CLACKAMAS COUNTY

GEORGE MARLTON, JD
PROCUREMENT DIVISION DIRECTOR

PROCUREMENT DIVISION
PUBLIC SERVICES BUILDING
2051 KAEN ROAD | OREGON CITY, OR 97045

INVITATION TO BID #2019-09
ROOF TOP UNIT RENOVATION PROJECT
RESPONSE TO CLARIFYING QUESTIONS#1
March 28, 2019

Note that these are questions submitted by interested firms to the above referenced solicitation. The below answers are for clarification purposes only and in no way alter or amend the BID as published.

1. *What is the age of the building and is there known asbestos?*

   Answer: The building was built in 1985 according to the County's plans and there is no known asbestos that the County is aware of.

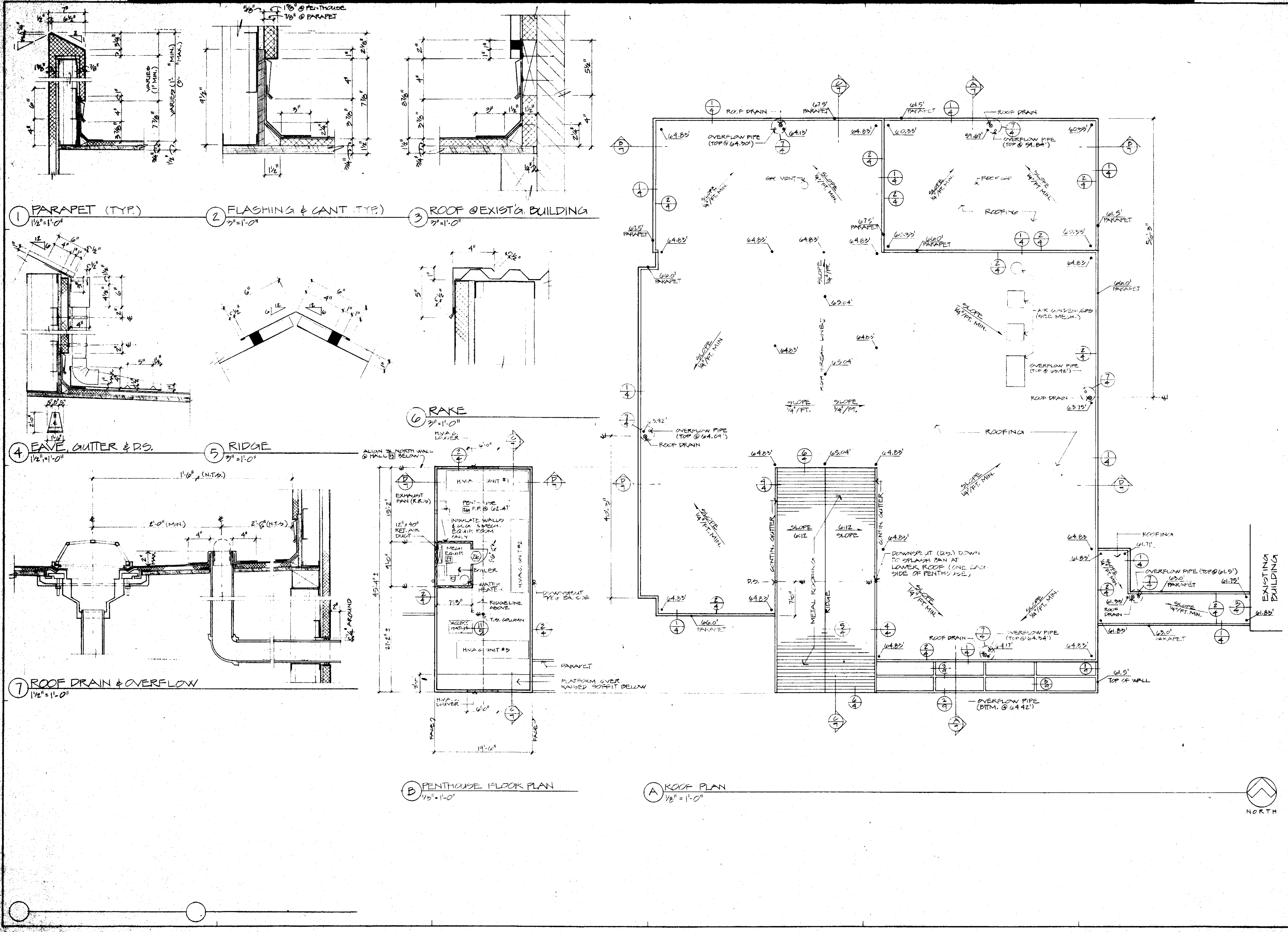
2. *Who will be responsible for wrapping the curbs on the roof?*

   Answer: Since the roof curbs for the new units will be built by the Facilities construction crew, the County, will have a roofing contractor come in to wrap the curbs.

3. *Can you please provide as-built, mechanical drawings and floor plans?*

   Answer: Yes, the as-built, mechanical drawings and floor plans are attached below.

End of Clarifying Questions#1



CLACKAMAS COUNTY
EMERGENCY OPERATIONS CENTER
OREGON CITY OREGON

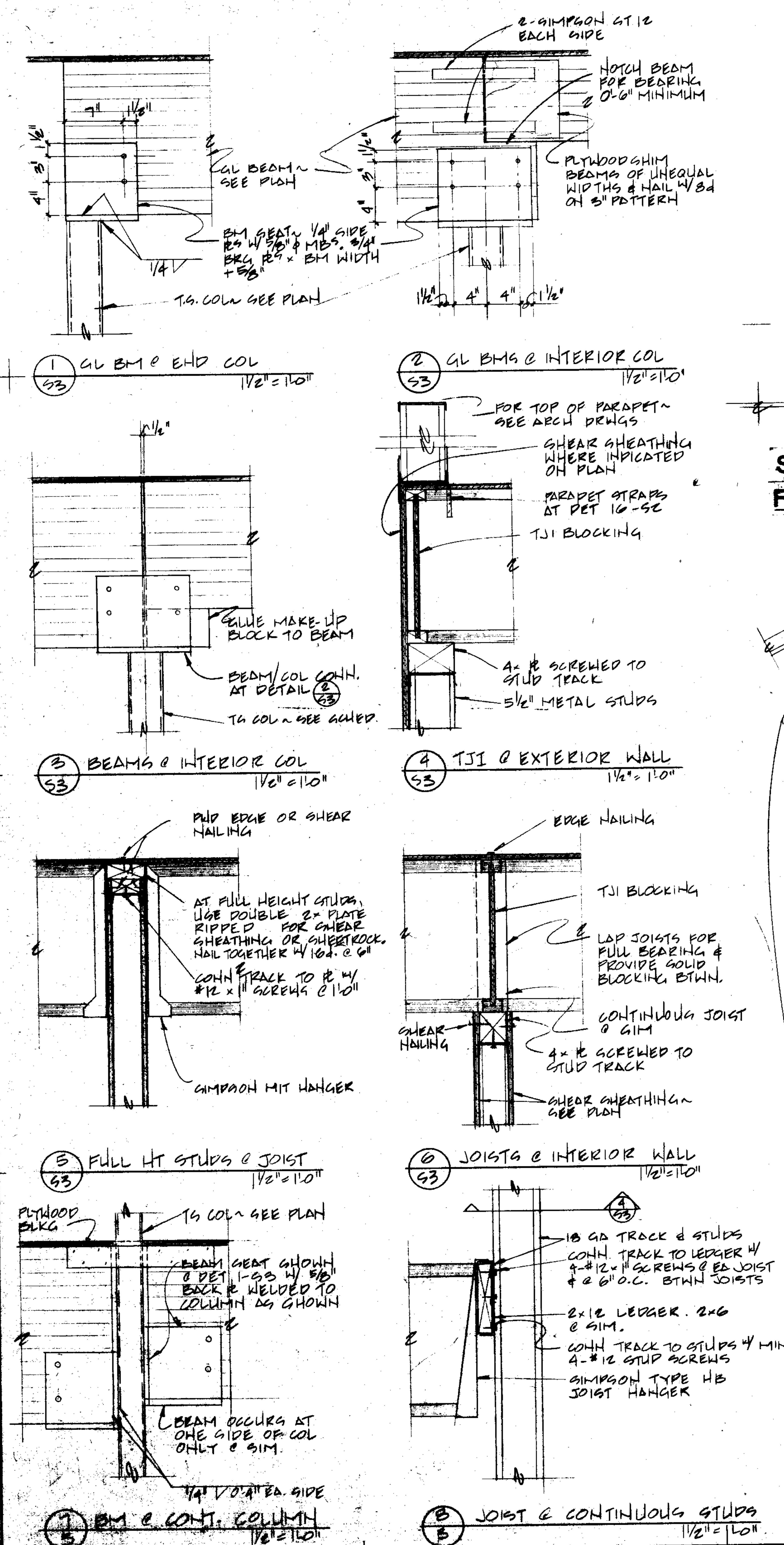
ARCHITECTS Barrentine Bates Lee AIA

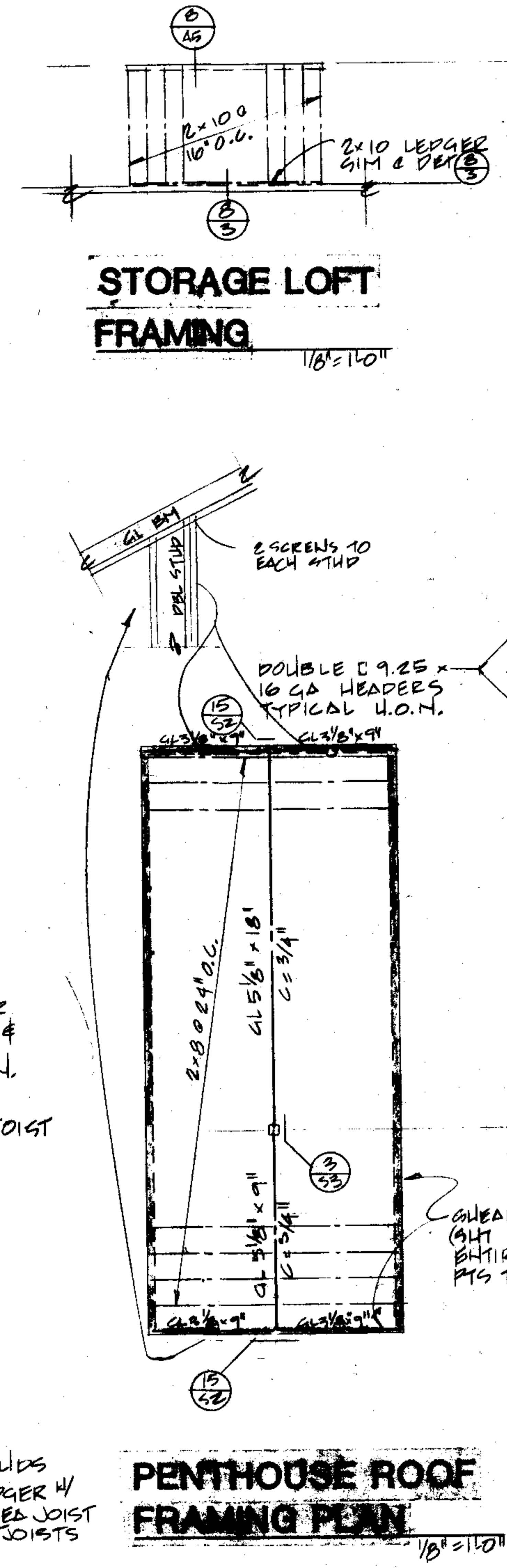
ARCHITECTURE PLANNING INTERIOR DESIGN

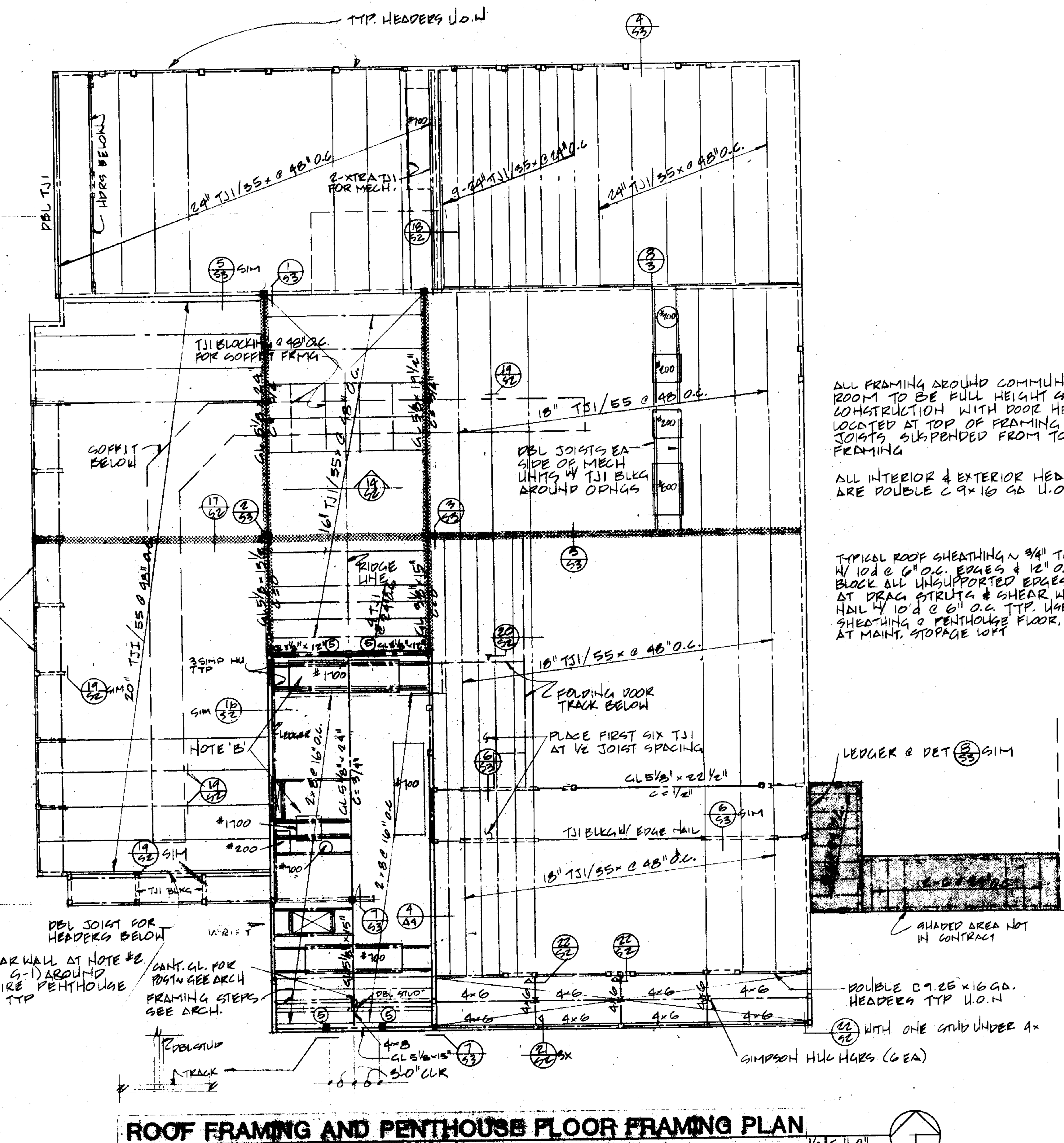
JOB NO.

DATE

A·4







ALL FRAMING AROUND COMMUNICATIONS ROOM TO BE FULL HEIGHT STUD CONSTRUCTION WITH DOOR HEADERS LOCATED AT TOP OF FRAMING & JOISTS SUSPENDED FROM TOP OF FRAMING

ALL INTERIOR & EXTERIOR HEADERS ARE DOUBLE C 9x16 GA U.O.N.

TYPICAL ROOF SHEATHING ~ 3/4" T&G PLY. W/ 10d @ 6" O.C. EDGES & 12" O.C FIELD. BLOCK ALL UNSUPPORTED EDGES TYP. AT DRAG STRUTS & SHEAR WALLS, NAIL W/ 10d @ 6" O.C. TYP. USE SAME SHEATHING @ PENTHOUSE FLOOR, ROOF & AT MAINT. STORAGE LOFT

NOTES:

A) COLUMN SIZES ARE EXAGERATED FOR CLARITY SEE COLUMN SCHEDULE ON SHEET S-1
B) MULTIPLE FLOOR JOISTS AROUND OPENINGS & UNDER MECHANICAL UNITS AS SHOWN
C) ▬▬ - DENOTES INCLUDED IN DRAG STRUT NAILING OR REQUIREING A DRAG STRUT
D) ASSUME DOUBLE STUD CONSTRUCTION AT ALL OPENINGS, HEADERS, BEAMS, ETC IN ALL SHEAR AND BEARING WALLS UNLESS OTHERWISE NOTED

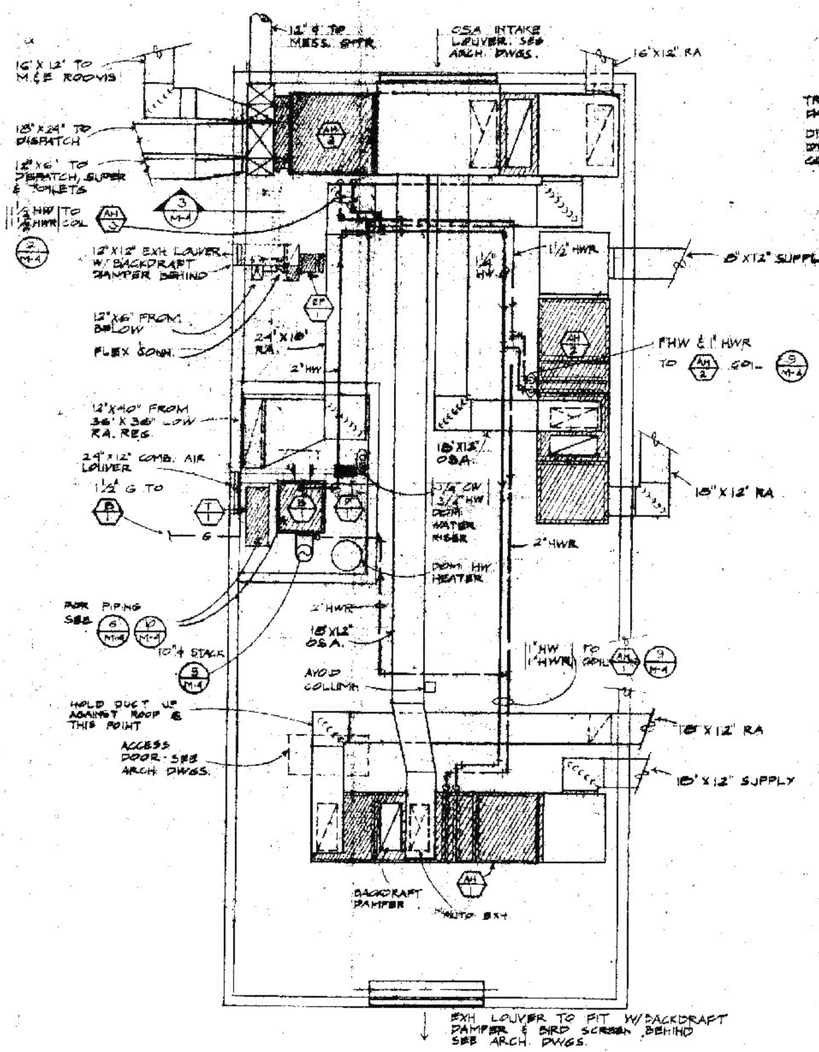
VDA VAN DOMELEN/ LOOSLI & ASSOCIATES Consulting Structural Engineers

ARCHITECTS Barrentine Bates Lee AIA
ARCHITECTURE PLANNING INTERIOR DESIGN

GLACKAMAS COUNTY COMMUNICATIONS CENTER OREGON CITY, OREGON

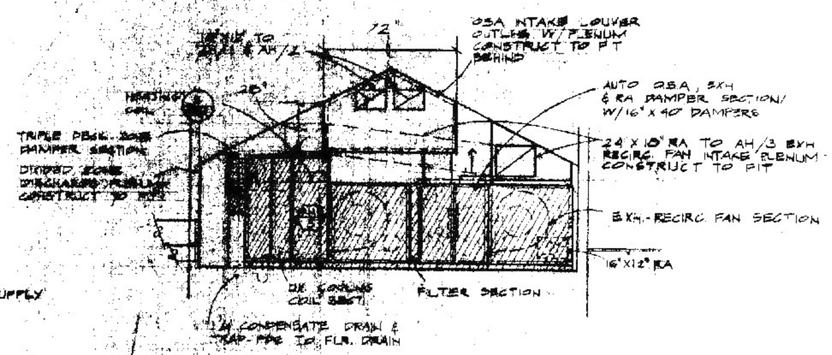
JOB NO. 8431.01
DATE 8.1.85
REVISIONS

S-3



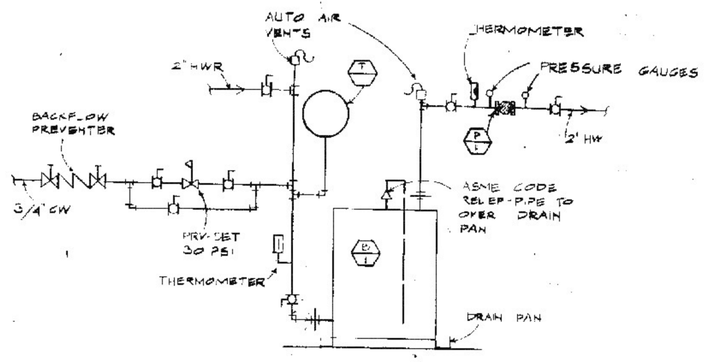
1 / M-4 MECH. ROOM DETAIL

SCALE ¼" = 1'-0"



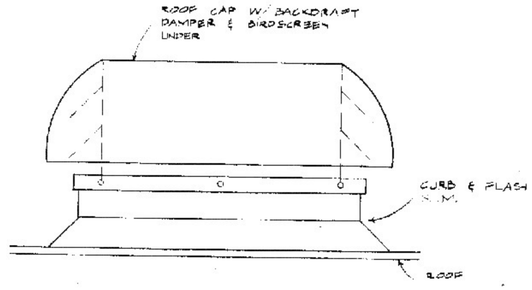
3 / M-4 SECTION

¼" = 1'-0"



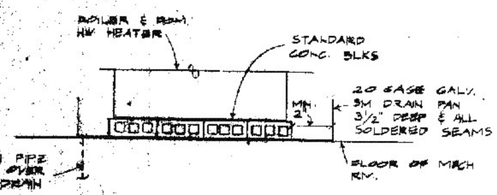
6 / M-4 BOILER PIPING DIAGRAM

DIAGRAMATIC ONLY



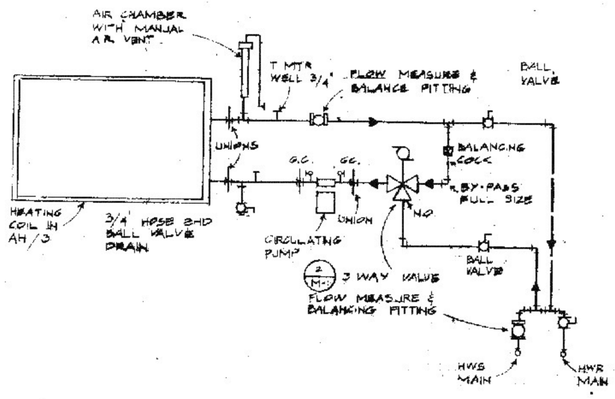
7 / M-4 ROOF CAP DETAIL

NOT TO SCALE



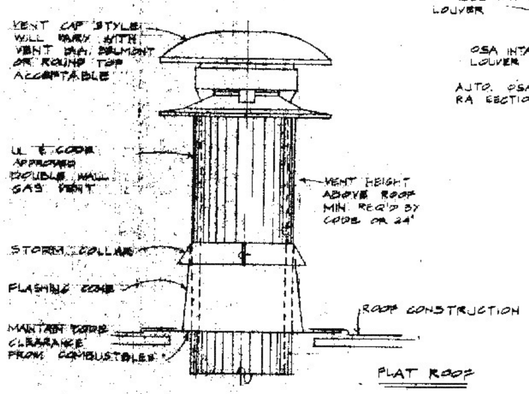
4 / M-4 BOILER & DOM. HW. DRIP PAN DETAIL

NOT TO SCALE



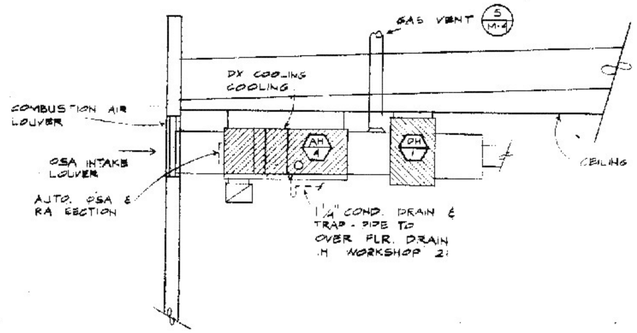
2 / M-4 HEATING COIL PIPING DIAGRAM

DIAGRAMMATIC



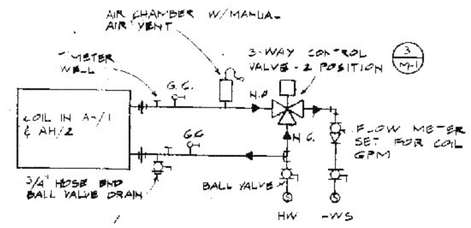
5 / M-4 GAS VENT DETAIL

NOT TO SCALE



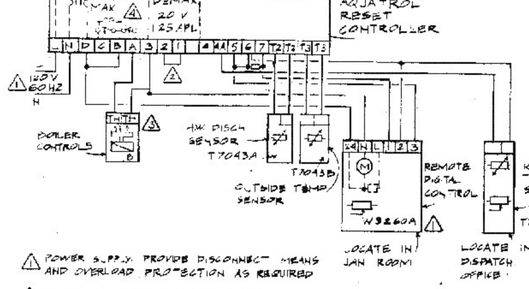
8 / M-4 SECTION

SCALE ¼" = 1'-0"



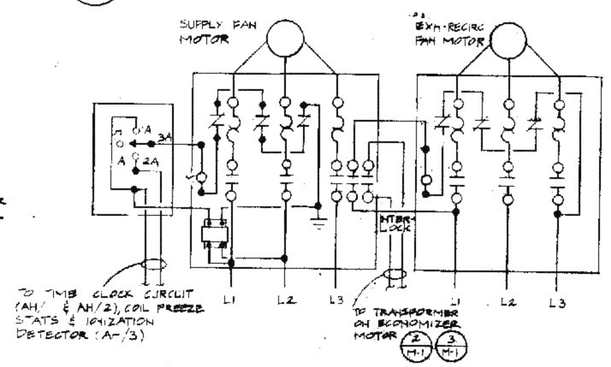
9 / M-4 HEATING COIL AH/1 & AH/2

DIAGRAMMATIC



10 / M-4 BOILER CONTROL DIAGRAM

DIAGRAMMATIC



NOTE: LINE VOLTAGE INTERLOCKS SHOWN. LOW VOLTAGE IS ACCEPTABLE

1 / M-4 TYP. SUPPLY FAN STARTER & INTERLOCK DIAGRAM

BOILERS

MARK NUMBER	B 1	
FUEL	NAT. GAS	
NOM. BOILER HP.	9.7	
GROSS OUTPUT (MBH)	323	
TRIM-HEATING WATER	30PSI	
BURNER — TYPE	FORCED DRAFT	
BURNER — FIRING RATE (MBH)	399	
BURNER — FAN HP	1/6	
OPERATING WEIGHT-LB	1700	

AIR HANDLING EQUIPMENT

		AH 1	AH 2	AH 3	AH 4
	MARK NUMBER	AH 1	AH 2	AH 3	AH 4
	TYPE	SINGLE-ZONE	SINGLE-ZONE	MULTI-ZONE	SINGLE-ZONE
	SYSTEM	OFFICE	EMERG OP.	DISPATCH	MAINT. OFFICE
FAN SECTION	TOTAL CFM.	1320	1260	4000	920
	MIN. OSA. %	10	10	10	10
	TSP. (IN. H2O)	1.5	1.5	1.75	1.25
	OUTLET VEL. (fpm)	2315	2211	1717	2100
	RPM	1777	1734	894	1953
	TIP SPEED (fpm)	3785	3693	3513	3730
	MOTOR (HP)	1	1	3	1
	STARTER TYPE	MAG	MAG	MAG	MAG
	INTERNALLY ISOLATED	YES	YES	YES	YES
	ARRANGEMENT	SINGLE	SINGLE	SINGLE	SINGLE
	WHEEL TYPE	FC	FC	FC	FC
EXH.-RECIRC.	TOTAL CFM.	1320	1260	4000	
	EXTERNAL SP ('H2O)	1/2"	1/2"	1/2"	
	RPM.	871	853	561	
	MOTOR HP.	1/2	1/2	1.5	
	WHEEL TYPE	FC	FC	FC	
FILTER	TYPE - DISPOSABLE	2"	2"	2"	2"
	MIN AREA - SQ.FT.	4	4	10	2
HEATING COIL	TO FIT UNIT	AH 1	AH 2	AH 3	
	MIN AREA (SQ.FT.)	2.63	2.63	5.01	
	ENT. AIR (°F.)	60°	60	60	
	LVG. AIR (°F.)	100°	100	100	
	TOTAL (MBH)	57	54	173	
	MIN. ROWS	2	2	2	
	MAX. FINS/INCH	8	8	8	
	MAX. FACE VELOCITY	500	480	720	
	AIR PRESS. LOSS (IN. H2O)	0.15	0.14	0.3	
	HW GPM	5.7	5.4	17.3	
	HW ENT/LVG °F	180/160	180/160	180/160	
	HW ΔP FT	1.92	1.77	1.5	
	GAS HEAT	NO	NO	NO	DH 1
COOLING COIL	TO FIT UNIT	AH 1	AH 2	AH 3	AH 4
	AREA (SQ.FT.)	2.63	2.63	7.7	1.35
	ENT. AIR °FDB/°FWB	80.6/65.1	80.6/65.1	80.6/65.1	80.6/65.1
	LVG AIR °FDB/°FWB	55°/54°	55°/54	55°/54°	55°/54
	TOTAL MBH	46.6	56.6	130.5	22.7
	MIN. ROWS	4	4	4	4
	MAX. FINS/INCH	10	8	8	8
	MAX. FACE VELOCITY (FPM)	500	480	519	371
	MAX. AIR PRESS LOSS (IN.H2O)	0.68"	0.54"	0.8"	0.35"
	SUCTION TEMP	40°	40°	40°	40°

AIR CONDENSER-COMPRESSOR

MARK NUMBER	AC 1	AC 2	AC 3	AC 4
NOMINAL TONS	4	5	10	2
CAPACITY TO MATCH	AH / 1	AH / 2	AH / 3	AH / 4
SUCTION TEMP (°F)	40°	40°	40°	40°
COND. TEMP (°F)	95°	95°	95°	95°
LOW AMBIENT CONTROL	NO	NO	YES	NO

EXHAUST FANS

	MARK NUMBER	EF 1	EF 2
	DESCRIPTION	UTIL. SET	CEIL. EXH. FAN
	SYSTEM	TOILET	TOILET
	CFM	250	40
	SP. (IN. H2O)	3/8"	0.2"
	OUTLET VELOCITY (FPM)	1040	—
	RPM	1180	1050
	TIP SPEED (FPM)	2120	—
	MOTOR (HP)	1/8	1/50
	INTERLOCK WITH MARK	AH 3	—
	WHEEL TYPE	FC	FC
	DISCHARGE	VERT.	—
ISOLATOR	TYPE	OPEN SPRING	INTERNAL
	DEFLECTION	1/2"	—

PUMPS

MARK NUMBER	P 1	P 2
SERVICE	HEAT'G WATER	
TYPE	IN-LINE	IN-LINE
GPM	28.4	17.3
DISCHARGE HEAD (FT.)	35	20
MOTOR (HP)	1/2	1/3
RPM	1750	1750
STARTER	MAG	MAG

VAV DAMPER ASSEMBLY

MARK NUMBER	BP 1	BP 2	ZP 1	ZP 2	ZP 3	ZP 4	ZP 5
TYPE	BY-PASS	BY-PASS	ZONE	ZONE	ZONE	ZONE	ZONE
CFM	1320	1260	185	370	430	150	980
MAX. SYSTEM SP. "H2O	0.4"	0.4"	—	—	—	—	—
SIZE	12"φ	12"φ	8"φ	8"φ	3"φ	6"φ	12"φ
VELOCITY	—	—	835	1200	1370	830	1393

RADIANT HEATER

MARK NO.	RH 1
BTU/HR INPUT	75,000
FLUE SIZE	5"φ

DUCT HEATER

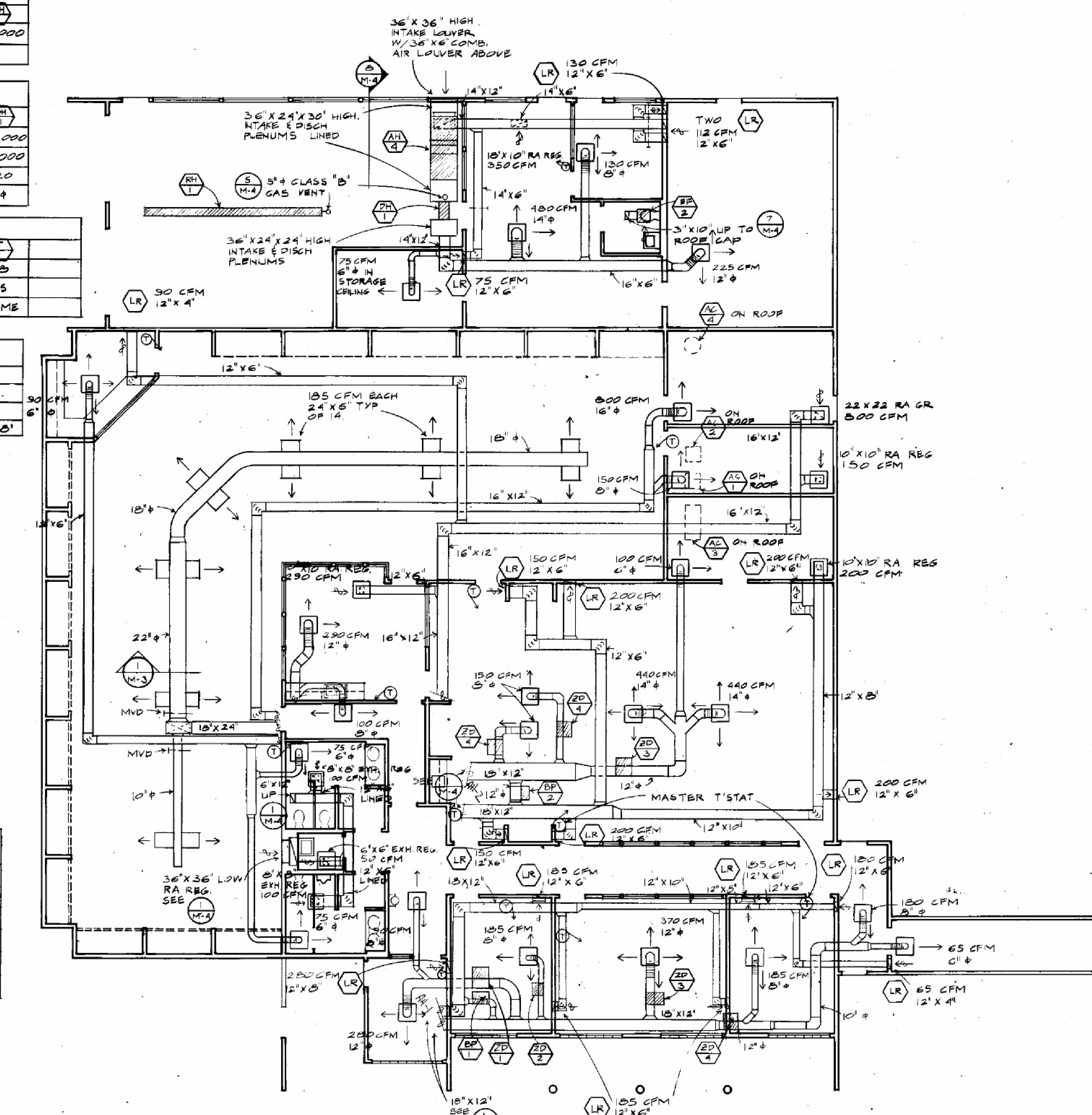
MARK NO.	DH 1
BTU/HR INPUT	75,000
BTU/HR OUTPUT	60,000
CFM	920
FLUE SIZE	5"φ

EXPANSION TANK

MARK NO.	T 1	
CAPACITY - GAL	7.8	
ACCEPTANSE FACTOR	2.5	
CODE	ASME	

FUEL OIL TANK

MARK NO.	T 2
CAPACITY - GALLONS	5000
CODE	U.L.
DIMENSIONS	95"φ X 168"

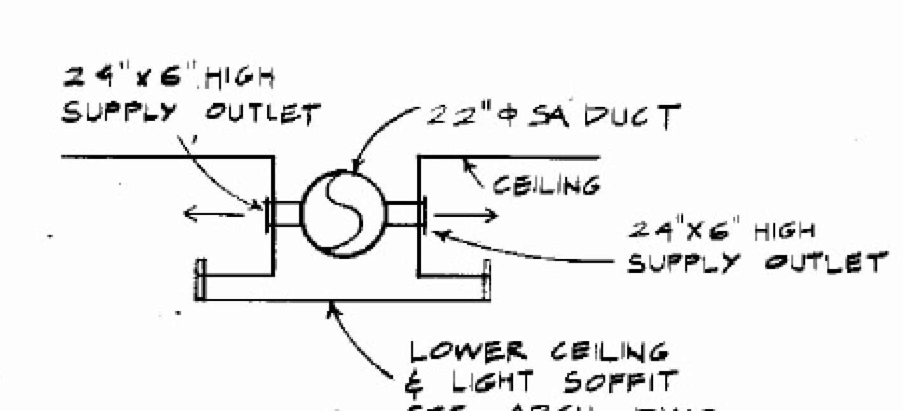


HVAC PLAN

SCALE 1/8" = 1'-0"

(LR) LOW RA. GR. AT FLOOR ABOVE BASE 3 1/2" X 14" DUCT UP IN STUD SPACE. MVD. IN DUCT ABOVE CEILING

NOTE: SEE ARCH. REFLECT. CEILING PLAN FOR CEILING DIFFUSER LOCATIONS



1 / M-3 SECTION

SCALE 1/4" = 1'-0"

ARCHITECTS
ARCHITECTURE PLANNING INTERIOR DESIGN

CLACKAMAS COUNTY

EMERGENCY OPERATIONS CENTER

OREGON CITY, OREGON

JOB NO | DATE | REVISIONS

M3