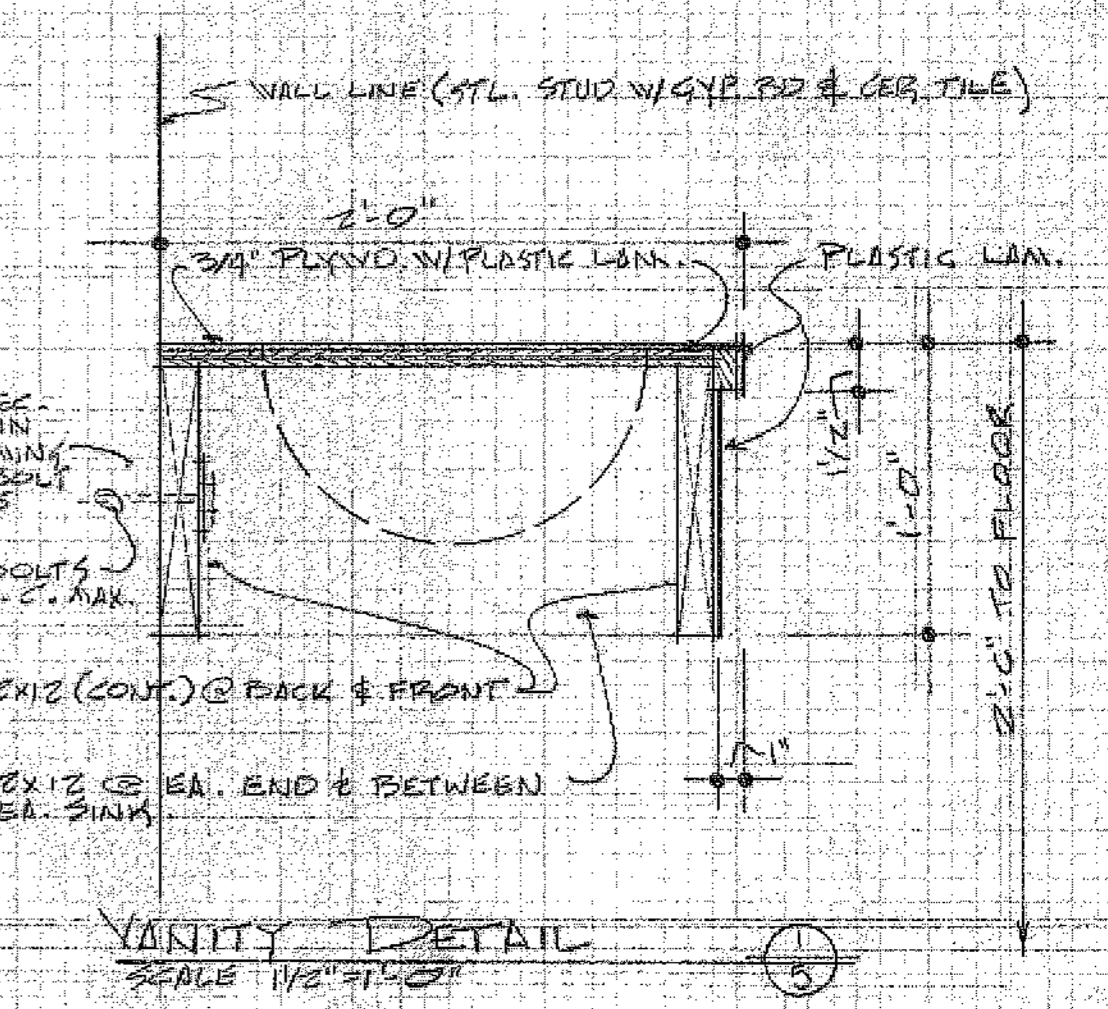
FLOOR PLAN ROOMS 104, 105 & 106
SCALE 1/4"=1'-0"



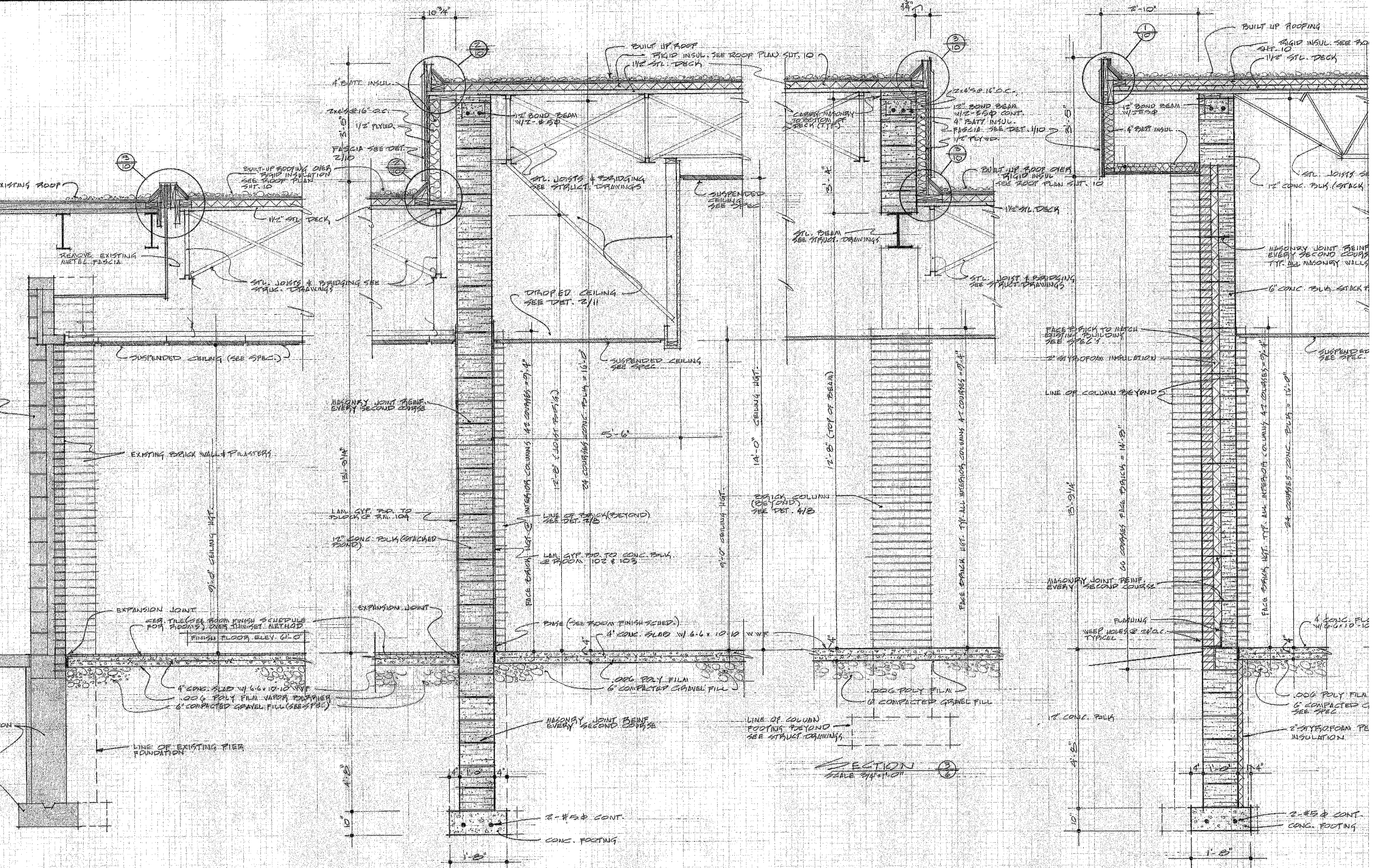
NORTH ELEVATION RM. 105
SCALE 1/4"=1'-0"
EAST ELEVATION RM. 105
SCALE 1/4"=1'-0"
SOUTH ELEVATION RM. 105
SCALE 1/4"=1'-0"
WEST ELEVATION RM. 105
SCALE 1/4"=1'-0"
NORTH ELEVATION RM. 106
SCALE 1/4"=1'-0"
WEST ELEVATION RM. 106
SCALE 1/4"=1'-0"



NORTH ELEVATION RM. 104
SCALE 1/4"=1'-0"
EAST ELEVATION RM. 104
SCALE 1/4"=1'-0"
SOUTH ELEVATION RM. 104
SCALE 1/4"=1'-0"
WEST ELEVATION RM. 104
SCALE 1/4"=1'-0"



VANITY DETAIL
SCALE 1/2"=1'-0"

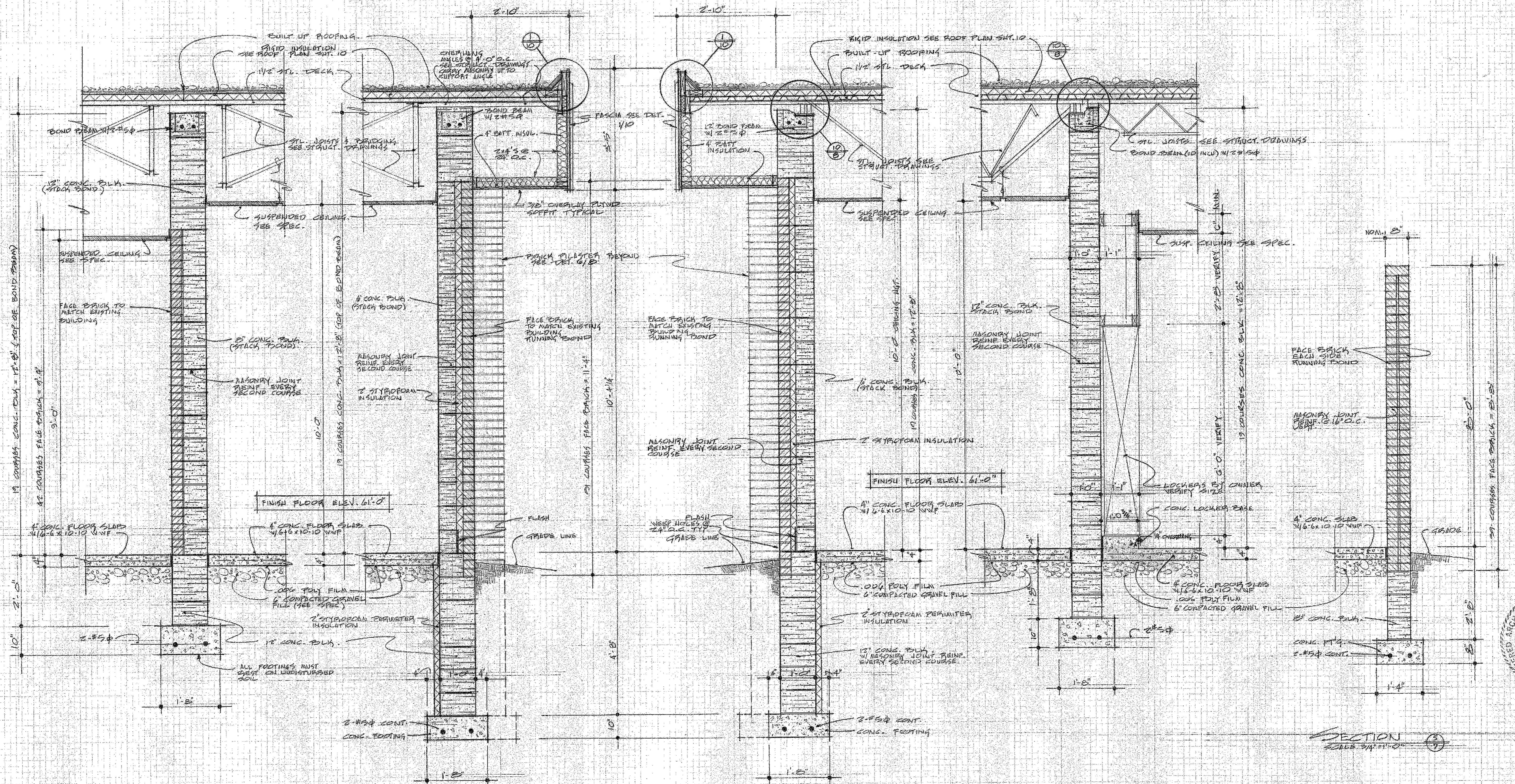


SECTION ①
SCALE 3/4"=1'-0"

SECTION ②
SCALE 3/4"=1'-0"

SECTION ③
SCALE 3/4"=1'-0"

SECTION ④
SCALE 3/4"=1'-0"

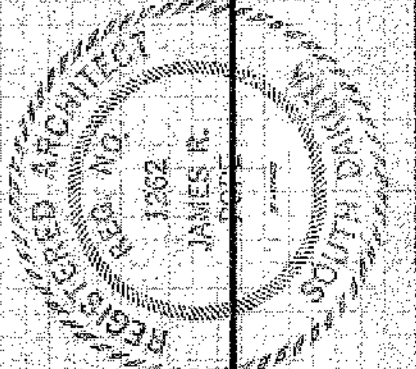


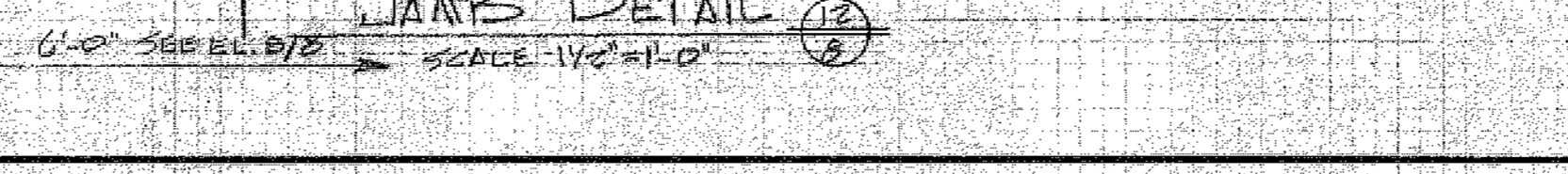
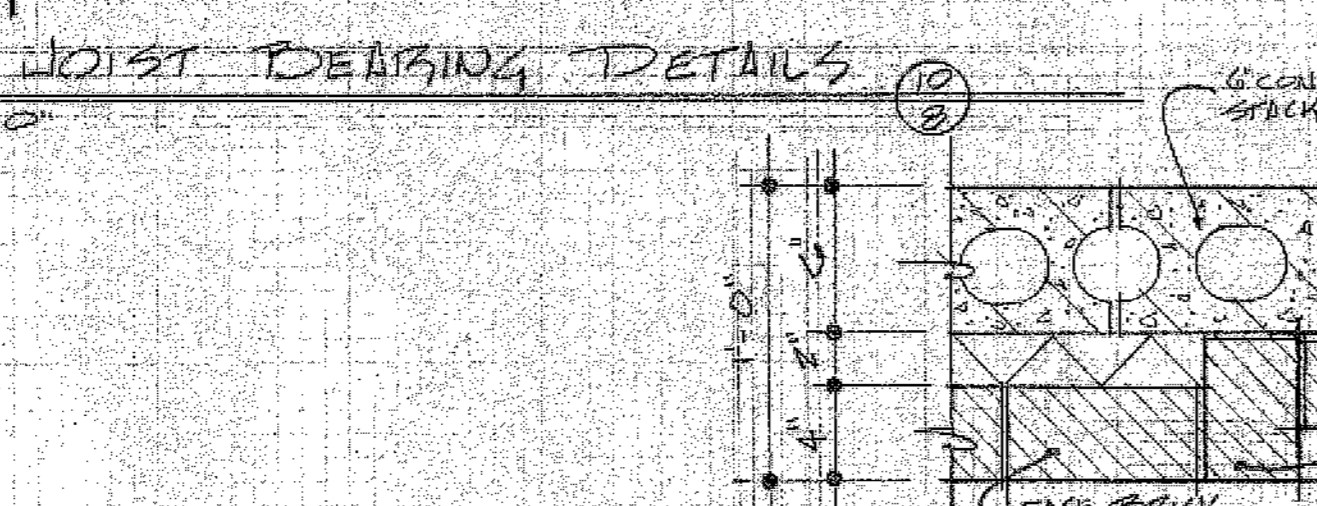
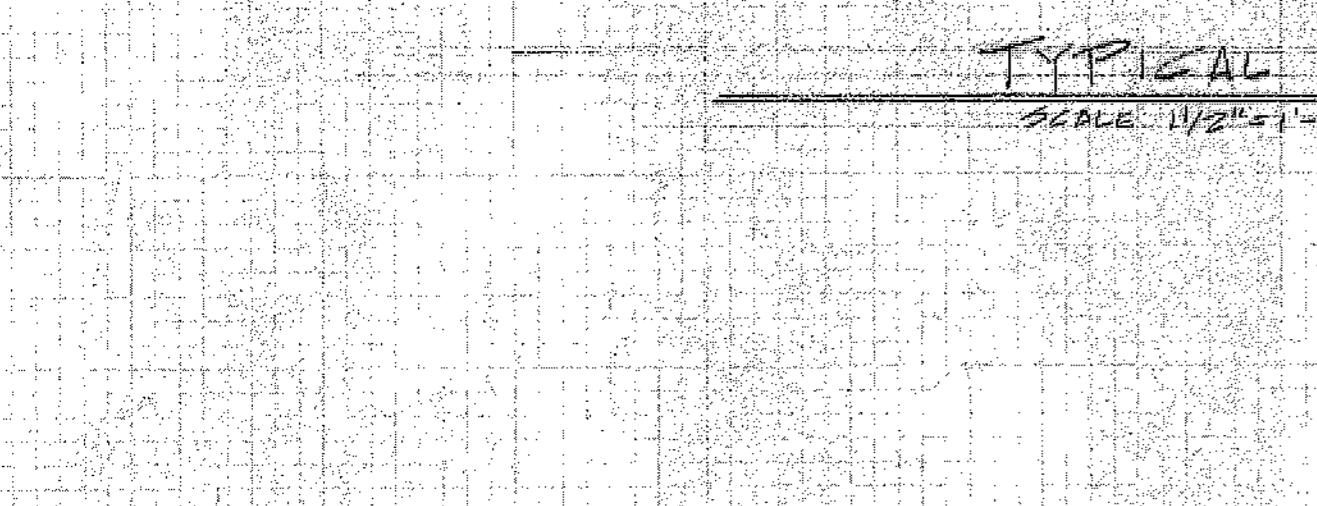
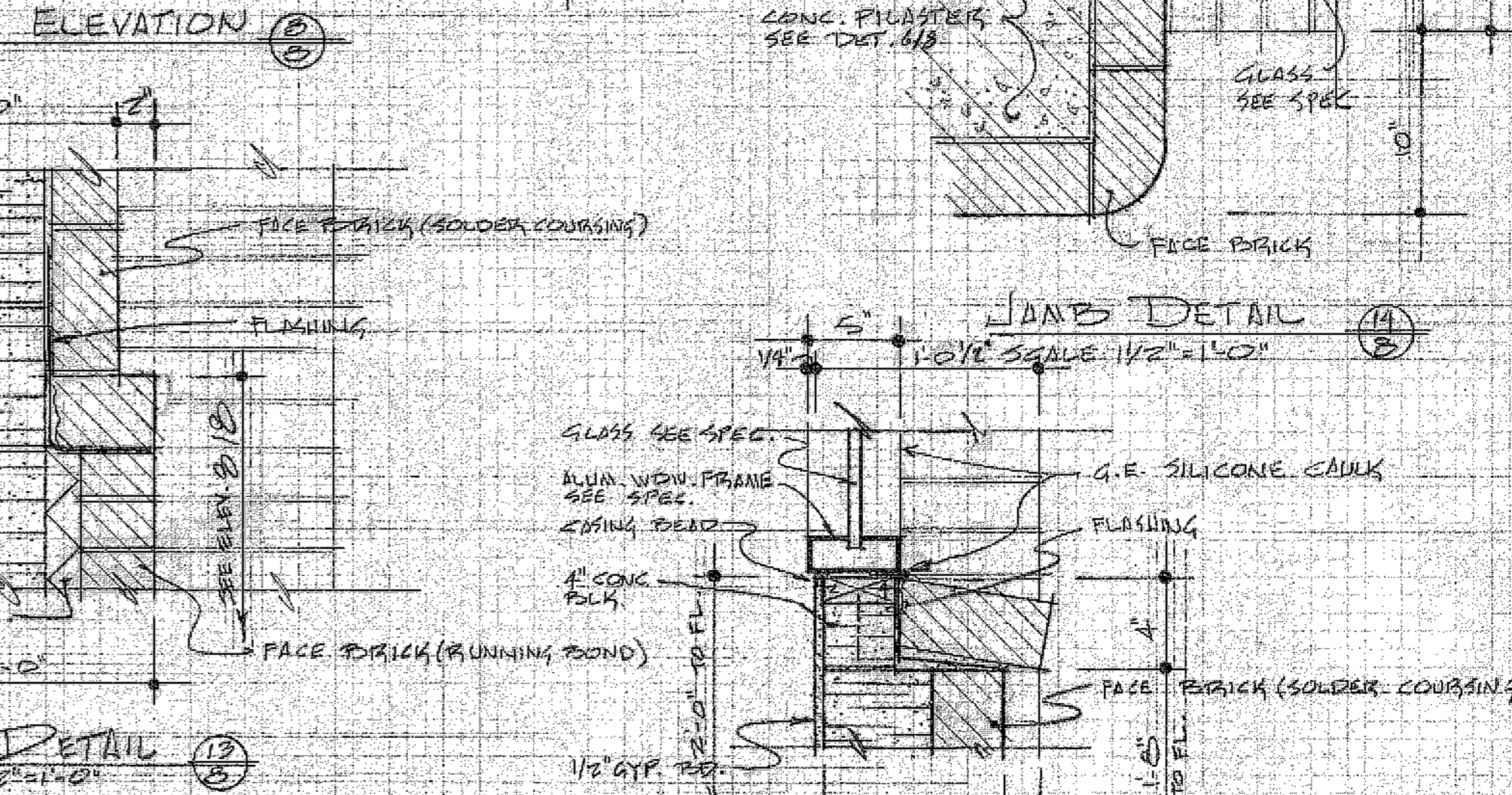
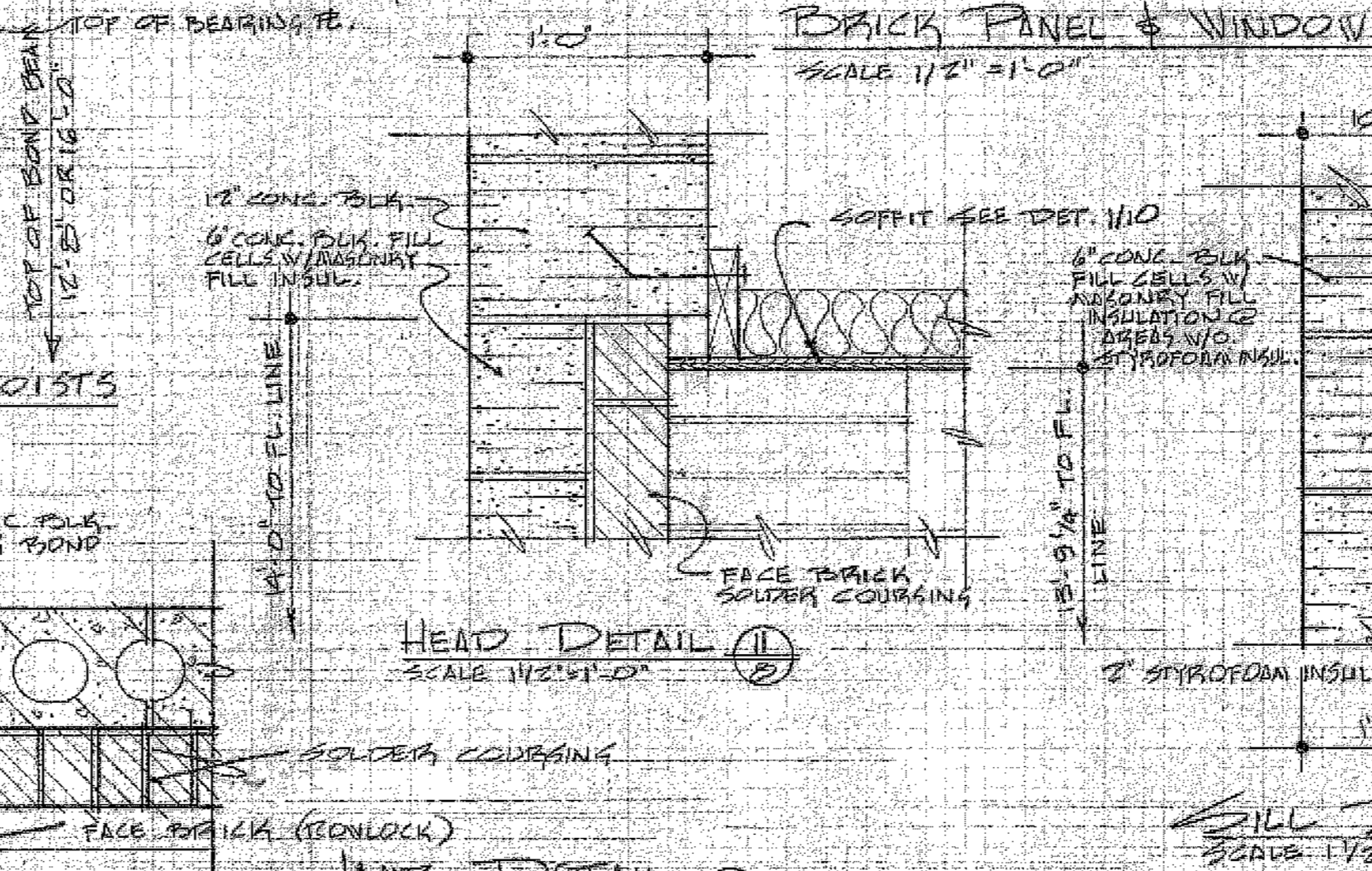
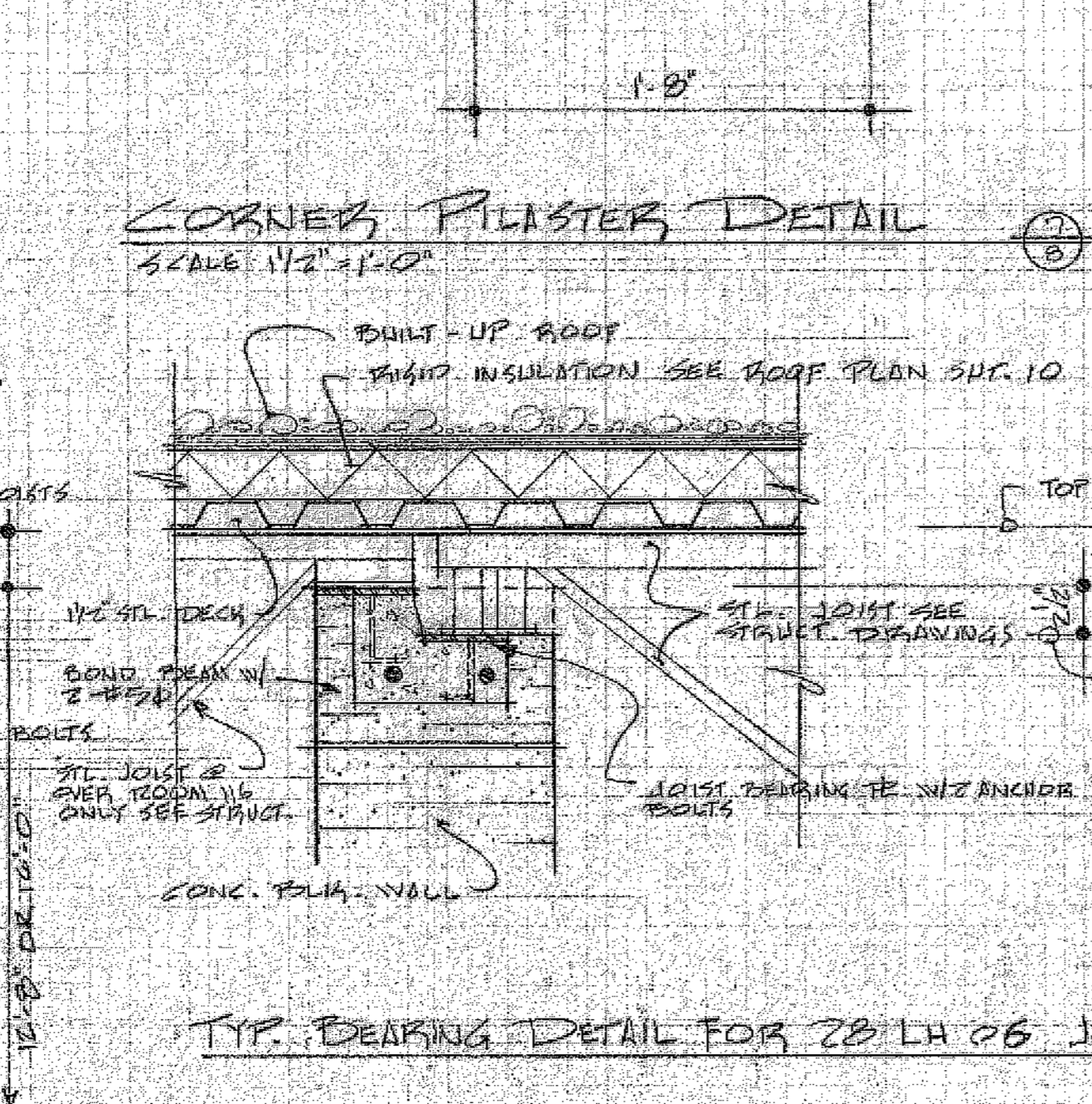
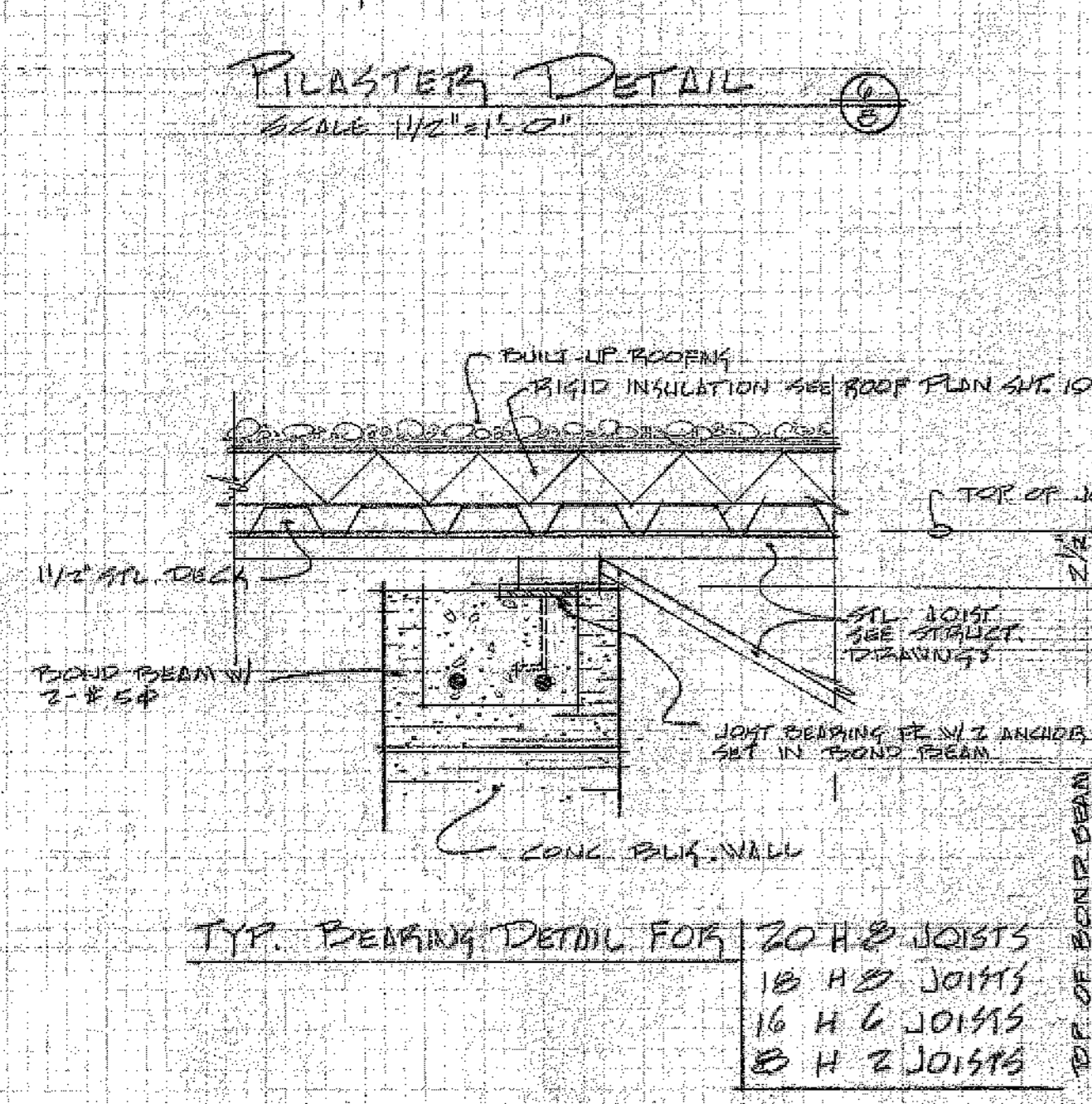
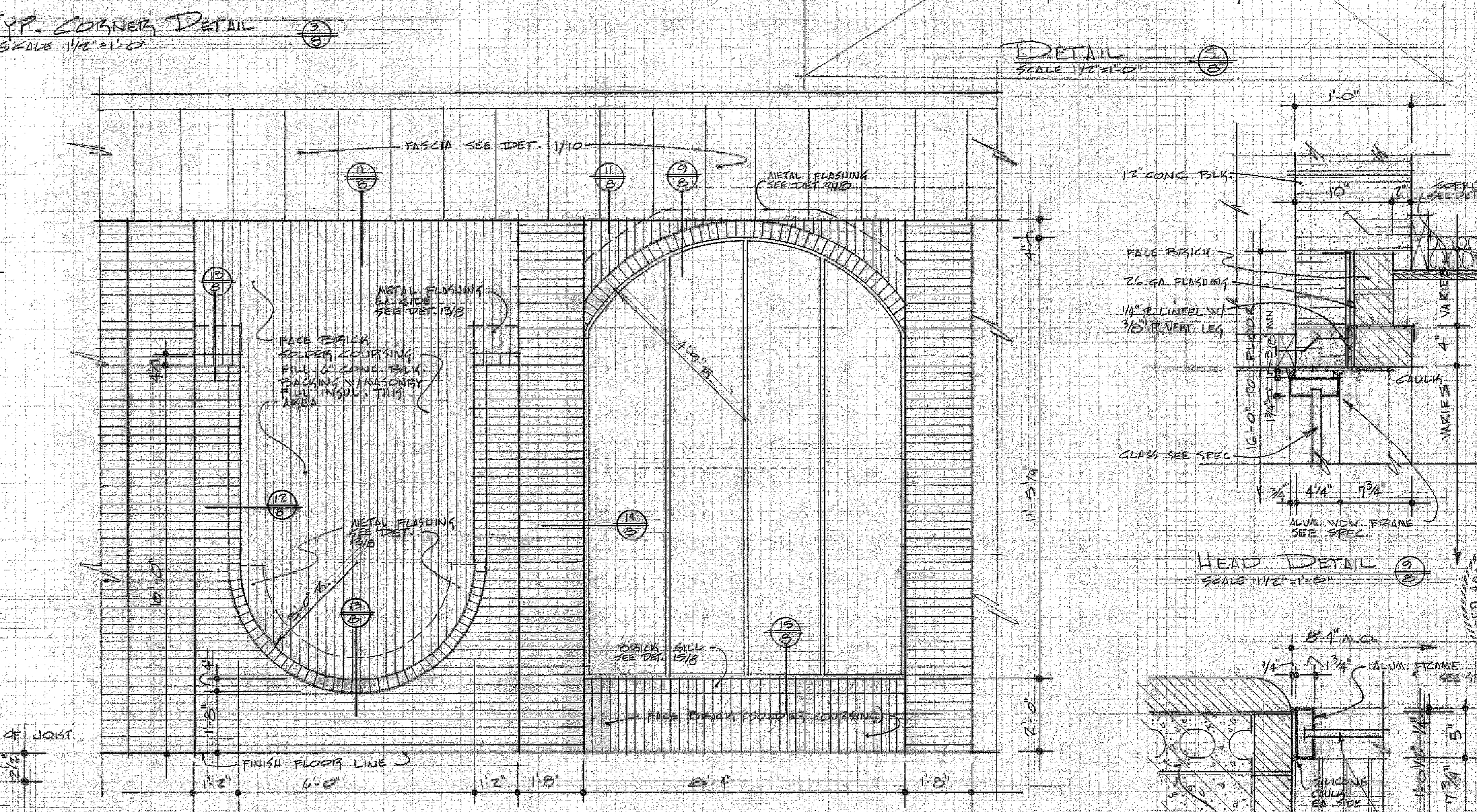
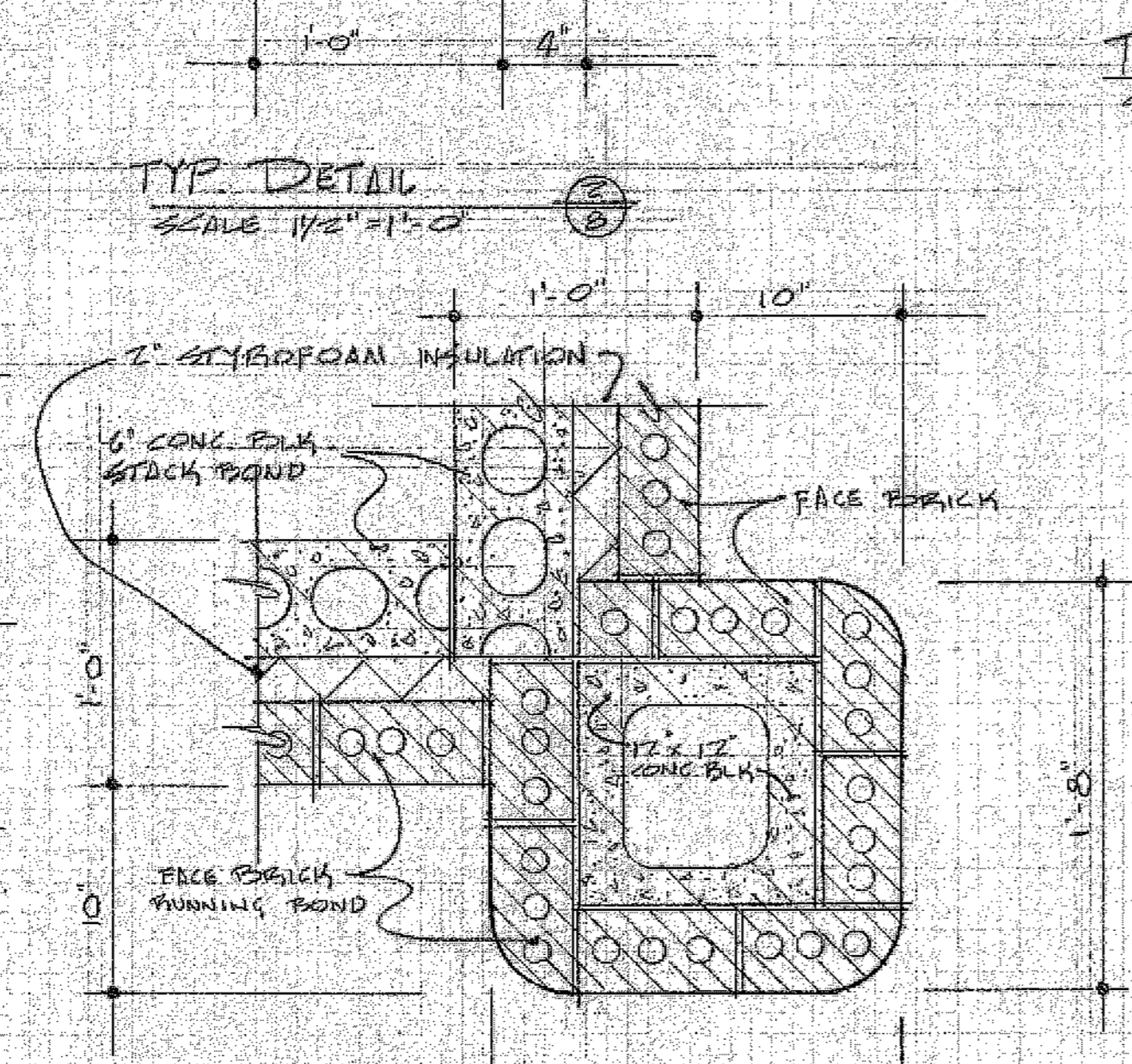
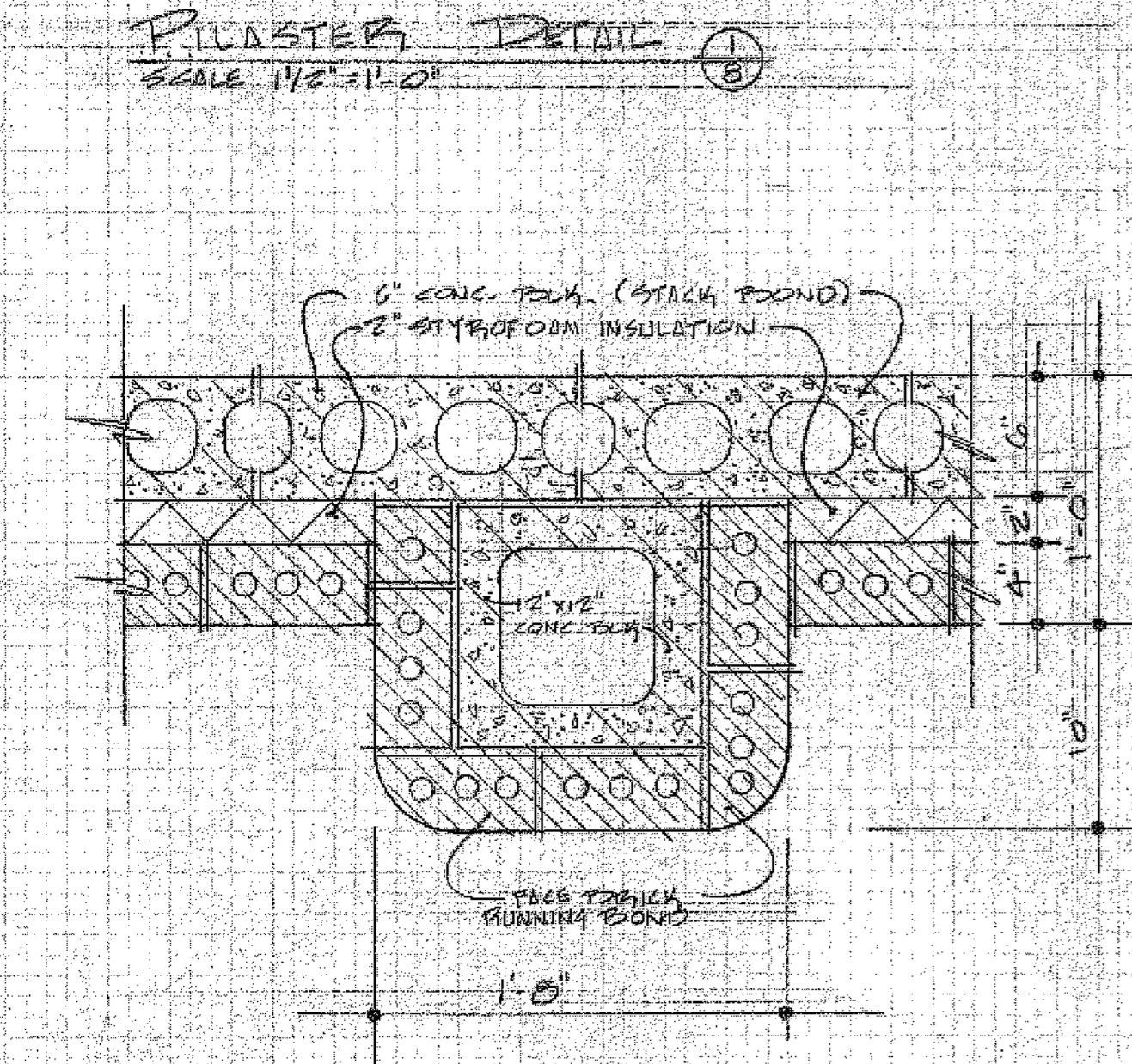
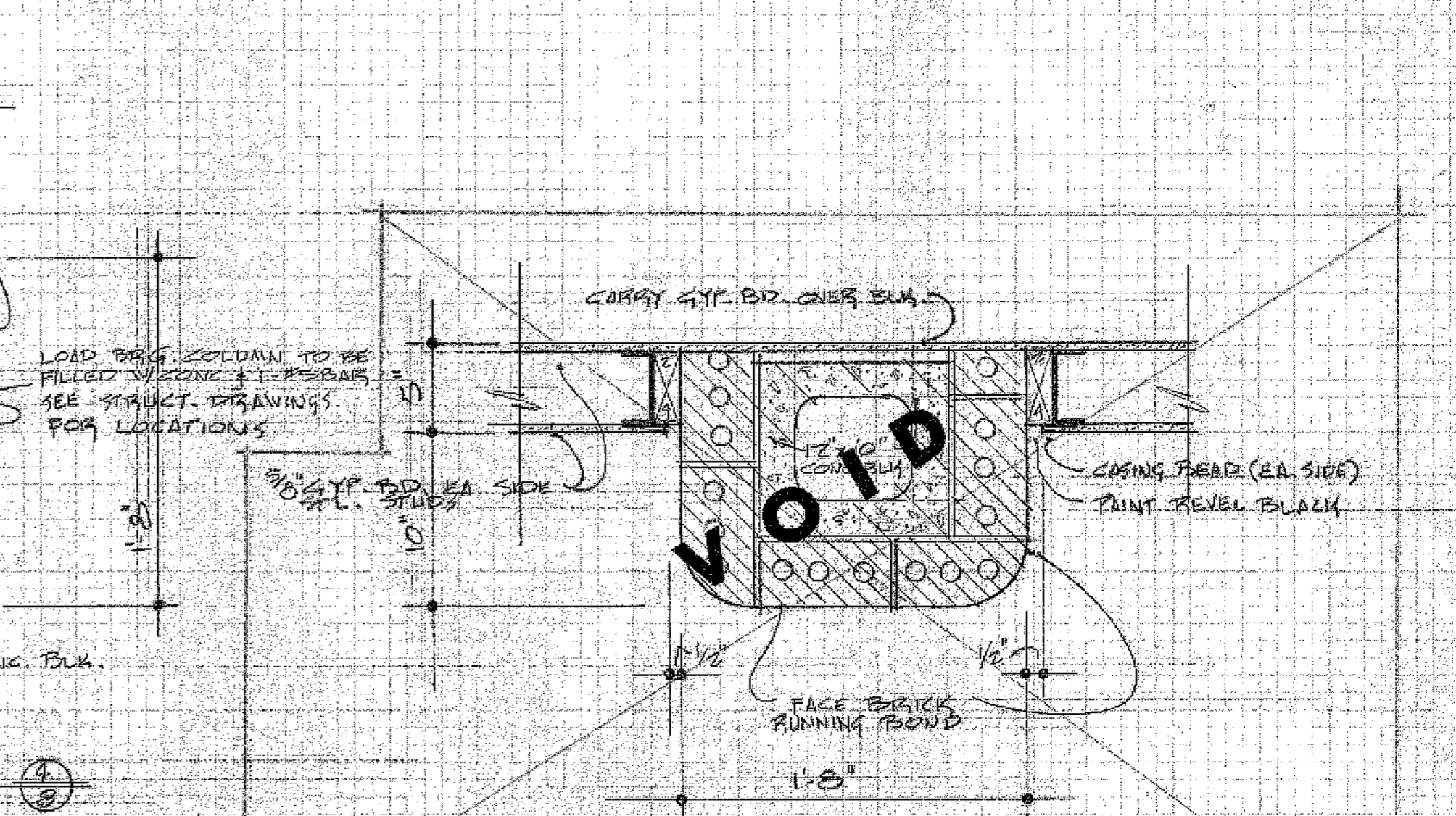
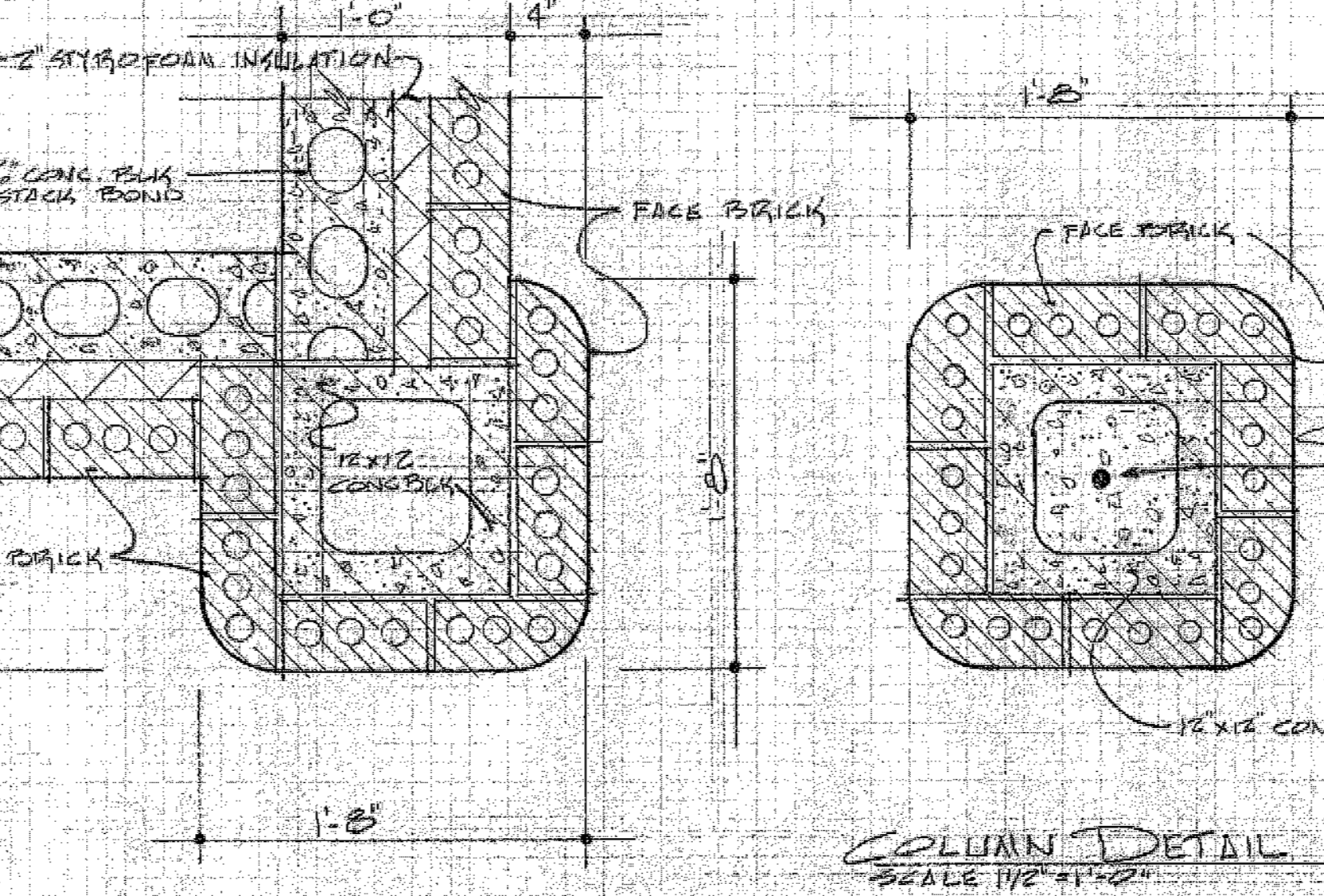
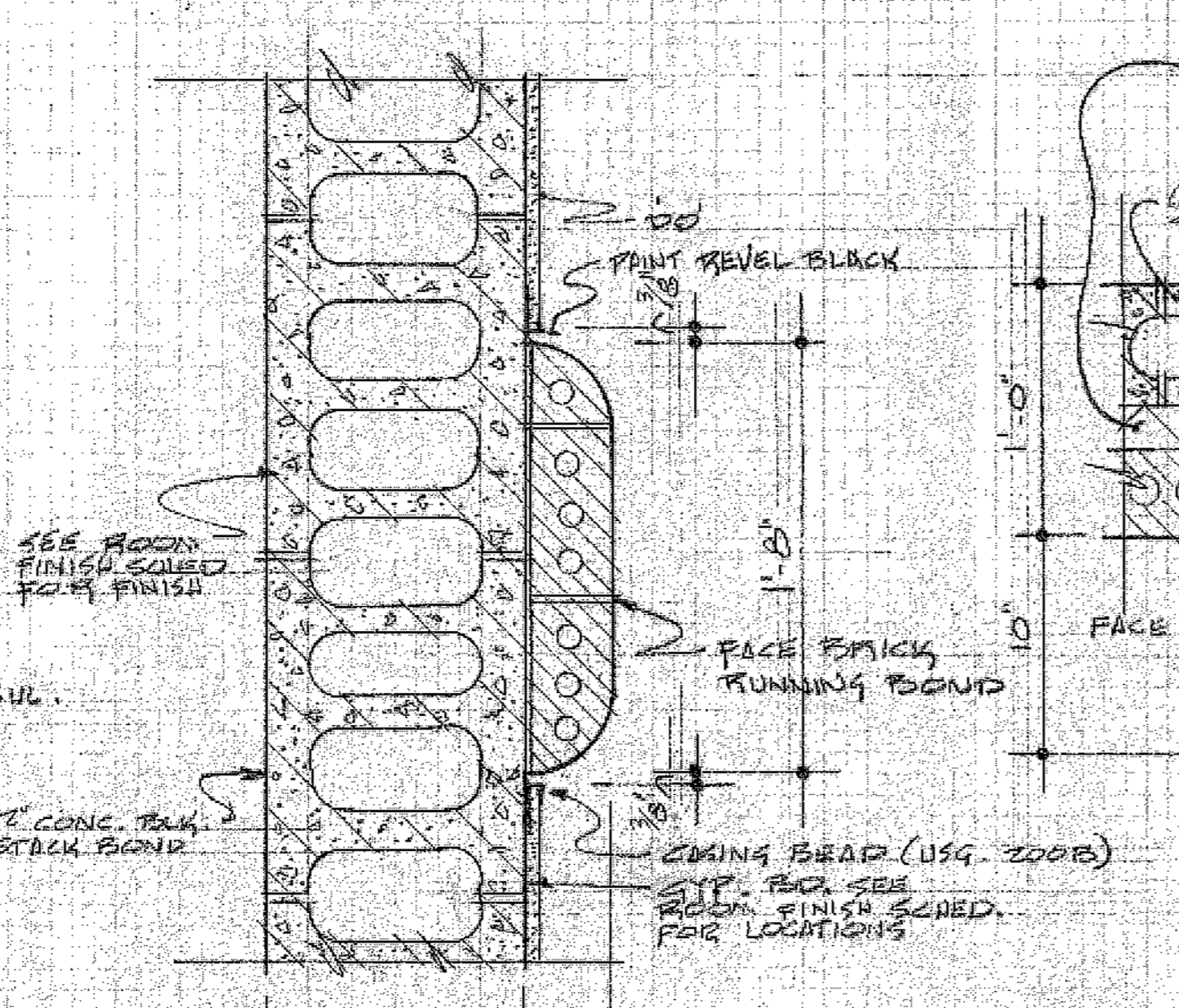
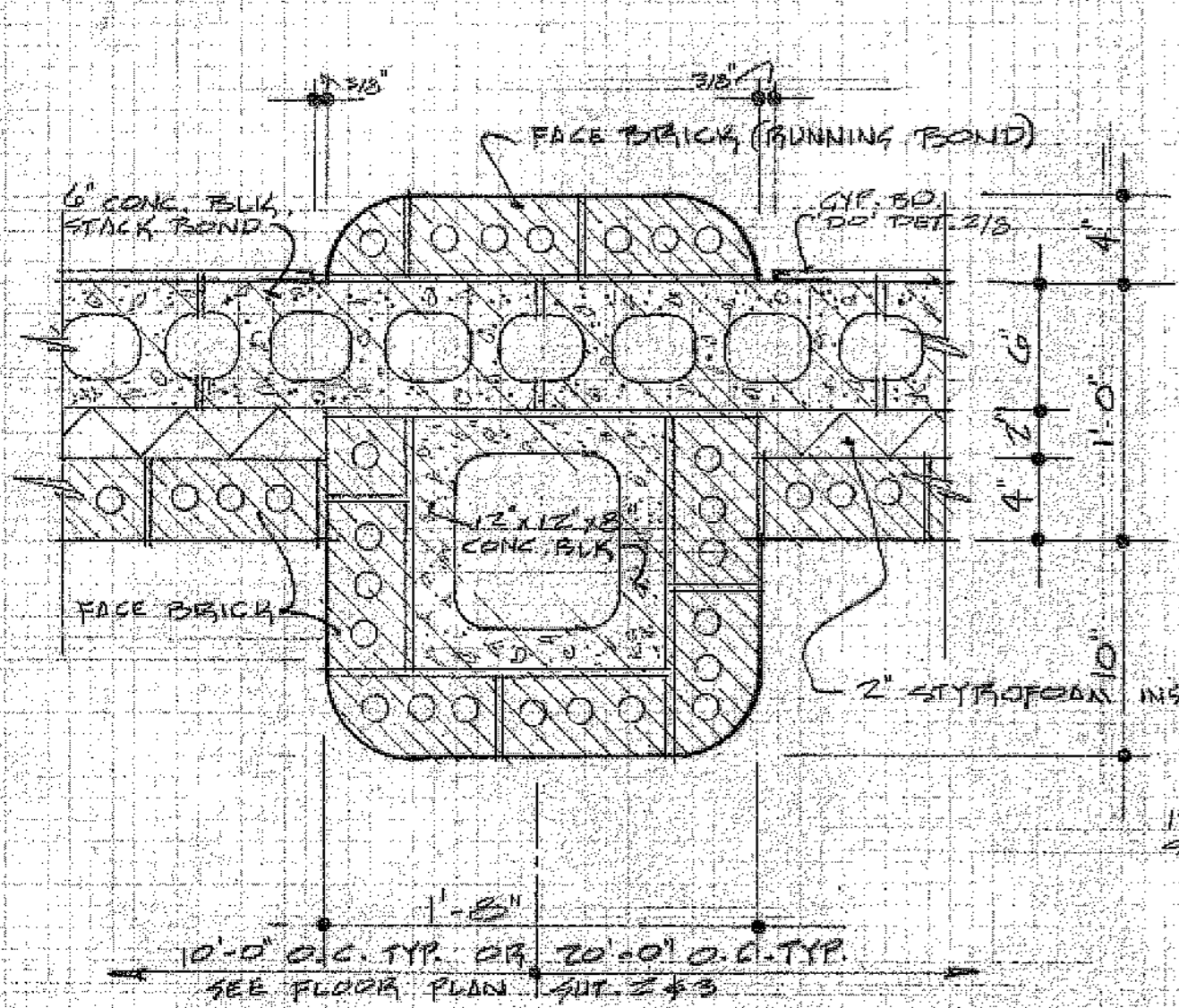
SECTION 1
SCALE 3/4"=1'-0"

SECTION 2
SCALE 3/4"=1'-0"

SECTION 3
SCALE 3/4"=1'-0"

SECTION 4
SCALE 3/4"=1'-0"





J. r. pope, architect
watertown, south dakota

PROPOSED LABORATORY ADDITION
JAMES R. POPE
1074
1974

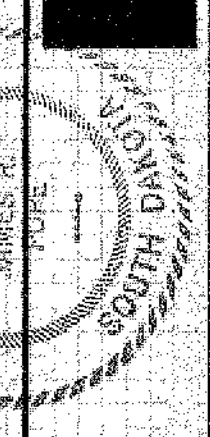
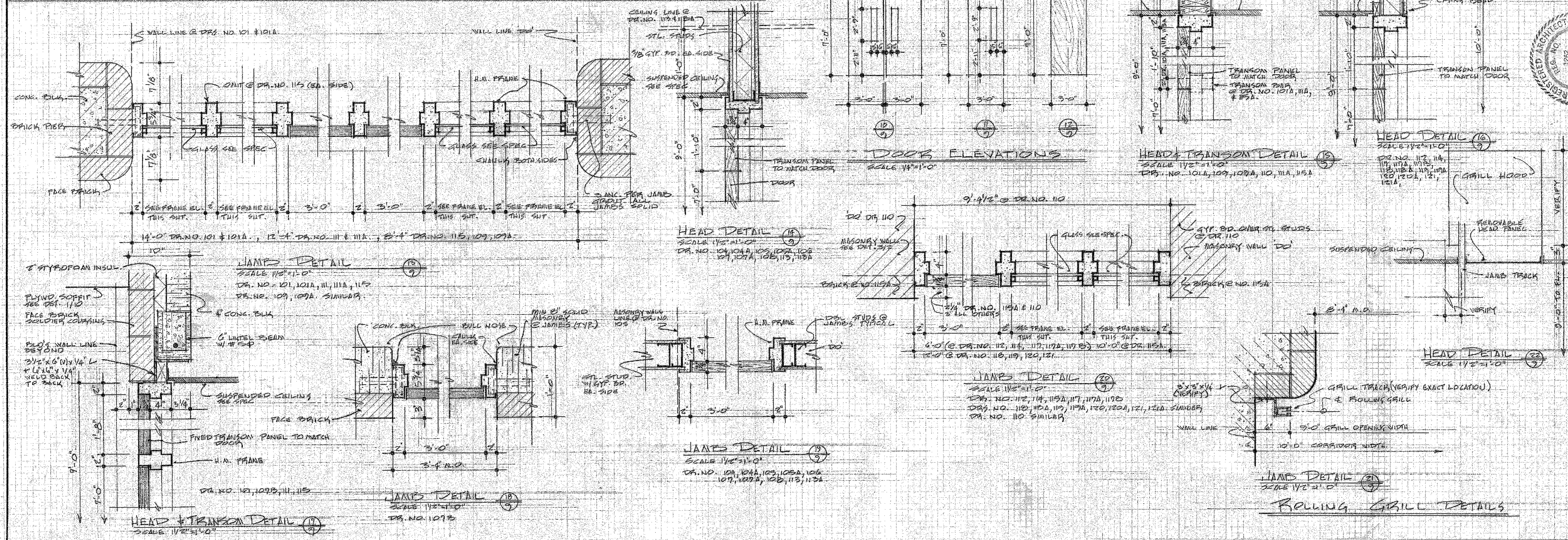
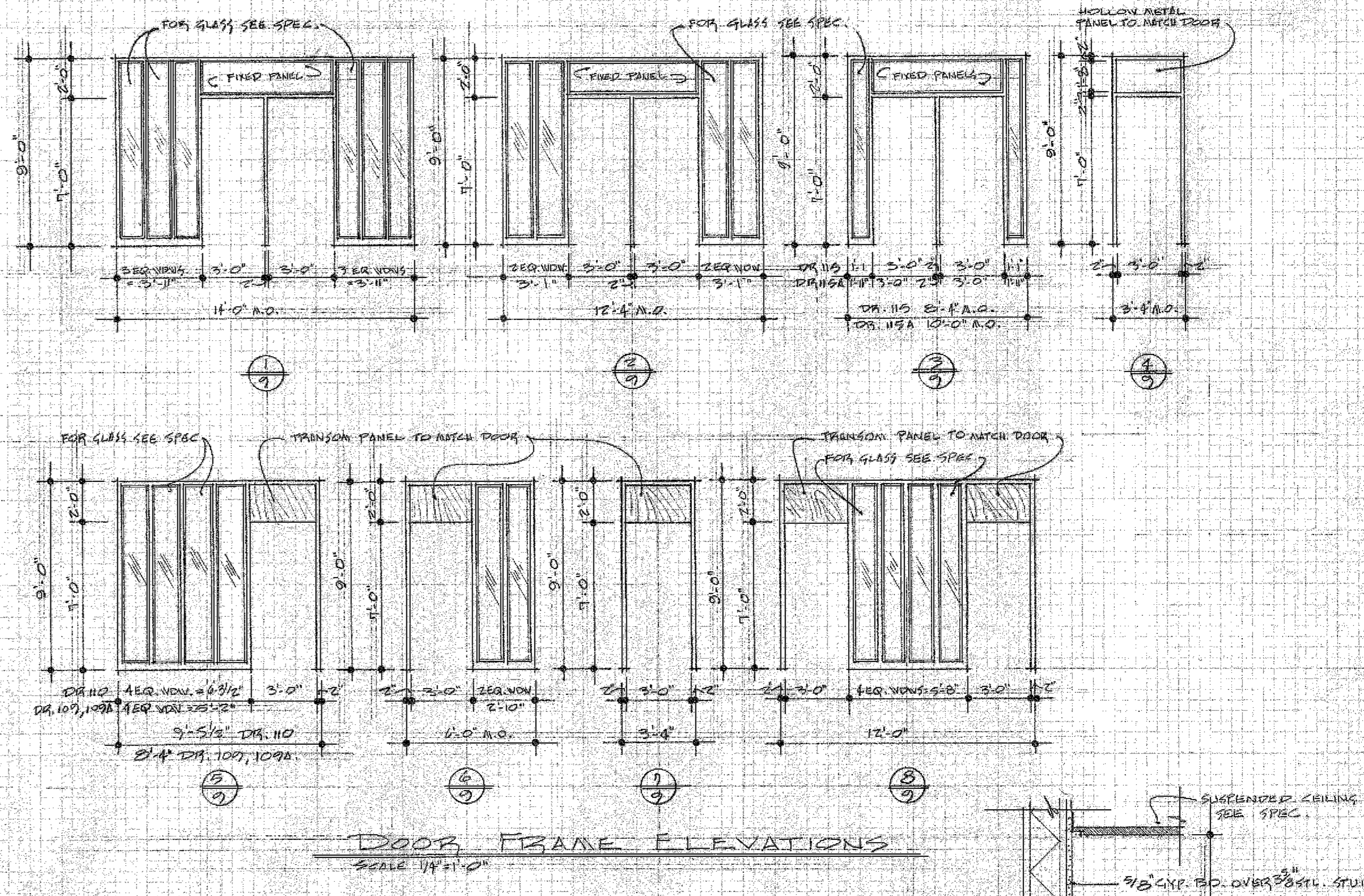
1282
JAMES R. POPE
1074
1974

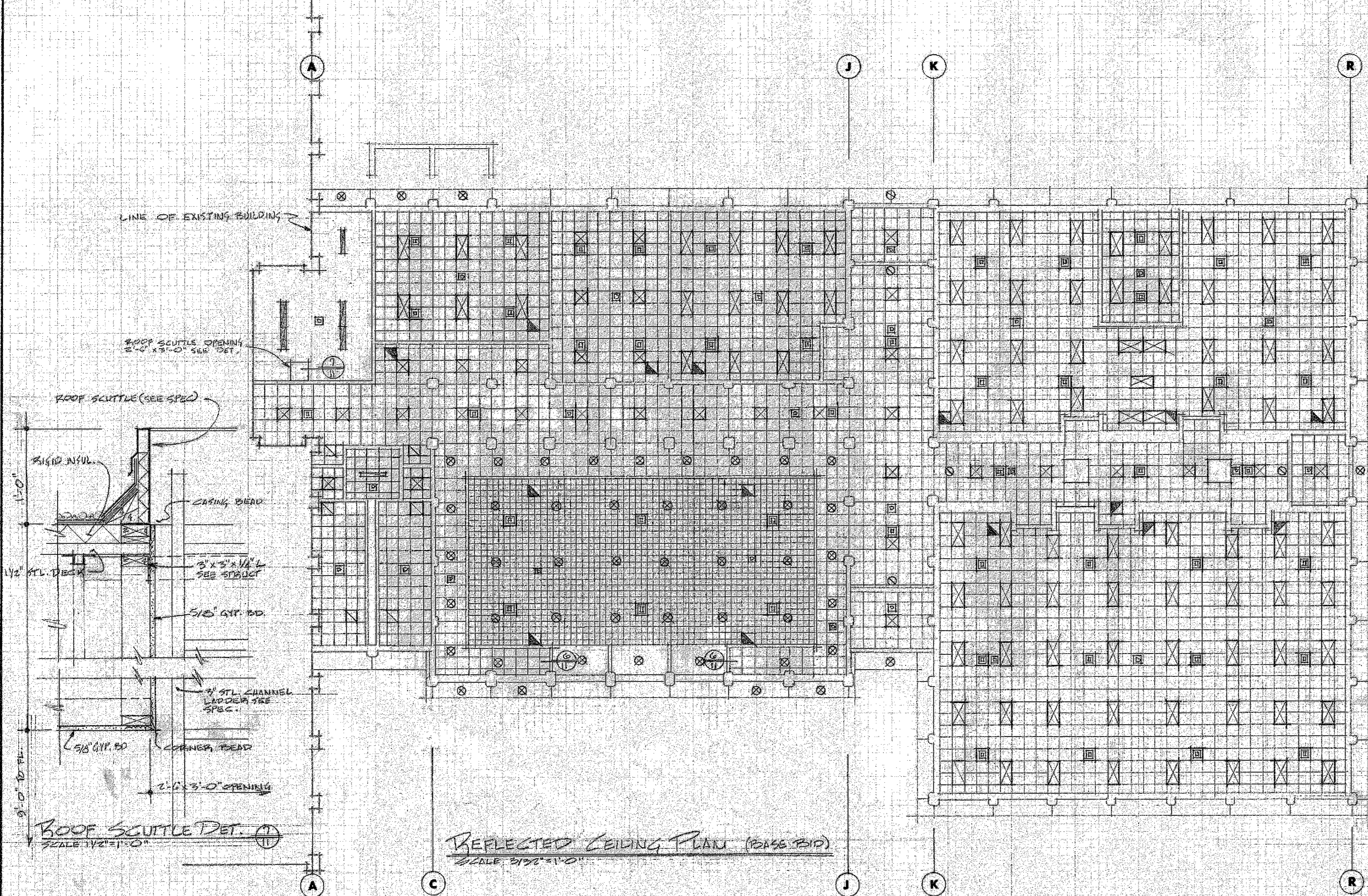
sheer
design
drawn
checked
revisions

8

DOOR SCHEDULE

OPENING MARK	DOOR DATA			FRAME DATA			DETAIL NO'S			REMARKS		
	FROM (SWP SIDE)	TO (DOOR SIDE)	THICKNESS	MATERIAL	FINISH	GLAZING	SIZE	MATERIAL	FINISH		GLAZING	
DOOR DATA	FRAME DATA	DETAIL NO'S	REMARKS	DOOR DATA	FRAME DATA	DETAIL NO'S	REMARKS	DOOR DATA	FRAME DATA	DETAIL NO'S	REMARKS	
101 VEST 101	OUTSIDE											
101A CORRIDOR 103	VEST 101											
104 MEN 104												
104A CORRIDOR 103												
105 WOMEN 105												
105A CORRIDOR 103												
106A CORRIDOR 103												
107B MECH. 107	CLASS RM. 108											TYPE SE TO BE 1/4" SOLID BARN 575 PREENZE
107C MECH. 107	OUTSIDE											
108B CORRIDOR 103												
109 CORRIDOR 103												
109A CORRIDOR 103												
109B CORRIDOR 103												
109C CORRIDOR 103												
110A CORRIDOR 103												
110B CORRIDOR 103												
111 VEST. III												
111A CORRIDOR 103												
112 M. BUS. I. 112												
113 LAB. 113												
113A LAB. 113												
114 M. BUS. II 114												
115 VEST. 115												
115A CORRIDOR 116												
117 ELEC. 117												
117A ELEC. 117												
117B ELEC. 117												
ALT NO. 1 #2												
118 CLASS. RM. 118												
118A CLASS. RM. 118												
119 OPERATING 119												
119A OPERATING 119												
ALT NO. 2												
120 CLASS. RM. 120												
120A CLASS. RM. 120												
121 CLASS. RM. 121												
121A CLASS. RM. 121												

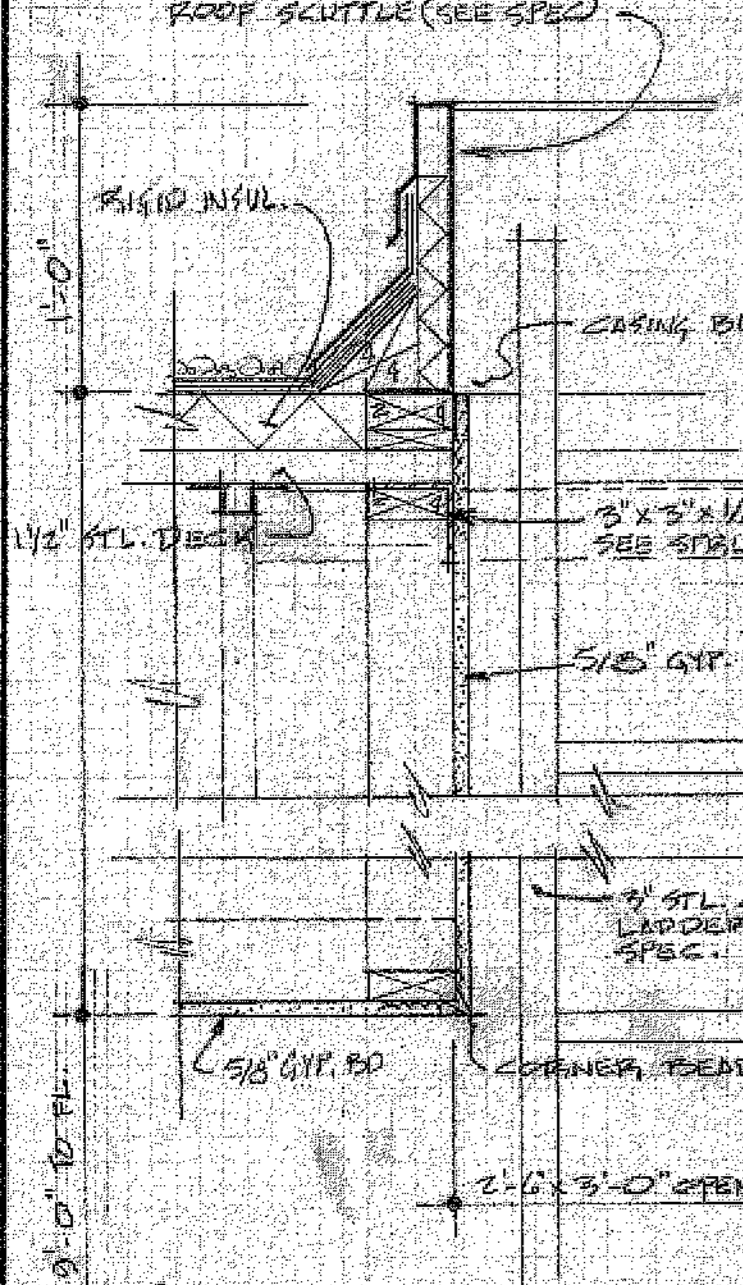




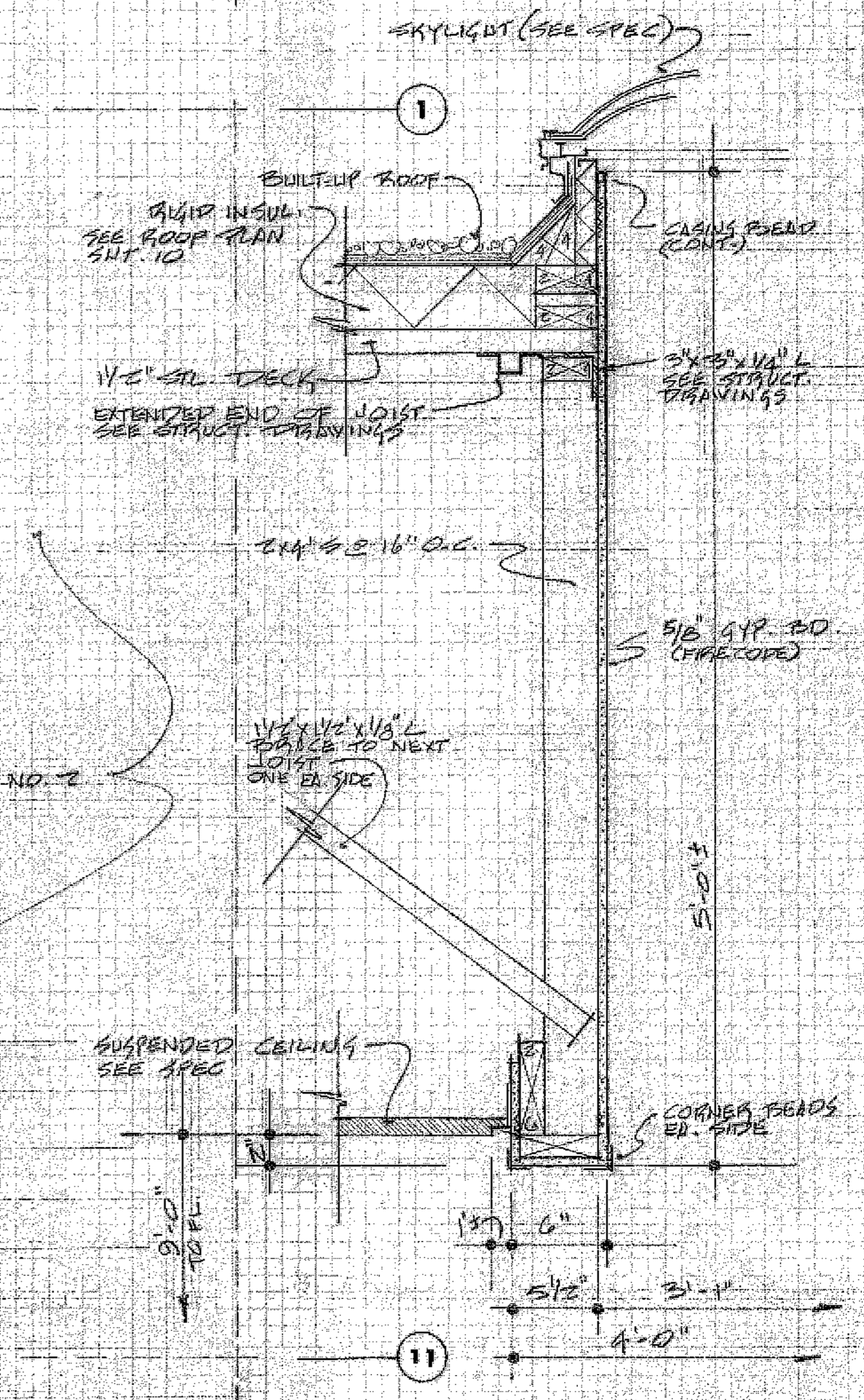
REFLECTED CEILING PLAN (BASE BID)
SCALE: 3/32"=1'-0"

REFLECTED CEILING PLAN LEGEND

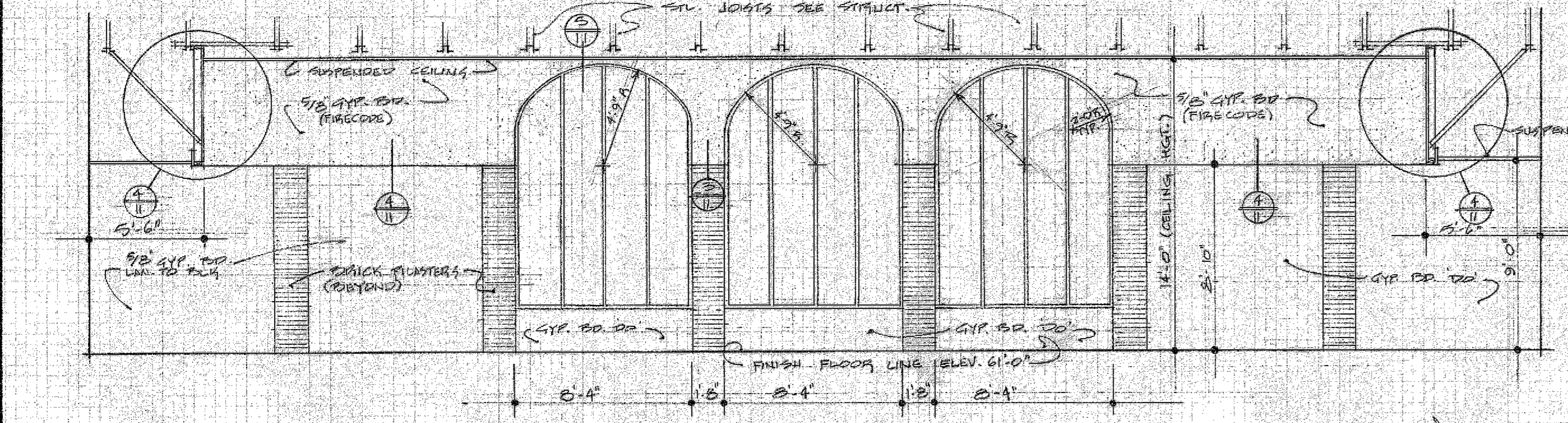
- ☒ RECESSED FLUORESCENT LIGHT
- ▨ SURFACE MOUNTED FLUORESCENT
- ☒ RECESSED INCANDESCENT
- SURFACE MOUNTED INCANDESCENT
- ⊠ FIRE DETECTOR
- AIR SUPPLY REGISTER
- ▤ RETURN AIR REGISTER
- ☒ EXHAUST REGISTER



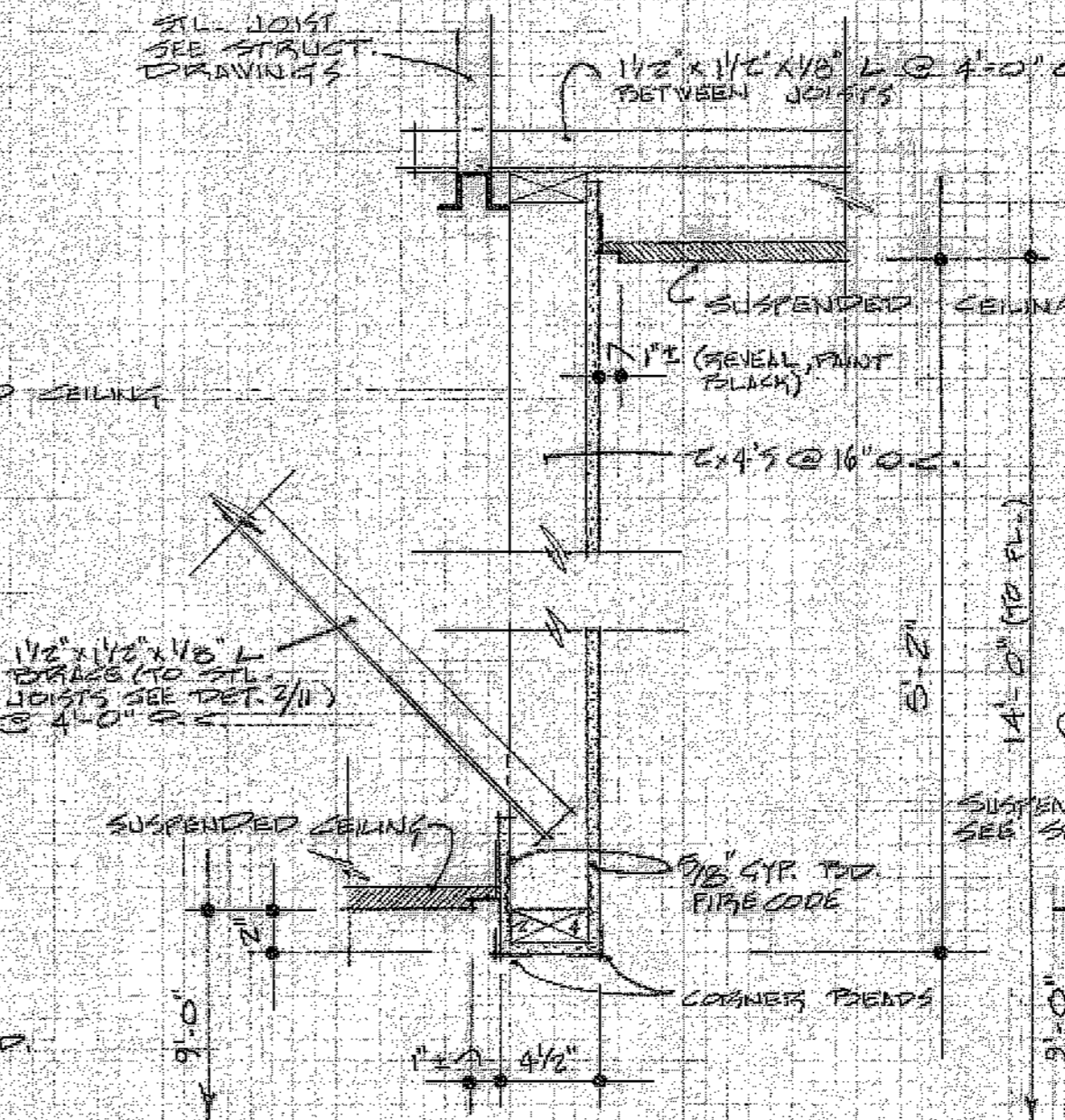
ROOF SCUTTLE DET.
SCALE: 1/2"=1'-0"



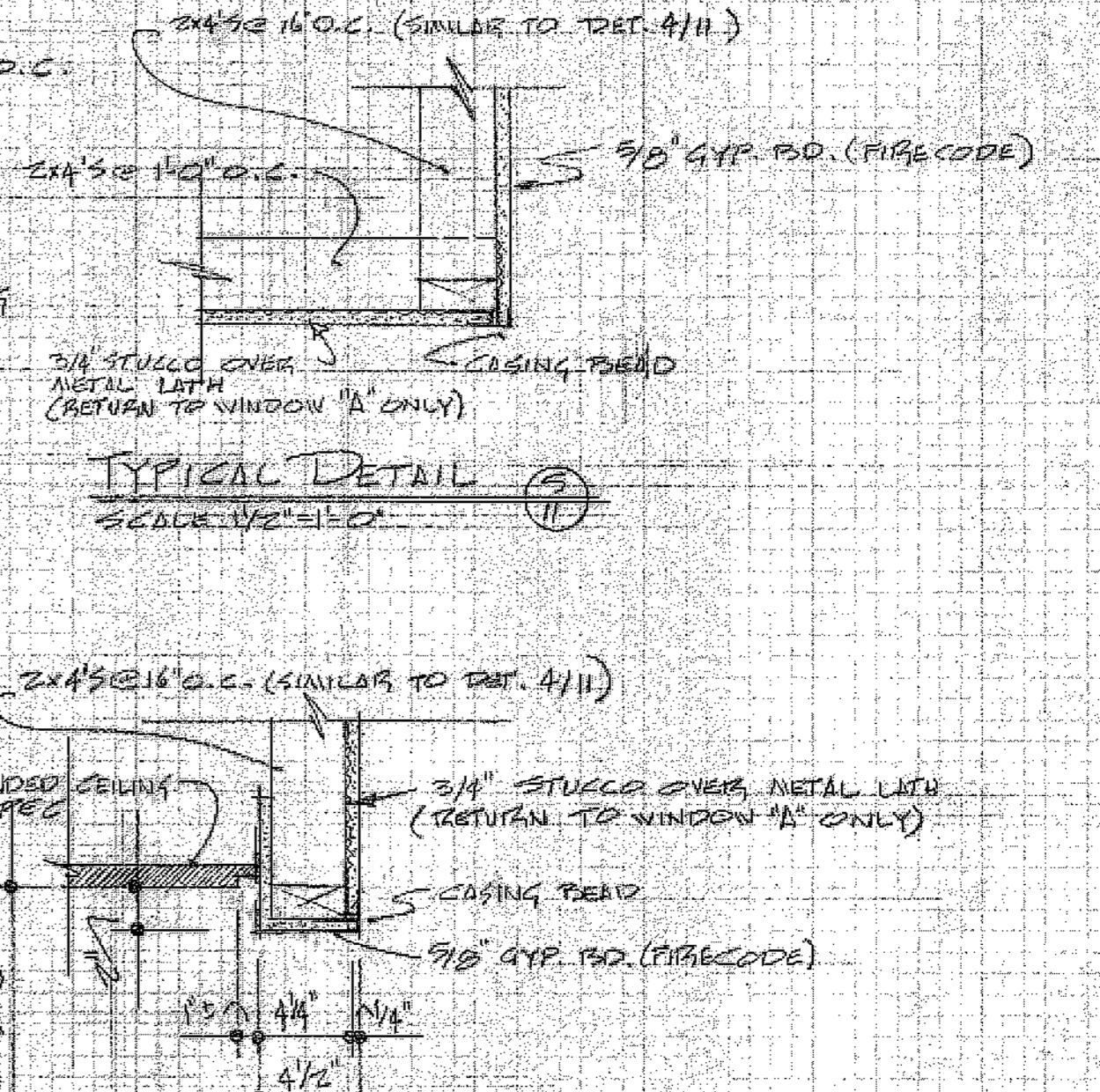
TYPICAL SKYLIGHT DETAIL
SCALE: 1/2"=1'-0"



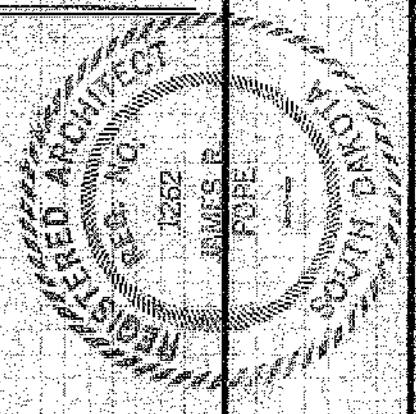
WEST ELEVATION - RM. 102
SCALE: 1/4"=1'-0"



TYPICAL DETAIL
SCALE: 1/2"=1'-0"



TYPICAL DETAIL
SCALE: 1/2"=1'-0"

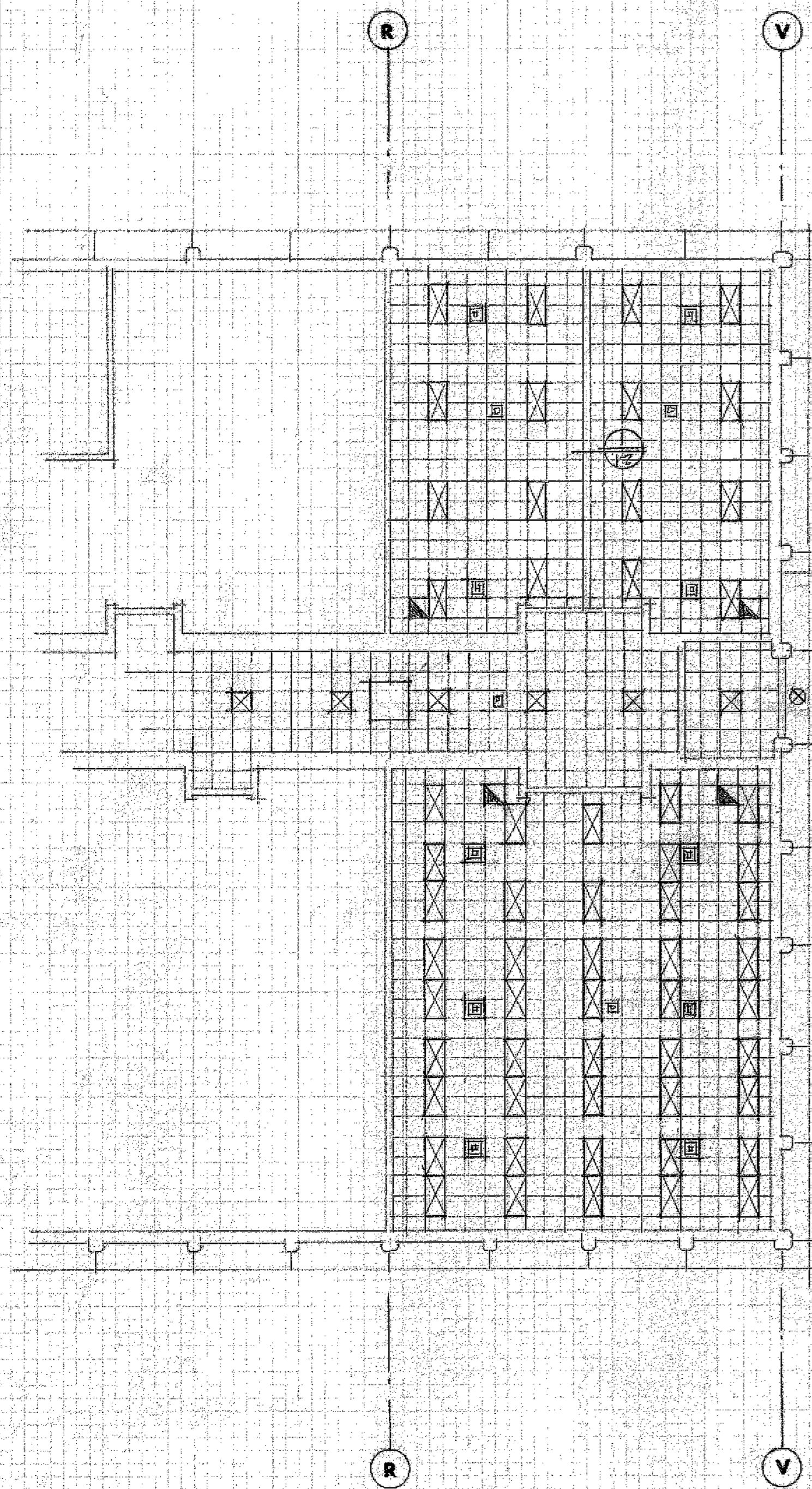


JAN. 10, 1974

sheet
design
drawn
checked
revisions

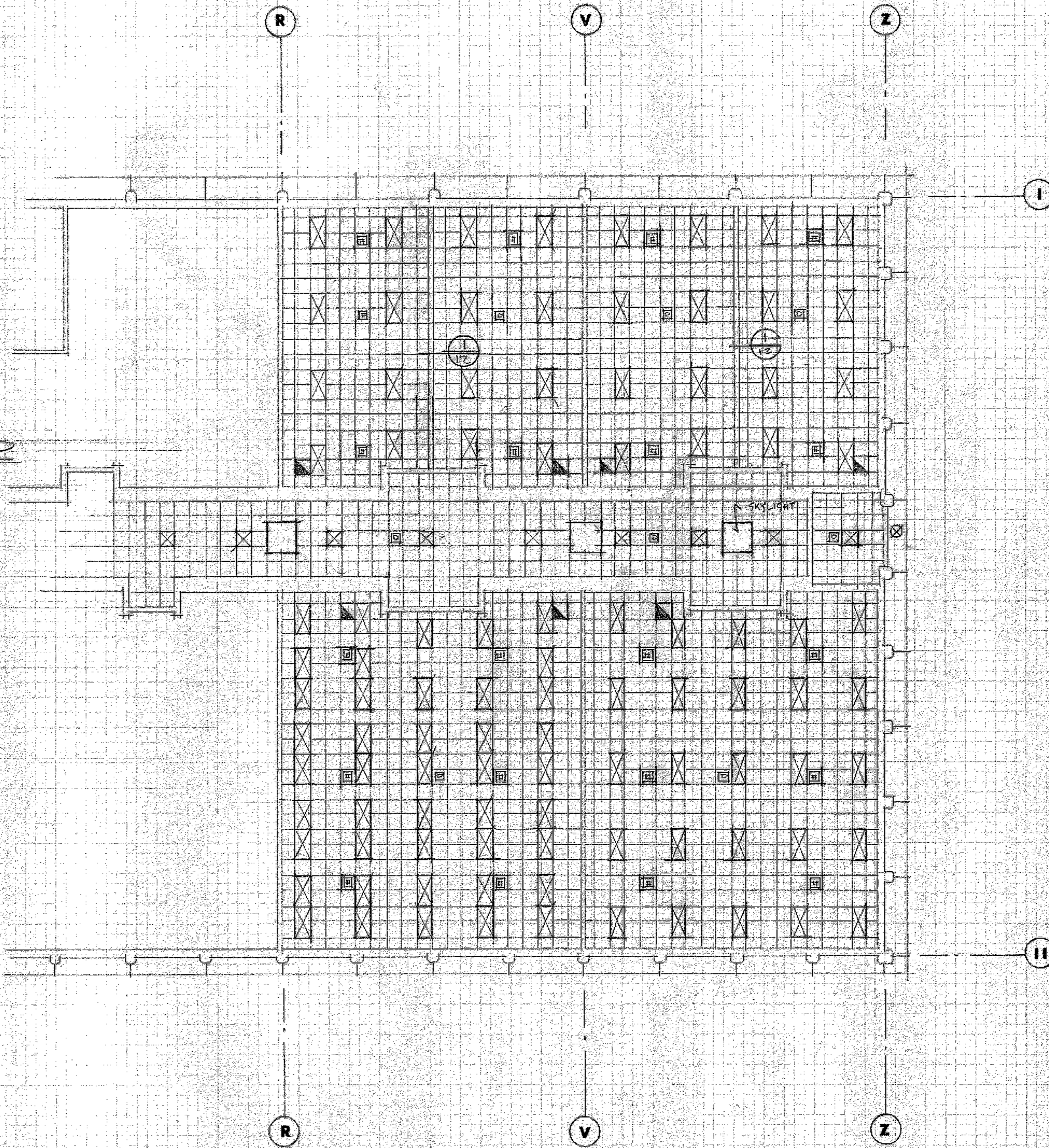
J. R. POPE, architect
watertown, south dakota

PROPOSED CLASSROOM ADDITION
LAKE AREA VOCATIONAL TECHNICAL SCHOOL
WATER TOWN, SOUTH DAKOTA



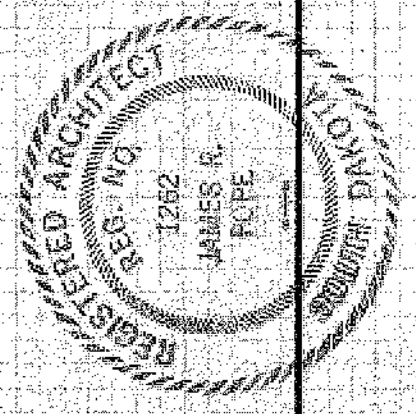
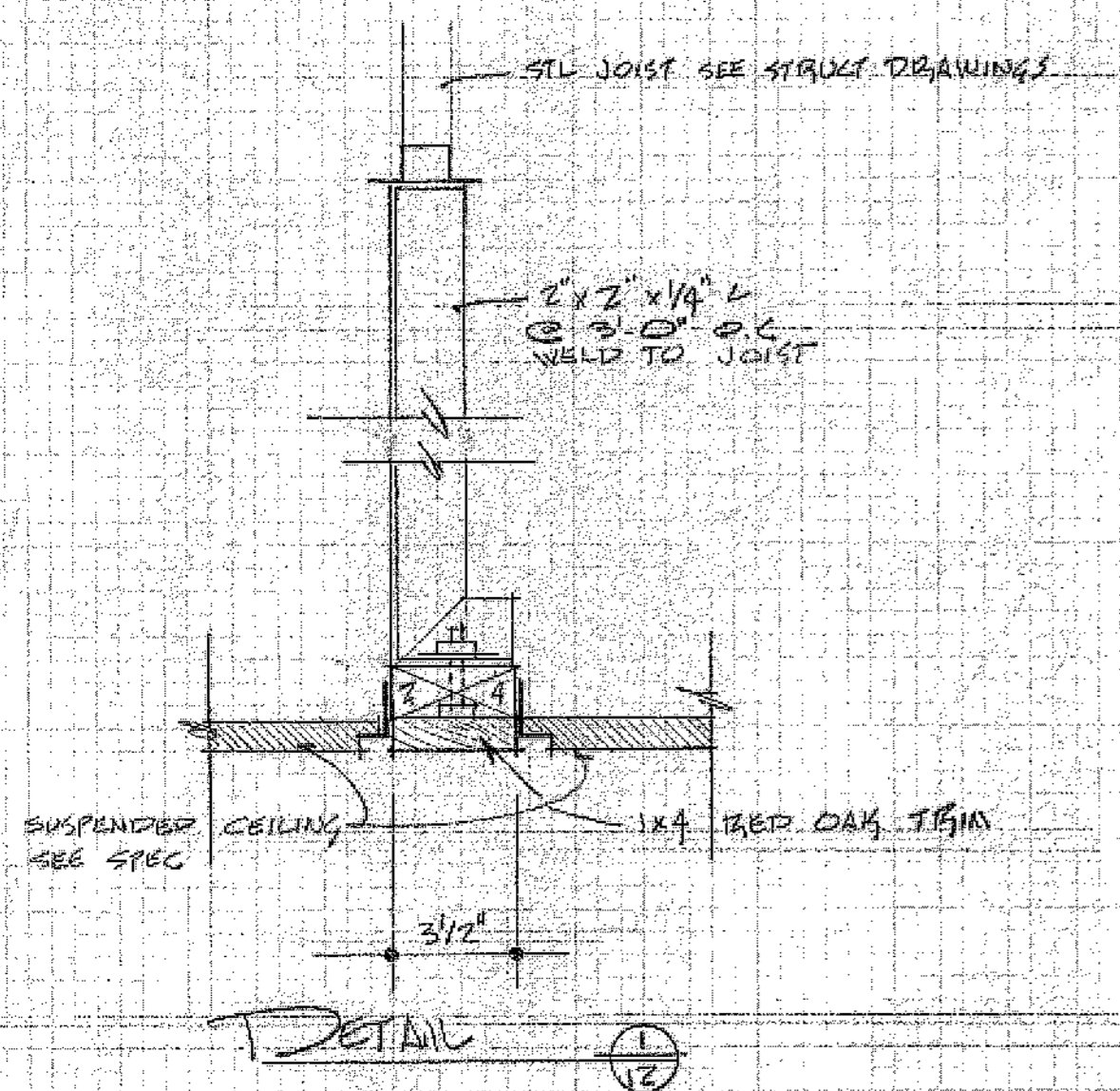
REFLECTED CEILING PLAN LEGEND

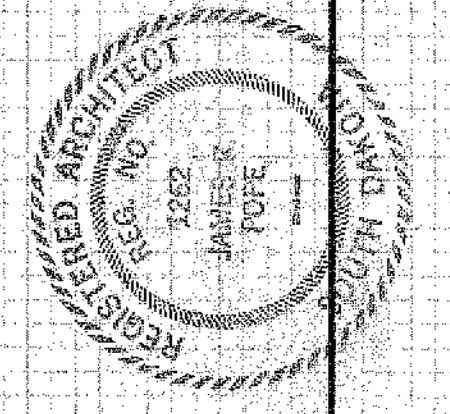
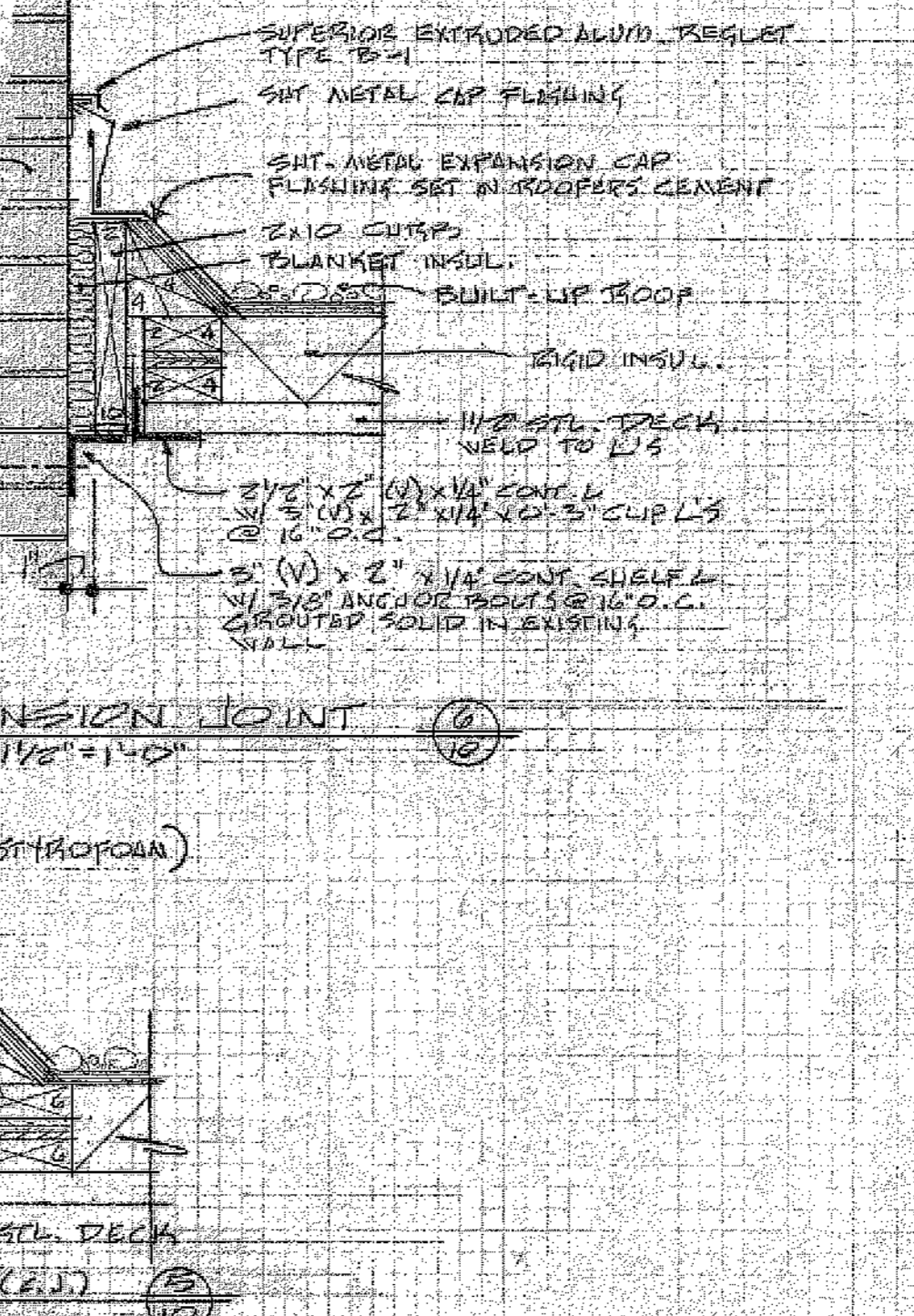
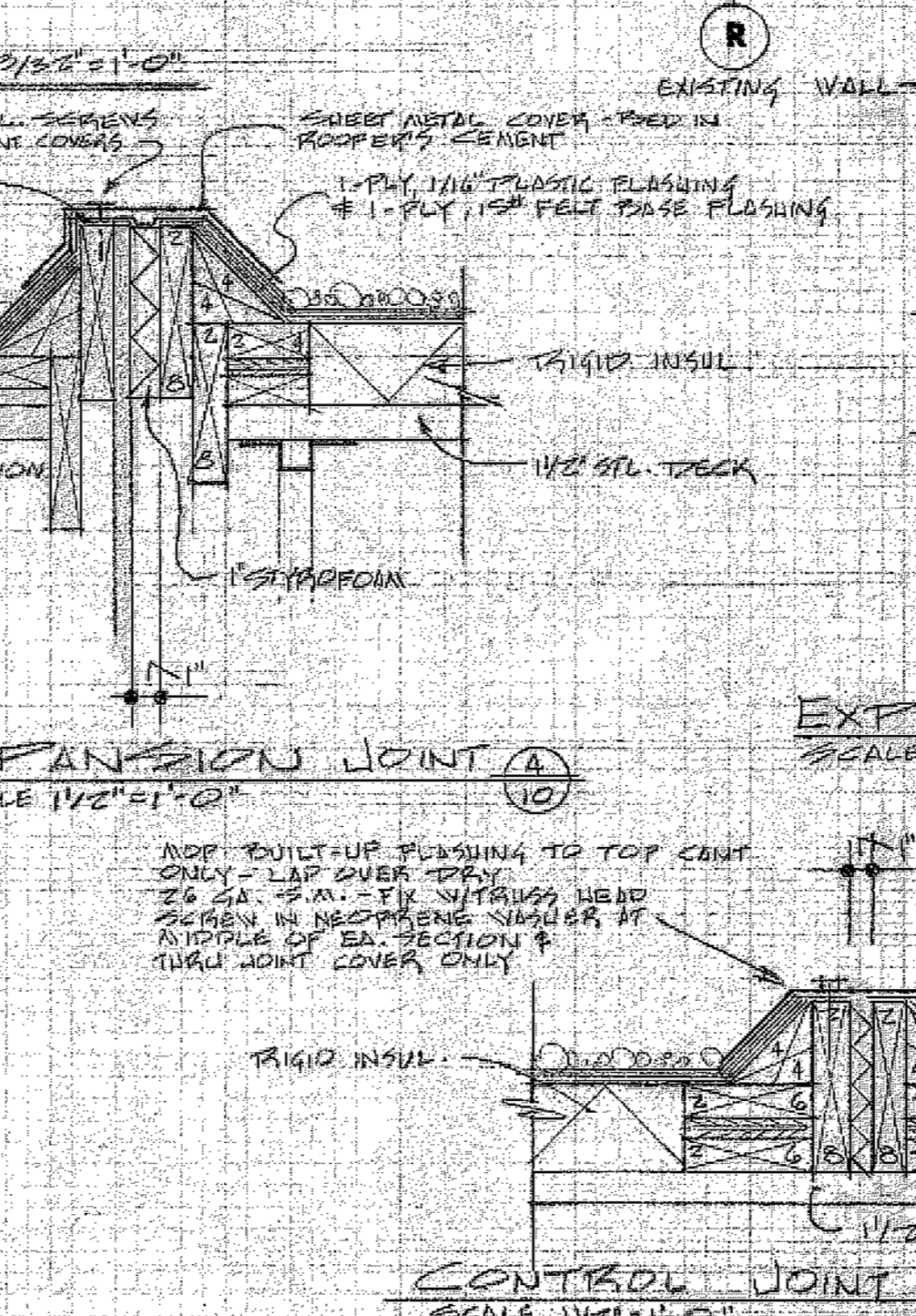
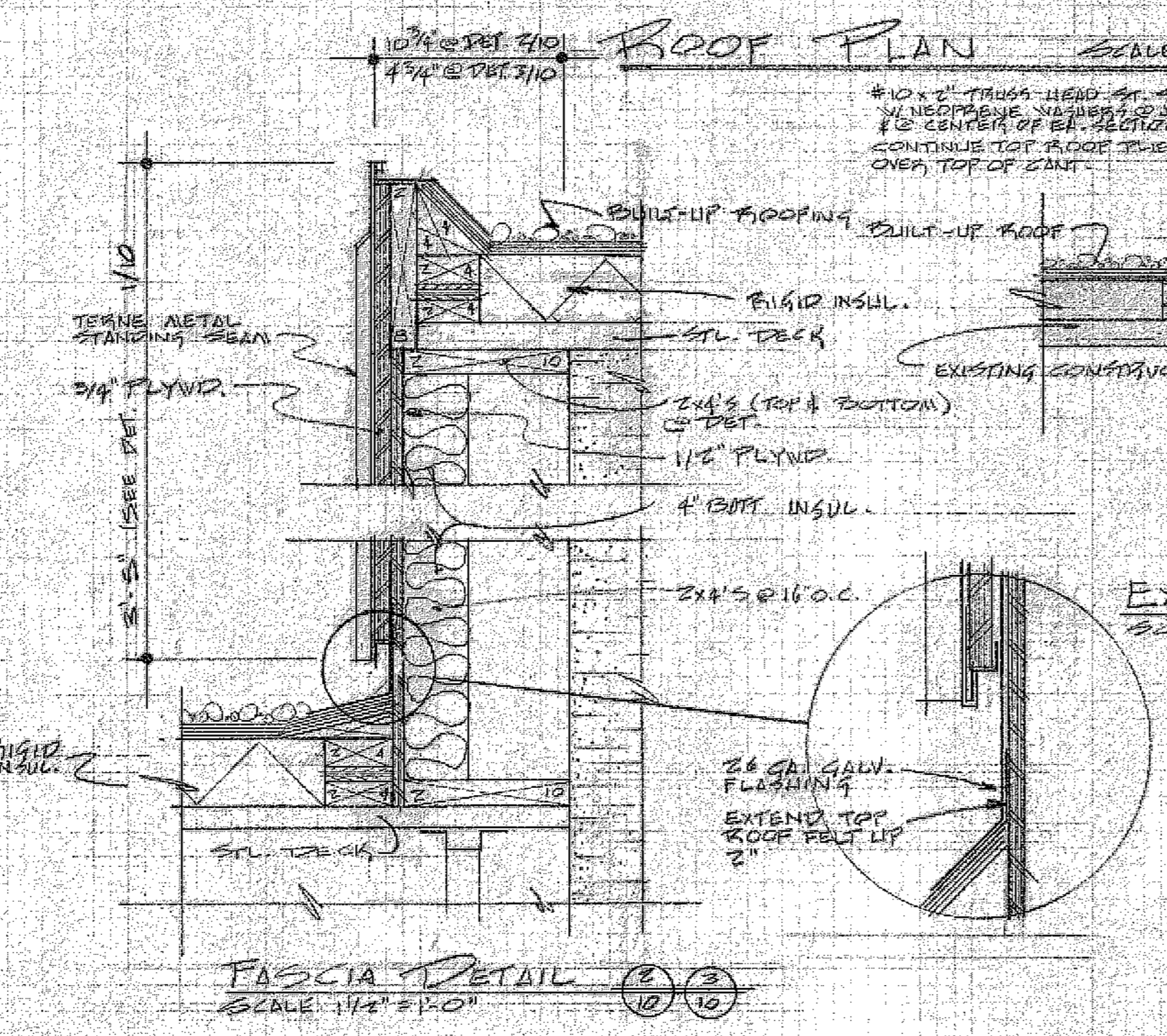
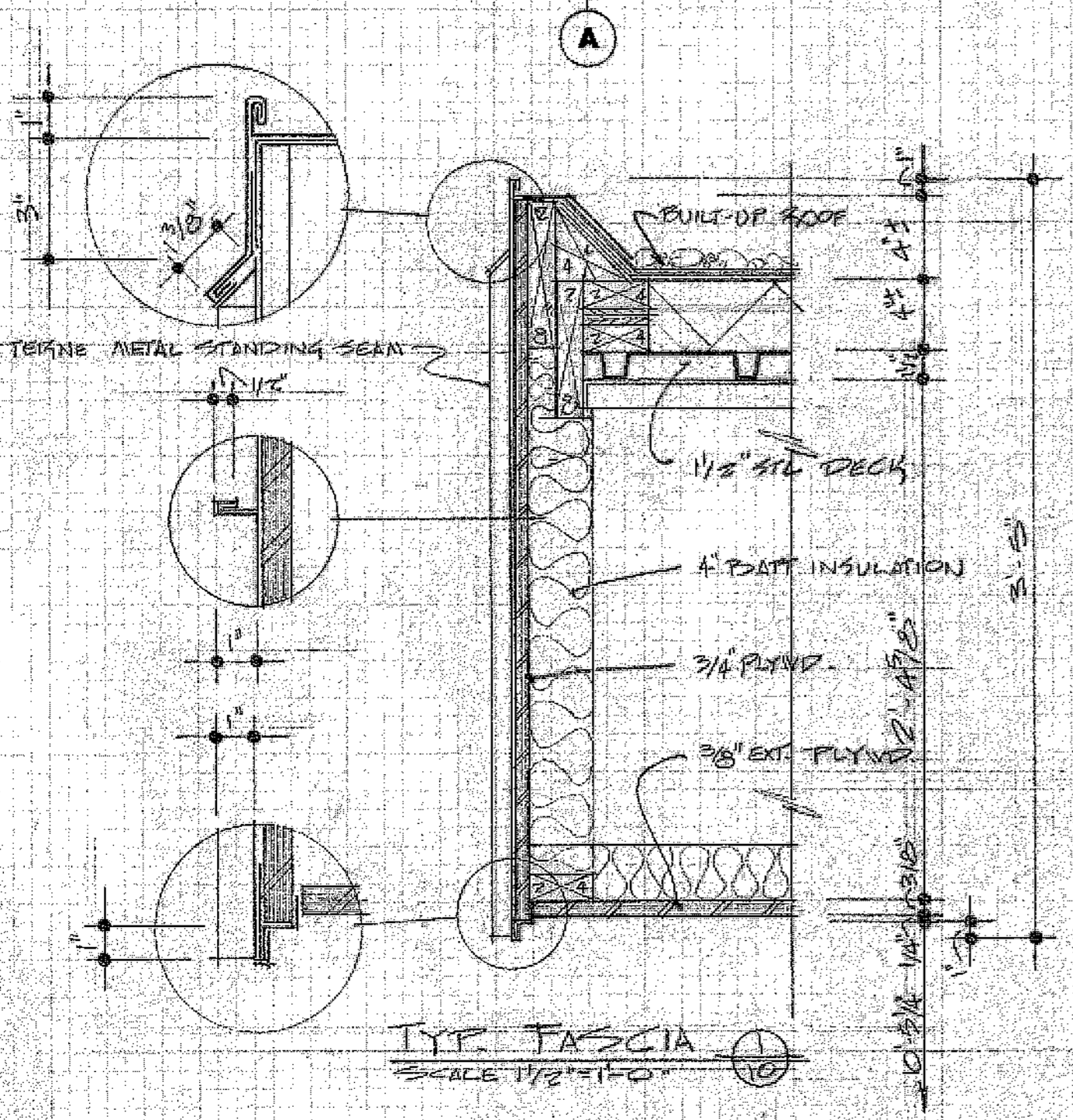
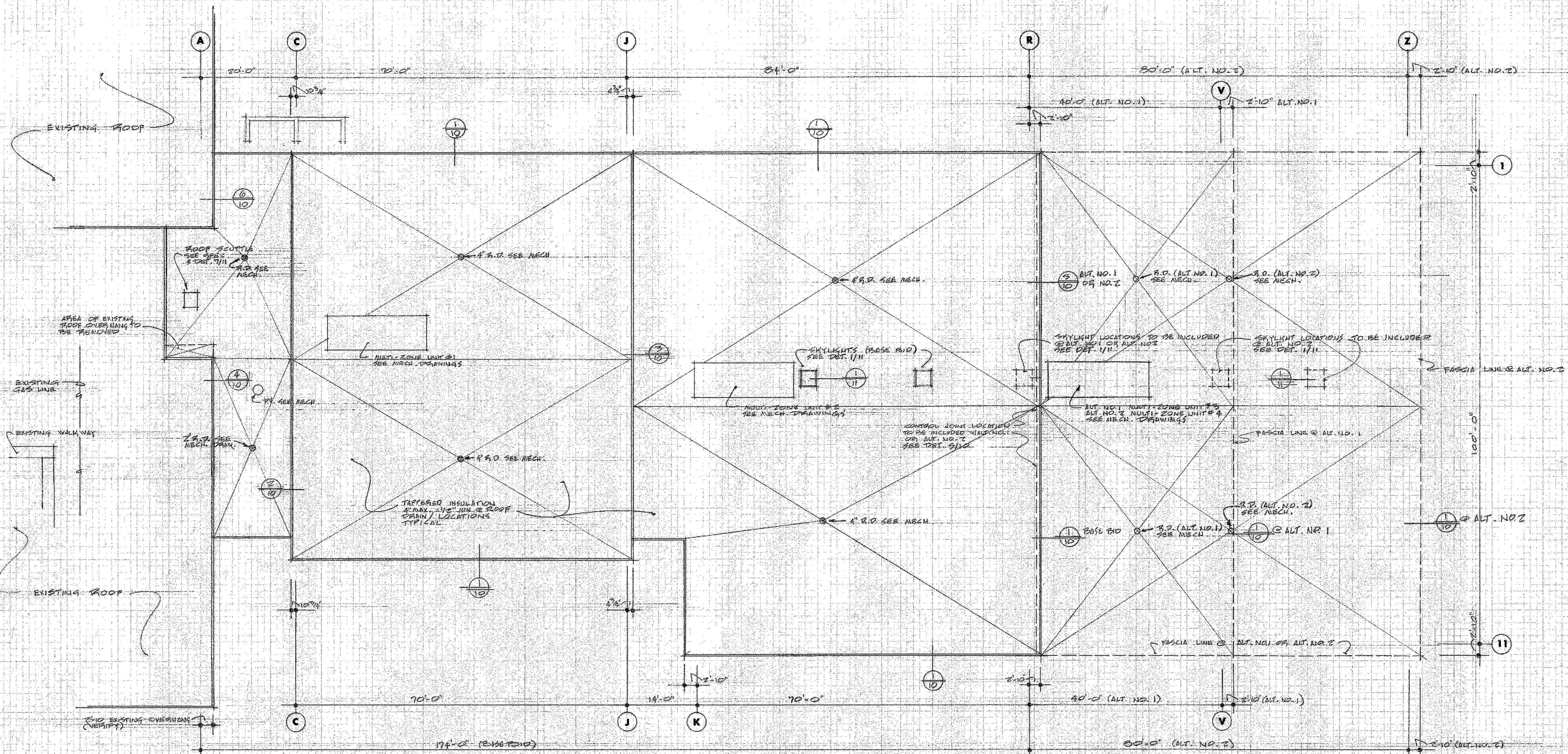
- ☒ RECESSED FLUORESCENT
- ▨ SURFACE MOUNTED FLUORESCENT
- ⊗ RECESSED INCANDESCENT
- ⊙ SURFACE MOUNTED INCANDESCENT
- ⊠ FIRE DETECTOR
- ⊡ AIR SUPPLY REGISTER
- ⊢ RETURN AIR REGISTER
- ⊣ EXHAUST REGISTER



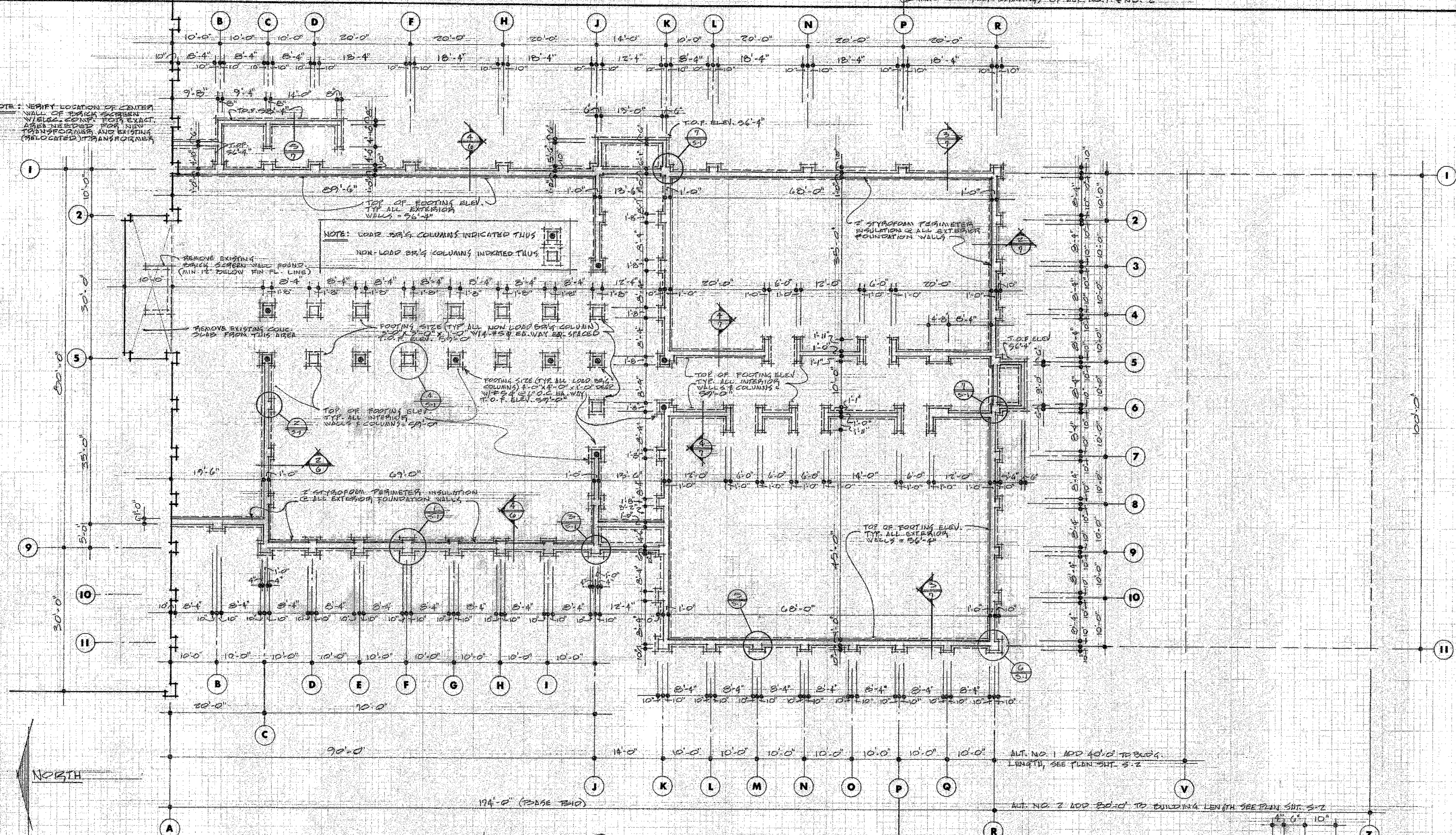
REFLECTED CEILING PLAN - (ALT. NO. 1)
SCALE - 3/32" = 1'-0"

REFLECTED CEILING PLAN - (ALT. NO. 2)
SCALE - 3/32" = 1'-0"

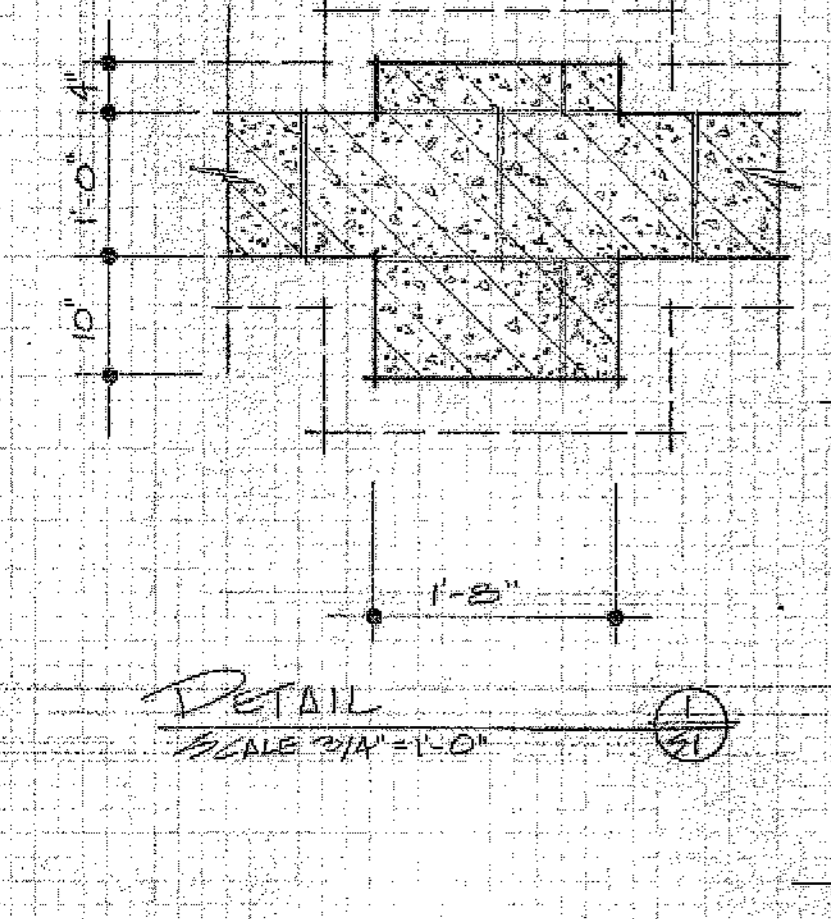




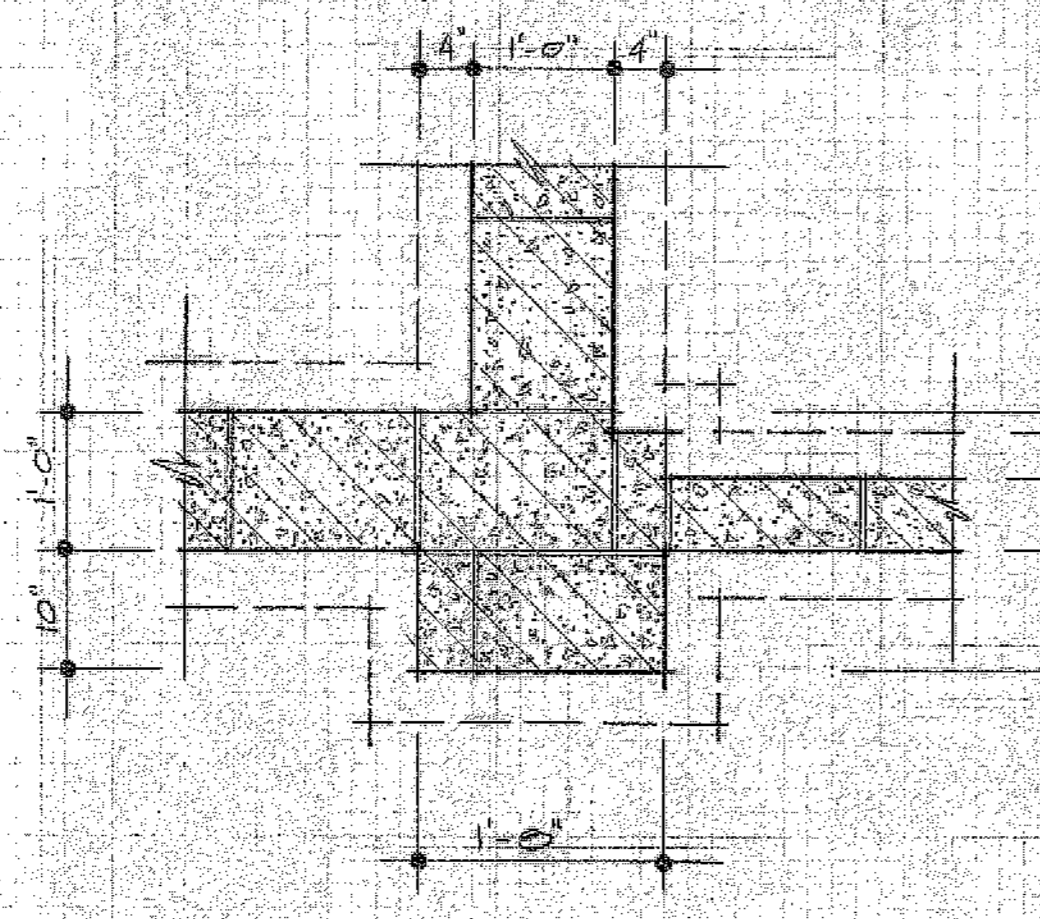
NOTE: VERIFY LOCATION OF CENTER WALL OF EACH SCREEN W/REG. COMP. FOR EXACT. MARKS. RELOCATE TOP NEW TRANSFORMER AND EXISTING (RELOCATED) TRANSFORMER.



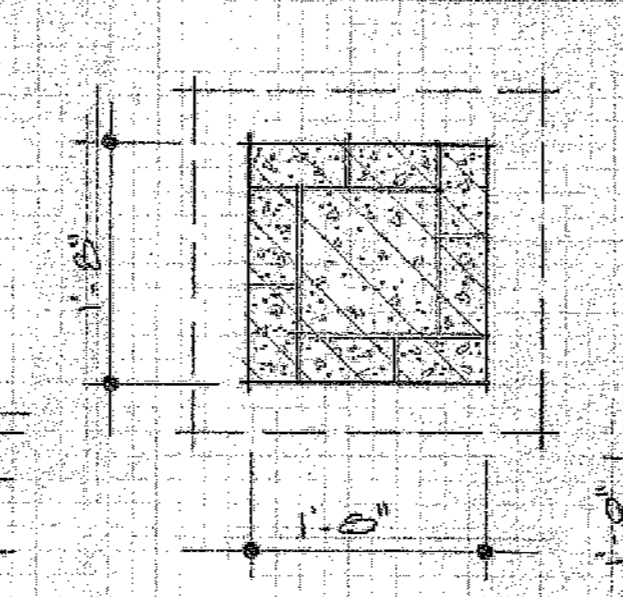
FOUNDATION & FOOTING PLAN - PHASE BID
SCALE 3/4" = 1'-0"



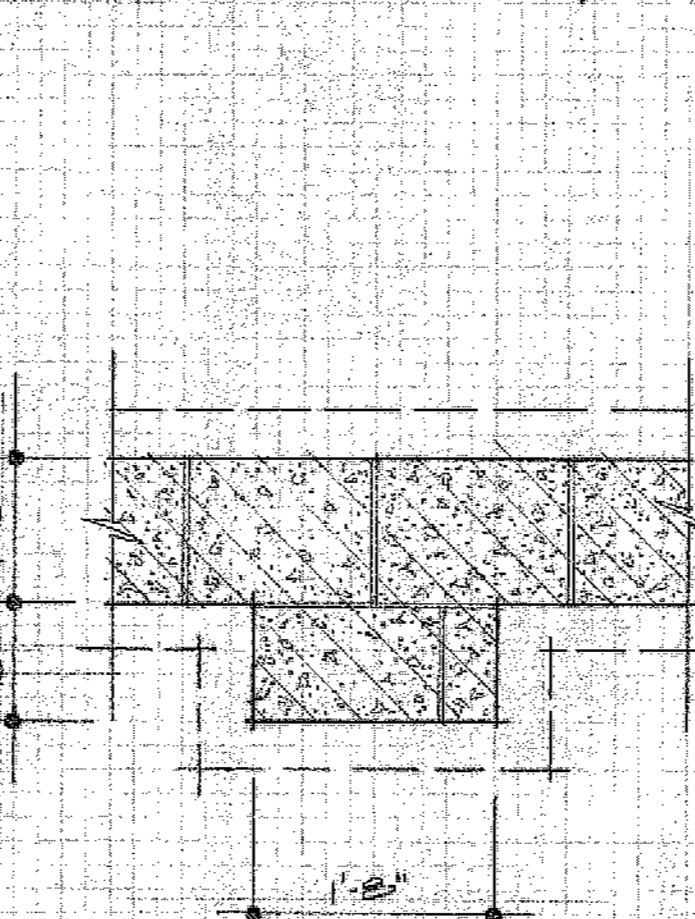
DETAIL SCALE 3/4" = 1'-0" 1



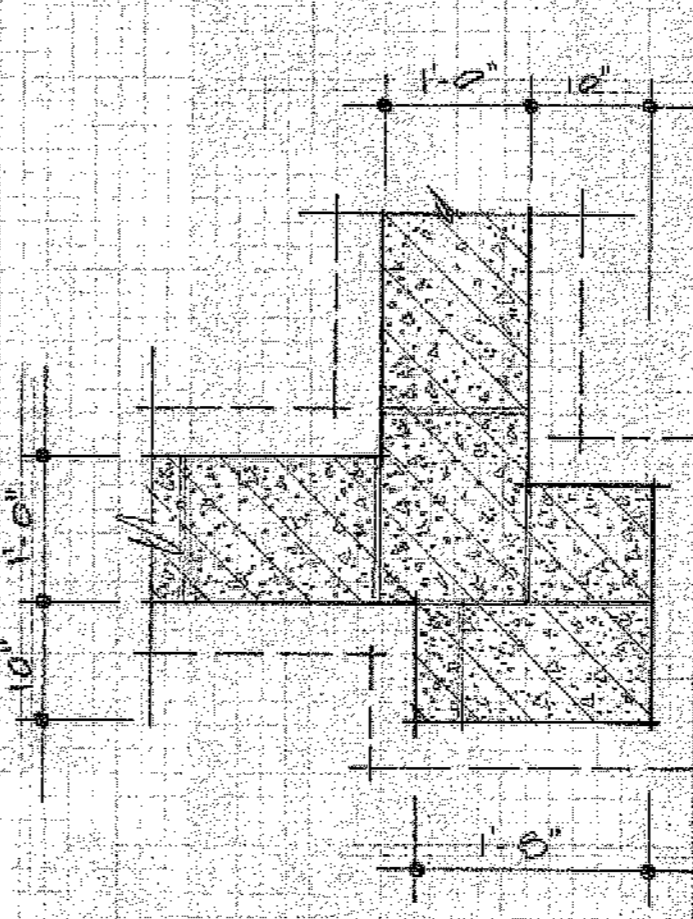
DETAIL SCALE 3/4" = 1'-0" 2



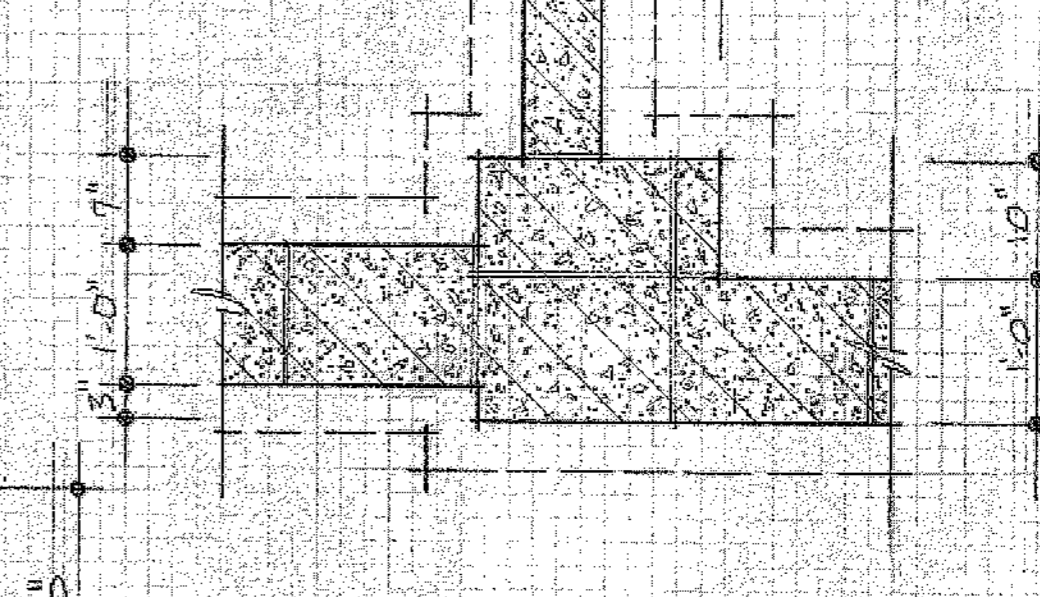
DETAIL SCALE 3/4" = 1'-0" 3



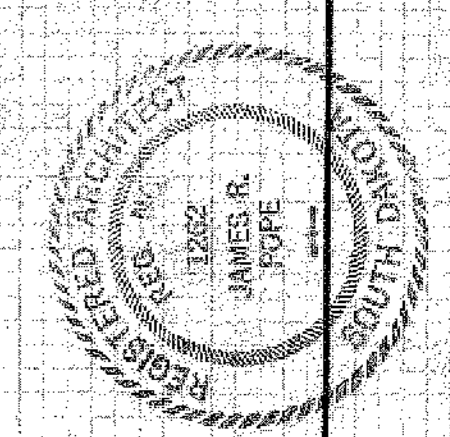
DETAIL SCALE 3/4" = 1'-0" 4

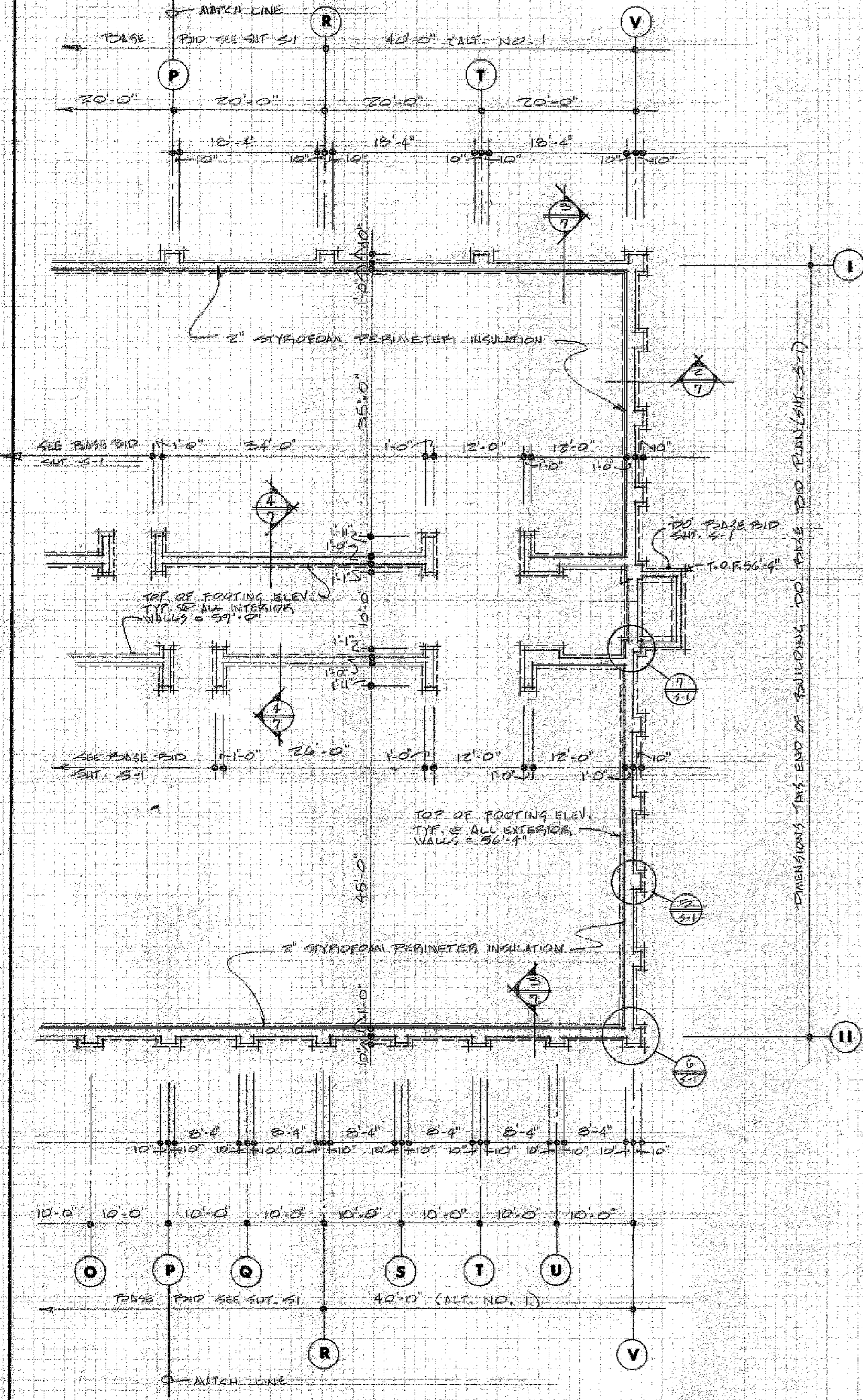


DETAIL SCALE 3/4" = 1'-0" 5

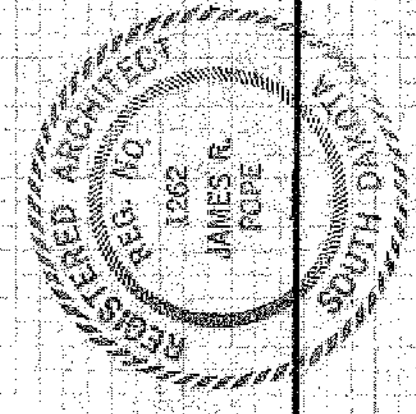
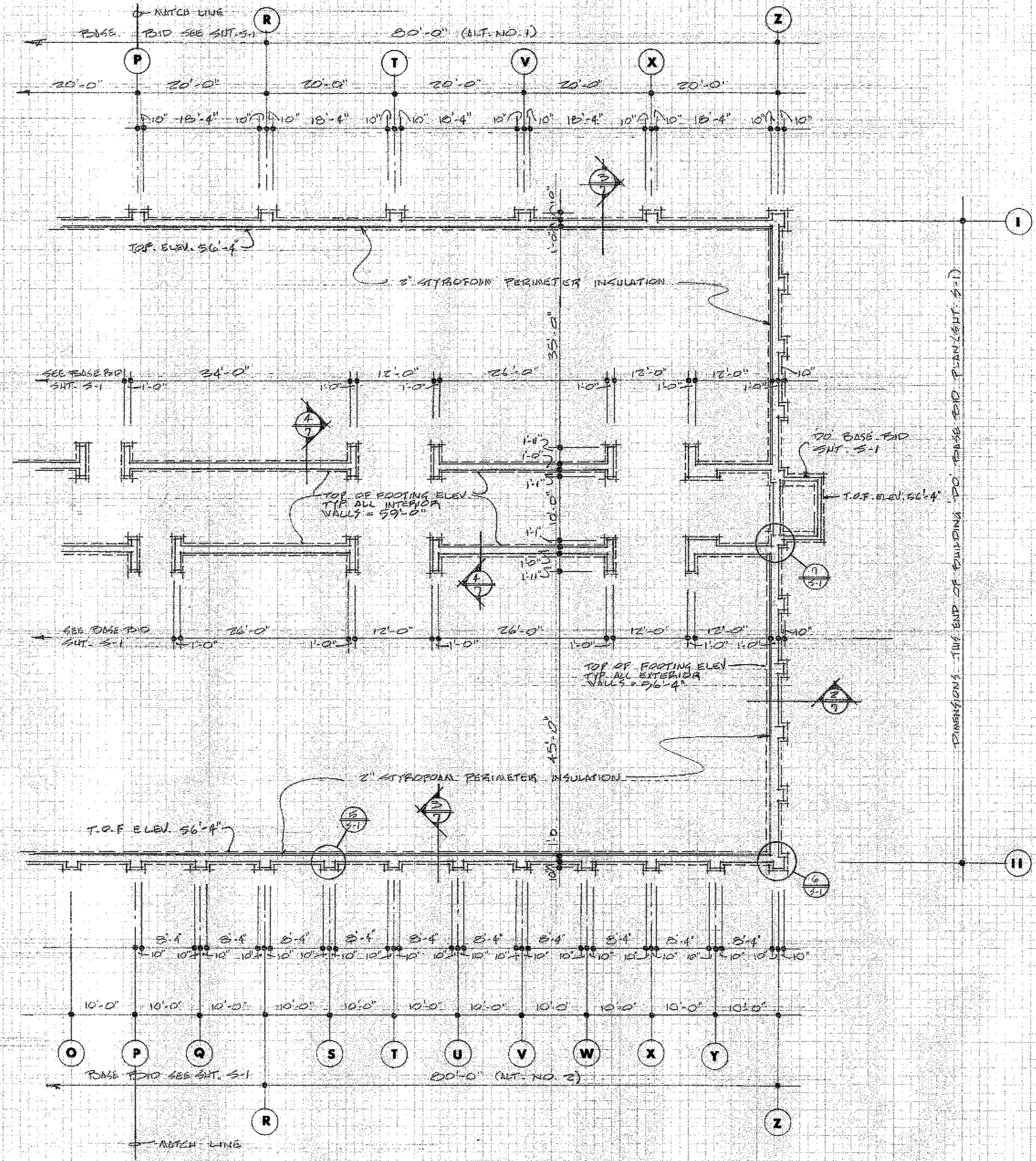


DETAIL SCALE 3/4" = 1'-0" 6





FOUNDATION AND FOOTING PLAN - ALT. NO. 1
SCALE 3/32" = 1'-0"



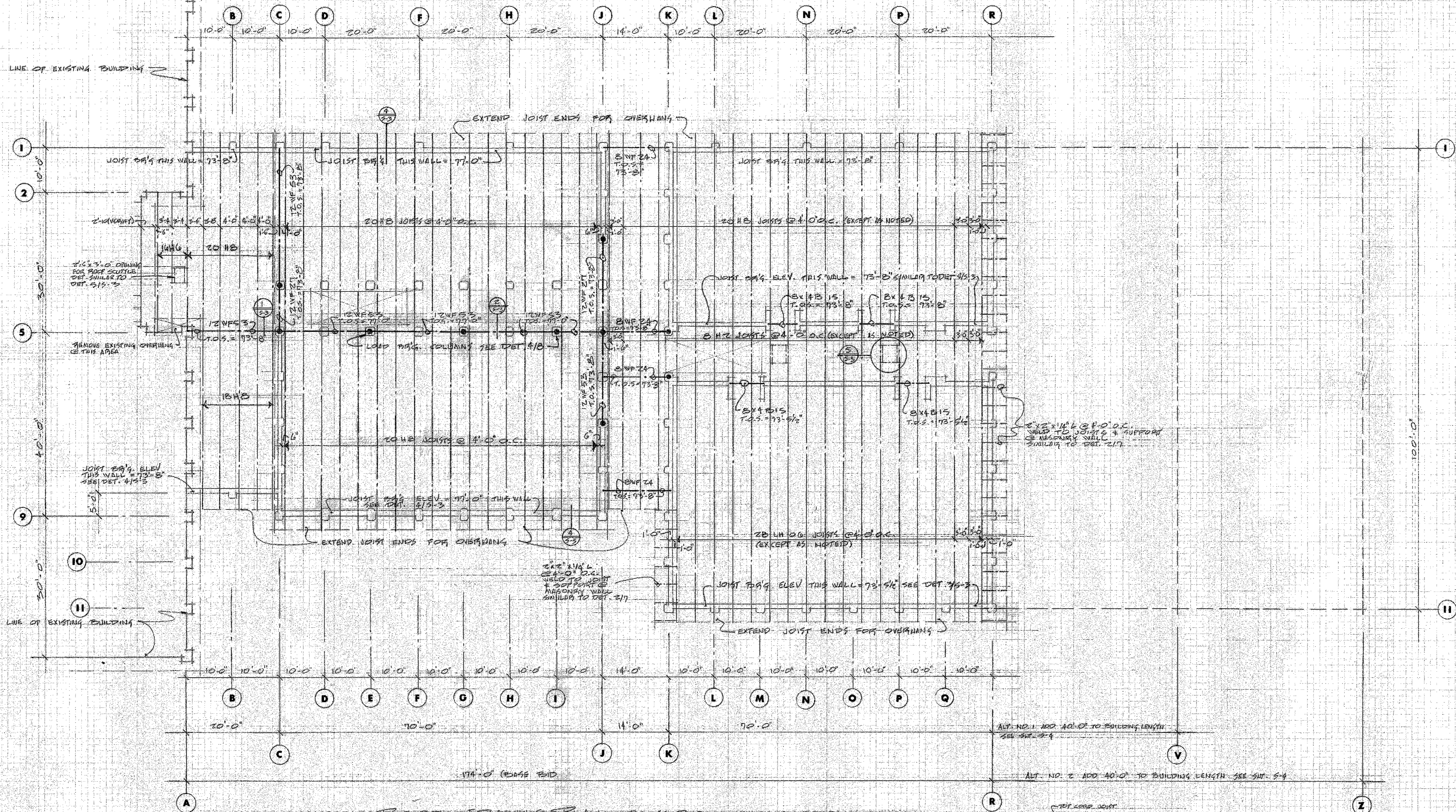
JAN. 10, 1974

sheet design
drawn
checked
revisions

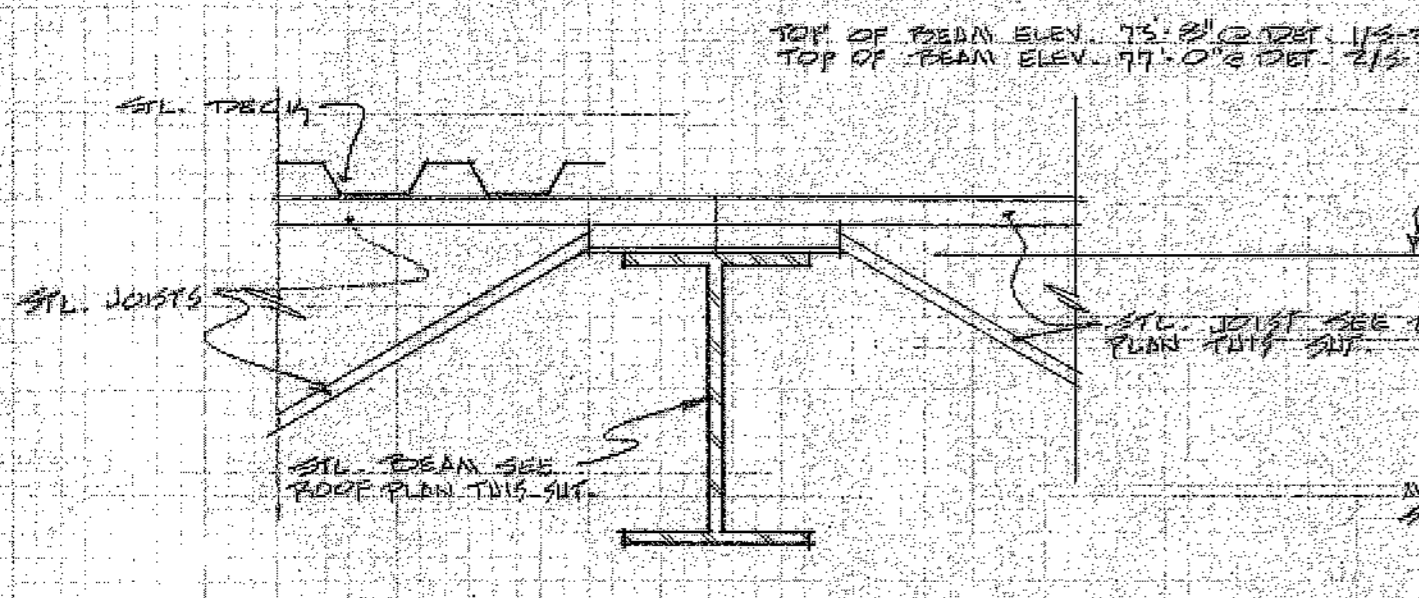
S2

J. R. Pope, architect
watertown, south dakota

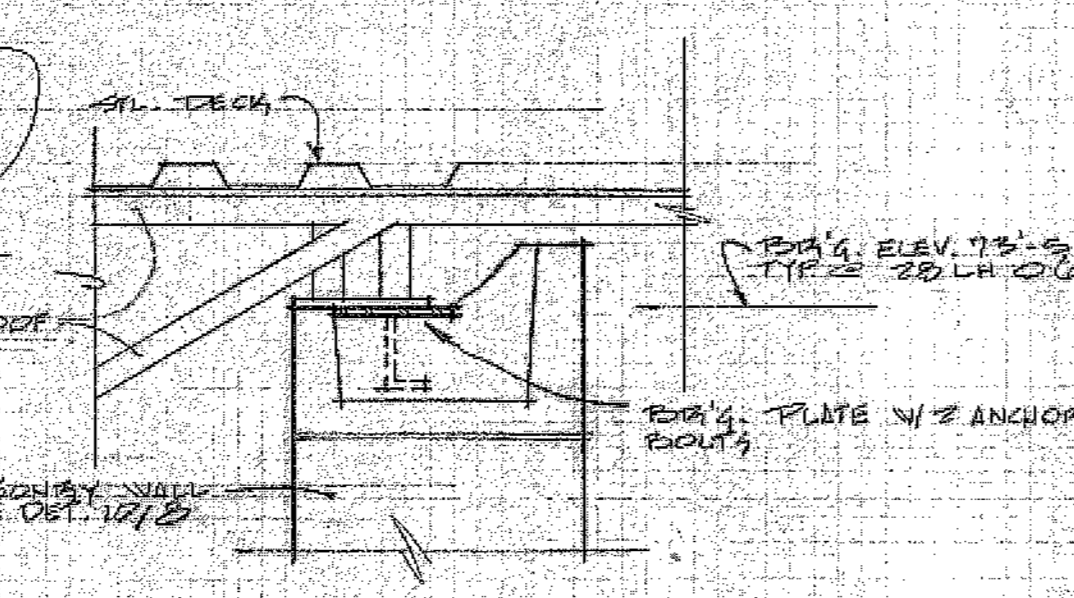
PROPOSED CLASSROOM ADDITION
LURE AREA VOCATIONAL-TECHNICAL SCHOOL
WATER TOWN, SOUTH DAKOTA



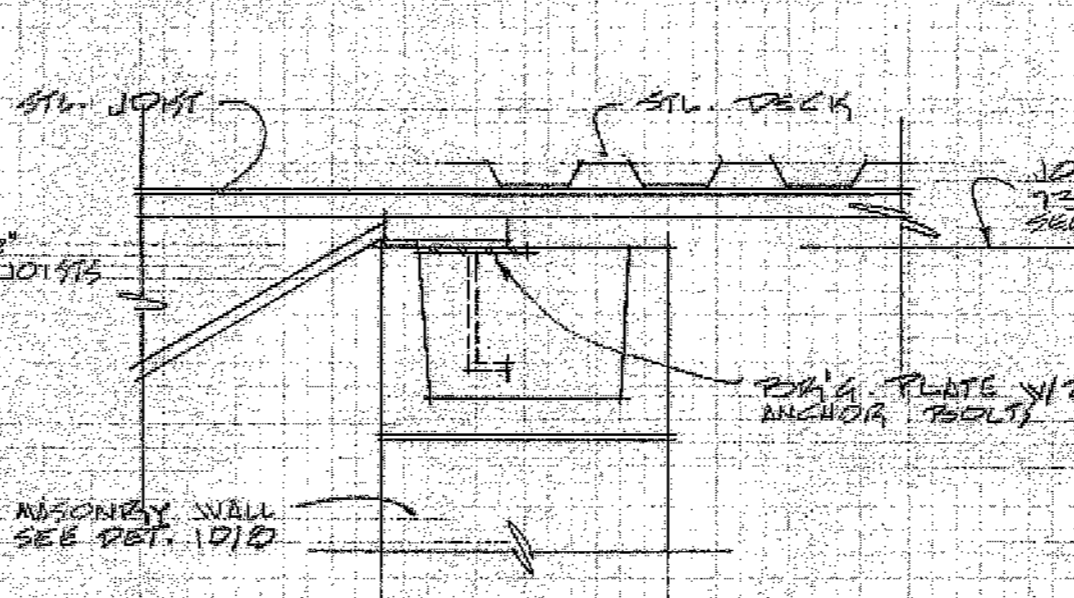
ROOF FRAMING PLAN - BASE BID
 BEAMS 2"x8" @ 1'-0"



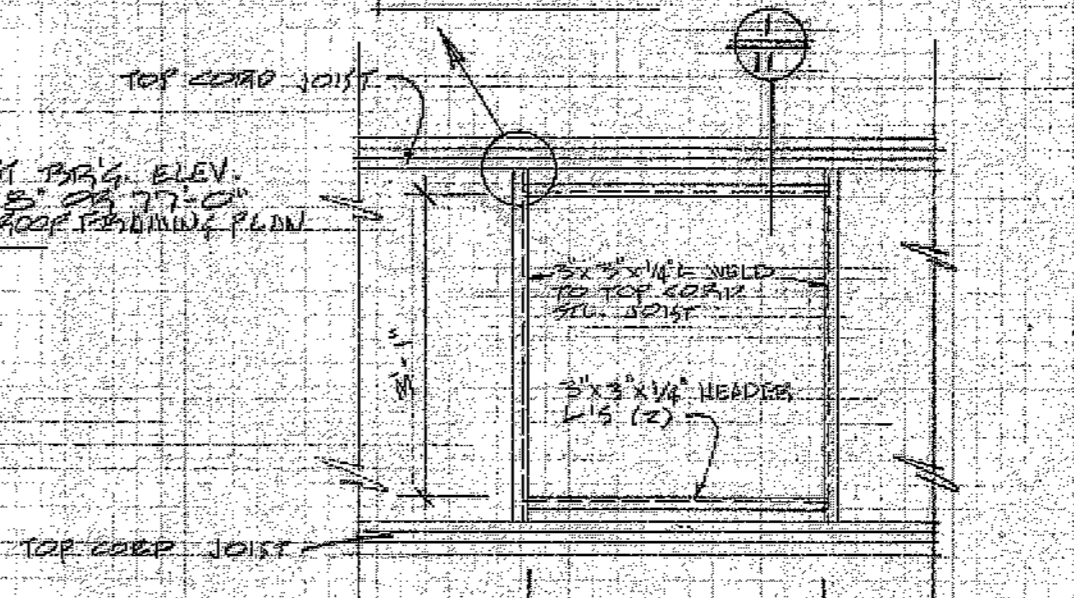
BEAM BAY DETAIL
 SCALE 1/2" = 1'-0"



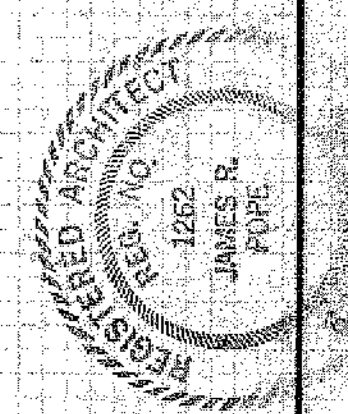
BAY DETAIL
 SCALE 1/2" = 1'-0"

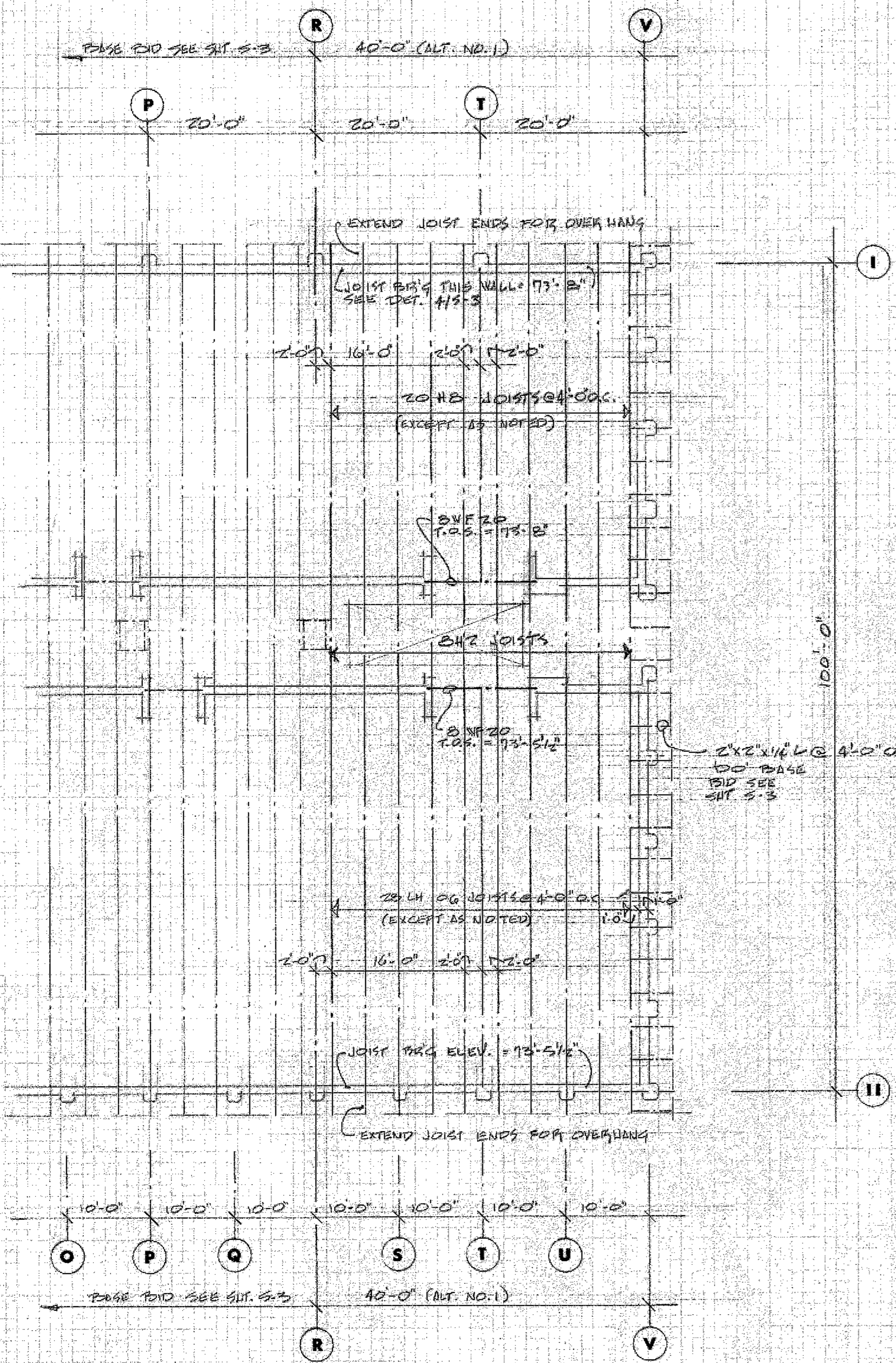


BAY DETAIL
 SCALE 1/2" = 1'-0"

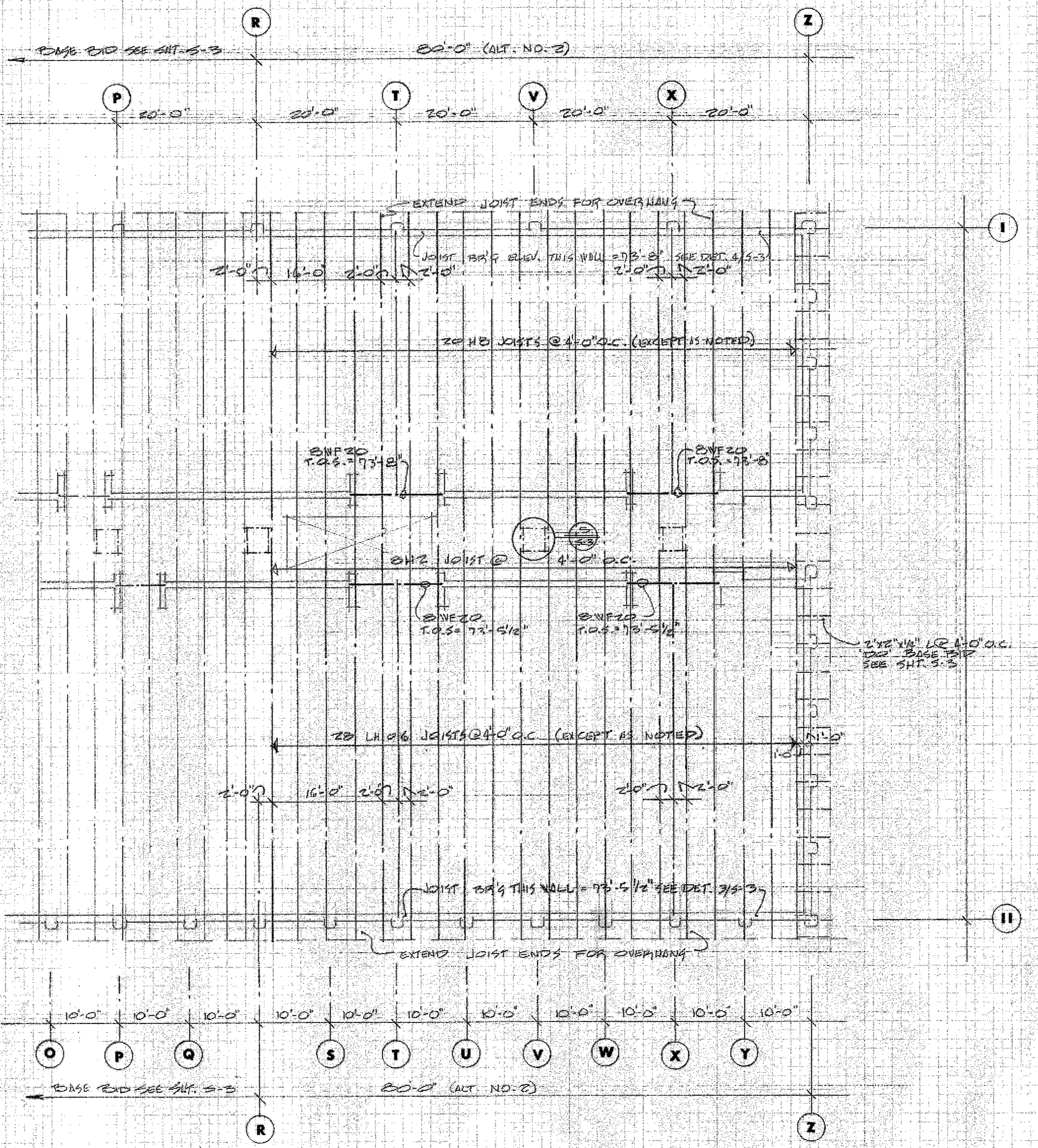


TYP. SKYLIGHT OPENING
 SCALE 1/2" = 1'-0"

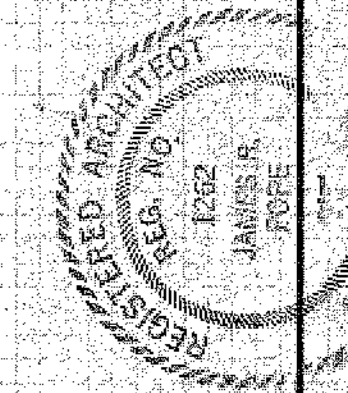




ROOF FRAMING PLAN - ALT. NO. 1
SCALE 3/32" = 1'-0"



ROOF FRAMING PLAN - ALT. NO. 2
SCALE 3/32" = 1'-0"



J. R. Pope, architect
Watertown, South Dakota

TRAPPESED CLASSROOM ADDITION
LAME AREA VOCATIONAL TECHNICAL SCHOOL
WATER TOWN, SOUTH DAKOTA

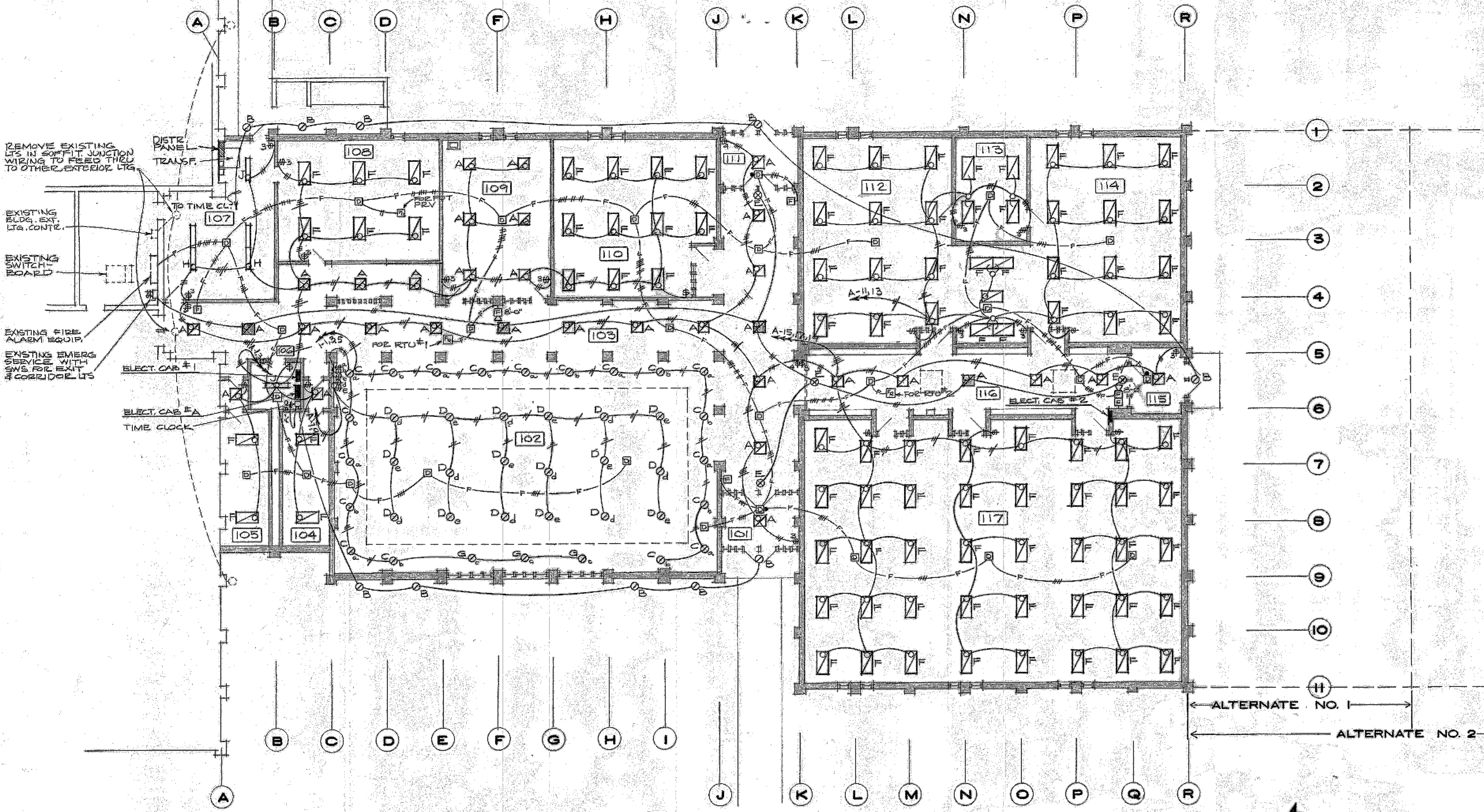
sheet design
drawn
checked
revisions

S4

ELECTRICAL SYMBOLS

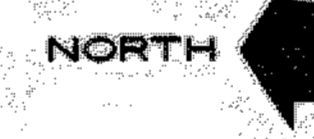
A	Chilling Unit	Capital letter indicates fixture type, small letter indicates switching	Telephone Cabinet
W	Wall Outlet		Electric Cabinet
L	Lamp Holder Outlet		Distribution Cabinet
S	Exit Sign		Special Equipment Cabinet - as Noted
R	Recessed Incandescent		Door Bell Push Button
F	Fluorescent Fixture		Buzzer
R.F.	Recessed Fluorescent Fixture		Bell
EM	Picture of Emergency Circuit		Chime
1S	Single Pole Switch		Clock
2S	Double Pole Switch		Clock Hanger Outlet
3S	Three-Way Switch		Double Face Clock
4S	Four-Way Switch		Speaker
5S	Switch with Pilot		Microphone Outlet
DS	Door Switch		Volume Control
OS	One Operated Switch		Call Back Switch
MS	Momentary Control Switch		Television Outlet
DS	Dimmer Switch		Fire Alarm Manual Station
DC	Duplex Convenience Outlet		Fire Detector
BO	Blank Outlet		Fire Detector Fixed Temp. Only
TL	Twist Lock Type Outlet		Smoke Detector
DC20	Duplex Convenience Outlet 20A		Flow Switch
SWR	Split Wired Duplex Outlet		Fire Alarm Horn
IR	Ironing Outlet		Fire Alarm Cut-Off Relay
PO	Pedestal Outlet		Door Holder
30	30A or 50A Outlet - as Noted		Nurse Call Station
SR	Switch & Single Receptacle 1-Gang Box		Remote Projection Control Outlet
FR	Flush Floor Receptacle		Existing Outlet
SP	Special Purpose Outlet or Connection		Underfloor Duct P-Power
M	Motor		Telephone
DSW	Disconnect Switch		Plugstrip
MS	Magnetic Starter		Ground
CM	Combination Magnetic Starter		Existing Conduit
MT	Motor Thermal Switch		Telephone Conduit
T	Thermocut		Clock Conduit
PS	Pushbutton Station		Sound Conduit
TR	Transformer		Fire Alarm Conduit
TF	Telephone Floor Outlet		Conduit in Floor or Underground
INT	Intercom		Low Voltage Wiring
			Television Conduit

Conduit in wall or ceiling space. Cross marks indicate number of wires. No marks indicate two wires. Arrows indicate home runs and panel. Numbers indicate panel and circuit in panel.



ELECTRICAL FLOOR PLAN - BASE BID

SCALE 3/32" = 1'-0"



LIGHTING		FIXTURE		SCHEDULE	
TYPE NO.	MANUFACTURER	CATALOG NO.	LAMP DATA		MOUNTING
			NO.	TYPE WATT	
A	LITHONIA	28-2U40-A12	2	F40W	GRID TROFFER 277V
B	PRESCOLITE	9309B-DL	1	M.V. 175	RECESSED 277V
C	PRESCOLITE	1054-720	1	INC 150	RECESSED 120V
D	PRESCOLITE	1060-250M.V.-732	1	M.V. 250	RECESSED 277V
E	PRESCOLITE	76211	2	INC 20	TOP MOUNT EXIT LIGHT 277V
F	LITHONIA	28-440-A12	4	F40W	GRID TROFFER 277V
G	PRESCOLITE	1059-732	1	INC 300	RECESSED 120V
H	LITHONIA	8TC-240	4	F40W	SURFACE STRIP 277V
J	LITHONIA	C-240	2	F40W	SURFACE STRIP 277V

ELECTRIC		HEATING		EQUIPMENT	
NO.	MANUFACTURER	CATALOG NO.	ELEC. CHAR.		MOUNTING
			WATTS	VOLT PH	
1	BERKO	CS811-2027-T	2000	277	TOP UNDER SILL WITH #TS BUILT-IN STAT
2	CHEMALOX	CUV-RFF-1553	5000	277	RECESSED CAB UNIT HTR 4" ABOVE FL - 9" DEEP
3	BERKO	CC2-2027	2000	277	SURFACE CONVECTOR W/CCT-1 BUILT-IN STAT

EC-A		VOLTS 277/480		PHASE 3		WIRE 4		MAIN CAPACITY 225		AMPERES	
		MOUNTING SURFACE		FEEDER SIZE 4#3/8 THW		MAIN CONNECTION MLO					
CCT NO.	ITEM FED	DISTRIBUTION WATS	WIRE SIZE	CIRCUIT BREAKER	NEUTRAL	FRAME	POLAR	AMP	DISTRIBUTION WATS	ITEM FED	CCT NO.
1	LTG 101,103-106,111	2700	12	20	1	E	A	E 1 20/12	2000	ELECT. HTR 102	2
3	107,109	2600					B		2000		4
5	110	2200					C		2000		6
7	102	2700					A		30	10	5000
9	102	2700					B		30	10	5000
11	112, 113	3200					C		30	10	5000
13	114	3400					A		20	12	2000
15	116, 117	3000					B		12	2000	105
17	117	3000					C		10	4000	LTG 118 (ALT. NO. 1#2)
19	117	3000					A		10	4200	119
21	SPARE	2000					B		10	4400	
23		3300					C		10	3000	121 (ALT. NO. 2)
25		3700					A		10	2000	
27		1000					B		10	4000	120
29		3000					C		12	2000	EXTERIOR
		3900					A		3	20	3900
		3900	12	20	3	EH	A	EH 3 20 12	3900	ROOF TOP UNIT	32
		3900					B		3900		
		3900					C		2000		
		3900	12	20	3	EH	A	EH 3 20 -	2000	SPARE	34
		3900					B		2000		
		3900					C		2000		

133.2 kW - 160.2 AMP

ABBREVIATIONS A STANDARD LIST. NOT ALL WORDS APPEAR IN THESE DRAWINGS.

A or AMP	AMPERE	LTG.	LIGHT
A.C.	ALTERNATING CURRENT	M.C.	MECHANICAL CONTRACTOR
A/C	AIR CONDITIONING	MCC	MOTOR CONTROL CENTER
A/E	ARCHITECT & ENGINEER	MFC	THOUSAND CIRCULAR MIL
A/H	ABOVE FINISH FLOOR	MLO	MAIN LOG ONLY
A/I	AIR HANDLING UNIT	M.D.	MOUNTED
AL	ALUMINUM	M.V.	MERCURY VAPOR
B.U.H.	BLAST UNIT HEATER	N.C.	NORMALLY CLOSED
C. or COND.	CONDUIT	N.E.C.	NATIONAL ELECTRICAL CODE
C/B	CIRCUIT BREAKER	NEMA	NATIONAL ELECTRICAL MANUFACTURERS ASSOCIATION
CCT	COPPER	NEUT.	NEUTRAL
C.U.H.	CABINET UNIT HEATER	N.O.	NORMALLY OPEN
D.C.	DIRECT CURRENT	O.H.	OVERHEAD
DC	DISTRIBUTION CABINET	P	POLE
DISC.	DISCONNECT	P.A.	PUBLIC ADDRESS
DW	DISH WASHER	PS	PUSH BUTTON
E.C.	ELECTRICAL CONTRACTOR	PH	PHASE
EC	ELECTRICAL CABINET	PMG.	PUMPING
EF	EVALUATION	PS	PULL SWITCH
EM	EMERGENCY	PVC	PLASTIC CONDUIT
EMT	ELECTRICAL METALLIC TUBING	PWR.	POWER
E.W.C.	ELECTRICAL WATER COOLER	REC. or RECEPT.	RECEPTACLE
EXP.	EXPLOSION PROOF	S.N.	SOLID NEUTRAL
FL	FIRE ALARM	SH	SWITCH
FLR.	FULL LOAD AMPERES	T.C.	TEMPERATURE CONTROL
FLOOR.	FLUORESCENT	TC	TELEPHONE CABINET
G.C.	GENERAL CONTRACTOR	TEL.	TELEPHONE
GEN.	GENERATOR	TR. or TRANS.	TRANSFORMER
GND. or GRND.	GROUND		
H.A.C.	HEATING & AIR CONDITIONING	U.G.	UNDERGROUND
H.D.	HEATING DISTRIBUTION	U.H.	UNIT HEATER
HTR.	HEATING	U.V.	UNIT VENTILATOR
H.V.	HEATING & VENTILATION	V	VOLT
HZ	HERTZ (CYCLES)	W	WATT or WIRE
I.C.	INTERFERING CURRENT	WP	WEATHERPROOF
INC.	INCANDESCENT	WTR.	WATER
JB	JUNCTION BOX	W	WIRE CONNECTED
KV	KILOVOLT	Δ	DELTA Connected
MVA	MILLIVOLT-AMPERE	Φ	PHASE
RW	RILOWATT		

I hereby certify that this plan, specification or report was prepared by me, or under my direct supervision, and that I am a duly Registered Professional Engineer under the laws of the State of South Dakota.
By John J. Anderson
Registration No. 361 Date Jan 10, 1974

J. r. pope, architect
 watertown, south dakota
 PROPOSED CLASSROOM ADDITION
 LAKE AREA VOCATIONAL TECHNICAL SCHOOL
 WATERTOWN, SOUTH DAKOTA
DGR CONSULTING ENGINEERS
 SIOUX FALLS, S. D.
 JAN 10 1974
 sheet ELECTRICAL PLAN - LIGHTS & P.A.
 design JLL
 drawn JLL
 checked JLL
 revisions

ELECTRICAL SYMBOLS

- Ceiling Outlet, Capital letter indicates fixture type, small letter indicates switching
- Wall Outlet
- Lamp Holder Outlet
- ⊗ Exit Sign
- ⊙ Recessed Incandescent
- ▭ Fluorescent Fixture
- ▭ Recessed Fluorescent Fixture
- ▭ Fixture of Emergency Circuit
- ⊙ Junction Box
- ⊙ Single Pole Switch
- ⊙ Double Switch
- ⊙ Three-Way Switch
- ⊙ Four-Way Switch
- ⊙ Switch with Pilot
- ⊙ Door Switch
- ⊙ Key Operated Switch
- ⊙ Momentary Contact Switch
- ⊙ Dimmer Switch
- ⊙ Duplex Convenience Outlet
- ⊙ Blank Outlet
- ⊙ Twist Lock Type Outlet
- ⊙ Duplex Convenience Outlet 20A
- ⊙ Split Wired Duplex Outlet
- ⊙ Ironing Outlet
- ⊙ Pedestal Outlet
- ⊙ 30A or 30A Outlet - as Noted
- ⊙ Switch & Single Receptacle 1-Gang Box
- ⊙ Flush Floor Receptacle
- ⊙ Special Purpose Outlet or Connection
- ⊙ Motor
- ⊙ Disconnected Switch
- ⊙ Magnetic Starter
- ⊙ Combination Magnetic Starter
- ⊙ Motor Thermal Switch
- ⊙ Thermostat
- ⊙ Pushbutton Station
- ⊙ Transformer
- ⊙ Telephone
- ⊙ Telephone Floor Outlet
- ⊙ Intercom
- ⊙ Telephone Cabinet
- ⊙ Electric Cabinet
- ⊙ Distribution Cabinet
- ⊙ Special Equipment Cabinet - as Noted
- ⊙ Door Bell Push Button
- ⊙ Buzzer
- ⊙ Bell
- ⊙ Chime
- ⊙ Clock
- ⊙ Clock Hanger Outlet
- ⊙ Double Face Clock
- ⊙ Speaker
- ⊙ Microphone Outlet
- ⊙ Volume Control
- ⊙ Call Back Switch
- ⊙ Television Outlet
- ⊙ Fire Alarm Manual Station
- ⊙ Fire Detector
- ⊙ Fire Detector Fixed Temp. Only
- ⊙ Smoke Detector
- ⊙ Flow Switch
- ⊙ Fire Alarm Horn
- ⊙ Fire Alarm Cut-Off Relay
- ⊙ Door Holder
- ⊙ Nurse Call Station
- ⊙ Remote Projection Control Outlet
- ⊙ Existing Outlet
- ⊙ Underfloor Duct P-Power
- ⊙ Plugstrip
- ⊙ Ground
- ⊙ Existing Conduit
- ⊙ Telephone Conduit
- ⊙ Clock Conduit
- ⊙ Sound Conduit
- ⊙ Fire Alarm Conduit
- ⊙ Conduit in Floor or Underground
- ⊙ Low Voltage Wiring
- ⊙ Television Conduit

ABBREVIATIONS A STANDARD LIST. NOT ALL WORDS APPEAR IN THESE DRAWINGS.

- | | | | |
|---------------|----------------------------|-----------------|--|
| A or AMP | AMPERE | LT. | LIGHT |
| A/C | ALTERNATING CURRENT | M.C. | MECHANICAL CONTRACTOR |
| A/E | ARCHITECT & ENGINEER | MCC | MOTOR CONTROL CENTER |
| A.F.F. | ABOVE FINISH FLOOR | MCM | THOUSAND CIRCULAR MIL |
| A.H.U. | AIR HANDLING UNIT | MLO | MAIN LUG ONLY |
| AL | ALUMINUM | MTO | MOUNTED |
| B.U.H. | BLAST UNIT HEATER | M.V. | MERCURY VAPOR |
| C. or COND. | CONDUIT | N.C. | NORMALLY CLOSED |
| C.B. or C/B | CIRCUIT BREAKER | N.E.C. | NATIONAL ELECTRIC CODE |
| CU | COPPER | NEMA | NATIONAL ELECTRICAL MANUFACTURER'S ASSOCIATION |
| C.U.H. | CABINET UNIT HEATER | NEUT. | NEUTRAL |
| D.C. | DIRECT CURRENT | N.O. | NORMALLY OPEN |
| D.C. | DIRECT CURRENT | O.H. | OVERHEAD |
| DISC. | DISCONNECT | P. | POLE |
| DW | DOWN | P.A. | PUBLIC ADDRESS |
| DW | DISHWASHER | P.B. | PUSH BUTTON |
| E.C. | ELECTRICAL CONTRACTOR | PH. | PHASE |
| EM | ELECTRICAL METALLIC TUBING | P.L.V. | POWER ROOF VENTILATOR |
| EM | EMERGENCY | P.V.C. | PULL SWITCH |
| E.W.C. | ELECTRICAL WATER COOLER | PVC | PLASTIC CONDUIT |
| EXP. | EXHAUST FAN | PWR. | POWER |
| FA | FIRE ALARM | REC. or RECEPT. | RECEPTACLE |
| FLA | FULL LOAD AMPERES | S.N. | SOLID NEUTRAL |
| FLOOR. | FLUORESCENT | SW. | SWITCH |
| G.C. | GENERAL CONTRACTOR | T.C. | TEMPERATURE CONTROL |
| GEN. | GENERATOR | TEL. | TELEPHONE CABINET |
| GND. or GRND. | GROUND | TR. or TRANS. | TRANSFORMER |
| H & AC | HEATING & AIR CONDITIONING | U.G. | UNDERGROUND |
| HD | HAND DRYER | U.H. | UNIT HEATER |
| HG. | HEATING | U.V. | UNIT VENTILATOR |
| H & V | HEATING & VENTILATION | V | VOLT |
| HZ | HERTZ (CYCLES) | W or WIRE | WATT or WIRE |
| I.C. | INTER interrupting CURRENT | W.P. | WEATHERPROOF |
| INC. | INCANDESCENT | WTR. | WATER |
| JB | JUNCTION BOX | Y | YWE Connected |
| KVA | KILOVOLT-AMPERE | Δ | DELTA Connected |
| KW | KILOWATT | Φ | PHASE |

REMOVE EXISTING LITS IN SOFFIT JUNCTION WIRING TO FEED THEM TO OTHER EXTERIOR LITG.

EXISTING BLDG. EXT. LITG. CONTE.

EXISTING SWITCH BOARD

EXISTING FIRE ALARM EQUIP.

EXISTING EMERG SERVICE WITH SW. FOR EXIT & CORRIDOR LITG.

DIST. PANEL TRANSF.

TO TIME CLK

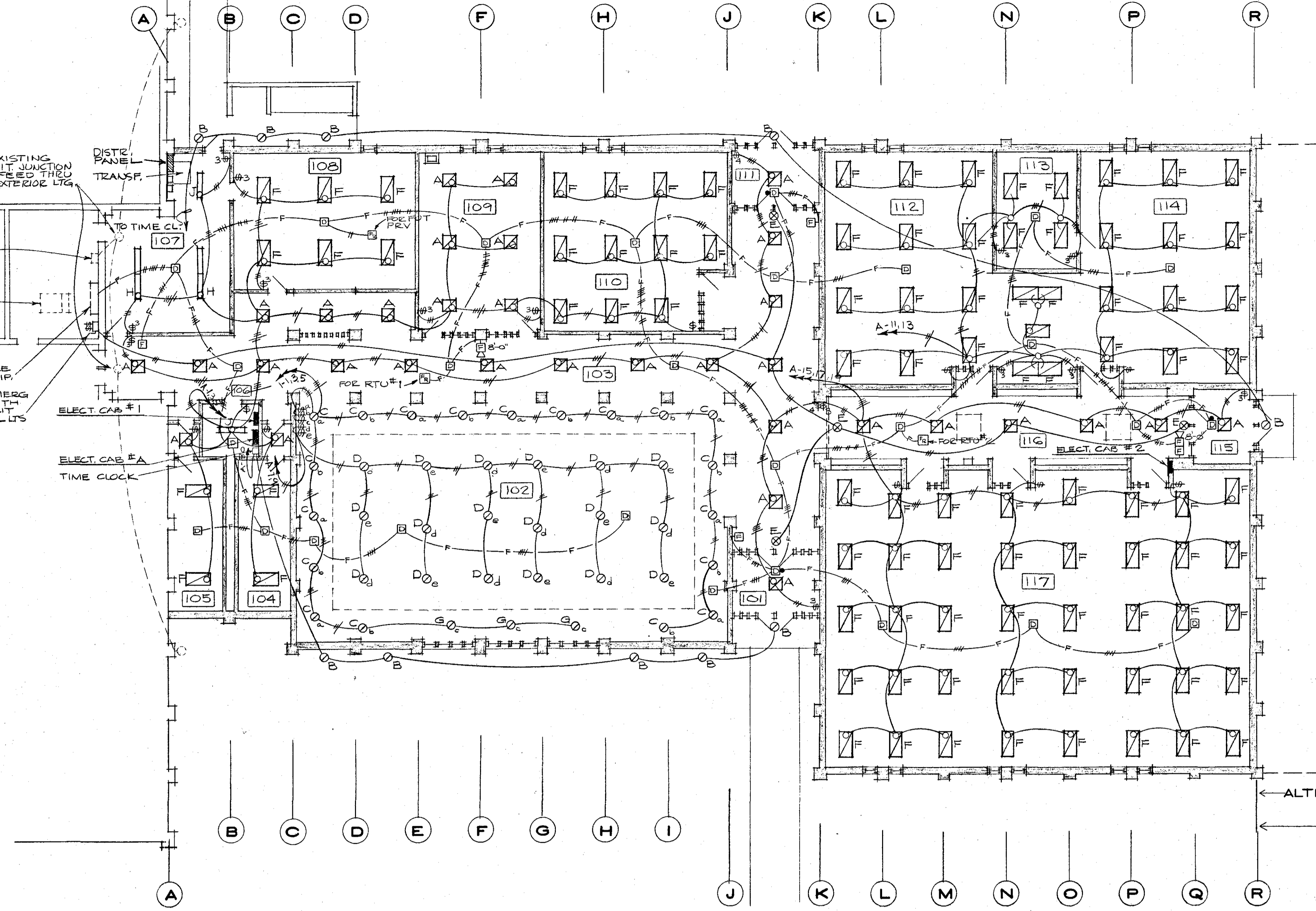
ELECT. CAB #1

ELECT. CAB #A

TIME CLOCK

FOR RTU #1

FOR RTU #2



ELECTRICAL FLOOR PLAN - BASE BID
SCALE 3/32" = 1' - 0"

LIGHTING		FIXTURE		SCHEDULE	
TYPE NO.	MANUFACTURER	CATALOG NO.	LAMP DATA		MOUNTING
			NO.	TYPE WATT	CAT. NO.
A	LITHONIA	2G-2U40-A12	2	FLOOR 40	F40WW/U
B	PRESCOLITE	93093-DL	1	M.V. 175	H175DX39-22
C	PRESCOLITE	1054-720	1	INC 150	50A23/99
D	PRESCOLITE	1060-250MV-732	1	M.V. 250	H250DX37-5
E	PRESCOLITE	76211	2	INC 20	20TG/2DC/1F
F	LITHONIA	2G-440-A12	4	FLOOR 40	F40WW
G	PRESCOLITE	1029-732	1	INC 300	300M/1F
H	LITHONIA	8TC-240	4	FLOOR 40	F40WW
J	LITHONIA	C-240	2	FLOOR 40	F40WW

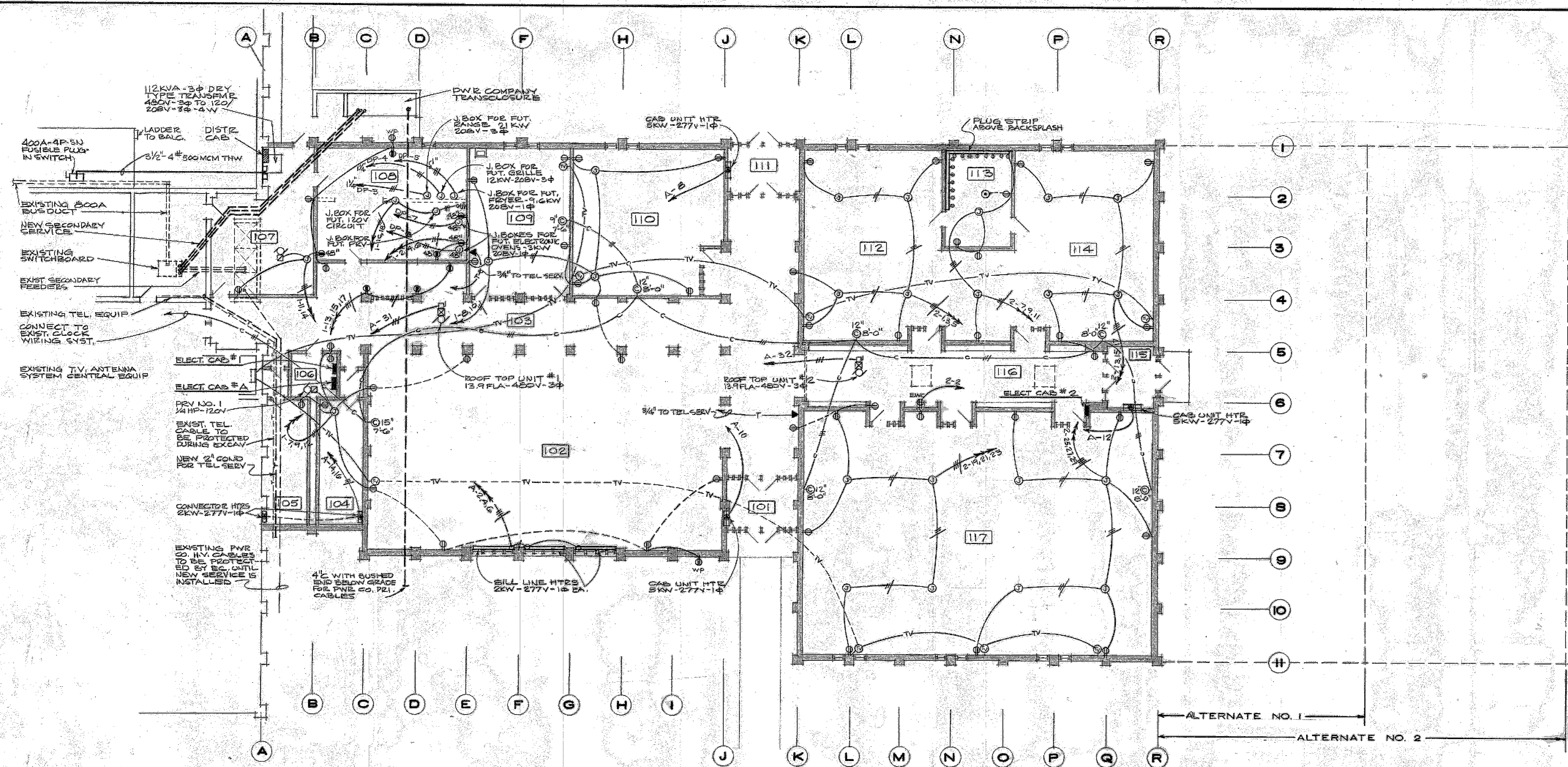
ELECTRIC		HEATING		EQUIPMENT	
NO.	MANUFACTURER	CATALOG NO.	ELEC. CHAR.		MOUNTING
			WATTS	VOLT PH	
1	BERKO	CS811-2027-T	2000	277	1 TOP UNDER BILL WITH #1'S BUILT-IN STAT
2	CHROMALOX	CUV-RFF-1553	5000	277	1 RECESSED CAB UNIT HTR 4" ABOVE FL. - 9" DEEP
3	BERKO	CC2-2027	2000	277	1 SURFACE CONNECTOR W/CCT-1 BUILT-IN STAT

EC-A		VOLTS 277/480 PHASE 3 WIRE 4 MAIN CAPACITY 225 AMPERES	
COI. NO.	ITEM FED	DISTRIBUTION WATTS	FEEDER SIZE 4 # 3/8 THW MAIN CONNECTION MLO
1	LTG 101,103-106,111	2700	12 20 1 E
3	107,109	2600	12 20 1 E
5	110	2200	12 20 1 E
7	102	2700	12 20 1 E
9	102	2700	12 20 1 E
11	112,113	3200	12 20 1 E
13	114	3400	12 20 1 E
15	116,117	3000	12 20 1 E
17	117	3000	12 20 1 E
19	117	3000	12 20 1 E
21	SPARE	2000	12 20 1 E
23		1000	12 20 1 E
25		3700	12 20 1 E
27		1000	12 20 1 E
29		3000	12 20 1 E
31	200F TOP UNIT	3900	12 20 3 EH
33	200F TOP UNIT ALT. 182	3900	12 20 3 EH

I hereby certify that this plan, specification or report was prepared by me, or under my direct supervision, and that I am a duly Licensed Professional Engineer under the laws of South Dakota.

By *John J. Pope*
Registration No. *661* Date *Jan 10, 1974*

J. R. POPE, ARCHITECT
 WATER TOWN, SOUTH DAKOTA
PROPOSED CLASSROOM ADDITION
 LAKE AREA VOCATIONAL TECHNICAL SCHOOL
 WATER TOWN, SOUTH DAKOTA
 JAN 10 1974
 SHEET ELECTRICAL PLAN - LIGHTS 3 EA
 design - JLL
 drawn - JLL
 checked - JLL
 revised - JLL



ELECTRICAL FLOOR PLAN - BASE BID
SCALE 3/32" = 1' - 0"



EC-1		VOLTS 120/208		PHASE 3		WIRE 4		MAIN CAPACITY 100		AMPERES	
MOUNTING SURFACE		FEEDER SIZE 4 # 3 THW		MAIN CONNECTION MLO							
COI. NO.	ITEM FED	DISTRIBUTION WATTS	WIRE SIZE	CIRCUIT BREAKER	NEUTRAL	CIRCUIT BREAKER	NEUTRAL	DISTRIBUTION WATTS	ITEM FED	COI. NO.	
1	LTG 102	1500	12	20	150	A	EQ	12	1500	REC 108	2
3	102	1400				B			1500	108	4
5	102	900				C			1500	108	6
7	REC 102	1000				A			1000	109, 110	8
9	102-106	1200				B			800	PRV 106	10
11	103, 107, 108	1200				C			500	CIRC PUMP	14
13	103	1500				A			1500	REC 108 (FUT)	16
15	103	1500				B			1000	PRV 108 (FUT)	18
17	103	1500				C			1100	SPARE	20
19	SPARE	1000				A					22
21		1000				B					24
23		1000				C					26

27.3 KW - 75.8 AMPS

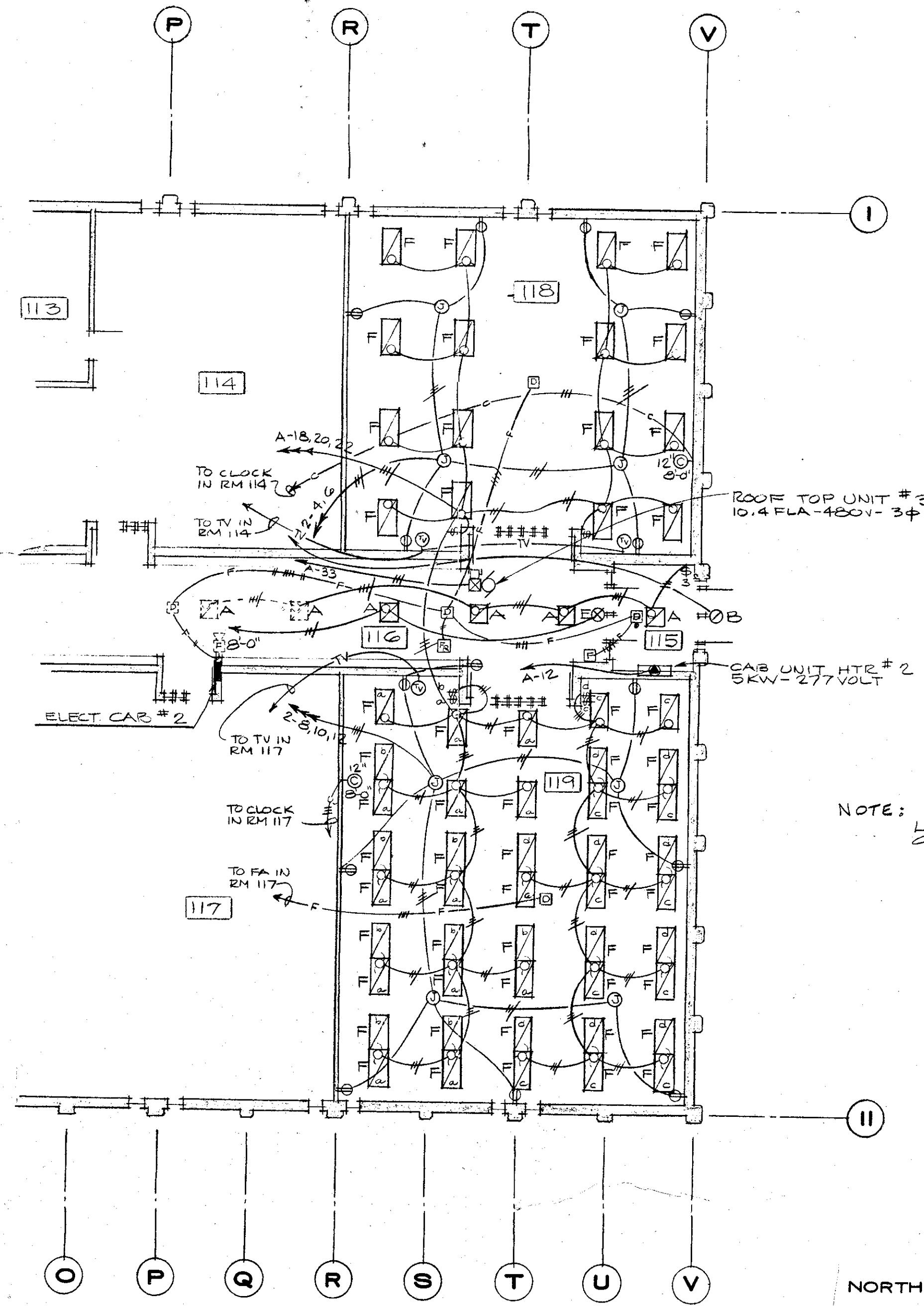
EC-2		VOLTS 120/208		PHASE 3		WIRE 4		MAIN CAPACITY 225		AMPERES	
MOUNTING FLUSH		FEEDER SIZE 4 # 1/2 THW		MAIN CONNECTION MLO							
COI. NO.	ITEM FED	DISTRIBUTION WATTS	WIRE SIZE	CIRCUIT BREAKER	NEUTRAL	CIRCUIT BREAKER	NEUTRAL	DISTRIBUTION WATTS	ITEM FED	COI. NO.	
1	REC 112	1000	12	20	150	A	EQ	12	1000	REC 116, 117	2
3	112 (J.Box)	1000				B			1000	118 (ALT. 1 & 2)	4
5	112 (J.Box)	1000				C			1000	119	6
7	112, 113 (J.Box)	1000				A			1000	119	8
9	112, 113	1000				B			1000	121	10
11	113	1000				C			1000	SPARE	12
13	114 (J.Box)	1000				A			1000	SPARE	14
15	114 (J.Box)	1000				B			1000	SPARE	16
17	114	1000				C			1000	SPARE	18
19	117 (J.Box)	1000				A			1000	SPARE	20
21	117	1000				B			1000	SPARE	22
23	117 (J.Box)	1000				C			1000	SPARE	24
25	117	1000				A			1000	SPARE	26
27	117 (J.Box)	1000				B			1000	SPARE	28
29	117 (J.Box)	1000				C			1000	SPARE	30

30 KW - 83.3 AMPS

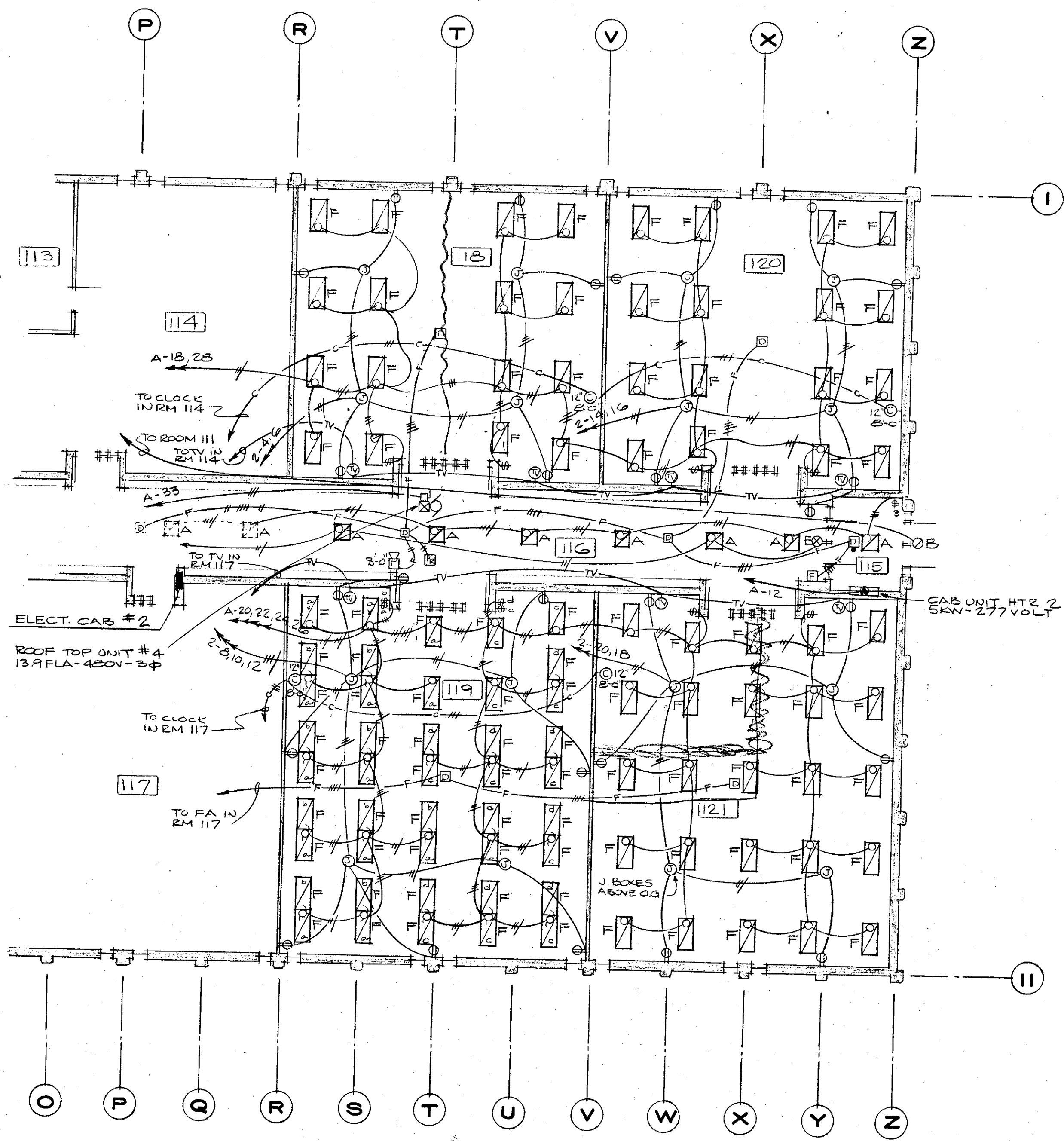
DISTRIBUTION PANEL NO.		VOLTS 120/208		PHASE 3		WIRE 4		MAIN CAPACITY 400		AMPERES	
MOUNTING SURFACE		FEEDER SIZE 4 # 3 THW		MAIN CONNECTION 400A-2P FUSIBLE S.S.W.							
ITEM NO.	EQUIPMENT FED	AMPS	POLES	FUSE SIZE	WIRE SIZE	FLA KW	FLC KW	FLC SW	FLC SW	FLC SW	
1	EC-1	100	3	100	3	9.1	9.1	9.1			
2	EC-2	100	3	100	3	10.0	10.0	10.0			
3	RANGE (FUT)	100	3	70	4	7.0	7.0	7.0			
4	GRILLE (FUT)	100	3	70	4	4.0	4.0	4.0			
5	FRYER (FUT)	60	3	60	6	4.6	4.6	0.0			
6	SPARE	60	3	-	-	2.0	2.0	3.6			
7	ELECTRONIC OVEN (FUT)	30	3	30	10	0.0	3.0	3.0			
8	"	30	3	30	10	3.0	0.0	3.0			
9	SPARE	30	3	-	-	1.0	1.0	1.0			
10	SPARE	30	3	-	-	1.0	1.0	1.0			

125.1 KW - 347.5 AMPS

I hereby certify that this plan, specification or report was prepared by me, or under my direct supervision, and that I am a duly Registered Professional Engineer under the laws of the state of South Dakota.
By W. J. Anderson
Registration No. 851 Date Jan 10, 1974

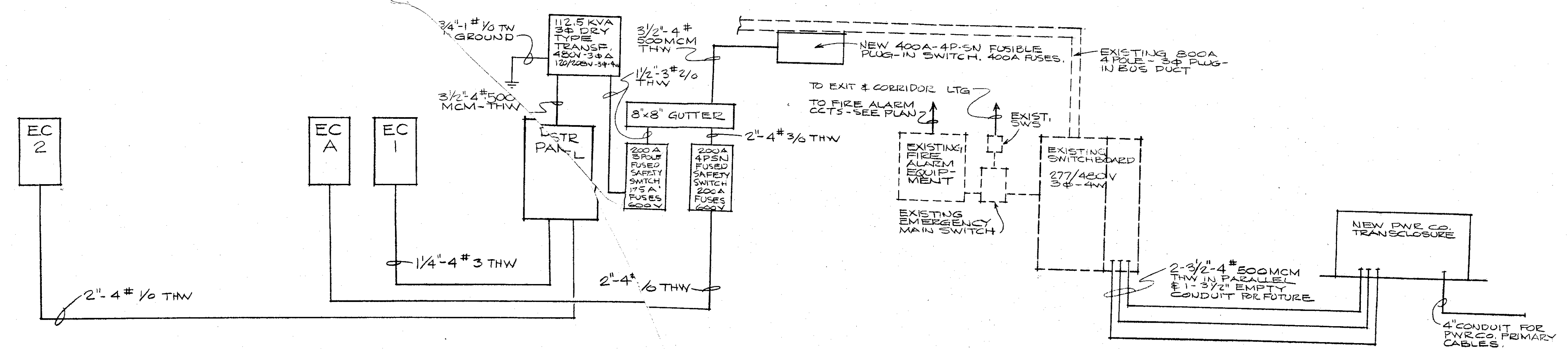


ALT. NO. 1 - ELECTRICAL FLOOR PLAN
SCALE 3/32" = 1'-0"



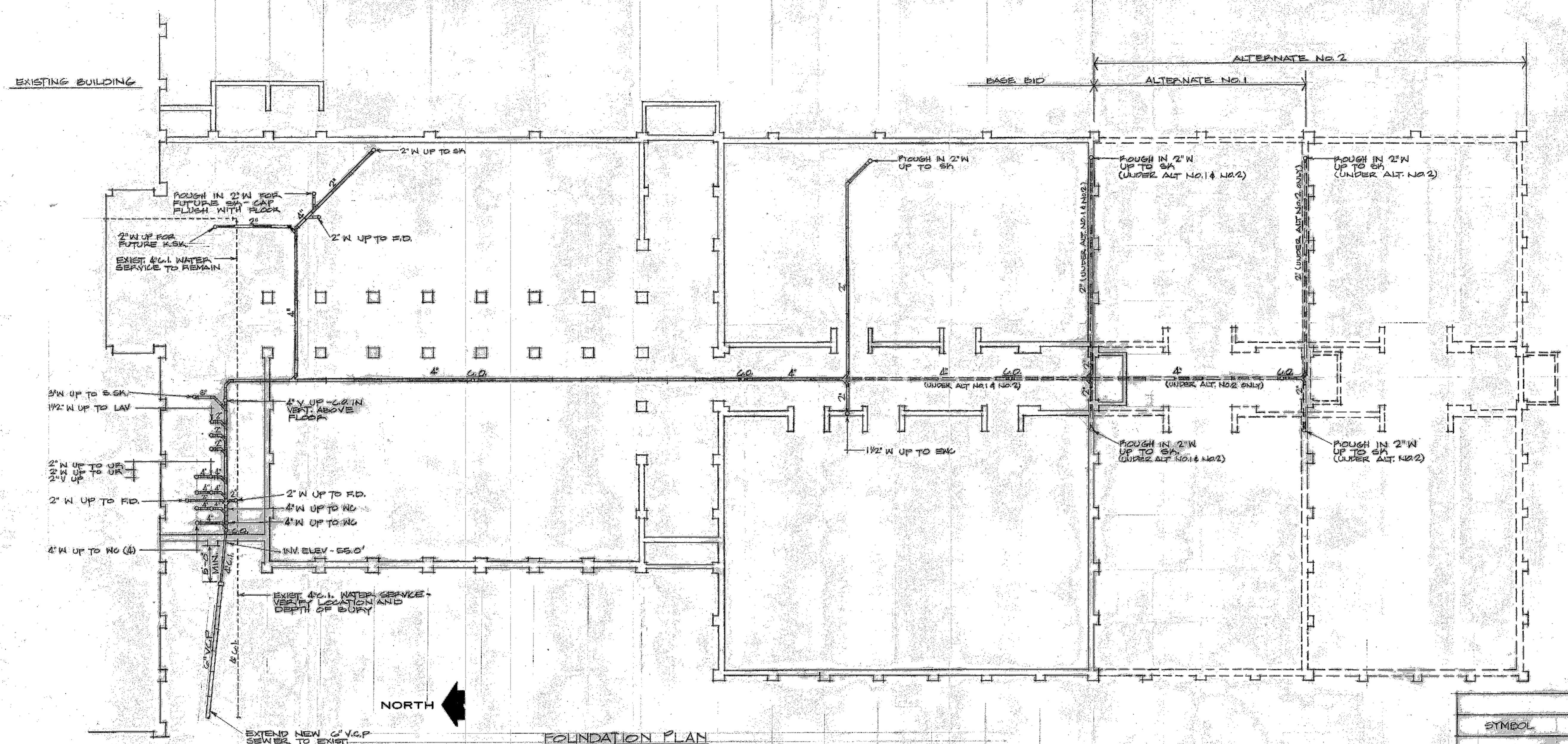
ALT. NO. 2 - ELECTRICAL FLOOR PLAN
SCALE 3/32" = 1'-0"

NOTE: LIGHT FIXTURES TO BE LOCATED BY REFLECTED CEILING PLAN SH. 12



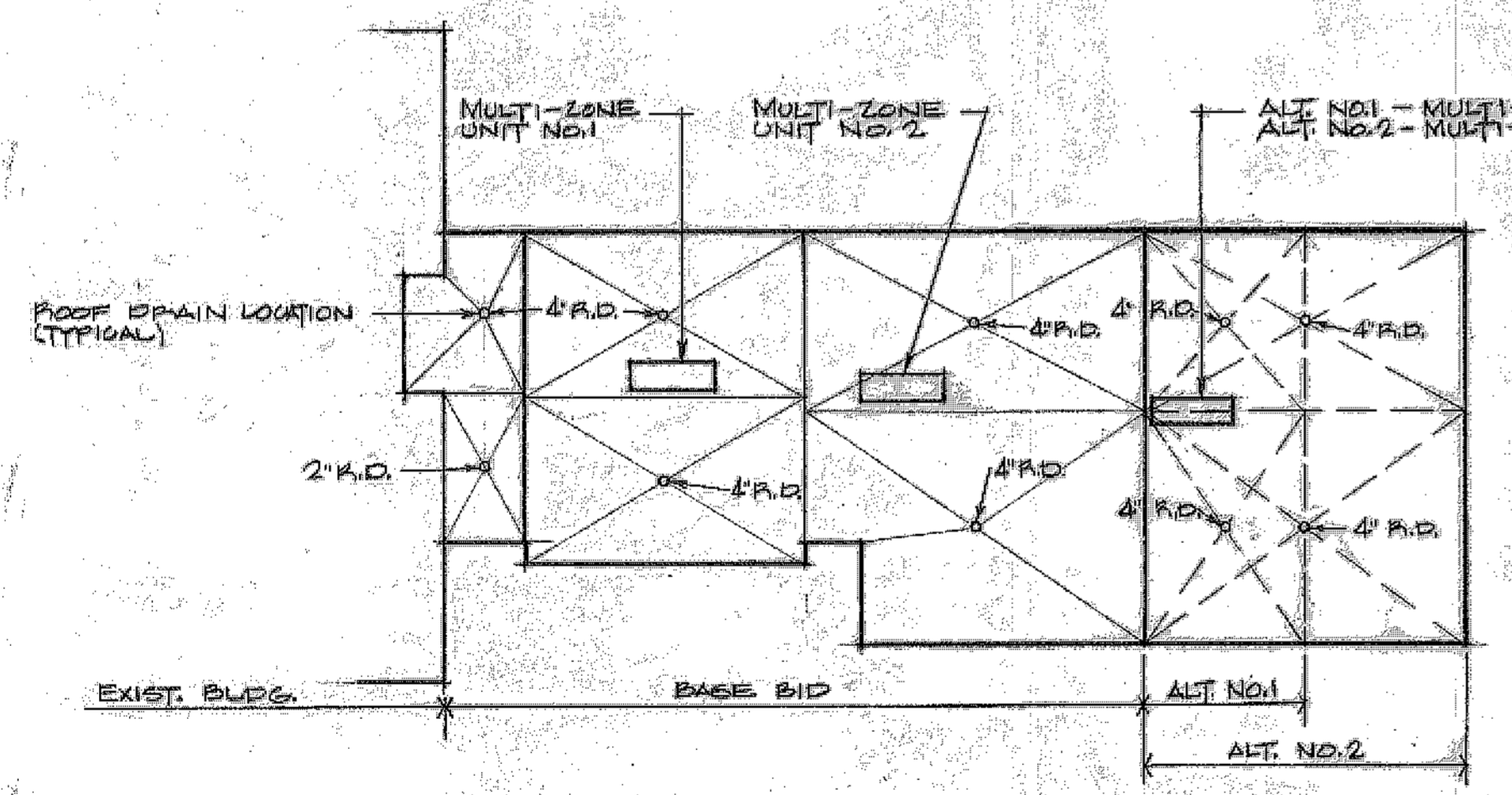
ELECTRICAL FEEDER DIAGRAM
N.T.S.

I hereby certify that this plan, specification or was prepared by me or under my direct supervision and that I am a duly Licensed Professional Engineer in the State of South Carolina.
By _____
Registration No. _____

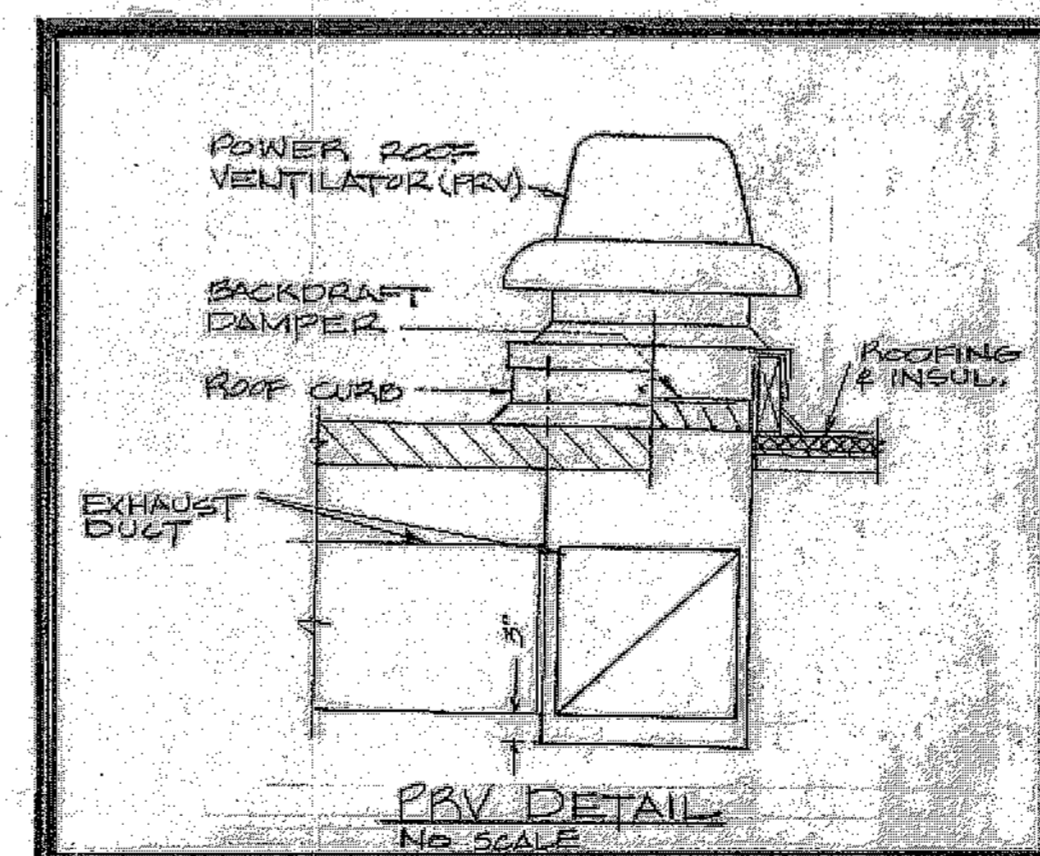


FOUNDATION PLAN
SCALE: 3/32" = 1'-0"

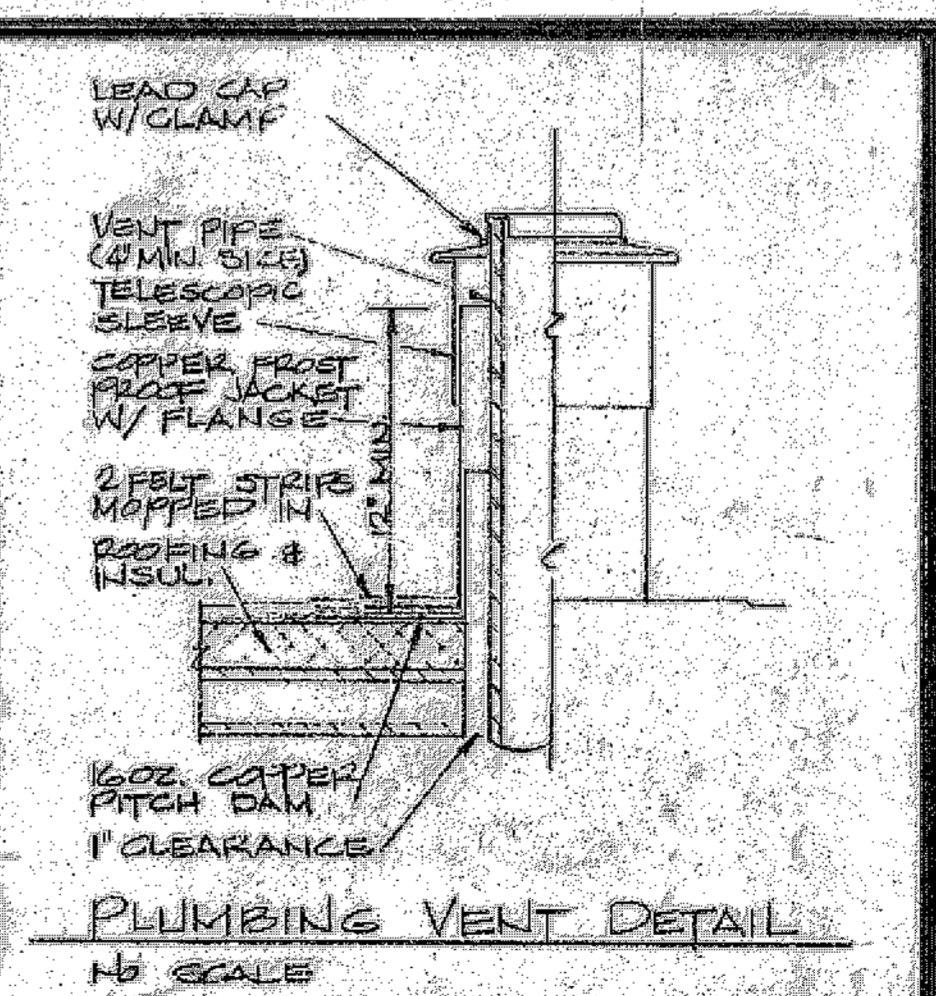
EXTEND NEW 6" V.C.P. SEWER TO EXIST. MANHOLE IN ELEVENTH ST. APPROX. 215' VERT. EXACT LOCATION, LENGTH, & ELEVATION



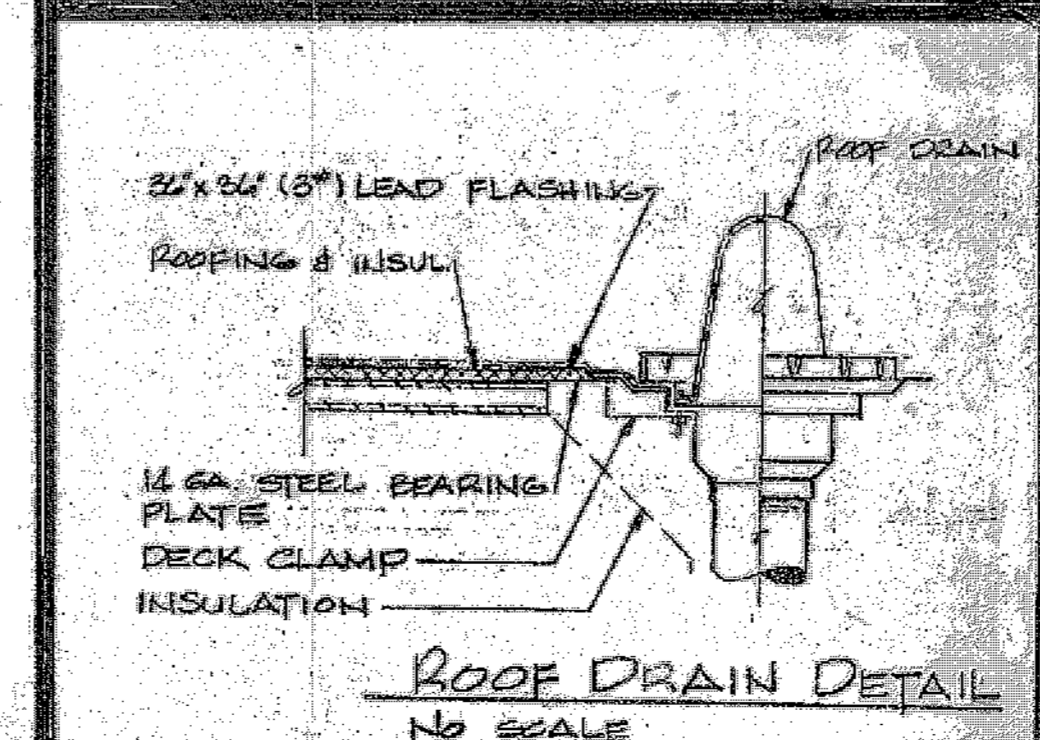
ROOF PLAN
SCALE: 1" = 40'



PRV DETAIL
NO SCALE



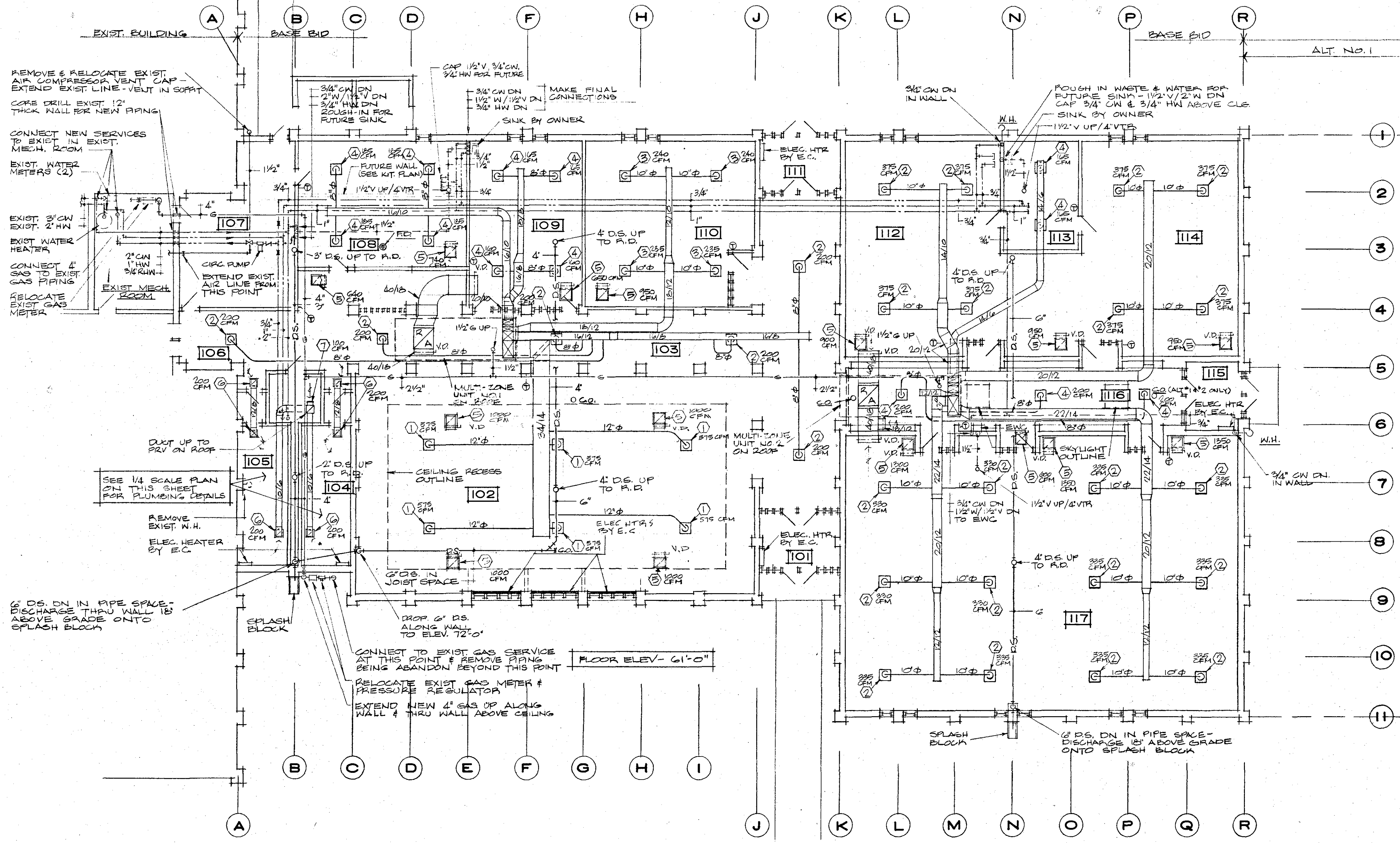
PLUMBING VENT DETAIL
NO SCALE



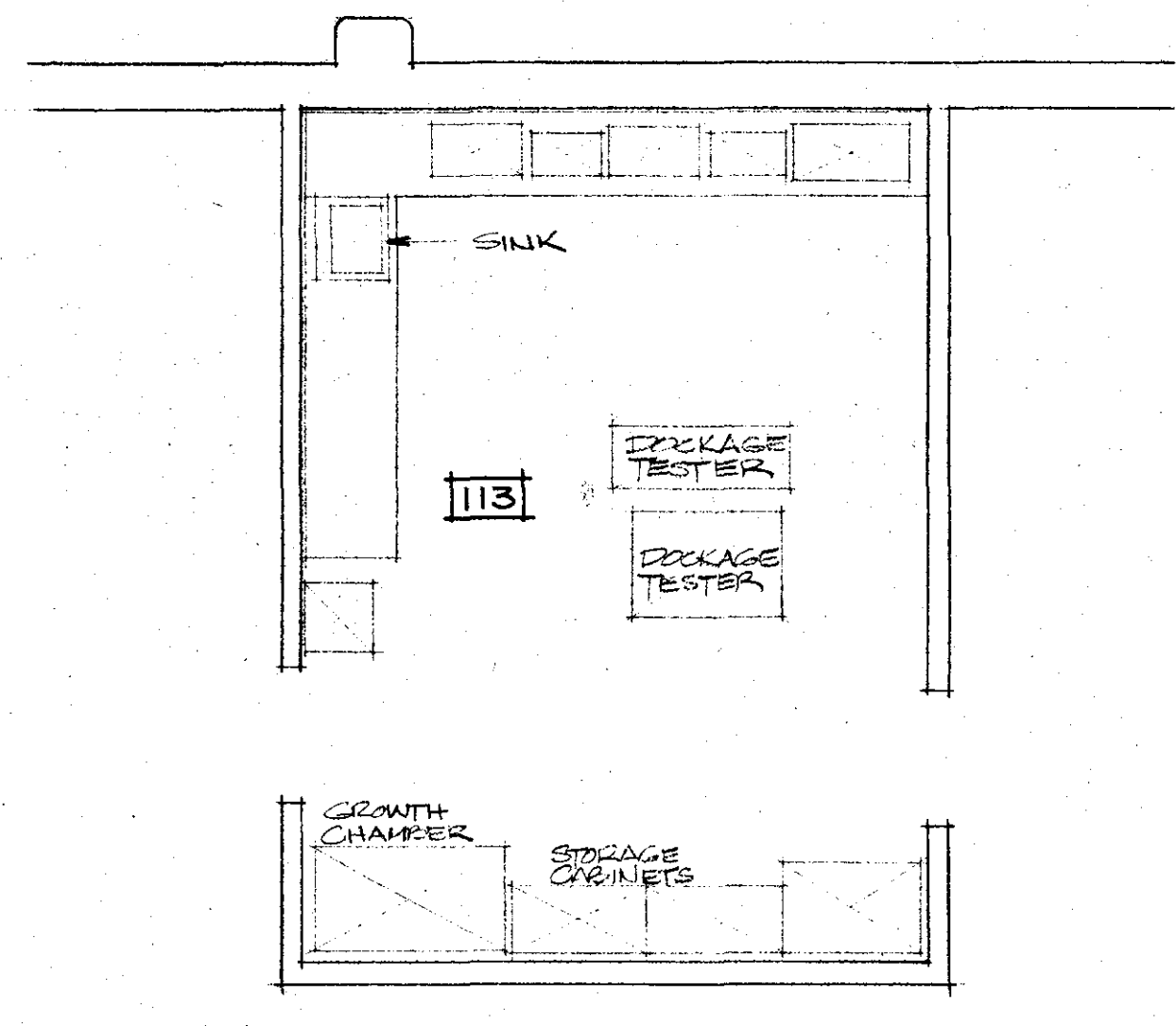
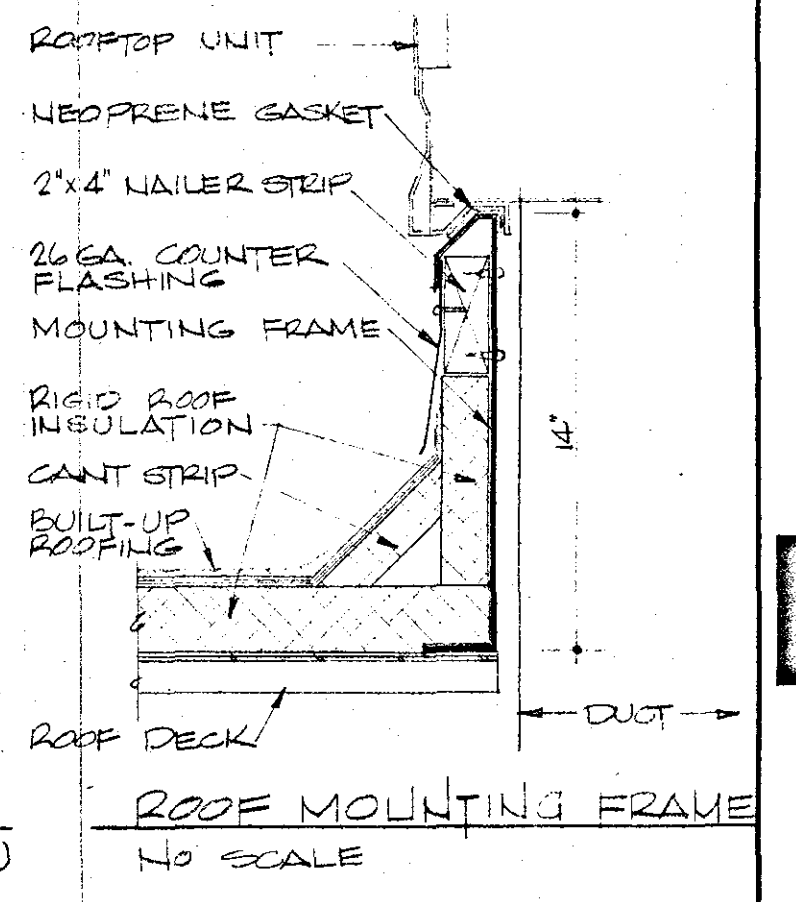
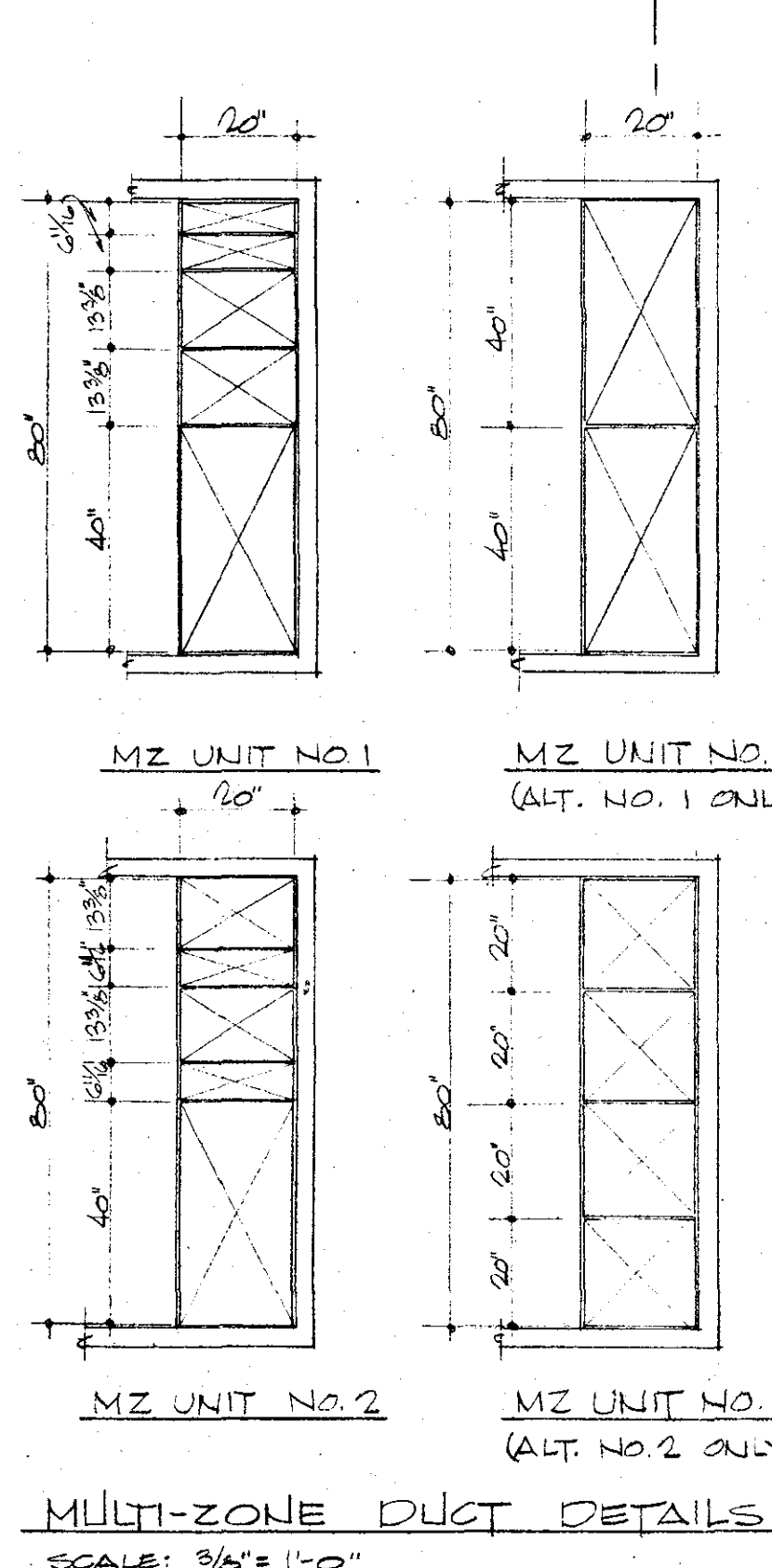
ROOF DRAIN DETAIL
NO SCALE

LEGEND		
SYMBOL	ABBREV.	DESCRIPTION
	CW	COLD WATER
	HW	HOT WATER
	RHW	RECIRCULATING HOT WATER
	G	GAS
	V	VENT
	W	WASTE - UNDERGROUND
	GV	GATE VALVE
	CV	CHECK VALVE
	BV	BALL VALVE
	DS	DOWNSPOUT
	L	LAVATORY
	WC	WATERCLOSET
	UR	URINAL
	H.B.	HOSE BIB
	WH	WALL HYDRANT
	SSK	SERVICE SINK
	SK	SINK
	C.O.	CLEANOUT
	R.D.	ROOF DRAIN
	FD	FLOOR DRAIN
	CI	CAST IRON
	GALV.	GALVANIZED STEEL
	V.C.P.	VITRIFIED CLAY PIPE
	VTR	VENT THRU ROOF
	PRV	POWER ROOF VENTILATOR
	SA	SUPPLY AIR
	RA	RETURN AIR
	FA	FRESH AIR
	VD	VOLUME DAMPER
	STAT	THERMOSTAT

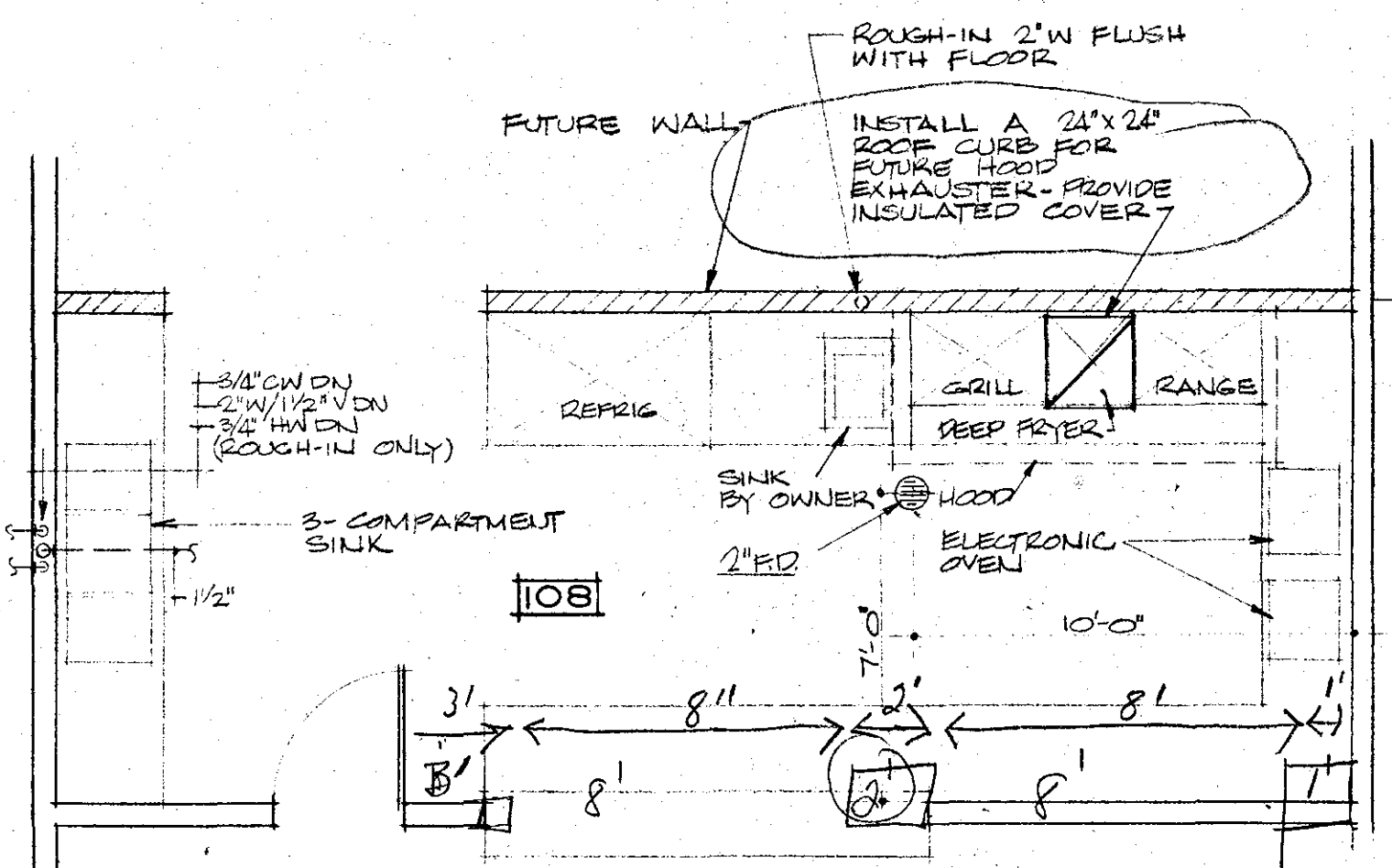
I hereby certify that this plan, specification or report was prepared by me, or under my direct supervision, and that I am a duly Registered Professional Engineer under the laws of the state of SOUTH DAKOTA
By William S. Bell
Registration No. 1945 Date 1-18-74



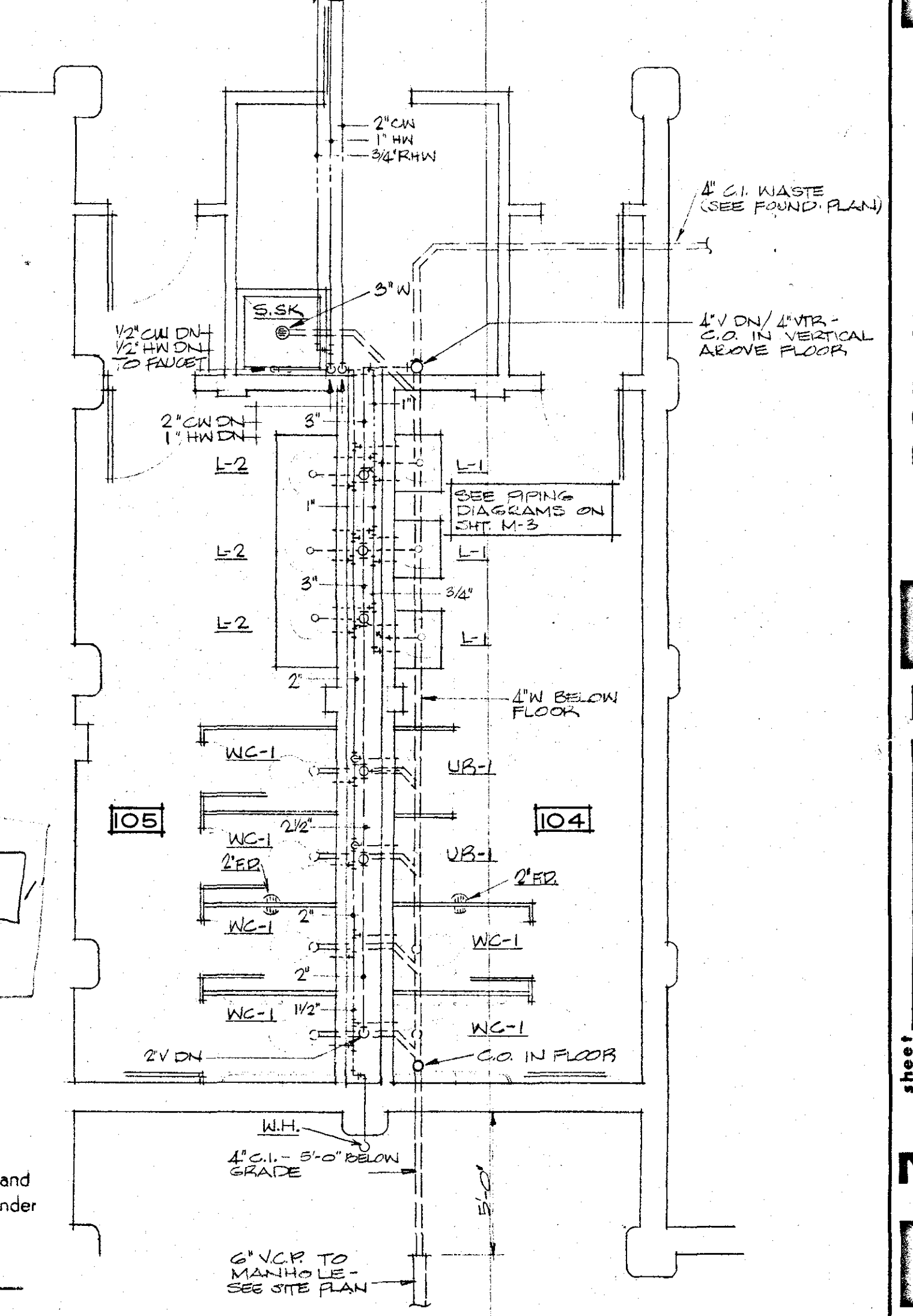
MECHANICAL FLOOR PLAN - BASE BID
SCALE: 3/32" = 1'-0"



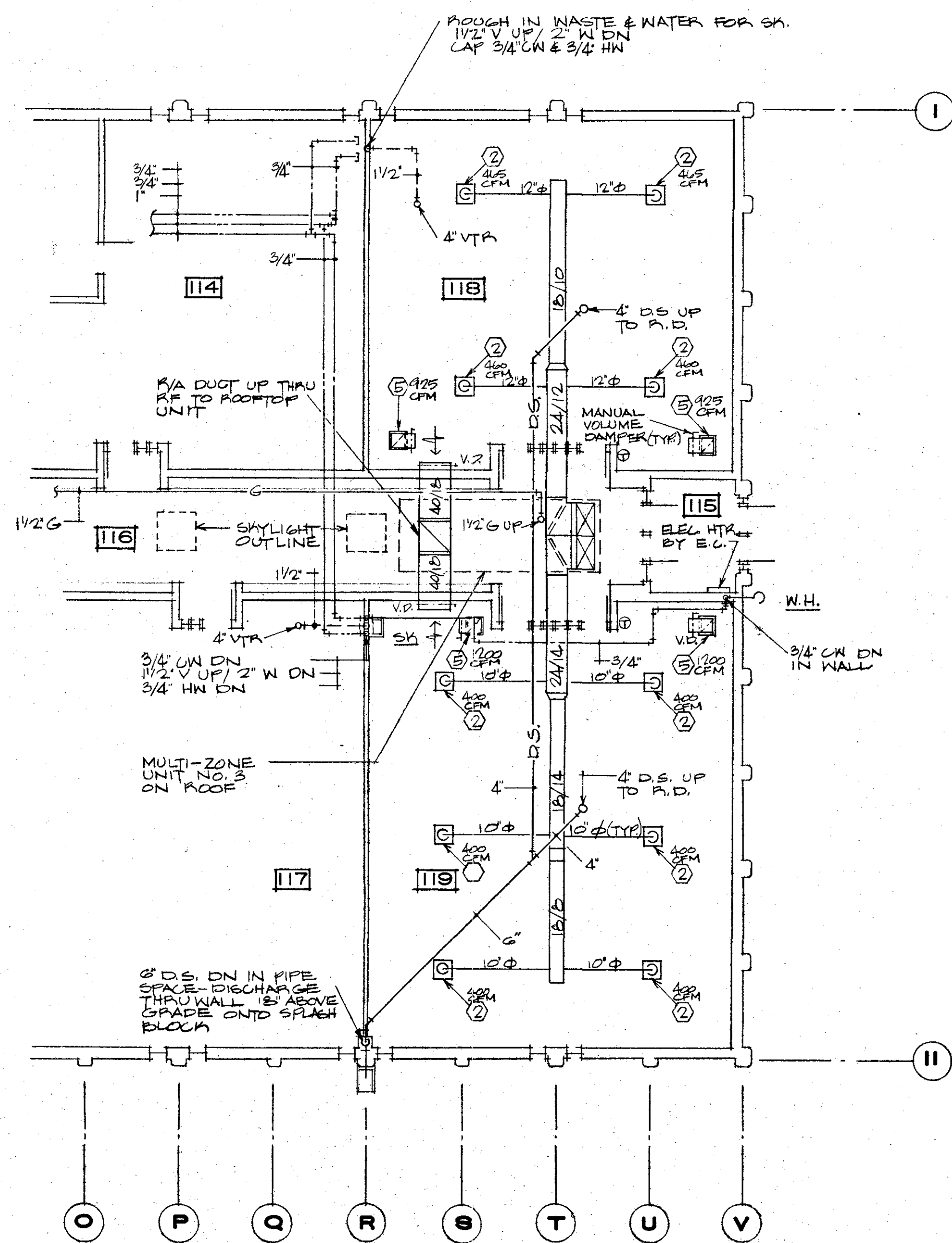
PROPOSED LAB LAYOUT (FUTURE)
SCALE: 1/4" = 1'-0"



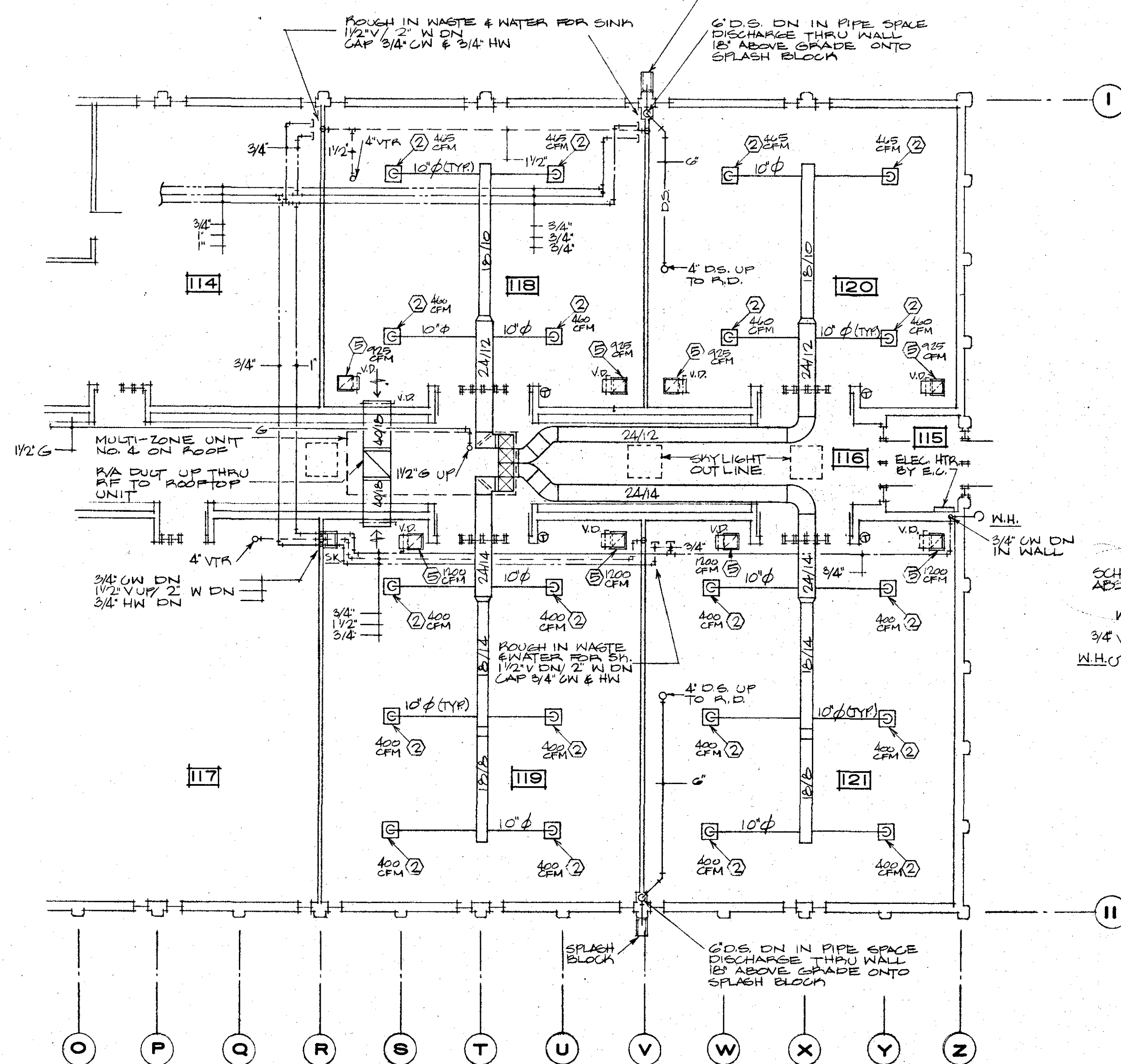
PROPOSED KITCHEN LAYOUT (FUTURE)
SCALE: 1/4" = 1'-0"



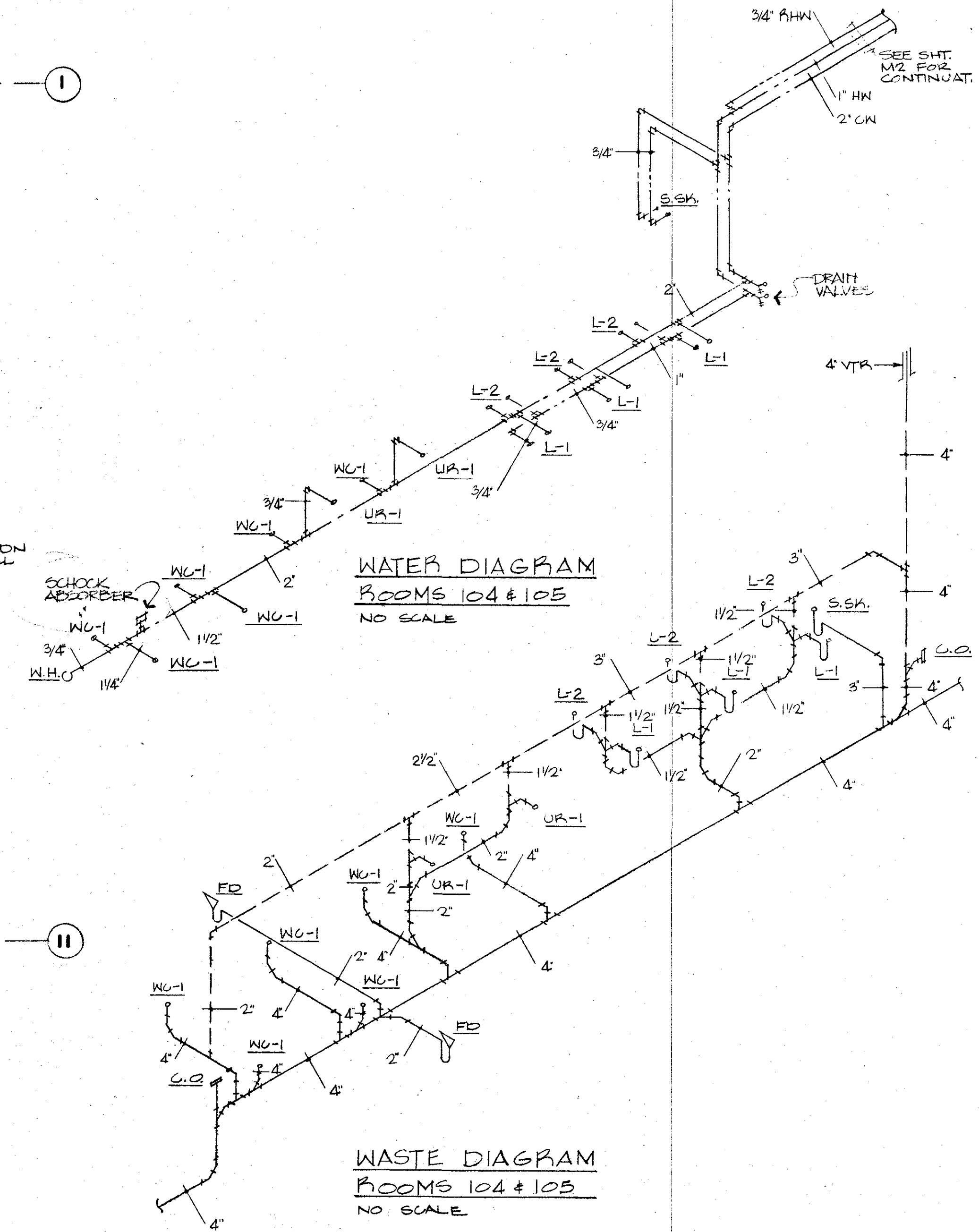
I hereby certify that this plan, specification or report was prepared by me, or under my direct supervision, and that I am a duly Registered Professional Engineer under the laws of the state of SOUTH DAKOTA.
By Arthur B. Albrit
Registration No. 1945 Date 6-15-74



FLOOR PLAN - ALTERNATE NO. 1
SCALE: 3/32" = 1'-0"

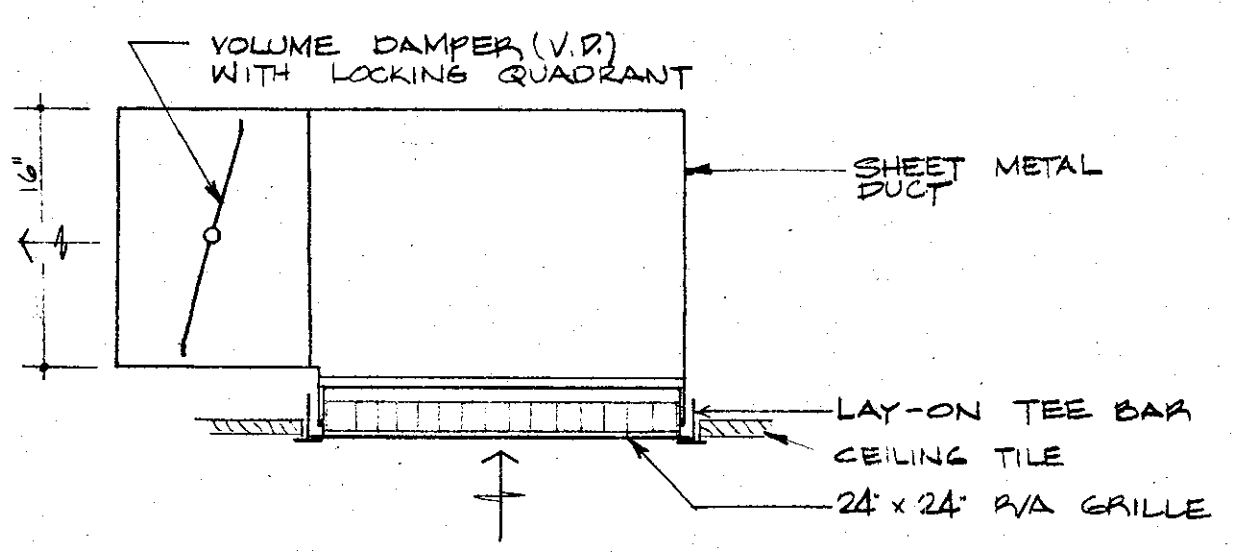


FLOOR PLAN - ALTERNATE NO. 2
SCALE: 3/32" = 1'-0"



WATER DIAGRAM
ROOMS 104 & 105
NO SCALE

WASTE DIAGRAM
ROOMS 104 & 105
NO SCALE



RETURN AIR GRILLE DETAIL
SCALE: 1" = 1'-0"



MULTI-ZONE ROOFTOP UNIT SCHEDULE							
UNIT NO.	LENNOX MODEL	CFM	E.S.P.	HTG. MBH INPUT	HTG. MBH OUTPUT	BLOWER HP	NO. OF ZONES
1	DM53-27B	6980	0.8'	350	262.5	5.0	5
2	DM53-27B	7730	0.8'	350	262.5	5.0	5
3	DM53-18B	4280	0.8'	215	206.25	3.0	2
4	DM53-27B	8500	0.8'	350	262.5	5.0	4

REGISTER, GRILLE, & DIFFUSER SCHEDULE					
SYMBOL NO.	SIZE	TYPE	MAX CFM	FRAME	REMARKS
①	12"	DNF 2412	700	LAY-IN	
②	10"	DAF 2410	500	LAY-IN	
③	8"	DAF 2408	300	LAY-IN	
④	6"	DAF 2406	200	LAY-IN	
⑤	22x22"	GR500L	1400	LAY-IN	
⑥	12'x12'	T110	300	OVERLAP	
⑦	12'x6'	T110	150	OVERLAP	

NOTES:
1. UNITS TO BE WIRED FOR 460V/3Ø POWER SUPPLY.
2. UNITS TO BE SUITABLE FOR ADDITION OF DX COOLING SYSTEM IN FUTURE WITHOUT MAJOR MODIFICATION.

NOTE: MODEL NUMBERS LISTED ARE TUTTLE & BAILEY NUMBERS

I hereby certify that this plan, specification or report was prepared by me, or under my direct supervision, and that I am a duly Registered Professional Engineer under the laws of the State of SOUTH DAKOTA.
By Arthur S. Witt
Registration No. 1945 Date 1-13-74